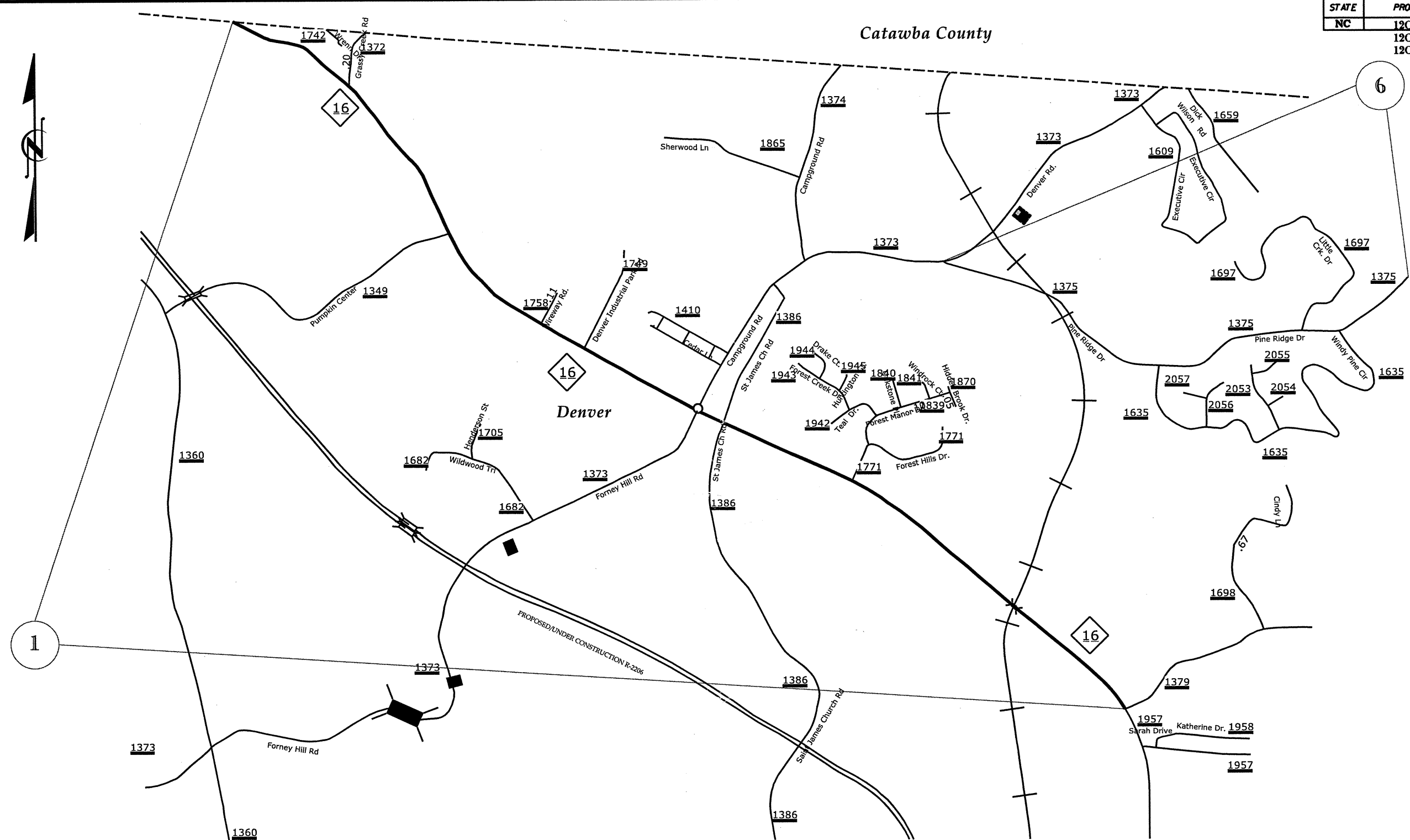


STATE	PROJECT WBS	SHEET NUMBER
NC	12C.055065 12CR.10551.8 12CR.20551.11	1

Catawba County

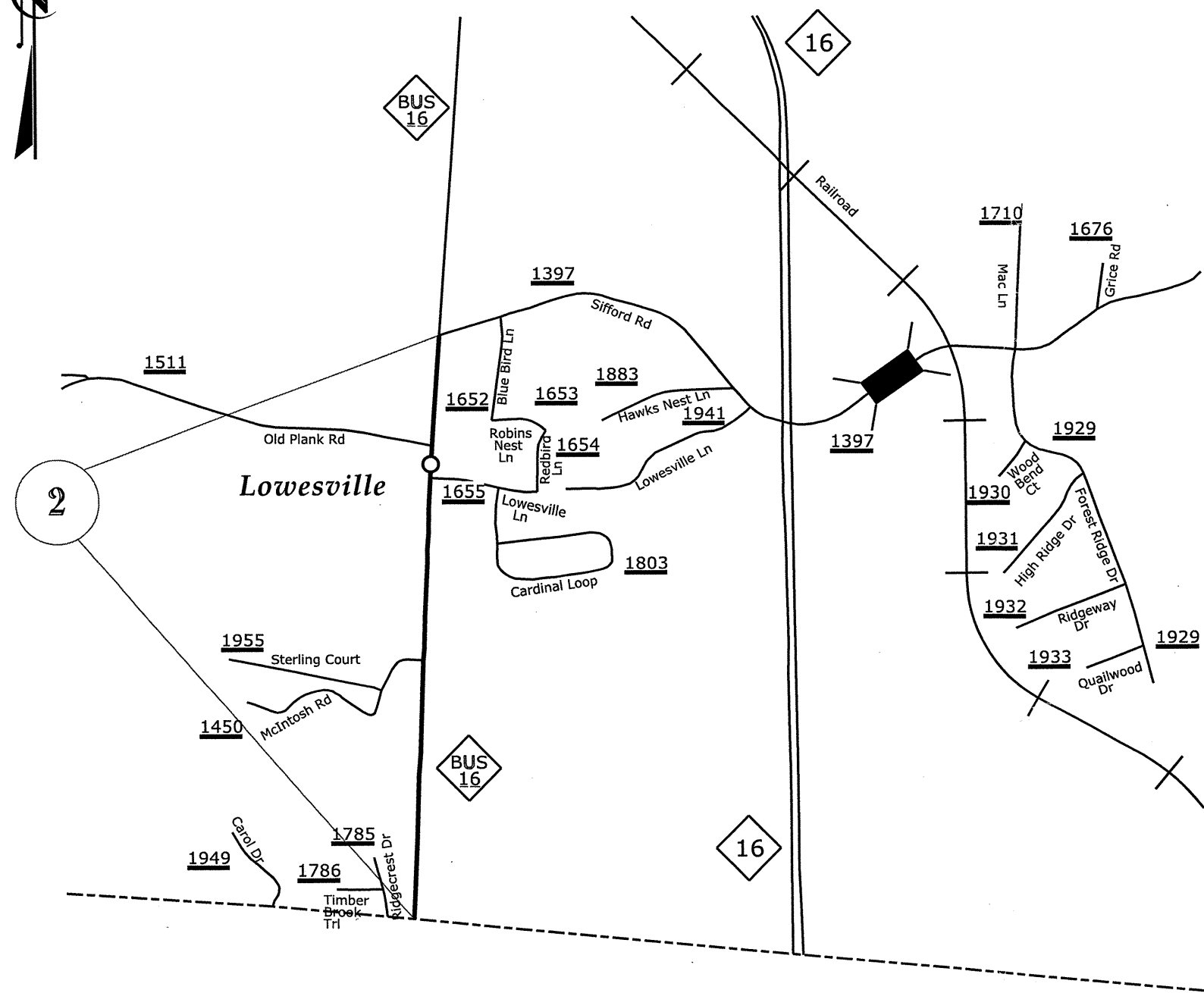


Drawn by: G. BRITTAIN

2010-2011  
Resurfacing Map  
LINCOLN COUNTY NC

No Scale

STATE	PROJECT WBS	SHEET NUMBER
NC	12C.055065	2
	12CR.10551.8	
	12CR.20551.11	



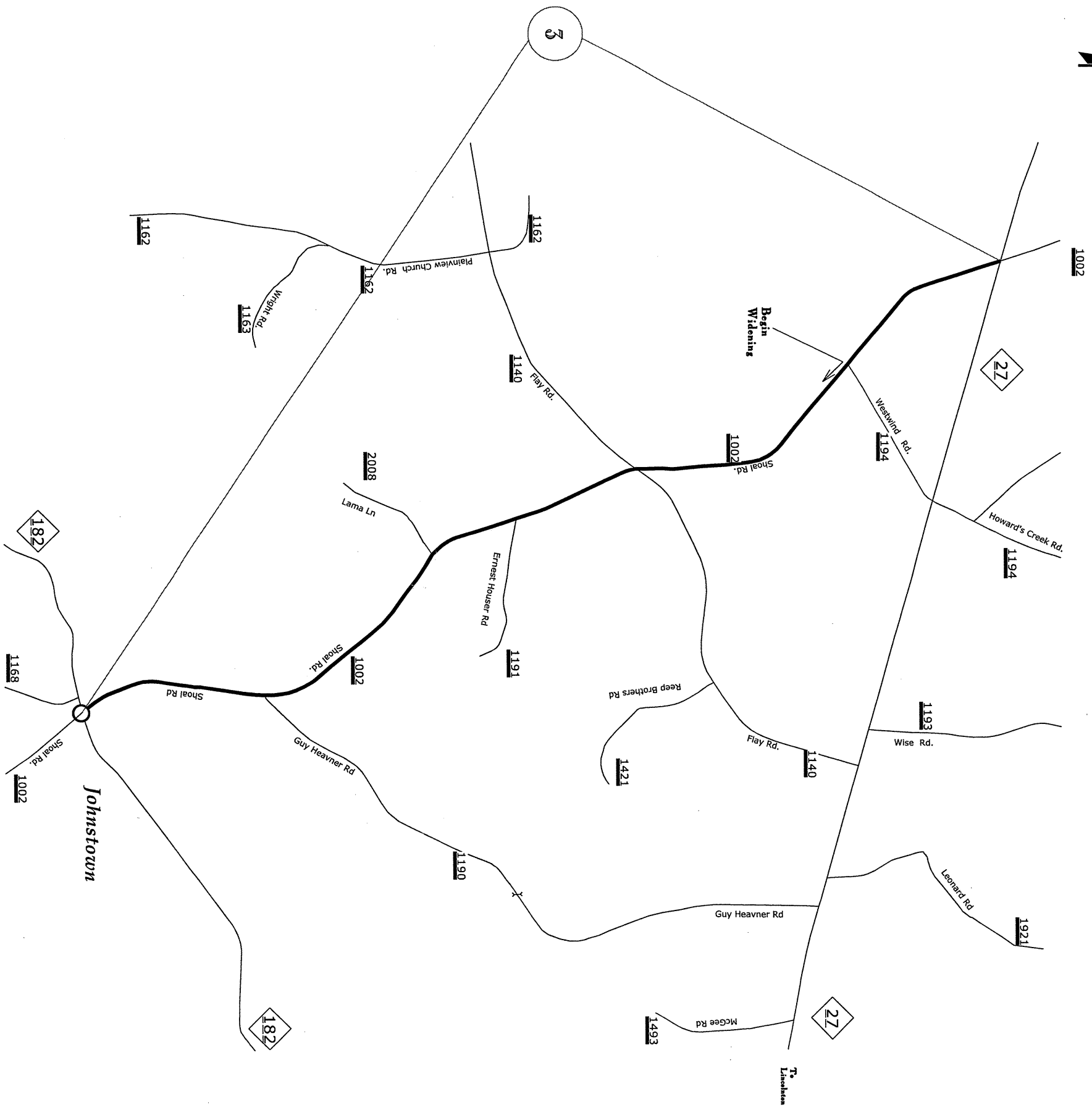
G. BRITAIN  
Drawn by:

Gaston County

No Scale

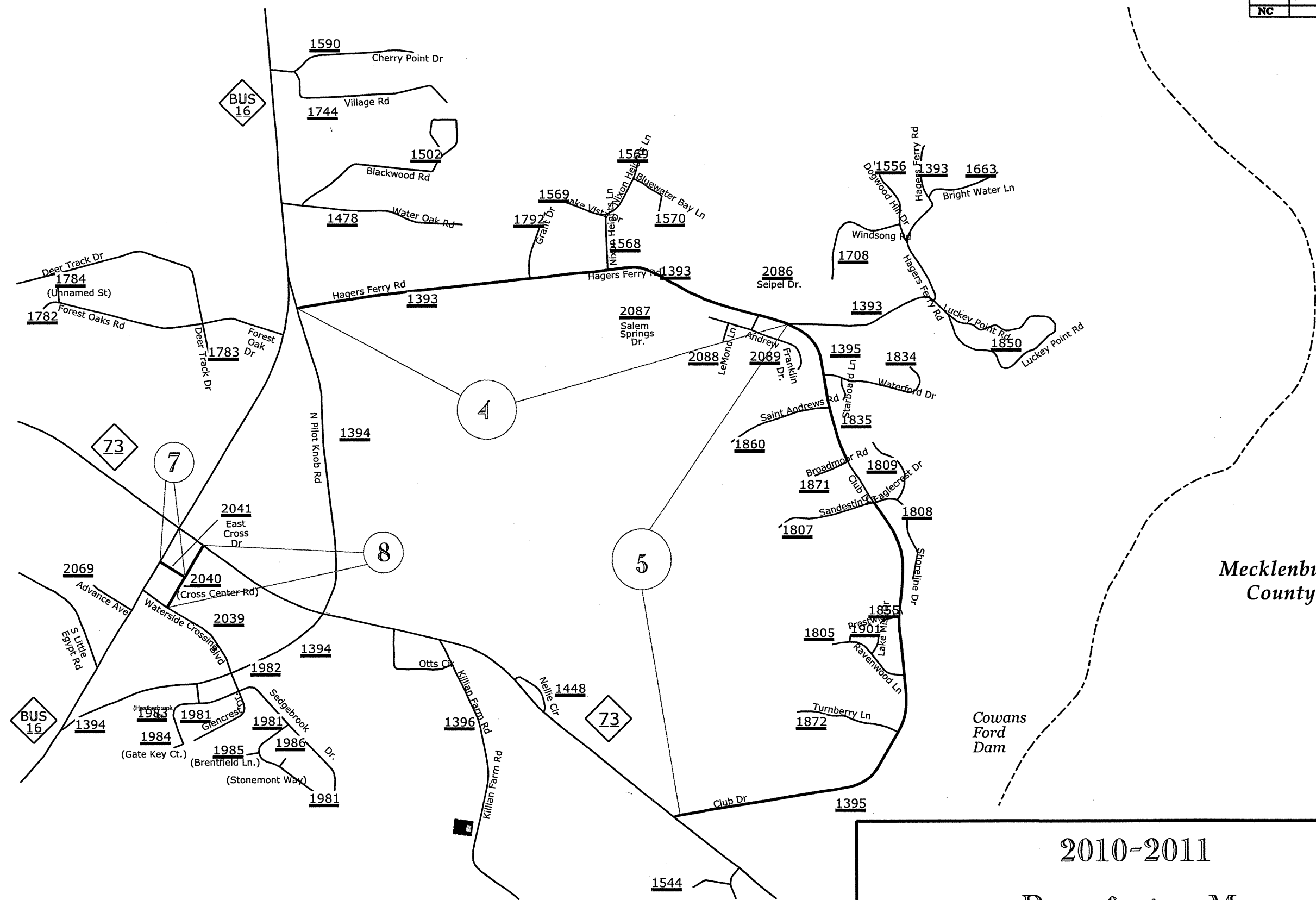
2010-2011  
Resurfacing Map  
LINCOLN COUNTY NC

STATE NO	PROJECT WBS	SHEET NUMBER
19C.055065	19C.055065	3
19CR.2055111		



**2010-2011**  
 Resurfacing Map  
**LINCOLN COUNTY NC**

STATE	PROJECT WBS	SHEET NUMBER
NC	12C.055065	4
	12CR.10551.8	
	12CR.20551.11	



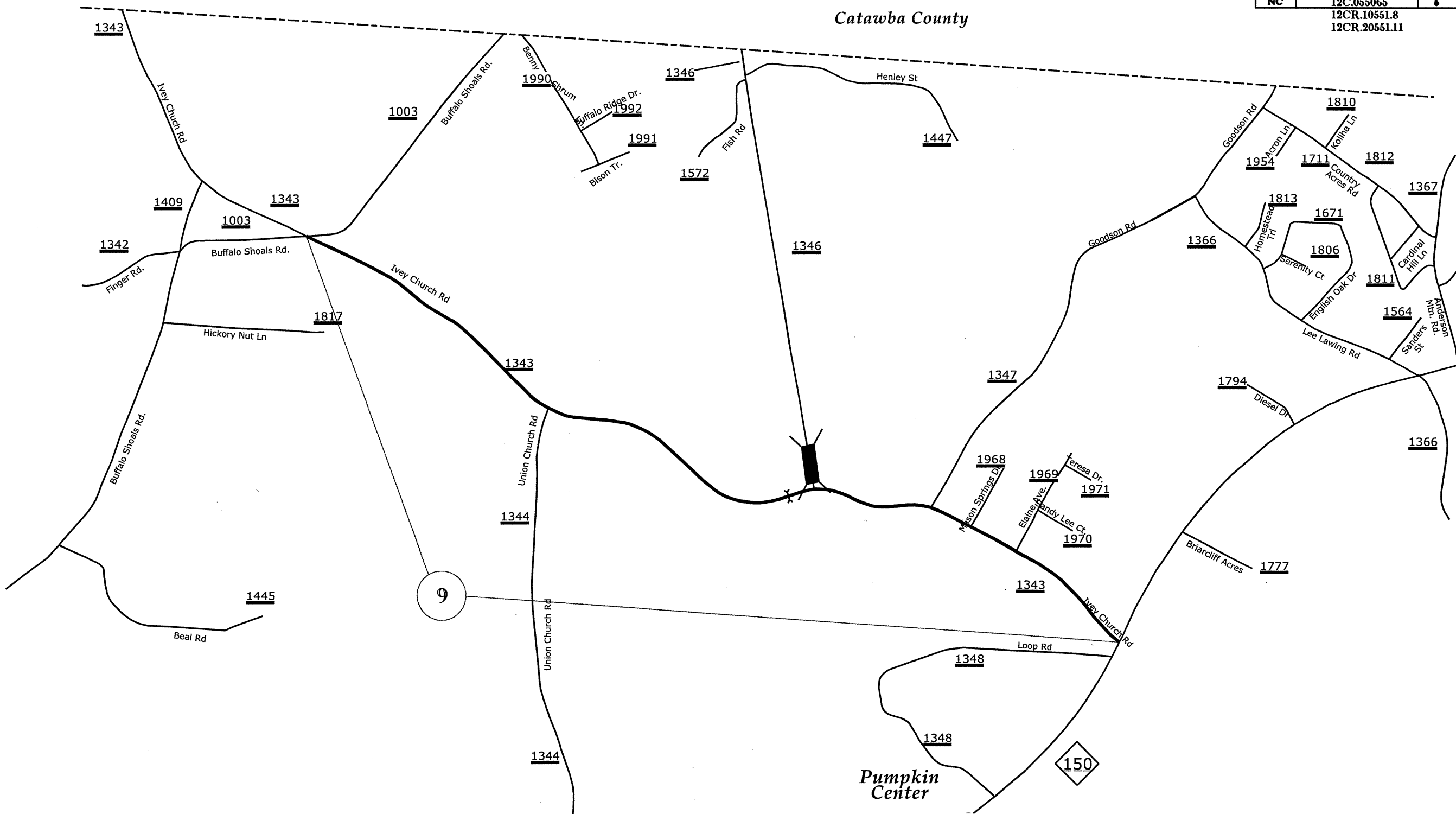
G. BRITTAIN  
Drawn by

No Scale

2010-2011  
Resurfacing Map  
LINCOLN COUNTY NC

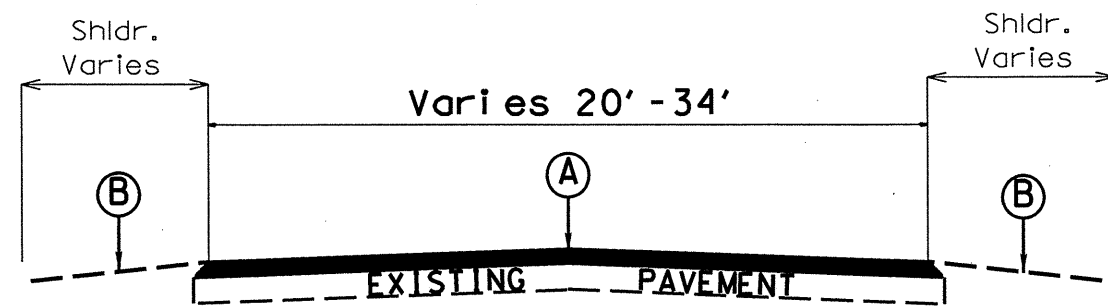
STATE	PROJECT WBS	SHEET NUMBER
NC	12C.055065	6
	12CR.10551.8	
	12CR.20551.11	

Catawba County



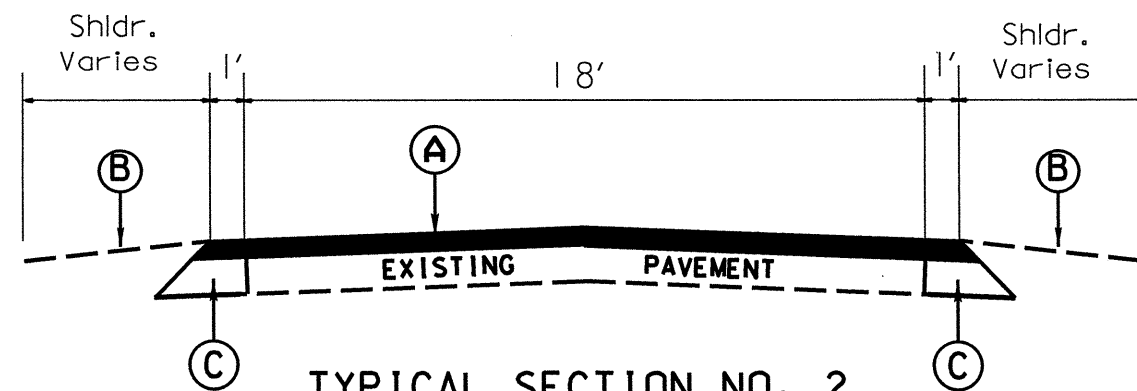
G. BRITTAIN  
Drawn by:

2010-2011  
 Resurfacing Map  
 LINCOLN COUNTY NC



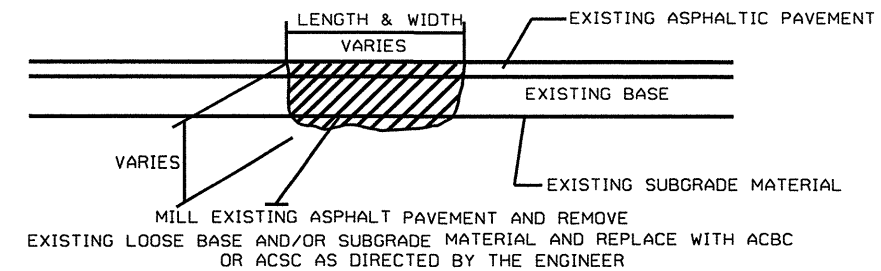
**TYPICAL SECTION NO. 1**

- MAP # 1 - (entire map)
- MAP # 2 - (entire map)
- Map # 3 - 0+00 to 32+00
- Map # 6 - (entire map)

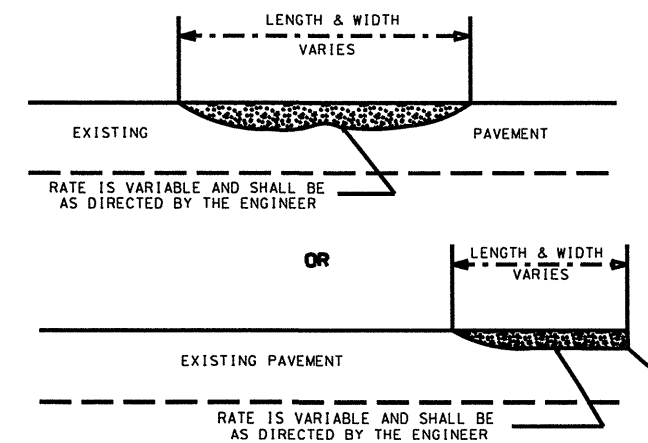


**TYPICAL SECTION NO. 2**

- MAP # 3 - 32+00 to 172+00
- Map # 4 - (entire map)
- Map # 5 - (entire map)
- Map # 9 - (entire map)



**PATCHING EXISTING PAVEMENT**



**ASPHALT CONCRETE SURFACE COURSE  
TYPE S9.5B. (LEVELING COURSE)**

PAVEMENT SCHEDULE	
A	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
B	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
C	PROP. APPROX. 8" OF ASPHALT BASE COURSE, TYPE B 25.0B, AT AN AVERAGE RATE OF 456 LBS PER SQ. YD. IN EACH OF TWO LIFTS

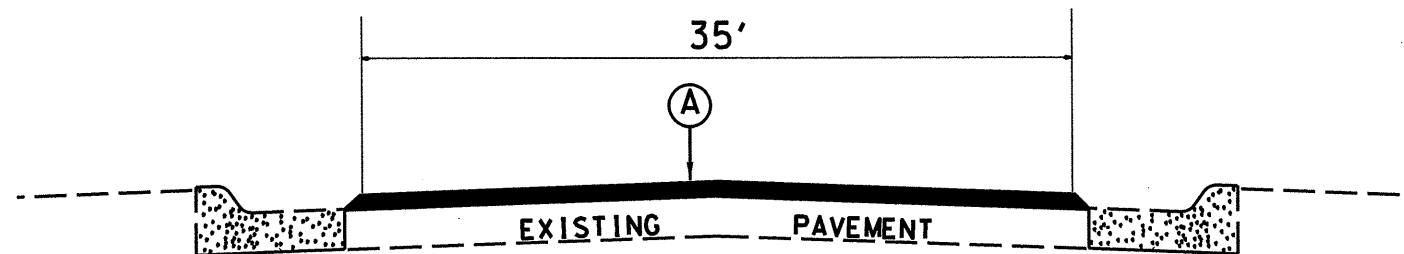
**General Notes:**

- \* Pavement edge slopes are 1:1 unless specified otherwise.
- \* Mill bridge approaches 100' to provide a smooth transition or as directed by the Engineer.

\*\*Stations increase to the N & E

2010 - 2011  
Resurfacing Program  
Typical Sections  
Lincoln County NC

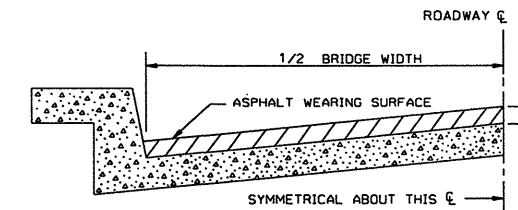
Checked by: G. Brittain



**TYPICAL SECTION NO. 3**

MAP # 7 - (entire map)

Map # 8 - (entire map)



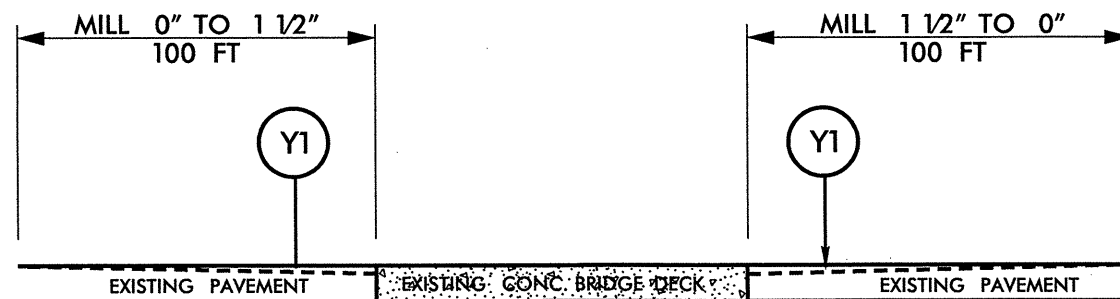
BRIDGE HALF TYPICAL SECTION

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.

NOTES

ALL UNPAVED S.R. ROADS TO BE SURFACED 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 NOTED.  
BRIDGES TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.



DETAIL A  
MILLING BRIDGE APPROACHES

PAVEMENT SCHEDULE	
A	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
B	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
C	PROP. APPROX. 8" OF ASPHALT BASE COURSE, TYPE B 25.0B, AT AN AVERAGE RATE OF 456 LBS PER SQ. YD. IN EACH OF TWO LIFTS
Y1	PROP. APPROX. 0 - 1.5" OF INCIDENTAL MILLING

General Notes:

- \* Pavement edge slopes are 1:1 unless specified otherwise.
- \* Mill bridge approaches 100' to provide a smooth transition or as directed by the Engineer.

\*\*Stations increase to the N & E

2010 - 2011  
Resurfacing Program  
Typical Sections  
Lincoln County NC

Checked by:

Drawn by: G. Brittain

PROJECT NO.	SHEET NO.	TOTAL NO.
12CR.10551.8 12CR.20551.11 12C.055065	8	

## SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LENGTH MI	WIDTH FT	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	AGGREGATE SHOULDER BORROW TON	INCIDENTAL MILLING SY	BASE COURSE, B25.0B TONS	SURFACE COURSE, S9.5B TONS	LEVELING COURSE, S9.5B TONS	PG 64-22 PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	ADJUSTMENT OF DROP INLET EA	ADJUSTMENT OF MANHOLES EA	ADJUSTMENT OF METER OR VALVE BOX EA	PORTABLE LIGHTING LS
12CR.10551.8	Lincoln	1	NC 16	FROM SR 1379 TO CATAWBA CO.	1	3.71	24	100	7.94	302	700	0	6028	600	401	950	3	14	12	
12CR.10551.8	Lincoln	2	NC 16	FROM GASTON CO. TO SR 1397	1	1.15	24	40	2.30	88	0	0	1613	150	107	250	0	0	0	
<b>TOTAL FOR PROJ NO. 12CR.10551.8</b>						<b>4.86</b>		<b>140</b>	<b>10.24</b>	<b>390</b>	<b>700</b>	<b>0</b>	<b>7641</b>	<b>750</b>	<b>508</b>	<b>1,200</b>	<b>3</b>	<b>14</b>	<b>12</b>	<b>1</b>
12C.055065	Lincoln	3	SR 1002 (SHOAL RD)	FROM NC 182 TO NC 27	1,2	3.26	vars. 21-34	0	0	0	0	2300	4144	400	374	0	0	0	0	
<b>TOTAL FOR PROJ NO. 12C.055065</b>												<b>2300</b>	<b>4144</b>	<b>400</b>	<b>374</b>					
12CR.20551.11	Lincoln	3	SR 1002 (SHOAL RD)	FROM NC 182 TO NC 27	1,2	3.26	vars. 21-34	140	6.52	248	0	0	0	0	0	400	0	0	0	
12CR.20551.11	Lincoln	4	SR 1393 (HAGERS FERRY)	FROM SR 1394 TO SR 1395	2	1.40	20	60	2.80	107	0	1250	1556	200	160	200	0	0	0	
12CR.20551.11	Lincoln	5	SR 1395 (CLUB DR)	FROM SR 1393 TO NC 73	2	1.90	20	60	3.80	145	0	1750	2237	220	224	250	0	0	0	
12CR.20551.11	Lincoln	6	SR 1375 (PINE RIDGE RD)	FROM SR 1373 TO END OF PVMT.	1	1.54	20	40	0.00	0	0	0	1727	175	115	350	0	0	0	
12CR.20551.11	Lincoln	7	SR 2041 (E. CROSS DR)	FROM NC 16 TO SR 2040	3	0.08	35	0	0.00	0	0	0	155	20	11	40	0	1		
12CR.20551.11	Lincoln	8	SR 2040 (CROSS CNTR. DR)	FROM SR 2039 TO NC 73	3	0.19	35	0	0.00	0	0	0	368	40	25	120	0	2	1	
12CR.20551.11	Lincoln	9	SR 1343 (IVEY MEM CH RD)	FROM NC 150 TO SR 1003	2	2.77	21	100	5.54	211	0	2350	3250	350	319	350	0	0	0	
<b>TOTAL FOR PROJ NO. 12CR.20551.11</b>						<b>11.14</b>		<b>400</b>	<b>18.66</b>	<b>711</b>	<b>0</b>	<b>5350</b>	<b>9293</b>	<b>1,005</b>	<b>854</b>	<b>1,710</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>0</b>
<b>GRAND TOTAL</b>						<b>12.74</b>		<b>540</b>	<b>28.90</b>	<b>1101</b>	<b>700</b>	<b>7650</b>	<b>21078</b>	<b>2155</b>	<b>1736</b>	<b>2910</b>	<b>3</b>	<b>17</b>	<b>13</b>	<b>1</b>



PROJECT NO.	SHEET NO.	TOTAL NO.
12CR.10551.8	9	
12CR.20551.11		
12C.055065		

## THERMOPLASTIC AND PAINT QUANTITIES






PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	4685000000-E	4686000000-E	4705000000-E	4710000000-E	4721000000-E		4725000000-E			4810000000-E		4905000000-N	
					4" X 90 M WHITE THERMO LF	4" X 120 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 MSG SCHOOL 120 M EA	THERMO RXR 120 M EA	THERMO STR & RT ARROW 90 M EA	THERMO LT ARROW 90 M EA	THERMO RT ARROW 90 M EA	4" WHITE PAINT LF	4" YELLOW PAINT LF	SNOW PLOWABLE MARKERS EA
12CR.10551.8	Lincoln	1	NC 16	FROM SR 1379 TO CATAWBA CO.	42500	750	45500	0	250	12	0	3	45	2	0	0	410
12CR.10551.8	Lincoln	2	NC 16	FROM GASTON CO. TO SR 1397	12250	325	12200	0	60	0	0	0	4	0	0	0	85
<b>TOTAL FOR PROJ NO. 12CR.10551.8</b>					<b>54,750</b>	<b>1,075</b>	<b>57,700</b>		<b>310</b>	<b>12</b>		<b>3</b>	<b>49</b>	<b>2</b>			<b>495</b>
					<b>54,750</b>	<b>58,775</b>				<b>12</b>		<b>3</b>	<b>54</b>				
12cr.20551.11	Lincoln	3	SR 1002 (SHOAL RD)	FROM NC 182 TO NC 27					66	6			12		69500	70500	
12cr.20551.11	Lincoln	4	SR 1393 (HAGERS FERRY)	FROM SR 1394 TO SR 1395											30250	29500	
12cr.20551.11	Lincoln	5	SR 1395 (CLUB DR)	FROM SR 1393 TO NC 73					30				4	2	42500	42500	
12cr.20551.11	Lincoln	6	SR 1375 (PINE RIDGE RD)	FROM SR 1373 TO END OF PVMT.				100	74		4				33250	32750	
12cr.20551.11	Lincoln	7	SR 2041 (E. CROSS DR)	FROM NC 16 TO SR 2040													
12cr.20551.11	Lincoln	8	SR 2040 (CROSS CNTR. DR)	FROM SR 2039 TO NC 73													
12cr.20551.11	Lincoln	9	SR 1343 (IVEY MEM CH RD)	FROM NC 150 TO SR 1003											59500	58500	
<b>TOTAL FOR PROJ NO. 12CR.20551.11</b>					<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>170</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>16</b>	<b>2</b>	<b>235000</b>	<b>233750</b>	<b>0</b>
										<b>10</b>		<b>0</b>	<b>18</b>		<b>468,750</b>		
<b>GRAND TOTAL</b>					<b>54,750</b>	<b>1,075</b>	<b>57,700</b>	<b>100</b>	<b>480</b>	<b>18</b>	<b>4</b>	<b>3</b>	<b>65</b>	<b>4</b>	<b>235,000</b>	<b>233,750</b>	<b>495</b>
					<b>54,750</b>	<b>58,775</b>				<b>22</b>		<b>3</b>	<b>72</b>		<b>468,750</b>		

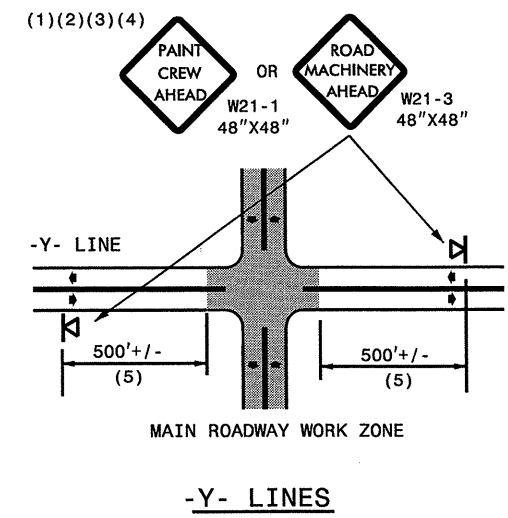


**GENERAL NOTES**

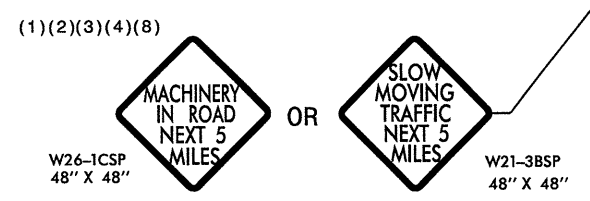
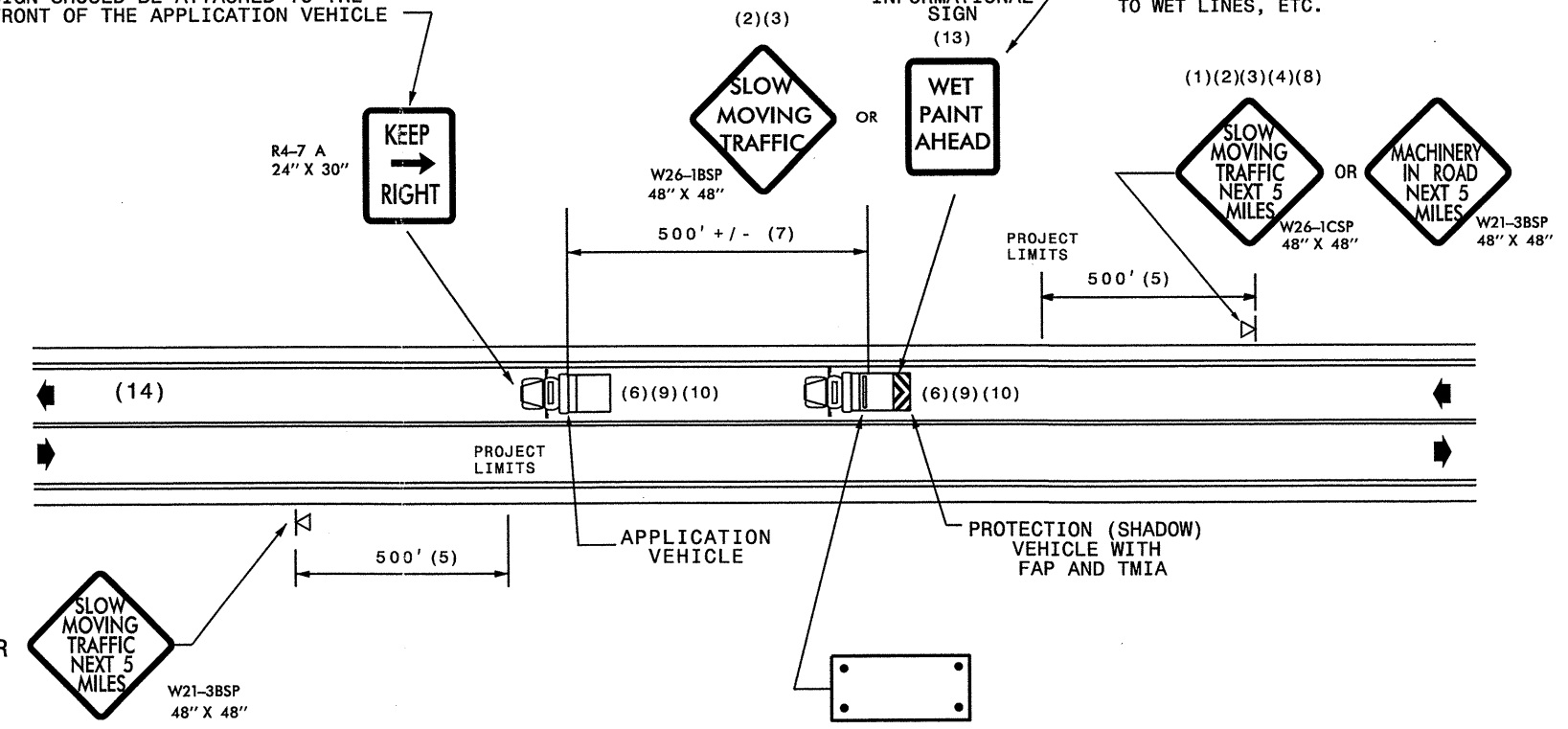
- (1) THE FOLLOWING OPTIONS MAY BE USED FOR ADVANCE WARNING SIGNS:
  - A. TRUCK MOUNTED SIGNS
  - B. TRUCK MOUNTED CHANGEABLE MESSAGE SIGN (CMS)
  - C. GROUND MOUNTED ADVANCE WARNING SIGNS (MUST CIRCLE TO PICK UP SIGNS)
  - D. GROUND MOUNTED CHANGEABLE MESSAGE SIGN (CMS) (MUST USE CIRCLE TO PICK UP SIGNS)
- (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