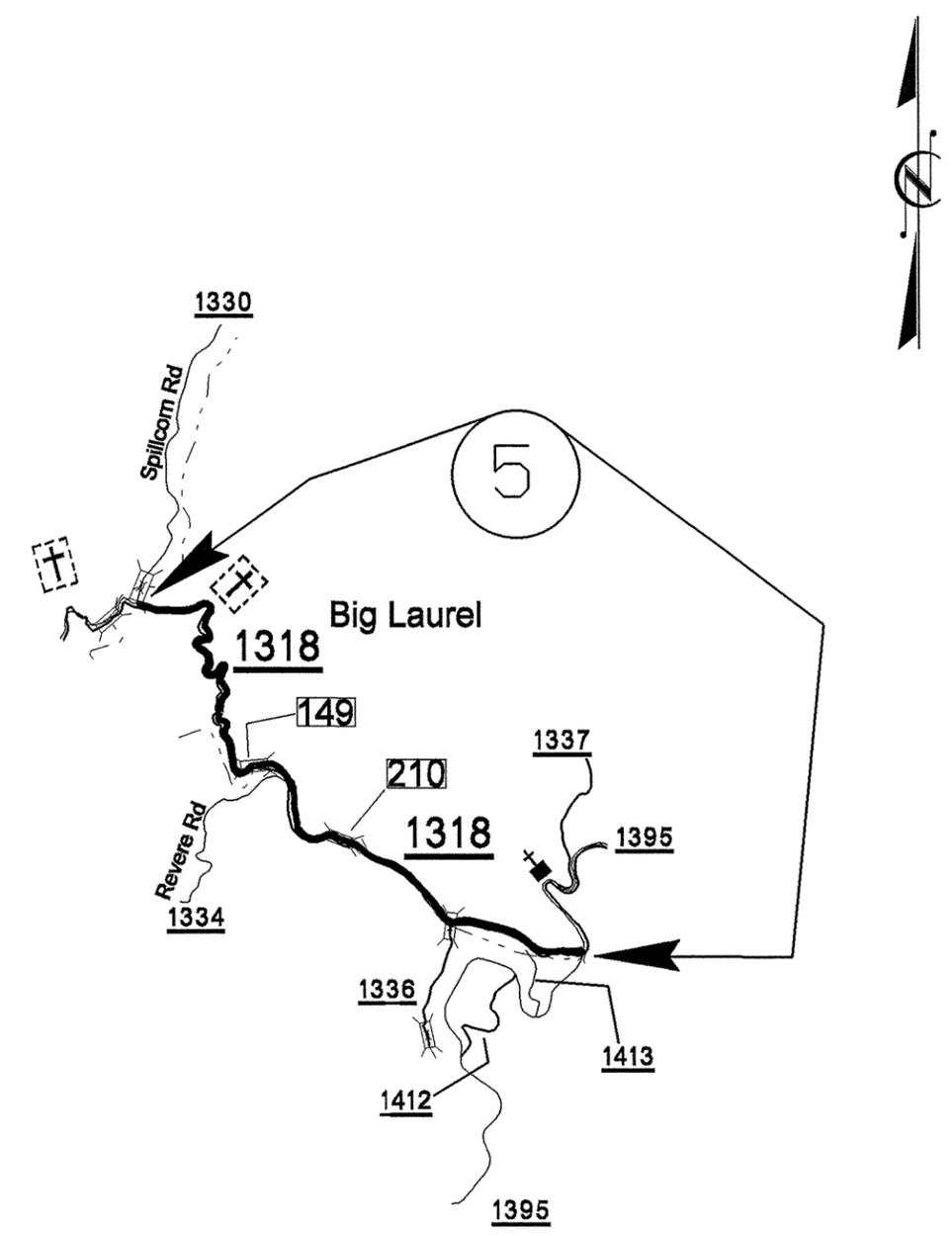
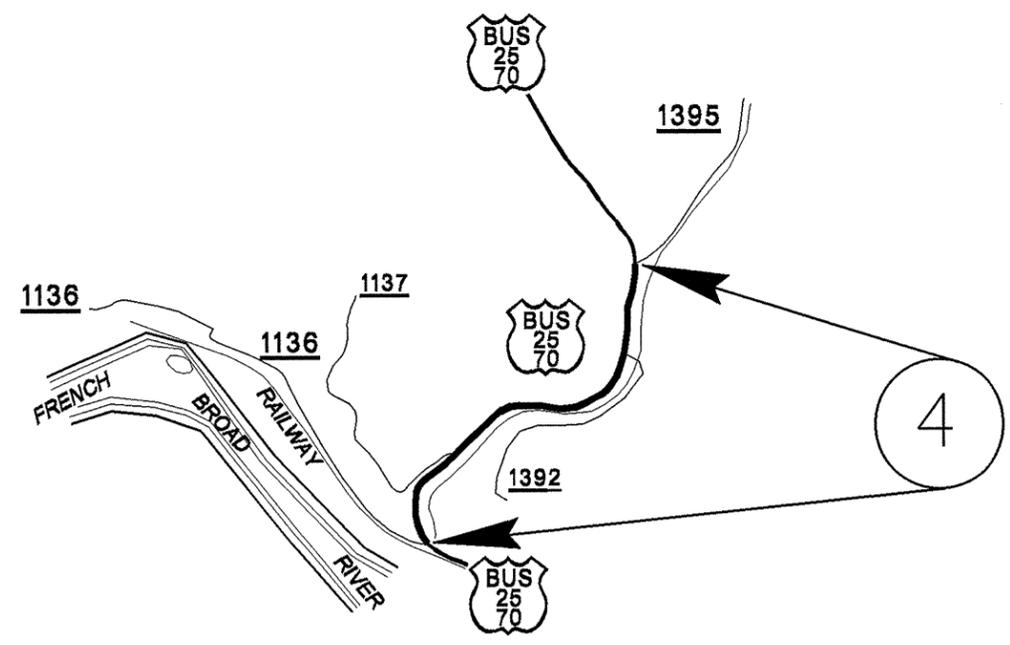


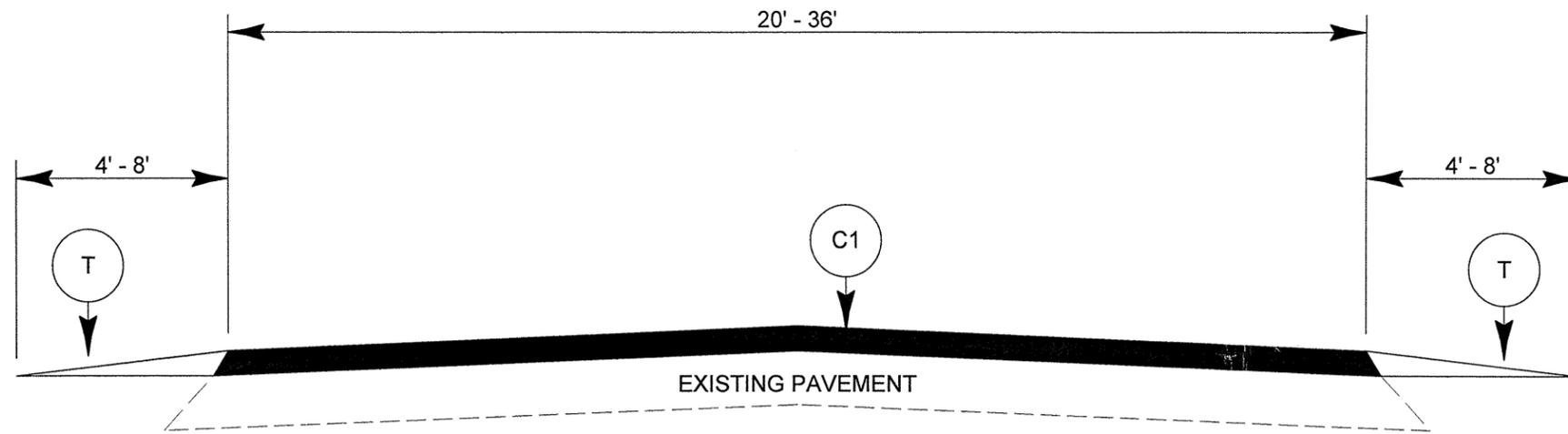


PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10571.9	2	6
13CR.20571.9		

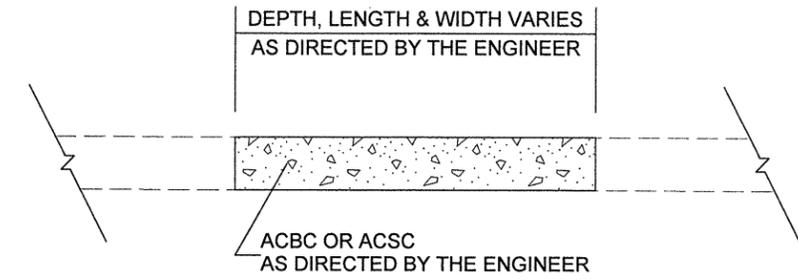


**MADISON COUNTY**

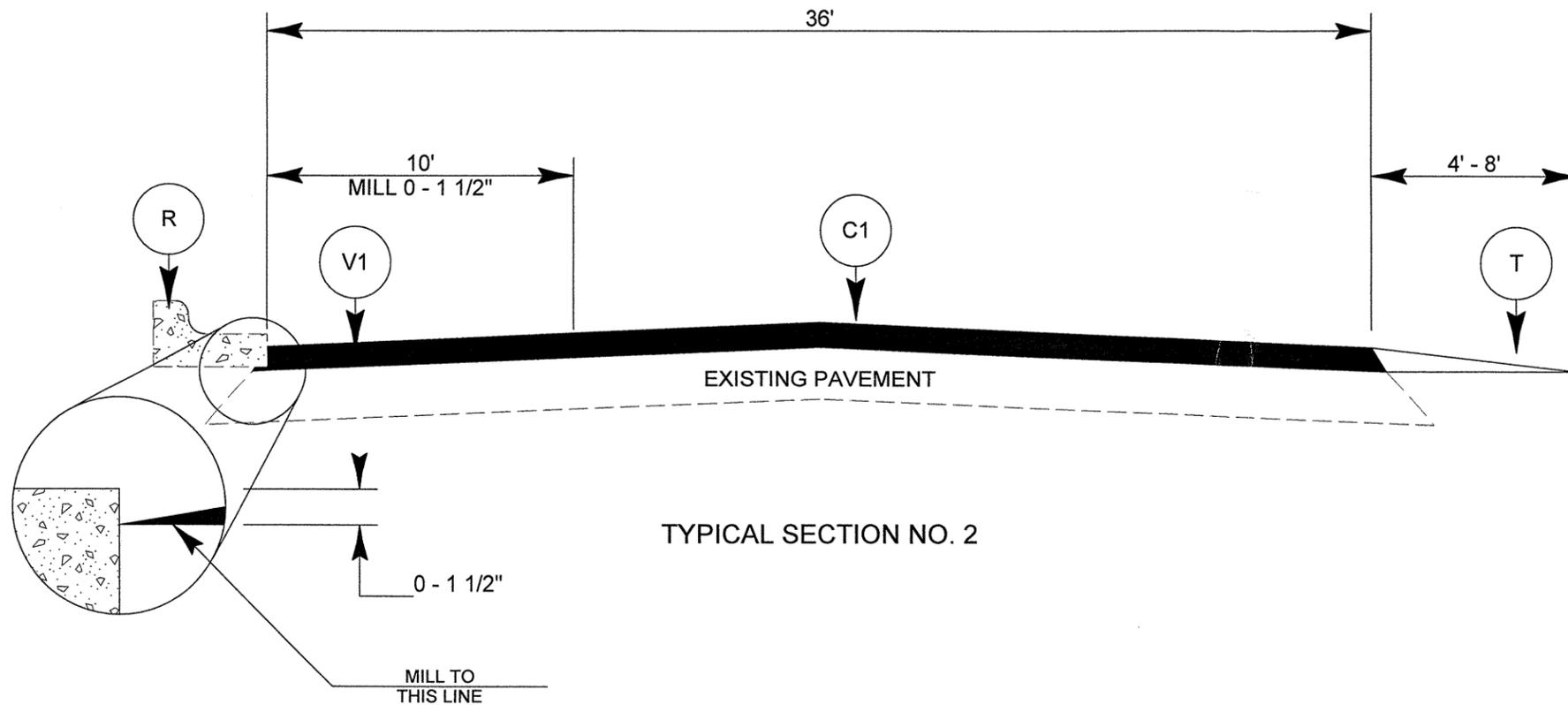
PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10571.9, 13CR.20571.9	3	6



TYPICAL SECTION NO. 1



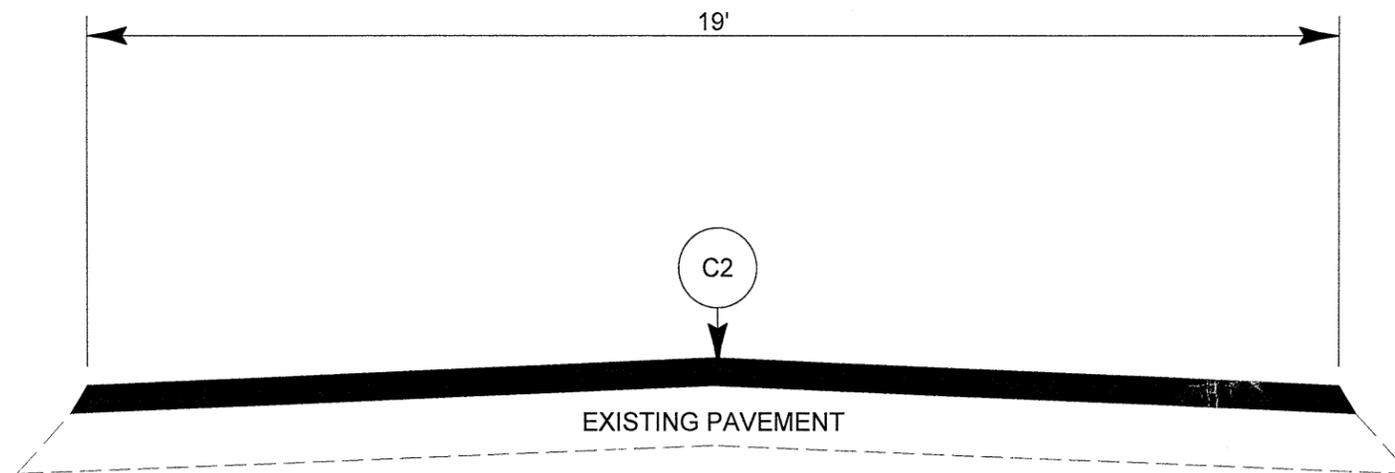
PATCHING EXISTING PAVEMENT



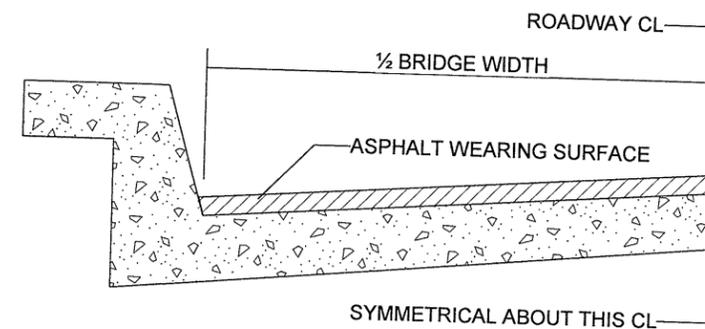
TYPICAL SECTION NO. 2

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
R	EXISTING CONCRETE CURB OR CONCRETE ISLAND
T	SHOULDER RECONSTRUCTION
V1	MILL 0 - 1 1/2"

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10571.9, 13CR.20571.9	4	6



TYPICAL SECTION NO. 3



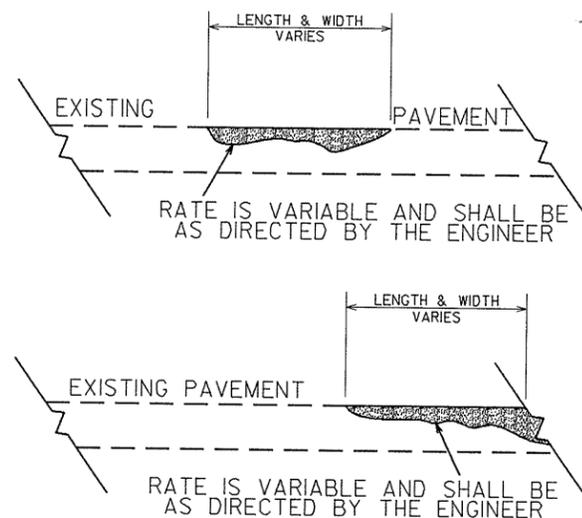
BRIDGE HALF TYPICAL SECTION

FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN

THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. THE MINIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1/2", SF9.5A 1.0", S9.5X 1.5", S12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A 3/4", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C 1/2". THE MAXIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1.0", SF9.5A 1.5", S9.5X 2.0", S12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A 3/4", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C 1/2".

NOTES

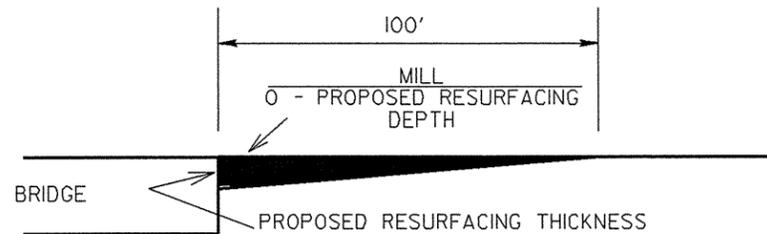
ALL UNPAVED ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.  
 ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.  
 EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.  
 SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE INDICATED.  
 BRIDGES ARE TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.



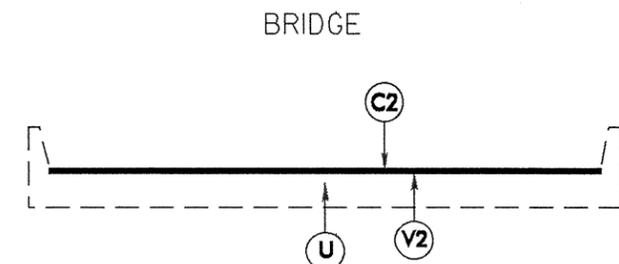
**DETAIL SHOWING METHOD OF WEDGING**

# MADISON COUNTY

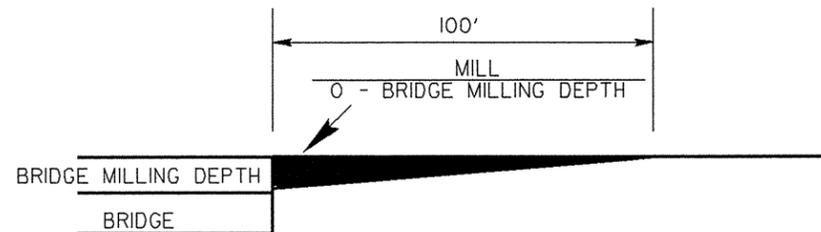
<b>PROJECT NO.</b>	<b>SHEET NO.</b>	<b>TOTAL SHEETS</b>
13CR.10571.9 & 13CR.20571.9	5	6



**MILLING DETAIL AT BRIDGE APPROACHES**  
**WHERE BRIDGES WILL NOT BE RESURFACED**  
**COST OF MILLING IS INCIDENTAL TO OTHER ITEMS**



**BRIDGE DETAIL**  
**BRIDGE # 149 AND # 210 MAP # 5**  
**MILL 1" OFF EXISTING PAVEMENT**  
**SEE MAPS FOR BRIDGE LOCATION**



**MILLING DETAIL AT BRIDGE APPROACHES**  
**WHERE BRIDGES WILL BE MILLED THEN RESURFACED**  
**COST OF MILLING IS INCIDENTAL TO OTHER ITEMS**

PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
U	EXISTING PAVEMENT
V2	MILL 1"

PROJECT NO.	SHEET NO.	TOTAL NO.
13CR.10571.9, 13CR.20571.9	6	6

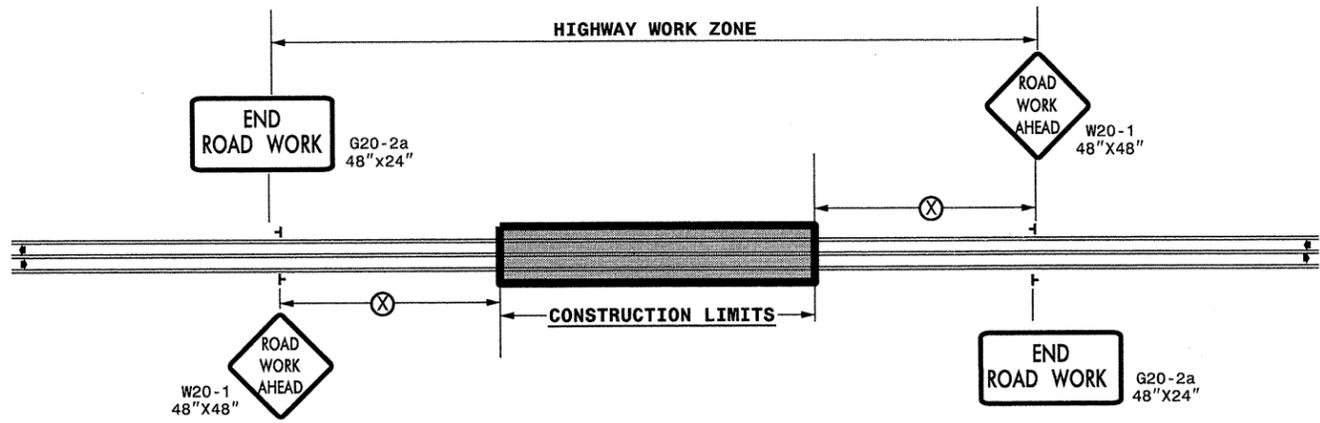
### SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	INCIDENTAL STONE BASE TON	SHOULDER RECONSTRUCTION SMI	1" MILLING SY	0" TO 1½" MILLING SY	ASPHALT CONC SURFACE COURSE, TYPE S9.5B TON	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A TON	ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT TON	ADJUSTMENT OF MANHOLES EA
13CR.10571.9	Madison	1	NC 213	FROM SR 1370 (GRAPEVINE RD) MP 9.76 TO WCL MARS HILL MP 13.11	1	NO	3.6	28	180.00	7.20			5,489		329	300	
	Madison	2	NC 213	FROM US 25/70 MP 6.20 TO SR 1611 (SILVER MILL RD.) MP 7.93	1	NO	1.8	28 - 36	90.00	3.60			2,862		172	200	
	Madison	3	NC 213	FROM ECL MARS HILL MP 14.18 TO SR 1549 ( CALVIN EDNEY) MP 14.87	1,2	NO	0.7	36	35.00	1.12		1,643	1,371		82	400	
	Madison	4	US 25/70 BUS	FROM SR 1136 MP 4.11 TO SR 1395 MP 4.58	1	NO	0.47	20	23.50	0.94			513		31	100	10
<b>TOTAL FOR PROJ NO. 13CR.10571.9</b>							<b>6.57</b>		<b>328.50</b>	<b>12.86</b>		<b>1,643</b>	<b>10,235</b>		<b>614</b>	<b>1,000</b>	<b>10</b>
13CR.20571.9	Madison	5	SR 1318 (BIG LAUREL RD.)	FROM SR 1330 MP 5.20 TO SR 1395 MP 7.96	3	NO	2.76	19	138.00		522			1,869	125	1,000	
<b>TOTAL FOR PROJ NO. 13CR.20571.9</b>							<b>2.76</b>		<b>138.00</b>		<b>522</b>			<b>1,869</b>	<b>125</b>	<b>1,000</b>	
<b>GRAND TOTAL</b>							<b>9.33</b>		<b>466.50</b>	<b>12.86</b>	<b>522</b>	<b>1,643</b>	<b>10,235</b>	<b>1,869</b>	<b>739</b>	<b>2,000</b>	<b>10</b>

### THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	LENGTH	WIDTH	4685000000-E	4686000000-E	4695000000-E	4710000000-E	4721000000-E	4725000000-E				4810000000-E		4905000000-N		
							4" X 90 M WHITE THERMO LF	4" X 120 M YELLOW THERMO LF	4" X 120 M WHITE THERMO LF	8" X 90 M YELLOW THERMO LF	24" X 120 M WHITE THERMO LF	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS, ONLY) EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS, RT ARROW) EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS, LT ARROW) EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS, STR ARROW) EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS, STR & RT ARROW) EA	PAINT PAVEMENT MARKING LINES (4") WHITE LF	PAINT PAVEMENT MARKING LINES (4") YELLOW LF	SNOWPLOWABLE PAVEMENT MARKERS EA	
13CR.10571.9	Madison	1	NC 213	FROM SR 1370 (GRAPEVINE RD) MP 9.76 TO WCL MARS HILL MP 13.11	3.6	28	38,016	38,016										238		
	Madison	2	NC 213	FROM US 25/70 MP 6.20 TO SR 1611 (SILVER MILL RD.) MP 7.93	1.8	28	19,008	19,008	396									140		
	Madison	3	NC 213	FROM ECL MARS HILL MP 14.18 TO SR 1549 ( CALVIN EDNEY) MP 14.87	0.7	36	5,914	9,240	600	550	188	4	8	29	3	3		92		
	Madison	4	US 25/70 BUS	FROM SR 1136 MP 4.11 TO SR 1395 MP 4.58	0.47	20	4,963	4,963										62		
<b>TOTAL FOR PROJ NO. 13CR.10571.9</b>							<b>6.57</b>		<b>67,901</b>	<b>71,227</b>	<b>996</b>	<b>550</b>	<b>188</b>	<b>4</b>	<b>9</b>	<b>29</b>	<b>3</b>	<b>3</b>	<b>532</b>	
								<b>72,223</b>						<b>44</b>						
13CR.20571.9	Madison	5	SR 1318 (BIG LAUREL RD.)	FROM SR 1330 MP 5.20 TO SR 1395 MP 7.96	2.76	19											58,291	58,291		
<b>TOTAL FOR PROJ NO. 13CR.20571.9</b>							<b>2.76</b>											<b>58,291</b>	<b>58,291</b>	
<b>GRAND TOTAL</b>							<b>9.33</b>		<b>67,901</b>	<b>71,227</b>	<b>996</b>	<b>550</b>	<b>188</b>	<b>4</b>	<b>9</b>	<b>29</b>	<b>3</b>	<b>3</b>	<b>58,291</b>	<b>58,291</b>
								<b>72,223</b>						<b>44</b>			<b>116,582</b>	<b>532</b>		

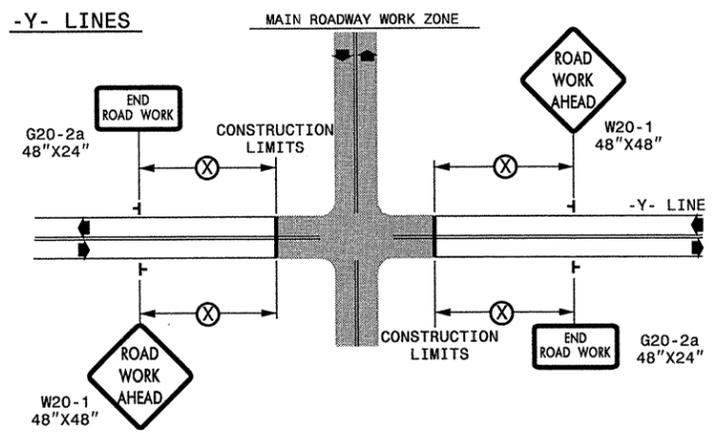
**TWO-WAY UNDIVIDED \*\* (L-LINES)**



POSTED SPEED LIMIT (M.P.H.)	RECOMMENDED MINIMUM SIGN SPACING
≤ 50	500'
≥ 55	1000'

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

**ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)**



**GENERAL NOTES**

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- \*\* TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

**LEGEND**

┆ STATIONARY SIGN

◀ DIRECTION OF TRAFFIC FLOW

DETAIL DRAWING FOR  
TWO-WAY UNDIVIDED  
WORK ZONE WARNING SIGNS

SHEET 1 OF 1

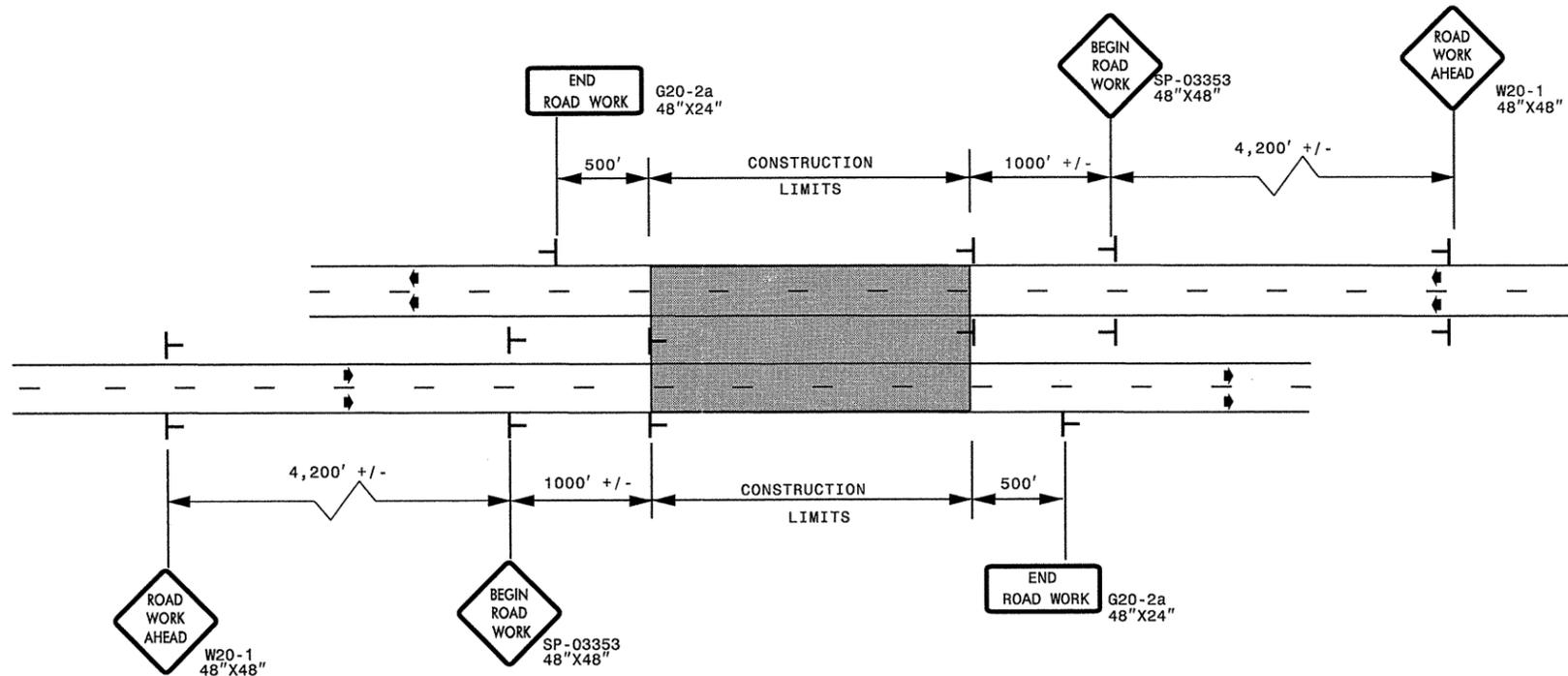
APPROVED: _____ DATE: _____	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS	
SEAL	SCALE: NONE	REVISIONS
	DATE: _____	7-98 10/01
	DWG. BY: _____	10-98 03/04
	DESIGN BY: _____	01/01 11/04
REVIEWED BY: _____		

27-OCT-2011 08:45  
 \\DOT\DF\ROOT\GROUPS-WZ\TCCC\TMU\WZTC\Resur\facimg\2011Resur\2011Western\2011DIV13\C202903A-B.13CR.10571.9x2.Madison.NC213etc..sg\C202903A-B.13CR.10571.9x2.Madison.2way\_Undiv.&Urban.F.r.wys\_stationary.dgn  
 sngreen AT 12:44:33

# ADVANCED WORK ZONE WARNING SIGNING FOR FREEWAYS (4 LANES OR GREATER)

PROJ. REFERENCE NO.	SHEET NO.
13CR.10571.9	TCP-2
13CR.20571.9	

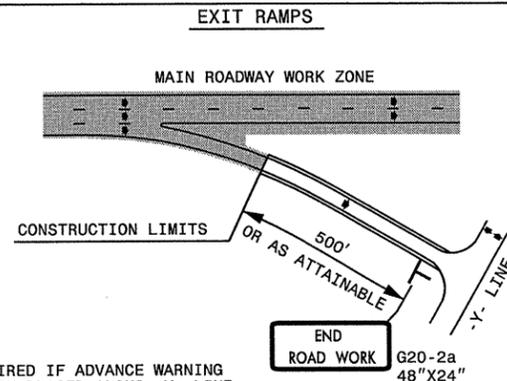
## DETAIL A



LEGEND	
	STATIONARY SIGN
◆	DIRECTION OF TRAFFIC FLOW

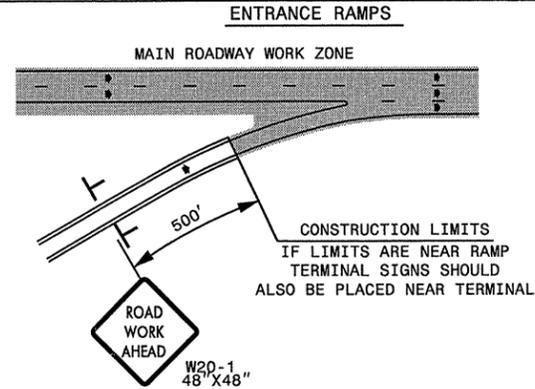
\* USE THE "\$250 SPEEDING PENALTY" SIGN, SPEED LIMIT SIGN, AND ORANGE PANEL; ONLY WHEN A "\$250 SPEEDING PENALTY" ORDINANCE HAS BEEN ISSUED BY THE REGIONAL TRAFFIC ENGINEER.

## DETAIL B

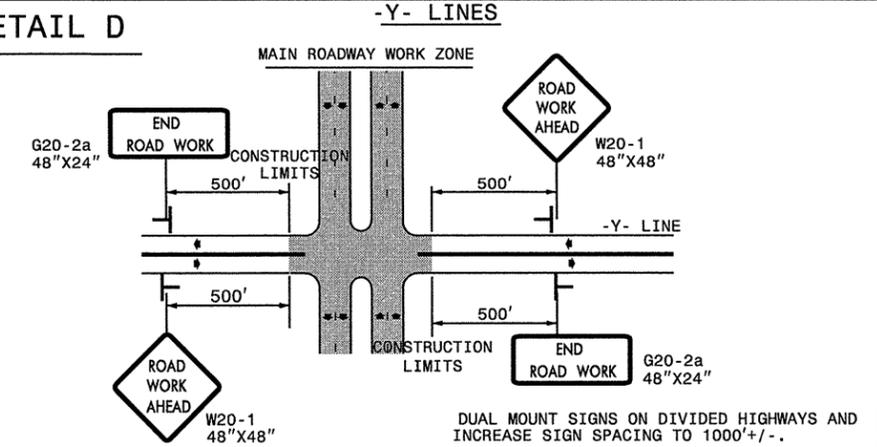


NOTE: SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

## DETAIL C



## DETAIL D

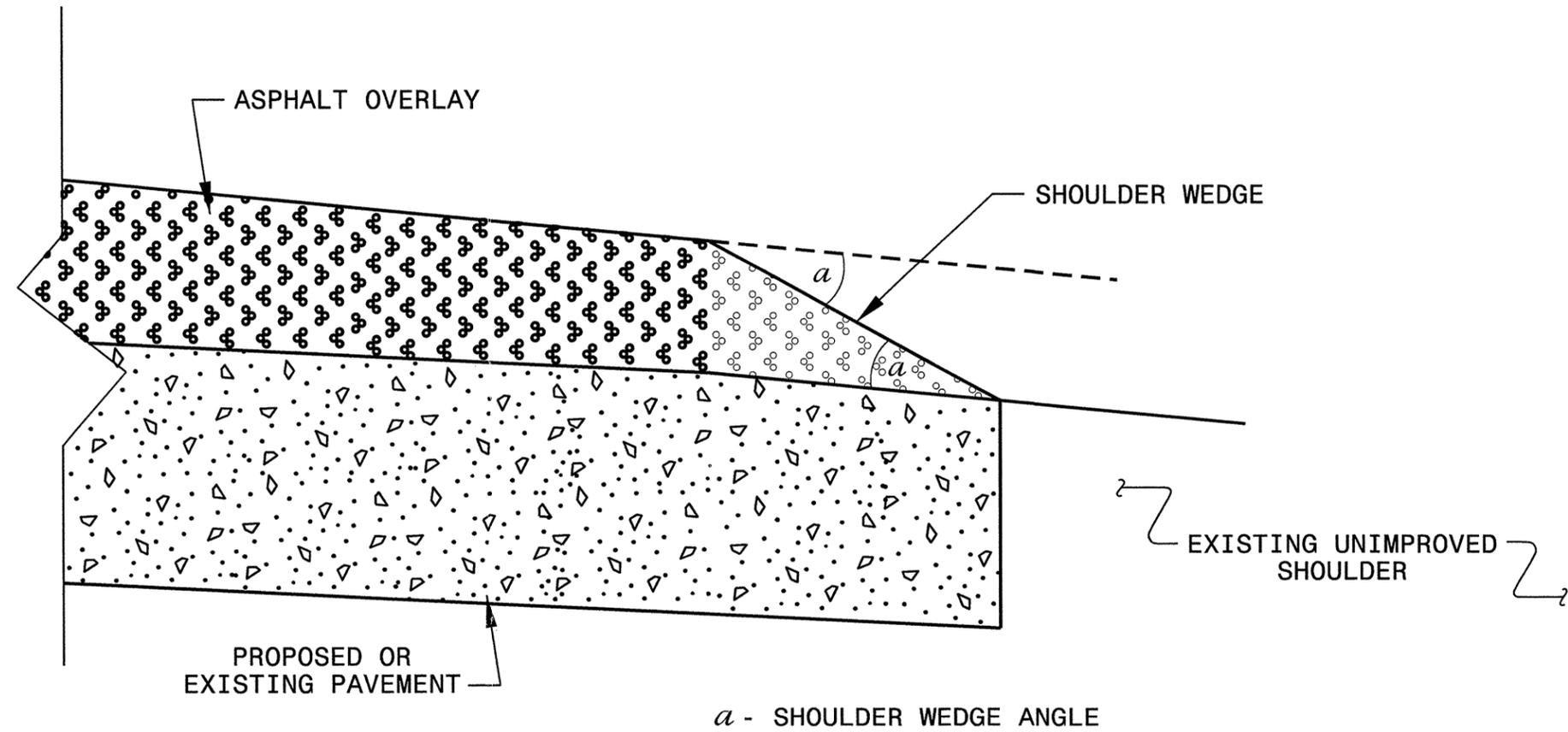


## GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.

APPROVED: _____ DATE: _____	ADVANCED WORK ZONE WARNING SIGNS FOR FREEWAYS (4 LANES OR GREATER)	
	SCALE: NONE	
	DATE: 8/03	
	DWG. BY: JI	
	DESIGN BY: JI	
REVIEWED BY: _____	REVISIONS	03/04

27-OCT-2010 08:47 \\DOT\DFSROOT\GROUPS-WZTC\Resurfacing\2010\Western\2010\Div13\202903A-B\13CR.10571.9x2.Madison\_freeways\_4lanes\_or\_greater\_stationary.dgn



## SHOULDER WEDGE DETAIL

04-OCT-2011 14:22  
 S:\Contracts\Special Details\Jhovan\ton\shoulderwedgedetail.dgn  
 ##USERNAME##

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b> Office 919-707-6950 FAX 919-250-4119	
<b>SHOULDER WEDGE DETAIL</b>	
ORIGINAL BY: T.SPELL	DATE: 7-19-11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn	