



Proposal Submitted By:

Contractor's Name

Contractor's Address

City

State

Zip Code

STATE OF ILLINOIS

Local Public Agency

County

Section Number

Street Name/Road Name

Type of Funds

☐ Material proposal ☒ Deliver and Install Proposal ☐ Plans

For a County and Road District Project

Submitted/Approved

Highway Commissioner Signature

Date

Submitted/Approved

County Engineer/Superintendent of Highways

Date

For a Municipal Project

Submitted/Approved/Passed

Signature

Date

Official Title

Department of Transportation

Released for bid based on limited review

Regional Engineer Signature

Date

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

CITY OF WASHINGTON

Tazewell

21-00000-00-GM

**NOTICE TO BIDDERS**Sealed proposals for the project described below will be received at the office of **CITY HALL**

301 Walnut St., Washington IL 61571	until	10:00 AM	on	5/3/2021
Address		Time		Date

1. Plans and proposal forms will be available in the office of

City Engineer.

301 Walnut St. Washington, IL 61571

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 Material/Deliver and Install Proposals.

4. A proposal guaranty in the proper amount, as specified in the BLRS Special Provision for Bidding Requirements and Conditions for Material/Deliver and Install Proposals, will be required. See the attached Special Provisions for specific instructions for proposal guaranty for this proposal packet.

5. The successful bidder at the time of execution of the contract will be required to deposit a contract bond of proposal guaranty as provided for in the special provisions. Failure on the part of the contractor to deliver the material within the time specified or to do the work specified herein will be considered just cause to forfeit his surety as provided in Article 108.10 of the Standard Specifications.

6. Proposals shall be submitted on forms furnished by the Awarding Authority and shall be enclosed in an envelope endorsed "Material Proposal, Section **21-00000-00-GM**".

By Order of  
Awarding Authority

City of Washington

County Engineer/Superintendent of Highways/  
Municipal Clerk

City Clerk

Date

05/03/21

**Material Proposal or Deliver & Install Proposal**To  
Awarding Authority

City of Washington

Awarding Authority Address

301 Walnut St

City

Washington

State

IL

Zip Code

61571

If this bid is accepted within 45 days from the date of opening, the undersigned agrees to furnish or to deliver & install any or all of the materials, at the quoted unit prices, subject to the following:

1. It is understood and agreed that the "Standard Specifications for Road and Bridge Construction", adopted 04/01/16 and the "Supplemental Specifications and Recurring Special Provisions", adopted 01/01/21, prepared by the Department of

Transportation, shall govern insofar as they may be applied and insofar as they do not conflict with the special provision and supplemental specifications attached hereto.

2. It is understood that quantities listed are approximate only and that they may be increased or decrease as may be needed to properly complete the improvement within its present limits or extensions thereto, at the unit prices stated and that bids will be compared on the basis of total price bid for each group.

3. Delivery in total or partial shipments as ordered shall be made within the time specified in the special provisions or by the acceptance at the point and in the manner specified in the "Schedule of Prices". If delivery on the job site is specified, it shall mean any place or paces on the road designed by the awarding authority or its authorized representative.

4. The contractor and/or local public agency performing the actual material placement operations shall be responsible for providing work zone traffic control, unless otherwise specified in this proposal. Such devices shall meet the requirements of and be installed in accordance with applicable provisions of the "Illinois Manual on Uniform Traffic Control Devices" and any referenced Illinois Highway Standards.

Local Public Agency

CITY OF WASHINGTON

County

Tazewell

Section Number

21-00000-00-GM

5. 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. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
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. The proposal guaranty as specified in the special provisions is attached.

If a bid bond is allowed or required, Department form BLR 12230 or a proposal guaranty check, complying with the specifications, made payable to: City Treasurer of Washington

The amount of the check is \_\_\_\_\_ ( \_\_\_\_\_ ).

#### Attach Cashier's Check or Certified Check Here

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

The proposal guaranty check will be found in the bid proposal for: Section Number \_\_\_\_\_ ).

Discounts will be allowed for payment as follows: \_\_\_\_\_ calendar days \_\_\_\_\_ calendar days

Discounts will not be considered in determining the low bidder

Bidder

By

Title

Address

City

State

Zip Code



Material Proposal Schedule of Prices



Local Public Agency

City of Washington

County

Tazewell

Section Number

21-00000-00-GM

Material Proposal Schedule of Prices

Group No.	Item(s)	Delivery	Unit	Quantity	Unit Price	Total
-	SPRAY PATCH SECTION					
-	Bit Mtrl Spray Patch		GAL	19000		
-	Spray Patch Agg		TON	500		
-						
-	SEAL COAT SECTION					
-	Bit Mtrl SC (CRSP)		GAL	56755		
-	SC Agg-Blk Trp Rk (3/8" Dia)		TON	1419		
-						
-	FOG COAT SECTION					
-	Fog Coat		SQ YD	113510		
-						
-	ASPHALT M/O SECTION					
-	Bit Surf Rem 3"		SQ YD	5700		
-	Incidental HMA		TON	986		
-	Bit Mtrl PC		GAL	427.5		

Add Row

The undersigned firm certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois, 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. The undersigned firm further certifies that it is not barred from contracting with any unit of State or local government as a result of a violation of State laws prohibiting bid-rigging or bid rotating.

Signature of Bidder

Date

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Address

City

State

Zip Code

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Affidavit of Illinois Business Office



Local Public Agency	County	Street Name/Road Name	Section Number
City of Washington	Tazewell	Various	21-00000-00-GM

I, \_\_\_\_\_ of \_\_\_\_\_, \_\_\_\_\_  
Name of Affiant City of Affiant State of Affiant  
being first duly sworn upon oath, state as follows:

1. That I am the \_\_\_\_\_ of \_\_\_\_\_  
Officer or Position Bidder
2. That I have personal knowledge of the facts herein stated.
3. That, if selected under the proposal described above, \_\_\_\_\_, will maintain a business office in the  
Bidder  
State of Illinois, which will be located in \_\_\_\_\_ County, Illinois.  
County
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	Date
<div></div>	<div></div>
Print Name of Affiant	
<div></div>	

Notary Public

State of IL

County \_\_\_\_\_

Signed (or subscribed or attested) before me on \_\_\_\_\_ by  
(date)

\_\_\_\_\_, authorized agent(s) of  
(name/s of person/s)

\_\_\_\_\_  
Bidder

(SEAL)

Signature of Notary Public

My commission expires \_\_\_\_\_



Local Public Agency	County	Street Name/Road Name	Section Number
City of Washington	Tazewell	Various	21-00000-00-GM

**All contractors are required to complete the following certification**

- ☒ For this contract proposal or for all bidding groups in this deliver and install proposal.  
☐ For the following deliver and install bidding 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 bidder's 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:

1. Except as provided in paragraph 4 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.
2. The undersigned bidder further certifies, for work to be performed by subcontract, that each of its subcontractors 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.
3. 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.

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4. Except for any work identified above, if any bidder or subcontractor 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 workforces and positions of ownership. ☐

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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 afterward 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	Signature	Date
Title		
Address	City	State Zip Code



**Illinois Department  
of Transportation**

**Local Public Agency  
Proposal Bid Bond**



Local Public Agency	County	Section Number
City of Washington	Tazewell	21-00000-00-GM

WE, \_\_\_\_\_ as PRINCIPAL, and

\_\_\_\_\_ as SURETY, are held jointly,

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

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LPA 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 LPA 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 LPA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LPA 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 \_\_\_\_\_ of \_\_\_\_\_ Day \_\_\_\_\_ Month and Year

**Principal**

Company Name

Signature

Date

By:



Title

Company Name

Signature

Date

By:



Title

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

**Surety**

Name of Surety

Signature of Attorney-in-Fact

Date

By:



STATE OF IL

COUNTY OF

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

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

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

Given under my hand and notarial seal this \_\_\_\_\_ day of \_\_\_\_\_ Month and Year

(SEAL)

Notary Public Signature

Date commission expires \_\_\_\_\_

Local Public Agency

County

Section Number

City of Washington

Tazewell

21-00000-00-GM

**ELECTRONIC BID BOND**

☐ **Electronic bid bond is allowed (box must be checked by LPA 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 LPA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

Electronic Bid Bond ID Code

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Company/Bidder Name

--

Signature

--

Date

--

Title

--





# Illinois Department of Transportation

## Affidavit of Availability

For the Letting of



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

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

### Part I. Work Under Contract

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

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

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

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

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

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

**Part III. Work Subcontracted to Others.**

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

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

Total Uncompleted					
-------------------	--	--	--	--	--

**Notary**

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

Officer or Director

Title

Signature

Date

Company

Address

City

State

Zip Code

Subscribed and sworn to before me

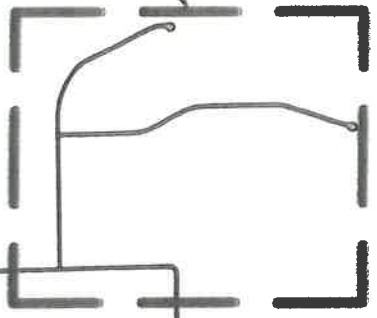
this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

(Signature of Notary Public)

My commission expires \_\_\_\_\_

(Notary Seal)

☐ Add pages for additional contracts

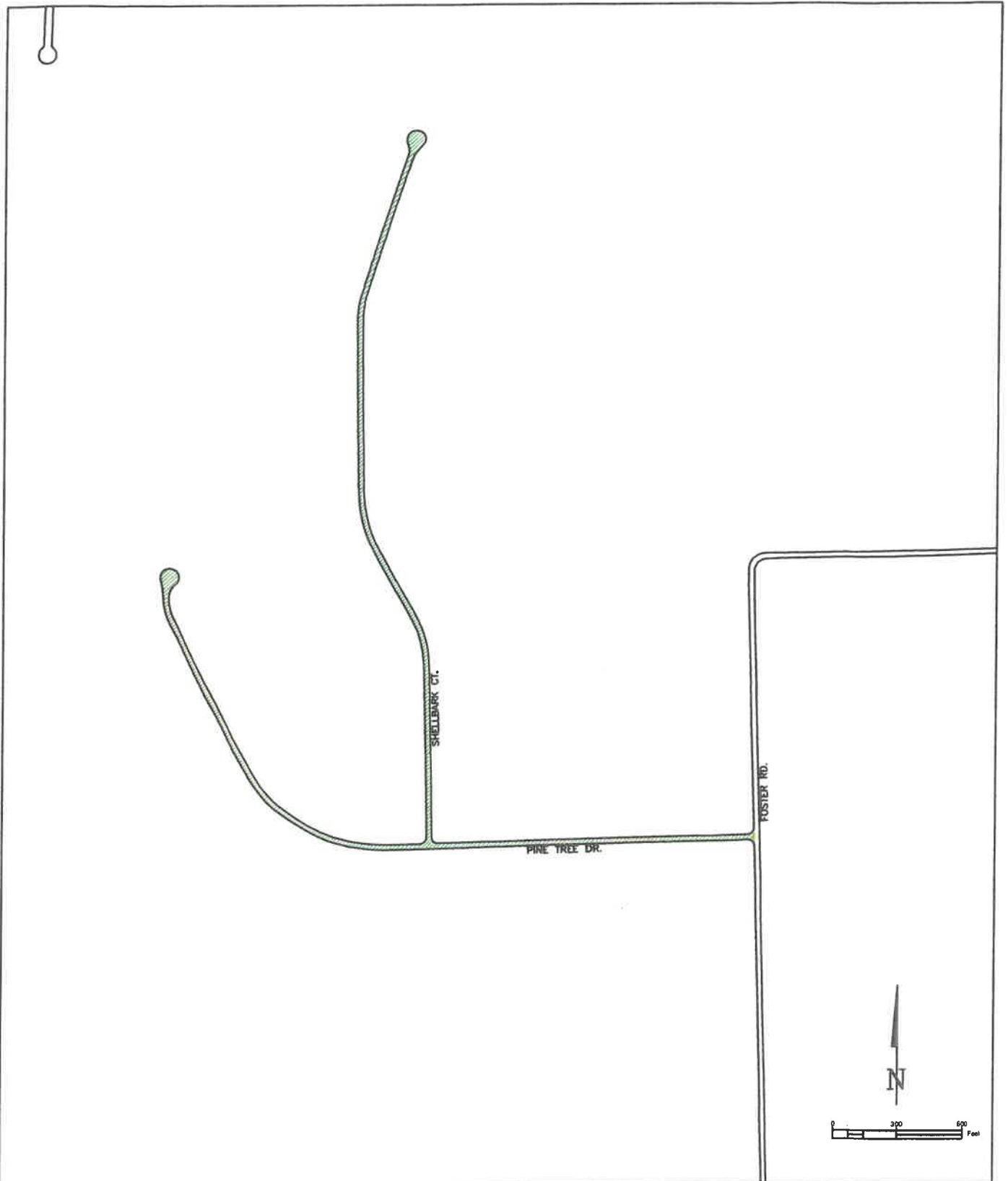


DESIGNED     D.L.C.      
 DRAWN     D.L.C.      
 CHECKED     D.L.C.      
 DATE     3/4/21    



**OVERVIEW**

City of Washington  
 COUNTY: TAZEWELL  
 SECTION: 21-00000-00-GM  
 ROUTE: VARIOUS



**AREA - PINE/SHELLBARK**

**City of Washington**

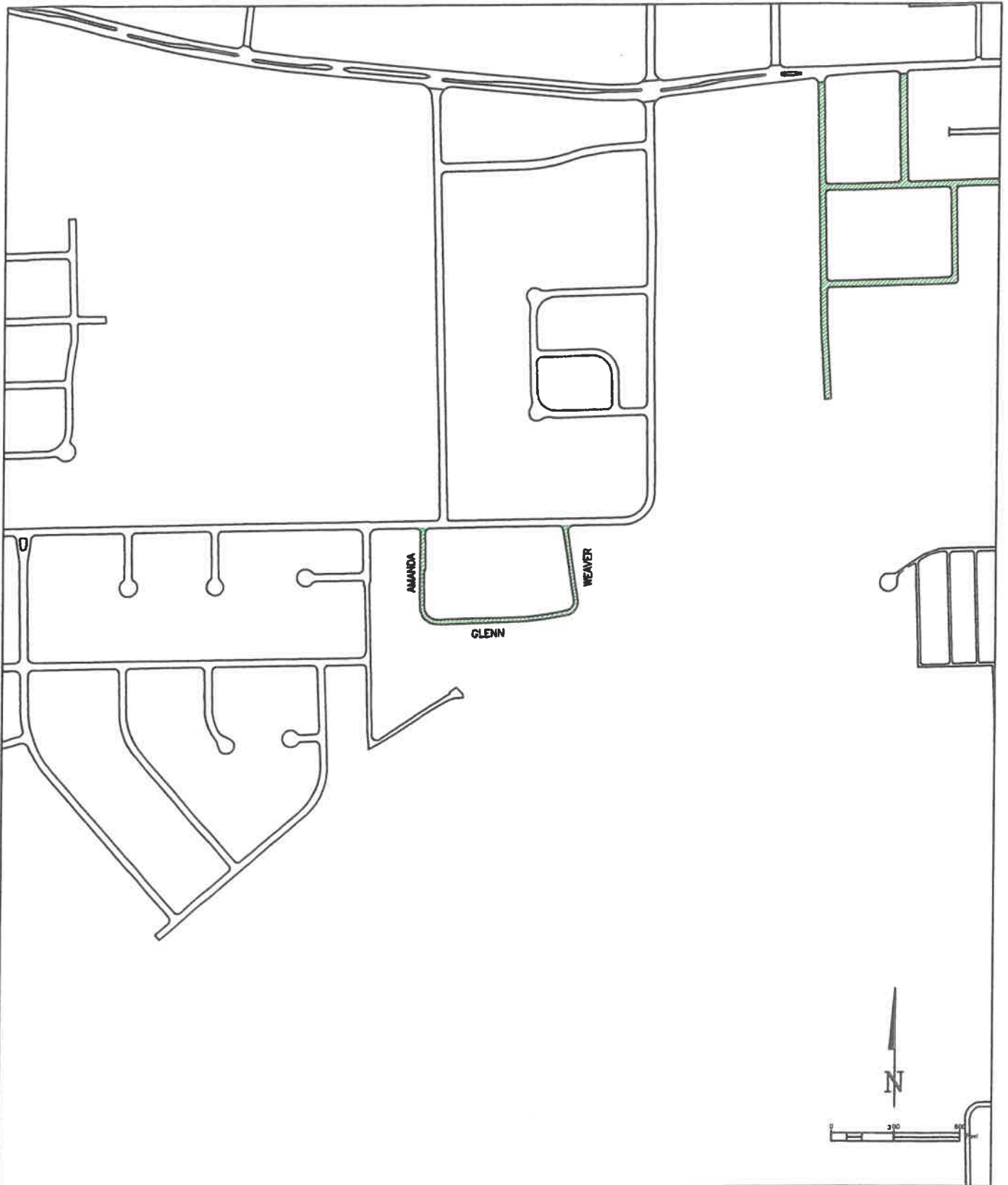
COUNTY: TAZEWELL

SECTION: 21-00000-00-GM

ROUTE: VARIOUS

DESIGNED DLC  
DRAWN DLC  
CHECKED ---  
DATE 3/4/21





AREA - AMANDA/WEAVER

City of Washington

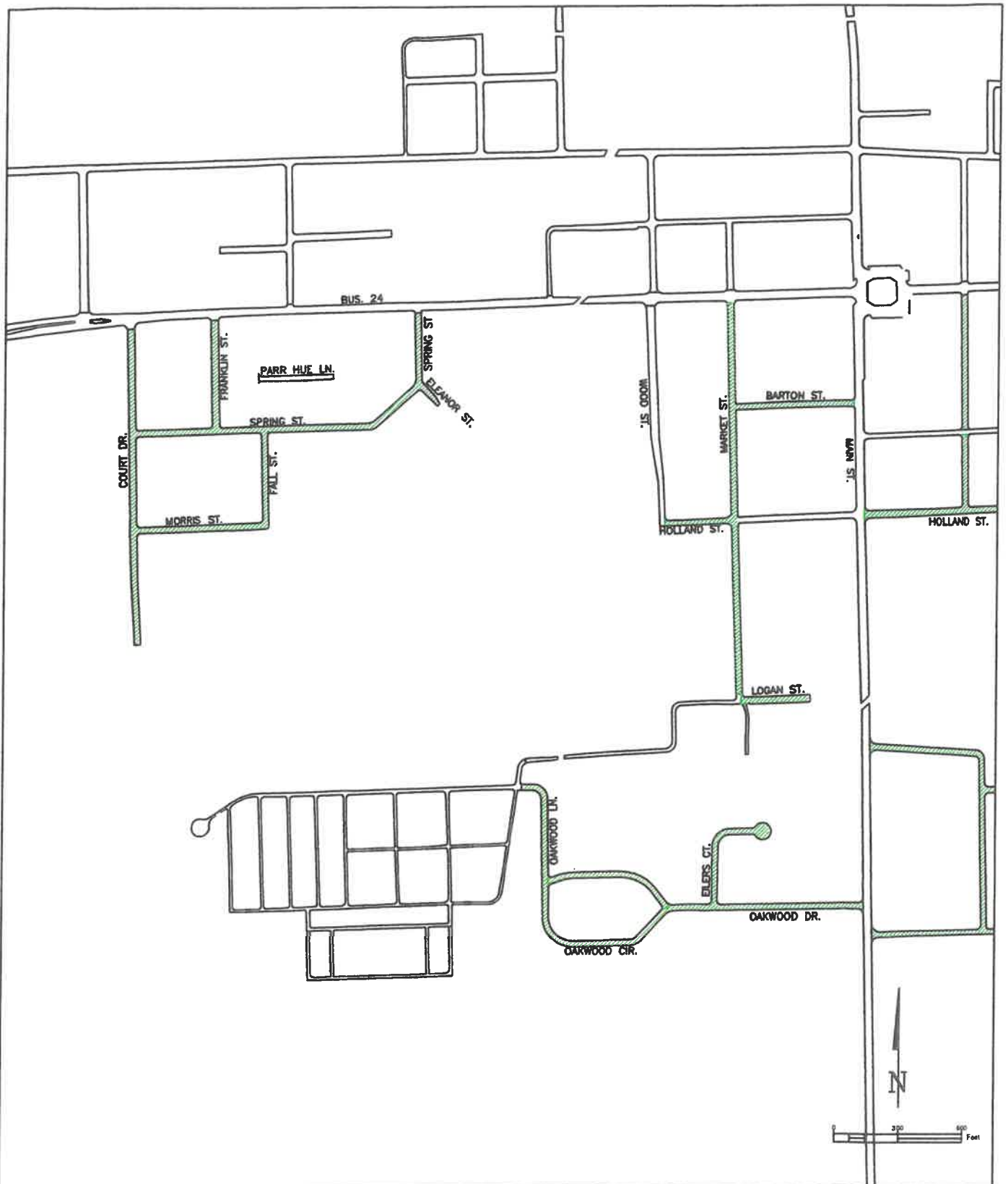
COUNTY: TAZEWELL

SECTION: 21-00000-00-GM

ROUTE: VARIOUS

DESIGNED	DLC
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CHECKED	---
DATE	3/4/21





DESIGNED DLC  
 DRAWN DLC  
 CHECKED ---  
 DATE 3/4/21



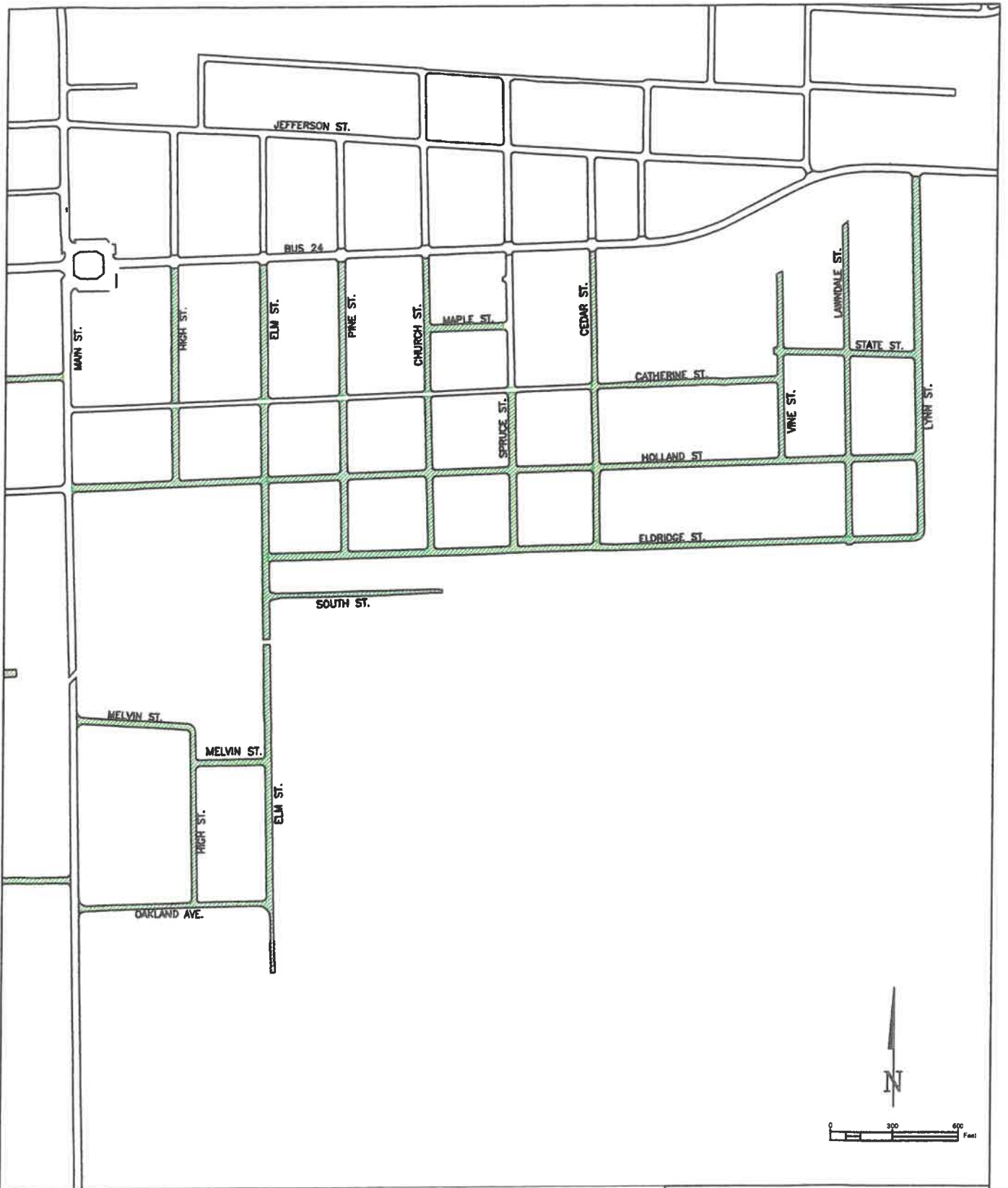
AREA(S) - COURT/SPRING + SW SQUARE

City of Washington

COUNTY: TAZEVELL

SECTION: 21-00000-00-6M

ROUTE: VARIOUS



DESIGNED	DLC
DRAWN	DLC
CHECKED	---
DATE	3/4/21



<b>AREA - SE SQUARE</b>
City of Washington
COUNTY: TAZEVELL
SECTION: 21-0000-00-GM
ROUTE: VARIDUS



CITY OF WASHINGTON  
21-00000-00-GM

AMANDA TO WEAVER

LOCATION

ROADWAY

FROM

KERN

TO

GLENN

WEAVER

GLENN

TOTALS

1,480

0.3

2,391.1

711

711

1,042

638

14

0.08

410

0.13

670

14

1,042

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638

14

CITY OF WASHINGTON 21-00000-00-GM AMANDA TO WEAVER		LOCATION FROM TO		TARGET APP RATES												#/SY 25						
				0.075				0.95				0.025						Gal/SY 0.5				
				0.075		0.95		0.025		0.025												
ROADWAY	FROM	TO	LENGTH (FT)	AVG WIDTH (FT)	AREA (SY)	FOG SEAL		BIT SURF		BIT SURF REM AND OVERLAY		Gal/SY 0.075		Lb/SY*In 112		Gal/SY 0.95		T/SY 0.025		Gal/SY 0.5		Comments
						FOG SEAL (SY)	BIT SURF REM 3" (SY)	BIT SURF BIT MTRL PR CT (GAL)	BIT MTRL SC - 3" TYP (TONS)	BIT MTRL SPRY PTCH (GAL)	SPRAY PATCH* AGG (TONS)	SPRAY PATCH BIT MTRL SC CRSP (GAL)	A-1 SEAL CT BLK TRP ROCK (TONS)									
AMANDA LN	KERN	GLENN	410	0.06	14	638	638	-	-	-	88.6	2.3	318.9	8.0								
GLENN ST	AMANDA	WEAVER	670	0.13	14	1,042	1,042	-	-	-	145.0	3.8	521.1	13.0								
WEAVER ST	KERN	GLENN	400	0.08	16	711	711	-	-	-	98.8	2.6	355.6	8.9								
TOTALS			1,480	0.3		2,391.1	2,391.1	-	-	-	332.4	8.8	1,195.5	29.9								

\*SPRAY PATCH QUANTITIES ARE ESTIMATED TO DETERMINE A TOTAL MAX QUANTITY FOR THE PROJECT





CITY OF WASHINGTON  
21-00000-00-GM  
COURT TO SPRING

CITY OF WASHINGTON 21-00000-00-GM															
COURT TO SPRING															
ROADWAY	FROM	TO	LENGTH (FT)	AVG WIDTH (FT)	AREA (SY)	FOG SEAL (SY)	BIT SURF REM 3" (SY)	BIT MTRL PR CT (GAL)	REM AND OVERLAY HMA SC - 3" TYP (TONS)	Lb/SY*In 112	Gal/SY 0.075	T/SY 0.025	Gal/SY 0.5	#/SY 25	Comments
TARGET APP RATES															
BIT SURF REM AND OVERLAY															
SPRAY PATCH*															
A-1 SEAL CT															
SC AGG															
BLK TRP ROCK															
(TONS)															
Court Dr	PEORIA	SOUTH END	1,465	30	4,883		528.0	39.6	88.7	679.7	17.9				No Chip Seal in 2021
Franklin	PEORIA	SPRING	510	32	1,813	1,813.3	96.0	7.2	16.1	252.4	6.6		906.7	22.7	
Parr Hue	SPRING TURN	TURN EAST END	280	12	373	373.3			-	52.0	1.4		186.7	4.7	
			340	20	756	755.6		-	105.2	2.8		377.8	9.4		
Fall	SPRING	MORRIS	410	28	1,276	1,275.6	24.0	1.8	4.0	177.5	4.7		637.8	15.9	
Morris	COURT	FALL	585	28	1,820	1,820.0	30.0	2.3	5.0	253.3	6.7		910.0	22.8	
Eleanor	PEORIA	SPRING	130	22	318	317.8			-	44.2	1.2		158.9	4.0	
Spring	COURT	ELEANOR	1,715	30	5,717	5,716.7	49.0	3.7	8.2	795.6	20.9		2,858.3	71.5	
TOTALS			5,435.0	1.0	16,955.6	12,072.2	727.0	54.5	122.1	2,359.9	62.1		6,036.1	150.9	

\*SPRAY PATCH QUANTITIES ARE ESTIMATED TO DETERMINE A TOTAL MAX QUANTITY FOR THE PROJECT



CITY OF WASHINGTON 21-00000-00-GM SOUTHWEST OF SQUARE															
ROADWAY	LOCATION		LENGTH		AVG WIDTH (FT)	AREA (SY)	TARGET APP RATES					T/SY 0.025	Gal/SY 0.5	#/SY 25	Comments
	FROM	TO	(FT)	(MI)			FOG SEAL (SY)	BIT SURF REM 3" (SY)	BIT MTRL PR CT (GAL)	HMA SC - 3" TYP (TONS)	BIT MTRL SPRY PTCH (GAL)				
MARKET	PEORIA	SOUTH END	1,815	0.34	26	5,243		239.0	17.9	40.2	729.8	19.2			No Chip Seal in 2021
BURTON	MARKET	MAIN	540	0.10	26	1,560	1,560.0			-	217.1	5.7	780.0	19.5	
LOGAN	MARKET	EAST END	295	0.06	26	852	852.2	25.0	1.9	4.2	118.6	3.1	426.1	10.7	
OAKWOOD LN	OAKWOOD CIR	NORTH END	700	0.13	18	1,400	1,400.0			-	194.9	5.1	700.0	17.5	
OAKWOOD CIR	OAKWOOD LN	OAKWOOD DR	1,305	0.25	18	2,610	2,610.0	92.0	6.9	15.5	363.3	9.6	1,305.0	32.6	
OAKWOOD DR	OAKWOOD CIR	MAIN	895	0.17	18	1,790	1,790.0			-	249.1	6.6	895.0	22.4	
EILERS CT	OAKWOOD DR	EAST END	535	0.10	18	1,070	1,070.0			-	148.9	3.9	535.0	13.4	
			80		VAR	559	558.5			-	77.7	2.0	279.3	7.0	Cul-de-sac
TOTALS			6,165	1.2		15,084.1	9,840.7	356.0	26.7	59.8	2,099.4	55.2	4,920.4	123.0	

\*SPRAY PATCH QUANTITIES ARE ESTIMATED TO DETERMINE A TOTAL MAX QUANTITY FOR THE PROJECT



CITY OF WASHINGTON  
21-00000-00-GM

SOUTH ANNEX AREA

ROADWAY	LOCATION		LENGTH (FT)	WIDTH (FT)	AREA (SY)	FOG SEAL (SY)	REM 3" (SY)	PR CT (GAL)	SC - 3" TYP (TONS)	SPRY PITCH (GAL)	AGG (TONS)	CRSP (GAL)	BLK TRP ROCK (TONS)	Comments
	FROM	TO												
SHELL BARK CR	PINETREE	NORTH END	3,330 80	24 VAR	8,880 559	8,880 559	267.0	20.0	44.9	1,235.9 77.7	32.5 2.0	4,440.0 279.3	111.0 7.0	Cul-de-sac
PINETREE DR	FOSTER	WEST END	3,340 80	24 VAR	8,907 559	8,907 559	50.0	3.8	8.4	1,239.6 77.7	32.6 2.0	4,453.3 279.3	111.3 7.0	Cul-de-sac
TOTALS			6,830	1.3	18,903.7	18,903.7	317.0	23.8	53.3	2,531.0	69.2	9,451.8	236.3	

\*SPRAY PATCH QUANTITIES ARE ESTIMATED TO DETERMINE A TOTAL MAX QUANTITY FOR THE PROJECT



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SOUTHEAST OF SQUARE

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SOUTHEAST OF SQUARE																						
ROADWAY	LOCATION		LENGTH (FT)	LENGTH (MI)	AVG WIDTH (FT)	AREA (SY)	TARGET APP RATES										Lb/SY*In 112	Gal/SY 0.075	T/SY 0.026	Gal/SY 0.5	#/SY 25	
	FROM	TO					FOG SEAL (SY)	BIT SURF REM 3" (SY)	BIT SURF REM AND OVERLAY	BIT MTRL PR CT (GAL)	HMA SC - 3" TYP (TONS)	BIT MTRL SPRY PTCH (GAL)	SPRAY PATCH AGG (TONS)	BIT MTRL SC CRSP (GAL)	A-1 SEAL CT SC AGG BLK TRP ROCK (TONS)	Comments						
MAPLE	CHURCH	SPRUCE	330	0.06	32	1,173	1,173.3					-		163.3	4.3	586.7	14.7					
STATE	WEST END	LYNN	735	0.14	28	2,287	2,286.7	85.0	6.4	14.3	318.3	8.4	1,143.3			28.6						
HOLLAND	MAIN	LYNN	3,865	0.73	30	12,883		2,636.0		442.8	1,793.1	47.2						No Chip Seal In 2021				
CATHERINE	CEDAR	VINE	855	0.16	30	2,850	2,850.0				396.7	10.4	1,425.0			35.6						
ELDRIDGE	MAIN	LYNN	2,970	0.56	30	9,900	9,900.0	438.0	32.9	73.6	1,377.9	36.3	4,950.0			123.8						
SOUTH	MAIN	EAST END	965	0.18	20	2,144	2,144.4				298.5	7.9	1,072.2			26.8						
MELVIN	MAIN	HIGH	545	0.10	28	1,696	1,695.6				236.0	6.2	847.8			21.2						
	HIGH	ELM	335	0.06	30	1,117	1,116.7				155.4	4.1	558.3			14.0						
OAKLAND	MAIN	ELM	880	0.17	22	2,151	2,151.1	11.0	0.8	1.8	299.4	7.9	1,075.6			26.9						
HIGH	PEORIA	CATHERINE	535	0.10	32	1,902	1,902.2				264.8	7.0	951.1			23.8						
	CATHERINE	HOLLAND	625	0.12	32	2,222	2,222.2				309.3	27.8	1,111.1			309.3						
	MELVIN	OAKLAND	815	0.15	30	2,717	2,716.7				378.1	10.0	1,358.3			34.0						
ELM	OAKLAND	CATHERINE	2,285	0.43	32	8,124	8,124.4	34.0	2.6	5.7	1,130.8	29.8	4,062.2			101.6						
	CATHERINE	PEORIA	625	0.12	32	2,222	2,222.2				309.3	8.1	1,111.1			27.8						
PINE	PEORIA	CATHERINE	695	0.13	32	2,471	2,471.1	61.0	4.6	10.2	343.9	9.1	1,235.6			30.9						
	CATHERINE	ELDRIDGE	625	0.12	32	2,222	2,222.2				309.3	8.1	1,111.1			27.8						
	ELDRIDGE	SOUTH	155	0.03	12	207	206.7				28.8	0.8	103.3			2.6						
CHURCH	PEORIA	CATHERINE	700	0.13	30	2,333	2,333.3	360.0			324.8	8.5	1,166.7			29.2						
	CATHERINE	ELDRIDGE	620	0.12	30	2,067	2,066.7				287.6	7.6	1,033.3			25.8						
	ELDRIDGE	SOUTH	155	0.03	12	207	206.7				28.8	0.8	103.3			2.6						
SPRUCE	CATHERINE	ELDRIDGE	705	0.13	32	2,507	2,506.7				348.9	9.2	1,253.3			31.3						
CEDAR	PEORIA	ELDRIDGE	1,350	0.26	28	4,200	4,200.0	16.0	1.2	2.7	584.6	15.4	2,100.0			52.5						
VINE	HOLLAND	NORTH END	845	0.16	28	2,629	2,629.9	48.0	3.6	8.1	365.9	9.6	1,314.4			32.9						
LAWDALE	ELDRIDGE	NORTH END	1,431	0.27	32	5,086	5,088.0	300.0	22.5	50.4	708.1	18.6	2,544.0			63.6						
LYNN	PEORIA	ELDRIDGE	1,850	0.31	32	5,867	5,866.7	311.0	23.3	52.2	816.5	21.5	2,933.3			73.3						
TOTALS			25,296.0	4.8		83,185.8	70,302.4	4,300.0	322.5	722.4	11,577.8	304.7	35,151.2			878.8						

\*SPRAY PATCH QUANTITIES ARE ESTIMATED TO DETERMINE A TOTAL MAX QUANTITY FOR THE PROJECT

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

SPECIAL PROVISION  
FOR  
INSURANCE

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

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

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

City of Washington, 301 Walnut St, Washington, IL 61571

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



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The following Special Provision supplement the "Standard Specifications for Road and Bridge Construction", adopted April 01, 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.

#### DESCRIPTION OF WORK

This work shall consist of base repairs, spray patching, seal coating, fog coating and other collateral work as needed to complete the project on various streets within the City of Washington, IL:

#### PROSECUTION AND PROGRESS OF WORK

All work must be completed by August 30, 2021 unless approved by the City. Coordination between the project's improvements, other contractors, and other proposed improvements will be required and the municipality will determine the best schedule. The mill and overlay section must be completed by June 13, 2021.

Special attention is called to Section 108, "Prosecution and Progress," and specifically to Article 108.03, "Prosecution of Work." This section shall be revised to provide that the Contractor shall notify the City Engineer at least twenty-four (24) hours in advance of either discontinuing or resuming, operations. Also, the Contractor shall advise the City Engineer of a date to begin operations a minimum of one week before starting work.

#### NOTICE TO BIDDER

All bidders are to be prequalified with the Illinois Department of Transportation under Prequalification Category for the section of the project being bid:

5 HMA Paving (Asphalt M/O Section)

15A Cover and Seal Coats (Seal Coat Section)

The successful bidder, shall have the corollary prequalified subcontractor certified in the remaining category and yet still meet the 50% requirement of the work performed by the Contractor's own forces as defined under Article 108.01 - Subcontracting.

The Owner reserves the right to reject any and all bids or conversely to waive any irregularities in said bids within the defined practices of the State of Illinois. This right is reserved to award bids based on the best interest and/or most advantageous to the Owner.

This work is being conducted under a deliver and install proposal. As such, additions or deductions shall be handled by change order process. The Contractor is alerted to this condition in advance.

#### TRAFFIC CONTROL AND PROTECTION

Traffic control shall be in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic

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Control Devices for Streets and Highways, and any special provision and Highway Standards contained herein and the Standard Specifications for Traffic Control Items.

Special attention is called to Articles 107.09 and 107.14 of the Standard Specifications for Road and Bridge Construction and the Traffic Control Standards 701301, 701501, 701901, and BLR 18. Only a single lane can be closed at a time, Traffic Control and Protection (TC&P) Standard 701501-06 shall be used. Equipment maneuvering or staging on adjoining roadways will be conducted under the protection of flaggers per TC&P 701501-06.

The Contractor shall at all times conduct his work so as to ensure the least possible disruption to traffic and inconvenience to the general public and to insure the protection of persons and property in a manner satisfactory to the Engineer. No road or street closure will be allowed without permission of the Engineer.

"No Parking" signs shall be posted at least 24 hours in advance of operations on any street or street segment.

The cost of this traffic control shall be included with the respective contract pay items and not paid for separately.

#### EQUIPMENT REQUIREMENTS

Equipment and materials can be stored at the City's Jefferson Street facility, in the NW quadrant / gravel lot turnaround area to avoid conflicts with City Ordinance.

#### MAILBOXES AND SIGNS

Any mailboxes or signs that require removal must be replaced at their exact locations. This work and all materials required to perform this work shall be included in the price of the contract.

#### BITUMINOUS SURFACE REMOVAL

Bituminous surface removal shall be completed on roadways identified by the Engineer. Most areas have been typically calculated as a nominal 3' wide by a normal 3" deep, however some removal areas may be omitted and others widened by the Engineer as roadways conditions necessitate.

The milling machine used for this operation shall be capable of maintaining grade control and cross slope. Only in areas of limited access shall a skid steer with grinder attachment be allowed. Operations are limited to only what can be replaced with incidental hot-mix asphalt within the same day's operation.

#### BITUMINOUS MATERIAL (PRIME COAT)

This material shall be a rapid cure prime (RC-70) at an application rate of 0.075 gallon per square yard in the areas of Bituminous Surface Removal.

This work shall be paid for at the contract unit price per gallon for BITUMINOUS MATERIALS (PRIME COAT) which shall include all labor, equipment and materials to complete the work.

#### INCIDENTAL HOT-MIX ASPHALT

Asphalt can be placed in either a single lift provided minimum density is achieved or as a scratch coat with a full width surface lift. The average thickness of the asphalt for the areas has been estimated at a nominal

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thickness of three inches (3").

Material is to be placed on the streets through an appropriate asphalt paver/spreader for the paving required.

Material placed within the radius returns or butt-joints will be included in the contract unit price per ton for INCIDENTAL HOT-MIX ASPHALT and no additional compensation will be allowed.

The following mixture requirements are applicable for this project.

Mixture Use(s) Surface Course

AC/PGPG 64-22

Design Air Voids: 4.0% @ N=50

Mixture Composition: (Gradation Mixture) IL 9.5

Friction Aggregate: Mixture D

Quality Management Program QCQA

Note: 1) Individual lift thickness of each mix type will be no less than 3 times the nominal maximum allowable aggregate size and no more than 6 times nominal maximum aggregate size, unless otherwise approved by the Engineer.

2) For design purposes, a mixture weight for all mixes is determined to be 112.0 lbs/s.y./in., unless otherwise noted. HMA quantity has been increased by 3% over theoretical quantity.

3) Sublot sizes for PFP and QCP mixes will be 1000 tons, unless otherwise agreed to by the Engineer and paving contractor.

This work will be paid for at the contract unit price per ton for INCIDENTAL HOT-MIX ASPHALT which shall include all labor, equipment and materials to complete the work.

#### SPRAY PATCHING

This work shall consist of spray patching the needed streets prior to the application of the Bituminous Surface Treatment A-1 with mixture of emulsified asphalt and aggregate at the locations shown in the plans.

Spray patching shall be done at least 30 days prior to Seal Coat operations.

The mixture of emulsified and aggregate shall be properly proportioned and applied to the surface of the streets according to these specifications and as directed by the Engineer.

Materials: Bituminous Material Seal Coat shall be CRS-2 or HFRS-2. The Seal Coat Aggregate shall be crushed aggregate CA 16 Black Trap Rock or crushed CM 16 Quartz provided it is angular and interlocking once applied.

Equipment: The equipment needed in the performance of the work shall be provided by the Contractor and shall be subject to approval of the Engineer. It shall be maintained in satisfactory working condition at all times.

Mixing Machine: The spray patch mixing and application machine shall be a continuous flow unit capable of accurately delivering a predetermined proportion of aggregate and asphalt emulsion and to discharge the



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thoroughly mixed product on a continuous basis. The machine shall be capable of thoroughly blending all the ingredients together.

Roller: A steel roller shall be utilized to "seat" and compact the spray patch.

Cleaning of Streets: All dirt, and deleterious material shall be cleaned from the existing pavement prior to applying the proposed spray patch. This work will not be paid for separately, but shall be included in the various pay items involved.

The Contractor shall cover all manholes, inlets and valve boxes prior to applying the proposed spray patch. After application of the spray patch, all covering material shall be removed and disposed of in accordance with the Article 202.03 of the Standard Specifications. This work will not be paid for separately, but shall be included in the various pay items involved.

This work shall be paid for at the contract unit price per gallon for BITUMINOUS MATERIALS SPRAY PATCH and per ton for SPRAY PATCH AGGREGATE.

#### APPLICATION OF BITUMINOUS SURFACE TREATMENT A-1

This work shall conform to the applicable portions of Section 403 of the Standard Specifications including as follows:

All related base repairs shall be completed prior to seal coating operations.

The pressure distributor and aggregate spreader shall be capable of covering the entire lane width in one pass.

Rolling shall be required in accordance with Article 403.12 of the Standard Specifications. One

rubber (pneumatic) tired and one steel roller shall be utilized to compact the seal coating materials, as directed by the Engineer. The equipment used shall meet the requirements of Article 403.03, with exception of the added tandem steel roller which shall meet Article 1101.01. A minimum total of two (2) passes over any one location across the entire width of the mat. Rollers shall be operated at a slow enough speed (Approximately 5 mph) so that tires do not pick up or shove aggregates.

The distributor and chipper shall in turn be operated at a speed that allows for the required number of roller passes.

Only single axle or tandem axle haul trucks will be allowed on the City streets for hauling of the seal coat aggregate. Larger trucks will be allowed only for the hauling and applying the bituminous seal coat material.

Sweeping shall be required before application by a self-propelled street sweeper with power vacuum capability. Sweeping and picking up excess seal coat aggregate after application and removal from the jobsite shall be required in accordance with Check Sheet #LRS9 no earlier than seven (7) calendar days and no later than fourteen (14) calendar days after placement of the seal coat aggregate. All loose aggregate removed at this time shall be the property of the City and shall be transported to the City's storage site located at the east end of Constitution Street.

Bituminous Materials Seal - CRSP at 0.40 gallons per square yard.

Aggregate Materials - CA-16 crushed Black Trap Rock at 25 pounds per square yard. The Contractor shall be required to furnish copies of stockpile gradations and test results to verify that the following specifications and weight requirements are met:

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- All aggregate shall be washed.
- The washed 200 sieve fines shall be less than one percent (<1%) as tested in the stockpile at the gravel pit location to prevent adhesion of bituminous material and possibly leading to an unsuccessful operation.
- The specific gravity shall be between 2.55 and 2.75.
- The LA Abrasion Number shall be less than 19.

The Contractor shall provide the Engineer the sources of the seal coat materials for approval at least 72 hours before delivery of the material to complete the seal coat work. The Contractor shall also be required to furnish copies of stockpile gradations and test results to verify that the specifications and weight requirements are met.

The aggregate shall be free of foreign material at the time of application and the Engineer has the right to reject any aggregate which contains excessive foreign material.

The Contractor and his materials supplier shall insure that the seal coat aggregate and the emulsion do not have the same charge (i.e. cationic to cationic) for successful binding of the emulsion to the aggregates .

Per Section 403.06, aggregates used for cover and seal coat shall contain no free moisture. As such, moisture in excess of 3% shall be deducted from the tonnage for aggregate. This will be spot checked by the Engineer and any deduction applied to that day's production. The Contractor's aggregate supplier shall take immediate steps to reduce excessive moisture from further deliveries.

Protection of utility structures and adjacent streets not to receive bituminous surface treatment shall be to the satisfaction of the Engineer.

Touch up work may be done as a separate operation using a hand-wand and hand shovel

distributed aggregate, provided all materials used are in conformance with the specification.

The Engineer should be consulted before changing the application rates or altering the width or length of a street.

"No Parking" signs shall be posted at least 24 hours in advance of operations on any street or street segment and removed promptly at the completion of seal coating.

Material yields may be randomly checked by the Engineer during the Contractor's operations using 3' X 3' piece of building fabric (or other material) in advance of the operation. The Contractor shall accommodate this testing and make provisions to touch up these areas as part of the contract , anticipated at a sample rate of once per day.

Tankers and pressure distributors shall be weighed on delivery/daily basis. It will only be at the discretion of the Engineer if the Bill of Lading tickets for tankers will be accepted as evidence of the initial delivery weight.

The Contractor shall clean up all debris generated during the prosecution of the work on each street segment within one (1) working day of completing the Seal Coat work. Such debris shall include, but not limited to initial sweepings, pieces of concrete or asphalt and temporary "No Parking" signs.

This work shall be paid at the contract unit price per gallon for BITUMINOUS MATERIALS SC (CRSP) and per ton for SEAL COAT AGGREGATE (TRAP ROCK).

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#### FOG COAT

This work shall conform to the applicable portions of BDE Special Provision number 80426 with the following changes made to the materials and method of measurement.

The allowable materials shall conform to the attached special provision for Chip-Lock, NTEA & GSB.

The application rate shall be a minimum of 0.17 gallons/square yard.

This work shall be measured by the Square Yard and paid for at the contract unit price per square yard for FOG COAT which shall include all labor, equipment and materials to complete the work.

#### PROPOSAL GUARANTY

A 5% Proposal Guaranty is required for this project. Guaranty shall be in the form of a cashier's check or Bid Bond.

#### PREVAILING WAGE RATES

The Contractor shall comply with all applicable provisions of the Prevailing Wage Act.

All questions of applicability of the Prevailing Wage Act are governed by the determinations of the Illinois Department of Labor (IDOL) . Prevailing wage rates may be obtained from IDOL's website at:

<https://www2.illinois.gov/idol/laws-rules/conmed/pages/rates.aspx>

**EACH SECTION ABOVE MAY BE BID SEPARATELY;  
I.E. SEALCOATING SECTION MAY BE BID SEPARATELY  
WITHOUT BIDDING THE FOG COAT SECTION, ETC.**

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## PUBLIC NOTICE SEAL COAT

The Contractor shall issue advance notice to all immediately effected residents and businesses by use of the following notice format as a door hanger, posted a minimum of one week in advance of all work. An electronic format copy of the following will be provided to the successful bidder.



### STREET MAINTENANCE PROGRAM/SCHEDULE CITY OF WASHINGTON, IL

**Weather permitting;** streets in your neighborhood will receive some base repair and a full width Seal Coat, an application of oil and rock chips between <insert date> and <insert date>. The purpose of the Seal Coat is to keep moisture from penetrating the street pavement and ultimately prevent potholes. While the Seal Coat is not a structural treatment like hot mix asphalt, it has been successfully used for many years.

Like all street maintenance work, Seal Coating will cause temporary disruptions and inconveniences for you and your neighbors. Please note the following tips and precautionary advice:

1. The City requests that you not park on the street during this time until you see that the Seal Coating work has been completed. Vehicles left on the street will be towed away.
2. Portions of the streets will need to be closed to traffic while this work is in progress. Operations on the street will be completed so that the street will be opened to traffic at the end of each day.
3. Do not drive through any wet oil until the chips have been applied. After the chips have been applied, drive very slowly.
4. It takes about two weeks for the oil and rock chips to full cure and bond. Please drive no faster than 15 mph during this period and avoid sudden or sharp starts, stops or turns for this two-week period. This will help ensure the life of the Seal Coat, avoid the scattering of loose chips and reduce the likelihood of tracking.
5. Loose chips will remain on the street for two to three weeks and will then be swept and removed. The City will re-sweep the streets as circumstances dictate.

Should you have any questions, please call City Hall at 444-3196.

With your cooperation, we can protect and extend the life of your street and avoid more costly repairs in the future.

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## PUBLIC NOTICE FOG COAT

The Contractor shall issue advance notice to all immediately effected residents and businesses by use of the following notice format as a door hanger, posted a minimum of one week in advance of all work. An electronic format copy of the following will be provided to the successful bidder.



### STREET MAINTENANCE PROGRAM/SCHEDULE CITY OF WASHINGTON, IL

**Weather permitting;** streets in your neighborhood will be treated with a Liquid Road Preservation Product, which is a fog coat of oil over the chips between <insert date> and <insert date>. The purpose of the Fog Coat is similar in concept to staining a wood deck to prevent it against damage against sun and water damage. Asphalt requires the same protective precautions to extend the life of the pavement.

Like all street maintenance work, Fog Coating will cause temporary disruptions and inconveniences for you and your neighbors. Please note the following tips and precautionary advice:

1. The City requests that you not park on the street during this time until you see that the Fog Coating work has been completed. The vehicles left on the street will be towed away.
2. Your road will NOT be closed. You will have access in and out all day. We recommend not returning into your driveway (unless absolutely necessary) until the product is dry, usually 1-2 hours after it is applied to your street.
3. If you have a special event or situation (garage sale, reception/party, appointment, etc) call <insert name and cell phone #> to see if other arrangements can be made.
4. Rain or equipment problems may delay the work until the following business days.
5. When you see cones on street, one side of the street is still wet. **DO NOT DRIVE ACROSS WET TREATMENT** into your driveway as you will track wet product onto your driveway. Wait until cones are picked up and you will not cause yourself clean-up issues on your driveway.

Should you have any questions, please call City Hall at 444-3196.

With your cooperation, we can protect and extend the life of your street and avoid more costly repairs in the future.

# **FOG COAT SPECIAL PROVISION**

The following materials listed and detailed in this special provision shall be permitted for use with the FOG COAT pay item.

- Chip-Lock
- NTEA
- GSB

**CHIP LOCK**

**Description:** This work consists of preparing and treating a chip and seal surface surface with a specialized anionic chip-lock asphalt emulsion.

**Material:** Conform to the following typical physical properties:

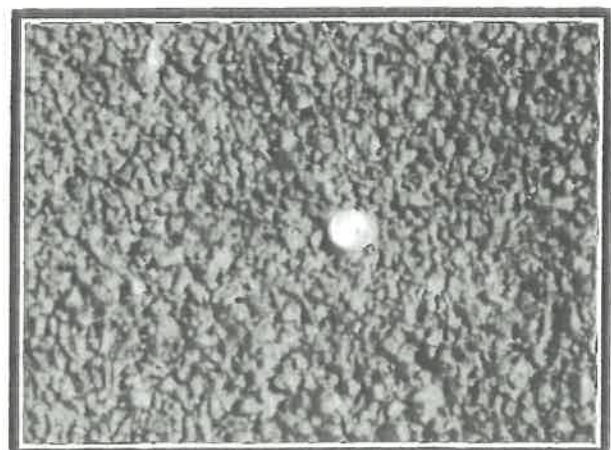
Parameter	AASHTO Test Method	MIN	MAX
Soybolt Furol Viscosity, SFS @ 77°F	T59	0	25
Settlement, % Max.	T59	—	5
Residue by Distillation, %	T59	27	35
Oil Distillate, %	T59	—	1
Sieve Test, %	T59	—	0.3
<b>Test on Residue</b>			
Penetration, @ 77°F	T49	—	40
Solubility, %	T59	97.5	—

**Note:** Product should not contain filler such as clay, etc.

**Weather Limitations:** Do not apply the asphalt material if the surface temperature is below the minimum placement temperature for the pavement course to be placed. Note: Subject to damage if frozen.

**Preparation of Surface:** Ensure that the surface is thoroughly clean and dry when the asphalt materials is applied.

**Application of Asphalt Material:** Uniformly apply the asphalt materials with a distributor. Surface to be clean and dry. Nozzle spray pattern should be identical to one another along the distributor spray bar. The angle of the nozzle should be a 15-30 degree angle to the spray bar axis to maximize overlap. Chip-Lock should be applied at a rate of .1-.3 gallons per square yard. Recommended application temperature is 150°F to 180°F. For irregular areas such as driveways and intersections, apply the asphalt material using a method the Engineer approves. Apply the chip-lock in a manner that offers the least inconvenience to traffic and that allows one-way traffic without pickup or tracking. The Engineer and Manufacturer's Representative will approve the quantity, rate of application, temperature, distributor settings and areas to be treated before applicaton of the chip-lock. Please contact the manufacturer representative for distributor settings and spray nozzles.





NTEA

## Chip Grip Fog Seal Special Provision

### Description.

This special provision covers the requirements for applying a fog seal to a chip seal surface. The fog seal will provide extra binder around the aggregates to prevent dislodging, reduce dust created by traffic driving on an uncoated aggregate surface and create a uniform, black wearing surface that helps delineate traffic markings.

### Materials.

The asphalt material shall be in accordance with the following table.

Tests on Emulsion	Test Method	Requirement
Viscosity, 77°F, Saybolt Furol Seconds	AASHTO T 72	50 max
Sieve Test, %	AASHTO T 59	0.3 max
Residue by distillation*, %	AASHTO T 59	30 min
Oil Distillate by volume of emulsion, %	AASHTO T 59	1.0 max
<b>Tests on Residue</b>		
Pen 77°F, 100g, 5 Sec., dmm	AASHTO T 49	40 max
Solubility in TCE, %	AASHTO T 44	97.5 min

\*300g of emulsion may be used to obtain enough residue for testing

### Construction Requirements.

A pressure distributor shall be used to apply Chip Grip within a certain range of application rates. The distributor shall be capable of recirculating material for mixing and agitation purposes. The distributor shall be capable of heating the Chip Grip to a temperature of at least 180 degrees Fahrenheit. The distributor shall be equipped with appropriate spray nozzles for the specified application rates and provide uniform coverage.

The contractor may use a portable storage unit or transfer trailer with mixing and heating capabilities to transport larger quantities of material to the job site.

Consult with the manufacturer for recommended storage conditions and storage life.

### Surface Preparation.

Prior to the application of the Chip Grip, the Engineer shall ensure the application area is free of debris and surface moisture. The Engineer will determine if the moisture under the surface will delay construction based on the amount of and time since the last rain. The area may be cleaned by sweeper/vacuum truck, power broom, air compressor or hand to the satisfaction of the Engineer.

### Application.

For chip seal applications with aggregate size of 3/8" or greater, the application of Chip Grip shall be at a rate between 0.05 to 0.08 gallon per square yard. After the first application is set to where

driving on the newly applied surface does not track or pick up on the tires, apply a second application in the same area at a rate in the same range, 0.05 to 0.08 gallon per square yard, in the opposite direction. The rates may be adjusted by the Engineer if coverage is not complete.

Material may be dispensed through a pressure feed hand wand attached to a portable storage unit or pressure distributor provided temperature is maintained and application rate can be accurately measured.

**Acceptance.**

Provide a Bill of Lading to the Engineer for every tanker or distributor supplying material to the project.

The material will be deemed acceptable if the chips in the chip seal are fully covered and the material does not track under traffic.

**Method of Measurement.**

Chip Grip will be measured by the square yard (sy).

**Basis of Payment.**

Chip Grip will be paid for at the contract unit price per square yard (sy).

**Pay Items**

**Pay Unit Symbol**

Chip Grip, Fog Seal Emulsion.....XXX

**GSB**

## GSB-88 Rejuvenating Sealer and Binder

**Product Description:** GSB-88 Emulsified Sealer/Binder is a chemically engineered asphalt pavement binder comprised of a cationic emulsion of Gilsonite ore and specially selected plastisizers. This chemical colloid stabilized emulsion has been specifically formulated for sealing city streets, county roads, airport runways, airport taxiways, and airport parking aprons and asphalt parking lots. GSB-88 Emulsified Sealer/Binder provides a durable, yet flexible topcoat, while special plastisizers and oils penetrate and rejuvenate asphalt pavements. The result is an emulsified seal coat that restores vital components to asphalt pavements lost during the aging and oxidation process. The Gilsonite seal proves a longwearing anti-oxidative seal for the surface of the asphalt pavement. GSB-88 Emulsified Sealer/Binder beautifies asphalt pavements by drying to an absolute black color.

### Section I. Product Specification

<b><u>Specifications for Rejuvenating Sealer &amp; Binder Ready To Apply:</u></b>	<b>Method</b>	<b>Specification</b>
Saybolt Viscosity at 77 F (25 C)	ASTM D-244	10-50 SEC
Residue by distillation, or evaporation		28% to 38%
Pumping stability test (2)		PASS

<b><u>Tests on Residue from Distillation or Evaporation:</u></b>	<b>Method</b>	<b>Specification</b>
Viscosity at 275 F (135 C)	ASTM D-2170	1750 CTS MAX.
Total distillate recovered by 680 F (360 C)		20% MAX.
Vapor pressure of distillate at 760 mmhg, 0 C (3)		0.1 mmhg MA
Solubility in 1,1,1 Trichloroethylene	ASTM D-2042	97.5% MIN.
Penetration	ASTM D-5	50 dmm MAX.
Asphaltenes	ASTM D-2007	15% MIN.
	ASTM D-2007	15% MAX.
<b><i>Saturates</i></b>		
Polar Compounds	ASTM D-2007	25% MIN.
Aromatics	ASTM D-2007	15% MIN.

- (1) pH may be used in lieu of the particle charge test which is sometimes inconclusive in slow setting, bituminous emulsions.
- (2) Pumping stability is tested by pumping 1 pint, (475 ml) of rejuvenation sealer and binder-88 diluted 1 part concentrate to 1 part water, at 77 F (25 C), through a ¼ inch gear pump operating 1750 rpm for 10 minutes with no significant separation or coagulation.
- (3) Vapor pressure is the pressure exerted when a liquid or solid is in equilibrium with its own vapor. Organic distillates with a vapor pressure of 0.1mm of mercury or less are not considered to be volatile organic compounds.
- (4) Base stock for the rejuvenating sealer and binder-emulsion shall be a homogenous mixture of Gilsonite select rejuvenation oils and select plastisizers.

## **SPECIAL PROVISIONS**

### **GSB-88 Rejuvenating Sealer and Binder**

#### **1.0 Aggregate Sand Specification**

1.1 Shall be a fused ferro-alumino-silicate of complex composition. Free of clay and organic matter. Material to be of a consistent chemistry and specific gravity to provide high breakdown resistance.

#### **2.0 Specifications for Aggregate**

- 2.1 Free silica shall be less than 0.1%
- 2.2 Shall be chemically inert
- 2.3 Particles shape to be fractured rough angular particles
- 2.4 Moh's Mineral Hardness Scale 6-7 Moh's
- 2.5 Sand to be black in appearance
- 2.6 Material to be moisture free & non-absorbing

#### **3.0 Equipment**

3.1 The rejuvenating sealer and binder shall be applied using a standard bituminous distributor that is properly modified to apply the aggregate and sealer-binder in a one continuous one step operation. The equipment must be in good working order and contain no contaminants or dilutants in the tank. Distributor bar tips must be clean, free of burrs, and adjustable for regulated flow. Any type of tip or pressure source is suitable that will maintain predetermined flow rates and constant pressure for leaks and to insure it is in working order prior to use.

3.2 The sanding unit for application of sand must be permanently attached to the distributor truck. It is imperative that the sanding be done immediately upon application of the material to the asphaltic surface. Separate truck sanding operations will not be acceptable.

3.3 Edging and return areas require the same application rate as the main traffic flow areas. These areas require a smaller mechanized application vehicle. This cart is capable of cutting edges and curved areas at the same application rate as the main distributor truck.

#### **4.0 Surface Preparation**

##### **4.1 Preparation of Pavement Surfaces**

4.1.1 Repair and patching of all major pavement defects shall be completed prior to application. Just before applying, clean the asphalt surface of all loose dust, dirt, and other debris. All cracks, other than hairline cracks, shall be filled with a suitable bituminous crack sealer. This may be done before or after application. Crack sealing is not part of this specification and not included in this bid project.

## **SPECIAL PROVISIONS**

### **GSB-88 Rejuvenating Sealer and Binder**

#### **5.0 Application**

##### **5.1 Rate of Application**

5.1.1 Rate of application shall be determined by the texture, porosity, and age of the asphalt pavement to be sealed. The rate of application can vary from 0.10 to 0.18 gallons per square yard. The average rate will generally be from 0.12 to 0.15 gallons per square yard. The optimum application rate shall be determined by the owner.

##### **5.2 Application Precautions**

5.2.1 Product shall not be applied to wet or damp pavement surfaces. Do not apply during rainy or damp weather, or when rain is anticipated within four to eight hours after application is completed. Pavement surface temperatures shall be 40 degrees F (4 C) and rising. Traffic shall not be allowed on the roadway surface until the rejuvenating sealer and binding agent has penetrated and fully cured.

#### **6.0 Sanding**

6.1 The surface texture of the pavement to be sealed shall be checked prior to application of rejuvenating sealer and binder to determine amount of sanding required. Sanding shall be done immediately following application using a sanding unit permanently attached to the distributor truck. Excess sand shall be swept or vacuumed from the pavement within 24 hours of the pavement reopening to pedestrian or vehicular traffic. Skid resistance testing shall be performed prior to application of rejuvenating sealer and binder. The optimum rate of sand application to be determined by owner.

#### **7.0 Storage and Handling Instructions**

7.1 GSB-88 Emulsified Sealer/Binder may be stored and handled like any standard asphalt emulsion. Vertical storage tanks are recommended. The storage tank should be equipped with a slow revolution mechanical agitator. Hot water heating coils, or electrical heaters are required in colder climates to prevent the emulsion from freezing. Positive displacement gear pumps should be used to transfer and apply GSB-88 Emulsified Sealer/Binder materials. Storage and handling temperatures are 100 degrees F (38 C) to 160 degrees F (71 C). GSB-88 Emulsified Sealer/Binder should be protected from freezing, or whenever the outside temperature drops below 40 degrees F (4 C) for prolonged time periods.

#### **8.0 Cure Time**

8.1 Under normal conditions, cure time for rejuvenating sealer and binder is two to eight hours. Sheltered or shady areas may require longer cure times. Spread blotter material if the rejuvenating agent fails to penetrate. Traffic shall be maintained until material is fully cured.

#### **9.0 Striping**

9.1 Striping, if necessary, shall be performed by others.

**SPECIAL PROVISIONS**  
**GSB-88 Rejuvenating Sealer and Binder**

**10.0 Clean Up**

10.1 GSB-88 Emulsified Sealer/Binder that has not dried may be cleaned up with water. Dried GSB-88 may be removed with degreasing solvents. GSB-88 should be removed from skin using hand cleaners and skin creams.

**11.0 Notification**

11.1 The Contractor shall handle all residential notification. This will entail posting resident notification flyers 24-48 hours before actual work begins. The notification shall detail the GSB-88 process (including the limited access to driveway during cure time) along with the onsite operations manager's contact number for any questions or issues that might arise.

**12.0 Maintenance**

11.1 Under normal wear and tear, a single application of GSB-88 Emulsified Sealer/Binder, properly applied, should not require reapplication for up to three years. Reapplications should be at the recommended rates. Regular preventative maintenance can extend the life of pavement indefinitely.

**13.0 Applicator Experience:**

12.1 GSB-88 shall be applied by an experienced applicator of such material. The applicator shall have a minimum of three (3) years experience in applying GSB product. The applicator must submit a list of three (3) projects on which similar work has been applied. Included on the list will be project name, contact, phone number of contact and project date.

12.2 Contractor shall be manufacturer authorized and approved as an applicator of GSB-88 Emulsion Sealer/Binder, using manufacturer approved installation equipment. The contractor shall be versed in proper shipping, handling, dilution, and application processes for GSB-88.



**SPECIAL PROVISIONS**  
**GSB-88 Rejuvenating Sealer and Binder**

**14.0 Manufacturers Representative**

13.1 The manufacturer shall be notified in order to provide the engineer with recommended procedures. A manufacturer representative shall also be present during application. For more info regarding GSB-88 Emulsified Sealer/Binder please call the manufacturer's representative/distributor.

13.2 GSB-88 Emulsified Sealer/Binder will penetrate the surface of any asphalt pavement sufficiently to bind together the top aggregate and become a part of the existing pavement whenever the pavement is clean and dry. Depth of penetration into the pavement is determined by the porosity of the pavement, application rate, pavement temperature and product viscosity and temperature.

13.3 GSB-88 Emulsified Sealer/Binder will preserve and protect asphalt pavement regardless of traffic abrasion. Even after the surface coating has worn off there will be sufficient Gilsonite compound around the surface aggregate and in the top asphalt to assure superior binding, sealing and preserving performance.

**15.0 Method of Measurement**

14.1 The quantity of GSB-88 Emulsified Sealer/Binder to be paid for will be the number of square yards of material actually applied and accepted by the Local Agency as complying with the plans and specifications.

**16.0 Basis of Payment**

15.1 Payment will be made at the contract unit price per square yard for GSB-88 Emulsified Sealer/Binder. This price will be full compensation for furnishing all materials, for all preparation, delivery, and application of these materials, and for all labor, equipment, tools, and incidentals necessary to complete this item, including the furnishing and placing of sand and any other work necessary to complete this item.

**PRE-CONSTRUCTION MEETING:** A pre-construction meeting for this Section is required.

**WEIGHT LIMITS:** Legal weight limits are to be observed on Local Agency roads at all times.

**TIME SCHEDULE:** The specified completion date for this project is September 15 of the current year.

**END OF  
FOG COAT  
SPECIAL  
PROVISION**

**INDEX  
FOR  
SUPPLEMENTAL SPECIFICATIONS  
AND RECURRING SPECIAL PROVISIONS**

Adopted January 1, 2021

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 1-1-21)

**SUPPLEMENTAL SPECIFICATIONS**

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205 Embankment .....	4
403 Bituminous Surface Treatment (Class A-1, A-2, A-3) .....	5
404 Micro-Surfacing and Slurry Sealing .....	6
405 Cape Seal .....	17
406 Hot-Mix Asphalt Binder and Surface Course .....	27
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# Check Sheet for Recurring Special Provisions



Local Public Agency

County

Section Number

City of Washington

Tazewell

21-00000-00-GM

☐ Check this box for lettings prior to 01/01/2021.

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

## Recurring Special Provisions

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7	<input type="checkbox"/> Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	123
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9	<input type="checkbox"/> Construction Layout Stakes Except for Bridges	125
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27	<b>Reserved</b>	179
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32	<input type="checkbox"/> Temporary Raised Pavement Markers	189
33	<input type="checkbox"/> Restoring Bridge Approach Pavements Using High-Density Foam	190
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35	<input type="checkbox"/> Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	197
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Local Public Agency

County

Section Number

City of Washington

Tazewell

21-00000-00-GM

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

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LRS 5	<input checked="" type="checkbox"/> Contract Claims	208
LRS 6	<input checked="" type="checkbox"/> Bidding Requirements and Conditions for Contract Proposals	209
LRS 7	<input type="checkbox"/> Bidding Requirements and Conditions for Material Proposals	215
LRS 8	<b>Reserved</b>	221
LRS 9	<input checked="" type="checkbox"/> Bituminous Surface Treatments	222
LRS 10	<b>Reserved</b>	223
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LRS 18	<input type="checkbox"/> Multigrade Cold Mix Asphalt	235

**BDE SPECIAL PROVISIONS**  
For the April 23 and June 11, 2021 Lettings

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

File Name	#		Special Provision Title	Effective	Revised
80099	1	<input type="checkbox"/>	Accessible Pedestrian Signals (APS)	April 1, 2003	April 1, 2020
80274	2	<input type="checkbox"/>	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
80192	3	<input type="checkbox"/>	Automated Flagger Assistance Device	Jan. 1, 2008	
80173	4	<input type="checkbox"/>	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
80426	5	<input checked="" type="checkbox"/>	Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	
80436	6	<input type="checkbox"/>	Blended Finely Divided Minerals	April 1, 2021	
80241	7	<input type="checkbox"/>	Bridge Demolition Debris	July 1, 2009	
50261	8	<input type="checkbox"/>	Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481	9	<input type="checkbox"/>	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491	10	<input type="checkbox"/>	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531	11	<input type="checkbox"/>	Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80425	12	<input type="checkbox"/>	Cape Seal	Jan. 1, 2020	Jan. 1, 2021
80384	13	<input checked="" type="checkbox"/>	Compensable Delay Costs	June 2, 2017	April 1, 2019
80198	14	<input type="checkbox"/>	Completion Date (via calendar days)	April 1, 2008	
80199	15	<input type="checkbox"/>	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80293	16	<input type="checkbox"/>	Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
80311	17	<input type="checkbox"/>	Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
80261	18	<input type="checkbox"/>	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80387	19	<input type="checkbox"/>	Contrast Preformed Plastic Pavement Marking	Nov. 1, 2017	
80434	20	<input type="checkbox"/>	Corrugated Plastic Pipe (Culvert and Storm Sewer)	Jan. 1, 2021	
80029	21	<input type="checkbox"/>	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	March 2, 2019
80402	22	<input type="checkbox"/>	Disposal Fees	Nov. 1, 2018	
80378	23	<input type="checkbox"/>	Dowel Bar Inserters	Jan. 1, 2017	Jan. 1, 2018
80421	24	<input type="checkbox"/>	Electric Service Installation	Jan. 1, 2020	
80415	25	<input checked="" type="checkbox"/>	Emulsified Asphalts	Aug. 1, 2019	
80423	26	<input type="checkbox"/>	Engineer's Field Office and Laboratory	Jan. 1, 2020	
80229	27	<input type="checkbox"/>	Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80417	28	<input type="checkbox"/>	Geotechnical Fabric for Pipe Underdrains and French Drains	Nov. 1, 2019	
80420	29	<input type="checkbox"/>	Geotextile Retaining Walls	Nov. 1, 2019	
80433	30	<input type="checkbox"/>	Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	
80304	31	<input type="checkbox"/>	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Nov. 1, 2020
80422	32	<input type="checkbox"/>	High Tension Cable Median Barrier	Jan. 1, 2020	Nov. 1, 2020
80416	33	<input checked="" type="checkbox"/>	Hot-Mix Asphalt – Binder and Surface Course	July 2, 2019	Nov. 1, 2019
80398	34	<input type="checkbox"/>	Hot-Mix Asphalt – Longitudinal Joint Sealant	Aug. 1, 2018	Nov. 1, 2019
80406	35	<input type="checkbox"/>	Hot-Mix Asphalt – Mixture Design Verification and Production (Modified for I-FIT)	Jan. 1, 2019	Jan. 2, 2021
80347	36	<input type="checkbox"/>	Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	July 2, 2019
80383	37	<input type="checkbox"/>	Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	July 2, 2019
80411	38	<input type="checkbox"/>	Luminaires, LED	April 1, 2019	
80393	39	<input type="checkbox"/>	Manholes, Valve Vaults, and Flat Slab Tops	Jan. 1, 2018	March 1, 2019
80045	40	<input type="checkbox"/>	Material Transfer Device	June 15, 1999	Aug. 1, 2014
80418	41	<input type="checkbox"/>	Mechanically Stabilized Earth Retaining Walls	Nov. 1, 2019	Nov. 1, 2020
80424	42	<input type="checkbox"/>	Micro-Surfacing and Slurry Sealing	Jan. 1, 2020	Jan. 1, 2021
80428	43	<input type="checkbox"/>	Mobilization	April 1, 2020	
80412	44	<input type="checkbox"/>	Obstruction Warning Luminaires, LED	Aug. 1, 2019	
80430	45	<input type="checkbox"/>	Portland Cement Concrete – Haul Time	July 1, 2020	
80359	46	<input type="checkbox"/>	Portland Cement Concrete Bridge Deck Curing	April 1, 2015	Nov. 1, 2019

80431	47	<input type="checkbox"/>	Portland Cement Concrete Pavement Patching	July 1, 2020	
80432	48	<input type="checkbox"/>	Portland Cement Concrete Pavement Placement	July 1, 2020	
80300	49	<input type="checkbox"/>	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
34261	50	<input type="checkbox"/>	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	51	<input type="checkbox"/>	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80306	52	<input checked="" type="checkbox"/>	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 2, 2021
80407	53	<input checked="" type="checkbox"/>	Removal and Disposal of Regulated Substances	Jan. 1, 2019	Jan. 1, 2020
80419	54	<input type="checkbox"/>	Silt Fence, Inlet Filters, Ground Stabilization and Riprap Filter Fabric	Nov. 1, 2019	April 1, 2020
80395	55	<input type="checkbox"/>	Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
80340	56	<input type="checkbox"/>	Speed Display Trailer	April 2, 2014	Jan. 1, 2017
80127	57	<input type="checkbox"/>	Steel Cost Adjustment	April 2, 2004	Aug. 1, 2017
80408	58	<input type="checkbox"/>	Steel Plate Beam Guardrail Manufacturing	Jan. 1, 2019	
80413	59	<input type="checkbox"/>	Structural Timber	Aug. 1, 2019	
80397	60	<input type="checkbox"/>	Subcontractor and DBE Payment Reporting	April 2, 2018	
80391	61	<input checked="" type="checkbox"/>	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
* 80437	62	<input type="checkbox"/>	Submission of Payroll Records	April 1, 2021	
* 80435	63	<input type="checkbox"/>	Surface Testing of Pavements – IRI	Jan. 1, 2021	April 1, 2021
80298	64	<input type="checkbox"/>	Temporary Pavement Marking	April 1, 2012	April 1, 2017
80409	65	<input checked="" type="checkbox"/>	Traffic Control Devices - Cones	Jan. 1, 2019	
80410	66	<input type="checkbox"/>	Traffic Spotters	Jan. 1, 2019	
20338	67	<input type="checkbox"/>	Training Special Provisions	Oct. 15, 1975	
80318	68	<input type="checkbox"/>	Traversable Pipe Grate for Concrete End Sections	Jan. 1, 2013	Jan. 1, 2018
80429	69	<input type="checkbox"/>	Ultra-Thin Bonded Wearing Course	April 1, 2020	
80288	70	<input checked="" type="checkbox"/>	Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
80302	71	<input type="checkbox"/>	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80414	72	<input type="checkbox"/>	Wood Fence Sight Screen	Aug. 1, 2019	April 1, 2020
80427	73	<input type="checkbox"/>	Work Zone Traffic Control Devices	Mar. 2, 2020	
80071	74	<input type="checkbox"/>	Working Days	Jan. 1, 2002	

The following special provisions are in the 2021 Supplemental Specifications and Recurring Special Provisions.

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location(s)</u>	<u>Effective</u>	<u>Revised</u>
80277	Concrete Mix Design – Department Provided	Check Sheet #37	Jan. 1, 2012	April 1, 2016
80405	Elastomeric Bearings	Article 1083.01	Jan. 1, 2019	
80388	Equipment Parking and Storage	Article 701.11	Nov. 1, 2017	
80165	Moisture Cured Urethane Paint System	Article 1008.06	Nov. 1, 2006	Jan. 1, 2010
80349	Pavement Marking Blackout Tape	Articles 701.04, 701.19(f), 701.20(j) and 1095.06	Nov. 1, 2014	April 1, 2016
80371	Pavement Marking Removal	Articles 783.02-783.04, 783.06 and 1101.13	July 1, 2016	
80389	Portland Cement Concrete	Article 1020.04 Table 1 and Note 4	Nov. 1, 2017	
80403	Traffic Barrier Terminal, Type 1 Special	Articles 631.04 and 631.12	Nov. 1, 2018	

The following special provisions have been deleted from use.

<u>File Name</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80317	Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	Aug. 1, 2019

The following special provisions require additional information from the designer. The additional information needs to be submitted as a separate document. The Project Coordination and Implementation section will then include the information in the applicable special provision.

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



## **BITUMINOUS SURFACE TREATMENT WITH FOG SEAL (BDE)**

Effective: January 1, 2020

**Description.** This work shall consist of constructing a single or multiple course bituminous surface treatment with fog seal.

- (a) A-1. A-1 shall consist of a bituminous seal coat material and a seal coat aggregate with a bituminous fog seal material.
- (b) A-2. A-2 shall consist of a bituminous cover coat material and a cover coat aggregate, and a bituminous seal coat material and seal coat aggregate with a bituminous fog seal material.
- (c) A-3. A-3 shall consist of two separate applications of a bituminous cover coat material and cover coat aggregate, and a bituminous seal coat material and seal coat aggregate with a bituminous fog seal material.

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

Item	Article/Section
(a) Cover Coat Aggregate .....	1003, 1004.03
(b) Seal Coat Aggregate (Note 1) .....	1003, 1004.03
(b) Bituminous Materials (Note 2) (Note 3) .....	1032

Note 1. The seal coat aggregate shall be either fine or coarse aggregate.

When fine aggregate is used, it shall be stone sand, wet bottom boiler slag, slag sand, or steel slag sand. The aggregate gradation shall be FA 1 (Special), FA 4 (Special), or FA 22 as specified on the plans and shall meet the following.

FINE AGGREGATE GRADATIONS						
Grad. No.	Sieve Size and Percent Passing					
	3/8 in. (9.5 mm)	No. 4 (4.75 mm)	No. 8 (2.36 mm)	No. 16 (1.18 mm)	No. 40 (425 µm)	No. 200 (75 µm)
FA 1 (Special)	100	90 ± 10	62.5 ± 17.5	32.5 ± 7.5	7.5 ± 7.5	1.5 ± 1
FA 4 (Special)	100	--	--	2 ± 2	--	1.5 ± 1
FA 22	100	1/	1/	8 ± 8	--	2 ± 2

- 1/ For the fine aggregate gradation FA 22, the aggregate producer shall set the midpoint percent passing, and the Department will apply a range of ± 10 percent. The midpoint shall not be changed without Department approval.

When coarse aggregate is used, it shall be crushed gravel, crushed stone, wet bottom boiler slag, crushed slag, crushed sandstone, or crushed steel slag. The coarse aggregate material shall be selected from the table in Article 1004.03(a) based upon the friction aggregate mixture specified. The aggregate quality shall be Class B and the total chert count shall be no more than 25.0 percent by weight (mass) as determined by the ITP 203. The aggregate gradation shall be CA 15, CA 16, or CA 20 as specified on the plans.

Note 2. The bituminous material shall be either a CRS-2P or an HFRS-2P polymer modified emulsified asphalt meeting the requirements of Article 1032.06(f)(2).

Note 3. The bituminous material used to construct the fog seal shall be either a SS-1h or a CSS-1h according to Article 1032.06.

Equipment. Equipment shall be according to the following.

Item	Article/Section
(a) Self-Propelled Pneumatic-Tired Roller (Note 1) .....	1101.01
(b) Mechanical Sweeper (Note 2) .....	1101.03
(c) Aggregate Spreaders (Note 3) .....	1102.04
(d) Pressure Distributor (Note 4) .....	1102.05
(e) Heating Equipment .....	1102.07

Note 1. There shall be a minimum of two rollers, with the final number of rollers determined by the rollers' abilities to maintain proper spacing with the aggregate spreader as directed by the Engineer.

Note 2. The mechanical sweeper shall be power driven and self-propelled with the broom located between the axles. The mechanical sweeper shall not use a cantilever-mounted broom and the broom rotation shall not be operated by forward movement.

Note 3. The aggregate spreader shall be a self-propelled mechanical type with the receiving hopper in the rear and shall pull the aggregate truck. The spreader shall be fitted with an automated system which provides positive interconnected control of the aggregate flow with the forward speed of the spreader. The automated system shall provide uniform and consistent aggregate application at the rate specified.

The Engineer will check the spread roll of the aggregate spreader for straightness each day before operations begin. Should the surface of the spread roll vary off a straight line along its longitudinal dimension by more than 1/16 in. (1.5 mm), the Engineer will inspect the application of aggregate for corrugations and, should these occur, the machine shall be repaired or replaced. The forward speed of the spreader during calibration shall be the same as is to be used during construction. The equipment required for aggregate spreader calibration may consist of several sheets of canvas, each being exactly 1 sq yd (0.8 sq m), and a weight scale. By making several runs at different gate openings over the sheets of canvas, placed to cover the full width applied by the spreader, and carefully

measuring the aggregate on each canvas sheet, the gate opening at the pre-established speed required to apply aggregate at the specified rate may be determined.

Note 4. The pressure distributor shall have a minimum capacity of 3000 gal (11,500 L). The application rate control shall be automated and shall control the application rate regardless of ground speed or spray bar width. The computer shall have the capability of recording the application rate, gallons sprayed, square yards, and feet traveled. The pressure distributor shall be capable of maintaining the asphalt emulsion at the specified temperature. The spray bar nozzles shall produce a uniform triple lap application fan spray, and the shutoff shall be instantaneous, with no dripping. The pressure distributor shall be capable of maintaining the specified application rate within  $\pm 0.015$  gal/sq yd ( $\pm 0.070$  L/sq m) for each load. The spray-bar nozzles shall be turned to make the same angle with the longitudinal axis of the spray bar as recommended by the manufacturer.

Application rates shall be determined by the procedures listed in ASTM D 2995, except the sample may be taken on three 8 x 12 in. (200 x 300 mm) metal plates. The three plates shall be positioned as directed by the Engineer.

### CONSTRUCTION REQUIREMENTS

Weather Limitations. This work shall be done between May 1 and August 31. Bituminous materials shall be applied only when the temperature of the air in the shade is above 55 °F (13 °C). No work shall be started if local conditions indicate that rain is imminent.

Fog seal operations shall be performed during daylight hours and not during foggy weather. The road surface may be damp but shall be free of standing water.

This work may be done between September 1 and September 15 provided both of the following conditions are met:

- (a) The temperature of the air in the shade is above 70 °F (20 °C) and the temperature of the surface to which the asphalt will be applied is 70 °F (20 °C) or above, and
- (b) The National Weather Service forecast for the area does not show any rain or any temperatures below 55 °F (13 °C) for the day the work is to be done or for the following five days.

Repair and Preparation of Base or Existing Surface. The base or existing surface shall be prepared according to Section 358.

Calibration. At least three days prior to starting the work, the Contractor shall provide the Engineer with a copy of the manufacturer's recommendations for the equipment to be used. The working day prior to starting construction, the pressure distributor and aggregate spreader shall be calibrated and adjusted according to the manufacturer's recommendations. Calibrations and adjustments shall be made in the presence of the Engineer on a level surface at a location

approved by the Engineer. The Contractor shall maintain proper calibration and adjustment of the equipment and the Engineer reserves the right to check application rates as the work progresses. Should the equipment fail to consistently apply the specified rates, the work shall be stopped, and the Contractor shall recalibrate and readjust the equipment.

**Application Rates.** Based upon the aggregate gradation to be used, the Contractor shall determine the application rates of bituminous material and seal coat aggregate. The application rates along with the seal coat gradations shall be submitted to the Engineer for approval prior to the start of work. Application rates shall be according to the following table for the aggregate type shown on the plans and shall result in aggregate embedment between 50 and 70 percent behind the roller. Changes in the application rate of greater than 15 percent shall be resubmitted to the Engineer for approval.

Aggregate Type	Bituminous Material Rate	Aggregate Rate
CA 15	0.38 – 0.46 gal/sq yd (1.7 – 2.1 L/sq m)	22 – 30 lb/sq yd (12 – 16 kg/sq m)
CA 16	0.36 – 0.40 gal/sq yd (1.6 – 1.8 L/sq m)	18 – 26 lb/sq yd (8 – 14 kg/sq m)
CA 20	0.36 – 0.40 gal/sq yd (1.6 – 1.8 L/sq m)	18 – 26 lb/sq yd (8 – 14 kg/sq m)
FA 1 (Special)	0.26 – 0.30 gal/sq yd (1.2 – 1.4 L/sq m)	16 – 20 lb/sq yd (9 – 11 kg/sq m)
FA 4 (Special)	0.28 – 0.36 gal/sq yd (1.3 – 1.6 L/sq m)	18 – 24 lb/sq yd (10 – 13 kg/sq m)
FA 22	0.32 – 0.40 gal/sq yd (1.5 – 1.8 L/sq m)	15 – 22 lb/sq yd (8 – 12 kg/sq m)

**Preparation of Bituminous Material.** The temperature of the bituminous material at the time of application shall be such that it shall spray uniformly without clogging the spraying nozzles and shall be applied within the temperature ranges of 150 – 190 °F (65 – 90 °C).

**Preparation of Aggregate.** The aggregate shall be stockpiled near the jobsite according to Article 1003.01(e) or 1004.01(e). The aggregate used shall contain no free moisture. Slightly damp aggregate may be used with the approval of the Engineer.

**Application of Bituminous Material.** The bituminous material shall be applied with a pressure distributor. The entire length of the spray bar shall be set at the height above the surface recommended by the manufacturer for even distribution of the bituminous material. A hand spray bar shall be used at locations not covered by the distributor.

The distributor shall be operated in a manner such that missing or overlapping of transverse joints shall be avoided. To prevent overlapping of successive applications of bituminous material at transverse joints, heavy paper shall be spread over the previously applied bituminous material and aggregates. In order to obtain a uniform application of the bituminous material, the distributor shall be traveling at the speed required for the specified rate of application when the spray bar crosses the paper.

Adjacent construction, such as concrete pavement, curb and gutter, bridge floors, raised reflective pavement markers, and bridge handrails, shall be protected by shields, covers or other means. If bituminous material is applied to adjacent construction, the Contractor shall remove such material to the satisfaction of the Engineer.

The emulsified asphalt shall not be applied when the wind conditions will inhibit uniform coverage from the fans of asphalt being applied.

Application of Aggregates. The cover and seal coat aggregates shall be spread evenly with an aggregate spreader over the entire surface being treated. When treating one-half of the pavement width at a time, an inside strip of uncovered emulsified asphalt 3 in. (75 mm) wide shall be left during construction of the first half to provide center joint overlap when the second half of the treatment is placed. In all cases, the aggregate shall be applied ahead of the truck or spreader wheels. Hand spreading will be permitted only when approved by the Engineer and, when so permitted, the aggregate shall be spread uniformly and at the approximate rate specified. Any ridges of aggregate left by the aggregate spreader shall be smoothed out with hand brooms immediately behind the aggregate spreader.

Equipment involved in the work shall operate as close to each other as practical. The aggregate spreader shall be within 150 ft (45 m) of the pressure distributor and the aggregate shall cover the asphalt emulsion within 30 seconds of application to ensure proper asphalt/aggregate adhesion.

Each aggregate truck shall be equipped with a suitable hitch for connection to the aggregate spreader while unloading. The trucks shall avoid contact between the truck body or bed and the aggregate spreader. The body or bed of the truck shall be modified, if necessary, to empty cleanly and completely into the receiving hopper of the aggregate spreader. No aggregate shall be allowed to spill onto the road surface when the truck is emptying into this hopper.

Cover Coat. Bituminous material for the cover coat shall not be applied until the previous application is acceptable to the Engineer.

At the beginning of each day's work, no bituminous material shall be applied until there is sufficient cover coat aggregate in the trucks at the work site to completely cover the first application of bituminous material. The amount of surface area covered by each successive application of bituminous material shall be determined by the Engineer. In no case shall this area be greater than can be covered with cover coat aggregate and given the initial rolling while the bituminous material is still in condition to hold aggregate.

The bituminous material, as specified in Article 1032.06(f)(2), shall be applied uniformly over the surface at the rate specified in the table above, the exact rate to be specified by the Engineer. Immediately following the application of the bituminous material, the cover coat aggregate shall be spread over the treated surface at the rate specified in the table above.

The aggregate shall be rolled following spreading. A maximum time of five minutes will be allowed between the spreading of aggregate and completion of the initial rolling of the aggregate. The rollers shall proceed in a longitudinal direction at a speed less than or equal to 5 mph (8 km/h). Each roller will travel over the aggregate a minimum of two times. The entire surface shall be rolled immediately with a self-propelled pneumatic-tired roller. Rolling shall proceed in a longitudinal direction beginning at the edges and progressing toward the center, overlapping on successive trips by at least 1/2 the width of the roller. The aggregate shall then be rolled with a separate pneumatic-tired roller until the aggregate is properly seated in the bituminous material.

Seal Coat. When constructing A-2 or A-3, the seal coat shall not be started until the cover coat immediately preceding the seal coat is completed.

Application of the bituminous material and aggregate and rolling of the seal coat shall be the same as specified above for the cover coat.

During the construction period, the Contractor shall maintain the completed work. If necessary, the Contractor shall apply additional seal coat aggregate to absorb excess bitumen appearing on the surface and shall repair any areas where pickup has occurred.

The Contractor shall use the appropriate sweeping equipment to perform an initial sweeping after a minimum of two hours curing and not less than one hour before sunset on the day the bituminous surface treatment is placed. The initial sweeping shall remove excess aggregate by lightly sweeping each pavement lane. The sweeping shall be sufficient to prevent migration of loose aggregate back onto any part of the pavement.

The Contractor shall sweep the pavement surface as needed to remove excess aggregate.

Application of Fog Seal. The bituminous material for the fog seal shall not be applied to the treated surface until the seal coat has cured for at least one day.

The temperature of the bituminous material shall be as specified in Article 1032.04. The bituminous material shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface of 0.03 to 0.05 lb/sq ft (0.146 to 0.244 kg/sq m). The Contractor shall demonstrate the application will produce 100 percent coverage of the surface after curing. If the application demonstration does not meet the coverage requirements, the spray pattern shall be adjusted until approved by the Engineer. The bituminous material shall be applied in a manner to minimize the amount of overspray.

A check shall be performed in the first 1,000 ft (300 m) of each project to verify the application rate according to the test procedure for "Determination of Residual Asphalt in Prime and Tack Coat Materials".

Opening to Traffic. The road shall be opened to traffic according to Article 701.17(c)(4).

Method of Measurement. The bituminous surface treatment (A-1, A-2 or A-3) will be measured for payment in place and the area computed in square yards (square meters). The width for

measurement will be the top width of the bituminous surface treatment as shown on the plans or as directed by the Engineer.

The bituminous material for fog seal will be measured for payment by weight of residual asphalt. A weight ticket for each truck load shall be furnished to the Engineer. The truck shall be weighed at a location approved by the Engineer. The ticket shall show the weight of the empty truck (the truck being weighed each time before it is loaded), the weight of the loaded truck, and the net weight of the bituminous material.

The percentage of asphalt residue of the actual certified product shall be shown on the producer's bill of lading or attached certificate of analysis. The weight of extra water added to dilute the emulsion shall also be shown on the bill of lading.

Payment will not be made for bituminous materials in excess of 105 percent of the amount specified by the Engineer.

Basis of Payment. This work will be paid for at the contract unit price per square yard (square meter) for BITUMINOUS SURFACE TREATMENT (PREVENTIVE MAINTENANCE).

Fog sealing will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (FOG SEAL) or POLYMERIZED BITUMINOUS MATERIALS (FOG SEAL).

When provided as a payment item, the preparation of the existing surface will be measured and paid for as specified in Section 358. If not provided as a payment item, preparation of existing surface will be paid for according to Article 109.04.

## **COMPENSABLE DELAY COSTS (BDE)**

Effective: June 2, 2017

Revised: April 1, 2019

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 according to Article 109.04.

When an extended traffic control 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."

## **DISPOSAL FEES (BDE)**

Effective: November 1, 2018

Replace Articles 109.04(b)(5) – 109.04(b)(8) of the Standard Specifications with the following:

- “(5) Disposal Fees. When the extra work performed includes paying for disposal fees at a clean construction and demolition debris facility, an uncontaminated soil fill operation or a landfill, the Contractor shall receive, as administrative costs, an amount equal to five percent of the first \$10,000 and one percent of any amount over \$10,000 of the total approved costs of such fees.
- (6) Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.
- (7) Statements. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with itemized statements of the cost of such force account work. Statements shall be accompanied and supported by invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

Itemized statements at the cost of force account work shall be detailed as follows.

- a. Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman. Payrolls shall be submitted to substantiate actual wages paid if so requested by the Engineer.
  - b. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
  - c. Quantities of materials, prices and extensions.
  - d. Transportation of materials.
  - e. Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.
- (8) Work Performed by an Approved Subcontractor. When extra work is performed by an approved subcontractor, the Contractor shall receive, as administrative costs, an amount equal to five percent of the total approved costs of such work with the minimum payment being \$100.

- (9) All statements of the cost of force account work shall be furnished to the Engineer not later than 60 days after receipt of the Central Bureau of Construction form "Extra Work Daily Report". If the statement is not received within the specified time frame, all demands for payment for the extra work are waived and the Department is released from any and all such demands. It is the responsibility of the Contractor to ensure that all statements are received within the specified time regardless of the manner or method of delivery."

80402

## EMULSIFIED ASPHALTS (BDE)

Effective: August 1, 2019

Revise Article 1032.06 of the Standard Specifications to read:

**“1032.06 Emulsified Asphalts.** Emulsified asphalts will be accepted according to the current Bureau of Materials Policy Memorandum, “Emulsified Asphalt Acceptance Procedure”. These materials shall be homogeneous and shall show no separation of asphalt after thorough mixing, within 30 days after delivery, provided separation has not been caused by freezing. They shall coat the aggregate being used in the work to the satisfaction of the Engineer and shall be according to the following requirements.

- (a) Anionic Emulsified Asphalt. Anionic emulsified asphalts RS-1, RS-2, HFRS-2, SS-1h, and SS-1 shall be according to AASHTO M 140, except as follows.

- (1) The cement mixing test will be waived when the emulsion is being used as a tack coat.
- (2) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.

- (b) Cationic Emulsified Asphalt. Cationic emulsified asphalts CRS-1, CRS-2, CSS-1h, and CSS-1 shall be according to AASHTO M 208, except as follows.

- (1) The cement mixing test will be waived when the emulsion is being used as a tack coat.
- (2) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.

- (c) High Float Emulsion. High float emulsions HFE-90, HFE-150, and HFE-300 are medium setting and shall be according to the following table.

Test	HFE-90	HFE-150	HFE-300
Viscosity, Saybolt Furol, at 122 °F (50 °C), (AASHTO T 59), SFS <sup>1/</sup>	50 min.	50 min.	50 min.
Sieve Test, No. 20 (850 µm), retained on sieve, (AASHTO T 59), %	0.10 max.	0.10 max.	0.10 max.
Storage Stability Test, 1 day, (AASHTO T 59), %	1 max.	1 max.	1 max.
Coating Test (All Grades), (AASHTO T 59), 3 minutes	stone coated thoroughly		
Distillation Test, (AASHTO T 59): Residue from distillation test to 500 °F (260 °C), % Oil distillate by volume, %	65 min. 7 max.	65 min. 7 max.	65 min. 7 max.

Characteristics of residue from distillation test to 500 °F (260 °C): Penetration at 77 °F (25 °C), (AASHTO T 49), 100 g, 5 sec, dmm	90-150	150-300	300 min.
Float Test at 140 °F (60 °C), (AASHTO T 50), sec.	1200 min.	1200 min.	1200 min.

1/ The emulsion shall be pumpable.

- (d) Penetrating Emulsified Prime. Penetrating Emulsified Prime (PEP) shall be according to AASHTO T 59, except as follows.

Test	Result
Viscosity, Saybolt Furol, at 77 °F (25 °C), SFS	75 max.
Sieve test, retained on No. 20 (850 µm) sieve, %	0.10 max.
Distillation to 500 °F (260 °C) residue, %	38 min.
Oil distillate by volume, %	4 max.

The PEP shall be tested according to the current Bureau of Materials Illinois Laboratory Test Procedure (ILTP), "Sand Penetration Test of Penetrating Emulsified Prime (PEP)". The time of penetration shall be equal to or less than that of MC-30. The depth of penetration shall be equal to or greater than that of MC-30.

- (e) Delete this subparagraph.

- (f) Polymer Modified Emulsified Asphalt. Polymer modified emulsified asphalts, e.g. SS-1hP, CSS-1hP, CRS-2P (formerly CRSP), CQS-1hP (formerly CSS-1h Latex Modified) and HFRS-2P (formerly HFP) shall be according to AASHTO M 316, except as follows.

- (1) The cement mixing test will be waived when the polymer modified emulsion is being used as a tack coat.
- (2) CQS-1hP (formerly CSS-1h Latex Modified) emulsion for micro-surfacing treatments shall use latex as the modifier.
- (3) Upon examination of the storage stability test cylinder after standing undisturbed for 24 hours, the surface shall show minimal to no white, milky colored substance and shall be a homogenous brown color throughout.
- (4) The distillation for all polymer modified emulsions shall be performed according to AASHTO T 59, except the temperature shall be  $374 \pm 9$  °F ( $190 \pm 5$  °C) to be held for a period of 15 minutes and measured using an ASTM 16F (16C) thermometer.
- (5) The specified temperature for the Elastic Recovery test for all polymer modified emulsions shall be  $50.0 \pm 1.0$  °F ( $10.0 \pm 0.5$  °C).

- (6) The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent.
- (g) Non-Tracking Emulsified Asphalt. Non-tracking emulsified asphalt NTEA (formerly SS-1vh) shall be according to the following.

Test	Requirement
Saybolt Viscosity at 77 °F (25 °C), (AASHTO T 59), SFS	20-100
Storage Stability Test, 24 hr, (AASHTO T 59), %	1 max.
Residue by Distillation, 500 ± 10 °F (260 ± 5 °C), or Residue by Evaporation, 325 ± 5 °F (163 ± 3 °C), (AASHTO T 59), %	50 min.
Sieve Test, No. 20 (850 µm), (AASHTO T 59), %	0.3 max.
Tests on Residue from Evaporation	
Penetration at 77 °F (25 °C), 100 g, 5 sec, (AASHTO T 49), dmm	40 max.
Softening Point, (AASHTO T 53), °F (°C)	135 (57) min.
Ash Content, (AASHTO T 111), % <sup>1/</sup>	1 max.

1/ The Solubility in Trichloroethylene test according to AASHTO T 44 may be run in lieu of Ash Content and shall meet a minimum of 97.5 percent

The different grades are, in general, used for the following.

Grade	Use
SS-1, SS-1h, RS-1, RS-2, CSS-1, CRS-1, CRS-2, CSS-1h, HFE-90, SS-1hP, CSS-1hP, NTEA (formerly SS-1vh)	Tack Coat
PEP	Prime Coat
RS-2, HFE-90, HFE-150, HFE-300, CRS-2P (formerly CRSP), HFRS-2P (formerly HFP), CRS-2, HFRS-2	Bituminous Surface Treatment
CQS-1hP (formerly CSS-1h Latex Modified)	Micro-Surfacing Slurry Sealing Cape Seal"



## HOT-MIX ASPHALT – BINDER AND SURFACE COURSE (BDE)

Effective: July 2, 2019

Revised: November 1, 2019

**Description.** This work shall consist of constructing a hot-mix asphalt (HMA) binder and/or surface course on a prepared base. Work shall be according to Sections 406 and 1030 of the Standard Specifications, except as modified herein.

**Materials.** Add the following after the second paragraph of Article 1003.03(c):

“For mixture IL-9.5FG, at least 67 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, steel slag sand, or combinations thereof meeting FA 20 gradation.”

Revise Article 1004.03(c) to read:

“(c) Gradation. The coarse aggregate gradations shall be as listed in the following table.

Use	Size/Application	Gradation No.
Class A-1, A-2, & A-3	3/8 in. (10 mm) Seal	CA 16 or CA 20
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & A-3	Cover Coat	CA 14
HMA High ESAL	IL-19.0	CA 11 <sup>1/</sup>
	SMA 12.5 <sup>2/</sup>	CA 13, CA 14, or CA 16
	SMA 9.5 <sup>2/</sup>	CA 13 or CA 16 <sup>3/</sup>
	IL-9.5	CA 16
	IL-9.5FG	CA 16
HMA Low ESAL	IL-19.0L	CA 11 <sup>1/</sup>
	IL-9.5L	CA 16

1/ CA 16 or CA 13 may be blended with the CA 11.

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/ The specified coarse aggregate gradations may be blended.”

**HMA Nomenclature.** Revise the “High ESAL” portion of the table in Article 1030.01 to read:

“High ESAL	Binder Courses	IL-19.0, IL-9.5, IL-9.5FG, IL-4.75, SMA 12.5, SMA 9.5
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	Surface Courses	IL-9.5, IL-9.5FG, SMA 12.5, SMA 9.5"
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Mixture Design. Revise the table in Article 1030.04(a)(1) and add SMA 9.5 and IL-9.5FG mixture compositions as follows:

"HIGH ESAL, MIXTURE COMPOSITION (% PASSING) <sup>1/</sup>						
Sieve Size	SMA 12.5 <sup>5/</sup>		SMA 9.5 <sup>5/</sup>		IL-9.5FG	
	min.	max.	min.	max.	min.	max.
1 in. (25 mm)						
3/4 in. (19 mm)		100		100		
1/2 in. (12.5 mm)	90	99	95	100		100
3/8 in. (9.5 mm)	50	85	70	95	90	100
#4 4.75 mm)	20	40	30	50	60	75
#8 (2.36 mm)	16	24 <sup>4/</sup>	20	30	45	60
#16 (1.18 mm)				21	25	40
#30 (600 $\mu$ m)				18	15	30
#50 (300 $\mu$ m)				15	8	15
#100 (150 $\mu$ m)					6	10
#200 (75 $\mu$ m)	8.0	11.0 <sup>3/</sup>	8.0	11.0 <sup>3/</sup>	4.0	6.5
#635 (20 $\mu$ m)		$\leq 3.0$		$\leq 3.0$		
Ratio of Dust/Asphalt Binder						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/ When establishing the adjusted job mix formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above 24 percent.
- 5/ When the bulk specific gravity (Gsb) of the component aggregates vary by more than 0.2, the blend gradations shall be based on volumetric percentage."

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

"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-9.5FG	IL-4.75 <sup>1/</sup>	
50	13.5	15.0	18.5	65 - 78 <sup>2/</sup>
70				65 - 75 <sup>3/</sup>
90				

1/ Maximum draindown for IL-4.75 shall be 0.3 percent.

2/ VFA for IL-4.75 shall be 76-83 percent.

3/ VFA for IL-9.5FG shall be 65-78 percent."

Revise the table in Article 1030.04(b)(3) to read:

"VOLUMETRIC REQUIREMENTS, SMA 12.5 <sup>1/</sup> and SMA 9.5 <sup>1/</sup>				
ESALs (million)	Ndesign	Design Air Voids Target, %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
≤ 10	50	4.0	16.0	75 - 80
> 10	80	4.0	17.0	75 - 80

1/ Maximum draindown shall be 0.3 percent."

Quality Control/Quality Assurance (QC/QA). Revise the third paragraph of Article 1030.05(d)(3) to read:

"If the Contractor and Engineer agree the nuclear density test method is not appropriate for the mixture, cores shall be taken at random locations determined according to the

QC/QA document "Determination of Random Density Test Site Locations". Core densities shall be determined using the Illinois Modified AASHTO T 166 or T 275 procedure."

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

"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.

When a longitudinal joint sealant (LJS) is applied, longitudinal joint density testing will not be required on the joint(s) sealed."

Revise the second table in Article 1030.05(d)(4) and its notes to read:

"DENSITY CONTROL LIMITS			
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-9.5FG	Ndesign = 50 - 90	93.0 – 97.4 %	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 or 80	93.5 – 97.4 %	91.0%

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

2/ 92.0 % when placed as first lift on an unimproved subgrade.”

Equipment. Add the following to Article 1101.01 of the Standard Specifications:

“(h) Oscillatory Roller. The oscillatory roller shall be self-propelled and provide a smooth operation when starting, stopping, or reversing directions. The oscillatory roller shall be able to operate in a mode that will provide tangential impact force with or without vertical impact force by using at least one drum. The oscillatory roller shall be equipped with water tanks and sprinkling devices, or other approved methods, which shall be used to wet the drums to prevent material pickup. The drum(s) amplitude and frequency of the tangential and vertical impact force shall be approximately the same in each direction and meet the following requirements:

- (1) The minimum diameter of the drum(s) shall be 42 in. (1070 mm);
- (2) The minimum length of the drum(s) shall be 57 in. (1480 mm);
- (3) The minimum unit static force on the drum(s) shall be 125 lb/in. (22 N/m); and
- (4) The minimum force on the oscillatory drum shall be 18,000 lb (80 kN).”

#### CONSTRUCTION REQUIREMENTS

Add the following to Article 406.03 of the Standard Specifications:

“(j) Oscillatory Roller ..... 1101.01”

Revise the third paragraph of Article 406.05(a) to read:

“All depressions of 1 in. (25 mm) or more in the surface of the existing pavement shall be filled with binder. At locations where heavy disintegration and deep spalling exists, the area shall be cleaned of all loose and unsound material, tacked, and filled with binder (hand method).”

Revise Article 406.05(c) to read.

“(c) Binder (Hand Method). Binder placed other than with a finishing machine will be designated as binder (hand method) and shall be compacted with a roller to the satisfaction of the Engineer. Hand tamping will be permitted when approved by the Engineer.”

Revise the special conditions for mixture IL-4.75 in Article 406.06(b)(2)e. to read:

“e. The mixture shall be overlaid within 5 days of being placed.”

Revise Article 406.06(d) to read:

“(d) Lift Thickness. The minimum compacted lift thickness for HMA binder and surface courses shall be as follows.

MINIMUM COMPACTED LIFT THICKNESS	
Mixture Composition	Thickness, in. (mm)
IL-4.75	3/4 (19) - over HMA surfaces <sup>1/</sup> 1 (25) - over PCC surfaces <sup>1/</sup>
IL-9.5FG	1 1/4 (32)
IL-9.5, IL-9.5L	1 1/2 (38)
SMA 9.5	1 1/2 (38)
SMA 12.5	2 (51)
IL-19.0, IL-19.0L	2 1/4 (57)

<sup>1/</sup> The maximum compacted lift thickness for mixture IL-4.75 shall be 1 1/4 in. (32 mm).”

Revise Table 1 and Note 3/ of Table 1 in Article 406.07(a) of the Standard Specifications to read:

"TABLE 1 - MINIMUM ROLLER REQUIREMENTS FOR HMA				
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement
Binder and Surface <sup>1/</sup>	V <sub>D</sub> , P <sup>3/</sup> , T <sub>B</sub> , 3W, O <sub>T</sub> , O <sub>B</sub>	P <sup>3/</sup> , O <sub>T</sub> , O <sub>B</sub>	V <sub>S</sub> , T <sub>B</sub> , T <sub>F</sub> , O <sub>T</sub>	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
IL-4.75 and SMA <sup>4/ 5/</sup>	T <sub>B</sub> , 3W, O <sub>T</sub>	- -	T <sub>F</sub> , 3W, O <sub>T</sub>	
Bridge Decks <sup>2/</sup>	T <sub>B</sub>	- -	T <sub>F</sub>	As specified in Articles 582.05 and 582.06.

<sup>3/</sup> A vibratory roller (V<sub>D</sub>) or oscillatory roller (O<sub>T</sub> or O<sub>B</sub>) may be used in lieu of the pneumatic-tired roller on mixtures containing polymer modified asphalt binder.”

Add the following to EQUIPMENT DEFINITION in Article 406.07(a) contained in the Errata of the Supplemental Specifications:

“O<sub>T</sub> - Oscillatory roller, tangential impact mode. Maximum speed is 3.0 mph (4.8 km/h) or 264 ft/min (80 m/min).

O<sub>B</sub> - Oscillatory roller, tangential and vertical impact mode, operated at a speed to produce not less than 10 vertical impacts/ft (30 impacts/m).”

Basis of Payment. Replace the second through the fifth paragraphs of Article 406.14 with the following:

“HMA binder and surface courses will be paid for at the contract unit price per ton (metric ton) for MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS; HOT-MIX ASPHALT BINDER COURSE (HAND METHOD), of the Ndesign specified; HOT-MIX ASPHALT BINDER COURSE, of the mixture composition and Ndesign specified; HOT-MIX ASPHALT SURFACE COURSE, of the mixture composition, friction aggregate, and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE (HAND METHOD), of the Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, of the mixture composition, friction aggregate, and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified; POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition, friction aggregate, and Ndesign specified.”

## REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2019

Revised: January 1, 2020

Revise Section 669 of the Standard Specifications to read:

### "SECTION 669. REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

**669.01 Description.** This work shall consist of the transportation and proper disposal of regulated substances. This work shall also consist of the removal, transportation, and proper disposal of underground storage tanks (UST), their contents and associated underground piping to the point where the piping is above the ground, including determining the content types and estimated quantities.

**669.02 Equipment.** The Contractor shall notify the Engineer of the delivery of all excavation, storage, and transportation equipment to a work area location. The equipment shall comply with OSHA and American Petroleum Institute (API) guidelines and shall be furnished in a clean condition. Clean condition means the equipment does not contain any residual material classified as a non-special waste, non-hazardous special waste, or hazardous waste. Residual materials include, but are not limited to, petroleum products, chemical products, sludges, or any other material present in or on equipment.

Before beginning any associated soil or groundwater management activity, the Contractor shall provide the Engineer with the opportunity to visually inspect and approve the equipment. If the equipment contains any contaminated residual material, decontamination shall be performed on the equipment as appropriate to the regulated substance and degree of contamination present according to OSHA and API guidelines. All cleaning fluids used shall be treated as the contaminant unless laboratory testing proves otherwise.

**669.03 Pre-Construction Submittals and Qualifications.** Prior to beginning this work, or working in areas with regulated substances, the Contractor shall submit a "Regulated Substances Pre-Construction Plan (RSPCP)" to the Engineer for review and approval using form BDE 2730. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

As part of the RSPCP, the Contractor(s) or firm(s) performing the work shall meet the following qualifications.

- (a) **Regulated Substances Monitoring.** Qualification for environmental observation and field screening of regulated substances work and environmental observation of UST removal shall require either pre-qualification in Hazardous Waste by the Department or demonstration of acceptable project experience in remediation and operations for contaminated sites in accordance with applicable Federal, State, or local regulatory requirements using BDE 2730.



Qualification for each individual performing regulated substances monitoring shall require a minimum of one-year of experience in similar activities as those required for the project.

- (b) Underground Storage Tank Removal. Qualification for underground storage tank (UST) removal work shall require licensing and certification with the Office of the State Fire Marshall (OSFM) and possession of all permits required to perform the work. A copy of the permit shall be provided to the Engineer prior to tank removal.

The qualified Contractor(s) or firm(s) shall also document it does not have any current or former ties with any of the properties contained within, adjoining, or potentially affecting the work.

The Engineer will require up to 21 calendar days for review of the RSPCP. The review may involve rejection or revision and resubmittal; in which case, an additional 21 days will be required for each subsequent review. Work shall not commence until the RSPCP has been approved by the Engineer. After approval, the RSPCP shall be revised as necessary to reflect changed conditions in the field and documented using BDE 2730A "Regulated Substances Pre-Construction Plan (RSPCP) Addendum" and submitted to the Engineer for approval.

## CONSTRUCTION REQUIREMENTS

**669.04 Regulated Substances Monitoring.** Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities at the contract specific work areas. As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 "Regulated Substances Monitoring Daily Record (RSMR)".

- (a) Environmental Observation. Prior to beginning excavation, the Contractor shall mark the limits of the contract specific work areas. Once work begins, the monitoring personnel shall be present on-site continuously during the excavation and loading of material.
- (b) Field Screening. Field screening shall be performed during the excavation and loading of material from the contract specific work areas, except for material classified according to Article 669.05(b)(1) or 669.05(c) where field screening is not required.

Field screening shall be performed with either a photoionization detector (PID) (minimum 10.6eV lamp) or a flame ionization detector (FID), and other equipment as appropriate, to monitor for potential contaminants associated with regulated substances. The PID or FID shall be calibrated on-site, and background level readings taken and recorded daily, and as field and weather conditions change. Field screen readings on the PID or FID in excess of background levels indicates the potential presence of regulated substances requiring handling as a non-special waste, special waste, or hazardous waste. PID or FID readings may be used as the basis of increasing the limits of removal with the approval of the Engineer but shall in no case be used to decrease the limits.

**669.05 Regulated Substances Management and Disposal.** The management and disposal of soil and/or groundwater containing regulated substances shall be according to the following:

- (a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in soil established pursuant to Subpart F of 35 Ill. Adm. Code 1100.605, the soil shall be managed as follows:
  - (1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC, but still considered within area background levels by the Engineer, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable. If the soils cannot be utilized within the right-of-way, they shall be managed and disposed of at a landfill as a non-special waste.
  - (2) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County identified in 35 Ill. Admin. Code 742 Appendix A. Table G, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of at a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation (USFO) within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (5) When the Engineer determines soil cannot be managed according to Articles 669.05(a)(1) through (a)(4) above and the materials do not contain special waste or hazardous waste, as determined by the Engineer, the soil shall be managed and disposed of at a landfill as a non-special waste.
  - (6) When analytical results indicate soil is hazardous by characteristic or listing pursuant to 35 Ill. Admin. Code 721, contains radiological constituents, or the Engineer otherwise determines the soil cannot be managed according to Articles 669.05(a)(1)

through (a)(5) above, the soil shall be managed and disposed of off-site as a special waste or hazardous waste as applicable.

- (b) Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO for any of the following reasons.

(1) The pH of the soil is less than 6.25 or greater than 9.0.

(2) The soil exhibited PID or FID readings in excess of background levels.

- (c) Soil Analytical Results Exceed Most Stringent MAC but Do Not Exceed Tiered Approach to Corrective Action Objectives (TACO) Residential. When the soil analytical results indicate that detected levels exceed the most stringent MAC but do not exceed TACO Tier 1 Soil Remediation Objectives for Residential Properties pursuant to 35 Ill. Admin. Code 742 Appendix B Table A, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO.

- (d) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 Ill. Admin. Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste or hazardous waste as applicable. Special waste groundwater shall be containerized and trucked to an off-site treatment facility, or may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority. Groundwater discharged to a sanitary sewer or combined sewer shall be pre-treated to remove particulates and measured with a calibrated flow meter to comply with applicable discharge limits. A copy of the permit shall be provided to the Engineer prior to discharging groundwater to the sanitary sewer or combined sewer.

Groundwater encountered within trenches may be managed within the trench and allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench, it may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority, or it shall be containerized and trucked to an off-site treatment facility as a special waste or hazardous waste. The Contractor is prohibited from discharging groundwater within the trench through a storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive

soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than  $10^{-7}$  cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer.

The Contractor shall use due care when transferring contaminated material from the area of origin to the transporter. Should releases of contaminated material to the environment occur (i.e., spillage onto the ground, etc.), the Contractor shall clean-up spilled material and place in the appropriate storage containers as previously specified. Clean-up shall include, but not be limited to, sampling beneath the material staging area to determine complete removal of the spilled material.

The Contractor shall provide engineered barriers, when required, and shall include materials sufficient to completely line excavation surfaces, including sloped surfaces, bottoms, and sidewall faces, within the areas designated for protection.

The Contractor shall obtain all documentation including any permits and/or licenses required to transport the material containing regulated substances to the disposal facility. The Contractor shall coordinate with the Engineer on the completion of all documentation. The Contractor shall make all arrangements for collection and analysis of landfill acceptance testing. The Contractor shall coordinate waste disposal approvals with the disposal facility.

The Contractor shall provide the Engineer with all transport-related documentation within two days of transport or receipt of said document(s). For management of special or hazardous waste, the Contractor shall provide the Engineer with documentation that the Contractor is operating with a valid Illinois special waste transporter permit at least two weeks before transporting the first load of contaminated material.

Transportation and disposal of material classified according to Article 669.05(a)(5) or 669.05(a)(6) shall be completed each day so that none of the material remains on-site by the close of business, except when temporary staging has been approved.

Any waste generated as a special or hazardous waste from a non-fixed facility shall be manifested off-site using the Department's county generator number provided by the Bureau of Design and Environment. An authorized representative of the Department shall sign all manifests for the disposal of the contaminated material and confirm the Contractor's transported volume. Any waste generated as a non-special waste may be managed off-site without a manifest, a special waste transporter, or a generator number.

The Contractor shall select a landfill permitted for disposal of the contaminant within the State of Illinois. The Department will review and approve or reject the facility proposed by the Contractor to use as a landfill. The Contractor shall verify whether the selected disposal facility is compliant with those applicable standards as mandated by their permit and whether the disposal facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The use of a Contractor selected landfill shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth.

**669.06 Non-Special Waste Certification.** An authorized representative of the Department shall sign and date all non-special waste certifications. The Contractor shall be responsible for providing the Engineer with the required information that will allow the Engineer to certify the waste is not a special waste.

(a) Definition. A waste is considered a non-special waste as long as it is not:

- (1) a potentially infectious medical waste;
- (2) a hazardous waste as defined in 35 Ill. Admin. Code 721;
- (3) an industrial process waste or pollution control waste that contains liquids, as determined using the paint filter test set forth in subdivision (3)(A) of subsection (m) of 35 Ill. Admin. Code 811.107;
- (4) a regulated asbestos-containing waste material, as defined under the National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61.141;
- (5) a material containing polychlorinated biphenyls (PCB's) regulated pursuant to 40 CFR Part 761;
- (6) a material subject to the waste analysis and recordkeeping requirements of 35 Ill. Admin. Code 728.107 under land disposal restrictions of 35 Ill. Admin. Code 728;
- (7) a waste material generated by processing recyclable metals by shredding and required to be managed as a special waste under Section 22.29 of the Environmental Protection Act; or
- (8) an empty portable device or container in which a special or hazardous waste has been stored, transported, treated, disposed of, or otherwise handled.

(b) Certification Information. All information used to determine the waste is not a special waste shall be attached to the certification. The information shall include but not be limited to:

- (1) the means by which the generator has determined the waste is not a hazardous waste;
- (2) the means by which the generator has determined the waste is not a liquid;
- (3) if the waste undergoes testing, the analytic results obtained from testing, signed and dated by the person responsible for completing the analysis;
- (4) if the waste does not undergo testing, an explanation as to why no testing is needed;

- (5) a description of the process generating the waste; and
- (6) relevant material safety data sheets.

**669.07 Temporary Staging.** Soil classified according to Articles 669.05(a)(2), (b)(1), or (c) may be temporarily staged at the Contractor's option. Soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) shall be managed and disposed of without temporary staging to the greatest extent practicable. If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Engineer in writing.

Temporary staging shall be accomplished within the right-of-way and the Contractor's means and methods shall be described in the approved or amended RSPCP. Staging areas shall not be located within 200 feet (61 m) of a public or private water supply well; nor within 100 feet (30 m) of sensitive environmental receptor areas, including wetlands, rivers, streams, lakes, or designated habitat zones.

The method of staging shall consist of containerization or stockpiling as applicable for the type, classification, and physical state (i.e., liquid, solid, semisolid) of the material. Materials of different classifications shall be staged separately with no mixing or co-mingling.

When containers are used, the containers and their contents shall remain intact and inaccessible to unauthorized persons until the manner of disposal is determined. The Contractor shall be responsible for all activities associated with the storage containers including, but not limited to, the procurement, transport, and labeling of the containers. The Contractor shall not use a storage container if visual inspection of the container reveals the presence of free liquids or other substances that could cause the waste to be reclassified as a hazardous or special waste.

When stockpiles are used, they shall be covered with a minimum 20-mil plastic sheeting or tarps secured using weights or tie-downs. Perimeter berms or diversionary trenches shall be provided to contain and collect for disposal any water that drains from the soil. Stockpiles shall be managed to prevent or reduce potential dust generation.

When staging non-special waste, special waste, or hazardous waste, the following additional requirements shall apply:

- (a) **Non-Special Waste.** When stockpiling soil classified according to Article 669.05(a)(1) or 669.05(a)(5), an impermeable surface barrier between the materials and the ground surface shall be installed. The impermeable barrier shall consist of a minimum 20-mil plastic liner material and the surface of the stockpile area shall be clean and free of debris prior to placement of the liner. Measures shall also be taken to limit or discourage access to the staging area.
- (b) **Special Waste and Hazardous Waste.** Soil classified according to Article 669.05(a)(6) shall not be stockpiled but shall be containerized immediately upon generation in containers, tanks or containment buildings as defined by RCRA, Toxic Substances Control

Act (TSCA), and other applicable State or local regulations and requirements, including 35 Ill. Admin. Code Part 722, Standards Applicable to Generators of Hazardous Waste.

The staging area(s) shall be enclosed (by a fence or other structure) to restrict direct access to the area, and all required regulatory identification signs applicable to a staging area containing special waste or hazardous waste shall be deployed.

Storage containers shall be placed on an all-weather gravel-packed, asphalt, or concrete surface. Containers shall be in good condition and free of leaks, large dents, or severe rusting, which may compromise containment integrity. Containers must be constructed of, or lined with, materials that will not react or be otherwise incompatible with the hazardous or special waste contents. Containers used to store liquids shall not be filled more than 80 percent of the rated capacity. Incompatible wastes shall not be placed in the same container or comingled.

All containers shall be legibly labeled and marked using pre-printed labels and permanent marker in accordance with applicable regulations, clearly showing the date of waste generation, location and/or area of waste generation, and type of waste. The Contractor shall place these identifying markings on an exterior side surface of the container.

Storage containers shall be kept closed, and storage pads covered, except when access is needed by authorized personnel.

Special waste and hazardous waste shall be transported and disposed within 90 days from the date of generation.

**669.08 Underground Storage Tank Removal.** For the purposes of this section, an underground storage tank (UST) includes the underground storage tank, piping, electrical controls, pump island, vent pipes and appurtenances.

Prior to removing an UST, the Engineer shall determine whether the Department is considered an "owner" or "operator" of the UST as defined by the UST regulations (41 Ill. Adm. Code Part 176). Ownership of the UST refers to the Department's owning title to the UST during storage, use or dispensing of regulated substances. The Department may be considered an "operator" of the UST if it has control of, or has responsibility for, the daily operation of the UST. The Department may however voluntarily undertake actions to remove an UST from the ground without being deemed an "operator" of the UST.

In the event the Department is deemed not to be the "owner" or "operator" of the UST, the OSFM removal permit shall reflect who was the past "owner" or "operator" of the UST. If the "owner" or "operator" cannot be determined from past UST registration documents from OSFM, then the OSFM removal permit will state the "owner" or "operator" of the UST is the Department. The Department's Office of Chief Counsel (OCC) will review all UST removal permits prior to submitting any removal permit to the OSFM. If the Department is not the "owner" or "operator" of the UST then it will not register the UST or pay any registration fee.

The Contractor shall be responsible for obtaining permits required for removing the UST, notification to the OSFM, using an OSFM certified tank contractor, removal and disposal of the UST and its contents, and preparation and submittal of the OSFM Site Assessment Report in accordance with 41 Ill. Admin. Code Part 176.330.

The Contractor shall contact the Engineer and the OSFM's office at least 72 hours prior to removal to confirm the OSFM inspector's presence during the UST removal. Removal, transport, and disposal of the UST shall be according to the applicable portions of the latest revision of the "American Petroleum Institute (API) Recommended Practice 1604".

The Contractor shall collect and analyze tank content (sludge) for disposal purposes. The Contractor shall remove as much of the regulated substance from the UST system as necessary to prevent further release into the environment. All contents within the tank shall be removed, transported and disposed of, or recycled. The tank shall be removed and rendered empty according to IEPA definition.

The Contractor shall collect soil samples from the bottom and sidewalls of the excavated area in accordance with 35 Ill. Admin. Code Part 734.210(h) after the required backfill has been removed during the initial response action, to determine the level of contamination remaining in the ground, regardless if a release is confirmed or not by the OSFM on-site inspector.

In the event the UST is designated a leaking underground storage tank (LUST) by the OSFM's inspector, or confirmation by analytical results, the Contractor shall notify the Engineer and the District Environmental Studies Unit (DESU). Upon confirmation of a release of contaminants and notifications to the Engineer and DESU, the Contractor shall report the release to the Illinois Emergency Management Agency (IEMA) (e.g., by telephone or electronic mail) and provide them with whatever information is available ("owner" or "operator" shall be stated as the past registered "owner" or "operator", or the IDOT District in which the tank is located and the DESU Manager).

The Contractor shall perform the following initial response actions if a release is indicated by the OSFM inspector:

- (a) Take immediate action to prevent any further release of the regulated substance to the environment, which may include removing, at the Engineer's discretion, and disposing of up to 4 ft (1.2 m) of the contaminated material, as measured from the outside dimension of the tank;
- (b) Identify and mitigate fire, explosion and vapor hazards;
- (c) Visually inspect any above ground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and groundwater; and
- (d) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors and free product that have migrated from the tank excavation zone and entered into subsurface structures (such as sewers or basements).



The tank excavation shall be backfilled according to applicable portions of Sections 205, 208, and 550 with a material that will compact and develop stability. All uncontaminated concrete and soil removed during tank extraction may be used to backfill the excavation, at the discretion of the Engineer.

After backfilling the excavation, the site shall be graded and cleaned.

**669.09 Regulated Substances Final Construction Report.** Not later than 90 days after completing this work, the Contractor shall submit a "Regulated Substances Final Construction Report (RSFCR)" to the Engineer using form BDE 2733 and required attachments. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

**669.10 Method of Measurement.** Non-special waste, special waste, and hazardous waste soil will be measured for payment according to Article 202.07(b) when performing earth excavation, Article 502.12(b) when excavating for structures, or by computing the volume of the trench using the maximum trench width permitted and the actual depth of the trench.

Groundwater containerized and transported off-site for management, storage, and disposal will be measured for payment in gallons (liters).

Backfill plugs will be measured in cubic yards (cubic meters) in place, except the quantity for which payment will be made shall not exceed the volume of the trench, as computed by using the maximum width of trench permitted by the Specifications and the actual depth of the trench, with a deduction for the volume of the pipe.

Engineered Barriers will be measured for payment in square yards (square meters).

**669.11 Basis of Payment.** The work of preparing, submitting and administering a Regulated Substances Pre-Construction Plan will be paid for at the contract lump sum price for REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN.

Regulated substances monitoring, including completion of form BDE 2732 for each day of work, will be paid for at the contract unit price per calendar day, or fraction thereof to the nearest 0.5 calendar day, for REGULATED SUBSTANCES MONITORING.

The installation of engineered barriers will be paid for at the contract unit price per square yard (square meter) for ENGINEERED BARRIER.

The work of UST removal, soil excavation, soil and content sampling, the management of excavated soil and UST content, and UST disposal, will be paid for at the contract unit price per each for UNDERGROUND STORAGE TANK REMOVAL.

The transportation and disposal of soil and other materials from an excavation determined to be contaminated will be paid for at the contract unit price per cubic yard (cubic meter) for

**NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL.**

The transportation and disposal of groundwater from an excavation determined to be contaminated will be paid for at the contract unit price per gallon (liter) for SPECIAL WASTE GROUNDWATER DISPOSAL or HAZARDOUS WASTE GROUNDWATER DISPOSAL. When groundwater is discharged to a sanitary or combined sewer by permit, the cost will be paid for according to Article 109.05.

Backfill plugs will be paid for at the contract unit price per cubic yard (cubic meter) for BACKFILL PLUGS.

Payment for temporary staging of soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) will be paid for according to Article 109.04. The Department will not be responsible for any additional costs incurred, if mismanagement of the staging area, storage containers, or their contents by the Contractor results in excess cost expenditure for disposal or other material management requirements.

Payment for accumulated stormwater removal and disposal will be according to Article 109.04. Payment will only be allowed if appropriate stormwater and erosion control methods were used.

Payment for decontamination, labor, material, and equipment for monitoring areas beyond the specified areas, with the Engineer's prior written approval, will be according to Article 109.04.

When the waste material for disposal requires sampling for landfill disposal acceptance, the samples shall be analyzed for TCLP VOCs, SVOCs, RCRA metals, pH, ignitability, and paint filter test. The analysis will be paid for at the contract unit price per each for SOIL DISPOSAL ANALYSIS using EPA Methods 1311 (extraction), 8260B for VOCs, 8270C for SVOCs, 6010B and 7470A for RCRA metals, 9045C for pH, 1030 for ignitability, and 9095A for paint filter.

The work of preparing, submitting and administering a Regulated Substances Final Construction Report will be paid for at the contract lump sum price REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT."

## **SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)**

Effective: November 2, 2017

Revised: April 1, 2019

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

“This mobilization payment shall be made at least seven 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

## **TRAFFIC CONTROL DEVICES - CONES (BDE)**

Effective: January 1, 2019

Revise Article 701.15(a) of the Standard Specifications to read:

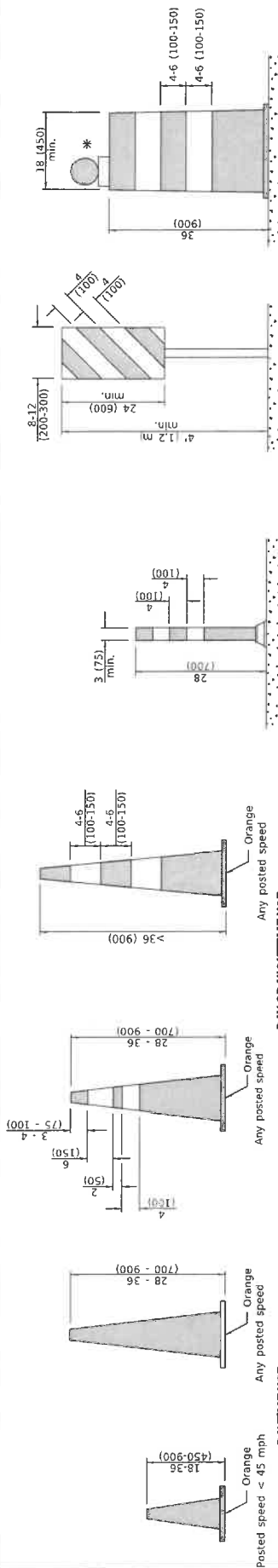
“(a) Cones. Cones are used to channelize traffic. Cones used to channelize traffic at night shall be reflectorized; however, cones shall not be used in nighttime lane closure tapers or nighttime lane shifts.”

Revise Article 1106.02(b) of the Standard Specifications to read:

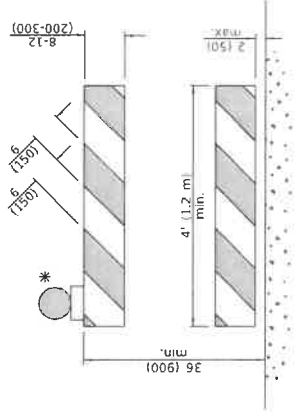
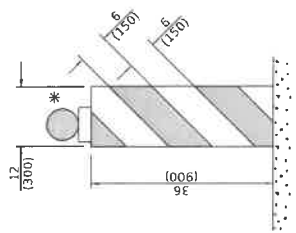
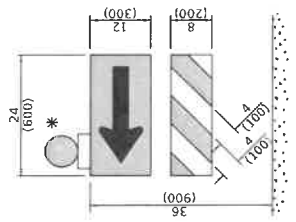
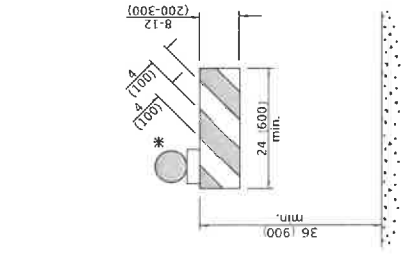
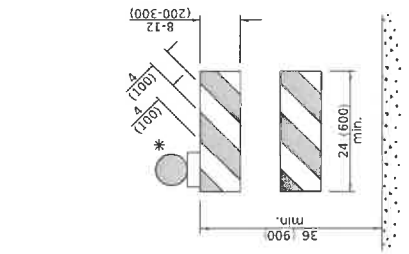
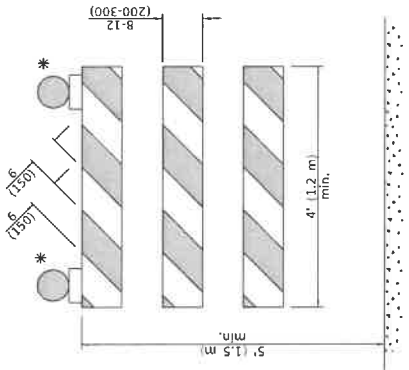
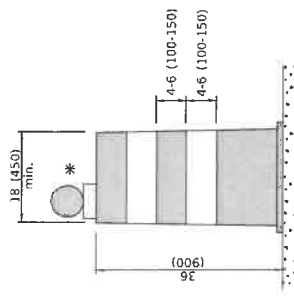
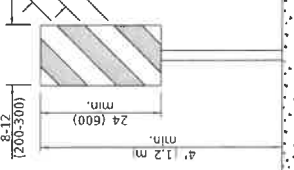
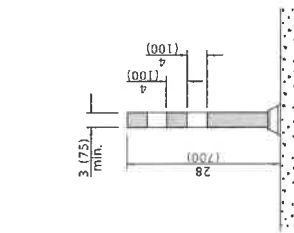
“(b) Cones. Cones shall be predominantly orange. Cones used at night that are 28 to 36 in. (700 to 900 mm) in height shall have two white circumferential stripes. If non-reflective spaces are left between the stripes, the spaces shall be no more than 2 in. (50mm) in width. Cones used at night that are taller than 36 in. (900 mm) shall have a minimum of two white and two fluorescent orange alternating, circumferential stripes with the top stripe being fluorescent orange. If non-reflective spaces are left between the stripes, the spaces shall be no more than 3 in. (75 mm) in width.

The minimum weights for the various cone heights shall be 4 lb for 18 in. (2 kg for 450 mm), 7 lb for 28 in. (3 kg for 700 mm), and 10 lb for 36 in. (5 kg for 900 mm) with a minimum of 60 percent of the total weight in the base. Cones taller than 36 in. shall be weighted per the manufacturer's specifications such that they are not moved by wind or passing traffic.”

80409



**CONES**



\* Warning lights (if required)

**GENERAL NOTES**

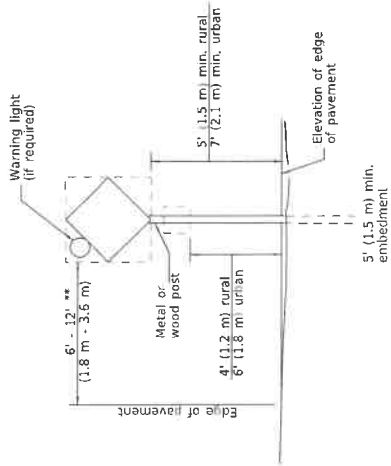
All heights shown shall be measured above the pavement surface.  
All dimensions are in inches (millimeters) unless otherwise shown.

TRAFFIC CONTROL DEVICES	
DATE	REVISIONS
1-1-19	Revised cone usage and added cones > 36" (900 m) height.
1-1-18	Revised END WORK ZONE SPEED LIMIT sign from orange to white background.

(Sheet 1 of 3)

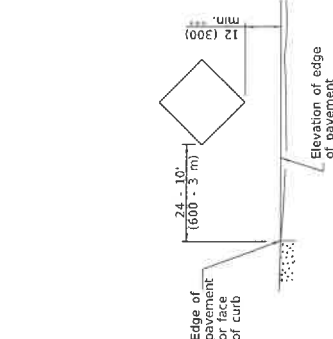
**STANDARD 701901-08**

APPROVED: *[Signature]* 2019  
ILLINOIS Department of Transportation  
ENGINEER OF SURVEYING AND ENGINEERING  
APPROVED: *[Signature]* 2019  
ENGINEER OF DESIGN AND ENVIRONMENT



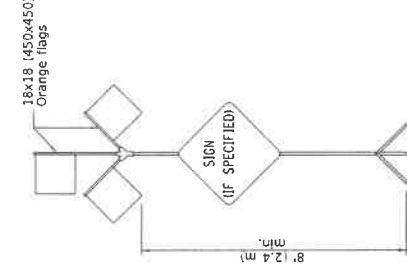
#### POST MOUNTED SIGNS

\*\* When curb or paved shoulder are present this dimension shall be 24 (600) to the face of curb or shoulder to the outside edge of the paved shoulder.



#### SIGNS ON TEMPORARY SUPPORTS

\*\*\* When work operations exceed 1000 ft (300 m) in length, the height of the sign shall be 5' (1.5 m) min. If located behind other devices, the height shall be sufficient to be seen completely above the devices.



#### HIGH LEVEL WARNING DEVICE

**ROAD CONSTRUCTION NEXT X MILES**  
G20-1104(0)-6036

**END CONSTRUCTION**  
G20-1105(0)-6024

This signing is required for all projects 2 miles (3200 m) or more in length.  
ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500' (150 m) in advance of project limits.  
END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).  
Dual sign displays shall be utilized on multi-lane highways.

#### WORK LIMIT SIGNING

WORK ZONE	WZ1-1105(0)-3618
SPEED LIMIT	R2-1-3648
PHOTO ENFORCED	R10-1108p-3618 ****
XXXX FINE MINIMUM	R2-1106p-3618

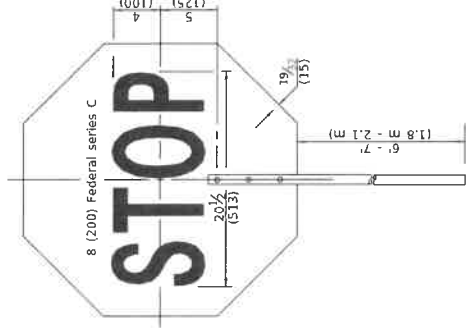
Sign assembly as shown on Standards or as allowed by District Operations.

**END WORK ZONE SPEED LIMIT**  
G20-1103-6036

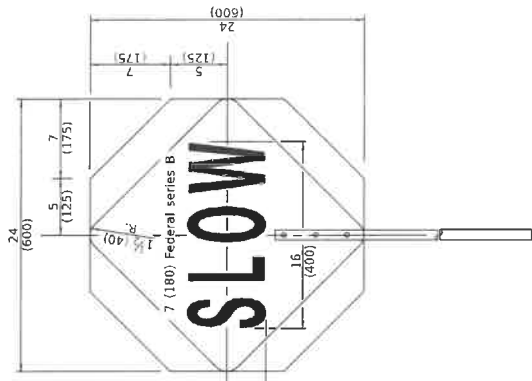
This sign shall be used when the above sign assembly is used.

#### HIGHWAY CONSTRUCTION SPEED ZONE SIGNS

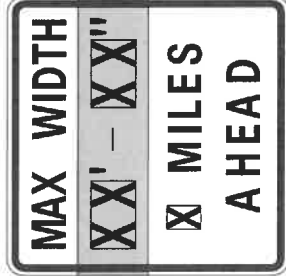
\*\*\*\* R10-1108p shall only be used along roadways under the jurisdiction of the State.



FRONT SIDE



REVERSE SIDE



W12-1103-4848

#### WIDTH RESTRICTION SIGN

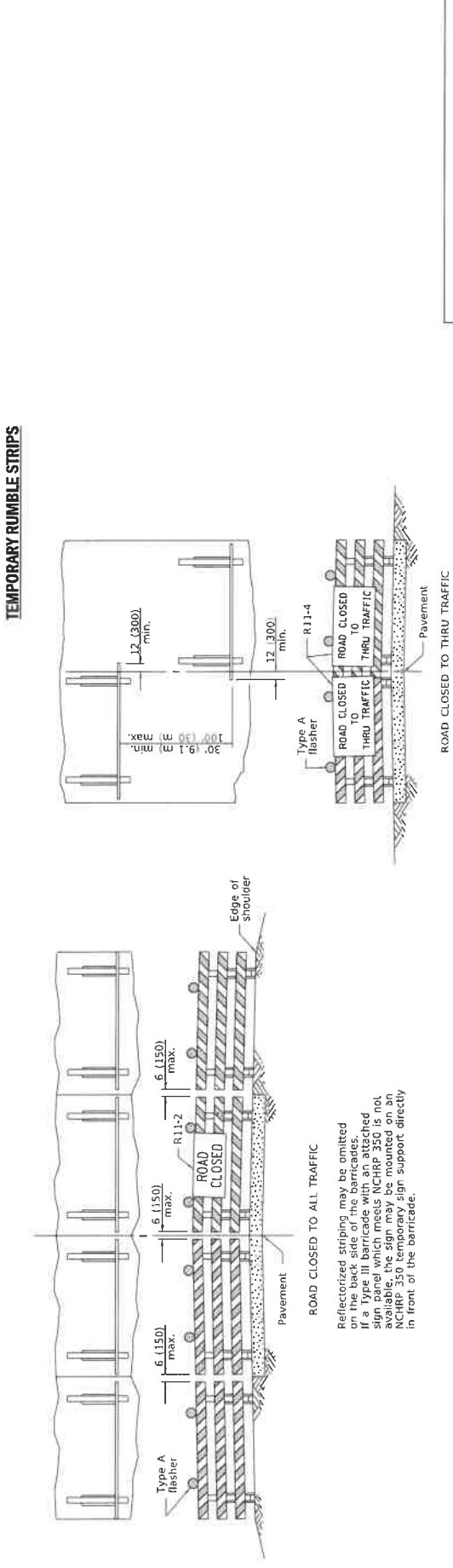
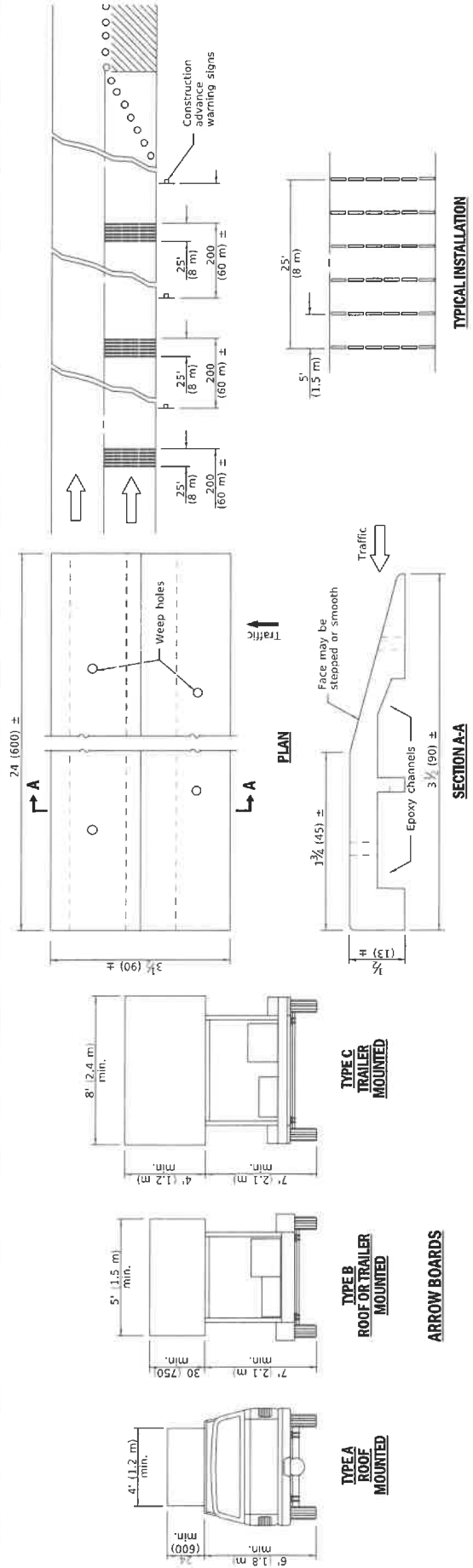
XX-XX" width and X miles are variable.

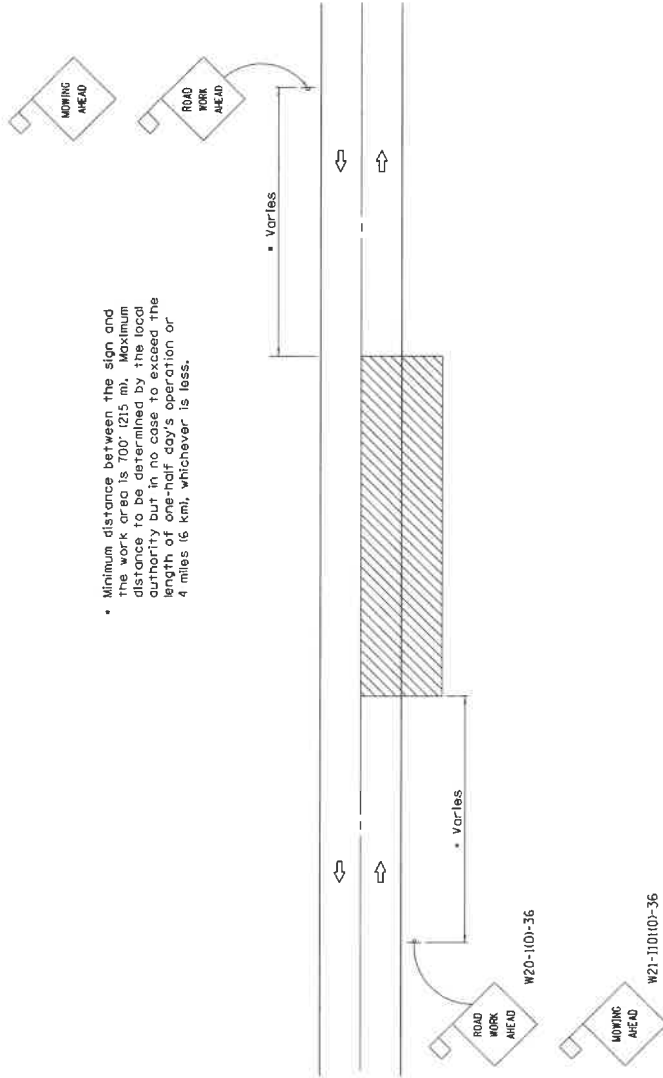
#### FLAGGER TRAFFIC CONTROL SIGN

**TRAFFIC CONTROL DEVICES**  
(Sheet 2 of 3)

**STANDARD 701901-08**

APPROVED	ISSUED
January 1, 2019	1-1-13
Illinois Department of Transportation	
APPROVED	APPROVED
ENGINEER OF SAFETY	ENGINEER OF DESIGN AND ENVIRONMENT
2019	2019





- Minimum distance between the sign and the work area is 700' (215 m). Minimum distance to be determined by the local authority but in no case to exceed the length of one-half day's operation or 4 miles (6 km), whichever is less.

## TWO-LANE, TWO-WAY TRAFFIC RURAL OPERATIONS ONLY DAY OPERATIONS ONLY

### SYMBOLS

Work area



Sign with 18x18 (450x450) mm, orange flag attached.



### TYPICAL APPLICATIONS

MOWING  
SPREADING AGGREGATE  
WEED SPRAYING  
SURFACE MAINTENANCE  
BITUMINOUS RESURFACING  
CRACK POURING  
SHOULDER REPAIR  
CLEANING DITCHES

### GENERAL NOTES

Maintenance operations shall be confined to one traffic lane, leaving the opposite lane open to traffic. At least 500' (150 m) of both traffic lanes shall be available for traffic movement between work areas at intervals not greater than 1000' (300 m).

When operations are on the pavement and stationary or moving at a speed less than 4 mph (6 km/h), a ONE LANE AHEAD, or other appropriate sign, shall be installed in each direction between the ROAD WORK AHEAD sign and the work area. The distance between the sign and the work area shall be a minimum of 400' (120 m) but in no case to exceed the length of one-half day's operation or 4 miles (6 km), whichever is less. The distance between the two signs shall be approximately 400' (120 m).

All signs are to be removed at completion of the day's operation.

Any unattended obstacle, excavation, or pavement drop off greater than 3 (75) in the work area shall be protected by Type I or Type II barricades with flashing lights.

Longitudinal dimensions may be adjusted slightly to fit field conditions.

All vehicles, equipment, men, and their activities are restricted at all times to one side of the pavement.

Flashing lights or rotating beacons are required for all maintenance vehicles while in operation.

Applicable operations illustrated in Standard 701301 may be used when operations do not exceed 15 minutes on the pavement or 60 minutes on the shoulder respectively.

All warning signs shall have minimum dimensions of 36x36 (900x900) mm and have a black legend on an orange reflectorized background.

When fluorescent signs are used, orange flags are not required.

This case is for use on rural local roads where the local authority considers this protection to be appropriate for the specific job conditions.

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

DATE	REVISIONS
1-1-15	Corrected RWA sign number.
1-1-09	Switched units to English (metric). Moved one General Note.

## TRAFFIC CONTROL DEVICES-- DAY LABOR MAINTENANCE

STANDARD B.L.R. 18-6

Illinois Department of Transportation APPROVED January 1, 2015 ENGINEER OF LOCAL ROADS AND STREETS APPROVED January 1, 2015 ENGINEER OF HIGHWAY AND ENVIRONMENT		ISSUED 1-1-97
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