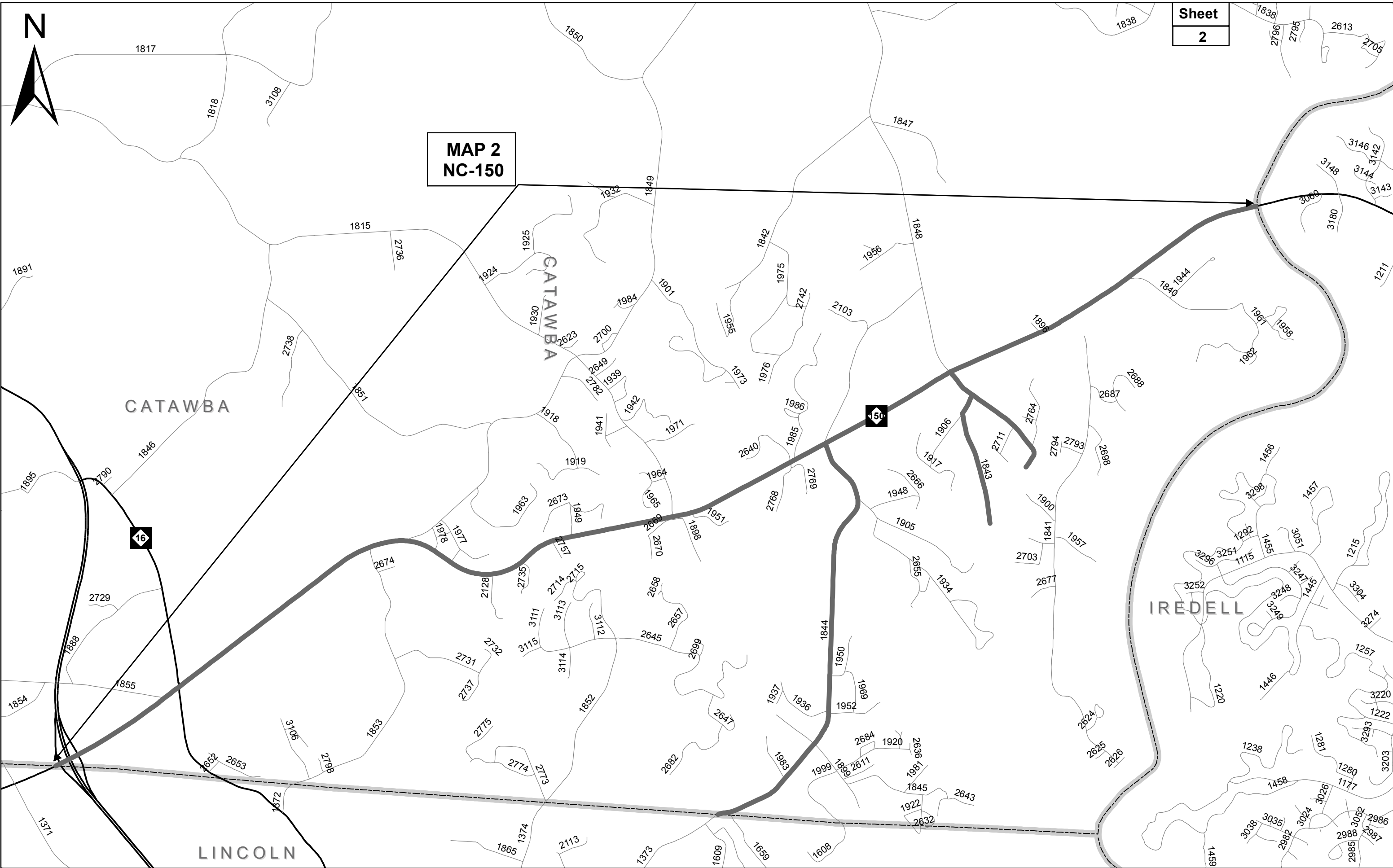


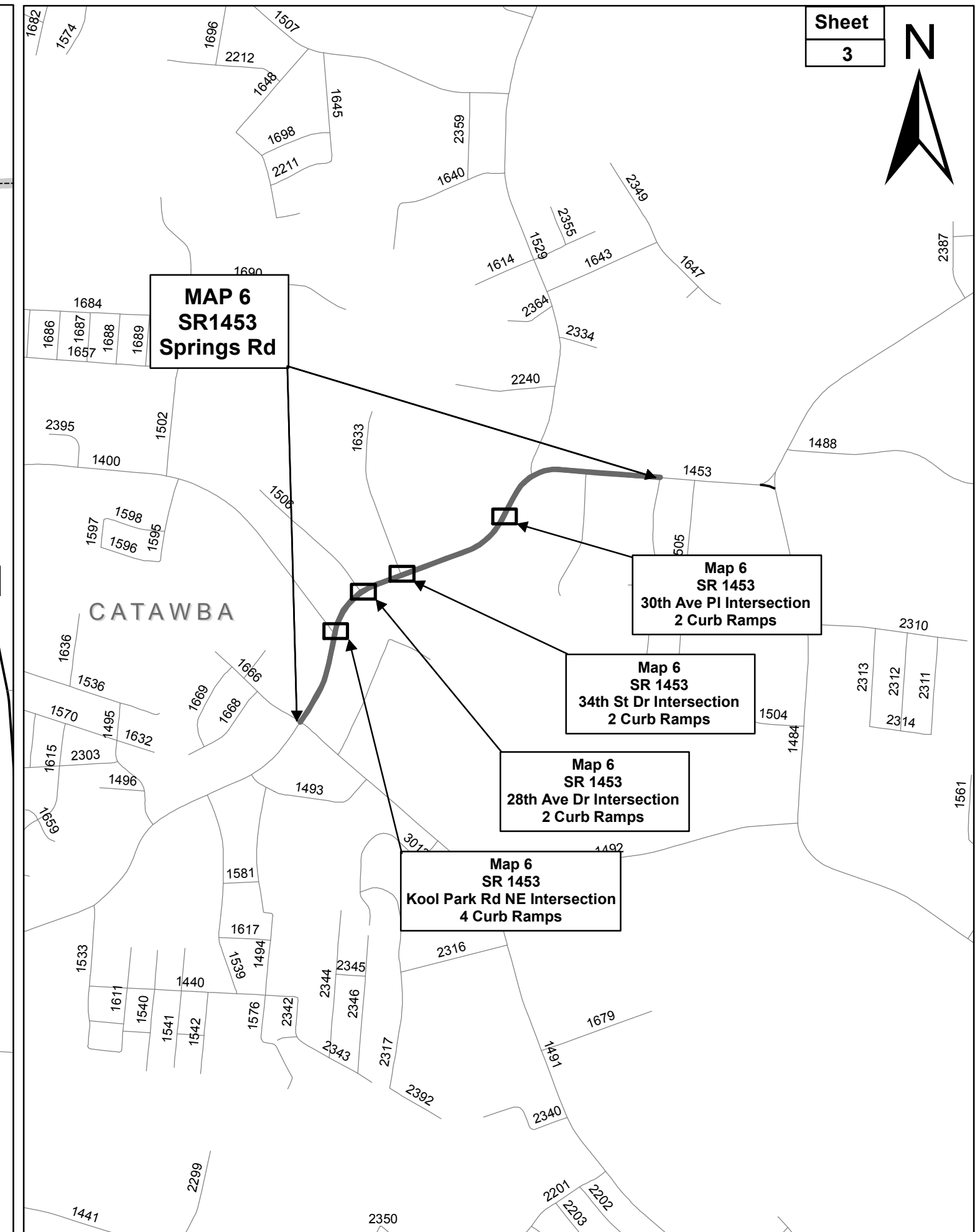
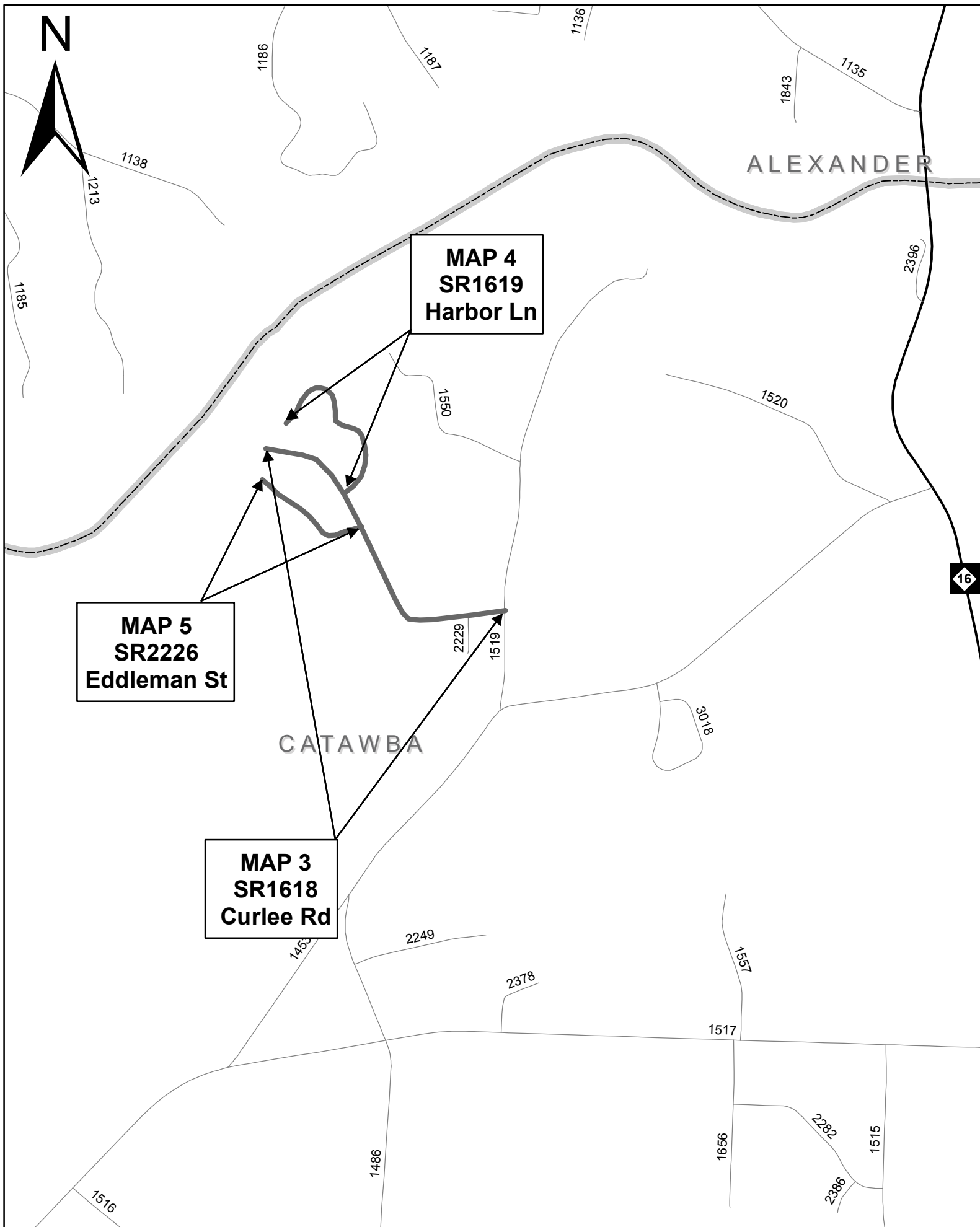
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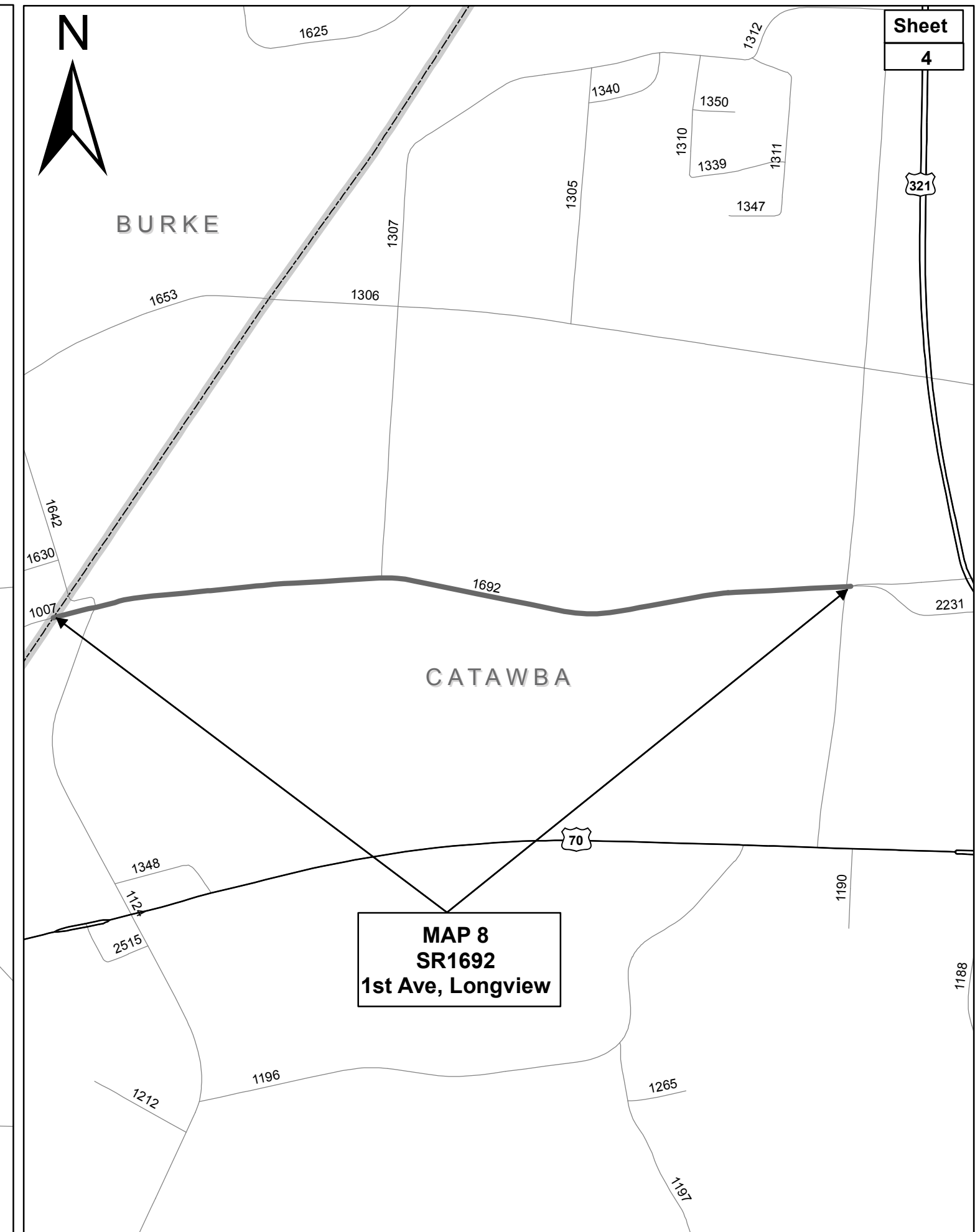
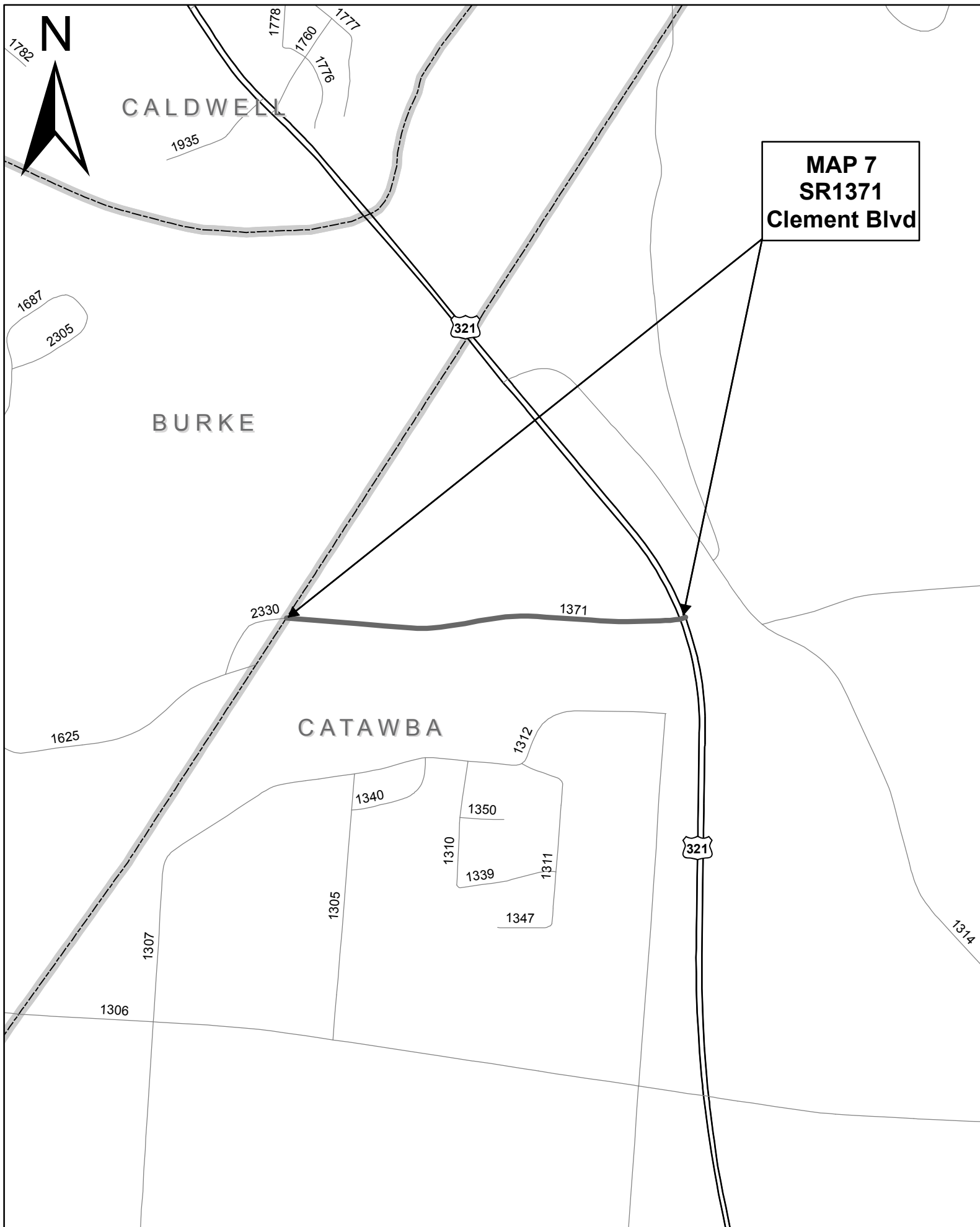
MAP 1
NC-16

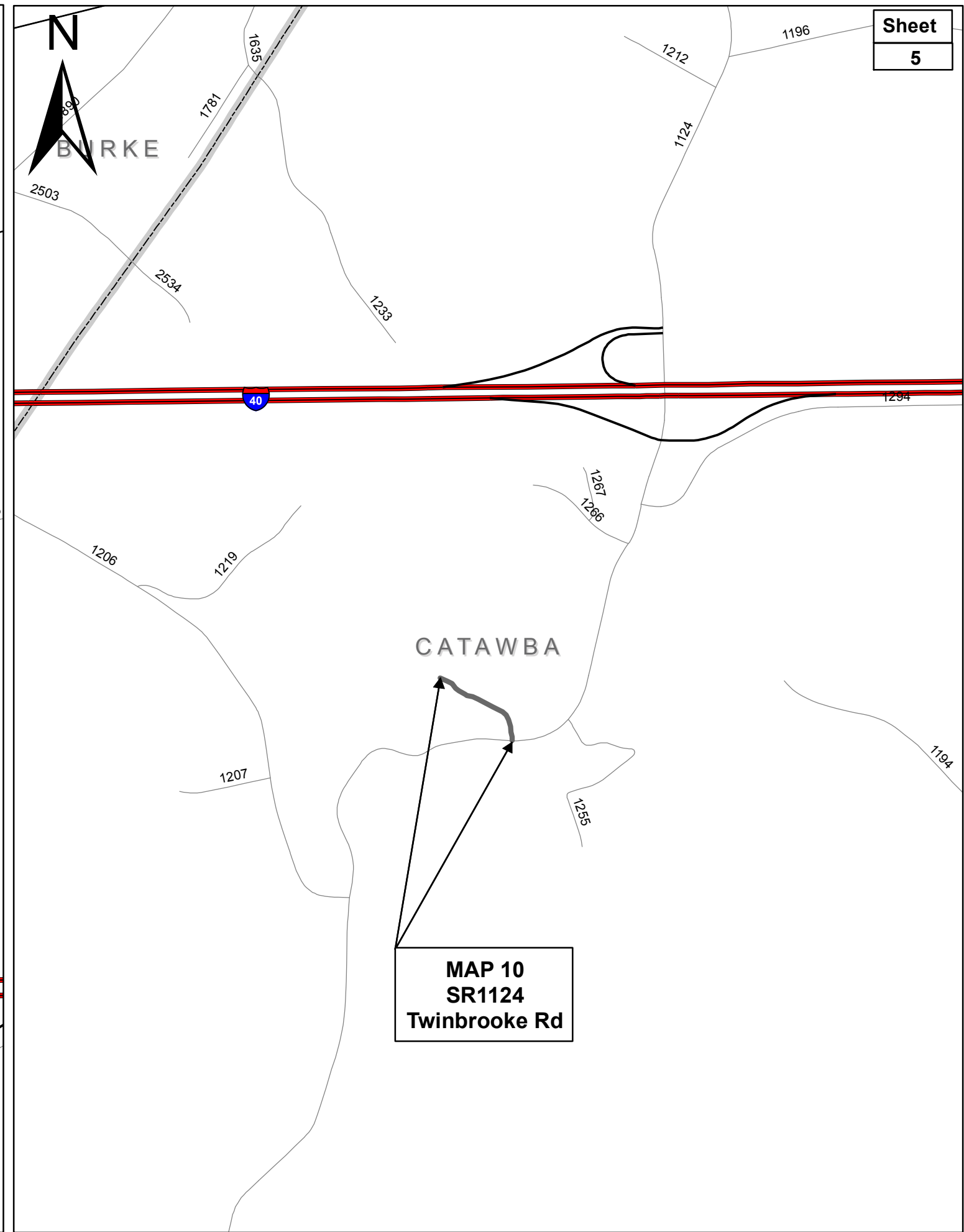
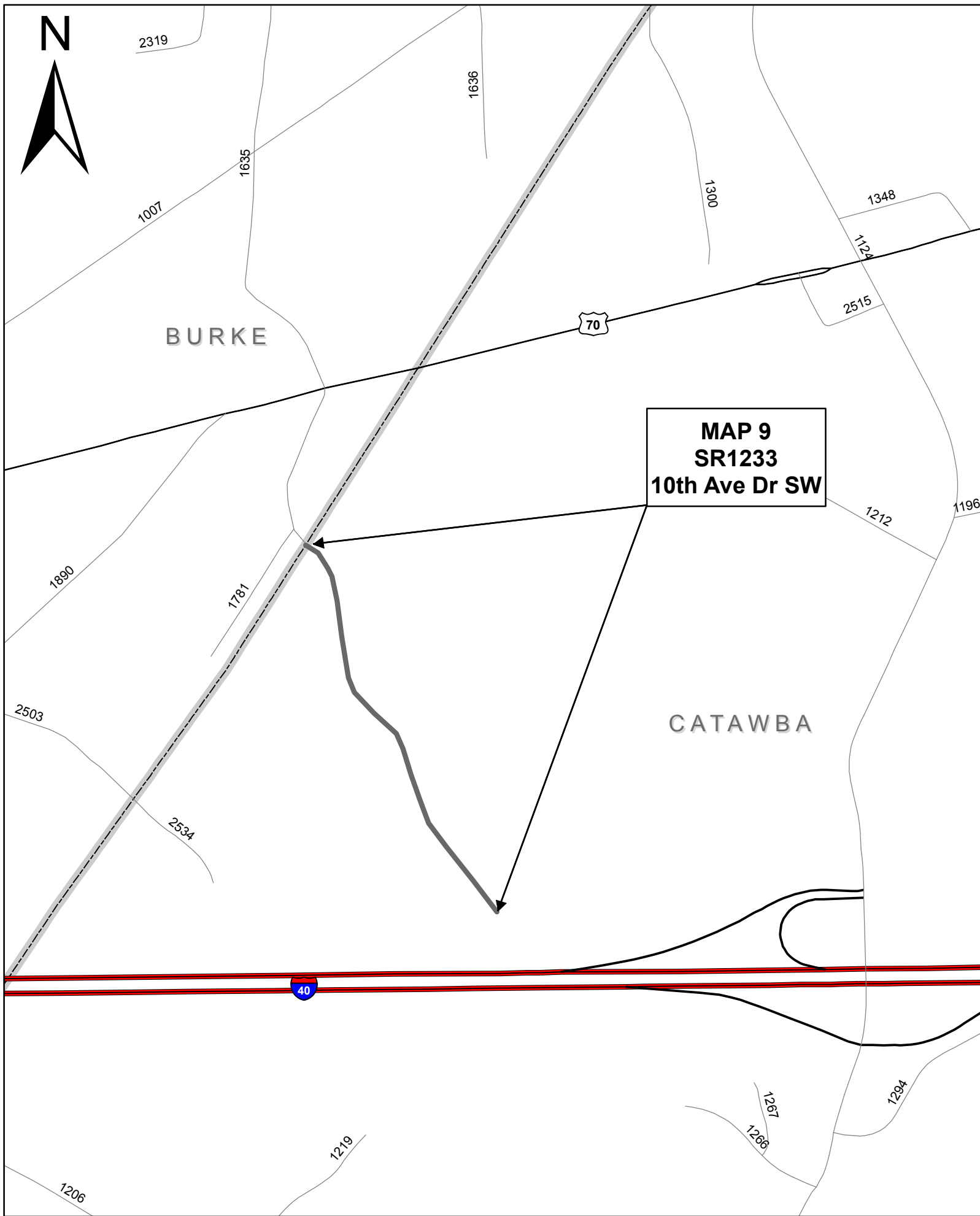
**MAP 2
NC-150**

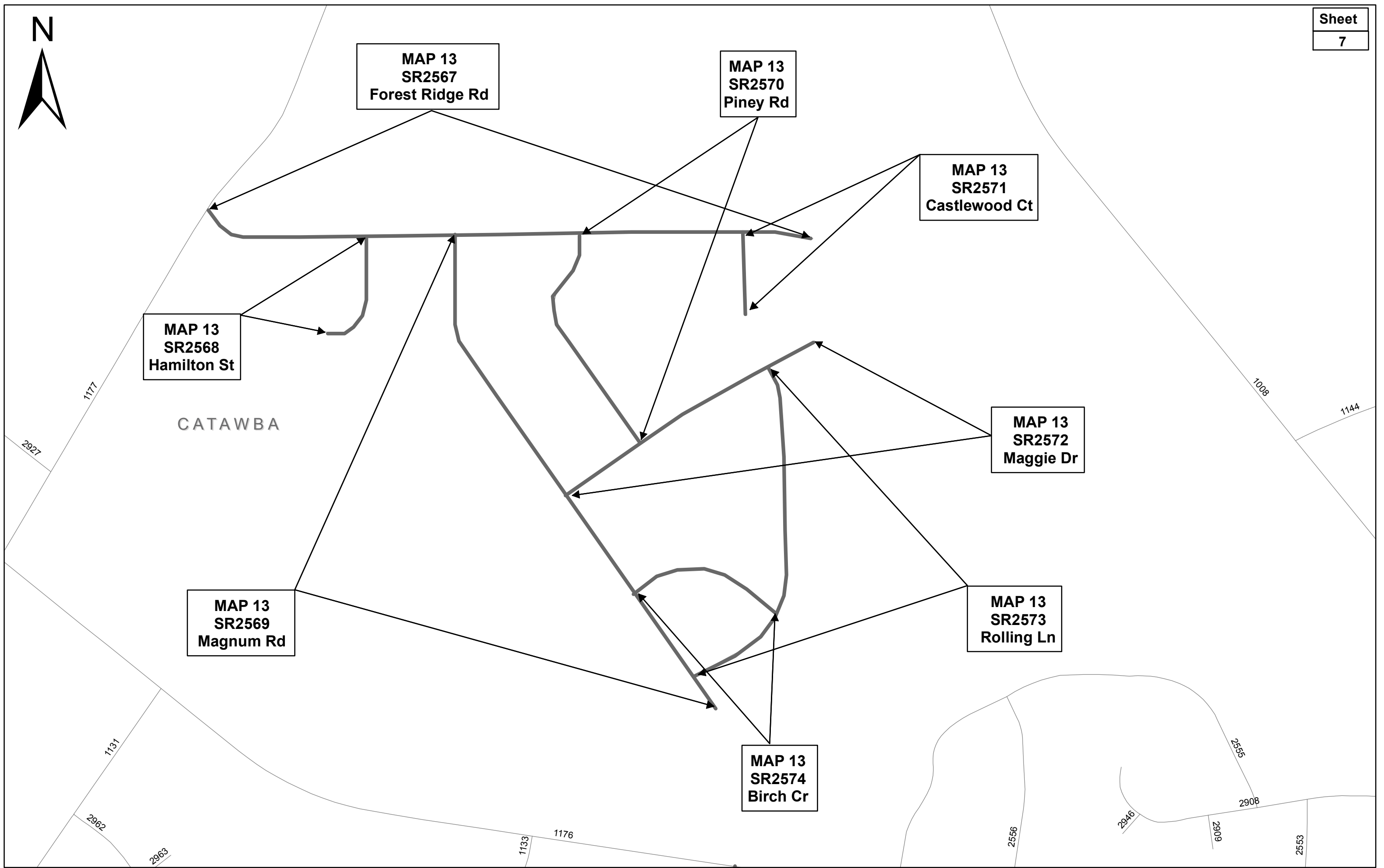
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2











MAP 13
SR2568
Hamilton St

MAP 13
SR2567
Forest Ridge Rd

MAP 13
SR2570
Piney Rd

MAP 13
SR2571
Castlewood Ct

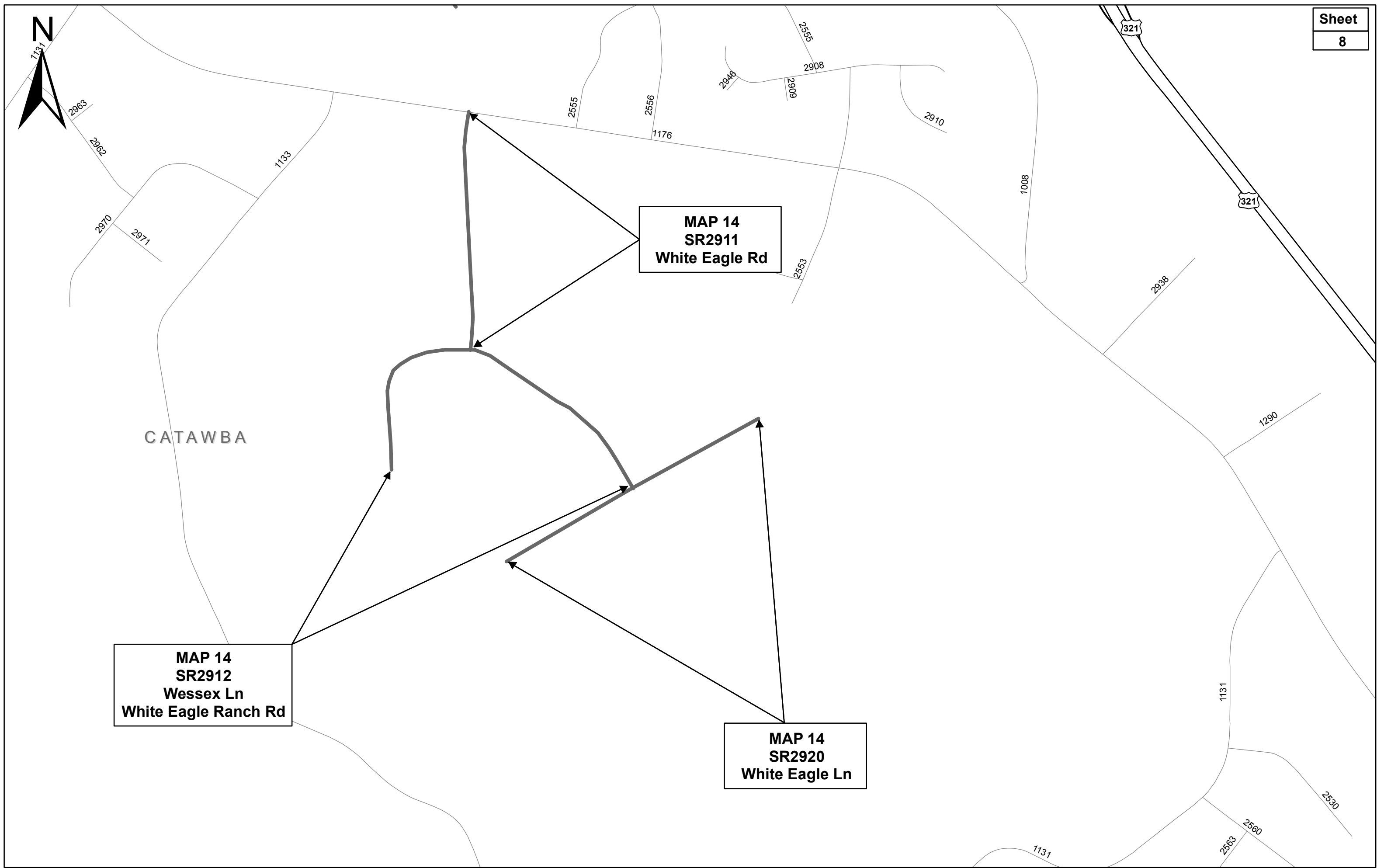
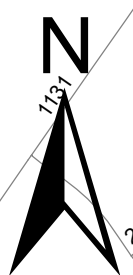
MAP 13
SR2572
Maggie Dr

MAP 13
SR2573
Rolling Ln

MAP 13
SR2574
Birch Cr

MAP 13
SR2569
Magnum Rd

CATAWBA

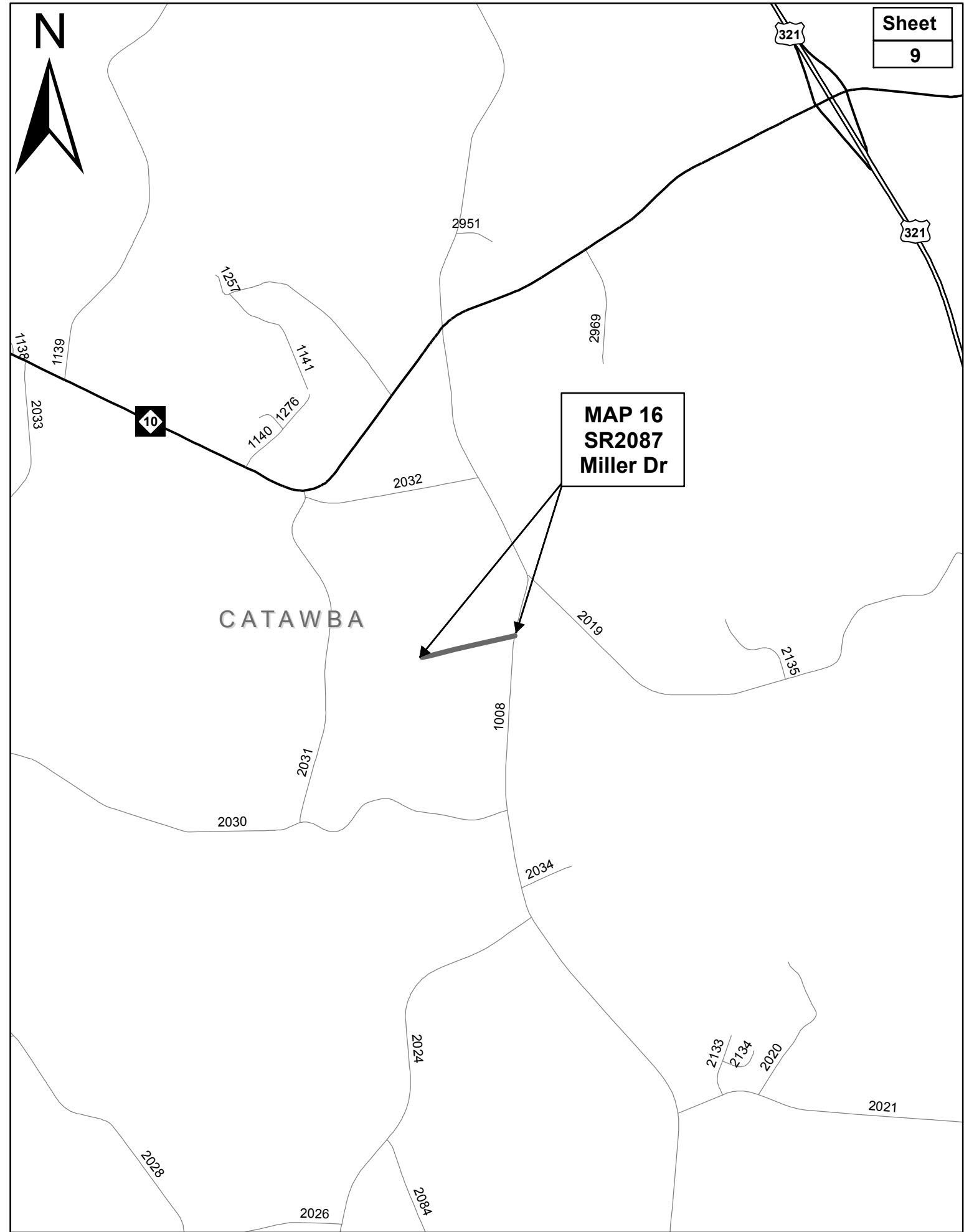
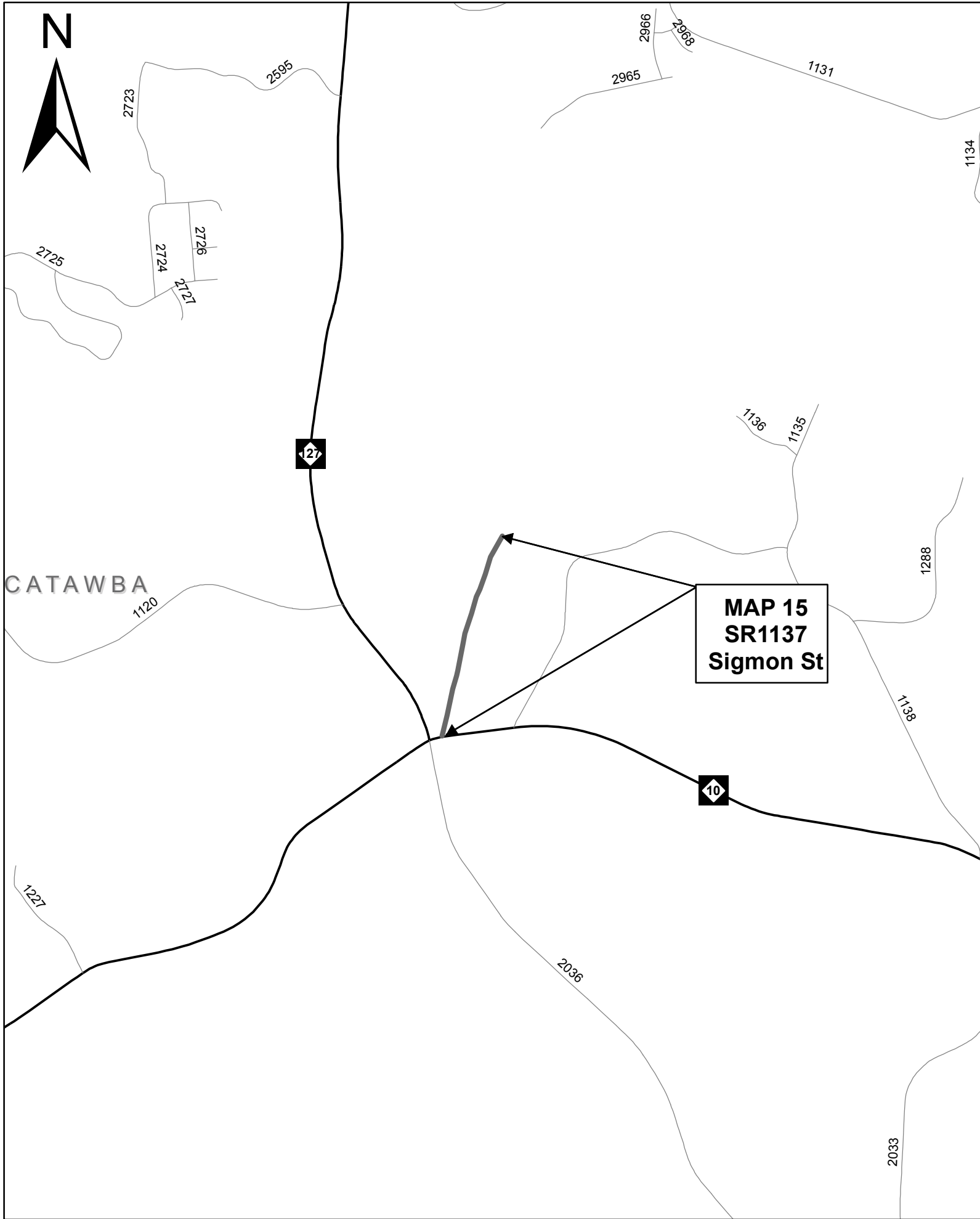


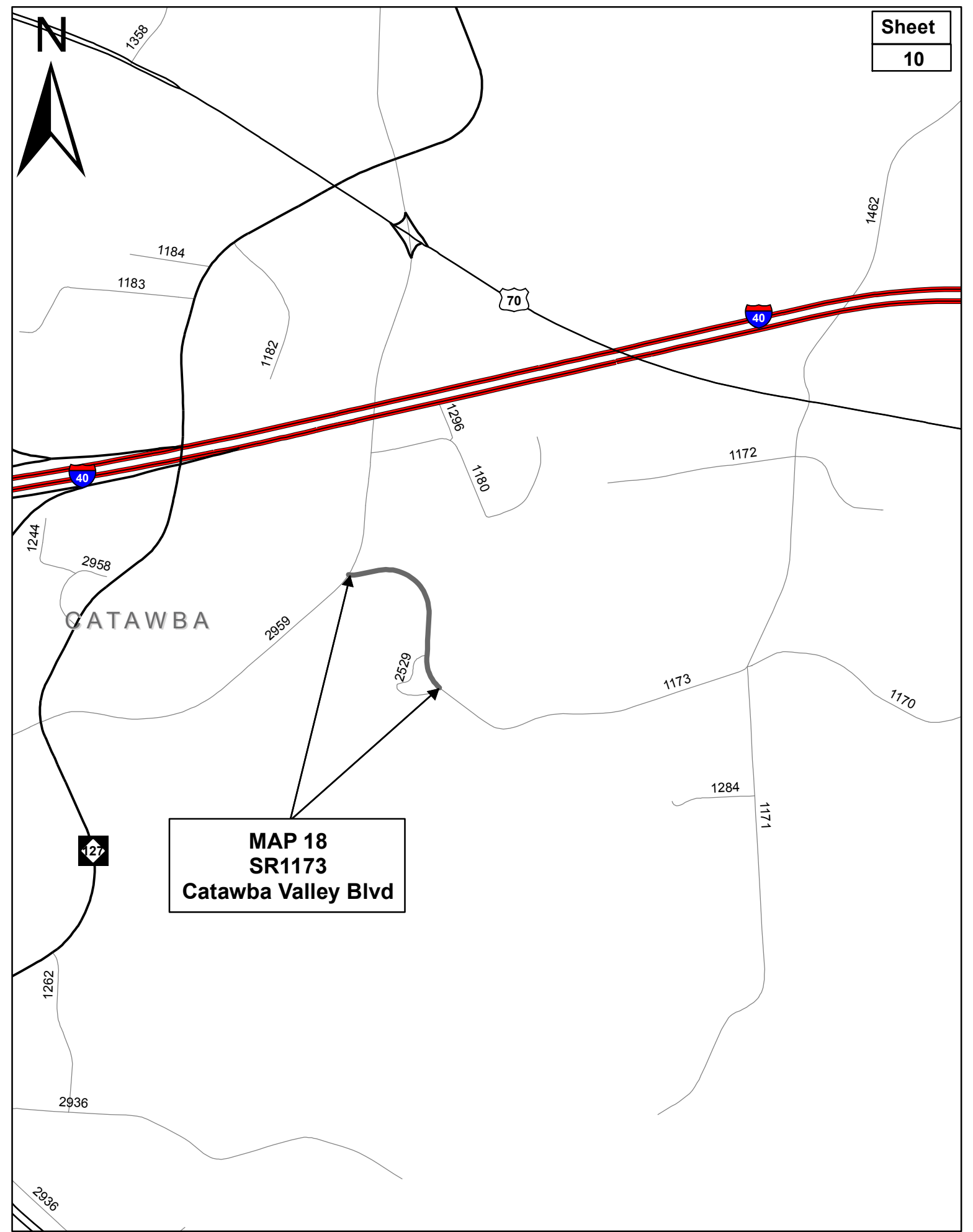
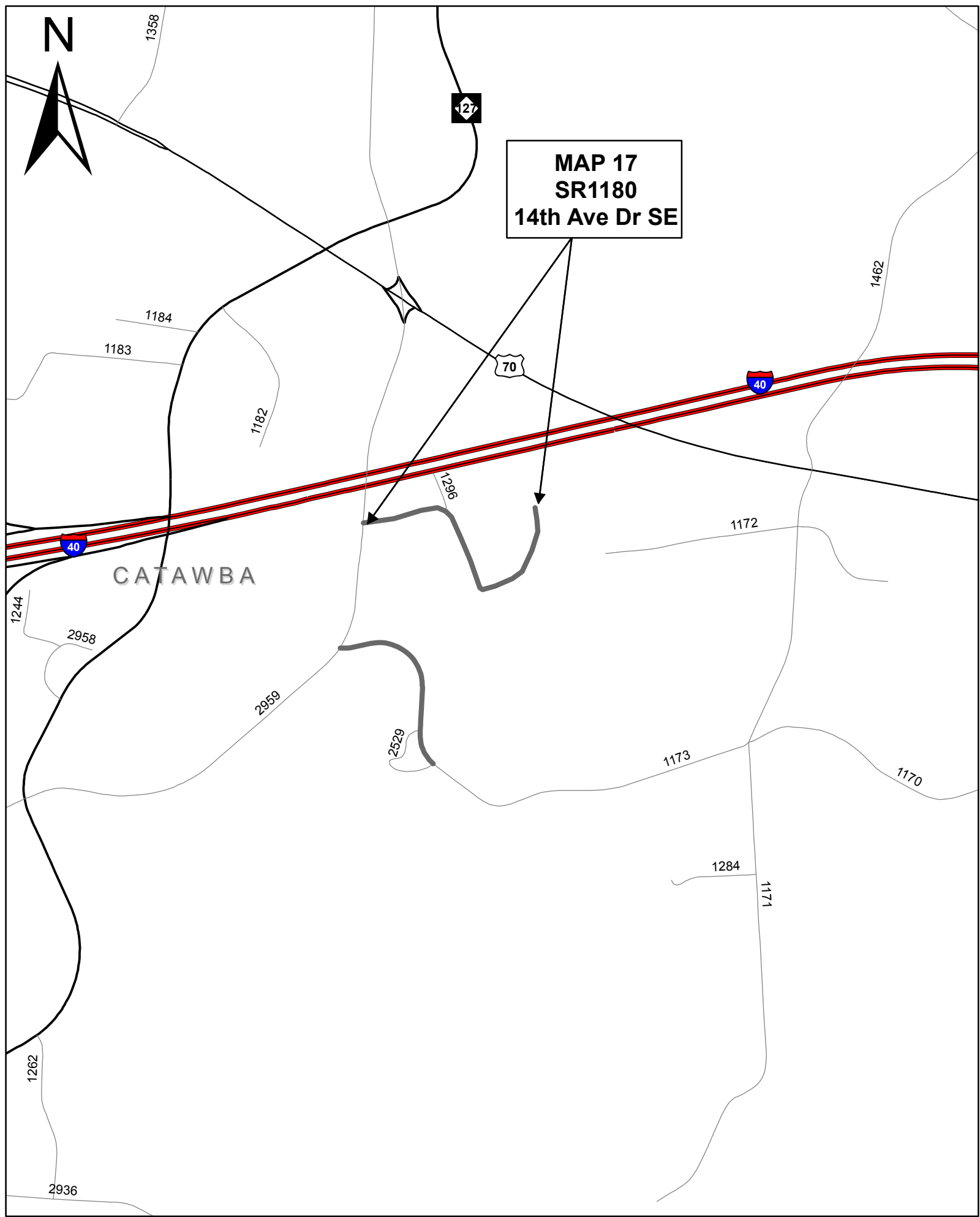
MAP 14
SR2911
White Eagle Rd

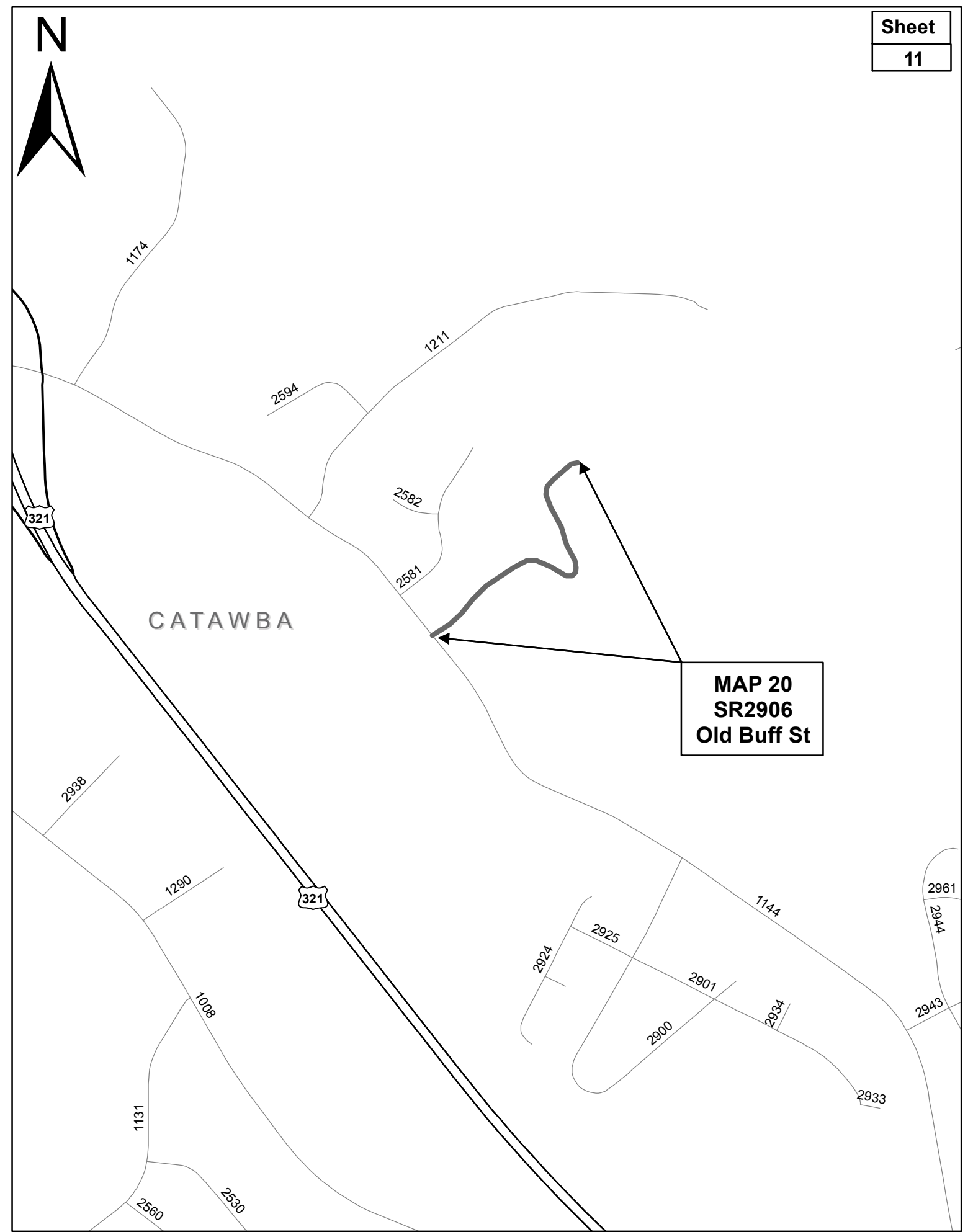
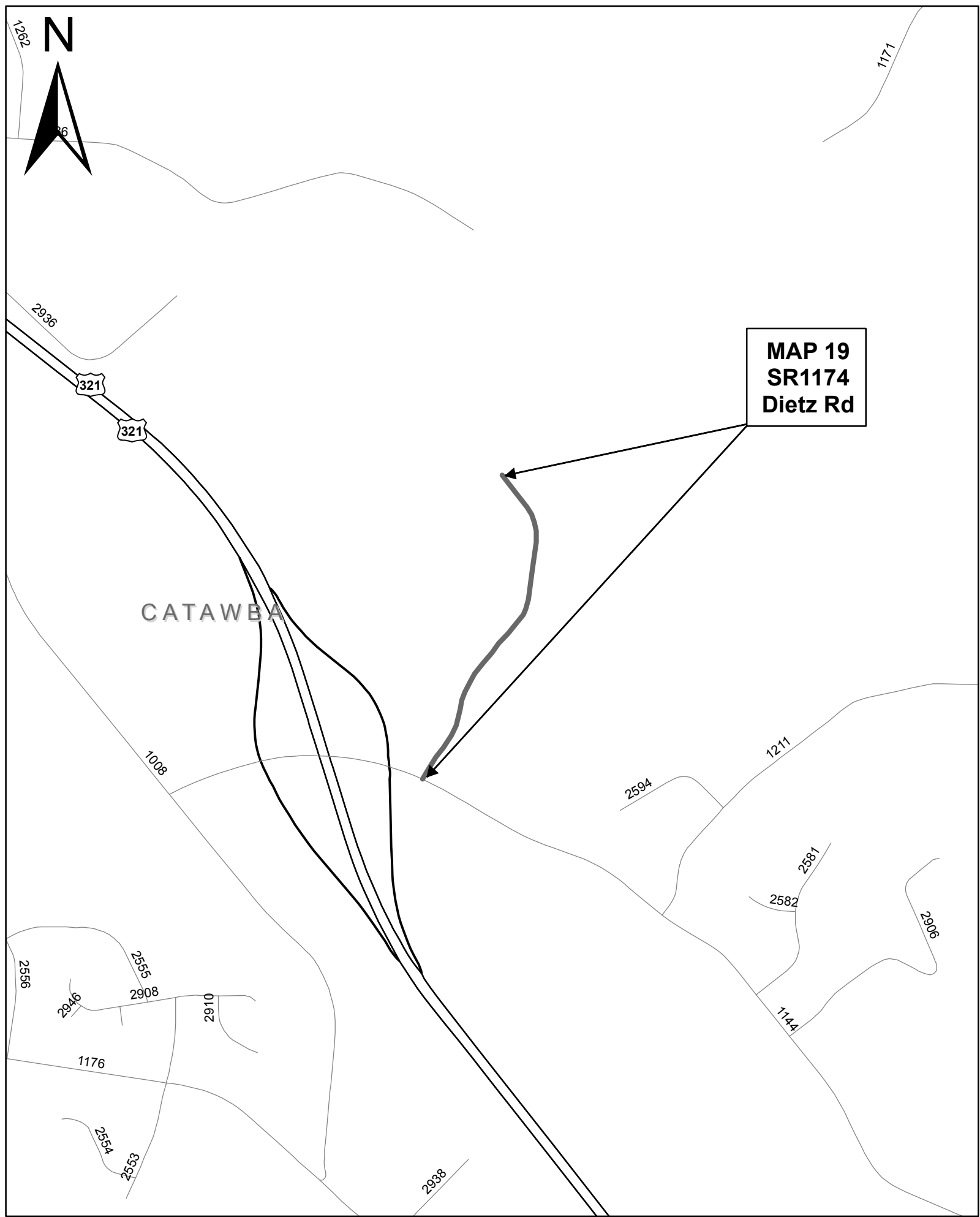
MAP 14
SR2912
Wessex Ln
White Eagle Ranch Rd

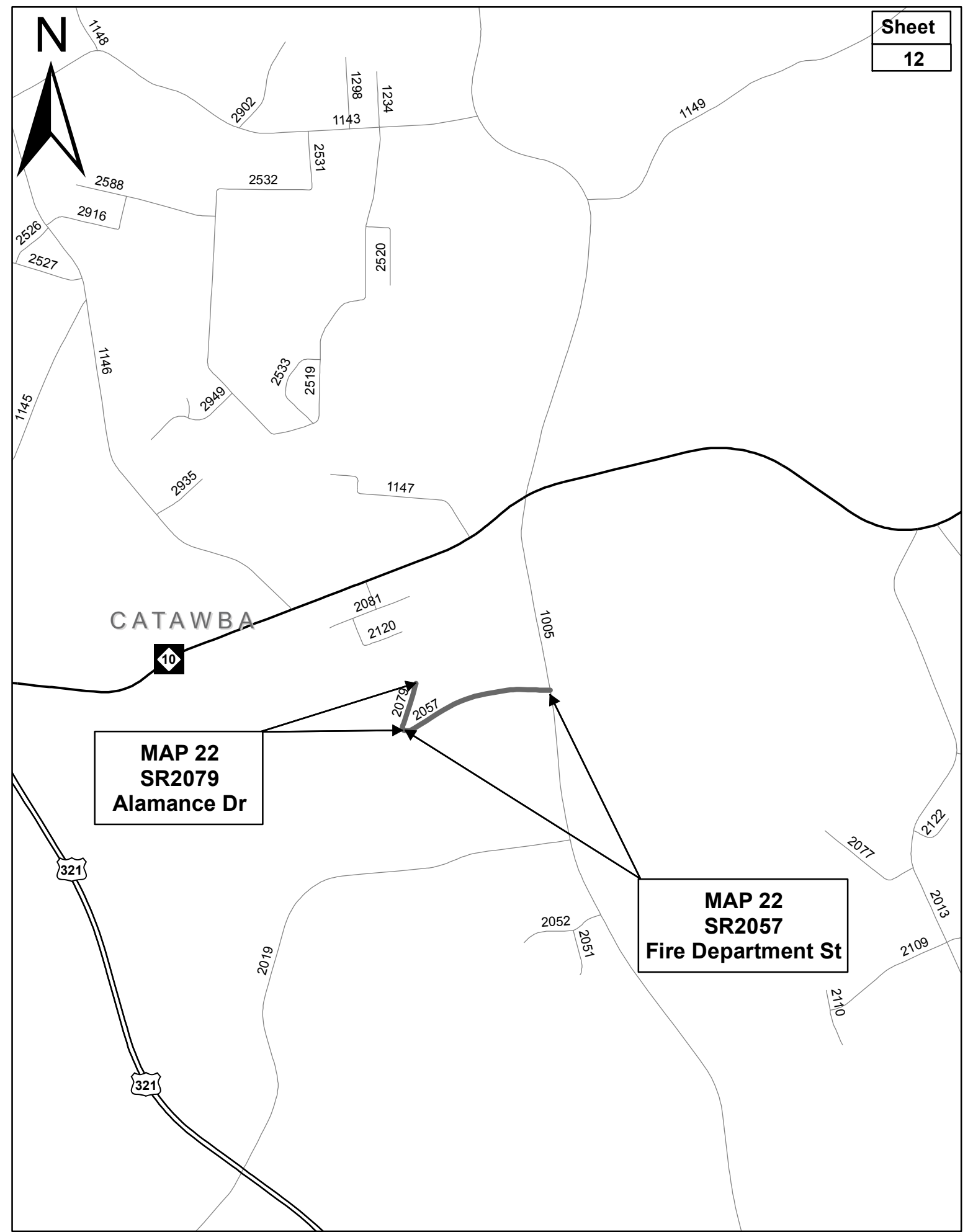
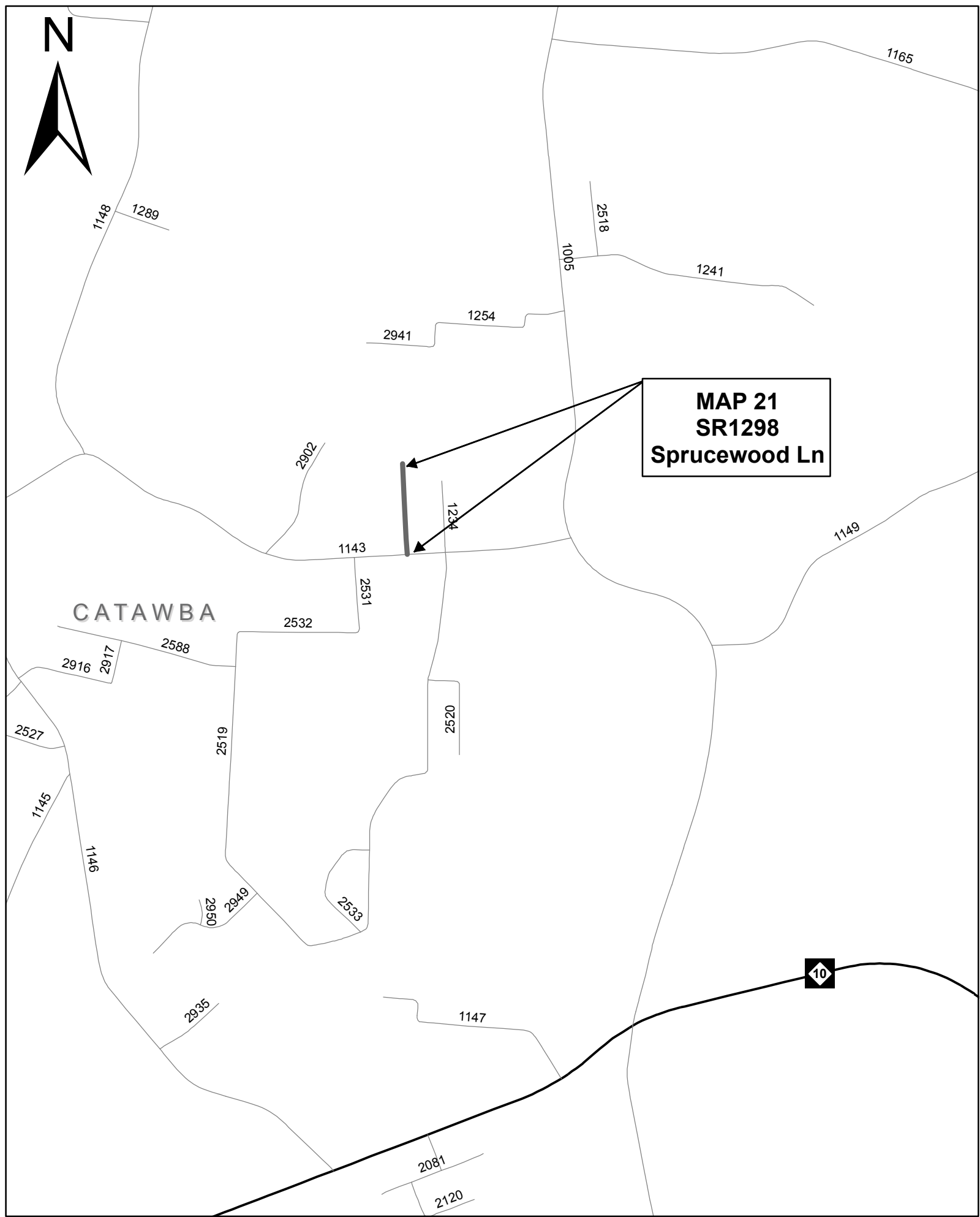
MAP 14
SR2920
White Eagle Ln

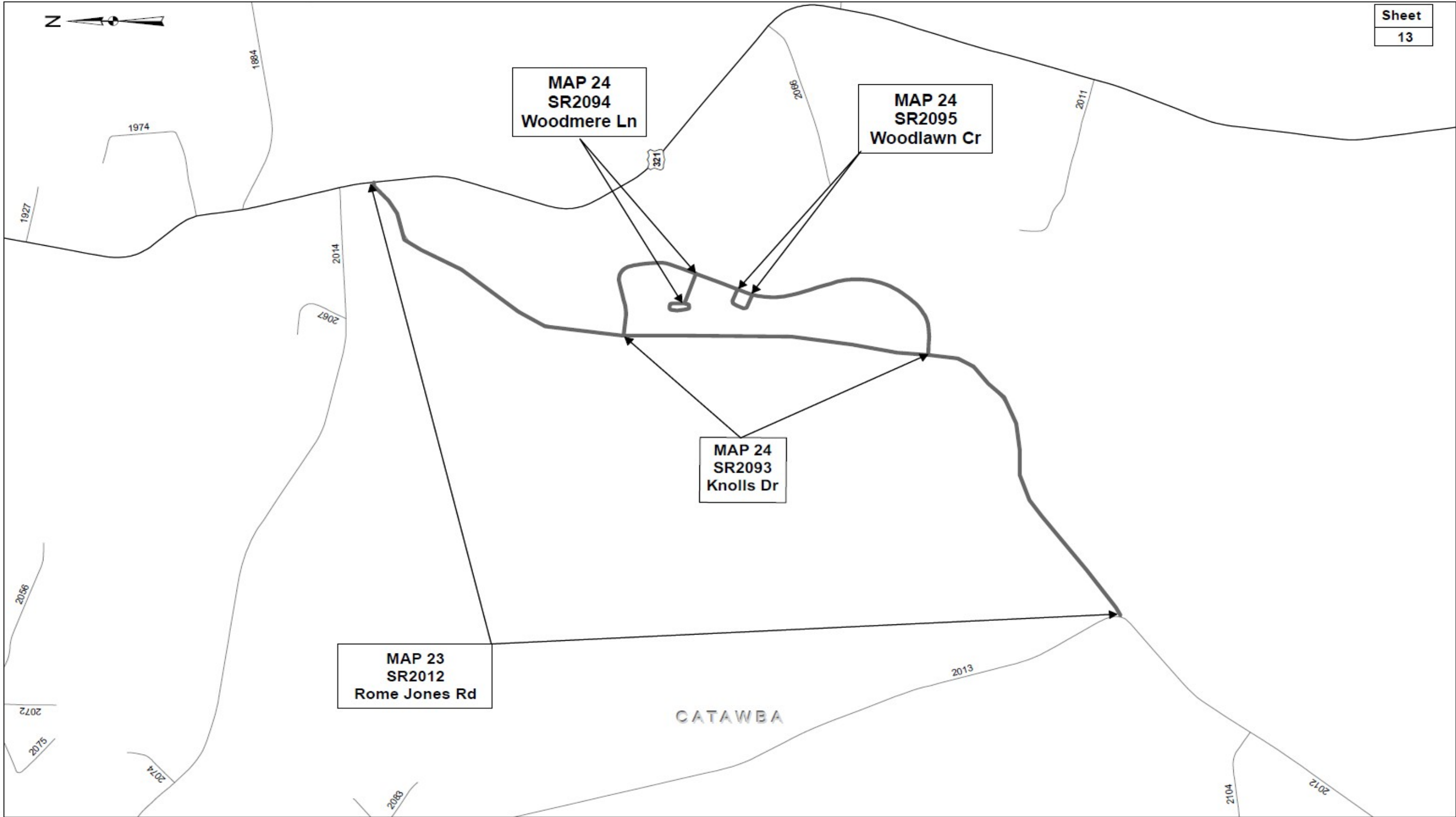
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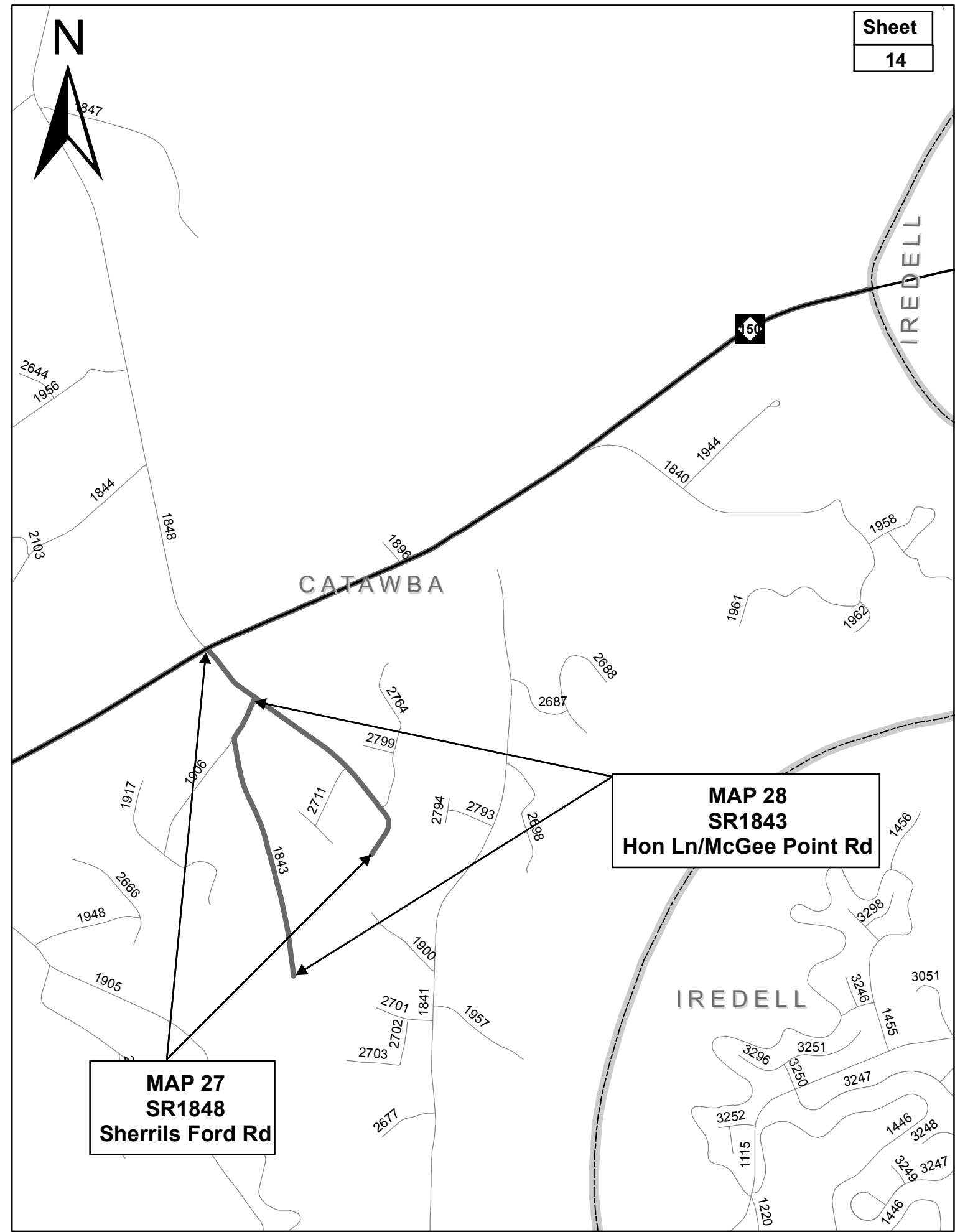
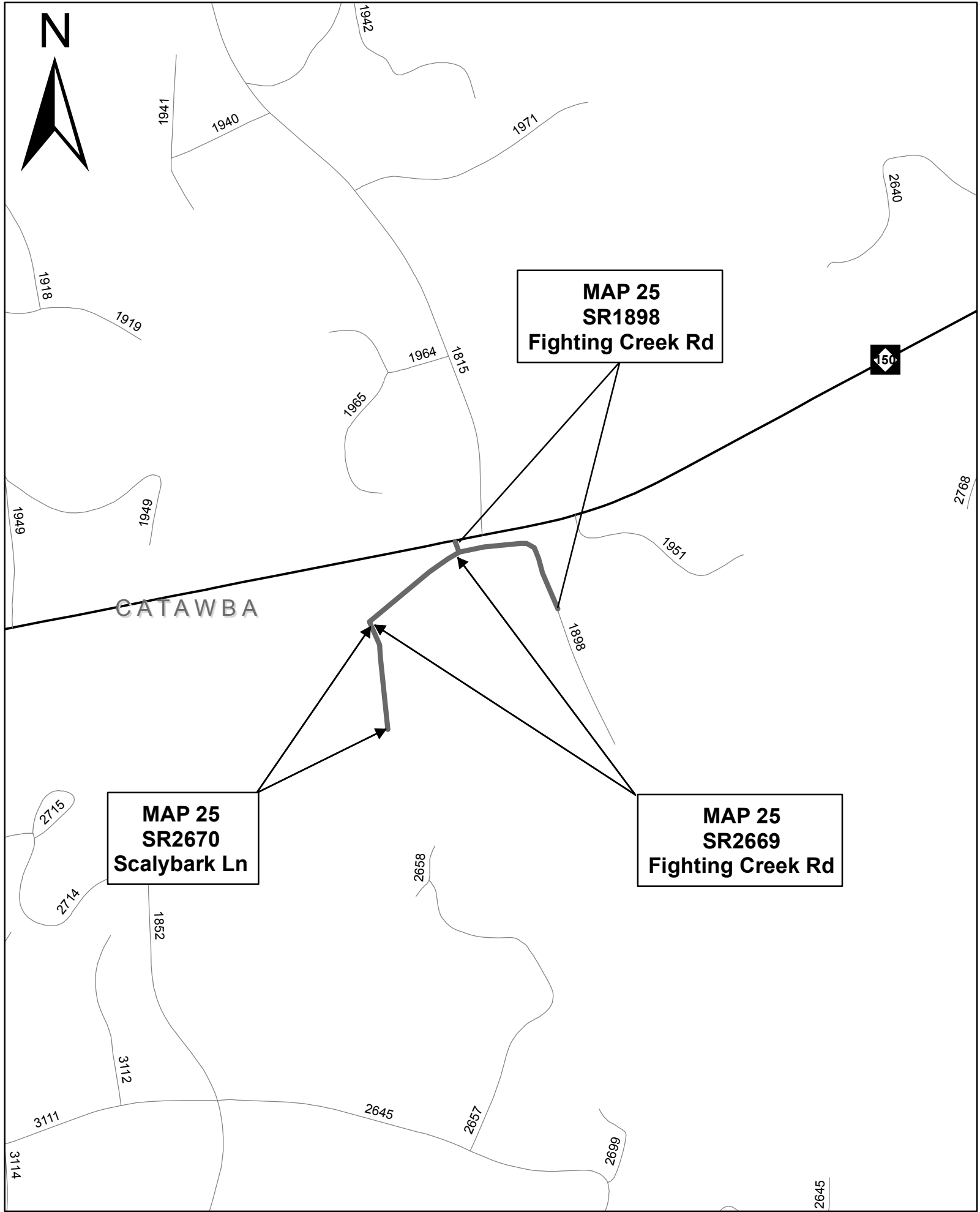


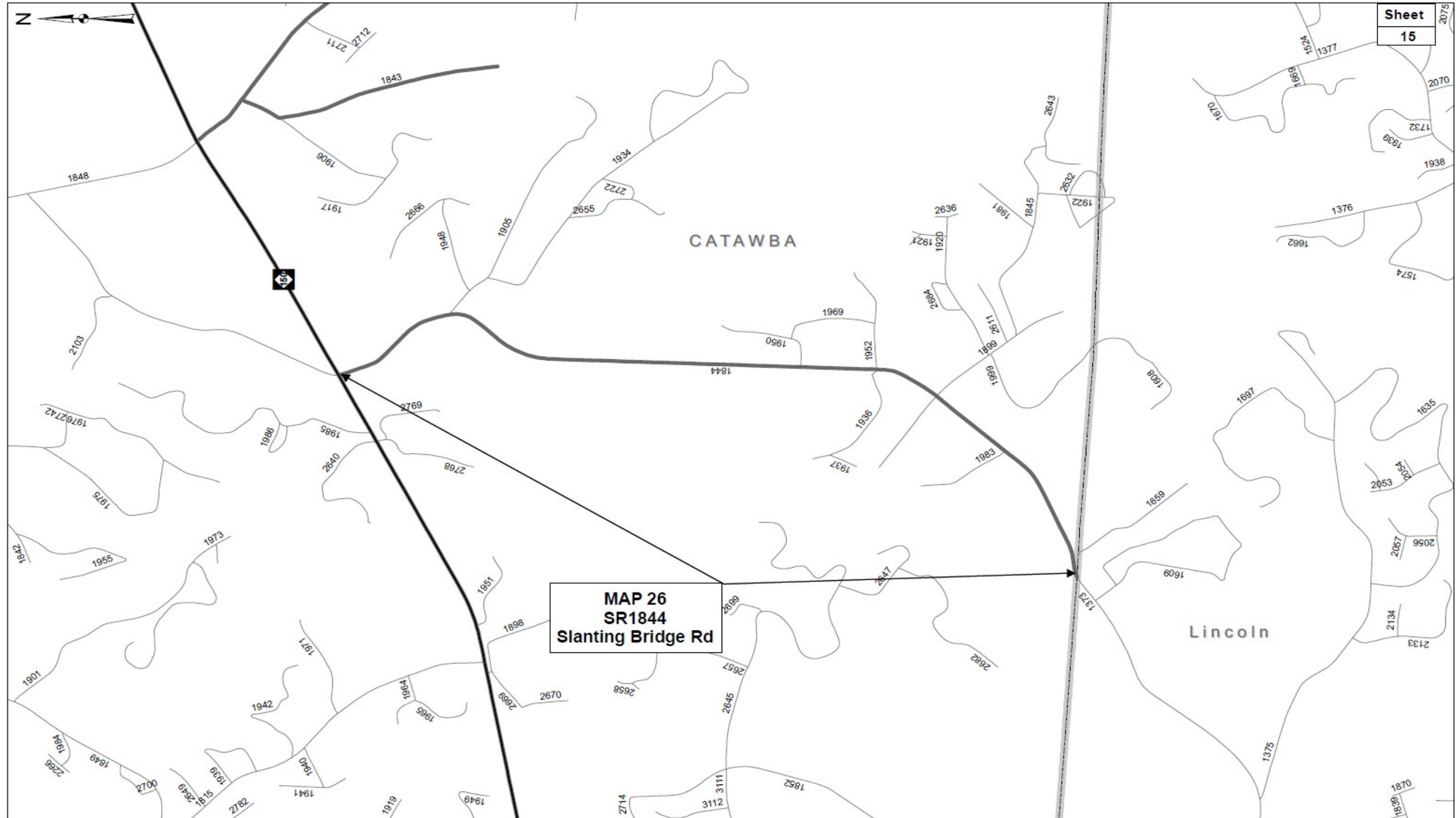


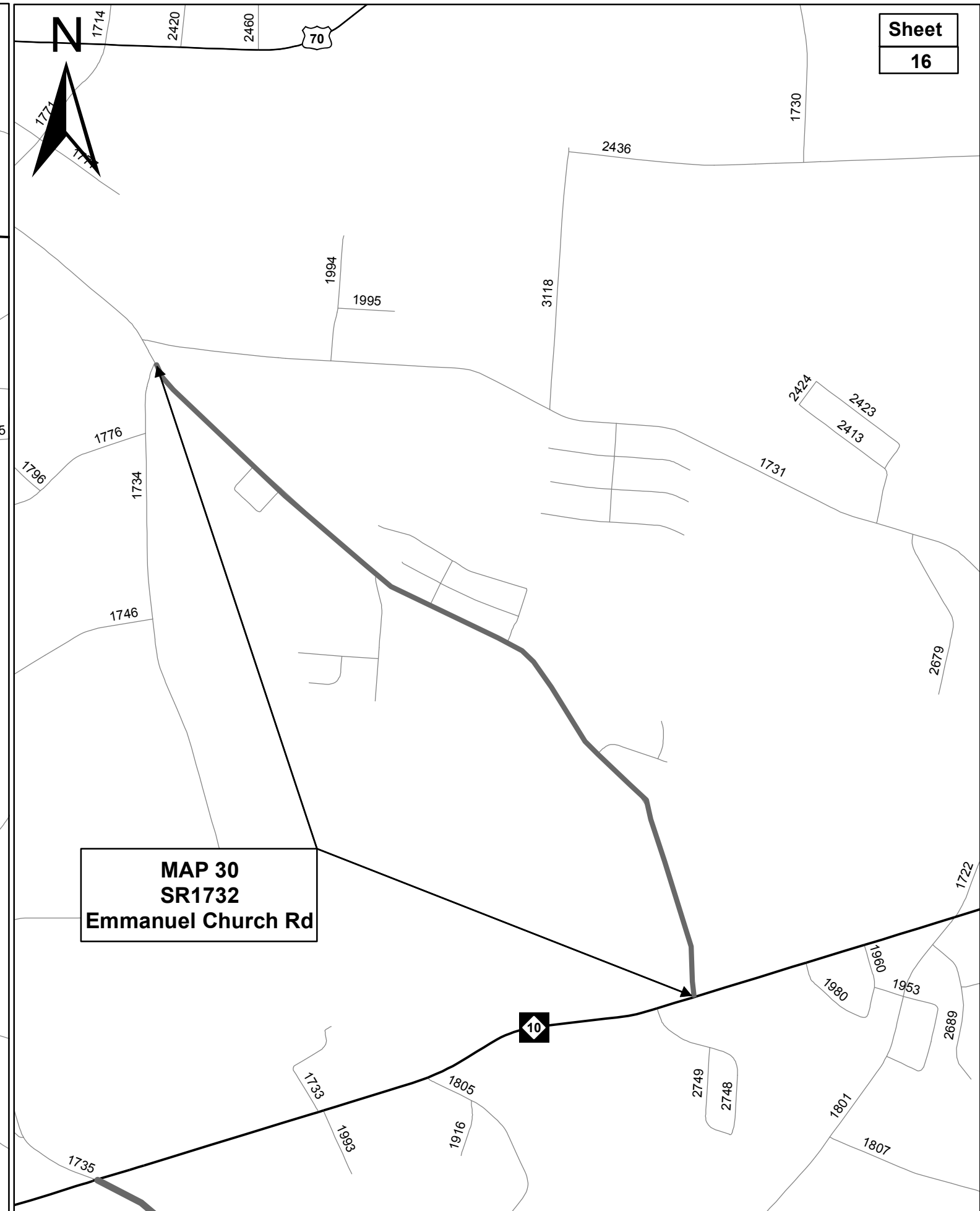
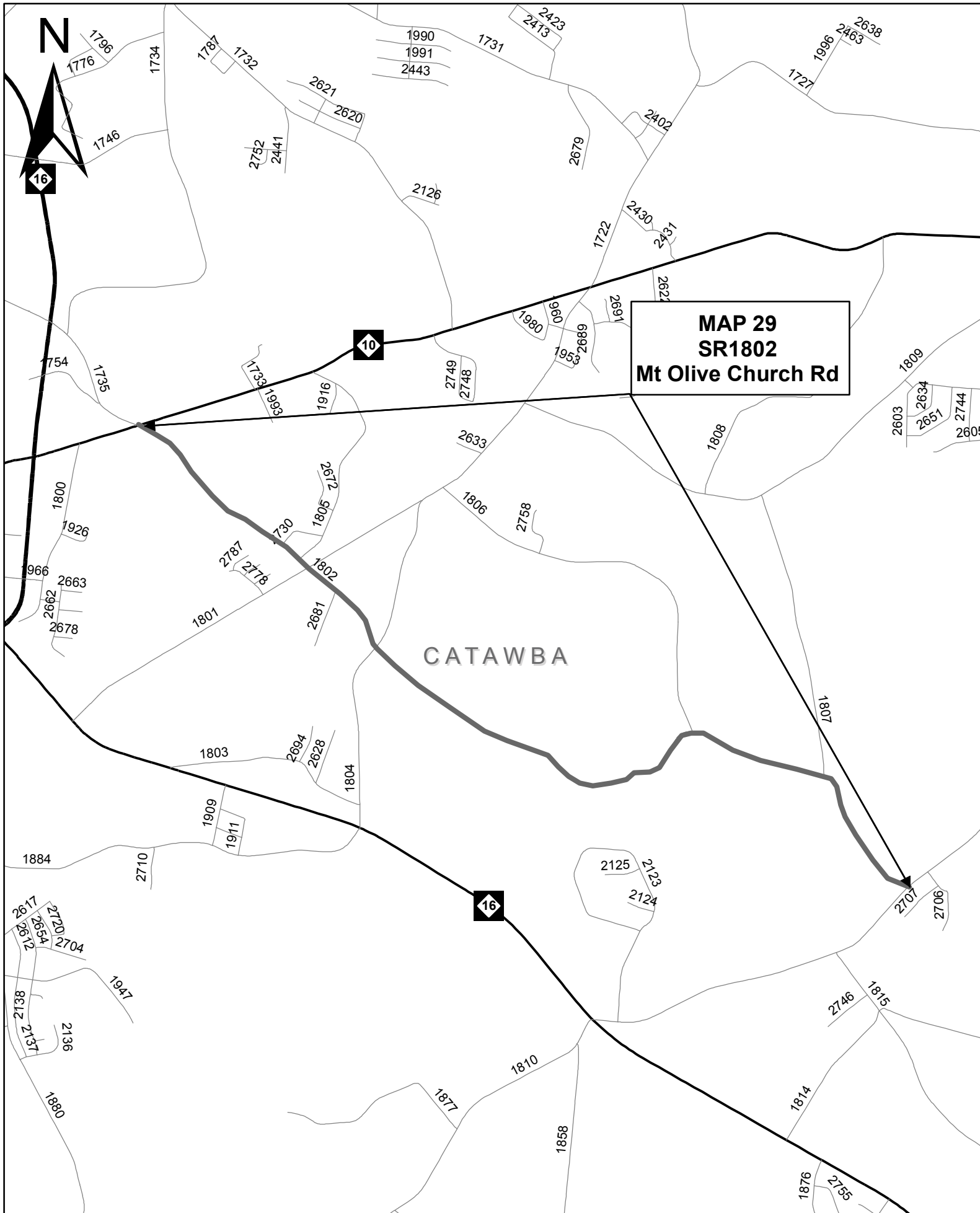














MAP 38
SR2330
9th Ave Dr NW

BURKE

CATAWBA

321

1314

1371

1625

1312

1307

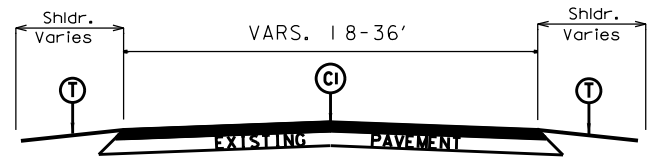
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1305

1310

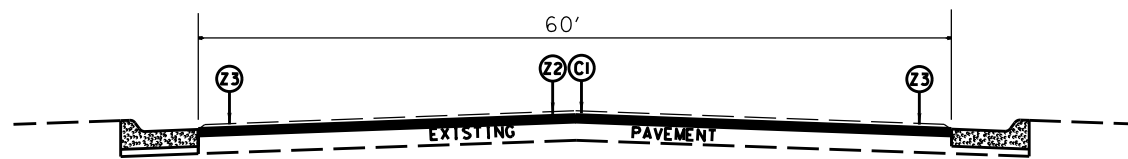
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1311



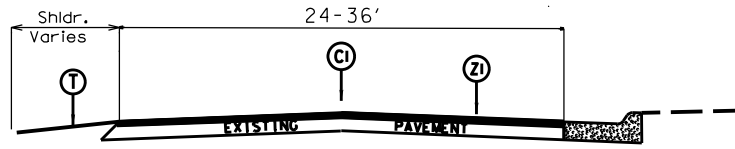
TYPICAL SECTION NO. 1

- MAP # 1 - (entire map)
- MAP # 2 - (entire map)
- MAP # 3 - (entire map)
- MAP # 6 - 56+64 to 60+19
- MAP # 8 - 0+00 to 40+91
- MAP # 9 - (entire map)
- MAP # 11 - 3+60 to 11+23
- MAP # 12 - (entire map)
- MAP # 15 - (entire map)
- MAP # 17 - (entire map)
- MAP # 18 - (entire map)
- MAP # 22 - 0+66 to 30+78
- MAP # 23 - (entire map)
- MAP # 26 - (entire map)
- MAP # 27 - (entire map)
- MAP # 29 - (entire map)
- MAP # 31 - 8+78 to 10+97
- MAP # 32 - (entire map)
- MAP # 33 - (entire map)



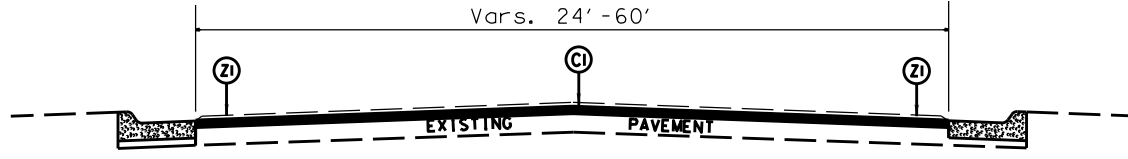
TYPICAL SECTION NO. 4

MAP # 6 - 0+00 TO 56+64



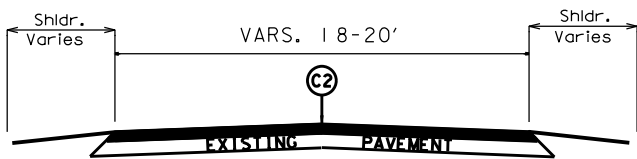
TYPICAL SECTION NO. 2

MAP # 11 - 0+00 TO 3+60



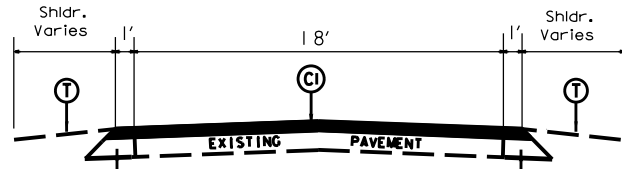
TYPICAL SECTION NO. 5

- MAP # 7 - (entire map)
- MAP # 8 - 40+91 to 79+20
- MAP # 22 - 0+00 to 0+66
- MAP # 31 - 0+00 to 8+78
- MAP # 38 - (entire map)



TYPICAL SECTION NO. 3

- MAP # 4 - (entire map)
- MAP # 5 - (entire map)
- MAP # 10 - (entire map)
- MAP # 13 - (entire map)
- MAP # 14 - (entire map)
- MAP # 16 - (entire map)
- MAP # 19 - (entire map)
- MAP # 20 - (entire map)
- MAP # 21 - (entire map)
- MAP # 24 - (entire map)
- MAP # 25 - (entire map)
- MAP # 28 - (entire map)
- MAP # 34 - (entire map)
- MAP # 35 - (entire map)
- MAP # 36 - (entire map)
- MAP # 37 - (entire map)



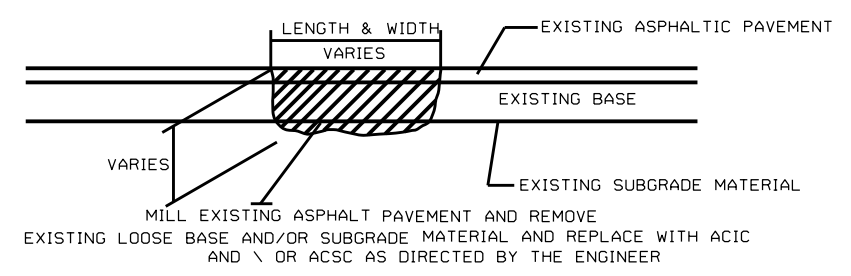
TYPICAL SECTION NO. 6

MAP # 30 - (entire map)
MAP # 31 - 10+97 to 216+48

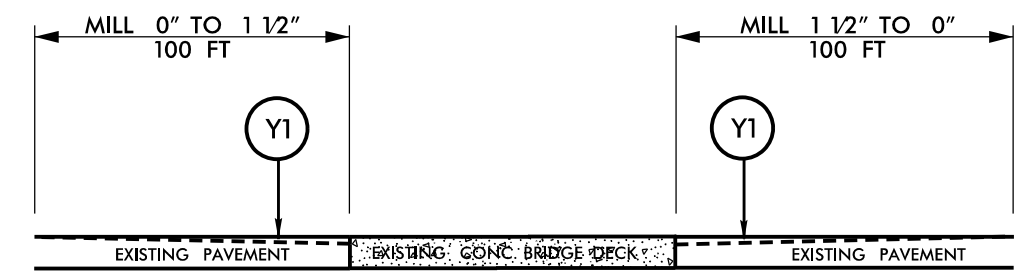
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
E	PROP. APPROX. 8.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD., IN EACH OF TWO LIFTS.
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION, WIDTH VARIES 2'-6')
Z1	MILL ASPHALT PAVEMENT APPROXIMATELY 0" TO 1.5" DEPTH, 0" ON CENTER AND 1.5" AT CURB
Z2	MILL ASPHALT PAVEMENT APPROXIMATELY 1.5" DEPTH
Z3	MILL ASPHALT PAVEMENT APPROXIMATELY 1.5" TO 3" DEPTH, 3" DEPTH AT CURB LINE TAPERING TO 1.5" OVER 12'
Y1	INCIDENTAL MILLING

Checked by: Drawn by: C. Brittain

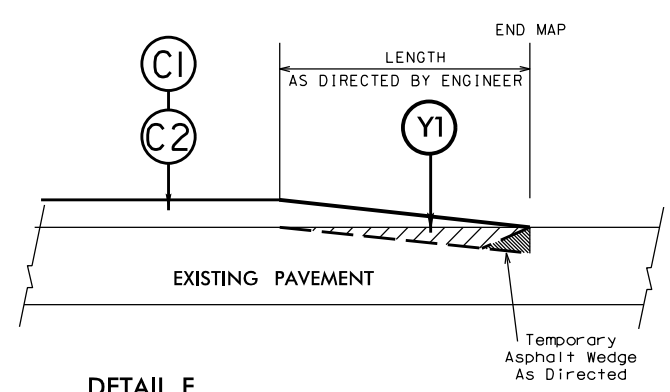
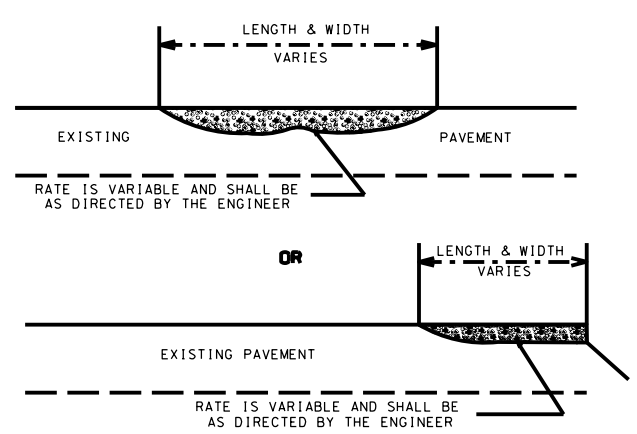
DETAIL A
PATCHING EXISTING PAVEMENT



DETAIL D
MILLING BRIDGE APPROACHES

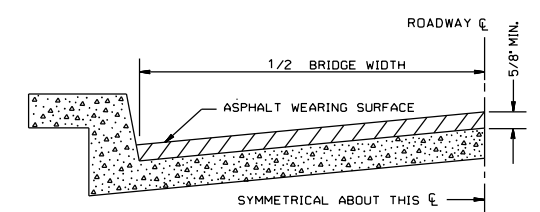


DETAIL B
ASPHALT CONCRETE SURFACE COURSE
TYPE S9.5B OR S9.5C (LEVELING COURSE)



DETAIL E
TIE-IN (INCIDENTAL) MILLING DETAIL

DETAIL C
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.

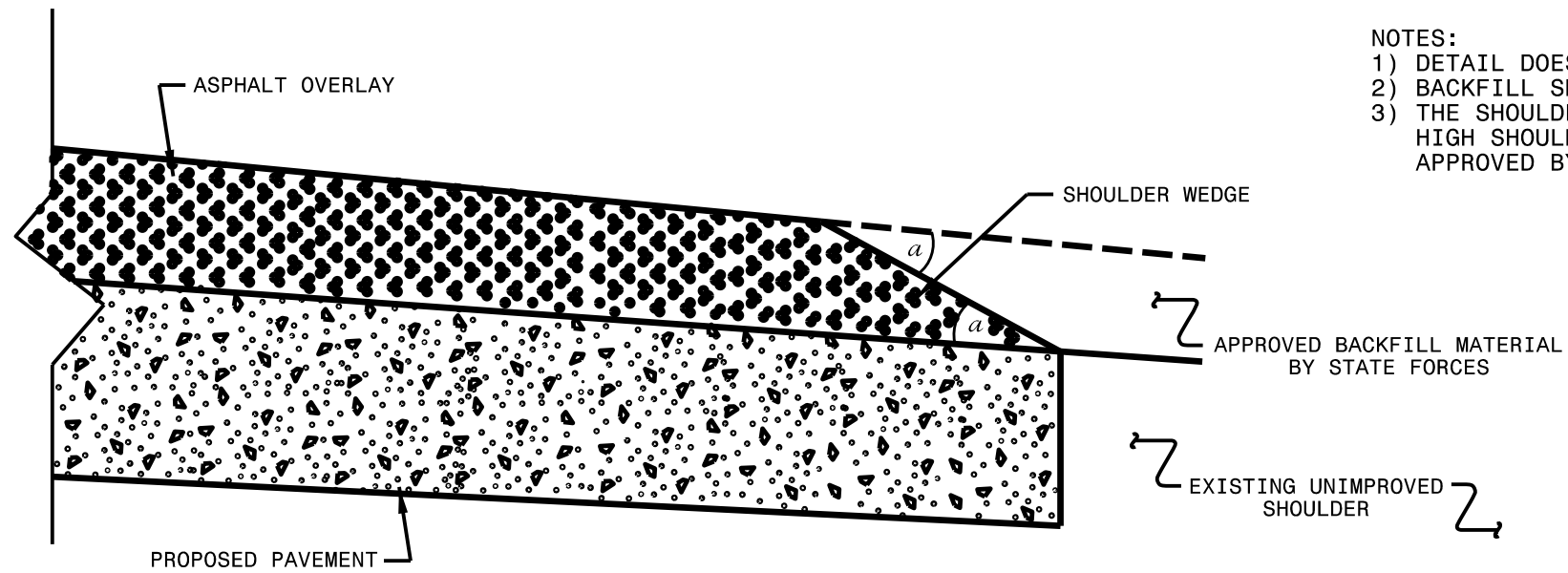
SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE NOTED.

BRIDGES TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.

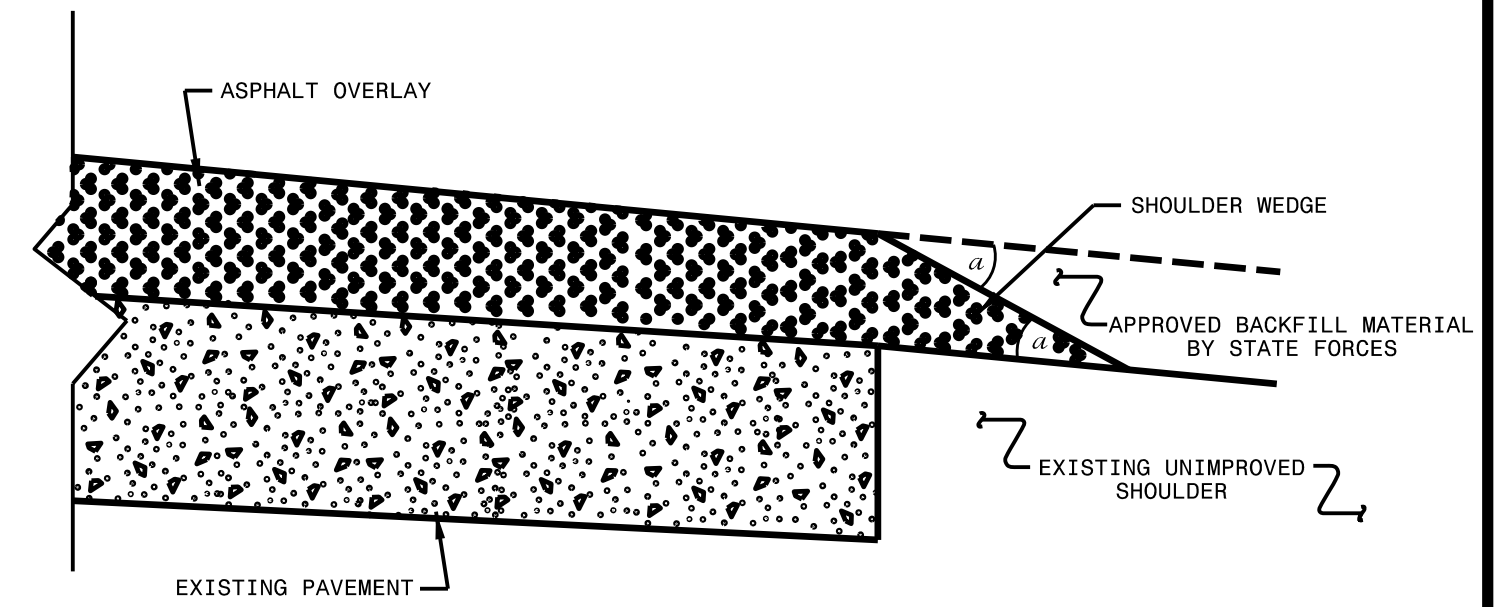
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
E	PROP. APPROX. 8.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD., IN EACH OF TWO LIFTS.
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION, WIDTH VARIES 2'-6')
Z1	MILL ASPHALT PAVEMENT APPROXIMATELY 0" TO 1.5" DEPTH, 0" ON CENTER AND 1.5" AT CURB
Z2	MILL ASPHALT PAVEMENT APPROXIMATELY 1.5" DEPTH
Z3	MILL ASPHALT PAVEMENT APPROXIMATELY 1.5" TO 3" DEPTH, 3" DEPTH AT CURB LINE TAPERING TO 1.5" OVER 12'
Y1	INCIDENTAL MILLING

Checked by: _____
Drawn by: C. Brittain

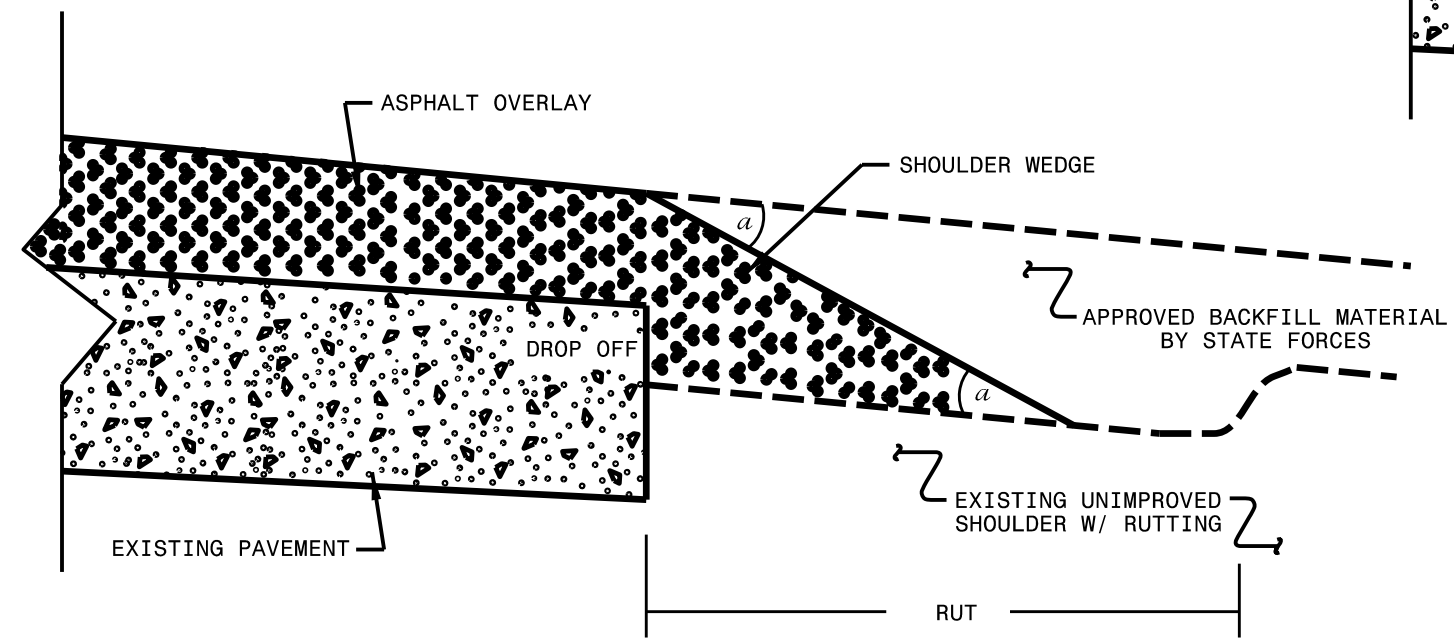
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



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



SHOULDER WEDGE DETAIL
(Resurfacing Projects w/ NO Widening)

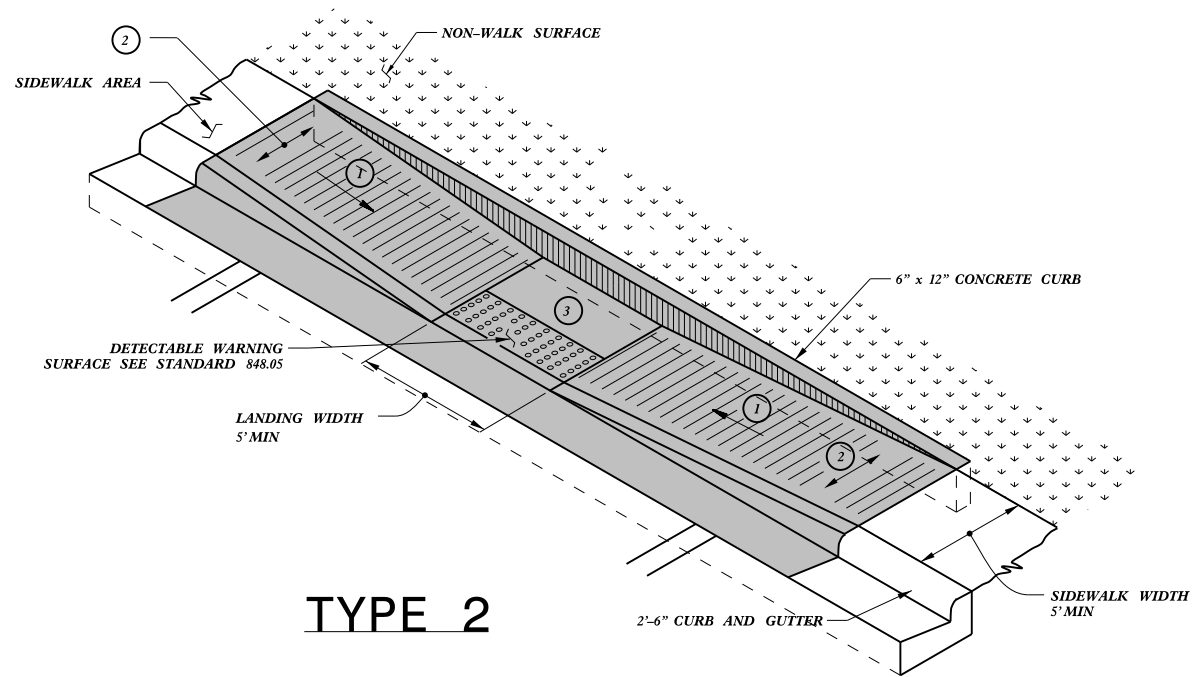


SHOULDER WEDGE DETAIL
(Resurfacing Adjacent to Rutted Shoulder)

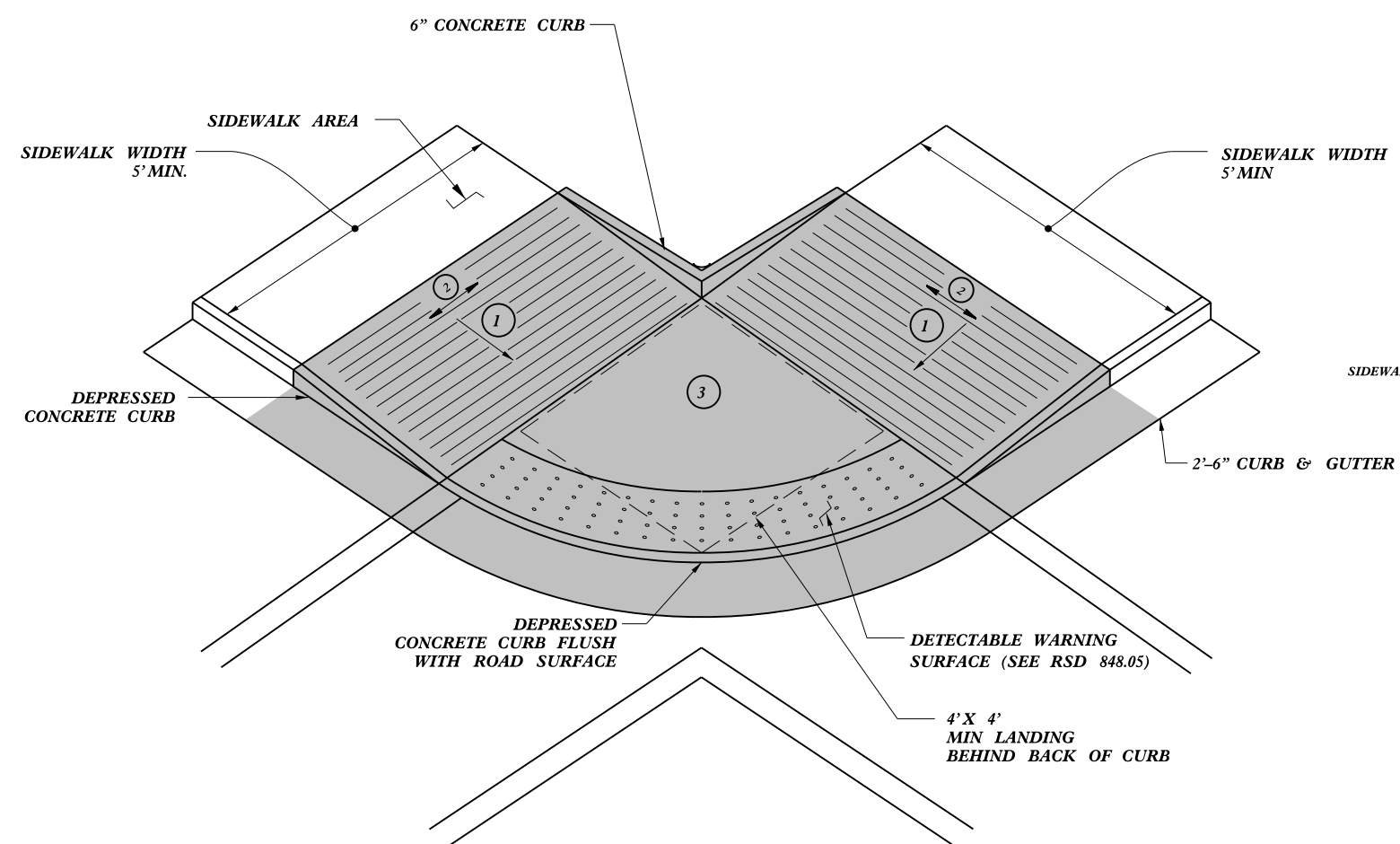
- SHOULDER WEDGE ANGLE = 30°

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:\usr\details\stand\shoulderwedgedetail.dgn		

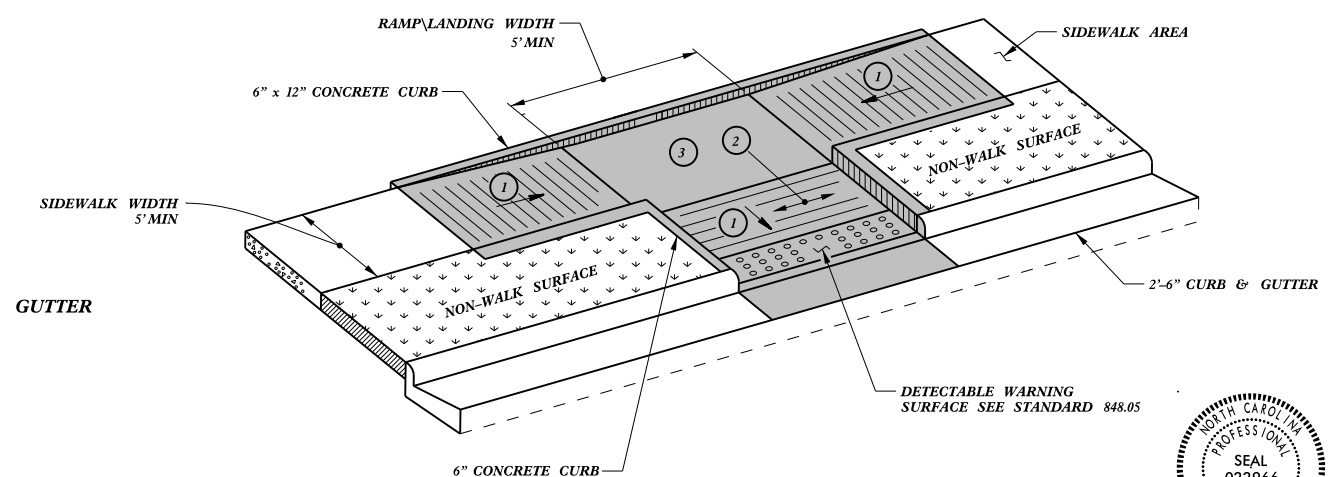
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TYPE 2



TYPE 2A



TYPE 3

11/18/2015



DocuSign
 Joel S. Howerton
 449E8E25522144E

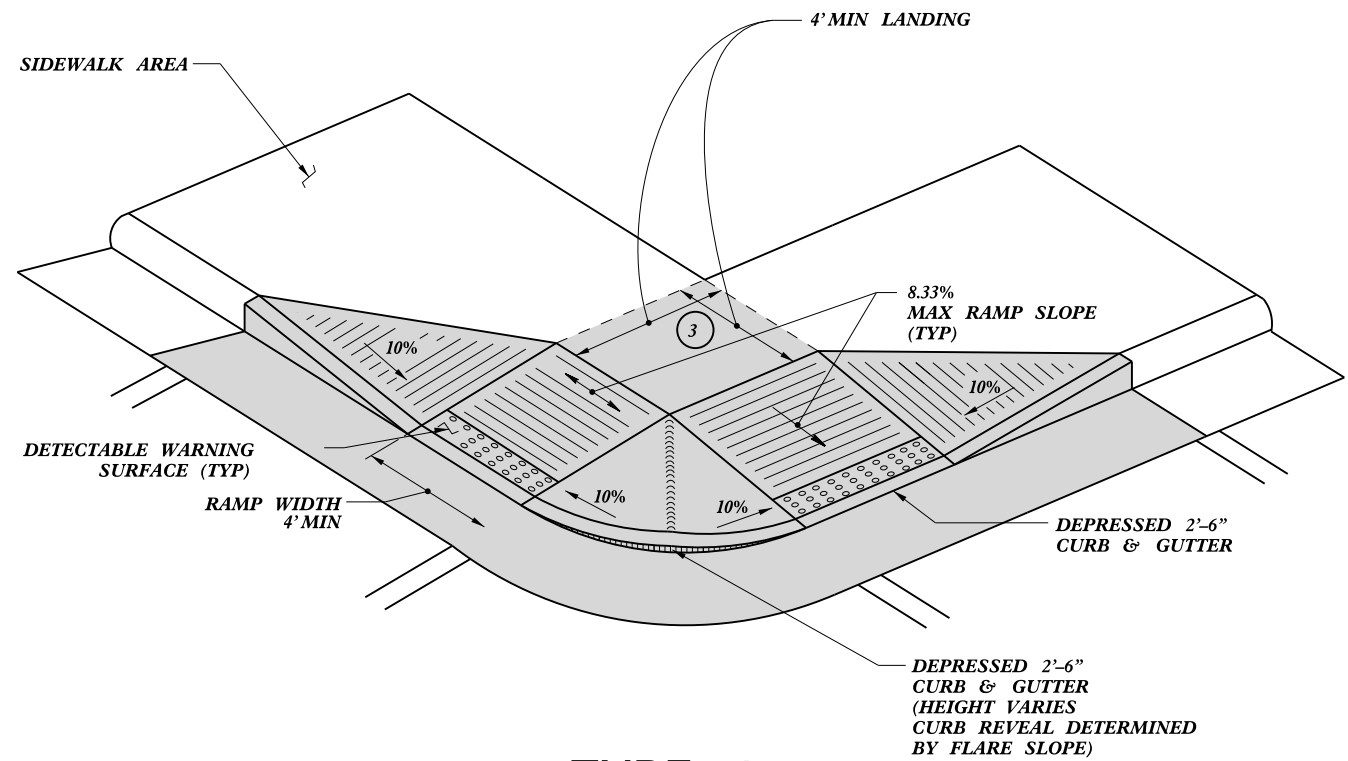
CONTRACT STANDARDS AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119

CURB RAMPS
 Parallel Ramps

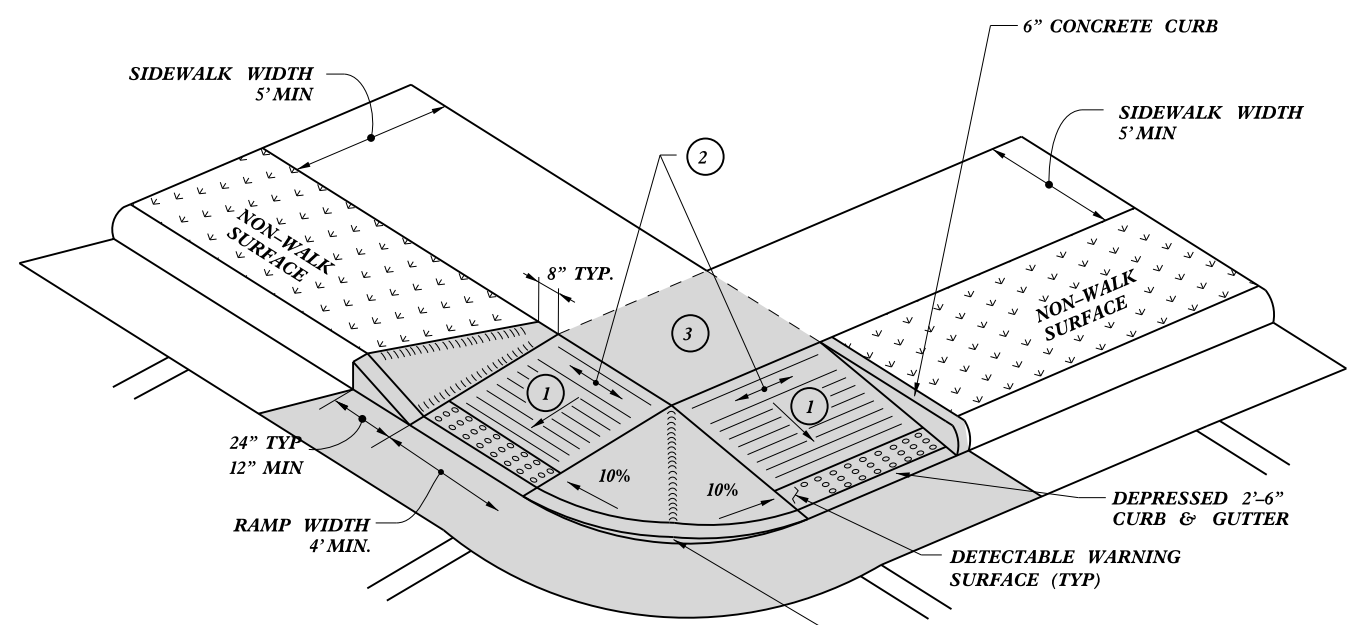
ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
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 CHECKED BY: _____ DATE: _____
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REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

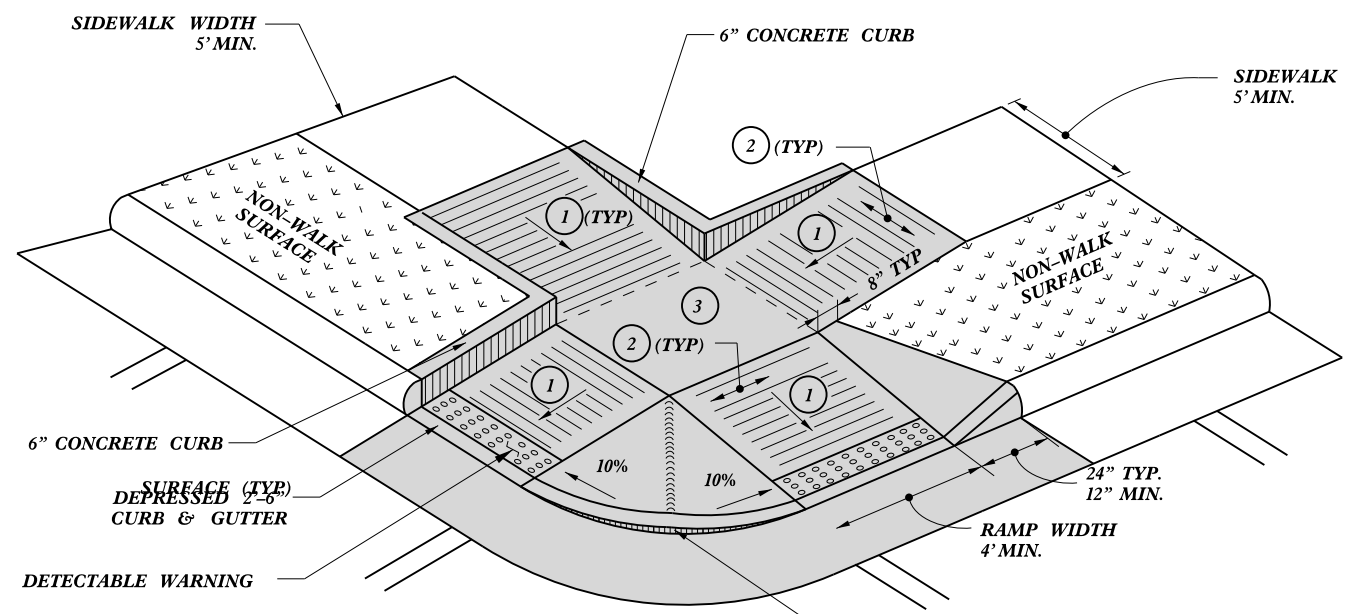
5/14/99



TYPE 4



TYPE 4A



TYPE 5

PAY LIMITS FOR 2 CURB RAMPS

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

DocuSigned by:
 Joel S Howerton
 449E8E25522144F...



11/18/2015

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

CURB RAMPS
 Shared Landing

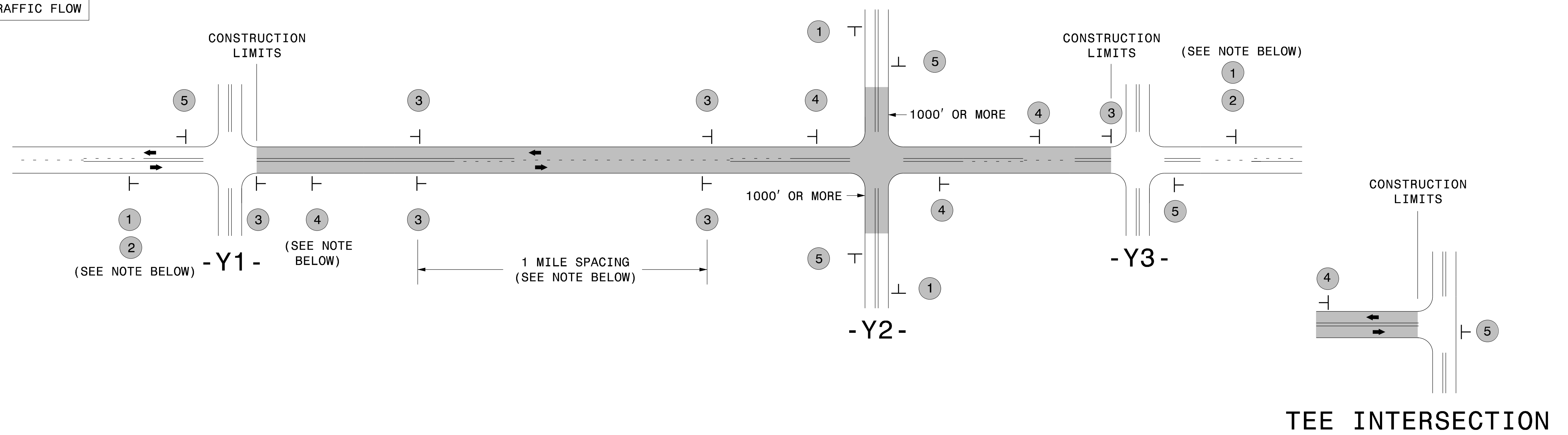
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REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

5/14/14/599
 \$\$\$\$\$\$SYTIME\$\$\$\$\$
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 \$\$\$\$\$\$DU\$\$\$\$\$
 \$\$\$\$\$\$2\$\$\$\$\$

SIGNING FOR RESURFACING PROJECTS

LEGEND
 ┆ STATIONARY SIGN
 ← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

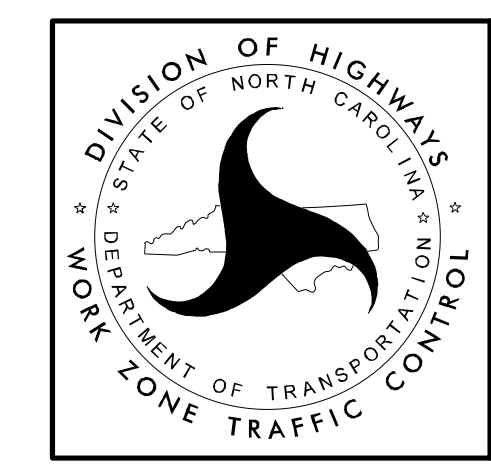
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1		PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
	2		#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	3		- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.	
	4		- 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. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.	
	5		PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	

THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.

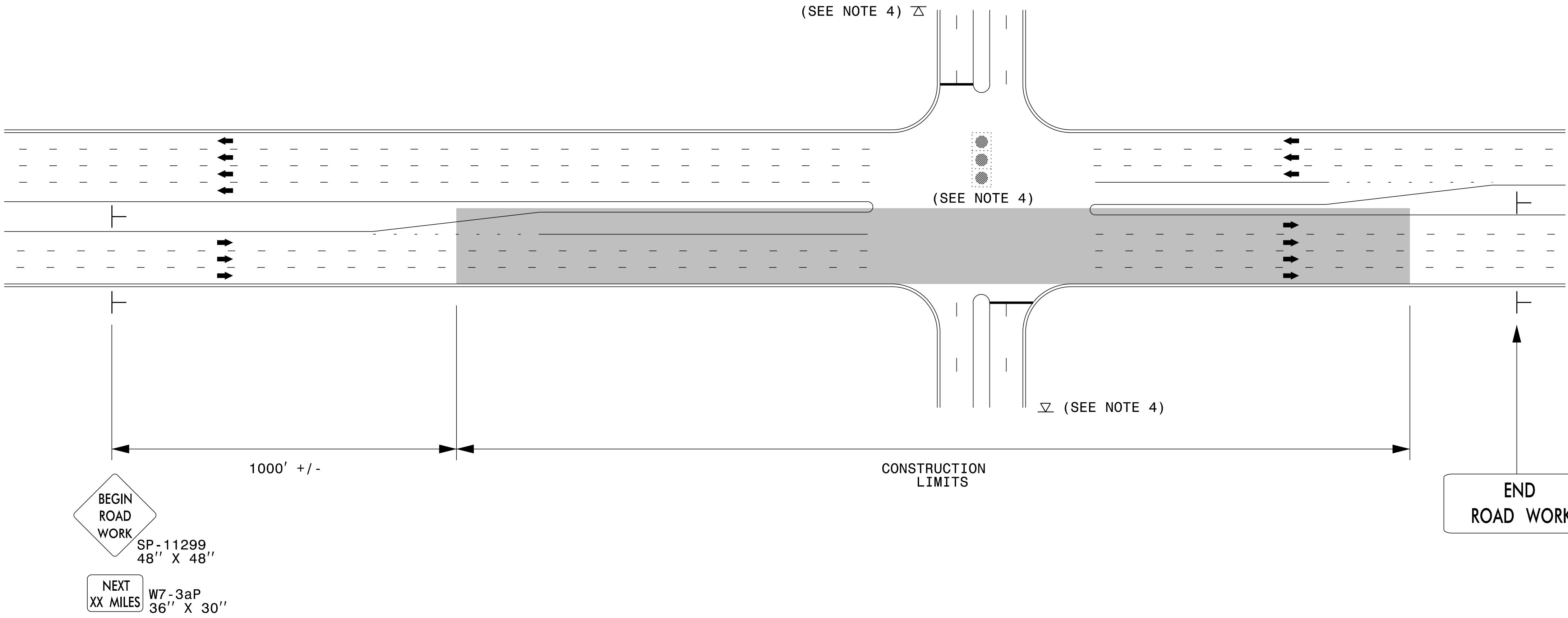
MAPS LESS THAN 2 MILES

FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

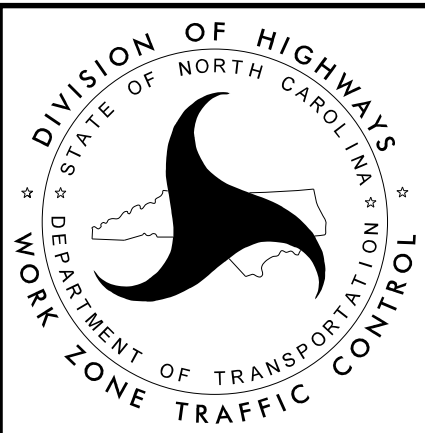
URBAN / SUBURBAN WORKZONES



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) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. 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



**RESURFACING ADVANCE
WARNING SIGNS FOR
URBAN / SUBURBAN
FACILITIES**

