

**VILLAGE OF DOWNERS GROVE**  
**Report for the Village**  
**5/15/2018**

<b>SUBJECT:</b>	<b>SUBMITTED BY:</b>
Bid - 2018 Street Resurfacing Contract B	Nan Newlon Director of Public Works

**SYNOPSIS**

A motion is requested to award a contract for the 2018 Street Resurfacing Contract B to K-Five Construction Corp. of Westmont, Illinois in the amount of \$2,792,999.76.

**STRATEGIC PLAN ALIGNMENT**

The goals for 2017-2019 include *Top Quality Infrastructure*.

**FISCAL IMPACT**

The FY18 budget includes a total of \$2,800,000: \$1,300,000 in the Motor Fuel Tax Fund (Page 4-6, Line 20) and \$1,500,000 in the Capital Projects Fund (Page 4-17, Line 20) for this contract.

**UPDATE & RECOMMENDATION**

This item was discussed at the May 8, 2018 Village Council meeting. Staff recommends approval on the May 15, 2018 consent agenda.

**BACKGROUND**

This contract is a component of the 2018 Roadway Maintenance Program (CIP Project ST-004). The scope of this contract includes resurfacing the streets included on the attached list with a new layer of asphalt along with the repair of defective sections of pavement and concrete curb and gutter.

This contract represents a portion of the budgeted roadway maintenance work. Other projects include Crack Sealing and Seal Coating Services, 2018 Preservative Seal and 2018 Fall Roadway Patching.

A Call for Bids was issued and published in accordance with the Village's Purchasing Policy. Three bids were received by the due date of April 18, 2018. A synopsis of the bids is as follows:

<u>Contractor</u>	<u>Base Bid</u>	
<b>K-Five Construction Corp.</b>	<b>\$2,792,999.76</b>	<b>Low Bid</b>
J. A. Johnson Paving Co.	\$2,911,216.71	
R. W. Dunteman Co.	\$2,955,571.41	

K-Five Construction Corporation satisfactorily completed the Village's 2011 Resurfacing (A) Project, the 2015 Fairview Ave Resurfacing LAFO Project and the 2017 Resurfacing LAFO Projects on Finley Rd & Dunham Rd.

**ATTACHMENTS**

Contract Documents

IDOT Form Contractor Certifications

Contractor Evaluation Form

List of Streets

RETURN WITH BID



Illinois Department of Transportation

Local Public Agency Formal Contract Proposal

PROPOSAL SUBMITTED BY		
K-Five Construction Corporation		
Contractor's Name		
999 Oakmont Plaza Drive, Suite 200		
Street		P.O. Box
Westmont, Illinois	60559	
City	State	Zip Code

STATE OF ILLINOIS

COUNTY OF DuPage  
Village of Downers Grove  
(Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF  
STREET NAME OR ROUTE NO. Various Locations  
SECTION NO. 18-00000-01-GM  
TYPES OF FUNDS MFT & Corporate

SPECIFICATIONS (required)       PLANS (required)

**For Municipal Projects**  
Submitted/Approved/Passed

Mayor    President of Board of Trustees    Municipal Official

Date 4/3/18

**Department of Transportation**  
 Released for bid based on limited review

Regional Engineer

Date 4-4-18

**For County and Road District Projects**  
Submitted/Approved

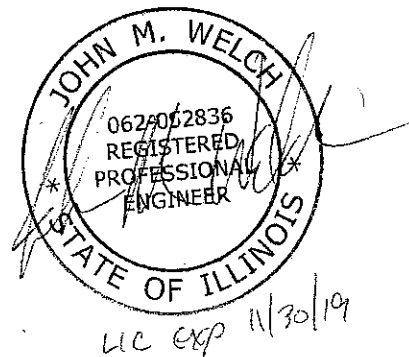
Highway Commissioner

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 DuPage  
 Local Public Agency Downers Grove  
 Section Number 18-00000-01-GM  
 Route Various

Sealed proposals for the improvement described below will be received at the office of Public Works Department,  
5101 Walnut Avenue, Downers Grove, Illinois 60515 until 10:00 AM on April 18, 2018  
 Address Time Date

Sealed proposals will be opened and read publicly at the office of Public Works Department  
5101 Walnut Avenue, Downers Grove, Illinois 60515 at 10:00 AM on April 18, 2018  
 Address Time Date

## DESCRIPTION OF WORK

Name 2018 Resurfacing (B) Length: 38004.00 feet ( 7.20 miles)  
 Location Various Streets  
 Proposed Improvement Pavement removal and replacement, level binder, hot-mix asphalt surface course,  
curb and gutter removal and replacement and all related work

1. Plans and proposal forms will be available in the office of Public Works Department, 5101 Walnut Avenue,  
Downers Grove, Illinois 60515, Scott Barr (630) 434-5488, Proposal Fee \$0  
 Address
2.  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.

## PROPOSAL

County DuPage  
 Local Public Agency Downers Grove  
 Section Number 18-00000-01-GM  
 Route Various

1. Proposal of K-Five Construction Corporation  
999 Oakmont Plaza Drive, Suite 200, Westmont, Illinois 60559  
 for the improvement of the above section by the construction of Pavement removal and replacement,  
level binder, hot-mix asphalt surface course, curb and gutter removal and replacement  
and all related work  
 a total distance of 38004.00 feet, of which a distance of 38004.00 feet, ( 7.200 miles) are to be improved.
2. The plans for the proposed work are those prepared by Village of Downers Grove  
 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 10/19/2018  
 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:  
 \_\_\_\_\_ Treasurer of Village of Downers Grove  
 The amount of the check is Bid Bond 5% ( \_\_\_\_\_ ).
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.

RETURN WITH BID



**Illinois Department  
of Transportation**

## SCHEDULE OF PRICES

County DuPage  
 Local Public Agency Village of Downers Grove  
 Section 18-00000-01-GM  
 Route Various

## Schedule for Multiple Bids

Combination Letter	Sections Included in Combinations	Total

## Schedule for Single Bid

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

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
1	Hot-Mix Asphalt Surface Course, Mix D, N50	Ton	10,307	\$72.15	\$743,650.05
2	Leveling Binder (Machine Method), N50	Ton	5,438	\$75.15	\$408,665.70
	Bituminous Materials (Tack Coat)	LB	82,821	\$0.01	\$828.21
4	Class D Patches, Type II, 4"	S.Y.	300	\$20.00	\$6,000.00
5	Class D Patches, Type III, 4"	S.Y.	542	\$20.00	\$10,840.00
6	Class D Patches, Type IV, 4"	S.Y.	18,912	\$20.00	\$378,240.00
7	Class D Patches, Type II, 6"	S.Y.	68	\$25.00	\$1,700.00
8	Class D Patches, Type III, 6"	S.Y.	100	\$25.00	\$2,500.00
9	Class D Patches, Type IV, 6"	S.Y.	1,688	\$25.00	\$42,200.00
10	Class D Patches, Type II, 8"	S.Y.	100	\$40.00	\$4,000.00
11	Class D Patches, Type III, 8"	S.Y.	100	\$40.00	\$4,000.00
12	Class D Patches, Type IV, 8"	S.Y.	259	\$40.00	\$10,360.00
13	Porous Granular Embankment, Special	C.Y.	435	\$27.50	\$11,962.50
14	Additional Hauling Surcharge, Non-Hazardous Special Waste	Load	3	\$1,100.00	\$3,300.00
15	Combination Concrete Curb and Gutter Removal	L.F.	11,877	\$4.05	\$48,101.85

## RETURN WITH BID

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
16	Combination Concrete Curb and Gutter, Type M-3. 12	L.F.	111	\$18.50	\$2,053.50
17	Combination Concrete Curb and Gutter, Type M-6. 12	L.F.	3,113	\$18.35	\$57,123.55
18	Combination Concrete Curb and Gutter, Type B-4. 12	L.F.	435	\$18.25	\$7,938.75
19	Combination Concrete Curb and Gutter, Type B-6. 12	L.F.	7,328	\$19.05	\$139,598.40
20	Combination Concrete Curb and Gutter, Type B-6. 12 Reinforced	L.F.	60	\$21.00	\$1,260.00
21	Combination Concrete Curb and Gutter, Type B-6. 18	L.F.	800	\$23.00	\$18,400.00
22	Combination Concrete Curb and Gutter, Type B-6. 18 Reinforced	L.F.	30	\$25.00	\$750.00
23	Manhole to be Adjusted	EA.	73	\$405.00	\$29,565.00
24	Manhole to be Adjusted, Special	EA.	47	\$610.00	\$28,670.00
25	Manhole to be Adjusted With New Type 1 Frame and Closed Lid	EA.	1	\$675.00	\$675.00
26	Manhole to be Reconstructed	EA.	1	\$1,200.00	\$1,200.00
27	Inlet to be Adjusted	EA.	52	\$280.00	\$14,560.00
28	Inlet to be Adjusted With New Type 3 Frame and Grate, Special	EA.	5	\$615.00	\$3,075.00
29	Inlet to be Reconstructed	EA.	1	\$825.00	\$825.00
30	Inlet, Type A, 24" With New Type 1 Frame and Grate	EA.	1	\$1,200.00	\$1,200.00
31	Inlet, Type B, 36" With Salvaged Frame and Grate	EA.	1	\$1,300.00	\$1,300.00
32	Inlet Filters	EA.	27	\$125.00	\$3,375.00
33	Inlet Filters Cleaning	EA.	27	\$50.00	\$1,350.00
34	Hot-Mix Asphalt Surface Removal, 1.75"	S.Y.	10,030	\$1.95	\$19,558.50
35	Hot-Mix Asphalt Surface Removal, 2.0"	S.Y.	63,264	\$2.25	\$142,344.00
36	Hot-Mix Asphalt Surface Removal, 2.5"	S.Y.	48,397	\$2.79	\$135,027.63
37	Portland Cement Concrete Surface Removal, 1.75"	S.Y.	145	\$10.19	\$1,477.55
38	Mixture For Cracks, Joints and Flangeways	Ton	16	\$400.00	\$6,400.00
39	Portland Cement Concrete Sidewalk Removal	S.F.	20,148	\$1.55	\$31,229.40
40	Portland Cement Concrete Sidewalk, 5"	S.F.	17,488	\$5.30	\$92,686.40



## RETURN WITH BID

## Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
41	Portland Cement Concrete Sidewalk, 6"	S.F.	990	\$5.55	\$5,494.50
42	Portland Cement Concrete Sidewalk, 8"	S.F.	355	\$5.75	\$2,041.25
43	Detectable Warnings	S.F.	1,250	\$28.25	\$35,312.50
44	Decorative Paver Driveway Removal and Replacement	S.Y.	34.5	\$95.00	\$3,277.50
45	Decorative Paver Driveway Sidewalk and Replacement	S.Y.	1	\$120.00	\$120.00
46	Aggregate Shoulders, Type B	Ton	699	\$12.50	\$8,737.50
47	Parkway Restoration		6,412	\$10.10	\$64,761.20
48	Supplemental Watering	Unit	5	\$90.00	\$450.00
49	Temporary Ramp, Hot-Mix Asphalt	S.Y.	75	\$70.00	\$5,250.00
50	Tree Root Pruning	Unit	5	\$130.00	\$650.00
51	Hot-Mix Asphalt Driveway Removal	S.Y.	1,356	\$25.00	\$33,900.00
52	Hot-Mix Asphalt Driveway Pavement, 3"	S.Y.	1,191	\$35.00	\$41,685.00
53	Hot-Mix Asphalt Driveway Pavement, 8"	S.Y.	165	\$45.00	\$7,425.00
54	Portland Cement Concrete Driveway Removal	S.Y.	873	\$15.50	\$13,531.50
	Portland Cement Concrete Driveway Pavement, 6"	S.Y.	873	\$54.25	\$47,360.25
56	Short Term Pavement Marking, 4"	L.F.	288	\$1.00	\$288.00
57	Short Term Pavement Marking, Removal	S.F.	32	\$2.00	\$64.00
58	Thermoplastic Pavement Marking Line, 4" Yellow	L.F.	14,854	\$0.58	\$8,615.32
59	Thermoplastic Pavement Marking Line, 4" White	L.F.	6,713	\$0.65	\$4,363.45
60	Thermoplastic Pavement Marking Line, 6" White	L.F.	394	\$1.25	\$492.50
61	Thermoplastic Pavement Marking Line, 12" White	L.F.	306	\$2.00	\$612.00
62	Thermoplastic Pavement Marking Line, 12" Yellow	L.F.	814	\$1.85	\$1,505.90
63	Thermoplastic Pavement Marking Line, 24" White	L.F.	255	\$4.00	\$1,020.00
64	Thermoplastic Pavement Marking, Letters & Symbols	S.F.	36.4	\$13.50	\$491.40
65	Erosion Barrier, Special	L.F.	800	\$6.20	\$4,960.00
66	Erosion, Sedimentation and Dust Control	L.S.	1	\$3,500.00	\$3,500.00

RETURN WITH BID

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
67	Construction Staking	L.S.	1	\$10,100.00	\$10,100.00
68	Traffic Control And Protection Standard 701501	L.S.	1	\$22,000.00	\$22,000.00
69	Traffic Control And Protection Standard 701502	L.S.	1	\$23,000.00	\$23,000.00
70	Traffic Control And Protection Standard 701801	L.S.	1	\$24,000.00	\$24,000.00
				<b>TOTAL BID</b>	<b>\$2,792,999.76</b>

## RETURN WITH BID

## CONTRACTOR CERTIFICATIONS

County	<u>DuPage</u>
Local Public Agency	<u>Downers Grove</u>
Section Number	<u>18-00000-01-GM</u>
Route	<u>Various</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.

RETURN WITH BID

SIGNATURES

County DuPage  
 Local Public Agency Downers Grove  
 Section Number 18-00000-01-GM  
 Route Various

(If an individual)

Signature of Bidder \_\_\_\_\_

Business Address \_\_\_\_\_

(If a partnership)

Firm Name \_\_\_\_\_

Signed By \_\_\_\_\_

Business Address \_\_\_\_\_

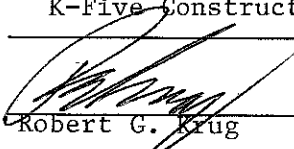
Inset Names and Addressed of All Partners



\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(If a corporation)

Corporate Name K-Five Construction Corporation

Signed By   
Robert G. Krug President

Business Address 999 Oakmont Plaza Drive, Suite 200  
Westmont, Illinois 60559

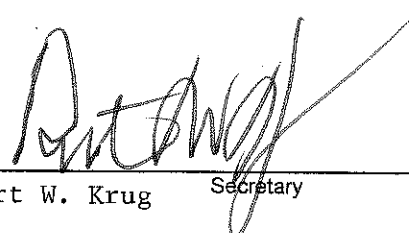
Inset Names of Officers



President Robert G. Krug

Secretary Robert W. Krug

Treasurer Josephine M. Krug

Attest:   
Robert W. Krug Secretary

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### Special Provisions



Local Public Agency	County	Section Number
Village of Downers Grove	DuPage	18-00000-01-GM

The following Special Provision 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 Specification and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of the above named section, and in case of conflict with any parts, or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

**Maintenance of Roadways**

Effective: September 30, 1985

Revised: November 1, 1996

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

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

**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 District One Bureau of Traffic at least 72 hours in advance of beginning work.~~ The Contractor shall contact Downers Grove Public Works at least 72 hours in advance of beginning work.

**STANDARDS:**

701301-04

701501-06

701502-08

701801-06

701901-07

**DETAILS:** TC-10, TC-13**SPECIAL PROVISIONS:**

Basis of Payment: This work shall be paid for at the contract Lump Sum price for TRAFFIC CONTROL AND PROTECTION STANDARD 701501 or TRAFFIC CONTROL AND PROTECTION STANDARD 701502 or TRAFFIC CONTROL AND PROTECTION STANDARD 701801



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

Effective: June 1, 2016

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

**UTILITIES TO BE ADJUSTED**

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

## Pre-Stage

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	ACTION
				None Anticipated

## Stage 1

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	ACTION
				None Anticipated

Stage 2

STAGE / LOCATION	TYPE	DESCRIPTION	RESPONSIBLE AGENCY	ACTION
				None Anticipated

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

Pre-Stage: \_\_\_\_\_ Days Total Installation  
 Stage 1: \_\_\_\_\_ Days Total Installation  
 Stage 2: \_\_\_\_\_ Days Total Installation

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

Agency/Company Responsible to Resolve Conflict	Name of contact	Address	Phone	e-mail address

UTILITIES TO BE WATCHED AND PROTECTED

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

## Pre-Stage

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER	ACTION
				None Anticipated

## Stage 1

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER	ACTION
				None Anticipated

## Stage 2

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER	ACTION
				None Anticipated

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

Agency/Company Responsible to Resolve Conflict	Name of contact	Address	Phone	e-mail address

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

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

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

INDEX  
FOR  
SUPPLEMENTAL SPECIFICATIONS  
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2018

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

ERRATA Standard Specifications for Road and Bridge Construction  
(Adopted 4-1-16) (Revised 1-1-18)

SUPPLEMENTAL SPECIFICATIONS

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## Check Sheet For Recurring Special Provisions



The Following Recurring Special Provisions Indicated By An "X" Are Applicable To This Contract And Are Included By Reference:

### Recurring Special Provisions

<u>Check Sheet #</u>		<u>Page No.</u>
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2	<input type="checkbox"/> Subletting of Contracts (Federal-Aid Contracts)	67
3	<input type="checkbox"/> EEO	68
4	<input type="checkbox"/> Specific EEO Responsibilities Non Federal-Aid Contracts	78
5	<input type="checkbox"/> Required Provisions - State Contracts	83
6	<input type="checkbox"/> Asbestos Bearing Pad Removal	89
7	<input type="checkbox"/> Asbestos Waterproofing Membrane and Asbestos Hot-Mix Asphalt Surface Removal	90
8	<input type="checkbox"/> Temporary Stream Crossings and In-Stream Work Pads	91
9	<input type="checkbox"/> Construction Layout Stakes Except for Bridges	92
10	<input type="checkbox"/> Construction Layout Stakes	95
11	<input type="checkbox"/> Use of Geotextile Fabric for Railroad Crossing	98
12	<input type="checkbox"/> Subsealing of Concrete Pavements	100
13	<input type="checkbox"/> Hot-Mix Asphalt Surface Correction	104
14	<input type="checkbox"/> Pavement and Shoulder Resurfacing	106
15	<input type="checkbox"/> Patching with Hot-Mix Asphalt Overlay Removal	107
16	<input type="checkbox"/> Polymer Concrete	109
17	<input type="checkbox"/> PVC Pipeliner	111
18	<input type="checkbox"/> Bicycle Racks	112
19	<input type="checkbox"/> Temporary Portable Bridge Traffic Signals	114
20	<input type="checkbox"/> Work Zone Public Information Signs	116
21	<input type="checkbox"/> Nighttime Inspection of Roadway Lighting	117
22	<input type="checkbox"/> English Substitution of Metric Bolts	118
23	<input type="checkbox"/> Calcium Chloride Accelerator for Portland Cement Concrete	119
24	<input type="checkbox"/> Quality Control of Concrete Mixtures at the Plant	120
25	<input checked="" type="checkbox"/> Quality Control/Quality Assurance of Concrete Mixtures	128
26	<input type="checkbox"/> Digital Terrain Modeling for Earthwork Calculations	144
27	<input type="checkbox"/> Reserved	146
28	<input type="checkbox"/> Preventive Maintenance - Bituminous Surface Treatment	147
29	<input type="checkbox"/> Reserved	153
30	<input type="checkbox"/> Reserved	154
31	<input type="checkbox"/> Reserved	155
32	<input type="checkbox"/> Temporary Raised Pavement Markers	156
33	<input type="checkbox"/> Restoring Bridge Approach Pavements Using High-Density Foam	157
34	<input type="checkbox"/> Portland Cement Concrete Inlay or Overlay	160
35	<input type="checkbox"/> Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	164

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>
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LRS 5	<input checked="" type="checkbox"/> Contract Claims	172
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LRS 7	<input type="checkbox"/> Bidding Requirements and Conditions for Material Proposals	179
LRS 8	<b>Reserved</b>	185
LRS 9	<input type="checkbox"/> Bituminous Surface Treatments	186
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LRS 12	<input checked="" type="checkbox"/> Wages of Employees on Public Works	190
LRS 13	<input checked="" type="checkbox"/> Selection of Labor	192
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LRS 16	<input type="checkbox"/> Protests on Local Lettings	197
LRS 17	<input checked="" type="checkbox"/> Substance Abuse Prevention Program	198
LRS 18	<input type="checkbox"/> Multigrade Cold Mix Asphalt	199

#### **IV. SPECIAL PROVISIONS**

**The following Special Provisions shall modify, supercede, or supplement the Standard Specifications.**

Where any section, subsection, paragraph, or subparagraph of the Standard Specifications is *supplemented* by any of the following paragraphs, the provisions of such section, subsection, paragraph, or subparagraph shall remain in effect. The Special Provisions shall govern in addition to the particular Standard Specification so supplemented, and not in lieu thereof.

Where any section, subsection, paragraph, or subparagraph of the Standard Specifications is *amended, voided, or superceded* by any of the following paragraphs, any provision of such section, subsection, paragraph, or subparagraph standing unaffected, shall remain in effect. The Special Provisions shall govern in lieu of any particular provision of the Standard Specification so amended, voided, or superceded, and not in addition to the portion changed.

##### **1 GENERAL CONSTRUCTION REQUIREMENTS**

The following general requirements are intended to govern the overall priority for the performance of the work described in this contract. As general requirements, they are not intended to dictate to the Contractor the precise method by which these tasks shall be performed.

(A) Unless otherwise allowed by the Village, no contract work on Brookbank Rd (59<sup>th</sup> St to 63<sup>rd</sup> St) can begin until a separate street construction project is completed this spring. A portion of southbound Brookbank north of 60<sup>th</sup> Place is being reconstructed. It is anticipated that this separate project will be complete by the end of June 2018.

(B) The contractor shall also make special note that no contract work on Fairmount Ave (67<sup>th</sup> to Claremont) or 68<sup>th</sup> St (Fairmount to Blackburn Pl) can begin until after the school year ends for El Sierra School on or about June 4, 2018. Majority of contract work in this area should then be complete prior to start of the new school year on August 23, 2018.

(C) A downtown Rotary Grove Fest scheduled for June 21 through June 24, 2018 may affect schedule of work in the area of Gilbert Ave west of Carpenter St. During this event, any previous work will require additional clean up, backfill etc., to safely allow for overflow traffic, parking and pedestrian use.

**Special consideration to hours and location of work near schools shall be made to allow for full and safe access during normal student arrival and departure schedules.**

The Contractor shall maintain traffic flow on All Streets during the day in accordance with the applicable special provision. Adequate signing and flagging is of particular importance for safe travel of all residents.

The Contractor shall conduct his operations to interfere as little as possible with Village employees or the public on or near the Work. All construction work specified under this contract shall be so engaged as to not impede normal traffic and pedestrian ways. Any barricading to detour traffic must receive prior written approval from the Engineer.



## Village of Downers Grove – 2018 Resurfacing (B)

Unless otherwise allowed by the Village, non-poured and/or non-finished concrete shall not be allowed to extend over a Saturday and Sunday period. All construction work shall be done such that continuous access to schools or businesses is maintained, although it may be restricted to one lane with proper barricading.

All voids and open excavation remaining adjacent to newly constructed curb and gutter, sidewalks, driveways, etc., must be addressed in a timely manner. For that period prior to full parkway restoration or turf placement, the Contractor shall backfill and grade all disturbed areas in the parkway so as to insure the safety of the general public. Parkways shall be left in a safe, clean and usable condition conducive to foot traffic and to the satisfaction of the Village. The Contractor shall also work to keep disturbed areas in the parkway weed free.

All street openings made prior to November 15<sup>th</sup> shall be fully restored according to the applicable special provisions, and the street reopened to regular traffic upon the availability of hot-mix bituminous concrete. The Contractor shall assume the risk of restoration over those reaches of pipe installed but not yet pressure-tested for pipe integrity.

If the project requires the phasing of construction, the contractor is to follow the phasing shown in the plan set. Any variations in the phasing plan shown on the plan set must be approved in writing by the Engineer before construction begins. The contractor will not be allowed to proceed to another phase without the approval of the Engineer. **The contractor will receive no additional compensation for constructing the project in phases.**

No more than three hundred linear feet (300 LF) of pavement may be open-cut and closed to use by the motoring public, and access to all individual drives within the current work zone must be restored at the end of each workday, unless a Village-approved phasing plan shows otherwise.

## **2 PRE-QUALIFICATION**

All Bidders must supply Certificate of Eligibility from IDOT, Prequalified 003 HMA Plant Mix.

## **3 COMPLETION TIME**

In addition to completion date listed on Proposal, BLR 12200 Pg. 3 of 6, the Contractor shall note the following. This project incorporates multiple phases of construction with various types of street rehabilitation treatments. Besides the overall time limit of the project, there are also interim deadlines on specific parts of the work in order to reduce the time residents are inconvenienced as a result of the project. Should the Contractor fail to complete the work within the stipulated time frames and/or prior to the completion date, the Contractor shall be liable for liquidated damages.

## **4 LIQUIDATED DAMAGES**

The Contractor must complete the work in accordance with the completion time requirements. If he fails to do so within the times stipulated, the Contractor shall be liable for liquidated damages for each additional calendar day in strict adherence to article 108.09 of the SSRBC, except that liquidated damages shall be fixed at \$1,275.00 per day.

## Village of Downers Grove – 2018 Resurfacing (B)

Monetary damages will be assessed against the Contractor if he fails to complete each phase of construction as described in this contract, and the overall completion of this project within the stipulated time frames, not as a penalty but liquidated damages for delay in completion of work.

The Contractor must read carefully the special provisions pertaining to each portion of work. Certain parts or phases of the proposed work will have intermittent time frames stipulated to lessen the disruption to affected and adjacent residents and businesses.

**Phases and time frames are as follows:**

- **Once work has begun on any street with the removal of concrete items, the Contractor shall complete final surface course placement within 40 calendar days.**
- **Curb replacement and permanent driveway restoration shall be completed within 10 calendar days of curb removal. This includes any sidewalk work and / or replacement of HMA or PCC driveway as designated.**
- **All voids / open excavations remaining adjacent to newly constructed curb and gutter, sidewalks, driveways, etc., shall be properly backfilled, compacted and graded per the specifications within 5 calendar days of their completion.**
- **The Contractor shall complete final surface course placement within 10 calendar days of pavement milling / surface removal.**
- **Unless otherwise dictated by the specifications, final parkway restoration / sod placement shall be completed within 7 calendar days of a street receiving final surface course placement.**
- **Placement of new aggregate shoulders shall be completed within 7 calendar days of a street receiving final surface course placement.**

## **5 ACCESS AND WATER SHUT OFF NOTIFICATION**

If access to a driveway will be blocked, or water will be turned off, the Contractor shall give that resident or business proper written notification at least 24 hours in advance. The Contractor must provide them the opportunity to remove their cars from the drive or make other arrangements, and prepare for any shutdown of the water system. Samples of written notices shall be submitted to the Engineer for approval.

In addition, the Contractor shall be responsible for notifying the resident or business verbally on the morning of any driveway closure, to ensure awareness of the lack of access.

**Basis of Payment:** This work shall be considered **INCIDENTAL** to the project.

## **6 TREE PROTECTION**

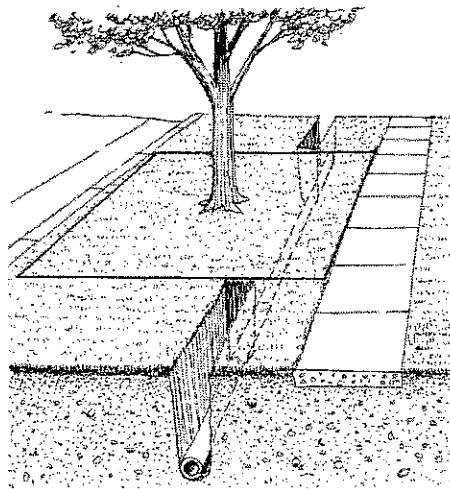
Municipal Codes regarding trees, including tree protection requirements for public parkway trees, are located in Chapter 24 of the Downers Grove Municipal Code. Specifically, Municipal Codes 24-7 and 24-8 detail the public parkway tree protection sizes and fines for violations. The Village Forester shall approve all tree protection measures and any deviations. All tree protection measures and any deviations shall be noted in the contract specifications and on approved project plan sheets and permits using the guidelines listed below.

## Village of Downers Grove – 2018 Resurfacing (B)

Tree protection shall include avoiding damage to the above ground tree branches and trunk, and the below ground root system and surrounding soil. Tree crowns and trunks shall not suffer any branch or bark loss. Roots shall be protected from compaction, storage of materials, severing, regrading of the parkway or excavation unless specifically noted on the project plan sheets.

The Critical Root Zone, or CRZ, is the area immediately surrounding a tree that must be protected from damage. In a municipal parkway setting with utilities and paved or concrete surfaces, the size of the CRZ has been adjusted to form a rectangle around the parkway tree trunk with minimum dimensions listed in the following table. The depth of the CRZ extends to 4 feet below the natural ground surface level.

<u>Parkway</u> <u>Tree diameter at 4.5'</u>	<u>Width street to property</u> <u>(min. curb to sidewalk)</u>	<u>Length along</u> <u>street (minimum)</u>	<u>Depth</u>
0 – 12.0 inches	10.0 feet	10 feet	4 feet
12.1 – 24.0 inches	10.0 feet	20 feet	4 feet
24.1 or more inches	10.0 feet	30 feet	4 feet



For projects that involve excavations of less than one (1) foot in depth in the parkway or street and are replacing structures in the same location, fencing of the public parkway trees shall not be required. Example projects include, but are not limited to, street pavement resurfacing, curb removal/replacement, driveway removal/replacement, or sidewalk removal/repairs or new sidewalk installations. Contractors shall be mindful of the CRZ dimensions and potential for fines if any parkway trees suffer any unauthorized damage as determined by the Village Forester.

For projects that involve excavations of one (1) or more feet in depth in the parkway or street or both, fencing of the public parkway trees shall be required. Example projects include, but are not limited to, watermain replacements with new roundway keystops and domestic service box installations, sanitary line replacements and new service connections, new or replacement natural gas services, new or replacement phone or fiber optic lines, or new or replacement storm sewers, or projects that widen roads which in turn decreases the parkway soil volume around public parkway trees.

Projects that require fencing (listed above) shall fence the public parkway trees with six (6) foot high chain link construction fence secured to metal posts driven in the ground which are spaced no further than ten (10) feet apart. The dimensions of the fence shall depend on the tree diameter size and shall follow the table listed for the CRZ above, or as large as practical dependent on driveways and other field conditions. The fenced rectangle shall have three (3) sides with the opening facing the adjacent residences for easy access for mowing or tree care. Under no circumstances shall any items be stored within the fence. All fencing shall be maintained daily in an upright good condition. The size and location of all fencing shall be shown on the project plan sheets.

To avoid damage to the CRZ, utilities must be augered underneath the public parkway trees. Excavation pits for augering equipment are to be outside the fenced area and are to be shown on the project plan sheets. Excavation pits for roundway keystops and domestic service boxes are to be as small as practical with excavation occurring in a direction away from the adjacent public parkway tree.

In cases when severing of roots within a portion of the CRZ may be unavoidable (ex. sidewalk installation, curb replacement, water or sanitary service replacement), subject to the approval of the Village Forester, sharp clean cuts shall be made on root ends to promote wound closure and root regeneration. Root pruning and excavation activities shall occur such that the smallest volume of soil and roots is disturbed, and the locations shall be shown on the project plan sheets.

In addition to fines and citations that may be assessed for violations of any Chapter 24 of the Municipal Code (such as not maintaining fencing around the CRZ or unauthorized removal of protected trees), the contractor may be subject to the following provisions:

- issuance of an invoice for the value or partial value of the tree lost due to damage to either the above ground or below ground portions of the parkway tree, or unauthorized tree removal.
- costs of repairs, such as pruning or cabling, or costs for removal of the damaged parkway tree along with the stump if the tree cannot remain in the right-of-way.
- fines of \$500 for the 1<sup>st</sup> offense; \$1,000 for the 2<sup>nd</sup> offense; \$2,500 for the 3<sup>rd</sup> and subsequent offenses.
- each day during which a violation continues shall be construed as a separate and distinct offense.

The value or partial value of the tree lost shall be determined by the Village Forester using the most current edition of the Guide for Plant Appraisal (prepared by the Council of Tree & Landscape Appraisers and the International Society of Arboriculture) and the most current edition of the Species Ratings & Appraisal Factors for Illinois (prepared by the Illinois Arborist Association). The total cost determined for the damage shall be deducted from the payments made to the Contractor for the project. Should the Village hire another Contractor or tree service to complete pruning work, these costs shall also be deducted from the payments made to the Contractor.

**Method of Measurement:** This work will be measured for payment at the contract unit price per linear foot of fencing as specified. **Only those trees meeting the guidelines and are properly fenced per the specifications shall be counted for payment.** All other work as specified herein shall be considered incidental and will not be paid for separately.

**Basis of Payment:** All work as specified herein shall not be paid for separately and shall be considered incidental to the contract.

## Village of Downers Grove – 2018 Resurfacing (B)

## 7 CLEANING UP

The Contractor shall, at all times, keep the premises free from an accumulation of waste material or rubbish caused by his employees or work. At the end of the day, he shall remove all his rubbish from and about the streets and sidewalks. All his tools, form boards, and surplus materials shall be removed and relocated to any temporary on-site storage location assigned by the Village or its Engineer, and shall leave his work "broom clean" or its equivalent, unless more precisely defined. Upon completion of the work called for by the contract, and upon final inspection and acceptance, the Contractor shall remove any of his remaining rubbish, tools, form boards, and surplus materials completely from the work site.

In case of dispute, the Village may remove the rubbish or other materials and charge the cost to the Contractor.

## 8 EXISTING UTILITIES

Existing Public Utilities, such as watermains, sewers, gas lines, streetlights, telephone lines, electric power lines, etc., shall be protected against damage during the construction of this project. The Contractor shall contact the Owners of all public utilities and obtain locations of all utilities within the limits of the proposed construction and make arrangements, if necessary, to adjust or move any existing utility at the utility company's expense. Any expense incurred by the contractor in connection with making arrangements shall be borne by the Contractor and considered incidental to the contract. It shall be this Contractor's responsibility to determine the actual location of all such facilities in the field.

The adjustment of all facilities of Nicor, SBC, the Commonwealth Edison Co., etc. shall be done by the respective utility company, and if known, are indicated on the plans as to be done "By Others". All other utility adjustments to sewer, water, and local facilities shall be performed under this contract, under the supervision of the Owner of the utility, and will be paid for under the respective items in the contract unless otherwise indicated on the plans or directed by the Engineer.

**Any existing facilities, residential or commercial sprinkler systems, etc. disturbed shall be returned to their original condition and any damage to said facilities shall be repaired immediately. The cost of repairs of any damaged utility shall be by agreement between the Contractor and the facility owner or utility company, and at no cost to the Village.**

Whenever the locations of existing utilities are known, the approximate location of said utility is indicated on the plans. This information is given only for the convenience of the Bidder and the Village assumes no responsibility as to accuracy of the information provided. The Contractor shall consider in his bid the location of all permanent and temporary utility appurtenances to their present or relocated positions, whether shown on the plans or not, and no additional compensation will be allowed for delays, inconvenience, or special construction methods required due to the existence of said appurtenances.

Whenever obstructions are encountered during the progress of the work and interfere to such an extent that an alteration in the plan is required, the Engineer shall order a deviation in the plan as required, the Engineer shall order a deviation in the line and/or grade to resolve the conflict, or relocation of the obstruction. The Contractor will be compensated for any additional pipe material, fittings, granular backfill, or structures required at the respective contract prices, and measured as specified in the Contract. No additional

## Village of Downers Grove – 2018 Resurfacing (B)

compensation will be allowed for delays or inconveniences, additional excavation, or any special construction methods required in prosecuting the work due to the existence of said obstruction.

## **9 CLASS D PATCHES, 4" & 6"**

**Description:** This work shall consist of pavement patching by methods and with materials in accordance with Sec. 442 of the Standard Specifications, except as amended herein.

The Contractor shall not use equipment of excessive size or weight that causes damage to existing pavement or appurtenances. Any damage done to the existing pavement or appurtenances that are to remain in place shall be repaired or removed and replaced by the contractor at his/her own expense, as directed by the Engineer.

Pavement patches shall vary in area but minimum width shall be measured at five feet (5'). Pavement patching shall be to a depth not less than four inches (4") or six inches (6"), and shall be a minimum of 4" or 6" below milled surface when Hot-Mix Asphalt Surface Removal is called for.

Where applicable the existing subbase shall be leveled and compacted. Where remaining base is existing HMA, PCC or brick, the bottom of each prepared hole shall be free of all loose material and a bituminous prime shall be applied to the bottom prior to replacement of HMA patches.

The use of surface removal equipment that complies with Art. 440.04 of the SSRBC will be permitted. The edges of the patch shall be smooth and free of loose material to a depth of not less than four inches or six inches.

The hot-mix asphalt material shall conform to the requirements for Hot-Mix Asphalt Binder Course, IL-19.0, N70.

**Method of Measurement:** Pavement removal and replacement will be measured for payment in place, and the area computed in square yards.

**Basis of Payment:** This work shall be paid for at the contract unit price per Square Yard for CLASS D PATCHES, TYPE II, 4" or CLASS D PATCHES, TYPE III, 4" or CLASS D PATCHES, TYPE IV, 4" or CLASS D PATCHES, TYPE II, 6" or CLASS D PATCHES, TYPE III, 6" or CLASS D PATCHES, TYPE IV, 6" or which price shall be payment in full for the work as specified herein.

## **10 COMBINATION CONCRETE CURB AND GUTTER REMOVAL**

**Description:** This work shall consist of the removal of existing P.C.C. Curb and Gutter of the type and size at the locations noted in Schedule of Quantities. This work shall be performed in accordance with Section 440 of the Standard Specifications, except as amended herein.

**Unless otherwise allowed by the engineer, curb and gutter removal and replacement shall be done on one side of a street at a time to allow for on street parking. No curb shall be removed from the opposite side of the street until completion of curb replacement and full access to driveways is restored on the first side.**

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This work shall include a full depth, perpendicular, straight joint sawn at the ends and all edges, including along the edge of pavement, of portions to be removed, unless otherwise directed by the engineer.

At those locations where curb removal operations fall within the Critical Root Zone (CRZ) the Contractor will be required to trench with a "chain" driven trencher immediately back of curb prior to curb removal. This procedure will proceed uninterrupted through the CRZ and insure general tree root pruning. The width of the CRZ shall be determined as noted in the general provision for TREE PROTECTION elsewhere in these documents. If it is determined that proposed removal methods do not cause undo harm to adjacent roots, the Village Forester may waive the need to perform trenching.

During removal operations Contractor shall take special care not to damage or extend sawed joint into adjacent appurtenances such as driveways and sidewalks which are to remain in place. During machine sawing operations Contractor shall also take special care to remove, clean, or otherwise account for any residue / slurry produced by the sawing so material will not be tracked by either vehicular or foot traffic onto adjacent appurtenances which are to remain in place.

Basis of Payment: This work shall be paid for at the contract unit price per Linear Foot for COMBINATION CONCRETE CURB AND GUTTER REMOVAL which price shall be payment in full for all work specified herein.

## **11 COMBINATION CONCRETE CURB AND GUTTER OF TYPE SPECIFIED**

Description: This work shall consist of the replacement of existing PCC Curb and Gutter in accordance with the applicable parts of Sec. 606 of the Standard Specifications, except as amended herein.

Replacement of curb and gutter shall include the placement of three-quarter inch (3/4") premolded expansion joint filler along the back of curb, for the full depth of the curb and gutter, where abutting existing concrete.

Transverse expansion joints with 3/4" joint filler shall be constructed at five feet (5') either side of utility structures, and at no more than ninety foot (90') intervals. All expansion joints shall include the placement of two (2) three-quarter inch (3/4") dowel bars with pinched stop caps as specified on detail sheet. Two (2) three quarter inch (3/4") dowel bars shall also be placed at all construction joints as specified on detail sheet and shall be drilled into existing curb and gutter a minimum of six inches (6").

New curb and gutter shall be backfilled with existing excavated earth.

Transverse contraction joints shall be constructed at no more than fifteen foot (15') intervals. When new curb and gutter is placed adjacent to concrete pavement or base, it shall be tied along the longitudinal construction joint with No. 6 (3/4") bars at 24" centers in accordance with the applicable portions of Article 420.05 of the Standard Specifications.

Placement of curb or curb and gutter as noted on Schedule of Quantities to be reinforced shall also include the placement of two (2) No. 4 (1/2") epoxy coated deformed reinforcement bars meeting the applicable portions of Section 508 of the Standard Specifications. Bars shall be placed at one-half depth of the body of the gutter running the entire length of newly placed sections. Curb or curb and gutter placed as described

## Village of Downers Grove – 2018 Resurfacing (B)

in this paragraph shall be paid for as CONCRETE CURB (TYPE SPECIFIED), REINFORCED or COMBINATION CONCRETE CURB AND GUTTER (TYPE SPECIFIED), REINFORCED.

All voids existing between newly placed curb and gutter and the adjacent roadway pavement shall be filled with Class SI concrete, prior to bituminous surface placement, to a point 1-1/2 inches below finish grade. This work shall be considered incidental.

Placement of curb and gutter shall include the application of membrane curing compound, Type III, in accordance with Articles 1020.13 and 1022.01 of the Standard Specifications unless otherwise directed by the Engineer.

If placement of curb and gutter takes place prior to April 15, or after November 1, the curb and gutter shall be properly cured and that followed by the application of protective coat in accordance with Article 420.18 of the Standard Specifications.

Basis of Payment: This work shall be paid for at the contract unit price per Linear Foot for COMBINATION CONCRETE CURB AND GUTTER (TYPE SPECIFIED) or COMBINATION CONCRETE CURB AND GUTTER (TYPE SPECIFIED), REINFORCED which price shall be payment in full for the work as specified herein.

## 12 POROUS GRANULAR EMBANKMENT, SPECIAL

Description: This work shall consist of removing and disposing of unsuitable sub-grade, furnishing, placing and compacting porous granular material to the lines and grades shown on the plans or as directed by the Engineer in accordance with the applicable portions of Sections 202 and 207 of the Standard Specifications. The material shall be used as a bridging layer over soft, pumpy, loose soil areas and for placement under water. The material shall conform with Articles 1003.04 and 1004.05 of the Standard Specifications except the gradation shall be as follows:

### 1. Crushed Stone, Crushed Blast Furnace Slag and Crushed Concrete

<u>Sieve Size</u>	<u>Percent Passing</u>
*6"	97±3
*4"	90±10
2"	45±25
#200	5±5

### 2. Gravel, Crushed Gravel and Pit Run Gravel

<u>Sieve Size</u>	<u>Percent Passing</u>
*6"	97±3
*4"	90±10
2"	55±25
#4	30±20
#200	5±5



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\*For undercuts less than 18" the percent passing the 6" sieve may be 90+10 and the 4" sieve requirement eliminated.

The porous granular material shall be placed in one lift when the total thickness to be placed is two (2) feet thick or less or as directed by the Engineer. Rolling each lift of the porous granular material with a vibratory roller meeting the requirements of Article 1101.01 of the Standard Specifications should be sufficient to obtain the desired keying or interlock and necessary compaction. The Engineer shall verify that adequate keying has been obtained.

A three- (3) inch nominal thickness top lift of capping aggregate having a gradation of CA-6 will be required. The use of on-site bituminous grindings resulting from bituminous surface removal, substantially meeting the gradation of CA-6, shall also be permitted. The granular cap shall be compacted to the satisfaction of the Engineer. It shall be the Contractor's responsibility that all proposed bituminous replacement regarding patching and paving operations in these areas will meet the specified performance criteria of their respective pay items.

Construction equipment not necessary for the completion of the replacement material will not be allowed on the undercut areas until completion of the recommended thickness of the porous granular embankment, special.

This work will be measured for payment in accordance with Article 207.04 of the Standard Specifications. When specified on the contract, the theoretical elevation of the bottom of the aggregate subgrade shall be used to determine the upper limit of Porous Granular Embankment, Special. The volume will be computed by the method of average end areas.

Basis of Payment: This work shall be paid for at the contract unit price per Cubic Yard for: POROUS GRANULAR EMBANKMENT, SPECIAL, which price shall include the capping aggregate, as required.

The Porous Granular Embankment, Special shall be used as field conditions warrant at the time of construction. No adjustment in unit price will be allowed for an increase or decrease in quantities from the estimated quantities shown on the plans.

### **13 MANHOLES OR INLETS, TO BE ADJUSTED OR RECONSTRUCTED**

Description: This item shall be done in accordance with Sec. 602 of the Standard Specifications for Road and Bridge Construction and the following provisions.

All excavation for structure adjustment shall be replaced with Class SI concrete and in accordance with the attached details. For excavation required for reconstructed items, backfill materials shall be mechanically compacted SELECTED GRANULAR BACKFILL placed per the special provision elsewhere in these documents.

Castings shall be set in full mortar or bituminous mastic beds. The adjustment of the casting to the required final grade shall be made with precast concrete adjusting rings. Brick, concrete block, or wooden shims will not be permitted.

When adjustments include new frame and grate or new frame and lid, all replacement frames, grates and lids shall be heavy duty. Depending on the type of frame, care shall be taken to properly align the new frame with the curb and gutter, and maintain the proper size opening into the structure.

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Although the cost of adjusting structures per this specification will be paid for under this contract, the Contractor shall be aware that many of the structures are not the property of the Village of Downers Grove, and that such work may require inspections and/or permits from other governmental agencies.

For those structures noted on the Schedule of Quantities or as designated by the Engineer as MANHOLE TO BE ADJUSTED, SPECIAL, for that period after Hot-Mix Asphalt Surface Removal operations and prior to adjustment to finished pavement elevation, frames and lids or grates shall be removed from the structure and stored in a safe manner until reused. The resulting void over the structure shall be covered with a steel plate and temporary pavement, or other approved method, capable of carrying the anticipated daily traffic in a safe manner. The Contractor shall also make note of structure location so it may be reestablished after initial bituminous paving operations have been completed.

For those structures designated as INLET TO BE ADJUSTED WITH NEW TYPE 3 FRAME AND GRATE, SPECIAL, the new frame and grate shall be a standard Type 3, or approved equal, except the barred curb box shall be replaced with an open face curb box.

Basis of Payment: This item shall be paid for at the contract unit price Each for MANHOLE TO BE ADJUSTED or MANHOLE TO BE ADJUSTED, SPECIAL or MANHOLE TO BE ADJUSTED WITH NEW FRAME AND LID (TYPE SPECIFIED) or MANHOLE TO BE RECONSTRUCTED.

This item shall also be paid for at the contract unit price Each for INLET TO BE ADJUSTED or INLET TO BE ADJUSTED WITH NEW TYPE 3 FRAME AND GRATE, SPECIAL or INLET TO BE RECONSTRUCTED which price shall be payment in full for all labor and materials specified herein including backfill with Selected Granular Backfill.

#### **14 TREE ROOT PRUNING**

Description: All trees, public or private, affected by new sidewalk installation within its root protection zone, shall be root pruned prior to any excavation taking place. Root pruning shall be performed in accordance with the applicable portions of Section 201 of the Standard Specifications as well as the Tree Protection Zone detail of the Plans. Root pruning shall be done only to the depth of the excavation necessary for installing the new walk. Root pruning shall start and proceed uninterrupted for the length of travel through the root protection zone. Root pruning shall be made no more than 10 inches from the tree-side edge of the proposed walk.

Approval by the Village Forester of the equipment to be used for root pruning, as well as the proposed path of the root pruning work, is required prior to the work being performed. The Engineer or his representative shall permit no excavation until written approval is obtained by the Contractor from the Village Forester. Additionally, no materials or equipment may be stored or kept in the Tree Protection Zone. Tree damage, as determined by the Village Forester, shall be assessed to the Contractor using the most recent edition of the Guide for Plant Appraisal, published by the International Society of Arboriculture.

Basis of Payment: This work shall be paid for at the contract unit price per Each for TREE ROOT PRUNING.

## **15 PORTLAND CEMENT CONCRETE SIDEWALK**

Description: This work shall consist of the removal and replacement of P.C.C. Sidewalk in accordance with the SSRBC, except as amended herein.

**Sidewalk removal and replacement shall be done on one side of a street at a time to allow for pedestrian mobility. No sidewalk shall be removed from the opposite side of the street until sidewalks on the first side are safely open to pedestrian traffic.**

Removal of sidewalk shall include the saw cutting of existing concrete as directed by the Engineer. Except for those locations specifically marked for Tree Root Pruning, removal of sidewalks shall also include any necessary additional pruning and removal of tree roots, bituminous paved sidewalks and/or bituminous overlayment of existing sidewalks, or excavation necessary to place the proposed sidewalk, curb ramp or side curb.

Replacement of sidewalk shall be of the width and thickness as noted on the Schedule of Quantities and as directed by the Engineer. Thickness of the proposed sidewalk shall generally be (5") five inch for standard or courtesy walks, (6") six inch for full width across residential drives, and (8") eight inch for full width across commercial drives.

Placement of P.C.C. sidewalk shall include the excavation for and placement of four inches (4") of Type B, CA-6, compacted aggregate base, the (3/4") three-quarter inch scoring of contraction joints (5') five feet on center, the placing of (1/2") one-half inch premolded expansion joints where new concrete abuts existing concrete and/or at (50') fifty feet on center and/or at the end of a pour. This work shall also include the adjustment to proper grade of all water valve or utility boxes encountered.

Replacement of sidewalk shall include the application of membrane curing compound, Type III, in accordance with Articles 1020.13 and 1022.01 of the Standard Specifications unless otherwise directed by the Engineer.

At those locations where existing street configuration does not contain curb and gutter, it is necessary to end construction of new sidewalk with a minimum of two (2) feet separation from the existing or proposed edge of pavement. At these locations, a HMA transition sidewalk shall be constructed between the concrete sidewalk and the edge of pavement.

Construction of the transition sidewalk shall include excavation as necessary for the full width of the concrete sidewalk, placement and compaction of the four inches (4") of Type B, CA-6 aggregate base, and the placement and compaction of 5 inches (5") of Hot-Mix Asphalt Surface, Mixture D, N50 (IL 9.5) per the applicable portions of Sec. 442 of the Standard Specifications. Asphalt to be placed in compacted layers not to exceed four inches (4").

Hot-Mix Asphalt Binder Course, IL-19.0, N50 may be utilized for the bottom courses, but in all cases the top course shall be a minimum 1 ½ inch lift of the HMA Surface noted above.

For those locations as noted on the Schedule of Quantities or as designated by the Engineer for Detectable Warnings, work shall be completed in accordance with Section 424 of the SSRBC and the Standards included in the details regarding curb ramps with detectable warnings and as amended herein.

Detectable Warnings will NOT include any placement of full depth red dyed concrete or other on-site fabrication such as stamping or molding the fresh concrete with coloring added to the surface of the concrete.

Detectable Warnings shall be limited to inserts meeting the requirements of the ADAAG and subject to approval by the Village.

Color of detectable warnings shall be brick red. The area of red detectable warning shall be protected from overspray during the application of Type III membrane curing compound.

If replacement of sidewalk takes place prior to April 15, or after November 1, all sidewalk shall be properly cured and that followed by the application of protective coat in accordance with Article 420.18 of the Standard Specifications.

Basis of Payment: This work shall be paid for at the contract unit price per Square Foot for PORTLAND CEMENT CONCRETE SIDEWALK REMOVAL and for PORTLAND CEMENT CONCRETE SIDEWALK, 5" or PORTLAND CEMENT CONCRETE SIDEWALK, 6" or PORTLAND CEMENT CONCRETE SIDEWALK, 8" which price shall be payment in full for the work as specified herein except for Detectable Warnings which shall be paid for separately.

Detectable warnings shall be paid for at the contract unit price per Square Foot for DETECTABLE WARNINGS which price shall be in addition to the cost for placement of the 5" sidewalk at the curb ramp.

## **16 PARKWAY RESTORATION**

Description: This item shall be done in accordance with the applicable portions of Sec. 252 of the Standard Specifications and the following provisions.

As contract work progresses through the Village, parkway restoration work shall commence in a timely manner in areas where permanent placement of new curb and gutter, driveways, sidewalks, etc., has been completed. **Parkway restoration including sod placement shall be completed on a street within 7 calendar days of final surface course placement.** Under no circumstances shall the Contractor prolong final grading, shaping and sod placement so that the entire project can be permanently restored at the same time.

This work shall consist of the excavation, topsoiling and sodding from a minimum of one and one-half (1-1/2) feet to a maximum of three (3) feet behind or adjacent to all curbs, sidewalks and driveways removed and replaced during the course of construction or as directed by the Engineer. Restoration will also be performed on areas disturbed by storm sewer or culvert construction.

**A number of locations may require extensive excavation or regrading of the parkway due to alignment change necessary to bring corner sidewalk ramps within ADA compliance.**

All topsoil to be used for parkway restoration shall be obtained from outside the limits of this improvement, transported to the site and placed at required locations to a minimum depth of 4". All materials shall meet the requirements of Art. 1081.05 of the Standard Specifications. All placement of topsoil shall meet the requirements of Sec. 211 of the Standard Specifications.

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All sod shall be an approved grass that is native to the locality of work meeting the requirements of Art. 1081.03 of the Standard Specifications. All placement of sod shall meet the requirements of Sec. 252 of the Standard Specifications.

For that period prior to full parkway restoration, the Contractor shall backfill and grade all disturbed areas so as to insure the safety of the general public. **All voids / open excavations remaining adjacent to newly constructed curb and gutter, sidewalks, driveways, etc., shall be properly backfilled, compacted and graded within 5 calendar days of their completion.**

Backfill shall be compacted by mechanical and/or hand methods so future consolidation / settlement does not occur. Parkway shall be left in a safe, clean and usable condition conducive to foot traffic and to the satisfaction of the Village. The Contractor shall protect these unfinished areas against erosion and work to keep them weed free. Erosion control work such as placement of temporary seed or erosion control blanket, including their removal and redressing of the disturbed areas, shall not be paid for separately but shall be considered incidental to the cost of PARKWAY RESTORATION.

Basis of Payment: This work shall be paid for at the contract unit price per Square Yard for PARKWAY RESTORATION which price shall be payment in full for any excavation and grading necessary, the furnishing, transporting and placement of all topsoil and sod and the full watering of sod. Unless otherwise directed by the Engineer, restoration of disturbed parkways more than three (3) feet behind the back of curb or more than three (3) feet adjacent to newly constructed driveway or sidewalk or more than six (6) feet either side of the newly placed storm sewer or pipe culvert will not be paid for separately but shall be considered incidental to the contract.

## 17     HOT-MIX ASPHALT DRIVEWAY

Description: This work shall consist of the removal and replacement of asphalt driveways at locations indicated on the plans and/or as required by the Engineer.

The replacement of the driveways shall consist of preparing a subgrade at all required locations, shaping of slopes adjacent to the driveways, the placement and compacting of six inches of CA-6 Aggregate Base, and the placement and compacting of three inches (3") of Hot-Mix Asphalt Surface, Mixture D, N50 (IL 9.5).

At locations noted on Schedule of Quantities, asphalt driveways shall be replaced with the six inches of CA-6 aggregate base along with eight inches (8") of Hot-Mix Asphalt comprised of six inches (6") of Hot-Mix Asphalt Binder, IL-19.0, N50 and finished with a minimum of two inches (2") of Hot-Mix Asphalt Surface, Mixture D, N50 (IL 9.5). Asphalt to be placed in compacted layers not to exceed four inches (4").

This work shall also include the adjustment to proper grade of all water valve or utility boxes encountered.

Where the edges of the new driveway pavement are exposed adjacent to the parkway, the edges shall have a neat forty-five (45) degree angle bevel shaped, compacted and tamped tight by mechanical and/or hand methods.

The locations at which this work will be measured for payment will consist of only those areas bounded by combination concrete curb and gutter. Those areas where the surface course of the pavement flares into existing driveways beyond the limits of the fully improved areas will not be included for payment.

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Basis of Payment: This work will be paid for at the contract unit price per Square Yard for HOT-MIX ASPHALT DRIVEWAY REMOVAL and for HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3" or HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 8" which price shall be payment in full for all work as specified herein.

**18 PORTLAND CEMENT CONCRETE DRIVEWAY**

Description: This work shall consist of the removal and replacement of concrete driveways in accordance with the applicable parts of Sec. 423 of the SSRBC except as amended herein.

This work shall include the placement of three-quarter inch (3/4") premolded expansion joint filler, for the full depth of the driveway pavement, where new concrete abuts existing concrete or as directed by the Engineer.

This work shall also include the adjustment to proper grade of all water valve or private utility boxes encountered.

Replacement of the driveways shall include the application of membrane curing compound, Type III, in accordance with Articles 1020.13 and 1022.01 of the SSRBC, unless otherwise directed by the Engineer. If replacement of the driveways takes place prior to April 15, or after November 1, the driveway shall be properly cured and that followed by the application of protective coat in accordance with Article 420.18 of the Standard Specifications.

Basis of Payment: This work will be paid for at the contract unit price per Square Yard for PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL and for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6" which price will be payment in full for all work as specified herein.

**19 TEMPORARY RAMP, HMA**

Description: This work shall consist of construction and maintenance of hot-mix asphalt ramps for temporary access to all abutting side streets and properties per the applicable portions of Article 406.08 of the SSRBC except as amended herein.

At those locations noted on the plans or as directed by the Engineer, the Contractor shall have sufficient bituminous material at the worksite prior to beginning hot-mix asphalt surface removal operations. After hot-mix asphalt surface removal operations and prior to placement of the permanent pavement, temporary ramps shall be constructed to supply access to all abutting streets and properties where traffic is to be maintained. Unless otherwise directed by the Engineer, construction of temporary bituminous ramps for access to abutting private properties will generally be limited to where surface removal operations are over 2 1/2" inches or more in depth.

Basis of Payment: This work will be paid for at the contract unit price per Square Yard for TEMPORARY RAMP, HOT-MIX ASPHALT, which price shall include all costs of furnishing, placing and maintaining the ramps. Removal of the temporary ramps prior to the placement of permanent pavement shall also be included in this item.

## **20      DECORATIVE PAVER DRIVEWAY OR SIDEWALK REMOVAL & REPLACEMENT**

Description: This work shall consist of removal and replacement of existing decorative concrete or brick paver driveways or sidewalks per the applicable portions of Check Sheet LRS 14 of the SSRBC except as amended herein.

At those locations noted on the plans or as directed by the Engineer, the Contractor shall remove existing decorative pavers in such a manner so that no damage occurs to the pavers and with full intent to reuse said paver blocks. Any decorative paver block damaged to an extent that it may not be reused as part of the final pavement, sidewalk or driveway shall be replaced in kind by the Contractor at no additional cost to the Village.

Extent of existing paver removal shall be at the direction of the Engineer. This removal will only be that amount necessary to construct the new curb and gutter or other appurtenance, and replace the decorative pavers to an acceptable grade and appearance.

At those locations where it is determined that an existing bituminous base warrants removal and replacement or repair, this portion of the work would be performed and measured for payment per the special provision for CLASS D PATCHING, of the necessary thickness.

Basis of Payment: This work shall be paid for at the contract unit price per Square Yard for DECORATIVE PAVER DRIVEWAY REMOVAL AND REPLACEMENT or DECORATIVE PAVER SIDEWALK REMOVAL AND REPLACEMENT, which price shall be payment in full for all materials and work as specified herein.

## **21      CONSTRUCTION STAKING**

Description: The Contractor shall furnish and place all construction layout stakes for this project. This work shall be conducted by competent personnel with suitable equipment and supervised by a licensed Illinois Land Surveyor. The Contractor shall be responsible for layout for all curb, sidewalk, pipe culvert, driveway and pavement removal and replacement, such that all finished work shall conform substantially to the lines, grades, elevations and dimensions shown on the plans.

The Contractor shall provide adequate control points to construct the individual Project elements, and shall provide the Engineer with adequate control in close proximity to check the compliance of the elements constructed.

Basis of Payment: This work shall be paid for at the contract Lump Sum price for CONSTRUCTION STAKING.

## **22      MANHOLE AND INLET CONSTRUCTION**

Description: This work shall consist of the construction of precast concrete drainage structures of the size and type shown on the plans or specified by the Engineer. Included in the contract unit price shall be all excavation, bedding, backfilling and reconnection of all existing inlet and outlet pipe. For all new structures backfill materials shall be mechanically compacted SELECTED GRANULAR BACKFILL placed per the special provision elsewhere in these documents.

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All structures in excess of four feet in depth shall be equipped with cast iron steps meeting the standards of ASTM A48. Precast sections shall conform to ASTM C 478 and shall be substantially free from fractures, large or deep cracks and surface roughness. Joints between precast sections shall be designed for rubber gaskets or bituminous mastic material.

Adequate foundation for all structures shall be obtained by removal and replacement of unsuitable materials with well graded granular material; or by tightening with coarse ballast rock, or by such other means as provided for foundation preparation of the connected sewers.

Precast base sections, risers and bottoms, shall be one piece and shall be placed on a well graded granular bedding of not less than two (2) inches in thickness. The bedding course shall be firmly tamped and made smooth and level to assure uniform contact and support of the precast element.

All lift holes shall be completely filled with mortar to ensure water tightness.

Castings shall be set in full mortar or bituminous mastic beds. The adjustment of the casting to the required final grade shall be made with precast concrete adjusting rings set in full mortar or bituminous mastic beds. Maximum adjustment with rings shall be twelve (12) inches. Brick, concrete block, or wooden shims will not be permitted.

In pavements, frames and grates or lids shall be heavy duty.

Basis of Payment: This work shall be paid for at the contract unit price Each for INLET, TYPE A, 24" WITH NEW FRAME AND GRATE (TYPE SPECIFIED) or INLET, TYPE B, 36" WITH SALVAGED FRAME AND GRATE which price shall be payment in full for all labor and materials specified herein including SELECTED GRANULAR BACKFILL.

### **23      SELECTED GRANULAR BACKFILL**

Description: All trenches and excavations beneath pavements and driveways, as shown on the plans or as directed by the Engineer in the field, will require SELECTED GRANULAR BACKFILL.

Such material shall meet the applicable requirements of Section 1004 of the SSRBC, except as amended herein. Except for the capping aggregate, the material will meet the gradation for CA-7, CA-11 or the gradation commonly known as ¾" chip.

**Backfill shall be placed in maximum 12" lifts and compacted by vibrating plate or other mechanical compacting device in a manner consistent with the Standard Specifications, to ensure that no future settlement occurs.**

All backfilling shall be done in accordance with Section 20-2.21 of the Standard Specifications for Water and Sewer Main Construction in Illinois. Specifically, all trenches and excavations other than those shown on the plans or designated by the Engineer to receive SELECTED GRANULAR BACKFILL shall be backfilled by any acceptable method which will not dislodge or damage the pipe, or cause bridging action in the trench. After SELECTED GRANULAR BACKFILL is placed as haunching to one-half pipe outside diameter, spoil material may be used as backfill in turf areas.



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**All backfilling, including granular bedding and backfill of approved excavated material, and placement and compaction of SELECTED GRANULAR BACKFILL around new or reconstructed storm sewer or structures shall be considered incidental to the contract.**

When Select Backfill is placed to the existing surface elevation and used as a temporary driving or walking surface, this item shall also include the maintenance of trench surface in a safe and usable condition, satisfactory to the engineer, until the permanent proposed pavement or walkway is completed.

This item also includes the disposal of the surplus excavated material that is replaced by selected granular backfill. Any material meeting the aforementioned gradation that has been excavated from the trenches may be used for backfilling the trenches. However, no compensation will be allowed as selected granular backfill for the portion of the trench backfilled with excavated material.

Basis of Payment: All work to backfill around new and reconstructed storm sewer or structures with SELECTED GRANULAR BACKFILL shall be considered Incidental to each respective pay item and will not be paid for separately.

## **24 EROSION, SEDIMENTATION AND DUST CONTROL**

Description: Throughout each and every phase of the project, all downstream ditches and storm sewers shall be protected from the run-off of roadway surfaces, excavations, and other construction activities generating the movement of dirt, mud, dust and debris. This work shall consist of constructing temporary erosion and sedimentation control systems as shown on the plans or as directed by the Engineer. The work shall be placed by methods and with materials in accordance with Sections 280, 1080 and 1081 of the SSRBC, except as amended herein.

All roadway surfaces shall be kept free of dirt, mud, dust and debris of any kind at all times through all phases of the project. All downstream ditches shall be protected from erosion and sedimentation by the installation of silt fence ditch checks; straw bales shall not be used. Piles of excavated material and/or trench backfill material, allowed to be in place in excess of three days, shall be protected against erosion and sedimentation runoff by use of silt fence or sediment filter logs. Storm sewer inlet structures or manholes shall be protected by temporary placement of geotextile fabric, filter baskets, or solid lids, as authorized in the field by the Engineer.

Dirt, mud, dust and debris of any kind shall be removed from the roadway surface to the satisfaction of the Engineer by any one or combination of the following: approved mechanical sweeping equipment, manual labor, or other approved techniques.

Erosion and sedimentation control measures as indicated in the Erosion Control Plan, or as directed by the Engineer shall be installed on the project site prior to beginning any construction activities which will potentially create conditions subject to erosion. Erosion control devices shall be in place and approved by the Engineer as to proper placement and installation prior to beginning other work. Erosion control protection for Contractor equipment storage sites, plant sites, and other sites shall be installed by the Contractor and approved by the Engineer prior to beginning construction activities at each site.

On those streets designated for Aggregate Base Repair and Preparation of Aggregate Base, dust control shall include the application of water to the existing aggregate base, as conditions warrant, by water truck

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or other approved method. Unless otherwise directed by the Engineer, during dry periods between rains, a minimum of two applications per day will be necessary.

Temporary or permanent storage in the flood plain of the following are prohibited unless elevated or flood proofed to one foot above the base flood elevation:

- Items susceptible to flood damage; or
- Unsecured buoyant materials or materials that may cause off-site damage including bulky materials, flammable liquids, chemicals, explosives, pollutants, or other hazardous materials; or
- Landscape waste.

**Silt Fence** Placement, maintenance, and removal of silt fence at areas designated by the Engineer. The work shall be placed by methods and materials in accordance with Sections 280 and 1080 of the SSRBC, except as amended herein.

**Erosion Barrier, Special** Placement, maintenance, and removal of EROSION BARRIER, SPECIAL shall be by methods and materials in accordance with applicable portions of Sections 280, 1080 and 1081 of the SSRBC, except as amended herein.

Barrier shall be placed approximately two (2 ft) +/- off edge of existing pavement or sidewalks being repaired at those locations noted on the schedule of quantities or as designated by the Engineer.

Barrier shall consist of a combination of two (2) excelsior logs or sediment filter logs staked immediately adjacent and parallel to each other. Barrier is intended to protect more sensitive wetland vegetation and turf areas from runoff and any and all workers and equipment during the duration of the improvements. All contract work near these designated sections shall take place outside the EROSION BARRIER, SPECIAL.

#### **DEFICIENCY CHARGE:**

The Village reserves the right to apply deficiency deductions per the applicable portions of Article 105.03 of the SSRBC.

**Basis of Payment:** This work shall be paid for at the contract Lump Sum price for: EROSION, SEDIMENTATION AND DUST CONTROL except for Inlet Filters and Erosion Barrier, Special which shall be paid for separately.

This work shall also be paid for at the contract unit price per Each for INLET FILTERS or INLET FILTERS CLEANING.

The double row of excelsior or sediment filter logs shall be measured as one and shall be paid for at the contract unit price per Linear Foot for EROSION BARRIER, SPECIAL.

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**25      HOT-MIX ASPHALT BINDER AND SURFACE COURSE**

This item shall be done in accordance with all applicable parts of Sections 406 and 1030 of the SSRBC, the included D-1 and BDE Specifications, and included mix table.

All preparation of the existing base shall be considered incidental to its respective pay item. This shall include but not be limited to cleaning cracks with an air compressor or other approved method prior to placement of mixture for cracks, joints and flangeways.

The target value for the air voids of the Hot-Mix Asphalt Surface Course, Mix D, N50 shall be 3.5% at the design number of gyrations.

Basis of Payment: Tack Coat shall be paid for at the contract unit price per Pound of residual asphalt applied for BITUMINOUS MATERIALS (TACK COAT).

The HMA surfacing shall be paid for at the contract unit price per Ton for LEVELING BINDER (MACHINE METHOD), N50, and HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50.

**26      IEPA CLEAN CONSTRUCTION AND DEMOLITION DEBRIS**

**Description:** If construction activities will result in removal and disposal of excavation spoils, per Illinois Public Act 96-1416 and the Illinois Environmental Protection Agency, soil sampling and analysis, along with certification from a licensed professional engineer (PE) or licensed professional geologist (PG) that the soil is uncontaminated, will be required prior to clean construction and demolition debris (CCDD) facility acceptance. However, if the subject property has never been used for industrial or commercial purposes, and is not adjacent to Potentially Impacted Properties (PIP's), then the site owner or operator may certify that the soil is uncontaminated by use of IEPA form LPC-662.

To facilitate meeting the above requirements, the Village will supply a signed LPC-663 or LPC-662 form. Neither the LPC-663/662, nor the report shall be considered a guarantee that excavated material shall meet the requirements of Illinois Public Act 96-1416, and the Contractor shall be responsible for satisfactory removal and disposal of all material as specified herein. No additional environmental testing of the existing on-site material may be performed without prior written permission from the Engineer. In the event that Contractor performs any additional testing without the written permission of the Engineer, Contractor will be required to properly and legally dispose of all material from the project site, regardless of its suitability for disposal in a CCDD facility, at his own expense, without any additional payment for testing, hauling and disposal as specified below.

The Village anticipates that one or more of the following CCDD facilities will accept material from this project:

- Reliable Lyons CCDD, 4226 Lawndale Ave, Lyons, IL 60534
- Hanson Material Service, 125 N Independence Blvd Romeoville, IL 60446
- Bluff City Materials, 1245 Gifford Rd, Elgin, IL 60120
- Vulcan Materials, 5500 Joliet Rd, McCook, IL 60525
- Heartland Recycling Aurara, 213 Mettel Rd, Aurora IL 60505

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Contractor shall consult with these facilities prior to submitting a bid for this project. Contractor shall base his bid on hauling all CCDD generated by this project to these facilities. No additional compensation will be allowed for hauling to any other facilities, for any reason, unless none of the above listed facilities will accept the material. If an alternate facility was approved by the Village prior to bid submittal, and that facility will no longer accept the material, the facilities listed above shall be used by the Contractor at no additional cost to the Village, unless none of the above facilities will accept the material. In the case where neither any of the above listed facilities, nor a pre-approved alternate facility, will accept the material, the Village and Contractor shall attempt to locate an alternate facility, unless the material is classified as unsuitable for disposal in a CCDD facility, in which case it shall be hauled to a landfill and paid for as specified below. Should the Contractor wish to haul material to an alternate facility, the name, location and contact information for the proposed facility shall be submitted to the Village for evaluation, a minimum of five (5) calendar days prior to submission of a bid. Any costs associated with additional sampling, analysis, and/or reporting to meet the acceptance requirements of the alternate facility shall be borne by the bidding Contractor and included within the Contractor's bid. By submitting a bid, Contractor agrees that at least one (1) of the above listed facilities, or an alternate facility approved by the Village in writing prior to the submission of the bid, will accept the material and shall be used for disposal of all CCDD from this project, unless otherwise determined to be non-hazardous special waste as specified below. In the event that the Contractor needs to alter the CCDD facility used for placement of excavated material, the Contractor shall notify the Engineer no later than three (3) days in advance of the planned alteration. In no event shall material be hauled to an alternate facility without the written permission of the Engineer.

**Construction Requirements:** The Contractor shall be responsible for satisfactory removal and disposal of all waste material, asphalt, concrete, stone, dirt, and debris generated or discovered in the course of the work. Removal and disposal of excavation items being disposed of at a clean construction and demolition debris (CCDD) facility shall meet the requirements of Public Act 96-1416. This work shall be incidental and shall not be paid for separately, with the exception of the **ADDITIONAL HAULING SURCHARGE, NON-HAZARDOUS SPECIAL WASTE** as specified below.

The temporary storing of excavated materials within the public right-of-way or project limits shall not be allowed unless approved by the Engineer. It shall be the Contractor's responsibility to find an approved dumpsite for debris and any excavated materials. The Village will not provide one.

The Contractor shall employ a licensed testing firm, as approved by Engineer, to screen each truck-load of material on-site, using a PID or FID field screen or other acceptable method. The PID shall be calibrated on a daily basis. The Contractor shall enter all truck-loads leaving the site into an on-site screening log including, but not limited to, project name, date, time, weather conditions, name of screener, hauling company, truck number, screening method, background PID reading, calibrated PID reading, truck/bucket PID reading, and description of materials screened. Each day prior to the first truck leaving the site, Engineer and Contractor's testing consultant shall agree on the allowable PID reading in accordance with the receiving CCDD facility procedures (typically 0.0 or daily background levels). The receiving CCDD facility may be consulted daily, or periodically, as needed to verify that the appropriate value is being used. If said screen indicates levels that will be unacceptable for disposal at the CCDD facility, the material shall be quarantined on-site for further evaluation. If material is rejected at the CCDD facility, it shall be returned to the project site and quarantined for further evaluation. No additional compensation shall be allowed for returning a rejected load back to the project site, or any other additional hauling, loading, unloading, etc, as may be required. Should it be determined by the Village or Village's agent that the material is not suitable for disposal in a CCDD facility, the Contractor shall be responsible for properly disposing of the material at an acceptable landfill, and providing the Village with all of the proper paperwork to document the

## Village of Downers Grove -- 2018 Resurfacing (B)

material disposal with the IEPA. This work shall be paid for as specified below. If a truck-load is rejected by a CCDD facility after leaving the project site, and said truck-load is not identified in the on-site screening log, the Contractor shall still be required to properly dispose of the material and provide the Village with the necessary documentation, but shall not be additionally compensated as specified below.

All additional work to satisfy these requirements shall be the responsibility of the Contractor. All costs associated with meeting these requirements shall be paid for as specified herein. These costs shall include but are not limited to all required testing, lab analysis, and certification by a licensed professional engineer (PE) or licensed professional geologist (PG), if required, in addition to the cost of additional hauling, dump fees, etc. Payment for this work shall be in addition to payment for EARTH EXCAVATION per the contract unit price. No adjustment to the contract unit price will be allowed due to changes to quantities based on actual field conditions.

**Basis of Payment:** This work shall be paid for at the contract unit price per Load for **ADDITIONAL HAULING SURCHARGE, NON-HAZARDOUS SPECIAL WASTE**, which price shall be payment in full for the work as specified herein.

SPECIAL PROVISION  
FOR  
CONSTRUCTION DEBRIS

Effective October 18, 1999

Add the following to the third paragraph of Article 202.03 of the Standard Specifications:

“The Contractor shall not conduct any generation, transportation, or recycling of construction or demolition debris, clean or general or uncontaminated soil generated during construction, remodeling, repair, and demolition of utilities, structures, and roads that is not commingled with any waste, without the maintenance of documentation identifying the hauler, generator, place of origin of the debris or soil, the weight or volume of the debris or soil, and the location, owner, and operator of the facility where the debris or soil was transferred, disposed, recycled or treated. This documentation must be maintained by the Contractor for 3 years.”

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## 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.”

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

SPECIAL PROVISION  
FOR  
EQUIPMENT RENTAL RATES

Effective: January 1, 2012

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.

Replace Article 109.04(b)(4) with the following:

- "(4) Equipment. For any machinery or special equipment (other than small tools) the use of which has been authorized by the Engineer, the Contractor will be paid according to the latest revision of "SCHEDULE OF AVERAGE ANNUAL EQUIPMENT OWNERSHIP EXPENSE" and latest index factor as issued by the Illinois Department of Transportation. The equipment should be of a type and size reasonably required to complete the extra work."



**BDE SPECIAL PROVISIONS**  
For the April 27 and June 15, 2018 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
80382	2	Adjusting Frames and Grates	April 1, 2017	
80274	3	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
80192	4	Automated Flagger Assistance Device	Jan. 1, 2008	
80173	5	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
80241	6	Bridge Demolition Debris	July 1, 2009	
50261	7	Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481	8	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491	9	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531	10	Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80366	11	✓ Butt Joints	July 1, 2016	
80386	12	Calcium Aluminate Cement for Class PP-5 Concrete Patching	Nov. 1, 2017	
80396	13	Class A and B Patching	Jan. 1, 2018	
80384	14	✓ Compensable Delay Costs	June 2, 2017	
80198	15	Completion Date (via calendar days)	April 1, 2008	
80199	16	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80293	17	Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
80311	18	Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
80277	19	Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
80261	20	✓ Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80387	21	Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
80029	22	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	July 2, 2016
80378	23	Dowel Bar Inserter	Jan. 1, 2017	Jan. 1, 2018
80388	24	✓ Equipment Parking and Storage	Nov. 1, 2017	
80229	25	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80304	26	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2017
80246	27	✓ Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2016
80347	28	Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	Jan. 1, 2018
80383	29	Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	Nov. 1, 2017
80376	30	✓ Hot-Mix Asphalt – Tack Coat	Nov. 1, 2016	
80392	31	✓ Lights on Barricades	Jan. 1, 2018	
80336	32	Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
80393	33	Manholes, Valve Vaults, and Flat Slab Tops	Jan. 1, 2018	
80045	34	Material Transfer Device	June 15, 1999	Aug. 1, 2014
80394	35	✓ Metal Flared End Section for Pipe Culverts	Jan. 1, 2018	April 1, 2018
80165	36	Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80349	37	Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
80371	38	Pavement Marking Removal	July 1, 2016	
80390	39	✓ Payments to Subcontractors	Nov. 2, 2017	
80377	40	Portable Changeable Message Signs	Nov. 1, 2016	April 1, 2017
80389	41	✓ Portland Cement Concrete	Nov. 1, 2017	
80359	42	Portland Cement Concrete Bridge Deck Curing	April 1, 2015	Nov. 1, 2017
80385	43	✓ Portland Cement Concrete Sidewalk	Aug. 1, 2017	
80300	44	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
80328	45	Progress Payments	Nov. 2, 2013	
34261	46	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006

<u>File Name</u>	<u>#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80157	47	<input type="checkbox"/> Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80306	48	<input type="checkbox"/> Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 1, 2018
80395	49	<input type="checkbox"/> Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
80340	50	<input type="checkbox"/> Speed Display Trailer	April 2, 2014	Jan. 1, 2017
80127	51	<input type="checkbox"/> Steel Cost Adjustment	April 2, 2004	Aug. 1, 2017
80391	52	<input checked="" type="checkbox"/> Subcontractor Mobilization Payments	Nov. 2, 2017	
80317	53	<input type="checkbox"/> Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016
80298	54	<input type="checkbox"/> Temporary Pavement Marking (NOTE: This special provision was previously named "Pavement Marking Tape Type IV".)	April 1, 2012	April 1, 2017
20338	55	<input type="checkbox"/> Training Special Provisions	Oct. 15, 1975	
80318	56	<input type="checkbox"/> Traversable Pipe Grate for Concrete End Sections (NOTE: This special provision was previously named "Traversable Pipe Grate".)	Jan. 1, 2013	Jan. 1, 2018
80288	57	<input checked="" type="checkbox"/> Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
80302	58	<input type="checkbox"/> Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80071	59	<input type="checkbox"/> Working Days	Jan. 1, 2002	

The following special provisions are in the 2018 Supplemental Specifications and Recurring Special Provisions.

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80368	Light Tower	Article 1069.08	July 1, 2016	
80369	Mast Arm Assembly and Pole	Article 1077.03(a)(1)	July 1, 2016	
80338	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	Recurring CS #35	April 1, 2014	April 1, 2016
80379	Steel Plate Beam Guardrail	Articles 630.02, 630.05, 630.06, and 630.08	Jan. 1, 2017	
80381	Traffic Barrier Terminal, Type 1 Special	Article 631.04	Jan. 1, 2017	
80380	Tubular Markers	Articles 701.03, 701.15, 701.18, and 1106.02	Jan. 1, 2017	

The following special provisions require additional information from the designer. The additional information needs to be submitted as a separate document. 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

**BUTT JOINTS (BDE)**

Effective: July 1, 2016

Add the following to Article 406.08 of the Standard Specifications.

- “(c) Temporary Plastic Ramps. Temporary plastic ramps shall be made of high density polyethylene meeting the properties listed below. Temporary plastic ramps shall only be used on roadways with permanent posted speeds of 55 mph or less. The ramps shall have a minimum taper rate of 1:30 (V:H). The leading edge of the plastic ramp shall have a maximum thickness of 1/4 in. (6 mm) and the trailing edge shall match the height of the adjacent pavement  $\pm$  1/4 in. ( $\pm$  6 mm).

The ramp will be accepted by certification. The Contractor shall furnish a certification from the manufacturer stating the temporary plastic ramp meets the following requirements.

Physical Property	Test Method	Requirement
Melt Index	ASTM D 1238	8.2 g/10 minutes
Density	ASTM D 1505	0.965 g/cc
Tensile Strength @ Break	ASTM D 638	2223 psi (15 MPa)
Tensile Strength @ Yield	ASTM D 638	4110 psi (28 MPa)
Elongation @ Yield <sup>1/</sup> , percent	ASTM D 638	7.3 min.
Durometer Hardness, Shore D	ASTM D 2240	65
Heat Deflection Temperature, 66 psi	ASTM D 648	176 °F (80 °C)
Low Temperature Brittleness, F <sub>50</sub>	ASTM D 746	<-105 °F (<-76 °C)

1/ Crosshead speed -2 in./minute

The temporary plastic ramps shall be installed according to the manufacturer's specifications and fastened with anchors meeting the manufacturer's recommendations. Temporary plastic ramps that fail to stay in place or create a traffic hazard shall be replaced immediately with temporary HMA ramps at the Contractor's expense.”

80366

**COMPENSABLE DELAY COSTS (BDE)**

Effective: June 2, 2017

Revise Article 107.40(b) of the Standard Specifications to read:

"(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.

- (1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.
- (2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.
- (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days."

Revise Article 107.40(c) of the Standard Specifications to read:

"(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.

- (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).

- (2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the Contractor's yard or another job and the cost to re-mobilize, whichever is less.

Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

- (3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven calendar days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Payment for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be determined according to Article 109.13."

Revise Article 108.04(b) of the Standard Specifications to read:

"(b) No working day will be charged under the following conditions.

- (1) When adverse weather prevents work on the controlling item.
- (2) When job conditions due to recent weather prevent work on the controlling item.
- (3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.
- (4) When delays caused by utility or railroad adjustments prevent work on the controlling item.
- (5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.
- (6) When any condition over which the Contractor has no control prevents work on the controlling item."

Revise Article 109.09(f) of the Standard Specifications to read:

"(f) Basis of Payment. After resolution of a claim in favor of the Contractor, any adjustment in time required for the work will be made according to Section 108. Any adjustment in the costs to be paid will be made for direct labor, direct materials, direct equipment, direct jobsite overhead, direct offsite overhead, and other direct costs allowed by the resolution. Adjustments in costs will not be made for interest charges, loss of anticipated profit, undocumented loss of efficiency, home office overhead and unabsorbed overhead

other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

The above Basis of Payment is an essential element of the contract and the claim cost recovery of the Contractor shall be so limited."

Add the following to Section 109 of the Standard Specifications.

**"109.13 Payment for Contract Delay.** Compensation for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be allowed when such costs result from a delay meeting the criteria in the following table.

Contract Type	Cause of Delay	Length of Delay
Working Days	Article 108.04(b)(3) or Article 108.04(b)(4)	No working days have been charged for two consecutive weeks.
Completion Date	Article 108.08(b)(1) or Article 108.08(b)(7)	The Contractor has been granted a minimum two week extension of contract time, according to Article 108.08.

Payment for each of the various costs will be according to the following.

- (a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.
- (b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.
  - (1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

Original Contract Amount	Supervisory and Administrative Personnel
Up to \$5,000,000	One Project Superintendent
Over \$ 5,000,000 - up to \$25,000,000	One Project Manager, One Project Superintendent or Engineer, and One Clerk
Over \$25,000,000 - up to \$50,000,000	One Project Manager, One Project Superintendent, One Engineer, and

	One Clerk
Over \$50,000,000	One Project Manager, Two Project Superintendents, One Engineer, and One Clerk

(2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.

(c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid. For working day contracts the payment will be made according to Article 109.04. For completion date contracts, an adjustment will be determined as follows.

Extended Traffic Control occurs between April 1 and November 30:

$$\text{ETCP Adjustment (\$)} = \text{TE} \times (\% / 100 \times \text{CUP} / \text{OCT})$$

Extended Traffic Control occurs between December 1 and March 31:

$$\text{ETCP Adjustment (\$)} = \text{TE} \times 1.5 (\% / 100 \times \text{CUP} / \text{OCT})$$

Where: TE = Duration of approved time extension in calendar days.  
 % = Percent maintenance for the traffic control, % (see table below).  
 CUP = Contract unit price for the traffic control pay item in place during the delay.  
 OCT = Original contract time in calendar days.

Original Contract Amount	Percent Maintenance
Up to \$2,000,000	65%
\$2,000,000 to \$10,000,000	75%
\$10,000,000 to \$20,000,000	85%
Over \$20,000,000	90%

When an ETCP adjustment is paid under this provision, an adjusted unit price as provided for in Article 701.20(a) for increase or decrease in the value of work by more than ten percent will not be paid.

Upon payment for a contract delay under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this provision."

## 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 <sup>1/</sup>	600-749	2002
	750 and up	2006
June 1, 2011 <sup>2/</sup>	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 <sup>2/</sup>	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

**EQUIPMENT PARKING AND STORAGE (BDE)**

Effective: November 1, 2017

Replace the first paragraph of Article 701.11 of the Standard Specifications with the following.

**“701.11 Equipment Parking and Storage.** During working hours, all vehicles and/or nonoperating equipment which are parked, two hours or less, shall be parked at least 8 ft (2.5 m) from the open traffic lane. For other periods of time during working and for all nonworking hours, all vehicles, materials, and equipment shall be parked or stored as follows.

- (a) When the project has adequate right-of-way, vehicles, materials, and equipment shall be located a minimum of 30 ft (9 m) from the pavement.
- (b) When adequate right-of-way does not exist, vehicles, materials, and equipment shall be located a minimum of 15 ft (4.5 m) from the edge of any pavement open to traffic.
- (c) Behind temporary concrete barrier, vehicles, materials, and equipment shall be located a minimum of 24 in. (600 mm) behind free standing barrier or a minimum of 6 in. (150 mm) behind barrier that is either pinned or restrained according to Article 704.04. The 24 in. or 6 in. measurement shall be from the base of the non-traffic side of the barrier.
- (d) Behind other man-made or natural barriers meeting the approval of the Engineer.”

80388

## 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% <sup>1/</sup>	91.0%
IL-9.5	Ndesign = 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0	Ndesign = 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L	Ndesign < 90	93.0 <sup>2/</sup> – 97.4%	90.0%
SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0% <sup>3/</sup>

**HOT-MIX ASPHALT – TACK COAT (BDE)**

Effective: November 1, 2016

Revise Article 1032.06(a) of the Standard Specifications to read:

“(a) Anionic Emulsified Asphalt. Anionic emulsified asphalts shall be according to AASHTO M 140. SS-1h emulsions used as a tack coat shall have the cement mixing test waived.”

80376

## LIGHTS ON BARRICADES (BDE)

Effective: January 1, 2018

Revise Article 701.16 of the Standard Specifications to read:

**"701.16 Lights.** Lights shall be used on devices as required in the plans, the traffic control plan, and the following table.

Circumstance	Lights Required
Daylight operations	None
First two warning signs on each approach to the work involving a nighttime lane closure and "ROUGH GROOVED SURFACE" (W8-I107) signs	Flashing mono-directional lights
Devices delineating isolated obstacles, excavations, or hazards at night (Does not apply to patching)	Flashing bi-directional lights
Devices delineating obstacles, excavations, or hazards exceeding 100 ft (30 m) in length at night (Does not apply to widening)	Steady burn bi-directional lights
Channelizing devices for nighttime lane closures on two-lane roads	None
Channelizing devices for nighttime lane closures on multi-lane roads	None
Channelizing devices for nighttime lane closures on multi-lane roads separating opposing directions of traffic	None
Channelizing devices for nighttime along lane shifts on multilane roads	Steady burn mono-directional lights
Channelizing devices for night time along lane shifts on two lane roads	Steady burn bi-directional lights
Devices in nighttime lane closure tapers on Standards 701316 and 701321	Steady burn bi-directional lights
Devices in nighttime lane closure tapers	Steady burn mono-directional lights
Devices delineating a widening trench	None
Devices delineating patches at night on roadways with an ADT less than 25,000	None
Devices delineating patches at night on roadways with an ADT of 25,000 or more	None

Batteries for the lights shall be replaced on a group basis at such times as may be specified by the Engineer."

Delete the fourth sentence of the first paragraph of Article 701.17(c)(2) of the Standard Specifications.

Revise the first paragraph of Article 603.07 of the Standard Specifications to read:

**“603.07 Protection Under Traffic.** After the casting has been adjusted and Class SI concrete has been placed, the work shall be protected by a barricade for at least 72 hours.”

80392

**PAYMENTS TO SUBCONTRACTORS (BDE)**

Effective: November 2, 2017

Add the following to the end of the fourth paragraph of Article 109.11 of the Standard Specifications:

“If reasonable cause is asserted, written notice shall be provided to the applicable subcontractor and/or material supplier and the Engineer within five days of the Contractor receiving payment. The written notice shall identify the contract number, the subcontract or material purchase agreement, a detailed reason for refusal, the value of payment being withheld, and the specific remedial actions required of the subcontractor and/or material supplier so that payment can be made.”

80390



**PORTLAND CEMENT CONCRETE (BDE)**

Effective: November 1, 2017

Revise the Air Content % of Class PP Concrete in Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

"TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA		
Class of Conc.	Use	Air Content %
PP	Pavement Patching Bridge Deck Patching (10)	
	PP-1	4.0 - 8.0"
	PP-2	
	PP-3	
	PP-4	
	PP-5	

Revise Note (4) at the end of Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

"(4) For all classes of concrete, the maximum slump may be increased to 7 in (175 mm) when a high range water-reducing admixture is used. For Class SC, the maximum slump may be increased to 8 in. (200 mm). For Class PS, the maximum slump may be increased to 8 1/2 in. (215 mm) if the high range water-reducing admixture is the polycarboxylate type."

80389

**PORTLAND CEMENT CONCRETE SIDEWALK (BDE)**

Effective: August 1, 2017

Revise the first paragraph of Article 424.12 of the Standard Specifications to read:

**"424.12 Method of Measurement.** This work will be measured for payment in place and the area computed in square feet (square meters). Curb ramps, including side curbs and side flares, will be measured for payment as sidewalk. No deduction will be made for detectable warnings located within the ramp."

80385

**SUBCONTRACTOR MOBILILATION PAYMENTS (BDE)**

Effective: November 2, 2017

Replace the second paragraph of Article 109.12 of the Standard Specifications with the following:

"This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

Value of Subcontract Reported on Form BC 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%"

80391

## 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  $\pm 2$  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

## HMA MIXTURE DESIGN REQUIREMENTS (D-1)

Effective: January 1, 2013

Revised: January 1, 2018

### 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 <sup>1/</sup> CA 16, CA 13 <sup>3/</sup>
HMA Low ESAL	IL-19.0L IL-9.5L Stabilized Subbase or Shoulders	CA 11 <sup>1/</sup> CA 16
SMA <sup>2/</sup>	1/2 in. (12.5mm) Binder & Surface IL 9.5 Surface	CA13 <sup>3/</sup> , CA14 or CA16  CA16, CA 13 <sup>3/</sup>

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) <sup>1/</sup> ; HMA Shoulders <sup>2/</sup>

1/ Uses 19.0L binder mix.

2/ Uses 19.0L for lower lifts and 9.5L for surface lift."

Revise Article 1030.02 of the Standard Specifications and Supplemental Specifications to read:

**"1030.02 Materials.** Materials shall be according to the following.

Item .....	Article/Section
(a) Coarse Aggregate .....	1004.03
(b) Fine Aggregate .....	1003.03
(c) RAP Material .....	1031
(d) Mineral Filler .....	1011
(e) Hydrated Lime .....	1012.01
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2) .....	1032
(h) Fibers (Note 3)	
(i) Warm Mix Asphalt (WMA) Technologies (Note 4)	

Note 1. Slaked quicklime shall be according to ASTM C 5.

Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.

Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included 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) <sup>1/</sup>										
Sieve Size	IL-19.0 mm		SMA <sup>4/</sup> IL-12.5 mm		SMA <sup>4/</sup> 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 <sup>5/</sup>	16	32 <sup>5/</sup>	34 <sup>5/</sup>	52 <sup>2/</sup>	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 <sup>3/</sup>	7.5	9.5 <sup>3/</sup>	4	6	7	9 <sup>3/</sup>
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				
Ndesign	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
	IL-19.0	IL-9.5	IL-4.75 <sup>1/</sup>	
50	13.5	15.0	18.5	65 – 78 <sup>2/</sup>
70			65 - 75	
90			65 - 75	

1/ Maximum Draindown for IL-4.75 shall be 0.3 percent

2/ VFA for IL-4.75 shall be 72-85 percent”

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

- “(3) SMA Mixtures.

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

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  $\geq 2.760$ .

- 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 <sup>1/</sup>

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  $275 \pm 5$  °F ( $135 \pm 3$  °C) or less, loose Warm Mix Asphalt shall be oven aged at  $270 \pm 5$  °F ( $132 \pm 3$  °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 at the beginning of each construction year according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures". At the request of the Producer, the Engineer may waive the test strip if previous construction during the current construction year has demonstrated the constructability of the mix using Department test results."

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."

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

Effective: November 1, 2012

Revise: January 1, 2018

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 Central Bureau of Materials Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Central Bureau of Materials 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, 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, HMA (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, 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 HMA (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 Central Bureau of Materials 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  $\leq 1000$  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 $\mu\text{m}$ )	$\pm 5 \%$
No. 200 (75 $\mu\text{m}$ )	$\pm 2.0 \%$
Asphalt Binder	$\pm 0.3 \%$
$G_{mm}$	$\pm 0.03$ <sup>1/</sup>

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

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the FRAP stockpile shall not be



used in Hot-Mix Asphalt unless the FRAP representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

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

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

% Passing: <sup>1/</sup>	FRAP	RAS
1/2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	4.0%
No. 200	2.2%	4.0%
Asphalt Binder Content	0.3%	3.0%
G <sub>mm</sub>	0.030	

1/ Based on washed extraction.

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

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

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

- (a) RAP. The aggregate quality of the RAP for homogeneous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
- (1) RAP from Class I, HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
  - (2) RAP from HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
  - (3) RAP from Class I, 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 Central Bureau of Materials 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 <sup>1/2/4/</sup>	Maximum % ABR		
	Binder/Leveling Binder	Surface	Polymer Modified <sup>3/</sup>
Ndesign			
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.

The RAP, FRAP and RAS stone specific gravities ( $G_{sb}$ ) shall be according to the "Determination of Aggregate Bulk (Dry) Specific Gravity ( $G_{sb}$ ) or Reclaimed Asphalt Pavement (RAP) and

Reclaimed Asphalt Shingles (RAS)" procedure in the Department's Manual of Test Procedures for Materials.

**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 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  $\pm 0.5$  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 Central Bureau of Materials 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  $\mu$ m) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

**FRICTION AGGREGATE (D-1)**

Effective: January 1, 2011

Revised: April 29, 2016

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

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

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

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA Low ESAL	Stabilized Subbase or Shoulders	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>1/</sup> Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L  SMA Binder	<u>Allowed Alone or in Combination</u> <sup>5/ 6/</sup> : Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete <sup>3/</sup>

Use	Mixture	Aggregates Allowed								
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L  SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup>								
HMA High ESAL	D Surface and Leveling Binder IL-9.5  SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : Crushed Gravel Carbonate Crushed Stone (other than Limestone) <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup>								
		<u>Other Combinations Allowed:</u>								
		<table border="1"> <thead> <tr> <th data-bbox="691 1129 971 1171"><i>Up to...</i></th> <th data-bbox="995 1129 1076 1171"><i>With...</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="691 1182 971 1224">25% Limestone</td> <td data-bbox="995 1182 1109 1224">Dolomite</td> </tr> <tr> <td data-bbox="691 1234 971 1276">50% Limestone</td> <td data-bbox="995 1234 1198 1339">Any Mixture D aggregate other than Dolomite</td> </tr> <tr> <td data-bbox="691 1350 971 1392">75% Limestone</td> <td data-bbox="995 1350 1235 1455">Crushed Slag (ACBF) or Crushed Sandstone</td> </tr> </tbody> </table>	<i>Up to...</i>	<i>With...</i>	25% Limestone	Dolomite	50% Limestone	Any Mixture D aggregate other than Dolomite	75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone
<i>Up to...</i>	<i>With...</i>									
25% Limestone	Dolomite									
50% Limestone	Any Mixture D aggregate other than Dolomite									
75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone									
HMA High ESAL	E Surface IL-9.5  SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> <sup>5/ 6/</sup> : Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag  No Limestone.								
		<u>Other Combinations Allowed:</u>								
		<table border="1"> <thead> <tr> <th data-bbox="691 1860 951 1898"><i>Up to...</i></th> <th data-bbox="971 1860 1049 1898"><i>With...</i></th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	<i>Up to...</i>	<i>With...</i>						
<i>Up to...</i>	<i>With...</i>									



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

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

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

Effective: June 26, 2006

Revised: April 1, 2016

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

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

Test	Asphalt Grade 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  $\pm 0.40$  percent.”

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

“(c) RAP Materials (Note 5) .....1031”

Add the following note to 1030.02 of the Standard Specifications:

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

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS
<b>PAVEMENT RESURFACING</b>	
Leveling Binder (Machine Method), N50 (IL-9.5 mm)	4% @ 50 Gyr.
Hot-Mix Asphalt Surface Course, Mix "D", N50 (IL-9.5 mm)	3.5% @ 50 Gyr.
<b>PATCHING</b>	
Class D Patches (HMA Binder IL-19 mm)	4% @ 70 Gyr.
Pavement Removal & HMA Replacement (HMA Binder IL-19 mm)	4% @ 70 Gyr.
<b>DRIVEWAYS</b>	
Hot-Mix Asphalt Surface Course, Mix "D", N50 (IL-9.5 mm), 3"	3.5% @ 50 Gyr.
Hot-Mix Asphalt Base Course (HMA Binder IL-19 mm), 6"	4% @ 50 Gyr.

The unit weight used to calculate all Hot-Mix Asphalt Surface Mixture Quantities is 112 Lbs/SqYd/In.

The "AC Type" for polymerized HMA mixes shall be SBS/SBR PG 76-22 and for non-polymerized HMA the "AC Type" shall be "PG 64-22" unless modified by district one special provisions. For use of recycled materials see special provisions.

**Prevailing Wage rates for  
DuPage County effective  
Sept. 1, 2017**

Trade Title	Region	Type	Class	Base Wage	Foreman Wage	M-F OT	OSA	OSH	H/W	Pension	Vacation	Training
ASBESTOS ABT-GEN	ALL	ALL		41.20	42.20	1.5	1.5	2	14.65	12.32	0.00	0.50
ASBESTOS ABT-MEC	ALL	BLD		37.46	39.96	1.5	1.5	2	11.62	11.06	0.00	0.72
BOILERMAKER	ALL	BLD		48.49	52.86	2	2	2	6.97	19.61	0.00	0.90
BRICK MASON	ALL	BLD		45.38	49.92	1.5	1.5	2	10.45	16.68	0.00	0.90
CARPENTER	ALL	ALL		46.35	48.35	1.5	1.5	2	11.79	18.87	0.00	0.63
CEMENT MASON	ALL	ALL		44.25	46.25	2	1.5	2	14.00	17.16	0.00	0.92
CERAMIC TILE FNISHER	ALL	BLD				1.5	1.5	2			0.00	
COMMUNICATION TECH	ALL	BLD				1.5	1.5	2				0.61
ELECTRIC PWR EQMT OP	ALL	ALL		37.89	51.48	1.5	1.5	2	5.00	11.75	0.00	0.38
ELECTRIC PWR EQMT OP	ALL	HWY		41.45	56.38	1.5	1.5	2	5.50	12.87	0.00	0.73
ELECTRIC PWR GRNDMAN	ALL	ALL		29.30	51.48	1.5	1.5	2	5.00	9.09	0.00	0.29
ELECTRIC PWR GRNDMAN	ALL	HWY		32.00	56.38	1.5	1.5	2	5.50	9.92	0.00	0.66
ELECTRIC PWR LINEMAN	ALL	ALL		45.36	51.48	1.5	1.5	2	5.00	14.06	0.00	0.45
ELECTRIC PWR LINEMAN	ALL	HWY		49.67	56.38	1.5	1.5	2	5.50	15.40	0.00	0.88
ELECTRIC PWR TRK DRV	ALL	ALL		30.34	51.48	1.5	1.5	2	5.00	9.40	0.00	0.30
ELECTRIC PWR TRK DRV	ALL	HWY		33.14	56.38	1.5	1.5	2	5.50	10.29	0.00	0.59
ELECTRICIAN	ALL	BLD		39.26	43.26	1.5	1.5	2	12.35	22.08	4.93	0.68
ELEVATOR CONSTRUCTOR	ALL	BLD		51.94	58.43	2	2	2	14.43	14.96	4.16	0.90
FENCE ERECTOR	NE	ALL		39.58	41.58	1.5	1.5	2	13.40	13.90	0.00	0.40
FENCE ERECTOR	W	ALL		45.06	48.66	2	2	2	10.52	20.76	0.00	0.70
GLAZIER	ALL	BLD		42.45	43.95	1.5	1.5	2	14.04	20.14	0.00	0.94
HT/FROST INSULATOR	ALL	BLD		50.50	53.00	1.5	1.5	2	12.12	12.96	0.00	0.72
IRON WORKER	E	ALL		47.33	49.33	2	2	2	14.15	22.39	0.00	0.35
IRON WORKER	W	ALL		45.61	49.25	2	2	2	11.52	22.65	0.00	0.81
LABORER	ALL	ALL		41.20	41.95	1.5	1.5	2	14.65	12.32	0.00	0.50

LATHER	ALL	ALL	46.35	48.35	1.5	1.5	2	11.79	18.87	0.00	0.63
MACHINIST	ALL	BLD	45.35	47.85	1.5	1.5	2	7.26	8.95	1.85	0.00
MARBLE FINISHERS	ALL	ALL	33.95	33.95	1.5	1.5	2	10.45	15.52	0.00	0.47
MARBLE MASON	ALL	BLD	44.63	49.09	1.5	1.5	2	10.45	16.28	0.00	0.59
MATERIAL TESTER I	ALL	ALL	31.20	31.20	1.5	1.5	2	14.65	12.32	0.00	0.50
MATERIALS TESTER II	ALL	ALL	36.20	36.20	1.5	1.5	2	14.65	12.32	0.00	0.50
MILLWRIGHT	ALL	ALL	46.35	48.35	1.5	1.5	2	11.79	18.87	0.00	0.63
OPERATING ENGINEER	ALL	BLD	50.10	54.10	2	2	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	BLD	48.80	54.10	2	2	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	BLD	46.25	54.10	2	2	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	BLD	44.50	54.10	2	2	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	BLD	53.85	54.10	2	2	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	BLD	51.10	54.10	2	2	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	BLD	53.10	54.10	2	2	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	FLT	38.00	38.00	1.5	1.5	2	18.05	13.60	1.90	1.30
OPERATING ENGINEER	ALL	HWY	48.30	52.30	1.5	1.5	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	HWY	47.75	52.30	1.5	1.5	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	HWY	45.70	52.30	1.5	1.5	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	HWY	44.30	52.30	1.5	1.5	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	HWY	43.10	52.30	1.5	1.5	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	HWY	51.30	52.30	1.5	1.5	2	18.80	14.35	2.00	1.30
OPERATING ENGINEER	ALL	HWY	49.30	52.30	1.5	1.5	2	18.80	14.35	2.00	1.30
ORNAMNTL IRON WORKER	E	ALL	46.75	49.25	2	2	2	13.90	19.79	0.00	0.75
ORNAMNTL IRON WORKER	W	ALL	45.06	48.66	2	2	2	10.52	20.76	0.00	0.70
PAINTER	ALL	ALL	44.18	46.18	1.5	1.5	1.5	10.30	8.20	0.00	1.35
PAINTER SIGNS	ALL	BLD	37.45	42.05	1.5	1.5	2	2.60	3.18	0.00	0.00
PILEDRIIVER	ALL	ALL	46.35	48.35	1.5	1.5	2	11.79	18.87	0.00	0.63
PIPEFITTER	ALL	BLD	47.50	50.50	1.5	1.5	2	11.79	17.85	0.00	0.63
PLASTERER	ALL	BLD	42.75	45.31	1.5	1.5	2	14.00	15.71	0.00	0.89
PLUMBER	ALL	BLD	49.25	52.20	1.5	1.5	2	14.34	13.35	0.00	1.28

ROOFER	ALL	BLD	42.30	45.30	1.5	1.5	2	9.08	12.14	0.00	0.58
SHEETMETAL WORKER	ALL	BLD	45.77	47.77	1.5	1.5	2	10.65	14.10	0.00	0.82
SPRINKLER FITTER	ALL	BLD	47.20	49.20	1.5	1.5	2	12.25	11.55	0.00	0.55
STEEL ERECTOR	E	ALL	42.07	44.07	2	2	2	13.45	19.59	0.00	0.35
STEEL ERECTOR	W	ALL	45.06	48.66	2	2	2	10.52	20.76	0.00	0.70
STONE MASON	ALL	BLD	45.38	49.92	1.5	1.5	2	10.45	16.68	0.00	0.90
TERRAZZO FINISHER	ALL	BLD	40.54	40.54	1.5	1.5	2	10.65	12.76	0.00	0.73
TERRAZZO MASON	ALL	BLD	44.38	47.88	1.5	1.5	2	10.65	14.15	0.00	0.82
TILE MASON	ALL	BLD	████████	████████	1.5	1.5	2	████████	████████	0.00	████████
TRAFFIC SAFETY WRKR	ALL	HWY	33.50	35.10	1.5	1.5	2	8.10	7.62	0.00	0.25
TRUCK DRIVER	ALL	ALL	36.30	36.85	1.5	1.5	2	8.10	9.76	0.00	0.15
TRUCK DRIVER	ALL	ALL	36.45	36.85	1.5	1.5	2	8.10	9.76	0.00	0.15
TRUCK DRIVER	ALL	ALL	36.65	36.85	1.5	1.5	2	8.10	9.76	0.00	0.15
TRUCK DRIVER	ALL	ALL	36.85	36.85	1.5	1.5	2	8.10	9.76	0.00	0.15
TUCKPOINTER	ALL	BLD	44.17	45.17	1.5	1.5	2	10.45	15.04	0.00	0.88

**Legend**

**M-F OT** Unless otherwise noted, OT pay is required for any hour greater than 8 worked each day, Mon through Fri. The number listed is the multiple of the base wage.

**OSA** Overtime pay required for every hour worked on Saturdays

**OSH** Overtime pay required for every hour worked on Sundays and Holidays

**H/W** Health/Welfare benefit

**Explanations DUPAGE COUNTY**

**IRON WORKERS AND FENCE ERECTOR (WEST) - West of Route 53.**

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.

**TRAFFIC SAFETY** - work associated with barricades, hoses 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.

#### 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 scuffing 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

Low voltage installation, maintenance and removal of telecommunication facilities (voice, sound, data and video) including telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), 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 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 Pump (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 Scream; 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 ENGINEER - FLOATING

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

#### 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 Turnatrailers 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 Turnatrailers 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.

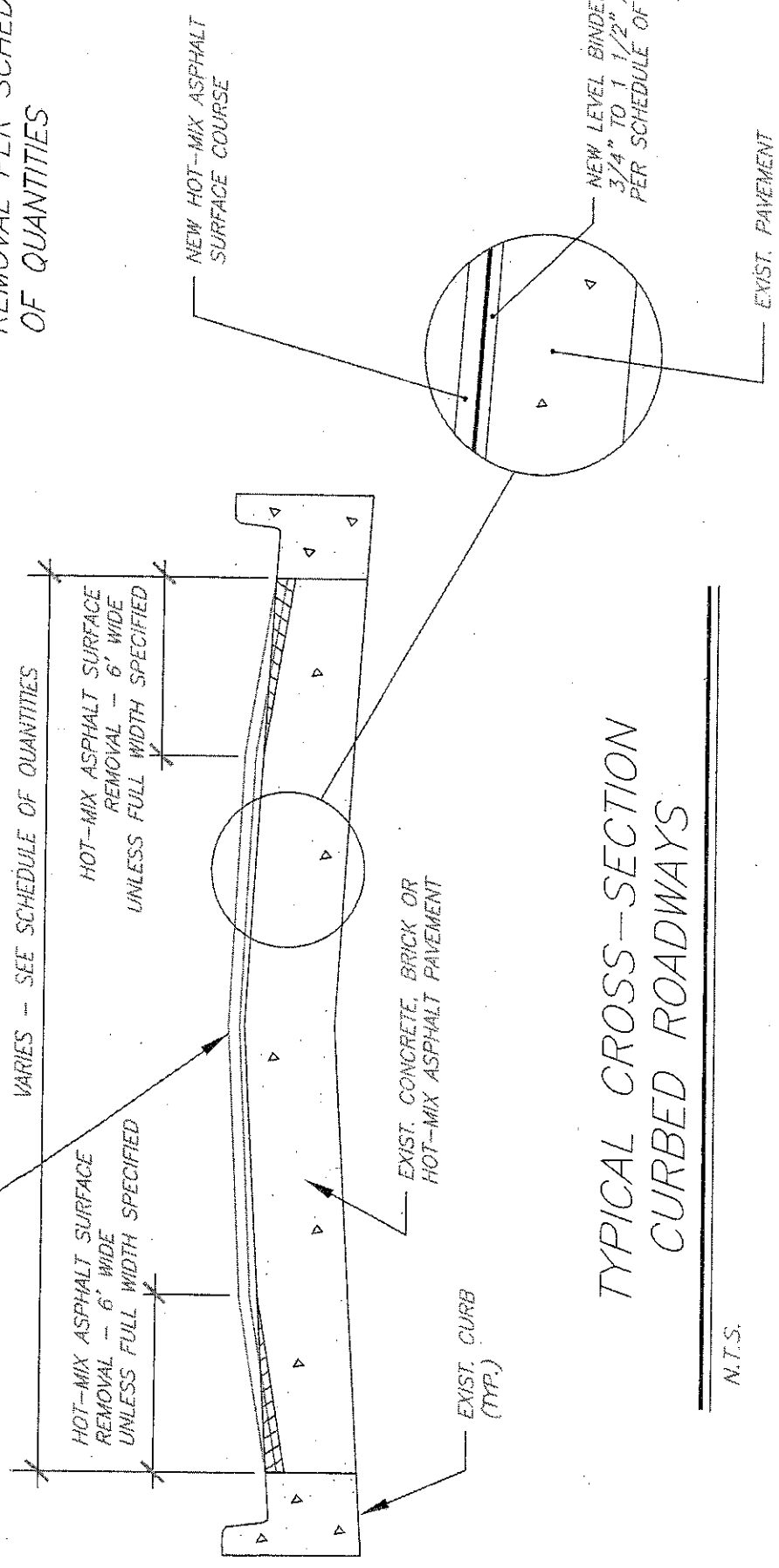
MATERIAL TESTER & MATERIAL TESTER/INSPECTOR I AND II

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".



NOTE: DEPTH OF EXISTING SURFACE  
REMOVAL PER SCHEDULE  
OF QUANTITIES

PER SCHEDULE OF QUANTITIES  
NEW 1 1/2" (MIN.) 1 3/4" (MIN.) OR 2" (MIN.)  
HOT-MIX ASPHALT SURFACE COURSE  
VARIES - SEE SCHEDULE OF QUANTITIES



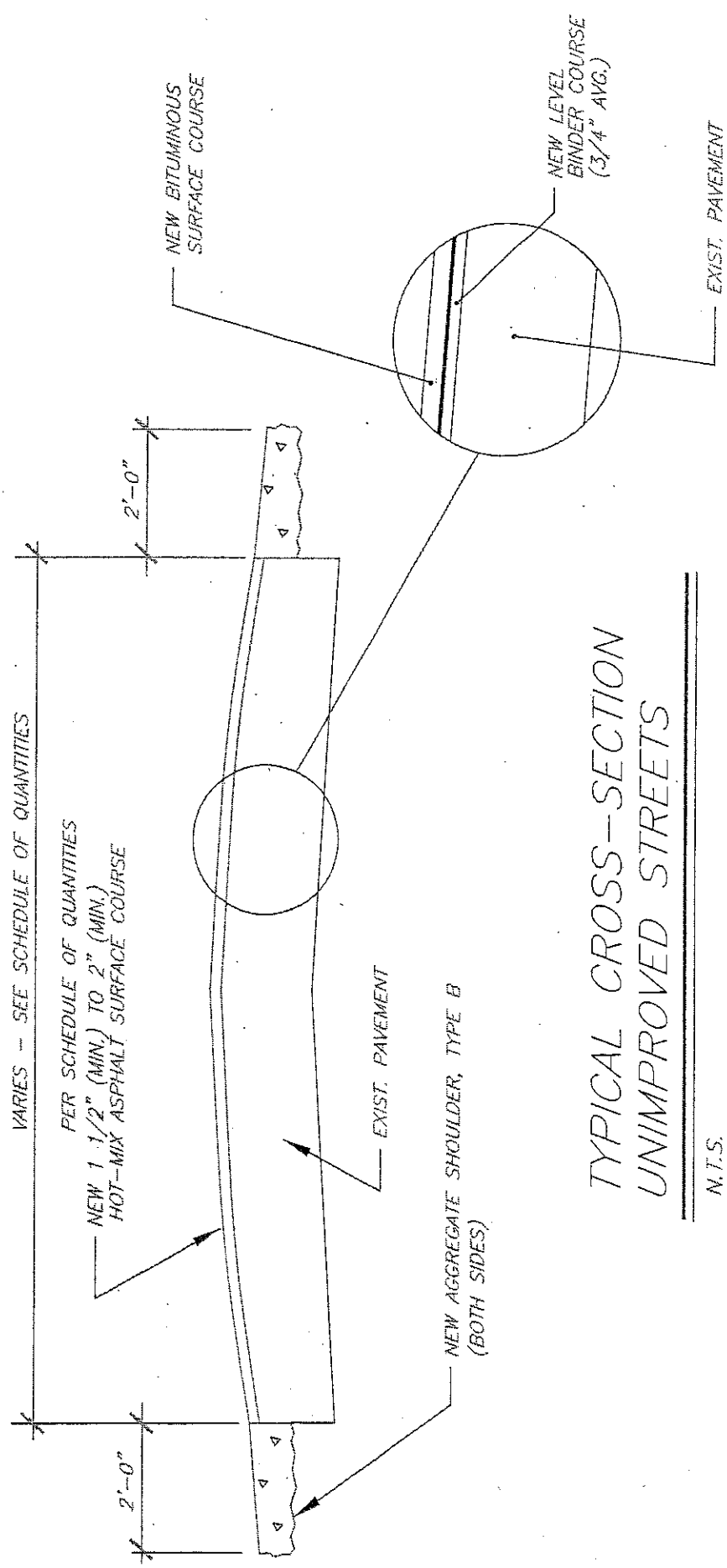
# TYPICAL CROSS-SECTION CURBED ROADWAYS

N.T.S.

R.W.B  
06/08/05  
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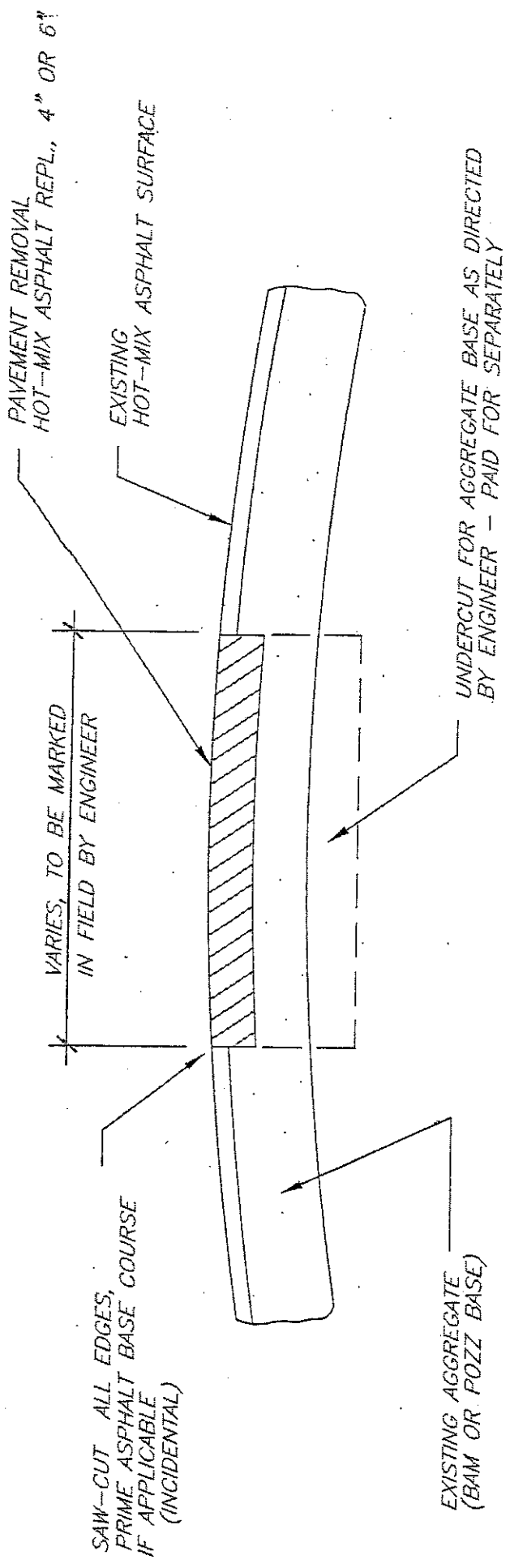
NOTE: DEPTH OF EXISTING SURFACE  
REMOVAL PER SCHEDULE  
OF QUANTITIES



### TYPICAL CROSS-SECTION UNIMPROVED STREETS

N.T.S.

R.W.B  
06/08/05  
C:\CADFILES\RESURFACING\DETAILS

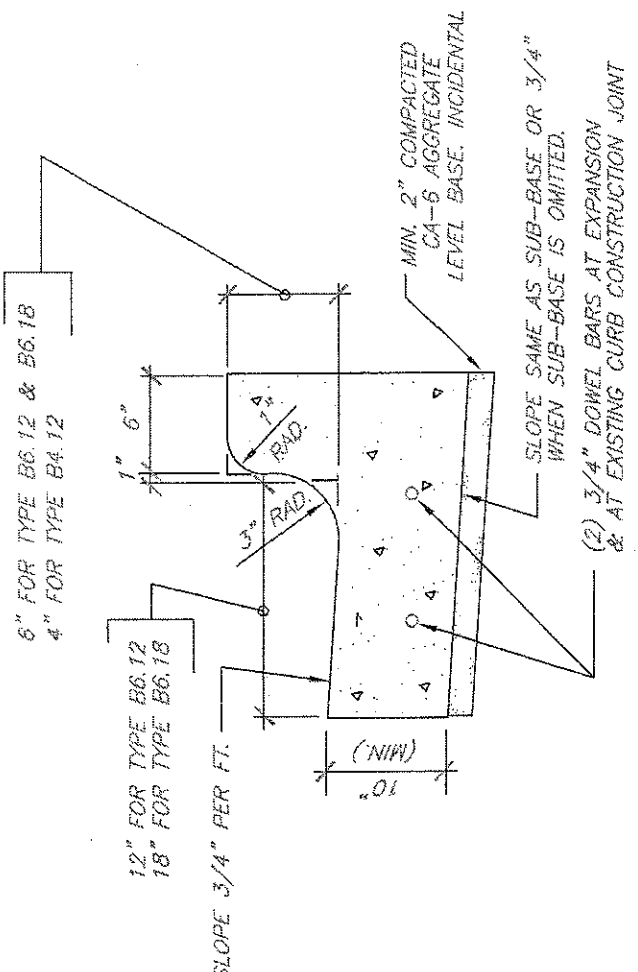


# CLASS D PATCHES, 4" or 6"

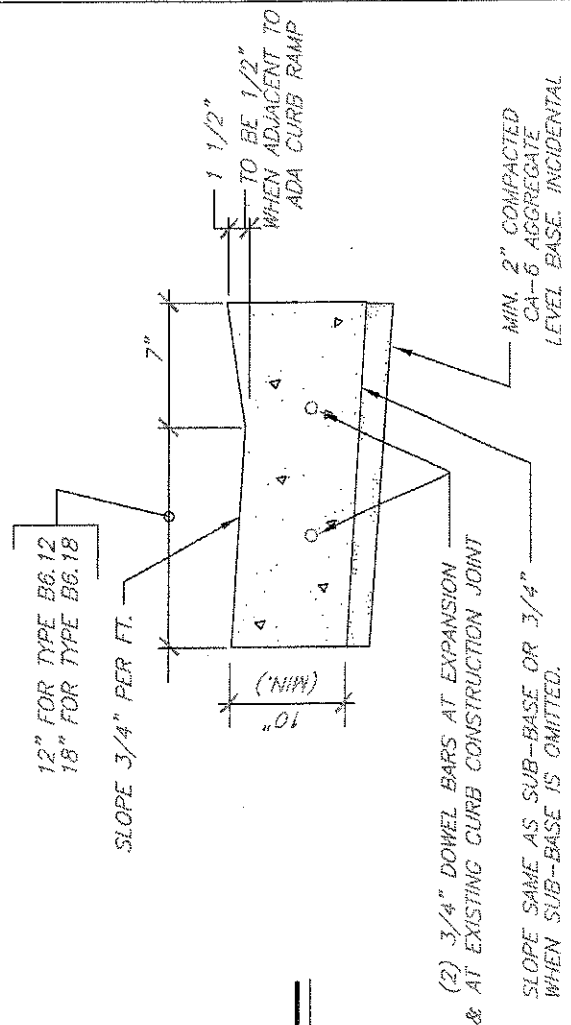
N.T.S.

R.W.B  
06/08/05  
C:\CADFILES\RESURFACING\DETAILS





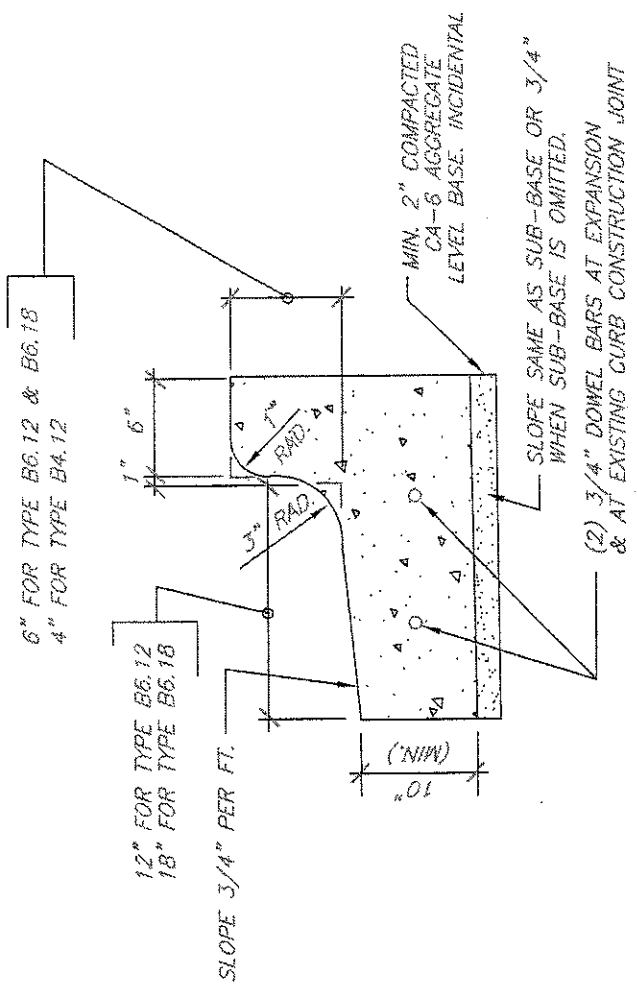
BARRIER CURB



DEPRESSED CURB



BARRIER CURB WITH REVERSED PITCH

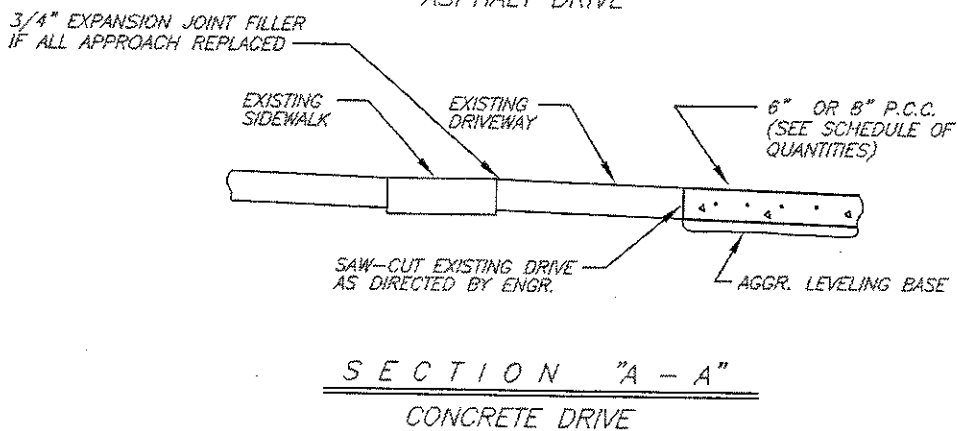
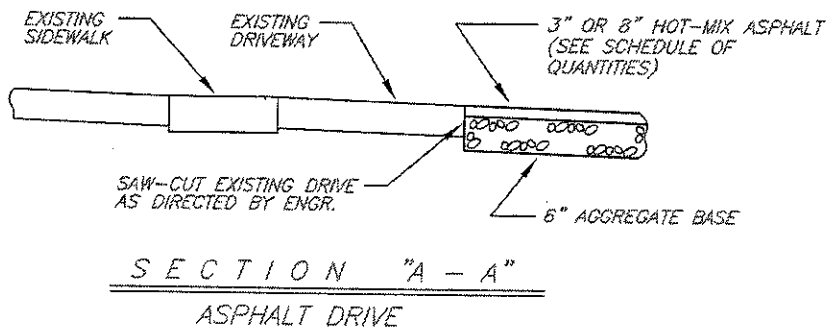
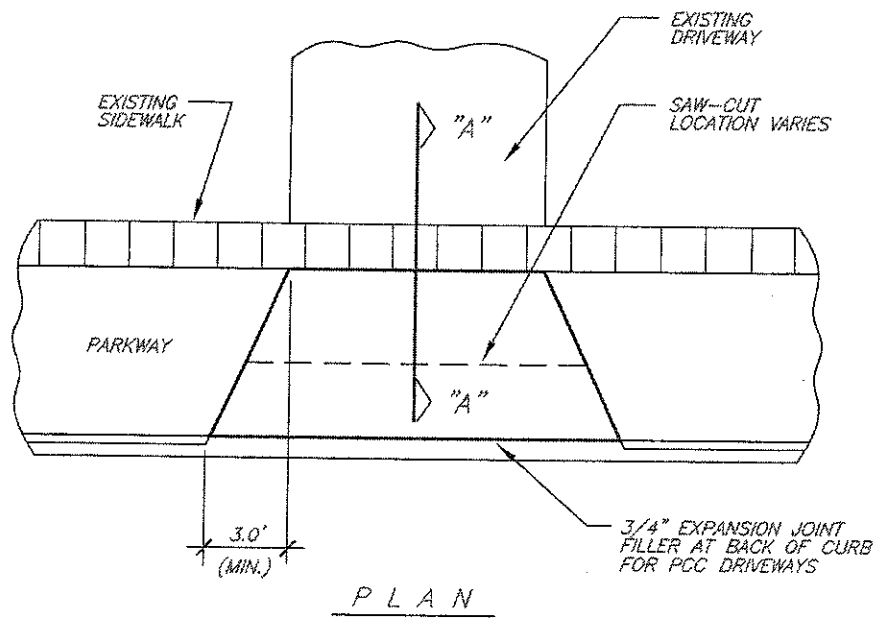


COMBINATION CONCRETE CURB AND GUTTER - BARRIER

JOINT SPACING ON CENTERS:  
15' FOR CONTRACTIONS  
90' FOR EXPANSION

N.T.S.

WHERE APPLICABLE NEW CURB SHALL BE TIED TO ADJACENT CONCRETE PAVEMENT OR BASE WITH NO. 6 (3/4") BARS AT 24" CENTERS IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001

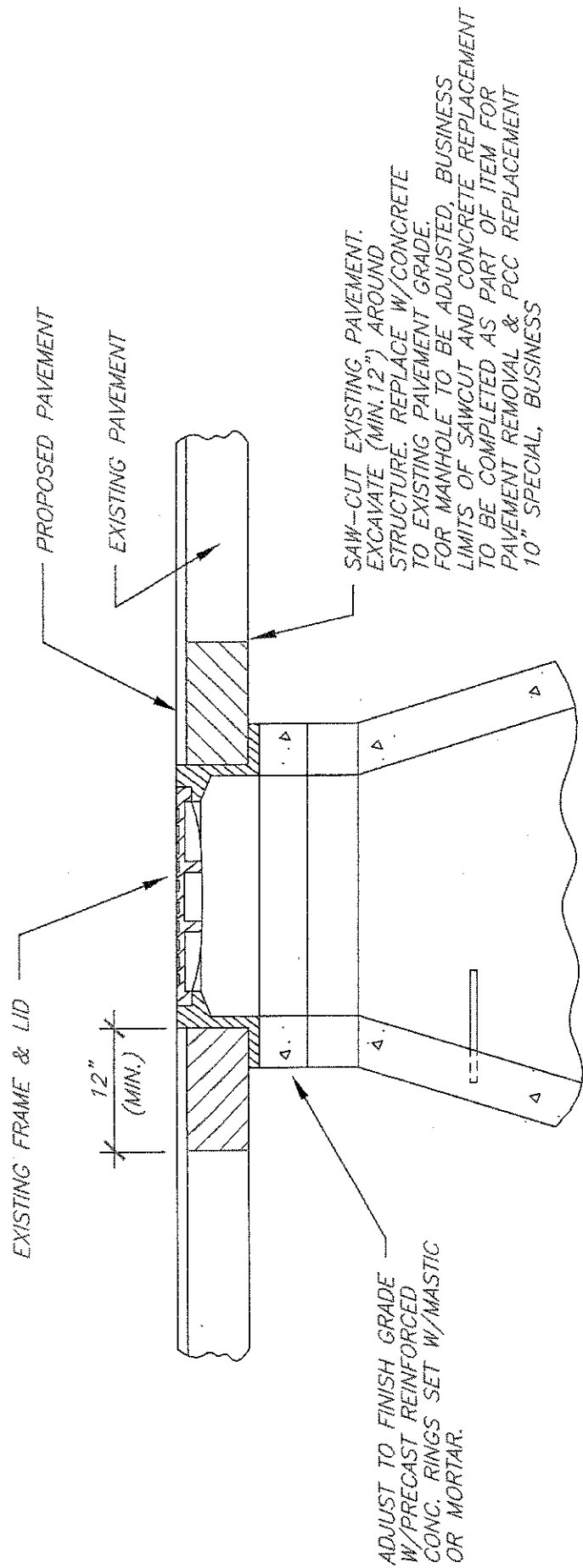


DRIVEWAY REMOVAL & REPLACEMENT

N.T.S.

R.W.B  
06/08/05  
C:\CADFILES\RESURFACING\DETAILS



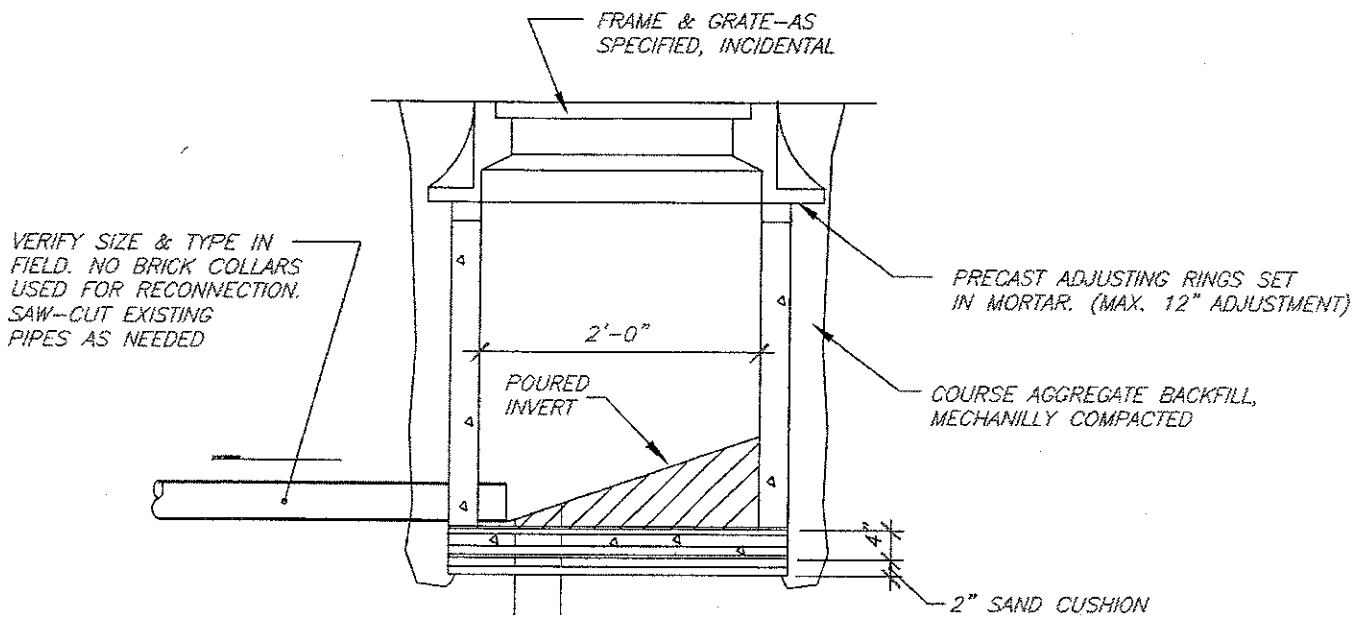


NOTES:

1. AFTER MANHOLE HAS BEEN ADJUSTED AND IF STREET IS OPEN TO TRAFFIC, A TYPE 1 BARRICADE W/FLASHER SHALL BE PLACED AT EACH MANHOLE.
2. SANITARY MANHOLE AND MANHOLE TO BE ADJUSTED, BUSINESS TO BE SET W/MASTIC

MANHOLE ADJUSTMENT DETAIL

N.T.S.



NOTE: INSIDE WALL OF INLET TO BE  
 FLUSH WITH FACE OF CURB FOR TYPE I FRAME  
 OR BACK OF CURB FOR TYPE 3 & TYPE II FRAME

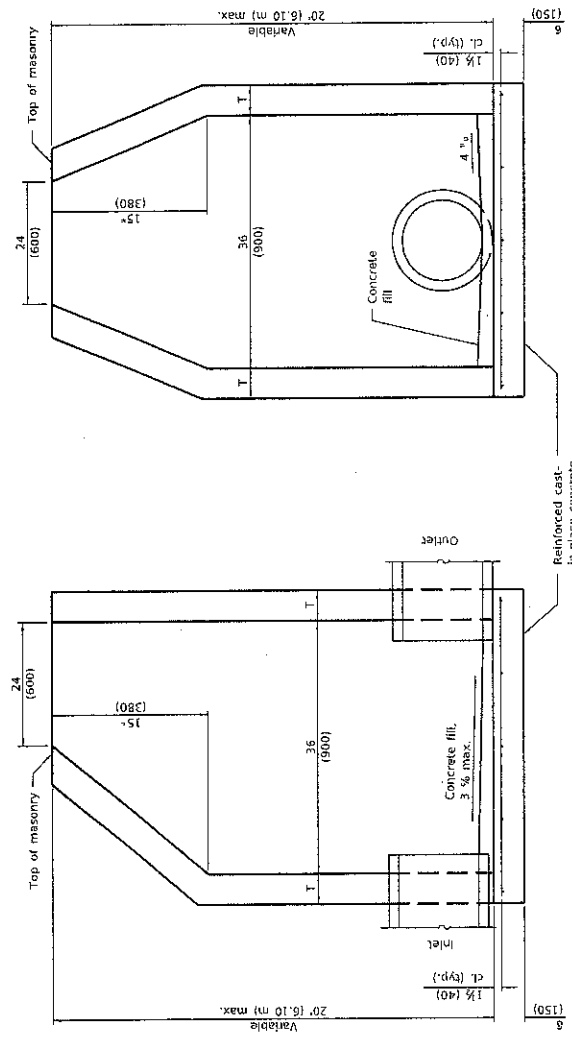
## TYPE "A" INLET NEW/REPLACEMENT

N.T.S.

R.W.B  
 06/08/05  
 C:\CADFILES\RESURFACING\DETAILS



4. For precast reinforced concrete sections, this dimension may vary from the dimension given to plus 6 (150).



ELEVATION - CONCENTRIC

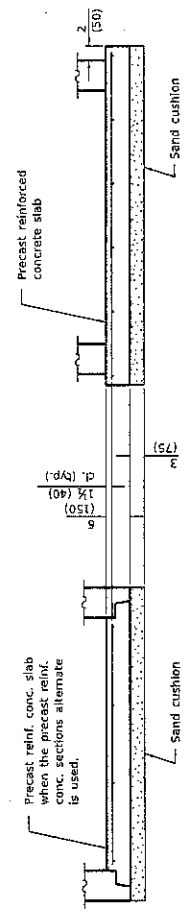
ELEVATION - ECCENTRIC

ALTERNATE MATERIALS FOR WALLS	T (min.)
Concrete Masonry Unit	5 (125)
Brick Masonry	6 (200)
Precast Reinforced Concrete Section	3 (75)
Cast-in-Place Concrete	6 (150)

**GENERAL NOTES**

Bottom slabs shall be reinforced with a minimum of 0.20 sq. in./ft. (420 sq. mm/m) in both directions with a maximum spacing of 12 (300).  
 Bottom slabs may be connected to the riser as determined by the fabricator; however, only a single row of reinforcement around the perimeter may be utilized.

See Standard 602601 for optional Precast Reinforced Concrete Flat Slab Top.  
 All dimensions are in inches (millimeters) unless otherwise shown.



ALTERNATE BOTTOM SLAB

DATE	REVISIONS
1-1-11	Detailed reinf. in slabs. Added max. limit to height.
1-1-09	Revised general notes. Switched units to English (metric).

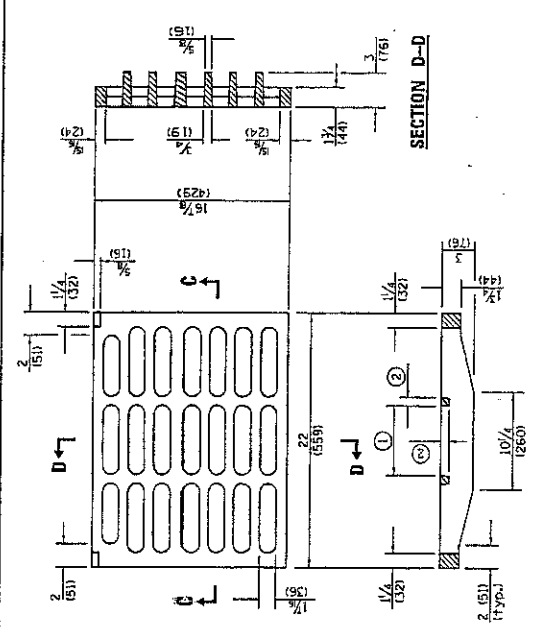
Illinois Department of Transportation  
 PHASED ISSUE 1 2011  
 ENGINEER OF PORTS AND TERRITORIES  
 APPROVED *[Signature]* 2011  
 ENGINEER OF DESIGN AND ENVIRONMENT

**INLET - TYPE B**

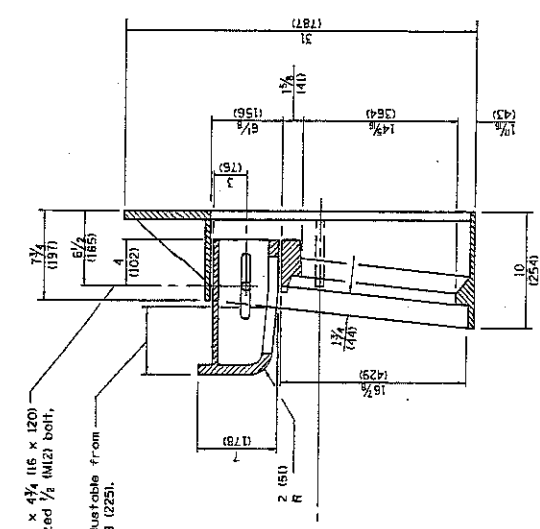
STANDARD 602306-03



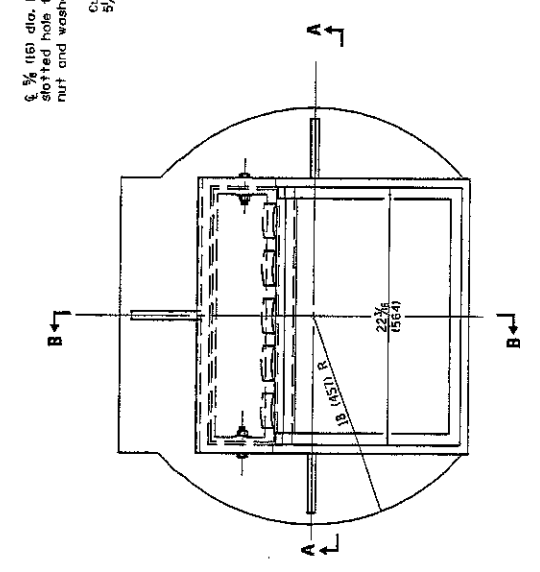




SECTION D-D



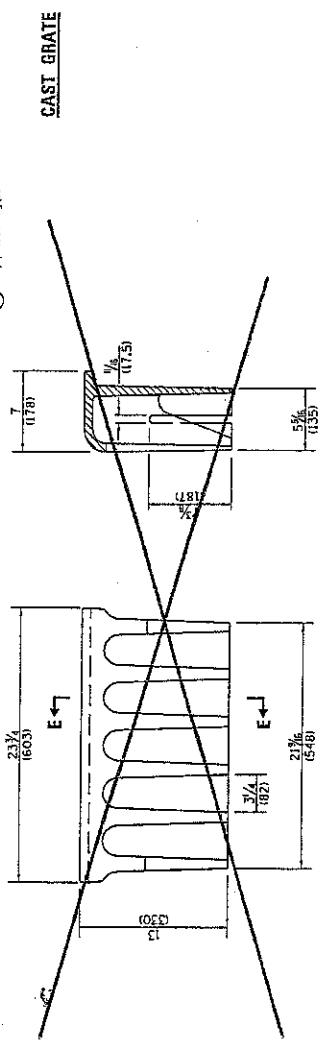
SECTION B-B



SECTION A-A

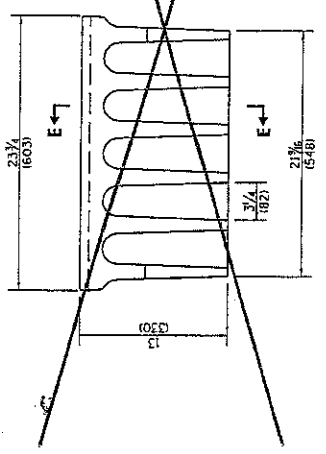
SECTION C-C

- ① = 6 (152) typ.
- ② = 3/4 (19) typ.



CAST GRATE

SECTION E-E



ALTERNATE CURB BOX

All dimensions are in inches (millimeters) unless otherwise shown.

PASSED January 1, 2015  
 ENGINEER OF POLICE AND PROCEEDURES  
 APPROVED January 1, 2015  
 ENGINEER OF HIGHWAY AND ENVIRONMENT

DATE	REVISIONS
1-1-15	Revised dimensions of frame and alternate curb box.
1-1-09	Switched units to English (metric).

**FRAME AND GRATE TYPE 3**

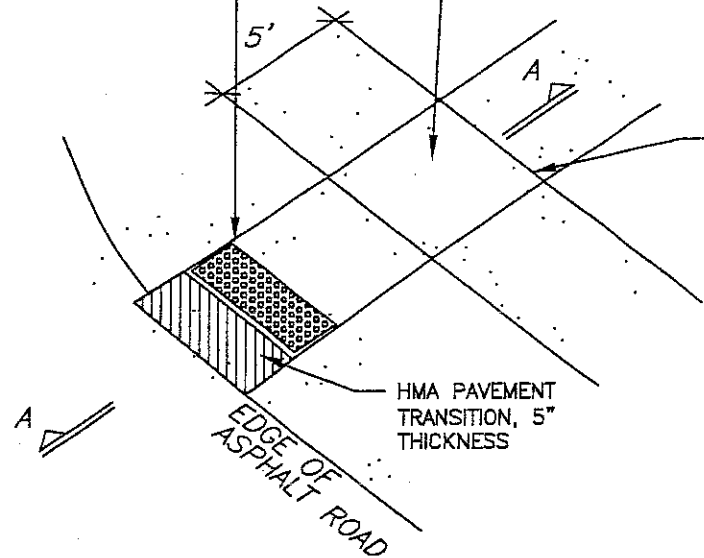
STANDARD 604006-05

ISSUED 1-1-97

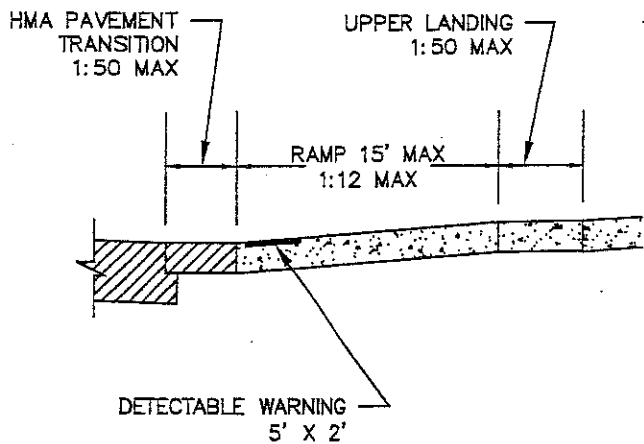
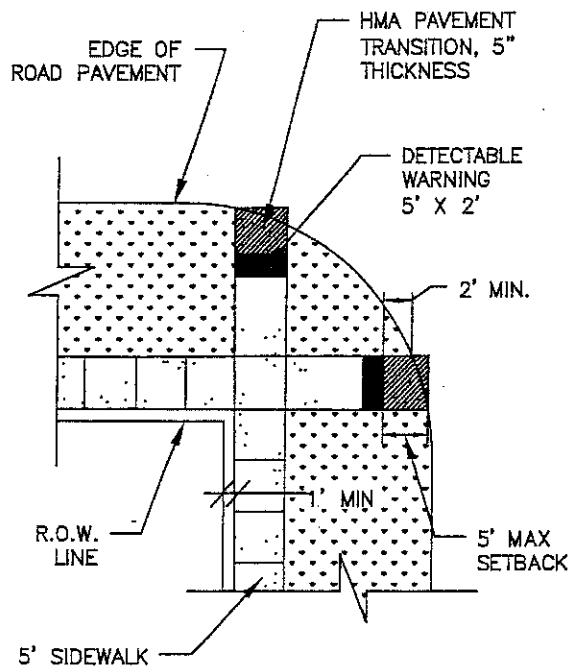


DETECTABLE WARNINGS  
5' X 2'

UPPER LANDING  
5' X 5'  
1:50 MAX SLOPE




1/2" PREMOULDED  
EXPANSION JOINT



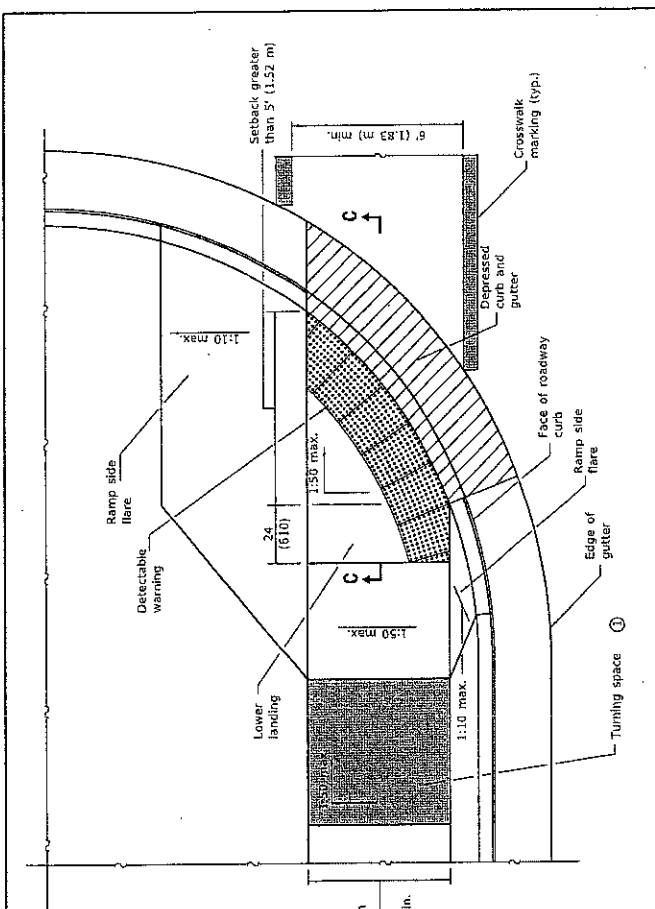
RAMPS SHALL MEET REQUIREMENTS OF IDOT STD. DETAILS FOR CURB RAMPS.

INSERT ADA DETECTABLE WARNING SURFACE TILE AS SPECIFIED.  
DYED CONCRETE NOT ALLOWED.

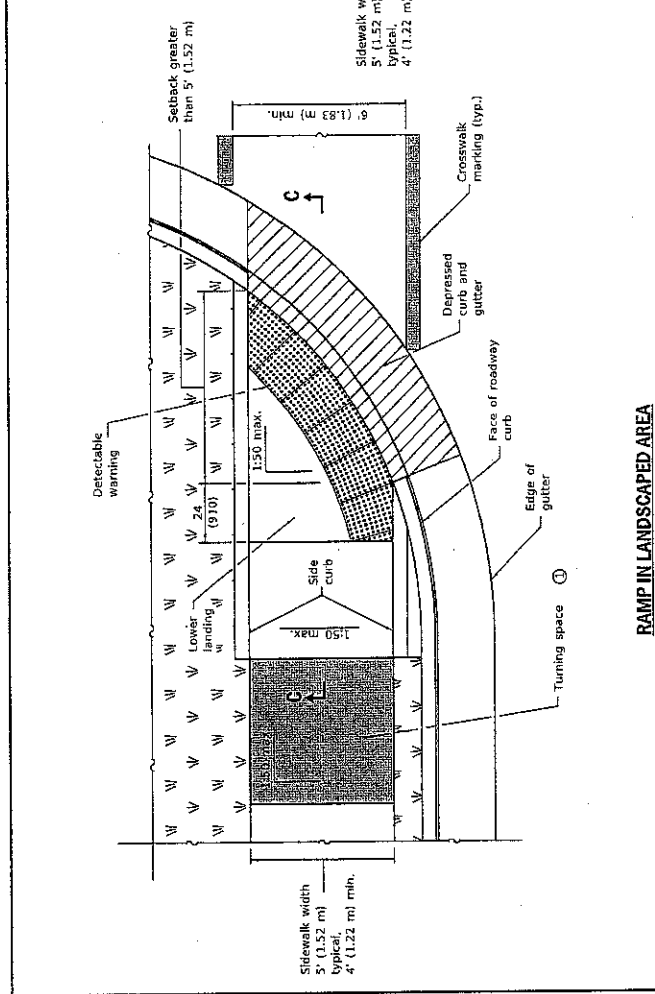
THE TYPE OF DETECTABLE WARNING TILE SHALL BE ARMOR-TILE, CAST IN PLACE SYSTEM, OR ACCESS TILE TACTILE SYSTEMS OR APPROVED EQUAL.

N.T.S.	DATE	REVISIONS	DRAWN BY	APPVD BY	STANDARD DETAIL
	04/12/07		D.J.G.		A.D.A RAMPS ON NON-CURBED STREETS
	03/25/11		S.A.V.	A.J.S.	
	03/26/12		T.J.T.	A.J.S.	
	03/01/15		A.J.S.	A.J.S.	
DRAWING NO.SWK-03					
I:\LIBRARY\DETAILS\SIDEWALK\SWK-03					

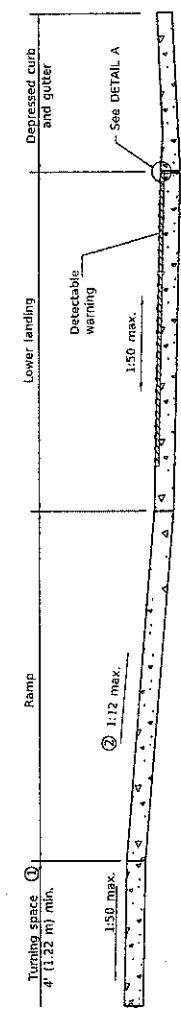




**RAMP IN LANDSCAPED AREA**  
SETBACK > 5'



**RAMP IN PAVED AREA**  
SETBACK > 5'



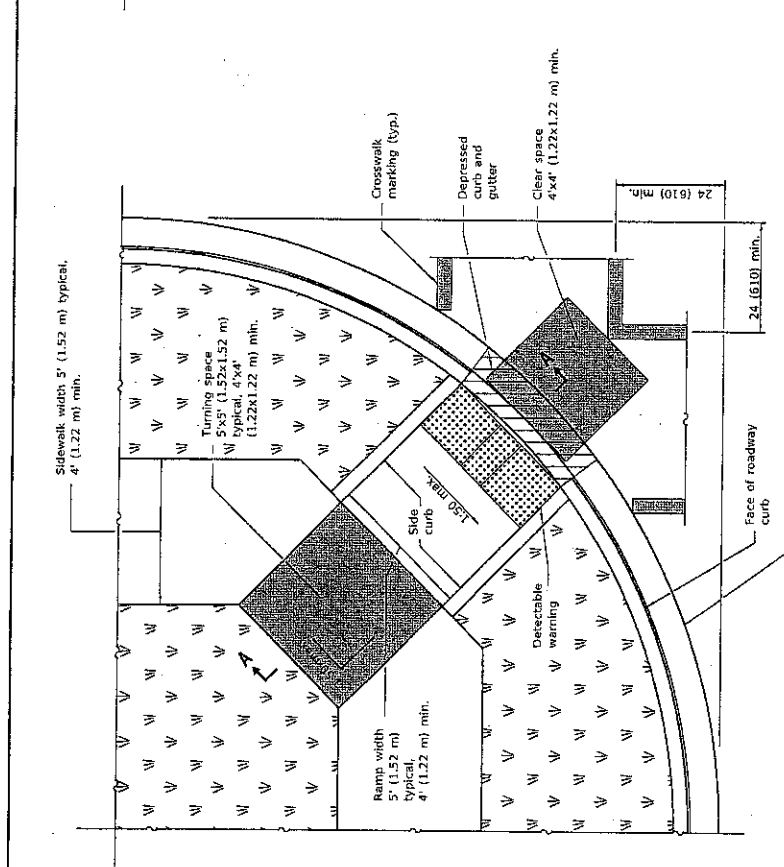
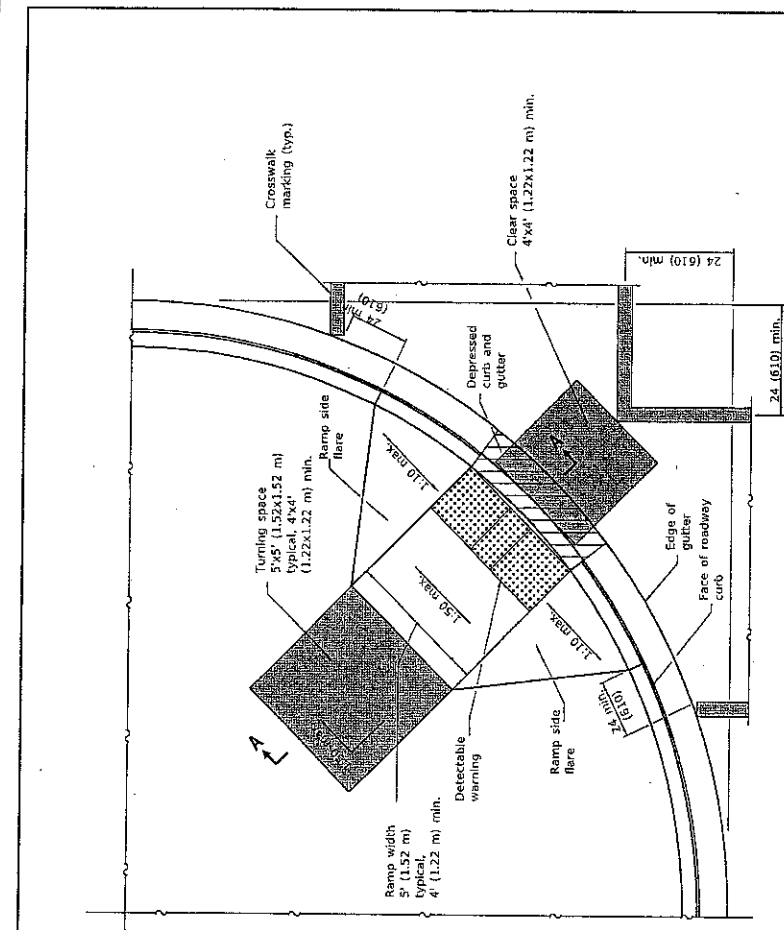
**SECTION C-C**

- ① Turning space not required for ramp slopes flatter than 1:20.
- ② The running slope of the curb ramp shall not require the ramp length to exceed 15' (4.5 m).

**GENERAL NOTES**  
All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).  
Where the turning space is constrained on a side opposite a ramp, the minimum length of the turning space in the direction of the ramp-run shall be 5' (1.52 m).  
Where 1:50 maximum slope is shown, 1:64 is preferred.  
See Standard 606001 for details of depressed curb adjacent to curb ramp.  
All dimensions are in inches (millimeters) unless otherwise shown.

**PERPENDICULAR CURB RAMPS FOR SIDEWALKS**  
(Sheet 2 of 2)  
**STANDARD 424001-10**

Illinois Department of Transportation  
ISSUED 1-1-97  
PASSED JANUARY 1, 2018  
ENGINEER OF TRAFFIC AND PROCEDURES  
APPROVED JAMES L. JAMES L. JAMES L.  
ENGINEER OF DESIGN AND ENVIRONMENT



**GENERAL NOTES**

This Standard shall only be used for curb radii of 20 ft. (6.1 m) or greater.

Where the turning space is constrained on a side opposite to the minimum length of the turning space in the direction of the ramp turn shall be 5' (1.52 m).

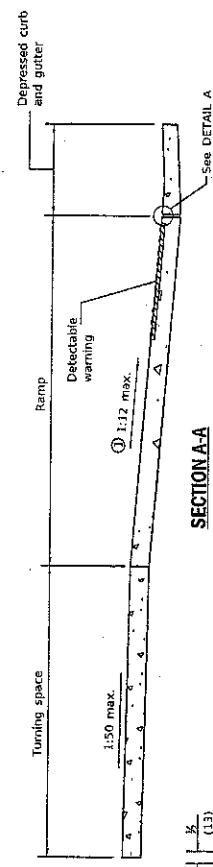
Where 1:50 maximum slope is shown, 1:64 is preferred.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V/H).

See Standard 60601 for details of depressed curb adjacent to curb ramp.

All dimensions are in inches (millimeters) unless otherwise shown.

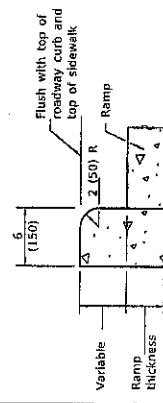
**RAMP IN PAVED AREA**



**SECTION A-A**

① The running slope of the curb ramp shall not require the ramp length to exceed 15' (4.5 m).

**RAMP IN LANDSCAPED AREA**



**SIDE CURB DETAIL**

Illinois Department of Transportation

ISSUED 1-1-12

PASSED: [Signature] 2018

APPROVED FOR POLICY AND PROCEDURES: [Signature] 2018

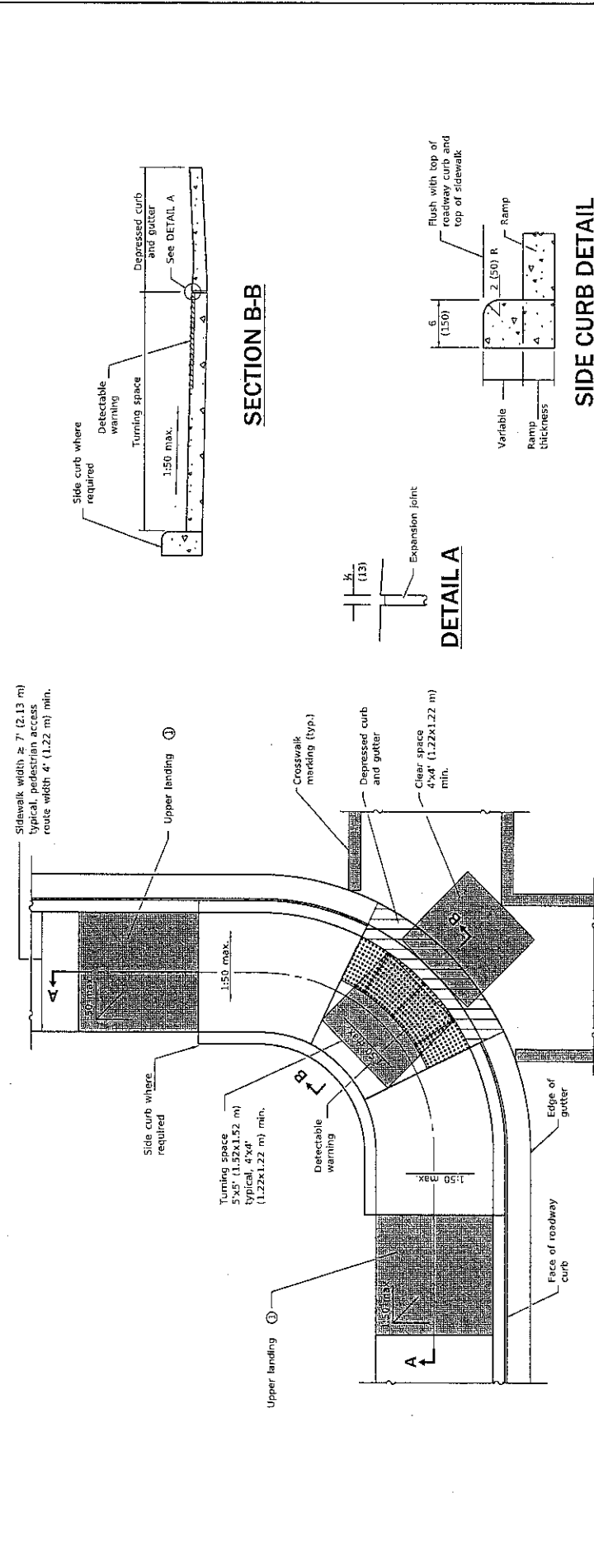
ENGINEER: [Signature] 2018

ENGINEER-IN-CHARGE: [Signature]

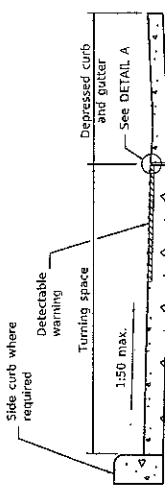
**DIAGONAL CURB RAMPS FOR SIDEWALKS**

DATE	REVISIONS
1-1-18	Omitted diagonal slope at turning spaces.
1-1-15	Changed 'Upper landing to turning space'. Added note 'reg. const. turning space.'

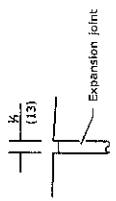
STANDARD 424006-03



**CORNER PARALLEL CURB RAMP**



**SECTION B-B**



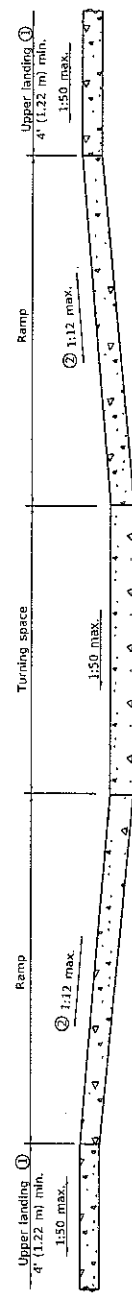
**DETAIL A**

**SIDE CURB DETAIL**

**GENERAL NOTES**  
 All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).  
 Where the turning space is constrained on a side opposite a ramp, the minimum length of the turning space in the direction of the ramp-run shall be 5' (1.52 m).  
 Where 1:50 maximum slope is shown, 1:64 is preferred.  
 See Standard 606601 for details of depressed curb adjacent to curb ramp.  
 All dimensions are in inches (millimeters) unless otherwise shown.

**SECTION A-A**

- ① Upper landing(s) not required for ramp slopes flatter than 1:20.
- ② The running slope of the curb ramp shall not require the ramp length to exceed 15' (4.5 m).

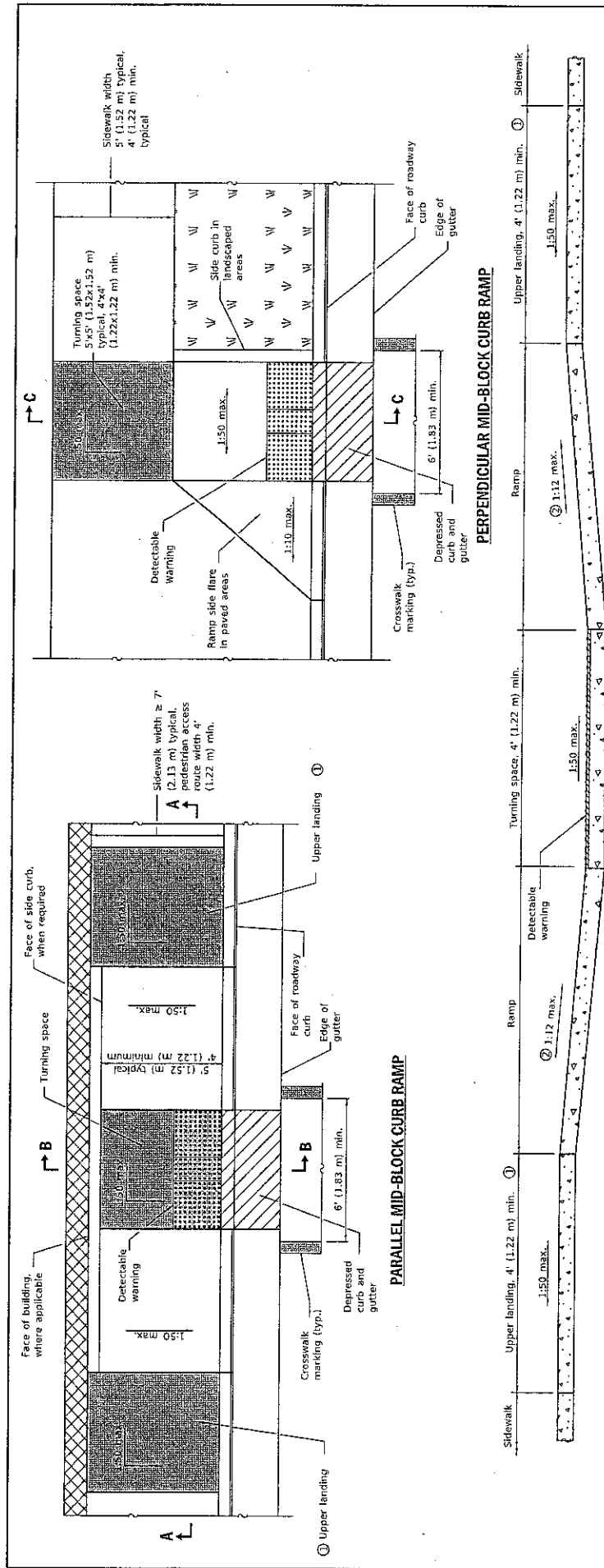


DATE	REVISIONS
1-1-17	Revised sidewalk width to include 24 (610) buffer behind curb.
1-1-15	Changed 'Lower landing' to 'Turning space'. Added x-walk markings. Added note ②.

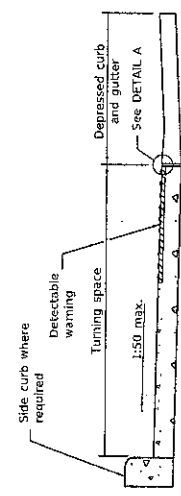
**CORNER PARALLEL CURB RAMPS FOR SIDEWALKS**

STANDARD 42401.1-03

Illinois Department of Transportation  
 PASSED JANUARY 1, 2017  
 ENGINEER OF POLICY AND PROCEDURES  
 APPROVED [Signature] 2017  
 ENGINEER OF DESIGN AND ENVIRONMENT



- SECTION A-A**
- ① Upper landing(s) not required for ramp slopes flatter than 1:20.
  - ② The running slope of the curb ramp shall not require the ramp length to exceed 15' (4.5 m).



**GENERAL NOTES**

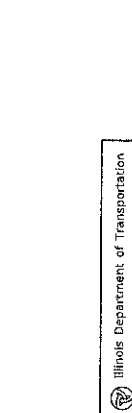
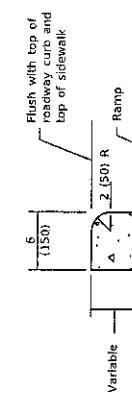
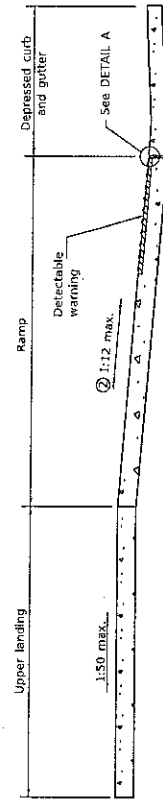
All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V/H).

Where the turning space is constrained on a side opposite a ramp, the minimum length of the turning space in the direction of the ramp-run shall be 5' (1.52 m).

Where 1:50 maximum slope is shown, 1:64 is preferred.

See Standard 606001 for details of depressed curb adjacent to curb ramp.

All dimensions are in inches (millimeters) unless otherwise shown.



MID-BLOCK CURB RAMPS FOR SIDEWALKS	
DATE	REVISIONS
1-1-18	Omitted diagonal slope at turning spaces and upper landings.
1-1-17	Revised sidewalk width to include 24 (610) buffer behind curb.

Illinois Department of Transportation

ISSUED 1-1-12

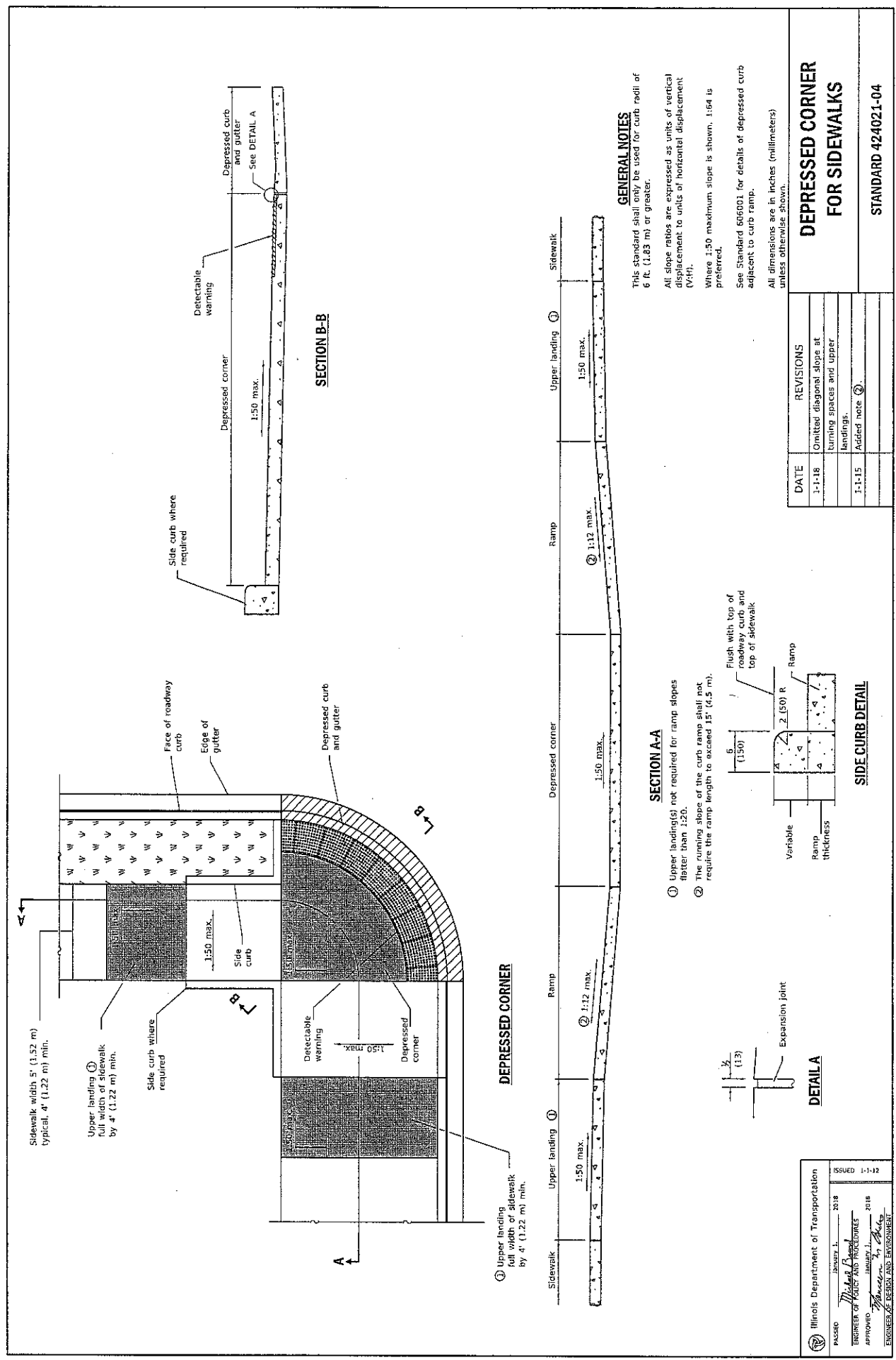
PAISED August 1, 2018

ENGINEER OF PROJECT AND PROCEDURES

APPROVED January 1, 2018

ENGINEER DESIGN AND SUPERVISOR

STANDARD 424016-04

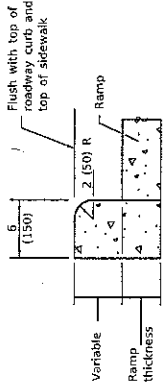


**GENERAL NOTES**

This standard shall only be used for curb radii of 6 ft. (1.83 m) or greater.  
 All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V/H).  
 Where 1:50 maximum slope is shown, 1:64 is preferred.  
 See Standard 606001 for details of depressed curb adjacent to curb ramp.  
 All dimensions are in inches (millimeters) unless otherwise shown.

**SECTION A-A**

- ① Upper landing(s) not required for ramp slopes flatter than 1:20.
- ② The running slope of the curb ramp shall not require the ramp length to exceed 15' (4.5 m).



**SIDE CURB DETAIL**

DATE	REVISIONS
1-1-18	Omit diagonal slope at turning spaces and upper landings.
1-1-15	Added note ②.

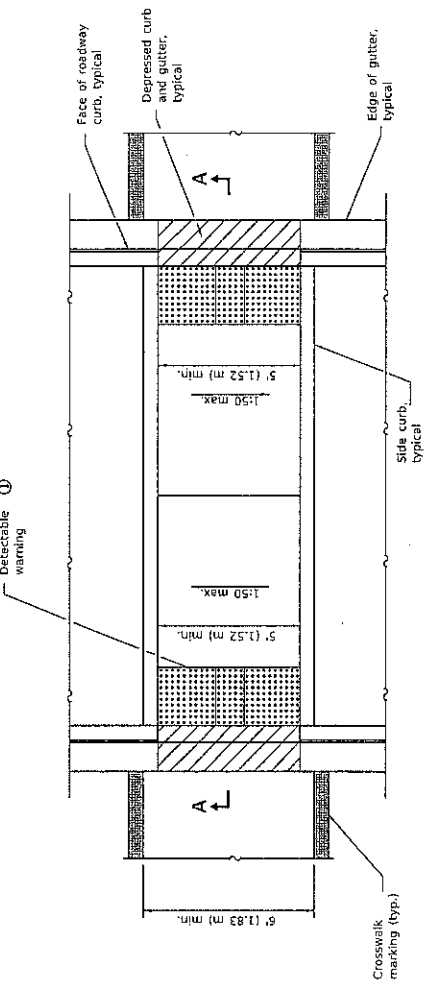
**DEPRESSED CORNER FOR SIDEWALKS**  
 STANDARD 424021-04

Illinois Department of Transportation  
 ISSUED 1-1-12

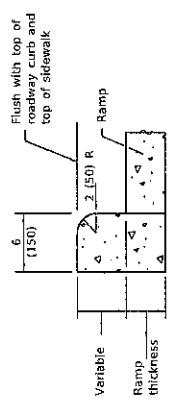
PROJECT: JANUARY 1, 2018  
 ENGINEER OF DESIGN AND PROCEDURES: [Signature]  
 APPROVED: [Signature] JANUARY 1, 2018  
 ENGINEER OF DESIGN AND ENVIRONMENT: [Signature]



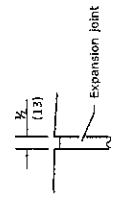




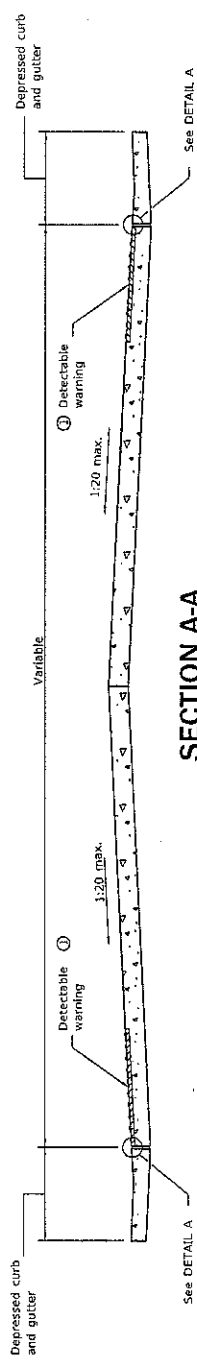
**MEDIAN PEDESTRIAN CROSSING**



**SIDE CURB DETAIL**



**DETAIL A**



**SECTION A-A**

(1) Omit detectable warnings when distance between back of curbs is less than 6' (1.83 m).

**GENERAL NOTES**

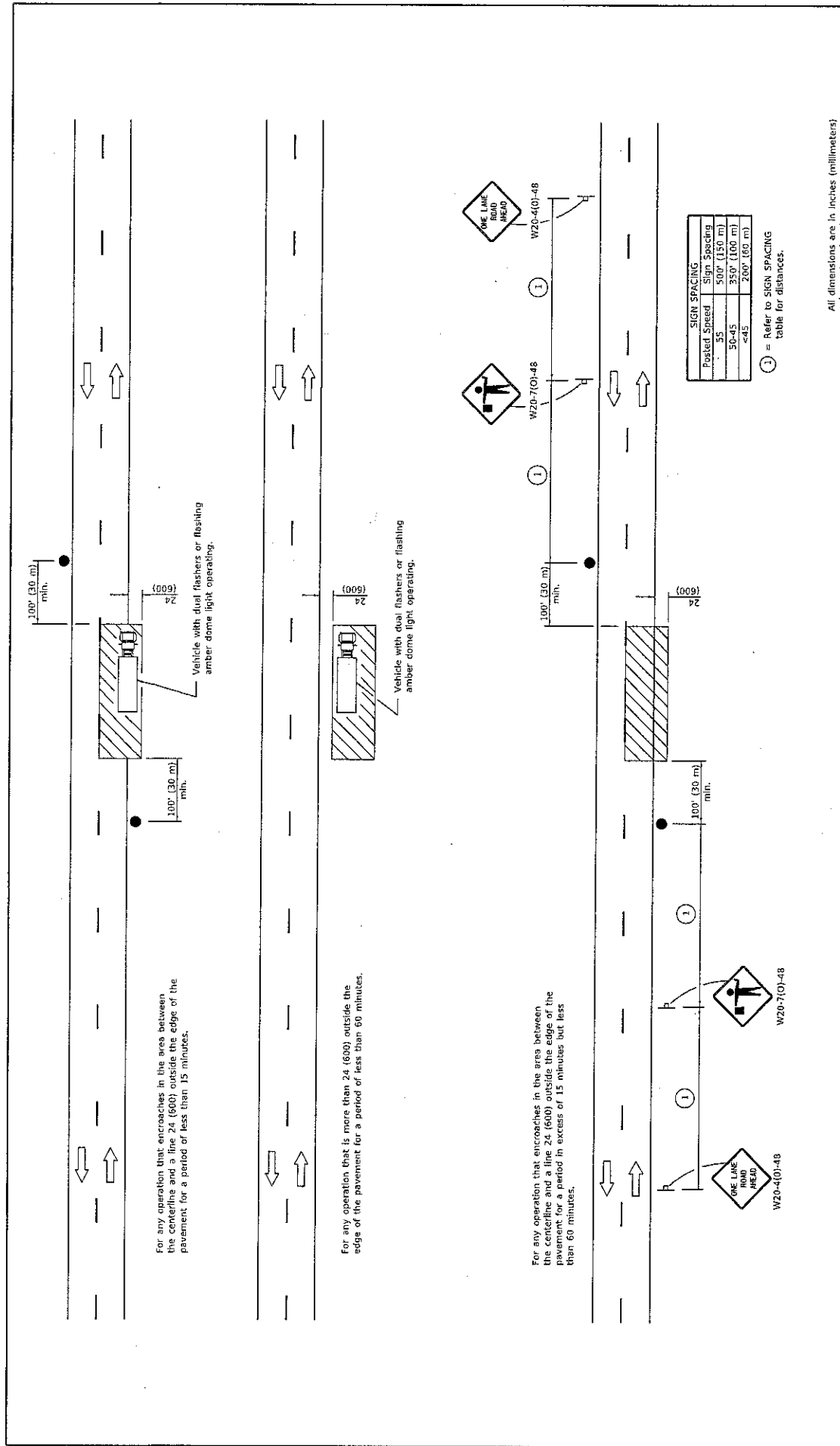
All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).  
Where 1:50 maximum slope is shown, 1:64 is preferred.  
See Standard 606001 for details of depressed curb adjacent to curb ramp.  
All dimensions are in inches (millimeters) unless otherwise shown.

REVISIONS	
DATE	REVISIONS
1-1-12	Widened crosswalk to 6' (1.83 m) min. inside dimension. Revised General Notes.
1-1-12	New standard.

**MEDIAN PEDESTRIAN CROSSINGS**

STANDARD 424031-01

Illinois Department of Transportation  
 PASSED: [Signature] 2013  
 ENGINEER OF POLICY AND PROCEDURES  
 APPROVED: [Signature] 2013  
 ENGINEER OF DESIGN AND ENVIRONMENT



All dimensions are in inches (millimeters) unless otherwise shown.

**LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS**

STANDARD 701301-04

DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to English (metric).

**SYMBOLS**

- Work area
- Sign on portable or permanent support
- Flagger with traffic control sign

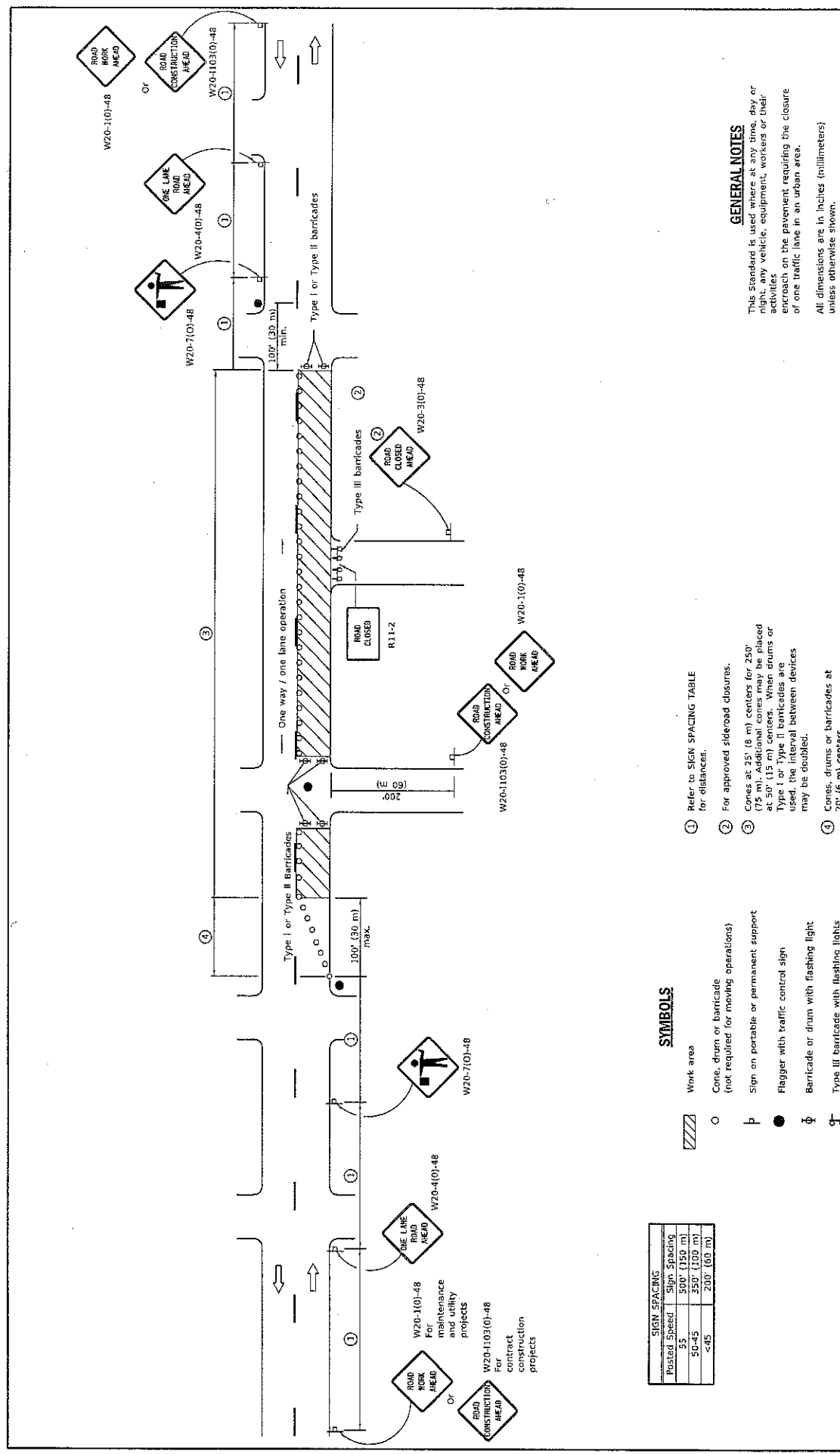
**TYPICAL APPLICATIONS**

- Marking patches
- Field survey
- String line
- Utility operations
- Cleaning up debris on pavement

Illinois Department of Transportation  
 ISSUED 1-1-97

PASSED: [Signature] 2011  
 ENGINEER OF SAFETY ENGINEERING

APPROVED: [Signature] 2011  
 ENGINEER OF DESIGN AND ENVIRONMENT



**GENERAL NOTES**

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an urban area.

All dimensions are in inches (millimeters) unless otherwise shown.

- ① Refer to SIGN SPACING TABLE for distances.
- ② For approved sidewalk closures.
- ③ Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
- ④ Cones, drums or barricades at 20' (6 m) centers.

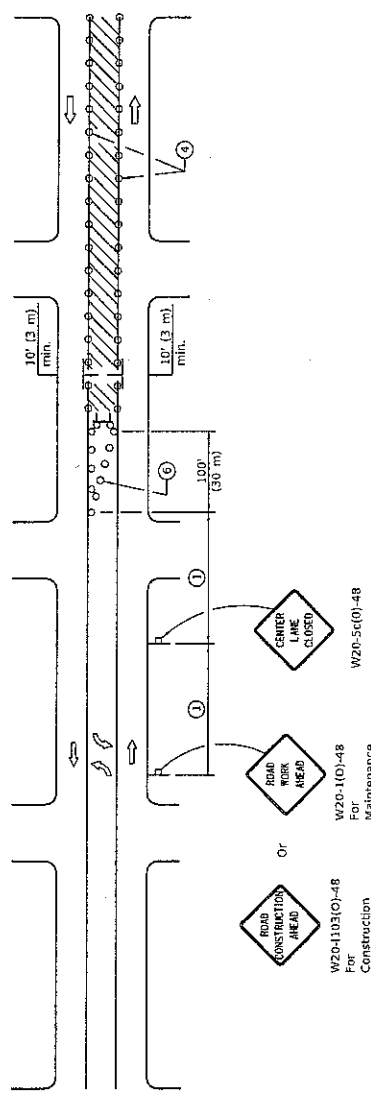
**SYMBOLS**

- Work area
- Cone, drum or barricade (not required for moving operations)
- Sign on portable or permanent support
- Flagger with traffic control sign
- Barricade or drum with flashing light
- Type III barricade with flashing lights

SIGN SPACING	
Posted Speed	Sign Spacing
55	500' (150 m)
50-45	250' (100 m)
<45	200' (60 m)

URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED	
STANDARD 701501-06	
DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to English (metric). Corrected sign No. 5.

Illinois Department of Transportation	
PASSED	ISSUED 1-1-97
APPROVED	2011
ENGINEER OF SAFETY ENGINEERING	
APPROVED	2011
ENGINEER OF DESIGN AND ENVIRONMENT	



**CASE I**  
(Signs required for both directions)

**GENERAL NOTES**  
This Standard is used to close one lane of an urban, two lane, two way roadway with a bidirectional turn lane.  
Case I applies when no workers are present. When workers are present, two lanes shall be closed and traffic control shall be according to Standard 701501.  
Calculate L as follows:  
SPEED LIMIT

English	(Metric)
40 mph (70 km/h) or less:	$L = \frac{WS^2}{60}$ $L = 150$
45 mph (80 km/h) or greater:	$L = \frac{W(S)^2}{60}$ $L = 0.65(W)(S)$

W = Width of offset in feet (meters).  
S = Normal posted speed mph (km/h).  
All dimensions are in inches (millimeters) unless otherwise shown.

- 1 Refer to SIGN SPACING TABLE for distances.
- 2 Required for speeds > 40 mph (70 km/h).
- 3 Required if work exceeds 500' (152 m) or 1 block.
- 4 Cones at 25' (8 m) centers for 250' (75 m) on approach. Additional cones may be placed at 50' (15 m) centers. When drums or type I or II barricades are used, the interval between devices may be doubled.
- 5 For approved sited road closures.
- 6 Cones, drums or barricades at 20' (6 m) centers in taper.
- 7 Use flagger sign only when flagger is present.

**SYMBOLS**

- Work area
- Barricade or drum with flashing light
- Flagger with traffic control sign
- Cone, drum or barricade (Cones for daytime use only)
- Sign on portable or permanent support
- Type III barricade with flashing lights

Posted Speed	Sign Spacing
55	500' (152 m)
50-45	350' (107 m)
<45	200' (61 m)

**URBAN LANE CLOSURE,  
2L, 2W, WITH BIDIRECTIONAL  
LEFT TURN LANE**  
(Sheet 1 of 2)

STANDARD 701502-08

DATE	REVISIONS
1-1-18	Corrected sign number for TWO WAY TRAFFIC sign for CASE II.
1-1-17	Added flashing lights to Type III bar, Revised elev. & sign spacing, TWT/TL taper length.

Illinois Department of Transportation  
ISSUED 1-1-01

PASSED  
JANUARY 1, 2018  
ENGINEER OF SAFETY, TRAFFIC AND ENGINEERING  
APPROVED  
JANUARY 1, 2018  
ENGINEER OF DESIGN AND ENVIRONMENT



① Omit whenever duplicated by road work traffic control.

**GENERAL NOTES**

This Standard is used where, at any time, pedestrian traffic must be rerouted due to work being performed.

This Standard must be used in conjunction with other Traffic Control & Protection Standards when roadway traffic is affected.

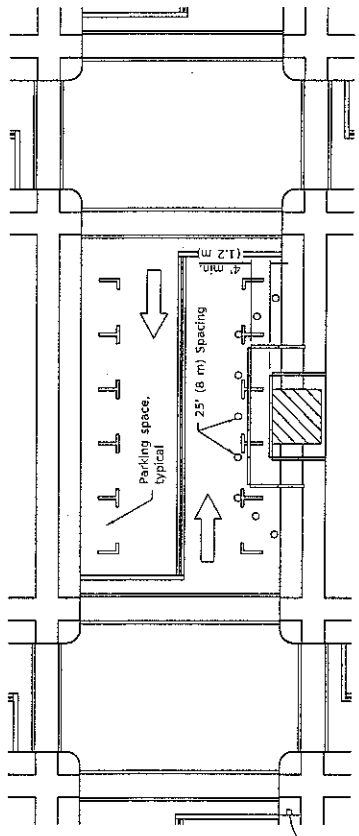
Temporary facilities shall be detectable and accessible.

The temporary pedestrian facilities shall be provided on the same side of the closed facilities whenever possible.

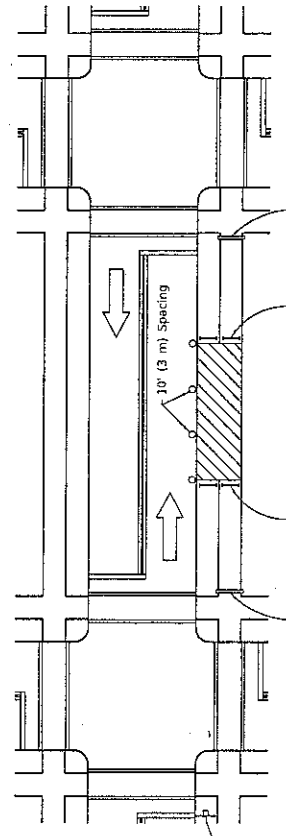
The SIDEWALK CLOSED / USE OTHER SIDE sign shall be placed at the nearest crosswalk or intersection to each end of the closure. Where the closure occurs at a corner, the signs shall be erected on the corner. The signs shall be erected from the sidewalk. The SIDEWALK CLOSED signs shall be used at the ends of the actual closures.

Type III barricades and R11-2-4830 signs shall be positioned as shown in "ROAD CLOSED TO ALL TRAFFIC" detail on Standard 701901.

All dimensions are in inches (millimeters) unless otherwise shown.



**SIDEWALK DIVERSION**



**SIDEWALK CLOSURE**

**SYMBOLS**

- Work area
- Sign on portable or permanent support
- Barricade or drum
- Cone, drum or barricade
- Type III barricade
- Detectable pedestrian channelizing barricade

DATE	REVISIONS
4-1-16	Omitted orange safety fence from standard as this is covered in the std. spec.
1-1-12	Added SIDEWALK DIVERSION, Modified appearance of plan views. Renamed Std.

**SIDEWALK, CORNER OR CROSSWALK CLOSURE**

(Sheet 1 of 2)

**STANDARD 701801-06**

Illinois Department of Transportation

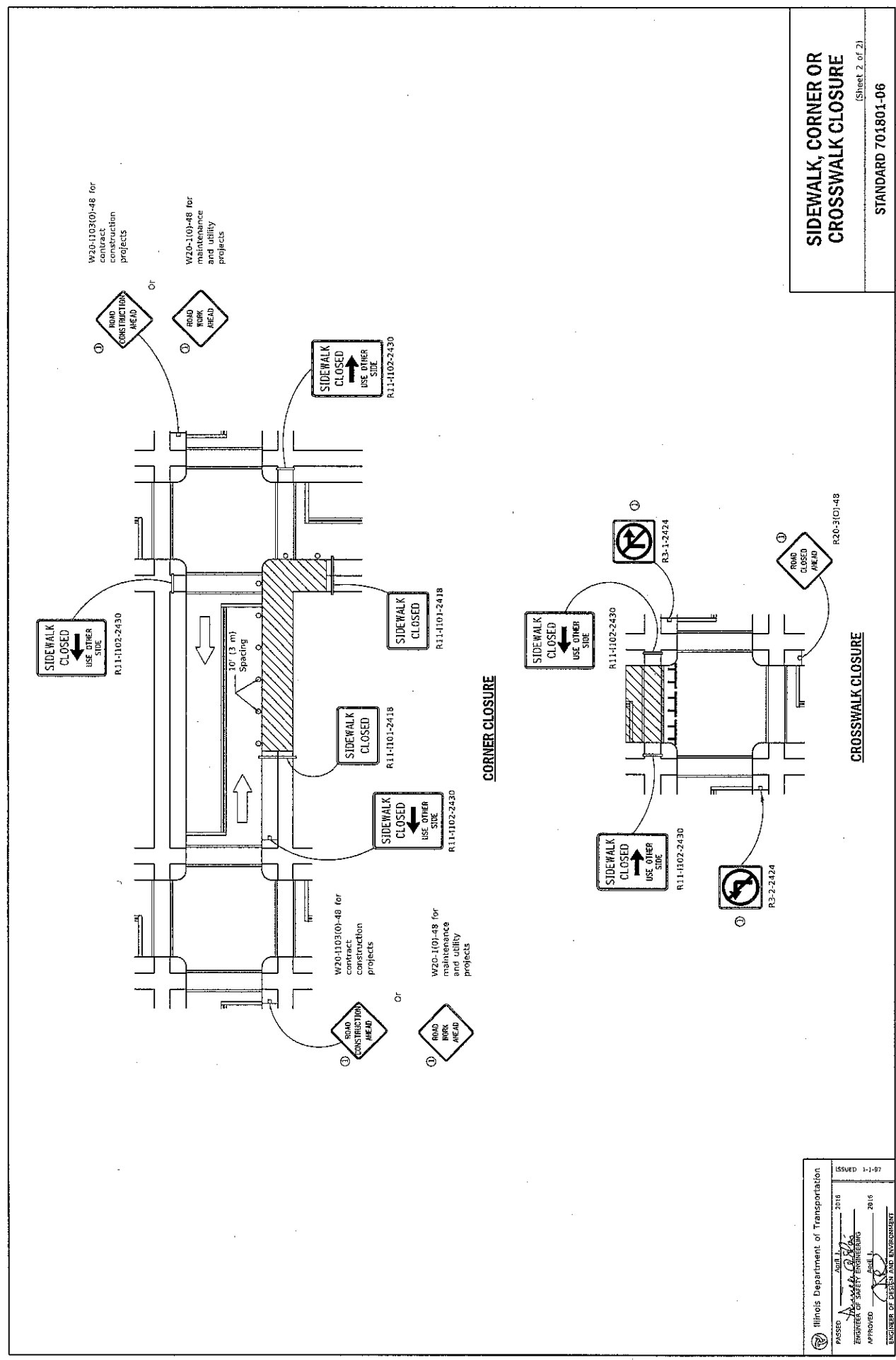
ISSUED 1-1-97

APPROVED: [Signature] 2016

ENGINEER OF SAFETY ENGINEERING

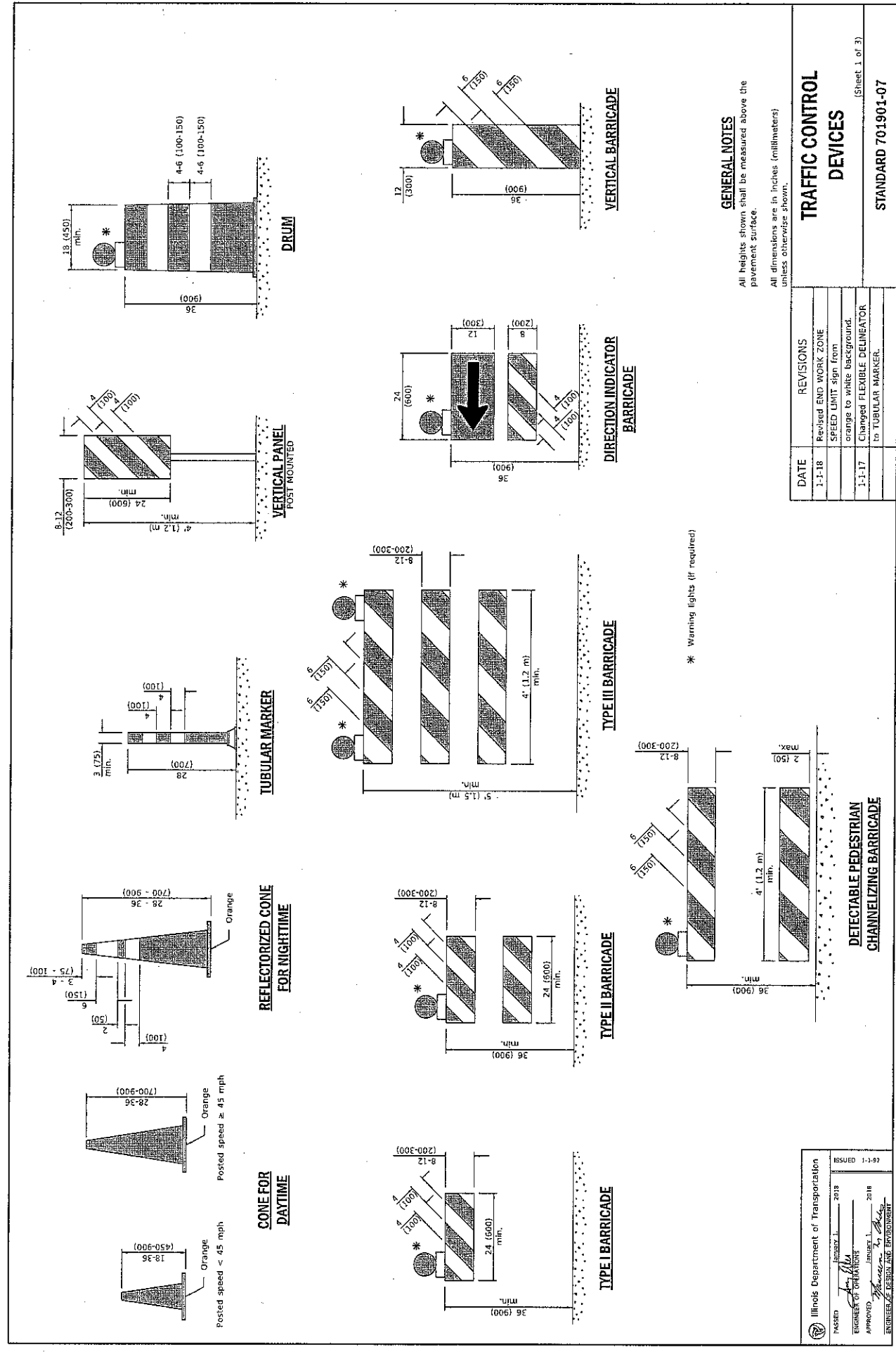
APPROVED: [Signature] 2016

ENGINEER OF DESIGN AND ENVIRONMENT



**SIDEWALK, CORNER OR CROSSWALK CLOSURE**  
 (Sheet 2 of 2)  
 STANDARD 701801-06

Illinois Department of Transportation PASSED APPROVED APPROVED ENGINEER OF PUBLIC WORKS ENGINEER OF PUBLIC WORKS	DATE: 2018 PROJECT: 2018 SHEET: 2018	ISSUED: 1-1-97	
	APPROVED: [Signature] APPROVED: [Signature]	DATE: 2018 DATE: 2018	DATE: 2018 DATE: 2018
	APPROVED: [Signature] APPROVED: [Signature]	DATE: 2018 DATE: 2018	DATE: 2018 DATE: 2018



DATE	REVISIONS
1-1-18	Revised END WORK ZONE SPEED LIMIT sign from orange to white background.
1-1-17	Changed FLEXIBLE DELINEATOR to TUBULAR MARKER.

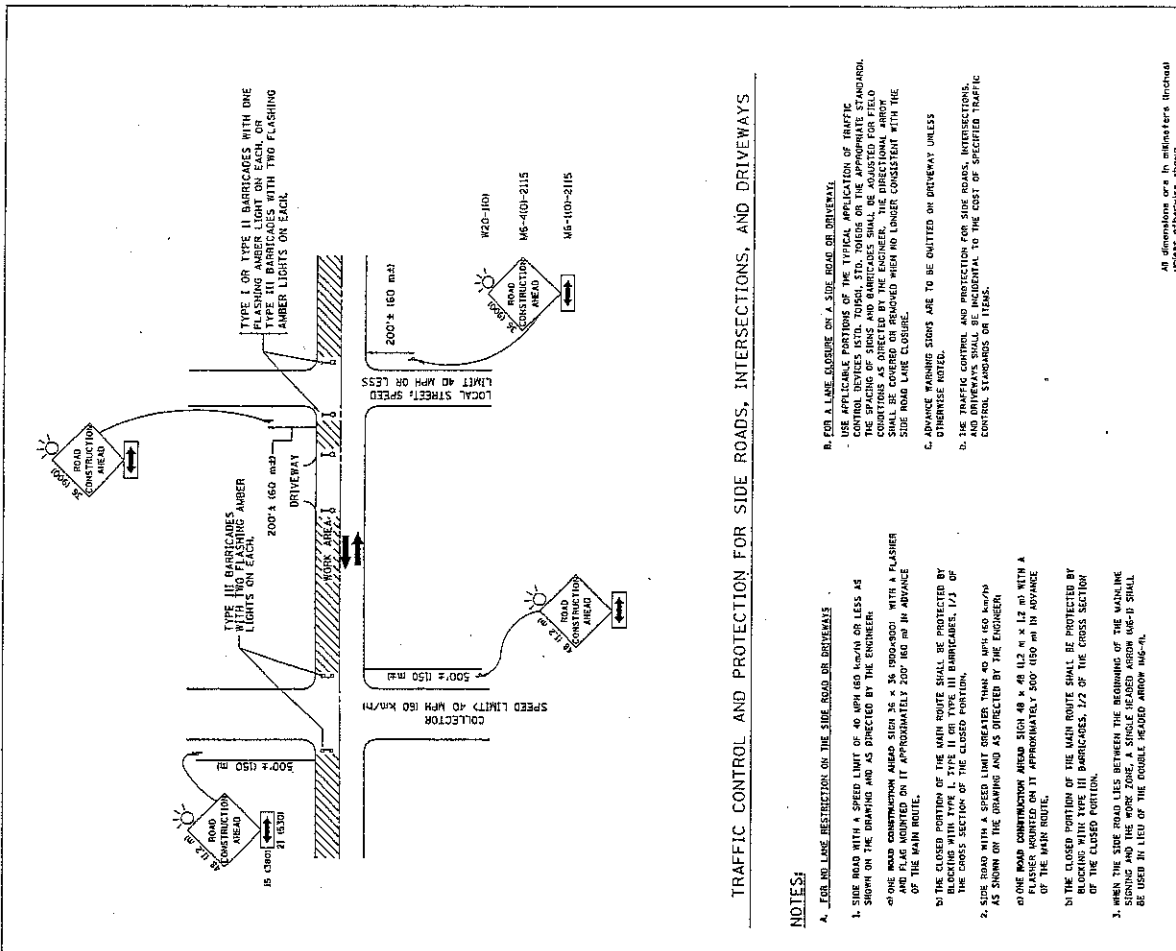
**TRAFFIC CONTROL DEVICES**  
 STANDARD 701901-07  
 (Sheet 1 of 3)

Illinois Department of Transportation  
 PASSED: [Signature] JEREMY L. [Signature]  
 ISSUED: 1-1-97  
 ENGINEER: DESIGN AND ENVIRONMENT









TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOLLOW THESE RESTRICTIONS ON THE SIDE ROAD OR DRIVEWAYS
  1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (64 KM/H) OR LESS AS SHOWN ON THE MAPS AND AS DIRECTED BY THE ENGINEER
    - a. ONE ROAD CONSTRUCTION AHEAD SIGN 36" x 36" (914x914) WITH A FLASHER AND TYPE III BARRICADES ON IT APPROXIMATELY 200' (60 M) IN ADVANCE OF THE MAIN ROUTE.
    - b. THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY TYPE III BARRICADES WITH TWO FLASHING AMBER LIGHTS ON EACH, OR TYPE II BARRICADES WITH ONE FLASHING AMBER LIGHT ON EACH, OR TYPE I BARRICADES WITH TWO FLASHING AMBER LIGHTS ON EACH.
  2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (64 KM/H) AS SHOWN ON THE MAPS AND AS DIRECTED BY THE ENGINEER
    - a. ONE ROAD CONSTRUCTION AHEAD SIGN 48" x 48" (1220 x 1220) WITH A FLASHER AND TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE MAIN ROUTE.
    - b. ONE ROAD CONSTRUCTION AHEAD SIGN 48" x 48" (1220 x 1220) WITH A FLASHER AND TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE MAIN ROUTE.
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY
  - 1. USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (E.G., TOWNS, STD. TOWNS OR THE APPROPRIATE STANDARD) AS SHOWN ON THE MAPS AND AS DIRECTED BY THE ENGINEER. ALL ROAD CLOSURES SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
  - 2. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
  - 3. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS ON ITEMS.

FILE NAME: 20180623234888.dwg	DESIGNED BY: LMA	DESIGNED DATE: 05-99	REVISIONS: 1. ORIGINAL 05-14-99 2. REVISED 05-14-99 3. REVISED 05-14-99 4. REVISED 05-14-99 5. REVISED 05-14-99	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS: 51A TO 51A	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS	SECTION: TP-10	COUNTY: [ ]	CONTRACT NO.:
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2018 RESURFACING (B)  
SCHEDULE OF QUANTITIES

STREET	FROM	TO	LENGTH (FT)	WIDTH (FT)	TOT. IMP. AREA (SY)	HMA SURF. CSE. MIX D.(TON)	MIN. THICKNESS (IN)	LEVEL BIND (TON)	AVG. THICKNESS (IN)
62ND PL	BROOKBANK RD	CARPENTER ST	601	28-28.5	1946	163	1.50	82	0.75
67TH CT	FAIRVIEW	WEST END	1321	19-21	3132	263	1.50	132	0.75
68TH ST	FAIRMOUNT AVE	FAIRVIEW AVE	1812	28-34	6646	558	1.50	279	0.75
72ND CT	E. CUL DE SAC	72ND ST	315	28.5	1424	120	1.50	60	0.75
73RD ST west	BAYBURY RD	EAST END	497	21	1198	101	1.50	50	0.75
73RD ST east	HARTFORD RD	FAIRMOUNT AVE	842	28	2673	225	1.50	112	0.75
74TH ST	HARTFORD RD	YORK RD	426	28	1339	112	1.50	56	0.75
ASHBURY AVE	BAYBURY RD	CANTERBURY PL	310	28	1000	84	1.50	50	0.90
BAYBURY RD	ASHBURY AVE	73RD ST	576	28	1831	154	1.50	92	0.90
BENTLEY CT	GRAND AVE	W. CUL DE SAC	208	28	867	73	1.50	36	0.75
BLACKBURN PL	N. CUL DE SAC	68TH ST	350	28	1445	121	1.50	61	0.75
BLANCHARD ST	DUNHAM RD	MAIN ST	2583	20-22	6466	543	1.50	272	0.75
BROOKBANK RD north	55TH ST	S. OF BLANCHARD	1530	18-28	3730	313	1.50	157	0.75
BROOKBANK RD south	63RD ST	59TH ST	2612	15-45	10577	889	1.50	593	1.00
BUCKINGHAM PL	GRAND AVE	FAIRVIEW AVE	916	28	2976	250	1.50	125	0.75
CANTERBURY PL	N. CUL DE SAC	75TH ST	871	28	2903	244	1.50	122	0.75
CHURCHILL CT	BUCKINGHAM PL	N. CUL DE SAC	194	28	823	69	1.50	35	0.75
CLAREMONT / PINEWOOD	MAIN ST	SOUTH END	1509	26-28	4768	401	1.50	200	0.75
FAIRMOUNT AVE	67TH ST	72ND ST	3415	28	11057	928	1.50	464	0.75
GILBERT AVE	CORNELL AVE	CARPENTER ST	4145	23-34	11386	956	1.50	549	0.75
GRAND AVE	BUCKINGHAM PL	68TH ST	963	28	3152	265	1.50	132	0.75
HARTFORD RD	74TH ST	73RD ST	470	28	1462	123	1.50	61	0.75
LYMAN AVE	55TH ST	SOUTH OF 59TH ST	3048	20-28	8274	695	1.50	371	0.75-1.00
MAIN ST	75TH ST	LEMONT RD	2025	48	10865	913	1.50	456	0.75
MIDDAUGH AVE	59TH ST	55TH ST	2429	22-23	6551	550	1.50	275	0.75
OSAGE AVE	S. CUL DE SAC	68TH ST	649	28	2265	190	1.50	114	0.90
OSAGE PL	N. CUL DE SAC	68TH ST	337	28	1402	118	1.50	59	0.75
RIDGEVIEW ST	W. OF FAIRMOUNT	E. OF FAIRMOUNT	1030	28	4054	341	1.50	170	0.75
STOCKLEY RD	W. OF CANTERBURY	74TH ST	1047	24-28	3045	256	1.50	128	0.75
TRENT RD	74TH ST	73RD ST	434	28	1394	117	1.50	59	0.75
WOLF PL	S. CUL DE SAC	68TH ST	173	28	878	74	1.50	37	0.75
YORK RD	74TH ST	73RD ST	366	28	1168	98	1.50	49	0.75
T0tals>			38004		122697	10307		5438	

Miles> 7.20

SCHEDULE OF QUANTITIES

2018 RESURFACING (B)  
SCHEDULE OF QUANTITIES

STREET	TACK COAT (LB)	CL D, Ty II 4" (SY)	CL D, Ty III 4" (SY)	CL D, Ty IV 4" (SY)	CL D, Ty II 6" (SY)	CL D, Ty III 6" (SY)	CL D, Ty IV 6" (SY)	CL D, Ty II 8" (SY)	CL D, Ty III 8" (SY)	CL D, Ty IV 8" (SY)	PGE SPECIAL (CY)
62ND PL	1314			161							
67TH CT	2114			719							
68TH ST	4466			800	43	50	600				-40
72ND CT	961			194							
73RD ST west	809			157							
73RD ST east	1804		20	250							
74TH ST	904		41	133							
ASHBURY AVE	675			191							
BAYBURY RD	1236			384							
BENTLEY CT	585	12									
BLACKBURN PL	975			383							
BLANCHARD ST	4365			2870							20
BROOKBANK RD north	2518	20	24	400							
BROOKBANK RD south	7139	16	20	2594			200	34			165
BUCKINGHAM PL	2009			220							
CANTERBURY PL	1960	20	20	360							
CHURCHILL CT	556			30							
CLAREMONT / PINEWOOD	3218	40	50	900	25	50	100				
FAIRMOUNT AVE	7464			892							
GILBERT AVE	7686			790			450	100	202		30
GRAND AVE	2128			396							
HARTFORD RD	987	40	53	117							
LYMAN AVE	5584	66	133	2299			210				80
MAIN ST	7334	30	39	1222			128	66	57		60
MIDDAUGH AVE	4422	26		848							40
OSAGE AVE	1529			293							
OSAGE PL	946			113							
RIDGEVIEW ST	2736	20	63	200							
STOCKLEY RD	2055		22	338							
TRENT RD	941	10	34	161							
WOLF PL	593			267							
YORK RD	788			230							
	82821	300	542	18912	68	100	1688	100	259		435

SCHEDULE OF QUANTITIES

2018 RESURFACING (B)  
SCHEDULE OF QUANTITIES

STREET	HAUL SPECIAL WASTE (LOAD)	CURB REM. (LF)	C & G TY M-3.12 (LF)	C & G TY B-4.12 (LF)	C & G TY B-6.12 (LF)	C & G TY B-6.12 REINFORCE(LF)	C & G TY B-6.18 (LF)
62ND PL		240					
67TH CT			240				
68TH ST		1217	262		955		
72ND CT		90					
73RD ST west							
73RD ST east		485			485		
74TH ST		299			299		
ASHBURY AVE		80			80		
BAYBURY RD		120			120		
BENTLEY CT		20			20		
BLACKBURN PL		55			55		
BLANCHARD ST							
BROOKBANK RD north		156	111				45
BROOKBANK RD south	1	1878		435	1443		
BUCKINGHAM PL		569			569		
CANTERBURY PL		170			170		
CHURCHILL CT		50			50		
CLAREMONT / PINEMOOD		638			638		
FAIRMOUNT AVE		2091	2071			20	
GILBERT AVE	1	556			208	40	308
GRAND AVE		260			260		
HARTFORD RD		297			297		
LYMAN AVE		282			282		
MAIN ST	1	547			70		447
MIDDAUGH AVE							
OSAGE AVE		305			305		
OSAGE PL		85			85		
RIDGEVIEW ST		450	450				
STOCKLEY RD		397			397		
TRENT RD		237			237		
WOLF PL		70			70		
YORK RD		233			233		
	3	11877	111	435	7328	60	800

SCHEDULE OF QUANTITIES

2018 RESURFACING (B)  
SCHEDULE OF QUANTITIES

STREET	C & G TY B-6.18 REINFORCE(LF)	M.H. ADJ. (EA)	M.H. ADJ. SPECIAL (EA)	M.H. ADJ. W/ NEW TY 1 FR (EA)	M.H. ADJ. RECON (EA)	M.H. IN. ADJ. (EA)	IN. ADJ. TY 3 FR SP (EA)	IN. ADJ. W/ NEW TY 1 FR. OL (EA)	NEW 2' IN. W/ TY 1 FR. OL (EA)
62ND PL		3					1		
67TH CT									
68TH ST		3	1	1			8		
72ND CT		2							
73RD ST west									
73RD ST east		3					1	2	
74TH ST		1					2	1	
ASHBURY AVE		1							
BAYBURY RD							2		
BENTLEY CT		1					1		
BLACKBURN PL									
BLANCHARD ST		1	6						
BROOKBANK RD north		7	4						
BROOKBANK RD south		15	4				2		
BUCKINGHAM PL							4		
CANTERBURY PL		2					1		
CHURCHILL CT							1		
CLAREMONT / PINWOOD		2					7		
FAIRMOUNT AVE		9	6				8		1
GILBERT AVE		11	7				2		
GRAND AVE							1		
HARTFORD RD								1	
LYMAN AVE		2	9				1		
MAIN ST	30	1					1		
MIDDAUGH AVE		4	10						
OSAGE AVE		1					2		
OSAGE PL									
RIDGEVIEW ST		1					3		
STOCKLEY RD		1					1		1
TRENT RD							3		
WOLF PL									
YORK RD		2						1	
	30	73	47	1	1	52	5	1	1

SCHEDULE OF QUANTITIES



2018 RESURFACING (B)  
SCHEDULE OF QUANTITIES

STREET	NEW 3' IN. W/ SALV. FR. (EA)	INLET FILTERS (EA)	INLET FILTERS CLEANING (EA)	HMA SURF.REM. 1.75" (SY)	HMA SURF.REM. 2" (SY)	HMA SURF.REM. 2.5" (SY)	PCC SURF.REM. 1.75" (SY)	CR.JT.&FLAN (TON)
62ND PL					1946			
67TH CT					3132			
68TH ST	12	12	12	4976	1670			
72ND CT				1424				
73RD ST west				1198				
73RD ST east				2673				
74TH ST				1339				
ASHBURY AVE				1000				
BAYBURY RD				1831				
BENTLEY CT			867					
BLACKBURN PL				1445				
BLANCHARD ST	3	3	3	6466				
BROOKBANK RD north				3274	456			
BROOKBANK RD south	9	9	9		9957			
BUCKINGHAM PL								
CANTERBURY PL				2976				
CHURCHILL CT				823				
CLAREMONT/PINEWOOD				2212		2556		
FAIRMOUNT AVE				2290		8767		
GILBERT AVE	1	1	1			11386		13
GRAND AVE	2	2	2	3152				
HARTFORD RD				1462				
LYMAN AVE				7094		1180		
MAIN ST						10479	145	3
MIDDAUGH AVE				6551				
OSAGE AVE				2265				
OSAGE PL				1402				
RIDGEVIEW ST				4054				
STOCKLEY RD	1			3045				
TRENT RD				1394				
WOLF PL				878				
YORK RD				1168				
	1	27	27	10030	63264	48397	145	16

SCHEDULE OF QUANTITIES

2018 RESURFACING (B)  
SCHEDULE OF QUANTITIES

STREET	SIDEWALK REMOVE (SF)	SIDEWALK 5" (SF)	SIDEWALK 6" (SF)	SIDEWALK 8" (SF)	DETECTABLE WARNINGS (SF)	DÉCOR PAVER DRIVE (SY)	DÉCOR PAVER WALK (SY)	AGG. SHOULD (TON)	PKWY REST (SY)
62ND PL									78
67TH CT								82	
68TH ST	4115	3700	50		250	3			859
72ND CT	405	340			20				74
73RD ST west								31	
73RD ST east	1020	885			60				300
74TH ST	875	640	180		40				203
ASHBURY AVE	450	400			30				71
BAYBURY RD	305	200			20				82
BENTLEY CT									7
BLACKBURN PL									25
BLANCHARD ST	75	75			10			160	7
BROOKBANK RD north	580	580			40		1		105
BROOKBANK RD south	1700	1430	125		70				833
BUCKINGHAM PL	925	865			60	17			316
CANTERBURY PL	703	503	200		40				100
CHURCHILL CT									21
CLAREMONT / PINEWOOD	400	400			40				260
FAIRMOUNT AVE	3970	3445	250	205	260				1199
GILBERT AVE	75	75			20		0.5		240
GRAND AVE	725	610			40	4		109	194
HARTFORD RD	175	125	50						128
LYMAN AVE	365	340			30			167	209
MAIN ST	615	465		150	40				200
MIDDAUGH AVE						7		150	
OSAGE AVE	185	125	60						130
OSAGE PL									35
RIDGEVIEW ST	1085	1085			80				289
STOCKLEY RD	625	625			50				162
TRENT RD	100	75	25						92
WOLF PL									30
YORK RD	675	500	50		50				173
	20148	17488	990	355	1250	34.5	1	699	6412

SCHEDULE OF QUANTITIES

2018 RESURFACING (B)  
SCHEDULE OF QUANTITIES

STREET	SUPPLEMENT WATER (UNID)	TEMP HMA RAMP (SY)	ROOT PRUNE (EA)	HMA DRIVE REMOVE (SY)	HMA DRIVE 3" (SY)	HMA DRIVE 8" (SY)	PCC DRIVE REMOVE (SY)	PCC DRIVE 6" (SY)	SHORT TERM PAVE MARK (LF)	SHORT TERM MARK REM (SF)
62ND PL				20	20		20	20.00		
67TH CT										
68TH ST	1			153	153		32	32.00		
72ND CT							32	32.00		
73RD ST west										
73RD ST east	1			101	101					
74TH ST			2	97	97					
ASHBURY AVE										
BAYBURY RD				87	87					
BENTLEY CT										
BLACKBURN PL										
BLANCHARD ST										
BROOKBANK RD north		5		47	47					
BROOKBANK RD south	1			93	93		88	88.00		
BUCKINGHAM PL							41	41.00		
CANTERBURY PL				152	152					
CHURCHILL CT				34	34					
CLAREMONT / PINEMOOD		17	1	39			117	117.00		
FAIRMOUNT AVE	2	6	1	36	20	39	333	333.00		
GILBERT AVE		11				16	55	55.00	288	32
GRAND AVE										
HARTFORD RD				81	81					
LYMAN AVE				73	73					
MAIN ST		36		113	3	110	23	23.00		
MIDDAUGH AVE										
OSAGE AVE				7	7		70	70.00		
OSAGE PL										
RIDGEVIEW ST							62	62.00		
STOCKLEY RD	1		1	39	39					
TRENT RD				67	67					
WOLF PL				117	117					
YORK RD										
	5	75	5	1356	1191	165	873		288	32

SCHEDULE OF QUANTITIES

2018 RESURFACING (B)  
SCHEDULE OF QUANTITIES

STREET	YEL. PAVT. MARK. LINE 4" (LF)	WH. PAVT. MARK. LINE 4" (LF)	WH. PAVT. MARK. LINE 6" (LF)	WH. PAVT. MARK. LINE 12" (LF)	WH. PAVT. MARK. LINE 12" (LF)	WH. PAVT. MARK. LINE 24" (LF)	PAVT. MARK. LET & SYM (SF)
62ND PL							
67TH CT			54			10	
68TH ST	2970	1788	91	108		17	
72ND CT							
73RD ST west							
73RD ST east							
74TH ST							
ASHBURY AVE							
BAYBURY RD							
BENTLEY CT							
BLACKBURN PL							
BLANCHARD ST		40				33	
BROOKBANK RD north							
BROOKBANK RD south		385				15	
BUGKINGHAM PL			68			14	
CANTERBURY PL							
CHURCHILL CT							
CLAREMONT / PINEWOOD							
FAIRMOUNT AVE	150			108		33	
GILBERT AVE	4426	4500				42	
GRAND AVE							
HARTFORD RD							
LYMAN AVE							
MAIN ST	7308		181		814	31	36.4
MIDDAUGH AVE						25	
OSAGE AVE				90		35	
OSAGE PL							
RIDGEVIEW ST							
STOCKLEY RD							
TRENT RD							
WOLF PL							
YORK RD							
	14854	6713	394	306	814	255	36.4

SCHEDULE OF QUANTITIES



Illinois Department of Transportation

Local Agency Proposal Bid Bond

Route Various
County DuPage
Local Agency Village of Downers Grove
Section 18-00000-01-GM

RETURN WITH BID

PAPER BID BOND

WE K-Five Construction Corporation as PRINCIPAL, and Continental Casualty Company 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.

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 18th day of April, 2018

Principal

K-Five Construction Corporation (Company Name)

By: Robert G. Krug (Signature and Title) President

By: (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.)

Continental Casualty Company (Name of Surety)

Surety

By: Christine Eitel (Signature of Attorney-in-Fact)

STATE OF ILLINOIS, COUNTY OF Cook

I, Ann Marie Waters, a Notary Public in and for said county, do hereby certify that Robert G. Krug & Christine Eitel

(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 18th day of April, 2018

My commission expires 7/5/2021

Ann Marie Waters (Notary Public)

ELECTRONIC BID BOND

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

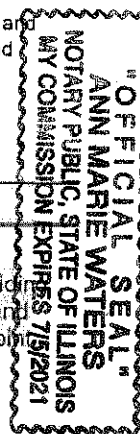
The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form. By providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LA under the conditions of the bid bond as shown above.

Electronic Bid Bond ID Code

(Company/Bidder Name)

(Signature and Title)

Date





POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company (herein called "the CNA Companies"), are duly organized and existing insurance companies having their principal offices in the City of Chicago, and State of Illinois, and that they do by virtue of the signatures and seals herein affixed hereby make, constitute and appoint

William Cahill, Kimberly Sawicki, Karen A Ryan, Kimberly R Holmes, Leigh Ann Francis, Ann Marie Waters, Christine Eitel, Richard A Freebourn Jr, Individually

of Lisle, IL, their true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on their behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind them thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of their insurance companies and all the acts of said Attorney, pursuant to the authority hereby given is hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law and Resolutions, printed on the reverse hereof, duly adopted, as indicated, by the Boards of Directors of the insurance companies.

In Witness Whereof, the CNA Companies have caused these presents to be signed by their Vice President and their corporate seals to be hereto affixed on this 16th day of February, 2018.



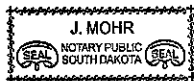
Continental Casualty Company  
National Fire Insurance Company of Hartford  
American Casualty Company of Reading, Pennsylvania

*Paul T. Bruflat*

Paul T. Bruflat Vice President

State of South Dakota, County of Minnehaha, ss:

On this 16th day of February, 2018, before me personally came Paul T. Bruflat to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company described in and which executed the above instrument; that he knows the seals of said insurance companies; that the seals affixed to the said instrument are such corporate seals; that they were so affixed pursuant to authority given by the Boards of Directors of said insurance companies and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance companies.



My Commission Expires June 23, 2021

*J. Mohr*

J. Mohr Notary Public

CERTIFICATE

I, D. Johnson, Assistant Secretary of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance companies printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance companies this 16 day of April, 2018.



Continental Casualty Company  
National Fire Insurance Company of Hartford  
American Casualty Company of Reading, Pennsylvania

*D. Johnson*

D. Johnson Assistant Secretary

Form F6853-4/2012

## Authorizing By-Laws and Resolutions

ADOPTED BY THE BOARD OF DIRECTORS OF CONTINENTAL CASUALTY COMPANY:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company at a meeting held on May 12, 1995:

“RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective.”

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of Continental Casualty Company.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25<sup>th</sup> day of April, 2012:

“Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the “Authorized Officers”) to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, “Electronic Signatures”); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company.”

ADOPTED BY THE BOARD OF DIRECTORS OF NATIONAL FIRE INSURANCE COMPANY OF HARTFORD:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company by unanimous written consent dated May 10, 1995:

“RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective.”

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of National fire Insurance Company of Hartford.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25<sup>th</sup> day of April, 2012:

“Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the “Authorized Officers”) to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, “Electronic Signatures”); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company.”

ADOPTED BY THE BOARD OF DIRECTORS OF AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company by unanimous written consent dated May 10, 1995:

“RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective.”

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of American Casualty Company of Reading, Pennsylvania.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25<sup>th</sup> day of April, 2012:

“Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the “Authorized Officers”) to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, “Electronic Signatures”); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company.”





Apprenticeship or Training Program Certification

Return with Bid

Route Various
County DuPage
Local Agency Downers Grove
Section 18-00000-01-GM

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.
K-Five Construction Corporation; Operating Engineers (Local 150), Cement Masons (Local 502), Cement Masons (Local 803), N. IL Cement Masons & Plasterers (Local 11), Laborers District Council of Chicago and Vicinity .
Subcontractors;

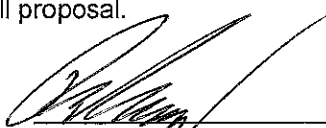
IV. Except for any work identified above, any bidder or subcontractor that shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check 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: K-Five Construction Corporation

Address: 999 Oakmont Plaza Drive, Suite 200  
Westmont, Illinois 60559

By:   
Robert G. Krug (Signature)  
Title: President

RETURN WITH BID



Illinois Department of Transportation

Affidavit of Illinois Business Office

County DuPage
Local Public Agency Downers Grove
Section Number 18-00000-01-GM
Route Various

State of Illinois )
County of DuPage ) ss.

I, Robert G. Krug of Westmont, Illinois, (Name of Affiant) (City of Affiant) (State of Affiant)

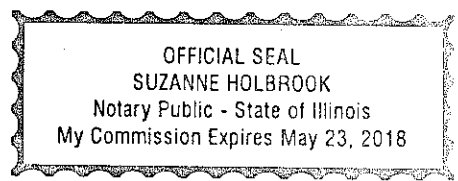
being first duly sworn upon oath, states as follows:

- 1. That I am the President of K-Five Construction Corporation officer or position bidder
2. That I have personal knowledge of the facts herein stated.
3. That, if selected under this proposal, K-Five Construction Corporation (bidder), will maintain a business office in the State of Illinois which will be located in DuPage 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)
Robert G. Krug, President
(Print Name of Affiant)

This instrument was acknowledged before me on 18th day of April, 2018

(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 \_\_\_\_\_**

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**

*SEE NEXT PAGE*

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						
<b>Total Value of All Work</b>						

**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)						
						\$ 0.00
<b>Totals</b>						

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.



• 13769 Main Street Lemont, Illinois 60439

Phone 630-257-5600

Fax 630-257-6788

April 17th, 2018

Local Municipality/City Engineer

RE: "Affidavit of Availability"

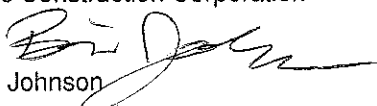
Gentlemen:

Per the attached "Rules for Prequalification of Contractors and Issuance of Plans and Proposals" as supplied by Illinois Department of Transportation Section 650.310 item'd' K-Five Construction Corporation hereby requests to forego the filing of an "Affidavit of Availability" based upon the "Unlimited" financial rating (d2) and bituminous and PCC paving rating (d2) as shown on the attached "Certificate of Eligibility".

This method of substitution for the "Affidavit of Availability" has been approved by IDOT's prequalification engineer and has been accepted by IDOT for contract lettings for IDOT. The prequalification engineer at IDOT (Springfield) is Mike Renner. If there are any questions he can be reached at (217) 782-3413.

Sincerely,

K-Five Construction Corporation

  
Brian Johnson

Estimator





Illinois Department of Transportation

RULES FOR  
PREQUALIFICATION OF CONTRACTORS  
AND  
ISSUANCE OF PLANS AND PROPOSALS

44 IL. ADM.CODE SEC. 650

ADOPTED JULY 2, 1994

AMENDED DECEMBER 7, 2000





- e) An applicant's capacity to perform may exceed the calculated equipment factor. This can occur by good management, efficiency and additional hours of work. When this occurs, the primary and advanced formulas will be replaced by the secondary formula.
- f) The work rating in any given category may not exceed the financial rating of the applicant.
- g) A work rating may be designated as "Illinois Work Only." This work rating indicates the dollar value of work which the applicant's own forces can perform within the State of Illinois in one construction season. This rating will be established by the Department if the applicant does work in more than one state or outside the continental United States and it would be impractical to verify all outstanding work.
- h) Prior to any consideration for establishing a work rating value, the applicant shall provide a list of all technical, supervisory and key personnel who would manage a project awarded by the Department. This list should include the individual's job title and number of years of construction experience. The Department may also require the submittal of resumes of the above individuals. Applicants prequalifying with the Department for the first time shall be required to submit resumes. Insufficient personnel may be justification for a reduction in the rating of a work category as determined by the primary, advanced or secondary formula. Hiring of additional personnel may be justification for an increase in the rating of a work category. Applicants without experienced personnel for a requested work category may be denied the rating.
- i) Methods to Improve a Work Rating
  - 1) Hiring of additional personnel.
  - 2) Purchase, lease or rental of additional equipment.
  - 3) Completion of additional work.
- j) A contractor may request additional rating in a work category at any time during the prequalification period by submitting a revised application or supplemental information.

#### Section 650.290 Advertising for Bids

The procedures for procuring contracts are set out in the Department's rules for contract procurement found at 44 Ill. Adm. Code 660. The procedures of this Subpart B govern the granting of authority to bid on contracts advertised for bids in the Transportation Bulletin in accordance with the Department's rules for contract procurement.

#### Section 650.300 Request for Proposal Forms and Plans; Authorization to Bid

A Request for Proposal Forms and Plans and Request for Authorization to Bid (Form BD-124) is published with the Transportation Bulletin. The Form BD-124 shall be used by contractors to request proposals and plans and to request formal authorization to bid on contracts advertised in the Transportation Bulletin. Anyone may obtain proposal forms and plans regardless of prequalification status. An Authorization to Bid must be granted in accordance with this Part before a prequalified contractor may submit a bid.

#### Section 650.310 Affidavit of Availability

- a) An Affidavit of Availability (Form BC-57) is attached to the Transportation Bulletin and must be submitted with a request for Authorizations to Bid. It is a sworn statement concerning the contractor's present and pending contract commitments. The contractor shall not omit or misrepresent its work outstanding. When the contractor has uncompleted or pending work as a party of a joint venture, the contractor's responsible portion of the work shall be shown. The affidavit shall be signed by an officer or



director of a corporate contractor, and otherwise, an owner shall sign. The affidavit is not required when Authorization to Bid is not being requested. The affidavit shall include:

- 1) The amount of all uncompleted work, by type, either as a principal or subcontractor together with the name of the agency under whose jurisdiction the work is being performed. All uncompleted work shall be based upon the engineer's or owners most recent estimate.
  - 2) The commitment of equipment and personnel on a payroll or rental basis even though no formal contract exists.
  - 3) All work on which the contractor is the low bidder and which has not yet been awarded.
  - 4) A listing of all subcontractors and the value of work sublet.
- b) Prospective bidders shall notify the Department within two working days of any low bids pending award or contracts awarded after submission of the affidavit.
- c) Facsimiles of the affidavit will be accepted for analysis purposes. Authorization to Bid will not be issued without a correct, signed and notarized original affidavit in the Department's Central Bureau of Construction's possession by the cut-off date specified in the Transportation Bulletin.

d) A contractor may request to forego filing an affidavit if it has a financial rating at either of the following levels. The Prequalification Section will grant such a request provided the contractor's existing contracts with the Department are not behind approved contract progress schedules and provided the most recent performance evaluation rating is not less than 6.0 in the performance factor calculation. (See Section 650.240 of this Part.)

- 1) A financial rating of \$300 million.
- 2) A financial rating of at least \$150 million or a Department calculated net worth of at least \$40 million, either in conjunction with two or more work ratings calculated to equal or exceed \$50 million each.

#### Section 650.315 Disclosure of Other Procurement Relationships

- a) Section 50-35(h) of the Illinois Procurement Code [30 ILCS 50/50-35(h)] requires that all bids of more than \$10,000 be accompanied by disclosure of all current or pending contracts, proposals, leases, or other ongoing procurement relationships the contractor has with any other unit of State government. This disclosure is required in addition to the financial interest disclosure provided at Section 650.80(d) of this Part.
- b) The Department provides the form for making the required disclosure of other procurement relationships with the Invitation for Bids in the Transportation Bulletin.
- c) Contractors submitting an Affidavit of Availability with a request for Authorization to Bid may incorporate by reference on this disclosure form the contents of the Affidavit of Availability that are responsive to the disclosure requirement. Procurement relationships that are not included in the Affidavit of Availability shall be disclosed on the form. Contractors not required to submit an Affidavit of Availability as provided in Section 650.310(a) of this Part shall make the required disclosures on the disclosure form.



## RETURN WITH BID

## CONTRACTOR CERTIFICATIONS

County	<u>DuPage</u>
Local Public Agency	<u>Downers Grove</u>
Section Number	<u>18-00000-01-GM</u>
Route	<u>Various</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.



# Village of Downers Grove

## Contractor Evaluation

Contractor: K-Five Construction Corporation

Project: ST-036-17 Finley Rd Resurfacing LAFO- Butterfield to Village Limits; ST-038-17 Dunham Rd Resurfacing LAFO- 63<sup>rd</sup> to 55th

Primary Contact: Ryan Scott      Phone: (630) 768-8457

Time Period: May 2017 – December 2017

On Schedule (allowing for uncontrollable circumstances)       Yes     No

Provide details if early or late completion: \_\_\_\_\_

Change Orders (attach information if needed): Finley: 2 balancing authorizations, 1 authorization to switch sodding to seed & blanket due to temperature specs. Dunham: 2 balancing authorizations, one authorization to add removal of agg shoulders pay item.

Difficulties / Positives: Quick responses in communication, kept Village updated. Very cooperative to work with. Very smooth projects.

Interaction with public:

Excellent     Good     Average     Poor

(Attach information on any complaints or compliments)

General Level of Satisfaction with work:

Well Satisfied     Satisfied     Not Satisfied

Reviewers: Stephanie Graves, PE

Date: 03/30/18

2018 RESURFACING PROJECT (B)  
STREETS ESTIMATED TO BE REPAVED

STREET	FROM	TO
62ND PL	BROOKBANK RD	CARPENTER ST
67TH CT	FAIRVIEW	WEST END
68TH ST	FAIRMOUNT AVE	FAIRVIEW AVE
72ND CT	E. CUL DE SAC	72ND ST
73RD ST	HARTFORD RD	FAIRMOUNT AVE
73RD ST	BAYBURY RD	EAST END
74TH ST	HARTFORD RD	YORK RD
ASHBURY AVE	BAYBURY RD	CANTERBURY PL
BAYBURY RD	ASHBURY AVE	73RD ST
BENTLEY CT	GRAND AVE	W. CUL DE SAC
BLACKBURN PL	N. CUL DE SAC	68TH ST
BLANCHARD ST	DUNHAM RD	MAIN ST
BROOKBANK RD	55TH ST	S. OF BLANCHARD
BROOKBANK RD	59TH ST	63RD ST
BUCKINGHAM PL	GRAND AVE	FAIRVIEW AVE
CANTERBURY PL	N. CUL DE SAC	75TH ST
CHURCHILL CT	BUCKINGHAM PL	N. CUL DE SAC
CLAREMONT DR	PINEWOOD DR	MAIN ST
FAIRMOUNT AVE	67TH ST	72ND ST
GILBERT AVE	CORNELL AVE	CARPENTER ST
GRAND AVE	BUCKINGHAM PL	68TH ST
HARTFORD RD	74TH ST	73RD ST
LYMAN AVE	55TH ST	SOUTH OF 59TH ST
MAIN ST	75TH ST	LEMONT RD
MIDDAUGH AVE	59TH ST	55TH ST
OSAGE AVE	S. CUL DE SAC	68TH ST
OSAGE PL	N. CUL DE SAC	68TH ST
PINEWOOD DR	CLAREMONT DR	SOUTH END
PINEWOOD DR	PINEWOOD DR N/S	LEMONT RD
RIDGEVIEW ST	W. CUL DE SAC	FAIRMOUNT AVE
RIDGEVIEW ST	FAIRMOUNT AVE	E. CUL DE SAC
STOCKLEY RD	W. OF CANTERBURY	74TH ST
TRENT RD	74TH ST	73RD ST
WOLF PL	S. CUL DE SAC	68TH ST
YORK RD	74TH ST	73RD ST