SECTION 905 -- PROPOSAL (CONTINUED)

I (We) hereby certify by digital signature and electronic submission via Bid Express of the Section 905 proposal below, that all certifications, disclosures and affidavits incorporated herein are deemed to be duly executed in the aggregate, fully enforceable and binding upon delivery of the bid proposal. I (We) further acknowledge that this certification shall not extend to the bid bond or alternate security which must be separately executed for the benefit of the Commission. This signature does not cure deficiencies in any required certifications, disclosures and/or affidavits. I (We) also acknowledge the right of the Commission to require full and final execution on any certification, disclosure or affidavit contained in the proposal at the Commission's election upon award. Failure to so execute at the Commission's request within the time allowed in the Standard Specifications for execution of all contract documents will result in forfeiture of the bid bond or alternate security.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO.	1	DATED	7/9/2025	ADDENDUM NO.		DATED	
ADDENDUM NO	2	DATED	8/5/2025	ADDENDUM NO.		DATED	
ADDENDUM NO		DATED		ADDENDUM NO.		DATED	

Number	Description
1	Postponed til August 26, 2025 Letting; Amendment EBSx Download Required.
2	Revised Table of Contents; Revised Advertisement; Revised NTB Nos. 7011 & 7013; SP 907-626-12 replaces SP 907-626-11; SP 907-720-4 replaces SP 907-720-3; Revised Bid Items; Revised Progress Schedule; Amendment EBSx Download Required.

TOTAL ADDENDA: 2
(Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE _____

_____
Contractor

BY _____
Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

_____
President Address

_____
Secretary Address

_____
Treasurer Address

The following is my (our) itemized proposal.

SP-0021-01(071)/ 109225301000 & SP-0021-01(076)/ 109933301000

Desoto County(ies)

Revised 01/26/2016

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
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(REVISIONS TO THE ABOVE WILL BE INDICATED ON THE SECOND SHEET
OF SECTION 905 AS ADDENDA)

08/04/2025 01:29 PM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 901 - ADVERTISEMENT

Electronic bids will be received by the Mississippi Transportation Commission at 10:00 o'clock A.M., Tuesday, August 26, 2025, from the Bid Express Service and shorty thereafter publicly read on the Sixth Floor For:

Mill & Overlay approximately 4 miles of SR 302 from 0.25 mile west of Malone Road to 0.06 mile east of US 78 & approximately 4 miles from 0.2 mile east of Airways Boulevard to 0.25 mile west of Malone Road, known as Project Nos. SP-0021-01(071) / 109225301 & SP-0021-01(076) / 109933301 in Desoto County.

The attention of bidders is directed to the Contract Provisions governing selection and employment of labor. Minimum wage rates have been predetermined by the Secretary of Labor and are subject to Public Law 87-581, Work Hours Act of 1962, as set forth in the Contract Provisions.

The Mississippi Department of Transportation hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, age, disability, religion or national origin in consideration for an award.

The award of this contract will be contingent upon the Contractor satisfying the DBE requirements.

The specifications are on file in the offices of the Mississippi Department of Transportation.

Contractors may request permission to bid online at http://shop.mdot.ms.gov at no cost. Upon approval, Contractors shall be eligible to submit a bid using Bid Express at http://bidx.com. Specimen proposals may be viewed and downloaded online at no cost at http://mdot.ms.gov or purchased online at http://shop.mdot.ms.gov at a cost of Ten Dollars ($10.00) per proposal plus a small convenience fee. Cash or checks will not be accepted as payment.

Bid bond, signed or countersigned by a Mississippi Agent or Qualified Nonresident Agent, with Power of Attorney attached, a Cashier's check or Certified Check for five (5%) percent of bid, payable to STATE OF MISSISSIPPI, must accompany each proposal.

The attention of bidders is directed to the provisions of Subsection 102.07 pertaining to irregular proposals and rejection of bids.

BRAD WHITE
EXECUTIVE DIRECTOR

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7011 **CODE: (SP)**

DATE: **08/05/2025**

SUBJECT: **Contract Time**

PROJECT: **SP-0021-01(071) / 109225301 & SP-0021-01(076) / 109933301**
Desoto County

The completion of work to be performed by the Contractor for this project will not be a specified date but shall be when all allowable working days are assessed, or any extension thereto as provided in Subsection 108.06. It is anticipated that the Notice of Award will be issued no later than **September 09, 2025** and the date for Notice to Proceed / Beginning of Contract Time will be **October 09, 2025**.

Should the Contractor request a Notice to Proceed earlier than **October 09, 2025** and it is agreeable with the Department for an early Notice to Proceed, the requested date will become the new Notice to Proceed date. Regardless of whether or not an early Notice to Proceed is granted, contract time will start at the original Notice to Proceed date.

All requests for an early Notice to Proceed shall be sent to the Project Engineer who will forward it to the Contract Administration Division.

157 Working Days have been allowed for the completion of work on this project.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7013 **CODE: (SP)**

DATE: **08/05/2025**

SUBJECT: **Scope of Work**

PROJECT: **SP-0021-01(071) / 109225301 & SP-0021-01(076) / 109933301**
Desoto County

The contract documents do not include an official set of construction plans but may, by reference; include some Standard Drawings when so specified in a Notice to Bidders entitled, "Standard Drawings".

PROJECT: SP-0021-01(071) / 109225301

The work to be accomplished using the pay items and corresponding specifications set forth in this contract is for milling and overlay of Mississippi Highway 302, beginning at 0.25 miles west of Malone Road (Station 672+00) and going easterly for approximately 4.2 miles to 0.06 miles east of US Highway 78 (Station 890+82).

It shall be the responsibility of the Contractor to protect the roadway and all existing structures, such as bridges and curb, from damage occurring as a result of the Contractor's operations. Damages to existing features caused by the Contractor's operations shall be repaired or replaced at no cost to the Mississippi Department of Transportation.

At bridge ends and at the end of workday, a taper of one (1) vertical inch for each three (3) horizontal foot shall be provided.

The Contractor shall make a utility location request to 811 prior to any excavation, except for trench widening or pavement removal/repair.

In order to expedite the safe movement of traffic and to protect each phase of the work as it is performed, a firm sequence of operations is essential. The work shall be begun and continually prosecuted.

The work shall consist of the following:

1. The following items have been set up for base repair if needed. These items will be used at the discretion of the Engineer.

    - 202-B, Removal of Asphalt Pavement, All Depths – for pavement structure.
    - 203-G, Excess Excavation – for material below the pavement structure
    - 304-F, Crushed Stone – to be used to replace unsuitable material below the 1-foot limit
    - 403-A, 19-mm, ST, Asphalt Pavement

- 503-C, Saw Cut, Full Depth

NOTE: Failed areas are estimated as one foot (1') of excavation and backfilled with one foot (1') (maximum 3½" lifts) of 19-mm, ST, asphalt. The asphalt shall be placed per the Project Engineer's instructions.

NOTE: Failed areas are to be backfilled the same day as excavation.

2. Fine milling of the existing asphalt pavement to a depth of two (2) inches. Milling operations shall be on the mainline, local roads, crossovers, and driveway pads. Fifty (50%) percent or a maximum of 10,000 tons of the milling material obtained shall become the property of the Mississippi Department of Transportation. The Contractor will deliver the milling material to the Desoto County Maintenance Shop located at 161 License Drive, Nesbit. The Contractor shall provide all necessary equipment and qualified personnel to push material into a suitable stockpile.

Area	Quantity (SY)
SR 302 Mainline	145,880
Intersections, driveways, shoulders	76,690
Total	222,570

NOTE: Payment for fine milling of pavement will be made under pay item 406-D, per square yard, and shall include all cost associated with the milling operation.

NOTE: Milled surfaces are to be covered with surface asphalt within five (5) calendar days of removal. The Contractor will be charged a fee of $5,000.00 for each full or partial day in which the milled surface is left uncovered after the five (5) calendar days.

NOTE: During this operation and prior to placement of the asphalt, due care shall be required to keep surface water from ponding on the roadway surface; continuous monitoring of the project may be required.

NOTE: During this operation and prior to placement of the asphalt, the Contractor shall repair and maintain all potholes.

3. The Contractor shall place the surface course on the previously milled surface.

Location	Type Mix	Area	Thickness	Asphalt
		SY	Inches	Tons
Mainline	12.5-mm, SMA	145,880	2	16,100
Intersections, driveways, shoulders	12.5-mm, HT, Poly	76,690	2	5,775

4. Placement of granular material on the shoulders as directed to raise the existing shoulders to the new surface course grade.

   NOTE: Shoulders shall be bladed, shaped and compacted throughout the length of the project regardless of whether granular material is required.

   NOTE: Granular material not required for the final shape of the shoulders may require removal under the pay item for excess excavation and may include small amounts of asphalt.

   NOTE: Due care shall be taken during this operation to blade material to the roadway and away from the ditch line. Material inadvertently bladed to the roadway vegetation shall be removed at no cost to the Mississippi Department of Transportation.

5. Placement of Temporary Traffic Stripe daily as per Special Provisions Nos. 907-618.

6. Place permanent pavement markings as required (Thermoplastic Striping, Reflective High Performance Raised Markers). Double Drop Thermoplastic Striping shall be required on the bridge decks. Contractor shall protect the preformed joint material. Any damage caused by the thermoplastic will be repaired at no cost to the State.

   NOTE: Right turn lanes will be extended as per the table below. Additional ARROWS and ONLY will be required.

Intersection	Travel direction	Description of change	Approximate Number of additional ARROWS and ONLY - spaced every 100 feet
Longview Heights Baptist Church	EB	Start turn lane 300 feet west of the west drive - 150-foot taper and 150-foot storage - extend turn lane to the first drive east of the Church - approximately 1000 foot in total length	8
Pleasant Hill Rd.	EB	Add turn lane with 300 feet of storage and a 150-foot taper (Begin taper at west side of Meadowbrook Lane)	2 - ARROWS; 1 - ONLY
	WB	Begin at the east side of the Target drive and install 150-foot taper and 150 feet of storage. Extend the right turn lane to the intersection of Pleasant Hill - approximately 1450 feet in total length	13

Enterprise Dr.	EB	Add turn lane with 200 feet of storage and a 150-foot taper	2 - ARROWS; 1 - ONLY
	WB	Add turn lane with 200 feet of storage and a 150-foot taper	2 - ARROWS; 1 – ONLY

7. Replace all existing post mounted standard roadside signs estimated in the attached table. The Contractor is to deliver the removed signs to the Desoto County Maintenance Shop located at 161 License Drive, Nesbit. All signs and hardware shall be removed from post prior to delivery. The Contractor is required to verify the sign quantity prior to ordering materials. All hardware and footings required for the erection of new signs and post shall be absorbed in other items of work.

Sign Quantity			
Pay Item	Description	Unit	Quantity
202-B	Removal of Sign, Including Post and Footing	EA	46
630-A	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness	SF	288.03
630-A	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness	SF	143.25
630-A	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness	SF	173.6
630-C	Square Tube Posts, 4.0 lb/ft	LF	15
630-C	Square Tube Post, 2.0 lb/ft	LF	705

NOTE: Existing pipe posts will remain in place with new signs attached as shown in the attached sign table.

8. Install radar detection at the traffic signals at the intersections of Malone Road, Pleasant Hill Road, Target/Planet Fitness, Davidson Road, South/West Hamilton Circle, Craft Road, Crumpler Boulevard/Eastover Boulevard, Enterprise Drive, US 78 West ramps, and US 78 East ramps per the attached information.

NOTE: Radar must be installed prior to milling out the loops.

TRAFFIC SIGNAL RADAR DETECTION CHART								
Intersection	**Detection Zone Location**	**Phase #**	**Detection Zone Size**	**STOPBAR Radar Unit**	**Advance Radar Unit**	**Radar Cable (ft)**	**Processor**	**Existing Pole Configuration**
302 at Malone	WB Left Turn Lane	1	6'X50'	1		210	1	Steel Strain Poles
	EB Thru Lanes	2	Priority Zone		1	175		

	SB Lanes	4	6'X50'	1		100		
	EB Left Turn Lane	5	6'X50'	1		200		
	WB Thru Lanes	6	Priority Zone		1	230		
	NB Lanes	8	6'X50'	1		300		
302 at Pleasant Hill	WB Left Turn Lane	1	6'X50'	1		380	1	Steel Strain Poles
	EB Thru Lanes	2	Priority Zone		1	330		
	NB Left Turn Lane	3	6'X50'	1		275		
	NB Thru Lanes	8	6'X50'					
	SB Thru Lanes	4	6'X50'	1		275		
	SB Left Turn Lane	7	6'X50'					
	EB Left Turn Lane	5	6'X50'	1		75		
	WB Thru Lanes	6	Priority Zone		1	140		
302 at Hobby Lobby/Target	WB Left Turn Lane	1	6'X50'	1		325	1	Mast Arm Poles
	EB Thru Lanes	2	Priority Zone		1	100		
	NB Left Turn Lane	3	6'X50'	1		180		
	NB Thru Lane	8	6'X50'					
	SB Thru Lane	4	6'X50'	1		200		
	SB Left Turn Lane	7	6'X50'					
	EB Left Turn Lane	5	6'X50'	1		75		
	WB Thru Lanes	6	Priority Zone		1	350		

Intersection	Detection Zone Location	Phase #	Detection Zone Size	STOPBAR Radar Unit	Advance Radar Unit	Radar Cable (ft)	Processor	Existing Pole Configuration
302 at Davidson	WB Left Turn Lane	1	6'X50'	1		75	1	Steel Strain Poles
	EB Thru Lanes	2	Priority Zone		1	150		
	SB Lanes	4	6'X50'	1		400		
	EB Left Turn Lane	5	6'X50'	1		400		
	WB Thru Lanes	6	Priority Zone		1	200		
	NB Lanes	8	6'X50'	1		250		
302 at Hamilton	WB Left Turn Lane	1	6'X50'	1		180	1	Mast Arm Poles
	EB Thru Lanes	2	Priority Zone		1	220		
	NB Lanes	3	6'X50'	1		75		
	SB Lanes	4	6'X50'	1		200		
	EB Left Turn Lane	5	6'X50'	1		225		
	WB Thru Lanes	6	Priority Zone		1	275		
302 at Craft	WB Left Turn Lane	1	Existing Video					Mast Arm Poles
	EB Thru Lanes	2	Existing Video					
	NB Left Turn Lane	3	Existing Video					
	NB Thru Lanes	8						
	SB Thru Lanes	4	Existing Video					
	SB Left Turn Lane	7						
	EB Left Turn Lane	5	Existing Video					
	WB Thru Lanes	6	Existing Video					
302 at Crumpler	WB Left Turn Lane	1	6'X50'	1		75	1	Steel Strain Poles
	EB Thru Lanes	2	Priority Zone		1	120		
	NB Lanes	3	6'X50'	1		200		
	SB Lanes	4	6'X50'	1		325		
	WB Thru Lanes	6	Priority Zone		1	200		

Intersection	Detection Zone Location	Phase #	Detection Zone Size	STOPBAR Radar Unit	Advance Radar Unit	Radar Cable (ft)	Processor	Existing Pole Configuration
302 at Enterprise	WB Left Turn Lane	1	6'X50'	1		200	1	Steel Strain Poles
	EB Thru Lanes	2	Priority Zone		1	175		
	NB Left Turn Lane	3	6'X50'	1		300		
	NB Thru Lane	8	6'X50'					
	SB Thru Lane	4	6'X50'	1		75		
	SB Left Turn Lane	7	6'X50'					
	EB Left Turn Lane	5	6'X50'	1		175		
	WB Thru Lanes	6	Priority Zone		1	200		
302 at 78 Ramps	WB Left Turn Lane	1	Existing Radar				1	Steel Strain Poles
	EB Thru Lanes	2	Priority Zone		1	220		
	SB Left Turn Lanes	3	6'X50'	1		315		
	WB Thru Lanes	4	Priority Zone		1	370		
	EB Left Turn Lane	5	6'X50'	1		280		
	WB Thru Lanes	6	Priority Zone		1	220		
	NB Left Turn Lanes	7	6'X50'	1		120		
	EB Thru Lanes	8	Priority Zone		1	170		
			Total	**30**	**18**	**10310**	**8**	

Note 1: Includes the replacement of controllers, conflict monitors, and installation of SDLC Hubs where called for.

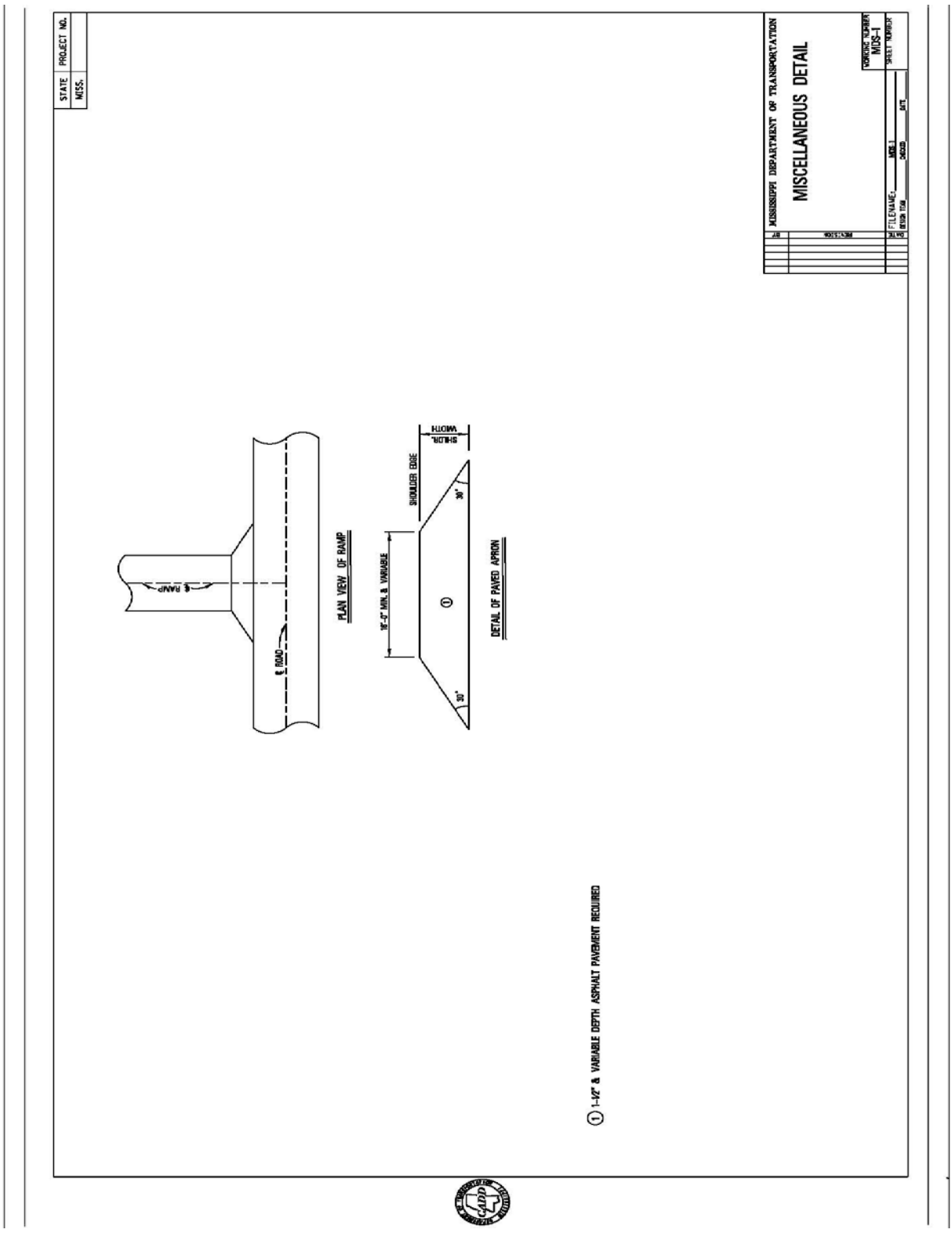
Note 2: Radar units shall be mounted per manufacturer recommendations. Contractor shall be responsible for setting up all new signal controllers and detection units as per manufacturer recommendations.

Note 3: Contractor may remove existing detection loop cable, if necessary.

Note 4: Cable quantities may be adjusted based on radar locations per manufacturer.

The Contractor shall provide all signs and traffic handling devices necessary to safely maintain traffic around or through the work areas.

The Engineer may direct the use of additional cones at County roads or intersections within lane closures and will be absorbed in pay item 907-618-A: Maintenance of Traffic.


STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
MISCELLANEOUS DETAIL
DRAWING NUMBER
MDS-1
SHEET NUMBER
FILENAME:
MDS-1
DESIGN
DATE
DATE
BY
REVISION
℄ RAMP
℄ ROAD
PLAN VIEW OF RAMP
SHOULDER EDGE
SHLDR. WIDTH
30°
30°
16'-0" MIN. & VARIABLE
①
DETAIL OF PAVED APRON
① 1-1/2" & VARIABLE DEPTH ASPHALT PAVEMENT REQUIRED

PROJECT: SP-0021-01(076) / 109933301

The work to be accomplished using the pay items and corresponding specifications set forth in this contract is for milling and overlay of Mississippi Highway 302, beginning at 0.2 miles east of Airways Boulevard (Station 474+20) and going easterly for approximately 3.8 miles to 0.25 miles west of Malone Road (Station 672+00).

It shall be the responsibility of the Contractor to protect the roadway and all existing structures, such as bridges and curb, from damage occurring as a result of the Contractor's operations. Damages to existing features caused by the Contractor's operations shall be repaired or replaced at no cost to the Mississippi Department of Transportation.

At bridge ends and at the end of workday, a taper of one vertical inch (1") for each three horizontal feet (3') shall be provided.

The Contractor shall make a utility location request to 811 prior to any excavation, except for trench widening or pavement removal/repair.

In order to expedite the safe movement of traffic and to protect each phase of the work as it is performed, a firm sequence of operations is essential. The work shall be begun and continually prosecuted.

The work shall consist of the following:

1. The following items have been set up for base repair if needed. These items will be used at the discretion of the Engineer.

- 202-B, Removal of Asphalt Pavement, All Depths – for pavement structure.
- 203-G, Excess Excavation – for material below the pavement structure
- 304-F, Crushed Stone – to be used to replace unsuitable material below the 1-foot limit
- 403-A, 19-mm, ST, Asphalt Pavement
- 503-C, Saw Cut, Full Depth

NOTE: Failed areas are estimated as one foot (1') of excavation and backfilled with one foot (1') (maximum 3½" lifts) of 19-mm, ST, asphalt. The asphalt shall be placed per the Project Engineer's instructions.

NOTE: Failed areas shall be backfilled the same day as excavation.

2. Fine milling of the existing asphalt pavement to a depth of two (2) inches. Milling operations shall be on the mainline, local roads, crossovers, and driveway pads. Fifty (50%) percent or a maximum of 10,000 tons of the milling material obtained shall become the property of the Mississippi Department of Transportation. The Contractor will deliver the milling material to the Desoto County Maintenance Shop located at 161 License Drive, Nesbit. The Contractor shall provide all necessary equipment and qualified personnel to push material into a suitable stockpile.

Area	Quantity (SY)
US 302 Mainline	131,867
Side Roads and Turning Lanes	51,933
Total	183,800

NOTE: Payment for fine milling of pavement will be made under pay item 406-D, per square yard, and shall include all cost associated with the milling operation.

NOTE: Milled surfaces shall be covered with surface asphalt within five (5) calendar days of removal. The Contractor will be charged a fee of $5,000.00 for each full or partial day in which the milled surface is left uncovered after the five (5) calendar days.

NOTE: During this operation and prior to placement of the asphalt, due care shall be required to keep surface water from ponding on the roadway surface; continuous monitoring of the project may be required.

NOTE: During this operation and prior to placement of the asphalt, Contractor shall repair and maintain all potholes.

3. The Contractor shall place the surface course on the previously milled surface.

Location	Type Mix	Area	Thickness	Asphalt
		SY	Inches	Tons
Mainline	9.5-mm, SMA	131,867	2	14,550
Intersections, Turn Lanes, Shoulders	12.5-mm, HT Poly	51,933	2	5,750

4. Placement of granular material on the shoulders as directed to raise the existing shoulders to the new surface course grade.

   NOTE: Shoulders shall be bladed, shaped and compacted throughout the length of the project regardless of whether granular material is required.

   NOTE: Granular material not required for the final shape of the shoulders may require removal under the pay item for excess excavation and may include small amounts of asphalt.

   NOTE: Due care shall be taken during this operation to blade material to the roadway and away from the ditch line. Material inadvertently bladed to the roadway vegetation shall be removed at no cost to the Mississippi Department of Transportation.

5. Placement of Temporary Traffic Stripe daily as per Special Provisions Nos. 907-618.

6. Place permanent pavement markings as required (Thermoplastic Striping, Reflective High Performance Raised Markers). Double Drop Thermoplastic Striping shall be required on the bridge decks. Contractor shall protect the preformed joint material. Any damage caused by the thermoplastic will be repaired at no cost to the State.

NOTE: Right turn lanes will be extended as per the table below. Additional ARROWS and ONLY will be required.

Intersection	Travel direction	Description of change	Approximate Number of additional ARROWS and ONLY - spaced every 100 feet
Getwell	EB	Begin the 150-foot taper at the east taper of the drive at Firestone Auto Care	5
	WB	Begin the 150-foot taper on the west side of Sonic drive	2
Malone Rd	EB	Add 200 feet of storage and 150-foot taper on the west side of existing turn lane	2 - ARROWS; 1 - ONLY
	WB	Add 200 feet of storage and 150-foot taper on the east side of existing turn lane	2 - ARROWS; 1 - ONLY

7. Replace all existing post mounted standard roadside signs estimated in the attached table. The Contractor is to deliver the removed signs to the Desoto County Maintenance Shop located at 161 License Drive, Nesbit. All signs and hardware shall be removed from post prior to delivery. The Contractor is required to verify the sign quantity prior to ordering materials. All hardware and footings required for the erection of new signs and post shall be absorbed in other items of work.

Sign Quantity			
Pay Item	Description	Unit	Quantity
202-B	Removal of Sign, Including Post and Footing	EA	40
630-A	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness	SF	152.8
630-A	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness	SF	155

630-A	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness	SF	129.9
630-C	Square Tube Posts, 4.0 lb/ft	LF	75
630-C	Square Tube Post, 2.0 lb/ft	LF	585

NOTE: Existing pipe posts will remain in place with new signs attached as shown in the attached sign table.

8. Install radar detection at the traffic signals at the intersections of Elmore Road, Swinnea Road, Tchulahoma Road, and Getwell Road per the attached information.

NOTE: Radar must be installed prior to milling out the loops.

TRAFFIC SIGNAL RADAR DETECTION CHART

Intersection	Detection Zone Location	Phase #	Detection Zone Size	STOPBAR Radar Unit	Advance Radar Unit	Radar Cable (ft)	Processor	Existing Pole Configuration
302 at Elmore	WB Left Turn Lane	1	6'X50'	1		60	1	Steel Strain Poles
	EB Thru Lanes	2	Priority Zone		1	100		
	NB Left Turn Lane	3	6'X50'	1		175		
	NB Thru Lanes	8	6'X50'					
	SB Thru Lane	4	6'X50'	1		200		
	SB Left Turn Lane	7	6'X50'					
	EB Left Turn Lane	5	6'X50'	1		175		
	WB Thru Lanes	6	Priority Zone		1	125		
302 at Swinnea	WB Left Turn Lane	1	6'X50'	1		275	1	Steel Strain Poles
	EB Thru Lanes	2	Priority Zone		1	230		
	NB Left Turn Lane	3	6'X50'	1		160		
	NB Thru Lanes	8	6'X50'					
	SB Thru Lanes	4	6'X50'	1		150		
	SB Left Turn Lane	7	6'X50'					
	EB Left Turn Lane	5	6'X50'	1		50		

	WB Thru Lanes	6	Priority Zone		1	90		
302 at Tchulahoma	WB Left Turn Lane	1	Existing Video					Mast Arm Poles
	EB Thru Lanes	2	Existing Video					
	NB Lanes	3	Existing Video					
	SB Lanes	4	Existing Video					
	EB Left Turn Lane	5	Existing Video					
	WB Thru Lanes	6	Existing Video					

Intersection	**Detection Zone Location**	**Phase #**	**Detection Zone Size**	**STOPBAR Radar Unit**	**Advance Radar Unit**	**Radar Cable (ft)**	**Processor**	**Existing Pole Configuration**
302 at Getwell	WB Left Turn Lane	1	Existing Video					Mast Arm Poles
	EB Thru Lanes	2	Existing Video					
	NB Left Turn Lanes	3	Existing Video					
	NB Thru Lanes	8	Existing Video					
	SB Thru Lanes	4	Existing Video					
	SB Left Turn Lanes	7	Existing Video					
	EB Left Turn Lane	5	Existing Video					
	WB Thru Lanes	6	Existing Video					
			Total	**8**	**4**	**1790**	**2**	

Note 1: Includes the replacement of controllers, conflict monitors, and installation of SDLC Hubs where called for.

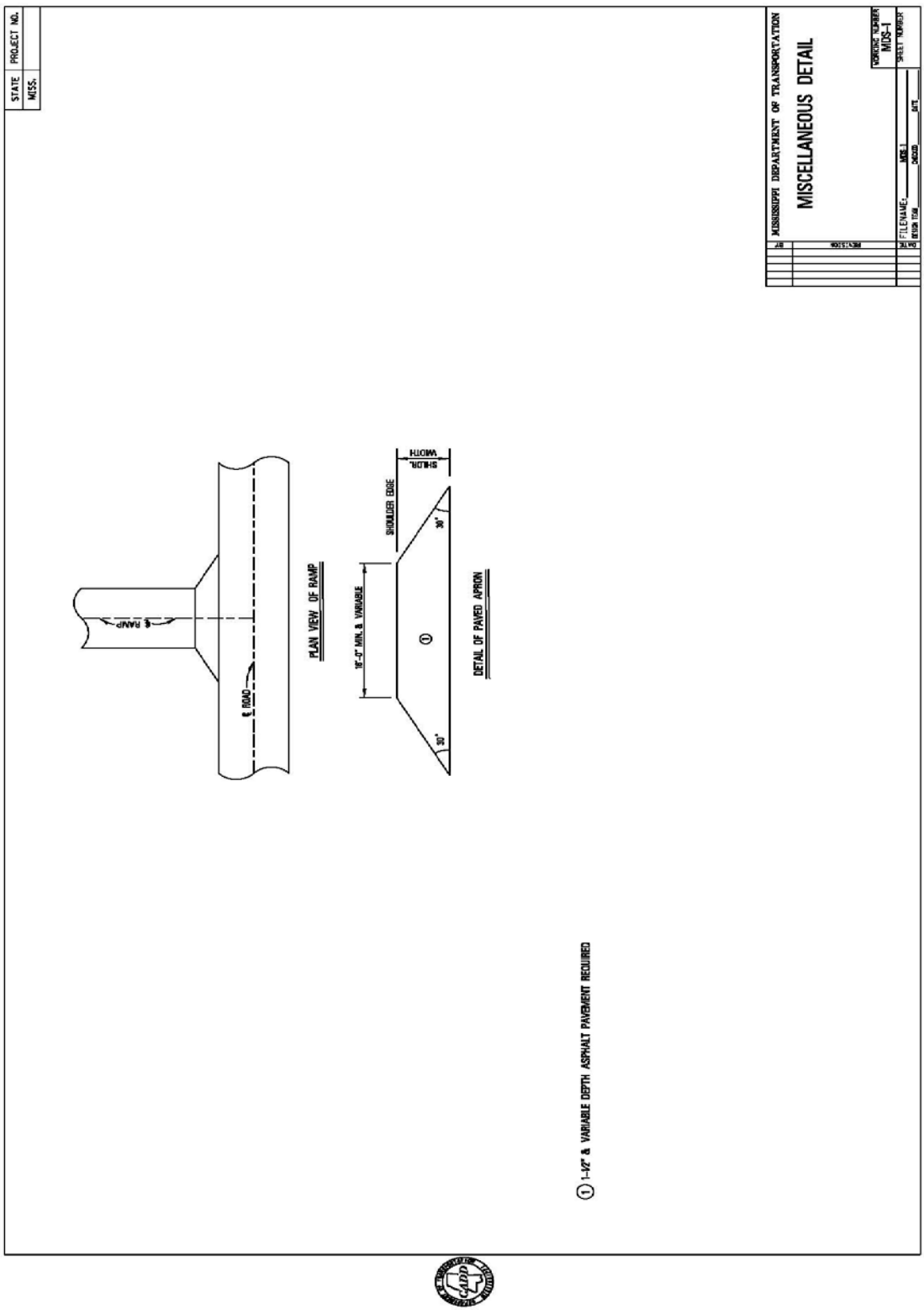
Note 2: Radar units shall be mounted per manufacturer recommendations. The Contractor shall be responsible for setting up all new signal controllers and detection units as per manufacturer recommendations.

Note 3: The Contractor may remove existing detection loop cable, if necessary.

Note 4: Cable quantities may be adjusted based on radar locations per manufacturer recommendations.

The Contractor shall provide all signs and traffic handling devices necessary to safely maintain traffic around or through the work areas.

The Engineer may direct the use of additional cones at County roads or intersections within lane closures and will be absorbed in pay item 907-618-A: Maintenance of Traffic.


STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
MISCELLANEOUS DETAIL
DRAWING NUMBER
MDS-1
SHEET NUMBER
BY
REVISION
DATE
FILENAME:
MDS-1
DESIGN ITEM
CHECKED
DATE
℄ RAMP
℄ ROAD
PLAN VIEW OF RAMP
SHOULDER EDGE
SHLDR. WIDTH
16'-0" MIN. & VARIABLE
30°
30°
①
DETAIL OF PAVED APRON
① 1-1/2" & VARIABLE DEPTH ASPHALT PAVEMENT REQUIRED

Hwy 302 from Malone Rd to Hwy 78

Location (Sta. #)	Lane Location	Sign Code	Sign Description	Size	630-A Standard Roadside Signs, Sheet Alumimum, 0.08" (SF)	630-A Standard Roadside Signs, Sheet Alumimum, 0.1" (SF)	630-A Standard Roadside Signs, Sheet Alumimum, 0.125" (SF)	630-C Square Tube Posts, 2.0 lb/ft (LF)	630-C Square Tube Posts, 4.0 lb/ft (LF)	202-B Removal U-Channel	Notes (missing but need to be added) (side road)
675+86	RT	W3-3	Stop Light Ahead	48x48			16				EB (west of Malone rd)
679+92	LT	R3-9b	Center Turning Lane	24x36	6			15		1	WB in front of SecureTrust
685+00	LT	R5-1	Do Not Enter	36x36		9		15		1	Malone SB right turn onto 302 WB
		R1-2	Yield	36" triangle	3.9						with do not enter
686+00	RT	R5-1	Do Not Enter	36x36		9		15		1	302 EB right turn onto Malone SB
		R1-2	Yield	36" triangle	3.9						with do not enter
687+00	LT	R5-1	Do Not Enter	36x36		9		15		1	302 WB right turn onto Malone NB
		R1-2	Yield	36" triangle	3.9						with do not enter
688+00	RT	R5-1	Do Not Enter	36x36		9		15		1	Malone NB right turn onto 302 EB
		R1-2	Yield	36" triangle	3.9						with do not enter
693+16	LT	R3-9b	Center Turning Lane	24x36	6			15		1	WB (east of Malone rd)
695+45	LT	W3-3	Stop Light Ahead	48x48			16				WB (east of Malone rd)
704+09	RT	S4-3P	School	24x8	1.33			15		1	302 EB before Longview Heights church/school
704+09		R2-1	Speed limit 45	24x30	5						
704+09		S4-2P	When Children present	24x10	1.67						
712+48	LT	R3-9b	Center Turning Lane	24x36	6			15		1	302 WB across from Longview Heights
716+28	LT	S1-1	Pedestrian crossing/school	36x36	9			15		1	302 WB across from Longview Heights
720+61	LT	S4-3P	School	24x8	1.33			15		1	302 WB before Longview Heights church/school
720+61		R2-1	Speed Limit 45	24x30	5						
720+61		S4-2P	When Children present	24x10	1.67						
723+10	RT	R3-9b	Center Turning Lane	24x36	6			15		1	
728+75	RT	R1-1	36" Stop Sign	36" Oct		7.46					Summerset Dr. (post in place but no sign)
731+00	RT	W3-3	Stop Light Ahead	48x48			16		15		302 EB before Pleasant Hill (missing)
734+00	RT	R1-1	36" Stop Sign	36" Oct		7.46		15		1	Meadowbrook Road
734+28	LT	R2-1	Speed Limit 55	24x30	5			15		1	302 WB in front of Gateway
738+00	LT	R5-1	Do Not Enter	36x36		9		15		1	Pleasant Hill SB right turn onto 302 WB
		R1-2	Yield	36" triangle	3.9						with do not enter
738+50	RT	R5-1	Do Not Enter	36x36		9		15		1	302 EB right turn onto Pleasant Hill SB
		R1-2	Yield	36" triangle	3.9						with do not enter
740+00	LT	R5-1	Do Not Enter	36x36		9		15		1	302 WB right turn onto Pleasant Hill NB
		R1-2	Yield	36" triangle	3.9						with do not enter
740+50	RT	R5-1	Do Not Enter	36x36		9		15		1	Pleasant Hill NB right turn onto 302 EB
		R1-2	Yield	36" triangle	3.9						with do not enter
744+73	RT	R2-1	Speed Limit 55	24x30	5			15		1	302 EB in front of Academy
748+28	LT	W3-3	Stop Light Ahead	48x48			16				WB (east of Pleasant Hill)
761+00	LT	R1-1	36" Stop Sign	36" Oct		7.46					Southbranch Pkwy
763+60	RT	R3-9b	Center Turning Lane	24x36	6			15		1	302 EB across from Potbelly
764+15	LT	R3-9b	Center Turning Lane	24x36	6			15		1	302 WB across from Methodist LeBonheur Healthcare
773+15	RT	R1-1	36" Stop Sign	36" Oct		7.46		15			Wedgewood (missing)
777+49	RT	R3-9b	Center Turning Lane	24x36	6			15		1	302 EB across from Crossroad Motors
781+25	LT	R3-9b	Center Turning Lane	24x36	6			15		1	302 WB across from DAS
783+40	LT	R2-1	Speed Limit 55	24x30	5			15		1	302 WB in front of All Animal Hospital
791+00	LT	R5-1	Do Not Enter	36x36		9		15		1	Davidson SB right turn onto 302 WB
		R1-2	Yield	36" triangle	3.9						with do not enter
793+75	LT	R5-1	Do Not Enter	36x36		9		15		1	302 WB right turn onto Davidson NB
		R1-2	Yield	36" triangle	3.9						with do not enter
794+23	RT	R3-9b	Center Turning Lane	24x36	6			15		1	302 EB across from NAPA
796+95	LT	R3-9b	Center Turning Lane	24x36	6			15		1	302 WB across from Carwash
797+25	LT									1	Empty post across from Carwash - Remove sign post only
799+09	LT	W2-1	Intersection Warning	30x30			6.25				302 WB across from Captain D
804+00	RT	R1-1	36" Stop Sign	36" Oct		7.46					Autumn Oaks Dr
813+04	RT	R3-9b	Center Turning Lane	24x36	6			15		1	302 EB across from Mugshots
818+00	RT	R1-1	36" Stop Sign	36" Oct		7.46					Whippoorwill Drive
819+00	RT	W3-3	Stop Light Ahead	48x48			16				EB (east of Whippoorwill)
827+00	LT	R1-1	36" Stop Sign	36" Oct		7.46					at entrance to Arby's
827+66	LT	W3-3	Stop Light Ahead	48x48			16				WB (east of Hamilton Cr)
827+77	RT	W3-5	Reduced Speed Limit Ahead (45)	36x36			9				302 EB across from RedMed - reuse blue directional sign on top
828+45	LT	R3-9b	Center Turning Lane	24x36	6			15		1	302 WB across from RedMed
834+60	RT	R2-1	Speed Limit 45	24x30	5			15		1	302 EB in front of Advanced Auto Parts
835+72	LT	R2-1	Speed Limit 55	24x30	5			15		1	302 WB in front of Advanced Auto Parts
842+65	RT	W3-3	Stop Light Ahead	48x48			16				EB (west of Craft)
842+80	RT	R3-9b	Center Turning Lane	24x36	6			15		1	302 EB across from Walgreens
843+97	LT	R3-9b	Center Turning Lane	24x36	6			15		1	302 WB across from Walgreens
850+22	LT	W3-3	Stop Light Ahead	48			16				WB (east of Craft)
851+17	LT	R2-1	Speed Limit 45	24x30	5			15		1	302 EB
856+12	RT	R3-9b	Center Turning Lane	24x36	6			15		1	302 EB in front of Nationwide
856+16	LT	R3-9b	Center Turning Lane	24x36	6			15		1	302 EB in front of Advanced Dermatology
858+70	RT	R4-7	Keep Right	24x30	5						Oak Forest Dr. south center island
859+00	RT	R1-1	36" Stop Sign	36" Oct		7.46					Oak Forest Dr. south
858+70	LT	R4-7	Keep Right	24x30	5						Oak Forest Dr. north center island
858+70	LT	REUSE	Do Not Litter $325 Fine	12x18							same post as Keep Right - reuse sign
858+40	RT	R1-1	36" Stop Sign	36" Oct		7.46					Oak Forest Dr. north - missing
864+23	LT	R2-1	Speed Limit 45	24x30	5			15		1	302 WB west of Eastover
867+24	RT	R3-9b	Center Turning Lane	24x36	6			15		1	302 EB across from Autozone
869+16	RT	M2-1P	JCT	21x15	2.19			15			302 EB in front of Kroger
		M1-4	"78"	24x24	4						same post as JCT
869+60	LT	R1-1	36" Stop Sign	36" Oct		7.46					Ashley Cove (across from Kroger)

875+40	LT	R2-1	Speed Limit 45	24x30	5			15		1	302 WB east of Enterprise
877+64	LT	R3-9b	Center Turning Lane	24x36	6			15		1	302 EB across from Applebees
879+00	LT	R1-2	Yield	36" triangle	3.9			15		1	bottom of 78 ramp
879+94	RT	M3-4P	West	24x12	2						6 on one post
879+94		M1-4	"78"	24x24	4						
879+94		M6-3P	Arrow	21x15	2.19						
879+94		M3-2P	East	24x12	2						
879+94		M1-4	"78"	24x24	4						
879+94		M6-2P	Arrow	21x15	2.19						
882+00	RT	R1-2	Yield	36" triangle	3.9			15		1	EB 78 ramp
891+34	LT	M3-2P	East	24x12	2						302 WB (3 on 1 post)
891+34		M1-4	"78"	24x24	4						
891+34		M6-1P	Arrow	21x15	2.19						
888+58	RT	M3-4P	West	24x12	2						302 EB (3 on one post)
888+58		M1-4	"78"	24x24	4						
888+58		M6-1P	Arrow	21x15	2.19						
889+50	LT	R1-2	Yield	36" triangle	3.9			15		1	WB 78 ramp
890+00	RT	R6-1L	One Way	36x12	3						bottom of 78 ramp
	RT	R5-1	Do Not Enter	36x36		9					same post as "one way"
887+28	LT	D9-2	Hospital	24x24	4			15		1	302 WB east of 78
		M6-1P	Arrow (blue background)	21x15	2.19						with hospital sign
877+29	RT	D9-2	Hospital	24x24	4			15		1	302 EB west of 78
		M6-1P	Arrow (blue background)	21x15	2.19						with hospital sign
Totals					**288.03**	**173.6**	**143.25**	**705**	**15**	**46**	

Hwy 302 from Airways to Malone

Location (Sta. #)	Lane Location	Sign Code	Sign Description	Size	630-A001 0.08" (SF)	630-A005 0.1" (SF)	630-A003 0.125" (SF)	630-C005 2lb Post (LF)	630-C001 4lb Post (LF)	202-B219 Removal U-Channel	Notes:
473+20	LT	R2-1	Speed Limit 45	24x30	5			15		1	WB (west of Airways)
476+10	RT	W9-1	Right Lane Ends	36x36	9			15		1	EB (east of Airways)
477+15	RT	W9-2	Lane Ends. Merge Left	36x36	9			15		1	EB (east of Airways) (all text)
479+00	RT	W4-2R	Lane Ends	36x36			9	15		1	EB (East of Airways)
484+00	RT	R2-1	Speed Limit 45	24x30	5			15		1	front of Ford dealership
485+50	LT	R1-1	36" Stop	36" Oct		7.46		15		1	Malco Blvd w/Street Names
488+25	RT	R1-1	36" Stop	36" Oct		7.46		15		1	Hospitality Lane
496+50	LT	R1-1	36" Stop	36" Oct		7.46		15		1	Greenbriar Dr. w/Street Names
496+50	RT	R1-1	36" Stop	36" Oct		7.46		15			Greenbriar Dr south side (coming out of Sam's) - missing
499+50	RT	W3-3	Stop Light Ahead	48			16		15		EB (west of Elmore) - missing
509+00	LT	W3-3	Stop Light Ahead	48			16		15		WB (east of Elmore) - missing
504+00	RT	R2-1	Speed Limit 45	24x30	5			15		1	east of Elmore
514+25	LT	R1-1	36" Stop	36" Oct		7.46		15		1	Flower Creek Dr. w/Street Names
521+00	RT	W3-3	Stop Light Ahead	48			16				EB (west of Swinnea Rd) ***EXISTING PIPE POST**
522+25	RT	R1-1	36" Stop	36" Oct		7.46			15	1	Drive east of Harbor Freight
523+00	LT	R2-1	Speed Limit 45	24x30	5			15		1	WB
530+00	LT	W3-3	Stop Light Ahead	48			16		15	1	WB (east of Swinnea)
531+00	RT	R3-9b	Center Turning Lane	24x36	6						Across from Kohls ***EXISTING PIPE POST**
531+50	LT	W3-3	Stop Light Ahead	48"			16				WB (east of Swinnea) ***EXISTING PIPE POST**
535+00	LT	R3-9b	Center Turning Lane	24x36	6			15		1	west of McCain
536+00	RT	R3-9b	Center Turning Lane	24x36	6			15		1	west of McCain
540+00	RT	R1-1	36" Stop	36" Oct		7.46		15		1	McCain Dr w/Street Names
541+00	LT	R1-1	36" Stop	36" Oct		7.46		15		1	Stonegate Blvd
542+00	LT	R2-1	Speed Limit 45	24x30	5			15		1	front of Italia restaurant
543+00	RT	R3-9b	Center Turning Lane	24x36	6			15		1	EB (east of McCain)
547+25	LT	R3-9b	Center Turning Lane	24x36	6			15		1	front of Pepboys
550+00	RT	R2-1	Speed Limit 45	24x30	5			15		1	EB (east of Fox Chase)
560+00	LT	R3-9b	Center Turning Lane	24x36	6			15		1	front of O'Reilly
560+50	RT	R2-1	Speed Limit 45	24x30	5			15		1	EB past O'Reilly
570+00	LT	R3-9b	Center Turning Lane	24x36	6			15		1	WB (west of Pecan Ln)
570+00	RT	R2-1	Speed Limit 45	24x30	5			15		1	EB (west of Pecan Ln)
574+29	LT	R1-1	36" Stop	36" Oct		7.46					Pecan Ln w/Street Names ***EXISTING PIPE POST**
577+00	RT	W3-3	Stop Light Ahead	48x48			16				EB (west of Tchulahoma) ***EXISTING PIPE POST**
580+50	RT	W4-2	Lane Ends	36x36			9	15		1	on Tchulahoma SB
		reuse	no trucks $1000 fine	reuse	0						same pole as Tchulahoma SB Lane Ends
580+80	LT	W4-2	Lane Ends	36x36			9	15		1	on Tchulahoma NB
		reuse	no trucks $1000 fine	reuse	0						same pole as Tchulahoma NB Lane Ends
582+50	RT	R2-1	Speed Limit 55	24x30	5			15		1	EB (east of Tchulahoma)
582+50	LT	W3-3	Stop Light Ahead	48x48			16				WB (east of Tchulahoma) ***EXISTING PIPE POST**
591+00	LT	R2-1	Speed Limit 45	24x30	5			15		1	WB (east of Wholesale Nutrition)
598+30	LT	R3-9b	Center Turning Lane	24x36	6			15		1	WB (west of Country Oaks)
598+30	RT	R3-9b	Center Turning Lane	24x36	6			15		1	EB (west of Country Oaks)
598+86	LT	R1-1	36" Stop	36" Oct		7.46					Country Oaks w/Street Names ***EXISTING PIPE POST**
600+00	LT	W3-5	Reduced SL Ahead (45)	36x36	9			15		1	WB (east of Country Oaks)
613+64	LT	R1-1	36" Stop	36" Oct		7.46		15		1	Timber Trail w/Street Names
629+50	RT	W3-3	Stop Light Ahead	48x48			16		15		EB (west of Tchulahoma)
643+50	RT	R1-2	Yield	36" triangle	3.9			15		1	Rt turn from EB302 onto SB Snowden
		R5-1	Do Not enter	36x36		9					same pole as yield
645+00	RT	R1-2	Yield	36" triangle	3.9			15		1	Rt turn from NB Snowden onto EB302
		R5-1	Do Not enter	36x36		9					same pole as yield
643+66	RT	R1-1	36" Stop	36" Oct		7.46		15		1	Snowden
643+66	LT	R1-1	36" Stop	36" Oct		7.46		15		1	Creech Dr w/Street Names
647+00	RT	R2-1	Speed Limit 55	24x30	5			15		1	front of Waffle house
		R7-1	No Parking Any Time	12x18	1.5						(no arrow on sign) same pole as speed limit 55
650+00	RT	R3-9b	Center Turning Lane	24x36	6			15		1	
		R7-1	No Parking Any Time	12x18	1.5						(no arrow on sign) same pole as center turn lane
660+50	RT	R1-1	36" Stop	36" Oct		7.46					Cobblestone Blvd w/Street Names ***EXISTING PIPE POST**
667+00	LT	R1-1	36" Stop	36" Oct		7.46		15		1	Cowboy Drive w/Street Names
Totals					**152.8**	**129.9**	**155**	**585**	**75**	**40**	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-626-12 **CODE: (IS)**

DATE: 06/17/2025

SUBJECT: Thermoplastic Traffic Markings

Section 626, Thermoplastic Traffic Markings, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete Section 626 on pages 492 thru 496, and substitute the following.

SECTION 626 - THERMOPLASTIC TRAFFIC MARKINGS

907-626.01--Description. This work consists of furnishing materials and placing thermoplastic pavement markings of the type specified in conformity with these specifications and the details shown on the plans or established. All hot-applied thermoplastic pavement markings shall be coated with a double-drop combination of optics.

This work may also consist of placing an audible bump or puck style marking system on the edge line that provides an audible and vibratory warning when driven over. The marking system shall be a road marking system of the dimensions indicated at regular and predetermined intervals.

This work may also consist of placing a profile or raised shape marking system on centerline or edge line that provides audible and vibratory warning when driven over. The marking system shall be a road marking system of the dimensions indicated and at regular and predetermined intervals. When placed on centerline, the markings system shall consist of an extruded black transverse thermoplastic bar of the dimensions indicated at regular and predetermined intervals.

This work may also consist of placing high contrast thermoplastic markings. High contrast thermoplastic markings shall consist of placing thermoplastic pavement markings over a black thermoplastic pavement marking to enhance the marking's visibility.

All pavement marking material, excluding lines over rumble strips, shall be applied using the extrusion/ribbon method. Lines placed over rumble strips shall be applied using the atomization/spray method, unless the extrusion/ribbon method can be demonstrated to perform adequately and is approved by the Engineer.

Permanent pavement marking tape (permanent cold plastic tape) may be used in lieu of hot applied thermoplastic markings. Substitution will only be allowed for pay items 907-626-A through H. Substituted pavement marking tape shall be of the same color and width as that required for the hot applied thermoplastic. Unless otherwise specified, the markings, whether hot applied or pavement marking tape, shall be of the same type of material for the entire project. Stop bars and crosswalks shall not be substituted with pavement marking tape and shall be alkyd hot-applied thermoplastic markings or heat-fused preformed pavement markings. Material and construction

requirements for substituted pavement marking tape shall meet the requirements of Special Provision 907-628. The layout and spacing for substituted pavement markings will remain as shown in the plans, or in the contract documents, for hot applied thermoplastic markings. Measurement of adhesive substituted pavement markings shall be made in accordance with Special Provision 907-628. Payment for adhesive substituted pavement markings shall be made at the unit price for the appropriate hot applied thermoplastic marking.

When thermoplastic pavement markings are used on bridge decks or concrete surfaces, the surface shall be sealed with an epoxy sealer prior to the application of thermoplastic.

907-626.02--Materials. All pavement marking materials shall meet the requirements of Special Provision 907-720.

907-626.02.1--Audible Bumps. Audible bumps shall have a profile such that the leading and trailing edges are sloped at a sufficient angle to create an audible and vibratory warning.

Audible bumps shall be at least 0.45 inches above the pavement surface at the highest point of the bump. The height shall be measured after the application of drop-on material. The bumps shall have a minimum dimension of two and one-half inches (2½") in both transverse and longitudinal directions. The bumps may have a drainage channel. The width of each drainage channel shall not exceed one-quarter of an inch (¼") at the bottom of the channel.

907-626.02.2--Audible Transverse Bars. The length of transverse bars is the measurement lateral to the direction of travel, also known as transverse width. The width of transverse bars is the measurement parallel to the travel way.

Transverse bars on centerline shall have a length of 10 inches, a width of three inches (3"), and a height of 350 mils. Transverse bars on centerline shall be placed on 2-foot centers through no-passing zones and 5-foot centers through passing zones. Transverse bars on centerline shall be placed in advance of permanent thermoplastic markings.

Transverse bars on edge lines shall have a length of six inches (6"), a width of three inches (3"), and a height of 350 mils. Transverse bars on edge lines shall be placed on 2-foot centers. Tolerance for the longitudinal and transverse measurements shall be one quarter of an inch (¼") and the tolerance for height shall be 50 mils. The above dimensions are based on 6-inch strip application.

Thermoplastic material for edge line transverse bars shall be as specified on the Plans and meet the requirements of Special Provision 907-720 or as specified on the plans. Thermoplastic material for centerline transverse bars shall be black and shall meet the requirements of Special Provision 907-720.

907-626.02.3--High Contrast Markings. High contrast markings shall be black with the pertinent marking color overlaid on top and shall meet the requirements of Special Provision 907-720.

907-626.03--Construction Requirements.

907-626.03.1--Equipment. Equipment for hot application shall be of sufficient size and stability to ensure smooth, uniform, properly aligned markings of the dimensions specified. The equipment shall be suitably equipped for heating and controlling the flow of the material. The equipment shall be constructed to provide continuous mixing and agitation of the material. The conveying parts of the equipment, between the main material reservoir and applicator, shall be so constructed as to prevent accumulation and clogging. The equipment shall be constructed so that all mixing and conveying parts, up to and including the applicator, maintain the material at the plastic temperature. The thermoplastic material shall be dispensed at a temperature recommended by the manufacturer. The applicator shall include a cutoff device remotely controlled to provide clean, square stripe ends and to provide a method for applying skip lines. The thermoplastic reservoir shall be insulated and equipped with an automatic thermostatic control to maintain the proper temperature of the material.

The application equipment shall be capable of automatic placement of intermittent and continuous line patterns in single or double line applications simultaneously. The intermittent timer mechanism shall provide a variable ratio of materials applied and variable cycle length such that accurate placement of new patterns, or replacement of existing patterns can be achieved.

The equipment shall also be capable of applying the top dressing of optics (beads) in a manner that firmly embeds them into the surface of the thermoplastic material for at least one half of the diameter of the larger gradation sizes of the optics. The dispensing equipment shall be equipped with an automatic cut-off control for the application of the optics that is synchronized with the cut-off of the thermoplastic material.

Optics applied to the surface of the completed stripe shall be applied by an automatic dispenser attached to the pavement marking equipment in such a manner that the optics are immediately dispensed upon the completed line. The dispenser shall be equipped with an automatic cutoff control, synchronized with the cutoff of the pavement marking equipment. The double-drop optics as defined in 907-720 shall be automatically applied at a uniform rate to achieve the minimum retroreflectivity requirements of 907-626.

907-626.03.2--Construction Details. The thermoplastic compound shall be screed or ribbon extruded to the pavement surface. Heat-fused, pre-formed pavement markings shall be fusible to asphalt surfaces by means of the normal heat of a propane weed-burner type of torch or other heating device as recommended by the manufacturer. Heat-fused, pre-formed pavement markings shall be instantly highly reflective without the application of additional optics.

Thermoplastic markings shall not be applied to the pavement surface when the pavement surface temperature is less than 55°F. The pavement surface shall be dry, to the satisfaction of the Engineer, before application will be permitted. Unless otherwise specified by the manufacturer, thermoplastic pavement marking material shall be applied to the surface between 400°F and 450°F with a recommended application temperature being 420°F.

Immediately before application, all areas to be marked shall be thoroughly cleaned. Cleaning may be done by rotary brooms, air blast, scrapers, or whatever combination of equipment is necessary to clean the pavement thoroughly without damage to the pavement surface. On areas of pavement

cured with compound, the membrane shall be removed completely by shot blasting, sand blasting or other approved method. Before edge striping, particular care shall be taken to remove all vegetation, loose soil, and the like from the area to be marked. Should other methods fail, the surface shall be wetted with a water jet and scrubbed as necessary to dislodge all foreign material. After washing, the surface shall be allowed to dry thoroughly, and all films of dried mud apparent after surface drying shall be removed before application of markings. Marking shall follow as closely as practicable after the surface has been cleaned and dried, but no markings shall be applied until the surface has been inspected and permission given to proceed. The cost for preparing the surface shall be included in the contract unit prices for the marking items.

Unless otherwise directed by the Engineer, traffic stripes that are conflicting with the thermoplastic stripe shall be removed prior to placement of the thermoplastic material. Removal of pavement markings shall be done by a means that will not gouge the surface of the pavement in a manner that requires patching to ensure the integrity of the pavement. Temporary paint stripe may be left in place when satisfactorily placed in the proper location. Any temporary stripe not covered shall be removed. Payment for removal of stripe, except temporary stripe, will be made under Section 202.

On newly constructed asphalt pavements, any sand, grit, or other surface contaminants shall be removed using compressed air and/or sweeping. Water blasting may be necessary to remove surface contaminants which cannot be removed by the use of compressed air and/or sweeping. This work is considered surface preparation.

The finished lines shall have well defined edges and the thickness of thermoplastic markings above the roadway surface shall be no less than 90 mils for edge lines, center lines, lane lines, barrier lines, and detail stripe including gore markings, and no less than 120 mils for crosswalks, stop lines, and railroad, word and symbol markings. The minimum thickness, as required above, will be measured in the center of the line when gauged. The minimum thickness one-half inch (½") from the edges shall not be less than 75% of the thickness required in the center.

Any thermoplastic traffic marking less than the required thickness shall be corrected by recapping at no additional costs to the Department. Although a thickness tolerance of 25 percent from center to edge is allowed, a consistent underrun of any amount in thickness as determined by the Engineer will not be acceptable.

The length and width of lines shall be within a tolerance of ±3 inches and ±1/8 inch, respectively. For skip markings, the tolerance for intervals shall not exceed the line length tolerance. On curves, unsightly variations from the normal curvature will not be permitted unless specifically shown on the plans or ordered by the Engineer.

Heat-fused, pre-formed pavement markings shall be supplied with a minimum average thickness of 90 mils before application on the roadway surface.

All newly applied thermoplastic material shall be protected from traffic until the material is sufficiently dry so as not to sustain damage from vehicle tires. Any material so damaged by traffic shall be repaired, and the thermoplastic material tracked onto the pavement shall be removed and

replaced.

907-626.03.3--Reflectivity Requirements. The longitudinal pavement markings shall meet the following retroreflectivity values when measured within 10 to 30 calendar days of placement, after removing loose beads.

Table 1. Minimum Dry Retroreflectivity

Color	All Stripe without Rumble mcd/m²/lx	Rumble Stripe mcd/m²/lx
White	375	250
Yellow	225	150

For projects with less than two miles between the BOP and EOP, retroreflectivity measurements will not be required.

907-626.03.3.1--Measuring Devices. Retroreflectivity measurements are required to be taken using a vehicle mounted mobile retroreflectometer using 30-meter geometry with video and mapping capabilities as per AASHTO T-398. The retroreflectometer and operator shall be certified by the manufacturer, authorized representative of the manufacturer, or an MDOT approved program such as the Texas A&M Transportation Institute (TTI) Mobile Retroreflectometer Certification Program. The Contractor shall provide copies of current certifications for the operator(s) and the device(s) to the Engineer.

907-626.03.3.2--Acceptance Procedure. Averages of the mobile measurements shall be provided for every 0.1 miles unless otherwise specified or approved. Take measurements on each section of roadway for each series of markings (i.e., edge line, center skip line, each line of a double line, etc.) and for each direction of traffic flow. Measure each line in both directions for centerlines on two-way roadways (i.e., measure both double solid line in both directions and measure all center skip lines in both directions). Furnish measurements in compliance with the below requirements. Use all equipment in accordance with the manufacturer's recommendations and directions. Inform the Engineer at least 24 hours before taking any measurements.

A marking meets the retroreflectivity requirements if:

- The combined average retroreflectivity value for a one-mile segment meets the minimum retroreflectivity values specified, and
- Within the one-mile segment, no more than three consecutive 0.1 mile intervals shall have an average retroreflectivity value below the minimum required value.

The one-mile segment will start from the beginning of the data collection and end after a mile worth of measurements have been taken; each subsequent mile of measurements will be a new segment. If the remainder is 0.5 miles or less, it shall be included in the previous mile segment, otherwise the remaining segment of greater than 0.5 mile shall be its own segment. Centerlines with 2 stripes (either solid or broken) will result in 2 miles of data for each mile segment. Each centerline stripe must be tested for compliance as a stand-alone stripe.

The Contractor may elect to restripe with a minimum of 0.060 in. (60 mils) at no cost to the Department each one-mile segment that failed to meet the minimum retroreflectivity requirements.

Measurements shall be retaken within 10 to 30 calendar days after the second application for the mile segment for that series of markings. If the markings do not meet minimum retroreflectivity after the second application, the Engineer may require removal of all existing markings, a new application as initially specified, and a repeat of the application process until minimum retroreflectivity requirements are met.

907-626.03.3.3--Mobile Retroreflectivity Data Collection. Mobile Retroreflectivity Data Collection (MRDC) shall be conducted on dry pavement only and when the ambient air temperature is greater than 40°F. Data shall be submitted to the Engineer no later than 3 working days after the day the data is collected. Submit all raw data collected in addition to all other data submitted. Provide data files in Microsoft Excel format or a format approved by the Engineer. The data file and video must contain the following information.

907-626.03.3.3.1--Data File. Data files shall be provided with the following:

- Date;
- District;
- County;
- Name of mobile retroreflectometer operator;
- Route number with reference markers or other reference information provided by the Engineer to indicate the location of beginning and end data collection points on that roadway;
- Cardinal direction;
- Line type (single solid, single broken, double solid, etc.);
- Line color;
- File name corresponding to video;
- Data for each centerline listed separately;
- Average reading taken for each 0.1-mi. interval (or interval designated by the Engineer);
- Accurate GPS coordinates (within 20 ft.) for each interval;
- Color-coding for each interval indicating passing or failing, unless otherwise directed by the Engineer (passing and failing thresholds provided by the Engineer);
- Graphical representation of the MRDC (y-axis showing retroreflectivity and x-axis showing intervals) corresponding with each data file;
- Distance in miles driven while measuring the pavement markings;
- Event codes (pre-approved by the Engineer) indicating problems with measurement;
- Upper validation threshold (may be included separately with the raw data but must be clearly identified with the data collected using that threshold).

907-626.03.3.3.2--Map. A map shall be provided in an electronic format approved by the Engineer with each MRDC submission that includes the following information:

- Date;
- District number;
- County;

- Color-coded 1-mi. intervals (or interval length designated by the Engineer) for passing and failing retroreflectivity values or retroreflectivity threshold values provided by the Engineer; and
- Percentage of passing and failing intervals, if required by the Engineer.

907-626.03.3.3.3--Video. A high-quality video file shall be provided with the following information:

- Date and corresponding data file name on label;
- District number;
- County;
- Route number with reference markers or other designated reference information to indicate the location of beginning and end collection points on that roadway; and
- Retroreflectivity values presented on the same screen with the following information:
    - Date;
    - Location;
    - Starting and ending mileage;
    - Total miles;
    - Retroreflectivity readings; and
    - Upper validation thresholds (may be included separately with the raw data but must be clearly identified with the data collected using that threshold).

907-626.03.4--Reflectivity Verification Testing. The Engineer or a third party may perform retroreflectivity verification testing on any project. At a minimum, each Contractor performing work for the Department will be verified on an annual basis. The Contractor-submitted retroreflectivity data will be compared to the verification test data to determine acceptability of the Contractor's mobile retroreflectometer data. Comparison of the data will result in one of the two scenarios below:

- Contractor's Data is Validated – If the difference between Contractor's and Engineer/third party data is 20% or less, then the Contractor's data is validated. The Contractor's data will be used for acceptance.
- Contractor's Data is not Validated – If the difference between the Contractor's and Engineer/third party data is more than 20%, then the Contractor's data is not validated. The Engineer/third party data will be used for acceptance and the Contractor will be required to take corrective action prior to additional Contractor data collection and may require re-certification of the mobile retroreflectometer.

907-626.04--Method of Measurement. Thermoplastic stripe completed in accordance with the plans and specifications will be measured by the mile or by the linear foot, as indicated, from end-to-end of individual stripes. In the case of skip lines the measurement will include skip intervals. The length used to measure centerline, lane lines, and edge stripes will be the horizontal length computed along the roadway.

Detail traffic stripe will be measured by the linear foot from end-to-end of individual stripes. Measurements will be made along the surface of each stripe and will exclude skip intervals where

skips are specified. Stripes more than six inches (6") in width will be converted to equivalent lengths of 6-inch stripe.

Hot-applied legend, which is to include railroad markings, pedestrian crosswalks, and stop lines, will be measured by the square foot or linear foot. Pay areas of individual letters and symbols will usually be shown on the plans and measured by the square foot. Transverse railroad bands, pedestrian crosswalks and stop lines will generally be measured by the linear foot, in which case, stripes more than six inches (6") in width will be converted to equivalent lengths of 6-inch widths.

Pre-formed legend which is to include railroad markings and pedestrian crosswalks will be measured and paid for by each.

The length measured for thermoplastic audible bump edge stripe will not include the permanent thermoplastic edge stripe. Permanent thermoplastic edge stripe will be measured for payment under a separate pay item.

Thermoplastic audible bar centerline skip stripe will be measured by the linear foot or mile. Measurements will be made along the surface from end-to-end of the stripe and will include skip intervals. The length used to measure audible bar centerline stripe will be the horizontal length computed along the roadway. The length measured for thermoplastic audible bar centerline skip stripe will not include the permanent centerline continuous or skip stripe. Permanent centerline continuous and skip stripe will be measured for payment under separate pay items.

Thermoplastic audible bar edge stripe will be measured by the linear foot or mile. Measurements will be made along the surface from end-to-end of the stripe. The length used to measure thermoplastic audible bar edge stripe will be the horizontal length computed along the roadway. The length measured for thermoplastic audible bar edge stripe will not include the permanent thermoplastic edge stripe. Permanent thermoplastic edge stripe will be measured for payment under a separate pay item.

907-626.05--Basis of Payment. Thermoplastic traffic markings will be paid for at the contract unit price per mile, linear foot, square foot or each as applicable. Any deductions for non-satisfactory material test results will be made after final testing has been performed.

Payment will be made under:

907-626-A:	6" Thermoplastic Traffic Stripe, Skip White	- per linear foot or mile
907-626-B:	6" Thermoplastic Traffic Stripe, Continuous White	- per linear foot or mile
907-626-C:	6" Thermoplastic Edge Stripe, Continuous White	- per linear foot or mile
907-626-D:	6" Thermoplastic Traffic Stripe, Skip Yellow	- per linear foot or mile
907-626-E:	6" Thermoplastic Traffic Stripe, Continuous Yellow	- per linear foot or mile

907-626-F:	6" Thermoplastic Edge Stripe, Continuous Yellow	- per linear foot or mile
907-626-G:	Thermoplastic Detail Stripe, Color *	- per linear foot
907-626-H:	Thermoplastic Legend, Color *	- per linear foot, square foot, or per each
907-626-Q:	Thermoplastic Audible Bump Edge Stripe	-per linear foot or mile
907-626-R:	Thermoplastic Detail Audible *** Stripe, Color **,	-per mile
907-626-AA:	6" High Contrast Thermoplastic Traffic Stripe, Skip White	- per linear foot or mile
907-626-BB:	6" High Contrast Thermoplastic Traffic Stripe, Continuous White	- per linear foot or mile
907-626-CC:	6" High Contrast Thermoplastic Edge Stripe, Continuous White	- per linear foot or mile
907-626-DD:	6" High Contrast Thermoplastic Traffic Stripe, Skip Yellow	- per linear foot or mile
907-626-EE:	6" High Contrast Thermoplastic Traffic Stripe, Continuous Yellow	- per linear foot or mile
907-626-FF:	6" High Contrast Thermoplastic Edge Stripe, Continuous Yellow	- per linear foot or mile
907-626-GG:	High Contrast Thermoplastic Detail Stripe, Color *	- per linear foot
907-626-HH:	High Contrast Thermoplastic Legend, Color *	- per linear foot, square foot, or each

* Indicate Blue - ADA if applicable
** Indicate White or Black
*** Indicate Centerline - Passing Zone, Centerline - No-Passing Zone, or Edge Line

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-720-4 **CODE: (IS)**

DATE: **06/17/2025**

SUBJECT: **Pavement Marking Materials**

Section 720, Pavement Marking Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete Section 720 on pages 840 thru 854, and substitute the following.

SECTION 720 - PAVEMENT MARKING MATERIALS

907-720.01--General. The Department reserves the right to perform sampling and testing of any materials at any time. Upon request of the Engineer, samples of the material shall be furnished.

907-720.02--Color Requirements. All pavement markings except raised pavement markers are required to meet the color requirements of ASTM D6628.

907-720.03--Optics. Optics used in thermoplastic pavement markings shall consist of a double-drop system of glass beads or advanced optics.

907-720.03.1--Glass Beads. The manufacturer shall furnish the Engineer with a certified test report indicating that the glass beads meet AASHTO M 247. AASHTO Type 4 beads shall be applied to the newly placed stripe first, followed by the application of AASHTO Type 1 or Type 2 beads. Type 1, 2, and 4 glass beads shall be transparent, clean, colorless glass, smooth and spherically shaped, free from milkiness, pits, or excessive air bubbles. Type 1, 2, and 4 glass beads shall be coated with a bead coating that is compatible with the traffic marking material to which the glass beads will be applied and will provide adequate moisture proofing, increased adhesion, and optimum embedment of the glass beads.

907-720.03.1.1—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing will be in accordance with the Materials Division Inspection, Testing, and Certification Manual (Materials Manual).

907-720.03.2--Advanced Optics. Advanced optics are materials that do not meet the specific requirements of AASHTO M 247 but produce a final drop-on optics system that meets or exceeds the reflectivity requirements in Special Provision 907-626. Advanced optics shall be a double-

drop system that is pre-approved and listed on the Department's Approved Products List.

907-720.03.2.1—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing may be conducted at the request of the Engineer.

907-720.04--Thermoplastic Marking Material. Thermoplastic marking material shall meet the color requirements of Subsection 907-720.02.

There shall be no obvious change in the color of the material if held at its plastic temperature for a period of four (4) hours nor by reason of four (4) re-heatings to its plastic temperature.

The pavement markings shall maintain its original dimension and placement. The material shall not be slippery when wet and it shall not lift from the pavement in freezing weather.

907-720.04.1--Extruded Thermoplastic Material. Extruded thermoplastic pavement marking material shall meet the requirements of AASHTO M 249, and shall meet the requirements of 907-720.04 with the following exceptions:

- Blue - ADA thermoplastic marking material shall meet the requirements of Subsection 907-720.04.2 with the exception that the color shall be Blue – ADA, and the Contractor may use hot applied thermoplastic materials meeting the satisfaction of the Engineer.

907-720.04.2--Spray-Applied Thermoplastic Material. Spray-applied thermoplastic pavement marking material shall meet the requirements of AASHTO M 249 and shall meet the requirements of 907-720.04.

907-720.04.3--Pre-formed Thermoplastic Material. Heat-fused, pre-formed thermoplastic pavement marking material shall meet the color requirements of 907-720.02.

907-720.04.4—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

907-720.05--Pavement Marking Tape. Pavement marking tape shall be listed on the Department's Approved Lists.

907-720.05.1—Cold Plastic Pavement Markings (Permanent Pavement Marking Tape). Pavement marking tape for use in roadway applications shall be designated on the Department's Approved Lists as permanent.

The prefabricated markings described shall consist of white or yellow pigmented plastic films with reflective optics uniformly distributed throughout their entire cross-sectional area, and be capable of being affixed by either a pressure sensitive pre-coated adhesive or a liquid contact cement. The markings shall be provided complete in a form that will facilitate rapid application and protect the markings in shipment and storage. The manufacturer shall identify proper solvents and/or adhesives to be applied at the time of application, all equipment necessary for proper application, and recommendations for application that will assure an effective performance life.

Prefabricated legends and symbols shall conform to the applicable shapes and sizes as outlined in the current "Manual on Uniform Traffic Control Devices."

907-720.05.1.1--Specific Requirements. Unless otherwise indicated on the plans, the patterned material without adhesive shall have a minimum caliper of 0.065 inch at the thickest portion of the patterned cross-section and a minimum caliper of 0.020 inch at the thinnest portion of the cross-section. The material shall be a pliant polymer film with 50±15% of the surface are raised and presenting a near vertical face angle of 0° to 60° to traffic from any direction. The channels between the raised areas shall be substantially free of exposed optics or particles.

The size and quality of the optics will be such that performance requirements of Subsection 907-720.02 for the retroreflective pliant polymer film shall be met. The pigments shall be selected and blended to provide a marking film that is white or yellow conforming to the performance requirements of Subsection 907-720.02 through the expected life of the film.

907-720.05.1.2--Conformability and Resealing. The marking shall be capable of conforming to pavement contours, breaks, faults, etc. through the action of traffic at normal pavement temperatures.

The marking shall have resealing characteristics that allows it to be capable of fusing with itself and previously applied marking of the same composition under normal conditions of use. The marking shall be capable of use for patching worn areas of the same type in accordance with manufacturer's instructions.

907-720.05.1.3--Tensile Strength and Elongation. The material shall have a minimum tensile strength of 40 pounds per square inch of cross section when tested according to ASTM D 638. A 6-inch x 1-inch x 0.06-inch sample shall be tested at a temperature between 70°F and 80°F using a jaw speed of 12 inches per minute.

The material shall have a minimum elongation of 75% at break when tested according to ASTM D 638 using a jaw speed of 12 inches per minute.

907-720.05.1.4--Skid Resistance. The surface of the material shall provide a minimum skid resistance value of 45 BPN when tested according to ASTM E 303 except values will be taken at

downweb and at a 45-degree angle from downweb. These two values will then be averaged to find the skid resistance of the patterned surface.

907-720.05.1.5--Effective Performance Life and Warranty. When applied according to the recommendations of the manufacturer the pavement marking tape shall provide a neat and durable marking that will not flow or distort due to temperature if the pavement surface remains stable. The film shall be weather resistant and through normal traffic wear shall show no appreciable fading, lifting, or shrinkage throughout the useful life of the marking, nor shall it show significant tearing, roll back, or other signs of poor adhesion.

All manufacturer's standard warranties and guarantees on pavement marking tape, which are provided as customary trade practice, shall be delivered to the Engineer at the final inspection. All warranties and guarantees shall be made out to the Department.

907-720.05.1.6—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing will be in accordance with the Materials Division Inspection, Testing, and Certification Manual (Materials Manual). Samples of the material shall be furnished and shall be provided at no cost to the State.

907-720.05.2--Preformed Pavement Markings for Construction Zones. Preformed pavement markings for construction zones shall be designated Department's Approved Lists as temporary. Retroreflective preformed pavement markings for construction zones shall be as specified on the plans or in the contract documents.

The markings shall be provided in specified widths and shapes. Preformed words and symbols shall conform to the applicable shapes and sizes as outlined in the current "Manual on Uniform Traffic Control Devices for Streets and Highways," or as modified.

The materials shall be packaged in accordance with accepted commercial standards and when stored indoors in a cool dry place, shall be suitable for use one year after date of purchase.

907-720.05.2.1--Specific Requirements. Preformed markings shall consist of retroreflective materials on a conformable backing and shall meet the performance requirements of Subsection 907-720.02. The markings shall consist of a mixture of high-quality polymeric materials, pigments, and optics with a reflective layer of optics bonded to the top surface. The markings shall be pre-coated with a pressure sensitive adhesive capable of adhering to pavement in accordance with the manufacturer's instructions without the use of heat, solvents, or other additional adhesives. The markings and/or adhesive shall not require any curing time after application. A coated non-metallic medium shall be incorporated with the pressure sensitive adhesive to facilitate removal.

907-720.05.2.2—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

907-720.06--Raised Pavement Markers. Pavement markers shall be listed on the Department's Approved Lists and shall conform to ASTM D 4280.

907-720.06.1--Packaging. Shipments shall be made in containers acceptable to common carriers and packaged in such a manner as to ensure delivery in perfect condition. All damaged shipments shall be replaced by the Contractor. Each package shall be clearly marked as to the name of the manufacturer, type, quantity enclosed, lot number, and date of manufacture.

907-720.06.2--Non-Reflective Pavement Markers. Non-reflective pavement markers are occasionally referred to as "jiggle markers". Non-reflective markers consisting of a heat-fired, vitreous, ceramic base, and a heat-fired, opaque, glazed surface are permitted for use; the bottom of the marker shall not be glazed. Ceramic markers shall be produced from any suitable combination of intimately mixed clays, shales, talcs, flints, feldspars, or other inorganic material. Ceramic markers shall be thoroughly and evenly matured, and all non-reflective pavement markers shall be free from defects which affect appearance or serviceability.

Ceramic non-reflective markers shall conform to the following finish and testing requirements in Table 2 below.

Table 2

Ceramic Non-Reflective Marker Requirements	
Glaze Thickness	0.005 inch, minimum
Mohs Hardness	6, minimum
Autoclave	Glaze shall not spall, craze, or peel.
Compressive Strength	750 psi, minimum
Water Absorption	2.0%, maximum

907-720.06.3—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

907-720.07--Adhesive for Pavement Markers. The adhesive shall be listed on the Department's Approved Lists and shall be an asphaltic material suitable for bonding pavement markers to surfaces when the road surface and marker temperatures are in the range of 50°F to 160°F. The composition of the adhesive must be such that its properties will not deteriorate when heated to and applied at temperatures up to 425°F. Samples may be submitted in the form of an adhesive

testing package from each batch or material obtained from a package shipped to the project.

907-720.07.1--Packaging and Labeling. The adhesive shall be packaged in self-releasing cardboard containers that will stack properly. The label shall show the manufacturer, quantity, and lot or batch number. "Adhesive for Pavement Markers" or "Adhesive for Traffic Markers" shall be printed in bold lettering on the label.

907-720.07.2--Bituminous Adhesive. The asphaltic adhesive material shall be flexible type.

907-720.07.2.1--Flexible Bituminous Adhesive. Flexible bituminous adhesive shall be designated on the Department's Approved Lists as flexible and shall comply with requirements of Table 3 below.

Table 3

Flexible Bituminous Adhesive Properties			
	Min	Max	Test Method
Penetration @ 77°F	-	25	ASTM D 5
Softening Point, °F	200	-	ASTM D 36
Brookfield Viscosity @ 400°F, cp.	-	10,000	ASTM D 3236
Ductility @ 77°F, 5 cm/min	15	-	ASTM D 113
Ductility @ 39.2°F, 1 cm/min	5	-	ASTM D 113
Asphalt Compatibility	Pass		ASTM D 5329
Flexibility @ 20°F	Pass		Per Subsection

907-720.07.3—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing will be in accordance with the Materials Division Inspection, Testing, and Certification Manual (Materials Manual). Samples of the material shall be furnished and shall be provided at no cost to the State.

Mill & Overlay approximately 4 miles of SR 302 from 0.25 mile west of Malone Road to 0.06 mile east of US 78 & approximately 4 miles from 0.2 mile east of Airways Boulevard to 0.25 mile west of Malone Road, known as Project Nos. SP-0021-01(071) / 109225301 & SP-0021-01(076) / 109933301 in Desoto County.

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
			Roadway Items		
0010	202-B007		100	Square Yard	Removal of Asphalt Pavement, All Depths
0020	202-B215		86	Each	Removal of Sign Including Post & Footing
0030	203-G001	(E)	200	Cubic Yard	Excess Excavation, FM, AH
0032	304-B004	(GT)	2,225	Ton	Granular Material, Class 5, Group D
0040	406-D001		406,370	Square Yard	Fine Milling of Bituminous Pavement, All Depths
0050	407-A001	(A2)	38,282	Gallon	Asphalt for Tack Coat
0060	503-C010		400	Linear Feet	Saw Cut, Full Depth
0070	618-B001		2	Square Feet	Additional Construction Signs [$10.00]
0080	619-A1001		17	Mile	Temporary Traffic Stripe, Continuous White
0090	619-A2001		18	Mile	Temporary Traffic Stripe, Continuous Yellow
0100	619-A3001		17	Mile	Temporary Traffic Stripe, Skip White
0110	619-A4002		17	Mile	Temporary Traffic Stripe, Skip Yellow
0120	619-A5001		35,221	Linear Feet	Temporary Traffic Stripe, Detail
0130	619-A6002		10,548	Linear Feet	Temporary Traffic Stripe, Legend
0140	620-A001		1	Lump Sum	Mobilization
0150	630-A001		442	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness
0160	630-A003		299	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness
0170	630-A005		304	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness
0180	630-C001		90	Linear Feet	Square Tube Posts, 4.0 lb/ft
0190	630-C005		1,290	Linear Feet	Square Tube Posts, 2.0 lb/ft
0200	907-403-A006	(BA1)	200	Ton	19-mm, ST, Asphalt Pavement
0210	907-403-D001	(BA1)	11,525	Ton	12.5-mm, HT, Asphalt Pavement, Polymer Modified
0220	907-405-A002	(BA1)	30,650	Ton	Stone Matrix Asphalt, 12.5 mm Mixture
0230	907-618-A001		1	Lump Sum	Maintenance of Traffic
0240	907-626-A007		17	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip White
0250	907-626-C012		17	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous White
0260	907-626-D003		17	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow
0270	907-626-E003		18	Mile	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
0280	907-626-G006		35,221	Linear Feet	Thermoplastic Double Drop Detail Stripe, White
0290	907-626-G007		6,136	Linear Feet	Thermoplastic Double Drop Detail Stripe, Yellow
0300	907-626-H006		7,912	Square Feet	Thermoplastic Double Drop Legend, White
0310	907-626-H007		10,548	Linear Feet	Thermoplastic Double Drop Legend, White

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0320	907-627-J001		675	Each	Two-Way Clear Reflective High Performance Raised Markers
0330	907-627-K001		2,085	Each	Red-Clear Reflective High Performance Raised Markers
0340	907-627-L001		6,253	Each	Two-Way Yellow Reflective High Performance Raised Markers
0350	907-632-C001		10	Each	Modify Existing Traffic Signal Cabinet Assembly
0360	907-641-A002		38	Each	Signal Stop Bar Radar Vehicle Detection Sensor, Type 2
0370	907-641-B002		22	Each	Signal Advanced Radar Vehicle Detection Sensor, Type 2
0380	907-641-D001		12,100	Linear Feet	Radar Vehicle Detection Cable
0390	907-641-F002		10	Each	Signal Radar Vehicle Detection Processor, Type 2
			ALTERNATE GROUP AA NUMBER 1		
0400	304-F001	(GT)	200	Ton	3/4" and Down Crushed Stone Base
			ALTERNATE GROUP AA NUMBER 2		
0410	304-F002	(GT)	200	Ton	Size 610 Crushed Stone Base
			ALTERNATE GROUP AA NUMBER 3		
0420	304-F003	(GT)	200	Ton	Size 825B Crushed Stone Base

FORM CSD-612
Rev. 1 / 2015

YEAR 2025 PROGRESS SCHEDULE YEAR 2026

PROJECT NUMBER SP-0021-01(071)/ 109225301 & SP-0021-01(076) / 109933301
COUNTY Desoto

NO.	WORK PHASE DESCRIPTION	LINE NUMBERS	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	
1	Miscellaneous	20, 70-190, 230, 350-390										0											157				
2	Base & Pavements	10, 30-60, 200-220, 400-420										5	22				40						152				
3	Stripe	240-340																					152	157			
	LET:	August 26, 2025																									
	NOA:	September 09, 2025																									
	NTP/BCT:	October 09, 2025																									
	W.D.:	157																									
MONTH			JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	172 WORKING DAYS PER YEAR
ANTICIPATED WORKING DAYS PER MONTH			6	7	11	15	19	20	21	21	20	16	11	5	6	7	11	15	19	20	21	21	20	16	11	5	

NOTE: THE ANTICIPATED WORKING DAYS SHOWN ON THIS SCHEDULE ARE FOR INFORMATIONAL PURPOSES ONLY.
THE ACTUAL WORKING DAY TOTAL AS ASSESSED BY THE PROJECT ENGINEER ON FORM CSD-765 SHALL GOVERN.