

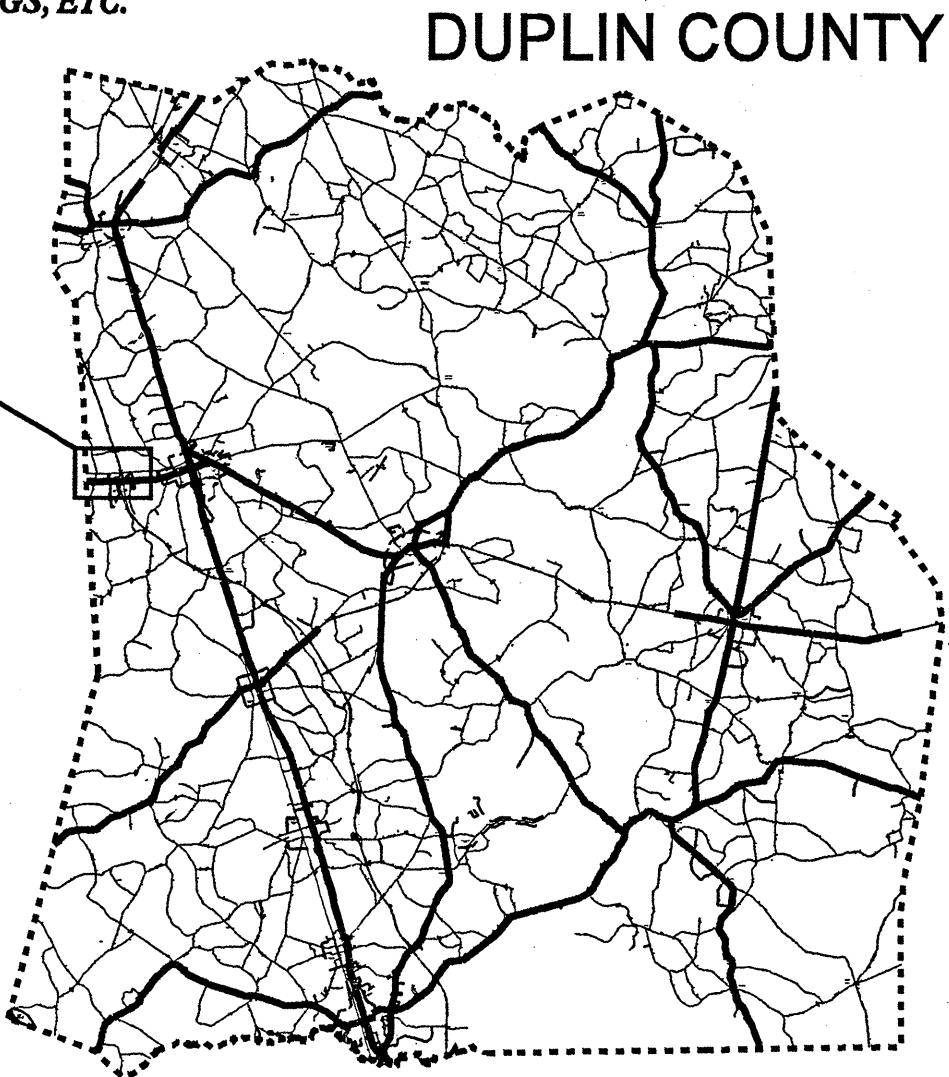
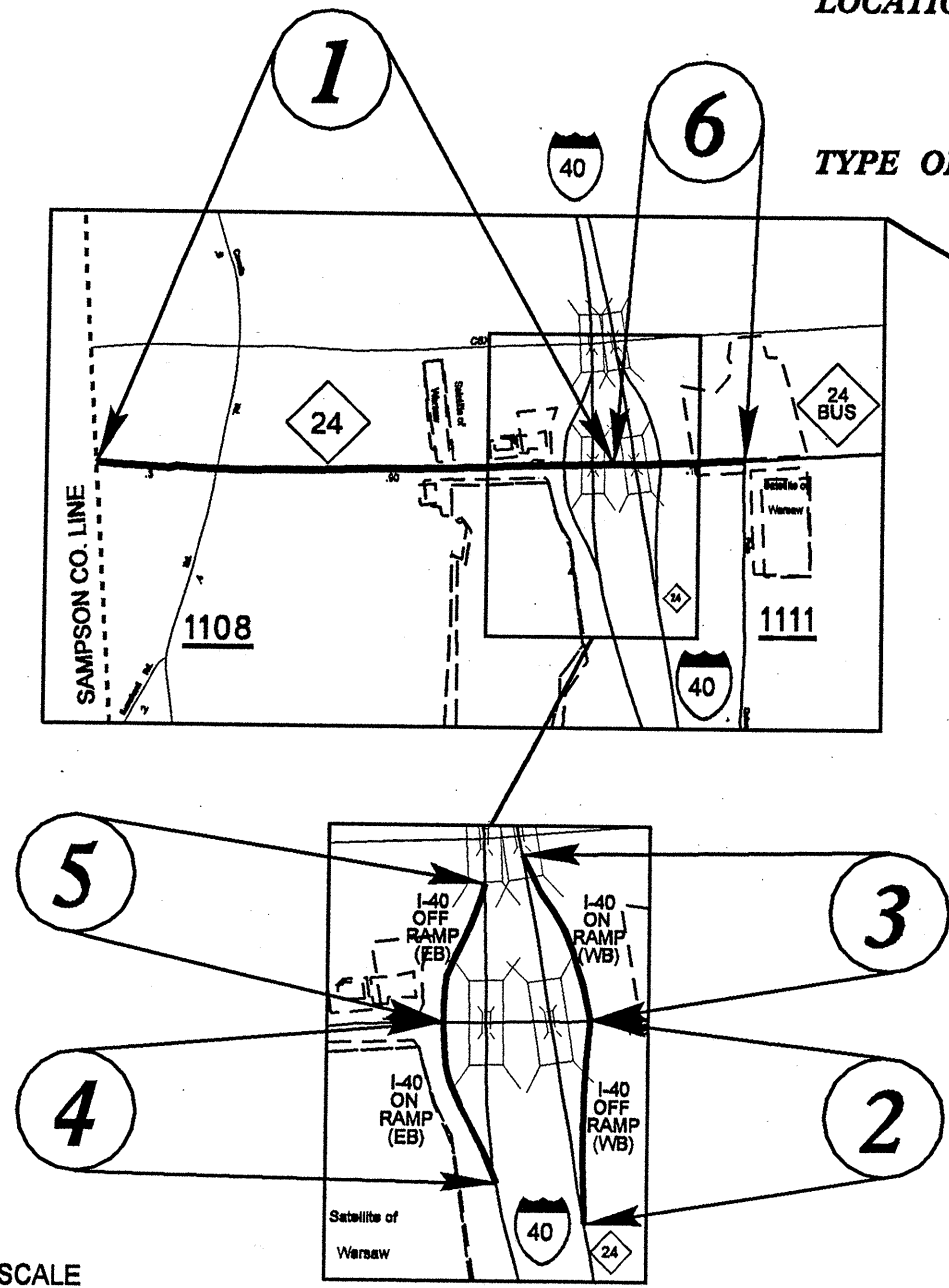
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**DUPLIN COUNTY**

LOCATION: DUPLIN CO. - NC 24 AT I-40, I-40 RAMPS,  
NC 50 (SR 1830 - NC 41/NC 50)

3CR.10311.64		SECRET	TOTAL

TYPE OF WORK: RESURFACING, MILLING, PAVEMENT  
MARKERS AND MARKINGS, ETC.



NOT TO SCALE

**WBS ELEMENT: 3CR.10311.64**

**GRAPHIC SCALES**

PLANS

PROFILE (HORIZONTAL)

PROFILE (VERTICAL)

**DESIGN DATA**

ADT =

DHV = %

D = %

T = %

V = MPH

\* TTST DUAL

**PROJECT LENGTH**

MAP NO. 1 = 1.18 MI.

MAP NO. 2 = 0.25 MI.

MAP NO. 3 = 0.23 MI.

MAP NO. 4 = 0.22 MI.

MAP NO. 5 = 0.19 MI.

MAP NO. 6 = 0.28 MI.

MAP NO. 7 = 6.06 MI.

**TOTAL = 8.41 MI.**

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**  
124 Division Dr., Wilmington, NC 28401

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:  
NOV. 18, 2008

HYDRAULICS ENGINEER

ROADWAY DESIGN TECHNICIAN

DNL

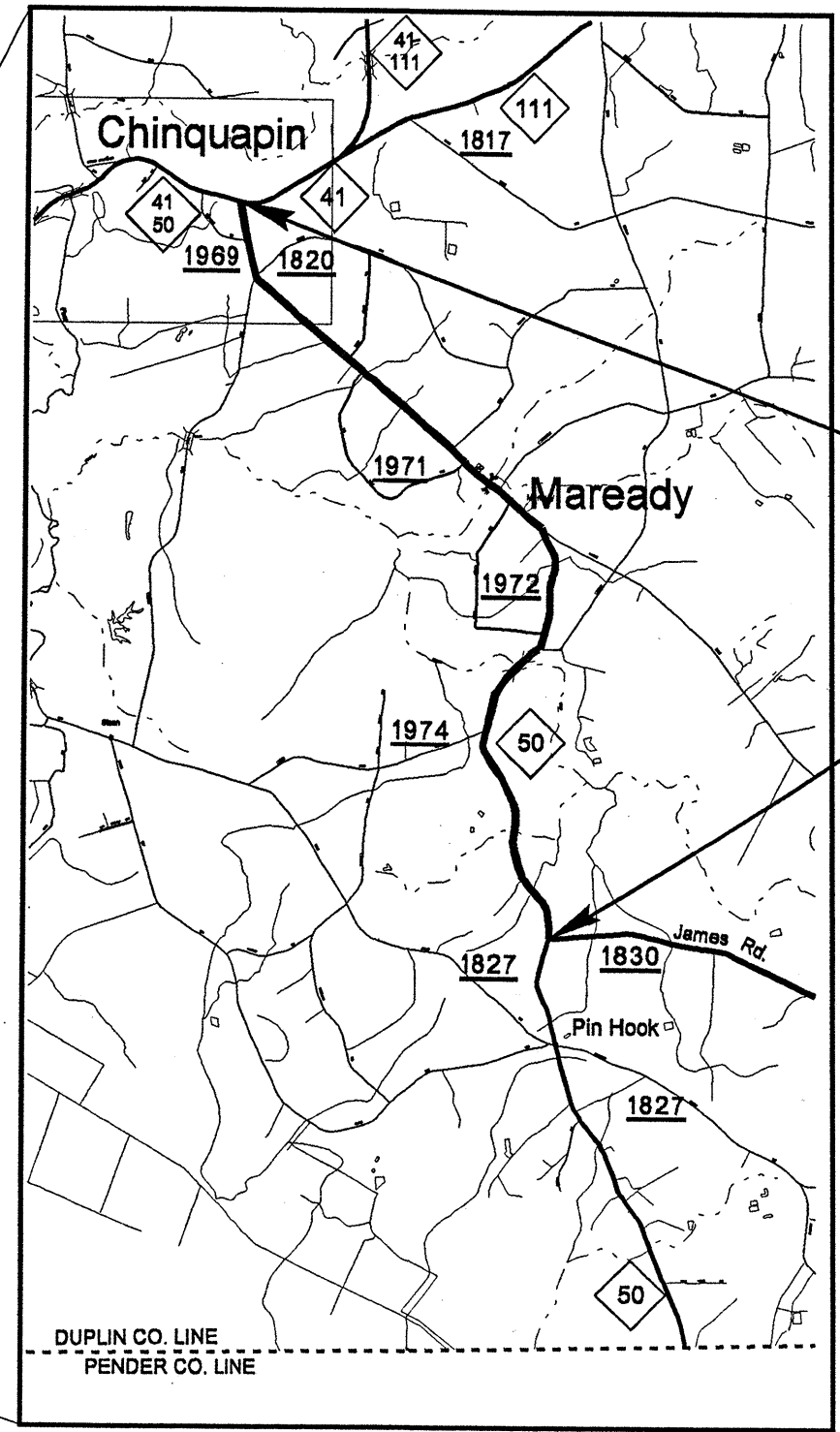
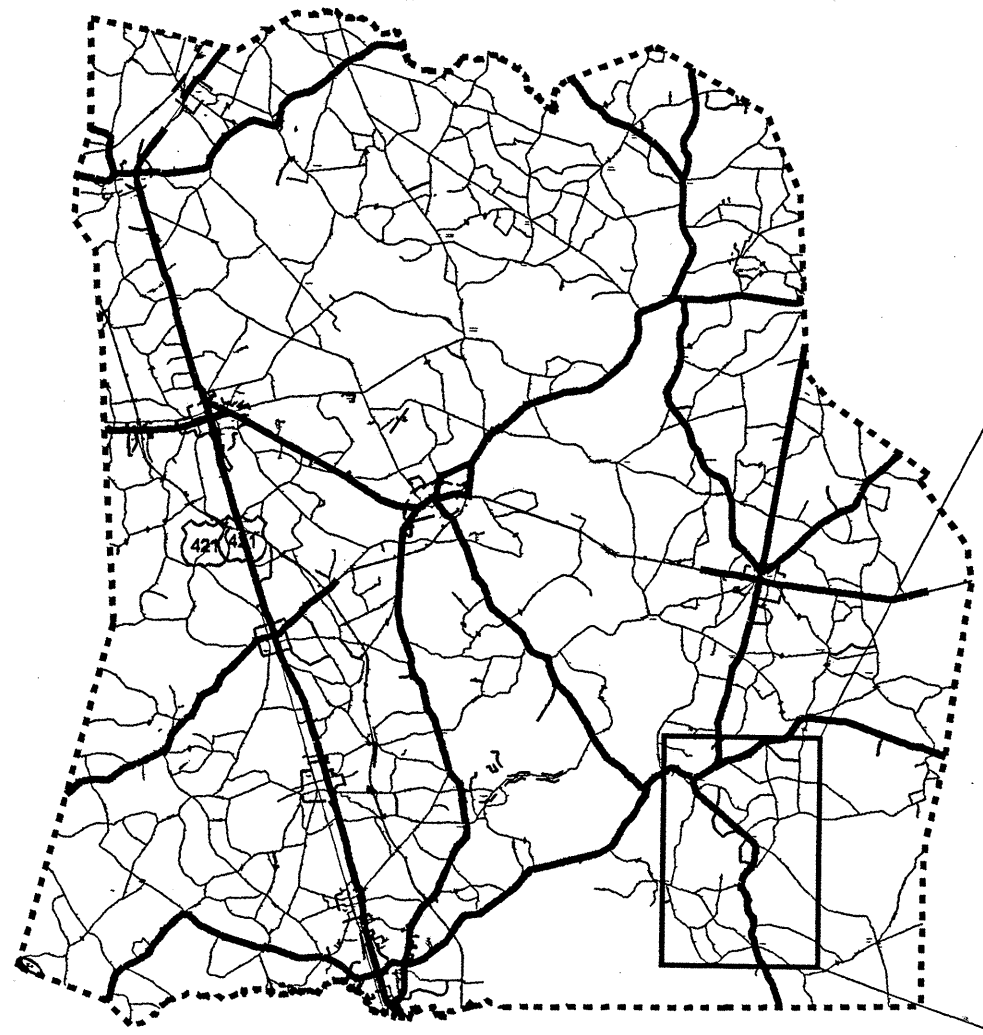
DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

DIVISION DESIGN ENGINEER

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diavave AT D3CAD27935



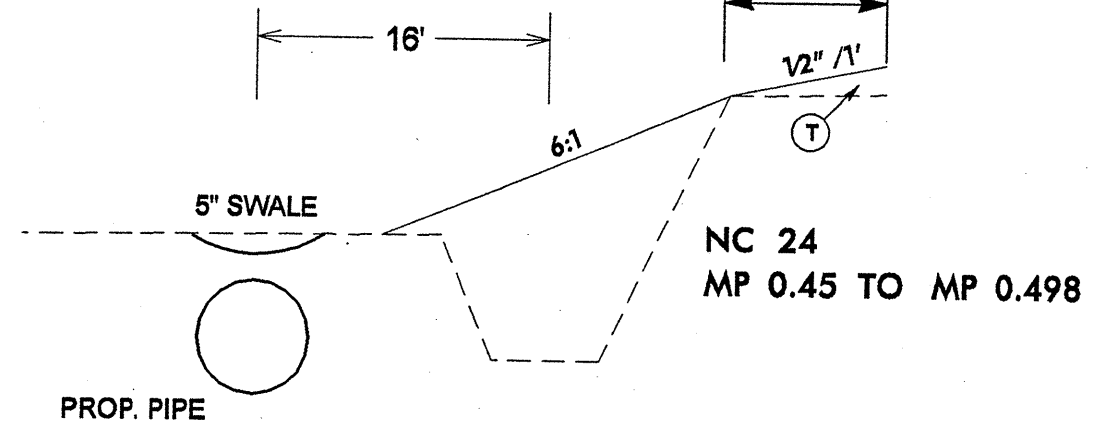
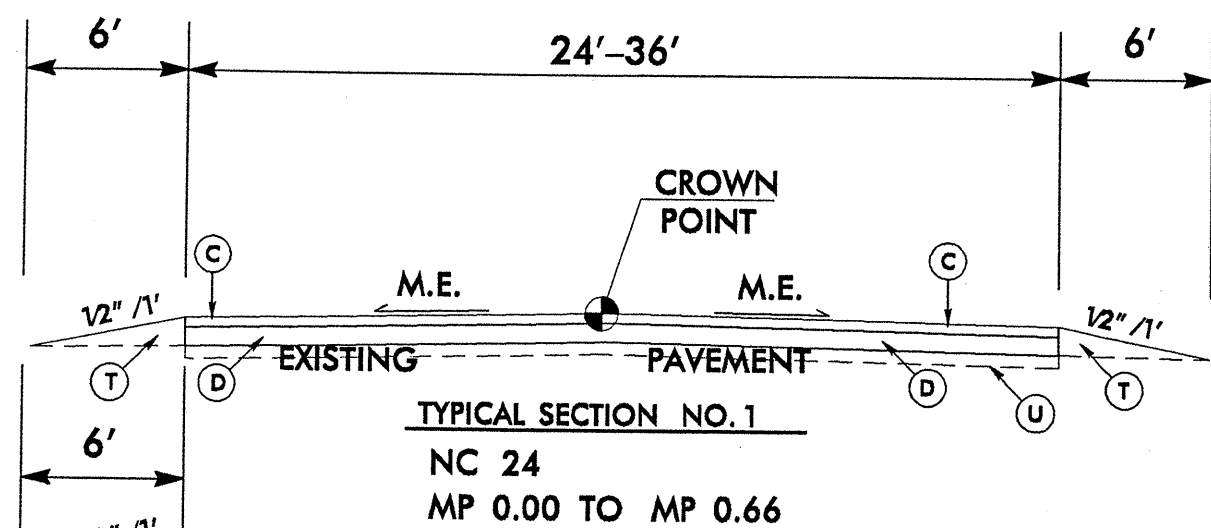
# DUPLIN COUNTY



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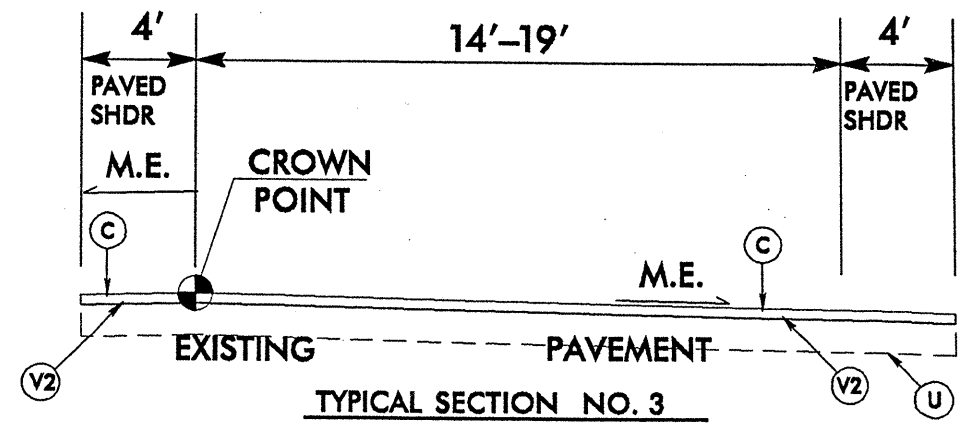
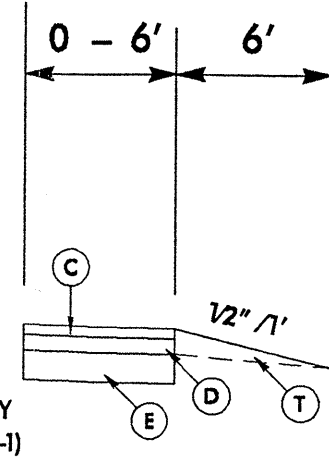
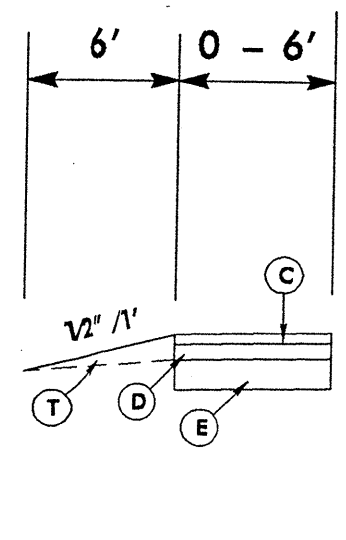
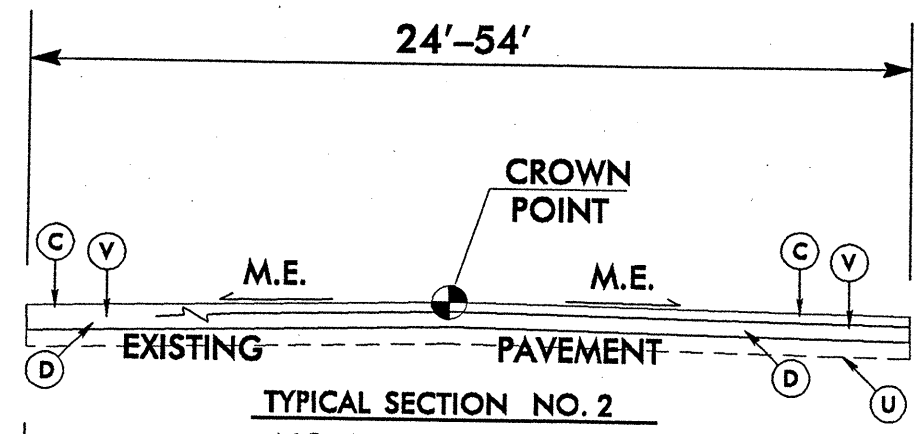
NOT TO SCALE

PROJECT REFERENCE NO. 3CR10311.64	SHEET NO. 3
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PAVEMENT SCHEDULE			
C	PROP. APPROX. 1 1/4" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE 88.80, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	U	EXISTING PAVEMENT.
C1	PROP. APPROX. 1 1/4" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE 88.88, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	V	MILLING BITUMINOUS PAVEMENT. 4" DEPTH.
D	PROP. APPROX. 2 1/4" DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 119.00, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.	V2	MILLING BITUMINOUS PAVEMENT. 1 1/2" DEPTH.
E	PROP. APPROX. 5 1/2" DEPTH ASPHALT CONCRETE BASE COURSE, TYPE 825.00, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.		
T	EARTH MATERIAL		

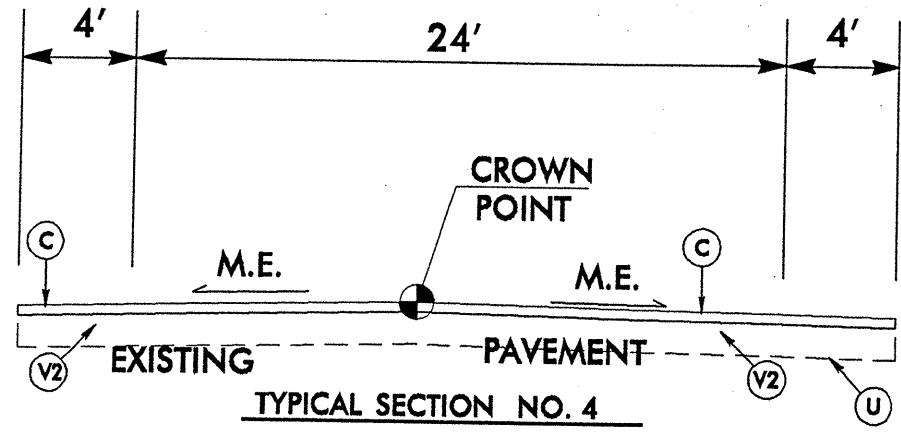
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.  
SEE STD. DRAWING 1206.01, SHEET 2 OF 2, TABLE 1 FOR EDGE LINE OFFSETS.  
M.E. = MATCH EXISTING



REVISIONS

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8/17/09



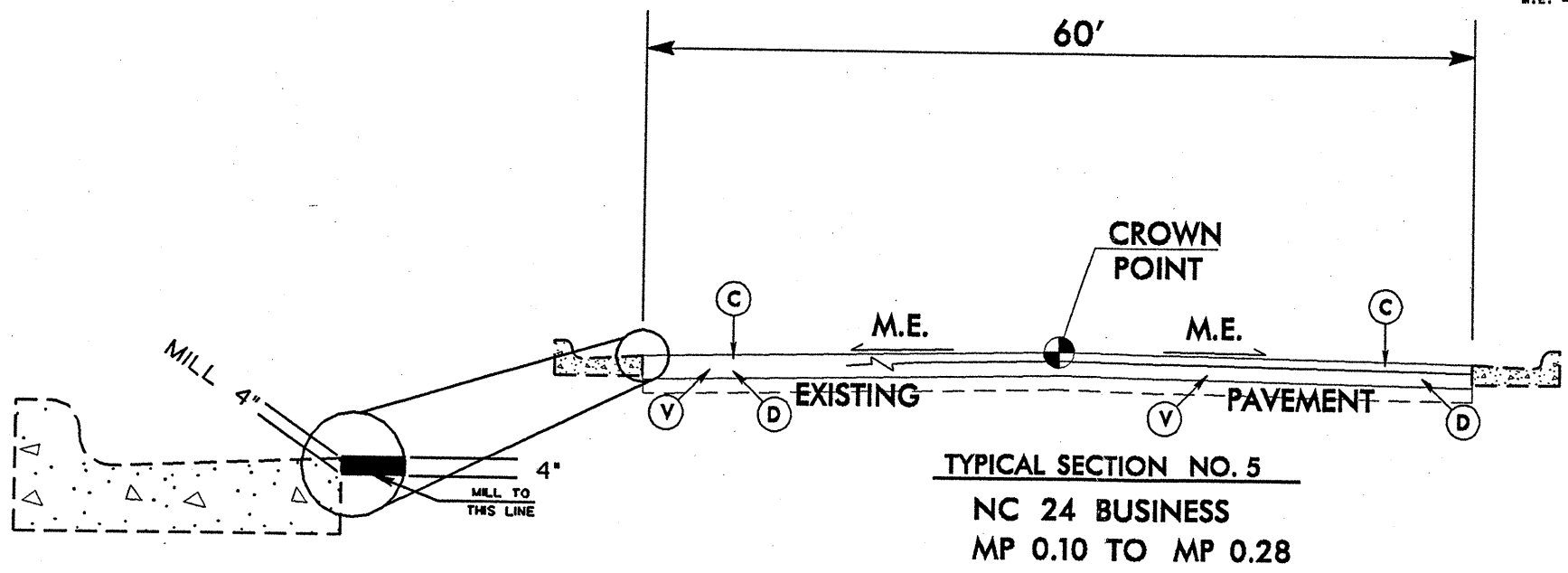
**TYPICAL SECTION NO. 4**

**I-40 OFF RAMP (WB)  
MP 0.17 TO MP 0.25**

PAVEMENT SCHEDULE	
C	PROP. APPROX. 1 1/2" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE 89.0C, AT AN AVERAGE RATE OF 188 LBS. PER SQ. YD.
C1	PROP. APPROX. 1 1/2" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE 89.88, AT AN AVERAGE RATE OF 188 LBS. PER SQ. YD.
D	PROP. APPROX. 2 1/2" DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 119.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E	PROP. APPROX. 5 1/2" DEPTH ASPHALT CONCRETE BASE COURSE, TYPE 825.0C, AT AN AVERAGE RATE OF 827 LBS. PER SQ. YD.
T	EARTH MATERIAL
U	EXISTING PAVEMENT.
V	MILLING BITUMINOUS PAVEMENT. 4" DEPTH.
V2	MILLING BITUMINOUS PAVEMENT. 1 1/2" DEPTH.

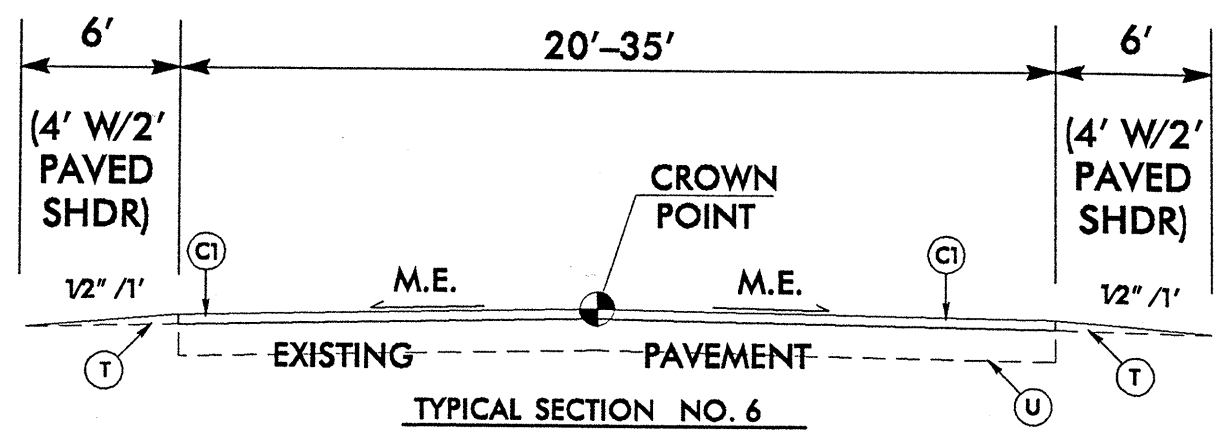
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.  
SEE STD. DRAWING 1205.01, SHEET 2 OF 2, TABLE 1 FOR EDGE LINE OFFSETS.  
M.E. = MATCH EXISTING

PROJECT REFERENCE NO. SCR.10311.64	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**TYPICAL SECTION NO. 5**

**NC 24 BUSINESS  
MP 0.10 TO MP 0.28**



**TYPICAL SECTION NO. 6**

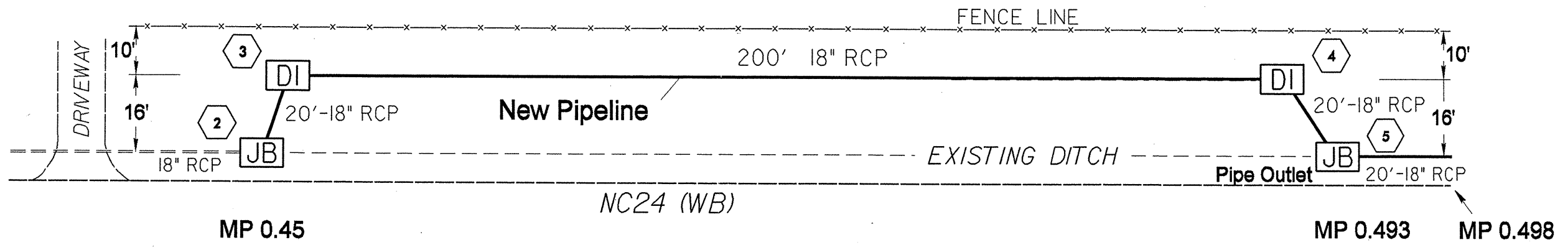
**NC 50  
MP 0.00 TO MP 6.06**

REVISIONS

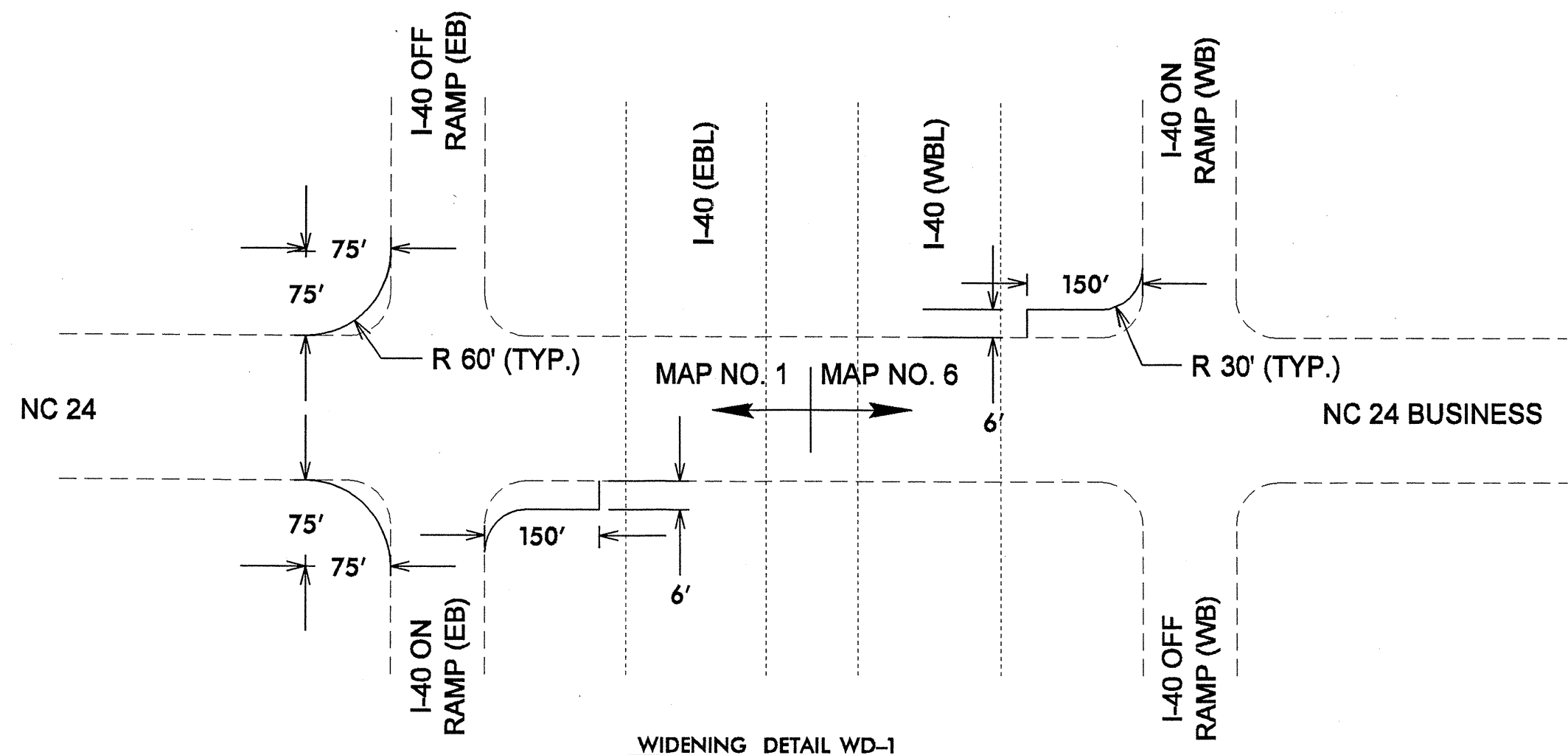
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8/17/09

DUPLIN CO. - MAP 1

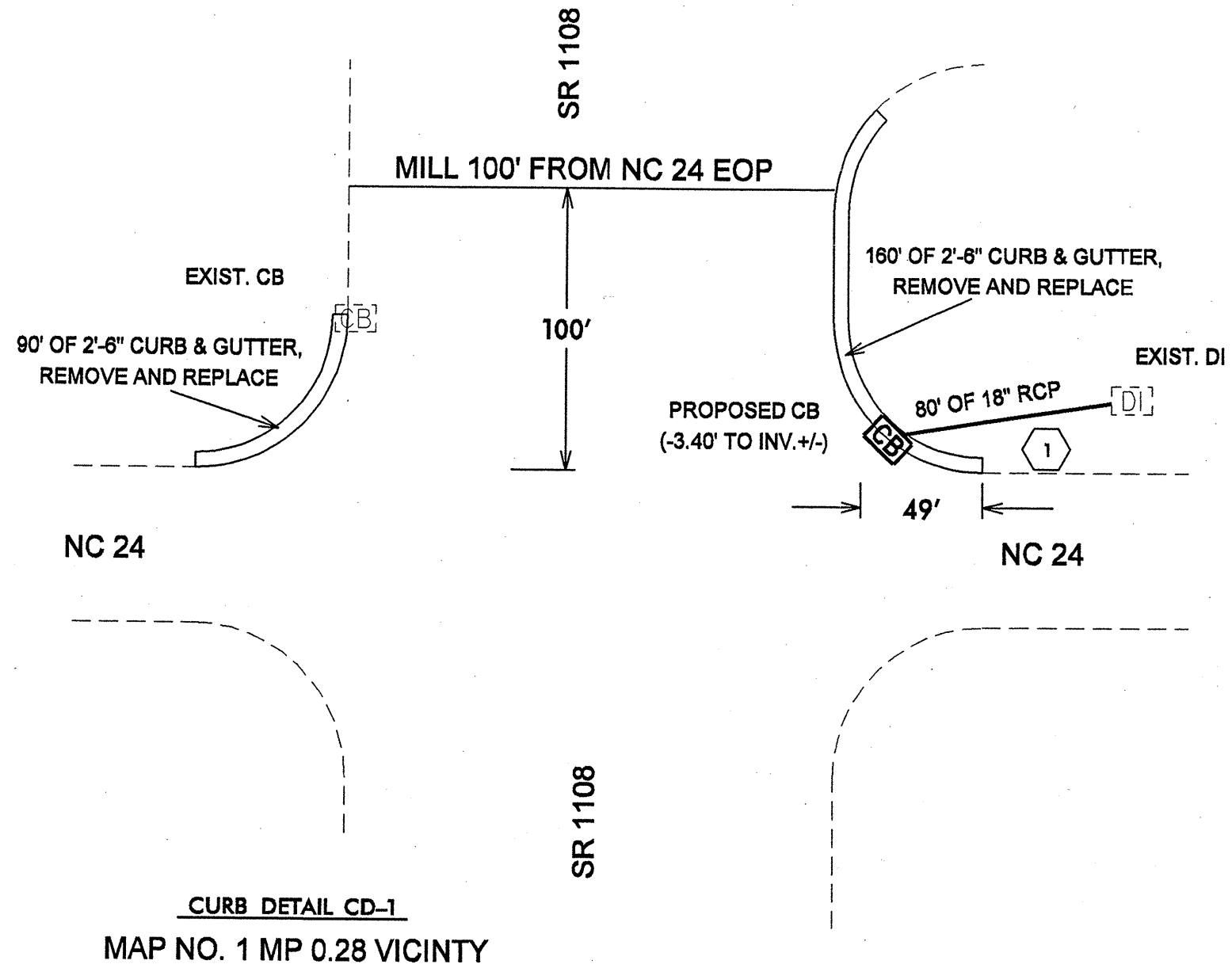


PIPE DETAIL PD-1



WIDENING DETAIL WD-1

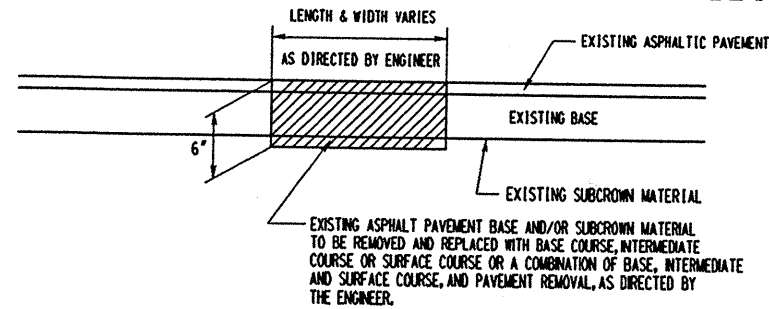
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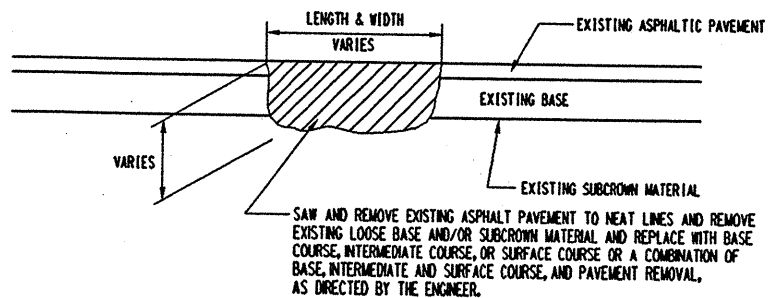
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PROJECT REFERENCE NO. SCR.10311.64	SHEET NO. 7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

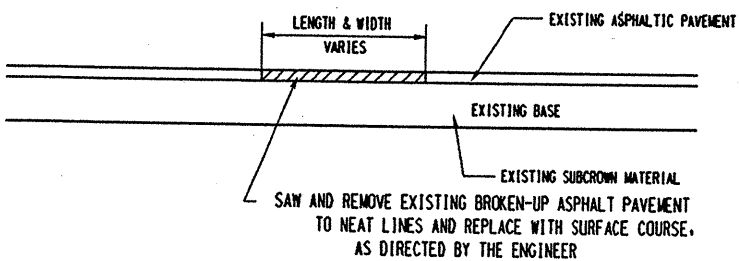
DETAILS OF REPAIRING EXISTING PAVEMENT PRIOR TO RESURFACING FOR FULL DEPTH AND MILLING



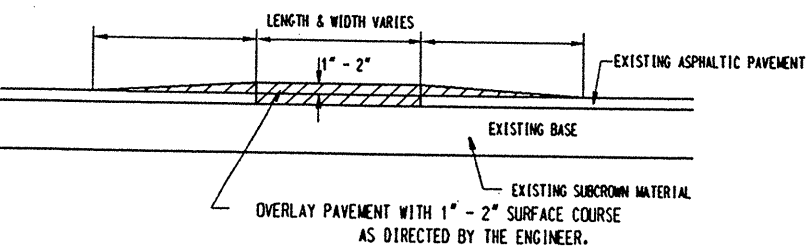
DETAIL NO. 1



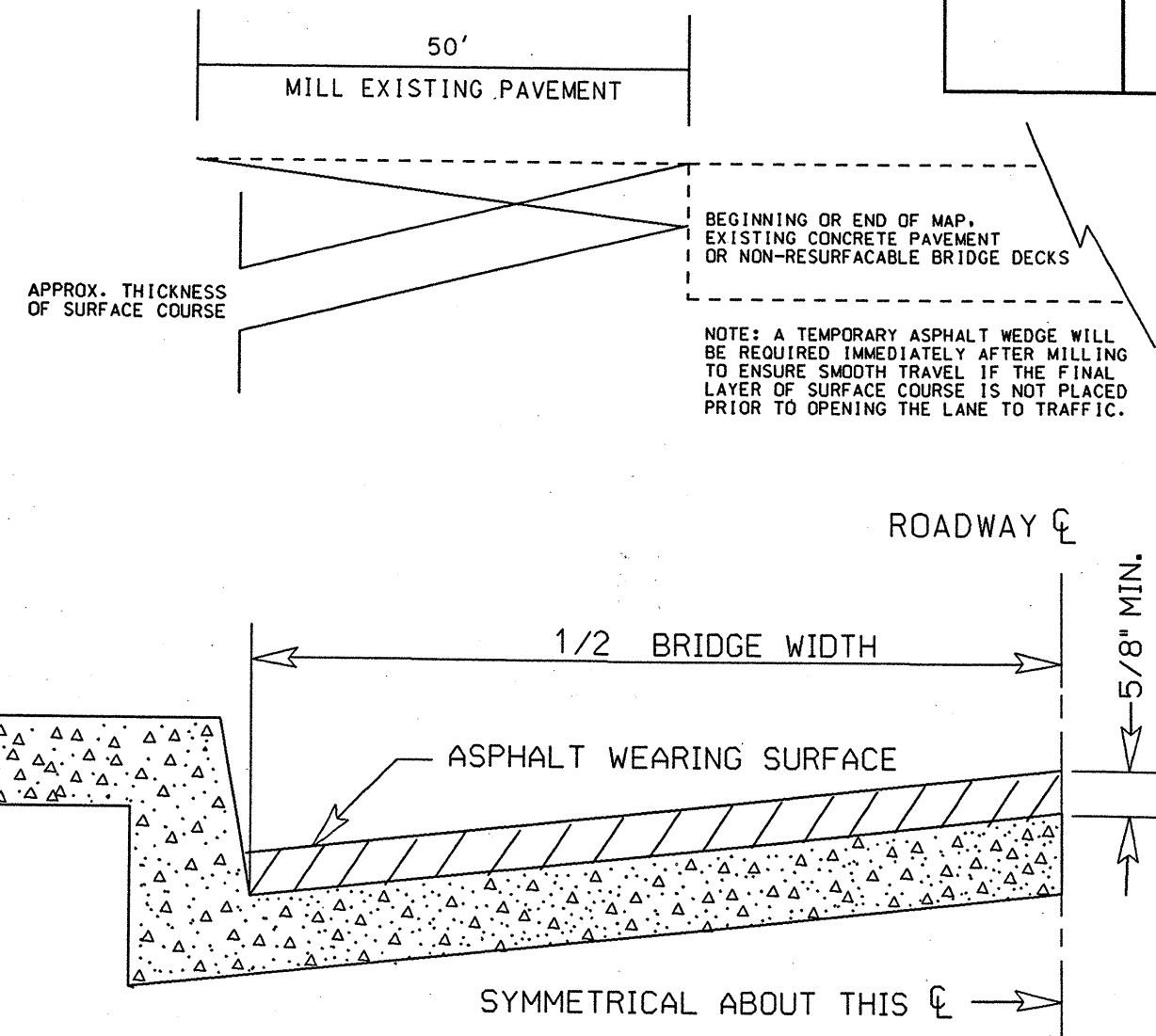
DETAIL NO. 2



DETAIL NO. 3



DETAIL NO. 4



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. A THICKNESS OF NOT LESS THAN 5/8" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1-1/2" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.

REVISIONS

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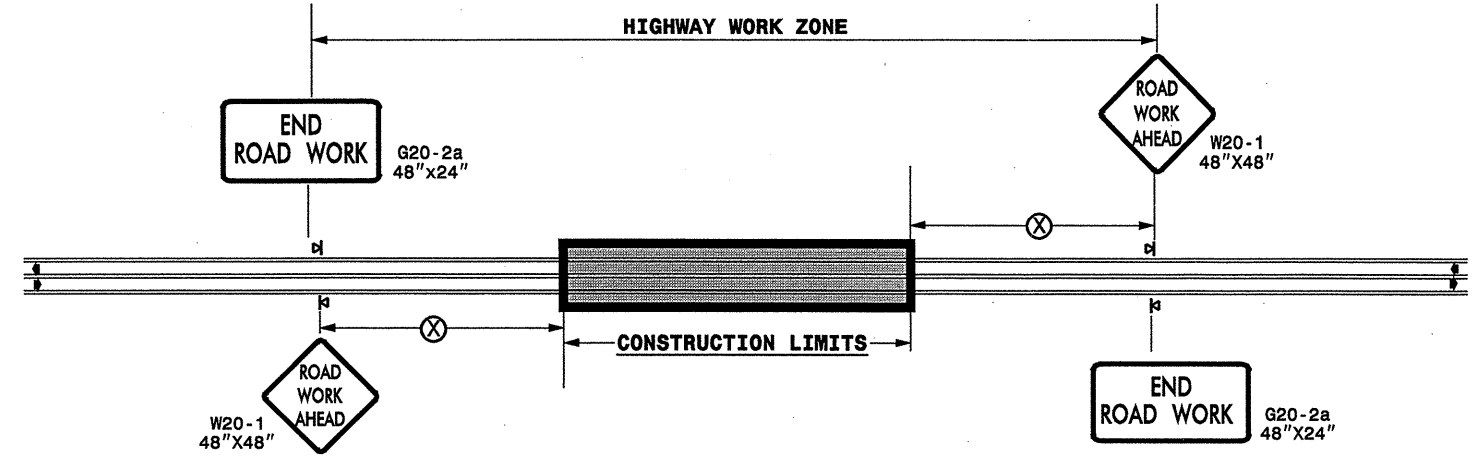
PROJECT NO.	SHEET NO.	TOTAL NO.
3CR.10311.64	9	

## THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	4415000000-N	4420000000-N	4480000000-N	4685000000-E		4686000000-E		4695000000-E	4710000000-E	4721000000-E		4725000000-E				4810000000-E		4820000000-E	4835000000-E	4840000000-N					4845000000-N		4905000000-N					
					FLASHING ARROW PANELS, TYPE C EA	CHANGEABLE MESSAGE SIGN EA	TMA EA	4" X 90 M WHITE THERMO LF	4" X 90 M YELLOW 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	THERMO MSG ONLY 120 M EA	THERMO MSG SCHOOL 120 M EA	THERMO LT ARROW 90 M EA	THERMO STR & RT ARROW 0 M EA	THERMO RT ARROW 90 M EA	THERMO STR ARROW 90 M EA	4" WHITE PAINT LF	4" YELLOW PAINT LF	8" YELLOW PAINT LF	24" WHITE PAINT LF	PAINT MSG ONLY EA	PAINT LT ARROW EA	PAINT STR & RT ARROW EA	PAINT STR ARROW EA	PAINT RT ARROW EA	PAINT STR ARROW EA	PAINT RT ARROW EA	SNOW PLOWABLE MARKERS (Y/Y) EA	SNOW PLOWABLE MARKERS (C/R) EA				
3CR.10311.64	Duplin	1	NC 24	SAMPSON COUNTY LINE TO I-40																																
		"	"	FULL WIDTH (MP 0.00-0.09, 0.46-0.66)				3,062		3,062								3,062	3,062														19			
		"	"	TAPER 24'-36' (MP 0.09-0.19, 0.36-0.46)				2,112		4,224		100						2,112	4,224	100														27		
		"	"	FULL WIDTH (MP 0.19-0.36)				1,795		1,795	658	50			4	4		2,453	1,795	30				4	4								12	30		
		"	"	TAPER 36'-24' (MP 0.66-0.72)				634		1,267		100						634	1,267	100													8			
		"	"	FULL WIDTH (MP 0.72-0.95)				2,429		3,036					8			2,429	3,036					8									61			
		"	"	FULL WIDTH (MP 0.95-1.12)				1,795		2,076	464	50	50		4	2	5	4	2,259	2,076	50	50		4	2	4	5					18	22			
		"	"	FULL WIDTH (MP 1.12-1.18)				634		1,267	317	50						950	1,267	50												8	16			
TOTAL FOR MAP NO. 1								12,461		16,727	1,439	350	50		16	6	5	4	13,899	16,727	330	50		16	6	4	5			153	68					
		2	I-40 OFF RAMP (WB)	FULL WIDTH (MP 0.00-0.12)	1	1	1	634	634									634	634																	
		"	"	TAPER 22'-32' (MP 0.12-0.17)				264	264		132							396	264																	
		"	"	FULL WIDTH 32' (MP 0.17-0.25)				422	422		422		60		5		5		845	422		60		5			5						21			
TOTAL FOR MAP NO. 2					1	1	1	1,320	1,320		554		60		5		5		1,875	1,320		60		5			5						21			
		3	I-40 ON RAMP (WB)	FULL WIDTH (MP 0.00-0.23)				1,214	1,214									1,214	1,214																	
		4	I-40 ON RAMP (EB)	FULL WIDTH (MP 0.00-0.22)				1,162	1,162									1,162	1,162																	
		5	I-40 OFF RAMP (EB)	FULL WIDTH (MP 0.00-0.09)	1	1	1	475	475									475	475																	
		"	"	TAPER 22'-32' (MP 0.09-0.15)				317	317		158							475	317																	
		"	"	FULL WIDTH (MP 0.15-0.19)				211	211		211		50		3		3		422	211		50		3			3							21		
TOTAL FOR MAP NO. 5					1	1	1	1,003	1,003		369		50		3		3		1,372	1,003		50		3			3							21		
		6	NC 24 BUSINESS	I-40 TO SR 1111 (MP 0.00-0.28)																																
		"	"	FULL WIDTH (MP 0.00-0.10)				1,056		1,056	418		30		5		4	1,474	1,056		30		5			4						7	20			
		"	"	FULL WIDTH (MP 0.10-0.28)						2,556	449	50	30	8	4	4	2	212	2,556	50	30	8	4		2	4						49	21			
TOTAL FOR MAP NO. 6								1,056		3,612	867	50	60	8	9	4	6	1,686	3,612	50	60	8	9		6	4						56	41			
		7	NC 50	SR 1830 TO NC 41 / NC 50																																
		"	"	FULL WIDTH (MP 0.00-2.92)				30,835		28,382																									193	
		"	"	FULL WIDTH (MP 2.92-5.48, 5.90-6.06)				28,723		26,438			50				6																		180	
		"	"	TAPER 24'-35' (MP 5.48-5.54, 5.82-5.90)				1,478		1,478		150																								
		"	"	FULL WIDTH (MP 5.54-5.82)				2,957		3,696	84		50			6	17																	74	15	
TOTAL FOR MAP NO. 7								63,993		59,994	84	150	100			12	17																	447	15	
TOTAL FOR PROJ NO. 3CR.10311.64					2	2	2	82,209	4,699	80,333	3,313	550	320	8	12	50	6	17	10	21,208	25,038	380	220	8	33	6	10	17				656	166			
GRAND TOTAL					2	2	2	86,908	4,699	83,646	3,313	550	320	8	20	50	6	17	10	46,246	25,038	380	220	8	33	6	10	17				66	822			



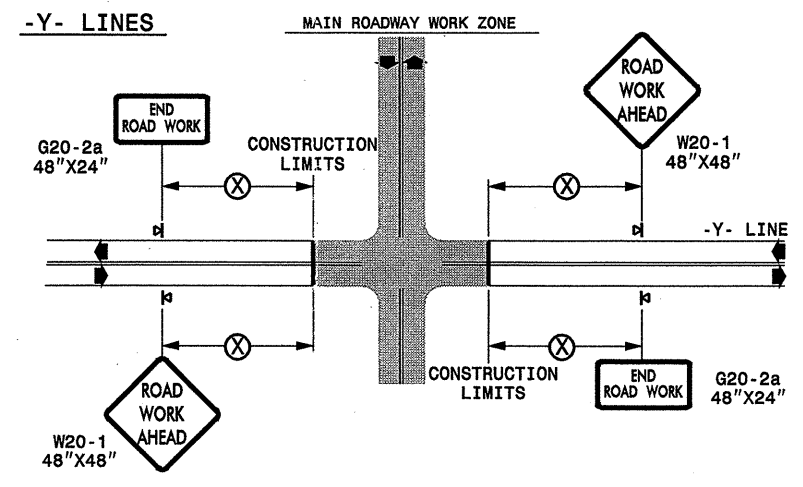
**TWO-WAY UNDIVIDED \*\* (L-LINES)**



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 ADVANCE WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE PORTABLE WORK ZONE SIGNS ONLY WITH PORTABLE WORK ZONE SIGN STANDS SPECIFICALLY DESIGNED FOR ONE ANOTHER. PORTABLE WORK ZONE SIGNS MAY BE ROLL UP OR APPROVED COMPOSITE.
- PROVIDE PORTABLE WORK ZONE SIGN STANDS, PORTABLE SIGNS AND SIGN SHEETING WHICH ARE LISTED ON THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCT LIST OR ACCEPTED AS TRAFFIC QUALIFIED BY THE TRAFFIC CONTROL UNIT.
- \*\* 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**

◀ PORTABLE SIGN

➡ DIRECTION OF TRAFFIC FLOW

DETAIL DRAWING  
FOR TWO-WAY UNDIVIDED  
WORK ZONE WARNING SIGNS

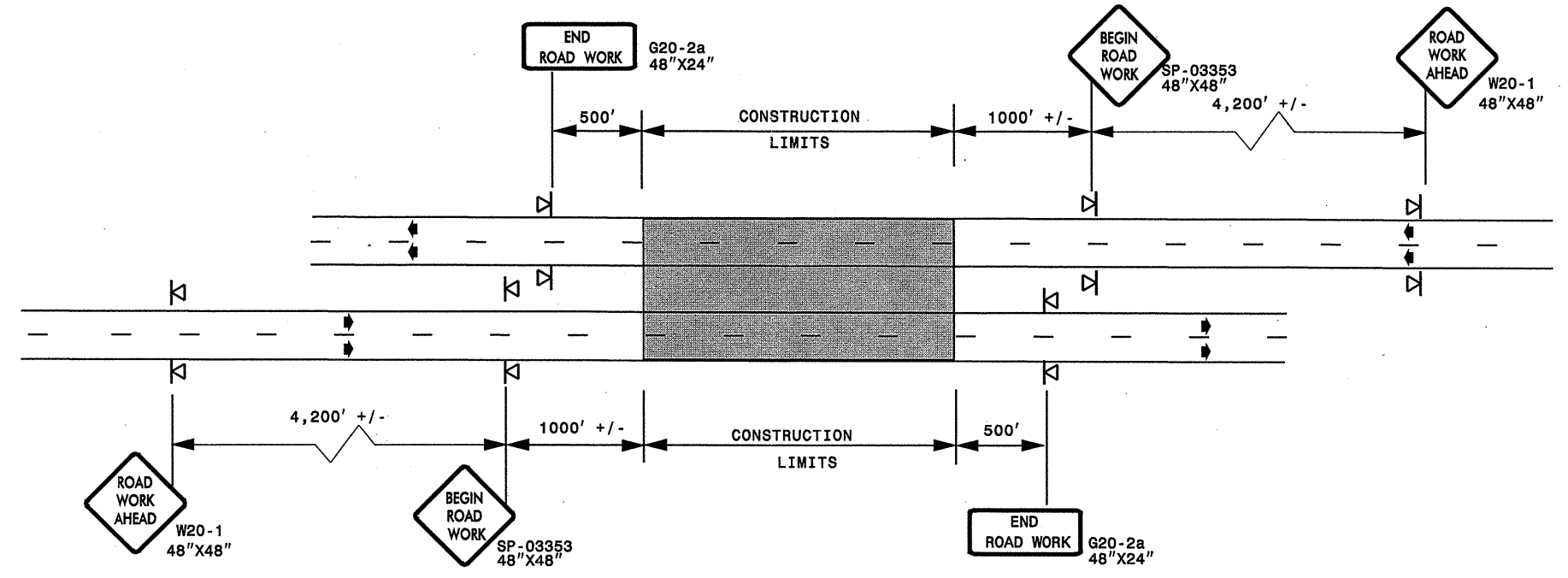
SHEET 1 OF 1

APPROVED: _____ DATE: _____	<p>DETAIL DRAWING FOR TWO-WAY UNDIVIDED ADVANCED WORK ZONE WARNING SIGNS</p>		REVISIONS	
SEAL			SCALE: NONE	7-98
			10-98	03/04
			01/01	11/04

05-OCT-2008 18:03  
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 AT WZTCC237502  
 pseymore

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

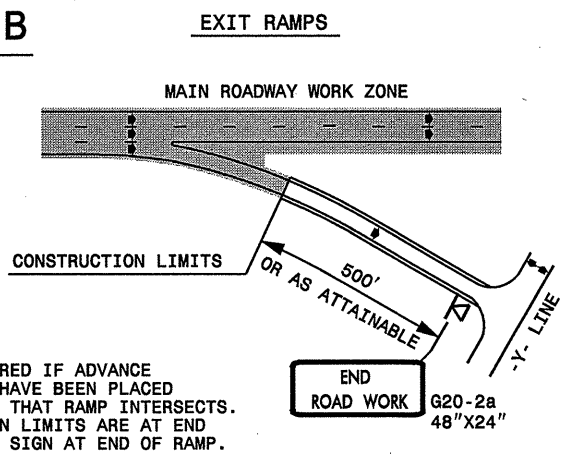
DETAIL A



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

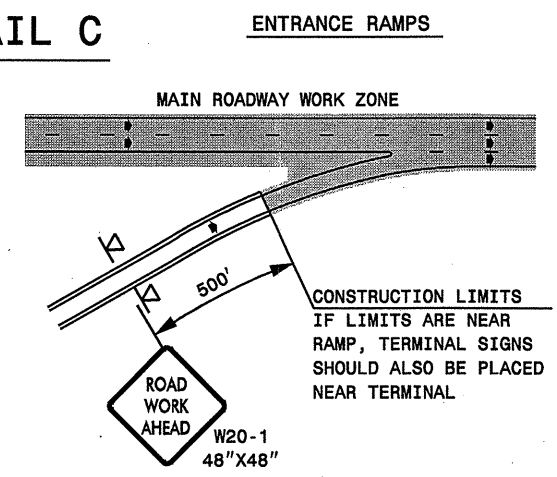
ROADWAYS INTERSECTING ALONG FREEWAY WORK ZONE (Y-LINES)

DETAIL B

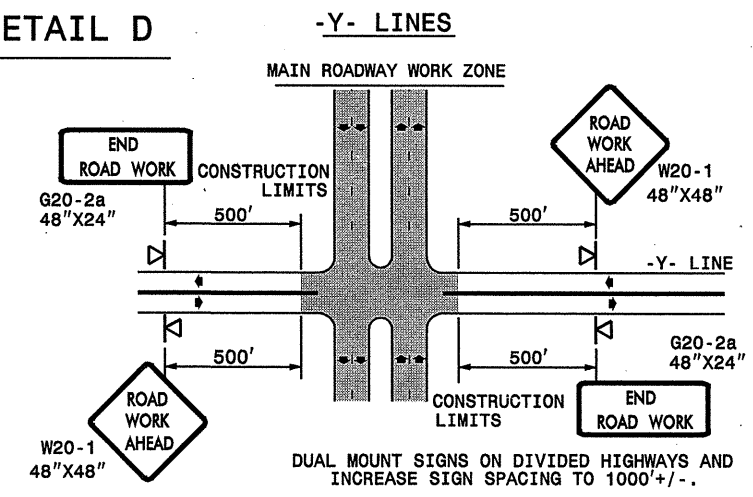


NOTE:  
SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

DETAIL C



DETAIL D



GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCE WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE PORTABLE WORK ZONE SIGNS ONLY WITH PORTABLE WORK ZONE SIGN STANDS SPECIFICALLY DESIGNED FOR ONE ANOTHER. PORTABLE WORK ZONE SIGNS MAY BE ROLL UP OR APPROVED COMPOSITE.
- PROVIDE PORTABLE WORK ZONE SIGN STANDS, PORTABLE SIGNS AND SIGN SHEETING WHICH ARE LISTED ON THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCT LIST OR ACCEPTED AS TRAFFIC QUALIFIED BY THE TRAFFIC CONTROL UNIT.
- \*\* TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

**LEGEND**

◁ PORTABLE SIGN

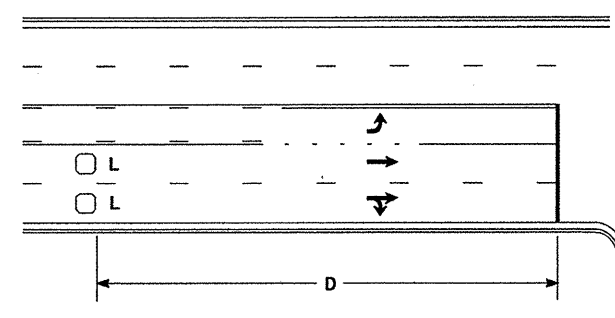
➡ DIRECTION OF TRAFFIC FLOW

DETAIL DRAWING  
FOR FREEWAYS  
WORK ZONE WARNING SIGNS  
(SHORT-DURATION LANE CLOSURES)

05-OCT-2008 18:04 \\DOT\DF-SR00\T01\GROUPS-WZTCC\design\p4\resur\facimg\resur\facimg2008\div03\c202143\_3cr1031164\_duplin.nc24nc50\c202143\_3cr1031164\_freelanesgreatJuly2006.dgn psevmore AT WZTCC231502

APPROVED: _____	DATE: _____	DETAIL DRAWING FOR FREEWAYS 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: _____			

### High Speed Detection [≥40 mph (64 km/hr)]

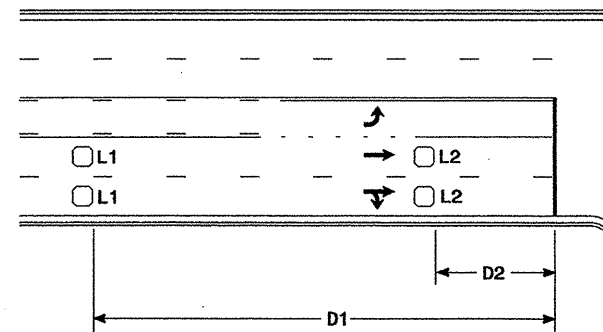


Speed Limit mph (km/hr)	D ft (m)
40 (64)	250 (75)
45 (72)	300 (90)
50 (80)	355 (110)
55 (88)	420 (130)

L = 6ft X 6ft (1.8m X 1.8m)  
Wired in series for TS1  
Controllers  
Wired separately for TS2,  
170, and 2070L Controllers

Volume Density Operation

OR



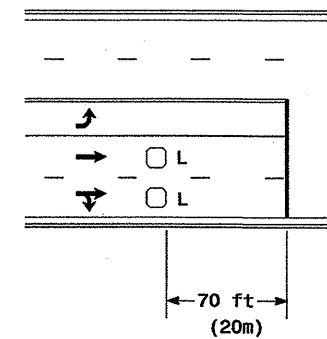
Speed Limit mph (km/hr)	D1 ft (m)	D2 ft (m)
40 (64)	250 (75)	80 (25)
45 (72)	300 (90)	90 (27)
50 (80)	355 (110)	100 (30)
55 (88)	420 (130)	110 (35)

L1 = 6ft X 6ft  
(1.8m X 1.8m)  
Wired in series  
L2 = 6ft X 6ft  
(1.8m X 1.8m)  
Wired in series

"Stretch" Operation

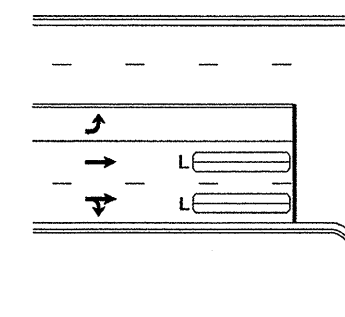
### Low Speed Detection [≤35 mph (56 km/hr)]

3CR.10311.64



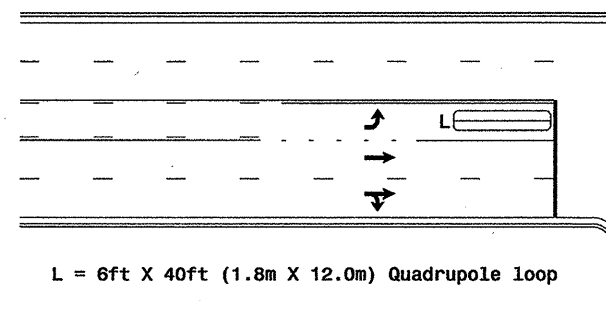
L = 6ft X 6ft (1.8m X 1.8m)  
Wired in series

OR



L = 6ft X 40ft (1.8m X 12.0m)  
Quadrupole loop, wired separately

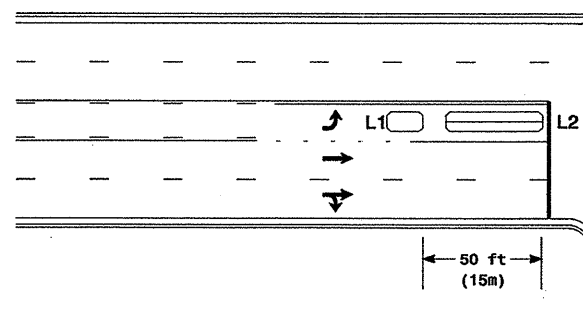
### Left Turn Lane Detection



L = 6ft X 40ft (1.8m X 12.0m) Quadrupole loop

Presence Loop Detection

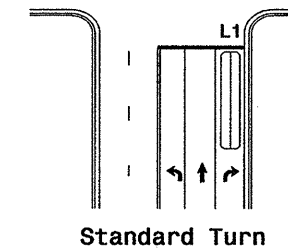
OR



L1 = 6ft X 15ft (1.8m X 4.6m) Queue detector  
L2 = 6ft X 40ft (1.8m X 12.0m) Quadrupole loop

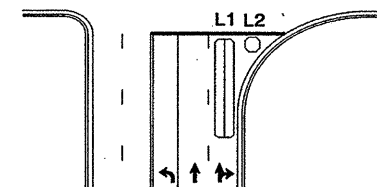
Queue Loop Detection

### Right Turn Lane Detection

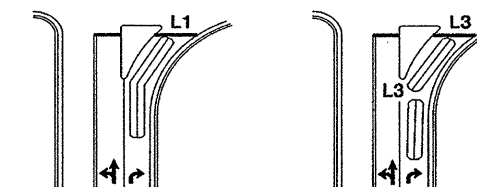


Standard Turn

L1 = 6ft X 40ft (1.8m X 12.0m) Quadrupole loop  
L2 = 6ft X 6ft (1.8m X 1.8m) [Minimum] Presence loop  
Wired separately  
L3 = 6ft X 20ft (1.8m X 6.0m) Quadrupole loop  
Wired in series

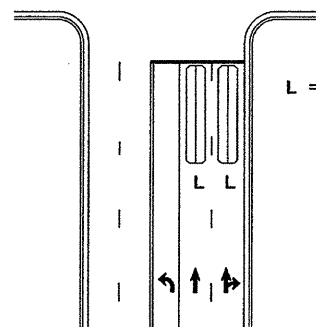


Wide Radius Turn



Channelized Turn

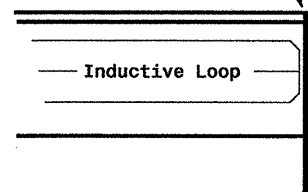
### Side Street Detection



L = 6ft X 40ft (1.8m X 12.0m)  
Quadrupole loop  
Wired to separate  
detectors/channels

### Presence Loop Placement at Stop Lines

Locate loop slightly  
behind leading  
edge of stop line



Note:  
Loop may be located in advance  
of stop line when stop line is  
greater than 15' (4.5m) from edge  
of intersecting roadway; or, when  
loop detects a permissive or  
protected/permissive left turn.

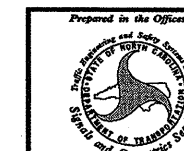
### Recommended Number of Turns

Single 6' X 6' (1.8m X 1.8m)  
loop (wired separately):

Length of Lead-in ft (m)	Number of Turns
< 250 (75)	3
250-375 (75-115)	4
375-525 (115-160)	5
> 525 (160)	6

Quadrupole loops: Use 2-4-2 turns

6' X 15' (1.8m X 4.6m) Loops:  
Lead-in < 150' (45 m), use 2 turns  
Lead-in > 150' (45 m), use 3 turns



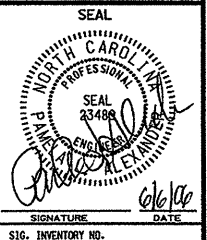
### Typical Loop Locations

PLAN DATE: June 2006 REVIEWED BY:  
PREPARED BY: P. L. Alexander REVIEWED BY:

122 N. McDowell St., Raleigh, NC 27603

SCALE  
N/A

REVISIONS  
INIT. DATE  
1. Revise pavement markings  
2. 12/1/06



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ENGLISH DETAIL DRAWING FOR  
**INDUCTIVE DETECTION LOOPS**

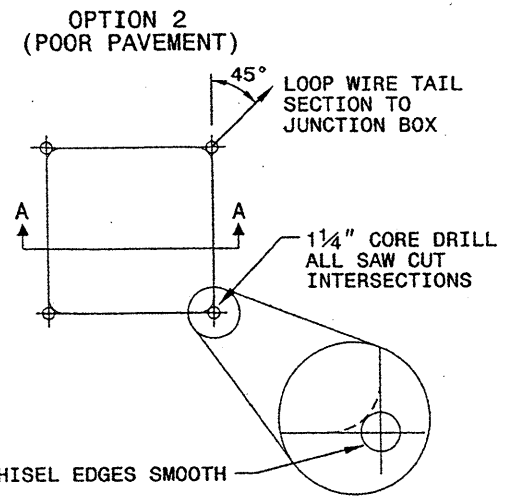
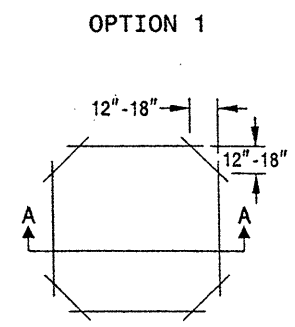
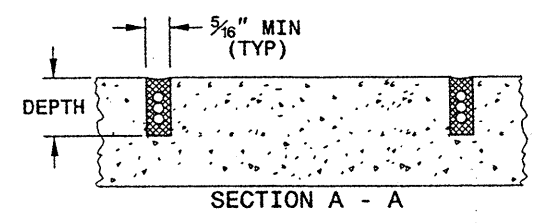
SHEET 1 OF 3  
**1725D01**

**CONVENTIONAL 4-SIDED LOOP**

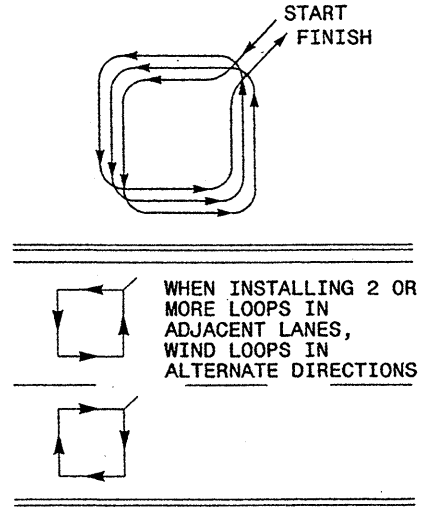
SAW CUT OPTIONS

SAW SLOT DEPTH CHART

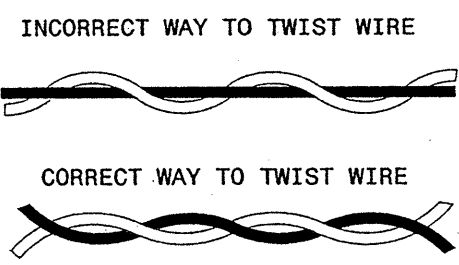
DEPTH (IN)	NO. OF WIRE TURNS				
	2	3	4	5	6
CONCRETE	2.0	2.0	2.5	2.5	3.0
ASPHALT	2.0	2.5	3.0	3.0	3.0



LOOP WINDING METHOD



LOOP WIRE TWISTING METHOD

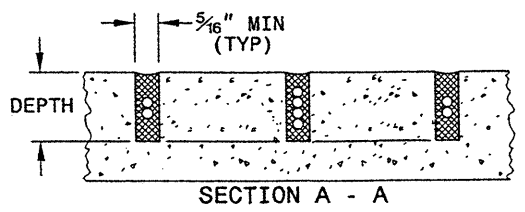
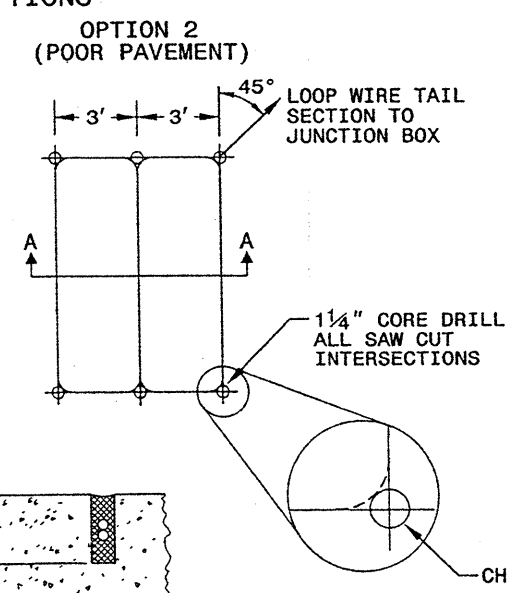
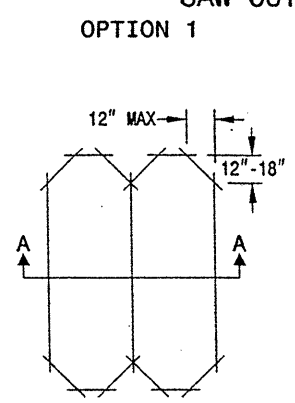


NOTES

1. OVERLAP SAW CUTS AT CORNERS AND INTERSECTION POINTS TO ENSURE UNIFORM SAW SLOT DEPTH.
2. MAINTAIN 12" SPACING BETWEEN LOOP WIRE TAIL SECTIONS.
3. WIRE LOOPS CONNECTED TO THE SAME DETECTOR CHANNEL IN SERIES.
4. LOCATE LOOPS IN CENTER OF LANES UNLESS OTHERWISE SHOWN ON PLANS OR APPROVED BY ENGINEER.

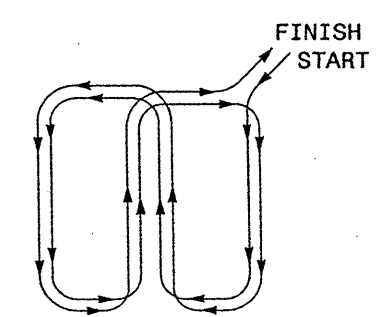
**QUADRUPOLE LOOP**

SAW CUT OPTIONS



DEPTH IS 2.5" FOR CONCRETE AND 3.0" FOR ASPHALT

LOOP WINDING METHOD



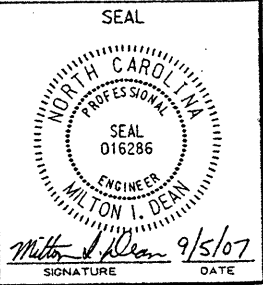
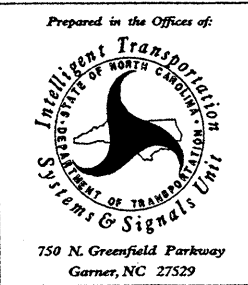
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DIVISION OF HIGHWAYS  
RALEIGH, N.C.

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ENGLISH DETAIL DRAWING FOR  
**INDUCTIVE DETECTION LOOPS**

SHEET 1 OF 3  
**1725D01**

See Plate for Title



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DIVISION OF HIGHWAYS  
RALEIGH, N.C.

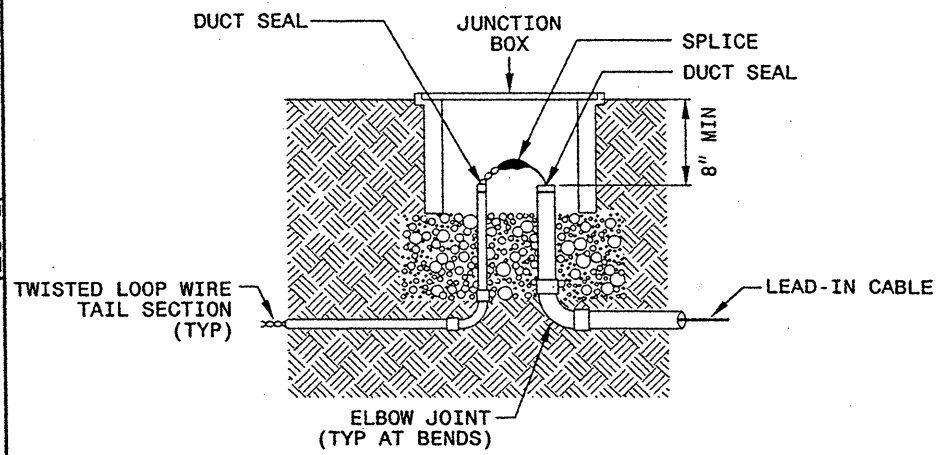
5-07

ENGLISH DETAIL DRAWING FOR  
**INDUCTIVE DETECTION LOOPS**  
LOOP WIRE DETAILS

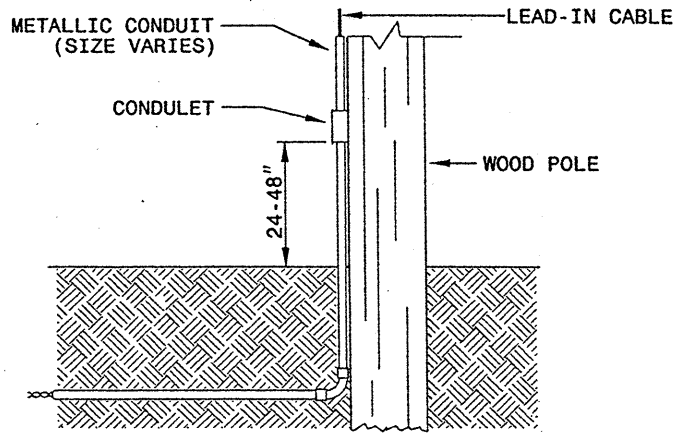
SHEET 2 OF 3  
**1725D01**

LOOP WIRE SPLICE POINT DETAILS

LOOP WIRE AT JUNCTION BOX



LOOP WIRE AT POLE

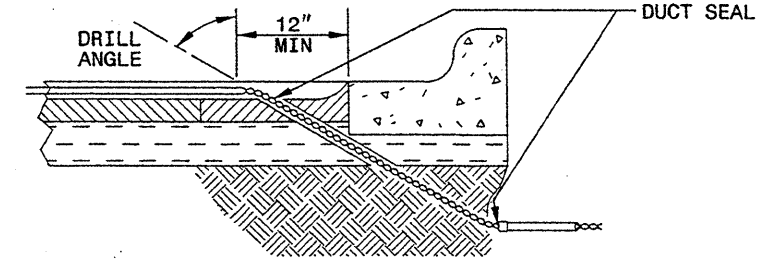


NOTE

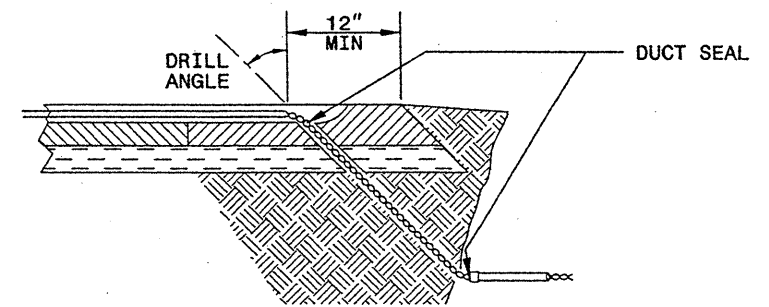
SPLICE ALL LOOP WIRE TAIL SECTIONS/LEAD-IN CABLE IN JUNCTION BOXES OR APPROVED CONDULETS.

LOOP WIRE PAVEMENT EDGE DETAILS

LOOP WIRE AT CURB & GUTTER SECTION



LOOP WIRE AT PAVEMENT SECTION



NOTES

1. DO NOT EXCAVATE UNDER CURB AND GUTTER SECTIONS FOR CONDUIT INSTALLATION.
2. TWIST LOOP WIRE TAIL SECTIONS FROM WHERE LOOP WIRE TAIL LEAVES SAW CUT TO JUNCTION BOX, INCLUDING THROUGH CONDUIT.
3. BEFORE SEALING LOOPS, INSTALL DUCT SEAL WHERE LOOP WIRE TAIL SECTION LEAVES SAW CUT IN PAVEMENT AND AT ENTRANCE OF CONDUIT TO JUNCTION BOX.

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ENGLISH DETAIL DRAWING FOR  
**INDUCTIVE DETECTION LOOPS**  
LOOP WIRE DETAILS

SHEET 2 OF 3  
**1725D01**

See Plate for Title



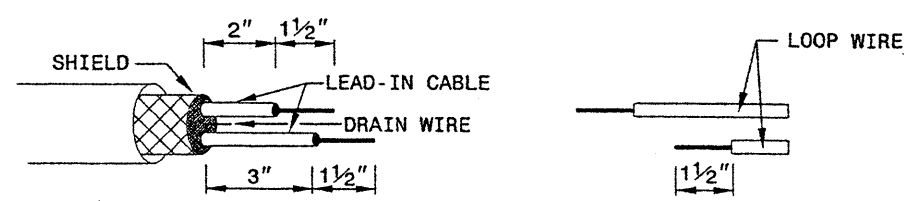
STATE OF NORTH CAROLINA  
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5-07

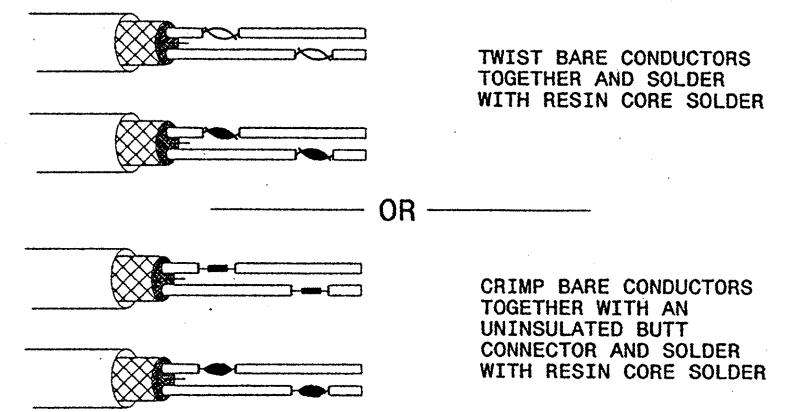
ENGLISH DETAIL DRAWING FOR  
**INDUCTION DETECTION LOOPS**  
 SPLICING FOR LEAD-IN CABLE AND LOOP WIRE

SHEET 3 OF 3  
**1725D01**

**STEP 1. STRIP LOOP WIRE AND LEAD-IN CABLE**

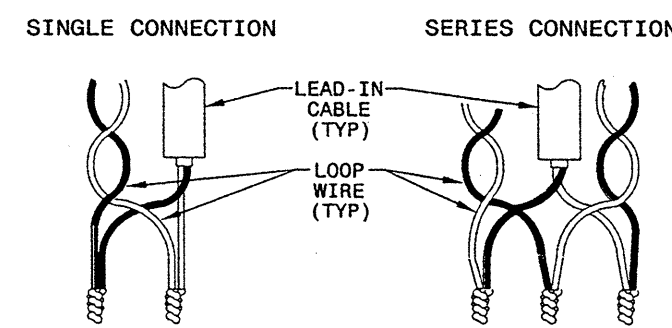


**STEP 2. CONNECT AND SOLDER**

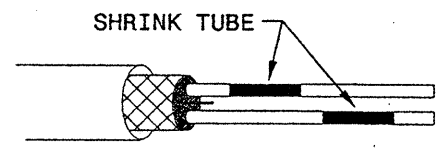


BOND SHIELD DRAIN WIRE AT SPLICE SECTIONS (DO NOT GROUND)

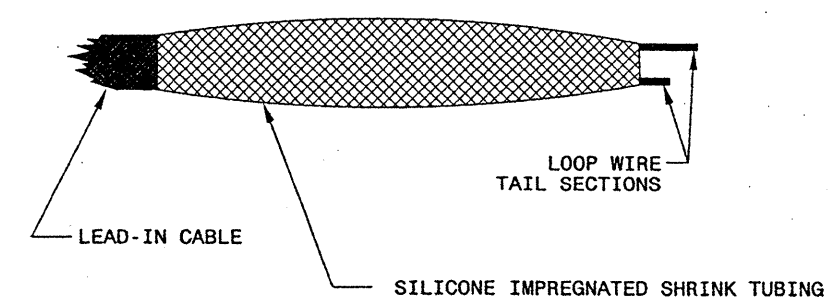
**LOOP WIRE AND LEAD-IN CABLE CONNECTION DETAILS**



**STEP 3. INSULATE EACH SOLDER JOINT SEPARATELY**



**STEP 4. ENVIRONMENTALLY PROTECT SPLICE**



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ENGLISH DETAIL DRAWING FOR  
**INDUCTIVE DETECTION LOOPS**  
 SPLICING FOR LEAD-IN CABLE AND LOOP WIRE

SHEET 3 OF 3  
**1725D01**

See Plate for Title

Prepared in the Offices of:

750 N. Greenfield Parkway  
Garner, NC 27529

SEAL

Milton L. Dea 9/5/07  
SIGNATURE DATE

05-SEP-2007 14:01  
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