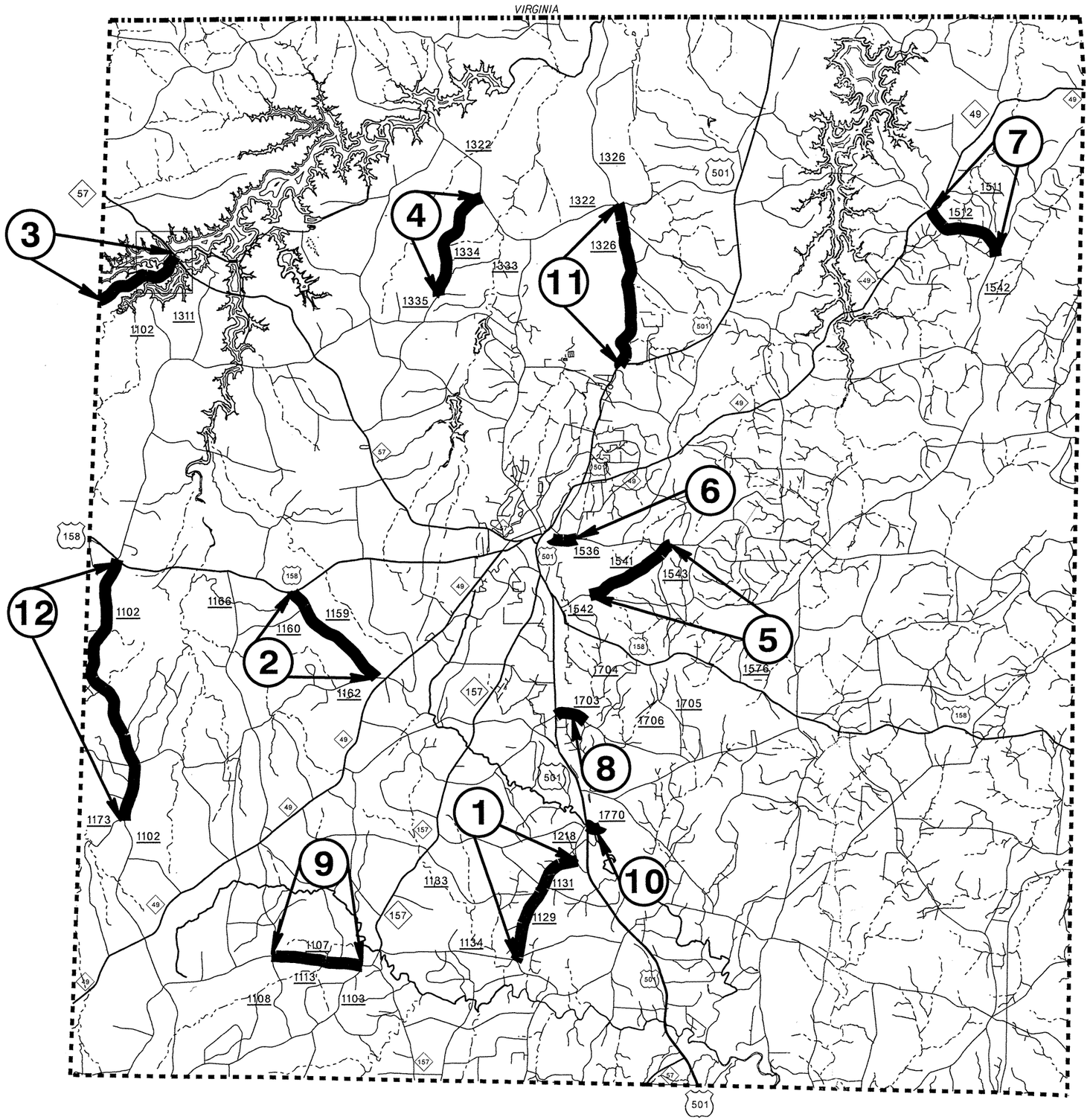
PROJECT REFERENCE NO.	SHEET NO.
5CR.20731.11	1



2012 PERSON COUNTY RESURFACING

1. SR 1129 From SR 1134 to SR 1218

2. SR 1159 From SR 1162 to US 158

3. SR 1313 From NC 57 to Caswell County Line

4. SR 1334 From SR 1335 to SR 1322

5. SR 1541 From SR 1542 to SR 1536

6. SR 1536 From Main Street to SR 1537

7. SR 1512 From NC 49 to SR 1542

8. SR 1703 From US 501 to a Pave Joint 0.6 miles East of Old Durham Road

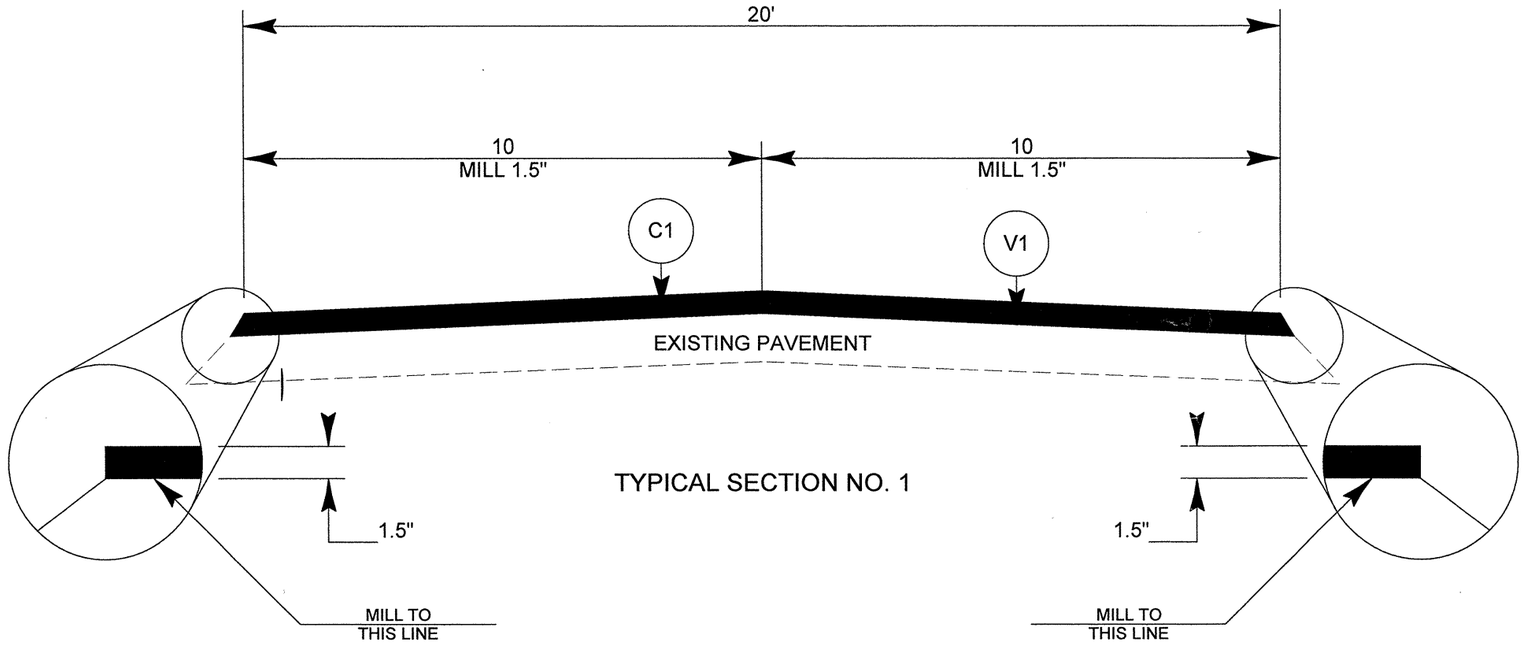
9. SR 1107 From SR 1103 to SR 1108

10. SR 1770 From US 501 to Cul–de–sac

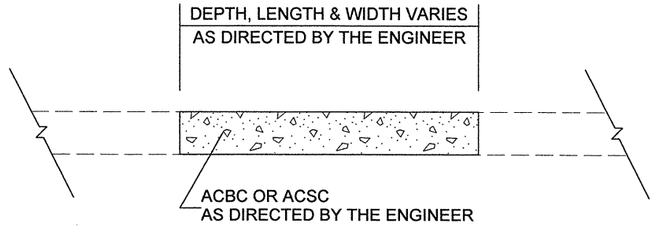
11. SR 1326 From US 501 to SR 1322

12. SR 1102 From US 158 to SR 1173

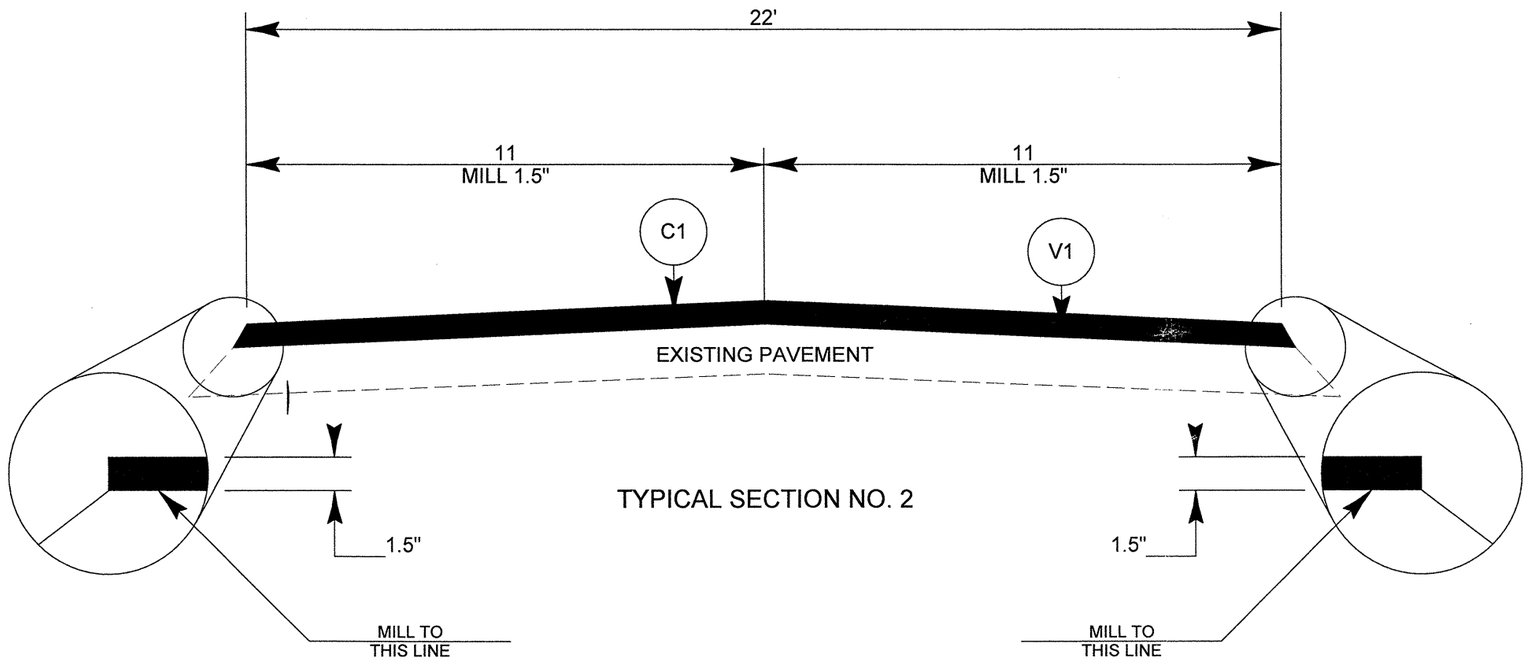
PROJECT NO.	SHEET NO.	TOTAL SHEETS
5CR.20731.11	2	



TYPICAL SECTION NO. 1



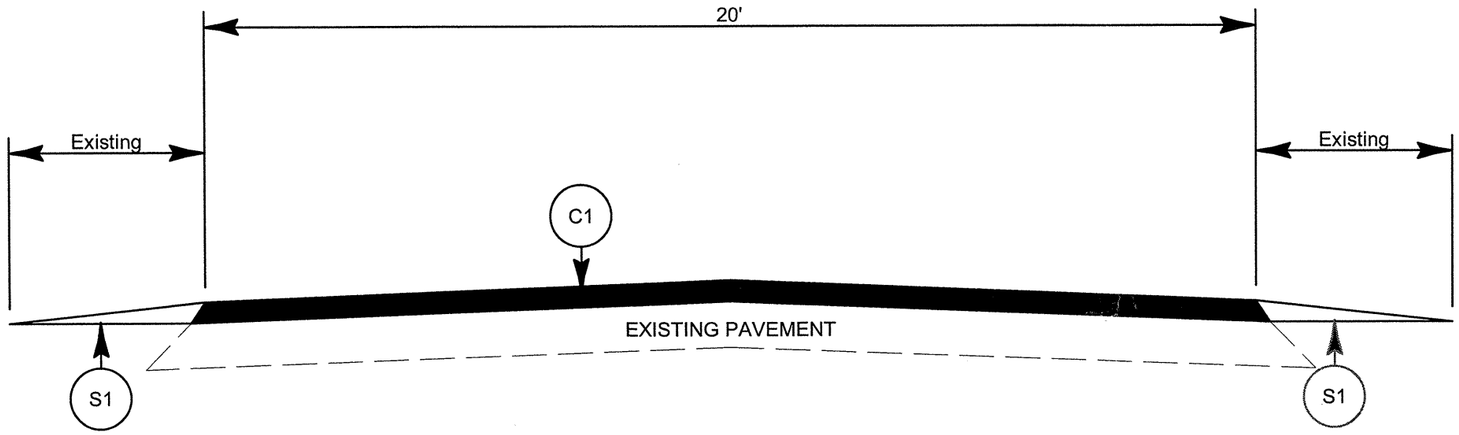
PATCHING EXISTING PAVEMENT



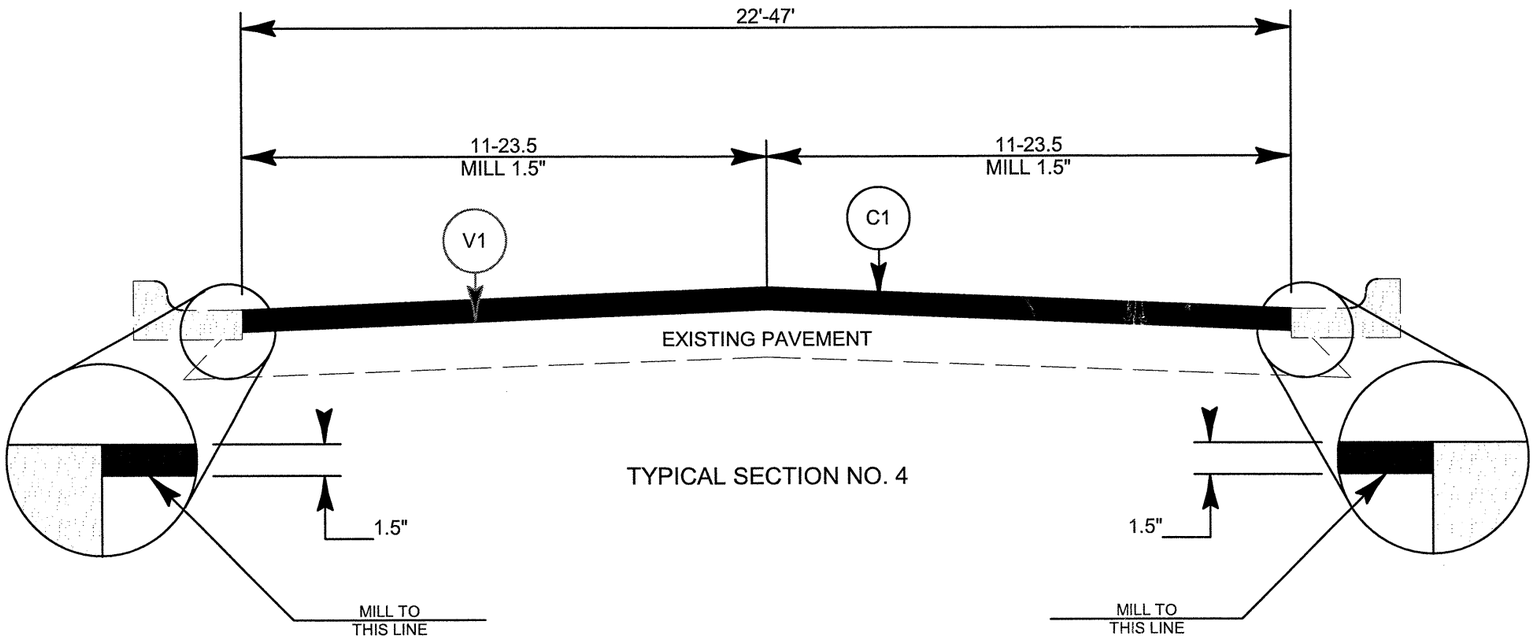
TYPICAL SECTION NO. 2

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
S1	SHOULDER RECONSTRUCTION WITH EARTH MATERIAL
S2	SHOULDER RECONSTRUCTION WITH AGGREGATE SHOULDER BORROW
V1	PROP. 1 1/2" MILLING EXISTING PAVEMENT

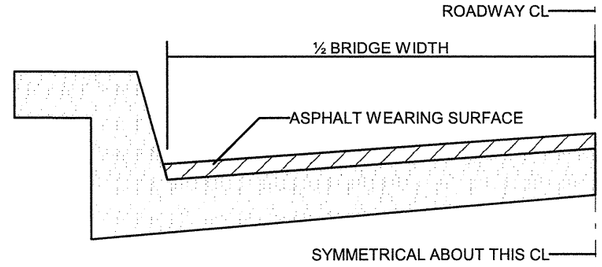
PROJECT NO.	SHEET NO.	TOTAL SHEETS
5CR.20731.11	3	



TYPICAL SECTION NO. 3



TYPICAL SECTION NO. 4



BRIDGE HALF TYPICAL SECTION

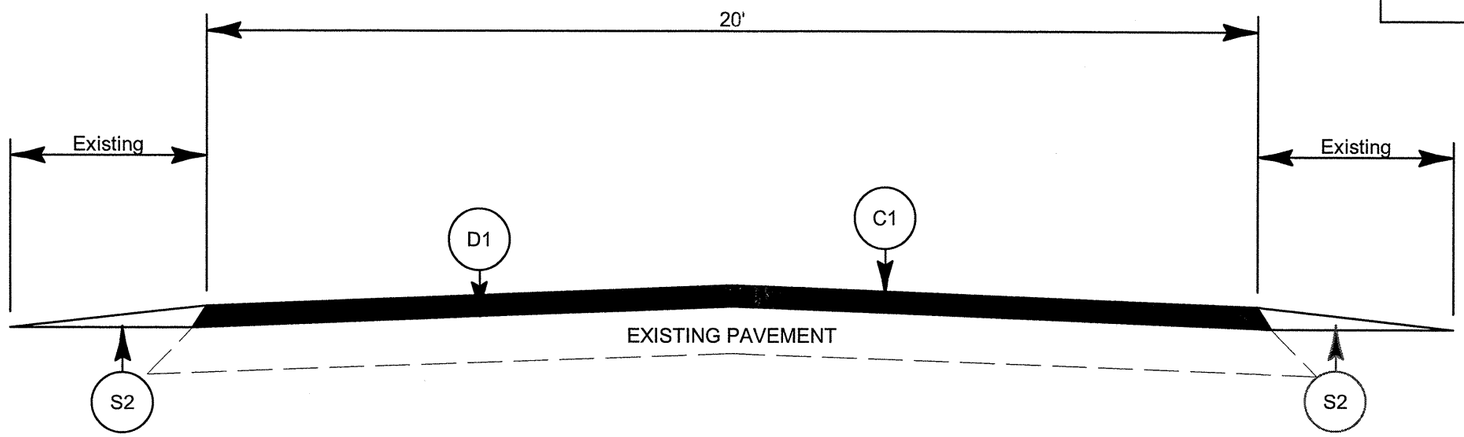
FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN

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 ½", SF9.5A 1.0", S9.5X 1.5", S12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A ¾", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C ½".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 ¾", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C ½".

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
5CR.20731.11	4	



TYPICAL SECTION NO. 5

PROJECT NO.	SHEET NO.	TOTAL NO.
5CR.20731.11	5	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	BORROW CY	INCIDENTAL STONE BASE TONS	SHOULDER RECON-STRUCTION SMI	1½" MILLING SY	INCIDENTAL MILLING SY	INTER-MEDIATE COURSE, I19.0B TONS	SURFACE COURSE, SF9.5A TON	ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT TONS	SEED & MULCHING AC
5CR.20731.11	Person	1	SR 1129 FRANK TIMBERLAKE ROAD	FROM SR 1134 SATTERFIELD ROAD TO SR 1218 ROBY BARTON ROAD	1	NO	2.48	20		30		29,099			2,416	162	10	
	Person	2	SR 1159 THEE HESTER ROAD	FROM SR 1162 HESTER STORE ROAD TO US 158	1	NO	2.4	20		40		28,160			2,338	157	20	
	Person	3	SR 1313 KELLY BREWER	FROM NC 57 TO CASWELL COUNTY LINE	2	NO	1.95	22		30		25,168			2,088	140	50	
	Person	4	SR 1334 OAK GROVE ROAD	FROM SR 1335 TO SR 1322	3	NO	2.3	20	450	60	4.60				2,240	150	300	3.30
	Person	5	SR 1541 ALLENSVILLE ROAD	FROM SR 1542 TO SR 1536	1	NO	1.8	20		40		21,120			1,753	117	30	
	Person	6	SR 1536 DEPOT STREET	FROM MAIN ST. TO RAILROAD CROSSING	4	NO	0.22	22-47				4,453			369	25	10	
		"	"	FROM RAILROAD CROSSING TO SR 1537 SLOAN ROAD	1	NO	0.2	20		10		2,347			195	13	10	
	Person	7	SR 1512 OLIVE BRANCH CRURCH ROAD	FROM NC 49 TO SR 1542	1	NO	1.8	20		35		21,120			1,753	117	10	
	Person	8	SR 1703 LUCY GARRETT ROAD	FROM US 501 TO OLD DURHAM ROAD	1	NO	0.1	20				1,173			97	7		
		"	"	FROM OLD DURHAM ROAD TO A PAVE JOINT 0.6 MI EAST	1	NO	0.6	20		10		7,040			584	39		
	Person	9	SR 1107 UNION GROVE CHURCH ROAD	FROM SR 1103 TO SR 1108	1	NO	1.8	20		50		21,120			1,753	117		
	Person	10	SR 1770 CROWN BLVD	FROM US 501 TO CUL-DE-SAC	5	NO	0.3	20	380		0.60		300	507	292	42	30	
	Person	11	SR 1326 WOODSDALE ROAD	FROM US 501 TO SR 1322	1	NO	3.4	20		70		39,893			3,312	222	50	
	Person	12	SR 1102 GORDONTON ROAD	FROM US 158 TO SR 1173	1	NO	5.6	20		55		65,707			5,455	365	20	
TOTAL FOR PROJ NO. 5CR.20731.11							**24.95**		**830**	**430**	**5.20**	**266,400**	**300**	**507**	**24,645**	**1,673**	**540**	**3.30**
GRAND TOTAL							**24.95**		**830**	**430**	**5.20**	**266,400**	**300**	**507**	**24,645**	**1,673**	**540**	**3.30**

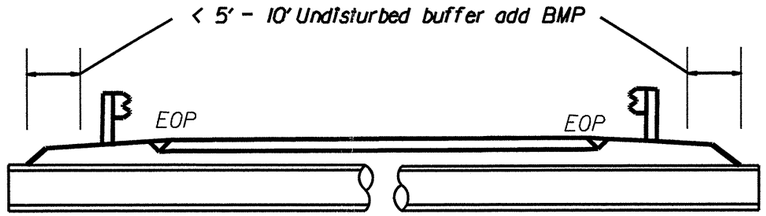
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	LENGTH	WIDTH	4685000000-E 4" X 90 M WHITE THERMO LF	4686000000-E 4" X 120 M YELLOW THERMO LF	4705000000-E 16" X 120 M WHITE THERMO LF	4710000000-E 24" X 120 M WHITE THERMO LF	4721000000-E THERMO RXR 120 M EA	4810000000-E 4" YELLOW PAINT LF	4900000000-N YELLOW & YELLOW MARKERS EA
5CR.20731.11	Person	1	SR 1129 FRANK TIMBERLAKE ROAD	FROM SR 1134 SATTERFIELD ROAD TO SR 1218 ROBY BARTON ROAD	2.48	20	26,685	16,368					164
	Person	2	SR 1159 THEE HESTER ROAD	FROM SR 1162 HESTER STORE ROAD TO US 158	2.4	20	25,824	15,840					158
	Person	3	SR 1313 KELLY BREWER	FROM NC 57 TO CASWELL COUNTY LINE	1.95	22	20,982	12,870					129
	Person	4	SR 1334 OAK GROVE ROAD	FROM SR 1335 TO SR 1322	2.3	20	24,748	15,180					152
	Person	5	SR 1541 ALLENSVILLE ROAD	FROM SR 1542 TO SR 1536	1.8	20	19,368	11,880					119
	Person	6	SR 1536 DEPOT STREET	FROM MAIN ST. TO RAILROAD CROSSING	0.22	34.5	260	1,452	50	25	2		
		"	"	FROM RAILROAD CROSSING TO SR 1537 SLOAN ROAD	0.2	20	2,152	1,320	50	25	2		
	Person	7	SR 1512 OLIVE BRANCH CRURCH ROAD	FROM NC 49 TO SR 1542	1.8	20	19,368	11,880					119
	Person	8	SR 1703 LUCY GARRETT ROAD	FROM US 501 TO OLD DURHAM ROAD	0.1	20	1,076	660					
		"	"	FROM OLD DURHAM ROAD TO A PAVE JOINT 0.6 MI EAST	0.6	20	6,456	3,960					
	Person	9	SR 1107 UNION GROVE CHURCH ROAD	FROM SR 1103 TO SR 1108	1.8	20	19,368	11,880					119
	Person	10	SR 1770 CROWN BLVD	FROM US 501 TO CUL-DE-SAC	0.3	20	3,228	1,980		25		1980	
	Person	11	SR 1326 WOODSDALE ROAD	FROM US 501 TO SR 1322	3.4	20	36,584	22,440					224
	Person	12	SR 1102 GORDONTON ROAD	FROM US 158 TO SR 1173	5.6	20	60,256	36,960					370
TOTAL FOR PROJ NO. 5CR.20731.11					**24.95**		**266,355**	**164,670**	**100**	**75**	**4**	**1,980**	**1,554**
GRAND TOTAL					**24.95**		**266,355**	**164,670**	**100**	**75**	**4**	**1,980**	**1,554**

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

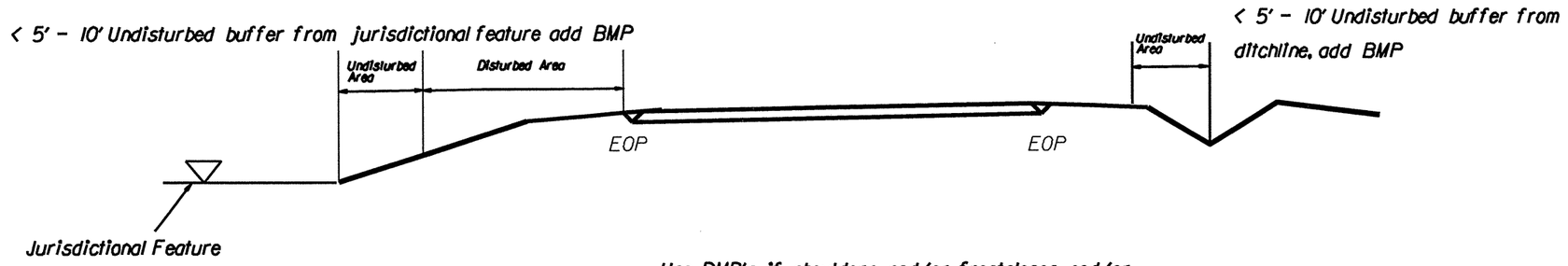
BMP Options: Wattle, Silt Fence, or Hardened Aggregate.

EROSION CONTROL DETAIL

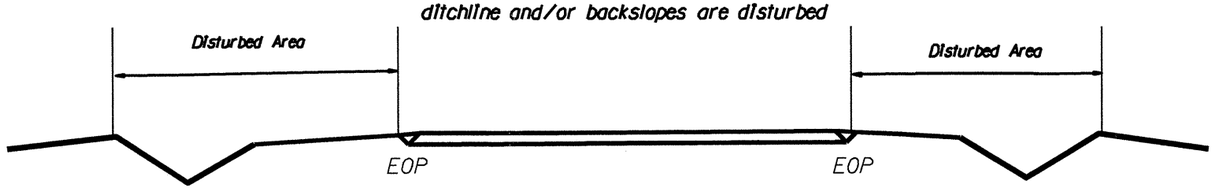


Pipe/Culvert

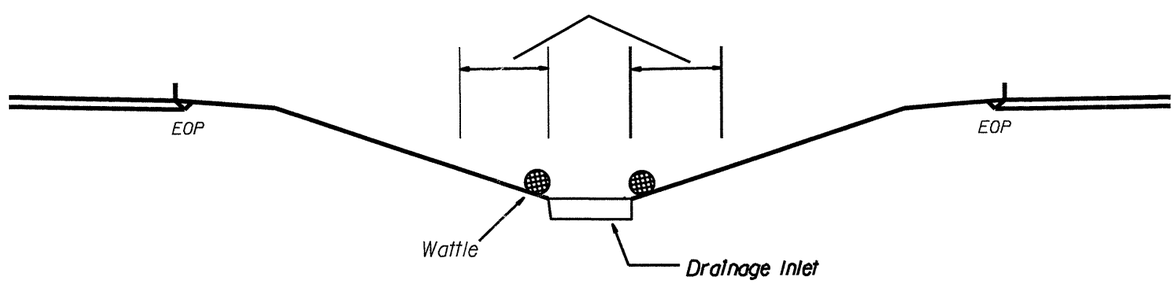
SCR. 20731.11
Sht. 6



Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed

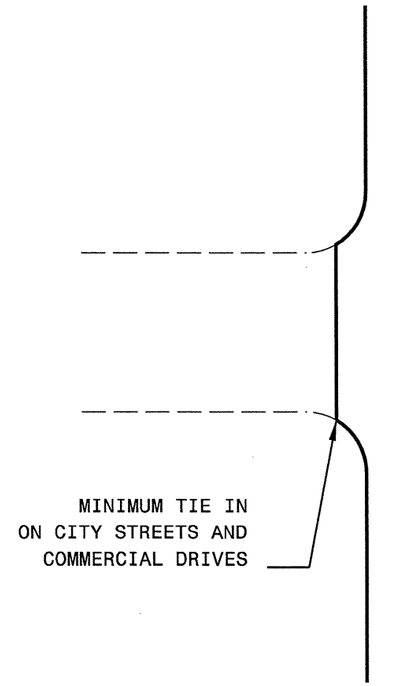


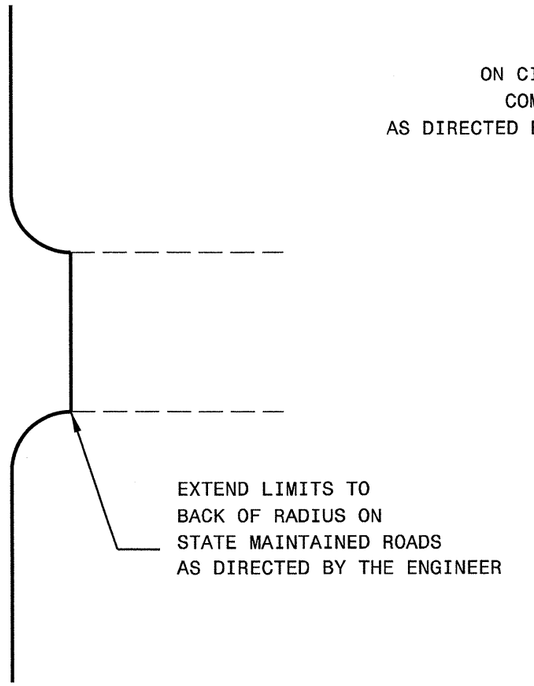
< 5' - 10' Undisturbed buffer from inlet, add wattle



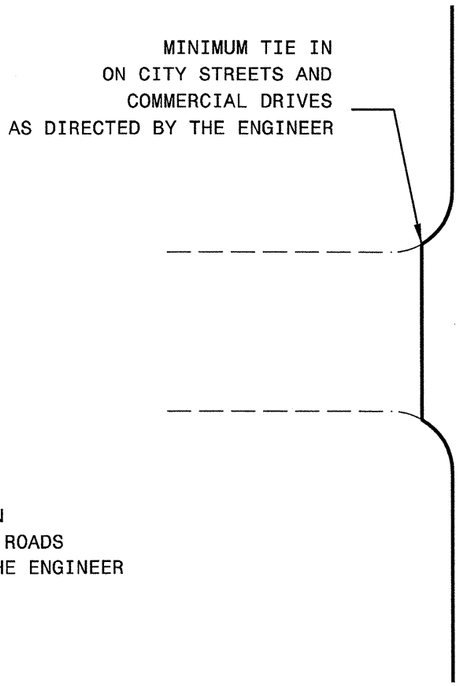
NOT TO SCALE

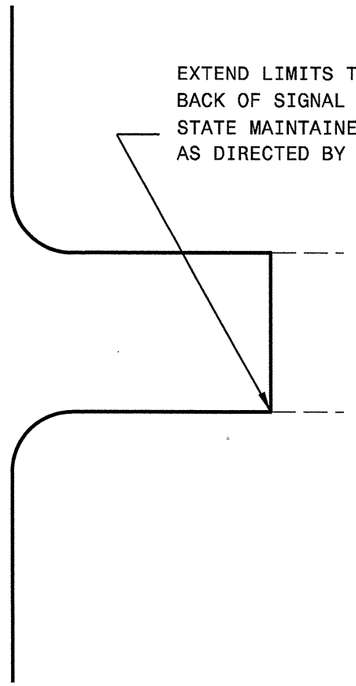
PROJECT REFERENCE NO.	SHEET NO.
SCR.20731.11	7





DETAIL OF PROJECT LIMITS AT
UNSIGNALIZED Y LINES

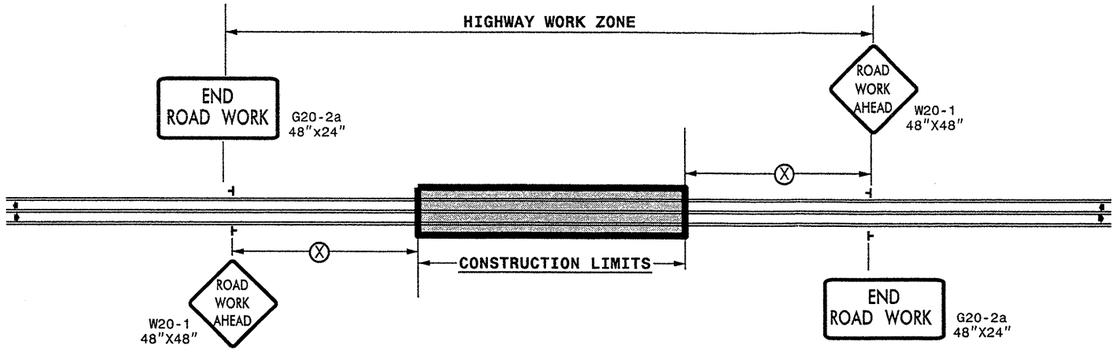




DETAIL OF PROJECT LIMITS AT
SIGNALIZED Y LINES

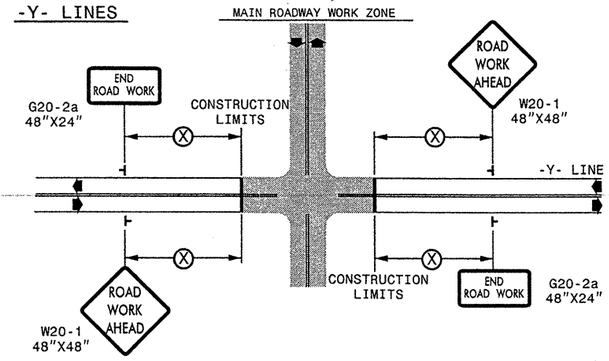
PROJ. REFERENCE NO.	SHEET NO.
5CR.20731.11	TCP-1

TWO-WAY UNDIVIDED ** (L-LINES)



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

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

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

DETAIL DRAWING FOR TWO-WAY UNDIVIDED WORK ZONE WARNING SIGNS

SHEET 1 OF 1

APPROVED:_____ DATE:_____

SEAL

DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS

SCALE: NONE	REVISIONS	
DATE:	7-98	10/01
DWG. BY:	10-98	03/04
DESIGN BY:	01/01	11/04
REVIEWED BY:	CADD FILE	

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 ACCOMODATE 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.

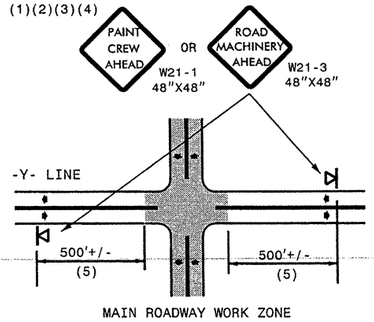
(12) ALL TRAFFIC CONTROL DEVICES WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEMS FOR PAVEMENT MARKING AND MARKERS.

(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.

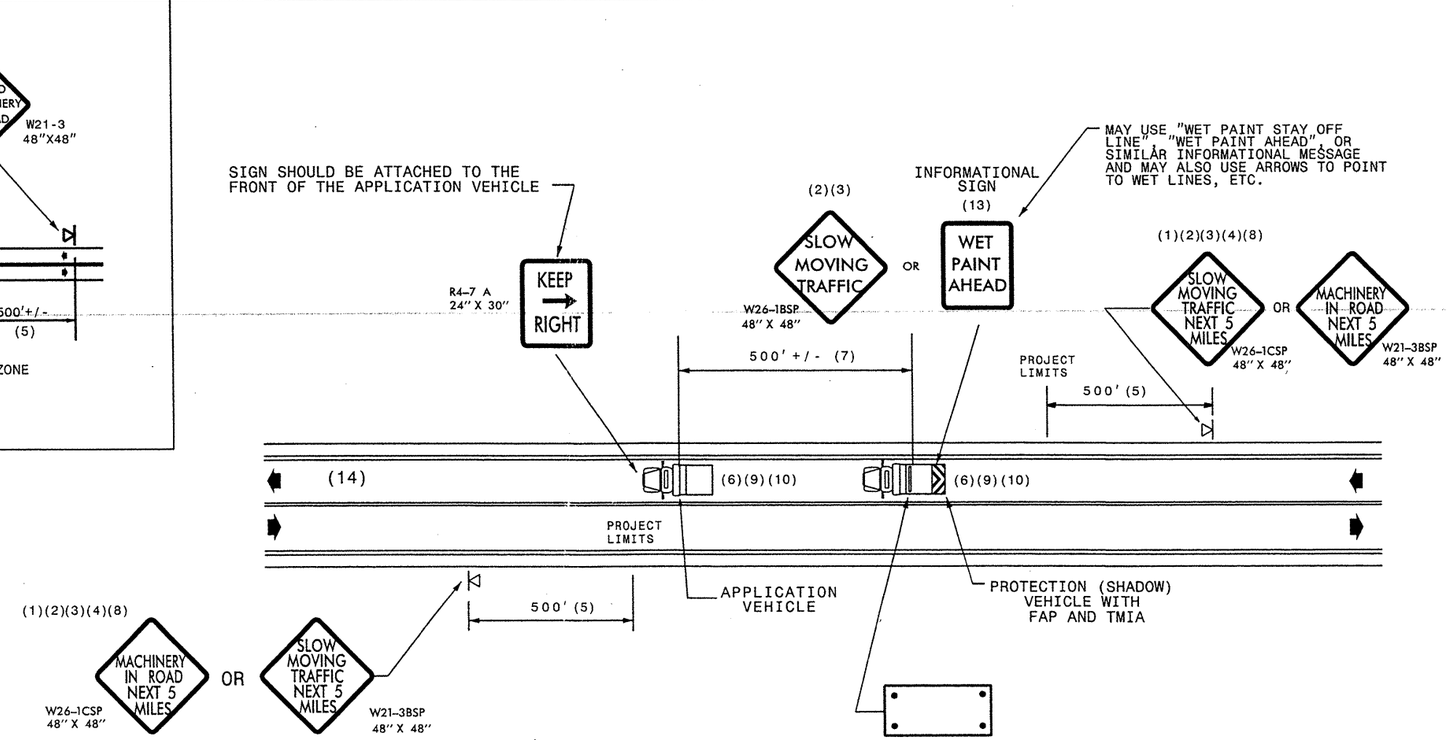
(14) IF A LEAD VEHICLE IS ADDED TO OPERATION, IT SHOULD HAVE THE SAME ADVANCE WARNING SIGNS AS THE APPLICATION VEHICLE SHOWN BELOW.

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"



-Y- LINES



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