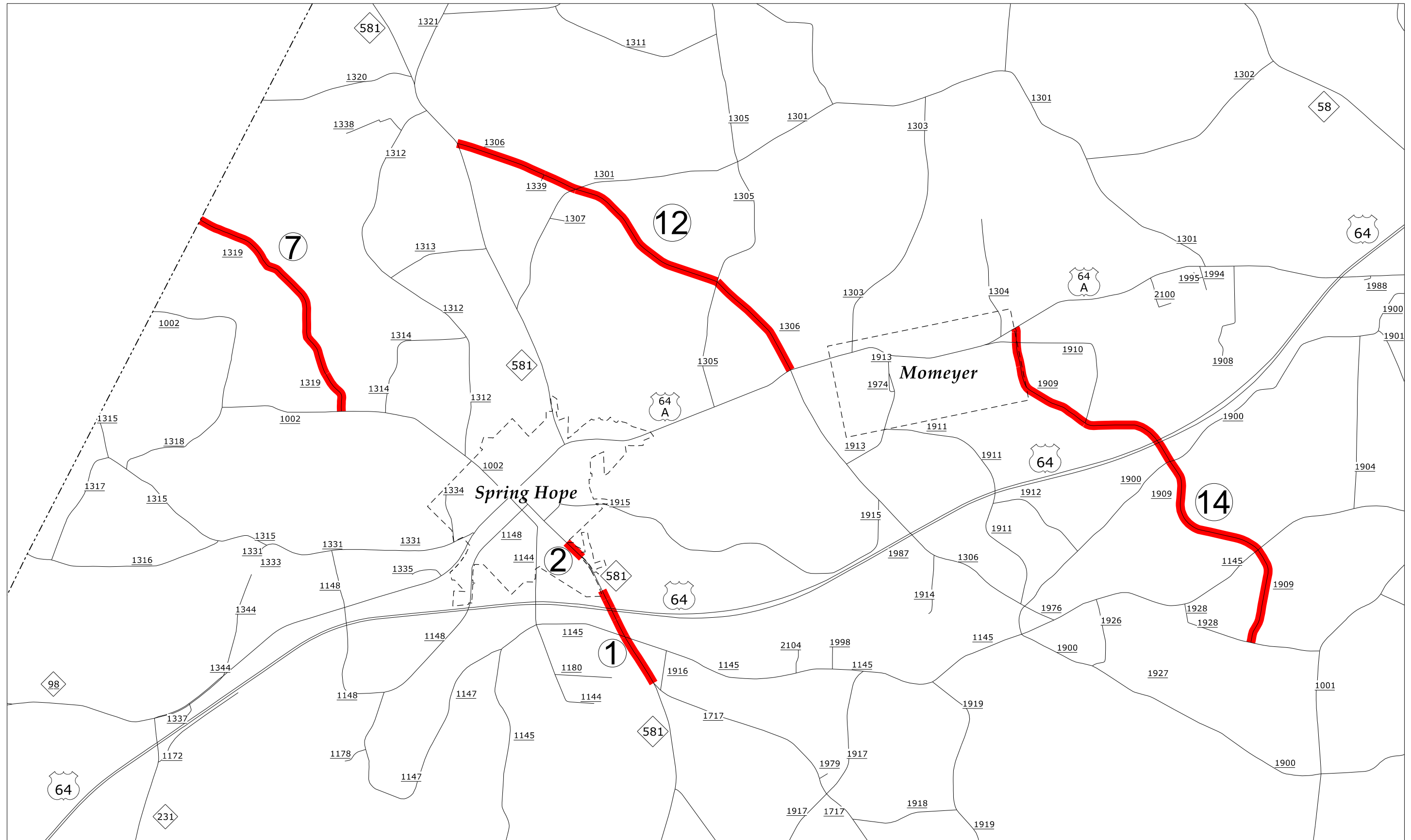


NASH COUNTY

2022CPT.04.15.10641

2022CPT.04.15.20641

SHEET 1

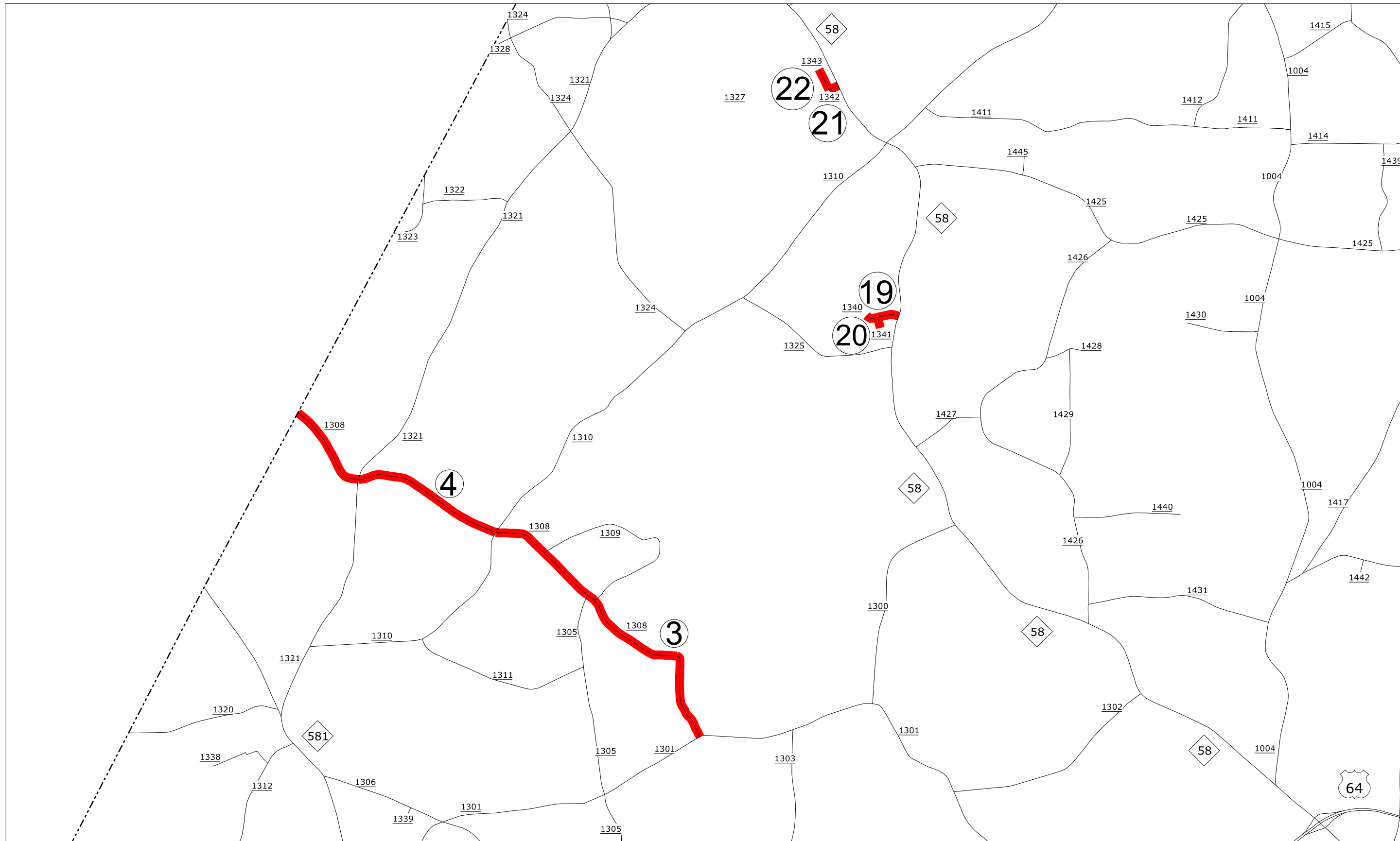


NASH COUNTY

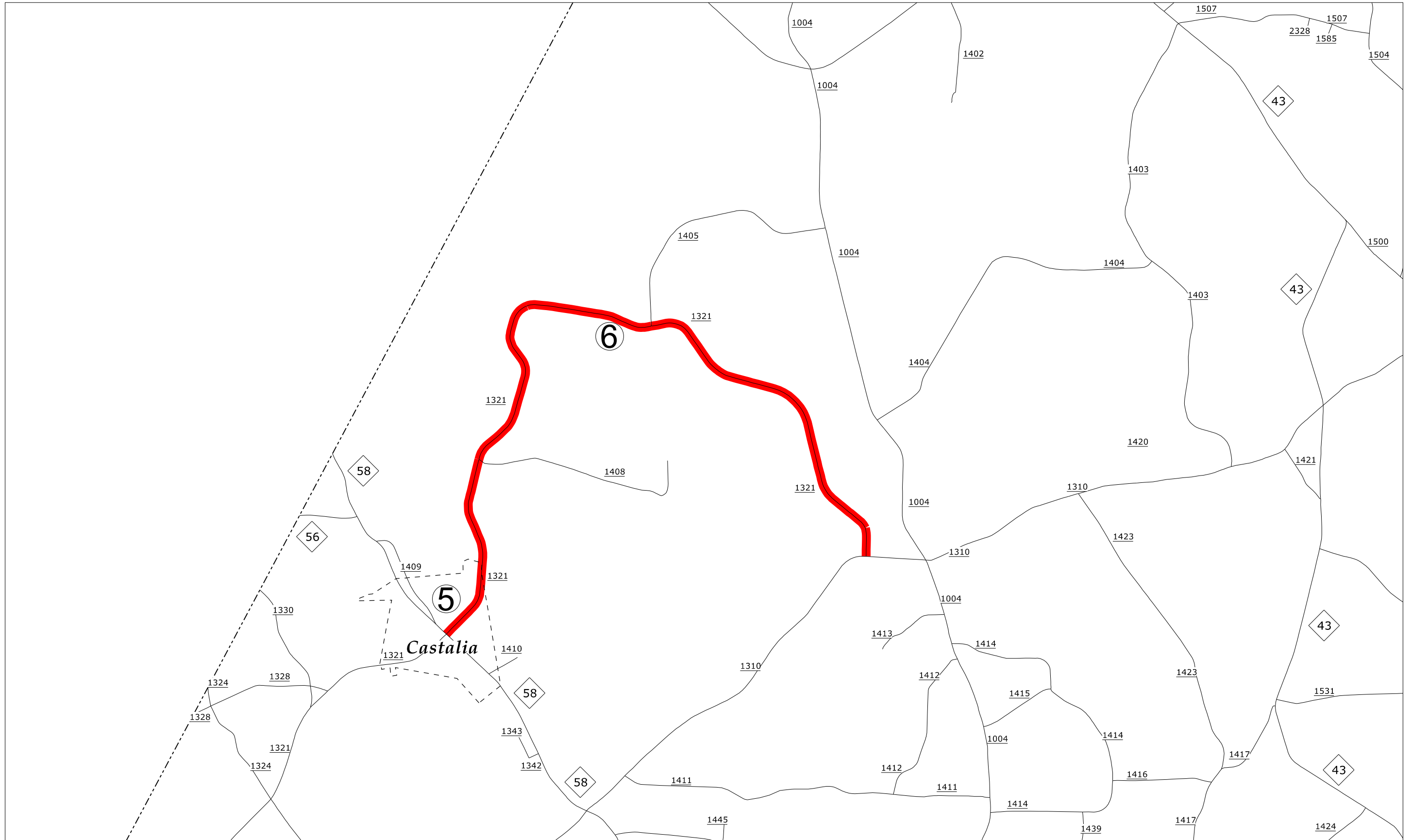
2022CPT.04.15.10641

2022CPT.04.15.20641

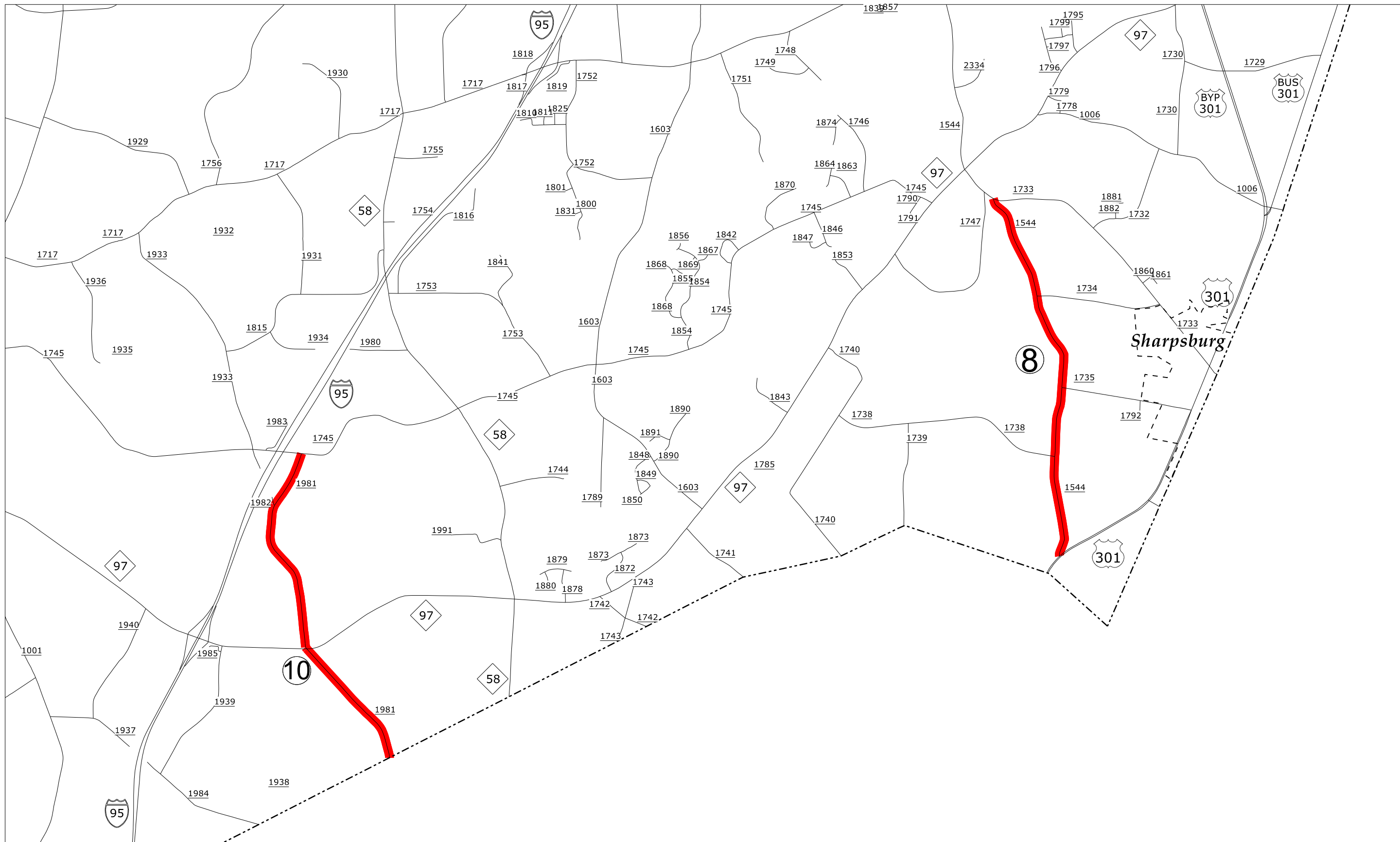
SHEET 2



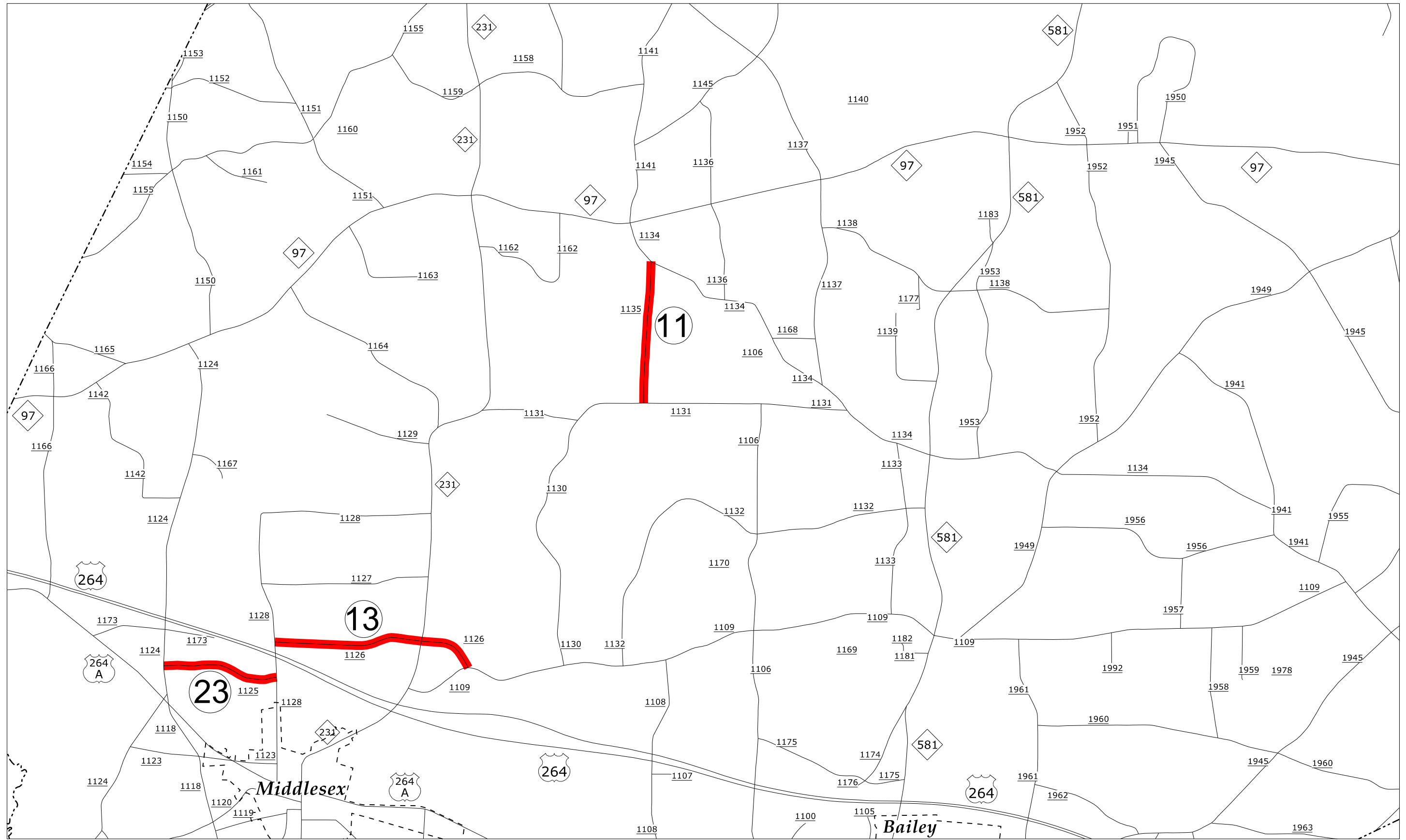
NASH COUNTY



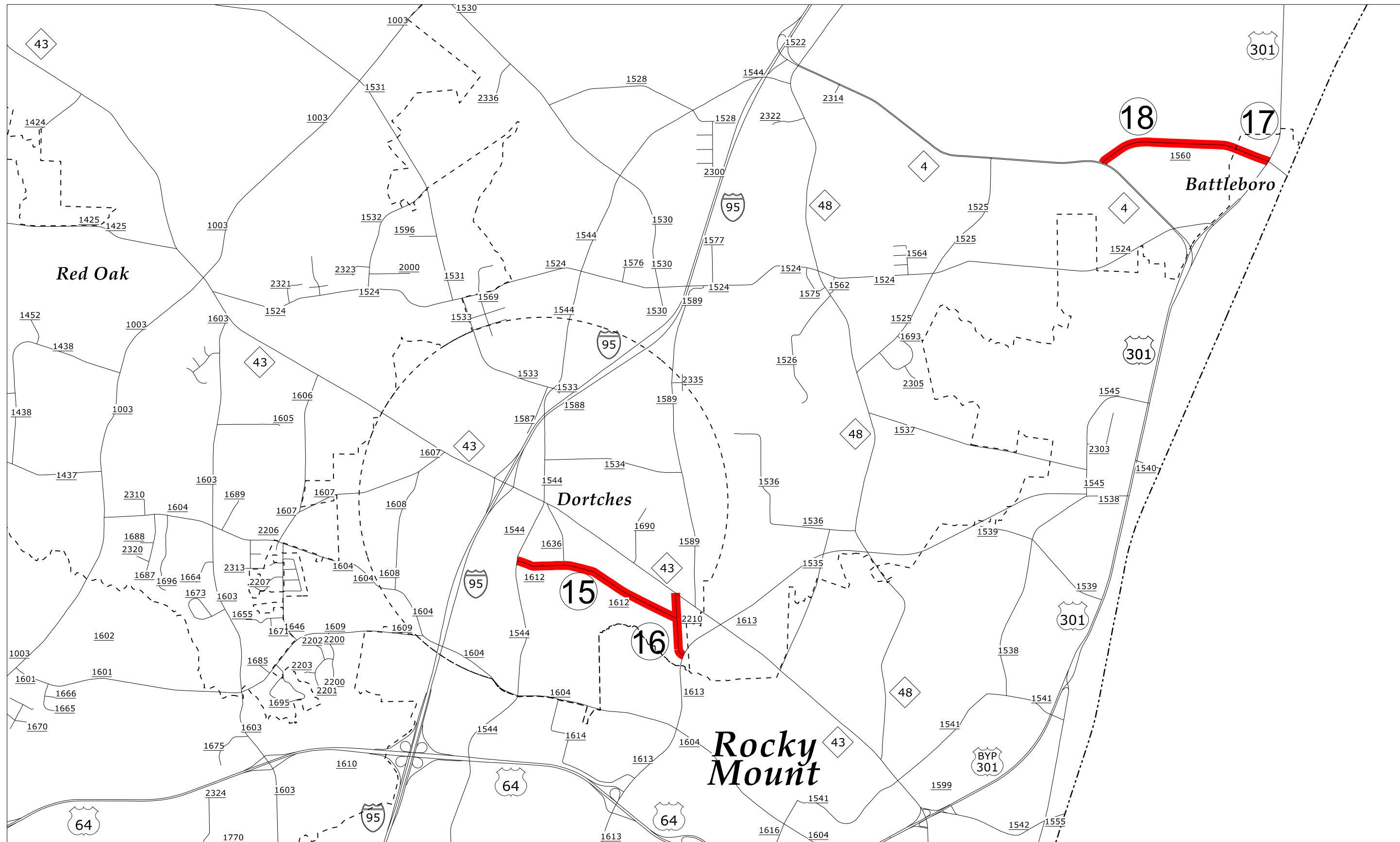
NASH COUNTY



NASH COUNTY



NASH COUNTY



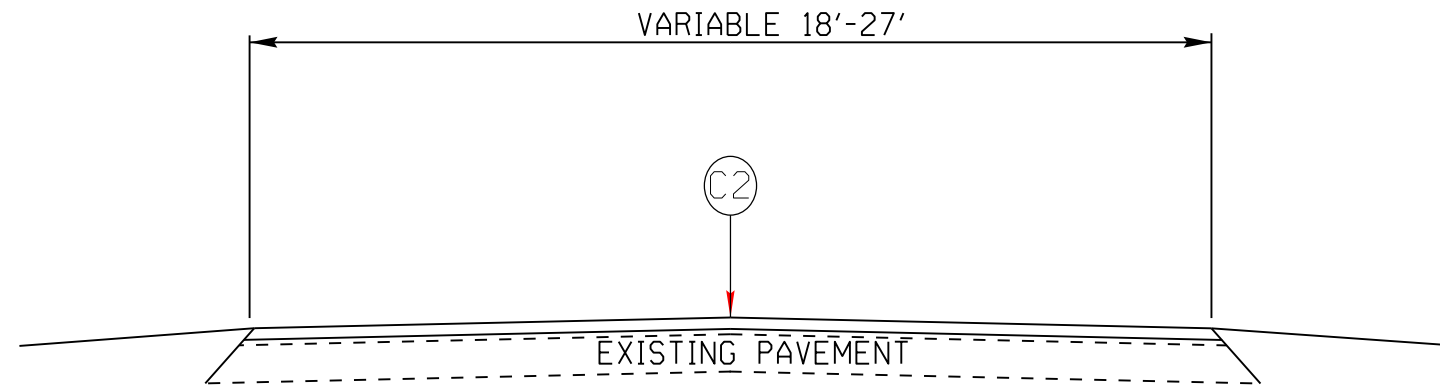
PAVEMENT SCHEDULE

WBS 2022CPT.04.15.10641,
2022CPT.04.15.20641

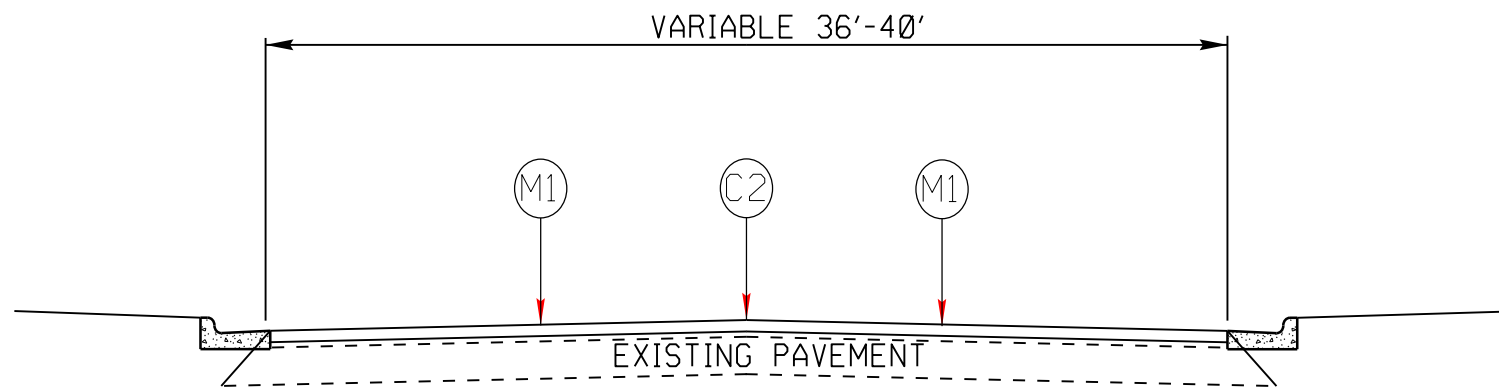
SHEET 8

C2	ASPHALT CONCRETE SURFACE COURSE, S9.5B, AT AN AVERAGE RATE OF 165 LBS PER SQ YD (1.5")
----	--

M1	1.5" MILLING
----	--------------



TYPICAL NO.1

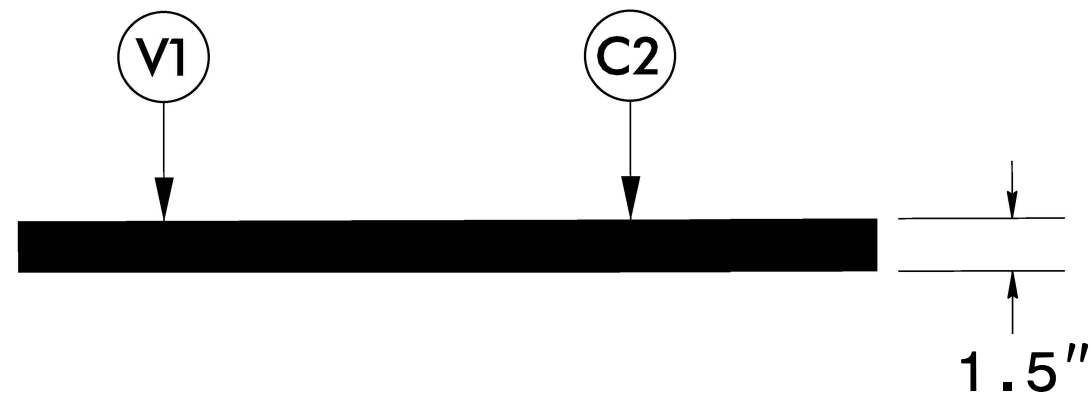


TYPICAL NO.2

REPAIR OF EXISTING PAVEMENT

PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165.0 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING

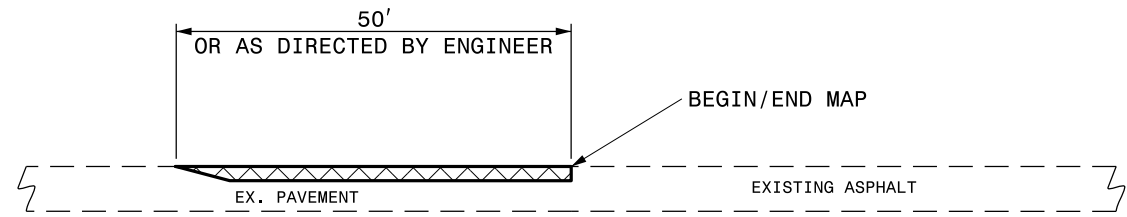
DRAWINGS NOT TO SCALE



NOTE:

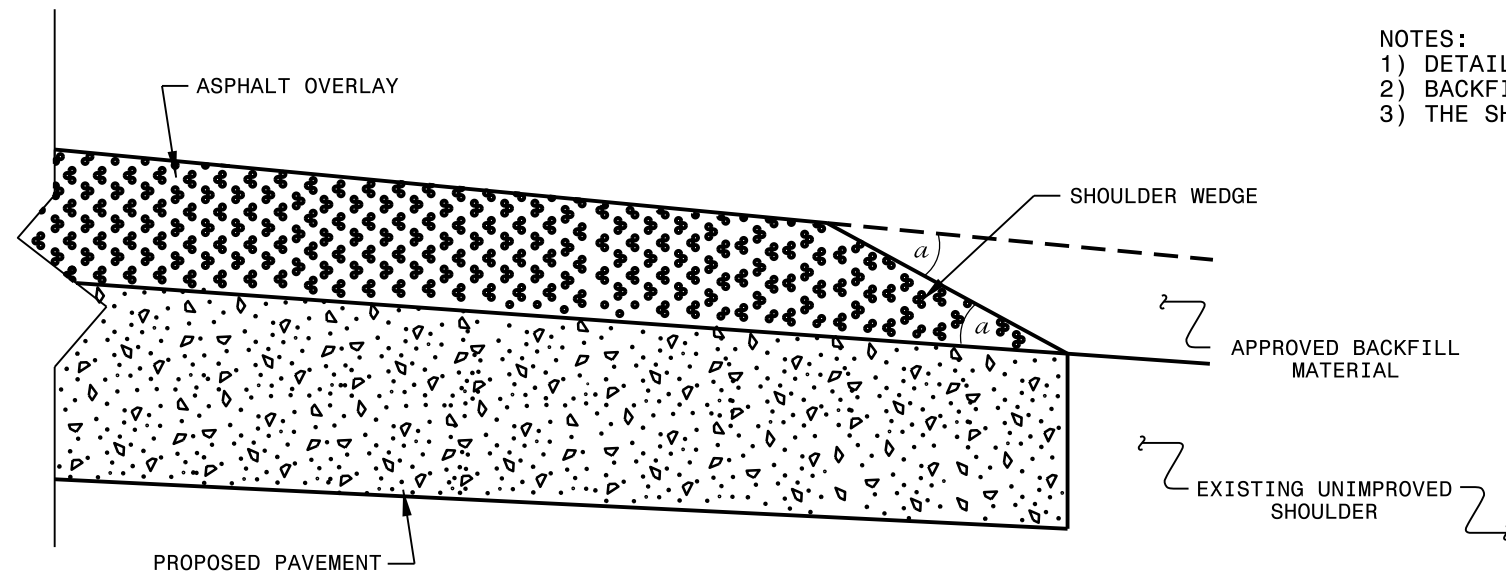
1. THE CONTRACTOR SHALL PERFORM ANY UNIFORM OR INCIDENTAL MILLING AT TIE-INS BEFORE PERFORMING REPAIR OF EXISTING PAVEMENT.
2. THE CONTRACTOR SHALL PERFORM THE PAVEMENT REMOVAL AND REPAIR IN THE SAME DAY.

Incidental Milling Detail

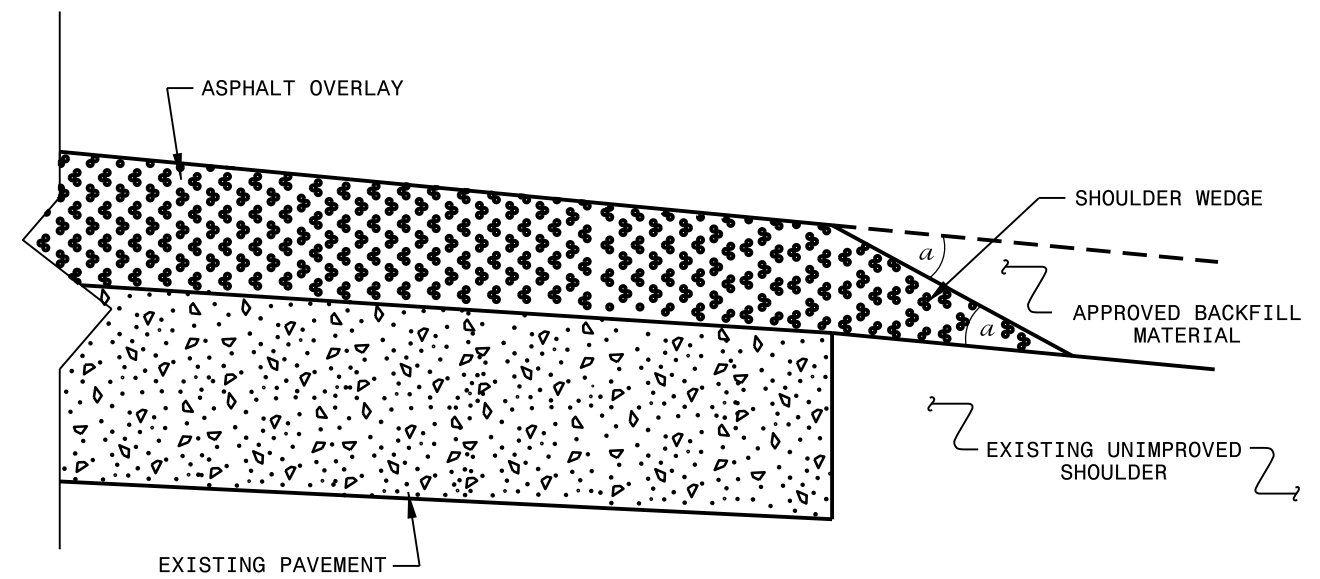


DETAIL 1
BEGIN/END MAP TIE-IN

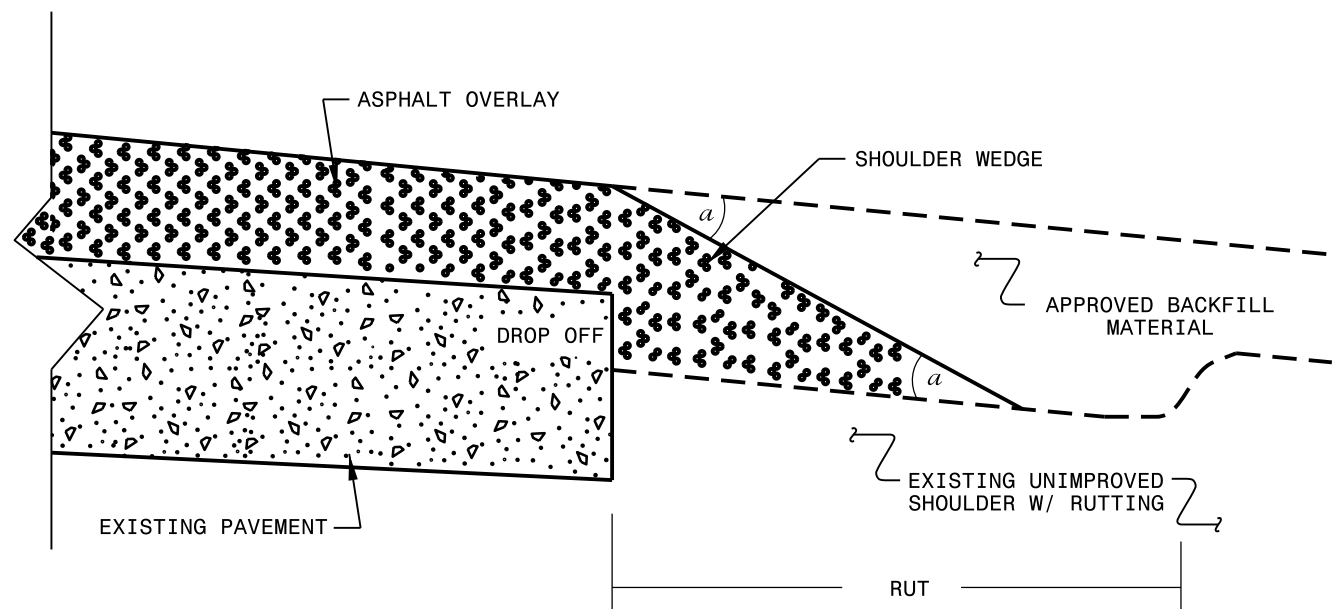
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)

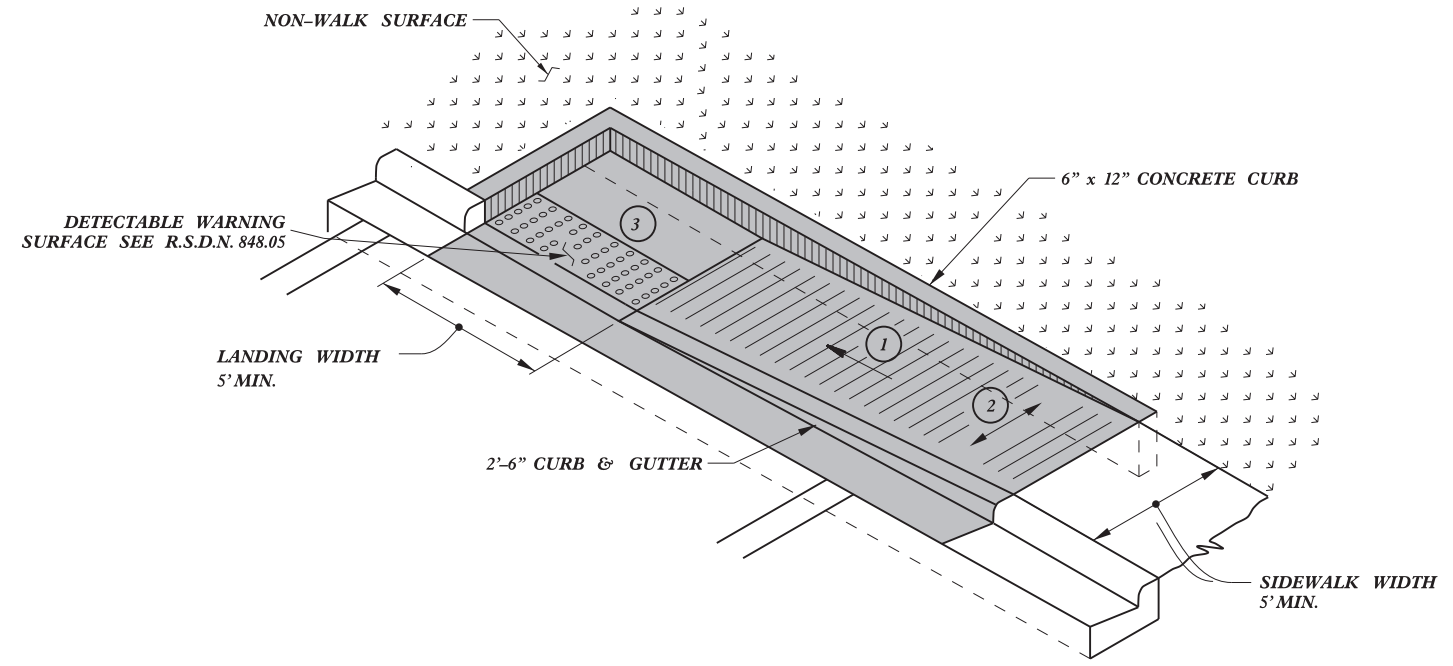


SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

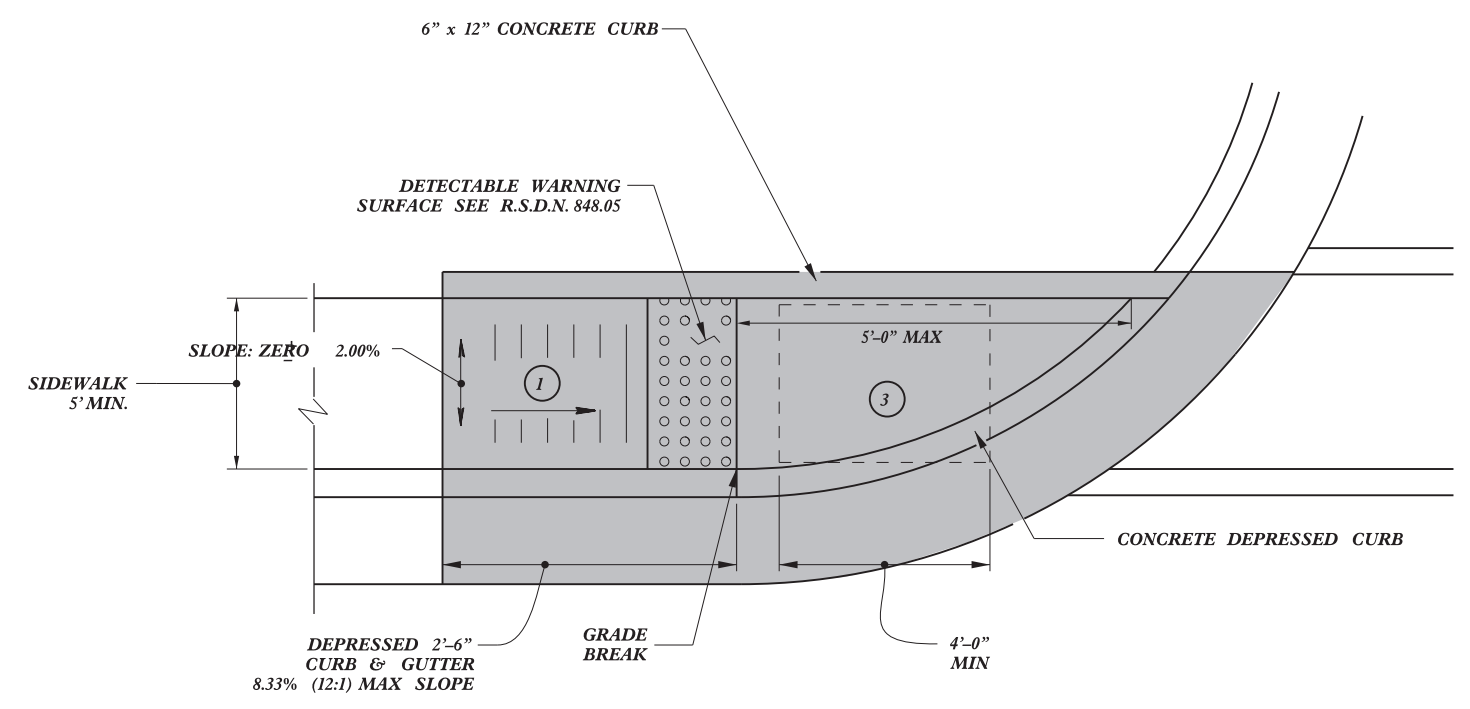
- SHOULDER WEDGE ANGLE = 30°

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.: susr/details/stand/shoulderwedgedetail.dgn			

SYSTEMS DESIGN
 USER NAME



TYPE 1A



TYPE 1

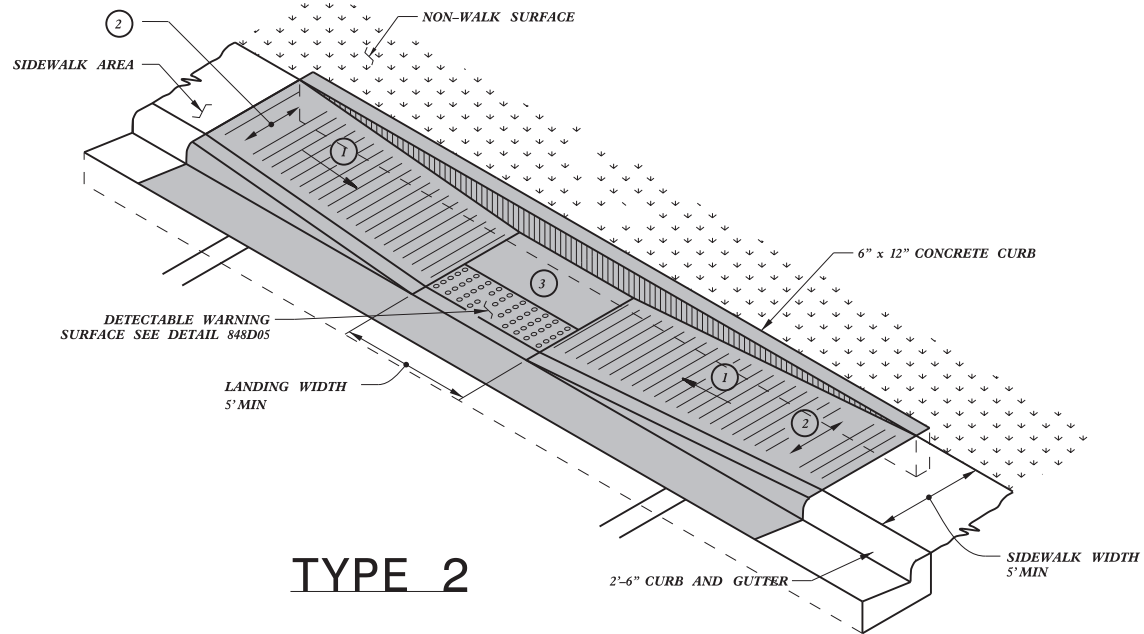
- ① 8.33% (12:1) MAX RAMP SLOPE
- ② CROSS SLOPE: 2.00%
- ③ CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

PAY LIMITS FOR CURB RAMP

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: sstds/2012CurbRamp/CurbRampDetails.dwg	

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

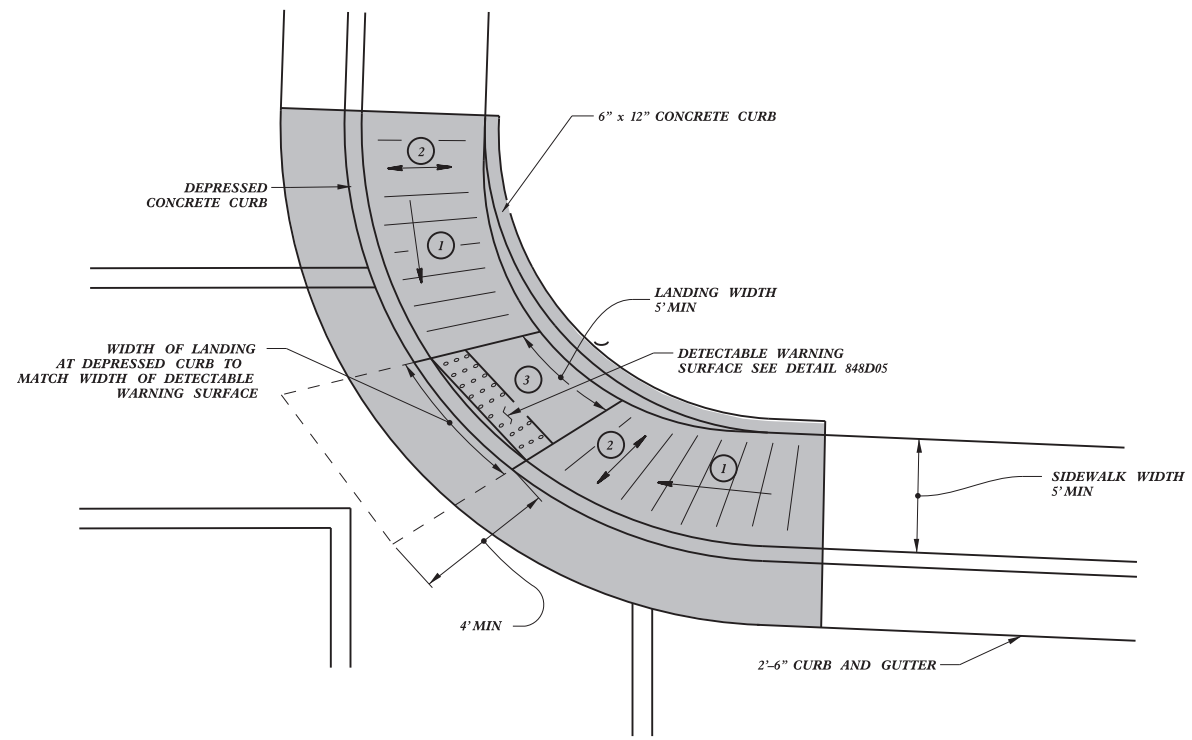
23-MAR-2012 15:05 J:\Contracts\AT\5023750\Jhowerton\Standard Drawings\2012 Standard Drawings\2012 Curb Ramp Special Details\Curb Ramp Details.dwg



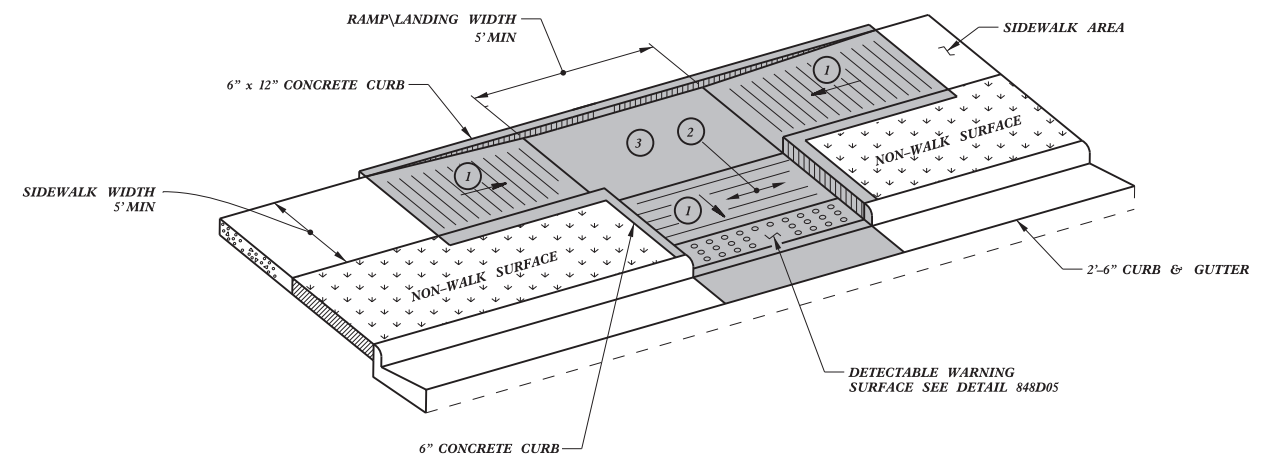
TYPE 2

 PAY LIMITS FOR CURB RAMP

- 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.



TYPE 2A

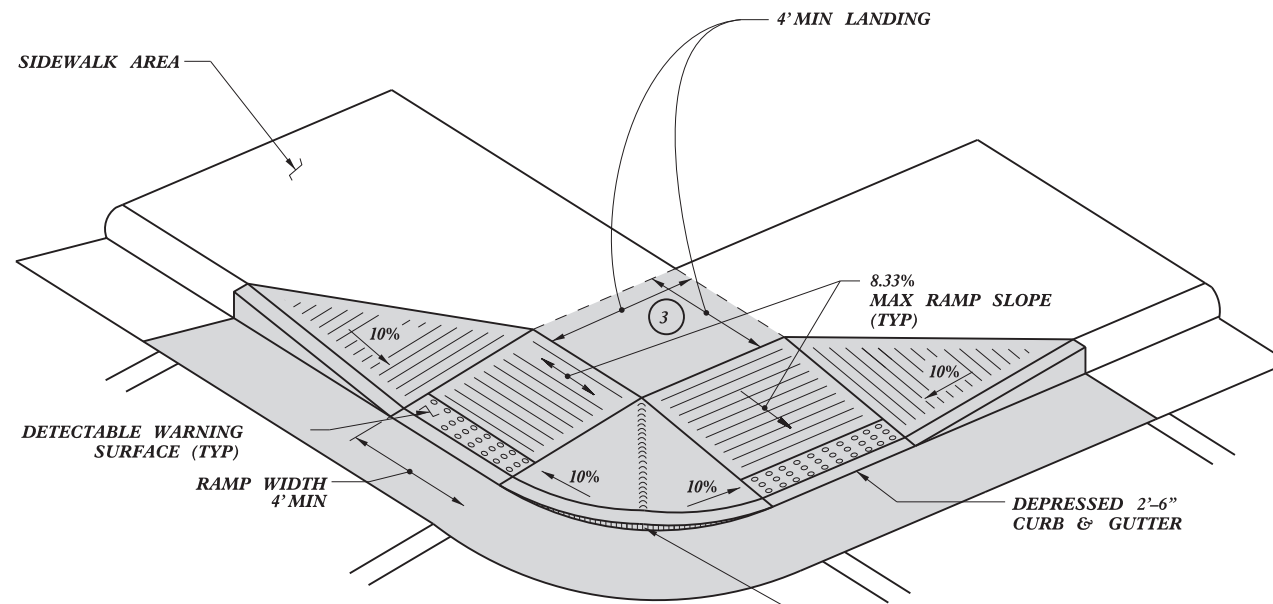


TYPE 3

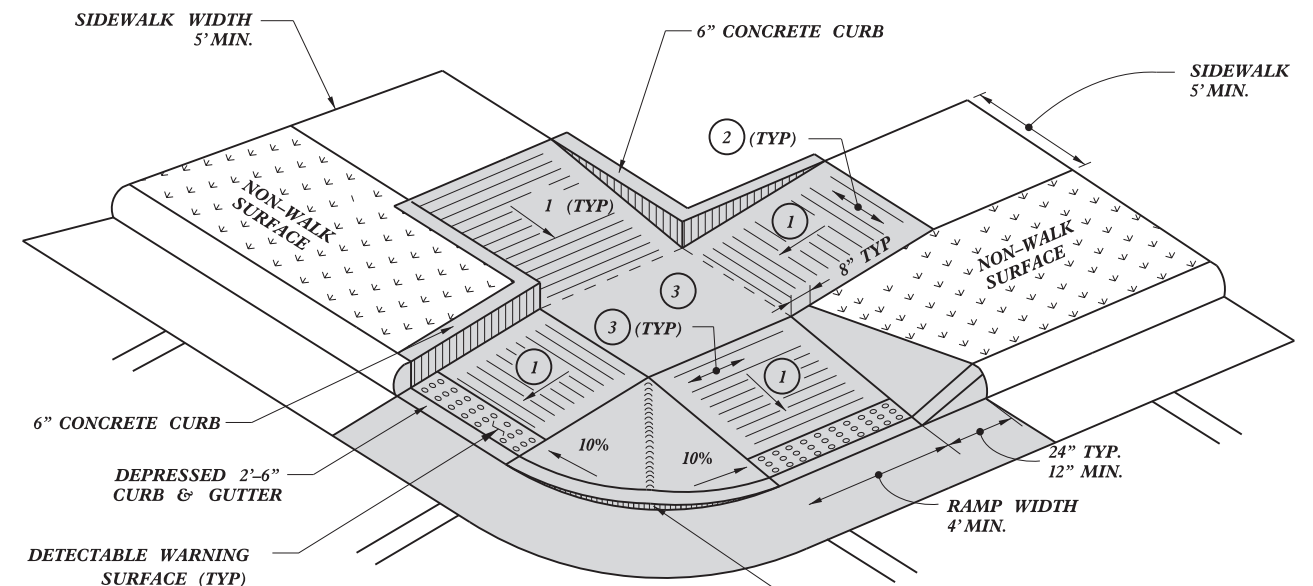
CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Parallel Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
FILE SPEC: s:\stds\2012CurbRamp\CurbRampDetails.dwg	

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

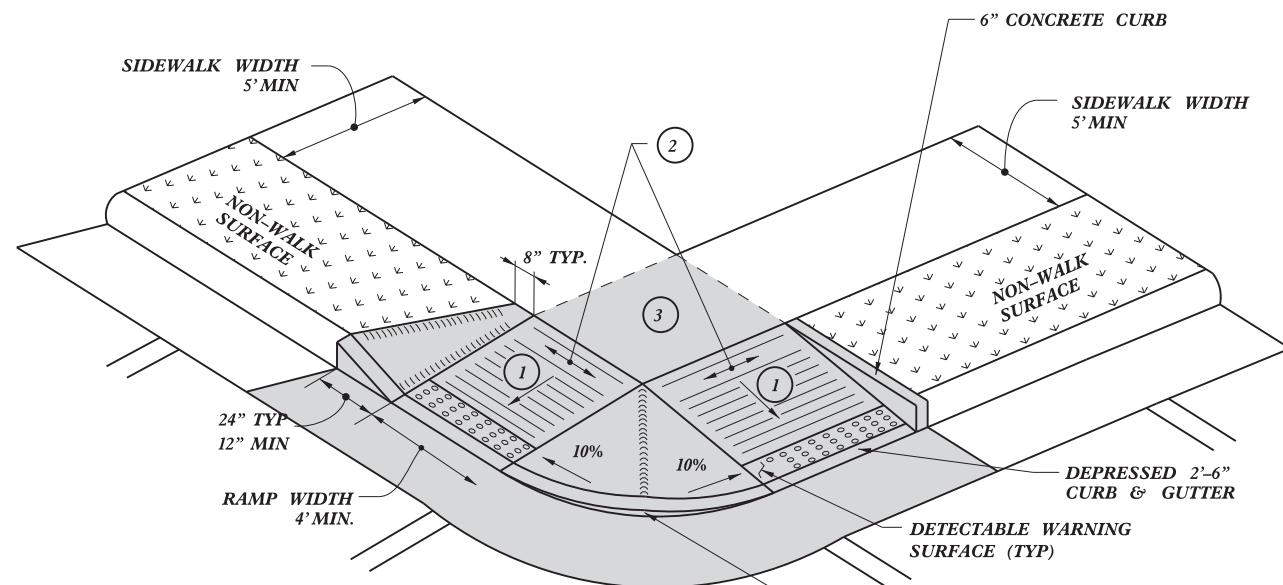
23-MAR-2012 15:07 S:\Contracts\2012\Standard Drawings\2012 Standard Drawings\Curb Ramp Special Details\Curb Ramp Details.dwg J.Howerton AT 05023750



TYPE 4



TYPE 5



TYPE 4A

- 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.

PAY LIMITS FOR CURB RAMP

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Shared Landing	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: s:stds/2012CurbRamp/CurbRampDetails.dwg	

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

23-MAR-2012 15:08 J:\Contracts\2012\Standard Drawings\2012 Standard Drawings\Curb Ramp Special Details\Curb Ramp Details.dwg J:\Contracts\2012\Standard Drawings\Howerton\Standard Drawings\2012 Standard Drawings\Curb Ramp Special Details\Curb Ramp Details.dwg

Div 4/Dist2 Bridges in 2023 Nash Resurfacing Package

2022CPT.04.15.10641 15

County	Road #	Road Name	Bridge #	Current Surface	Posted (Yes/No)	Proposed Work with Resurfacing	Bridge Comments
Nash	SR 1319	Spring Hill Road	140	Asphalt		mill and fill 1.5" (Incidental Milling)	Bridge built in 2019. Mill and fill 1.5" (Incidental Milling) up to new asphalt at each end of bridge project making a smooth transition. Do not mill and fill across bridge.
Nash	SR 1981	Tar River Church Road	108	Concrete		Mill approaches 50' and tie to approach slabs (Incidental Milling)	Concrete Deck. Mill 1.5" and resurface 1.5" (Incidental Milling) on each approach up to the Concrete nose making a smooth and level tie on each Bridge approach from AWS.
Nash	NC 581	NC 581	145	Concrete		Mill approaches 50' and tie to approach slabs (Incidental Milling)	Concrete Deck. Mill 1.5" and resurface 1.5" (Incidental Milling) on each approach up to the Concrete nose making a smooth and level tie on each Bridge approach from AWS.
Nash	SR 1909	Old County Home Road	63	Concrete		Mill approaches 50' and tie to approach slabs (Incidental Milling)	Concrete deck. Mill 1.5" and resurface 1.5" (Incidental Milling) on each approach up to the Concrete nose making a smooth and level tie on each Bridge approach from AWS.
Nash	SR 1308	Richardson Road	88	Asphalt		mill and fill 1.5" (Incidental Milling)	Not posted. Do not mill , resurface 1.5" across bridge to allow for 3" AWS depth for asphalt plug joints . Per Wiggins data AWS is currently 1.5 "

*Note Bridge Decks and Approaches are Incidental Milling, Depth is listed to note depth

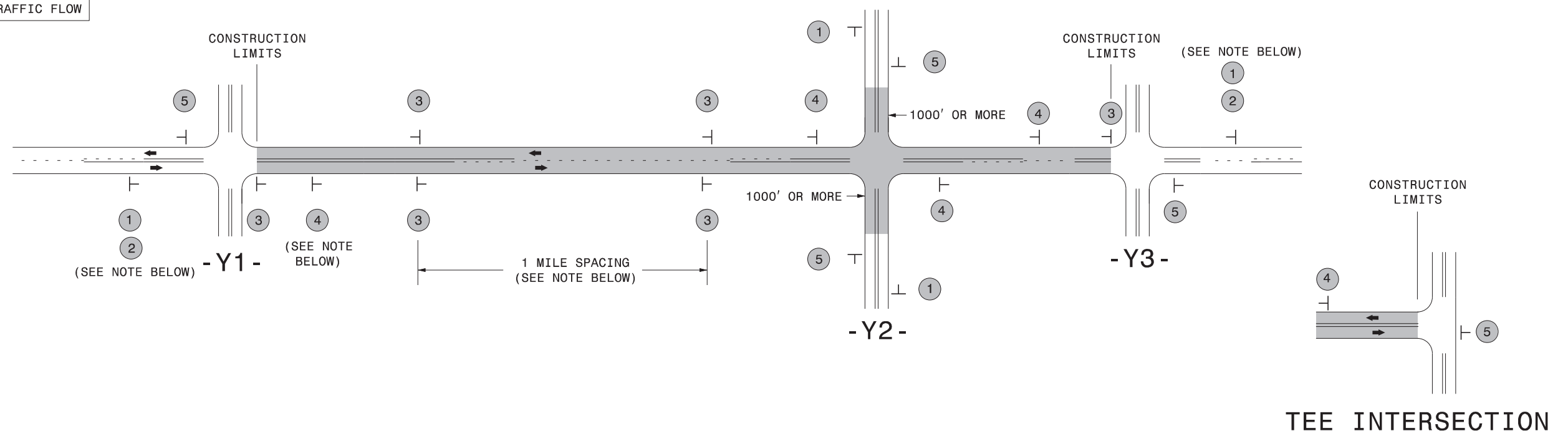
PROJECT NO.	SHEET NO.	TOTAL NO.
2022CPT.04.15.10641		16
2022CPT.04.15.20641		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	1220000000-E	1297000000-E	1330000000-E	1519000000-E	1575000000-E	1704000000-E	2613000000-N	2815000000-N	2830000000-N	2845000000-N	7444000000-E	7456000000-E		
												INCIDENTAL STONE BASE	1 1/2" MILLING	INCIDENTAL MILLING	SURFACE COURSE, 59.58	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	REMOVE & REPLACE CURB RAMPS	ADJ. OF DROP INLET	ADJ. OF MANHOLES	ADJ. OF METER OR VALVE BOX	INDUCTIVE LOOP	LEAD-IN CABLE		
												MI	FT	TONS	SY	TONS	TONS	EA	EA	EA	EA	LF	LF		
2022CPT.04.15.10641	Nash	1	NC 581	500' NORTH OF BRIDGE TO SR 1717 (MACEDONIA RD)	1	2	2WU	NO	NO	0.852	27	10		400	1,641	110									
TOTAL FOR MAP NO. 1												0.852	10	400	1,641	110									
2022CPT.04.15.10641	Nash	2	NC 581	1600' N OF BRIDGE TO SPRING HOPE CITY LIMITS	1	2	2WU	NO	NO	0.17	27			48	230	15									
TOTAL FOR MAP NO. 2												0.17		48	230	15									
TOTAL FOR PROJ NO. 2022CPT.04.15.10641												1.022	10	448	1,871	125									
2022CPT.04.15.20641	Nash	3	SR 1308 (RICHARDSON RD)	SR 1301 (PLEASANT GROVE CHRUH RD) TO SR 1305 (BASS RD)	1	2	2WU	NO	NO	1.576	20	20		445	1,597	107	50								
TOTAL FOR MAP NO. 3												1.576	20	445	1,597	107	50								
2022CPT.04.15.20641	Nash	4	SR 1308 (RICHARDSON RD)	SR 1305 (BASS RD) TO FRANKLIN COUNTY LINE	1	2	2WU	NO	NO	3	18	40		100	2,711	182	45								
TOTAL FOR MAP NO. 4												3	40	100	2,711	182	45								
2022CPT.04.15.20641	Nash	5	SR 1321 (RED BUD RD)	NC 58 TO 500' FROM INTERSECTION OF NC 58 AND SR 1321 (RED BUD RD)	2	2	2WU	NO	NO	0.095	36		2006	200	171	11									
TOTAL FOR MAP NO. 5												0.095		2006	200	171	11								
2022CPT.04.15.20641	Nash	6	SR 1321 (RED BUD RD)	500' FROM INTERSECTION OF NC 58 AND SR 1321 (RED BUD RD) TO SR 1310 (TAYLORS GIN RD)	1	2	2WU	NO	NO	6.83	20	60		400	6,992	468									
TOTAL FOR MAP NO. 6												6.83	60	400	6,992	468									
2022CPT.04.15.20641	Nash	7	SR 1319 (SPRING HILL RD)	SR 1002 (SEVEN PATHS RD) TO FRANKLIN COUNTY LINE	1	2	2WU	NO	NO	2.068	20	60		20	2,095	140	30								
TOTAL FOR MAP NO. 7												2.068	60	20	2,095	140	30								
2022CPT.04.15.20641	Nash	8	SR 1544 (HALIFAX RD)	US 301 TO SR 1733 (MILL BRANCH RD)	1	2	2WU	NO	NO	3.05	22	40		560	3,560	239									
TOTAL FOR MAP NO. 8												3.05	40	560	3,560	239									
2022CPT.04.15.20641	Nash	9	SR 1500 (SWIFT CREEK SCHOOL RD)	SR 1003 (RED OAK RD) TO NC 48	1	2	2WU	NO	NO	3.658	23	40		150	4,310	289	412								
TOTAL FOR MAP NO. 9												3.658	40	150	4,310	289	412								
2022CPT.04.15.20641	Nash	10	SR 1981 (TAR RIVER CHURCH RD)	WILSON COUNTY LINE TO SR 1745 (BEND OF THE RIVER RD)	1	2	2WU	NO	NO	2.76	22	40		120	3,044	204	10								
TOTAL FOR MAP NO. 10												2.76	40	120	3,044	204	10								
2022CPT.04.15.20641	Nash	11	SR 1135 (STONE WHITLEY RD)	SR 1134 (STRICKLAND RD) TO SR 1131 (BRYANT RD)	1	2	2WU	NO	NO	1.15	20	20		230	1,257	84									
TOTAL FOR MAP NO. 11												1.15	20	230	1,257	84									
2022CPT.04.15.20641	Nash	12	SR 1306 (N OLD FRANKLIN RD)	NC 581 TO US 64 ALT	1	2	2WU	NO	NO	3.4	20	40		40	3,427	230	30								
TOTAL FOR MAP NO. 12												3.4	40	40	3,427	230	30								
2022CPT.04.15.20641	Nash	13	SR 1126 (BALDY HILL RD)	SR 1128 (BUCK DEANS RD) TO SR 1109 (STONEY HILL CHURCH RD)	1	2	2WU	NO	NO	1.6	22	20		90	1,785	120	4								
TOTAL FOR MAP NO. 13												1.6	20	90	1,785	120	4								
2022CPT.04.15.20641	Nash	14	SR 1909 (OLD COUNTY HOME RD)	US 64 ALT TO SR 1928 (EVANS RD)	1	2	2WU	NO	NO	3.902	20	40		40	3,961	265	40								
TOTAL FOR MAP NO. 14												3.902	40	40	3,961	265	40								
2022CPT.04.15.20641	Nash	15	SR 1612 (BRAKE RD)	SR 1544 (HALIFAX RD) TO SR 2210 (WOODRUFF RD)	1	2	2WU	NO	NO	1.411	20	20		250	1,550	104									
TOTAL FOR MAP NO. 15												1.411	20	250	1,550	104									
2022CPT.04.15.20641	Nash	16	SR 2210 (WOODRUFF RD)	SR 1613 (THOMAS BETTS PKWY) TO NC 43	1	2	2WU	NO	NO	0.5	22	10		400	603	40									
TOTAL FOR MAP NO. 16												0.5	10	400	603	40									
2022CPT.04.15.20641	Nash	17	SR 1560 (W BATTLEBORO AVE)	US 301 TO 1500' FROM THE INTERSECTION OF US 301 AND SR 1560 (BATTLEBORO AVE)	2	2	2WU	NO	NO	0.284	36		5998	200	511	34		3					200	200	
TOTAL FOR MAP NO. 17												0.284		5998	200	511	34		3					200	200
2022CPT.04.15.20641	Nash	18	SR 1560 (W BATTLEBORO AVE)	1500' FROM THE INTERSECTION OF US 301 AND SR 1560 (BATTLEBORO AVE) TO NC 4	1	2	2WU	NO	NO	1.23	22	20		400	1,683	113			1	3	3				
TOTAL FOR MAP NO. 18												1.23	20	400	1,683	113			1	3	3				
2022CPT.04.15.20641	Nash	19	SR 1340 (HIGHPOINT DR)	NC 58 TO END OF STATE MAINTENANCE	1	2	2WU	NO	NO	0.27	20	10		20	271	18	50								
TOTAL FOR MAP NO. 19												0.27	10	20	271	18	50								
2022CPT.04.15.20641	Nash	20	SR 1341 (HIGHPOINT CT)	SR 1340 (HIGHPOINT DR) TO DEAD END	1	2	2WU	NO	NO	0.08	20	10		10	80	5	15								
TOTAL FOR MAP NO. 20												0.08	10	10	80	5	15								
2022CPT.04.15.20641	Nash	21	SR 1342 (WARDRICK RD)	NC 58 TO NC 1343 (RICHARDSON RD)	1	2	2WU	NO	NO	0.075	20	10		35	75	5	12								
TOTAL FOR MAP NO. 21												0.075	10	35	75	5	12								
2022CPT.04.15.20641	Nash	22	SR 1343 (RICHARDSON RD)	SR 1342 (WARDRICK RD) TO DEAD END	1	2	2WU	NO	NO	0.164	20	10			165	11	11								
TOTAL FOR MAP NO. 22												0.164	10		165	11	11								
2022CPT.04.15.20641	Nash	23	SR 1125 (LODGE RD)	SR 1128 (BUCK DEANS) TO SR 1124 (MASSEY RD)	1	2	2WU	NO	NO	0.94	23	20		48	1,084	73									
TOTAL FOR MAP NO. 23												0.94	20	48	1,084	73									
TOTAL FOR PROJ NO. 2022CPT.04.15.20641												37.664	530	8004	3,558	40,421	2,708	709	3	1	3	4	200	200	
GRAND TOTAL												38.686	540	8004	4,006	42,292	2,833	709	3	1	3	4	200	200	

SIGNING FOR RESURFACING PROJECTS

LEGEND
 ┆ STATIONARY SIGN
 ← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

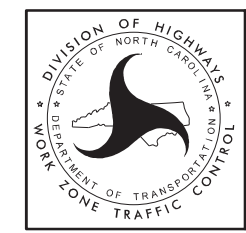
-Y- LINE SIGNING

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;"> W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> W20-7 A 48" X 48" 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.

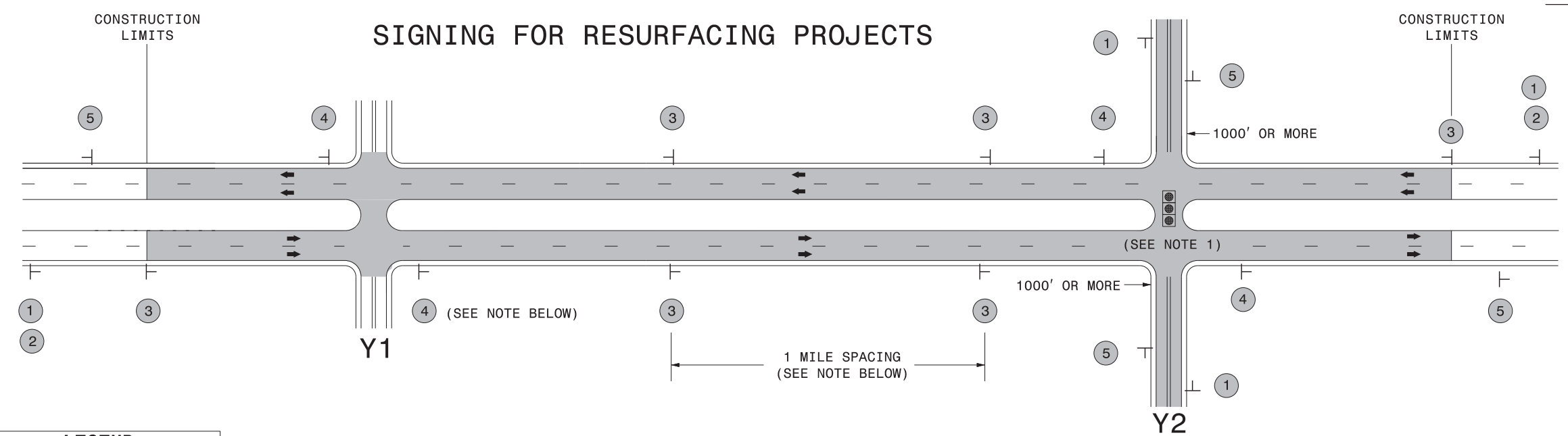
MAPS LESS THAN 2 MILES

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

5/15/2017 S:\TUXWZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing_AdvWarn_2Ln.dgn User:kedais



LEGEND
 ┆ STATIONARY SIGN
 ← DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

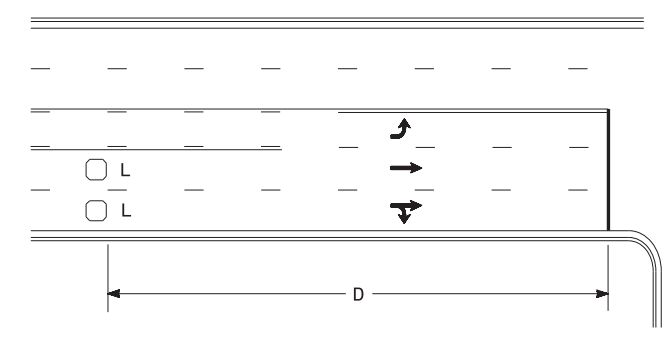
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		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)	<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, ADVANCE WARNING PORTABLE 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;"> <p>W20-1 48" X 48"</p> </div> <div style="text-align: center;"> <p>W20-7 A 48" X 48"</p> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p> <p>NOTES:</p> <ol style="list-style-type: none"> 1) 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.
		PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.	
		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.	
		PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.	

3/23/2015 C:\Users\rmgarrrett\Downloads\Resurfacing_AdvWarn_LrSu_Shldr.dgn User:rmgarrrett

**RESURFACING
 ADVANCE WARNING SIGNS
 FOR RURAL AND SUBURBAN
 MULTI-LANE ROADWAYS
 W/ SHOULDER SECTIONS**

High Speed Detection (≥40 mph)

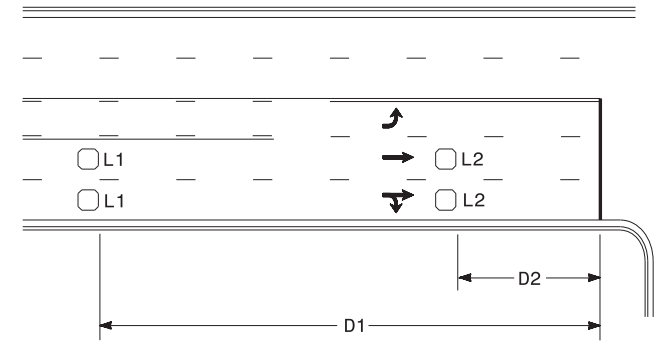


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired separately

Volume Density Operation

OR



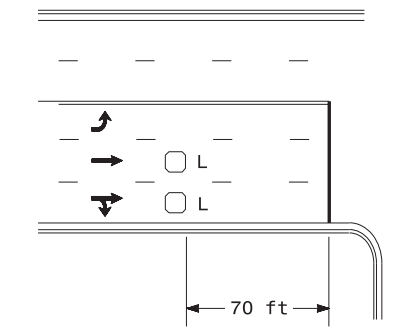
Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series

L2 = 6ft X 6ft
Wired in series

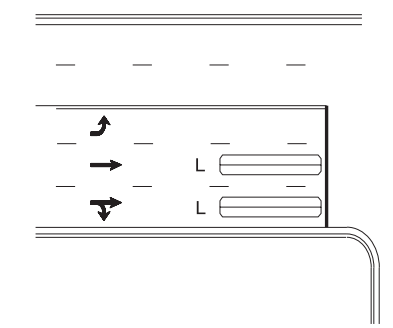
"Stretch" Operation

Low Speed Detection (≤35 mph)



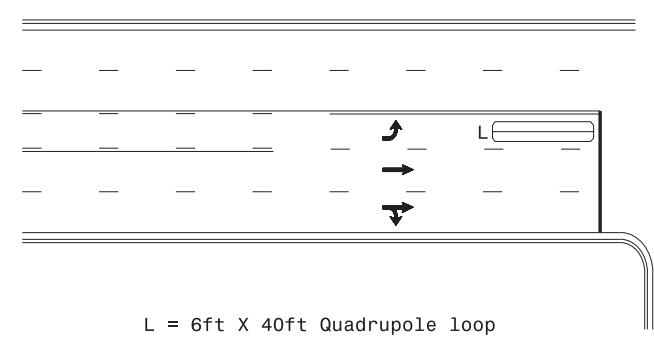
L = 6ft X 6ft
Wired in series

OR



L = 6ft X 40ft
Quadrupole loop, wired separately

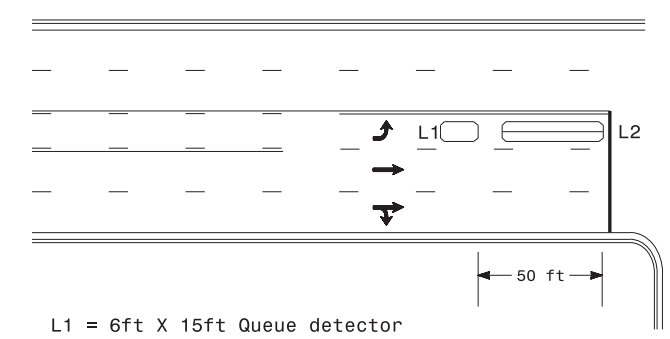
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

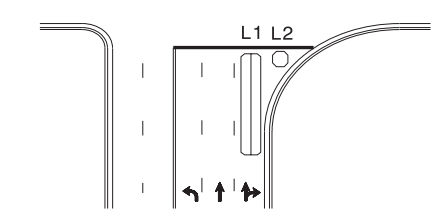
OR



L1 = 6ft X 15ft Queue detector
L2 = 6ft X 40ft Quadrupole loop

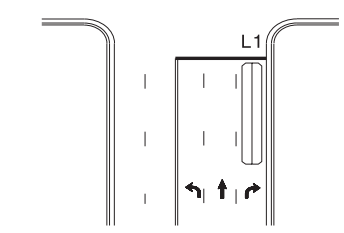
Queue Loop Detection

Right Turn Lane Detection

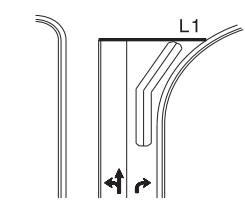


L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately

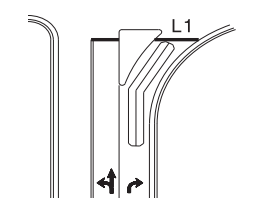
Shared Lane/
Wide Radius Turn



Standard Turn

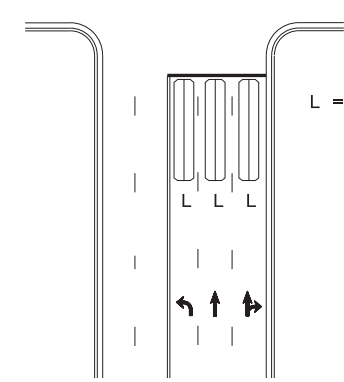


Wide Radius Turn



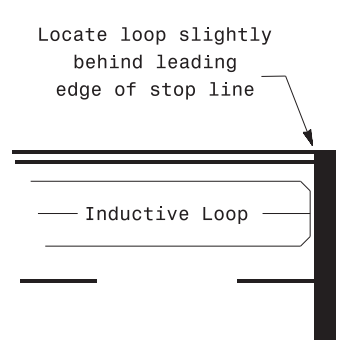
Channelized Turn

Side Street Detection



L = 6ft X 40ft
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 under any of the
following conditions:
- 1) stop line is greater than 15' from edge of intersecting roadway
 - 2) loop detects a permissive or protected/permissive left turn
 - 3) for an exclusive right turn lane

Recommended Number of Turns

Single 6' X 6' loop
(when wired separately):

Length of Lead-in ft	Number of Turns
< 250	3
250-375	4
375-525	5
> 525	6

Quadrupole loops: Use 2-4-2 turns

6' X 15' Loops:
Lead-in < 150', use 2 turns
Lead-in > 150', use 3 turns

750 N. Greenfield Pkwy, Garner, NC 27529

Prepared In the Offices of:

TRANSPORTATION MOBILITY AND SAFETY DIVISION
STATE OF NORTH CAROLINA
SIGNAL DESIGN SECTION

SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
029904
JASON P. GALLOWAY

Typical Signal Loop Locations	
PLAN DATE: September 2020	REVIEWED BY: JPG
PREPARED BY: PLA	REVIEWED BY:
SCALE: N/A	REVISIONS: INIT. DATE

9/8/2020
DATE

SIG. INVENTORY NO.