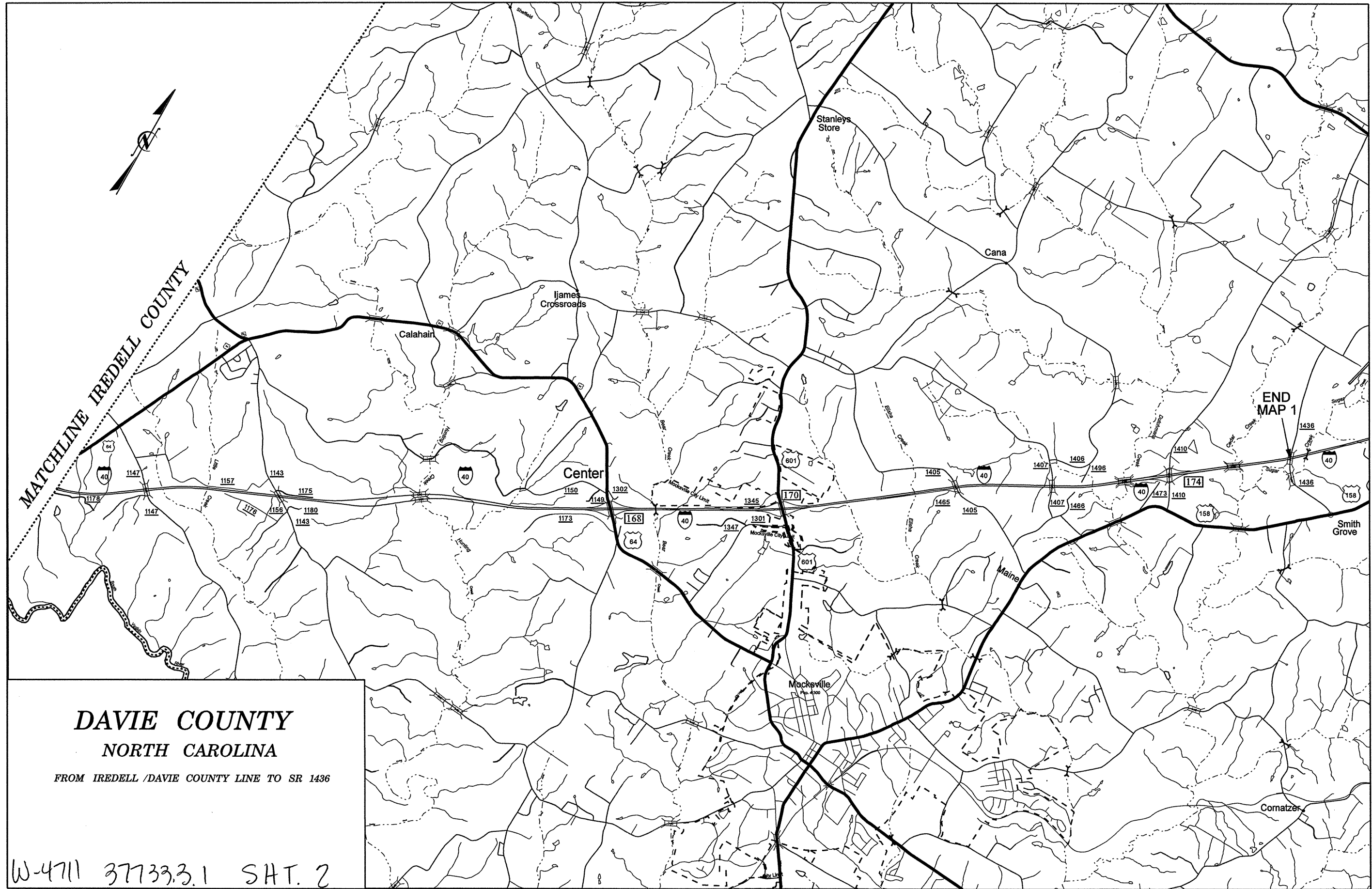


**IREDELL COUNTY**  
**NORTH CAROLINA**

FROM SR 2158 TO IREDELL / DAVIE COUNTY LINE

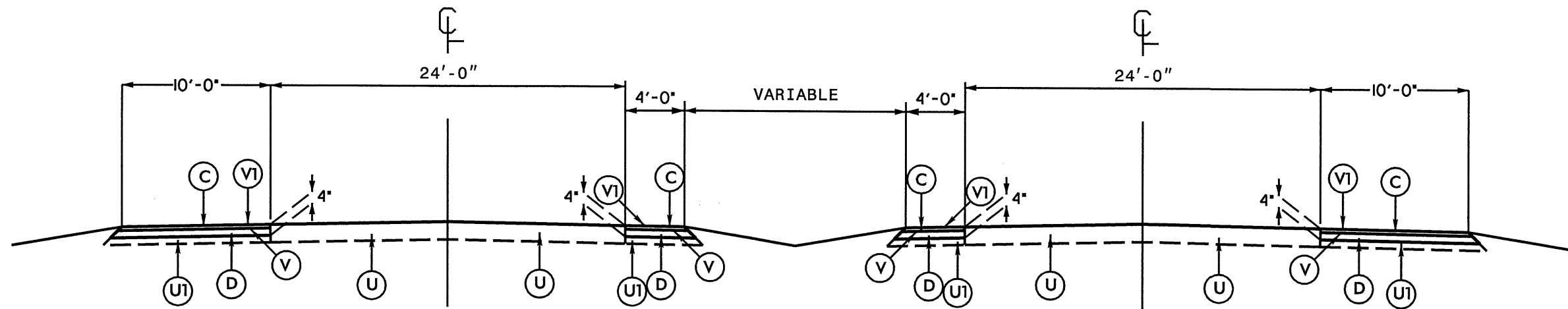
W-4711 37733.3.1 SH. 1



**DAVIE COUNTY**  
**NORTH CAROLINA**

FROM IREDELL / DAVIE COUNTY LINE TO SR 1436

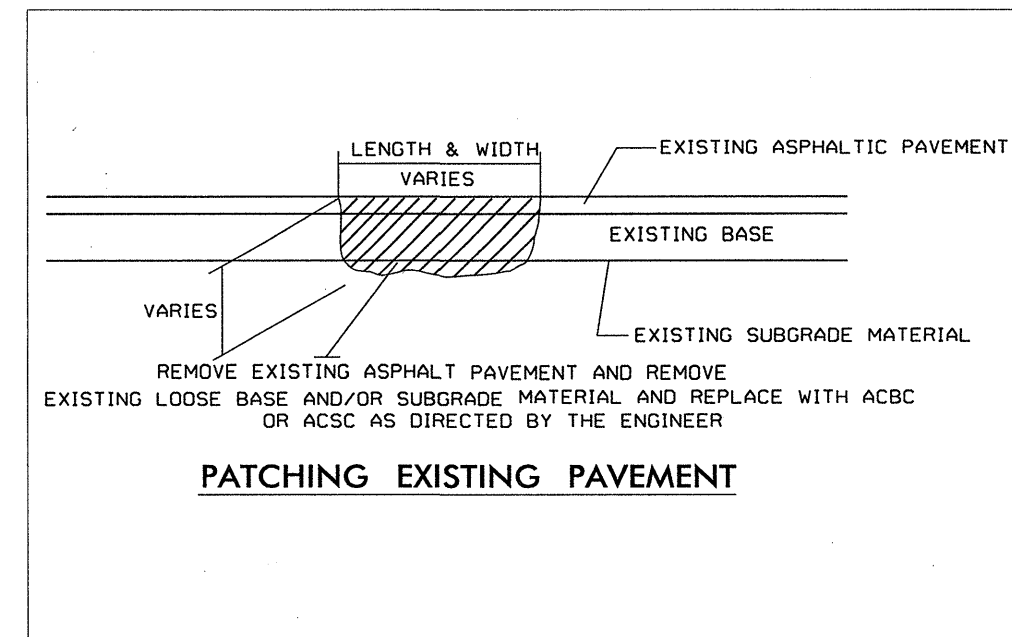
W-4711 37733.3.1 SHT. 2



**TYPICAL SECTION NO. 1**

USE TYPICAL SECTION NO. 1 AS FOLLOWS  
FROM MM154 IN IREDELL COUNTY  
TO UNDERPASS OF SR 1436 IN DAVIE COUNTY

PAVEMENT SCHEDULE	
C	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
U	EXISTING CONCRETE PAVEMENT.
U1	EXISTING ASPHALT PAVEMENT.
V	MILLING 4" DEPTH
V1	MILLED RUMBLE STRIPS



NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

PROJECT NO.	SHEET NO.	TOTAL NO.
W-4711 37733.3.1	4	

### SUMMARY OF QUANTITIES

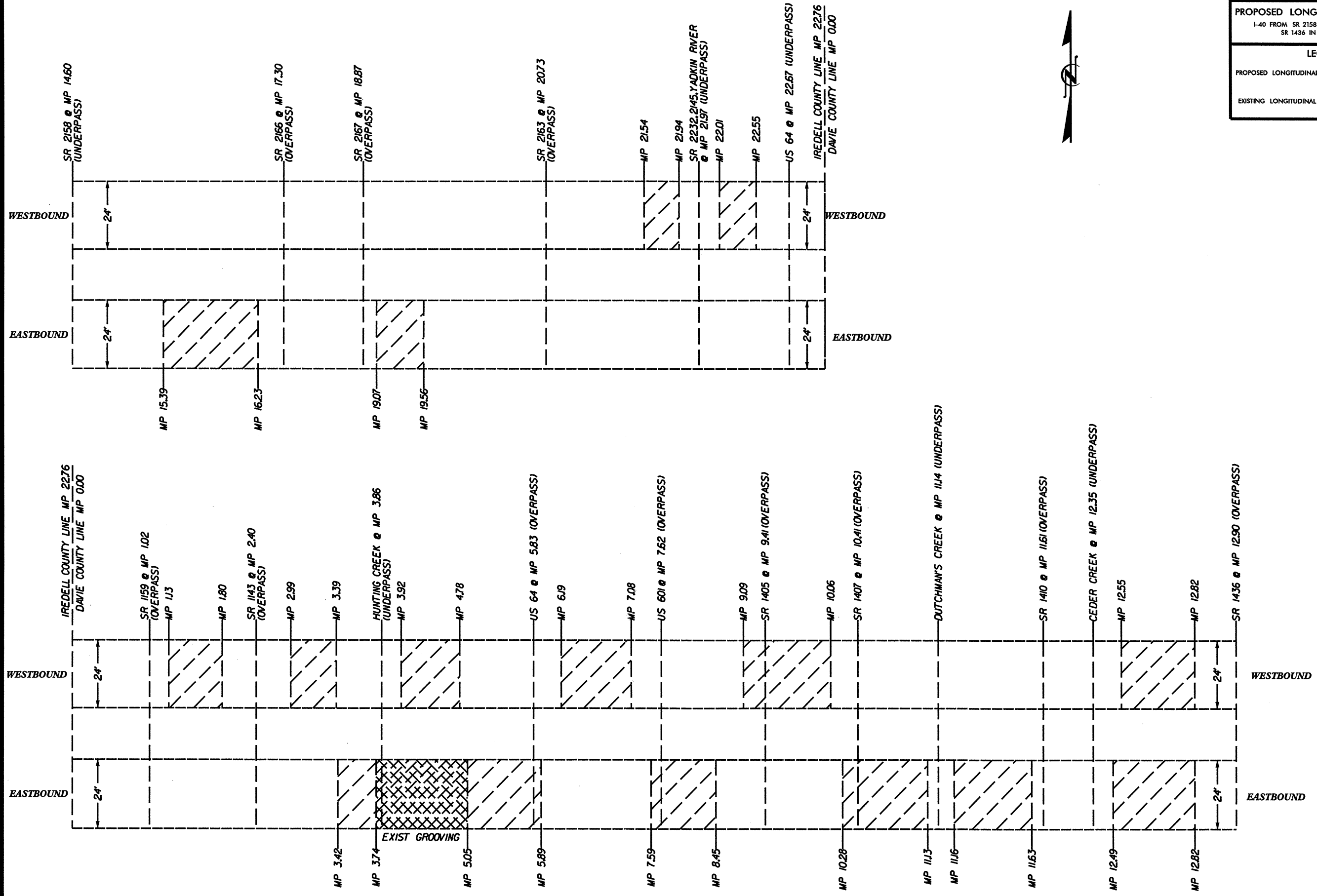
PROJECT NO.	COUNTY	MAP NO.	ROUTE	DESCRIPTION	TYP	FINAL SURFACE TESTING REQUIRED	LENGTH	WIDTH	UNDERCUT EXCAVATION	FABRIC FOR SOIL STABILIZATION	AGGREGATE BASE COURSE FOR BACKFILL	4" MILLING	INTERMEDIATE COURSE, 119.0C	SURFACE COURSE, S9.5C	PG 64-22 PLANT MIX	PG 70-22 PLANT MIX	PATCHING EXISTING PAVEMENT	MILLED RUMBLE STRIPS (ASPHALT CEMENT CONCRETE) LF	8" CRC REPAIR	GROOVING EXIST. CONC. PAVEMENT	GUARDRAIL ANCHOR UNITS, TYPE CAT-1	GUARDRAIL ANCHOR UNITS, TYPE 350
NO		NO			NO		MI	FT	CY	SY	TONS	SY	TONS	TONS	TONS	TONS	TONS		SY	SY	EA	EA
W-4711 37733.3.1	Iredell / Davie	1	I-40	I-40 from US 64 (MP 154) in Iredell County to SR 1436 (MP 175) in Davie County	1	NO	21.1	38	500	4,872	2,036	346,603	50,130	29,380	2,356	1,763	100	445,632	2,872	140,800	46	35
<b>TOTAL FOR MAP NO. 1</b>							21.1		500	4,872	2,036	346,603	50,130	29,380	2,356	1,763	100	445,632	2,872	140,800	46	35
<b>TOTAL FOR PROJ NO.</b>							21.1		500	4,872	2,036	346,603	50,130	29,380	2,356	1,763	100	445,632	2,872	140,800	46	35
<b>GRAND TOTAL</b>							21.1		500	4,872	2,036	346,603	50,130	29,380	2,356	1,763	100	445,632	2,872	140,800	46	35

### THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO.	COUNTY	MAP NO.	ROUTE	DESCRIPTION	4415000000-N	4420000000-N	4430000000-N	4480000000-N	4815000000-E		4847100000-E		4847120000-E	4895000000-N	4905000000-N
					FLASHING ARROW PANELS, TYPE C	CHANGEABLE MESSAGE SIGN	DRUMS	TMIA	6" WHITE PAINT	6" YELLOW PAINT	6" WHITE POLYUREA HIGHLY REFLECTIVE	6" YELLOW POLYUREA HIGHLY REFLECTIVE	12" WHITE POLYUREA HIGH REFLECTIVE	REPLACE SNOW. PLOW. MARKER REFLECTOR	SNOW PLOWABLE MARKERS
NO		NO			EA	EA	EA	EA	LF	LF	LF	LF	EA	EA	
W-4711 37733.3.1	Iredell / Davie	1	I-40	I-40 from US 64 (MP 154) in Iredell County to SR 1436 (MP 175) in Davie County	2	2	600	2	2,250	2,250	250,668	222,816	11,000	1,000	250
<b>TOTAL FOR MAP NO. 1</b>					2	2	600	2	2,250	2,250	250,668	222,816	11,000	1,000	250
<b>TOTAL FOR PROJ NO.</b>					2	2	600	2	2,250	2,250	250,668	222,816	11,000	1,000	250
<b>GRAND TOTAL</b>					2	2	600	2	2,250	2,250	250,668	222,816	11,000	1,000	250

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
W-4711	5
PROPOSED LONGITUDINAL GROOVING	
I-40 FROM SR 2158 IN IREDELL COUNTY TO SR 1436 IN DAVIE COUNTY	
LEGEND	
PROPOSED LONGITUDINAL GROOVING	
EXISTING LONGITUDINAL GROOVING	



PROJECT NO.	SHEET NO.	TOTAL NO.
W-4711	6	

**W-4711 I-40 IREDELL & DAVIE COUNTIES**

From SR 2158 (Milepost 14.60) in Iredell County to SR 1436 (Milepost 12.90) in Davie County  
Mileposts Taken from Straight Line Treatment Diagram dated November 2008  
Reverse Mileposts Represent 0.00 Beginning at Davie County Line

**CRC Repair Information**

Iredell County: 0.00 Iredell County Begin Milepost (Catawba County Line)  
22.76 Iredell County End Milepost (Davie County Line)

Direction	Milepost	Reverse Milepost	Lane	Length (ft)	Width (ft)	Patch Area (S.F.)	Patch Area (S.Y.)
Eastbound	17.10	5.66	Fast	40	12	480	53
Eastbound	17.50	5.26	Slow	40	12	480	53
Eastbound	17.50	5.26	Fast	40	12	480	53
Eastbound	17.53	5.23	Slow	40	12	480	53
Eastbound	17.53	5.23	Fast	40	12	480	53
Eastbound	17.71	5.06	Slow	40	12	480	53
Eastbound	17.82	4.95	Slow	60	12	720	80
Eastbound	18.54	4.23	Slow	46	12	552	61
Eastbound	18.54	4.23	Fast	46	12	552	61
Eastbound	18.93	3.83	Slow	35	12	420	47
Eastbound	18.94	3.82	Slow	35	12	420	47
Eastbound	19.04	3.72	Slow	40	12	480	53
Eastbound	19.42	3.34	Slow	30	12	360	40
Eastbound	20.12	2.64	Slow	60	12	720	80
Eastbound	20.29	2.47	Slow	40	12	480	53
Eastbound	20.29	2.47	Fast	40	12	480	53
Eastbound	20.30	2.46	Slow	30	12	360	40
Eastbound	20.97	1.79	Slow	52	12	624	69
Eastbound	20.97	1.79	Fast	52	12	624	69
Eastbound	21.33	1.44	Slow	45	12	540	60
Eastbound	21.38	1.38	Slow	30	12	360	40
Eastbound	21.45	1.31	Slow	153	12	1836	204
Eastbound	21.58	1.18	Slow	40	12	480	53
Eastbound	21.58	1.18	Fast	20	12	240	27
Eastbound	21.69	1.07	Slow	30	12	360	40
Eastbound	21.71	1.05	Slow	80	12	960	107

1605

Direction	Milepost	Reverse Milepost	Lane	Length (ft)	Width (ft)	Patch Area (S.F.)	Patch Area (S.Y.)
Westbound	22.45	0.32	Slow	30	12	360	40
Westbound	21.92	0.84	Slow	20	12	240	27
Westbound	21.92	0.84	Fast	20	12	240	27
Westbound	19.25	3.51	Slow	40	12	480	53
Westbound	18.69	4.07	Slow	62	12	744	83
Westbound	17.47	5.29	Slow	78	12	936	104
Westbound	17.39	5.37	Slow	32	12	384	43
Westbound	17.34	5.42	Slow	48	12	576	64
Westbound	17.26	5.50	Slow	30	12	360	40
Westbound	16.63	6.13	Slow	42	12	504	56
Westbound	15.17	7.60	Slow	30	12	360	40
Westbound	14.92	7.84	Slow	35	12	420	47
Westbound	14.81	7.95	Slow	42	12	504	56
Westbound	14.74	8.02	Slow	45	12	540	60

739

**NOTE: Slab replacement locations & sizes are approximate. Final location & size to be determined by the Engineer.**

PROJECT NO.	SHEET NO.	TOTAL NO.
W-4711	7	

**W-4711 I-40 IREDELL & DAVIE COUNTIES**  
 From SR 2158 (Milepost 14.60) in Iredell County to SR 1436 (Milepost 12.90) in Davie County  
 Mileposts Taken from Straight Line Treatment Diagram dated November 2008  
 Reverse Mileposts Represent 0.00 Beginning at Forsyth County Line

**CRC Repair Information**  
 Davie County 0.00 Davie County Begin Milepost (Iredell County Line)  
 19.30 Davie County End Milepost (Forsyth County Line)

Direction	Milepost	Reverse Milepost	Lane	Length (ft)	Width (ft)	Patch Area (S.F.)	Patch Area (S.Y.)
Eastbound	12.7	6.60	Slow	10	12	120	13
Eastbound	11.87	7.43	Slow	6	12	72	8
Eastbound	11.28	8.02	Fast	6	12	72	8
Eastbound	11.26	8.04	Slow	12	12	144	16
Eastbound	10.95	8.35	Slow	12	12	144	16
Eastbound	10.8	8.50	Fast	6	12	72	8
Eastbound	10.76	8.54	Slow	6	12	72	8
Eastbound	10.63	8.67	Slow	12	12	144	16
Eastbound	10.51	8.79	Slow	12	12	144	16
Eastbound	10.47	8.83	Slow	12	12	144	16
Eastbound	10.32	8.98	Slow	12	12	144	16
Eastbound	10.32	8.98	Fast	16	12	192	21
Eastbound	9.84	9.46	Slow	12	12	144	16
Eastbound	4.9	14.40	Slow	12	12	144	16
Eastbound	4.25	15.05	Slow	6	12	72	8
Eastbound	4.25	15.05	Fast	6	12	72	8
Eastbound	3.9	15.40	Fast	12	12	144	16
Eastbound	3.67	15.63	Slow	6	12	72	8
Eastbound	3.31	15.99	Fast	8	12	96	11
Eastbound	2.77	16.53	Slow	12	12	144	16
Eastbound	0.56	18.74	Slow	12	12	144	16

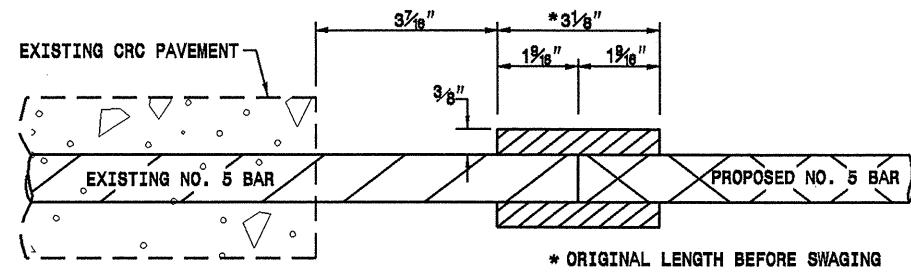
277

Direction	Milepost	Reverse Milepost	Lane	Length (ft)	Width (ft)	Patch Area (S.F.)	Patch Area (S.Y.)
Westbound	12.62	6.68	Fast	24	12	288	32
Westbound	11.65	7.65	Slow	10	12	120	13
Westbound	10.13	9.17	Slow	12	12	144	16
Westbound	9.43	9.87	Slow	12	12	144	16
Westbound	9.1	10.20	Slow	10	12	120	13
Westbound	9.08	10.22	Slow	6	12	72	8
Westbound	8.33	10.97	Slow	12	12	144	16
Westbound	6.63	12.67	Slow	16	12	192	21
Westbound	6.22	13.08	Slow	6	12	72	8
Westbound	6.18	13.12	Slow	12	12	144	16
Westbound	6.13	13.17	Slow	14	12	168	19
Westbound	2.64	16.66	Slow	12	12	144	16
Westbound	1.52	17.78	Slow	6	12	72	8
Westbound	0.96	18.34	Slow	12	12	144	16
Westbound	0.44	18.86	Slow	24	12	288	32

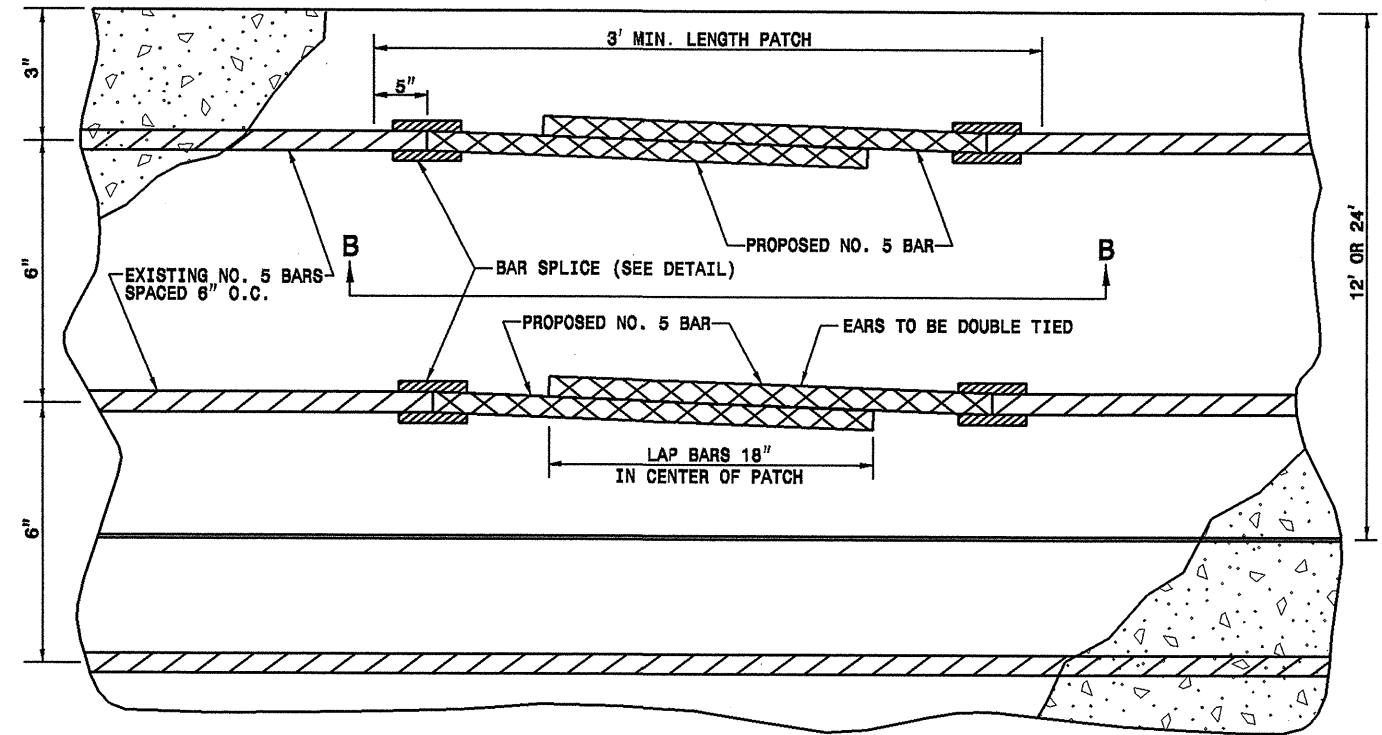
251

*NOTE: Slab replacement locations & sizes are approximate. Final location & size to be determined by the Engineer.*

5/14/99

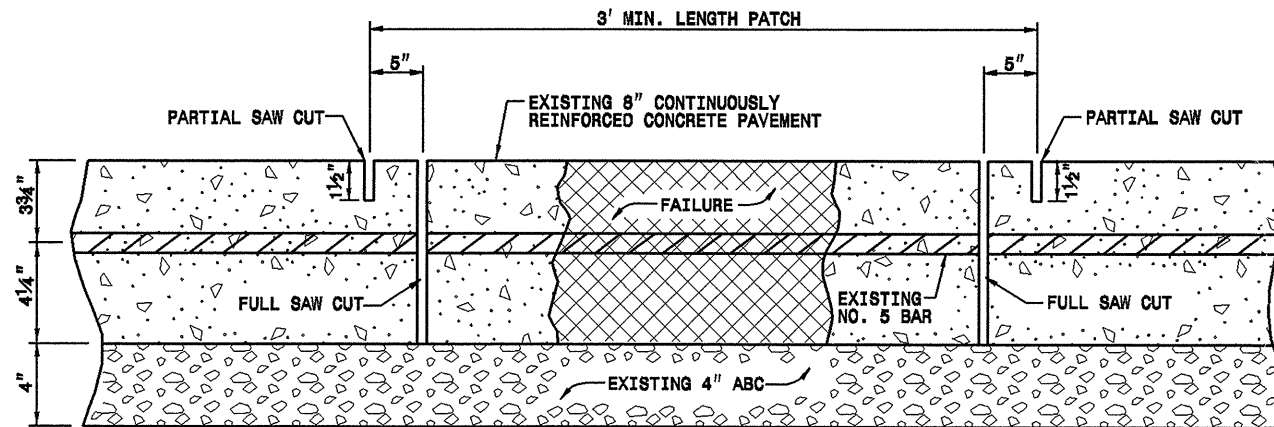


**DETAIL OF BAR SPLICING**

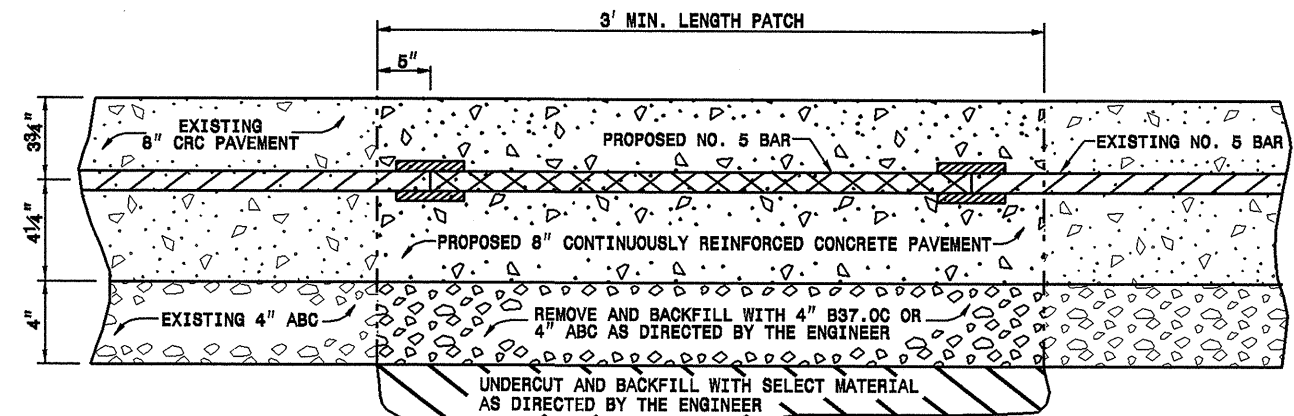


BAR SUPPORTS SHALL BE PLACED ON 5' CENTERS FOR PATCHES GREATER THAN 10' IN LENGTH AND AT CENTER OF PATCH FOR REPAIRS LESS THAN 10'. HEIGHT OF SUPPORTS SHALL BE DETERMINED BY THE CONTRACTOR.

**PLAN**



**DETAIL OF SAW CUTS**



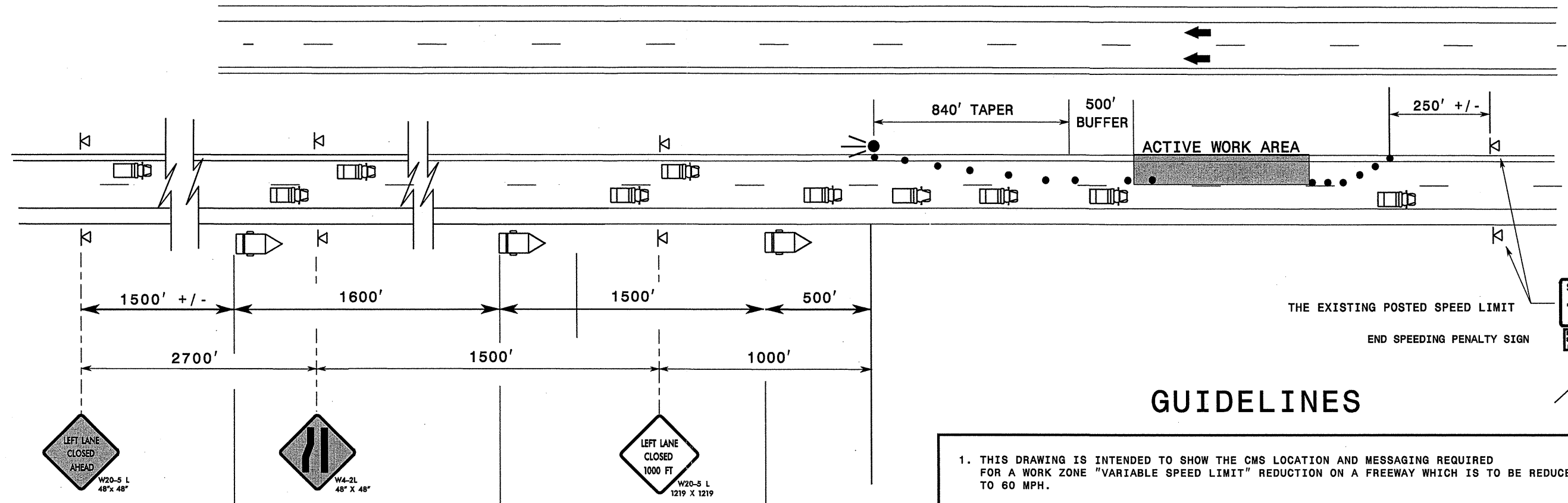
PLACE SOIL STABILIZATION FABRIC UNDER SELECT BACKFILL

**SECTION B-B**

**DETAIL OF CONCRETE PAVEMENT REMOVAL AND REPLACEMENT**

PROJECT SERVICES UNIT STANDARDS AND SPECIAL DESIGN Office 919-250-4128 FAX 919-250-4119	
<b>DETAIL FOR REPAIR OF CONTINUOUSLY REINFORCED CONCRETE PAVEMENT</b>	
ORIGINAL BY: E.E. WARD	DATE: 4-98
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: d837:/usr/details/stand/crcrepair.dgn	





### GUIDELINES

1. THIS DRAWING IS INTENDED TO SHOW THE CMS LOCATION AND MESSAGING REQUIRED FOR A WORK ZONE "VARIABLE SPEED LIMIT" REDUCTION ON A FREEWAY WHICH IS TO BE REDUCED TO 60 MPH.
2. EACH DIRECTION OF THE PROJECT IS TO BE EVALUATED FOR THE "VARIABLE SPEED LIMIT" REDUCTION. THIS DRAWING INTENTIONALLY HAS 1 DIRECTION SIGNED AS A REMINDER TO CAREFULLY CONSIDER WHETHER BOTH DIRECTIONS OF THE PROJECT NEED TO HAVE THE SPEED LIMIT REDUCED.
3. IN ADDITION, FOR ACTIVE WORK AREAS THAT EXCEED 1 MILE IN LENGTH, AN EVALUATION IS TO BE MADE TO DETERMINE IF ADDITIONAL CMS'S ARE NEEDED TO SUPPLEMENT THE INITIAL ONES. PORTABLE MOUNTED W3-5 SIGNS WITH SPEED PENALTY SIGNS ARE TO BE PLACED ALONG ENTRANCE RAMPS LOCATED WITHIN THE ACTIVE WORK AREA.
4. THE \$250 SPEEDING PENALTY APPLIES FOR ALL PROJECTS THAT QUALIFY FOR A "VARIABLE SPEED LIMIT" REDUCTION.
5. THE "VARIABLE SPEED LIMIT" REDUCTION IS ONLY IN EFFECT WHEN WORKERS ARE PRESENT. THE SPEED LIMIT AND SPEED PENALTY MESSAGES ARE TO BE REMOVED AND THE SIGNS ARE TO BE TURNED OFF OR OTHER PERTINENT MESSAGING MAY BE DISPLAYED. AT THE COMPLETION OF THE ACTIVITY, THE REGIONAL TRAFFIC ENGINEER SHALL BE NOTIFIED BY THE RESIDENT ENGINEER TO RESCIND THE ORDINANCE.
6. WHEN "VARIABLE SPEED LIMIT" REDUCTIONS ARE IN EFFECT, THE CONTRACTOR IS TO COVER ANY ANY EXISTING SPEED LIMIT SIGNS LOCATED WITHIN THE ACTIVE WORK AREA THAT CONFLICT WITH THE "VARIABLE SPEED LIMIT" REDUCTION.

MESSAGE NO. 1	MESSAGE NO. 2
SPEED REDUCTION AHEAD	WZ SPEED LIMIT 60 MPH

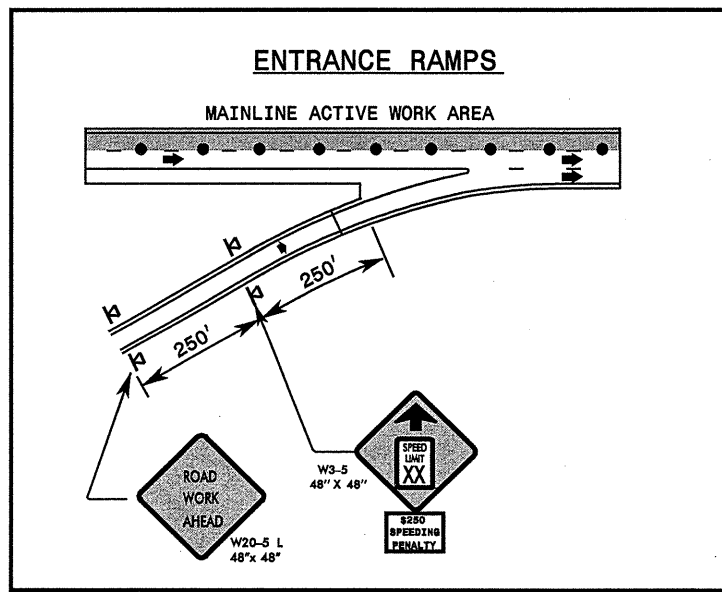
CHANGEABLE MESSAGE SIGN

MESSAGE NO. 1	MESSAGE NO. 2
BEGIN 60 MPH	WORKERS IN ROADWAY

CHANGEABLE MESSAGE SIGN

MESSAGE NO. 1	MESSAGE NO. 2
SPEED LIMIT 60	\$250 SPEEDING PENALTY

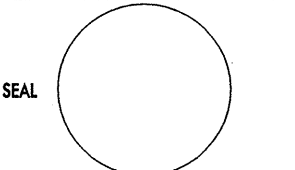
CHANGEABLE MESSAGE SIGN



**NOTE TO ALL:**

THE ACTIVITY MUST FIRST BE EVALUATED BY THE REGIONAL TRAFFIC ENGINEER UTILIZING THE APPROVED GUIDELINES BEFORE ANY "VARIABLE SPEED LIMIT" REDUCTIONS AS SHOWN ON THIS DRAWING ARE INSTALLED.

THE "VARIABLE SPEED LIMIT" REDUCTION MUST ORDINANCED AND SIGNED BY THE STATE TRAFFIC ENGINEER BEFORE ANY CMS IS USED FOR REDUCING THE SPEED LIMIT.

APPROVED: _____	DATE: _____	"VARIABLE SPEED LIMIT" REDUCTION WITH PORTABLE CMS'S	
			
		DATE: 09/04/09	DESIGN BY: SK
DWG. BY: SK	REVIEWED BY: _____		

IO-FEB-2010 16:14 \\DOT\DFS\00701\GROUPS-WZTCC\WZTC\DesignGroup3\Squad3A\Woolard\W-4711\Variable Speed Limit Reduction.dgn  
 ahoyes AT WZTC244738