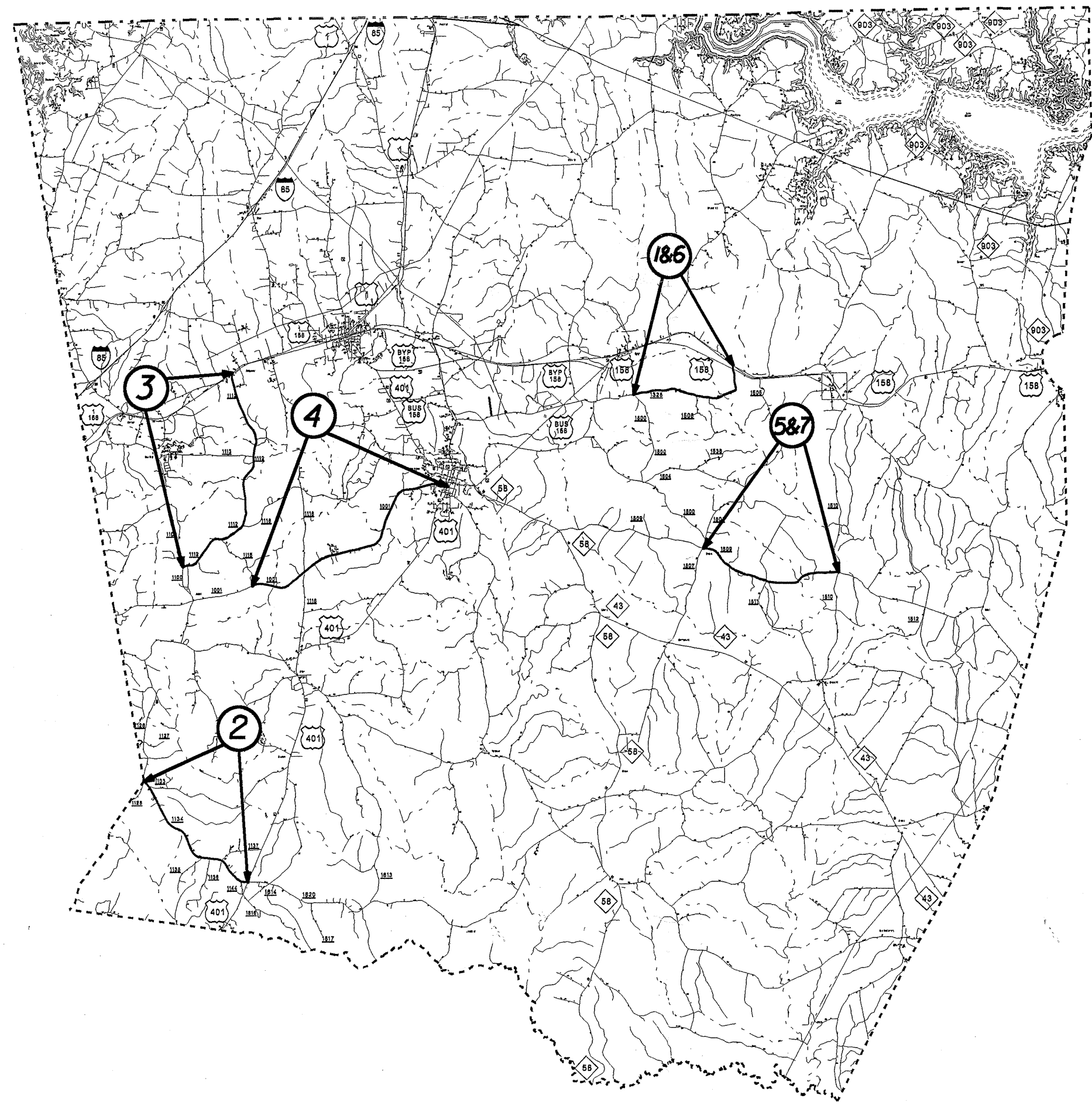
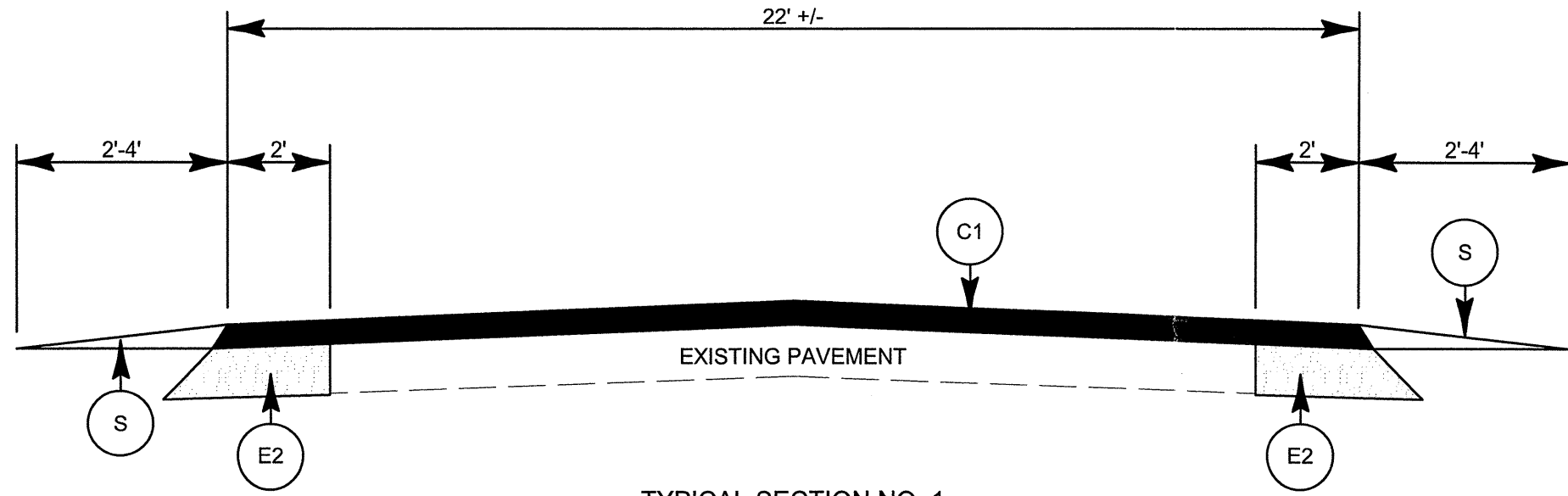


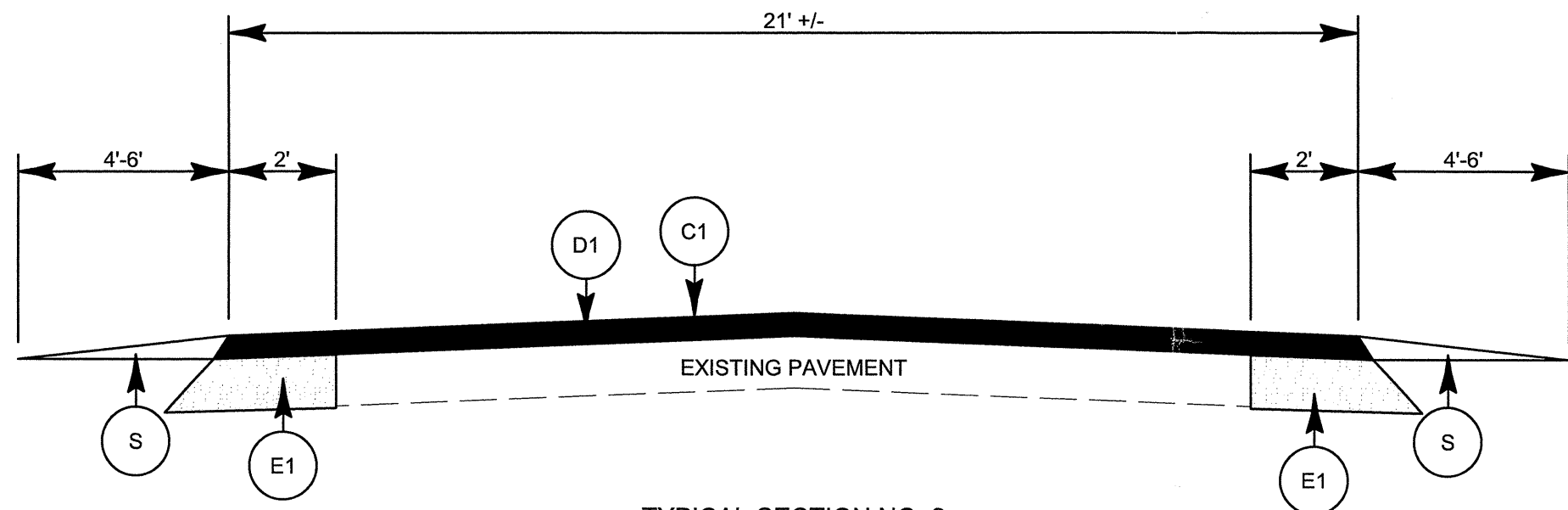
2012 WARREN COUNTY RESURFACING



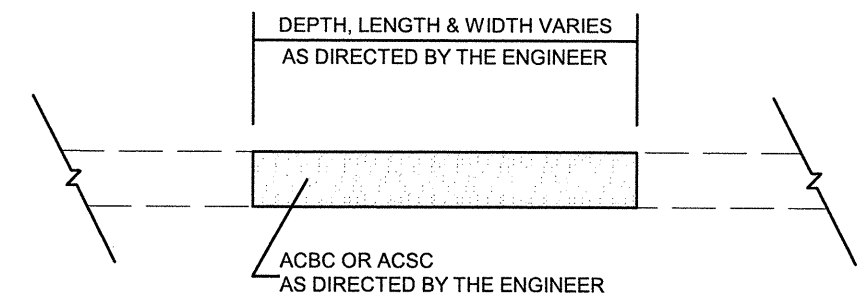
PROJECT NO. 5C.093056, 5C.093058, 5CR.20931.11,	SHEET NO. 2	TOTAL SHEETS
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TYPICAL SECTION NO. 1

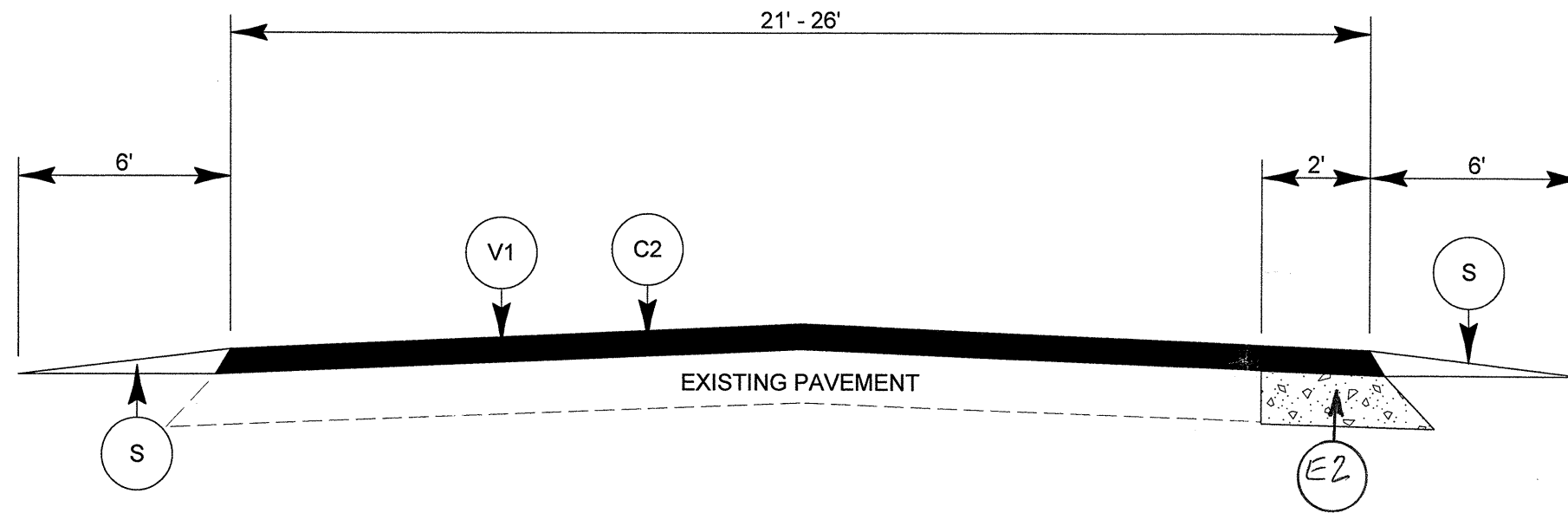


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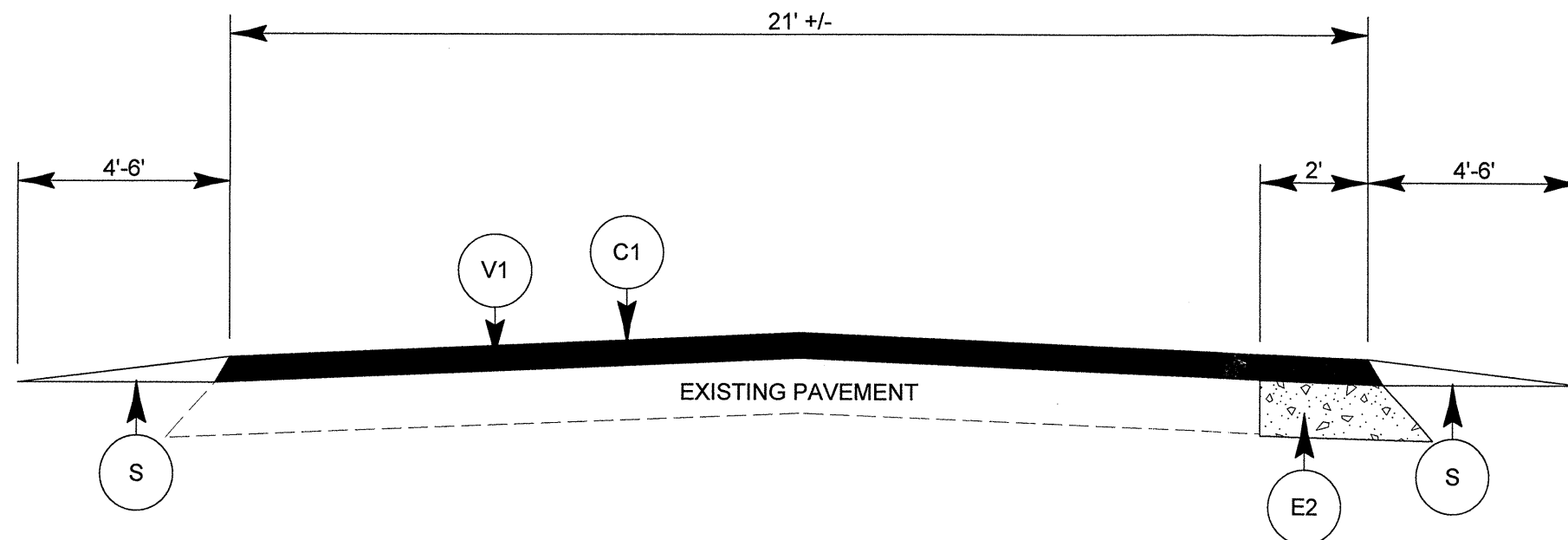


PATCHING EXISTING PAVEMENT	
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" OF ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 165 LBS PER SQ YD
C2	PROP. APPROX. 1.5" OF ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 168 LBS PER SQ YD
D1	PROP. APPROX. 2.5" OF ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B AT AN AVERAGE RATE OF 285 LBS PER SQ YD
E1	PROP. APPROX. 5.5" OF ASPHALT CONCRETE BASE COURSE, TYPE B25.0B AT AN AVERAGE RATE OF 627 LBS PER SQ YD
E2	PROP. APPROX. 7" OF ASPHALT CONCRETE BASE COURSE, TYPE B25.0B AT AT AVERAGE RATE OF 399 LBS PER SQ YD IN EACH OF TWO LAYERS TO PROVIDE 2' WIDENING AS DIRECTED BY THE ENGINEER
S	SHOULDER RECONSTRUCTION WITH SEEDING AND MULCHING AND BORROW AS DIRECTED BY THE ENGINEER
V1	PROP. 1.5" MILLING
V2	PROP. 3" MILLING, INCLUDING EXISTING ASPHALT IN GUTTER

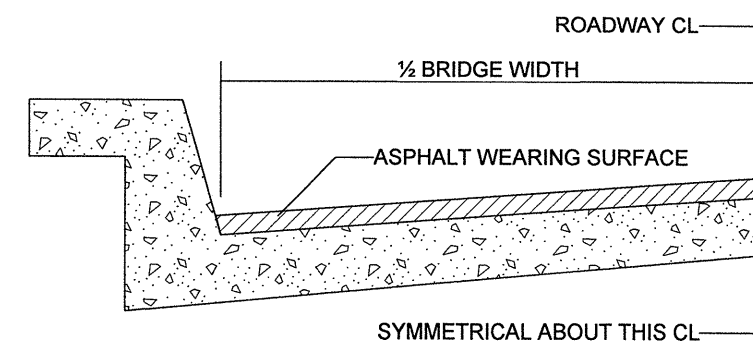
PROJECT NO.	SHEET NO.	TOTAL SHEETS
5C.093056, 5C.093058, 5CR.20931.11,	3	



TYPICAL SECTION NO. 3



TYPICAL SECTION NO. 4



BRIDGE HALF TYPICAL SECTION

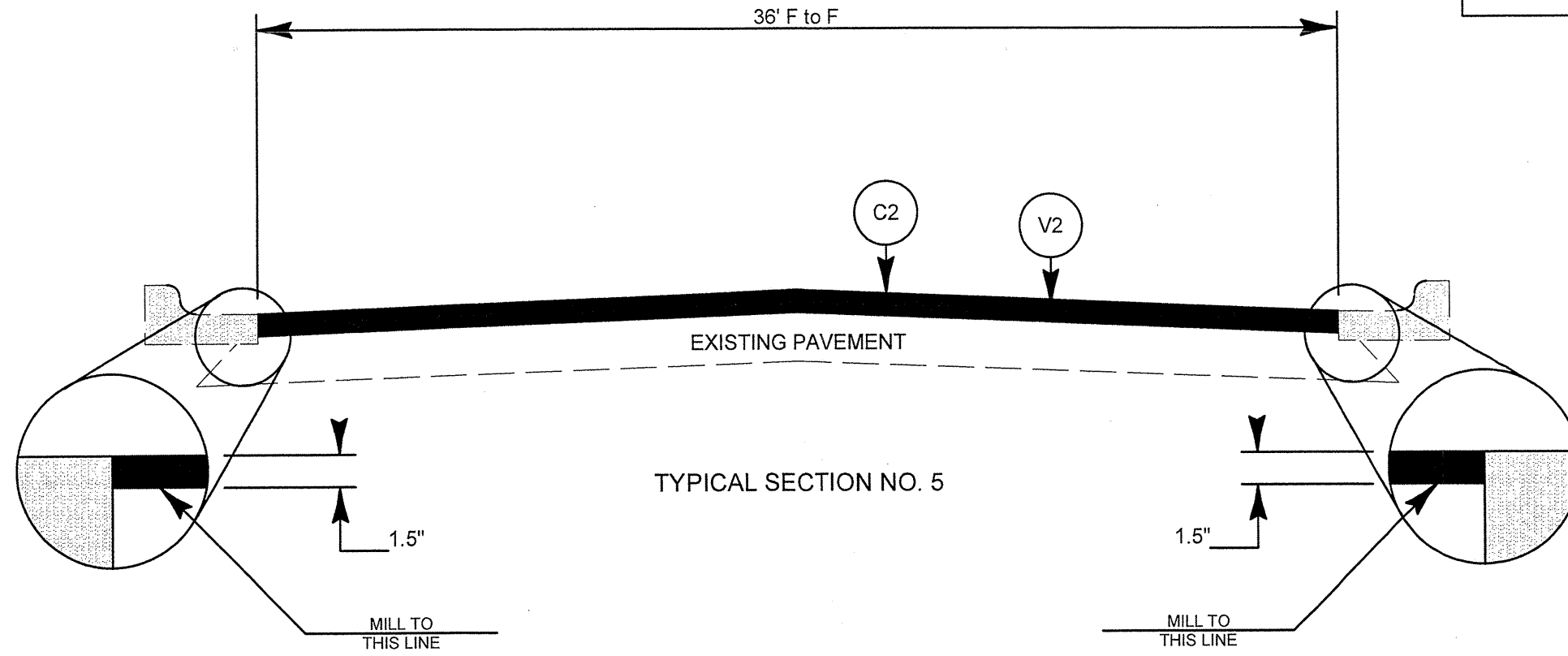
FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN

THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. 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.

PROJECT NO.	SHEET NO.	TOTAL SHEETS
5C.093056, 5C.093058, 5CR.20931.11,	4	



PROJECT NO.	SHEET NO.	TOTAL NO.
5C.093056, 5C.093058 5CR.20931.11,	5	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	SAFETY WEDGE REQUIRED	LENGTH MI	WIDTH FT	BORROW CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	1 1/2" MILLING SY	3" MILLING SY	BASE COURSE, B25.0B TONS	INTER-MEDIATE COURSE, I19.0B TONS
5C.093056	Warren	1	SR 1325 HARRIS TOWN RD.	FROM SR 1500 (MACON EMBRO RD.) TO US 158	1	NO	NO	2.8	22	560	34	5.60			3,300	
TOTAL FOR PROJ NO. 5C.093056																
5C.093058	Warren	7	SR 1509 (EMBRO-ODELL RD)	FROM SR 1507 (MARMADUKE RD) TO SR 1510 (MAT NELSON RD)	2	NO	NO	3.4	21	1,020	41	6.80			3,150	6,330
TOTAL FOR PROJ NO. 5C.093058																
5CR.20931.11	Warren	2	SR 1134 VICKSBORO ROAD	FROM VANCE CO. LINE TO US 401	3	NO	NO	3.5	21	150	42	1.00	43,120		800	
5CR.20931.11	Warren	3	SR 1112 AXTELL-RIDGEWAY RD	FROM US 158 TO SR 1100 (MANSON AXTELL RD)	4	NO	NO	5.4	21	225	65	1.00	66,528		250	
5CR.20931.11	Warren	4	SR 1001 MARTIN LUTHER KING	FROM SR 1115 TO US 401	3 & 5	NO	YES	5.45	24	375	65	3.75	67,500	8,448	2,350	
5CR.20931.11	Warren	5	SR 1509 (EMBRO-ODELL ROAD)	FROM SR 1507 (MARMADUKE RD) TO SR 1510 (MAT NELSON RD)	2	NO	NO	3.4	21							
5CR.20931.11	Warren	6	SR 1325 HARRIS TOWN RD.	FROM SR 1500 (MACON EMBRO RD.) TO US 158	1	NO	NO	2.8	22							
TOTAL FOR PROJ NO. 5CR.20931.11																
GRAND TOTAL								26.75		2,330	247	18.15	177,148	8,448	9,850	6,330

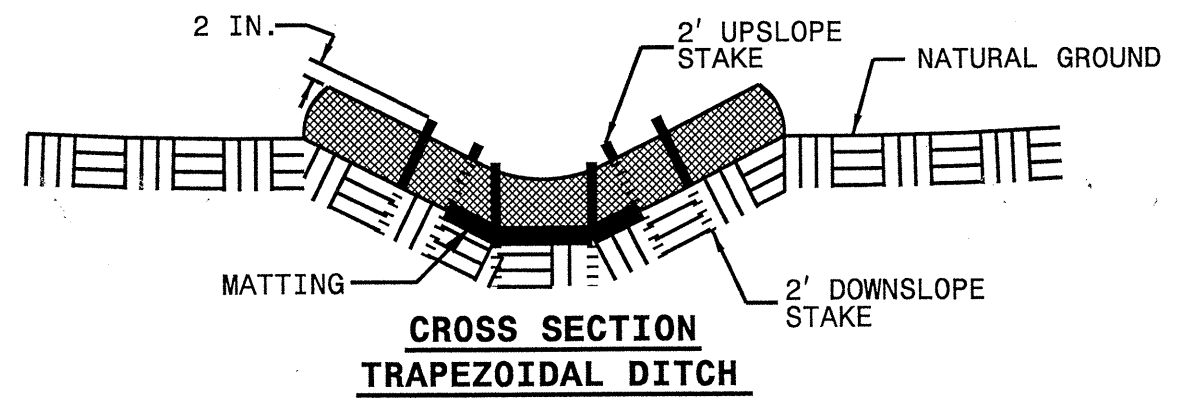
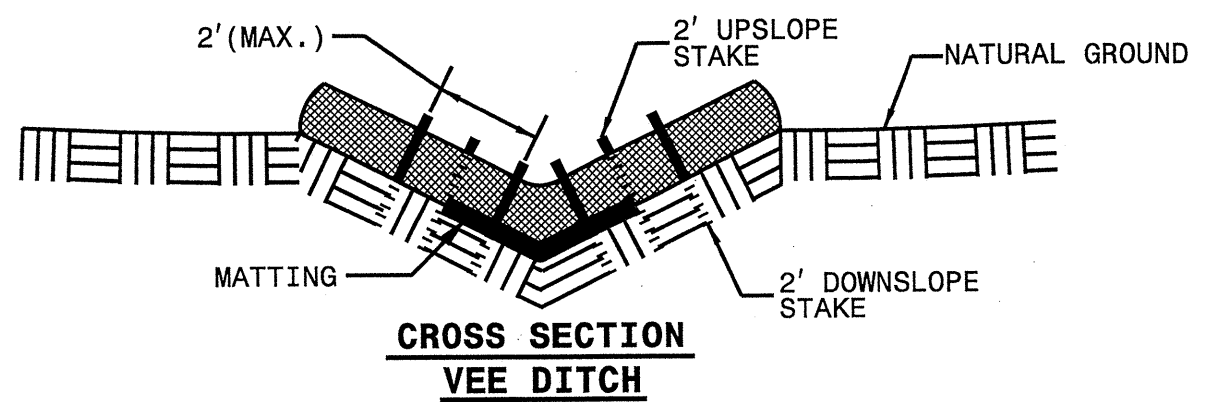
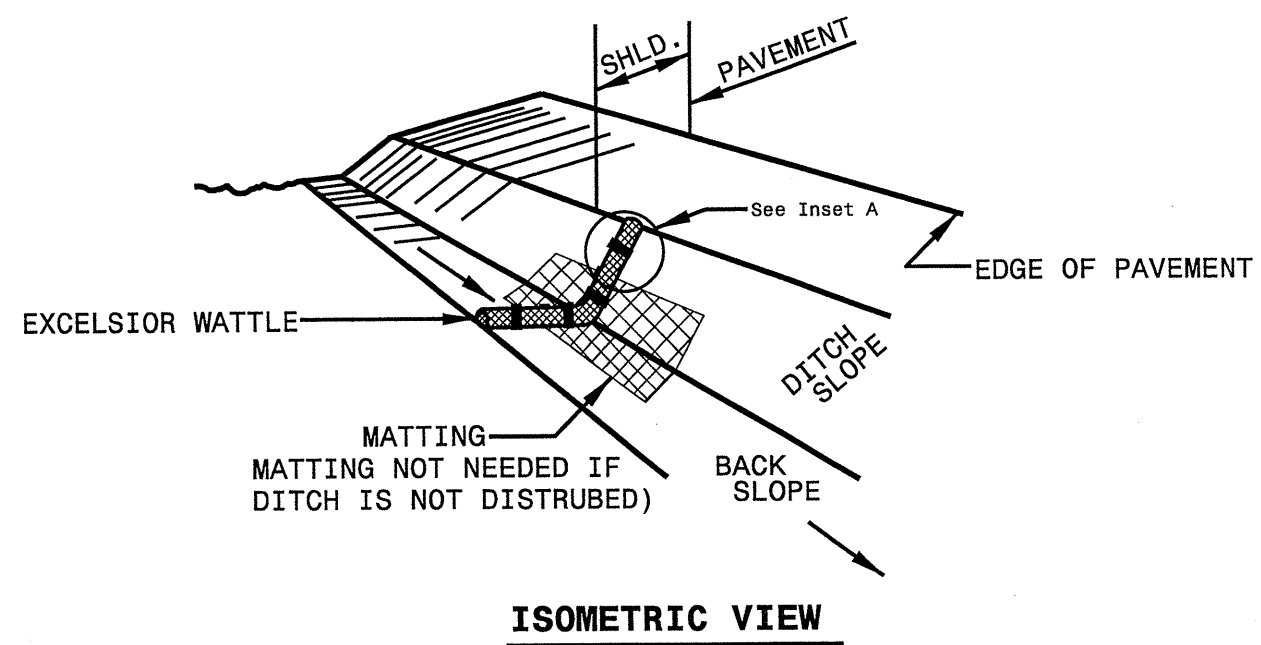
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, SF9.5A TON	ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT TONS	ADJUST DROP INLET EA	ADJUST MANHOLES EA	ADJUST METER OR VALVE BOX EA	TEMPORARY SILT FENCE LF	WATTLE LF	SEED & MULCHING AC	INDUCTIVE LOOP LF	LEAD-IN CABLE (14-2) LF
5C.093056	Warren	1	SR 1325 HARRIS TOWN RD.	FROM SR 1500 (MACON EMBRO RD.) TO US 158			145	750				300	60	2.70		
TOTAL FOR PROJ NO. 5C.093056																
5C.093058	Warren	7	SR 1509 (EMBRO-ODELL RD)	FROM SR 1507 (MARMADUKE RD) TO SR 1510 (MAT NELSON RD)			417	200				300	200	4.10		
TOTAL FOR PROJ NO. 5C.093058																
5CR.20931.11	Warren	2	SR 1134 VICKSBORO ROAD	FROM VANCE CO. LINE TO US 401	3,753		260	100					100	1.00		
5CR.20931.11	Warren	3	SR 1112 AXTELL-RIDGEWAY RD	FROM US 158 TO SR 1100 (MANSON AXTELL RD)		5,687	392	200					100	0.50		
5CR.20931.11	Warren	4	SR 1001 MARTIN LUTHER KING	FROM SR 1115 TO US 401	6,479		492	100	1	5	7	400	200	2.70	400	60
5CR.20931.11	Warren	5	SR 1509 (EMBRO-ODELL ROAD)	FROM SR 1507 (MARMADUKE RD) TO SR 1510 (MAT NELSON RD)		3,581	240									
5CR.20931.11	Warren	6	SR 1325 HARRIS TOWN RD.	FROM SR 1500 (MACON EMBRO RD.) TO US 158		3,088	207									
TOTAL FOR PROJ NO. 5CR.20931.11																
GRAND TOTAL					10,232	12,356	2,153	1,350	1	5	7	1,000	660	11.00	400	60

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	LENGTH	WIDTH	4685000000-E	4686000000-E	4705000000-E	4710000000-E	4721000000-E		4810000000-E		4830000000-E	4835000000-E	4840000000-N	4900000000-N	
							4" X 90 M WHITE THERMO LF	4" X 120 M YELLOW THERMO LF	16" X 120 M WHITE THERMO LF	24" X 120 M WHITE THERMO LF	THERMO RXR 120 M EA	THERMO MSG SCHOOL 120 M EA	4" WHITE PAINT LF	4" YELLOW PAINT LF	16" WHITE PAINT LF	24" WHITE PAINT LF	PAINT MSG RKR EA	YELLOW & YELLOW MARKERS EA	
5C.093056	Warren	1	SR 1325 HARRIS TOWN RD.	FROM SR 1500 (MACON EMBRO RD.) TO US 158	2.8	22	30,128	18,480											
TOTAL FOR MAP NO. 1							30,128	18,480											
TOTAL FOR PROJ NO. 5C.093056							30,128	18,480											
5C.093058	Warren	7	SR 1509 (EMBRO-ODELL RD)	FROM SR 1507 (MARMADUKE RD) TO SR 1510 (MAT NELSON RD)	3.4	21	36,584	22,440					36,584	22,440					
TOTAL FOR MAP NO. 7							36,584	22,440					36,584	22,440					
TOTAL FOR PROJ NO. 5C.093058							36,584	22,440					36,584	22,440					
												59,024							
5CR.20931.11	Warren	2	SR 1134 VICKSBORO ROAD	FROM VANCE CO. LINE TO US 401	3.5	21	37,660	23,100					37,660	23,100				231	
TOTAL FOR MAP NO. 2							37,660	23,100					37,660	23,100					231
5CR.20931.11	Warren	3	SR 1112 AXTELL-RIDGEWAY RD	FROM US 158 TO SR 1100 (MANSON AXTELL RD)	5.4	21	58,104	35,640	50	45	2		58,104	35,640	50.00	45	2		
TOTAL FOR MAP NO. 3							58,104	35,640	50	45	2		58,104	35,640	50	45	2		
5CR.20931.11	Warren	4	SR 1001 MARTIN LUTHER KING	FROM SR 1115 TO US 401	5.45	24	58,642	35,970		100		12	58,642	196,037				360	
TOTAL FOR MAP NO. 4							58,642	35,970		100		12	58,642	196,037				360	
5CR.20931.11	Warren	5	SR 1509 (EMBRO-ODELL ROAD)	FROM SR 1507 (MARMADUKE RD) TO SR 1510 (MAT NELSON RD)	3.4	21													
TOTAL FOR MAP NO. 5																			
5CR.20931.11	Warren	6	SR 1325 HARRIS TOWN RD.	FROM SR 1500 (MACON EMBRO RD.) TO US 158	2.8	22													
TOTAL FOR MAP NO. 6																			
TOTAL FOR PROJ NO. 5CR.20931.11							154,406	94,710	50	145	2	12	154,406	254,777	50	45	2	591	
GRAND TOTAL												14	409,183						
					26.75		221,118	135,630	50	145	2	12	190,990	277,217	50	45	2	591	
												14	468,207						

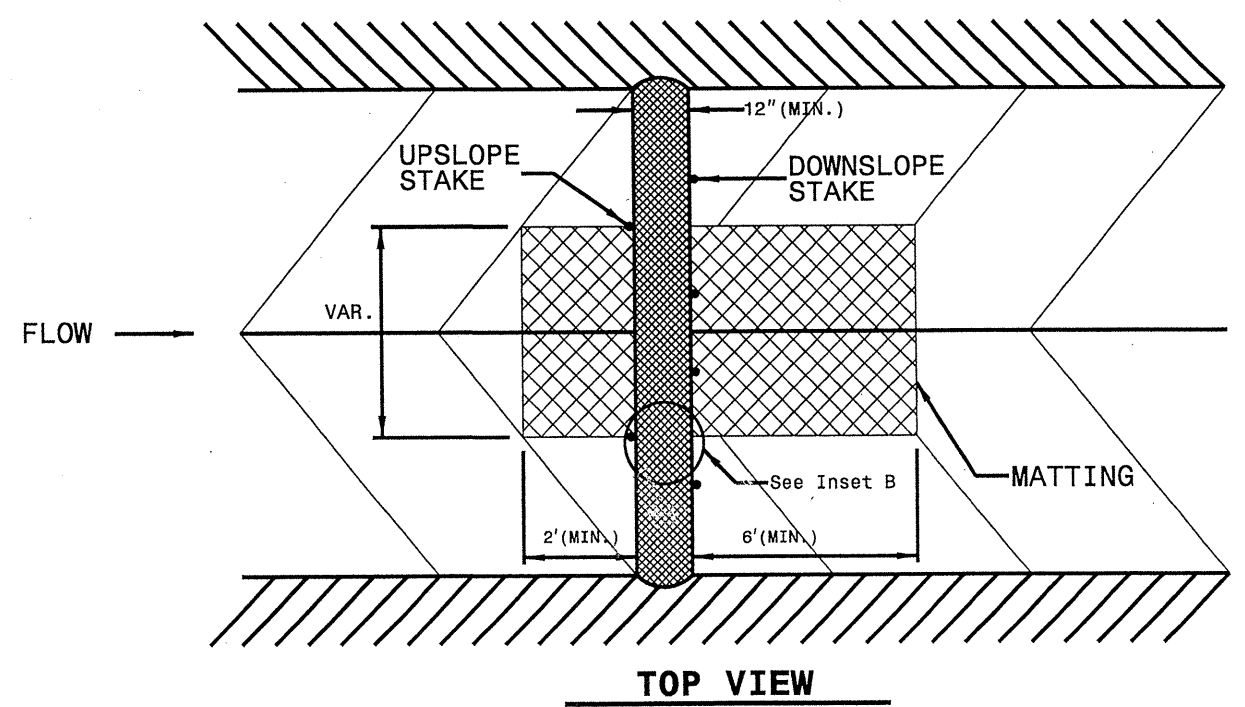
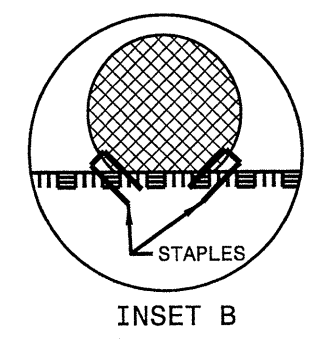
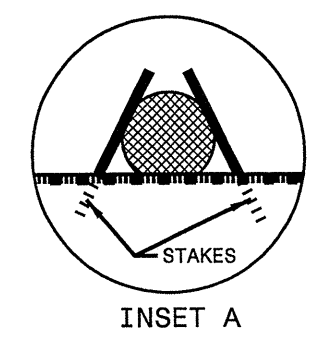
Sht. 6
 SC. 093056, etc.

WATTLE DETAIL



NOTES:

- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
- PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
- INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
- IF DITCH WILL BE DISTURBED, INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



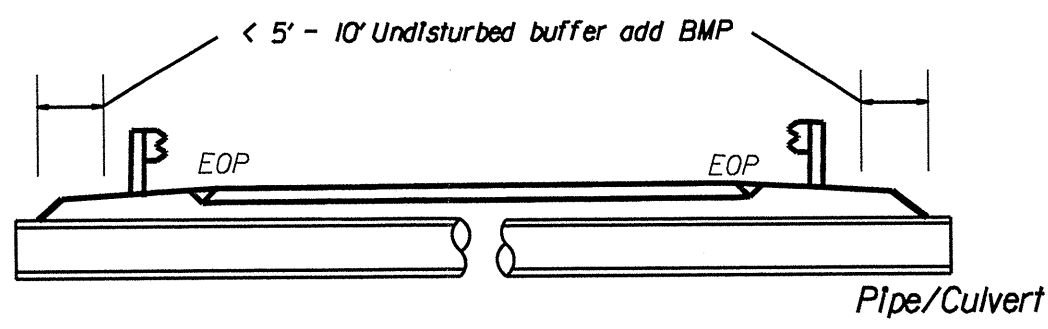
Sheet 7

2-1111 EC-12/0001.12

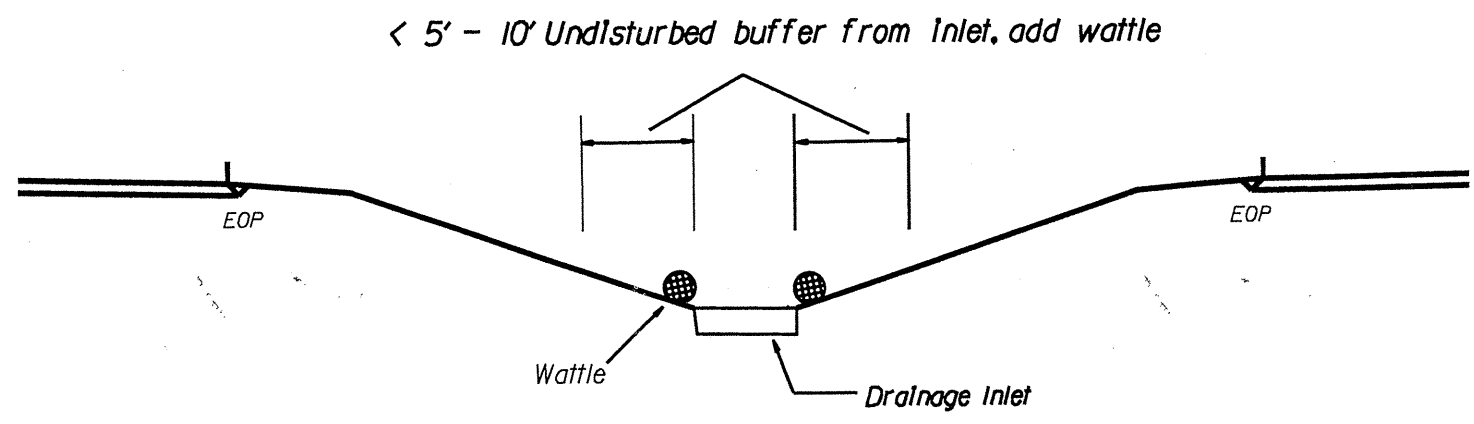
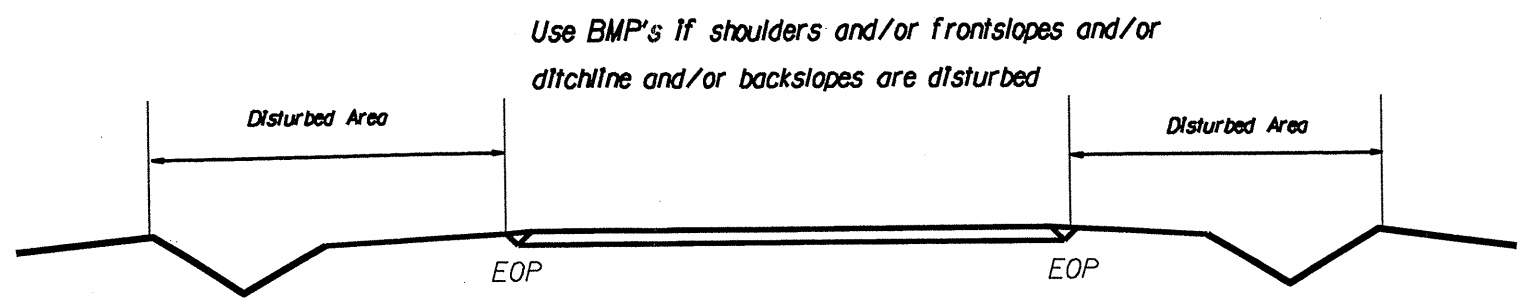
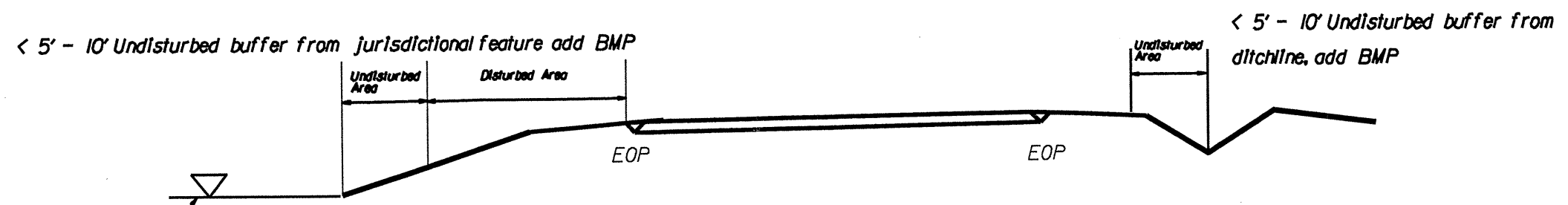
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle, Silt Fence, or Hardened Aggregate.

EROSION CONTROL DETAIL

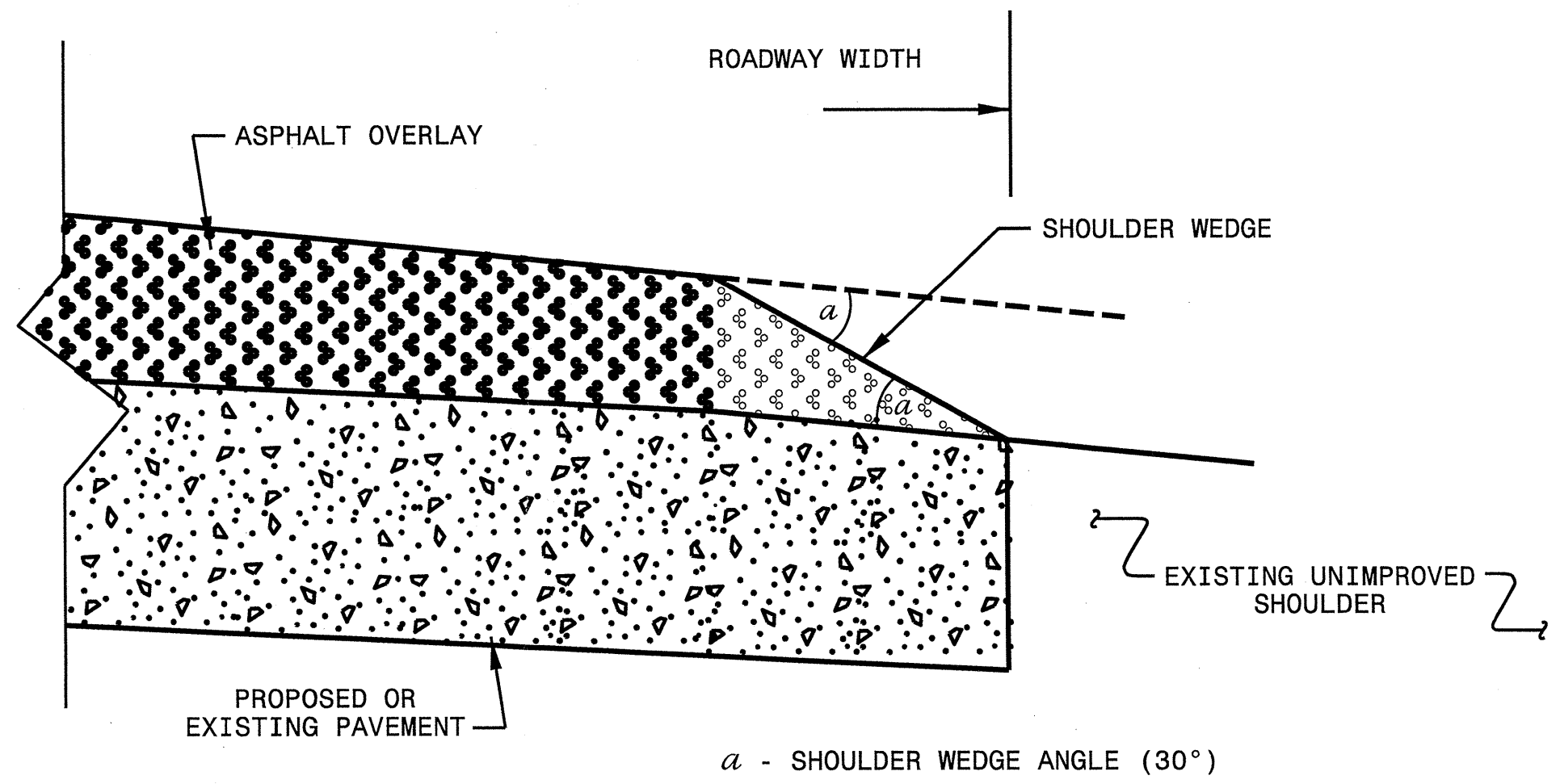


SC. 693056, etc.



NOT TO SCALE

SC.693056.etc

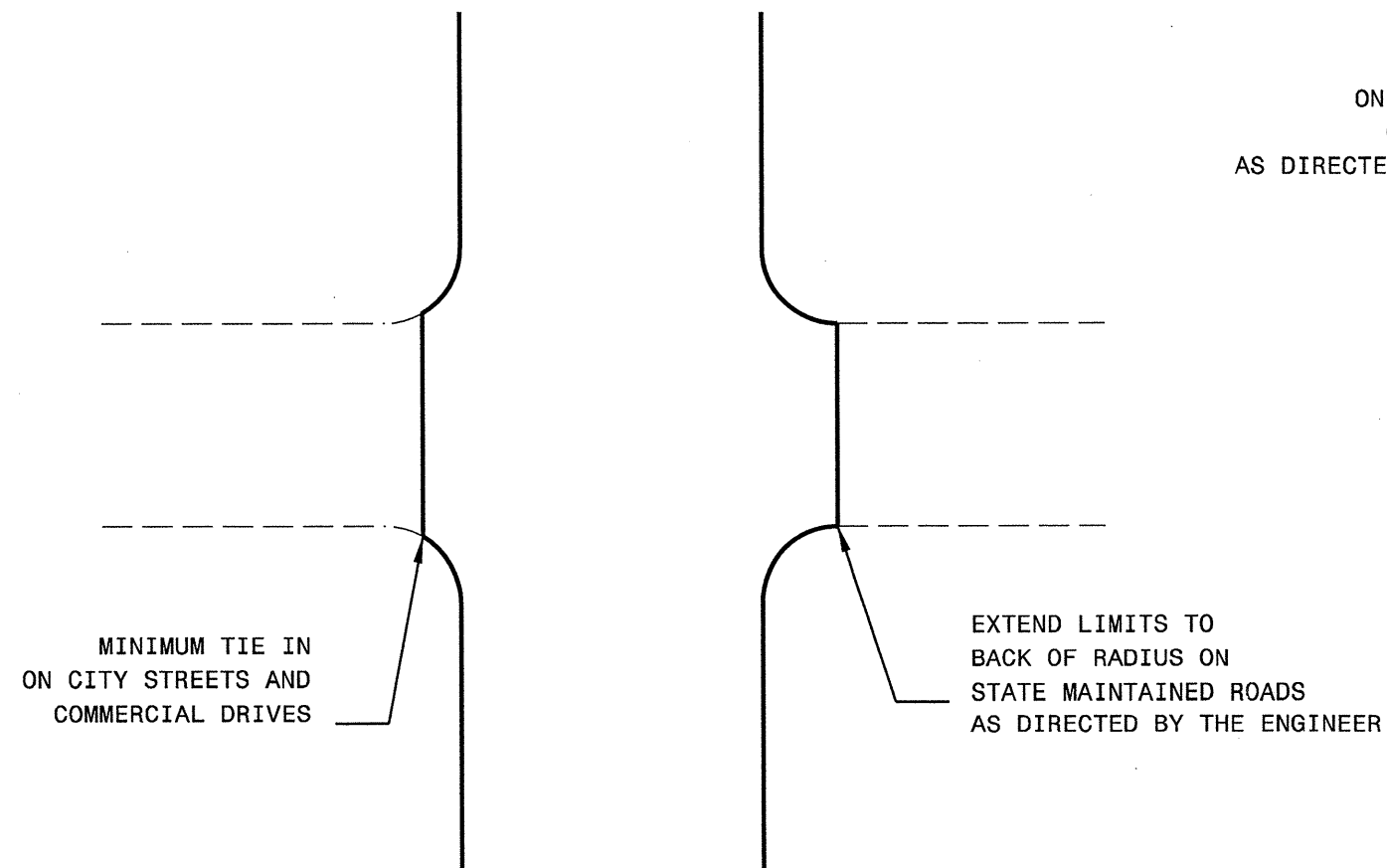


SHOULDER WEDGE DETAIL

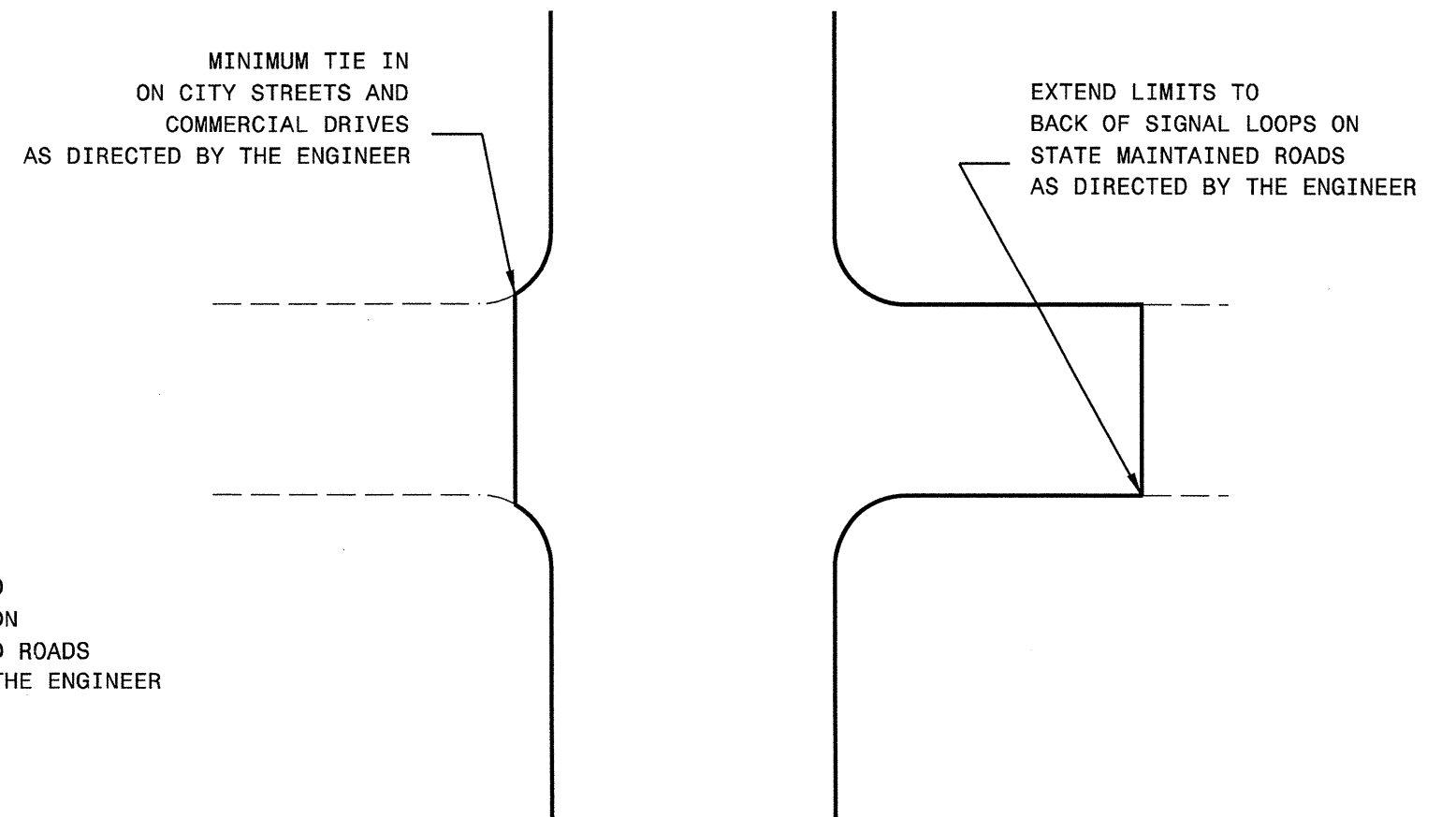
USE ON MAP 4 WITH TYPICAL SECTION 3

 SYSTEMS
 DESIGN
 GROUP

SHOULDER WEDGE DETAIL	
ORIGINAL BY: _____	DATE: _____
MODIFIED BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
FILE SPEC: _____	



DETAIL OF PROJECT LIMITS AT
UNSIGNALIZED Y LINES








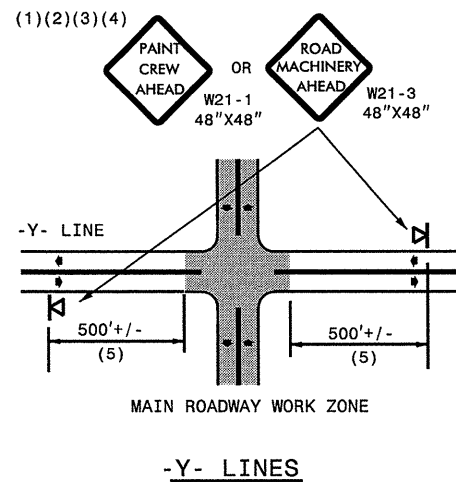
DETAIL OF PROJECT LIMITS AT
SIGNALIZED Y LINES

GENERAL NOTES

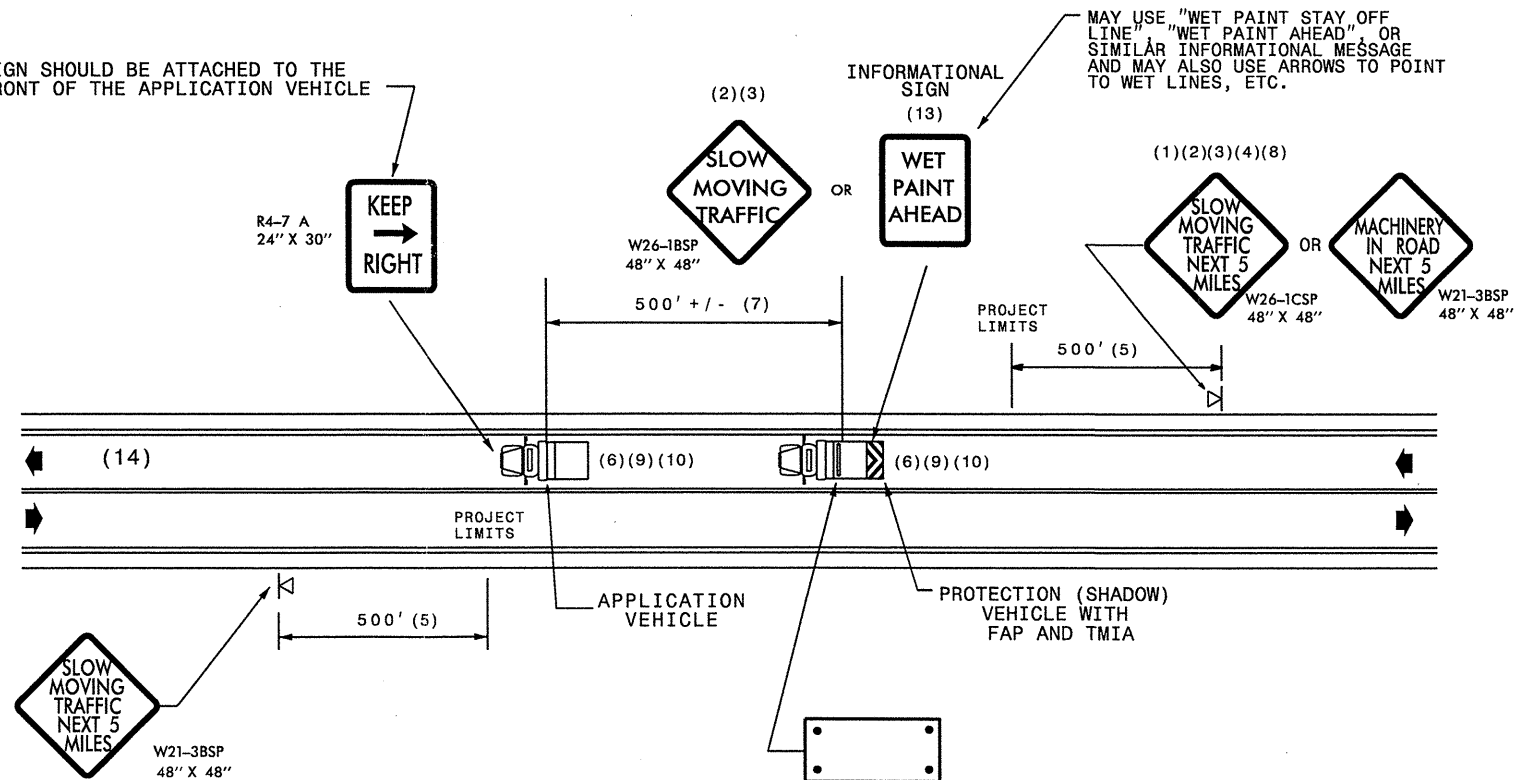
- (1) THE FOLLOWING OPTIONS MAY BE USED FOR ADVANCE WARNING SIGNS:
 - A. TRUCK MOUNTED SIGNS
 - B. TRUCK MOUNTED CHANGEABLE MESSAGE SIGN (CMS)
 - C. GROUND MOUNTED ADVANCE WARNING SIGNS (MUST CIRCLE TO PICK UP SIGNS)
 - D. GROUND MOUNTED CHANGEABLE MESSAGE SIGN (CMS) (MUST USE CIRCLE TO PICK UP SIGNS)
- (2) ALL ADVANCE WARNING SIGNS MUST BE 48" X 48" WITH FLUORESCENT ORANGE TYPE VII, VIII OR IX SHEETING. IF SPACE LIMITATIONS ON SHOULDER PROHIBIT A 48" X 48" SIGN, A SMALLER SIGN CAN BE USED WITH APPROVAL FROM ENGINEER.
- (3) SIGNS ON VEHICLES SHOULD BE MOUNTED A MINIMUM OF ONE (1) FOOT FROM THE GROUND AND SHOULD NOT BLOCK THE MOTORIST'S SIGHT OF THE FLASHING ARROW PANEL AND/OR LIGHTBAR.
- (4) GROUND MOUNTED ADVANCED WARNING SIGNS SHOULD BE MOUNTED A MINIMUM OF ONE (1) FOOT FROM THE GROUND TO BOTTOM OF SIGN.
- (5) SIGN SPACING SHOULD BE ADJUSTED FOR HORIZONTAL AND VERTICAL CURVES, ETC. TO IMPROVE SIGHT DISTANCES.
- (6) ADDITIONAL VEHICLES SHOULD BE USED IN WORK CARAVAN TO FACILITATE DRYING OF PAVEMENT MARKING MATERIAL (TMIA'S ARE OPTIONAL ON THESE ADDITIONAL VEHICLES). HOWEVER, THE FIRST VEHICLE MOTORISTS SEE IN THE TRAVEL LANE SHALL HAVE A TMIA.
- (7) ADJUST DISTANCE AS NEEDED TO PREVENT MOTORISTS FROM ENTERING SPACE BETWEEN THE APPLICATION AND PROTECTION VEHICLE. DISTANCE CAN BE LENGTHENED TO ACCOMMODATE SIGHT DISTANCE NEEDS.
- (8) ROUND UP MILEAGE TO NEXT WHOLE MILE. WORK ZONE SHOULD NOT EXCEED FIVE (5) MILES IN LENGTH.
- (9) RADIO COMMUNICATION BETWEEN VEHICLES IS REQUIRED.
- (10) USE OF A LIGHT BAR ON ALL VEHICLES IS PREFERRED, BUT A ROTATING BEACON MAY BE USED INSTEAD.
- (11) IF WORK IS PERFORMED AT NIGHT, THE WORK AREA MUST BE ILLUMINATED WITH MACHINE AND/OR TOWER LIGHTS AS APPROVED BY THE ENGINEER.
- (12) ALL TRAFFIC CONTROL DEVICES WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEMS FOR PAVEMENT MARKING AND MARKERS.
- (13) INFORMATIONAL SIGNS SHOULD BE ACTIVITY SPECIFIC, i.e. "PAINT CREW IN ROAD". SIGNS MAY BE RECTANGULAR OR DIAMOND SHAPE. SIGN SIZE SHOULD BE BASED ON THE MOTORIST ABILITY TO RECOGNIZE SIGN WHEN TRAVELING FIVE (5) MILES ABOVE POSTED SPEED LIMIT.
- (14) IF A LEAD VEHICLE IS ADDED TO OPERATION, IT SHOULD HAVE THE SAME ADVANCE WARNING SIGNS AS THE APPLICATION VEHICLE SHOWN BELOW.

LEGEND

-  PORTABLE SIGN. SIGNS MUST BE NCHRP-350 AND NCDOT APPROVED.
-  DIRECTION OF TRAFFIC FLOW
-  APPLICATION VEHICLE WITH LIGHT BAR
-  PROTECTION VEHICLE WITH TRUCK MOUNTED IMPACT ATTENUATOR (TMIA) AND LIGHT BAR (SEE ROADWAY STANDARD NO. 1165.01). TMIA MUST BE NCHRP-350 TEST LEVEL 3 (60+MPH) APPROVED.
-  FLASHING ARROW PANEL, TYPE "B" (60"X30" MIN.), "CAUTION MODE"



SIGN SHOULD BE ATTACHED TO THE FRONT OF THE APPLICATION VEHICLE

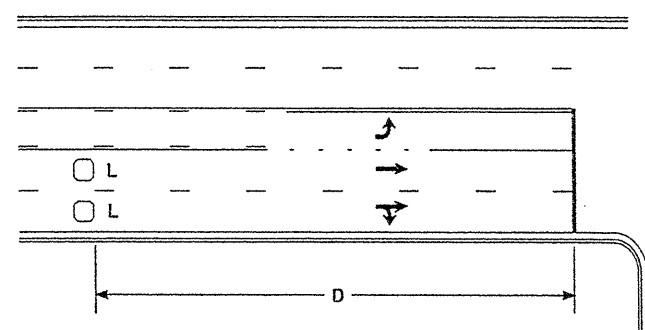


MOVING OPERATION CARAVAN

(OPERATIONS TRAVELING 3 MPH OR FASTER)
PLACING PAVEMENT MARKING OR MARKERS
ON TWO-LANE TWO-WAY ROADWAYS

DRAWING NUMBER 6
IMPLEMENTATION DATE: 07/01/97
REVISED: 11/03/04

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

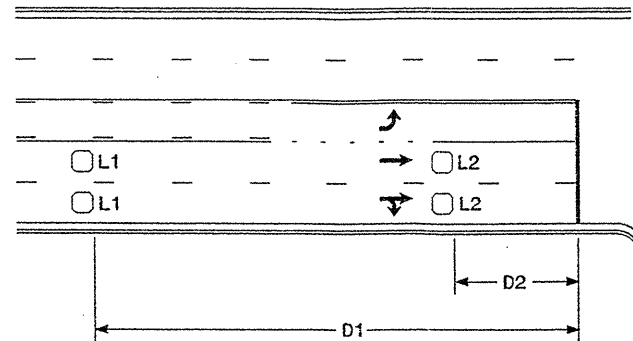


Speed Limit mph (km/hr)	D ft (m)
40 (64)	250 (75)
45 (72)	300 (90)
50 (80)	355 (110)
55 (88)	420 (130)

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

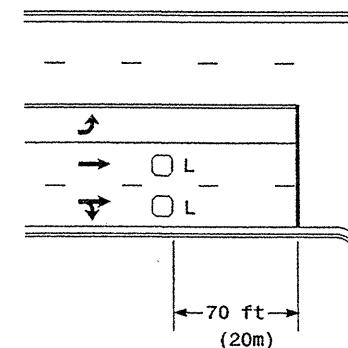


Speed Limit mph (km/hr)	D1 ft (m)	D2 ft (m)
40 (64)	250 (75)	80 (25)
45 (72)	300 (90)	90 (27)
50 (80)	355 (110)	100 (30)
55 (88)	420 (130)	110 (35)

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

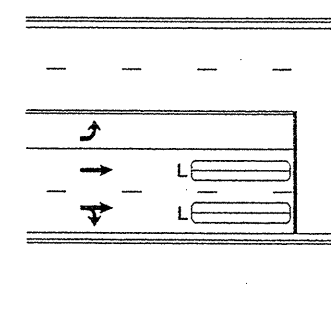
"Stretch" Operation

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



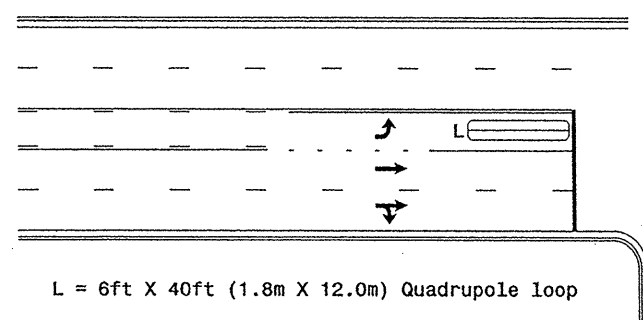
L = 6ft X 6ft (1.8m X 1.8m)
 Wired in series

OR



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

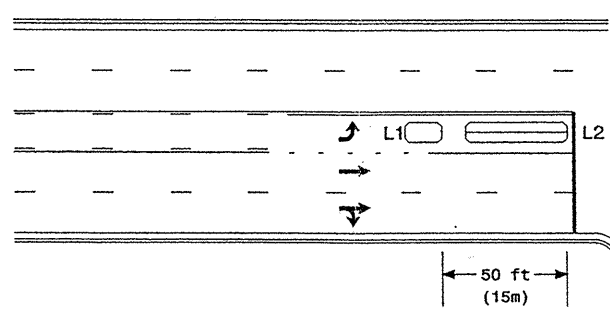
Left Turn Lane Detection



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

Presence Loop Detection

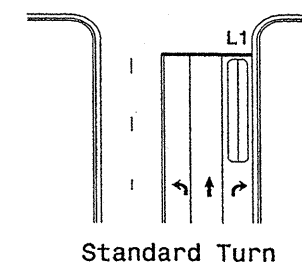
OR



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

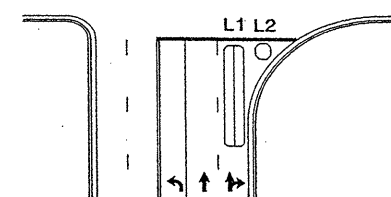
Queue Loop Detection

Right Turn Lane Detection

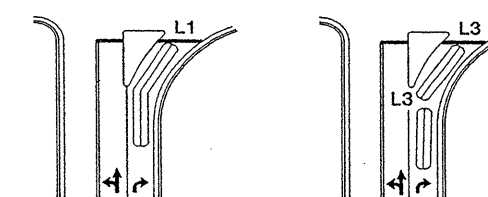


Standard Turn

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

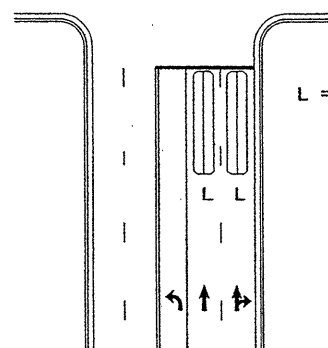


Wide Radius Turn



Channelized Turn

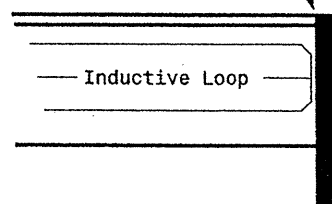
Side Street Detection



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

122 N. McDowell St., Raleigh, NC 27603

PLAN DATE: June 2006	REVIEWED BY:
PREPARED BY: P. L. Alexander	REVIEWED BY:
SCALE: N/A	REVISIONS:
	INIT. DATE
	DATE
	SIGNATURE DATE

SIG. INVENTORY NO.

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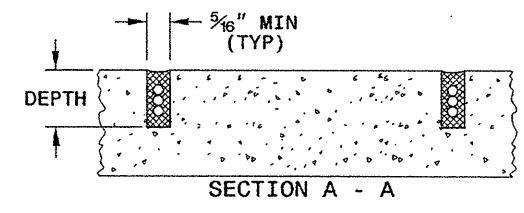
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ENGLISH DETAIL DRAWING FOR
INDUCTIVE DETECTION LOOPS

SHEET 1 OF 3
1725D01

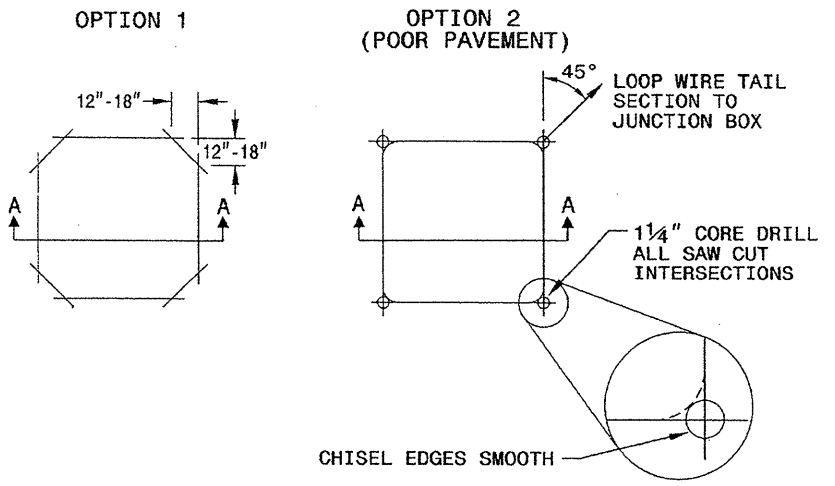
SAW SLOT DEPTH CHART

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

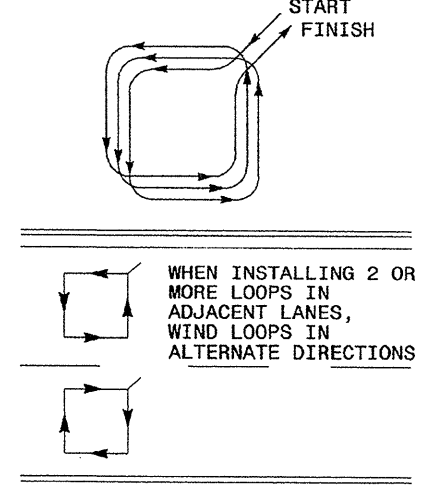


CONVENTIONAL 4-SIDED LOOP

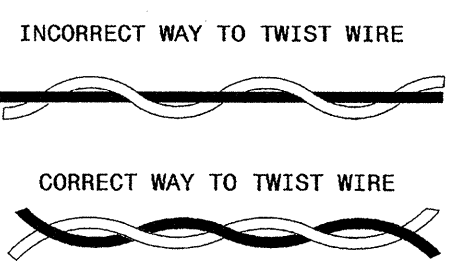
SAW CUT OPTIONS



LOOP WINDING METHOD



LOOP WIRE TWISTING METHOD

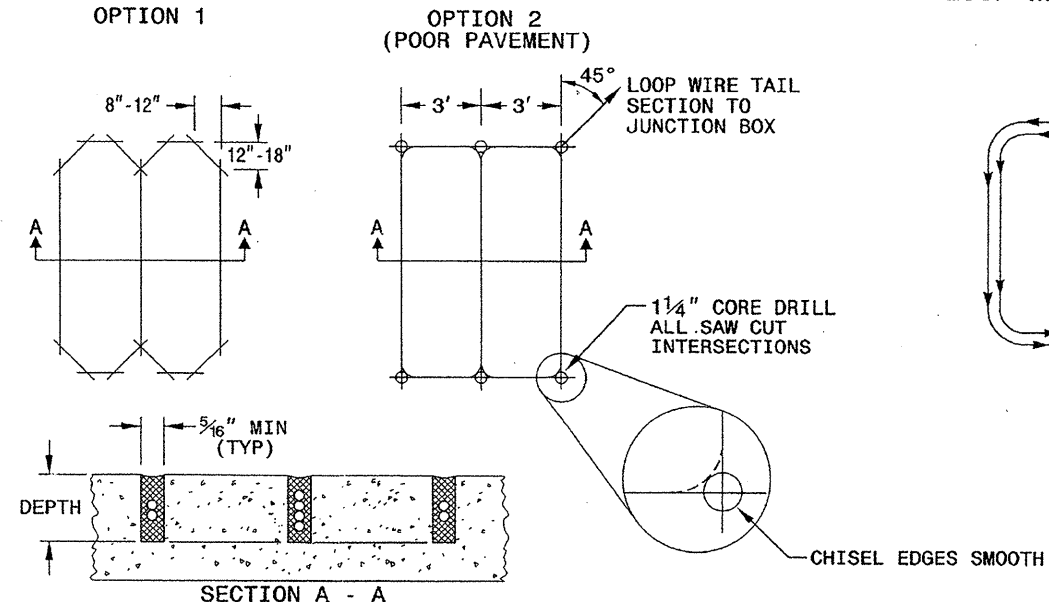


NOTES

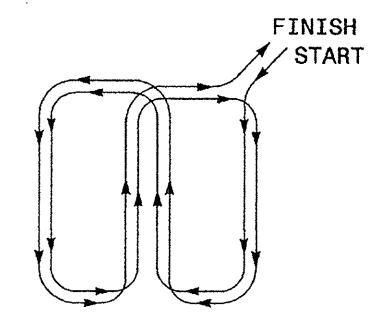
- OVERLAP SAW CUTS AT CORNERS AND INTERSECTION POINTS TO ENSURE UNIFORM SAW SLOT DEPTH.
- MAINTAIN 12" SPACING BETWEEN LOOP WIRE TAIL SECTIONS.
- WIRE LOOPS CONNECTED TO THE SAME DETECTOR CHANNEL IN SERIES.
- LOCATE LOOPS IN CENTER OF LANES UNLESS OTHERWISE SHOWN ON PLANS OR APPROVED BY ENGINEER.

QUADRUPOLE LOOP

SAW CUT OPTIONS



LOOP WINDING METHOD



SECTION A - A
DEPTH IS 2.5" FOR CONCRETE AND 3.0" FOR ASPHALT

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ENGLISH DETAIL DRAWING FOR
INDUCTIVE DETECTION LOOPS

SHEET 1 OF 3
1725D01

See Plate for Title

Prepared in the Offices of:
Intelligent Transportation Systems & Signals Unit
750 N. Greenfield Parkway
Garner, NC 27529

SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
16286
WILTON I. DEAN

Wilton I. Dean 4/24/08
SIGNATURE DATE

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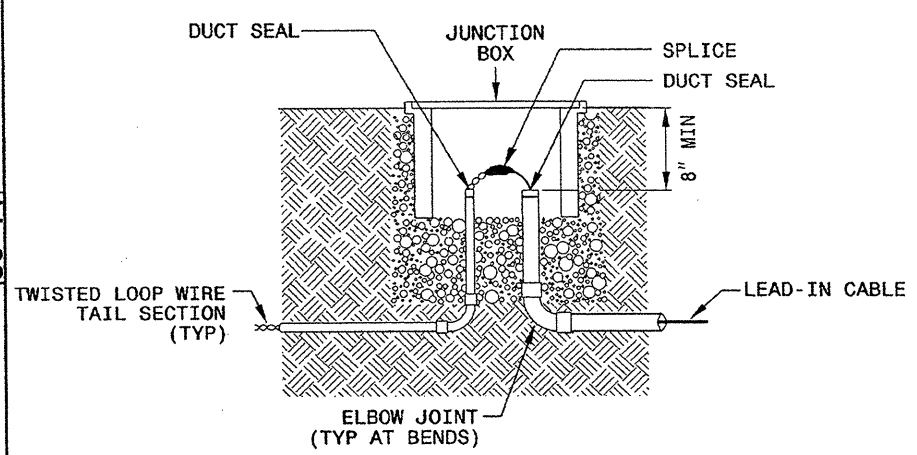
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ENGLISH DETAIL DRAWING FOR
INDUCTIVE DETECTION LOOPS
LOOP WIRE DETAILS

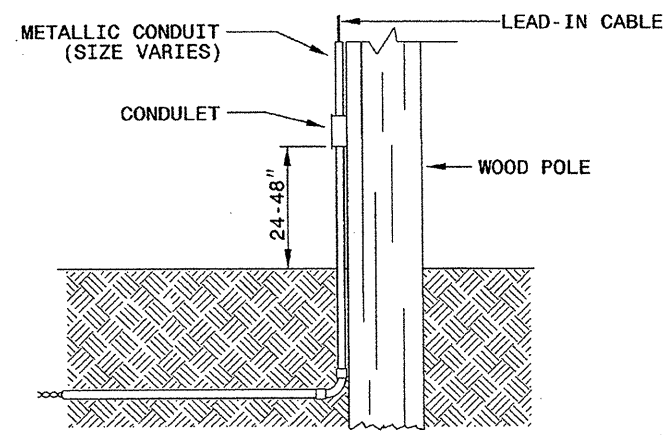
SHEET 2 OF 3
1725D01

LOOP WIRE SPLICE POINT DETAILS

LOOP WIRE AT JUNCTION BOX



LOOP WIRE AT POLE

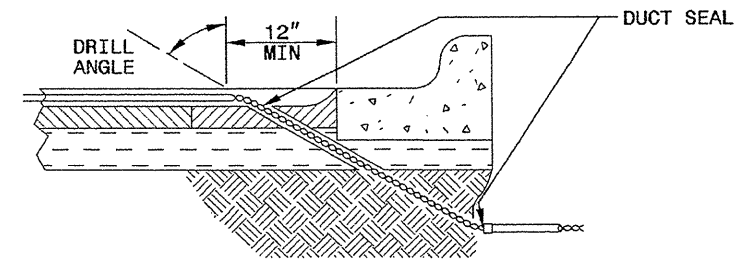


NOTE

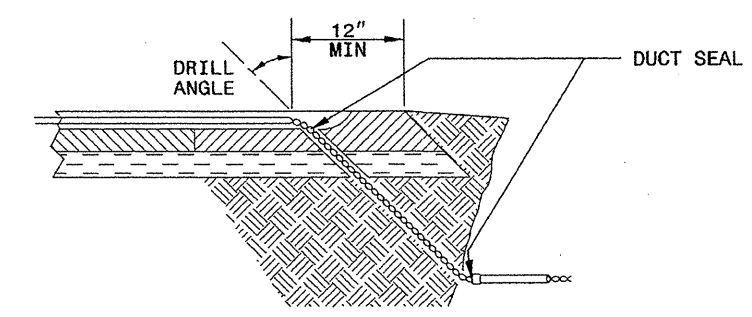
SPLICE ALL LOOP WIRE TAIL SECTIONS/LEAD-IN CABLE IN JUNCTION BOXES OR APPROVED CONDULETS.

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

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Garner, NC 27529

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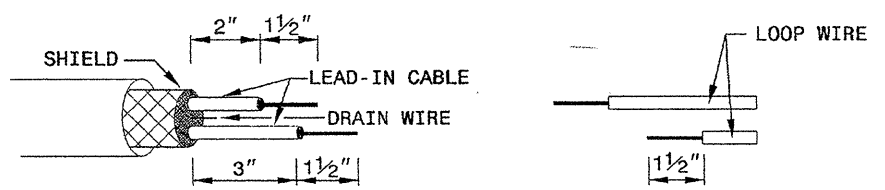
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RALEIGH, N.C.

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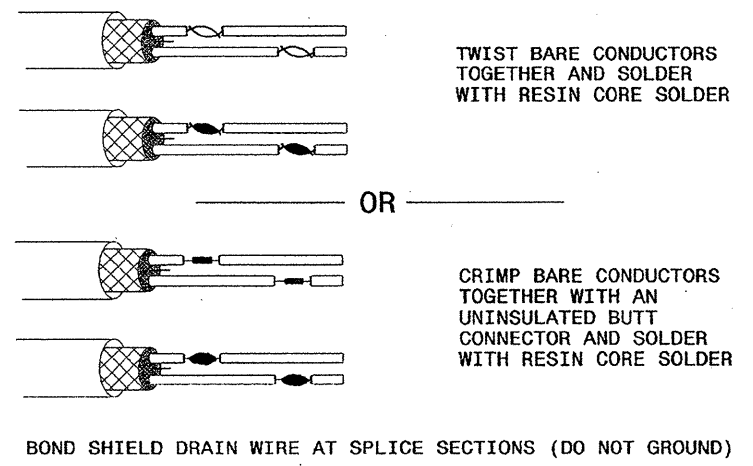
ENGLISH DETAIL DRAWING FOR
INDUCTIVE DETECTION LOOPS
SPlicing FOR LEAD-IN CABLE AND LOOP WIRE

SHEET 3 OF 3
1725D01

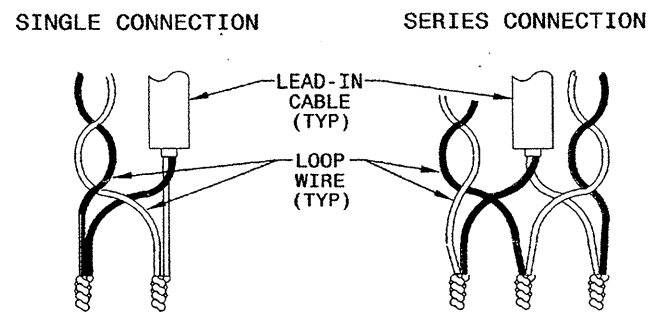
STEP 1. STRIP LOOP WIRE AND LEAD-IN CABLE



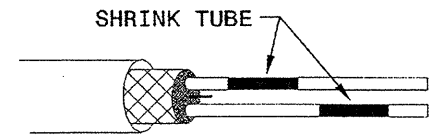
STEP 2. CONNECT AND SOLDER



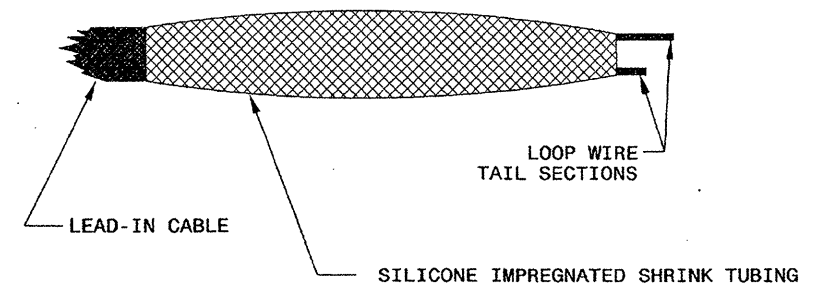
LOOP WIRE AND LEAD-IN CABLE CONNECTION DETAILS



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

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Garner, NC 27529

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