

ejg.
RETURN WITH BID



**Local Public Agency
Formal Contract Proposal**

PROPOSAL SUBMITTED BY		
Contractor's Name		
Street	P.O. Box	
City	State	Zip Code

STATE OF ILLINOIS

COUNTY OF KANE
CITY OF ST. CHARLES
(Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF
STREET NAME OR ROUTE NO. Various Locations
SECTION NO. 16-00108-00-RS
TYPES OF FUNDS MFT and Corporate

SPECIFICATIONS (required)

PLANS (required)

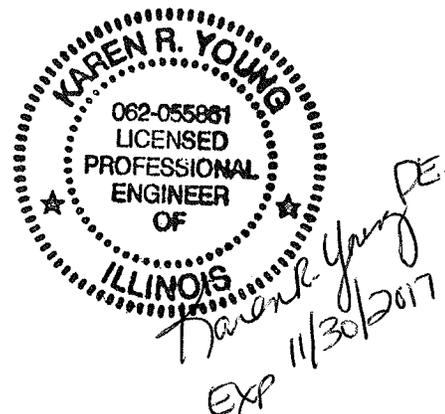
For Municipal Projects
Submitted/Approved/Passed
Karen R. Young PE
 Mayor President of Board of Trustees Municipal Official
Date 4/11/16

Department of Transportation
 Released for bid based on limited review
[Signature]
Regional Engineer
Date 04/12/16

For County and Road District Projects
Submitted/Approved

Highway Commissioner
Date _____
Submitted/Approved

County Engineer/Superintendent of Highways
Date _____



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

RETURN WITH BID

NOTICE TO BIDDERS

County Kane
Local Public Agency City of St. Charles
Section Number 16-00108-00-RS
Route Various Locations

Sealed proposals for the improvement described below will be received at the office of The City Clerk,
City of St. Charles, 2 East Main Street, St. Charles, IL 60174 until 2:00 PM on May 3, 2016
Address Time Date

Sealed proposals will be opened and read publicly at the office of The City Clerk
2 East Main Street, St. Charles, IL 60174 at 2:00 PM on May 3, 2016
Address Time Date

DESCRIPTION OF WORK

Name 2016 MFT Length: 16111.00 feet (3.05 miles)
Location Various
Proposed Improvement HMA pavement patching, curb & gutter, sidewalk, & driveway apron removal & replacement,
sanitary, water main & storm repairs, replacement & adjustment of structure frames, pavement markings, restoration.

1. Plans and proposal forms will be available in the office of City of St. Charles Web Site at no cost at:
http://www.stcharlesil.gov/bid-proposals. Contact Karen Young, Assistant Director of P.W at 630-377-4486
Address

2. [X] Prequalification
If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57), in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.

3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals.

4. The following BLR Forms shall be returned by the bidder to the Awarding Authority:
a. BLR 12200: Local Public Agency Formal Contract Proposal
b. BLR 12200a Schedule of Prices
c. BLR 12230: Proposal Bid Bond (if applicable)
d. BLR 12325: Apprenticeship or Training Program Certification (do not use for federally funded projects)
e. BLR 12326: Affidavit of Illinois Business Office

5. The quantities appearing in the bid schedule are approximate and are prepared for the comparison of bids. Payment to the Contractor will be made only for the 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 hereinafter provided.

6. Submission of a bid shall be conclusive assurance and warranty the bidder has examined the plans and understands all requirements for the performance of work. The bidder will be responsible for all errors in the proposal resulting from failure or neglect to conduct an in depth examination. The Awarding Authority will, in no case be responsible for any costs, expenses, losses or changes in anticipated profits resulting from such failure or neglect of the bidder.

7. The bidder shall take no advantage of any error or omission in the proposal and advertised contract.

8. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Agency and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the Notice to Bidders. Proposals received after the time specified will be returned to the bidder unopened.

9. Permission will be given to a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.

RETURN WITH BID

PROPOSAL

County Kane
Local Public Agency City of St. Charles
Section Number 16-00108-00-RS
Route Various Locations

- 1. Proposal of ... for the improvement of the above section by the construction of HMA pavement patching, curb & gutter removal & replacement, sidewalk removal & replacement, driveway apron removal & replacement, HMA resurfacing, sanitary sewer, water main & storm sewer repairs, replacement & adjustment of structure frames, pavement markings, and parkway restoration.
2. The plans for the proposed work are those prepared by City of St. Charles, Public Works Engineering and approved by the Department of Transportation on ...
3. The specifications referred to herein are those prepared by the Department of Transportation and designated as "Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications and Recurring Special Provisions" thereto, adopted and in effect on the date of invitation for bids.
4. The undersigned agrees to accept, as part of the contract, the applicable Special Provisions indicated on the "Check Sheet for Recurring Special Provisions" contained in this proposal.
5. The undersigned agrees to complete the work within ... working days or by 08/17/2016 unless additional time is granted in accordance with the specifications.
6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. Bid Bonds will be allowed as a proposal guaranty. Accompanying this proposal is either a bid bond if allowed, on Department form BLR 12230 or a proposal guaranty check, complying with the specifications, made payable to: City of St. Charles Treasurer of ... The amount of the check is 5% of the bid (...).
7. In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties, which would be required for each individual proposal. If the proposal guaranty check is placed in another proposal, it will be found in the proposal for: Section Number ...
8. The successful bidder at the time of execution of the contract will be required to deposit a contract bond for the full amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu thereof. If this proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby agreed that the Bid Bond or check shall be forfeited to the Awarding Authority.
9. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price.
10. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
11. The undersigned submits herewith the schedule of prices on BLR 12200a covering the work to be performed under this contract.
12. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid specified in the Schedule for Multiple Bids below.



Schedule of Prices

Route	VARIOUS LOCATIONS
County	KANE
Local Agency	CITY OF ST. CHARLES
Section	16-00108-00-RS

RETURN WITH BID

(For complete information covering these items, see plans and specifications)

Item No.	Items	Unit	Quantity	Unit Price	Total
MFT ITEMS					
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	42,830		
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	2,250		
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N50	TON	6,170		
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SF	177		
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SY	712		
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2-1/2"	SY	29,760		
44000160	HOT-MIX ASPHALT SURFACE REMOVAL, 2-3/4"	SY	2,219		
44000600	SIDEWALK REMOVAL	SF	418		
44200071	CLASS D PATCHES, TYPE II, 6 INCH	SY	2,745		
44300100	AREA REFLECTIVE CRACK CONTROL TREATMENT	SY	53,537		
67100100	MOBILIZATION	LS	1		
70300100	SHORT TERM PAVEMENT MARKING	LF	4,500		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SF	1,000		
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	SF	332		
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	LF	13,574		
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	LF	1,746		
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	LF	645		
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	LF	207		
	HOT-MIX ASPHALT BIKE PATH	SY	25		
X0327036	BIKE PATH REMOVAL	SY	46		
X4400220	CURB REMOVAL AND REPLACEMENT	LF	6,971		
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SY	22,130		
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LS	1		
XX003435	PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL AND REPLACEMENT	SY	956		
XX006947	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	SY	2,261		
Z0007420	SIDEWALK REPAIR (SPECIAL)	SF	10,790		
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	LS	1		
CORPORATE ITEMS (NON MFT)					
1	6" Ductile Iron Water Main, Class 52, with Polyethylene Encasement	LF	446		
2	6" Water Main Valve & 4' Dia. Valve Vault	EA	2		
3	6" Ductile Iron Water Main, Class 52 Tee, with Solid Sleeves & Polyethylene Encasement	EA	2		
4	1" Copper Water Service with B-Box & Connection to Existing	EA	1		
4A	1" Copper Water Service with B-Box	EA	7		
5	Remove 5-1/4" Valve Box & Replace with New 6" Valve & 4' Dia. Valve Vault	EA	1		
6	Remove 5-1/4" Valve Box & Replace with 4' Dia. Valve Vault	EA	2		
6A	Valve Vault, Rebuild Top of Structure	EA	1		
7	Remove Ex. Fire Hydrant & Replace with Fire Hydrant, Auxiliary Valve & Assembly	EA	3		
8	Remove Ex. Fire Hydrant & Replace with Fire Hydrant, New Auxiliary Box & Stabilizer	EA	9		
9	Remove & Replace Valve Vault Frame & Lid in Pavement or Curb	EA	5		
10	Remove & Replace Valve Vault Frame & Lid in Parkway	EA	15		
11	Remove & Replace 5-1/4" Auxiliary Valve Box & Install Stabilizer	EA	7		
12	New 48" Dia. Sanitary Manhole	EA	2		
13	Remove & Replace 48" Dia. Sanitary Manhole	EA	2		
14	Remove & Replace 48" Dia. Sanitary Drop Manhole	EA	1		
15	New 8" PVC SDR 26 Sanitary Sewer Main	LF	128		
16	Connect Existing Sanitary Sewer Service	EA	7		
17	Remove & Replace Sanitary Sewer Service, 6"	LF	56		
17A	Remove & Replace 6" San Sewer Main w/6" PVC SDR 26 San Sewer Main < 8' Deep	LF	16		
18	Remove & Replace 8" San Sewer Main w/8" PVC SDR 26 San Sewer Main > 10' Deep	LF	54		

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CONTRACTOR CERTIFICATIONS

County	<u>Kane</u>
Local Public Agency	<u>City of St. Charles</u>
Section Number	<u>16-00108-00-RS</u>
Route	<u>Various Locations</u>

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.

1. **Debt Delinquency.** The bidder or contractor or subcontractor, respectively, certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue unless the individual or other entity is contesting, in accordance with the procedures established by the appropriate revenue Act, its liability for the tax or the amount of tax. Making a false statement voids the contract and allows the Department to recover all amounts paid to the individual or entity under the contract in a civil action.

2. **Bid-Rigging or Bid Rotating.** The bidder or contractor or subcontractor, respectively, certifies that it is not barred from contracting with the Department by reason of a violation of either 720 ILCS 5/33E-3 or 720 ILCS 5/33E-4.

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.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government 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.

3. **Bribery.** The bidder or contractor or subcontractor, respectively, certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois or any unit of local government, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm.

4. **Interim Suspension or Suspension.** The bidder or contractor or subcontractor, respectively, certifies that it is not currently under a suspension as defined in Subpart I of Title 44 Subtitle A Chapter III Part 6 of the Illinois Administrative Code. Furthermore, if suspended prior to completion of this work, the contract or contracts executed for the completion of this work may be cancelled.

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SIGNATURES

County Kane
Local Public Agency City of St. Charles
Section Number 16-00108-00-RS
Route Various Locations

(If an individual)

Signature of Bidder _____

Business Address _____

(If a partnership)

Firm Name _____

Signed By _____

Business Address _____

Inset Names and Addressed of All Partners



(If a corporation)

Corporate Name _____

Signed By _____

President

Business Address _____

Inset Names of Officers



President _____

Secretary _____

Treasurer _____

Attest: _____
Secretary



Route Various Locations
County Kane
Local Agency City of St. Charles
Section 16-00108-00-RS

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PAPER BID BOND

WE _____ as PRINCIPAL,
and _____ as SURETY,
are held jointly, severally and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids whichever is the lesser sum. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the LA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this _____ day of _____

Principal

By: _____ (Company Name)
By: _____ (Company Name)
(Signature and Title) (Signature and Title)

(If PRINCIPLE is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed.)

Surety

By: _____ (Name of Surety)
(Signature of Attorney-in-Fact)

STATE OF ILLINOIS,
COUNTY OF _____

I, _____, a Notary Public in and for said county, do hereby certify that _____

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this _____ day of _____

My commission expires _____ (Notary Public)

ELECTRONIC BID BOND

[] Electronic bid bond is allowed (box must be checked by LA if electronic bid bond is allowed)

The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form. By providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

Electronic Bid Bond ID Code (grid)

Electronic Bid Bond ID Code

(Company/Bidder Name)

(Signature and Title)

Date



Return with Bid

Route	<u>Various Locations</u>
County	<u>Kane</u>
Local Agency	<u>City of St. Charles</u>
Section	<u>16-00108-00-RS</u>

All contractors are required to complete the following certification:

- For this contract proposal or for all groups in this deliver and install proposal.
- For the following deliver and install groups in this material proposal:

Illinois Department of Transportation policy, adopted in accordance with the provisions of the Illinois Highway Code, requires this contract to be awarded to the lowest responsive and responsible bidder. The award decision is subject to approval by the Department. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidders' subcontractors to disclose participation in apprenticeship or training programs that are (1) approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training, and (2) applicable to the work of the above indicated proposals or groups. Therefore, all bidders are required to complete the following certification:

- I. Except as provided in paragraph IV below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.
- II. The undersigned bidder further certifies for work to 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 or training program; or (B) will, prior to commencement of performance of work pursuant to this contract, establish participation in an approved apprenticeship or training program applicable to the work of the subcontract.
- III. The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each 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 employees. Types of work or craft 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 for which there is no applicable apprenticeship or training program available.

IV. Except for any work identified above, any bidder or subcontractor that shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check the following box, and identify the owner/operator workforce and positions of ownership.

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. 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 is accounted for and listed. 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. In order to fulfill the participation requirement, it shall not be necessary that any 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 or deliver and install proposal.

Bidder: _____

By: _____

(Signature)

Address: _____

Title: _____



Illinois Department of Transportation

Affidavit of Illinois Business Office

County Kane
 Local Public Agency City of St. Charles
 Section Number 16-00108-00-RS
 Route Various Locations

State of _____)
) ss.
 County of _____)

I, _____ of _____, _____,
 (Name of Affiant) (City of Affiant) (State of Affiant)

being first duly sworn upon oath, states as follows:

1. That I am the _____ of _____
 officer or position bidder .
2. That I have personal knowledge of the facts herein stated.
3. That, if selected under this proposal, _____, will maintain a
 (bidder)
 business office in the State of Illinois which will be located in _____ County, Illinois.
4. That this business office will serve as the primary place of employment for any persons employed in the construction contemplated by this proposal.
5. That this Affidavit is given as a requirement of state law as provided in Section 30-22(8) of the Illinois Procurement Code.

 (Signature)

 (Print Name of Affiant)

This instrument was acknowledged before me on _____ day of _____, _____.

(SEAL)

 (Signature of Notary Public)



**Illinois Department
of Transportation**

Bureau of Construction
2300 South Dirksen Parkway/Room 322
Springfield, Illinois 62764

**Affidavit of Availability
For the Letting of 16-00108-00-RS**

(Letting date)

Instructions: Complete this form by either typing or using black ink. "Authorization to Bid" will not be issued unless both sides of this form are completed in detail. Use additional forms as needed to list all work.

Part I. Work Under Contract

List below all work you have under contract as either a prime contractor or a subcontractor. It is required to include all pending low bids not yet awarded or rejected. In a joint venture, list only that portion of the work which is the responsibility of your company. The uncompleted dollar value is to be based upon the most recent engineer's or owners estimate, and must include work subcontracted to others. If no work is contracted, show **NONE**.

	1	2	3	4	Awards Pending	
Contract Number						
Contract With						
Estimated Completion Date						
Total Contract Price						Accumulated Totals
Uncompleted Dollar Value if Firm is the Prime Contractor						
Uncompleted Dollar Value if Firm is the Subcontractor						
Total Value of All Work						

Part II. Awards Pending and Uncompleted Work to be done with your own forces.

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show **NONE**.

						Accumulated Totals
Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases & Surfaces						
Highway,R.R. and Waterway Structures						
Drainage						
Electrical						
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting						
Signing						
Cold Milling, Planning & Rotomilling						
Demolition						
Pavement Markings (Paint)						
Other Construction (List)						
Totals						

Disclosure of this information is **REQUIRED** to accomplish the statutory purpose as outlined in the "Illinois Procurement Code". Failure to comply will result in non-issuance of an "Authorization To Bid." This form has been approved by the State Forms Management Center.

Part III. Work Subcontracted to Others

For each contract described in Part I, list all the work you have subcontracted to others.

	1	2	3	4	Awards Pending
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
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Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Total Uncompleted					

I, being duly sworn, do hereby declare this affidavit is a true and correct statement relating to ALL uncompleted contracts of the undersigned for Federal, State, County, City and private work, including ALL subcontract work, ALL pending low bids not yet awarded or rejected and ALL estimated completion dates

Subscribed and sworn to before me

this ____ day of _____, 20 ____.

Type or Print Name _____
Officer or Director Title

 Notary Public

Signed _____

My commission expires: _____

Company _____

(Notary Seal)

Address _____

ITEMS TO BE RETURNED WITH BID

The following documents shall be included with the submitted bid:

- BLR 12200 – Contract Proposal Cover
- BLR 12200 – Notice to Bidders
- BLR 12200 – Proposal
- BLR 12200a – Schedule of Prices
- BLR 12200 – Contractor Certifications
- BLR 12200 - Signatures
- BLR 12230 – Proposal Bid Bond
- BLR 12325 – Apprenticeship or Training Program Certification
- BLR 12326 - Affidavit of Illinois Business Office
- BC 57 – Affidavit of Availability
- IDOT Certification of Eligibility

The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction”, Adopted April 1, 2016 _____, the latest edition of the “Manual on Uniform Traffic Control Devices for Streets and Highways”, and the “Manual of Test Procedures of Materials” in effect on the date of invitation of bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of 16-00108-00-RS _____, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

STATUS OF UTILITIES TO BE ADJUSTED

Effective: January 30, 1987

Revised: July 1, 1994

Utility companies involved in this project have provided the following estimated dates:

<u>Name of Utility</u>	<u>Type</u>	<u>Location</u>	<u>Estimated Dates for Start and Completion of Relocation or Adjustments</u>
AT&T 1000 Commerce Drive Oak Brook, IL 60523 Attn: Janet Ahern 630-573-6414	Phone	Kautz Road. Sta. 71+76 30' Left	Rim Adjustment TBD
Comcast 688 Industrial Drive Elmhurst, IL 60126 Attn: Robert Stoll 630-600-6213	Cable TV	N/A	N/A
Nicor Gas 1844 Ferry Road Naperville, IL 60563 Attn: Bruce Koppang 630-388-3046	Natural Gas	N/A	N/A

The above represents the best information available to the Department and is included for the convenience of the bidder. The applicable portions of Articles 105.07 and 107.31 of the Standard Specifications shall apply.

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

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

No ERRATA this year.

SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec.

Page No.

No Supplemental Specifications this year.

CHECK SHEET
FOR
RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

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

<u>CHECK SHEET #</u>	<u>RECURRING SPECIAL PROVISIONS</u>	<u>PAGE NO.</u>
1	<input type="checkbox"/> Additional State Requirements for Federal-Aid Construction Contracts	1
2	<input type="checkbox"/> Subletting of Contracts (Federal-Aid Contracts)	4
3	<input type="checkbox"/> EEO	5
4	<input type="checkbox"/> Specific EEO Responsibilities Non Federal-Aid Contracts	15
5	<input type="checkbox"/> Required Provisions - State Contracts	20
6	<input type="checkbox"/> Asbestos Bearing Pad Removal	26
7	<input type="checkbox"/> Asbestos Waterproofing Membrane and Asbestos Hot-Mix Asphalt Surface Removal	27
8	<input type="checkbox"/> Temporary Stream Crossings and In-Stream Work Pads	28
9	<input type="checkbox"/> Construction Layout Stakes Except for Bridges	29
10	<input type="checkbox"/> Construction Layout Stakes	32
11	<input type="checkbox"/> Use of Geotextile Fabric for Railroad Crossing	35
12	<input type="checkbox"/> Subsealing of Concrete Pavements	37
13	<input type="checkbox"/> Hot-Mix Asphalt Surface Correction	41
14	<input type="checkbox"/> Pavement and Shoulder Resurfacing	43
15	<input type="checkbox"/> Patching with Hot-Mix Asphalt Overlay Removal	44
16	<input type="checkbox"/> Polymer Concrete	45
17	<input type="checkbox"/> PVC Pipeliner	47
18	<input type="checkbox"/> Bicycle Racks	48
19	<input type="checkbox"/> Temporary Portable Bridge Traffic Signals	50
20	<input type="checkbox"/> Work Zone Public Information Signs	52
21	<input type="checkbox"/> Nighttime Inspection of Roadway Lighting	53
22	<input type="checkbox"/> English Substitution of Metric Bolts	54
23	<input type="checkbox"/> Calcium Chloride Accelerator for Portland Cement Concrete	55
24	<input type="checkbox"/> Quality Control of Concrete Mixtures at the Plant	56
25	<input checked="" type="checkbox"/> Quality Control/Quality Assurance of Concrete Mixtures	64
26	<input type="checkbox"/> Digital Terrain Modeling for Earthwork Calculations	80
27	<input type="checkbox"/> Pavement Marking Removal	82
28	<input type="checkbox"/> Preventive Maintenance – Bituminous Surface Treatment	83
29	<input type="checkbox"/> Preventive Maintenance – Cape Seal	89
30	<input type="checkbox"/> Preventive Maintenance – Micro-Surfacing	104
31	<input type="checkbox"/> Preventive Maintenance – Slurry Seal	115
32	<input type="checkbox"/> Temporary Raised Pavement Markers	125
33	<input type="checkbox"/> Restoring Bridge Approach Pavements Using High-Density Foam	126

CHECK SHEET
FOR
LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

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

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

<u>CHECK SHEET #</u>		<u>PAGE NO.</u>
LRS 1	Reserved	130
LRS 2	<input type="checkbox"/> Furnished Excavation	131
LRS 3	<input checked="" type="checkbox"/> Work Zone Traffic Control Surveillance	132
LRS 4	<input checked="" type="checkbox"/> Flaggers in Work Zones	133
LRS 5	<input checked="" type="checkbox"/> Contract Claims	134
LRS 6	<input checked="" type="checkbox"/> Bidding Requirements and Conditions for Contract Proposals	135
LRS 7	<input type="checkbox"/> Bidding Requirements and Conditions for Material Proposals	141
LRS 8	Reserved	147
LRS 9	<input type="checkbox"/> Bituminous Surface Treatments	148
LRS 10	Reserved	149
LRS 11	<input checked="" type="checkbox"/> Employment Practices	150
LRS 12	<input checked="" type="checkbox"/> Wages of Employees on Public Works	152
LRS 13	<input checked="" type="checkbox"/> Selection of Labor	154
LRS 14	<input type="checkbox"/> Paving Brick and Concrete Paver Pavements and Sidewalks	155
LRS 15	<input checked="" type="checkbox"/> Partial Payments	158
LRS 16	<input type="checkbox"/> Protests on Local Lettings	159
LRS 17	<input checked="" type="checkbox"/> Substance Abuse Prevention Program	160
LRS 18	<input type="checkbox"/> Multigrade Cold Mix Asphalt	161

TRAFFIC CONTROL PLAN

Effective: September 30, 1985

Revised: January 1, 2007

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

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

The Contractor shall contact the City of St. Charles at least 72 hours in advance of beginning work.

STANDARDS:

701501-06

701801-06

701901-05

BLR 17-4

BLR 18-5

DETAILS:

TC-10

TC-13

SPECIAL PROVISIONS:

Maintenance of Roadways

Work Zone Traffic Control

Flaggers in Work Zones

Traffic Control and Protection

APPLICATION – RIGHT OF ENTRY

(Please allow 30-45 days for processing)

1. Name of Licensee City of St. Charles, Illinois
(Exact Name of the Owner of the Utility)

State of Incorporation IL; if not incorporated, please list entity's legal status

2. Address, email, phone and Fax number of Licensee
2 East Main Street, St. Charles, IL 60174

Email kryoung@stcharlesil.gov Phone 630-377-4408 Fax 630-513-7442

3. Name, address and phone number of individual to whom agreement is to be mailed
if different than Item 2.

4. Contact information for individual to contact in the event of questions.

Karen R. Young

Email kryoung@stcharlesil.gov Phone 630-377-4408 Fax 630-513-7442

5. Project site location:

St. Charles, Kane & DuPage Counties, Illinois
(City, County and State)

6. Railroad site location information:

At intersection of Kautz Road
(Railroad Mile Post, Subdivision, or any other pertinent location detail.)

7. Time period for your project use of Railroad Company's property:

Start Date: TBD Stop Date: TBD

8. Will there be any activity or equipment within 25 feet of a Railroad track in connection with this property?

() No (X) Yes (If Yes, a Flagman will be required on site at your cost.)

9. Will there be any excavation involved?

(X) No () Yes (If Yes, include shoring plans within Railroad standards.)

10. Purpose of your request:
(This must be detailed & complete; attach engineering plans, shoring plans and any pertinent supporting details, including maps or prints.)

Asphalt pavement grind and overlay of
Kautz Road. Curb and sidewalk repairs.
New pavement markings.

- Additional Fees and charges may be applicable to your request. These changes cannot be determined until your project is approved.

UNION PACIFIC RAILROAD
1400 DOUGLAS STREET MS 1690
OMAHA NE 68179

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

SPECIAL PROVISION
FOR
RAILROAD PROTECTIVE LIABILITY INSURANCE FOR LOCAL LETTINGS

Effective: March 1, 2005
Revised: January 1, 2006

All references to Sections or Articles in this specification shall be construed to mean a specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

Railroad Protective Liability Insurance. The contractor will be required to carry Railroad Protective Liability and Property Damage Liability Insurance in accordance with Article 107.11 of the Standard Specifications. A separate policy is required for each railroad indicated on the attached form unless otherwise noted. The limits of liability for each policy are listed on the attached form. The minimum limits of liability shall be in accordance with Article 107.11 of the Standard Specifications.

Basis of Payment. The costs for providing insurance, as noted above, will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

APPROVAL OF INSURANCE: The ORIGINAL and one CERTIFIED copy of each required policy shall be submitted for approval to the following address:

TBD

The contractor will be advised when approval of the insurance has been received from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Resident Engineer evidence that the required railroad protective liability insurance has been approved by the railroad(s). The Contractor shall also provide the Resident Engineer with expiration date of each required policy.

RAILROAD PROTECTIVE LIABILITY INSURANCE FORM

<u>NAMED INSURED & ADDRESS</u>	<u>NUMBER & SPEED OF PASSENGER TRAINS</u>	<u>NUMBER & SPEED OF FREIGHT TRAINS</u>
------------------------------------	---	---

DOT/AAR Number: _____ RR Mile Post: _____
Liability Limits: Combined Single Limit \$ _____ Aggregate Limit \$ _____
For Freight/Passenger Information Contact: _____ Phone: _____
For Insurance Information Contact: _____ Phone: _____

DOT/AAR Number: _____ RR Mile Post: _____
Liability Limits: Combined Single Limit \$ _____ Aggregate Limit \$ _____
For Freight/Passenger Information Contact: _____ Phone: _____
For Insurance Information Contact: _____ Phone: _____

DOT/AAR Number: _____ RR Mile Post: _____
Liability Limits: Combined Single Limit \$ _____ Aggregate Limit \$ _____
For Freight/Passenger Information Contact: _____ Phone: _____
For Insurance Information Contact: _____ Phone: _____

DOT/AAR Number: _____ RR Mile Post: _____
Liability Limits: Combined Single Limit \$ _____ Aggregate Limit \$ _____
For Freight/Passenger Information Contact: _____ Phone: _____
For Insurance Information Contact: _____ Phone: _____

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

SPECIAL PROVISION
FOR
INSURANCE

Effective: February 1, 2007
Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

City of St. Charles, Illinois

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

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets
SPECIAL PROVISION
FOR
CONSTRUCTION AND MAINTENANCE SIGNS

Effective: January 1, 2004
Revised: June 1, 2007

All references to Sections or Articles in this specification shall be construed to mean a specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

701.14. Signs. Add the following paragraph to Article 701.14:

All warning signs shall have minimum dimensions of 1200 mm x 1200 mm (48" x 48") and have a black legend on a fluorescent orange reflectorized background, meeting, as a minimum, Type AP reflectivity requirements of Table 1091-2 in Article 1091.02.

**SPECIAL PROVISIONS FOR
CITY OF ST CHARLES
2016 MFT STREET REHABILITATION PROGRAM**

The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction” adopted April 1, 2016, and the Supplemental Specifications adopted April 1, 2016 (hereafter referred to as the Standard Specifications); the “Manual on Uniform Traffic Control Devices for Streets and Highways” in effect on the date of invitation for bids; and the “Supplemental Specifications and Recurring Special Provisions”; adopted April 1, 2016. In case of conflict with any parts of said specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

The proposed project is located at “various locations” in the City of St Charles, Illinois. See location map for specific locations and limits. Gross and net length of improvement is 16,111 feet (3.05 City miles).

DESCRIPTION OF PROJECT

The proposed project consists of the construction of hot-mix asphalt pavement removal and resurfacing, pavement patching, curb and gutter removal and replacement, driveway pavement removal replacement, sidewalk removal and replacement, adjustment of utility and drainage structures. Restoration and all other incidental and collateral work necessary to complete the project as described herein will be the responsibility of the contractor.

COMPLETION DATE(S) OF PROJECT

Construction is scheduled to begin upon the proper execution of the contact documents which includes the submission of insurance and bonds, or with in two weeks of notice to proceed.

• **All Project Locations**

- The substantial completion of all work, contract terms and safely open all roadways to traffic by 11:59 PM on **August 17, 2016**.
- Final completion for all other ancillary work, including minimal landscaping restoration, shall be completed and ready for final acceptance and payment on or before **September 9, 2015**. Failure to comply with the deadlines for the substantial completion and final completion shall result in the enforcement of liquidated damages in accordance with the Special Provisions, “Liquidated Damages”, and Section 108.05 and 108.09 of the Standard Specifications, along with all fees acquired for extended need for resident engineering services.

CONTRACT REQUIREMENTS

CONSTRUCTION SCHEDULE

At the preconstruction conference, the Contractor shall meet with the City and the Engineer and present, in writing, a detailed construction schedule. Said schedule shall contain such information as the Engineer deems necessary, including sequencing of streets and dates for the starting and completing construction operations, location of off-site disposal areas, access routes to be used and location of equipment and material storage sites. Once approved, the Contractor must adhere to the schedule so that field markings of all items of work may proceed in advance of actual construction.

The Contractor shall confirm with the Engineer the scheduled commencement of each construction activity **at least four days in advance** to allow for proper notification of residents and motorists. The principle activities requiring public notification are commencement of utility repairs, curb and driveway removal and replacement, surface milling, roadway reconstruction, application of prime coat and HMA paving.

MATERIAL STORAGE

The Contractor shall not deliver and store any material on the project site more than one week in advance before commencing with his work. Only non-paved portion of the street may be used for any material storage. Any required pavement repair and parkway restoration (sod), due to the damage because of materials storage, shall be borne by the Contractor and shall be included in cost of MOBILIZATION.

NOTIFICATION OF WORK

The Contractor shall notify the City of St Charles, City Engineer 48 hours prior to commencement of all items of work.

CONSTRUCTION OPERATIONS

In order to minimize the effect of construction noise during the improvement, the Contractor and his subcontractors shall comply with the following requirements. Any changes to the schedule will not be accepted unless approved by the City Engineer.

- All engines and engine driven equipment used for hauling or construction shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive unusual noises. Any machine or device or part thereof which is regulated by or becomes regulated by Federal or State of Illinois noise standards shall conform to those standards.
- Construction operations including the startup of heavy equipment shall not begin before 7:00 AM Monday through Saturday. Construction operations including site cleanup, shall be completed before 7:00 PM Monday through Friday and 5:00PM on Saturday. No work of any kind, shall be done on

Sundays or holidays observed in Illinois. These time restrictions shall not apply to maintenance or operation of safety and traffic control devices such as barricades, signs and/or lighting, or construction of an emergency nature. If the Contractor requires additional time to complete a portion of the work on any given day or if he foresees the need to work extended hours for a number of days to comply with the construction schedule, he must receive approval of the Engineer.

- The Contractor shall schedule and conduct his operations so that the closure time of an existing driveway along the route of improvements is kept to a minimum. All homeowners shall be given a minimum 24-hour notice to initial removal of their driveway apron. The Contractor shall make every effort to keep driveways open including temporary grading and placement of aggregate.
- Beginning on the date that the Contractor begins work on this project, he shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvements. This normal maintenance shall include all repair work deemed necessary by the Engineer. The Contractor as required by the Engineer will provide traffic control and protection for this work. The work involved in maintaining the existing pavement will not be paid for separately at the Contract Unit Prices for the various items of work involved, unless otherwise specified elsewhere in these Special Provisions.

SEQUENCE OF OPERATIONS

The Contractor shall coordinate his work in a manner that will cause as little inconvenience to traffic as possible. The Contractor shall work closely with City Officials, Fire and Police Departments in coordinating interruption to normal traffic and parking facilities, access to homes and businesses, and inconveniences to the public.

The proposed work sequence follows:

- a. Construction staking and identification of utility repair locations **(Mandatory by Contractor prior to commencement of contract work)**.
- b. Rehabilitation of the existing storm, water, and sanitary utilities will be performed by the Contractor.
- c. Remove and replace curb and sidewalk sections as shown on plan.
- d. Grind the remaining HMA surface and base as shown on drawings.
- e. Proof-roll the existing base as needed.
- f. Undercut and replace w/compacted granular material or placement of class "B or D" patching (if requested by Engineer).
- g. Prime coat **(Contractor should refer to contract for application requirements and restrictions)**.
- h. Place HMA binder course.
- i. Adjust all utility structures, locking frames and covers in the roadway with concrete. (refer to City standard Engineering detail).

- j. Remove and replace driveway aprons as directed by engineer.
- k. Restore parkway, assuring that the minimum amount of waterings is met.
- l. Obtain Public Work's acceptance of all utility work be performing a final Engineering inspection. Contractor to provide laborer to remove F/C's for inspections. All structures shall be cleaned as required prior to final Engineering inspection.
- m. Bituminous Material Prime Coat.
- n. Aggregate Prime.
- o. Pavement Fabric
- p. Place HMA surface course.
- q. Sweep street as required.
- r. Placement of pavement markings as indicated in the contract.
- s. Remove all remaining traffic control protection and public notification appurtenances.

APPROVAL OF SUBCONTRACTORS

The Contractor shall provide a list of the intended source of materials and the intended Subcontractor to be used for the project. The City of St Charles shall approve all subcontractors to be used on the project and reserves the right to reject the use of any subcontractor due to past performance or the apparent inability to perform the item of the work required of him.

PROGRESS SCHEDULE AND WEEKLY REPORTING

In addition to the progress schedule submitted and approved prior to construction (Article 108.02), the Contractor will be required to submit a weekly plan of what daily work operations he intends to perform for each upcoming week. This report will be a continuation of the Engineer's "Weekly Report of Resident" BC 239 which will be submitted to the Contractor promptly following each week of work. The Contractor's plan should show his operations including those of all subcontractors for the seven (7) upcoming days of the week. It may be handwritten in the field by the project superintendent and faxed in to the City's Public Works Engineering Department office, fax number (630) 584-6520.

DAILY PROJECT SCHEDULING

The Contractor shall telephone the Engineer every morning to inform the Engineer of daily and weekly progress and schedules.

PUNCH LIST ITEMS

Throughout the duration of the project the Engineer shall submit periodic punch list items to the Contractor. **The City Public Works Division will also do utility inspections of work performed on public utilities. These inspections performed by the Public Works Division must be performed prior to installation of pavement surface course.** These items must be complete within five (5) calendar days after the Engineer notifies the Contractor of these items. Liquidated damages will be assessed if these items are not

complete to the satisfaction of the Engineer within the five (5) calendar days. Punch list items and dates will be strictly enforced and documented with the Contractor via the “Weekly Report of Resident”-BC 239.

CONTRACTOR PAYOUTS – REQUIRED SUBMITTALS

Contractor payout requests can be submitted at any time, and do not have to go through a scheduled City Council Meeting to authorize payment; as long as the Contract amount is not exceeded. Change Orders, which would cause the Contract to go above Original Contract Amount, will go through scheduled Committee and Council Meetings for approval.

Submittals required for **any** Contractor payouts, which must be received prior to release of payout, are listed below:

1. Lien Waivers from General Contractor and any Subcontractors or Vendor receiving payments from subject payout.
2. Copies of Certified Payroll for period when work was completed.
3. Sworn Statement from General Contractor.

CLEAN CONSTRUCTION OR DEMOLITION DEBRIS (CCDD)

The Contractor is to be aware of and comply with CCDD requirements. The City of St. Charles will provide IEPA form LPC-662, which will be executed by the City and provided to the contractor at the pre-construction meeting. It is our understanding that CCDD sites are accepting the 662 forms for spoil created in residential areas. The majority of the soil spoil material in this contract will be generated in residential areas. The contractor shall make sure that the CCDD site being utilized will accept the material based on the LPC-662 form and the fact that they are in residential areas. If the CCDD site being selected by the Contractor will not accept it, the Contractor will be responsible for the requirements necessary for the completion and execution of the LPC-663 forms for the residential roadway areas at no additional cost to the City.

For industrial areas the LPC-663 will be provided to the contractor at the pre-construction meeting.

CONSTRUCTION LAYOUT

Construction layout shall be considered included in the cost of the contract.

**GENERAL SPECIFICATIONS FOR
CITY OF ST CHARLES
2016 MFT STREET REHABILITATION PROGRAM**

GENERAL NOTES:

PRE-CONSTRUCTION VIDEO TAPING

The Contractor shall prepare pre-construction video documentation of all features in the areas affected by construction, including areas adjacent to the right-of-way and construction easements. All video cameras, recorders, tapes, accessories and appurtenances shall be high quality CD or DVD format equipment. Pre-construction video documentation shall consist of a series of high-resolution color audio-video tapes showing all areas affected by construction. All pertinent exterior and interior features within the construction's zone of influence shall be shown in sufficient detail to document its pre-construction condition. Features to be shown shall include but not be limited to pavements, curbs, driveways, sidewalks, retaining walls, buildings, landscaping, trees, shrubbery, fences, light posts, signs, interior features and equipment, etc. Viewer orientation shall be maintained by audio commentary on the audio track of each, videotape to help explain what is being viewed.

The pre-construction video taping shall be completed after the initial walkthrough and two copies of the tape(s) submitted to the City of St Charles before commencing with any construction activities, including material delivery. This work shall be included in the cost of MOBILIZATION.

CLEANING

The Contractor and his subcontractors by the end of the working day shall remove from the premises rubbish, waste material and accumulations and shall keep the premises clean. **The Contractor shall keep the premises clean during construction to the satisfaction of the Engineer. This work shall be included in the cost of MOBILIZATION.**

UTILITY LOCATIONS

The Contractor must exercise extreme caution while working around existing utilities. The Contractor shall notify JULIE (1-800-892-0123), a minimum of 48 hours commencing construction for utility locations within the scope of the project. It is recommended that the Contractor conduct a joint utility meet. It is the responsibility of the Contractor to contact agencies who may or may not be part of the JULIE system to obtain the horizontal and vertical field locations of their facilities within the limits of the proposed improvements.

The City of St Charles does not guarantee the accuracy of completeness of this information. The Contractor shall make his own investigation to determine the existence, nature, and location of all utilities lines and appurtenances within the limits of the improvement. The Contractor shall locate all utilities far enough in advance to avoid all

conflicts in grade separation, between the proposed improvements. If the Contractor encounters a conflict between the proposed improvements and existing utilities that was not located in advance by the Contractor, then the Contractor shall, at no cost to the City of St Charles, relocate the proposed improvements and/or the utility to avoid conflict.

The Contractor will be required to cooperate with all utility companies involved in connection with the removal, temporary relocation, reconstruction, or abandonment by these companies of any and all services or facilities owned or operated by them within the limits of this improvement.

Before doing any work which will damage, disturb or leave unsupported or unprotected any utility lines or appurtenances encountered, the Contractor shall notify the prospective Owner thereof, who will make arrangements for relocating, adjusting or otherwise maintaining or abandoning service on lines that fall within the limits of the proposed construction without cost to the Contractor, including the removal of all cables, manhole covers and other appurtenances which the Owner desires to salvage. After such arrangements have been made, the Contractor will proceed with the work as directed by the Engineer. All utility lines and appurtenances, which are abandoned by the Owner, shall be removed and disposed of by the Contractor.

The Contractor shall be responsible for facilitating prompt and timely removal, relocation, reconstruction, or abandonment of their facilities by all utility companies involved, and the coordination of his work with these companies to the end that work on this improvement is not delayed because of necessary changes in the existing utilities, public or private.

No extra compensation will be allowed to the Contractor for any expenses incurred by complying with these requirements or because delay, inconvenience or interruption in his work resulting from the failure of any utility company to remove, relocate, reconstruct, or abandon their services.

MATERIAL CERTIFICATION

The manufacturer and/or supplier of all materials used on the job site shall certify in writing to the Engineer that inspections and tests have been made and the results thereof comply with the requirements of the Standard Specifications and/or the Special Provisions.

RESIDENT NOTIFICATION

The Contractor shall be responsible for delivery of notification letters (supplied by the City) to all residents affected by each Phase of construction (underground utility work; grinding; driveway removal; prime coat application; binder course placement; surface course placement) at least 24 hours, but not more than 72 hours, prior to commencement of work.

The Contractor shall be responsible for posting suitable advance notice on scheduled to be resurfaced streets at least 24 hours, but not more than 48 hours, prior to commencement of work. "No Parking" signs displaying construction times shall be placed on roadways 48 hours prior to placement of HMA materials. All such notices shall be removed by the Contractor immediately upon the completion of work in each block. This work shall be included in the cost of MOBILIZATION.

PROTECTION OF TREES AND SHRUBS

All trees shall be protected and cared for during the construction in accordance with the applicable Articles of Section 201 of the Standard Specifications and this Special Provision, with the following revisions. The Contractor shall prune all tree roots along the side of the proposed improvement, prior to digging, in the presence of the qualified Arborist (hired by the Contractor) and Engineer. All costs for root pruning and costs for the Arborists shall be paid for by the Contractor and shall be included in the cost of MOBILIZATION. No additional compensation will be allowed for root pruning or Arborist's fees.

Every effort should be made by the Contractor when working near trees and shrubs to preserve same from harm. No trees or shrubs shall be removed unless authorized in the field by the Engineer. The Contractor shall provide the Engineer notification ten (10) working days prior to the removal of any tree or shrub. The Contractor shall be responsible for damage to or loss of any tree or shrub not specifically designated to be removed.

Damage to trees limbs shall be held to a minimum. Shrubs and trees limbs shall be tied back wherever necessary to prevent their loss or damage. Wherever damage by construction equipment to limbs and branches are unavoidable, they should be pruned before starting work in accordance with Articles 201.06 of the Standard Specifications.

Small trees (less than 4 inches in diameter) and shrubs not indicated for removal which are removed or severely damaged during construction shall be replaced in kind and size by the Contractor at no additional cost to the City, Engineer, or Resident. All planting shall be done in accordance with Section 1081 of the Standard Specifications.

Damages at the rate of two hundred dollars (\$200.00) per inch of trunk diameter shall be charges against the Contractor for unauthorized removal or destruction of any tree four (4) inches in diameter or larger. The protection and care of trees and shrubs as herein specified will be included in the cost of MOBILIZATION.

PROTECTION OF EXISTING DRAINAGE FACILITIES DURING CONSTRUCTION

Unless otherwise noted in the Contract Documents, the existing drainage facilities shall remain in use during the period of construction. Prior to commencing work, the Contractor, at his own expense shall determine the exact locations of existing structures that are within the proposed construction limits.

Unless reconstruction or adjustment of an existing manhole, catch basin, inlet or adjustment to the frame and grate is called for in the Contract Documents or ordered by the Engineer, the proposed work shall meet the existing elevation of these structures.

The Contractor shall take the necessary precautions when working near or above existing sewers to protect these sewers from any damage resulting from his operations. All work and material necessary to repair any existing sewers damaged due to non-compliance with this provision shall be provided, as directed by the Engineer, in accordance with Section 550 of the Standard Specifications, at the Contractor's expense with no extra compensation being allowed.

It shall be the Contractor's responsibility to direct the work and protect the facilities from damage during all construction activities.

LOCATING STORM SEWER, SANITARY SEWER, WATERMAIN OR OTHER COMPONENTS OF CITY UTILITIES

To prevent damage and facilitate work by others, the City will promptly respond to calls requesting the location of City owned storm sewer, sanitary sewer, watermain, or other components of City utilities. Public Works forces will locate City owned underground utilities or any other components, one time for each individual system, per project or contract, as requested by the general contractor of the construction project, before or after transfer of maintenance responsibilities. Each request may involve multiple locations where separated utility systems are involved. The contractor will be required to reimburse the City of St Charles for time and material costs associated with additional locate requests.

USE OF FIRE HYDRANTS

The Contractor shall contact the City of St Charles Water Division to obtain a water meter and for permission to use water from existing fire hydrants. The Water Division reserves the right to restrict which fire hydrant(s) may be used. The Contractor shall use special care in opening and closing of fire hydrants following Water Division guidelines. Repairs caused by failure to comply with proper operating guidelines will result in the sole responsibility of the Contractor.

CONSTRUCTION STAKES, LINES AND GRADES

Construction staking and benchmark establishment will be the responsibility of the Contractor, and shall be included in the cost of MOBILIZATION. The Contractor shall assume full responsibility for dimensions and elevations measured for such stakes.

The Contractor shall exercise care in the preservation of the stakes and marks, and shall have them reset at his/her expense when they are damaged, lost, displaced, removed or otherwise obliterated.

SAWING PAVEMENT, DRIVEWAY PAVEMENT, SIDEWALK, AND CURB

This work shall be performed at locations stated in the Contract Documents or as directed by the Engineer.

The Contractor shall cut the joint between the portion of pavement, driveway, sidewalk and/or curb to be removed and that to be left in place with a sawing machine to prevent spalling. This work shall be done in a manner that a straight and perpendicular joint will be secure. All saw cutting should be the full depth of the pavement, driveway, and sidewalk or curb to be removed.

It is the Contractor's responsibility to determine the thickness of the existing pavement and whether or not it contains reinforcement. This work shall be included in the cost of the item being removed. No additional compensation will be allowed for sawing reinforcement.

CONCRETE BREAKERS

When removing pavement, curb and gutter, shoulder, and/or other structures, the use of any type of concrete breakers, which might damage underground public or private utilities, will not be permitted. Under no circumstances will the use of a frost ball be permitted. The Contractor is prohibited from breaking up concrete by dropping it on the pavement or in any other manner, which in the opinion of the Engineer may damage existing or proposed pavements or other roadway appurtenances.

LIMITS OF REMOVAL

All pay items for removal and replacement must be field measured and marked by the Engineer prior to construction. No payment will be made for any items of work, which have been removed and/or replaced without having been field measured and marked by the Engineer. No additional payment will be made for removal and/or replacement beyond field markings unless specifically authorized by the Engineer.

AGGREGATE FOR TEMPORARY ACCESS

This work shall consist of construction and maintenance of an aggregate surface course for temporary access to abutting properties during construction operation, as specified in Article 107.09 of Standard Specifications and as directed by the Engineer.

Temporary access shall be constructed of aggregate as to the dimensions specified by the Engineer. After these temporary access locations have served their purpose, the aggregate shall be removed and, at the direction and approval of the Engineer, utilized for other temporary access locations. When temporary access is no longer required, the aggregate placed in its construction and maintenance shall be removed and utilized in the permanent construction, or otherwise disposed of as specified in Article 202.03 of the Standard Specifications.

This work shall include furnishings, transporting, placing, maintaining, and removing and reusing or disposing of aggregate. This work will not be paid for separately but shall be included in the cost of MOBILIZATION.

BACKFILLING OF STRUCTURES

This work shall be in accordance with the applicable portions of Article 550.07 of the Standard Specifications, herein specified and according to the plan details. Structures under pavement, or within 2' of pavement, sidewalk, driveways, etc. shall be backfilled with course aggregate CA-7 (crushed limestone). Structures in parkway shall be backfilled according to the details. This work shall not be paid for separately but shall be included in the contract unit price for the work performed on the associated structures.

TRENCH BACKFILL REQUIREMENTS

All utility and service trenches within (2) feet of paved surfaces, or at a distance specified by the Engineer, shall be backfilled with CA-7 (crushed limestone) and according to the plan details. All backfill material shall be properly compacted unless otherwise directed by the appropriate Engineering Division. This work shall not be paid for separately but shall be included in the contract unit price for the work performed.

FINAL ADJUSTMENT OF FRAME & COVER

The final adjustment of the frame and cover shall adhere to the following guidelines based on the location of the structure. For structures located within a paved area, mortar with solid steel shims shall be used between adjusting rings and the top of the structure. Structures located within an unpaved area shall use a preformed HMA joint sealant to be placed between each adjusting ring and the top of the structure. The preformed HMA joint sealant shall be E-Z Stick or an Engineer approved equivalent. The minimum dimension of the preformed material shall be one-half square inch. Prior to the placement of the final layer of the roadway, frames and adjusting rings located within paved areas shall be set in an IDOT approved concrete SI mixture. Contractors shall familiarize themselves with the City of St. Charles Standard Engineering Details for installation requirements.

RESTORATION

This work shall consist of the furnishing and placing of 4 inches of Topsoil, Sod and Supplemental Watering in the areas indicated on the drawings or as directed by the Engineer. The sod shall meet the requirements of Article 1081.03 for Salt Tolerant Sod. All work shall be in accordance with the applicable portions of Sections 211 and 252 of the Standard Specifications, except as herein modified.

The preparation of the ground surface shall include the removal of the existing sod and excavation, if necessary, of the existing ground to depth, which will permit placement of the required 4 inches of topsoil. Existing landscape areas outside the limits of construction that are damaged by the Contractor or its representatives for temporary storage of materials shall be replaced at the Contractor's expense.

Restoration as described shall be included in the cost of adjacent work, which shall include, but not limited to, Curb and Gutter, Sidewalk, Bike Path, Structure Frame Adjustments and Utility Repair pay items.

HOT-MIX ASPHALT SURFACE COURSE, MIX “D” N50

This work shall include all labor, materials and equipment required to place HMA surface course as stated in the Contract Documents, or as directed by the Engineer, and in accordance with the requirements of Section 406 of the Standard Specifications, except as herein modified, and with the exception that Reclaimed Asphalt Pavement must follow Use of “RAP & RAS (D-1) Special Provisions.”

The Contractor shall coordinate the work so that the period of time between the placement of the HMA binder course and the placement of the HMA surface is kept to a minimum. This period shall not exceed 14 calendar days. The Engineer shall determine if an extension of time will be allowed due to weather or other unforeseen circumstances. The Engineer shall assess liquidated damages of \$2000 per day for each day after the 14 calendar days have passed without approval for a time extension. Punch list items shall be addressed before the surface course is placed.

This work shall be paid for at the Contract Unit Price per ton for HOT-MIX ASPHALT SURFACE COURSE, MIX “D” N50, which price shall include all labor, equipment, materials and incidentals necessary to complete the work described above.

PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

The work shall be done in accordance with applicable portions of Sections 351, 424, and 440 of the Standard Specifications, Standard 424001, except as herein modified.

This work shall consist of the construction of new Portland cement concrete sidewalks at locations as shown on the plans and/or as directed by the Engineer. The work shall include the removal of soil to provide for the placement of four (4) inches of aggregate base course (CA-6 or approved equal) and placement of new P.C.C. sidewalk.

Any excavation required to construct the proposed sidewalk and aggregate base course to the proper elevation, and the excavation required for forming purposes, shall be considered incidental to the pay item. Excavated material shall be disposed of at a suitable off-site location. Any damage to existing sidewalks, curbs or driveways remaining in place due to forming methods or removal operations shall be replaced to the satisfaction of the Engineer at the Contractor’s own expense. If the sub base material is soft or unsuitable, the Contractor shall remove unsuitable material and provide compacted granular material (CA-6 or approved equal) as required to provide a stable sub base.

All new construction or reconstruction projects are required to utilize truncated domes to meet the current ADA standards of which may include, but not limited to, all pedestrian curb ramps, medians, pedestrian refuge islands, at-grade railroad crossings, alley and

commercial drive crossings (either at-grade or curb ramps) with traffic control devices, or other locations that pedestrians are required to cross a hazardous vehicular way. Refer to attached detail for truncated dome specifications and ADA standards. Use of inserted truncated dome plates, conforming to Federal Standard Color 30166 and consisting of vitrified polymer composite detectable tactile warning system in conformance with ADAAG shall be used at all appropriate locations, and shall be included in the cost of PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH. No surface mounted plates shall be allowed. The Contractor shall be responsible for proper ADA sidewalk ramps. Any non-conforming work will be removed and replaced by the Contractor with no additional compensation.

Expansion joints shall be placed where the sidewalk abuts existing sidewalk, curbs and between concrete driveway pavement. The minimum slab thickness for sidewalks shall be 6 inches through driveway limits and 5 inches for all other public walkways unless otherwise noted by the Engineer.

All exposed concrete shall receive a protective surface treatment consisting of two (2) coats of boiled linseed oil and petroleum spirits mixture, formulated and applied according to Article 420.18 of the Standard Specifications. If an application of sand is required by the Engineer for blotter material, it will be considered incidental to this work. The application of both coats shall be witnessed by the Engineer. The Engineer shall be notified 24 hours in advance prior to application. Protective surface treatment shall not be paid for separately but shall be included in the cost of the concrete item provided.

The excavation, aggregate base course replacement or fill, earthwork, bedding, Curing/Sealing Compound necessary to complete the sidewalk is considered incidental to the pay item. Where grading (filling, cutting or shaping), is required adjacent to the sidewalk, it shall be considered included in the cost of the pay item. Any excavation or disposal of material necessary for the installation of the curb and gutter in order to meet the new grade shall be considered incidental to this item.

This work shall be paid for at the contract unit price per square foot for PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, which price shall include all labor, equipment, materials, protective coat, backfill and incidentals necessary to complete the work as described above. **Restoration shall be included in the cost of this bid item.**

HOT-MIX ASPHALT SURFACE REMOVAL

This work shall consist of removing and disposing of the existing HMA surface as stated in the Contract Documents or directed by the Engineer. This work shall be done in accordance with applicable portions of Section 440 of the Standard Specifications, except as herein modified.

The Contractor shall coordinate the work so that the period of time between the milling of the existing HMA surface and the placement of the HMA binder or leveling binder is kept

to a minimum. This period shall not exceed 3 calendar days. The Engineer shall determine if an extension of time will be allowed due to weather or other unforeseen circumstances. The Engineer shall assess liquidated damages of \$2000 per day for each day after the 3 calendar days has passed without approval for a time extension.

Any existing pavement damage outside the removal limits shall be replaced to the satisfaction of the Engineer at the Contractor's expense.

The Contractor shall be responsible for protecting any curb and gutter from damage during the HMA removal operations. If the Contractor damages the curb and gutter, repairs shall be made to the satisfaction of the Engineer at the Contractor's expense. The Engineer, prior to the Contractor commencing the repair work, must approve the method of repair. Repairs may include complete removal and replacement if the Engineer considers the damage severe.

A butt joint and a ten (10) foot transition between pavement being replaced and pavement remaining in place shall be constructed in accordance with Article 406.08 of the Standard Specifications, except as herein modified. The Contractor shall saw to a depth two (2) inches below the existing grade or as directed by the Engineer, the joint between pavement removal and pavement being replaced, with a concrete saw. The work shall be done in such a manner that a straight joint will be secured. Butt joints shall be included in the cost of the associated pavement removal item.

This work shall be paid for at the contract unit price per square yard for HOT-MIX ASPHALT SURFACE REMOVAL, of the uniform depth or variable depth specified, which price shall include all labor, equipment, materials, butt joints and incidentals necessary to complete the work described above. The square yards of HMA Surface Removal will only be paid for once, regardless of the number of passes needed to remove the HMA surface.

CLASS D PATCHES, TYPE II, 6 INCH

This work shall consist of construction of Class D Patches of the type and depth specified in the Contract Documents and/or directed by the Engineer. This work shall be performed as per Section 442 of the Standard Specifications, except as herein modified.

Saw cutting shall not be paid for separately, but shall be included in the contract unit price for CLASS D PATCHES, TYPE II, 6 INCH.

On roadways to be resurfaced, the thickness of the proposed patches is required to be six inches (6") after milling. The existing pavement shall be removed to such depth that will permit construction of a six-inch (6") deep patch below the proposed milled surface. No additional payment will be allowed for additional excavation or other work necessary for compliance with this requirement.

This work shall be paid for at the contract unit price per square yard of CLASS D PATCHES, TYPE II, 6 INCH, which this price shall include all labor, equipment, materials, and incidentals necessary to complete the work as described above

BIKE PATH REMOVAL

This work shall include removal and disposal of excavated material for Hot-Mix Asphalt (HMA) bike path / mixed use path located throughout the project limits as noted on the plans or as directed by the Engineer.

This work shall be paid for at the contract unit price per square yard for BIKE PATH REMOVAL, which price shall include all labor, material, equipment, and incidentals necessary to complete the work as described above.

HOT-MIX ASPHALT BIKE PATH

This work shall be in accordance with applicable portions of Sections 351, 406 and 440 of the Standard Specifications, except as herein modified and shall consist of the placement of Hot-Mix Asphalt (HMA) bike paths located throughout the project limits.

This work shall include placement of six (6) inches of aggregate base course under three (3) inches of HMA surface course. If the existing base is soft or unsuitable, the Contractor shall remove the existing base and provide compacted granular material (CA-6 or approved equal) as required to provide a stable sub base.

Any portion of the existing adjoining bike path damaged by the Contractor will not be paid for separately, but shall be replaced at the Contractor's own expense.

This work shall be paid for at the contract unit price per square yard for HOT-MIX ASPHALT BIKE PATH, which price shall include all labor, material, equipment, backfill and incidentals necessary to complete the work as described above. Restoration shall be included in the cost of this bid item.

CURB REMOVAL AND REPLACEMENT

The work shall be done in accordance with applicable portions of Sections 351, 440 and 606 of the Standard Specifications, except as herein modified.

This work shall consist of the removal and replacement of the existing curb and gutter, excavation of material four (4) inches below the new curb, and placement of four (4) inches of aggregate base course (CA-6 or approved equal) at locations as directed by the Engineer.

The type of replacement concrete curb and gutter shall match the existing curb and gutter or be of the type specified by the Engineer. The thickness of the proposed gutter flag shall match the thickness of the adjacent pavement but in no case be less than nine (9) inches. The proposed curb and gutter shall be constructed to a grade established by the Engineer at

the time of construction. The Engineer must approve forming methods for pouring the curb and gutter. The use of the existing edge of pavement for HMA roadways shall not be considered a proper forming method for placement of P.C.C. material.

Any excavation required to construct the proposed curb and gutter to the proper elevation including excavation to subgrade for placement of four (4) inches of aggregate base course (CA-6 or approved equal), shall be include in the contract unit price for CURB REMOVAL AND REPLACEMENT. Any excavated material by the Contractor for forming purposes shall be included in this pay item. Any excavated material shall be properly disposed of at a suitable off-site location.

Any pavement area adjacent to the curb and gutter not designed to be removed, which is removed, damaged or otherwise disturbed during construction operations, shall be restored to the satisfaction of the Engineer. The restoration will not be paid for separately but shall be included in the associated pay item.

In curb and gutter sections to remain and where cracks exist, the contractor shall clean, rout and seal cracks with an approved polysulfide sealer (Standard Specifications, Article 606)

If the existing base is soft or unsuitable, the Contractor shall remove the existing base and provide compacted granular material (CA-6 or approved equal) as required to provide a stable sub base.

The proposed curb and gutter shall be depressed across all handicapped ramps, driveways and/or directed by the Engineer. **Placement of depressed curbing for private walkways or carriage walks shall not be permitted.**

Expansion joints shall be installed at 60' intervals and at all points of curvature where the radius is less than 100'. Contraction joints shall be formed at 15' intervals. Contraction joints shall be formed by saw cutting to a depth of at least two inches (2"). A keyed construction joint shall be placed at all locations of adjacent sidewalk (refer to City detail for specifications).

Two (2) drilled, epoxy coated, and grouted reinforcing bars or expansion tie anchors shall be used to tie the proposed curb and gutter to the existing curb and gutter. Furnishing and installing the expansion tie anchors or drilled and grouted reinforcing bars shall not be paid for separately, but shall be include in the contract unit price for CURB REMOVAL AND REPLACEMENT.

The Contractor must schedule the removal and replacement of the curb and gutter such that only one side of a given street will be under construction at any one time unless approved by the Engineer. All homeowners shall be given a minimum of 24 hours' notice prior to excavation of their driveway. In no case shall an open excavation caused by removal of

existing curbing, whether formed or not formed remain open for more than **3 calendar days** unless approved by the Engineer. The Engineer shall assess liquidated damages of \$1000 per day for each day after the 3 calendar days has passed without approval for a time extension.

Disturbed pavement, driveway and parkway areas shall be restored immediately following replacement operations, in all cases within **3 calendar days** from the date curb and gutter is cast. The Engineer shall assess liquidated damages of \$1000 per day for each day after the 3 calendar days has passed without approval for a time extension.

All exposed concrete shall receive a protective surface treatment consisting of two (2) coats of boiled linseed oil and petroleum spirits mixture, formulated and applied according to Article 420.18 of the Standard Specifications. If an application of sand is required by the Engineer for blotter material, it will be considered incidental to this work. The application of both coats shall be witnessed by the Engineer. The Engineer shall be notified 24 hours in advance prior to application. Protective surface treatment shall not be paid for separately but shall be included in the cost of the concrete item provided.

Where grading (filling, cutting or shaping), is required adjacent to the curb and gutter, it shall be considered included in the cost of the pay item. Any excavation or disposal of material necessary for the installation of the curb and gutter in order to meet the new grade shall be considered incidental to this item.

Where voids occur between the existing pavement and proposed curb any loose material shall be removed to the satisfaction of the engineer and it shall be backfilled with concrete to above the elevation of the proposed milled surface course and is considered included in the cost of the pay item. Soil backfill behind the proposed curb is considered included in the cost of the pay item.

The excavation, aggregate base course replacement or fill, earthwork, grading, bedding, Curing/Sealing Compound necessary to complete the curb and gutter is considered included in the cost of the pay item.

This work shall be paid for at the contract unit price per foot for CURB REMOVAL AND REPLACEMENT, which price shall include all labor, equipment, materials, protective coat and incidentals necessary to complete the work as described above. Restoration shall be included in the cost of this bid item.

PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL AND REPLACEMENT

This work shall be in accordance with applicable portions of Sections 351, 423, and 440 of the Standard Specifications, except as herein modified.

This work shall include removal and disposal of excavated material for Portland Cement Concrete (P.C.C.) driveways located throughout the project limits. Excavated materials shall include but not limited to Portland cement concrete pavement, HMA concrete pavement, aggregate subbase and soil. Excavation to subgrade shall not be paid for separately, but shall be included in the cost of **PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL AND REPLACEMENT**.

This work shall include placement of four (4) inches of aggregate base course under six (6) inches of Portland Cement Concrete. If the existing base is soft or unsuitable, the Contractor shall remove the existing base and provide compacted granular material (CA-6 or approved equal) as required to provide a stable sub base.

All homeowners shall be given a minimum 48 hours' notice prior to excavation of their driveway. This item includes all driveways removed due to conflict with work items included in the Contract Documents or as directed by the Engineer. Any driveway damaged by the Contractor will not be paid separately, but shall be replaced at the Contractor's own expense.

All exposed concrete shall receive a protective surface treatment consisting of two (2) coats of boiled linseed oil and petroleum spirits mixture, formulated and applied according to Article 420.18 of the Standard Specifications. If an application of sand is required by the Engineer for blotter material, it will be considered incidental to this work. The application of both coats shall be witnessed by the Engineer. The Engineer shall be notified 24 hours in advance prior to application. Protective surface treatment shall not be paid for separately but shall be included in the cost of the concrete item provided.

This work shall be paid for at the contract unit price per square yard for **PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL AND REPLACEMENT**, which price shall include all labor, materials, equipment, protective coat, backfill and incidentals necessary to complete the work as described above. Restoration shall be included in the cost of this bid item.

HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT

This work shall be in accordance with applicable portions of Sections 351, 406 and 440 of the Standard Specifications, except as herein modified.

This work shall include removal and disposal of excavated material for Hot-Mix Asphalt (HMA) driveways located throughout the project limits. Excavated materials shall include but not limited to Portland cement concrete pavement, HMA concrete pavement, aggregate subbase and soil. Excavation to subgrade shall not be paid for separately, but shall be included in the cost of **HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT**.

This work shall include placement of six (6) inches of aggregate base course under three (3) inches of HMA surface course. If the existing base is soft or unsuitable, the Contractor shall remove the existing base and provide compacted granular material (CA-6 or approved equal) as required to provide a stable sub base.

All homeowners shall be given a minimum 48 hours notice prior to excavation of their driveway. This item includes all driveways removed due to conflict with work items included in the Contract Documents or as directed by the Engineer. Any driveway damaged by the Contractor will not be paid separately, but shall be replaced at the Contractor's own expense.

This work shall be paid for at the contract unit price per square yard for HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT, which price shall include all labor, material, equipment, backfill and incidentals necessary to complete the work as described above. **Restoration shall be included in the cost of this bid item.**

SIDEWALK REPAIR (SPECIAL)

The work shall be done in accordance with applicable portions of Sections 351, 424, and 440 of the Standard Specifications, Standard 424001, except as herein modified.

This work shall consist of removal of the existing concrete sidewalk and replacement as stated in the Contract Documents and/or as directed by the Engineer. The work shall include the removal of existing sidewalk, removal of 4" of existing base course, placement of four (4) inches of aggregate base course (CA-6 or approved equal) and placement of new P.C.C. sidewalk.

Any excavation required for the purposes of placing aggregate base course to the proper elevation, all form work, and placement of P.C.C. material for the proposed sidewalk shall be included in the cost of this pay item. Any excavated material shall be disposed of at a suitable off-site location. Any damage to the existing sidewalks, curbs or driveways remaining in place due to forming methods or removal operations shall be replaced to the satisfaction of the Engineer at the Contractor's own expense. If the existing base is soft or unsuitable, the Contractor shall remove the existing base and provide compacted granular material (CA-6 or approved equal) as required to provide a stable sub base.

All new construction or reconstruction projects are required to utilize truncated domes to meet the current ADA standards of which may include, but not limited to, all pedestrian curb ramps, medians, pedestrian refuge islands, at-grade railroad crossings, alley and commercial drive crossings (either at-grade or curb ramps) with traffic control devices, or other locations that pedestrians are required to cross a hazardous vehicular way. Refer to attached detail for truncated dome specifications and ADA standards. Use of inserted truncated dome plates, conforming to Federal Standard Color 30166 and consisting of vitrified polymer composite detectable tactile warning system in conformance with ADAAG shall be used at all appropriate locations, and shall be included in the cost of

SIDEWALK REPAIR (SPECIAL). No surface mounted plates shall be allowed. The Contractor shall be responsible for proper ADA sidewalk ramps. Any non-conforming work will be removed and replaced by the Contractor with no additional compensation.

Expansion joints shall be placed where the sidewalk abuts existing sidewalk, curbs and between concrete driveway pavement. The minimum slab thickness for sidewalks shall be 6 inches through driveway limits and 5 inches for all other public walkways unless otherwise noted by the Engineer.

All exposed concrete shall receive a protective surface treatment consisting of two (2) coats of boiled linseed oil and petroleum spirits mixture, formulated and applied according to Article 420.18 of the Standard Specifications. If an application of sand is required by the Engineer for blotter material, it will be considered incidental to this work. The application of both coats shall be witnessed by the Engineer. The Engineer shall be notified 24 hours in advance prior to application. Protective surface treatment shall not be paid for separately but shall be included in the cost of the concrete item provided.

The excavation, aggregate base course replacement or fill, earthwork, bedding, Curing/Sealing Compound necessary to complete the sidewalk is considered incidental to the pay item. Where grading (filling, cutting or shaping), is required adjacent to the sidewalk, it shall be considered included in the cost of the pay item. Any excavation or disposal of material necessary for the installation of the curb and gutter in order to meet the new grade shall be considered incidental to this item.

This work shall be paid for at the contract unit price per square foot for **SIDEWALK REPAIR (SPECIAL)**, which price shall include all labor, equipment, materials, protective coat and incidentals necessary to complete the work as described above. Restoration shall be included in the cost of this bid item.

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

This work shall consist of the furnishing and installation of a ductile iron water main and fittings, with interior diameter as indicated on plans or as directed by the Engineer. The methods and procedures used to disconnect the existing water main and services, lowering of water pipe under the newly installed sewer pipe and reconnecting to existing water main shall be coordinated with the City of St. Charles Public Works department and shall be approved by the Engineer. Scheduling of the construction of the water main shall be strictly enforced. The work shall be constructed in accordance with the applicable sections of the Section 40 and 41 of the "Standard Specifications for Water and Sewer Main Construction in Illinois", the latest edition, and the City of St. Charles standards.

A. Watermain Pipe:

- a. Ductile Iron Class 52, conforming to AWWA Standard C-151.

- i. Cement Lining, conforming to AWWA Standard C-104.
 - ii. Mechanical or push-on joints shall conform to AWWA Standard C-111.
 - iii. At minimum, Type 3 laying conditions shall be provided, conforming to AWWA Standard C-600.
- b. All watermains shall be encased in a High Density Polyethylene Encasement with its material specifications and installation method in accordance with ANSI AWWA C105/A21.5, ASTM A674, using “Method A” installation.
- c. All side yard and rear yard water mains not directly adjacent to public roadways or paved surfaces shall be Ductile Iron Pipe, Class 55 with a type 5 laying condition.
- d. Brass Wedges shall be installed to provide electrical conductivity.

B. Joint Restraint:

All mechanical joint fittings shall have restraining glands installed. Restraint device shall be Uni-flange by Ford Company or Mega-lug by EBAA Iron. Push joint pipe restraint shall be Field Lock Gaskets by US Pipe or Series 1700 Mega-lug or Series 1390 Pipe Restraint by Ford. Lengths of pipe restraint shall be determined from manufacturers installation specifications (refer to watermain restraint detail).

C. Thrust Blocking

Concrete thrust blocks, as shown on the plans and/or directed by the Engineer, shall be constructed at plugs, tees, and bends of 3000 psi. concrete in accordance with section 41-2.09 of the “Standard Specifications for Water and Sewer Main Construction in Illinois”, latest edition, and City of St. Charles standards. The concrete thrust blocks shall completely fill the space between the bends or fittings and the walls of the trench from 6 inches below the fittings to 12 inches above the fitting with no possible interference with the making or remaking of the joints. In addition to the concrete thrust blocking all mechanical joints, bends of 22 degrees and larger, and fire hydrants shall be a “Megalug” restraint or approved equal. Bolts shall be “Cor-ten”. This work shall be considered incidental to the cost of the water main.

CONSTRUCTION REQUIREMENTS

Excavation

The installation depth of the water main shall not be less than 5 feet from the existing and proposed ground elevation to the top of the pipe, except where shown differently at crossings with other utilities or as directed by the Engineer. If the excavation has been made deeper than necessary, or is required deeper for adjustments for fire hydrants, valve vaults, services or for separation from sewer and other utilities, no additional cost shall be charged. The cost shall be considered

incidental to the cost of the water main. If necessary, bell holes of sufficient depth shall be provided across the bottom of the trench to accommodate the bell of the pipe providing sufficient room for joint making, and to ensure uniform bearing for the pipe. The cost associated with the excavated material removal and disposal, trench/pit and stockpile protection, granular trench backfill shall be considered incidental to this pay item.

A. Sequence of Operations

All valves to be shut down for the purpose of adjusting and/or lowering of water main, or for other shut downs of the water system, shall be done by the City of St. Charles Water Department. A tentative installation schedule of operation shall be submitted to the Village 72 hours before any shut down of the water system can be made. The actual sequence of construction installation shall be discussed and scheduled at a pre-construction meeting with the Contractor, Engineer and Public Works Department.

PROTECTION OF WATER MAINS AND WATER SERVICE LINES

A. Normal Conditions

Water mains shall be laid at least 10 feet horizontally from any sanitary sewer, storm sewer or sewer manholes, whenever possible. The Distance shall be measured edge-to-edge.

B. Unusual Conditions

When local conditions prevent a horizontal separation of 10 feet, a water main may be laid closer to a storm or sanitary sewer provided that:

1. The bottom of the water main is at least 18 inches above the top of the sewer.
2. Where this vertical separation cannot be obtained, the sewer shall be constructed of materials and with joints that are equivalent to water main standards of construction for 10 feet, as measured perpendicular, on either side of the water main.

C. Crossings – Water Mains, Sewers and Utilities

1. Normal Conditions: Water main crossing storm or sanitary services or sewers shall be laid to provide a separation of at least 18 inches between the bottom of the water main and the top of the sewer.
2. Unusual Conditions: When local conditions prevent a vertical separation as Normal Conditions, the following construction shall be used.

- a. Sewers passing over or under water mains should be constructed of the materials described for parallel installation where vertical separation cannot be obtained.
- b. Water mains passing under sewer shall, in addition, be protected by providing:
 1. A vertical separation of at least 18 inches between the bottom of the sewer and the top of the water main.
 2. Adequate structural support for the sewers to prevent excessive deflection of joints and settling on and breaking the water mains,

3. Installation and Backfilling

The work shall be constructed in conformance with the applicable sections of the “Standard Specification for Road and Bridge Construction”, latest edition; “Standard Specifications for Water and Sewer Main Construction in Illinois” – Section 41; City of St. Charles standards and specifications.

All pipe and fittings must be cleaned and swabbed with a chlorine solution of at least 50 mg/L. A City of St. Charles representative must test this solution. Backfill work shall be performed in accordance of with applicable portions of Section 208 of the “Standard Specifications for Road and Bridge Construction” latest addition, and City of St. Charles trench backfill specifications.

4. Water Main Crossing Utilities

Wherever the water main crosses existing utilities, including sewer, telephone, electric, gas, etc., the Contractor shall be responsible for determining the existing depth of said utilities prior to installation and at no additional cost.

This work as described above, shall be paid for at the Contract Unit price per lineal foot for 6” DUCTILE IRON WATER MAIN, CLASS 52, WITH POLYETHYLENE ENCASUREMENT, which price shall be payment in full for all labor, materials, including all fittings (bends, wyes, tees, reducers, plugs, sleeves) pipe, polyethylene encasement, thrust blocks, Mega-lugs, chlorination, and equipment required for a complete and operational installation, removal and disposal off-site of excavated material, trench and stockpile protection (fencing), bedding and granular trench backfill for water trench.

TESTING & DISINFECTING WATERMAINS

Watermains shall be tested and disinfected according to applicable portions of Section 41 of the “Standard Specifications for Water and Sewer Construction in Illinois”, latest edition.

The Contractor shall provide the necessary pump connections and pay for all costs of the testing and disinfecting, which shall be incorporated into the unit price bid for this bid item. Restoration shall be included in the cost of this bid item.

6" WATER MAIN VALVE & 4' DIA. VALVE VAULT

This work shall include installation of a new 6" right hand closing resilient wedge gate valve conforming to AWWA Standard C-509 as manufactured by Clow Corporation, Waterous Company or approved equal, and 48 inch diameter valve vault at locations as shown on the plans or as directed by the Engineer,

The installation of the valve vault shall be done in accordance with City of St. Charles Standards, and the Standard Specifications for Water and Sewer Main Construction in Illinois, most current edition. Valve vault shall be constructed of 6" wide reinforced concrete sections conforming to ASTM C-478. Butyl rubber strips shall be placed between the tongue and groove sections. The Contractor shall be responsible for measurement of the depth of the new structure sections and pipe sizes required for replacement. The Contractor shall be responsible for verifying in the field the proposed structure's rim and water main elevation before ordering or commencing with the work.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure. Refer to special provision for FINAL ADJUSTMENT OF FRAME & COVER.

This work shall be paid for at the contract unit price for 6" WATER MAIN VALVE & 4' DIA. VALVE VAULT, which price shall include all labor, equipment, materials, frame and lid, and incidentals necessary to complete the work as described above including, but not limited to pavement removal, excavation, removal and disposal of excavated materials, disposal of removed structure, and granular trench backfill.

**1" COPPER WATER SERVICE WITH B-BOX & CONNECTION TO EXISTING
or 1" COPPER WATER SERVICE WITH B-BOX**

For 1" COPPER WATER SERVICE WITH B-BOX & CONNECTION TO EXISTING the work shall consist of the disconnection and disposal of the existing water service between the water main and the curb stop, and reconnection of the proposed water service to the water main. The work shall include the installation of a new 1" cooperation stop and tap connection to the water main, tapping sleeve, any necessary 1" copper tubing, the curb box and curb stop, connections and all fittings necessary to reconnect the existing water service (near the property line) to the water main.

For 1" COPPER WATER SERVICE WITH B-BOX the work shall include the installation of a new 1" cooperation stop and tap connection to the water main, tapping sleeve, any

necessary 1" copper tubing, the curb box and curb stop. The new water service will terminate at the buffalo box and will not be connected to the existing water service.

Work shall be done in accordance with the City's water service detail, or as directed by the Engineer as specified herein. This work shall be performed in accordance with the applicable sections of the Standard Specifications and all local codes and ordinances. The Contractor should familiarize themselves with the City of St. Charles standard Engineering details.

Copper pipe shall be copper water tube, Type K, soft temper, for underground service, conforming to ASTM B-88 and B-251. The pipe shall be marked with the manufactures' name or trademark and a mark indicative of the type of pipe. The outside diameter of the pipe shall conform to ASTM B-251, table 2.

Buffalo boxes in driveways and sidewalks shall be adjusted as needed when work is done. The cost of adjusting the buffalo boxes shall be included in the cost of this bid item.

This item shall be paid for at the contract unit price for 1" COPPER WATER SERVICE WITH B-BOX & CONNECTION TO EXISTING or 1" COPPER WATER SERVICE WITH B-BOX, which price shall be payment in full for performing all work as specified herein and as shown on the detail, including all labor, materials, including excavation, disposal of materials, tapping sleeve, corporation stop, copper pipe, curb stop and curb box, necessary connector and any required final curb box adjustments to finished elevations, backfilling including granular trench backfill material where needed, and the disconnection of the existing water service at the main, for a complete water service operation installation. Restoration shall be included in the cost of this bid item.

**REMOVE 5-1/4" VALVE BOX & REPLACE WITH 4' DIA. VALVE VAULT or
REMOVE 5-1/4" VALVE BOX & REPLACE WITH NEW 6" VALVE & 4' DIA.
VALVE VAULT**

This work shall consist of the removal of the existing valve box, and the installation of a 48" diameter valve vault at locations as shown on the plans or as directed by the Engineer, and shall be done in accordance with City of St. Charles Standards, and the Standard Specifications for Water and Sewer Main Construction in Illinois, most current edition. Valve vault shall be constructed of 6" wide reinforced concrete sections conforming to ASTM C-478. Butyl rubber strips shall be placed between the tongue and groove sections. The Contractor shall be responsible for measurement of the depth of the new structure sections and pipe sizes required for replacement. The Contractor shall be responsible for verifying in the field the proposed structure's rim and water main elevation before ordering or commencing with the work.

This work shall also include removal and installation of a 6" right hand closing resilient wedge gate valve conforming to AWWA Standard C-509 as manufactured by Clow

Corporation, Waterous Company or approved equal, at locations as shown on the plans or as directed by the Engineer.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure. Refer to special provision for FINAL ADJUSTMENT OF FRAME & COVER.

This work shall be paid for at the contract unit price each for REMOVE 5-1/4" VALVE BOX & REPLACE WITH NEW 6" VALVE & 4' DIA. VALVE VAULT or REMOVE 5-1/4" VALVE BOX & REPLACE WITH 4' DIA. VALVE VAULT, which price shall include all labor, material, equipment, and incidentals necessary to complete the work specified to comply with the City of St. Charles requirements including, but not limited to pavement removal, excavation,, removal of excavated material and disposal of removed structures, supply and compaction of trench backfill, supply and installation of frame and cover. Contractors shall familiarize themselves with the City of St. Charles Public Works Engineering Details for more detailed specifics.

VALVE VAULT, REBUILD TOP OF STRUCTURE

This work shall consist of the removal of the existing frame and lid, adjusting rings and eccentric manhole cone, and the installation of a new concentric manhole cone, concrete adjusting rings and frame and lid at the valve vault location as shown on the plans or as directed by the Engineer, and shall be done in accordance with City of St. Charles Standards, and the Standard Specifications for Water and Sewer Main Construction in Illinois, most current edition. Valve vault sections shall be constructed of 6" wide reinforced concrete sections conforming to ASTM C-478. Butyl rubber strips shall be placed between the tongue and groove sections. The Contractor shall be responsible for the height measurements of the existing cone section, adjusting rings and manhole frame to ensure the height of the new components shall match the existing pavement grade.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure. Refer to special provision for FINAL ADJUSTMENT OF FRAME & COVER.

This work shall be paid for at the contract unit price each for VALVE VAULT, REBUILD TOP OF STRUCTURE, which price shall include all labor, material, equipment, and incidentals necessary to complete the work specified to comply with the City of St. Charles requirements including, but not limited to, pavement removal, excavation,, removal of excavated material and disposal of removed structures, supply and compaction of trench backfill, supply and installation of frame and cover. Contractors shall familiarize themselves with the City of St. Charles Public Works Engineering Details for more detailed specifics.

**REMOVE EX FIRE HYDRANT & REPLACE WITH FIRE HYDRANT,
AUXILIARY VALVE & ASSEMBLY**

This work shall consist of the removal and replacement of fire hydrants, auxiliary valves and valve boxes. These existing materials shall be delivered to the Department of Public Works.

All new fire hydrants shall conform to the following requirements:

Fire Hydrant:

- e. Approved Models: (Refer to standard Fire Hydrant Detail)
 - i. Mueller Super Centurion 200
 - ii. Waterous Pacer Model WB-67-250
 - iii. Clow Medallion
 - iv. All hydrants shall have:
 - 1. 6” mechanical joint connection
 - 2. 5 ¼” valve opening
 - 3. 5” cover over hydrant lateral
 - 4. 6” valve on lateral
 - 5. “Hydrfinder” standard hydrant locator, installed
 - 6. Valve box shall have a valve box stabilizer installed *
*(Valve box adaptor #2 type A, as made by Adaptor, Inc. or approved equal)
- f. Fire Hydrant Paint: Safety Red, Sherwin Williams ‘Shercryl’ 6403-31922, B66R300
- g. Bolts Placed Underground: All below grade factory installed bolts and fasteners shall be 304-grade stainless steel.

The contractors shall familiarize themselves with the City of St. Charles Public Works Engineering Details for more detailed specifics.

All fire hydrants shall be equipped with an auxiliary valve and cast iron valve box. The auxiliary valve shall be six-inch (6”) ductile iron water pipe conforming to AWWA Standard C151, C111, and C104. The valve boxes shall be of the adjustable type, shall be set at finished grade, and shall have the valve box covers stamped “Water”.

This item shall be paid at the contract unit price per each for REMOVE EX FIRE HYDRANT & REPLACE WITH FIRE HYDRANT, AUXILIARY VALVE & ASSEMBLY, which price shall include the cost of all labor, materials, and equipment necessary to install the fire hydrant, auxiliary valve, auxiliary valve box with stabilizer, and line extension as detailed in the Sewer and Water Specifications, and to the satisfaction of the Engineer.

REMOVE EX FIRE HYDRANT & REPLACE WITH FIRE HYDRANT, NEW AUXILIARY BOX & STABILIZER

This work shall consist of the removal and replacement of fire hydrants and auxiliary valve boxes. These existing materials shall be delivered to the Department of Public Works.

See special provision for REMOVE EX FIRE HYDRANT & REPLACE WITH FIRE HYDRANT, AUXILIARY VALVE & ASSEMBLY for fire hydrant auxiliary valve box specifications.

This item shall be paid at the contract unit price per each for REMOVE EX FIRE HYDRANT & REPLACE WITH FIRE HYDRANT, NEW AUXILIARY BOX & STABILIZER, which price shall include the cost of all labor, materials, and equipment necessary to install the fire hydrant and auxiliary valve box with stabilizer as detailed in the Sewer and Water Specifications, and to the satisfaction of the Engineer.

NEW 48" DIA. SANITARY MANHOLE

This work shall consist of the installation of a 48" inner diameter sanitary manhole using precast reinforced concrete bases and sections, at locations s indicated in the plans, or as directed by the Engineer.

Manholes shall conform to ASTM 478. Steps shall be made of steel reinforced plastic, using an approved plastic meeting ASTM D4101, Type II, Grade 49108, over a #3 grade 60, and ASTM A615 reinforcing bar. The Contractor shall be responsible for measurement of the depth of the new structure sections and pipe sizes required for replacement. The Contractor shall be responsible for verifying in the field the proposed structure's rim and invert elevation before ordering or commencing with any sewer work. Manhole installation shall comply with ASTM C 891. Contractors should familiarize themselves with the City of St. Charles Standard Engineering Details for Sanitary Manholes.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure. Refer to special provision for FINAL ADJUSTMENT OF FRAME & COVER.

This work shall be paid for at the contract unit price each for NEW 48" DIA. SANITARY MANHOLE, which price shall be payment in full for performing the work as specified therein and shall include all saw-cutting, all excavation, supply and compaction of granular backfill (refer to City of St Charles standard details for specifics). Also included in the unit

cost will be any flexible manhole pipe boots with stainless steel bands and Cor-ten bolts, new frames and lids, additional barrel sections for extra depth manholes, frame sealing to the barrel section (mortar in paved areas), any necessary structure adjustments required to match final grades, internal chimney seal supply and installation, the replacement or relaying of sewer pipes as necessary (minimum 3-feet), which included all necessary connectors (non-shear mission bands), and any necessary pavement patches required around the structure.

REMOVE & REPLACE 48” DIA. SANITARY MANHOLE OR 48” DIA. SANITARY DROP MANHOLE

This work shall consist of the removal and replacement of existing sanitary manholes or drop manholes at locations as indicated in the plans, or as directed by the Engineer. Refer to special provision for New 48” Dia. Sanitary Manhole for specifications of materials and rim adjustments.

This work shall be paid for at the contract unit price each for REMOVE & REPLACE 48” DIA. SANITARY MANHOLE OR 48” DIA. SANITARY DROP MANHOLE , which price shall be payment in full for performing the work as specified therein and shall include all saw-cutting, all excavation and backfill, supply and compaction of granular backfill (refer to City of St Charles standard details for specifics). Also included in the unit cost will be any flexible manhole pipe boots with stainless steel bands and Cor-ten bolts, new frames and lids, drop connection, additional barrel sections for extra depth manholes, frame sealing to the barrel section, any necessary structure adjustments required to match final grades, internal chimney seal supply and installation, the replacement or relaying of sewer pipes as necessary (minimum 3-feet), which included all necessary connectors (non-shear mission bands), and any necessary pavement patches required around the structure.

REMOVE & REPLACE, SANITARY SEWER SERVICE, 6’

This work shall consist of the replacement of existing sanitary sewer service pipe sections as indicated on drawings and/or as directed by the Engineer.

A. Material – Sanitary Sewer System:

Plastic Polyvinyl Chloride (PVC) Pressure-rated pipe, conforming to ASTM D 2241, SDR 26. Plastic Pressure pipe joints shall be in conformance with ASTM D3139, using Flexible Elastomeric Seals.

Pipe installation shall conform to the requirements of the latest version of the Standard Specification for Water and Sewer Main Construction in Illinois, Section 31-1.02 to 31-1.10 inclusive, ASTM D 2321 and City of St Charles requirements.

It is the Contractors responsibility to field verify the exact locations and elevations of existing utilities and existing sewer service and coordinate with the Engineer, any changes to the proposed utility layout and/or elevations.

Non-shear mission couplings shall be used for connections to existing sanitary sewer pipe. The Contractor shall refer to the City of St. Charles Standard Engineering details for all pipe connections, trench backfill and bedding requirements, and service installation requirements.

This item shall be paid for at the contract unit price per linear foot of REMOVE & REPLACE, SANITARY SEWER SERVICE, 6" which price shall be payment in full for all labor, material, and equipment necessary for the removal and disposal of the excavated material, removal of existing pipe, bedding preparation, fittings, gaskets, connection to existing service and manholes, supply and compaction of granular trench backfill, all for complete installation.

SANITARY MANHOLE CHIMNEY SEAL

For all sanitary sewer manhole rim adjustments, chimney seals shall be provided. Chimney seals shall be internal or external as directed by the Engineer. Chimney seal installation work shall include furnishing and installing an internal or external chimney seal as manufactured by "Cretex Specialty Products", or approved equal by the City, and any necessary materials to provide a complete job. For sanitary manhole rim adjustments this work shall be paid for at the contract unit price for SANITARY MANHOLE CHIMNEY SEAL.

REMOVE (48" or 60" Dia.) STORM MANHOLE & REPLACE WITH (60" or 72" Dia.) STORM MANHOLE

This work shall consist of the replacement of existing storm manholes of the diameter noted on the plans or as directed by the Engineer. The Contractor is to provide precast concrete reinforced manholes complying with ASTM 478 standards.

This work shall be in accordance with Section 602 of the Standard Specifications and the City of St. Charles requirements. The Contractor shall be responsible for verifying in the field the proposed structure's rim and invert elevations, and pipe diameters.

The type of lid or grate (open, closed, etc.) shall be as indicated on the drawings or as directed by Engineer. Type 3 frames shall be Neenah R-3277-A, combination frame, grate and curb box. All structures with open lids or grates shall be provided with temporary silt filter baskets. Manhole installation shall comply with ASTM C 891. The Engineer will work with the Contractor to stake proposed structure location. Approval shall be obtained before commencing with structure installation.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure. Refer to special provision for FINAL ADJUSTMENT OF FRAME & COVER.

This work shall be paid for at the contract unit price each for REMOVE (48" or 60" Dia.) STORM MANHOLE & REPLACE WITH (60" or 72" Dia.) STORM MANHOLE, which

price shall be payment in full for performing the work as specified therein and shall include new frame and lid, all excavation, removal of excavated material and disposal of removed structures, supply and compaction of trench backfill (refer to City specifications for type of backfill material based on location of structure). All items addressed, including steel reinforced polyurethane steps, all pipe reconnections (with a minimum of 3 feet of pipe to be replaced), all non-shear mission bands, frame, frame sealing to the barrel section (mortar in paved areas, easy stick in parkway areas), grate and lid installation, erosion control measures and any necessary structure adjustments required to match final grades.

REMOVE & REPLACE INLET or CATCH BASIN

This work shall consist of the replacement of existing inlets or catch basins of the diameter noted on the plans or as directed by the Engineer. The Contractor is to provide precast concrete reinforced manholes complying with ASTM 478 standards.

This work shall be in accordance with Section 602 of the Standard Specifications and the City of St. Charles requirements. The Contractor shall be responsible for verifying in the field the proposed structure's rim and invert elevations, and pipe diameters.

The type of lid or grate (open, closed, etc.) shall be as indicated on the drawings or as directed by Engineer. Type 3 frames shall be Neenah R-3277-A, combination frame, grate and curb box. All structures with open lids or grates shall be provided with temporary silt filter baskets. Catch basin installation shall comply with ASTM C891. The Engineer will work with the Contractor to stake proposed structure location. Approval shall be obtained before commencing with structure installation.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure. Refer to special provision for FINAL ADJUSTMENT OF FRAME & COVER.

Sediment control shall consist of furnishing, installation, maintenance and removal of a drainage structure inlet filter assembly, consisting of a frame and filter bag to collect sediment in surface storm water runoff, in accordance with Article 280.04(c) of the Standard Specifications at locations as directed by the Engineer, including, but not limited to pavement removal, excavation, removal of excavated material and disposal of removed structures, supply and compaction of trench backfill, supply and installation of frame and cover.

This work shall be paid for at the contract unit price each for REMOVE AND REPLACE INLET or CATCH BASIN, which price shall be payment in full for performing the work as specified therein and shall include new frame and lid, all excavation, removal of excavated material and disposal of removed structures, sediment control, supply and compaction of trench backfill (refer to City specifications for type of backfill material based on location of structure). All items addressed, including steel reinforced polyurethane steps, all pipe reconnections (with a minimum of 3 feet of pipe to be

replaced), all non-shear mission bands, frame, frame sealing to the barrel section (mortar in paved areas, easy stick in parkway areas), grate and lid installation, erosion control measures and any necessary structure adjustments required to match final grades, shall be included in the contract unit price for REMOVE & REPLACE INLET or CATCH BASIN.

RESET or REMOVE & REPLACE FRAMES & LIDS (PAVEMENT, CURB, SIDEWALK or PARKWAY)

This work shall consist of the adjustment of existing structures, removal and disposal of existing frames and lids not designated for reuse, and the installation of new frames and lids in locations as shown on the drawings, to the proper finished grade as designated by the Engineer. All work shall be in accordance with the applicable portions of Section 603 and 604 of the Standard Specifications, except as herein modified, and the City of St. Charles requirements.

The Contractor shall be responsible for the loading transporting and unloading of new frames and lids on the job site. The existing frames and lids shall remain the property of the City of St Charles. The Contractor shall deliver the existing frames and lids to the City of St Charles Public Works facility, or as directed by the Engineer. This work shall include the removal of all existing masonry/concrete adjusting rings, and adjustment to the proper finished grade with new concrete adjusting rings.

Sanitary manholes shall include the installation of internal chimney seals. The chimney seals shall be as manufactured by “Cretex” Specialty Products or an Engineer approved equivalent. Refer to provision for SANITARY MANHOLE CHIMNEY SEAL.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure. Refer to special provision for FINAL ADJUSTMENT OF FRAME & COVER.

Sediment control shall consist of furnishing, installation, maintenance and removal of a drainage structure inlet filter assembly, consisting of a frame and filter bag to collect sediment in surface storm water runoff, in accordance with Article 280.04(c) of the Standard Specifications at locations as directed by the Engineer.

Manholes, catch basins, inlets, and valve vaults shall all be considered as structures for this pay item. This item shall be paid for at the contract unit price per each for RESET FRAMES & LIDS, of the type specified: (Pavement, Curb, Sidewalk or Parkway). This price shall include labor, materials, equipment and sediment control required for resetting the existing frame and lid, including the preformed HMA joint sealant or mortar, pavement removal, excavation, removal of excavated material.

Manholes, catch basins, inlets, and valve vaults shall all be considered as structures for this pay item. This item shall be paid for at the contract unit price per each for REMOVE & REPLACE FRAMES & LIDS, of the type specified: (Pavement, Curb, Sidewalk or

Parkway). This price shall include labor, materials, equipment and sediment control required for replacing the frame and lid, including but not limited to the preformed HMA joint sealant or mortar, pavement removal, excavation, removal of excavated material and delivery of the frames to the City of St. Charles facility, and the supply and installation of the frame and cover.

STORM SEWER REMOVAL AND REPLACEMENT, or STORM SEWER PIPE, VARIOUS SIZES & MATERIAL

This work shall consist of the removal and replacement of existing and/or construction of new storm sewer systems as indicated on drawings and/or as directed by the Engineer.

One of the following pipe materials shall be used for this project:

A. Storm Sewer System:

1. Plastic Polyvinyl Chloride (PVC) Pressure-Rated pipe, conforming to ASTM D 2241, SDR 21 or 26. Plastic Pressure pipe joints shall be in conformance with ASTM D3139, using Flexible Elastomeric Seals.
2. Reinforced Concrete Low-Head Pressure Pipe (RCP), conforming to ASTM C 361, Class C-25, with bell-and-spigot joints and rubber gasket with the following minimum wall thickness: 12" pipe-2 inch wall; 15" thru 24"-3 inch; 27" thru 30"3.25 inch; Above 30"-4 inch.

Pipe installation shall conform to the requirements of the latest edition of the Standard Specifications for Water & Sewer Main Construction in Illinois, Section 31-1.02 to 31-1.10 inclusive, ASTM D 2321 and City of St. Charles requirements.

It is the contractor's responsibility to field verify the exact locations and elevations of existing utilities and existing sewer service connections and coordinate with Engineer any changes to the proposed utility layout and/or elevation.

It is also contractors responsibility field verify if the existing sewer service connections are active before commencing with the appropriate, connection to the main sewer pipe, fitting installation.

Non-shear mission couplings shall be used for connections to existing storm sewer pipes. The Contractor shall refer to the City of St. Charles Standard Engineering details for all pipe connections, trench backfill and bedding requirements, and service installation requirements. Unnecessary joints in the replaced section of pipe will not be allowed.

All newly installed sewer lines and existing public sewer systems abutting the project must be televised and reported. A current color videotape record and a type written transcription of an internal inspection of the newly constructed storm and sanitary sewer system shall be submitted and approved by the Public Works Engineering Division before pavement placement. The contractor must rotate the lens of the camera to look at all services. The service connections must be noted in the television report. Non-shear Mission couplings shall be used for connection to existing storm sewer material.

This items shall be paid for at the contract unit price per linear foot of STORM SEWER REMOVAL AND REPLACEMENT, or STORM SEWER PIPE, VARIOUS SIZES & MATERIAL which price shall be payment in full for all labor, material, and equipment necessary for the pavement removal, excavation, removal and disposal of the excavated material, removal of existing pipe, bedding preparation, fittings, gaskets, connection to exiting service connections and manholes, supply and compaction of granular trench backfill, testing and video-taping per City's requirements, all for a complete installation.

MANHOLES TO BE ADJUSTED (SPECIAL)

This work shall consist of the adjustment of electric or communication manhole frames in the sidewalk or pavement at the locations as shown on the plans, to the proper finished grade as designated by the Engineer prior to placement of PCC sidewalk or hot-mix asphalt surface course.

The Contractor shall adhere to guidelines for the final adjustment of the frame and cover based on the location of the structure. Refer to special provision for FINAL ADJUSTMENT OF FRAME & COVER.

This work shall be paid for at the contract unit price per each for MANHOLES TO BE ADJUSTED (SPECIAL), which price shall include all labor, equipment, materials, adjustment rings, and incidentals necessary to complete the work described herein and as shown in the plans.

RAILROAD FLAGGING (UPRR)

This work shall be performed as in accordance with Sections 107.12 and 109.05 of the Standard Specifications.

The flagging costs incurred for the work associated at the location of the Kautz Road and the Union Pacific Railroad (UPRR) grade crossing will be reimbursed by IDOT in accordance with Section 109.05 of the Standard Specifications. The Contractor is responsible for prepaying the UPRR in advance for flagging services provided. The Contractor shall deposit the cost of flagging services for thirty (30) days with the UPRR. If the Contractor uses less than 30 days, then the Contractor will be charged for the days used and the balance will be reimbursed back to the Contractor. The Contractor will then be reimbursed by IDOT for the actual number of flagging days used. The Contractor is required to conduct operations at all times in full compliance with the rules, regulations and requirements of the UPRR Special Provisions contained in the Contract Specifications and as described below.

The Contractor shall give thirty (30) days advance written notice to the Engineering Superintendent of the Railroad or his authorized representative prior to commencement of any construction work on the Improvement affecting the railroad property. The Contractor shall notify the Railroad sufficiently in advance of when the protective services are required. The Contractor shall make every effort to notify the Railroad in advance if a previously requested flagger will not be needed for any reason. Any costs for flagging

protection provided by the Railroad at the Contractor's request for those days when the Contractor does not work shall be borne by the Contractor.

Any proposed activity in the vicinity of a highway-rail grade crossing must adhere to the guidelines set forth in the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) regarding work in temporary traffic control zones in the vicinity of highway-rail grade crossings which states that lane restrictions, flagging, or other operations shall not create conditions where vehicles can be queued across the railroad tracks. If the queuing of vehicles across the tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the crossing to prevent vehicles from stopping on the tracks, even if automatic warning devices are in place.

RAILROAD FLAGGING (UPRR) will be paid for according to Article 109.05 of the Standard Specifications.

ADJUSTMENTS AND RECONSTRUCTIONS

Effective: March 15, 2011

Revise the first paragraph of Article 602.04 to read:

“602.04 Concrete. Cast-in-place concrete for structures shall be constructed of Class SI concrete according to the applicable portions of Section 503. Cast-in-place concrete for pavement patching around adjustments and reconstructions shall be constructed of Class PP-1 concrete, unless otherwise noted in the plans, according to the applicable portions of Section 1020.”

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

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

Revise Article 603.05 to read:

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

Revise Article 603.06 to read:

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

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

Revise the first sentence of Article 603.07 to read:

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

DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (DISTRICT 1)

Effective: April 1, 2011
 Revised: April 2, 2011

Add the following to Article 603.02 of the Standard Specifications:

- “(i) Temporary Hot-Mix Asphalt (HMA) Ramp (Note 1) 1030
- “(j) Temporary Rubber Ramps (Note 2)

Note 1. The HMA shall have maximum aggregate size of 3/8 in. (95 mm).

Note 2. The rubber material shall be according to the following.

Property	Test Method	Requirement
Durometer Hardness, Shore A	ASTM D 2240	75 ±15
Tensile Strength, psi (kPa)	ASTM D 412	300 (2000) min
Elongation, percent	ASTM D 412	90 min
Specific Gravity	ASTM D 792	1.0 - 1.3
Brittleness, °F (°C)	ASTM D 746	-40 (-40)”

Revise Article 603.07 of the Standard Specifications to read:

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

When castings are under traffic before the final surfacing operation has been started, properly sized temporary ramps shall be placed around the drainage and/or utility castings according to the following methods.

- (a) Temporary Asphalt Ramps. Temporary hot-mix asphalt ramps shall be placed around the casting, flush with its surface and decreasing to a featheredge in a distance of 2 ft (600 mm) around the entire surface of the casting.
- (b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 40 mph or less and when the height of the casting to be protected meets the proper sizing requirements for the rubber ramps as shown below.

Dimension	Requirement
Inside Opening	Outside dimensions of casting + 1 in. (25 mm)

Thickness at inside edge	Height of casting \pm 1/4 in. (6 mm)
Thickness at outside edge	1/4 in. (6 mm) max.
Width, measured from inside opening to outside edge	8 1/2 in. (215 mm) min

Placement shall be according to the manufacturer's specifications.

Temporary ramps for castings shall remain in place until surfacing operations are undertaken within the immediate area of the structure. Prior to placing the surface course, the temporary ramp shall be removed. Excess material shall be disposed of according to Article 202.03."

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

Effective: June 26, 2006

Revised: April 1, 2016

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

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

Test	Asphalt Grade GTR 70-28	Asphalt Grade GTR 64-28
Flash Point (C.O.C.), AASHTO T 48, °F (°C), min.	450 (232)	450 (232)
Rotational Viscosity, AASHTO T 316 @ 275 °F (135 °C), Poises, Pa·s, max.	30 (3)	30 (3)
Softening Point, AASHTO T 53, °F (°C), min.	135 (57)	130 (54)
Elastic Recovery, ASTM D 6084, Procedure A (sieve waived) @ 77 °F, (25 °C), aged, ss, 100 mm elongation, 5 cm/min., cut immediately, %, min.	65	65

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

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

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

“A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing throughout by continuous agitation and recirculation of the asphalt binder to provide a

uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of ± 0.40 percent.”

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

“(c) RAP Materials (Note 5)1031”

Add the following note to 1030.02 of the Standard Specifications:

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

HEAT OF HYDRATION CONTROL FOR CONCRETE STRUCTURES (D-1)

Effective: November 1, 2013

Article 1020.15 shall not apply.

HMA MIXTURE DESIGN REQUIREMENTS (D-1)

Effective: January 1, 2013

Revised: April 1, 2016

1) Design Composition and Volumetric Requirements

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

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

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

"Use	Size/Application	Gradation No.
Class A-1, 2, & 3	3/8 in. (10 mm) Seal	CA 16
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & 3	Cover	CA 14
HMA High ESAL	IL-19.0 IL-9.5	CA 11 ^{1/} CA 16, CA 13 ^{3/}
HMA Low ESAL	IL-19.0L IL-9.5L Stabilized Subbase or Shoulders	CA 11 ^{1/} CA 16
SMA ^{2/}	1/2 in. (12.5mm) Binder & Surface IL 9.5 Surface	CA13 ^{3/} , CA14 or CA16 CA16, CA 13 ^{3/}

1/ CA 16 or CA 13 may be blended with the gradations listed.

2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.

3/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.

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

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

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

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

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

“High ESAL	IL-19.0 binder; IL-9.5 surface; IL-4.75; SMA-12.5, SMA-9.5
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, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.

Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that

produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

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

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

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

High ESAL, MIXTURE COMPOSITION (% PASSING) ^{1/}										
Sieve Size	IL-19.0 mm		SMA ^{4/} IL-12.5 mm		SMA ^{4/} IL-9.5 mm		IL-9.5 mm		IL-4.75 mm	
	min	max	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	80	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8 (2.36 mm)	20	42	16	24 ^{5/}	16	32 ^{5/}	34 ^{6/}	52 ^{2/}	70	90
#16 (1.18 mm)	15	30					10	32	50	65
#30 (600 μm)			12	16	12	18				
#50 (300 μm)	6	15					4	15	15	30
#100 (150 μm)	4	9					3	10	10	18
#200 (75 μm)	3	6	7.0	9.0 ^{3/}	7.5	9.5 ^{3/}	4	6	7	9 ^{3/}
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

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

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

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

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 72-85 percent”

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

“(3) SMA Mixtures.

Volumetric Requirements SMA ^{1/}			
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
80 ^{4/}	3.5	17.0 ^{2/}	75 - 83
		16.0 ^{3/}	

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

2/ Applies when specific gravity of coarse aggregate is ≥ 2.760 .

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

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

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

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

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

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

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

2) Design Verification and Production

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

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

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

- (1)Hamburg Wheel Test criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

Illinois Modified AASHTO T 324 Requirements ^{1/}

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

- 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.

Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions.
For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.

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

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

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

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

“The Hamburg Wheel test shall also be conducted on all HMA mixtures from a sample taken within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day’s production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract. If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria”

Method of Measurement:

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

“The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design’s G_{mb} .”

Basis of Payment.

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

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

HOT MIX ASPHALT - QUANTITY CORRECTION (BMPR)

Effective: October 1, 2014

Revised: October 2, 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 HMA 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.”

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

Effective: November 1, 2012

Revise: April 2, 2016

Revise Section 1031 of the Standard Specifications to read:

“SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

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

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

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

- (a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including

unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP -#4 or Type 2 RAS", etc...).

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.
- (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, Superpave (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 in. (75 mm) single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

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

However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of Type 1 RAS with Type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

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

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

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

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

- (b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.

- (1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.
- (2) Incoming Material. For testing as incoming material at the HMA plant, washed extraction shall be run at the minimum frequency of one sample per 250 tons (227 metric tons). A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). The incoming material test results shall meet the tolerances specified herein.

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

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

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

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

Parameter	FRAP
No. 4 (4.75 mm)	$\pm 6 \%$
No. 8 (2.36 mm)	$\pm 5 \%$
No. 30 (600 μm)	$\pm 5 \%$
No. 200 (75 μm)	$\pm 2.0 \%$
Asphalt Binder	$\pm 0.3 \%$
G_{mm}	± 0.03 ^{1/}

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

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

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

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

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

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

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

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

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

The Engineer will notify the Contractor of observed deficiencies.

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

Test Parameter	Acceptable Limits of Precision	
	FRAP	RAS
% Passing: ^{1/}		
1/2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	3.0%
No. 200	2.2%	2.5%
Asphalt Binder Content	0.3%	1.0%
G _{mm}	0.030	

1/ Based on washed extraction.

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

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

1031.05 Quality Designation of Aggregate in RAP and FRAP.

- (a) RAP. The aggregate quality of the RAP for homogeneous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

- (1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
- (2) RAP from Superpave/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
- (3) RAP from Class I, Superpave/HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
- (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

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

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

(a) FRAP. The use of FRAP in HMA shall be as follows.

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

(b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.

- (c) FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.

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

Max Asphalt Binder Replacement for FRAP with RAS Combination

HMA Mixtures ^{1/ 2/ 4/}	Maximum % ABR		
	Binder/Leveling Binder	Surface	Polymer Modified ^{3/}
30L	50	40	30
50	40	35	30
70	40	30	30
90	40	30	30
4.75 mm N-50			40
SMA N-80			30

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

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

- (a) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements herein, the

additional FRAP or RAS stockpiles may be used in the original design at the percent previously verified.

- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.300 shall be used for mix design purposes.

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

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

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

- (a) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.
- (b) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.
 - (1) Dryer Drum Plants.
 - a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.

- f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
 - g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.
 - h. Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)
 - i. When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.
 - j. Accumulated mixture tonnage.
 - k. Dust Removed (accumulated to the nearest 0.1 ton (0.1 metric ton))
- (2) Batch Plants.
- a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - d. Mineral filler weight to the nearest pound (kilogram).
 - f. RAS and FRAP weight to the nearest pound (kilogram).
 - g. Virgin asphalt binder weight to the nearest pound (kilogram).
 - h. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

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

1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B.

The use of RAP or FRAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used shall be according to the current Bureau of Materials and Physical

Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".

- (b) Gradation. The RAP material shall meet the gradation requirements for CA 6 according to Article 1004.01(c), except the requirements for the minus No. 200 (75 μ m) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

BDE SPECIAL PROVISIONS
For the April 22 and June 10, 2016 Lettings

The following special provisions indicated by an "x" are applicable to this contract and will be included by the Project Development and Implementation Section of the BD&E. An * indicates a new or revised special provision for the letting.

<u>File Name</u>	<u>#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80099	1	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
* 80274	2	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
80192	3	Automated Flagger Assistance Device	Jan. 1, 2008	
80173	4	<input checked="" type="checkbox"/> Bituminous Materials Cost Adjustments	Nov. 2, 2006	July 1, 2015
80241	5	Bridge Demolition Debris	July 1, 2009	
50261	6	Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481	7	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491	8	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531	9	Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80360	10	<input checked="" type="checkbox"/> Coarse Aggregate Quality	July 1, 2015	
80198	11	Completion Date (via calendar days)	April 1, 2008	
80199	12	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80293	13	Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	April 1, 2015
* 80311	14	Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
* 80277	15	Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
80261	16	<input checked="" type="checkbox"/> Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
* 80029	17	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2016
* 80363	18	Engineer's Field Office	April 1, 2016	
80358	19	Equal Employment Opportunity	April 1, 2015	
* 80364	20	<input checked="" type="checkbox"/> Errata for the 2016 Standard Specifications	April 1, 2016	
80229	21	Fuel Cost Adjustment	April 1, 2009	July 1, 2015
80304	22	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
* 80246	23	<input checked="" type="checkbox"/> Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2016
* 80347	24	Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	April 1, 2016
* 80336	25	Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
80045	26	Material Transfer Device	June 15, 1999	Aug. 1, 2014
* 80342	27	Mechanical Side Tie Bar Inserter	Aug. 1, 2014	April 1, 2016
80165	28	Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
* 80361	29	Overhead Sign Structures Certification of Metal Fabricator	Nov. 1, 2015	April 1, 2016
* 80349	30	Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
* 80298	31	Pavement Marking Tape Type IV	April 1, 2012	April 1, 2016
* 80365	32	Pedestrian Push-Button	April 1, 2016	
* 80359	33	Portland Cement Concrete Bridge Deck Curing	April 1, 2015	April 1, 2016
* 80353	34	Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	April 1, 2016
* 80338	35	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	April 1, 2016
* 80300	36	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
80328	37	Progress Payments	Nov. 2, 2013	
34261	38	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	39	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
* 80306	40	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	April 1, 2016
* 80340	41	Speed Display Trailer	April 2, 2014	April 1, 2016
80127	42	Steel Cost Adjustment	April 2, 2004	July 1, 2015
80362	43	Steel Slag in Trench Backfill	Jan. 1, 2016	
* 80317	44	Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016

<u>File Name</u>	<u>#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80355	45	Temporary Concrete Barrier	Jan. 1, 2015	July 1, 2015
20338	46	Training Special Provisions	Oct. 15, 1975	
80318	47	Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
* 80288	48	Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
80302	49	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80289	50	Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	51	Working Days	Jan. 1, 2002	

The following special provisions and recurring special provisions are in the 2016 Standard Specifications.

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80240	Above Grade Inlet Protection	Articles 280.02, 280.04, and 1081.15	July 1, 2009	Jan. 1, 2012
80310	Coated Galvanized Steel Conduit	Article 811.03	Jan. 1, 2013	Jan. 1, 2015
80341	Coilable Nonmetallic Conduit	Article 1088.01	Aug. 1, 2014	Jan. 1, 2015
80294	Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet	Article 540.04	April 1, 2012	April 1, 2014
80334	Concrete Gutter, Curb, Median, and Paved Ditch	Articles 606.02, 606.07, and 1050.04	April 1, 2014	Aug. 1, 2014
80335	Contract Claims	Article 109.09	April 1, 2014	
Chk Sht #27	English Substitution of Metric Reinforcement Bars	Article 508.09	April 1, 1996	Jan. 1, 2011
80265	Friction Aggregate	Articles 1004.01 and 1004.03	Jan. 1, 2011	Nov. 1, 2014
80329	Glare Screen	Sections 638 and 1085	Jan. 1, 2014	
Chk Sht #20	Guardrail and Barrier Wall Delineation	Sections 635, 725, 782, and 1097	Dec. 15, 1993	Jan. 1, 2012
80322	Hot-Mix Asphalt – Mixture Design Composition and Volumetric Requirements	Sections 312, 355, 406, 407, 442, 482, 601, 1003, 1004, 1030, and 1102	Nov. 1, 2013	Nov. 1, 2014
80323	Hot-Mix Asphalt – Mixture Design Verification and Production	Sections 406, 1030, and 1102	Nov. 1, 2013	Nov. 1, 2014
80348	Hot-Mix Asphalt – Prime Coat	Sections 403, 406, 407, 408, 1032, and 1102	Nov. 1, 2014	
80315	Insertion Lining of Culverts	Sections 543 and 1029	Jan. 1, 2013	Nov. 1, 2013
80351	Light Tower	Article 1069.08	Jan. 1, 2015	
80324	LRFD Pipe Culvert Burial Tables	Sections 542 and 1040	Nov. 1, 2013	April 1, 2015
80325	LRFD Storm Sewer Burial Tables	Sections 550 and 1040	Nov. 1, 2013	April 1, 2015
80337	Paved Shoulder Removal	Article 440.07	April 1, 2014	
80254	Pavement Patching	Article 701.17	Jan. 1, 2010	
80352	Pavement Striping - Symbols	Article 780.14	Jan. 1, 2015	
Chk Sht #19	Pipe Underdrains	Section 601 and Articles 1003.01, 1003.04, 1004.05, 1040.06, and 1080.05	Sept. 9, 1987	Jan. 1, 2007
80343	Precast Concrete Handhole	Articles 814.02, 814.03, and 1042.17	Aug. 1, 2014	
80350	Retroreflective Sheeting for Highway Signs	Article 1091.03	Nov. 1, 2014	
80327	Reinforcement Bars	Section 508 and Articles 421.04, 442.06, 1006.10	Nov. 1, 2013	
80344	Rigid Metal Conduit	Article 1088.01	Aug. 1, 2014	
80354	Sidewalk, Corner, or Crosswalk Closure	Article 1106.02	Jan. 1, 2015	April 1, 2015
80301	Tracking the Use of Pesticides	Article 107.23	Aug. 1, 2012	
80356	Traffic Barrier Terminals Type 6 or 6B	Article 631.02	Jan. 1, 2015	
80345	Underpass Luminaire	Articles 821.06 and 1067.04	Aug. 1, 2014	April 1, 2015

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80357	Urban Half Road Closure with Mountable Median	Articles 701.18, 701.19, and 701.20	Jan. 1, 2015	July 1, 2015
80346	Waterway Obstruction Warning Luminaire	Article 1067.07	Aug. 1, 2014	April 1, 2015

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

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

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

Effective: November 2, 2006

Revised: August 1, 2013

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

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

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

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

Where: CA = Cost Adjustment, \$.

BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting, \$/ton (\$/metric ton).

%AC_V = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_V will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC_V and undiluted emulsified asphalt will be considered to be 65% AC_V.

Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: $Q, \text{ tons} = A \times D \times (G_{mb} \times 46.8) / 2000$. For HMA mixtures measured in square meters: $Q, \text{ metric tons} = A \times D \times (G_{mb} \times 1) / 1000$. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different G_{mb} and % AC_V.

For bituminous materials measured in gallons: $Q, \text{ tons} = V \times 8.33 \text{ lb/gal} \times SG / 2000$

For bituminous materials measured in liters: $Q, \text{ metric tons} = V \times 1.0 \text{ kg/L} \times SG / 1000$

Where: A = Area of the HMA mixture, sq yd (sq m).

D = Depth of the HMA mixture, in. (mm).

G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

Basis of Payment. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI_L and BPI_P in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(BPI_L - BPI_P) \div BPI_L\} \times 100$$

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Return With Bid

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**OPTION FOR
BITUMINOUS MATERIALS COST ADJUSTMENTS**

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

Contract No.: _____

Company Name: _____

Contractor's Option:

Is your company opting to include this special provision as part of the contract?

Yes

No

Signature: _____ **Date:** _____

80173

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 ₂ SO 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.”

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

Revised: November 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term “equipment” refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment’s respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 ^{1/}	600-749	2002
	750 and up	2006
June 1, 2011 ^{2/}	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 ^{2/}	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (<http://www.epa.gov/cleandiesel/verification/verif-list.htm>), or verified by the California Air Resources Board (CARB) (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

80261

ERRATA FOR THE 2016 STANDARD SPECIFICATIONS (BDE)

Effective: April 1, 2016

- Page 84 Article 204.02. In the seventh line of the first paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 90 Article 205.06. In the first sentence of the third paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 91 Article 205.06. In the first sentence of the fourth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the second sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 91 Article 205.06. In the second line of the fifth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 91 Article 205.06. In the sixth line of the eighth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 148 Article 302.09. In the second sentence of the fifth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 99" to "Illinois Modified AASHTO T 99".
- Page 152 Article 310.09. In the second sentence of the second paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 99" to "Illinois Modified AASHTO T 99".
- Page 155 Article 311.05(a). In the first sentence of the fifth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the second sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 155 Article 311.05(a). In the second line of the sixth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 163 Article 351.05(a). In the second sentence of the fifth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the third sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 163 Article 351.05(a). In the second line of the sixth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 169 Article 352.11. In the second sentence of the fourth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 134 (Method B)" to "Illinois Modified AASHTO T 134 (Method B)".

Page 169 Article 352.12. In the first sentence of the first paragraph change "AASHTO T 22" to "Illinois Modified AASHTO T 22", and in the second sentence change "AASHTO T 134 (Method B)" to "Illinois Modified AASHTO T 134 (Method B)".

Page 196 Article 406.07(a). After the footnotes in Table 1 - Minimum Roller Requirements for HMA add the following:

"EQUIPMENT DEFINITION

- V_s - Vibratory roller, static mode, minimum 125 lb/in. (2.2 kg/mm) of roller width. Maximum speed = 3 mph (5 km/h) or 264 ft/min (80 m/min). If the vibratory roller does not eliminate roller marks, its use shall be discontinued and a tandem roller, adequately ballasted to remove roller marks, shall be used.
- V_D - Vibratory roller, dynamic mode, operated at a speed to produce not less than 10 impacts/ft (30 impacts/m).
- P - Pneumatic-tired roller, max. speed 3 1/2 mph (5.5 km/h) or 308 ft/min (92 m/min). The pneumatic-tired roller shall have a minimum tire pressure of 80 psi (550 kPa) and shall be equipped with heat retention shields. The self-propelled pneumatic-tired roller shall develop a compression of not less than 300 lb (53 N) nor more than 500 lb (88 N) per in. (mm) of width of the tire tread in contact with the HMA surface.
- T_B - Tandem roller for breakdown rolling, 8 to 12 tons (7 to 11 metric tons), 250 to 400 lb/in. (44 to 70 N/mm) of roller width, max. speed = 3 1/2 mph (5.5 km/h) or 308 ft/min (92 m/min).
- T_F - Tandem roller for final rolling, 200 to 400 lb/in. (35 to 70 N/mm) of roller width with minimum roller width of 50 in. (1.25 m). Ballast shall be increased if roller marks are not eliminated. Ballast shall be decreased if the mat shoves or distorts.
- 3W- Three wheel roller, max. speed = 3 mph (5 km/h) or 264 ft/min (80 m/min), 300 to 400 lb/in. (53 to 70 N/mm) of roller width. The three-wheel roller shall weigh 10 to 12 tons (9 to 11 metric tons)."

Page 331 Article 505.04(p). Under Range of Clearance in the first table change "in. x 10⁻⁶" to "in. x 10⁻³".

Page 444 Article 542.03. In the Notes in Table IIIB add "CPP Corrugated Polypropylene (CPP) pipe with smooth interior".

- Page 445 Article 542.03. In the fourth column in Table IIIB (metric) change the heading for Type 5 pipe from "CPE" to "CPP".
- Page 445 Article 542.03. In the Notes in Table IIIB (metric) change "PE Polyethylene (PE) pipe with a smooth interior" to "CPP Corrugated Polypropylene (CPP) pipe with smooth interior".
- Page 449 Article 542.04(f)(2). In the third line of the second paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 544 Article 639.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, Traffic Signals," to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals,"".
- Page 546 Article 640.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 548 Article 641.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaire and Traffic Signals," to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals,"".
- Page 621 Article 727.03. In the first sentence of the third paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 629 Article 734.03(a). In the fourth line of the second paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 649 Article 801.02. In the first sentence of the first paragraph change "AASHTO's Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 742 Article 1003.04(c). Under Gradation in the table change "(see Article 1003.02(c))" to "(see Article 1003.01(c))".
- Page 755 Article 1004.03(b). Revise the third sentence of the first paragraph to read "For Class A (seal or cover coat), and other binder courses, the coarse aggregate shall be Class C quality or better."

- Page 809 Article 1020.04(e). In the third line of the first paragraph change "ITP SCC-3" to "ITP SCC-4".
- Page 945 Article 1069.05. In the first sentence of the tenth paragraph change ""Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 961 Article 1070.04(b)(1). In the third sentence of the first paragraph change ""Standard Specifications of Structural Supports for Highway Signs, Luminaires and Traffic Signals" published by AASHTO" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 989 Article 1077.01. In the second sentence of the first paragraph change "Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, as published by AASHTO" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 1121 Article 1103.13(a). In the first line of the first paragraph change "Bridge Deck Approach Slabs." to "Bridge Deck and Approach Slabs.".

80364

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010

Revised: April 1, 2016

Description. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

“Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location.”

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

“Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4% ^{1/}	91.0%
IL-9.5	Ndesign = 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0	Ndesign = 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} – 97.4%	90.0%
SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%”

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012

Revised: April 1, 2016

Description. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

"1102.01 Hot-Mix Asphalt Plant. The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

"(11) Equipment for Warm Mix Technologies.

- a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

- b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

"(e) Warm Mix Technologies.

- (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
- (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C).
WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

80288

Kane County Prevailing Wage for July 2015

(See explanation of column headings at bottom of wages)

Trade Name	RG	TYP	C	Base	FRMAN	M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng	
=====	==	==	=	=====	=====	=====	==	==	=====	=====	=====	=====	
ASBESTOS ABT-GEN		ALL		39.400	39.950	1.5	1.5	2.0	13.42	11.28	0.000	0.500	
ASBESTOS ABT-MEC		BLD		36.340	38.840	1.5	1.5	2.0	11.47	10.96	0.000	0.720	
BOILERMAKER		BLD		47.070	51.300	2.0	2.0	2.0	6.970	18.13	0.000	0.400	
BRICK MASON		BLD		43.780	48.160	1.5	1.5	2.0	10.05	14.43	0.000	1.030	
CARPENTER		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.40	0.000	0.630	
CEMENT MASON		ALL		43.000	45.000	2.0	1.5	2.0	10.00	18.27	0.000	0.500	
CERAMIC TILE FNSHER		BLD		36.810	0.000	1.5	1.5	2.0	10.55	9.230	0.000	0.770	
COMMUNICATION TECH	N	BLD		36.360	38.460	1.5	1.5	2.0	12.27	10.25	0.000	0.640	
COMMUNICATION TECH	S	BLD		38.620	40.720	1.5	1.5	2.0	10.19	10.81	0.000	1.350	
ELECTRIC PWR EQMT OP		ALL		37.890	51.480	1.5	1.5	2.0	5.000	11.75	0.000	0.380	
ELECTRIC PWR EQMT OP		HWY		39.220	53.290	1.5	1.5	2.0	5.000	12.17	0.000	0.390	
ELECTRIC PWR GRNDMAN		ALL		29.300	51.480	1.5	1.5	2.0	5.000	9.090	0.000	0.290	
ELECTRIC PWR GRNDMAN		HWY		30.330	53.290	1.5	1.5	2.0	5.000	9.400	0.000	0.300	
ELECTRIC PWR LINEMAN		ALL		45.360	51.480	1.5	1.5	2.0	5.000	14.06	0.000	0.450	
ELECTRIC PWR LINEMAN		HWY		46.950	53.290	1.5	1.5	2.0	5.000	14.56	0.000	0.470	
ELECTRIC PWR TRK DRV		ALL		30.340	51.480	1.5	1.5	2.0	5.000	9.400	0.000	0.300	
ELECTRIC PWR TRK DRV		HWY		31.400	53.290	1.5	1.5	2.0	5.000	9.730	0.000	0.310	
ELECTRICIAN	N	ALL		43.750	48.130	1.5	1.5	2.0	14.66	12.31	0.000	0.880	
ELECTRICIAN	S	BLD		45.950	50.550	1.5	1.5	2.0	10.57	12.87	0.000	1.610	
ELEVATOR CONSTRUCTOR		BLD		50.800	57.150	2.0	2.0	2.0	13.57	14.21	4.060	0.600	
FENCE ERECTOR		ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700	
GLAZIER		BLD		40.500	42.000	1.5	2.0	2.0	13.14	16.99	0.000	0.940	
HT/FROST INSULATOR		BLD		48.450	50.950	1.5	1.5	2.0	11.47	12.16	0.000	0.720	
IRON WORKER		ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700	
LABORER		ALL		39.200	39.950	1.5	1.5	2.0	13.42	11.28	0.000	0.500	
LATHER		ALL		42.520	44.520	1.5	1.5	2.0	13.29	12.76	0.000	0.630	
MACHINIST		BLD		45.350	47.850	1.5	1.5	2.0	7.260	8.950	1.850	0.000	
MARBLE FINISHERS		ALL		32.400	34.320	1.5	1.5	2.0	10.05	13.75	0.000	0.620	
MARBLE MASON		BLD		43.030	47.330	1.5	1.5	2.0	10.05	14.10	0.000	0.780	
MATERIAL TESTER I		ALL		29.200	0.000	1.5	1.5	2.0	13.42	11.28	0.000	0.500	
MATERIALS TESTER II		ALL		34.200	0.000	1.5	1.5	2.0	13.42	11.28	0.000	0.500	
MILLWRIGHT		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.40	0.000	0.630	
OPERATING ENGINEER		BLD 1		48.100	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		BLD 2		46.800	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		BLD 3		44.250	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		BLD 4		42.500	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		BLD 5		51.850	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		BLD 6		49.100	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		BLD 7		51.100	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		FLT		36.000	36.000	1.5	1.5	2.0	17.10	11.80	1.900	1.250	
OPERATING ENGINEER		HWY 1		46.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		HWY 2		45.750	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		HWY 3		43.700	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		HWY 4		42.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		HWY 5		41.100	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		HWY 6		49.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250	
OPERATING ENGINEER		HWY 7		47.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250	
ORNAMNTL IRON WORKER		ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700	
PAINTER		ALL		41.730	43.730	1.5	1.5	1.5	10.30	8.200	0.000	1.350	
PAINTER SIGNS		BLD		33.920	38.090	1.5	1.5	1.5	2.600	2.710	0.000	0.000	
PILEDRIVER		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.40	0.000	0.630	
PIPEFITTER		BLD		46.000	49.000	1.5	1.5	2.0	9.000	15.85	0.000	1.780	
PLASTERER		BLD		43.430	46.040	1.5	1.5	2.0	13.05	14.43	0.000	1.020	
PLUMBER		BLD		46.650	48.650	1.5	1.5	2.0	13.18	11.46	0.000	0.880	
ROOFER		BLD		41.000	44.000	1.5	1.5	2.0	8.280	10.54	0.000	0.530	
SHEETMETAL WORKER		BLD		44.720	46.720	1.5	1.5	2.0	10.65	13.31	0.000	0.820	
SIGN HANGER		BLD		26.070	27.570	1.5	1.5	2.0	3.800	3.550	0.000	0.000	
SPRINKLER FITTER		BLD		49.200	51.200	1.5	1.5	2.0	11.75	9.650	0.000	0.550	
STEEL ERECTOR		ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700	
STONE MASON		BLD		43.780	48.160	1.5	1.5	2.0	10.05	14.43	0.000	1.030	
SURVEY WORKER		----->NOT IN EFFECT		ALL	37.000	37.750	1.5	1.5	2.0	12.97	9.930	0.000	0.500
TERRAZZO FINISHER		BLD		38.040	0.000	1.5	1.5	2.0	10.55	11.22	0.000	0.720	
TERRAZZO MASON		BLD		41.880	44.880	1.5	1.5	2.0	10.55	12.51	0.000	0.940	
TILE MASON		BLD		43.840	47.840	1.5	1.5	2.0	10.55	11.40	0.000	0.990	

TRAFFIC SAFETY WRKR	HWY	32.750	34.350	1.5	1.5	2.0	6.550	6.450	0.000	0.500
TRUCK DRIVER	ALL 1	35.920	36.120	1.5	1.5	2.0	8.280	8.760	0.000	0.150
TRUCK DRIVER	ALL 2	32.700	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TRUCK DRIVER	ALL 3	32.900	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TRUCK DRIVER	ALL 4	33.100	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TUCKPINTER	BLD	43.800	44.800	1.5	1.5	2.0	8.280	13.49	0.000	0.670

Legend: RG (Region)

TYP (Trade Type - All, Highway, Building, Floating, Oil & Chip, Rivers)

C (Class)

Base (Base Wage Rate)

FRMAN (Foreman Rate)

M-F>8 (OT required for any hour greater than 8 worked each day, Mon through Fri.)

OSA (Overtime (OT) is required for every hour worked on Saturday)

OSH (Overtime is required for every hour worked on Sunday and Holidays)

H/W (Health & Welfare Insurance)

Pensn (Pension)

Vac (Vacation)

Trng (Training)

Explanations

KANE COUNTY

ELECTRICIANS AND COMMUNICATIONS TECHNICIAN (NORTH) - Townships of Burlington, Campton, Dundee, Elgin, Hampshire, Plato, Rutland, St. Charles (except the West half of Sec. 26, all of Secs. 27, 33, and 34, South half of Sec. 28, West half of Sec. 35), Virgil and Valley View CCC and Elgin Mental Health Center.

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

CERAMIC TILE FINISHER

The grouting, cleaning, and polishing of all classes of tile, whether for interior or exterior purposes, all burned, glazed or unglazed products; all composition materials, granite tiles, warning detectable tiles, cement tiles, epoxy composite materials, pavers, glass, mosaics, fiberglass, and all substitute materials, for tile made in tile-like units; all mixtures in tile like form of cement, metals, and other materials that are for and intended for use as a finished floor surface, stair treads, promenade roofs, walks, walls, ceilings, swimming pools, and all other places where tile is to form a finished interior or exterior. The mixing of all setting mortars including but not limited to thin-set mortars, epoxies, wall mud, and any other sand and cement mixtures or adhesives when used in the preparation, installation, repair, or maintenance of tile and/or similar materials. The handling and unloading of all sand, cement, lime, tile, fixtures, equipment, adhesives, or any other materials to be used in the preparation, installation, repair, or maintenance of tile and/or similar materials. Ceramic Tile Finishers shall fill all joints and voids regardless of method on all tile work, particularly and especially after installation of said tile work. Application of any and all protective coverings to all types of tile installations including, but not be limited to, all soap compounds, paper products, tapes, and all polyethylene coverings, plywood, masonite, cardboard, and any new type of products that may be used to protect tile installations, Blastrac equipment, and all floor scarifying equipment used in preparing floors to receive tile. The clean up and removal of all waste and materials. All demolition of existing tile floors and walls to be re-tiled.

COMMUNICATIONS TECHNICIAN

Construction, installation, maintenance and removal of telecommunication facilities (voice, sound, data and video), telephone, security systems, fire alarm systems that are a component of a multiplex system and share a common cable, and data inside wire, interconnect, terminal equipment, central offices, PABX and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area network), LAN (local area networks), and ISDN (integrated system digital network), pulling of wire in raceways, but not the installation of raceways.

MARBLE FINISHER

Loading and unloading trucks, distribution of all materials (all stone, sand, etc.), stocking of floors with material, performing all rigging for heavy work, the handling of all material that may be needed for the installation of such materials, building of scaffolding, polishing if needed, patching, waxing of material if damaged, pointing up, caulking, grouting and cleaning of marble, holding water on diamond or Carborundum blade or saw for setters cutting, use of tub saw or any other saw needed for preparation of material, drilling of holes for wires that anchor material set by setters, mixing up of molding plaster for installation of material, mixing up thin set for the installation of material, mixing up of sand to cement for the installation of material and such other work as may be required in helping a Marble Setter in the handling of all material in the erection or installation of interior marble, slate, travertine, art marble, serpentine, alberene stone, blue stone, granite and other stones (meaning as to stone any foreign or domestic materials as are specified and used in building interiors and exteriors and customarily known as stone in the trade), carrara, sanionyx, vitrolite and similar opaque glass and the laying of all marble tile, terrazzo tile, slate tile and precast tile, steps, risers treads, base, or any other materials that may be used as substitutes for any of the aforementioned materials and which are used on interior and exterior which are installed in a similar manner.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

OPERATING ENGINEER - BUILDING

Class 1. Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson Attachment; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Conveyor (Truck Mounted); Concrete Paver Over 27E cu. ft; Concrete Paver 27E cu. ft. and Under; Concrete Placer; Concrete Placing Boom; Concrete Pump (Truck Mounted); Concrete Tower; Cranes, All; Cranes, Hammerhead; Cranes, (GCI and similar Type); Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Heavy Duty Self-Propelled Transporter or Prime Mover; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, One, Two and Three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Hydro Vac (and similar equipment); Locomotives, All; Motor Patrol; Lubrication Technician; Manipulators; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes-Screw Type Pumps; Gypsum Bulker and Pump; Raised and Blind Hole Drill; Roto Mill Grinder; Scoops - Tractor Drawn; Slip-Form Paver; Straddle Buggies; Operation of Tie Back Machine; Tournapull; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Boilers; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Inside Elevators; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Laser Screed; Rock Drill (Self-Propelled); Rock Drill (Truck Mounted); Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Combination Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators (remodeling or renovation work); Hydraulic Power Units (Pile Driving, Extracting, and Drilling); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Low Boys; Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 4. Bobcats and/or other Skid Steer Loaders; Oilers; and Brick Forklift.

Class 5. Assistant Craft Foreman.

Class 6. Gradall.

Class 7. Mechanics; Welders.

OPERATING ENGINEERS - HIGHWAY CONSTRUCTION

Class 1. Asphalt Plant; Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Spreader; Autograder/GOMACO or other similar type machines: ABG Paver; Backhoes with Caisson Attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Tower Cranes of all types: Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Dredges; Elevators, Outside type Rack & Pinion and Similar Machines; Formless Curb and Gutter Machine; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Truck Mounted; Hoists, One, Two and Three Drum; Heavy Duty Self-Propelled Transporter or Prime Mover; Hydraulic Backhoes; Backhoes with shear attachments up to 40' of boom reach; Lubrication Technician; Manipulators; Mucking Machine; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Snow Melters; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; Hydraulic Telescoping Form (Tunnel); Operation of Tieback Machine; Tractor Drawn Belt Loader; Tractor Drawn Belt Loader (with attached pusher - two engineers); Tractor with Boom; Tractaire with Attachments; Traffic Barrier Transfer Machine; Trenching; Truck Mounted Concrete Pump with Boom; Raised or Blind Hole Drills (Tunnel Shaft); Underground Boring and/or Mining Machines 5 ft. in diameter and over tunnel, etc; Underground Boring and/or Mining Machines under 5 ft. in diameter; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (Less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Concrete Wheel Saw; Conveyor Muck Cars (Haglund or Similar Type); Drills, All; Finishing Machine - Concrete; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro-Blaster; Hydro Excavating (excluding hose work); Laser Screed; All Locomotives, Dinky; Off-Road Hauling Units (including articulating) Non Self-Loading Ejection Dump; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotary Snow Plows; Rototiller, Seaman, etc., self-propelled; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper - Single/Twin Engine/Push and Pull; Scraper - Prime Mover in Tandem (Regardless of Size); Tractors pulling attachments, Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than Asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper-Form-Motor Driven.

Class 4. Air Compressor; Combination - Small Equipment Operator; Directional Boring Machine; Generators; Heaters, Mechanical; Hydraulic Power Unit (Pile Driving, Extracting, or Drilling); Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Vacuum Trucks (excluding hose work); Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. SkidSteer Loader (all); Brick Forklifts; Oilers.

Class 6. Field Mechanics and Field Welders

Class 7. Dowell Machine with Air Compressor; Gradall and machines of like nature.

OPERATING ENGINEERS - FLOATING

Diver. Diver Wet Tender, Diver Tender, ROV Pilot, ROV Tender

SURVEY WORKER - Operated survey equipment including data collectors, G.P.S. and robotic instruments, as well as conventional levels and transits.

TRAFFIC SAFETY - work associated with barricades, horses and drums used to reduce lane usage on highway work, the installation and removal of temporary lane markings, and the installation and removal of temporary road signs.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; Teamsters; Unskilled Dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turntrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turntrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

TERRAZZO FINISHER

The handling of sand, cement, marble chips, and all other materials that may be used by the Mosaic Terrazzo Mechanic, and the mixing, grinding, grouting, cleaning and sealing of all Marble, Mosaic, and Terrazzo work, floors, base, stairs, and wainscoting by hand or machine, and in addition, assisting and aiding Marble, Masonic, and Terrazzo Mechanics.

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

MATERIAL TESTER & MATERIAL TESTER/INSPECTOR I AND II

Notwithstanding the difference in the classification title, the classification entitled "Material Tester I" involves the same job

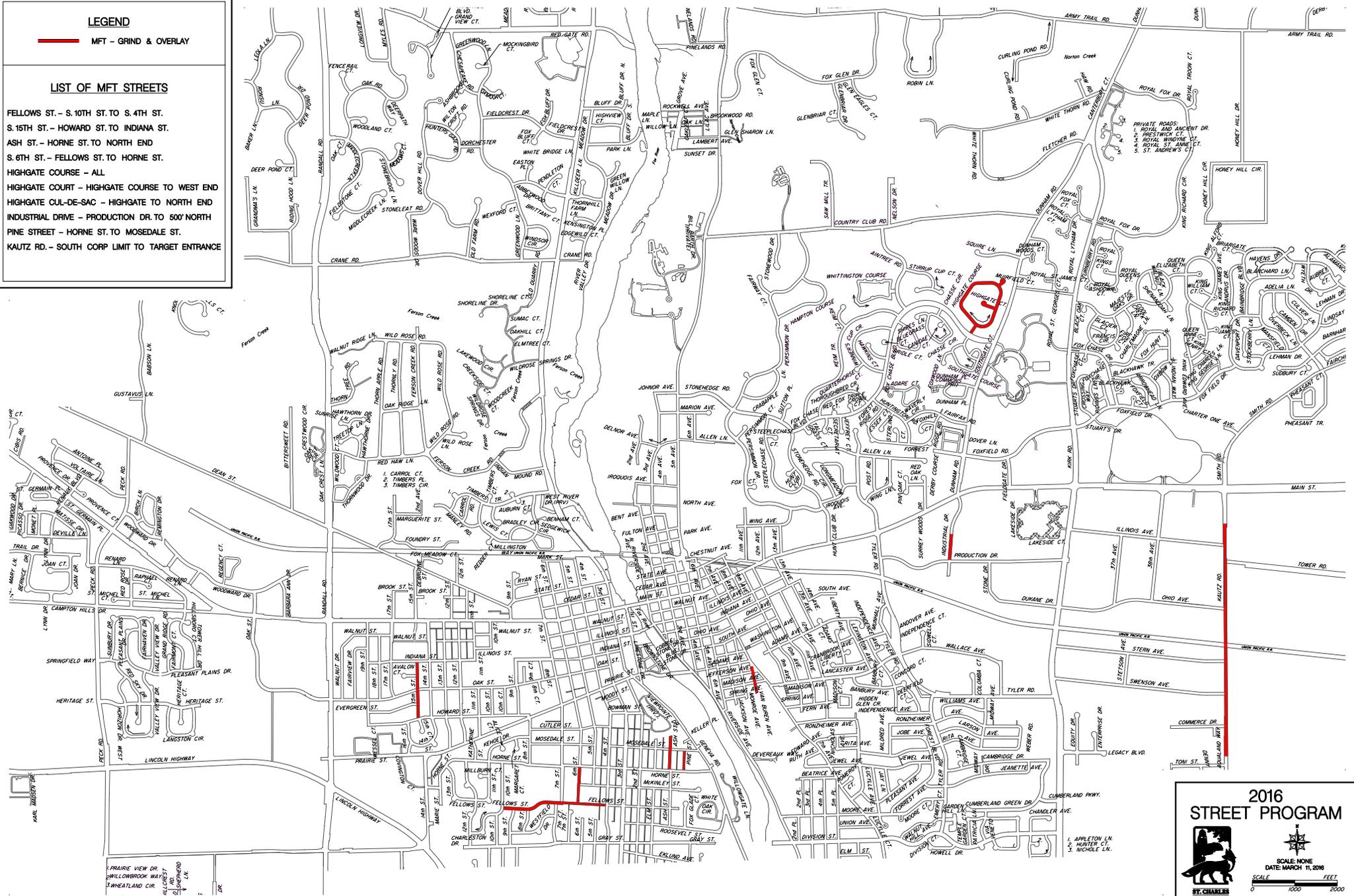
duties as the classification entitled "Material Tester/Inspector I".
Likewise, the classification entitled "Material Tester II" involves
the same job duties as the classification entitled "Material
Tester/Inspector II".

LEGEND

 MFT - GRIND & OVERLAY

LIST OF MFT STREETS

- FELLOWS ST. - S. 10TH ST. TO S. 4TH ST.
- S. 15TH ST. - HOWARD ST. TO INDIANA ST.
- ASH ST. - HORNE ST. TO NORTH END
- S. 6TH ST. - FELLOWS ST. TO HORNE ST.
- HIGHGATE COURSE - ALL
- HIGHGATE COURT - HIGHGATE COURSE TO WEST END
- HIGHGATE CUL-DE-SAC - HIGHGATE TO NORTH END
- INDUSTRIAL DRIVE - PRODUCTION DR. TO 500' NORTH
- PINE STREET - HORNE ST. TO MOSEDALE ST.
- KAUTZ RD. - SOUTH CORP LIMIT TO TARGET ENTRANCE



2016 STREET PROGRAM



SCALE NONE
DATE: MARCH 11, 2016
SCALE FEET
0 1000 2000
FILE: 2016-MFT-STREET-PROGRAM.DGN

1. PRAIRIE VIEW DR.
2. WILLOWBROOK WAY
3. WHEATLAND CIR.
4. ALLORE ST.
5. SHEPHERD V LN.

1. APPLETON LN.
2. HUNTER CT.
3. WICKLE L LN.