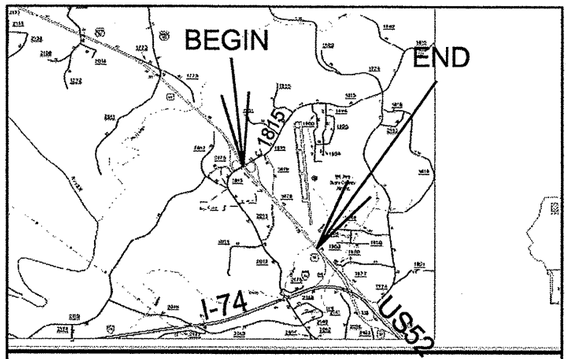
PROJECT REFERENCE NO.	SHEET NO.
TICR.10861.21	1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

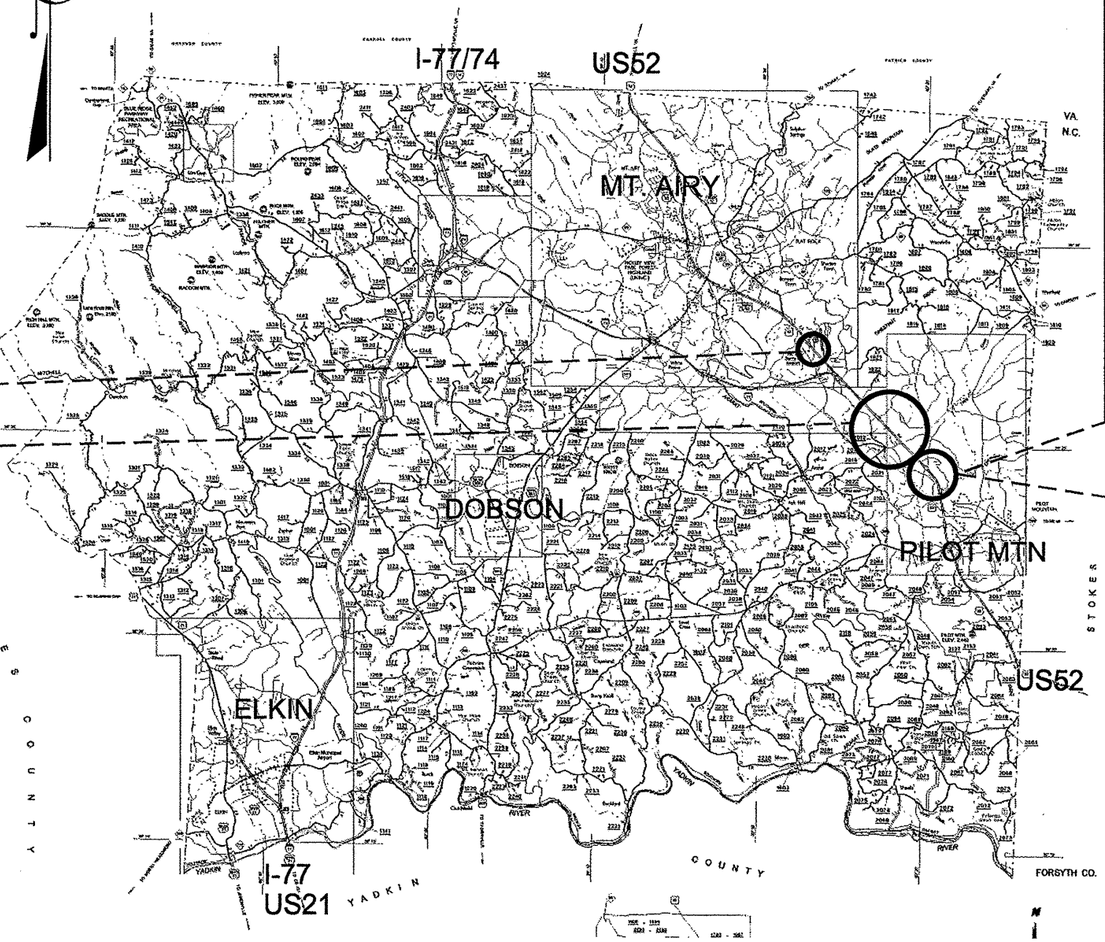
SURRY COUNTY

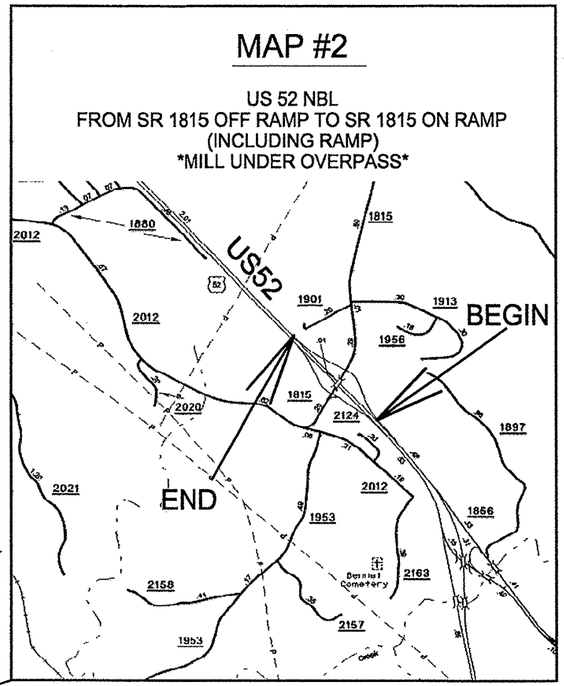
PRIMARY ASPHALT RESURFACING



MAP #4

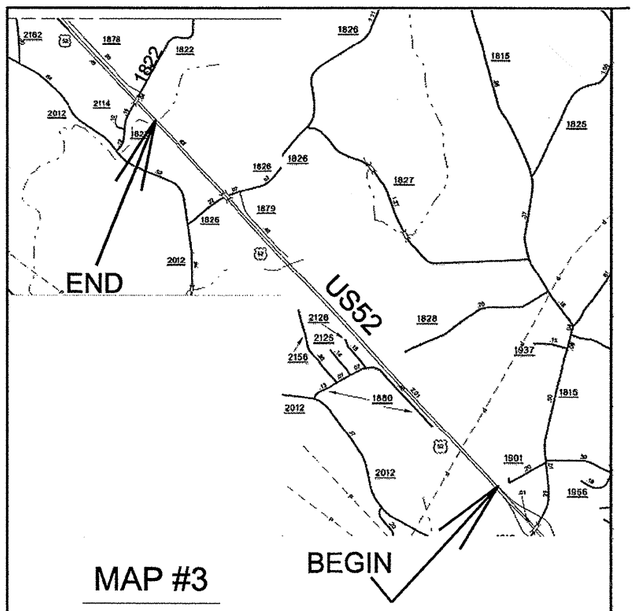
US 52 SBL
FROM SR 1815 TO BEGIN TAPER AT RAMP





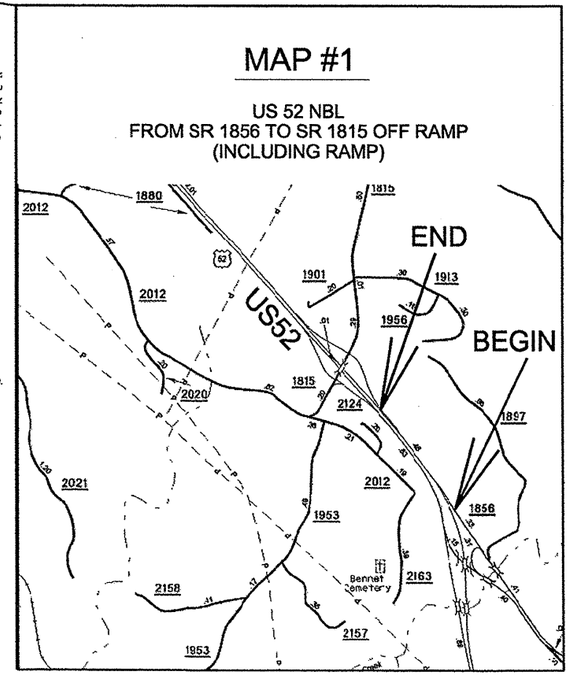
MAP #2

US 52 NBL
FROM SR 1815 OFF RAMP TO SR 1815 ON RAMP
(INCLUDING RAMP)
MILL UNDER OVERPASS



MAP #3

US 52 NBL
FROM SR 1815 ON RAMP TO 425' SOUTH OF SR 1822
MILL BRIDGE APPROACHES AT SR 1826



MAP #1

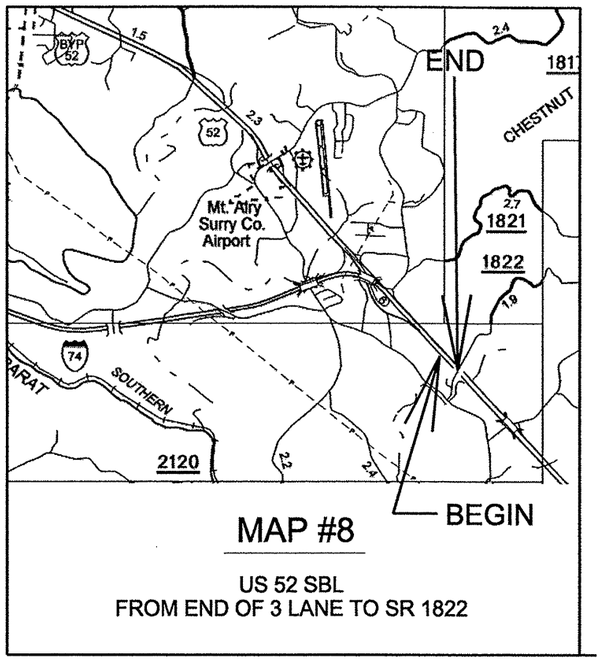
US 52 NBL
FROM SR 1856 TO SR 1815 OFF RAMP
(INCLUDING RAMP)

PROJECT REFERENCE NO.	SHEET NO.
IICRJ0861.21	2

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

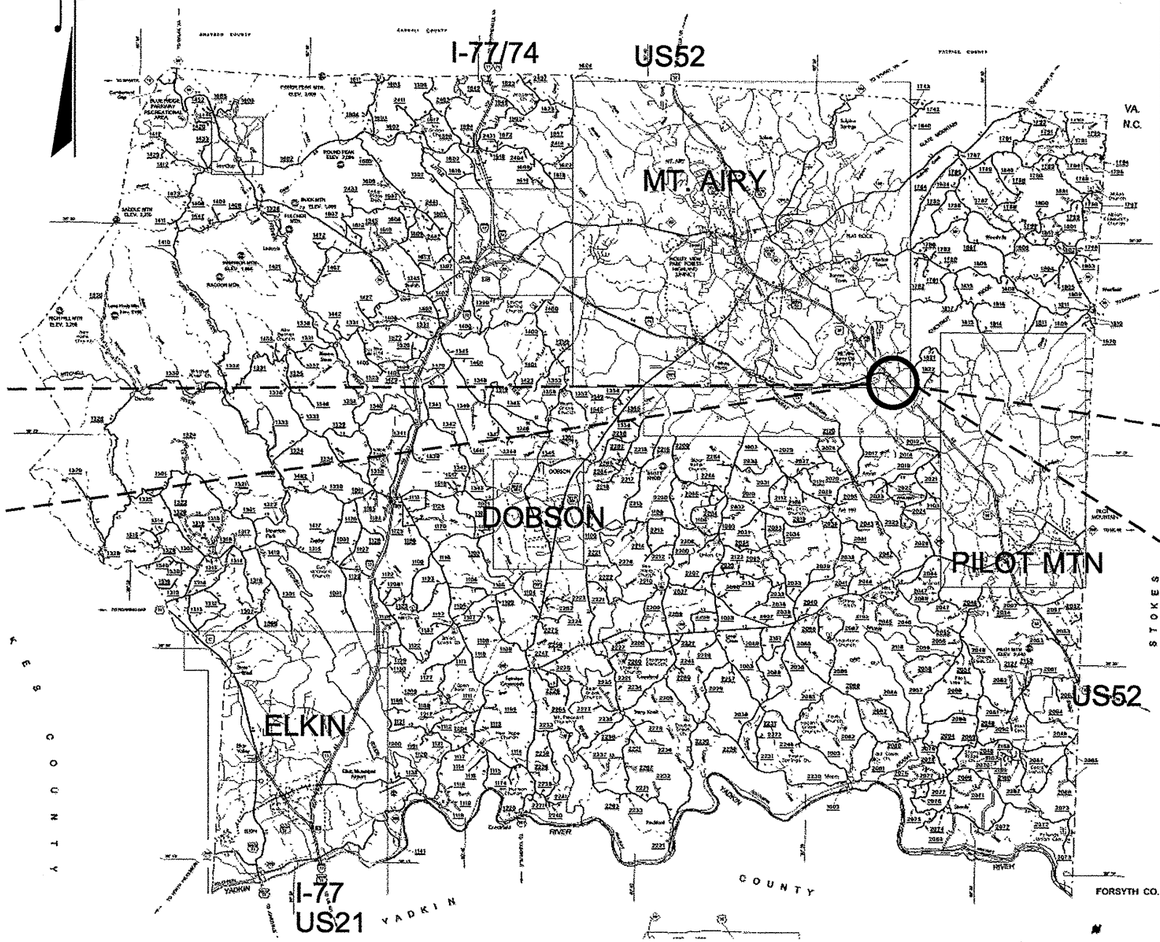
SURRY COUNTY

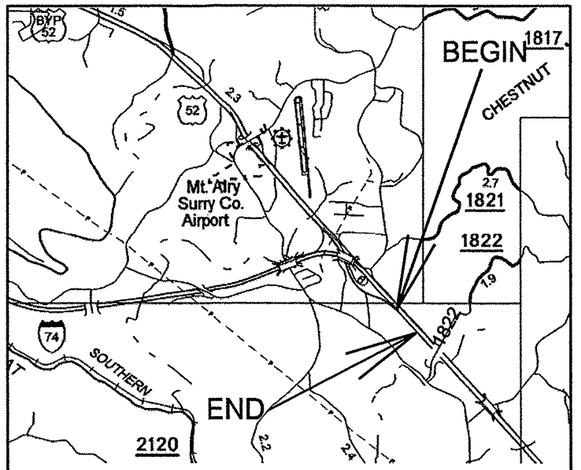
PRIMARY ASPHALT RESURFACING



MAP #8

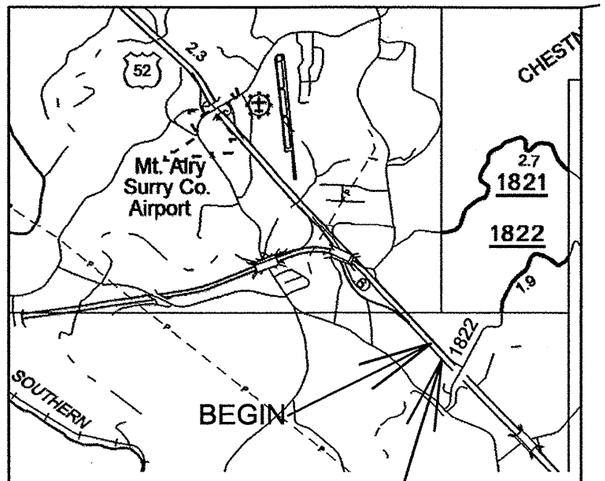
US 52 SBL
FROM END OF 3 LANE TO SR 1822





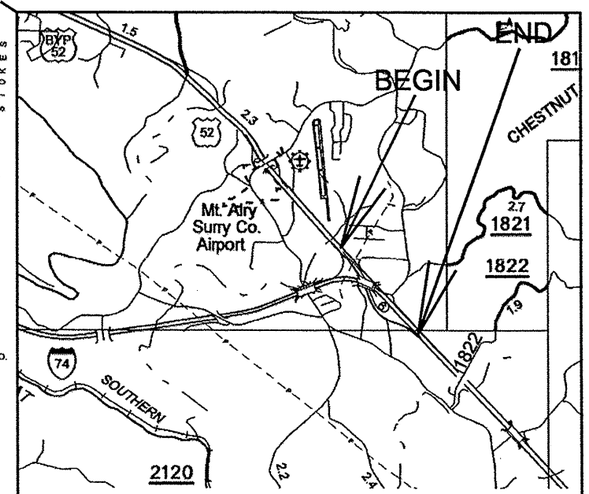
MAP #6

US 52 SBL
FROM BEGIN GORE AREA TO END OF 4 LANE



MAP #7

US 52 SBL
FROM END OF 4 LANE TO END OF 3 LANE



MAP #5

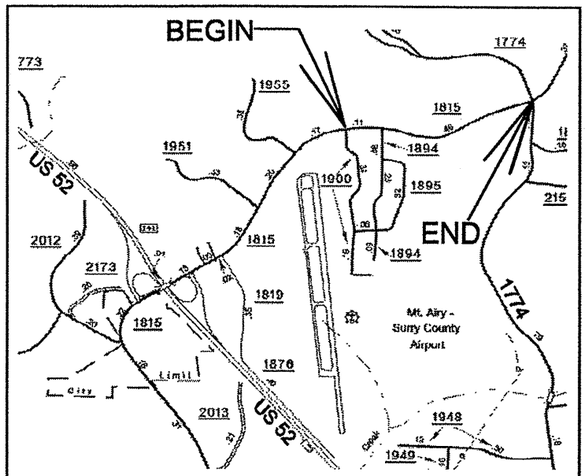
US 52 SBL
FROM BEGIN TAPER AT RAMP TO BEGIN GORE AREA
MILL UNDER I-74 OVERPASS

PROJECT REFERENCE NO.	SHEET NO.
IICR.20861.21	3

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

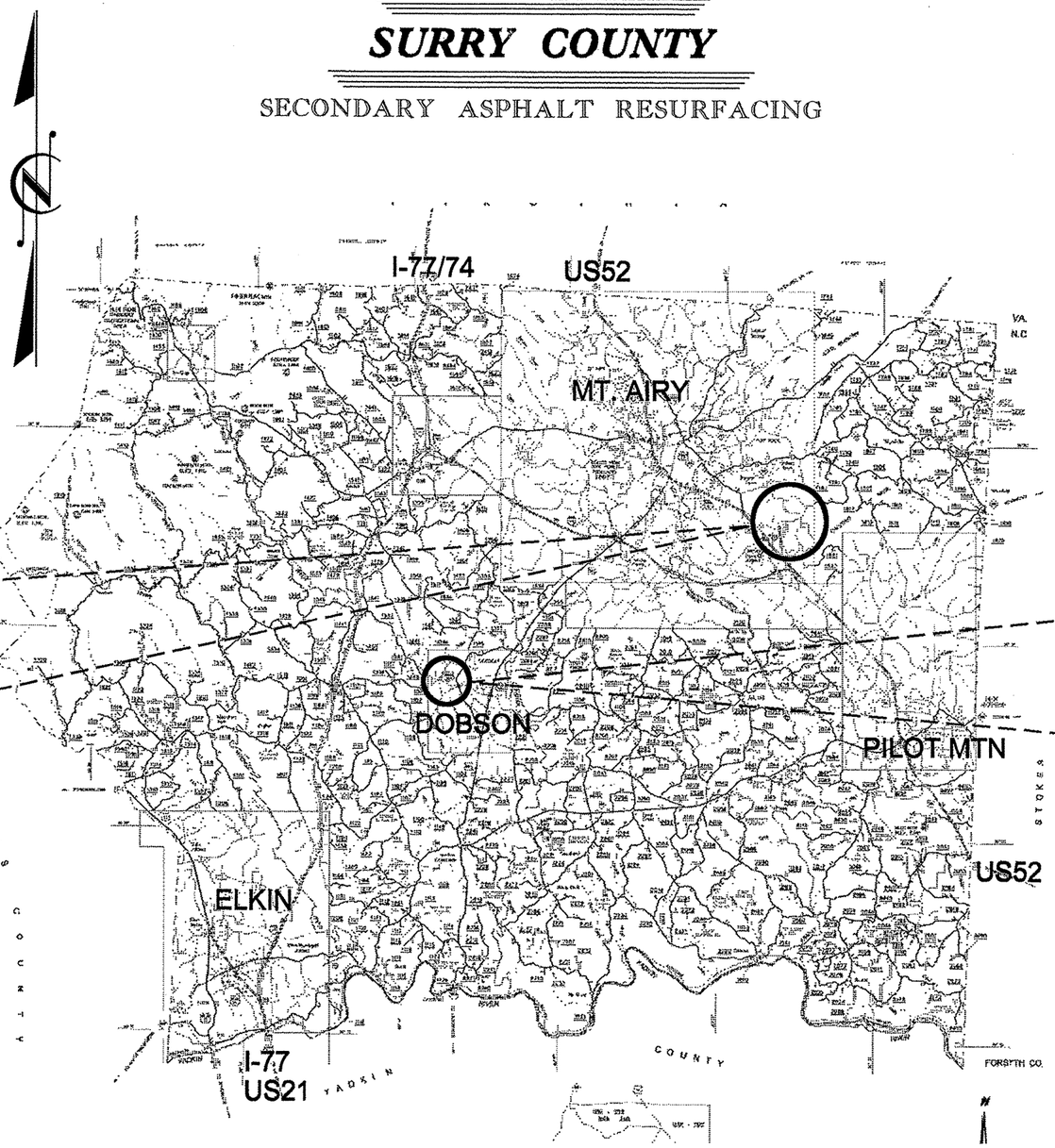
SURRY COUNTY

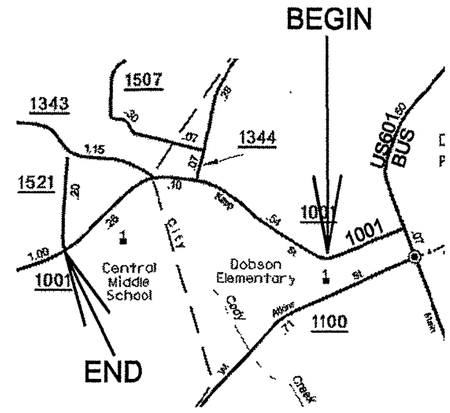
SECONDARY ASPHALT RESURFACING



MAP #12

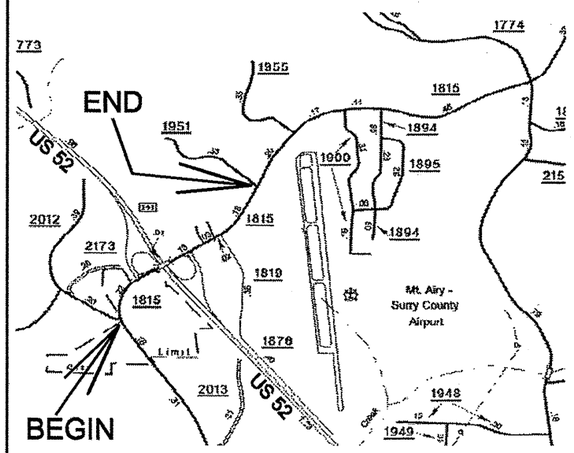
SR 1815
FROM SR 1900 TO SR 1774
SKIP R-5309 PROJECT LIMITS





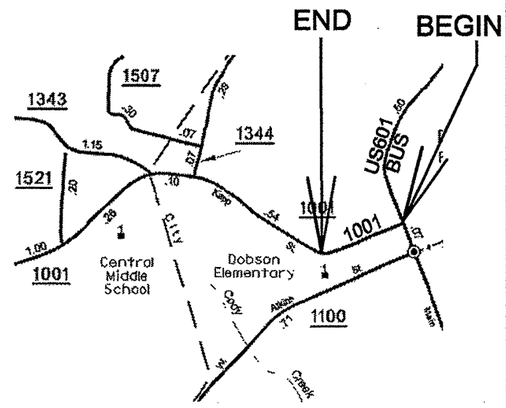
MAP #10

SR 1001
FROM DOBSON ELEM SCHOOL TO SR 1521
MILL 4"



MAP #11

SR 1815
FROM SR 2012 TO COTTAGE DRIVE
MILL BETWEEN US 52 RAMPS



MAP #9

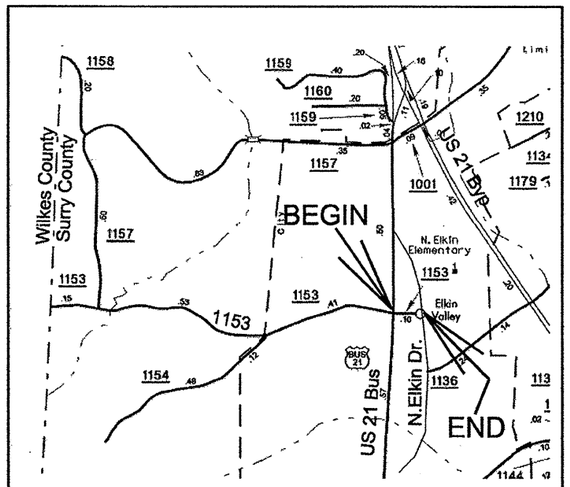
SR 1001
FROM US 601 TO DOBSON ELEM SCHOOL
MILL 4"

PROJECT REFERENCE NO.	SHEET NO.
IICR.2086121	4

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

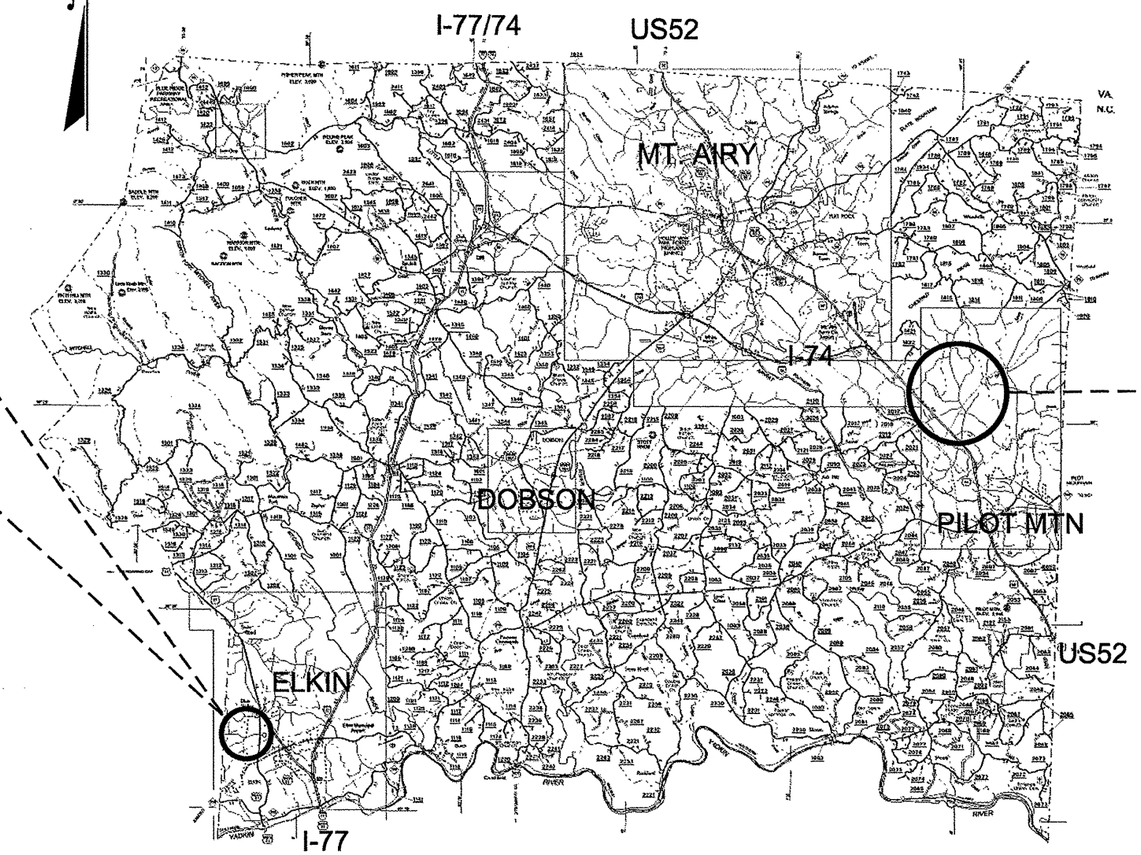
SURRY COUNTY

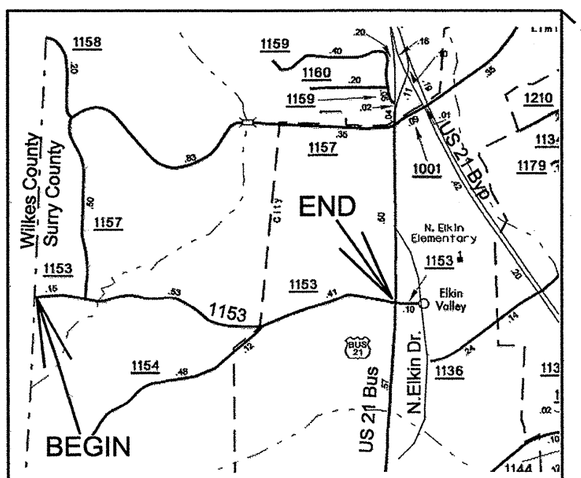
SECONDARY ASPHALT RESURFACING



MAP #15

SR 1153
FROM US 21 BUS TO N. ELKIN DRIVE



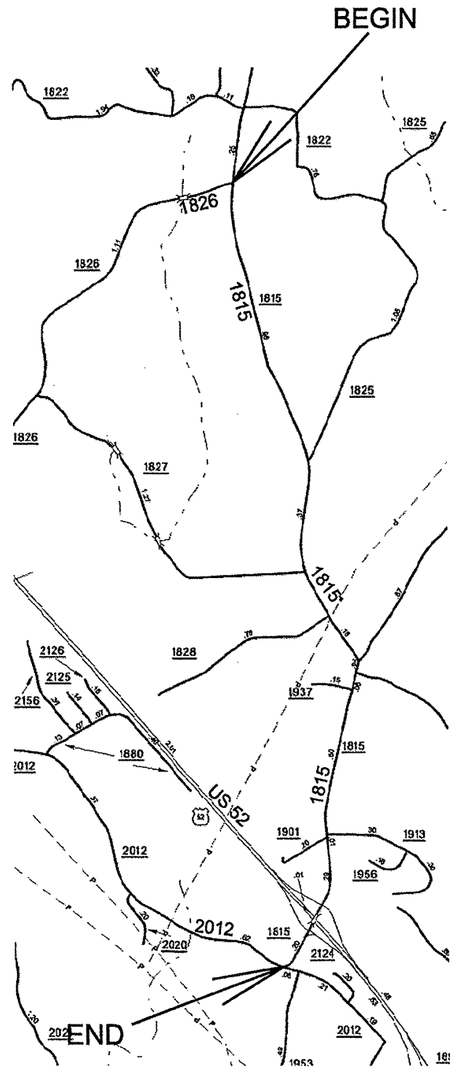


MAP #14

SR 1153
FROM WILKES CO LINE TO US 21 BUS

MAP #13

SR 1815
FROM SR 1826 TO SR 2012
MILL FROM SR 2012 TO US 52 NB RAMP

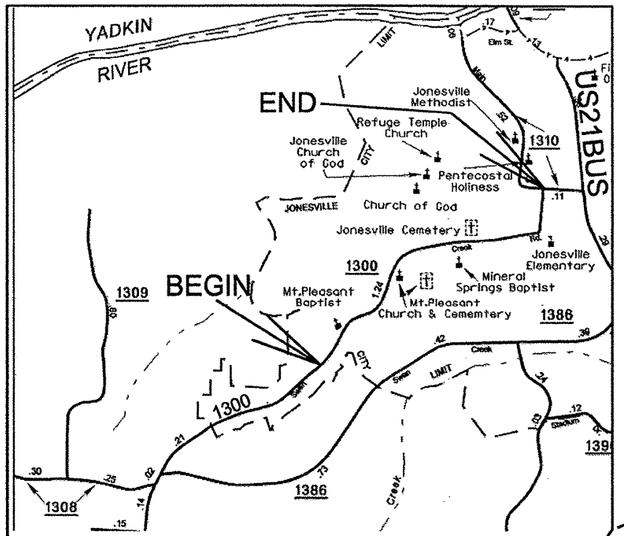


PROJECT REFERENCE NO.	SHEET NO.
IICRJ0991121 & IICR2099121	5

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

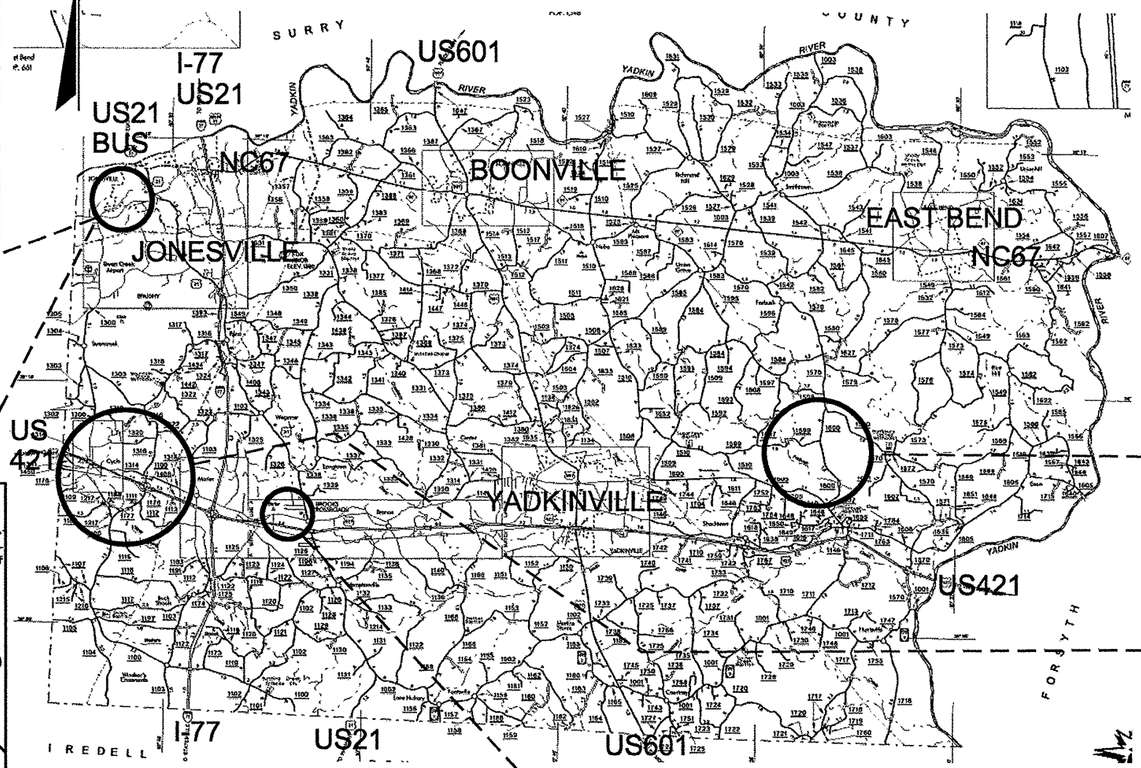
YADKIN COUNTY

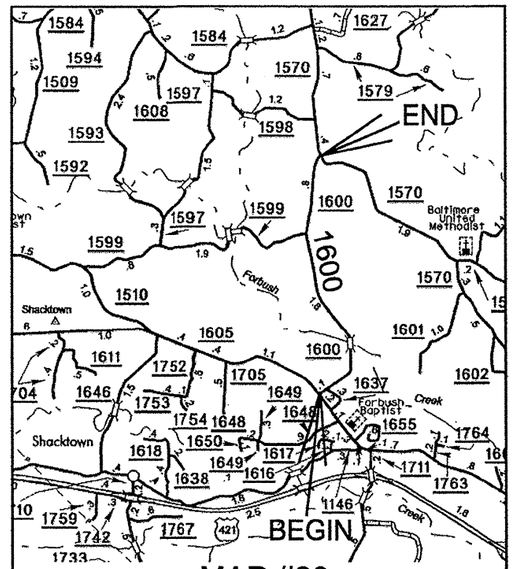
PRIMARY & SECONDARY ASPHALT RESURFACING



MAP #19

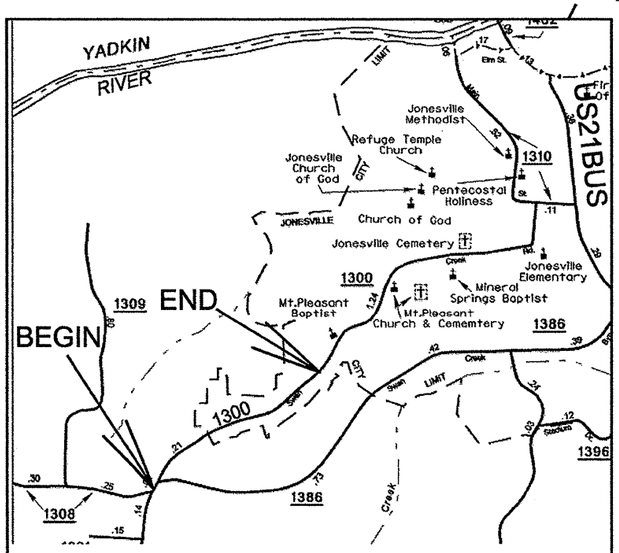
SR 1300
FROM PAVEMENT CHANGE TO SR 1310





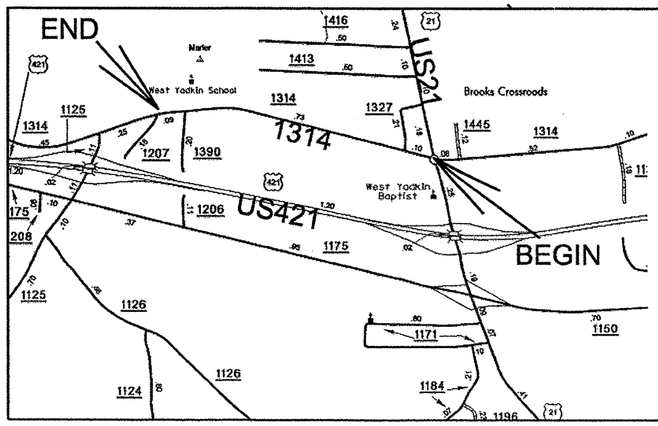
MAP #20

SR 1300
FROM SR 1605 TO SR 1570
GAP TURN LANE AT FORBUSH SCHOOL



MAP #18

SR 1300
FROM SR 1308 TO PAVEMENT CHANGE

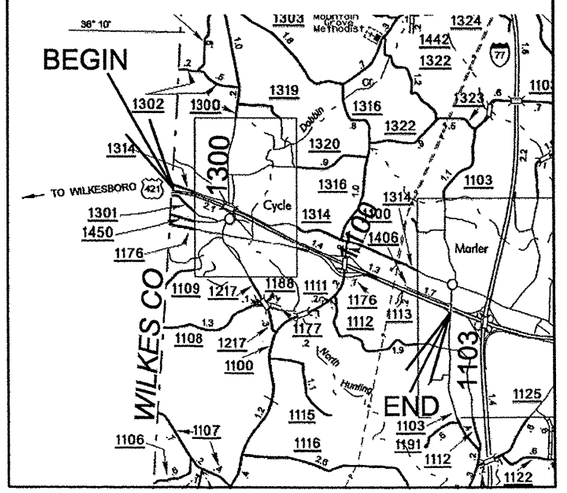


MAP #17

SR 1314
FROM US 21 TO SR 1207

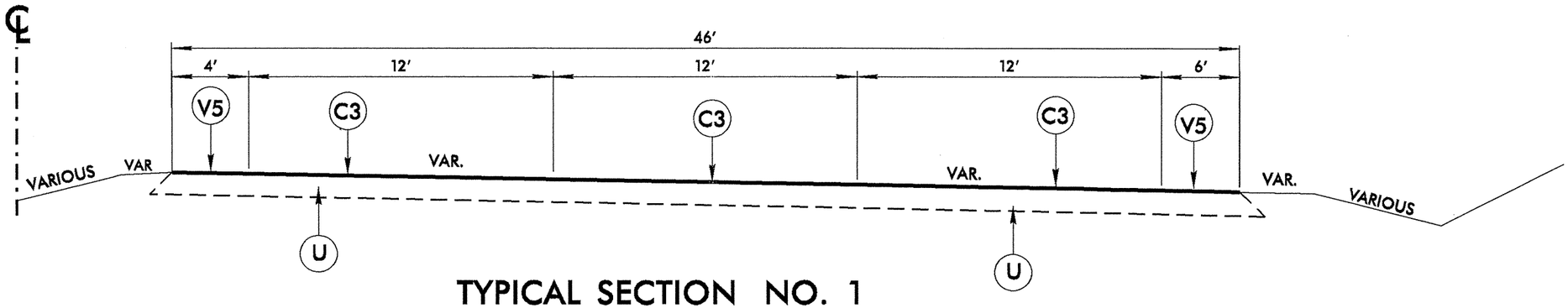
MAP #16

US 421 SBL
FROM WILKES CO LINE TO 150' WEST OF SR 1103
(INCLUDE RAMPS AT SR 1100)
MILL O/S LANE FROM SR 1103 TO 2.2 MILES



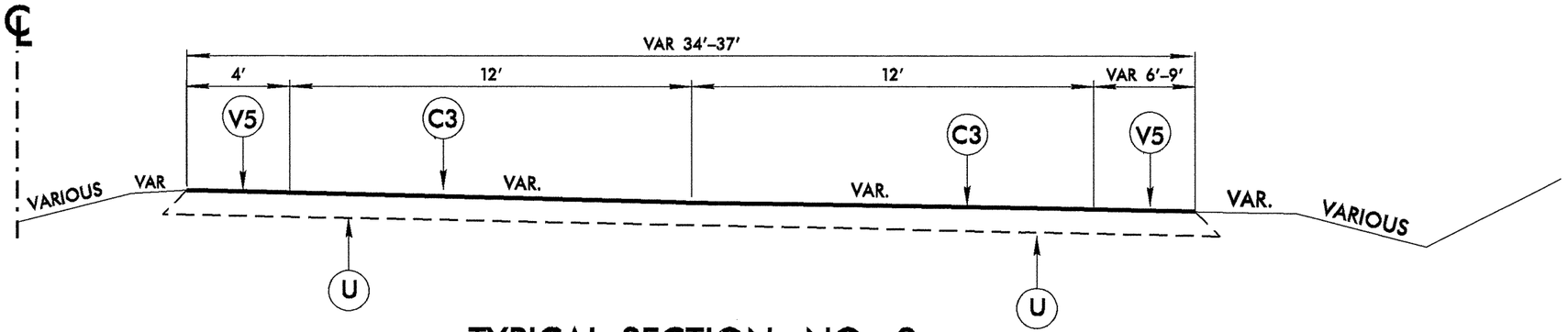
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
IICRJ0861.21, IICRJ0991.21, IICR.20861.21, ETC.	6



TYPICAL SECTION NO. 1

MAP 1 – US 52 NBL FROM SR 1856 TO SR 1815 OFF RAMP



TYPICAL SECTION NO. 2

MAP 2 – US 52 NBL FROM SR 1815 OFF RAMP TO SR 1815 ON RAMP

PAVEMENT SCHEDULE			
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 3"
C3	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V3	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 4"
D1	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V4	INCIDENTAL MILLING
T	SHOULDER RECONSTRUCTION	V5	MILLED RUMBLE STRIPS (ASPHALT CEMENT)
U	EXISTING PAVEMENT		

SURRY & YADKIN COUNTIES
PRIMARY AND SECONDARY RESURFACING

DIVISION II

REVISIONS	INIT.	DATE

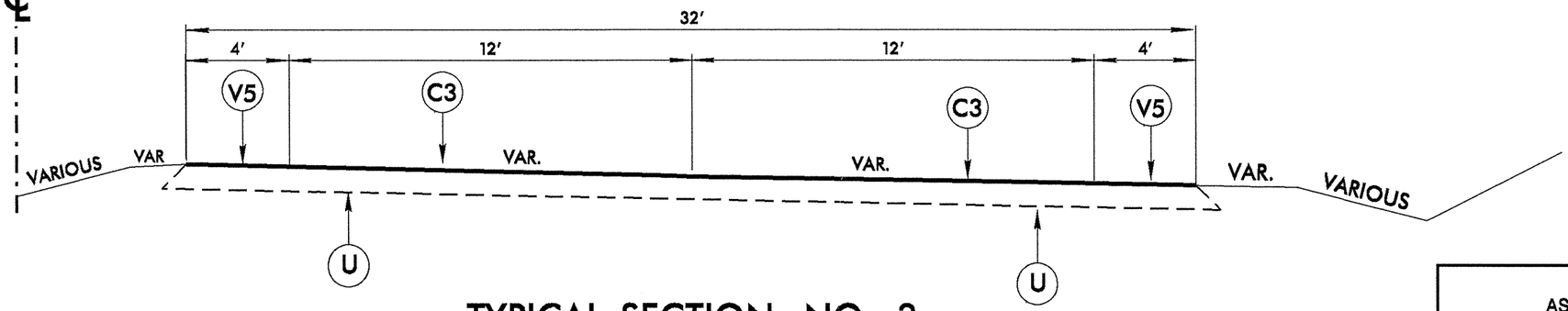
N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

SCALE: N/A	DATE: 5/2013
PREPARED BY:	S.B. DARNELL
REVIEWED BY:	J.D. WOOD
REVIEWED BY:	J.L. LAWS

8/17/99

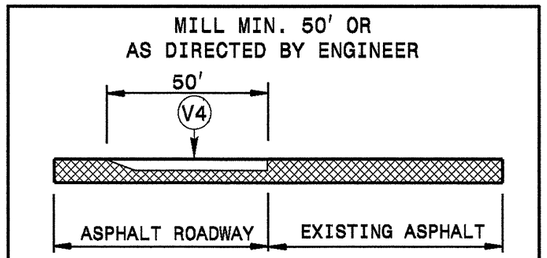
PROJECT REFERENCE NO.	SHEET NO.
IICRJ0861.21, IICRJ0991.21, IICR.2086I.21, ETC.	7



TYPICAL SECTION NO. 3

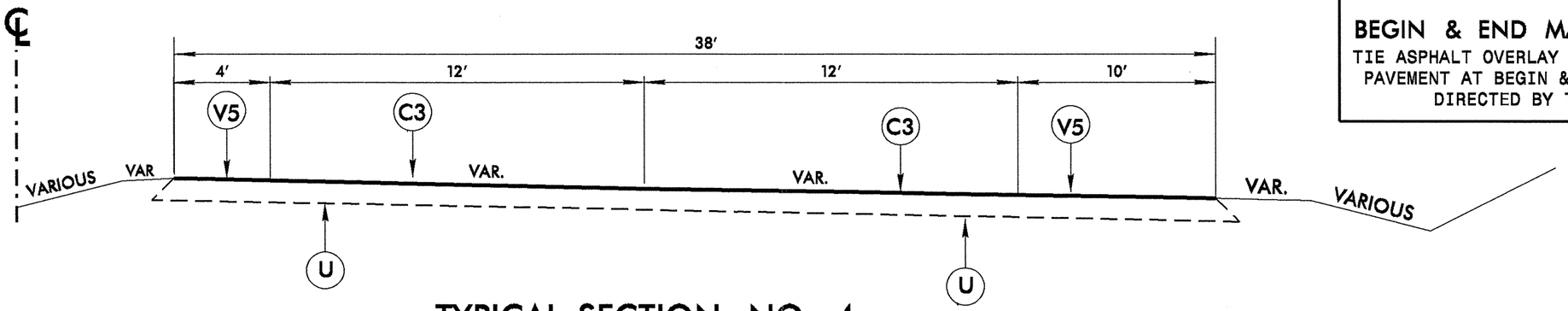
MAP 3 – US 52 NBL FROM SR 1815 ON RAMP TO 425' SOUTH OF SR 1822

MAP 4 – US 52 SBL FROM SR 1815 TO BEGIN TAPER AT RAMP



BEGIN & END MAP TIE IN DETAIL

TIE ASPHALT OVERLAY TO EXISTING ASPHALT PAVEMENT AT BEGIN & END OF MAPS OR AS DIRECTED BY THE ENGINEER



TYPICAL SECTION NO. 4

MAP 5 – US 52 SBL FROM BEGIN TAPER TO BEGIN GORE AREA

PAVEMENT SCHEDULE			
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 3"
C3	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V3	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 4"
D1	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V4	INCIDENTAL MILLING
T	SHOULDER RECONSTRUCTION	V5	MILLED RUMBLE STRIPS (ASPHALT CEMENT)
U	EXISTING PAVEMENT		

SURRY & YADKIN COUNTIES
PRIMARY AND SECONDARY RESURFACING

DIVISION II

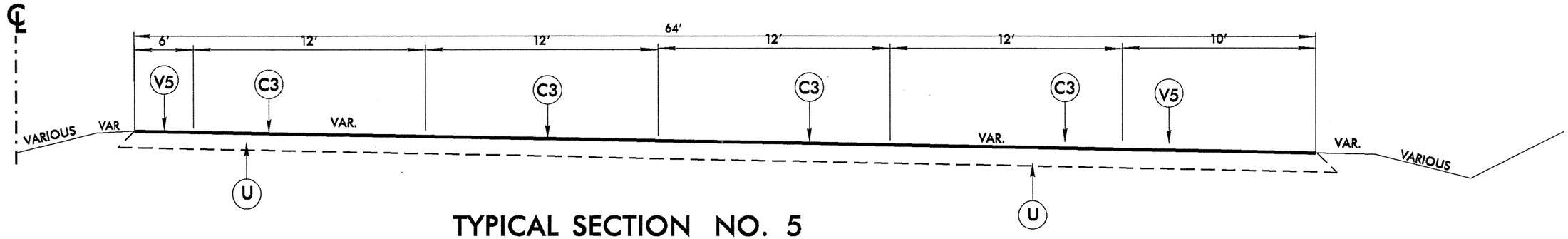
REVISIONS	INIT.	DATE

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

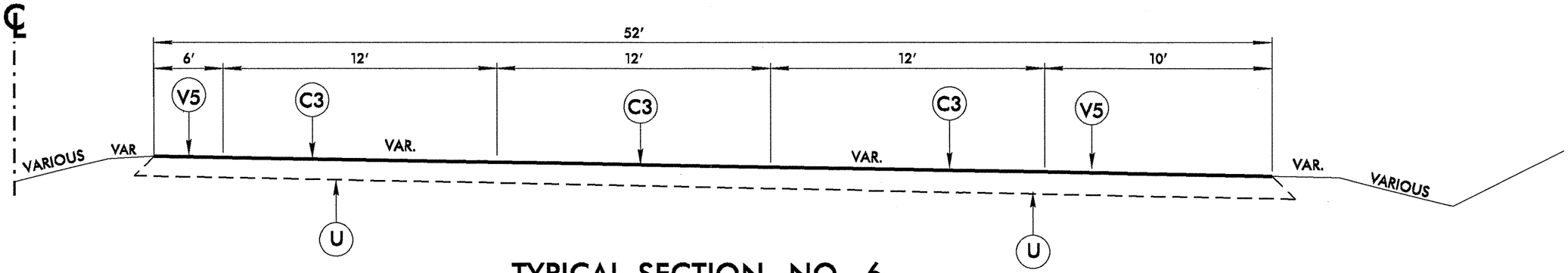
SCALE: N/A	DATE: 5/2013
PREPARED BY:	S.B. DARNELL
REVIEWED BY:	J.D. WOOD
REVIEWED BY:	J.L. LAWS

PROJECT REFERENCE NO.	SHEET NO.
IICRJ0861.21, IICRJ0991.21, IICR.20861.21, ETC.	8



TYPICAL SECTION NO. 5

MAP 6 – US 52 SBL FROM BEGIN GORE AREA TO END OF 4 LANE



TYPICAL SECTION NO. 6

MAP 7 – US 52 SBL FROM END OF 4 LANE TO END OF 3 LANE

PAVEMENT SCHEDULE			
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 3"
C3	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V3	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 4"
D1	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V4	INCIDENTAL MILLING
T	SHOULDER RECONSTRUCTION	V5	MILLED RUMBLE STRIPS (ASPHALT CEMENT)
U	EXISTING PAVEMENT		

SURRY & YADKIN COUNTIES
PRIMARY AND SECONDARY RESURFACING

DIVISION II

REVISIONS	INIT.	DATE

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

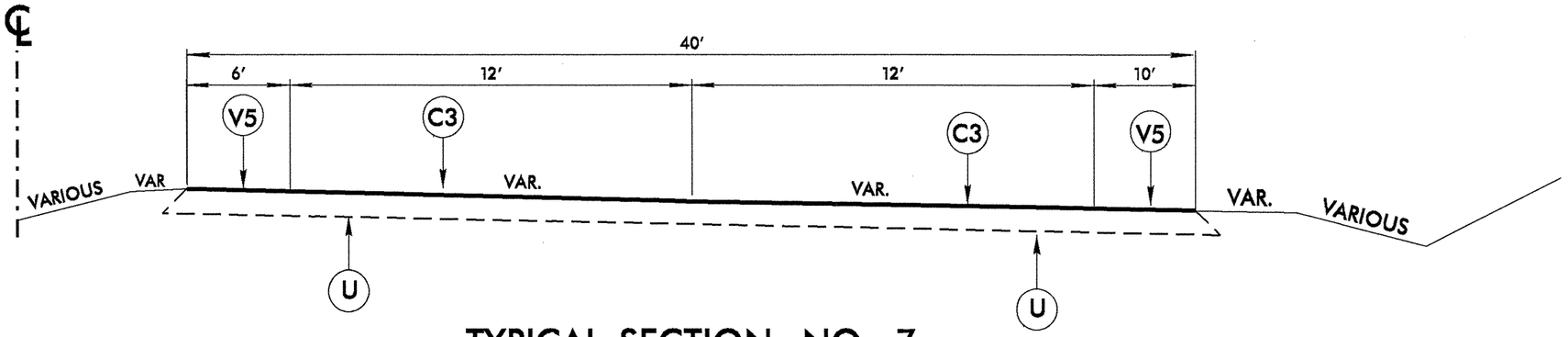
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

SCALE:	N/A
DATE:	5/2013
PREPARED BY:	S.B. DARNELL
REVIEWED BY:	J.D. WOOD
REVIEWED BY:	J.L. LAWS

8/17/99

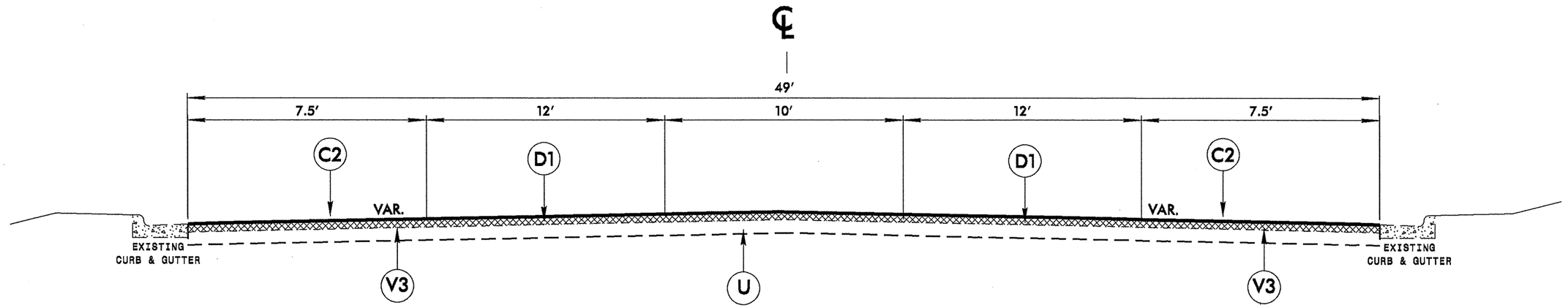
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
IICRJ0861.21, IICRJ0991.21, IICR.20861.21, ETC.	9



TYPICAL SECTION NO. 7

MAP 8 – US 52 SBL FROM END OF 3 LANE TO SR 1822



TYPICAL SECTION NO. 8

MAP 9 – SR 1001 FROM US 601 TO DOBSON ELEM SCHOOL

PAVEMENT SCHEDULE			
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 188 LBS. PER SQ. YD.	V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 3"
C3	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 188 LBS. PER SQ. YD.	V3	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 4"
D1	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 188 LBS. PER SQ. YD.	V4	INCIDENTAL MILLING
T	SHOULDER RECONSTRUCTION	V5	MILLED RUMBLE STRIPS (ASPHALT CEMENT)
U	EXISTING PAVEMENT		

SURRY & YADKIN COUNTIES
PRIMARY AND SECONDARY RESURFACING

DIVISION II

REVISIONS	INIT.	DATE

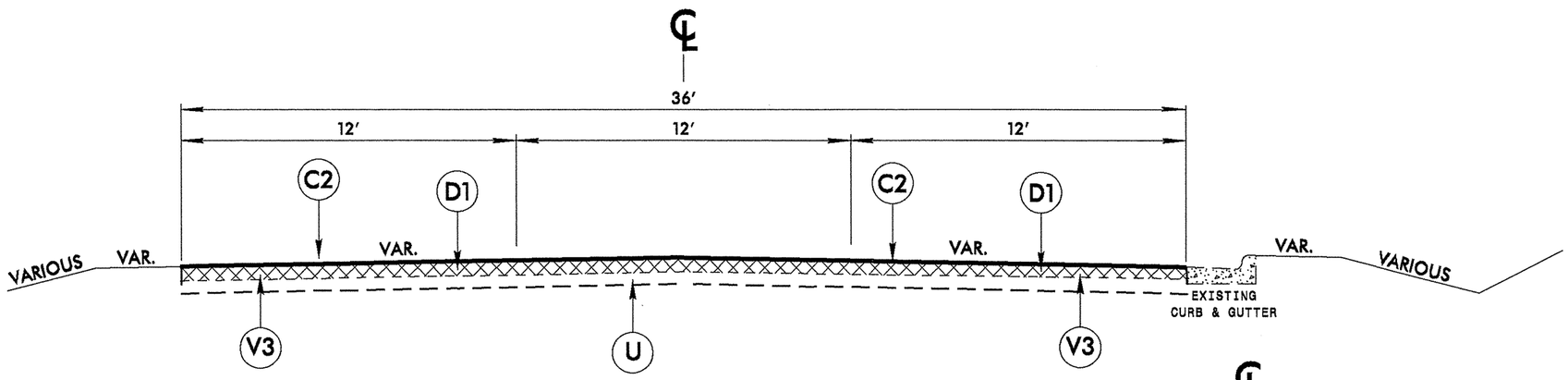
N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

DIVISION OF HIGHWAYS · DIVISION 11 · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

SCALE:	N/A
DATE:	5/2013
PREPARED BY:	S.B. DARNELL
REVIEWED BY:	J.D. WOOD
REVIEWED BY:	J.L. LAWS

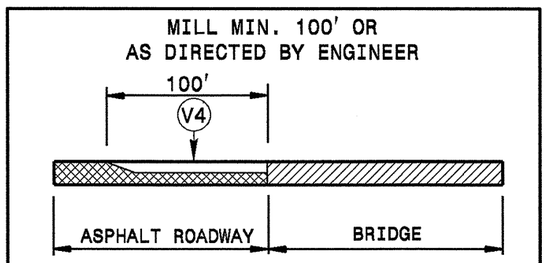
8/17/93

PROJECT REFERENCE NO.	SHEET NO.
IICRJ0861.21, IICRJ0991.21, IICR.20861.21, ETC.	10



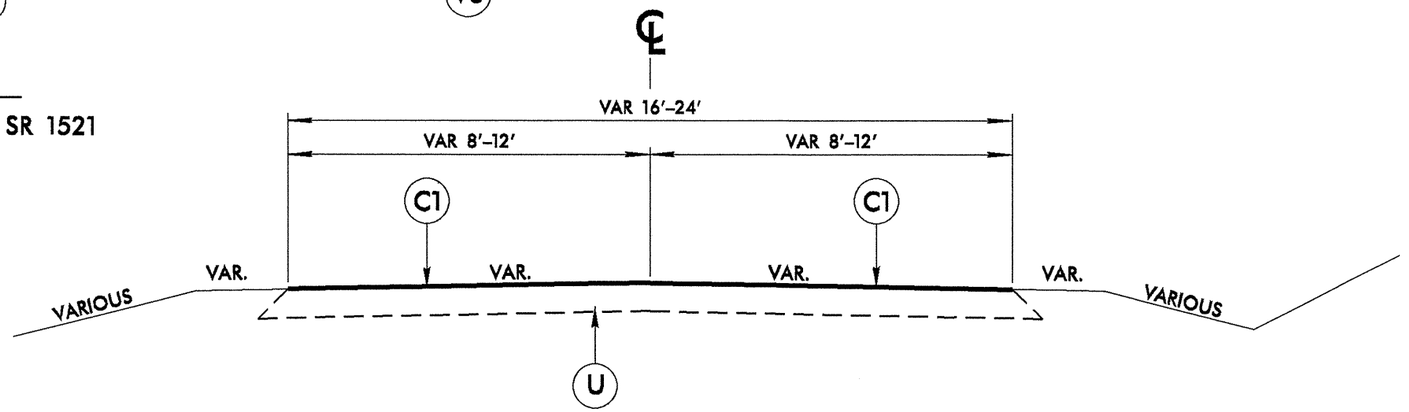
TYPICAL SECTION NO. 9

MAP 10 – SR 1001 FROM DOBSON ELEM SCHOOL TO SR 1521



BRIDGE TIE IN DETAIL

TIE ASPHALT OVERLAY TO BRIDGE APPROACH SLABS OR AS DIRECTED BY THE ENGINEER



TYPICAL SECTION NO. 10

MAP 11 – SR 1815 FROM SR 2012 TO COTTAGE DRIVE
MAP 12 – SR 1815 FROM SR 1900 TO SR 1774
MAP 13 – SR 1815 FROM SR 1826 TO SR 2012
MAP 14 – SR 1153 FROM WILKES CO LINE TO US 21 BUS
MAP 15 – SR 1153 FROM US 21 BUS TO N. ELKIN DRIVE
MAP 17 – SR 1314 FROM US 21 TO SR 1207
MAP 18 – SR 1300 FROM SR 1308 TO PAVEMENT CHANGE
MAP 20 – SR 1600 FROM SR 1605 TO SR 1570

PAVEMENT SCHEDULE			
C1	PROP. APPROX. 1½″ ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½″
C2	PROP. APPROX. 1½″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 188 LBS. PER SQ. YD.	V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 3″
C3	PROP. APPROX. 1½″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 188 LBS. PER SQ. YD.	V3	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 4″
D1	PROP. APPROX. 2½″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 188 LBS. PER SQ. YD.	V4	INCIDENTAL MILLING
T	SHOULDER RECONSTRUCTION	V5	MILLED RUMBLE STRIPS (ASPHALT CEMENT)
U	EXISTING PAVEMENT		

SURRY & YADKIN COUNTIES
PRIMARY AND SECONDARY RESURFACING

DIVISION II

REVISIONS	INIT.	DATE

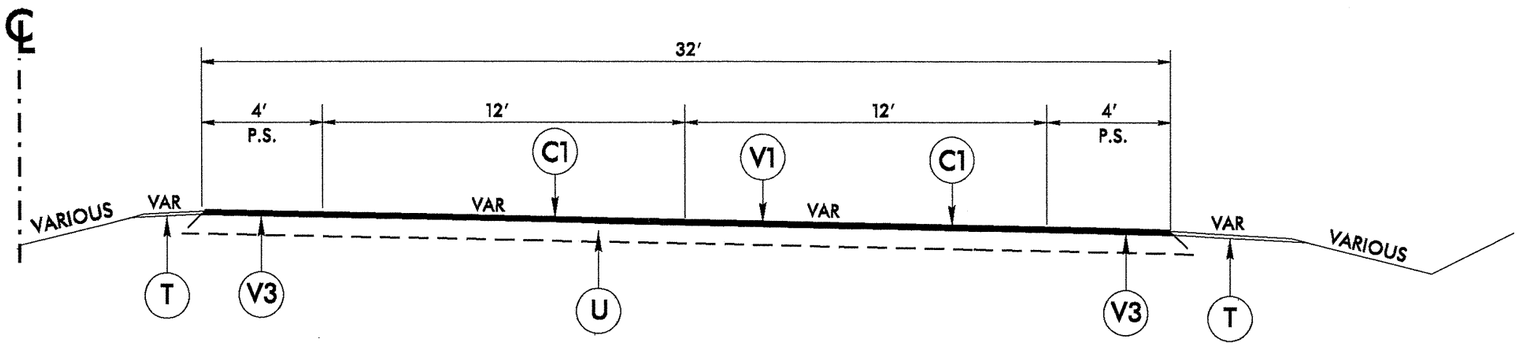
N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

SCALE: N/A	DATE: 5/2013
PREPARED BY:	S.B. DARNELL
REVIEWED BY:	J.D. WOOD
REVIEWED BY:	J.L. LAWS

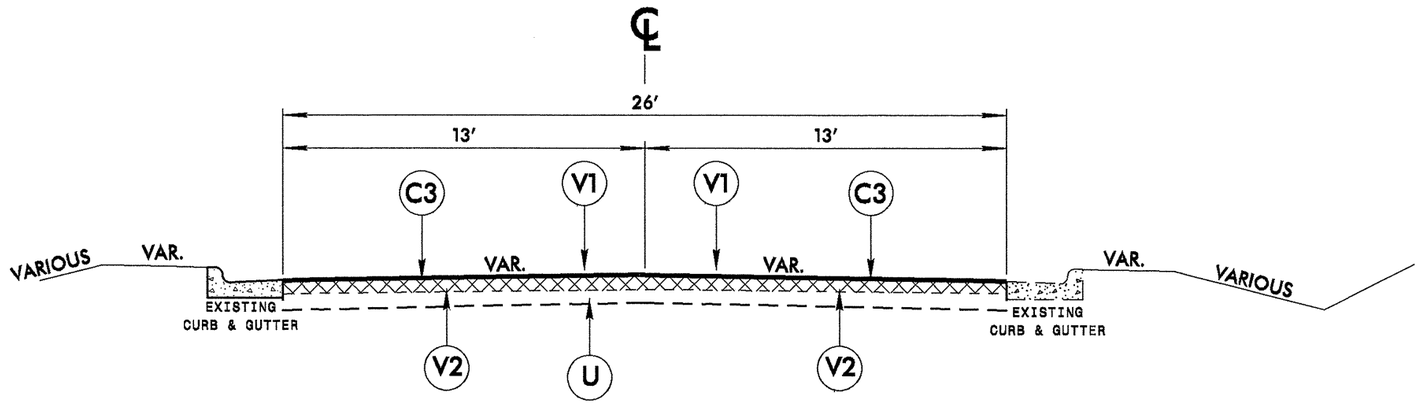
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
IICRJ0861.21, IICRJ0991.21, IICR.2086I.21, ETC.	II



TYPICAL SECTION NO. 11

MAP 16 – US 421 SBL FROM WILKES CO LINE TO 150' WEST OF SR 1103



TYPICAL SECTION NO. 12

MAP 19 – SR 1300 FROM PAVEMENT CHANGE TO SR 1310

NOTE: MILL AND FILL 1-½" FROM PAVEMENT CHANGE TO MINERAL SPRINGS DRIVE;
MILL 3" AND FILL 1-½" FROM MINERAL SPRINGS DRIVE TO SR 1310

PAVEMENT SCHEDULE			
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 185 LBS. PER SQ. YD.	V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 3"
C3	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V3	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 4"
D1	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	V4	INCIDENTAL MILLING
T	SHOULDER RECONSTRUCTION	V5	MILLED RUMBLE STRIPS (ASPHALT CEMENT)
U	EXISTING PAVEMENT		

SURRY & YADKIN COUNTIES
PRIMARY AND SECONDARY RESURFACING

DIVISION II

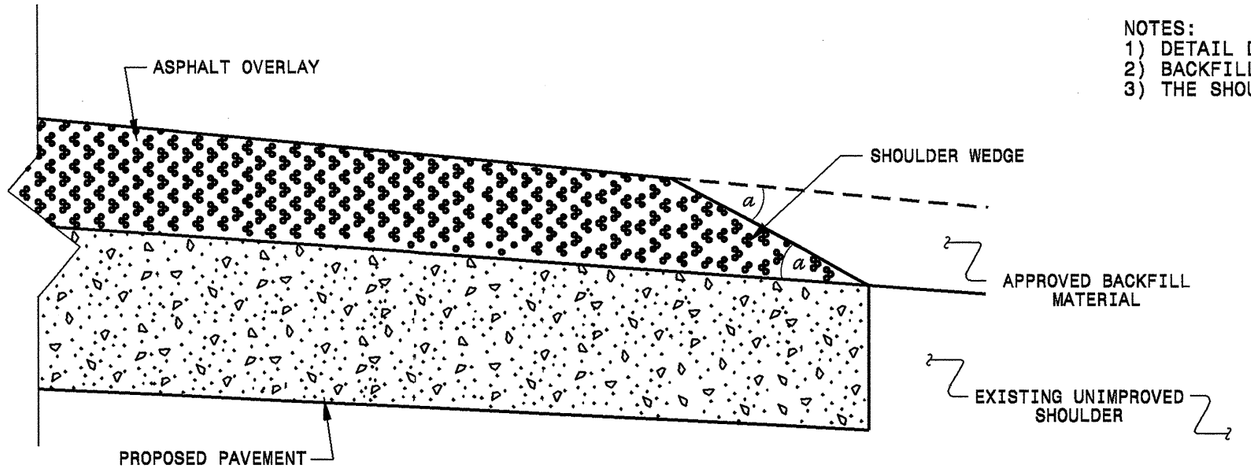
REVISIONS	INIT.	DATE

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

SCALE: N/A DATE: 5/2013
PREPARED BY: S.B. DARNELL
REVIEWED BY: J.D. WOOD
REVIEWED BY: J.L. LAWS

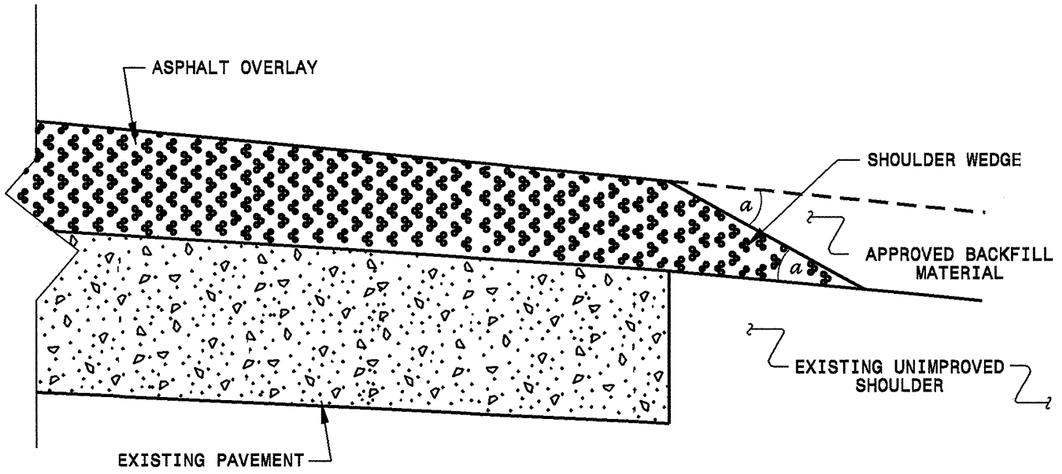
PROJECT REFERENCE NO.	SHEET NO.
11CR.10861.21, ETC.	12



NOTES:
1) DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE.
2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.

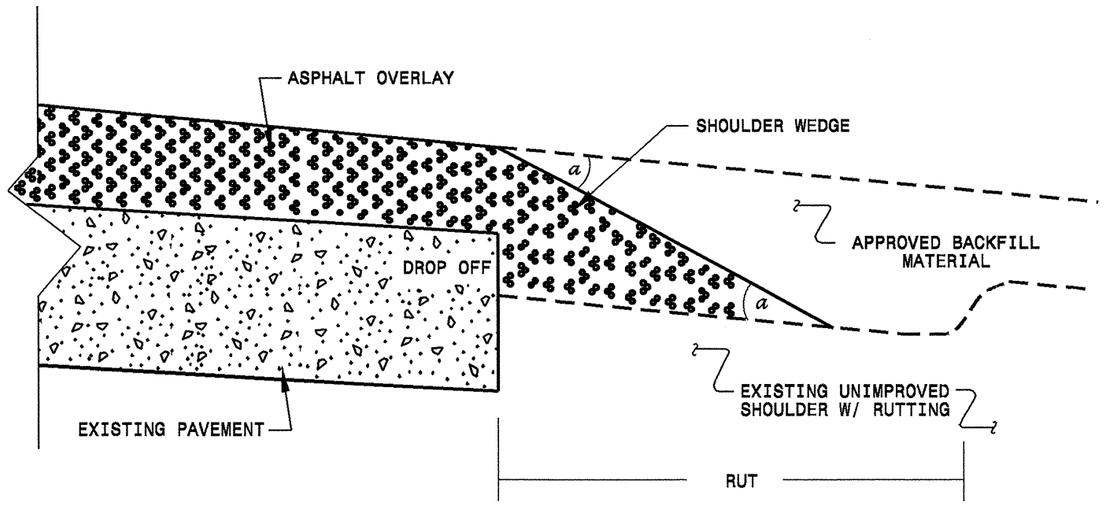
SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ Widening or with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL

(Resurfacing Adjacent to Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SHOULDER WEDGE DETAILS

ORIGINAL BY: T.SPELL DATE: 7-19-11
MODIFIED BY: _____ DATE: 10/16/12
CHECKED BY: _____ DATE: _____
FILE SPEC.: s:\ue\details\stand\shoulderwedgedetail.dgn

25-JUN-2013 09:37
C:\Users\vrkuckman\Documents\Revised Shoulder Wedge Detail.dgn
$$$$USERNAME$$$$

PROJECT NO.	SHEET NO.	TOTAL NO.
11CR.10861.21, 11CR.20861.21	13	14
11CR.10991.21, ETC.		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	BORROW EXCAVATION CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	4" MILLING SY	1½" MILLING SY	3" MILLING SY	INCIDENTAL MILLING SY	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	SURFACE COURSE, SF9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	MILLED RUMBLE STRIPS (ASPHALT CEMENT CONCRETE) LF	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	PORTABLE LIGHTING LS	SEED & MULCHING AC	PAVED TRENCHING LF	UNPAVED TRENCHING LF	JUNCTION BOX (STANDARD SIZE) EA	INDUCTIVE LOOP LF	LEAD-IN CABLE LF
11CR.10861.21	Surry	1	US 52 NBL	FROM SR 1856 TO SR 1815 OFF RAMP (INCLUDING RAMP)	1	3	MD	NO	NO	0.43	46							1,200			1,290		76	4,550										
11CR.10861.21	Surry	2	US 52 NBL	FROM SR 1815 OFF RAMP TO SR 1815 ON RAMP (INCLUDING RAMP)	2	2	MD	NO	NO	0.43	37							330			1,130		67	4,550										
11CR.10861.21	Surry	3	US 52 NBL	FROM SR 1815 ON RAMP TO 425' SOUTH OF SR 1822	3	2	MD	NO	NO	2.31	32							656			3,657		216	24,394										
11CR.10861.21	Surry	4	US 52 SBL	FROM SR 1815 TO BEGIN TAPER AT RAMP	3	2	MD	NO	NO	0.82	32							200			1,493		88	8,660										
11CR.10861.21	Surry	5	US 52 SBL	FROM BEGIN TAPER TO BEGIN GORE AREA	4	2	MD	NO	NO	1	38							200			2,220		131	10,560										
11CR.10861.21	Surry	6	US 52 SBL	FROM BEGIN GORE TO END OF 4 LANE	5	4	MD	NO	NO	0.21	64							200			735		43	2,218										
11CR.10861.21	Surry	7	US 52 SBL	FROM END 4 LANE TO END 3 LANE	6	3	MD	NO	NO	0.24	52							200			451		27	2,535										
11CR.10861.21	Surry	8	US 52 SBL	FROM END 3 LANE TO SR 1822	7	2	MD	NO	NO	0.11	40							200			207		12	1,162										
TOTAL FOR PROJ NO. 11CR.10861.21										**5.55**								**3,186**			**11,183**		**660**	**58,629**										
11CR.20861.21	Surry	9	SR 1001	FROM US 601 BUS TO DOBSON ELEM SCHOOL	8	3	MU	NO	NO	0.19	49		200		5,462				782	460			65		4	8	1		100.00	100.00	4.00	250	100
11CR.20861.21	Surry	10	SR 1001	FROM DOBSON ELEM SCHOOL TO SR 1521	9	3	MU	NO	NO	0.71	36		200		15,000				2,149	1,300			181		8	4	*							
11CR.20861.21	Surry	11	SR 1815	FROM SR 2012 TO COTTAGE DRIVE	10	2	2WU	NO	NO	0.61	24		200					267				730	49										
11CR.20861.21	Surry	12	SR 1815	FROM SR 1900 TO SR 1774	10	2	2WU	NO	NO	0.57	22		200					250				650	44										
11CR.20861.21	Surry	13	SR 1815	FROM SR 1826 TO SR 2012	10	2	2WU	NO	NO	2.81	22		300					2,004				3,045	204										
11CR.20861.21	Surry	14	SR 1153	FROM WILKES CO LINE TO US 21 BUS	10	2	2WU	NO	NO	1.07	20		300					222				1,145	77		2								
11CR.20861.21	Surry	15	SR 1153	FROM US 21 BUS TO N. ELKIN DRIVE	10	2	2WU	NO	NO	0.06	16		100					178				47	3		1								
TOTAL FOR PROJ NO. 11CR.20861.21										**6.02**			**1,500**		**20,462**			**2,921**	**2,931**	**1,760**		**5,617**	**623**		**12**	**15**	**1**		**100.00**	**100.00**	**4.00**	**250**	**100**
11CR.10991.21	Yadkin	16	US 421 SBL	FROM WILKES LINE TO 150' WEST OF SR 1103	11	2	MD	NO	NO	3.5	32	350		7.00		15,488		712			8,125		479	36,960				2.55					
TOTAL FOR PROJ NO. 11CR.10991.21										**3.5**		**350**		**7.00**		**15,488**		**712**			**8,125**		**479**	**36,960**				**2.55**					
11CR.20991.21	Yadkin	17	SR 1314	FROM US 21 TO SR 1207	10	2	2WU	NO	NO	0.93	20		100					222				940	63										
11CR.20991.21	Yadkin	18	SR 1300	FROM SR 1308 TO PAVEMENT CHANGE	10	2	2WU	NO	NO	0.62	20		50					222				640	43										
11CR.20991.21	Yadkin	19	SR 1300	FROM PAVEMENT CHANGE TO SR 1310	12	2	2WU	NO	NO	0.86	26					8,542	4,576					870	58		8	15							
11CR.20991.21	Yadkin	20	SR 1600	FROM SR 1605 TO SR 1570	10	2	2WU	NO	NO	2.53	20		200					500				2,500	167										
TOTAL FOR PROJ NO. 11CR.20991.21										**4.94**			**350**			**8,542**	**4,576**	**944**				**4,950**	**331**		**8**	**15**							
GRAND TOTAL										**20.01**		**350**	**1,850**	**7.00**	**20,462**	**24,030**	**4,576**	**7,763**	**2,931**	**1,760**	**19,308**	**10,567**	**2,093**	**95,589**	**20**	**30**	**1**	**2.55**	**100.00**	**100.00**	**4.00**	**250**	**100**

PROJECT NO.	SHEET NO.	TOTAL NO.
11CR.10861.21, 11CR.20861.21	14	14
11CR.10991.21, ETC.		

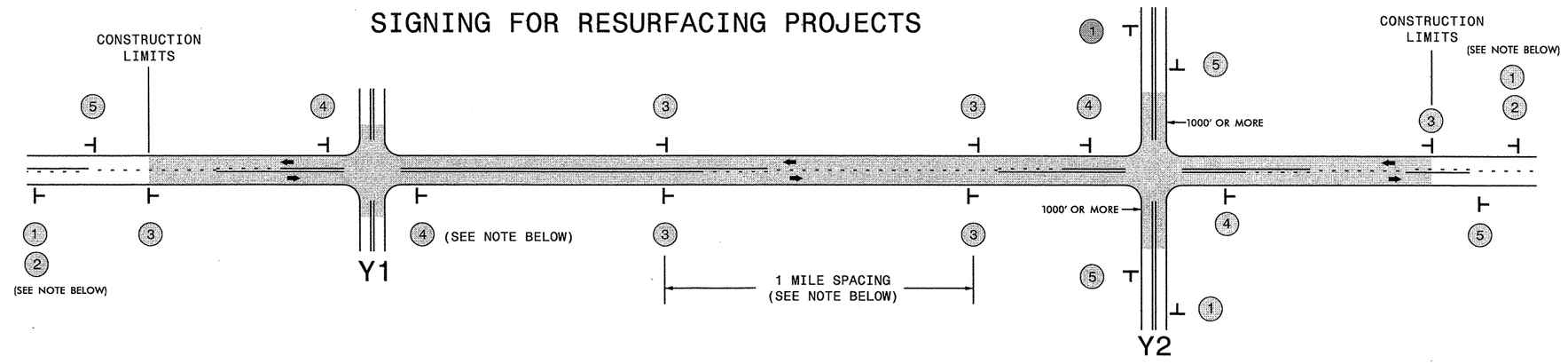
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4366000000-E WORK ZONE ADVANCE/GENERAL WARNING SIGNS SF	4589000000-N TEMPORARY TRAFFIC CONTROL LS	4510000000-N LAW ENFORCEMENT HR	4810000000-E 4" WHITE PAINT LF	4810000000-E 4" YELLOW PAINT LF	4815000000-E 6" WHITE PAINT LF	4815000000-E 6" YELLOW PAINT LF	4820000000-E 8" WHITE PAINT LF	4825000000-E 12" WHITE PAINT LF	4835000000-E 24" WHITE PAINT LF	4840000000-N PAINT MSG ONLY EA	4840000000-N PAINT MSG SCHOOL EA	4845000000-N PAINT RT ARROW EA	4845000000-N PAINT MERGE ARROW EA	4845000000-N PAINT LT ARROW EA	4845000000-N PAINT STR & LT ARROW EA	4845000000-N PAINT STR & RT ARROW EA	4905000000-N SNOW PLOWABLE MARKERS EA
11CR.10861.21	Surry	1	US 52 NBL	FROM SR 1856 TO SR 1815 OFF RAMP (INCLUDING RAMP)	1	3	MD	0.43	46	80.211	1.00				9,254	9,254		1,300		4		2					90
11CR.10861.21	Surry	2	US 52 NBL	FROM SR 1815 OFF RAMP TO SR 1815 ON RAMP (INCLUDING RAMP)	2	2	MD	0.43	37	80.211	*				9,254	5,676		1,300									90
11CR.10861.21	Surry	3	US 52 NBL	FROM SR 1815 ON RAMP TO 425' SOUTH OF SR 1822	3	2	MD	2.31	32	80.211	*				54,886	48,787											152
11CR.10861.21	Surry	4	US 52 SBL	FROM SR 1815 TO BEGIN TAPER AT RAMP	3	2	MD	0.82	32	80.211	*				19,483	17,318											54
11CR.10861.21	Surry	5	US 52 SBL	FROM BEGIN TAPER TO BEGIN GORE AREA	4	2	MD	1	38	80.211	*				23,760	21,120		700									126
11CR.10861.21	Surry	6	US 52 SBL	FROM BEGIN GORE TO END OF 4 LANE	5	4	MD	0.21	64	80.211	*				4,990	4,435		700				4					60
11CR.10861.21	Surry	7	US 52 SBL	FROM END 4 LANE TO END 3 LANE	6	3	MD	0.24	52	80.211	*				6,336	5,069						3					32
11CR.10861.21	Surry	8	US 52 SBL	FROM END 3 LANE TO SR 1822	7	2	MD	0.11	40	80.211	*				2,614	2,323											8
TOTAL FOR PROJ NO. 11CR.10861.21								**5.55**		**641.688**					**130,577**	**113,982**		**4,000**		**4**		**2**	**7**				**612**
															244,559					**4**		**9**					
11CR.20861.21	Surry	9	SR 1001	FROM US 601 TO DOBSON ELEM SCHOOL	8	3	MU	0.19	49	80.211	*	95.50	4,013	5,016			185		168		6	1		7	1	2	32
11CR.20861.21	Surry	10	SR 1001	FROM DOBSON ELEM SCHOOL TO SR 1521	9	3	MU	0.71	36	80.211	*		14,995	37,488					120		6			18			149
11CR.20861.21	Surry	11	SR 1815	FROM SR 2012 TO COTTAGE DRIVE	10	2	2WU	0.61	24	80.211	*		12,883	12,883													
11CR.20861.21	Surry	12	SR 1815	FROM SR 1900 TO SR 1774	10	2	2WU	0.57	22	80.211	*		12,038	12,038													
11CR.20861.21	Surry	13	SR 1815	FROM SR 1826 TO SR 2012	10	2	2WU	2.81	22	80.211	*		59,347	59,347													
11CR.20861.21	Surry	14	SR 1153	FROM WILKES CO LINE TO US 21 BUS	10	2	2WU	1.07	20	80.211	*		22,598	22,598					50					1		1	
11CR.20861.21	Surry	15	SR 1153	FROM US 21 BUS TO N. ELKIN DRIVE	10	2	2WU	0.06	16	80.211	*		1,267	1,267					30								
TOTAL FOR PROJ NO. 11CR.20861.21								**6.02**		**561.477**		**95.5**	**127,141**	**150,637**			**185**		**368**		**12**	**1**		**26**	**1**	**3**	**181**
													277,778							**12**		**31**				
11CR.10991.21	Yadkin	16	US 421 SBL	FROM WILKES LINE TO 150' WEST OF SR 1103	11	2	MD	3.5	32	80.211	*				83,160	73,920		2300									340
TOTAL FOR PROJ NO. 11CR.10991.21								**3.5**		**80.211**					**83,160**	**73,920**		**2,300**									**340**
															157,080											
11CR.20991.21	Yadkin	17	SR 1314	FROM US 21 TO SR 1207	10	2	2WU	0.93	20	80.211	*		19642	19642													
11CR.20991.21	Yadkin	18	SR 1300	FROM SR 1308 TO PAVEMENT CHANGE	10	2	2WU	0.62	20	80.211	*		13094	13094													
11CR.20991.21	Yadkin	19	SR 1300	FROM PAVEMENT CHANGE TO SR 1310	12	2	2WU	0.86	26	80.211	*	95.50	18163	18163					160		12						
11CR.20991.21	Yadkin	20	SR 1600	FROM SR 1605 TO SR 1570	10	2	2WU	2.53	20	80.211	*		53434	53434													335
TOTAL FOR PROJ NO. 11CR.20991.21								**4.94**		**320.844**		**95.5**	**104,333**	**104,333**					**160**		**12**						**335**
													208,666							**12**						
GRAND TOTAL								**20.01**		**1,604.22**	**1**	**191.00**	**231,474**	**254,970**	**213,737**	**187,902**	**185**	**6,300**	**528**	**4**	**24**	**3**	**7**	**26**	**1**	**3**	**1,468**
													486,444		**401,639**					**28**		**40**					

PROJ. REFERENCE NO.	SHEET NO.
SEE BELOW	1

11CR.10861.21,
11CR.20861.21,
11CR.10991.21,
11CR.20991.21

SIGNING FOR RESURFACING PROJECTS



LEGEND
- ⊢ STATIONARY SIGN
- ⬅ DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION

1 — ROAD WORK AHEAD W20-1 48" X 48"

2 — NEXT XX MILES W7-3aP 24" X 18"

PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.

#2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER.(NO FRACTIONAL OR DECIMAL NUMBERS)

3 — LOW/SOFT SHOULDER SP 13107 48" X 48"

PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET ½ MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.

4 — ROAD UNDER CONST SP 13106 48" X 48"

THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.

5 — END ROAD WORK G20-2 A 48" X 24"

PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.

-Y- LINE SIGNING

NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE
2) SUBDIVISION ROADS
3) DEAD END ROADS

WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.

ROAD WORK AHEAD W20-1 48" X 48"

PLACED 500' IN ADVANCE OF FLAGGER.

W20-7 A 48" X 48"

PLACED 250' IN ADVANCE OF FLAGGER.

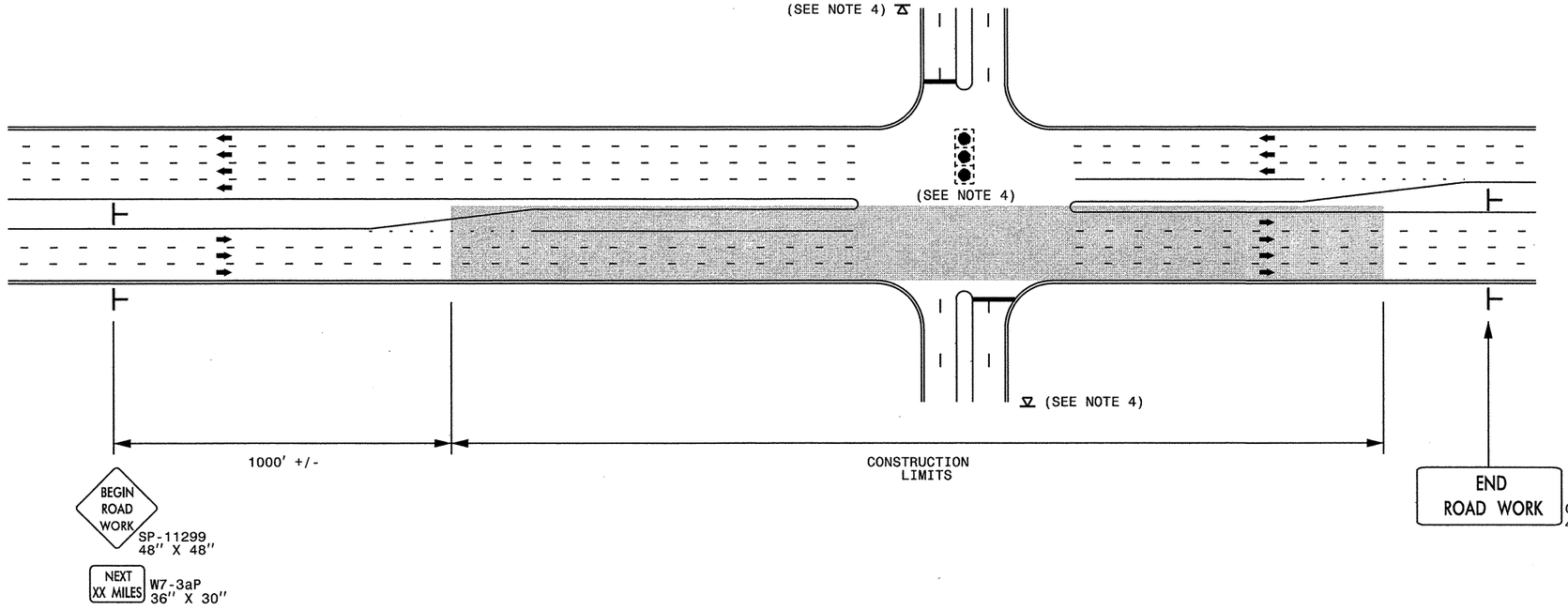
DIVISION OF HIGHWAYS • STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION • WORK ZONE TRAFFIC CONTROL

RESURFACING ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2 LANE ROADWAYS

PROJ. REFERENCE NO.	SHEET NO.
SEE BELOW	2

11CR.10861.21,
11CR.20861.21,
11CR.10991.21,
11CR.20991.21

URBAN / SUBURBAN WORKZONES



NOTES:

1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
4) USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AND PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.
5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS.THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

⊢ STATIONARY SIGN

➡ DIRECTION OF TRAFFIC FLOW

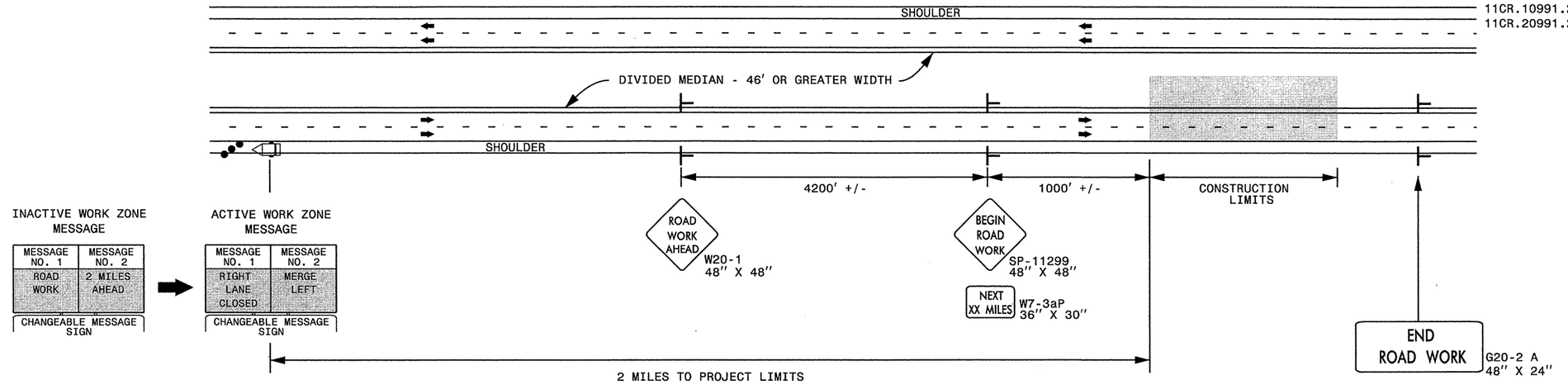
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

RESURFACING ADVANCE WARNING SIGNS FOR URBAN / SUBURBAN FACILITIES

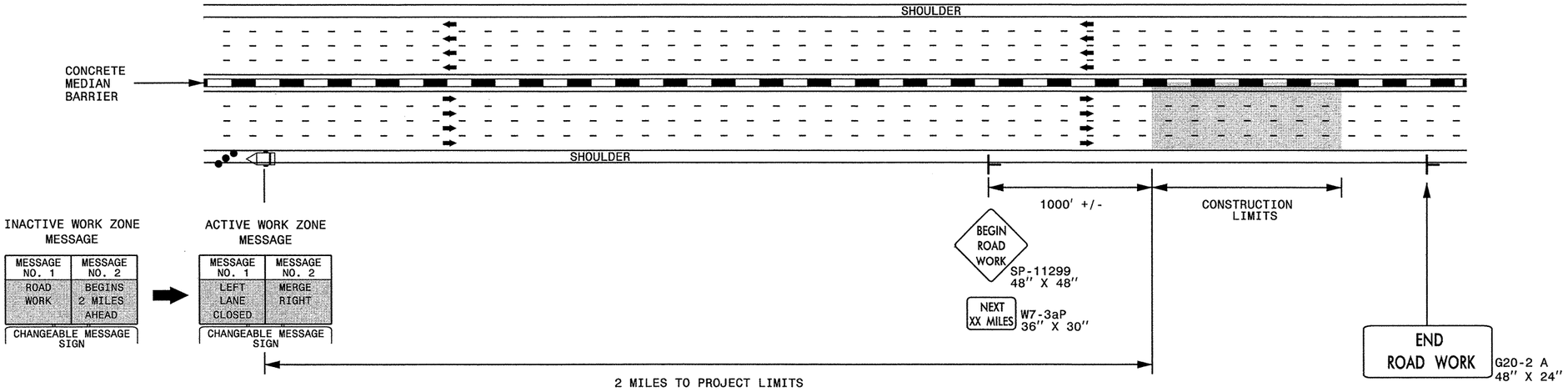
PROJ. REFERENCE NO.	SHEET NO.
SEE BELOW	3

11CR.10861.21,
11CR.20861.21,
11CR.10991.21,
11CR.20991.21

DIVIDED MEDIANS WITH WIDTHS 46′ OR GREATER



DIVIDED MEDIANS WITH WIDTHS LESS THAN 46′ OR WITH PERMANENT MEDIAN BARRIER



NOTES:

1) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 6′ AS MEASURED FROM THE EDGE OF PAVEMENT.
2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
3) FOR MEDIAN WIDTHS LESS THAN 46′ (MEASURED EDGELINE TO EDGELINE) USE THE BOTTOM DRAWING.
4) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
5) INSTALL "ROAD WORK AHEAD"(W20-1) ALONG ENTRANCE RAMPS 500′ PRIOR TO RAMP TERMINAL, AND "END ROAD WORK" (G20-2a) AT THE END OF EXIT RAMPS WITHIN THE WORK ZONE.
6) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER AND WITH DIVIDED MEDIANS OF 46′ OR GREATER. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

- CHANGEABLE MESSAGE SIGN (CMS)
- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW
- TRAFFIC DRUM

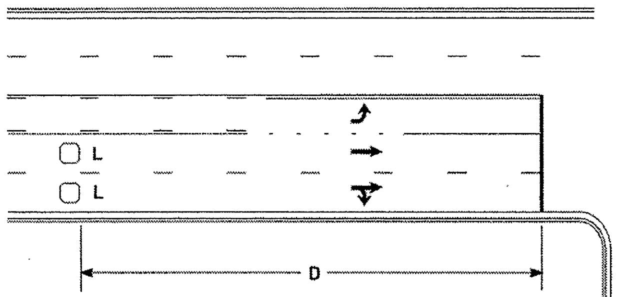
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

RESURFACING ADVANCE WARNING SIGNS FOR HIGH SPEED FACILITIES ≥ 60 MPH

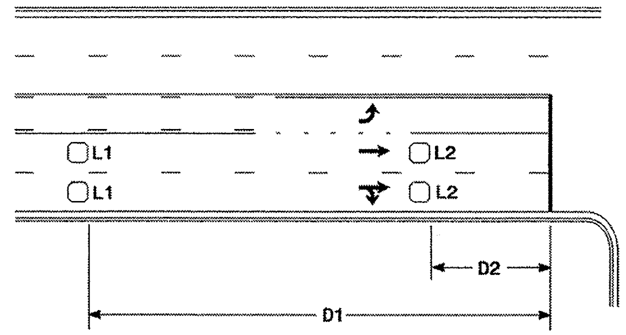
PROJECT REFERENCE NO.	SHEET NO.
SEE BELOW	SIG 1

11CR.10861.21, 11CR.20861.21
11CR.10991.21, 11CR.20991.21

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



OR



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

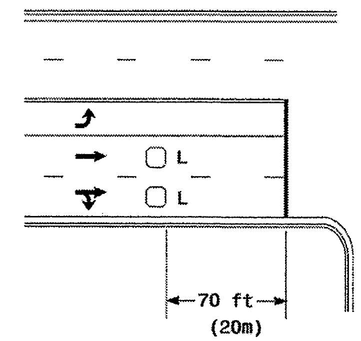
Speed Limit mph (km/hr)	D1 ft	(m)	D2 ft	(m)
40 (64)	250	(75)	80	(25)
45 (72)	300	(90)	90	(27)
50 (80)	355	(110)	100	(30)
55 (88)	420	(130)	110	(35)

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

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

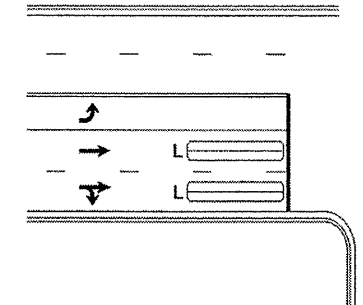
"Stretch" Operation

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



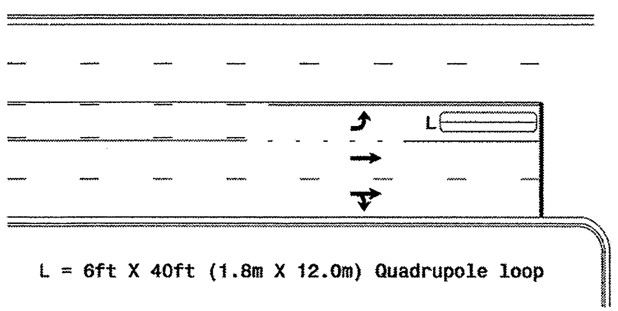
L = 6ft X 6ft (1.8m X 1.8m)
Wired in series

OR



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

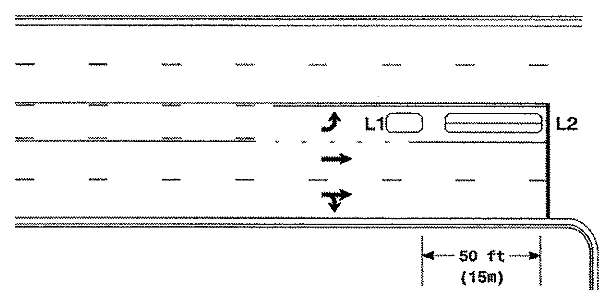
Left Turn Lane Detection



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

Presence Loop Detection

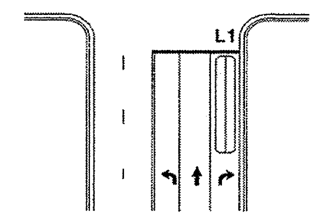
OR



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

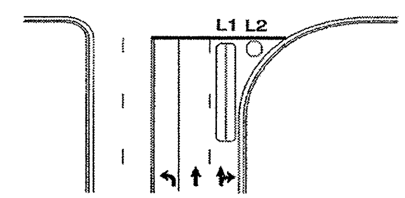
Queue Loop Detection

Right Turn Lane Detection

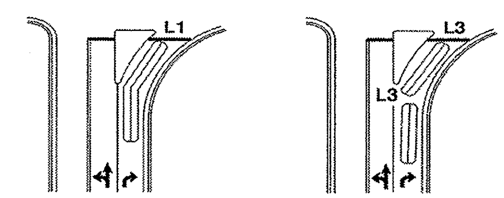


Standard Turn

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

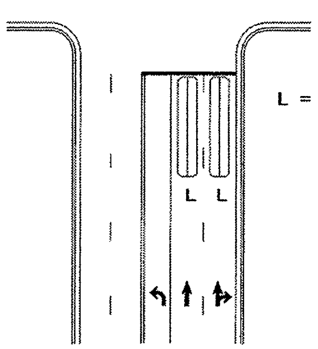


Wide Radius Turn



Channelized Turn

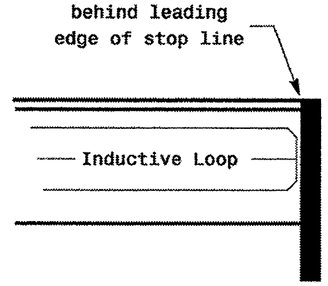
Side Street Detection



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

Prepared in the Offices of:
Traffic Engineering and Safety Systems Branch
State of North Carolina Department of Transportation
Signals and Geometrics Section
122 N. McDowell St., Raleigh, NC 27603

Typical Loop Locations

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

SCALE
N/A

REVISIONS	INIT.	DATE
Revise pavement markings		

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 23486 ENGINEER PAMELA A. ALEXANDER

SIGNATURE DATE 6/6/06

SIG. INVENTORY NO.