

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. <u> 1 </u>	DATED <u> 11/16/2021 </u>	ADDENDUM NO. <u> </u>	DATED <u> </u>
ADDENDUM NO. <u> </u>	DATED <u> </u>	ADDENDUM NO. <u> </u>	DATED <u> </u>
ADDENDUM NO. <u> </u>	DATED <u> </u>	ADDENDUM NO. <u> </u>	DATED <u> </u>

Number	Description
1	Revised Table of Contents; Deleted Notice to Bidder No. 2783; Revised Notice to Bidder No. 3704; Added S.P No. 907-619-5; Revised Bid Items; Amendment EBSx Download Required.

TOTAL ADDENDA: 1
(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-9519-00(004)/ 108715301000, SP-9520-00(001)/ 108715302000 & SP-9513-00(001)/ 108715303000
Lincoln County(ies)

Revised 01/26/2016

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION
TABLE OF CONTENTS**

**PROJECT: SP-9519-00(004)/108715301 - Lincoln
SP-9520-00(001)/108715302 - Lincoln
SP-9513-00(001)/108715303 - Lincoln**

Section 901 - Advertisement

Section 904 - Notice to Bidders

#1	Governing Specification, w/ Supplement
#3	Final Cleanup
#9	Federal Bridge Formula
#14	Railway-Highway Provision, w/Supplement
#113	Tack Coat
#296	Reduced Speed Limit Signs
#445	Mississippi Agent or Qualified Nonresident Agent
#516	Errata and Modifications to the 2017 Standard Specifications
#1225	Early Notice to Proceed
#1226	Material Storage Under Bridges
#1241	Fuel and Material Adjustments
#2206	MASH Compliant Devices
#2273	Mississippi Special Fuel Tax Law
#2365	Special Project Sign
#2654	Disadvantaged Business Enterprises In Special Funded Projects, w/ Supplement
#2812	Traffic Signal and ITS Components
#2954	Reflective Sheeting for Signs
#3318	DBE Prebid Meeting
#3600	Canadian Nation / Illinois Central Railroad Construction Requirements
#3676	Asphalt Gyratory Compactor Internal Angle Calibration
#3703	Contract Time
#3704	Scope of Work
#3705	Lane Closure Restrictions

Section 907 - Special Provisions

907-102-2	Bidding Requirements and Conditions
907-103-2	Award and Execution of Contract
907-108-4	Subletting of Contract
907-109-3	Measurement and Payment
907-411-1	Material Transfer Equipment
907-619-6	Temporary Portable Rumble Strips
907-619-5	Traffic Control for Construction Zones
907-626-5	Thermoplastic Blue ADA Markings
907-631-1	Traffic Signal Systems - General
907-632-1	Traffic Signal Cabinet Assemblies
907-634-4	Traffic Signal and ITS Equipment Poles
907-637-3	Traffic Signal Conduit and Pull Boxes
907-643-2	Video Vehicle Detector
907-662-2	Radio Interconnect System
907-663-5	Networking Equipment, w/ Supplement

PROJECT: SP-9519-00(004)/108715301 - Lincoln
SP-9520-00(001)/108715302 - Lincoln
SP-9513-00(001)/108715303 - Lincoln

907-701-3	Hydraulic Cement
907-702-4	Bituminous Materials
907-703-1	Gradation
907-705-1	Stone Riprap
907-707-2	Joint Material
907-711-2	Plain Steel Wire
907-714-3	Miscellaneous Materials
907-720-2	Acceptance Procedure for Glass Beads
907-721-2	Materials for Signs
907-722-1	Materials for Traffic Signal Installation
907-899-1	Railway-Highway Provisions

Section 905 - Proposal, Proposal Bid Items, Combination Bid Proposal
State Board of Contractors Requirement
State Certification Regarding Non-Collusion, Debarment and Suspensions
Section 902 - Contract Form
Section 903 - Contract Bond Forms

Form--OCR-485

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

11/16/2021 02:24 PM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 3704

CODE: (SP)

DATE: 10/19/2021

SUBJECT: Scope of Work

PROJECT: SP-9519-00(004)/ 108715301, SP-9520-00(001) / 108715302, & SP-9513-00(001)/ 108715303 – Lincoln 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.”

The work to be accomplished using the pay items and corresponding specifications set forth in the contract is to overlay the following sections of SR 184 from US 84 to US 51 and from BSM near Brookway Blvd. to US 84, overlay the following section of SR 583 from US 84 to ESM, and to place pavement markings along the following section of SR 550 from US 51 to ESM.

<u>Route</u>	<u>Length (Mile)</u>	<u>Width (Feet)</u>	<u>Surface</u>	<u>Thickness (Inches)</u>	<u>Level/Lift</u>	<u>Thickness</u>
SR 184	2	23’ & var.	9.5-mm, ST	1”	UTAP	0.5”
SR 184	5	38’ & var.	9.5-mm, ST	1”	UTAP	0.5”
SR 583	0.6	27’ & var.	9.5-mm, ST	1”	UTAP	0.5”
SR550	0.68	22’ & var.	–	–	–	–

Typical section: TS-1 thru TS-5 address requirements for SR 184
TS-6 addresses requirements for SR 583

Work on the Project shall consist of the following:

1. The Contractor shall erect and maintain construction signing, provide all signs, set up night time lane closures (if needed), and traffic handling devices in accordance with the Traffic Control Plan. The cost for this work is to be included in the price bid for pay item 618-A: Maintenance of Traffic. All traffic control devices on this project should comply with the latest version of the MUTCD. Fluorescent orange sheeting shall be used on all construction and traffic control signs except for those designated in the standards to be black legend and border on white background.
2. Prior to the overlay, the existing shoulders shall be clipped and surplus material shall be spread along the edge of the shoulders, fore slopes, or other adjacent areas as directed by the Project Engineer. Amounts of surplus material that may be impractical for such spreading

shall be removed as directed by the Engineer. The work here described is to be an absorbed item

3. The Contractor shall fine mill at the following locations:

<u>ROUTE</u>	<u>LOCATION</u>	<u>LENGTH</u>	<u>REMARKS</u>
184	14+40 to 15+90	150'	BOP
	108+52 to 110+02	150'	EOP
<u>Local Roads</u>			As Directed
Moreton Place			
Eola Trail			
Spring Drive			
Deer Run Trail			
Oakhill Drive			
Zetus Road			
Long Leaf Trail			

184	190+00 to 191+50	150'	BOP
	226+38 to 227+88	150'	EOP
	BSM to 18+30	Various	Along Curb as Directed
	Approx. 202+00	300'	Rail Road Crossing
<u>Local Roads</u>			As Directed
Snyder Lane			
Nalco Lane			
East Lincoln Drive			
Kinnison Trail			
Rogers Lane			
Nola Road			
County Farm Lane			
Belt Line Drive			
Twin Oaks Lane			
E Highland Drive			
W Highland Drive			
Rushing Street			
Avalon Street			
Cloverdale Street			
Marr Street			
MLK North			
MLK South			
Short Street			

Penn Street
 Grenn Street
 Wood Street
 Henry Myers Street
 Panther Street
 N. 3rd Street
 N. 2nd Street
 S. 2nd Street
 N. 1st Street
 S. 1st Street
 N. Railroad Avenue
 S. Railroad Avenue
 N. Whitworth Avenue
 S. Whitworth Avenue
 N. Jackson Street
 S. Jackson Street
 N. Church Street

583	583/84 Interchange Crossover 26+70 to 35+10	Variable 150'	As Directed EOP
<u>Local Roads</u>			As Directed
Greenview Trail			
Dale Trail			

4. The Contractor shall perform bridge end repair on SR 184 and SR 583 as shown on TS-5 and TS-6 as well as milling and inlaying various sections as shown on TS-1, TS-2, and TS-5 on SR 184.

Bridge End Repair

Remarks

SR 583
 13+65
 15+65

As per detail on TS-6

SR 184
 85+50
 87+50

As per detail on TS-5

Mill/Inlay

Remarks

<u>SR 184</u>	As per details on TS-1, TS-2, and TS-5
31+49 to 46+96	Lt. Ln.
33+47 to 37+43	Rt. Ln.
42+21 to 43+50	Rt. Ln.
83+68 to 84+35	Rt. Ln.
87+93 to 88+45	Lt. Ln.
88+17 to 88+45	Rt. Ln.
90+40 to 90+81	Lt. Ln.
92+00 to 92+25	Both Lanes
94+56 to 94+88	Rt. Ln.
96+62 to 97+27	Rt. Ln.
97+95 to 98+40	Lt. Ln.
98+45 to 98+81	Rt. Ln.
100+37 to 100+65	Lt. Ln.
100+76 to 100+97	Rt. Ln.
101+89 to 102+15	Lt. Ln.
104+22 to 105+25	Lt. Ln.

<u>SR 184</u>	
191+48 to 196+00	Both Lanes
Hwy. 184 at N Second St.	As Directed
Hwy. 184 at Hamilton St.	As Directed
Hwy 184 at Nola Rd	As Directed
Hwy 184 at County Farm	As Directed

5. The Contractor shall perform excess excavation beneath and around each section of existing guardrail at the bridge along SR 583 located at approximately 13+65. The excavated granular material shall be replaced with crushed stone as per sheet GR-4A-MOD. The existing asphalt pads at these locations are to remain in place.
6. The Contractor shall perform pre-leveling operations by placing ½” and variable of UTAP, Leveling in the areas indicated on sheets TS-1–TS-5 on SR 184, and from the BOP to EOP as shown on TS-6 on SR 583.

The Contractor shall remove existing pavement markers prior to placing asphalt. The cost of removing these pavement markers is to be absorbed in other items bid.

The Contractor shall take due care to maintain a uniform outside edge of pavement, and shall place asphalt to establish an approximate vertical face in order for granular material to be placed directly against the surface and not on a shelf of an underlying course. A rubber tire roller shall be used in addition to a steel wheel roller in obtaining compaction in the wheel ruts on this leveling lift of asphalt.

7. The Contractor shall place top lifts of asphalt on the roadway left and right of the centerline from BOP to EOP as shown in TS-1–TS-5 on SR 184, and TS-6 on SR 583. The finished

cross-slope is to be 2% in tangent sections and match the existing super elevation rate in horizontal curves.

Asphalt surface shall be placed on all local roads and driveway aprons (1½" Thickness).

Driveway aprons shall be paved 10' wide or as directed by the engineer. All local roads shall be paved to the normal right of way line or as directed by the Engineer.

Note: The Contractor shall be responsible for traffic control while MDOT personnel conduct density testing on the asphalt. The cost shall be included in the price bid for pay item 618-A: Maintenance of Traffic.

8. The Contractor shall place granular material on the shoulders to raise the existing shoulders to the new grade, bladed, shaped, and compacted to a minimum slope of 4% as shown in TS-1–TS-5 on SR 184, and TS-6 on SR 583. Granular material will not be allowed to be placed directly on the top lift of asphalt, but must be placed directly on the gravel shoulder by means of a road widener machine approved by the Project Engineer. Light blading or mowing of the shoulders will be required prior to placement of the granular material.
9. The Contractor shall place rumble strips in the locations indicated on the typical sections on sheets TS-1–TS-5 on SR 184
10. The Contractor shall perform traffic signal improvements at the following intersections as detailed on sheets 2001 thru 2004 with additional details listed on sheets 2005 thru 2009.
 - SR 184 at Church Street
 - SR 184 at Jackson Street
 - SR 184 at First Street
 - SR 184 at Second Street
11. The Contractor shall place all permanent pavement markings, including stripe and raised pavement markers on following sections of SR 184 from US 84 to US 51 and from BSM near Brookway Blvd. to US 84, the following section of SR 583 from US 84 to ESM, and along the following section of SR 550 from US 51 to ESM as required by the Standard Drawings or as directed by the Engineer.

An asphalt taper caused by the milling or shall be placed at the temporary joints overlay in order to provide for the safe movement of traffic. The taper shall be three feet (3') in length per one inch of depth and will be an absorbed item.

Temporary striping shall be required after milling and overlaying operations. Temporary striping shall be placed in the same locations and layout as permanent stripe. All centerline, lane lines, edge lines, and no passing stripes that have been removed during the day's operations shall be replaced with temporary stripe before work is discontinued for the day or as soon thereafter as weather conditions will permit, except that:

- Replacement of no-passing stripes may be delayed for a period not to exceed three (3) days for a two or three lane road.
- Temporary edge lines on projects requiring shoulders constructed of granular material may be delayed for a period not to exceed three (3) days.

All asphalt and concrete curbs along local roads from BOP to EOP shall be painted (two applications) with white traffic paint and traffic beads as shown on sheet DCIS-1; such costs shall be included in other items bid.

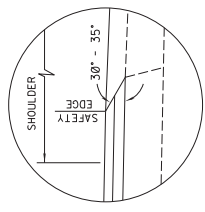
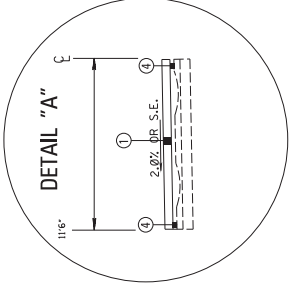
It shall be the responsibility of the Contractor to protect the roadway and all existing structures, such as bridges, culverts, signs, and curbs, from damage occurring as a result of the Contractor's operations. Damages to existing structures caused by the Contractor's operations shall be repaired or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

Incidental work such as removing vegetation, shaping and compaction of shoulders, removing excess asphalt material, project clean-up, and other incidental work necessary to complete the project will not be measured for separate payment. Such costs shall be included in the price of other items bid.

It is the Contractor's responsibility to insure the drainage of surface water from milled areas. Temporary wedges (paper joints) of full lane width asphalt shall be placed by the Contractor immediately after the fine milling process to allow the safe transition of traffic. These wedges shall be maintained in a satisfactory condition by the Contractor until the permanent asphalt is placed, cost to be absorbed.

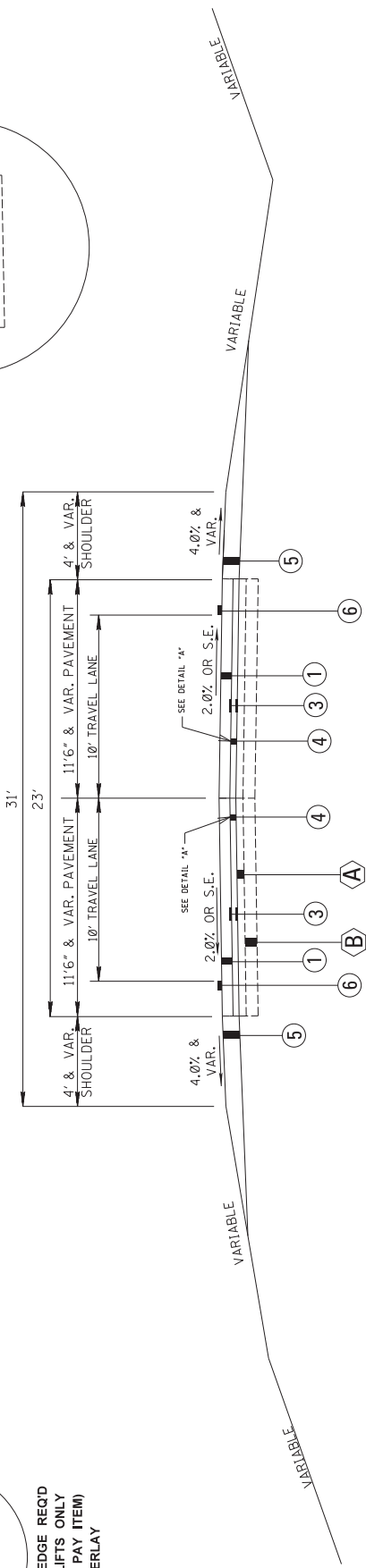
The Contractor shall be responsible for coordinating with CN Railroad all work performed within the ROW of the railroad as required by other Notice to Bidders.

FMS CON: 108715/201000
 STATE PROJECT NO.
 MISS. SP-9519-00(004)



SAFETY EDGE REQ'D
 TOP 2 LIFTS ONLY
 (NOT A PAY ITEM)
 OVERLAY

SR 184
 CL



TYPICAL SECTION
 B.O.P. STA. 14+40 - STA. 110+02
 (10+00 = US 84W and SR 184 intersection)

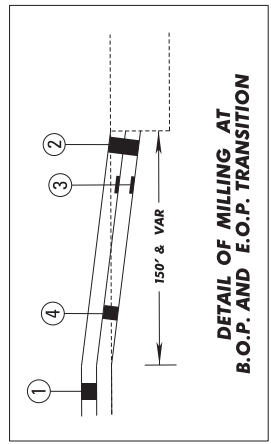
NOT TO SCALE

PROPOSED

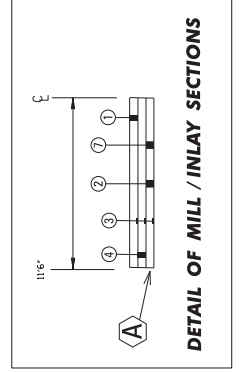
- 1 1" OF 9.5MM ST ASPHALT REQ'D
- 2 1.5" & VAR. FINE MILLING WHERE REQ'D
- 3 TACK COAT REQ'D
- 4 0.50" & VAR. OF ULTRA THIN ASPHALT, LEVELING REQ'D
- 5 1.5" & VAR. OF CL. 6, GR. D GRANULAR MATERIAL REQ'D
- 6 RUMBLE STRIPE REQ'D (SEE SHEET RS-2 DETAIL A 12' PAVEMENT EDGE)
- 7 1.5" OF 9.5MM ST ASPHALT REQ'D

EXISTING

- A BITUMINOUS PAVEMENT IN PLACE
- B GRANULAR SUBGRADE IN PLACE



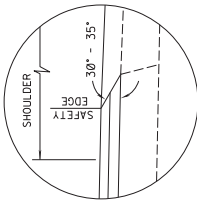
**DETAIL OF MILLING AT
 B.O.P. AND E.O.P. TRANSITION**



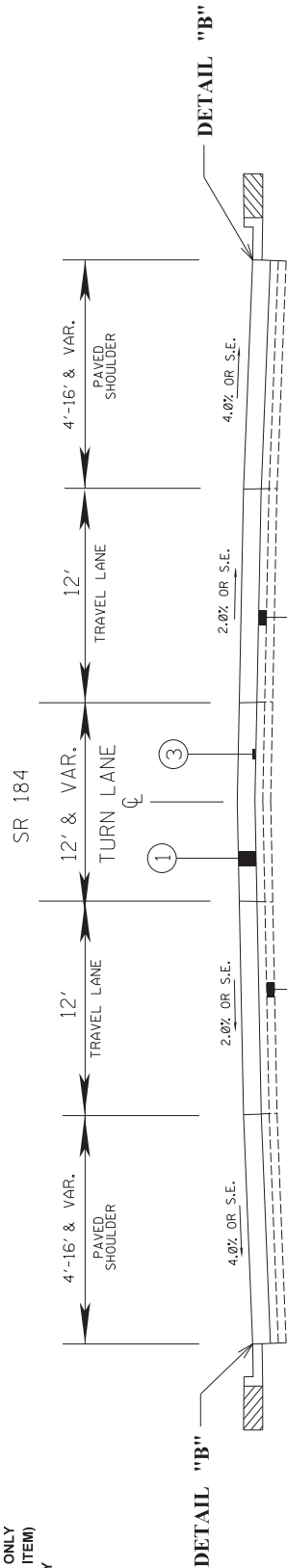
DETAIL OF MILL / INLAY SECTIONS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TYPICAL SECTION	
MAINLINE	
PROJECT NO.: SP-9519-00(004)	SECTION NUMBER
COUNTY: LINCOLN	CS-1
FILE NAME: IS-1.dwg	SHEET NUMBER
DESIGN TEAM: DISTRICT J, CHERED	DATE
BY	REVISION

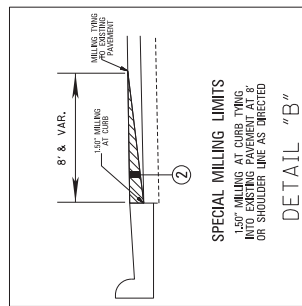
FMS CON: 108715/201000
 STATE PROJECT NO.
 MISS. SP-9519-00(004)



SAFETY EDGE REQ'D
 TOP 2 LIFTS ONLY
 (NOT A PAY ITEM)
 OVERLAY



TYPICAL SECTION
 STA. 190+00 - STA. 215+00
 (STA. 190+00 = BSM)
 NOT TO SCALE

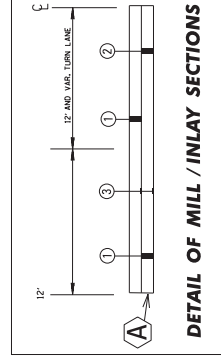
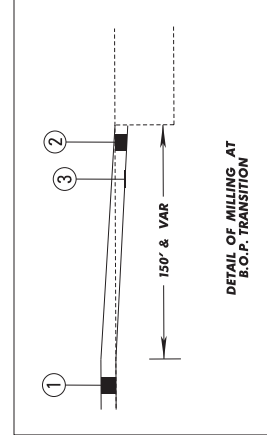


PROPOSED

- ① 1.5" OF 9.5MM ST ASPHALT REQ'D
- ② 1.5" & VAR. FINE MILLING WHERE REQ'D
- ③ TACK COAT REQ'D
- ④ 0.50" & VAR. OF ULTRA THIN ASPHALT, LEVELING REQ'D (NOT USED ON THIS SHEET)

EXISTING

- Ⓐ BITUMINOUS PAVEMENT IN PLACE
- Ⓑ GRANULAR SUBGRADE IN PLACE

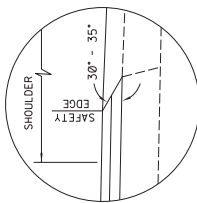


MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TYPICAL SECTION	
MAINLINE	
PROJ. NO.: SP-9519-00(004)	DATE
COUNTY: LINCOLN	DESIGN TEAM
FILE NAME: IS-11.dwg	DISTRICT J.
DESIGN NUMBER	CHECKED
SHEET NUMBER	DATE
3	

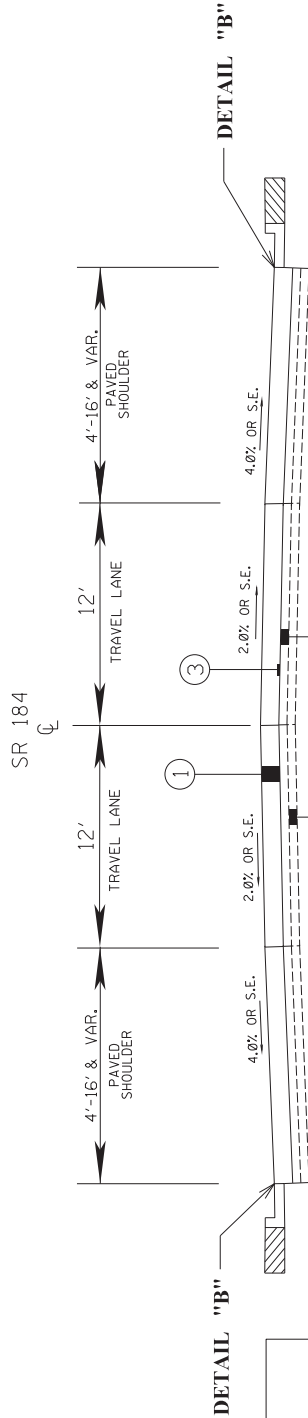


FMS CON: 108715/301000
STATE PROJECT NO. MISS. SP-9519-00(004)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TYPICAL SECTION MAINLINE	
PROJ. NO.: SP-9519-00(004)	COUNTY: LINCOLN
FILE NAME: IS-1.dwg	SHEET NUMBER: 4
DESIGN TEAM: DISTRICT J	CHECKED: _____
DATE: _____	



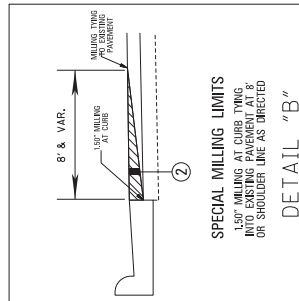
SAFETY EDGE REQ'D
TOP 2 LIFTS ONLY
(NOT A PAY ITEM)
OVERLAY



TYPICAL SECTION

STA. 215+00 - STA. 18+30
(STA. 216+29.409 BK = STA. 0+00 AH)

NOT TO SCALE



SPECIAL MILLING LIMITS
1.5" MILLING AT CURB TYPING
1.5" MILLING AT SHOULDER LINE AS DIRECTED

DETAIL "B"

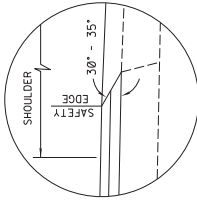
PROPOSED

- ① 1.5" OF 9.5MM ST ASPHALT REQ'D
- ② 1.5" & VAR. FINE MILLING WHERE REQ'D
- ③ TACK COAT REQ'D

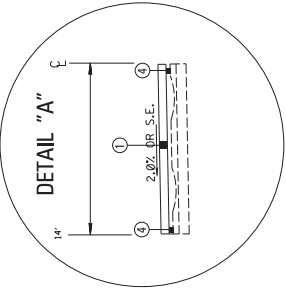
EXISTING

- Ⓐ BITUMINOUS PAVEMENT IN PLACE
- Ⓑ GRANULAR SUBGRADE IN PLACE

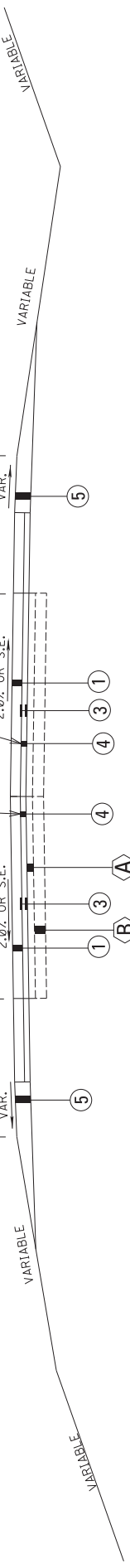
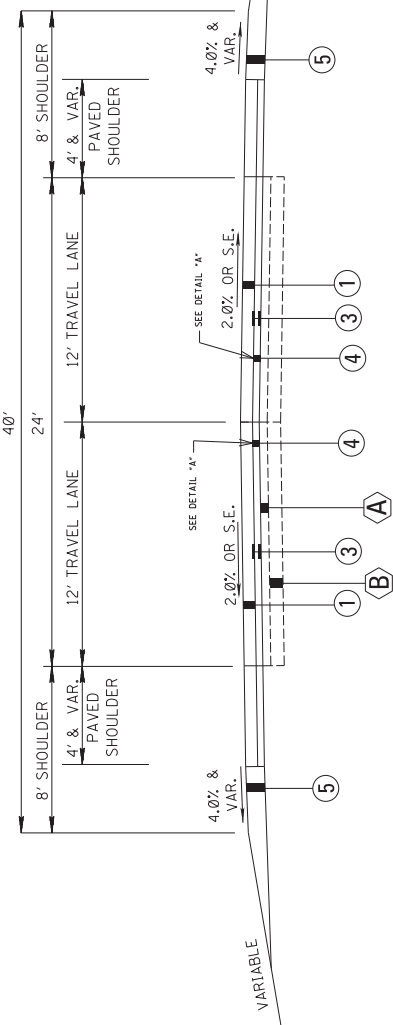
FMS CON: 18715/201000
 STATE PROJECT NO.
 MISS. SP-9519-00(004)



SAFETY EDGE REQ'D
 TOP 2 LIFTS ONLY
 (NOT A PAY ITEM)
 OVERLAY



SR 184
 CL
 40'



TYPICAL SECTION

STA. 18+30 - STA. 39+00

NOT TO SCALE

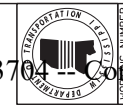
PROPOSED

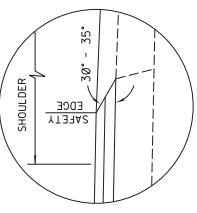
- ① 1" OF 9.5MM ST ASPHALT REQ'D
- ② 1.5" & VAR. FINE MILLING WHERE REQ'D (NOT USED ON THIS SHEET)
- ③ TACK COAT REQ'D
- ④ 0.50" & VAR. OF ULTRA THIN ASPHALT, LEVELING REQ'D
- ⑤ 1.5" & VAR. OF CL. 6, GR. D GRANULAR MATERIAL REQ'D

EXISTING

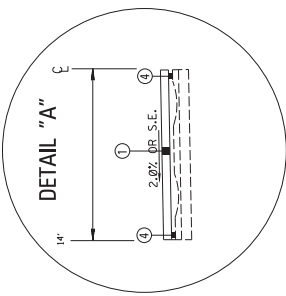
- Ⓐ BITUMINOUS PAVEMENT IN PLACE
- Ⓑ GRANULAR SUBGRADE IN PLACE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TYPICAL SECTION	
MAINLINE	
PROJ. NO.: SP-9519-00(004)	MOD. NO. NUMBER
COUNTY: LINCOLN	CS-4
FILE NAME: IS-1.dwg	SHEET NUMBER
DESIGN TEAM: DISTRICT J	CHECKED
DATE	5

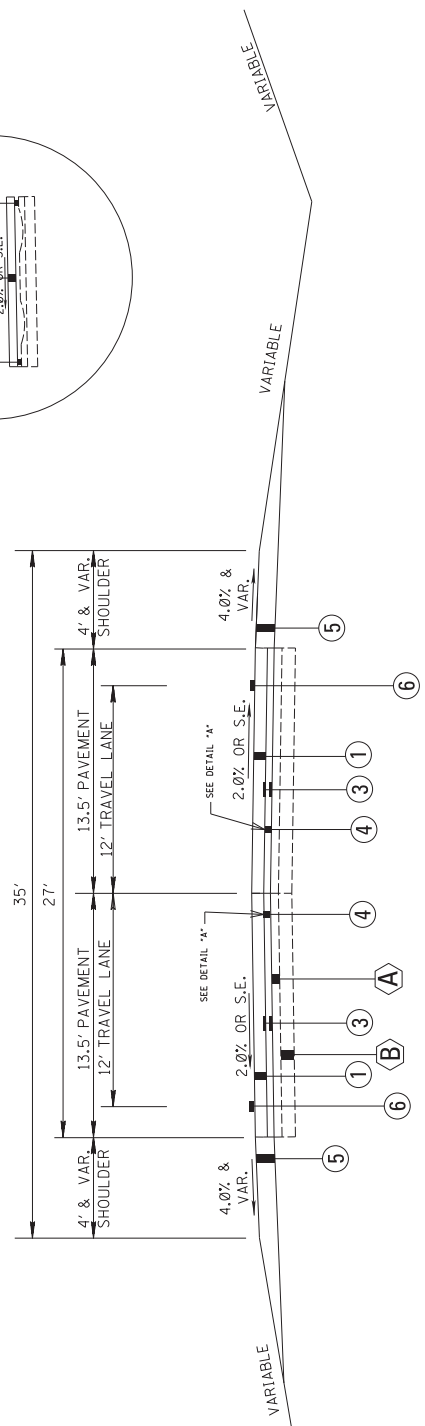




SAFETY EDGE REQ'D
 TOP 2 LIFTS ONLY
 (NOT A PAY ITEM)
 OVERLAY



SR 184
 CL



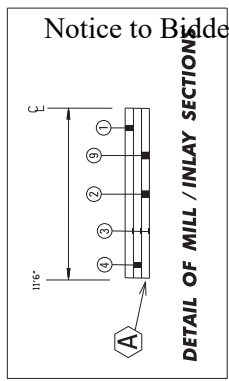
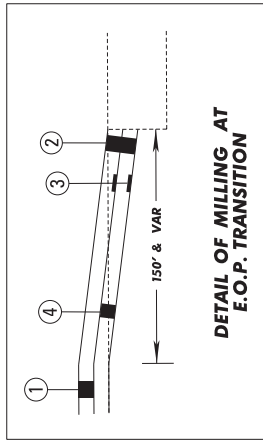
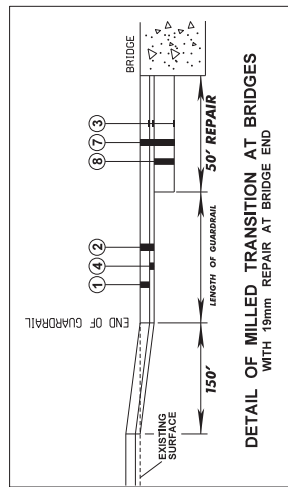
TYPICAL SECTION
 STA. 39+00 - STA. 227+88
 RUMBLE STRIPS REQUIRED FROM STA. 60+00 TO EOP
 NOT TO SCALE

EXISTING

- (A) BITUMINOUS PAVEMENT IN PLACE
- (B) GRANULAR SUBGRADE IN PLACE

PROPOSED

- (1) 1" OF 9.5MM ST ASPHALT REQ'D
- (2) 1.5" & VAR. FINE MILLING WHERE REQ'D
- (3) TACK COAT REQ'D
- (4) 0.50" & VAR. OF ULTRA THIN ASPHALT, LEVELING REQ'D
- (5) 1.5" & VAR. OF CL. 6, GR. D GRANULAR MATERIAL REQ'D
- (6) RUMBLE STRIPE WHERE REQ'D (SEE SHEET RS-2 DETAIL A 14" PAVEMENT EDGE)
- (7) 5" & VAR. FINE MILLING WHERE REQ'D
- (8) 3.5" AND VAR. 19MM ST ASPHALT REQ'D
- (9) 1.5" OF 9.5MM ST ASPHALT REQ'D



MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 TYPICAL SECTION
 MAINLINE

PROJ. NO.: SP-9519-00(004)
 COUNTY: LINCOLN
 FILE NAME: IS-1.dwg
 DESIGN TEAM: DISTRICT J.

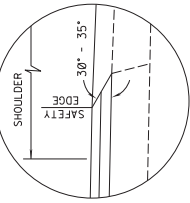
DATE: _____

REVISION: _____

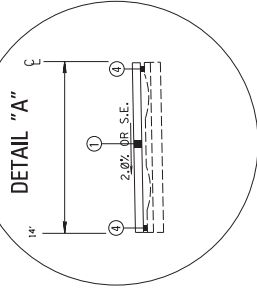
BY: _____

DESIGN NUMBER: 45-5
 SHEET NUMBER: 6

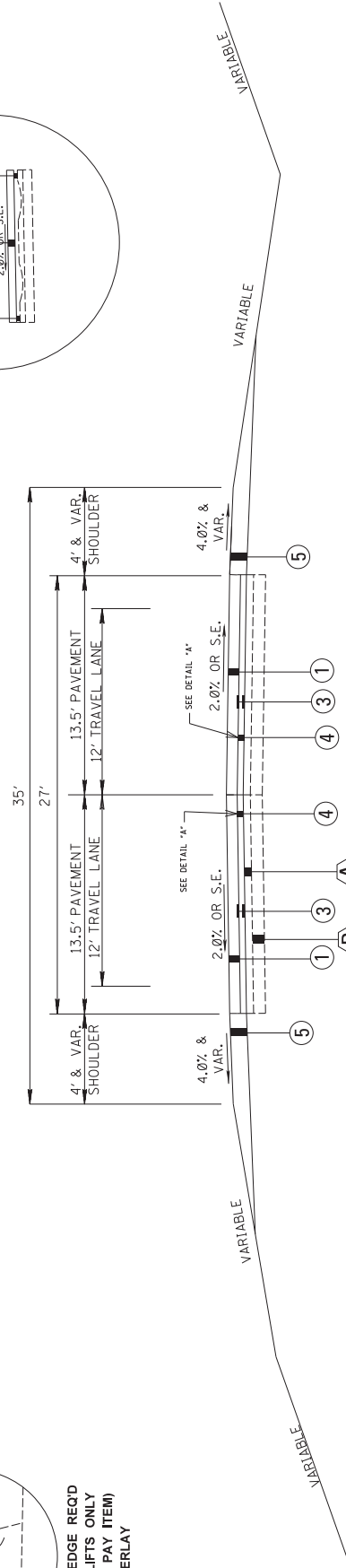
FMS CON: 108715/303000
 STATE PROJECT NO.
 MISS. SP-9513-00(001)



SAFETY EDGE REQ'D
 TOP 2 LIFTS ONLY
 (NOT A PAY ITEM)
 OVERLAY



SR 583
 CL



TYPICAL SECTION

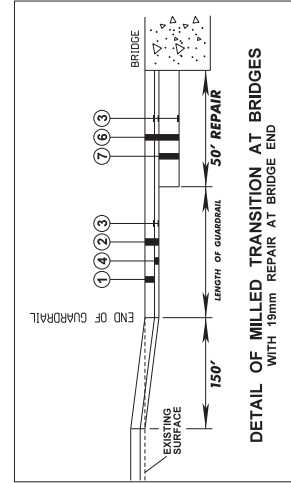
B.O.P. STA. 0+00 - E.O.P. STA. 35+10
 (0+00 = US 84 median and SR 583 CL intersection)
 NOT TO SCALE

PROPOSED

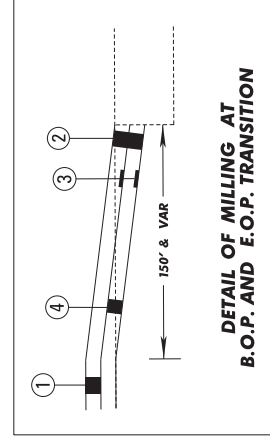
- ① 1" OF 9.5MM ST ASPHALT REQ'D
- ② 1.5" & VAR. FINE MILLING WHERE REQ'D
- ③ TACK COAT REQ'D
- ④ 0.50" & VAR. OF ULTRA THIN ASPHALT, LEVELING REQ'D
- ⑤ 1.5" & VAR. OF CL. 6, GR. D GRANULAR MATERIAL REQ'D
- ⑥ 5" & VAR. FINE MILLING WHERE REQ'D
- ⑦ 3.5" AND VAR. 19MM ST ASPHALT REQ'D

EXISTING

- Ⓐ BITUMINOUS PAVEMENT IN PLACE
- Ⓑ GRANULAR SUBGRADE IN PLACE



DETAIL OF MILLED TRANSITION AT BRIDGES
 WITH 19mm REPAIR AT BRIDGE END



DETAIL OF MILLING AT B.O.P. AND E.O.P. TRANSITION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION			PROJECT NUMBER	7
TYPICAL SECTION MAINLINE			FILE NAME: IS-11.dwg	DATE
PROJ. NO.: SP-9513-00(001)	COUNTY: LINCOLN	DESIGN TEAM: DISTRICT J.	CHECKED	DATE
BY	REVISION			

STATE	PROJECT NO.
MISS	SP-9519-00(004)/SP-9520-00(001)/SP-9513-00 (001)

SUMMARY OF QUANTITIES (SHEET 1)

PAY ITEM NO.	PAY ITEM	UNIT	LINCOLN : 108715-301000	
			Prelim	Final
202-B2-40	Removal of Traffic Stripe	LF	450	
203-G002	Excess Excavation, LVM, AH	CY	40	
304-A008	Granular Material, LVM, Class 6, Group D	CY	2,719	
403-A006	19-mm, ST, Asphalt Pavement	TON	56	
403-A015	9.5-mm, ST, Asphalt Pavement	TON	9,113	
406-D001	Fine Milling of Bituminous Pavement, All Depths	SY	27,317	
407-A001	Asphalt for Tack Coat	GAL	17,746	
907-411-A001	Ultra Thin Asphalt Pavement Leveling	TON	3,446	
423-A001	Rumble Strips, Ground In	MI	11	
613-D006	Adjustment of Manhole Cover and Water Valve	EA	11	
618-A001	Maintenance of Traffic	LS	1	
618-B001	Additional Construction Signs	SF	1	
619-A1001	Temporary Traffic Stripe, Continuous White	MI	20	
619-A2001	Temporary Traffic Stripe, Continuous Yellow	MI	17	
619-A4002	Temporary Traffic Stripe, Skip Yellow	MI	7	
619-A5001	Temporary Traffic Stripe, Detail	LF	16,670	
619-A6001	Temporary Traffic Stripe, Legend	SF	630	
619-A6002	Temporary Traffic Stripe, Legend	LF	9,198	
907-619-B001	Temporary Portable Rumble Strips	LF	132	
620-A001	Mobilization	LS	1	
626-C002	6" Thermoplastic Double Drop Edge Stripe, Continuous White	MI	11	
626-D001	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow	MI	5	
626-E001	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow	MI	9	
626-G001	Thermoplastic Detail Stripe, Blue-ADA	LF	308	
626-G002	Thermoplastic Detail Stripe, White	LF	9,454	
626-G003	Thermoplastic Detail Stripe, Yellow	LF	2,682	
907-626-H001	Thermoplastic Legend, Blue-ADA Handicap Symbol	EA	4	
626-H004	Thermoplastic Legend, White	SF	630	
626-H005	Thermoplastic Legend, White	LF	7,366	
627-C001	Red-Clear Reflective Raised Markers	EA	78	
627-3001	Two-Way Clear Reflective High Performance Raised Markers	EA	702	
627-L001	Two-Way Yellow Reflective High Performance Raised Markers	EA	1,079	
627-P001	Two-Way Blue Reflective High Performance Raised Markers	EA	36	
630-F006	Delineators, Guard Rail, White	EA	22	
907-632-D001	Solid State Traffic Actuated Controller, Type 1	EA	4	
907-634-B001	Traffic Signal Equipment Pole Shaft Extension, 10'	EA	4	
907-637-C028	Traffic Signal Conduit, Underground, Type 4, 2"	LF	145	
907-637-D002	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 2"	LF	385	
907-643-A004	Video Vehicle Detection Sensor, Type 1A	EA	15	
907-643-B001	Video Vehicle Detection Cable	LF	1,921	
647-A001	Removal of Existing Traffic Signal Equipment	LS	1	
907-662-D002	Radio Interconnect, Broadband, Short Range	EA	5	
907-663-A001	Network Switch, Type A	EA	4	
907-899-A001	Railway-Highway Provisions	LS	1	

- ① ONLY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER IF THE EXISTING CONDUIT IS DETERMINED TO BE UNUSABLE.
- ② CONTACT TRAFFIC ENGINEERING SO THAT THE TIMINGS FROM THE OLD CONTROLLERS CAN BE SWAPPED INTO THE NEW CONTROLLERS.
- ③ CONTROLLERS AND RADARS TO BE SALVAGED TO MDOT. EXISTING RADIO'S, ANTENNAS, AND COAX CABLES TO BE COMPLETELY REMOVED.
- ④ RADIO'S SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SHALL BE LOCATED AT MS 184 @ CHURCH ST., JACKSON ST., FIRST ST., AND SECOND ST., AND AT US 51 @ BROOKWAY BLVD. ALL CABLING, MOUNTING, HARDWARE, ARRESTORS, ETC. NECESSARY FOR A COMPLETE OPERABLE UNIT ARE COST ABSORBED INTO THIS PAY ITEM.




MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
SUMMARY OF QUANTITIES	
Working Number	SO-1
Sheet Number	8
PROJ NO: SP-9519-00(004)	COUNTY: LINCOLN
FILENAME: 1008715 SQS	Checked
Design Team	Date: 02/20/2021

STATE	PROJECT NO.
MISS	SP-9519-00(004)/SP-9520-00(001)/SP-9513-00 (001)

PAY ITEM NO.	PAY ITEM	LINCOLN : 108715-302000	
		UNIT	Prelim Final
618-A001	Maintenance of Traffic	LS	1
620-A001	Mobilization	LS	1
626-C002	6" Thermoplastic Double Drop Edge Stripe, Continuous White	MI	1
626-D001	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow	MI	1
626-E001	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow	MI	1
626-G002	Thermoplastic Detail Stripe, White	LF	500
626-G003	Thermoplastic Detail Stripe, Yellow	LF	220
626-H004	Thermoplastic Legend, White	SF	144
626-H005	Thermoplastic Legend, White	LF	129


SUMMARY OF QUANTITIES (SHEET 2)

 MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES	
PROJ NO: SP-9520-00(001) COUNTY: LINCOLN FILENAME: 1008715 SQS Design Team	Working Number SQ-2 Sheet Number 9 Date: 02/28/2024 Checked

STATE	MISS	PROJECT NO.
		SP-9519-00(004)/SP-9520-00(001)/SP-9513-00 (001)

PAY ITEM NO.	PAY ITEM	LINCOLN : 108715-303000	
		Prelim	Final
202-B240	Removal of Traffic Stripe	LF	450
203-G002	Excess Excavation, LVM, AH	CY	180
304-A008	Granular Material, LVM, Class 6, Group D	CY	233
304-H001	3/4" and Down Crushed Stone Base, LVM	CY	180
	OR		
304-H002	Size 610 Crushed Stone Base, LVM	CY	180
	OR		
304-H003	Size 825B Crushed Stone Base, LVM	CY	180
403-A006	19-mm, ST, Asphalt Pavement	TON	51
403-A015	9.5-mm, ST, Asphalt Pavement	TON	1,100
406-D001	Fine Milling of Bituminous Pavement, All Depths	SY	8,800
407-A001	Asphalt for Tack Coat	GAL	1,920
907-411-A001	Ultra Thin Asphalt Pavement Leveling	TON	414
618-A001	Maintenance of Traffic	LS	1
618-B001	Additional Construction Signs	SF	1
619-A1001	Temporary Traffic Stripe, Continuous White	MI	1
619-A2001	Temporary Traffic Stripe, Continuous Yellow	MI	1
619-A4002	Temporary Traffic Stripe, Skip Yellow	MI	1
619-A5001	Temporary Traffic Stripe, Detail	LF	9,887
619-A6002	Temporary Traffic Stripe, Legend	LF	576
907-619-B001	Temporary Portable Rumble Strips	LF	66
620-A001	Mobilization	LS	1
626-C002	6" Thermoplastic Double Drop Edge Stripe, Continuous White	MI	1
626-D001	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow	MI	1
626-E001	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow	MI	1
626-G002	Thermoplastic Detail Stripe, White	LF	3,234
626-G003	Thermoplastic Detail Stripe, Yellow	LF	3,390
626-H005	Thermoplastic Legend, White	LF	828
627-1001	Two-Way Clear Reflective High Performance Raised Markers	EA	158
627-L001	Two-Way Yellow Reflective High Performance Raised Markers	EA	156
630-F006	Delineators, Guard Rail, White	EA	22

SUMMARY OF QUANTITIES (SHEET 3)

	
MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES	
Working Number: SQ-3	PROJ NO: SP-9513-00(001) COUNTY: LINCOLN
Sheet Number: 10	FILENAME: 1008715 SQS Design Team
Checked	Date: 02/26/2021


STATE	PROJECT NO.
MISS	SP-9519-00(004)/SP-9520-00(001)/SP-9513-00(001)

SUMMARY OF QUANTITIES (SHEET 4)

PAY ITEM NO.	PAY ITEM	UNIT	Total Amount	
			Prelim	Final
202-B2-40	Removal of Traffic Stripe	LF	900	
203-G002	Excess Excavation, LVM, AH	CY	220	
304-A008	Granular Material, LVM, Class 6, Group D	CY	2,952	
304-H001	3/4" and Down Crushed Stone Base, LVM	CY	180	
	OR			
304-H002	Size 610 Crushed Stone Base, LVM	CY	180	
	OR			
304-H003	Size 825B Crushed Stone Base, LVM	CY	180	
403-A006	19-mm, ST, Asphalt Pavement	TON	107	
403-A015	9.5-mm, ST, Asphalt Pavement	TON	10,213	
406-D001	Fine Milling of Bituminous Pavement, All Depths	SY	36,117	
407-A001	Asphalt for Tack Coat	GAL	19,666	
907-411-A001	Ultra Thin Asphalt Pavement Leveling	TON	3,860	
423-A001	Rumble Strips, Ground In	MI	11	
613-D006	Adjustment of Manhole Cover and Water Valve	EA	11	
618-A001	Maintenance of Traffic	LS	1	
618-B001	Additional Construction Signs	SF	2	
619-A1001	Temporary Traffic Stripe, Continuous White	MI	21	
619-A2001	Temporary Traffic Stripe, Continuous Yellow	MI	18	
619-A4002	Temporary Traffic Stripe, Skip Yellow	MI	8	
619-A5001	Temporary Traffic Stripe, Detail	LF	26,557	
619-A6001	Temporary Traffic Stripe, Legend	SF	630	
619-A6002	Temporary Traffic Stripe, Legend	LF	9,774	
907-619-B001	Temporary Portable Rumble Strips	LF	198	
620-A001	Mobilization	LS	1	
626-C002	6" Thermoplastic Double Drop Edge Stripe, Continuous White	MI	13	
626-D001	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow	MI	7	
626-E001	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow	MI	11	
626-G001	Thermoplastic Detail Stripe, Blue-ADA	LF	308	
626-G002	Thermoplastic Detail Stripe, White	LF	13,188	
626-G003	Thermoplastic Detail Stripe, Yellow	LF	6,292	
907-626-H001	Thermoplastic Legend, Blue-ADA Handicap Symbol	EA	4	
626-H004	Thermoplastic Legend, White	SF	774	
626-H005	Thermoplastic Legend, White	LF	8,323	
627-C001	Red-Clear Reflective Raised Markers	EA	78	
627-3001	Two-Way Clear Reflective High Performance Raised Markers	EA	860	
627-L001	Two-Way Yellow Reflective High Performance Raised Markers	EA	1,235	
627-P001	Two-Way Blue Reflective High Performance Raised Markers	EA	36	
630-F006	Delineators, Guard Rail, White	EA	44	
907-632-D001	Solid State Traffic Actuated Controller, Type 1	EA	4	
907-634-B001	Traffic Signal Equipment Pole Shaft Extension, 10'	EA	4	
907-637-C028	Traffic Signal Conduit, Underground, Type 4, 2"	LF	145	

- ① ONLY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER IF THE EXISTING CONDUIT IS DETERMINED TO BE UNUSABLE.
- ② CONTACT TRAFFIC ENGINEERING SO THAT THE TIMINGS FROM THE OLD CONTROLLERS CAN BE SWAPPED INTO THE NEW CONTROLLERS.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES - PROJECT TOTALS



PROJ NO: SP-9519-00(004)/SP-9520-00(001)/SP-9513-00(001)
 FMS: 108715-301000/108715-302000/108715-303000

Working Number: SQ-4
 Sheet Number: 11

Revision: _____ Date: 02/26/2024

Checked: _____
 Design Team: _____


FILENAME: 1008715 SQS

STATE	PROJECT NO.
MISS	SP-9519-00(004)/SP-9520-00(001)/SP-9513-00(001)

SUMMARY OF QUANTITIES (SHEET 5)

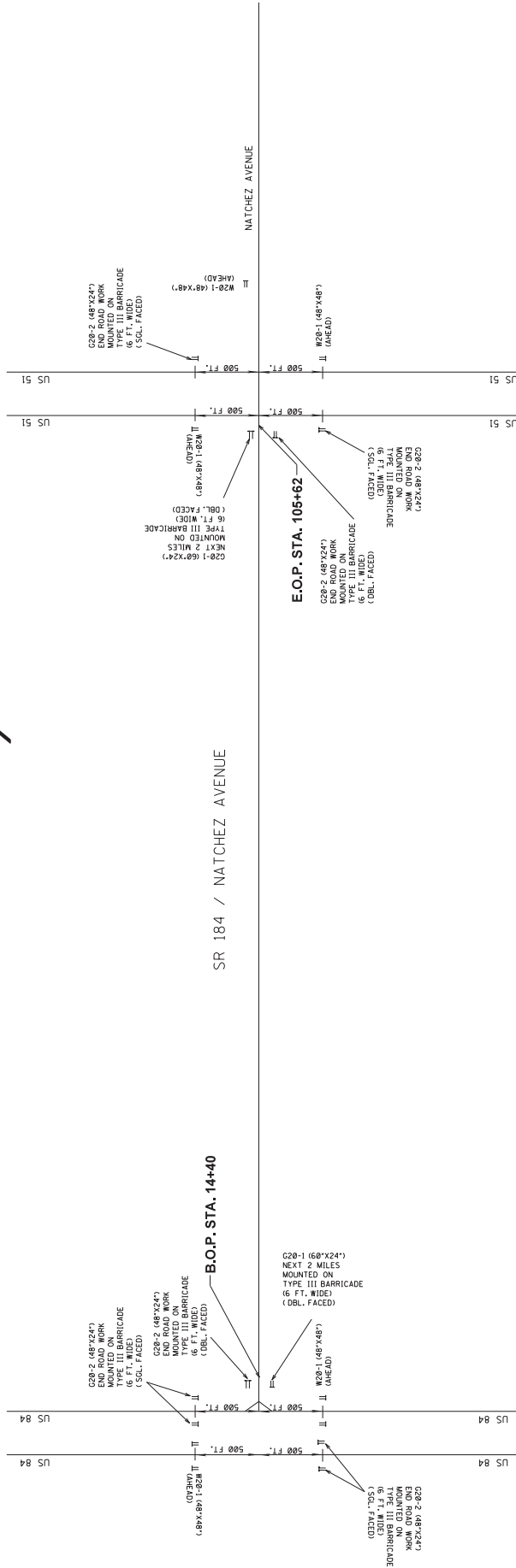
PAY ITEM NO.	PAY ITEM	UNIT	Total Amount	
			Prelim	Final
907-637-D002	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 2"	LF	385	
907-643-A004	Video Vehicle Detection Sensor, Type 1A	EA	15	
907-643-B001	Video Vehicle Detection Cable	LF	1,921	
647-A001	Removal of Existing Traffic Signal Equipment	LS	1	
907-662-D002	Radio Interconnect, Broadband, Short Range	EA	5	
907-663-A001	Network Switch, Type A	EA	4	
907-899-A001	Railway-Highway Provisions	LS	1	

- ① ONLY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER IF THE EXISTING CONDUIT IS DETERMINED TO BE UNUSABLE.
- ② CONTROLLERS AND RADARS TO BE SALVAGED TO MDOT. EXISTING RADIOS, ANTENNAS, AND COAX CABLES TO BE COMPLETELY REMOVED.
- ③ MANUFACTURER'S RECOMMENDATIONS AND SHALL BE LOCATED AT MS 184 @ CHURCH ST., JACKSON ST., FIRST ST., AND SECOND ST., AND AT US 51 @ BROOKWAY BLVD. ALL CABLING, MOUNTING, HARDWARE, ARRESTORS, ETC. NECESSARY FOR A COMPLETE OPERABLE UNIT ARE COST ABSORBED INTO THIS PAY ITEM.

 MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES - PROJECT TOTALS	
Revision	Working Number SQ-5
Design Team	Sheet Number SQ-5
Checked	Date 02/28/2021
# FILENAME: 1008715 SQS	# 12

FMS CON: 10715/301000
 STATE PROJECT NO.
 MISS. SP-9519-00(004)

NOTE: W20-1 (48"X48") SHALL BE REQ'D ON ALL LOCAL ROADS.



*** NOT TO SCALE ***

ADDITIONAL TRAFFIC CONTROL SIGNS REQUIRED:

R4-1 "DO NOT PASS", R4-2 "PASS WITH CARE", AND W14-3 "NO PASSING ZONE" SIGNS ARE REQUIRED IN ACCORDANCE WITH SUB-SECTION 907-618 AND AS SPECIFIED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. IF "NO PASSING ZONES" ARE 1,000' OR MORE, INSTALL ADDITIONAL "DO NOT PASS" & "NO PASSING ZONE" SIGNS ON MAXIMUM SPACING OF 750'.

ALL TRAFFIC CONTROL ITEMS SHALL BE INCLUDED IN BID FOR PAY ITEM 618-A001. MAINTENANCE OF TRAFFIC FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED ON THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
DETAIL OF CONSTRUCTION SIGNING	
PROJECT NUMBER	SP-9519-00(004)
COUNTY	LINCOLN
FILE NAME	DCS-1.dwg
DESIGN TEAM	DISTRICT J
DATE	6/26/2011
SHEET NUMBER	13

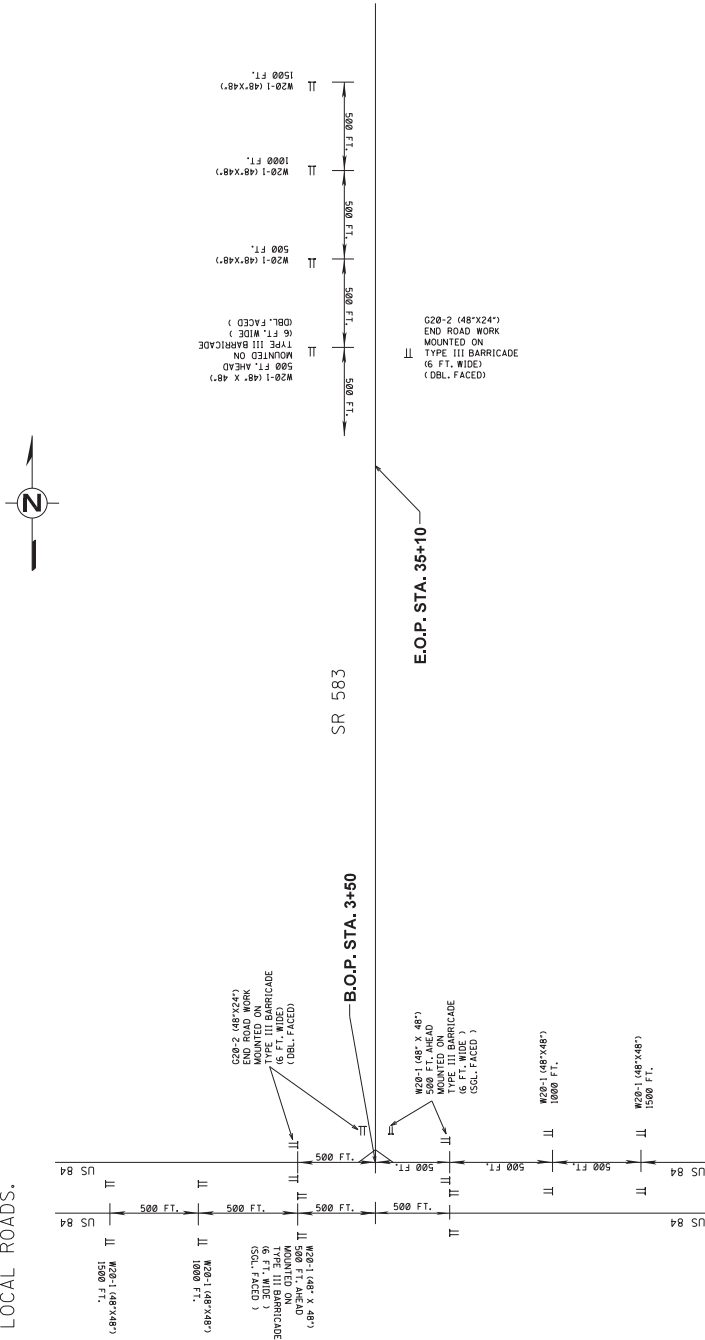


FMS CON: 108715/303000
 STATE PROJECT NO.
 MISS. SP-9513-00(001)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
DETAIL OF CONSTRUCTION SIGNING	
PROJECT NUMBER	SP-9513-00(001)
COUNTY	LINCOLN
FILE NAME	DGCS-1.dwg
DESIGN TEAM	DISTRICT J
DATE	8/26/2001
REVISION	
BY	



NOTE: W20-1 (48"X48") SHALL BE REQ'D ON ALL LOCAL ROADS.



*** NOT TO SCALE ***

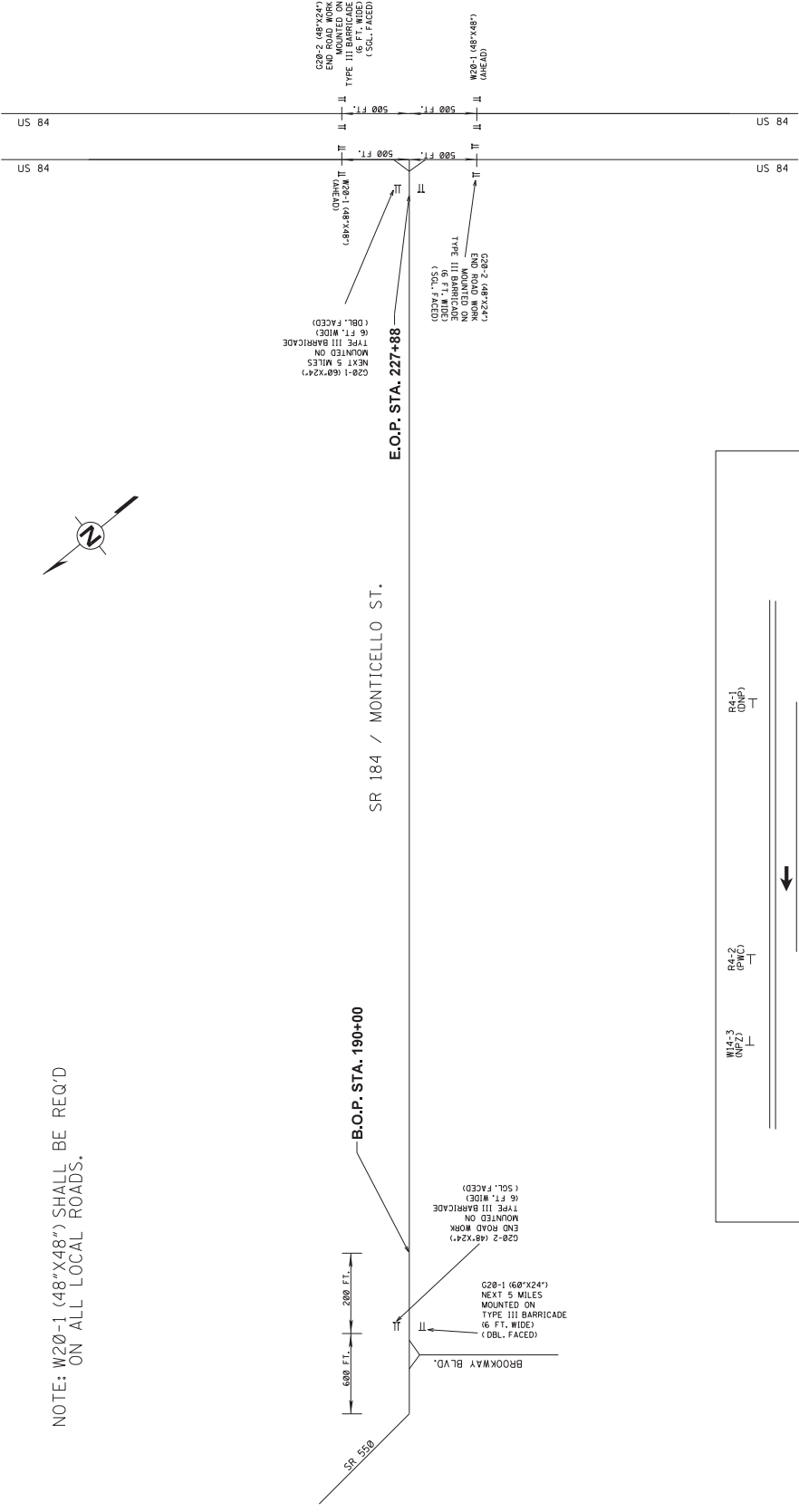
ADDITIONAL TRAFFIC CONTROL SIGNS REQUIRED:

R4-1 "DO NOT PASS", R4-2 "PASS WITH CARE", AND W14-3 "NO PASSING ZONE" SIGNS ARE REQUIRED IN ACCORDANCE WITH SUB-SECTION 907-618 AND AS SPECIFIED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. IF "NO PASSING ZONES" ARE 1,000' OR MORE, INSTALL ADDITIONAL "DO NOT PASS" & "NO PASSING ZONE" SIGNS ON MAXIMUM SPACING OF 750'.

ALL TRAFFIC CONTROL ITEMS SHALL BE INCLUDED IN BID FOR PAY ITEM 618-4001. MAINTENANCE OF TRAFFIC FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED ON THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.

FMS CON: 108715/301000
 STATE PROJECT NO.
 MISS. SP-9519-00(004)

NOTE: W20-1 (48"X48") SHALL BE REQ'D
 ON ALL LOCAL ROADS.



*** NOT TO SCALE ***

ADDITIONAL TRAFFIC CONTROL SIGNS REQUIRED:

R4-1 "DO NOT PASS", R4-2 "PASS WITH CARE", AND W14-3 "NO PASSING ZONE" SIGNS ARE REQUIRED IN ACCORDANCE WITH SUB-SECTION 907-618 AND AS SPECIFIED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. IF "NO PASSING ZONES" ARE 1,000' OR MORE, INSTALL ADDITIONAL "DO NOT PASS" & "NO PASSING ZONE" SIGNS ON MAXIMUM SPACING OF 750'.

ALL TRAFFIC CONTROL ITEMS SHALL BE INCLUDED IN BID FOR PAY ITEM 618-A801. MAINTENANCE OF TRAFFIC FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED ON THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 DETAIL OF CONSTRUCTION
 SIGNING

REVISION	DATE

DESIGN TEAM: DISTRICT 1, CHECKED: DATE: 6/26/2011

PROJECT NO.: SP-9519-00(004)
 COUNTY: LINCOLN

PROJECT NUMBER: 15
 SHEET NUMBER: 15

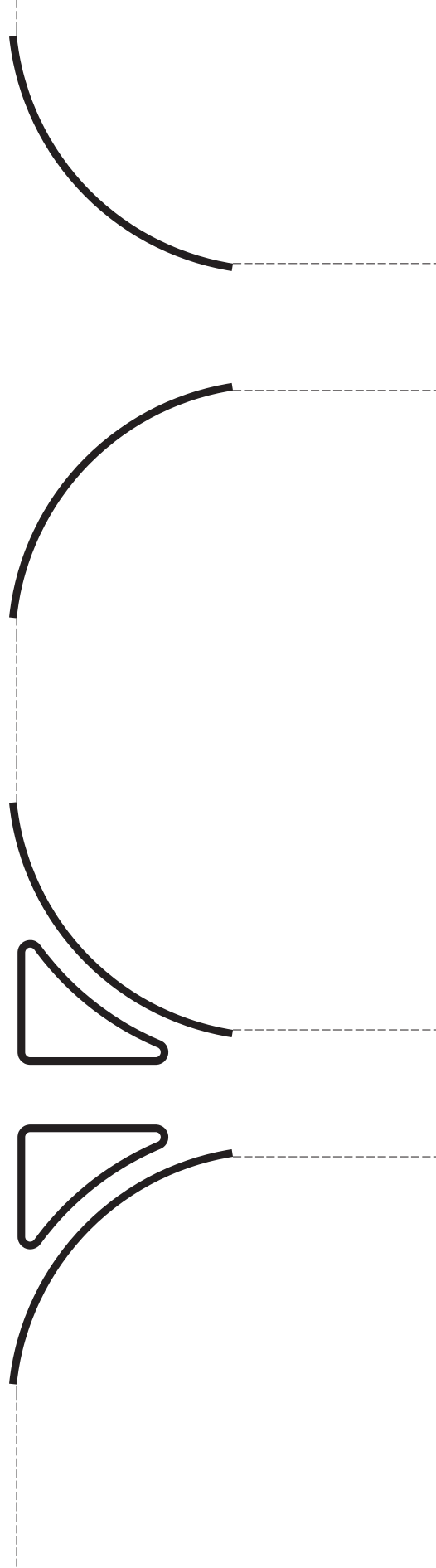


FMS CON: 108715301000302000303000

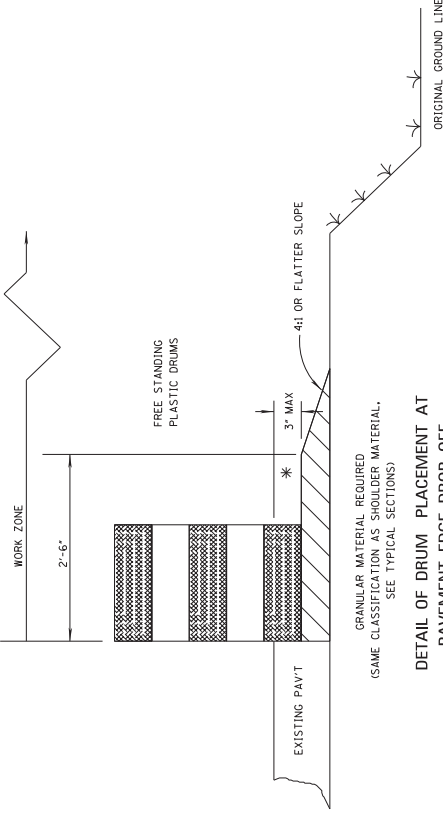
STATE	PROJECT NO.
MISS.	SP-8513-00(004) SP-8513-00(001) SP-8513-00(001)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRANSPORTATION	
DETAIL FOR CURB AND ISLAND STRIPING	
SP-8513-00(004) SP-8513-00(001) SP-8513-00(001)	
PROJECT NO.:	
COUNTY: LINCOLN	
FILE NAME: 2010DCIS-1.dgn	DATE:
DESIGN TEAM:	DISTRICT: 16
REVISION	DATE

* * ALL ASPHALT AND CONCRETE CURBS ALONG RAMPS, LOCAL ROADS, ETC. FROM B.O.P. TO E.O.P. SHALL BE PAINTED (TWO APPLICATIONS) WITH WHITE TRAFFIC PAINT AND TRAFFIC BEADS; COST TO BE ABSORBED IN OTHER PAY ITEMS.



STATE	PROJECT NO.
MISS.	SP-9519-00(004)
MISS.	SP-9513-00(001)



DETAIL OF DRUM PLACEMENT AT PAVEMENT EDGE DROP-OFF

NOTES:

* A. PAVEMENT EDGE DROP-OFF

- IF LESS THAN TWO AND ONE QUARTER (2.25) INCHES-NO PROTECTION REQUIRED. PLACE A SHOULDER WORK SIGN (W21-5) 500 FEET IN ADVANCE OF WORK ZONE SHOULDER AND A LOW SHOULDER SIGN (W8-3) AT THE BEGINNING AND THROUGHOUT THE WORK ZONE @ (11 MILE ±0.C.).
- TWO AND ONE QUARTER TO THREE INCHES-PLACE DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MILES PER HOUR OR GREATER, CONES MAY BE USED IN PLACE OF DRUMS, PANELS, AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MILES PER HOUR AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING FOR TAPERS SHOULD BE IN ACCORDANCE WITH THE MUT.C.D. (1 / 3 L, WHERE L IS THE TAPER LENGTH IN FEET.)
- GREATER THAN THREE (3) INCHES-POSITIVE SEPARATION OR WEDGE WITH 4:1 OR FLATTER SLOPE NEEDED. IF THERE IS EIGHT (8) FEET OR MORE DISTANCE BETWEEN THE EDGE OF TRAVEL LANE AND DROP-OFF, THEN DRUMS, PANELS OR BARRICADES MAY BE USED.
- FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN THREE (3) INCHES MAY BE PROTECTED WITH DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.
- LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

B. DRUM SPACING

- TANGENTS = 2 X S
 - TAPERS = L / 3
- WHERE L = S X W
S = TAPER LENGTH IN FEET
S = SPEED IN MPH (POSTED OR 85 PERCENTILE)
W = WIDTH OF OFFSET IN FEET

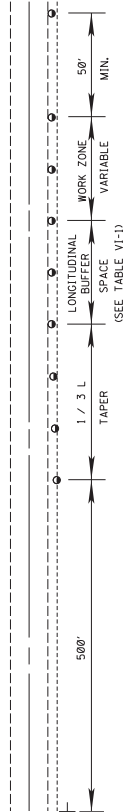
C. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

TABLE VI-1. GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE

POSTED SPEED (MPH)	LENGTH (FEET)
20	35
25	55
30	85
35	110
40	170
45	220
50	280
55	335
60	395
65	485

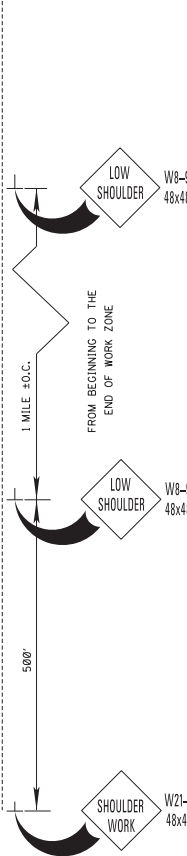
* * * POSTED SPEED, OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.

PLASTIC DRUMS (SEE NOTE FOR SPACING)



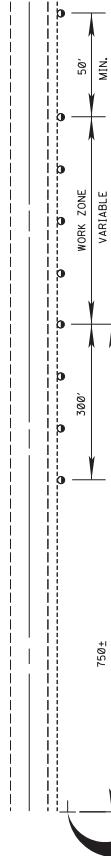
TYPICAL SHOULDER CLOSURE

- TO BE USED WITH EIGHT (8) FOOT OR GREATER WIDTH IMPROVED SHOULDER.
- TO BE USED WHEN CONSTRUCTION VEHICLES (EQUIPMENT) ENCROACHES ON OR WITHIN TWO (2) FEET OF THE SHOULDER BREAK.



TYPICAL SHOULDER WORK #1 (SEE NOTE A-1 THIS SHEET)

PLASTIC DRUMS (SEE NOTE FOR SPACING)



TYPICAL SHOULDER WORK #2

NOTE: WORK OUTSIDE TWO (2) FOOT AND WITHIN TEN (10) FEET OF THE SHOULDER BREAK MAY BE PROTECTED BY PLACING DRUMS ALONG THE SHOULDER EDGE, 300 FEET PRIOR TO AND 50 FEET BEYOND THE WORK AREA, OR SEE NOTE A-3 THIS SHEET.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

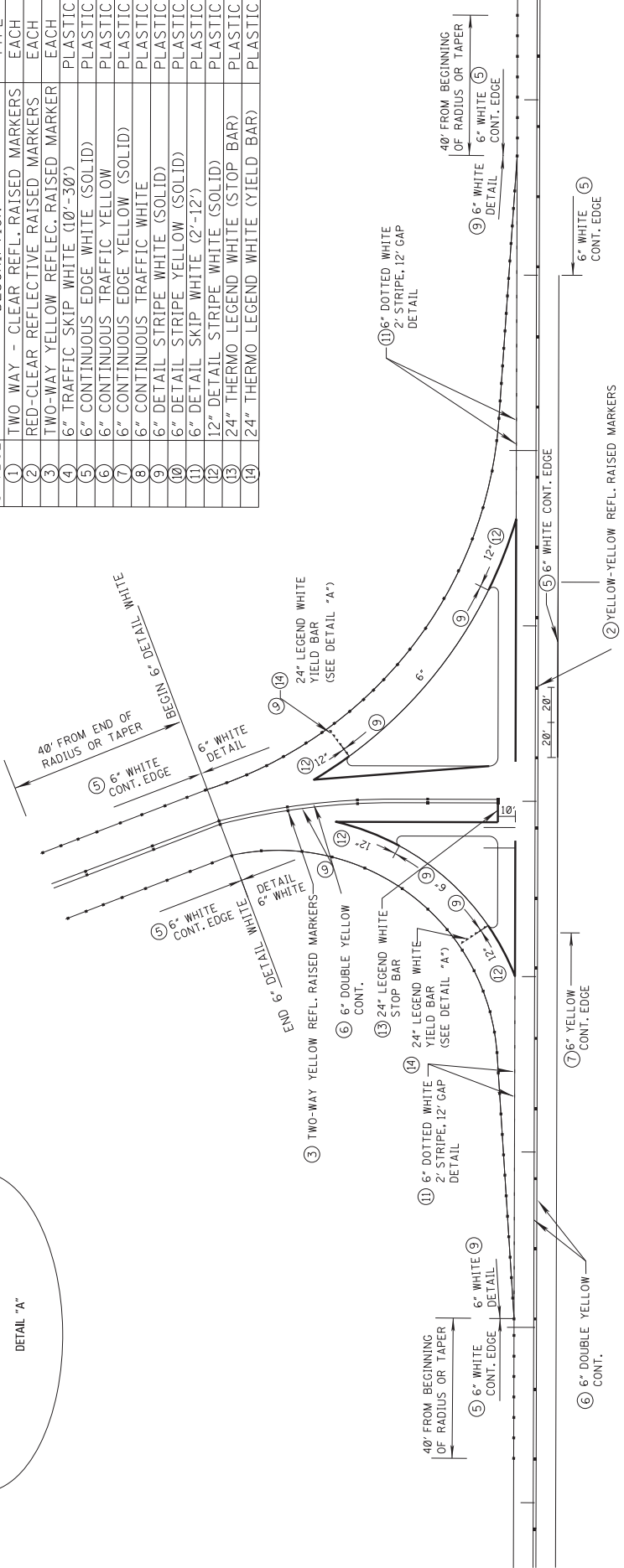
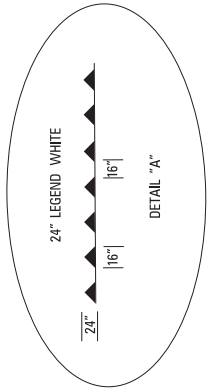
TRAFFIC CONTROL DETAILS
DRUM PLACEMENT AND
SHOULDER CLOSURE

PROJECT NUMBER: SP-9519-00(004)
SUBJECT: SP-9513-00(001)
COUNTY: LINCOLN

FILE NAME: _____
DESIGN TEAM: _____
DATE: _____
SHEET NUMBER: 18

FMS CON: 108716301000/030000
 PROJECT NO. SP-9519-00(004)
 STATE MISS. SP-9513-00(001)

PAVEMENT MARKING		
SYMBOL	DESCRIPTION	TYPE
(1)	TWO WAY - CLEAR REFL. RAISED MARKERS	EACH
(2)	RED-CLEAR REFLECTIVE RAISED MARKERS	EACH
(3)	TWO-WAY YELLOW-REFLEC. RAISED MARKER	EACH
(4)	6" TRAFFIC SKIP WHITE (10°-30°)	PLASTIC
(5)	6" CONTINUOUS EDGE WHITE (SOLID)	PLASTIC
(6)	6" CONTINUOUS TRAFFIC YELLOW	PLASTIC
(7)	6" CONTINUOUS EDGE YELLOW (SOLID)	PLASTIC
(8)	6" CONTINUOUS TRAFFIC WHITE	PLASTIC
(9)	6" DETAIL STRIPE WHITE (SOLID)	PLASTIC
(10)	6" DETAIL STRIPE YELLOW (SOLID)	PLASTIC
(11)	6" DETAIL SKIP WHITE (2'-12')	PLASTIC
(12)	12" DETAIL STRIPE WHITE (SOLID)	PLASTIC
(13)	24" THERMO LEGEND WHITE (STOP BAR)	PLASTIC
(14)	24" THERMO LEGEND WHITE (YIELD BAR)	PLASTIC



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAIL OF STRIPING
 CHANNELIZED INTERSECTIONS
 2-LANE HIGHWAY

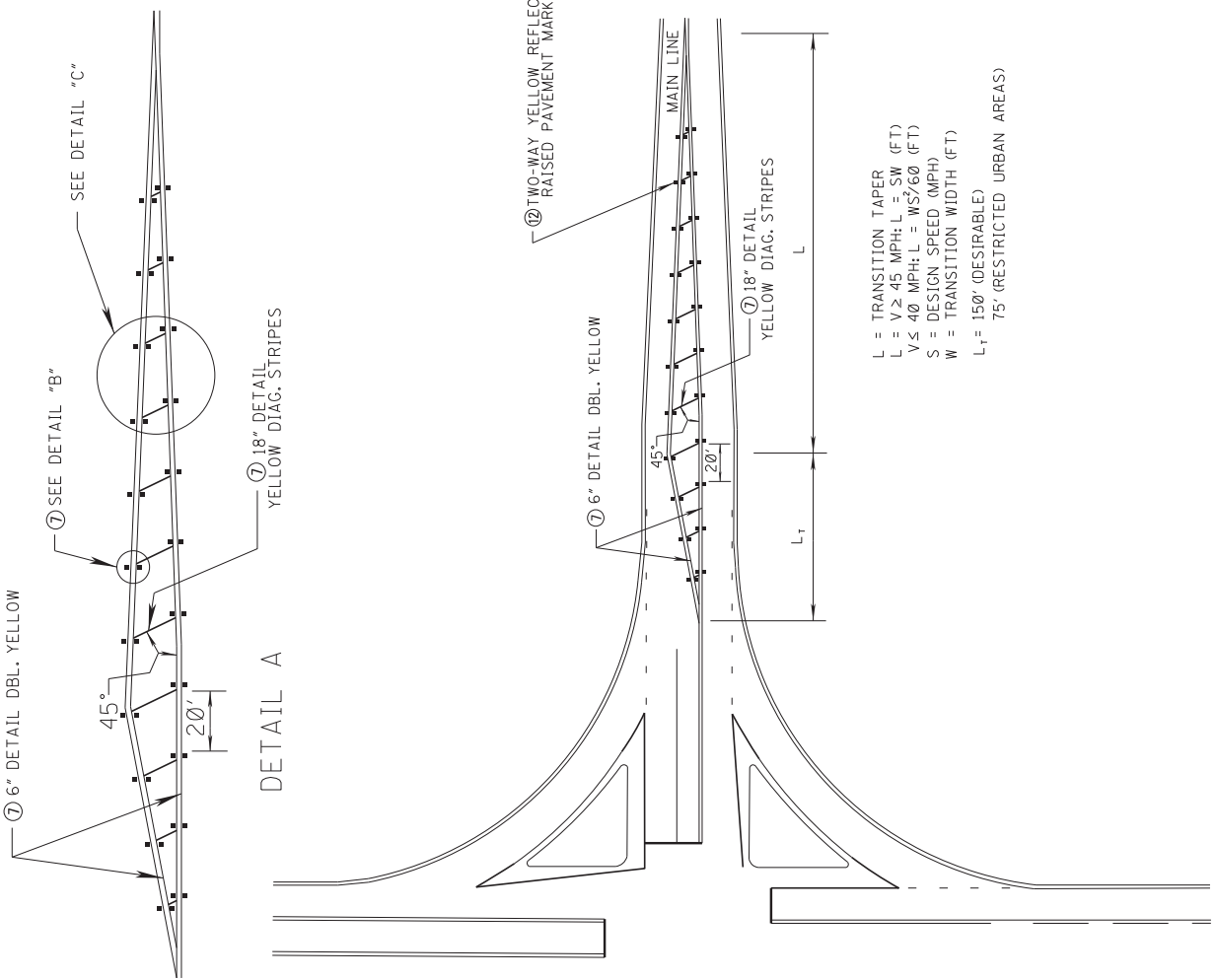
SP-9519-00(004)
 PROJ. NO.: SP-9513-00(001)
 COUNTY: LINCOLN

DATE: _____
 DESIGN TEAM: _____
 CHECKED: _____
 DATE: _____

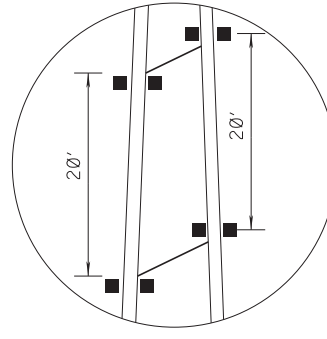
TANGENT SECTIONS	URBAN AREA (FT - IN)	RURAL AREA (FT - IN)
HORIZONTAL CURVES	40' - 0"	80' - 0"
INTERCHANGE LIMITS	40' - 0"	40' - 0"

PAVEMENT MARKING

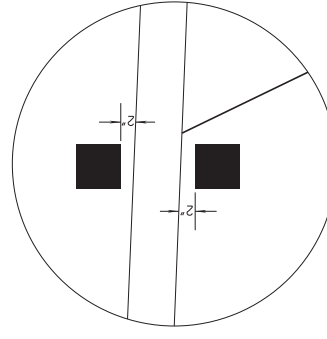
SYMBOL	DESCRIPTION	UNIT	TYPE	QUANTITY
①	6" THERMOPLASTIC TRAFFIC STRIPE SKIP WHITE	LF	PLASTIC	
②	6" THERMOPLASTIC TRAFFIC STRIPE CONT. WHITE	LF	PLASTIC	
③	6" THERMOPLASTIC EDGE STRIPE CONT. WHITE	LF	PLASTIC	
④	6" THERMOPLASTIC TRAFFIC STRIPE CONT. YELLOW	LF	PLASTIC	
⑤	6" THERMOPLASTIC EDGE STRIPE CONT. YELLOW	LF	PLASTIC	
⑥	THERMOPLASTIC DETAIL STRIPE, WHITE	LF	PLASTIC	
⑦	THERMOPLASTIC DETAIL STRIPE, YELLOW	LF	PLASTIC	
⑧	THERMOPLASTIC LEGEND, WHITE	LF	PLASTIC	
⑨	THERMOPLASTIC LEGEND, YELLOW	LF	PLASTIC	
⑩	REFLECTIVE HIGH PEBB. RAISED MARKERS	SF		
⑪	RED-CLEAR REFLECTIVE HIGH PEBB. RAISED MARKERS	SF		
⑫	TWO-WAY YELLOW REFLECTIVE HIGH PEBB. RAISED MARKERS	SF		
⑬				
⑭				



L = TRANSITION TAPER
 L = $V \geq 45$ MPH; L = SW (FT)
 V ≤ 40 MPH; L = $WS^2/60$ (FT)
 S = DESIGN SPEED (MPH)
 W = TRANSITION WIDTH (FT)
 L₁ = 150' (DESIRABLE)
 75' (RESTRICTED URBAN AREAS)



DETAIL C



DETAIL B

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING DETAILS FOR GORE AREAS

SP-9519-00(004)
 PROJ. NO.: SP-9513-00(001)
 COUNTY: LINCOLN

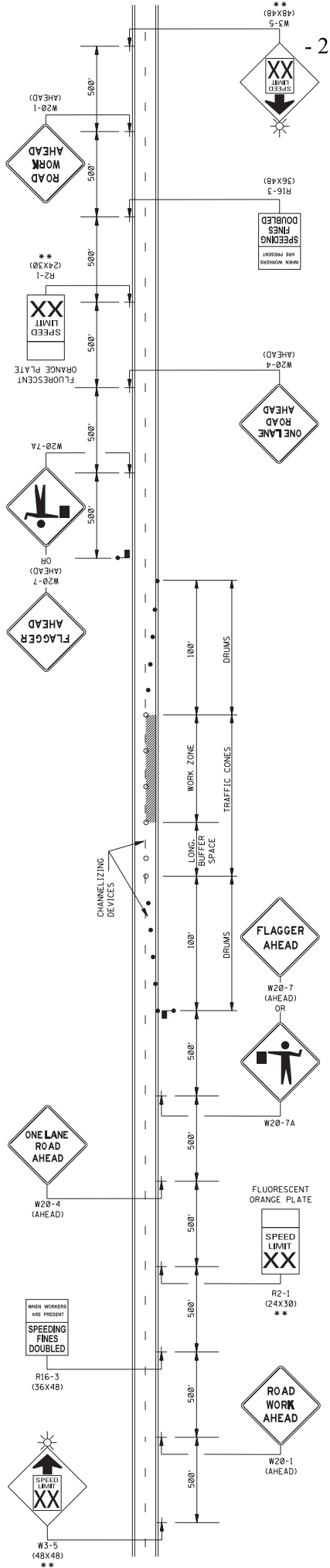
FILE NAME: L25JPMO-4.CADD
 DESIGN TEAM: DISTRICT J. CHECKED: _____ DATE: _____

REVISION

BY



PROJECT NO.	SP-9513-00(001)
STATE	MISS.
MISS.	SP-9513-00(001)



GENERAL NOTES:

1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE. FLAGGER STATIONS SHALL BE LOCATED SUCH THAT APPROACHING VEHICLES WILL HAVE SUFFICIENT DISTANCE TO STOP. VALUES IN STOPPING SIGHT DISTANCE COLUMN MAY BE USED AS A MINIMUM FOR THIS DISTANCE.

POSTED SPEED AND/OR DESIGN SPEED	MPH	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL BUFFER SPACE (ft)	STOPPING DISTANCE
		TAPER	LANE LINE & WORK ZONE		
25	25	20	50	55	155
30	30	20	60	65	200
35	35	20	70	75	250
40	40	20	80	120	300
45	45	20	100	170	350
50	50	20	100	250	425
55	55	20	110	335	495
60	60	20	120	415	570
65	65	20	130	485	645

† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 28" IN HEIGHT.
3. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" x 36" AND BLACK COPY ON FLUORESCENT ORANGE SHEETING.
4. WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
5. ADDITIONAL FLAGGERS MAY BE NEEDED AS DIRECTED BY THE ENGINEER.
6. WHEN WORK IS REQUIRED AT NIGHT, FLAGGER STATIONS SHALL BE ILLUMINATED.
7. CHANNELIZING DEVICE TYPES FOR:
 - A. APPROACH AND EXIT TAPERS - RETROREFLECTIVE PLASTIC DRUMS
 - B. ALONG LANE LINE AND WORK ZONE - TRAFFIC CONES (28" HEIGHT)
8. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

ROAD TYPE	A	B	C
URBAN (35 MPH OR LESS)	100 FT.	100 FT.	100 FT.
URBAN (40 - 70 MPH)	350 FT.	350 FT.	350 FT.
RURAL	500 FT.	500 FT.	500 FT.
EXPRESSWAY / FREEWAY	1000 FT.	1500 FT.	2640 FT.

- LEGEND
- FLAGGER
 - RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
 - TRAFFIC CONES (28" HEIGHT MINIMUM)
 - THE SPEED ON R2-1 AND W3-5 SIGNS SHALL BE THE SPEED LIMIT UNLESS OTHERWISE DIRECTED BY COMMISSION ORDER.

Notice to Bidders No. 3776

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)

SP-9513-00(004)
SP-9513-00(001)

PROJECT NO.: SP-9513-00(001)
COUNTY: LINCOLN

FILE NAME: L27SDICP-1.dwg
DESIGN TEAM: DISTRICT 7, CHECKED

DATE

NO. OF SHEETS	22
SHEET NUMBER	SP-CP-1

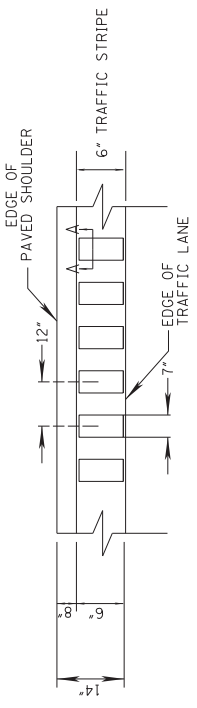
FMS CON: 108715/301000
 STATE PROJECT NO.
 MISS. SP-9519-00(004)



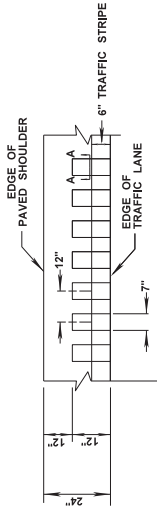
PROJECT NUMBER
 SP-9519-00
 SHEET NUMBER
 23

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
DETAIL OF RUMBLE STRIPS (GROUND IN)	
PROJ. NO.: SP-9519-00(004)	DATE
COUNTY: LINCOLN	DESIGN TEAM
FILE NAME: L28JRS-2.DGN	DISTRICT J.
CHECKED	DATE

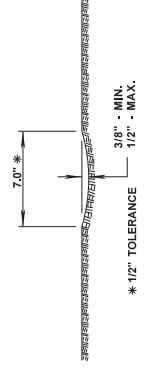
- GENERAL NOTES**
- GROUND-IN RUMBLE STRIPES SHALL BE APPLIED ON LEFT AND RIGHT SHOULDERS OF ALL PAVED SHOULDERS ON THIS PROJECT
 - GROUND-IN RUMBLE STRIPES SHALL BE OMITTED ACROSS PRINCIPAL INTERSECTING ROADWAYS OR OTHER INTERRUPTIONS IN NORMAL SHOULDER WIDTH AS DIRECTED BY THE ENGINEER
 - COST TO BE PAID FOR USING APPROPRIATE PAY ITEMS
 - GROUND-IN RUMBLE STRIPES SHALL BE APPLIED TO MAINLINE ONLY



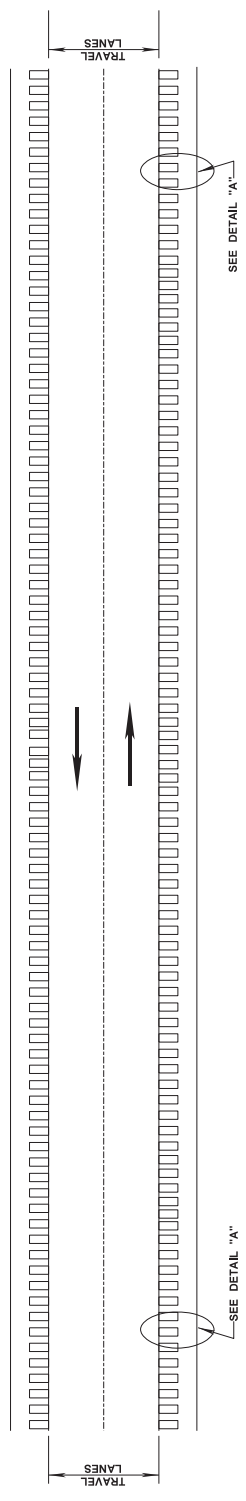
DETAIL "A"
12' PAVEMENT EDGE



DETAIL "A"
14' PAVEMENT EDGE

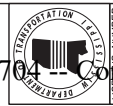


SECTION "A-A"



PLAN
 NOT TO SCALE

FMS CON: 108715/301000
 STATE PROJECT NO. SP-9519-00(004)
 MISS.

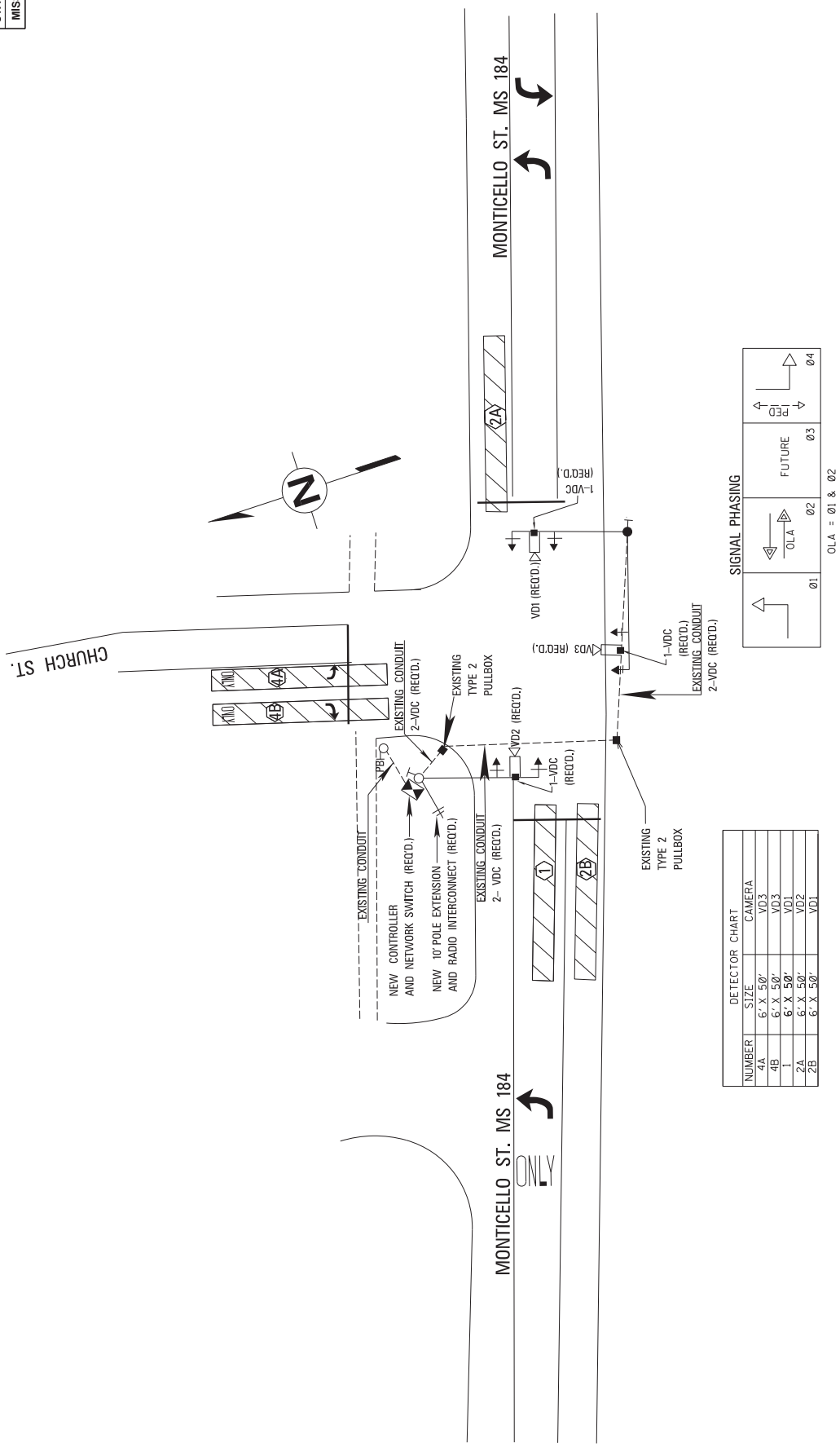


PROJECT NUMBER
 TSI-1
 SHEET NUMBER
 2001

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
BY	REVISION

TRAFFIC SIGNAL IMPROVEMENTS
 @ S.R. 184 & CHURCH ST.

PROJ. NO.: SP-9519-00(004)
 COUNTY: LINCOLN
 FILE NAME: ISI-1.dgn
 DESIGN TEAM: DISTRICT 1, CHECKED: _____ DATE: _____

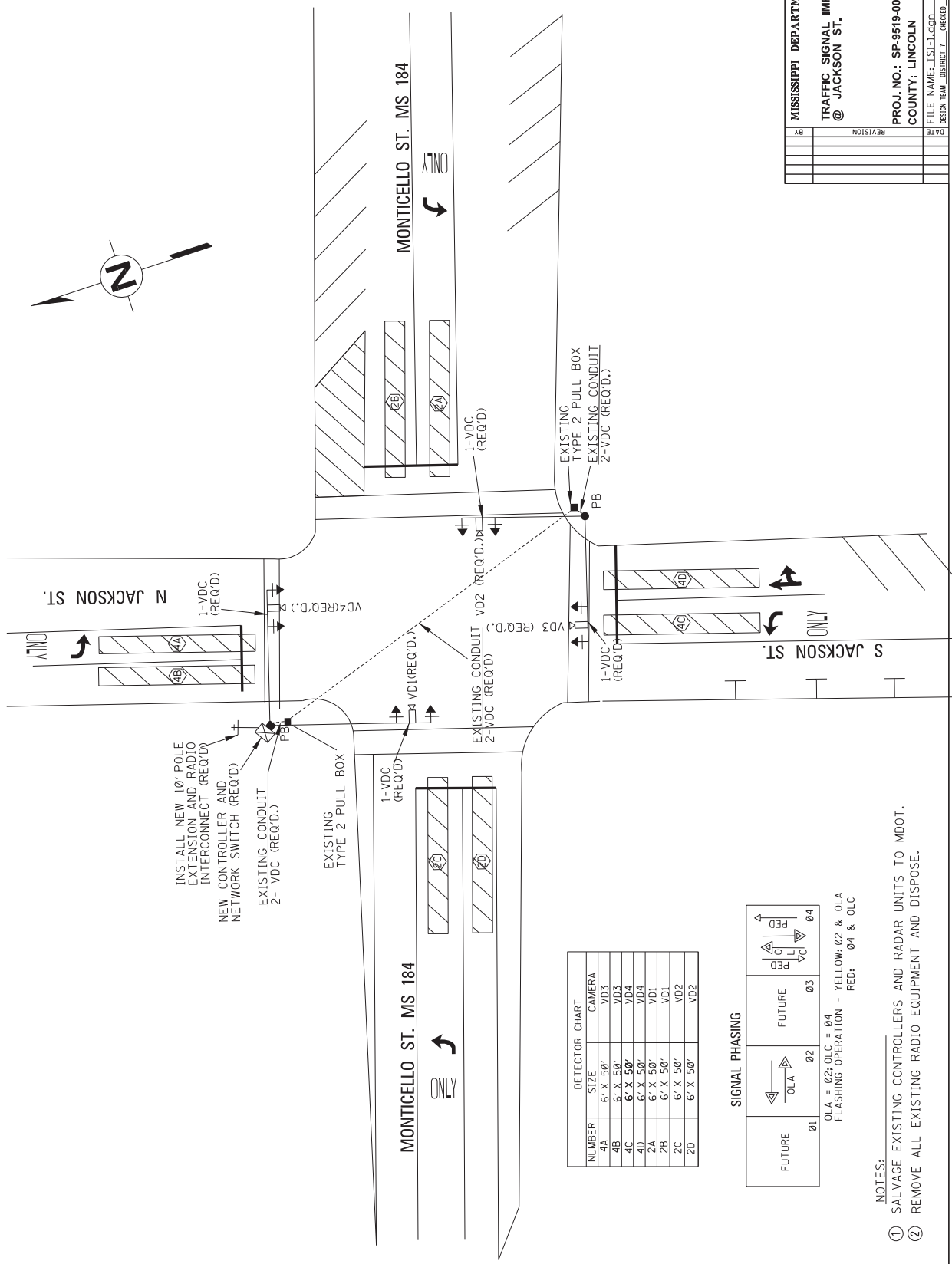


- NOTES:
- ① SALVAGE EXISTING CONTROLLERS AND RADAR UNITS TO MDOT.
 - ② REMOVE ALL EXISTING RADIO EQUIPMENT AND DISPOSE.

FMS CON: 108715/301000
 STATE PROJECT NO.
 MISS. SP-9519-00(004)



MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 TRAFFIC SIGNAL IMPROVEMENTS
 @ JACKSON ST.
 PROJ. NO.: SP-9519-00(004)
 COUNTY: LINCOLN
 FILE NAME: ISI-1.dgn
 DESIGN TEAM: DISTRICT 1, CHECKED: []
 DATE: []



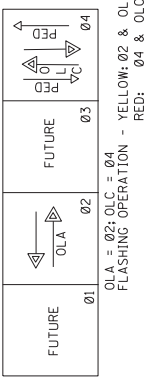
INSTALL NEW 10' POLE
 EXTENSION AND RADIO
 INTERCONNECT (REQ'D)
 NEW CONTROLLER AND
 NETWORK SWITCH (REQ'D)
 EXISTING CONDUIT
 2- VDC (REQ'D.)

EXISTING
 TYPE 2 PULL BOX

DETECTOR CHART

NUMBER	SIZE	CAMERA
4A	6' X 50'	VD3
4B	6' X 50'	VD3
4C	6' X 50'	VD3
4D	6' X 50'	VD4
2A	6' X 50'	VD1
2B	6' X 50'	VD1
2C	6' X 50'	VD2
2D	6' X 50'	VD2

SIGNAL PHASING



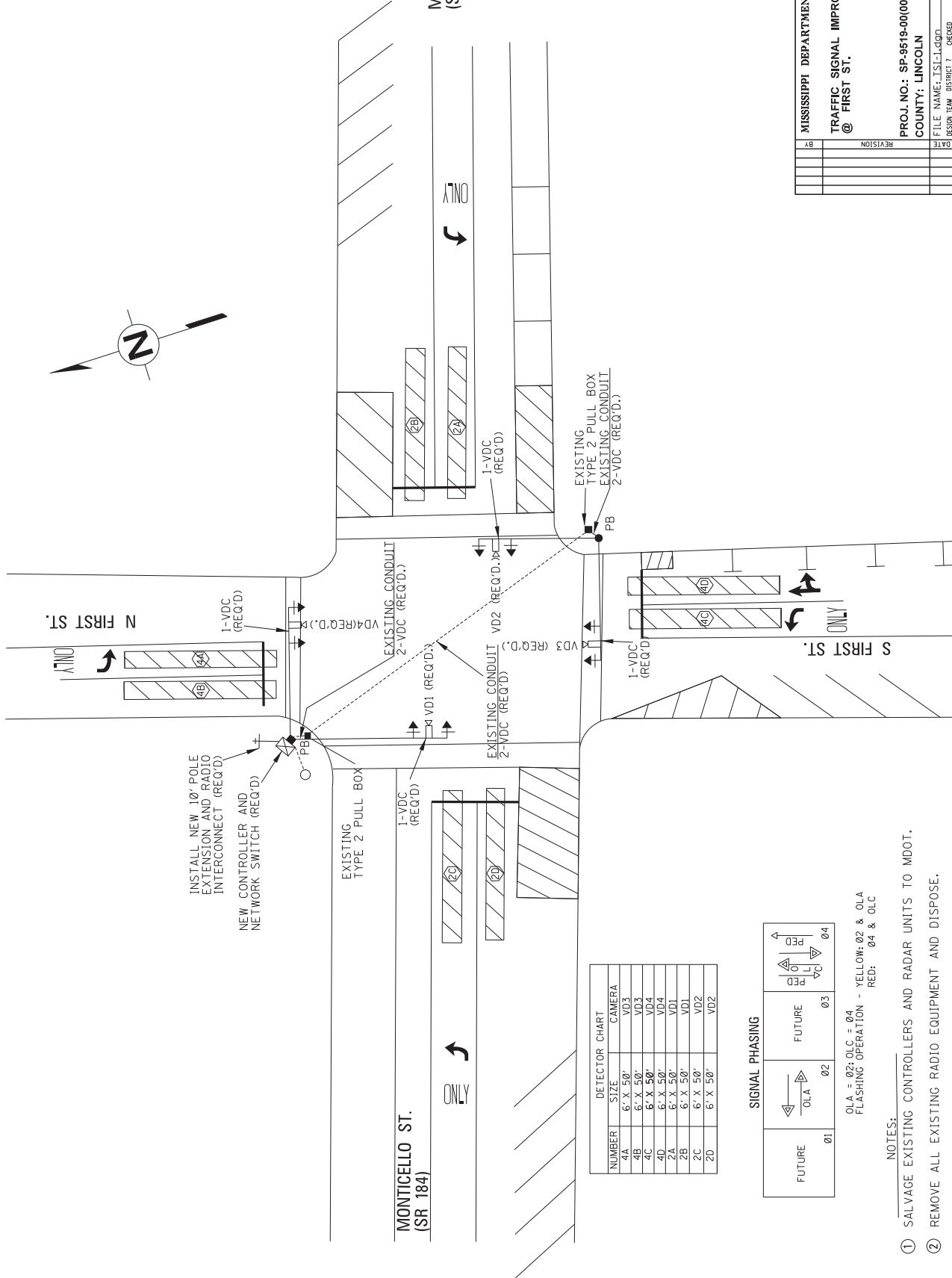
- NOTES:
- 1 SALVAGE EXISTING CONTROLLERS AND RADAR UNITS TO MDOT.
 - 2 REMOVE ALL EXISTING RADIO EQUIPMENT AND DISPOSE.

FMS CON: 108715/201000
 STATE PROJECT NO.
 MISS. SP-9519-00(004)

Notice to Bidders No 3704

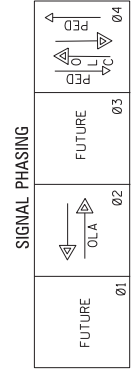


MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC SIGNAL IMPROVEMENTS	
@ FIRST ST.	
PROJ. NO.:	SP-9519-00(004)
COUNTY:	LINCOLN
FILE NAME:	ISI-1.dgn
DESIGN TEAM:	DISTRICT J.
DATE:	2003



DETECTOR CHART

NUMBER	SIZE	CAMERA
4A	6' X 50'	VD3
4B	6' X 50'	VD3
4C	6' X 50'	VD4
4D	6' X 50'	VD4
2A	6' X 50'	VD1
2B	6' X 50'	VD1
2C	6' X 50'	VD2
2D	6' X 50'	VD2



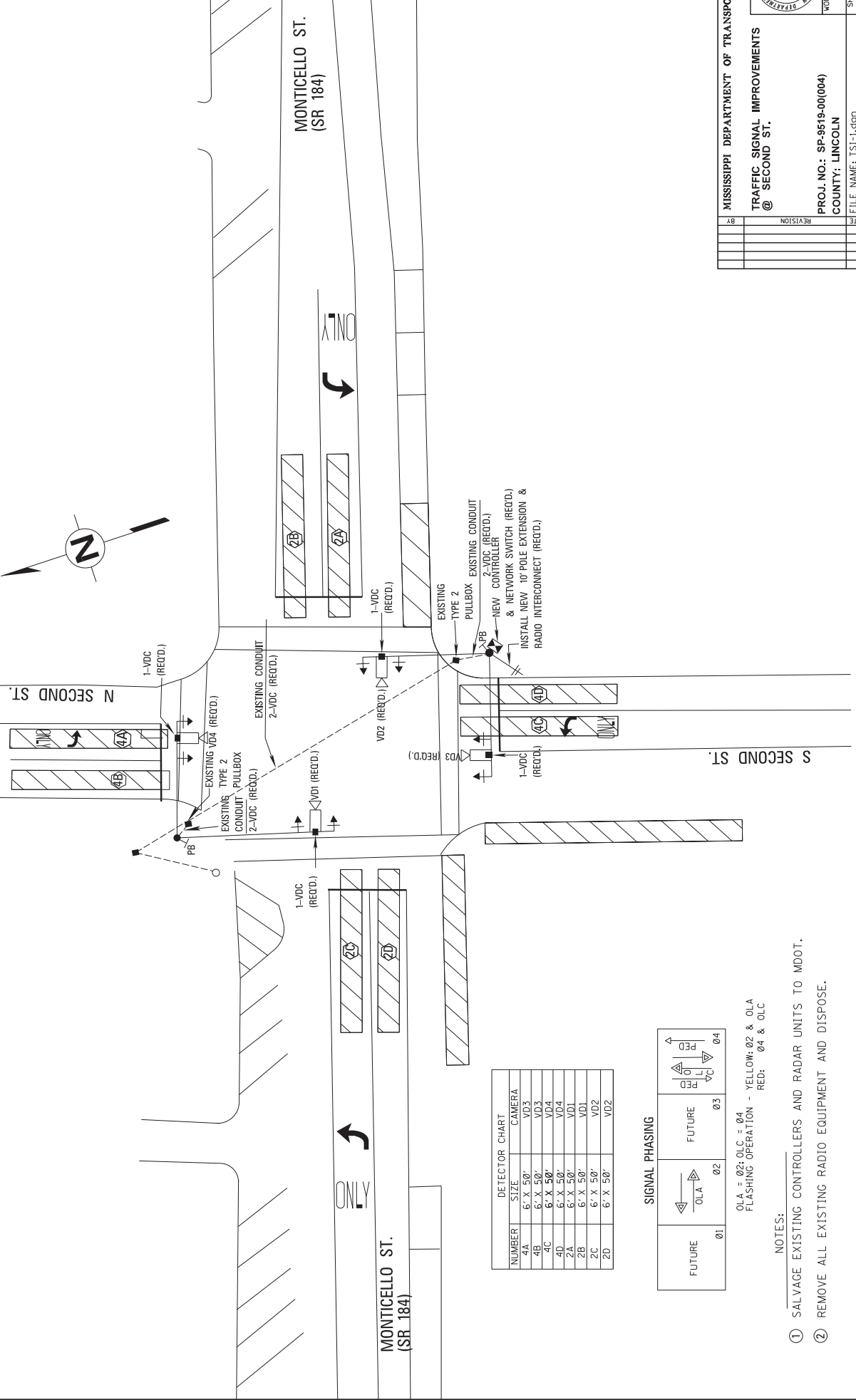
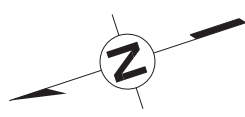
- NOTES:
- ① SALVAGE EXISTING CONTROLLERS AND RADAR UNITS TO MDOT.
 - ② REMOVE ALL EXISTING RADIO EQUIPMENT AND DISPOSE.

FMS CON: 108715/201000
 STATE PROJECT NO.
 MISS. SP-9519-00(004)

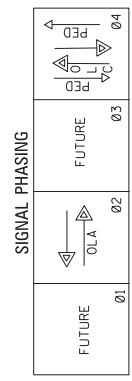
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 TRAFFIC SIGNAL IMPROVEMENTS
 @ SECOND ST.

PROJ. NO.: SP-9519-00(004)
 COUNTY: LINCOLN
 FILE NAME: ISI-1.dgn
 DESIGN TEAM: DISTRICT 1, CHECKED: DATE: 2004

REVISION	DATE



NUMBER	DETECTOR	SIZE	CAMERA
4A	6' X 50"	VD3	
4B	6' X 50"	VD3	
4C	6' X 50"	VD4	
4D	6' X 50"	VD4	
2A	6' X 50"	VD1	
2B	6' X 50"	VD1	
2C	6' X 50"	VD2	
2D	6' X 50"	VD2	



OLA = 02; OLC = 04
 FLASHING OPERATION - YELLOW: 02 & OLA
 RED: 04 & OLC

- NOTES:
- 1 SALVAGE EXISTING CONTROLLERS AND RADAR UNITS TO MDOT.
 - 2 REMOVE ALL EXISTING RADIO EQUIPMENT AND DISPOSE.

TRAFFIC SIGNAL GENERAL NOTES

- TRAFFIC SIGNAL CABINETS AND CONTROLLERS SHALL BE WIRED TO PROVIDE FOR ALL PHASES INCLUDING FUTURE PHASES IN ACCORDANCE WITH THE PHASE SEQUENCE DIAGRAM.
- ALL TRAFFIC SIGNAL CONTROLLERS SHALL ETHERNET READY, AND COMPATIBLE WITH MDOT'S EXISTING TRAFFIC SIGNAL MANAGEMENT SOFTWARE. ALL TRAFFIC SIGNAL CONTROLLER FIRMWARE SHALL BE CAPABLE OF DELAYING THE ONSET OF THE FLASHING YELLOW ARROW. ALL MMUS SHALL BE ETHERNET READY, 16 CHANNEL, AND CAPABLE OF RUNNING 12 DIFFERENT MODES OF FLASHING YELLOW ARROW OPERATION. THE CONTRACTOR SHALL COORDINATE WITH MDOT FOR IP ADDRESSES ON ALL NETWORKABLE DEVICES. DEVICES INCLUDE BUT NOT LIMITED TO: CONTROLLER, MMU WITH SDLC CABLE (CONFLICT MONITOR), AND DETECTION UNITS. TRAFFIC SIGNAL CONTROLLER CABINET SHALL HAVE A 16 LOAD BAY FACILITY, REAR ACCESS DOOR, LARTOP TRAY, AND DUAL POSITION INTERNAL LED LIGHTING. ALL TRAFFIC SIGNAL CONTROLLER CABINETS SHALL HAVE A 5 POSITION CARD RACK AND ONE 175 WATT MINIMUM POWER SUPPLY AND 4 AVAILABLE SLOTS UNLESS OTHERWISE NOTED ON PLANS. SEE 907-4332.02.6.1.

- FOR PROTECTED/PERMITTED LEFT TURN PHASING USING TYPE 2 FYA TRAFFIC SIGNAL HEADS, OPERATION SHALL BE AS FOLLOWS: THE PROTECTED PHASE OF THIS OPERATION SHALL DISPLAY A SOLID GREEN ARROW, FOLLOWED BY A SOLID YELLOW ARROW, AND ENDING WITH A SOLID RED ARROW. THE PERMITTED PORTION OF THIS OPERATION SHALL START WITH A FLASHING YELLOW ARROW, FOLLOWED BY A SOLID YELLOW ARROW, AND ENDING WITH A SOLID RED ARROW. THERE SHALL BE A DELAY (AS DIRECTED BY THE ENGINEER) BETWEEN THE END OF THE PROTECTED PORTION OF THIS OPERATION AND THE BEGINNING OF THE PERMITTED PORTION OF THIS OPERATION. DURING THIS DELAY, THE OPPOSING PHASE TRU HEADS ARE CAPABLE OF DISPLAYING A GREEN BALL. SIGNAL CONTROLLER WITH FIRMWARE NECESSARY TO ACCOMPLISH THIS DELAY SHALL BE PROVIDED.

- POLES AND FOUNDATIONS OF EXISTING SIGNAL INSTALLATION REMOVALS SHALL BE CUT OFF 6" BELOW GROUND, REMOVED AND AREA RESTORED TO MATCH ADJACENT SURFACE AS DIRECTED BY THE ENGINEER.
- ALL REMOVED EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS SPECIFIC ITEMS ARE NOTED IN THE PLANS TO BE SALVAGED AS DIRECTED BY THE ENGINEER.

- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ELECTRICAL SERVICE FROM THE POWER COMPANY SERVICE POINT TO THE POWER SERVICE PEDESTAL FOR SPAN WIRE INSTALLATION. POWER SHALL RUN FROM THE POWER COMPANY SERVICE POINT NEAR TO THE SIGNAL POLE NEAREST THE CONTROLLER. THE SERVICE SHALL THEN RUN TO THE CONTROLLER AS SHOWN ON THE PLANS. FOR MAST ARM INSTALLATION, POWER SHALL RUN FROM THE POWER COMPANY SERVICE POINT UNDERGROUND DIRECTLY TO THE POWER SERVICE PEDESTAL, THEN TO THE CONTROLLER CABINET, AS SHOWN ON THE PLANS. A DISCONNECT SHALL BE INSTALLED AT THE POWER COMPANY SERVICE POLE FOR MAST ARM INSTALLATIONS.

- POWER SERVICE METER SHALL NOT BE MOUNTED ON THE CONTROLLER CABINET OR MAST ARM POLE SHAFTS. A SEPARATE POWER SERVICE PEDESTAL FOR MOUNTING THESE ITEMS IS REQUIRED. (SEE TSD-6 & TSD-7). BLACK CONDUCTORS SHALL BE USED FOR ALL LINE (HOT) WIRES AND WHITE CONDUCTORS SHALL BE USED FOR ALL NEUTRAL WIRES.

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE THE NECESSARY ARRANGEMENTS WITH THE LOCAL POWER COMPANY TO PROVIDE THE POWER SUPPLY ASSEMBLY FOR ANY NEW INSTALLATION. THE CONTRACTOR SHALL PAY FOR, AT NO COST TO THE DEPARTMENT, ALL POSITS, HOOK-UP CHARGES, OR OTHER SERVICE FEES REQUIRED BY THE POWER COMPANY FOR THE ESTABLISHMENT OF NEW SERVICE. THE COST OF ALL SUCH FEES SHALL BE CONSIDERED INCIDENTAL AND ABSORBED WITHIN EXISTING PAY ITEMS. THE MONTHLY SERVICE BILL FOR THE NEW POWER SERVICE INSTALLATION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SWAP THE ELECTRICAL SERVICE ACCOUNT OVER TO THE DEPARTMENT OR LOCAL AGENCY. WHEN ELECTRIC POWER SERVICE EXISTS AND IS USED FOR THE OPERATION OF AN EXISTING SYSTEM, THE MONTHLY SERVICE FEES SHALL CONTINUE TO BE PAID BY THE DEPARTMENT OR THE LOCAL AGENCY. IF THE EXISTING POWER SERVICE IS INTENDED FOR USE WITH A NEW SIGNAL SYSTEM, THEN ANY SERVICE CHARGE FEES

- POLES, SIGNAL HEADS, EQUIPMENT BOXES, PULLBOXES AND CONDUIT LOCATIONS MAY BE VARIED SLIGHTLY TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. HOWEVER, SIGNAL HEAD OR POLE LOCATIONS SHALL BE WITHIN REQUIREMENTS OUTLINED IN THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND HIGHWAY DESIGN AND OPERATIONAL PRACTICES RELATED TO HIGHWAY SAFETY.
- THE CONTRACTOR SHALL PROVIDE MAST ARM POLE DESIGN CERTIFICATION AND CALCULATIONS AS OUTLINED IN SECTION 722.02 OF STANDARD SPECIFICATIONS. DESIGN STANDARD FOR MAST ARMS POLES SHALL BE 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. USE FATIGUE CATEGORY II, USE 50 YEAR DESIGN SERVICE LIFE AND DO NOT CONSIDER GALLING OR TRUCK-INDUCED GUSTS, WIND AND ICE LOADS VARIABLE BASED UPON MAPS IN THE 2013 AASHTO SPECIFICATION. USE UPSWEPT MAST ARMS UNLESS OTHERWISE NOTED ON PLANS. SEE TSD 3.

- DETERMINATION OF REQUIRED SIZES, LENGTHS AND GAUGES OF TYPE I - XI STEEL POLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND SECTION 722.02 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED IN PLANS OR SPECIFICATIONS.
- TRAFFIC SIGNAL MAST ARM POLES SHALL BE HOT DIPPED GALVANIZED WITH FINISH APPROVED BY THE ENGINEER.
- TRAFFIC SIGNAL MAST ARM POLES REQUIRING LUMINAIRES ARE DESIGNATED BY (L). ALL LUMINAIRES SHALL BE LED UNLESS OTHERWISE NOTED ON PLANS.

- STAINLESS STEEL TAG ATTACHED TO THE POLE SHAFT USING 3/16 INCH STAINLESS STEEL POP RIVETS WITH PROPERTIES AND INFORMATION AS FOLLOWS:
 - MINIMUM 1/4 INCH THICKNESS
 - MANUFACTURER NAME
 - MONTH / YEAR OF MANUFACTURE
 - UNIQUE IDENTIFYING NUMBER FOR FUTURE MANUFACTURER REFERENCE
 - EXTERNAL PROJECT NUMBER FROM THE PLANS COVER SHEET (EXAMPLE: STP-XXXX-XX...)
 TAG TO BE INSTALLED ON SHAFT SIDE OPPOSITE THE MAINLINE HIGHWAY AND LOCATED APPROXIMATELY 48 INCHES ABOVE THE TOP OF BASE PLATE.

- THE TOP OF THE STRAIN POLE FOUNDATION SHALL BE 6" ABOVE THE GROUND. THE CONTRACTOR SHALL PROVIDE POLES OF SUFFICIENT LENGTH PLUS 2 FEET TO PROVIDE REQUIRED VERTICAL CLEARANCE OF THE TRAFFIC SIGNAL HEADS WITHOUT EXTENDING THE FOUNDATION ABOVE THE GROUND LINE OF THE POINT WHERE THE POLE IS LOCATED. EVEN THOUGH THIS MAY BE BELOW THE FINISHED GRADE OF THE ROADWAY.

- ALL STRAIN POLES AT AN INTERSECTION SHALL BE THE SAME DIAMETER AND UTILIZE THE SAME BOLT CIRCLE SPACING.

- POLE FOUNDATIONS AND BASE MOUNTED CABINET FOUNDATIONS, GRADE SHALL BE ESTABLISHED TO ±3" OF EDGE OF PAVEMENT ELEVATION UNLESS APPROVED BY SIGNAL PROJECT ENGINEER.

- TRAFFIC SIGNAL HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS WITH BLACK BACK PLATES
- PEDESTRIAN HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS.

- PEDESTRIAN PUSHBUTTONS SHALL BE EITHER STANDARD PUSHBUTTONS OR APS (ACCESSIBLE PEDESTRIAN SYSTEM) STYLE AS NOTED ON PLANS. SIGNS TO BE INCLUDED IN PAY ITEM FOR PEDESTRIAN PUSHBUTTONS AT NO ADDITIONAL COST. SIDE OF POLE LOCATIONS OF PUSHBUTTONS MAY BE FIELD ADJUSTED. PUSHBUTTON HARDWARE SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS.

- FIELD DRILL AND TAP EXISTING POLES WHERE PEDESTRIAN SIGNALS AND PUSHBUTTONS ARE REQUIRED ON PLANS. (ABSORBED ITEM).

Notice to Bidders No. 37



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC SIGNAL GENERAL NOTES	
PROJECT NUMBER	SP-9519-00(004)
SHEET NUMBER	TSD-1
DATE	2/28/18
DESIGN TEAM	FILENAME: FinalTSDs_3.8.2018.dgn
CHECKED	DATE: 2/28/18
COUNTY: LINCOLN	PROJECT NO.: SP-9519-00(004)
DATE	DATE
BY	BY
APP'D	APP'D
REVISION	REVISION

- SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SIMILARLY, IF AN EXISTING POWER SERVICE IS TO BE DISCONNECTED, ANY SERVICE CHARGE FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF ALL SUCH FEES SHALL BE CONSIDERED INCIDENTAL AND ABSORBED WITHIN EXISTING PAY ITEMS.
- WHEN CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY SIGNALS TO ACCOMMODATE ROADWAY CONSTRUCTION, IT SHALL BE PAID FOR UNDER PAY ITEM 1619-H1, TRAFFIC SIGNAL, LUMP SUM, UNLESS OTHERWISE NOTED ON PLANS.
- VEHICLE LOOP ASSEMBLIES SHALL BE INSTALLED IN THE TOP LAYER OF BINDER OR EXISTING SURFACE BEFORE THE FINAL SURFACE COURSE IS APPLIED (BASED ON 2" FINAL LIFT MAXIMUM).

- WHEN RADAR, VIDEO, OR MULTI-SENSOR DETECTION IS USED, THE SYSTEM MAY REQUIRE BOTH STOP BAR AND ADVANCE DETECTION. TSI PLANS SHOW A GENERIC LAYOUT FOR DETECTION; DETECTOR MAY BE RELOCATED PER MANUFACTURER'S RECOMMENDATIONS. THERE SHALL BE NO EXTRA PAY FOR MOVING OF DETECTORS OTHER THAN CABLE LENGTHS. MANUFACTURER TO HAVE FACTORY REP ON SITE DURING INSTALLATIONS UNLESS CERTIFIED BY THE MANUFACTURER. DETECTION CABLE WILL BE MEASURED BY THE LINEAR FOOT, MEASURED HORIZONTALLY ALONG THE CONDUIT, MESSENGER CABLE OR MAST ARM AND VERTICALLY ALONG THE POLE. DETECTION CABLE FOR CAMERAS, THE POWER AND VIDEO CABLE MAY BE IN THE SAME JACKET.
- ALL DETECTION UNITS SHALL BE NETWORKABLE DEVICES AND BE ON THE MDOT NETWORK IF NOTED ON PLANS.

- ALL GROUNDING EQUIPMENT SHALL BE COST ABSORBED.
- MESSENGER CABLE AND OTHER SUPPORTING DEVICES WHERE REQUIRED SHALL BE ABSORBED IN THE PAY ITEMS FOR SIGNAL CABLE.

- THE CONTRACTOR SHALL STAKE THE LOCATION OF EACH POLE FOUNDATION AND NOTIFY THE PROJECT ENGINEER FOR CONCURRENCE IN THE LOCATION BEFORE PROCEEDING WITH THE PURCHASE OF THE POLE.

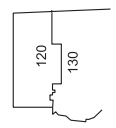
- THE CONTRACTOR SHALL BE REQUIRED TO ADEQUATELY AND COMPLETELY COVER TRAFFIC SIGNAL HEADS DURING TIMES THAT THEY ARE NOT IN OPERATION WITH A DURABLE, OUTDOOR-HARDENED MATERIAL THAT CONTRASTS WITH THE COLOR OF THE HEAD THAT CLEARLY DESIGNATES THAT THE SIGNAL IS NOT IN "STOP AND GO" MODE. HEAD CLEARS ARE TO BE APPROVED BY THE ENGINEER.

- A NEW TRAFFIC SIGNAL INSTALLATION SHALL BE PUT IN FLASH OPERATION FOR A PERIOD OF THREE (3) TO SEVEN (7) DAYS PRIOR TO THE ACTIVATION OF THE SIGNAL'S "STOP AND GO" OPERATION. ACTIVATION OF NEW TRAFFIC SIGNALS SHALL BE DURING A MID-WEEK WEEKDAY (TUESDAY - THURSDAY) DURING A NON-PEAK TIME AND SHALL BE COORDINATED WITH THE ENGINEER. UPON INITIAL INSPECTION AND ACCEPTANCE TESTING OF THE NEW TRAFFIC SIGNAL INSTALLATION, THE CONTRACTOR SHALL REQUEST THE START OF THE 30 DAY BURN-IN PERIOD TO COMMENCE, AS OUTLINED IN SUBSECTION 631.03.4 OF THIS SPECIFICATION. ANY NOTED DEFICIENCIES FOUND WITHIN THAT 30 DAY PERIOD SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER. THE 30 DAY BURN-IN PERIOD MUST COMMENCE WITHIN THE CONTRACT TIME, AND BEFORE SUBSTANTIAL COMPLETION OF THE PROJECT IS GRANTED.

- CONTRACTOR IS RESPONSIBLE FOR SCHEDULING FINAL INSPECTION MEETING WITH DISTRICT OFFICE, PROJECT OFFICE AND TRAFFIC ENGINEERING FOR SIGNAL PORTION OF THE PROJECT.

WIND SPEEDS AND ICING REGION MAP

COUNTY	BASIC WIND SPEED MPH	ICE LOADING RECD
Jefferson Davis	110	NO
JONES	110	NO
KEMPER	100	NO
LAFAYETTE	90	YES
LAMAR	120	NO
LAUDERDALE	110	NO
LAWRENCE	110	NO
LEE	90	NO
LEFLORE	90	YES
LINCOLN	100	NO
LOWNDES	90	YES
MADISON	100	NO
MARION	110	NO
MARSHALL	90	YES
MONROE	90	YES
MONTGOMERY	90	YES
NESHOBA	100	NO
NEWTON	100	NO
NOXUBEE	100	YES
OKTIBBEHA	90	YES
PANOLA	90	YES
Pearl River	130	NO
PERRY	120	NO
PIKE	110	NO
PONTOTOC	90	YES
PRENTISS	90	YES
QUITMAN	90	YES
RANKIN	100	NO
SCOTT	100	NO
SHARKEY	90	NO
SIMPSON	100	NO
SMITH	100	NO
STONE	130	NO
SUNFLOWER	90	YES
TALLAHATCHIE	90	YES
TATE	90	YES
TIPPAH	90	YES
TISHOMINGO	90	YES
TUNICA	90	YES
UNION	90	YES
WALTON	110	NO
WALTHALL	90	NO
WARREN	90	NO
WASHINGTON	90	YES
WAYNE	110	NO
WEBSTER	90	NO
WILKINSON	100	YES
WINSTON	100	NO
YALOBUSHA	90	YES
YAZOO	90	NO

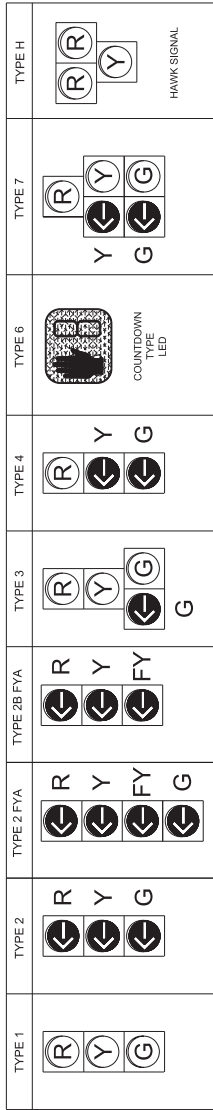


2009/2013 AASHTO WIND LOAD LIST BY COUNTY

COUNTY	BASIC WIND SPEED MPH	ICE LOADING RECD
ADAMS	100	NO
ALCORN	90	YES
AMITE	110	NO
ATTALA	100	YES
BENTON	90	YES
BOLIVAR	90	YES
CALHOUN	90	YES
CARROLL	90	YES
CHICKASAW	90	YES
CHOCTAW	90	YES
CLAIBORNE	100	NO
CLARKE	110	NO
CLAY	90	YES
COAHOMA	90	YES
COPIAH	90	NO
COVINGTON	110	NO
DESOLO	90	YES
FOREST	120	NO
FRANKLIN	100	NO
GEORGE	130	NO
GREENE	120	NO
GRENADE	90	YES
HANCOCK	140	NO
HARRISON	140	NO
HINDS	100	NO
HOLMES	90	YES
HUMPHREYS	90	YES
ISSAQUEENA	90	NO
ITAWAMBA	90	YES
JACKSON	140	NO
JASPER	110	NO
JEFFERSON	100	NO

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL HEADS, TRAFFIC SIGNAL SIGNS AND WIND SPEEDS
 PROJ. NO.: SP-9519-00(004)
 COUNTY: LINCOLN

DETAIL OF TYPICAL TRAFFIC SIGNAL HEADS

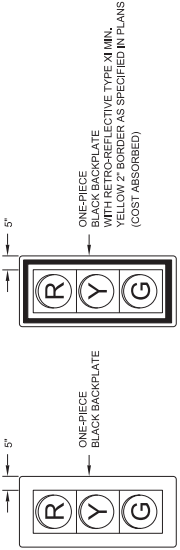


SIGNAL PLAN LEGEND

- SIGNAL HEAD REQUIRED / TYPE
- PEDESTRIAN HEAD REQUIRED
- EXISTING SIGNAL HEAD
- SIGN
- VEHICLE LOOP DETECTOR
- QUADRAPOLE VEHICLE LOOP DETECTOR
- VEHICLE LOOP DETECTOR NUMBER
- WIRELESS MAGNETOMETER SENSOR
- BASE MOUNTED CABINET FOR SIGNAL CONTROLLER
- POLE MOUNTED CABINET FOR SIGNAL CONTROLLER
- EXISTING POLE
- POLE REQUIRED
- NEW PEDESTAL POLE
- MAST ARM POLE REQUIRED
- EXISTING PULLBOX
- EXISTING PULLBOX (TYPE SPECIFIED ON PLAN SHEETS)
- RADAR DETECTOR (RD)
- VIDEO DETECTOR (VD)
- MULTI-SENSOR DETECTOR (MS)
- OPTICAL DETECTOR UNIT
- CONDUIT
- ROLL PIPE
- LUMINAIRE
- DECORATIVE LUMINAIRE
- GROUND MOUNTED PEDESTAL SERVICE PANEL
- RADIO INTERCONNECT ANTENNA
- TWO-WAY WIRELESS ANTENNA
- WIRELESS REPEATER
- PTZ / FKED CAMERA
- PUSH BUTTON
- SHIELDED CABLE
- POWER CABLE
- LUMINAIRE POWER CABLE
- OPTICAL DETECTOR CABLE
- NUMBER OF CONDUCTORS
- INTERCONNECT CABLE
- RADIO COMMUNICATIONS CABLE
- FIBER OPTIC CABLE (72 SM)
- FIBER DROP CABLE (12 SM)
- DETECTION CABLE
- STOP BAR DETECTION ZONE

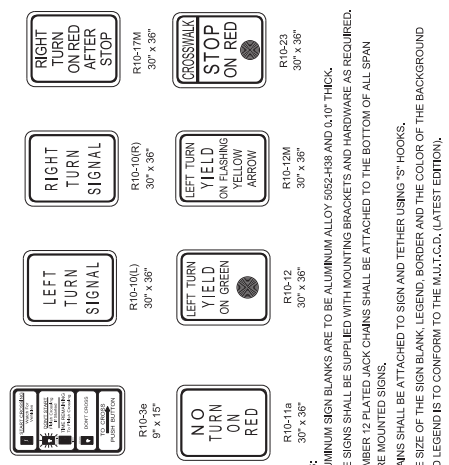
- NOTES:
- ALL SIGNAL HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON THE PLANS.
 - ALL SIGNAL HEADS SHALL BE L.E.D. LENSES UNLESS OTHERWISE NOTED ON THE PLANS. TYPE "A" SIGNAL HEAD IS TO BE GEOMETRICALLY PROGRAMMED VIA LOUVERS.
 - LETTER "R" ON HEAD TYPES MEANS RIGHT TURN ARROWS.
 - TYPE 6 SIGNAL HEAD SYMBOLS/NUMBERS SHALL BE FULLY ILLUMINATED (NO OUTLINE SYMBOLS ALLOWED). THERE IS A SEPARATE PAY ITEM FOR PEDESTRIAN PUSHBUTTON. PEDESTRIAN PUSHBUTTON SHALL BE FURNISHED WITH R10-36 SIGN. (COST ABSORBED).
 - ALL FVA SIGNAL HEAD SHALL BE FURNISHED WITH R10-10L, R10-10R, OR R10-17M SIGN. WHEN NOTED ON PLANS, TYPE 4 & 5 SIGNAL HEADS SHALL BE FURNISHED WITH R10-12M SIGN.
 - TYPE H SIGNAL HEAD SHALL BE FURNISHED WITH R10-23 SIGN WHEN INDICATED ON PLANS.
 - COST OF SIGNAL SIGNS, MOUNTING BRACKETS, HARDWARE, AND LABOR SHALL BE COST ABSORBED.
 - FOR SPAN WIRE INSTALLATION, THE HOUSING FOR THE RED INDICATION OF A TYPE 7 HEAD, SHALL BE ALUMINUM.

DETAIL OF TRAFFIC SIGNAL WITH BACKPLATE



- NOTE:
 ALL SIGNAL HEADS SHALL INCLUDE BACKPLATES AND VESORS UNLESS OTHERWISE NOTED ON TRAFFIC SIGNAL INSTALLATION SHEETS.

DETAIL OF TYPICAL TRAFFIC SIGNAL SIGNS



- NOTE:
- ALUMINUM SIGN BLANKS ARE TO BE ALUMINUM ALLOY 5052-H38 AND 0.10" THICK.
 - THE SIGNS SHALL BE SUPPLIED WITH MOUNTING BRACKETS AND HARDWARE AS REQUIRED.
 - NUMBER 12 PLATED JACK CHAINS SHALL BE ATTACHED TO THE BOTTOM OF ALL SPAN WIRE MOUNTED SIGNS.
 - CHAINS SHALL BE ATTACHED TO SIGN AND TETHER USING "S" HOOKS.
 - THE SIZE OF THE SIGN BLANK, LEGEND, BORDER AND THE COLOR OF THE BACKGROUND AND LEGEND IS TO CONFORM TO THE M.U.T.C.D. (LATEST EDITION).

GENERAL NOTES:
 1. VIDEO DETECTION (AVD) WILL PROVIDE PRECISE LOCATION OF VEHICLES, BICYCLES, AND PEDESTRIANS FOR TRAFFIC SIGNAL CONTROLLER INPUTS. THERE ARE TWO VARIATIONS OF TYPE 1 VIDEO VEHICLE DETECTION: TYPE 1A CAMERA WITH INDEPENDENT VIDEO DETECTION PROCESSOR, TYPE 1B A SINGLE INTEGRATED CAMERA WITH VIDEO DETECTION PROCESSOR. THE WORK SHALL CONSIST OF PROVIDING ALL MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO FURNISH, INSTALL, AND TEST THE VIDEO VEHICLE DETECTION EQUIPMENT, COMPLETE AND READY FOR SERVICE.

TYPE 2 VIDEO VEHICLE DETECTION (MSVD) WILL PROVIDE PRECISE LOCATION OF VEHICLES, BICYCLES, AND PEDESTRIANS FOR TRAFFIC SIGNAL CONTROLLER INPUTS. TYPE 2 VIDEO VEHICLE DETECTION SHALL BE DESIGNED TO BE SPAN WIRE MOUNTED. THE WORK SHALL CONSIST OF PROVIDING ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO FURNISH, INSTALL, AND TEST THE VIDEO VEHICLE DETECTION EQUIPMENT, COMPLETE AND READY FOR SERVICE.

THE MULTISENSOR VEHICLE DETECTION (MSVD) WILL PROVIDE DETECTION OF VEHICLES ON A ROADWAY USING A MULTISENSOR DETECTION FOR TRAFFIC SIGNAL CONTROLLER INPUTS. THE MULTISENSOR SHALL UTILIZE TWO (2) DIFFERENT SENSORS TO DETECT AND TRACK VEHICLES. THE MODULE SHALL PROCESS INFORMATION FROM BOTH VIDEO IMAGING AND RADAR SENSORS SIMULTANEOUSLY IN REAL-TIME. THE WORK SHALL CONSIST OF PROVIDING ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO FURNISH, INSTALL, AND TEST THE MULTISENSOR VEHICLE DETECTION EQUIPMENT, COMPLETE AND READY FOR SERVICE.

2. INSTALL VIDEO DETECTION PROCESSOR UNIT(S) INSIDE CONTROLLER CABINET UNLESS OTHERWISE NOTED ON PLANS.

3. AIM THE CAMERA SO THE HORIZON IS NOT VISIBLE IN THE FIELD OF VIEW.

4. INSURE WATER-TIGHT CABLE ENTRY AND EXIT POINTS FOR CONNECTIONS.

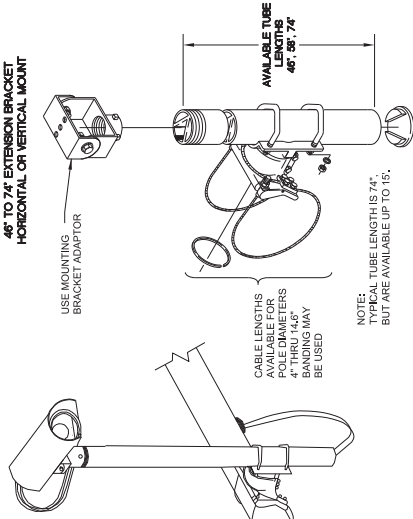
5. CONTRACTOR TO USE MANUFACTURER'S SUPPLIED OR APPROVED CABLE, CONNECTIONS AND MOUNTING HARDWARE.

6. DETECTION SUPPLIER TO ASSIST CONTRACTOR WITH INFORMATION ON BEST MOUNTING POSITION (LOCATION ON ARM, MOUNTING HEIGHT, ETC.).

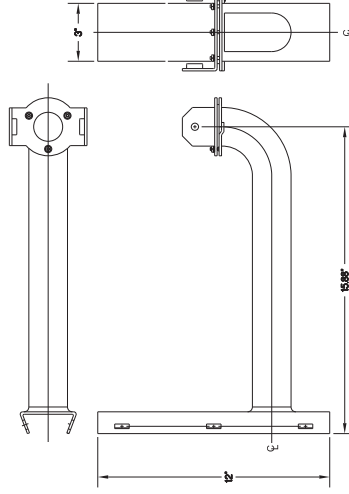
7. POWER AND VIDEO / MULTISENSOR CABLE PROVIDED SHALL BE AS RECOMMENDED BY THE MANUFACTURER FOR OPTIMAL VIDEO DETECTION PERFORMANCE. THE POWER AND VIDEO / MULTISENSOR CABLE MAY BE INSTALLED UNDER THE SAME OUTER JACKET. THE CABLES WILL BE MEASURED BY THE LINEAR DISTANCE FROM THE CENTER OF THE CAMERA TO THE MESSANGER CABLE OR MAST ARM AND VERTICALLY ALONG THE POLE.

8. SURGE PROTECTION DEVICES SHALL BE PROVIDED FOR ALL NEW OR ADDED VIDEO DETECTION DEVICES AS RECOMMENDED BY THE MANUFACTURER.
 9. ALL DETECTION UNITS SHALL BE NETWORKABLE DEVICES TO BE ON THE MDT NETWORK IF NOTED ON PLANS.

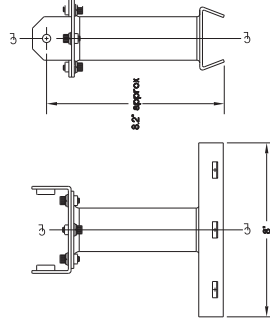
46" TO 74" EXTENSION BRACKET
 HORIZONTAL OR VERTICAL MOUNT



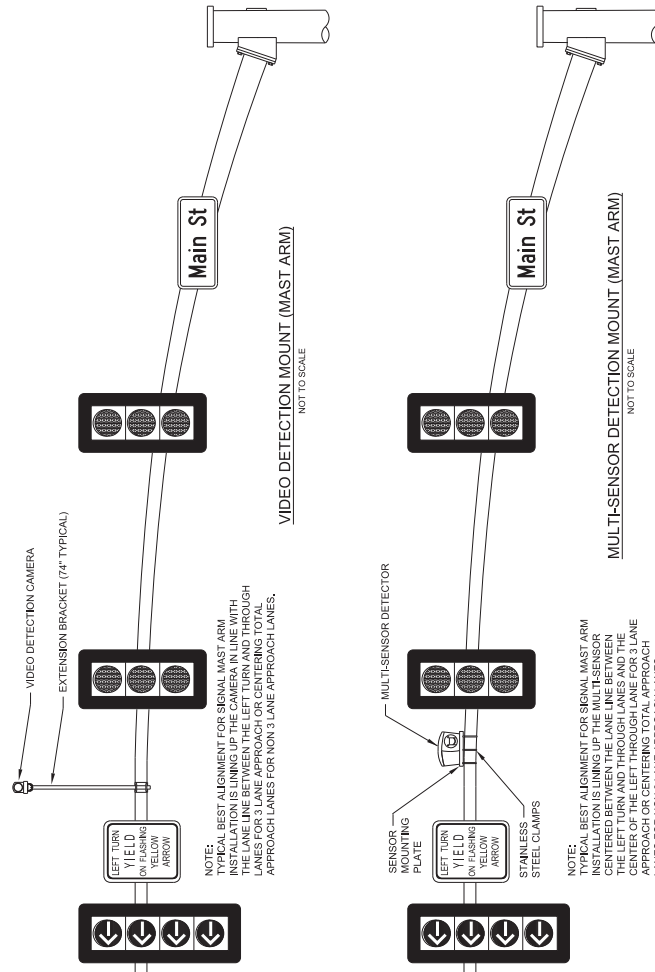
VIDEO DETECTION EXTENSION BRACKET
 NOT TO SCALE



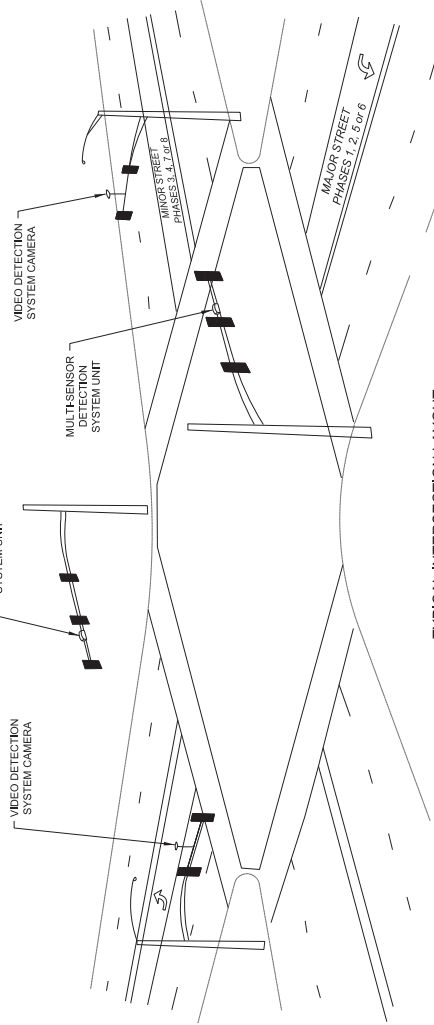
VERTICAL SURFACE MOUNTING BRACKET
 NOT TO SCALE



HORIZONTAL MOUNTING BRACKET
 NOT TO SCALE



NOTE: 1. BEST ALIGNMENT FOR SIGNAL MAST ARM INSTALLATION IS LINING UP THE CAMERA IN LINE WITH THE CENTER OF THE LANE BETWEEN THE LEFT TURN AND THROUGH LANES AND THE CENTER OF THE LEFT THROUGH LANE FOR 3 LANE APPROACH LANES FOR NON 3 LANE APPROACH LANES.

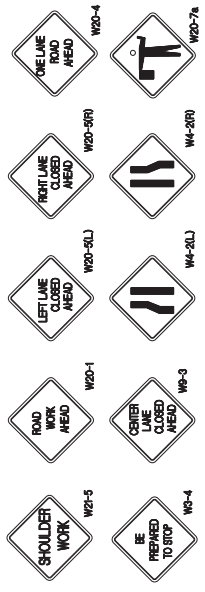


TYPICAL INTERSECTION LAYOUT
 NOT TO SCALE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
VIDEO/MULTI-SENSOR DETECTION FOR TRAFFIC SIGNALS
 PROJECT NO.: SP-9519-00(004)
 COUNTY: LINCOLN
 FILE NAME: FinalTSDs_3.8.2019.dgn
 DESIGN TEAM: []
 CHECKED: []
 DATE: 2019.08.06
 SHEET NUMBER: 2007
 DRAWING NUMBER: TSD-9V

REVISION	DATE

SIGN LEGEND



- GENERAL NOTES:**
1. ADDITIONAL ADVANCE WARNING SIGNS MAY BE NECESSARY. ANY ADDITIONAL SIGNS SHOULD BE INCLUDED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
 2. POST MOUNTED SIGNS SHALL HAVE A 7" MINIMUM MOUNTING HEIGHT.
 3. PAYMENT FOR ALL SIGNS, CONES, DRUMS, CONCRETE BARRIERS, STEEL PLATES AND OTHER MATERIALS, BARRICADES, LABOR AND INCIDENTALS REQUIRED TO IMPLEMENT THE TRAFFIC CONTROL PLAN SHALL BE INCLUDED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
 4. APPROACH SIDE TRAFFIC CONTROL TO BE USED WHEN WORK OCCURS ON EITHER THE APPROACH SIDE OR THE FAR SIDE OF THE INTERSECTION. FAR SIDE TRAFFIC CONTROL IS NOT NEEDED WHEN WORK IS CONFINED TO THE APPROACH SIDE ONLY.
 5. FOR A DIVIDED HIGHWAY SITUATION, A SECOND SET OF ADVANCE WARNING SIGNS SHALL BE ERRECTED IN MEDIUM AREA (8' MIN. MEDIUM WIDTH REQUIRED).

- LEGEND**
- DRUMS (30" MAXIMUM SPACING) - CONES SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF TEN (10) POUNDS. CONES USED IN SPEED ZONES EQUAL TO OR GREATER THAN 45 MPH SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF FIFTEEN (15) POUNDS. ALL CONES SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.

SIGNS - SEE SIGN LEGEND MIN. SIZE 48" x 48", BLACK ON ORANGE BACKGROUND

FLAGGER WITH PADDLE - 18" STOP/SLOW PADDLES ACCEPTED AS PROPER TRAFFIC CONTROL DEVICES SHALL BE USED. HAND HELD FLAGS SHALL NOT BE FOR FLAGGING OPERATION.



- CONSIDERED MINIMUM DISTANCE - ENGINEER TO DETERMINE APPROPRIATE SPACING IN THE FIELD
- ** SPEED LIMIT BUFFER TAPER LENGTH (Feet)

M.P.H.	FEET	(Per 12 Lane Shift)
20	90	
25	115	
30	135	
35	150	
40	180	
45	250	
50	320	
55	380	
60	440	
65	500	
70	570	
75	645	
80	720	
85	800	

Notice to Bidders No 3784

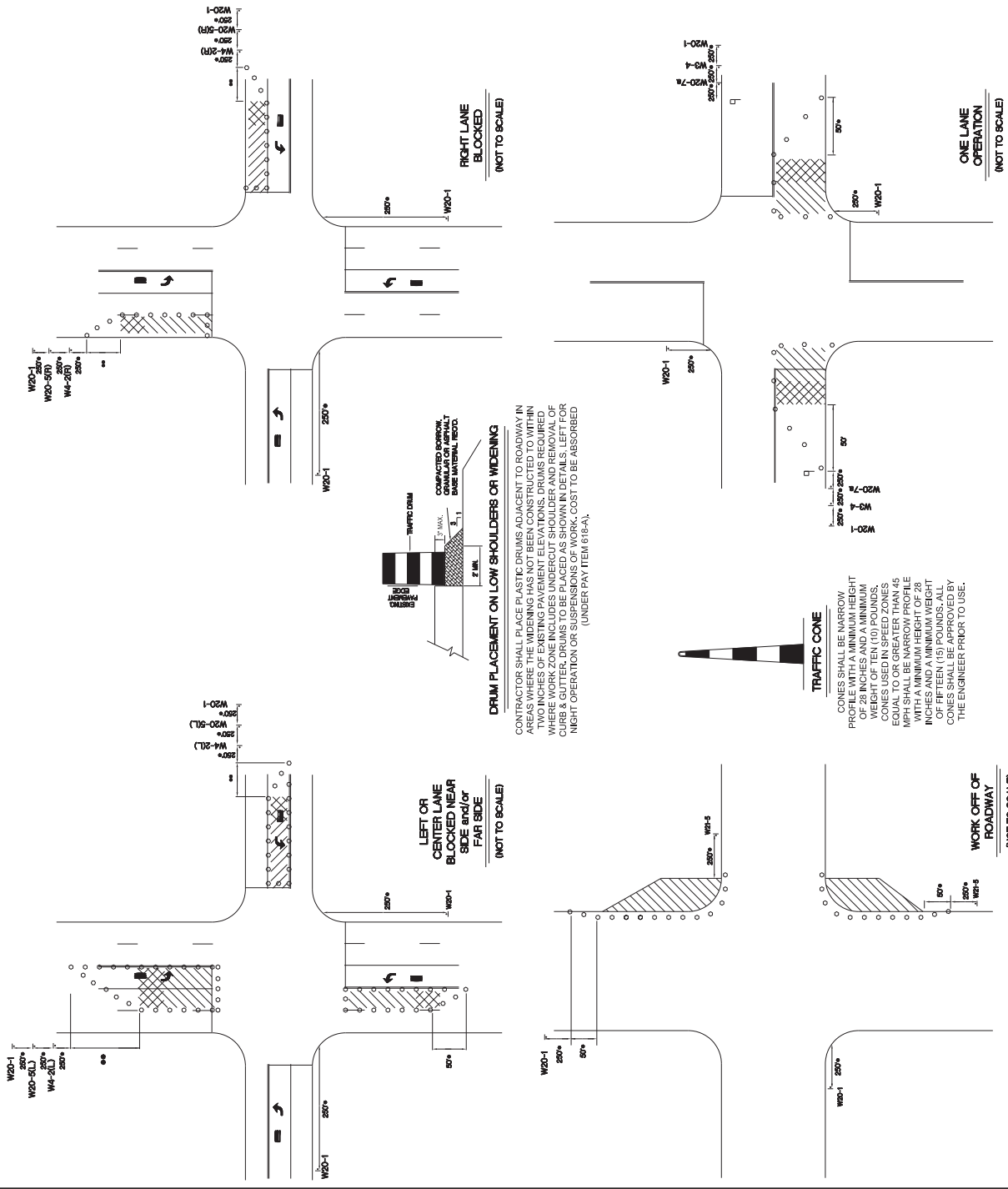
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN (TYPICAL SIGNAL INSTALLATION)

WORKING NUMBER: **TSD-10**
SHEET NUMBER: **2008**

PROJECT NO.: SP-9519-00(004)
COUNTY: LINCOLN

DATE: **2018.08.08**
DESIGN TEAM: **J. Ethel LTSDs**
CHECKED: **3.8.2019.dgn**



DRUM PLACEMENT ON LOW SHOULDERS OR WIDENING

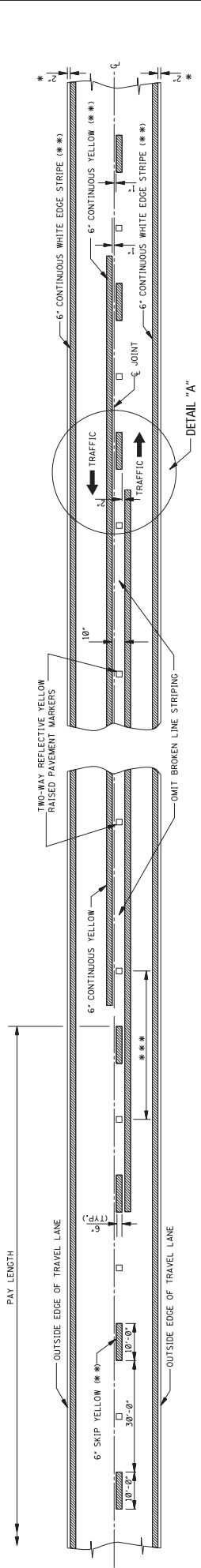
CONTRACTOR SHALL PLACE PLASTIC DRUMS ADJACENT TO ROADWAY IN AREAS WHERE THE WIDENING HAS NOT BEEN CONSTRUCTED TO WITHIN TWO INCHES OF EXISTING PAVEMENT ELEVATIONS. DRUMS REQUIRED WHERE WORK ZONE INCLUDES UNDERCUT SHOULDER AND REMOVAL OF CURB & GUTTER. DRUMS TO BE PLACED AS SHOWN IN DETAILS. LEFT FOR NIGHT OPERATION OR SUSPENSIONS OF WORK. COST TO BE ABSORBED (UNDER PAY ITEM 618-A).

TRAFFIC CONE

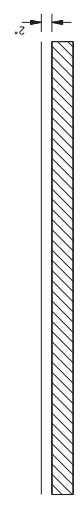
CONES SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF TEN (10) POUNDS. CONES USED IN SPEED ZONES EQUAL TO OR GREATER THAN 45 MPH SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF FIFTEEN (15) POUNDS. ALL CONES SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.

WORK OFF OF ROADWAY
(NOT TO SCALE)

ONE LANE OPERATION
(NOT TO SCALE)



TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)



DIRECTION OF TRAFFIC

NOTE: THE CRITERIA FOR NO-PASSING ZONES CAN BE FOUND IN THE MOOT ROADWAY DESIGN MANUAL, SECTION 11-1.01.

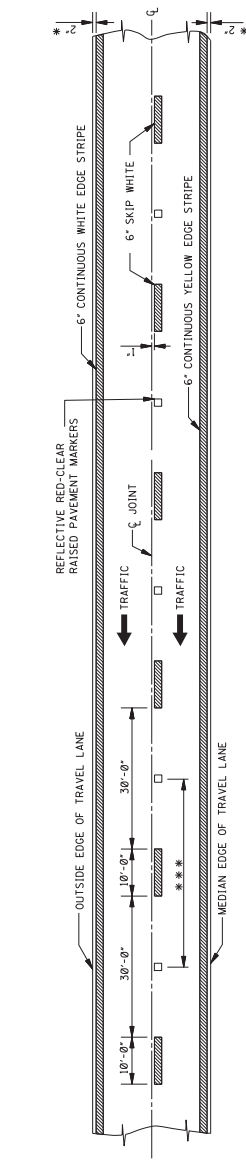
GENERAL NOTES:

- * 1. 2' UNLESS SHOWN ELSEWHERE ON THE PLANS, FOR STRIPING ON RUMBLE STRIP SECTIONS REFER TO WK. SHEETS RS-1, RS-2, AND RS-3.
- ** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR PLASTIC AS INDICATED IN PAY ITEMS).
- *** 3. SPACING OF REFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:

TANGENT SECTIONS	URBAN AREA	RURAL AREA
40'-0"	40'-0"	80'-0"
80'-0"	40'-0"	40'-0"
INTERCHANGE LIMITS	40'-0"	1-40'-0"

- 1. NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON ALL INTERCHANGES. ON INTERCHANGES WITH SPACING 100'-0" OR GREATER, REFLECTIVE RAISED PAVEMENT MARKERS SHALL BE REQUIRED THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
- 4. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE. RAISED PAVEMENT MARKERS AS LISTED IN THE MOOT *APPROVED SOURCES OF MATERIALS.*

DETAIL "A"



4-LANE WITH ONE-WAY TRAFFIC

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

**PAVEMENT MARKING
DETAILS FOR
2-LANE AND 4-LANE
DIVIDED ROADWAYS**

DATE: _____ ISSUE DATE: AUGUST 01, 2017

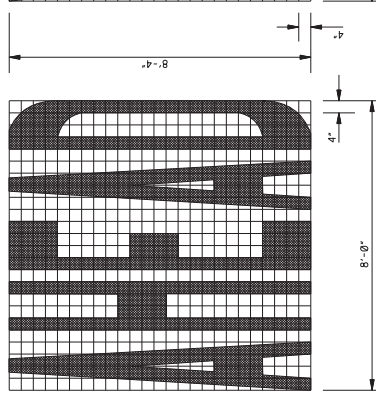
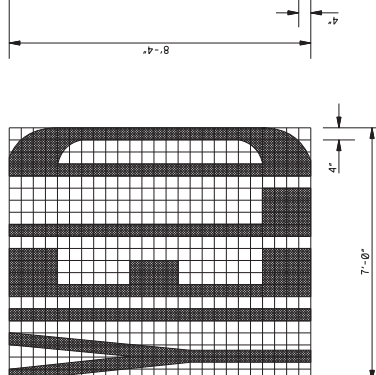
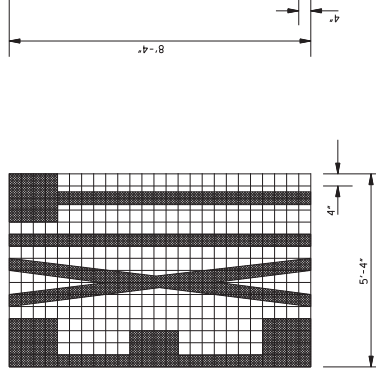
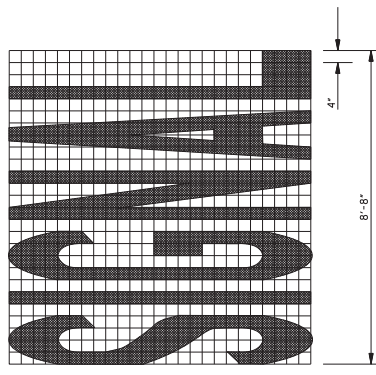
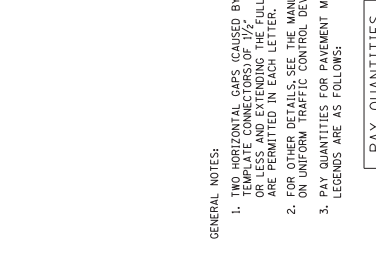
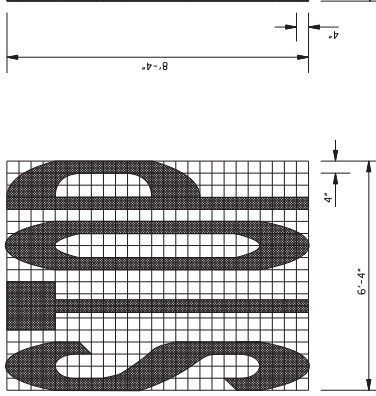
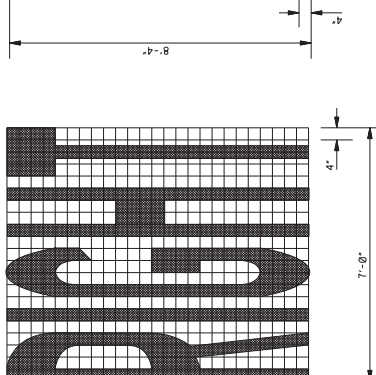
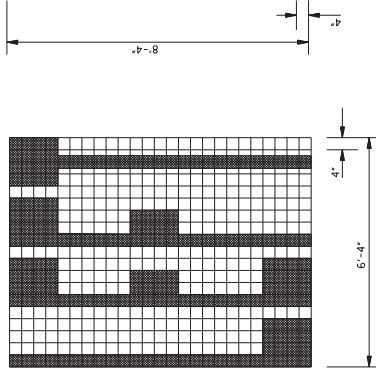
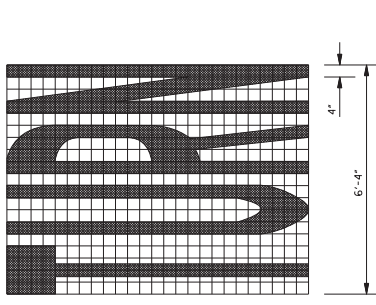
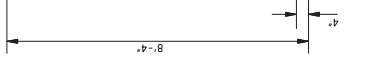
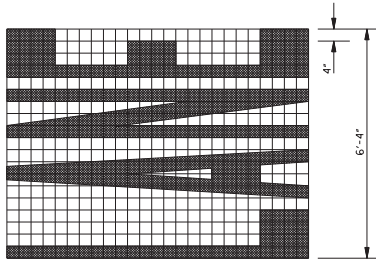
BY: _____ REVISION: _____

PROJECT NUMBER: _____

PLANTING NUMBER: PM-1

SCALE: _____

6/051



- GENERAL NOTES:
- TWO HORIZONTAL GAPS, CAUSED BY THE LETTER 'A', SHALL BE PERMITTED IN EACH LETTER, OR LESS, AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
 - FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

PAY QUANTITIES	
LEGEND	AREA (SQ. FT.)
STOP	24.6
RIGHT	28.6
TRAFFIC	17.3
TURN	27.3
LANE	22.7
AHEAD	32.3
YIELD	26.8
EXIT	18.5
SIGNAL	32.5
SCHOOL	35.5

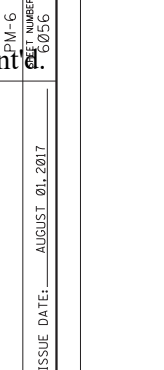
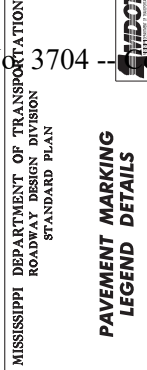
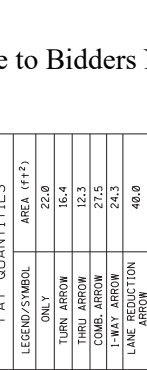
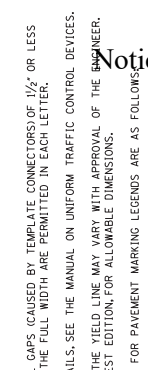
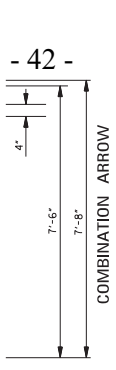
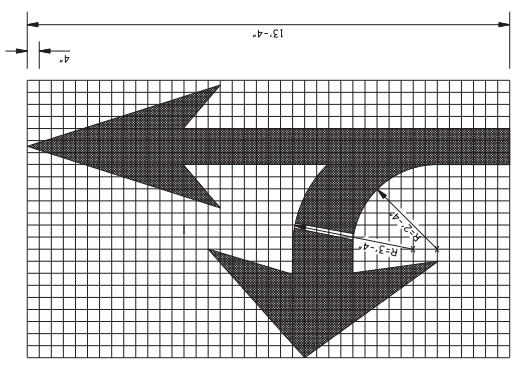
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

**PAVEMENT MARKING
LEGEND DETAILS**

ISSUE DATE: AUGUST 01, 2017

PROJECT NUMBER: 3704
DRAWING NUMBER: PM-5
SHEET NUMBER: 41
JOB NUMBER: 6055

DATE	REVISION	BY



GENERAL NOTES:
1. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1/2" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
2. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
3. DIMENSIONS OF THE YIELD LINE MAY VARY WITH APPROVAL OF THE ENGINEER. SEE MUTCD, LATEST EDITION, FOR ALLOWABLE DIMENSIONS.
4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

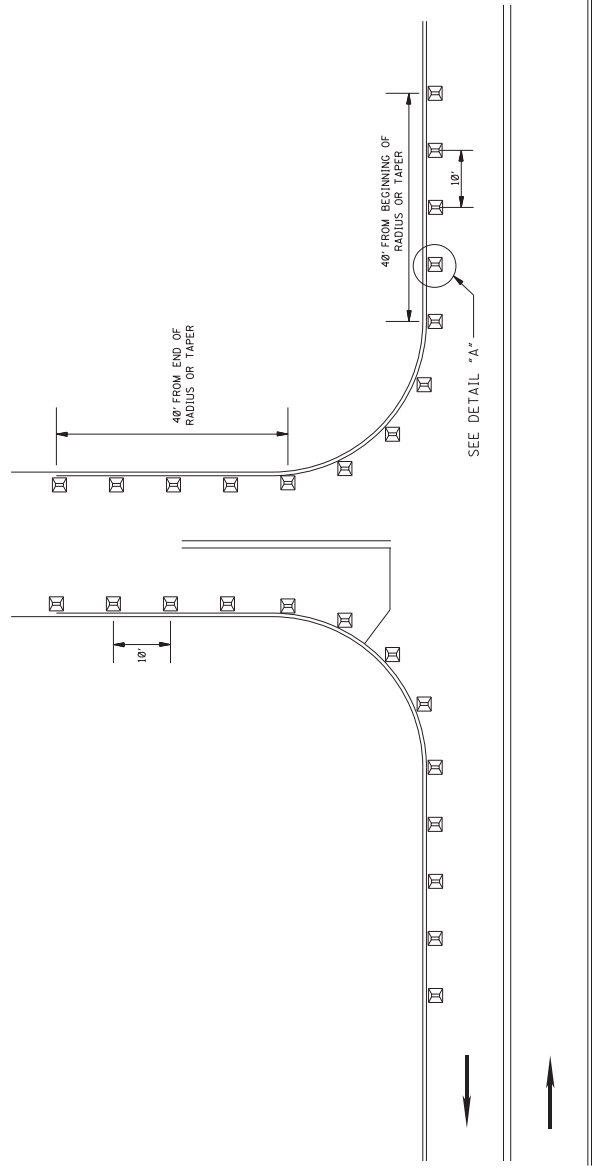
PAY QUANTITIES	
LEGEND/SYMBOL	AREA (ft ²)
ONLY	22.0
TURN ARROW	16.4
THRU ARROW	12.3
COMB. ARROW	27.5
1-WAY ARROW	24.3
LANE REDUCTION ARROW	40.0

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVEMENT MARKING
LEGEND DETAILS

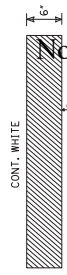
ISSUE DATE: AUGUST 01, 2017

TYPICAL PLACEMENT OF RAISED PAVEMENT MARKERS ON SIDE ROAD RADIUS 2-LANE, TWO WAY TRAFFIC



GENERAL NOTES:

1. MARKERS SHALL BE VISIBLE FROM THE TRAVELING MOTORIST ON STATE DESIGNATED HIGHWAYS.
2. MARKERS SHALL BE HIGH PERFORMANCE TWO-WAY CLEAR.
3. MARKERS SHALL NOT BE ROTATED WHEN BEING PLACED ALONG RADIUS AND TANGENT SECTION OF LOCAL ROAD.
4. MARKERS SHALL BE INSTALLED AT SIMPLE AND CHANNELIZED INTERSECTIONS TO THE LIMITS SHOWN ABOVE.



DETAIL A

↑
DIRECTION OF TRAFFIC

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

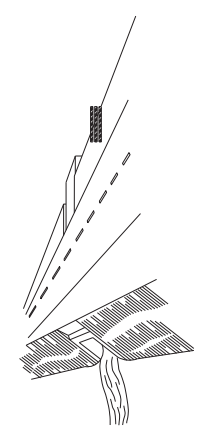
2-WAY RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (2-LANE)

PLAN NUMBER
SPM-11

ISSUE DATE: AUGUST 01, 2017

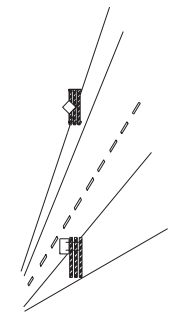
DATE	REVISION

PLAN NUMBER 6061



WING BARRICADES

- WING BARRICADES ARE TYPE III BARRICADES ERECTED ON THE SHOULDER ON ONE OR BOTH SIDES OF THE PAVEMENT TO GIVE THE SENSATION OF A NARROWING OR RESTRICTED ROADWAY. WING BARRICADES MAY BE USED AS A MOUNTING FOR THE ADVANCE WARNING SIGNS OR FLASHERS.
 - IN ADVANCE OF A CONSTRUCTION PROJECT EVEN WHEN NO PART OF THE ROADWAY IS ACTUALLY CLOSED.
 - IN ADVANCE OF ALL BRIDGE OR CULVERT WIDENING OPERATIONS.

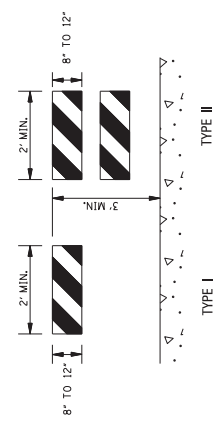


BARRICADE CLOSING A ROAD

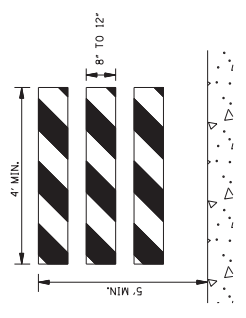
BARRICADE CHARACTERISTICS

	I	II	III
WIDTH OF RAIL **	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL **	24" MIN.	24" MIN.	48" MIN.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF FACTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS

- * 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.
- ** 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS SHALL HAVE A MINIMUM OF 270 sq ft OF REFLECTIVE AREA FACING TRAFFIC.



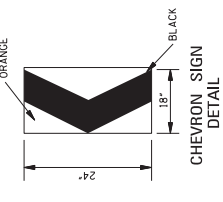
TYPE I



TYPE II

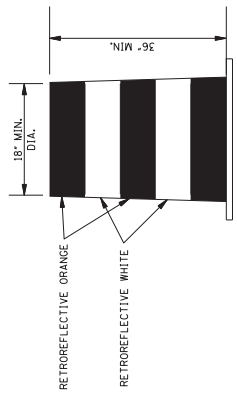
STANDARD BARRICADES

- THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
- RAIL STRIPE SHOULD BE 6 INCHES EXCEPT THAT 4-INCH WIDE STRIPES MAY BE USED IF RAIL LENGTHS ARE LESS THAN 36 INCHES.
- DO NOT PLACE SANDBAGS OR OTHER DEVICES TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
- FOR ADDITIONAL INFORMATION OR DETAILS: SEE MUTCD, LATEST EDITION.
- BARRICADES ARE CLASSIFIED BY FHWA AS CATEGORY II WORK ZONE DEVICES WHICH REQUIRE CRASHWORTHINESS ACCEPTANCE LETTERS. TO DATE, 2-IN. THICK TIMBER RAILS HAVE NOT BEEN SUCCESSFULLY CRASH TESTED. A LIST OF CRASHWORTHY BARRICADES AND OTHER CATEGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE: http://safety.fhwa.dot.gov/roadway_dept/policy/guide/road-hardware/cat2.cfm



CHEVRON SIGN DETAIL

- A CHEVRON SIGN CONSISTS OF A BLACK CHEVRON TYPE MARKING ON AN ORANGE BACKGROUND AND SHALL POINT IN THE DIRECTION OF TRAFFIC FLOW.
- THE CHEVRON SIGN SHALL BE MOUNTED ON CRASHWORTHY SUPPORT.
- CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHOULD BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPE.



PLASTIC DRUM STRIPING DETAIL

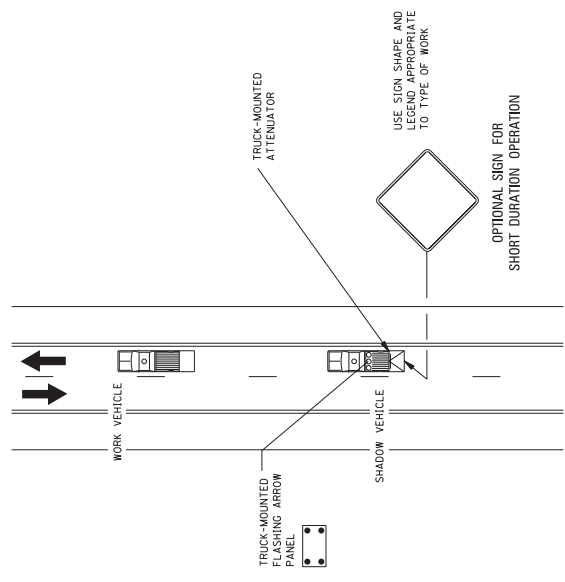
- PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD OF STRIPING TO PROVIDE A TEMPORARY WARNING TO TRAVELERS. PLASTIC DRUMS SHALL BE USED IN CONFORMANCE WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) RETROREFLECTIVE, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE & 2 WHITE) 6" WIDE.
- DRUMS SHOULD NEVER BE PLACED IN THE ROADWAY WITHOUT WARNING SIGNS.
- WHERE PRACTICAL PLASTIC DRUMS SHOULD BE PLACED NO CLOSER THAN 10' FROM THE EDGE OF TRAVELED LANE.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS

PROJECT NUMBER: CP-8
SHEET NUMBER: 6358
ISSUE DATE: AUGUST 01, 2017

MOBILE OPERATIONS ON TWO-LANE ROAD

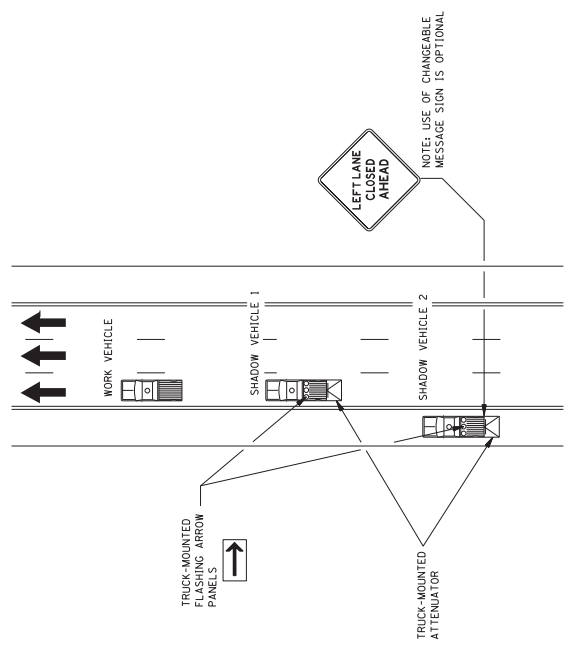


MOBILE OPERATIONS ON TWO-LANE ROAD

NOTES FOR TWO-LANE OPERATION:

1. THESE PRACTICAL AND WHEN NEEDED, THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS. IF THIS CAN NOT BE DONE FREQUENTLY, AS AN ALTERNATIVE, A "DO NOT PASS" SIGN MAY BE PLACED ON THE REAR OF THE VEHICLE BLOCKING THE LANE.
2. THE DISTANCE BETWEEN THE WORK AND SHADOW VEHICLES MAY VARY ACCORDING TO THE TYPE OF OPERATION. SHADOW VEHICLES SHOULD BE USED TO WARN TRAFFIC OF THE OPERATION AHEAD, WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR. THE SHADOW VEHICLE SHOULD MAINTAIN THE MINIMUM DISTANCE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. THE SHADOW VEHICLE SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
3. ADDITIONAL SHADOW VEHICLES TO WARN AND REDUCE THE SPEED OF ONCOMING OR OPPOSING TRAFFIC MAY BE USED. POLICE PATROL CARS MAY BE USED FOR THIS PURPOSE.
4. A TRUCK-MOUNTED ATTENUATOR (TMA) SHOULD BE USED ON THE SHADOW VEHICLE AND MAY BE USED ON THE WORK VEHICLE.
5. THE WORK VEHICLE SHALL BE EQUIPPED WITH BEACONS, AND THE SHADOW VEHICLES SHALL BE EQUIPPED WITH TWO HIGH-INTENSITY FLASHING LIGHTS MOUNTED ON THE REAR, ADJACENT TO THE SIGN. SHADOW AND WORK VEHICLES SHALL DISPLAY FLASHING OR ROTATING BEACONS BOTH FORWARD AND TO THE REAR.
6. VEHICLE-MOUNTED SIGNS SHOULD BE MOUNTED WITH THE BOTTOM OF THE SIGN LOCATED AT A MINIMUM HEIGHT OF 48" ABOVE THE PAVEMENT AND SHALL NOT BE OBTURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.
7. ARROW BOARD TO BE USED IN CAUTION MODE.
8. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

MOBILE OPERATIONS ON MULTILANE ROAD



MOBILE OPERATIONS ON MULTILANE ROAD

NOTES FOR MULTILANE LANE OPERATION:

1. VEHICLES USED FOR THESE OPERATIONS SHOULD BE MADE HIGHLY VISIBLE WITH APPROPRIATE EQUIPMENT, SUCH AS FLASHING LIGHTS, ROTATING BEACONS, FLAGS, SIGNS, OR ARROW PANELS.
2. SHADOW VEHICLE 2 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK MOUNTED ATTENUATOR (TMA), AN APPROPRIATE LANE CLOSURE SIGN SHOULD BE PLACED ON SHADOW VEHICLE 2 SO AS NOT TO OBTURE THE ARROW PANEL.
3. SHADOW VEHICLE 1 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK-MOUNTED ATTENUATOR (TMA).
4. SHADOW VEHICLE 2 SHOULD TRAVEL AT A VARYING DISTANCE FROM THE WORK OPERATION SO AS TO PROVIDE ADEQUATE SIGHT DISTANCE FOR TRAFFIC APPROACHING FROM THE REAR.
5. WHEN ADEQUATE SHOULDER WIDTH IS NOT AVAILABLE, SHADOW VEHICLE 2 SHOULD BE ELIMINATED.
6. ON HIGH-SPEED ROADWAYS, A THIRD SHADOW VEHICLE SHOULD BE USED (i.e., VEHICLE 3 ON THE SHOULDER IF PRACTICAL), VEHICLE 2 IN THE CLOSED LANE, AND VEHICLE 1 IN THE CLOSED LANE.
7. ARROW PANELS SHALL BE AS A MINIMUM TYPE B, 60" X 30" IN ACCORDANCE WITH THE CRITERIA PRESENTED IN THE MUTCD.
8. WORK SHOULD NORMALLY BE DONE DURING OFF-PEAK HOURS.
9. VEHICLE-MOUNTED SIGNS SHOULD BE MOUNTED WITH THE BOTTOM OF THE SIGN LOCATED AT A MINIMUM HEIGHT OF 48" ABOVE THE PAVEMENT AND SHALL NOT BE OBTURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.
10. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

REVISION	
BY	DATE

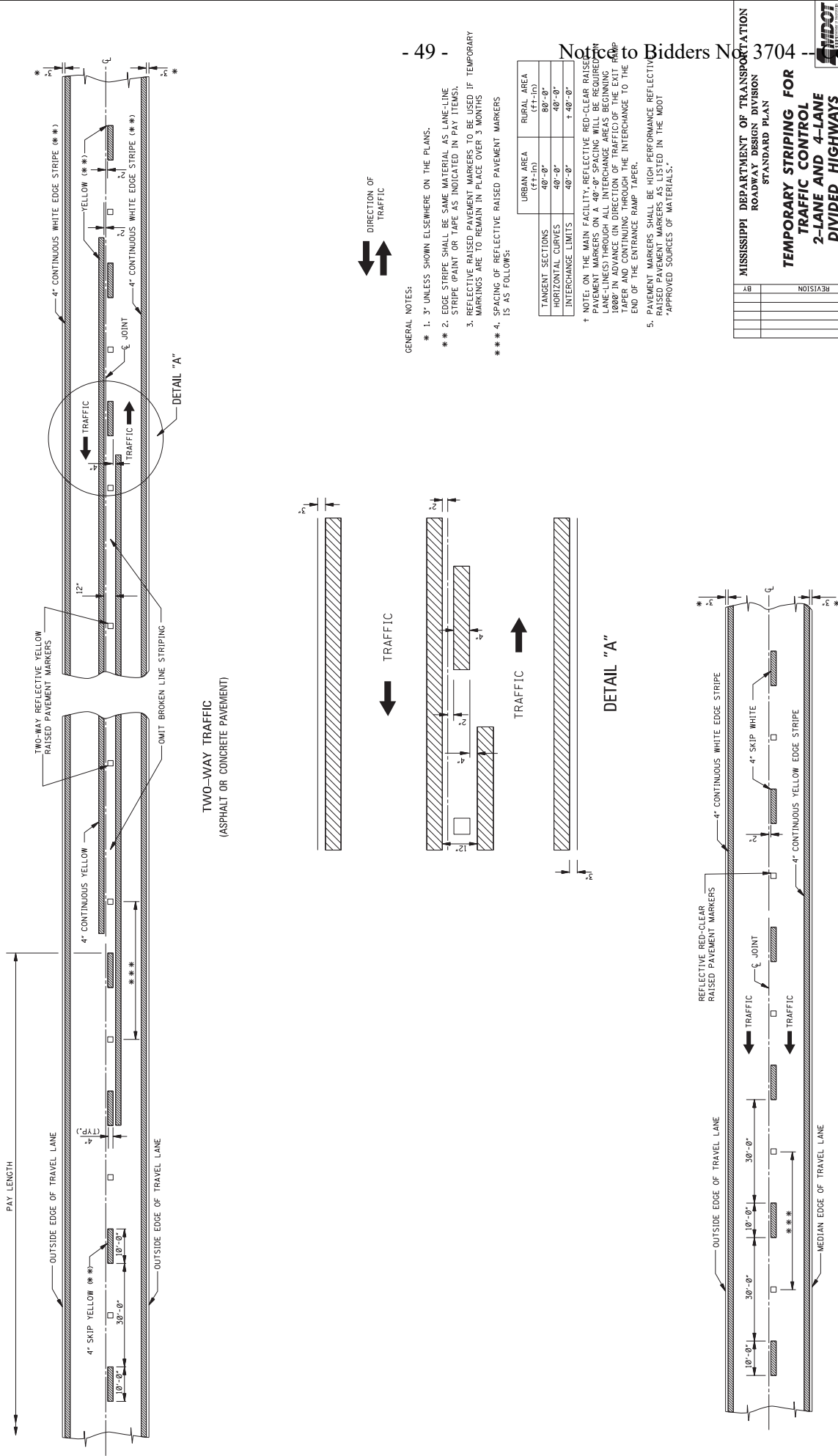
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

**TRAFFIC CONTROL PLAN
MOBILE OPERATIONS
MULTILANE ROADS
AND
TWO-LANE ROADS**

ISSUE DATE: AUGUST 01, 2017

PROJECT NUMBER: 359





TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)

4-LANE WITH ONE-WAY TRAFFIC



GENERAL NOTES:

- * 1. 3" UNLESS SHOWN ELSEWHERE ON THE PLANS.
- ** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR TAPE AS INDICATED IN PAY ITEMS).
- 3. REFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
- *** 4. SPACING OF REFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS.

TANGENT SECTIONS	URBAN AREA (FF-IN)	RURAL AREA (FF-IN)
HORIZONTAL CURVES	40'-0"	80'-0"
INTERCHANGE LIMITS	40'-0"	140'-0"

* NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED IN LANE-LINES THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP. THESE MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE PAVEMENT MARKERS AS LISTED IN THE MOOT "APPROVED SOURCES OF MATERIALS".

Notice to Bidders No 3704

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS

CP-13

ISSUE DATE: AUGUST 01, 2017



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-619-5

CODE: (IS)

DATE: 01/17/2018

SUBJECT: Traffic Control for Construction Zones

Section 619, Traffic Control for Construction Zones, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-619.02--Materials.

907-619.02.8--Traffic Signals and Flashers. Delete Subsection 619.02.8.1 on pages 452 thru 455, and substitute the following.

907-619.02.8.1-Portable Traffic Signals. Portable traffic signals shall be trailer or pedestal mounted units that provide for easy, legal transportation and quick setup and deployment. Each unit shall be self-contained. The types of portable traffic signals are as follows.

- Type 1 portable traffic signal shall include two signal heads per trailer with one signal head mounted on an overhead mast arm that can be extended over the travel lane, and the other signal head shall be mounted on the vertical upright of the trailer.
- Type 2 portable traffic signal shall include one signal head that is mounted on the vertical upright of the pedestal/cart or trailer. Pedestal/Cart mounted shall be designated as Type 2A and Trailer mounted shall be designated as Type 2B. Type 2 portable traffic signals shall be tested to MASH Standards or NCHRP Test Level 3 crash testing requirements by an accredited independent test facility, with supporting documentation available upon request.
- Type 3 portable traffic signal shall be the same as Type 1 mentioned above but with enhanced capabilities as mentioned in each applicable section below.

The portable traffic signals shall be MUTCD Compliant and utilize standard ITE signal heads, and adhere to the ITE Specifications and Standards for Vehicle Traffic Control Signal Heads, Light Emitting Diode (LED) Circular Signal Supplement. The units shall be battery powered with a solar charging system, and be equipped with an onboard battery charger capable of being used with a 120V AC power source. Portable traffic signals shall be able to communicate with other portable signals via 900 MHz or other accepted wireless communications. If wireless connectivity is not feasible, hardwired connectivity shall be an acceptable alternative, as approved by the Engineer. Portable Traffic Signals shall include all the major components listed below or be able to perform the functions of these components. The major components of the unit shall include, but are not limited to, the trailer or pedestal/cart, telescoping mast arm (on Type 1 and 3), signal head(s) and back plates, traffic signal controller with operating software, solar charging system with batteries, input and output devices, vehicle detection, flasher units, conflict monitor, relays,

communications system and other equipment required for the safe operation and installation of the unit.

907-619.02.8.1.1--Signal Heads. The signal heads and all applicable components of the portable traffic signal shall meet the physical display and operational requirements of conventional traffic signals as specific in the Manual on Uniform Traffic Control Devices (MUTCD). The signal heads shall be cast aluminum or polycarbonate and shall meet the requirements laid out in the Mississippi Standard Specification for traffic signal heads and associated MDOT material specifications for traffic signal heads. The signal heads shall accommodate standard 12-inch LED indications meeting the ITE Specification "Vehicle Traffic Control Signal Heads" and ITE Specifications and Standards for Vehicle Traffic Control Signal Heads, Light Emitting Diode (LED) Circular Signal Supplement.

For Type 1, Type 2 and Type 3 portable traffic signals, the signal heads shall have the ability to be rotated 180 degrees to face in the opposite direction and shall have the ability to rotate and lock in approximately 10 degree increments to position the signal head for the optimum visibility to motorists.

For Type 1 portable traffic signals, each unit shall contain two signal heads with one signal head mounted on an overhead mast arm that can be extended over the travel lane with a minimum clearance of 17 feet measured from the bottom of the signal head unit to the road surface. The lower signal head shall be mounted to the vertical upright of the trailer at a minimum height of eight feet (8') from the bottom of the signal head unit to the road surface.

For Type 2 portable traffic signals, the signal head shall be mounted to the vertical upright of the trailer at a minimum height of eight feet (8') from the bottom of the signal head unit to the road surface.

For Type 3 portable traffic signals, each unit shall be the same as Type 1 mentioned above but with enhanced capabilities as mentioned below.

907-619.02.8.1.2--Controller and Operating Requirements. The portable traffic signal (Types 1, 2, and 3) shall include a solid state Controller Unit (CU) that is in compliance with NEMA TS 5 Performance Standard. The CU shall have an easy to read front panel backlit display for viewing and programming the configuration settings and CU status. The CU shall be capable of operating the portable traffic signal system in a fixed time, traffic actuated or manual control mode. Multiple portable traffic signals shall have the capability to be interconnected to form a portable traffic signal system. Each portable traffic signal within a connected system shall have the capability to serve as either the master or remote signal. Each portable traffic signal shall include a Conflict Monitor Unit (CMU), or Malfunction Management Unit (MMU) to ensure phase conflicts do not exist during operation.

For Type 1 and Type 2 portable traffic signals, a minimum of five (5) automatic time-of-day timing plans within a 24-hour period should be available in fixed time mode. The CU should have the ability to control a minimum of four (4) traffic phases with programmable cycle time adjustments and user adjustable red, amber, minimum green and maximum green times. The CU shall have

the capability of programming green and red times from 1 to 999 seconds and yellow times up to 15 seconds in one-second increments. The CU shall also have the capability of facilitating standby modes of red, red flash and yellow flash.

For Type 3 portable traffic signals, a minimum of ten (10) automatic time-of-day timing plans within a 24-hour period should be available in fixed time mode. The CU should have the ability to control a minimum of 16 traffic phases with programmable cycle time adjustments and user adjustable red, amber, minimum green and maximum green times. The CU shall have the capability of programming green and red times from 1 to 999 seconds and yellow times up to 15 seconds in one-second increments. The CU shall also have the capability of facilitating standby modes of red, red flash and yellow flash.

The system shall also have the ability to operate in vehicle actuation mode when vehicle detection components are used. The operating system shall have the capability to allow the Portable Traffic Signal to be connected to and controlled by a standard NEMA controller.

The system shall have the capability to be controlled remotely using a hardwired or wireless remote. The wireless radio remote shall be capable of communicating at a clear line of site distance up to ¼ mile from the master.

The CU shall have the capability of interfacing with a Remote Monitoring System (RMS) capable of reporting signal location, battery voltage, and system faults. The RMS shall include a password-protected web site, viewable via an internet connection. In the event of a system fault, the RMS shall provide specific information concerning the cause of the system fault (example: "red lamp on signal number 1 out"). The RMS shall immediately contact previously designated individuals via SMS text messaging or email, upon a fault event.

The active timing program operating the PTS system shall be available and viewable through the RMS website at all times. The RMS shall maintain a history of the operating system in each signal including total operating hours, alerts, and the location of the PTS trailer.

907-619.02.8.1.3--Wireless Communications. The portable traffic signals shall communicate with other portable traffic signals within the signal system via license-free wireless 900 MHZ radio link communications as specified in Subsection 662.02.2 of the radio Interconnect System specification. The radio units shall maintain communications at a minimum distance of one (1) mile. The radio system shall conform to the applicable Federal Communications Commission requirements and all applicable state and local requirements.

The portable traffic signals shall be in direct communication at all times either by wireless or hardware connection to provide for the required conflict monitoring / malfunction management system.

907-619.02.8.1.4--Power Requirements. Each Portable Traffic Signal shall be equipped with a power source consisting of a solar collection array, solar controller and/or charging unit and batteries sufficient to operate the signal system. The number and size of batteries shall be sufficient to operate the Type 1 and Type 3 signals for a minimum of 30 days and Type 2A signals for

minimum of five (5) days, and Type 2B signals for minimum of 15 days without additional charging or assist from the solar array. An on-board battery charger shall be compatible with both the solar array and with a 120V AC power source.

For Type 1 signals, the solar panel array shall provide for a minimum of 440 watts of solar collection capability.

For Type 2A signals, the solar panel array shall provide for a minimum of 90 watts of solar collection capability.

For Type 2B signals, the solar panel array shall provide for a minimum of 110 watts of solar collection capability.

For Type 3 signals, the solar panel array shall provide for a minimum of 480 watts of solar collection capability and shall include a tilt and rotate system to optimally position the panels.

All instrumentation for the electrical system and battery compartment shall be contained in a lockable weatherproof enclosure. Solar panels shall be secured to the mounting brackets for theft prevention.

907-619.02.8.1.5--Trailer and Lift System. The trailer or pedestal/cart and all mounted components shall conform to the wind loading requirements as follows: 100 mph minimum for Type 1 portable traffic signals, 55 mph minimum for Type 2A portable traffic signals, 75 mph minimum for Type 2B portable traffic signals, and 90 mph minimum for Type 3 portable traffic signals as described in the AASHTO *Standard Specifications for Highway Signs, Luminaries and Traffic Signals*, as specified in the plans including all interims and updates. At the request of the Engineer, proof of conformance to these wind load ratings shall be verified by a third-party. No additional loose ballast shall be used to meet these wind load requirements. The trailer shall be made of structural steel and shall include four (4) leveling/stabilizer jacks capable of lifting the trailer a minimum of six inches (6”).

The trailer or pedestal shall be equipped with a mechanical, hydraulic or electric lift system sufficient for one person to be able to raise and lower the vertical upright and/or horizontal mast arm to and from the operating position.

For Type 1, 2B, and Type 3 signals, the trailer shall be equipped to provide legal and safe transport on the public highway system at speeds up to 55 mph.

All exterior metal surfaces, except signal heads and back plates, shall be powder-coat painted highway safety orange.

907-619.02.9--Impact Attenuators. Delete the sentence in the first paragraph of Subsection 619.02.9 on page 455, and substitute the following.

Impact attenuators must be listed on the Department's APL.

907-619.02.11--Snap-Back Delineators. Delete the sentence in the paragraph of Subsection 619.02.11 on page 456, and substitute the following.

Snap-back delineators shall be selected from the list of surface mounted flexible delineator posts as shown on the Department's APL.

907-619.02.14--Changeable Message Sign.

907-619.02.14.5--PCMS Controller and Storage Cabinets. Delete the fifth sentence in the first paragraph of Subsection 619.02.14.5 on pages 462 and 463, and substitute the following.

The controller cabinet shall be illuminated.

907-619.05--Basis of Payment. Add the following to the list of pay items ending on page 480.

907-619-E3: Changeable Message Sign ***** - per each

907-619-H2: Traffic Signal, Portable, Type ____ - per each

Section 905

SP-9519-00(004)/108715301, SP-9520-00(001)/108715302, SP-9513-00(001)/108715303

Proposal (Sheet 2 - 1)

LINCOLN

Mill & Overlay approximately 2 miles of SR 184 from US 84 to US 51 and approximately 5 miles of SR 184 from the BOSM near Brookway Blvd. to US 84, Placement of Pavement Markings on approximately 1 mile of SR 550 from US 51 to the EOSM, and Mill & Overlay approximately 1 mile of SR 583 from US 84 to the EOSM, known as State Project Nos. SP-9519-00(004) / 108715301, SP-9520-00(001) / 108715302, and SP-9513-00(001) / 108715303 in Lincoln County.

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
Roadway Items					
0010	202-B240		900	Linear Feet	Removal of Traffic Stripe
0020	203-G002	(E)	220	Cubic Yard	Excess Excavation, LVM, AH
0030	304-A008	(GY)	2,952	Cubic Yard	Granular Material, LVM, Class 6, Group D
0040	403-A006	(BA1)	107	Ton	19-mm, ST, Asphalt Pavement
0050	403-A015	(BA1)	10,213	Ton	9.5-mm, ST, Asphalt Pavement
0060	406-D001		36,117	Square Yard	Fine Milling of Bituminous Pavement, All Depths
0070	407-A001	(A2)	19,666	Gallon	Asphalt for Tack Coat
0080	423-A001		11	Mile	Rumble Strips, Ground In
0090	613-D006		11	Each	Adjustment of Manhole Cover and Water Valve
0100	618-A001		1	Lump Sum	Maintenance of Traffic
0110	618-B001		2	Square Feet	Additional Construction Signs [\$10.00]
0120	619-A1001		21	Mile	Temporary Traffic Stripe, Continuous White
0130	619-A2001		18	Mile	Temporary Traffic Stripe, Continuous Yellow
0140	619-A4002		8	Mile	Temporary Traffic Stripe, Skip Yellow
0150	619-A5001		26,557	Linear Feet	Temporary Traffic Stripe, Detail
0160	619-A6001		630	Square Feet	Temporary Traffic Stripe, Legend
0170	619-A6002		9,774	Linear Feet	Temporary Traffic Stripe, Legend
0180	620-A001		1	Lump Sum	Mobilization
0190	626-C002		13	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous White
0200	626-D001		7	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow
0210	626-E001		11	Mile	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
0220	626-G001		308	Linear Feet	Thermoplastic Detail Stripe, Blue-ADA
0230	626-G002		13,188	Linear Feet	Thermoplastic Detail Stripe, White
0240	626-G003		6,292	Linear Feet	Thermoplastic Detail Stripe, Yellow
0250	626-H004		774	Square Feet	Thermoplastic Legend, White
0260	626-H005		8,323	Linear Feet	Thermoplastic Legend, White
0270	627-K001		78	Each	Red-Clear Reflective High Performance Raised Markers
0280	627-J001		860	Each	Two-Way Clear Reflective High Performance Raised Markers
0290	627-L001		1,235	Each	Two-Way Yellow Reflective High Performance Raised Markers
0300	627-P001		36	Each	Two-Way Blue Reflective High Performance Raised Markers
0310	630-F006		44	Each	Delineators, Guard Rail, White

Section 905

SP-9519-00(004)/108715301, SP-9520-00(001)/108715302, SP-9513-00(001)/108715303

Proposal (Sheet 2 - 2)

LINCOLN

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0320	647-A001		1	Lump Sum	Removal of Existing Traffic Signal Equipment
0330	907-411-A001	(BA1)	3,860	Ton	Ultra Thin Asphalt Pavement
0340	907-619-B001		198	Linear Feet	Temporary Portable Rumble Strips
0342	907-619-E3001		2	Each	Changeable Message Sign
0350	907-626-H001		4	Each	Thermoplastic Legend, Blue-ADA Handicap Symbol
0360	907-632-D001		4	Each	Solid State Traffic Actuated Controller, Type 1
0370	907-634-B001		4	Each	Traffic Signal Equipment Pole Shaft Extension, 10'
0380	907-637-C028		145	Linear Feet	Traffic Signal Conduit, Underground, Type 4, 2"
0390	907-637-D002		385	Linear Feet	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 2"
0400	907-643-A004		15	Each	Video Vehicle Detection Sensor, Type 1A
0410	907-643-B001		1,921	Linear Feet	Video Vehicle Detection Cable
0420	907-662-D002		5	Each	Radio Interconnect, Broadband, Short Range
0430	907-663-A001		4	Each	Network Switch, Type A
0440	907-899-A001		1	Lump Sum	Railway-Highway Provisions
ALTERNATE GROUP AA NUMBER 1					
0450	304-H001	(GY)	180	Cubic Yard	3/4" and Down Crushed Stone Base, LVM
ALTERNATE GROUP AA NUMBER 2					
0460	304-H002	(GY)	180	Cubic Yard	Size 610 Crushed Stone Base, LVM
ALTERNATE GROUP AA NUMBER 3					
0470	304-H003	(GY)	180	Cubic Yard	Size 825B Crushed Stone Base, LVM