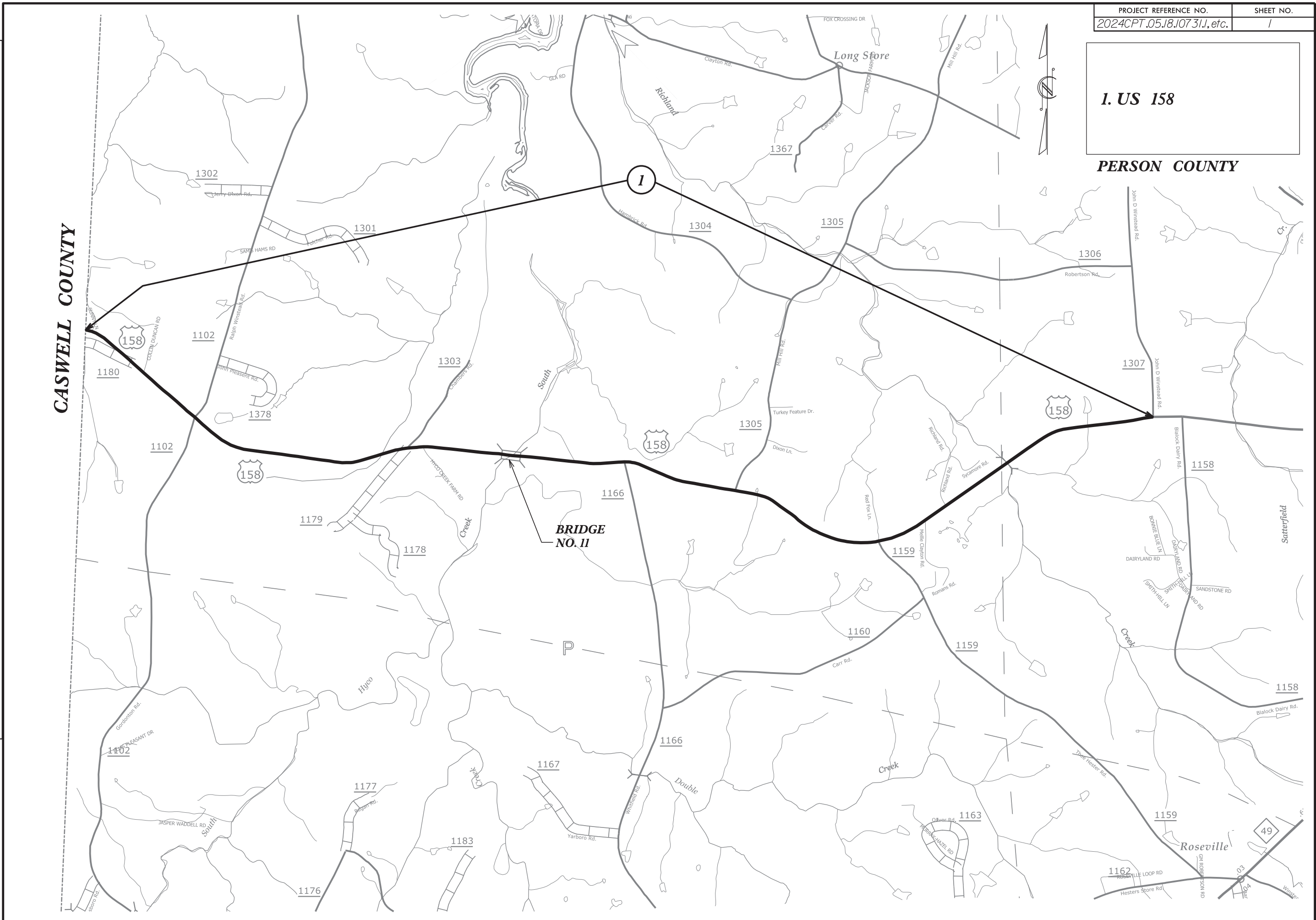


1. US 158

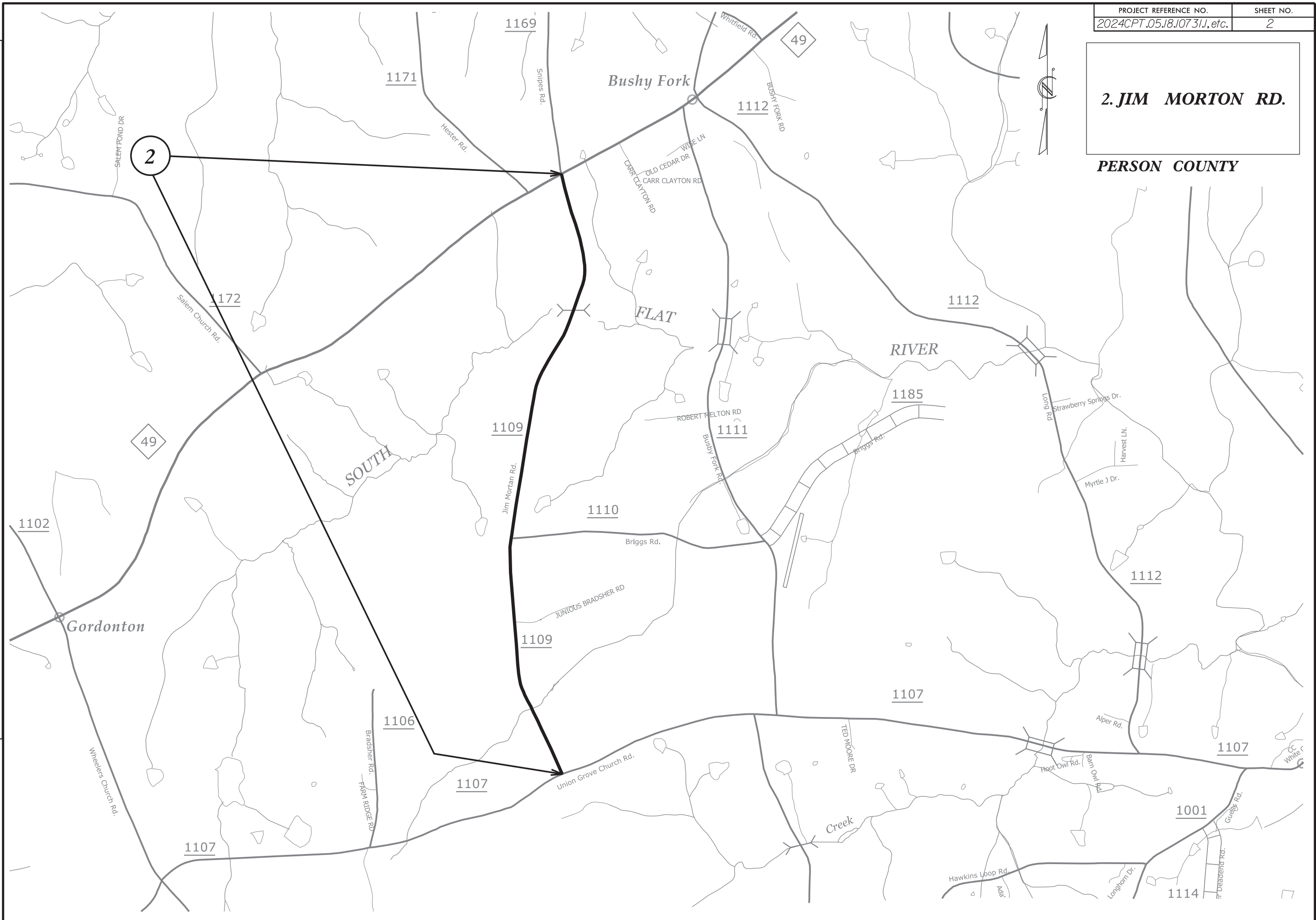
PERSON COUNTY

CASWELL COUNTY



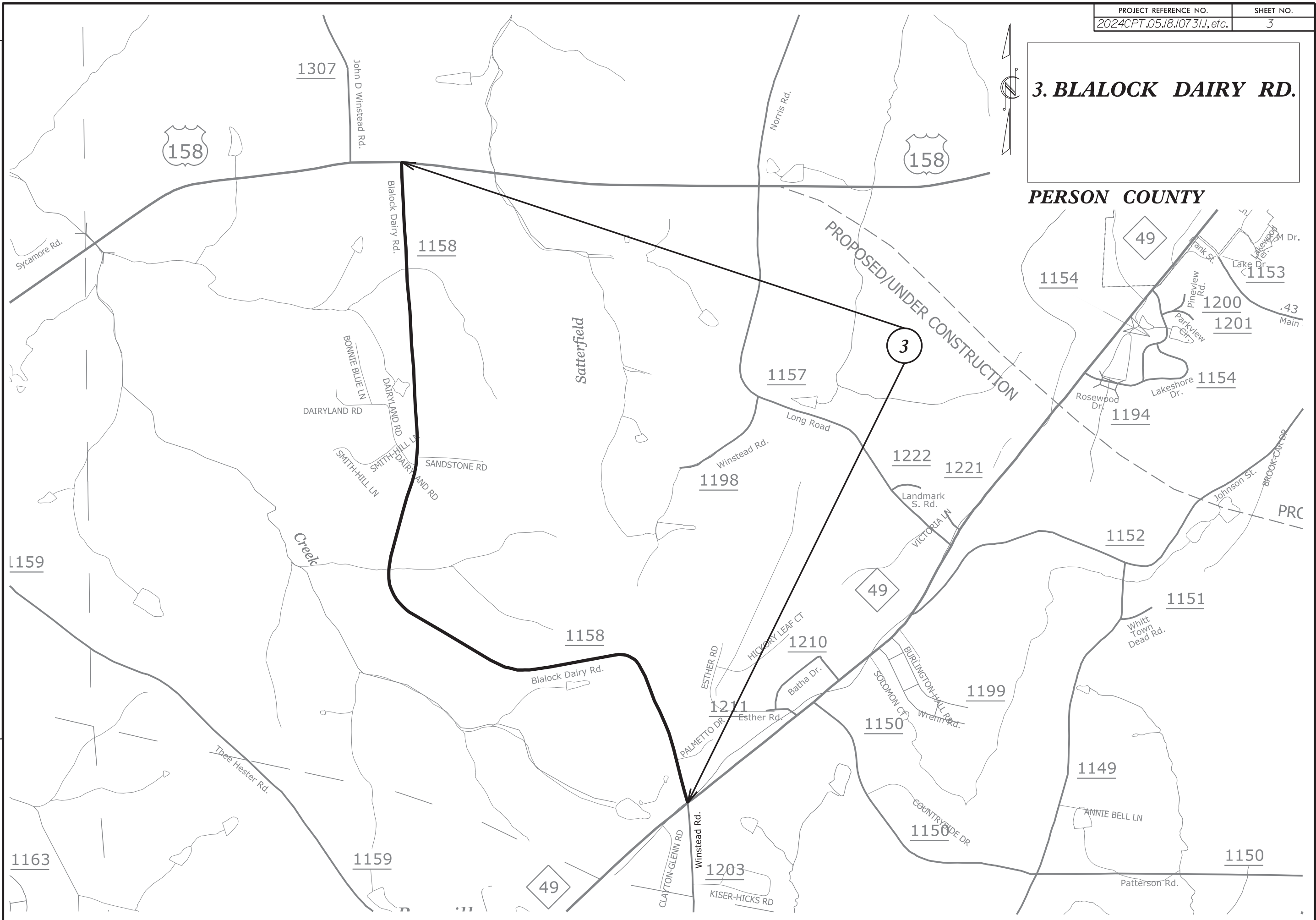
2. JIM MORTON RD.

PERSON COUNTY



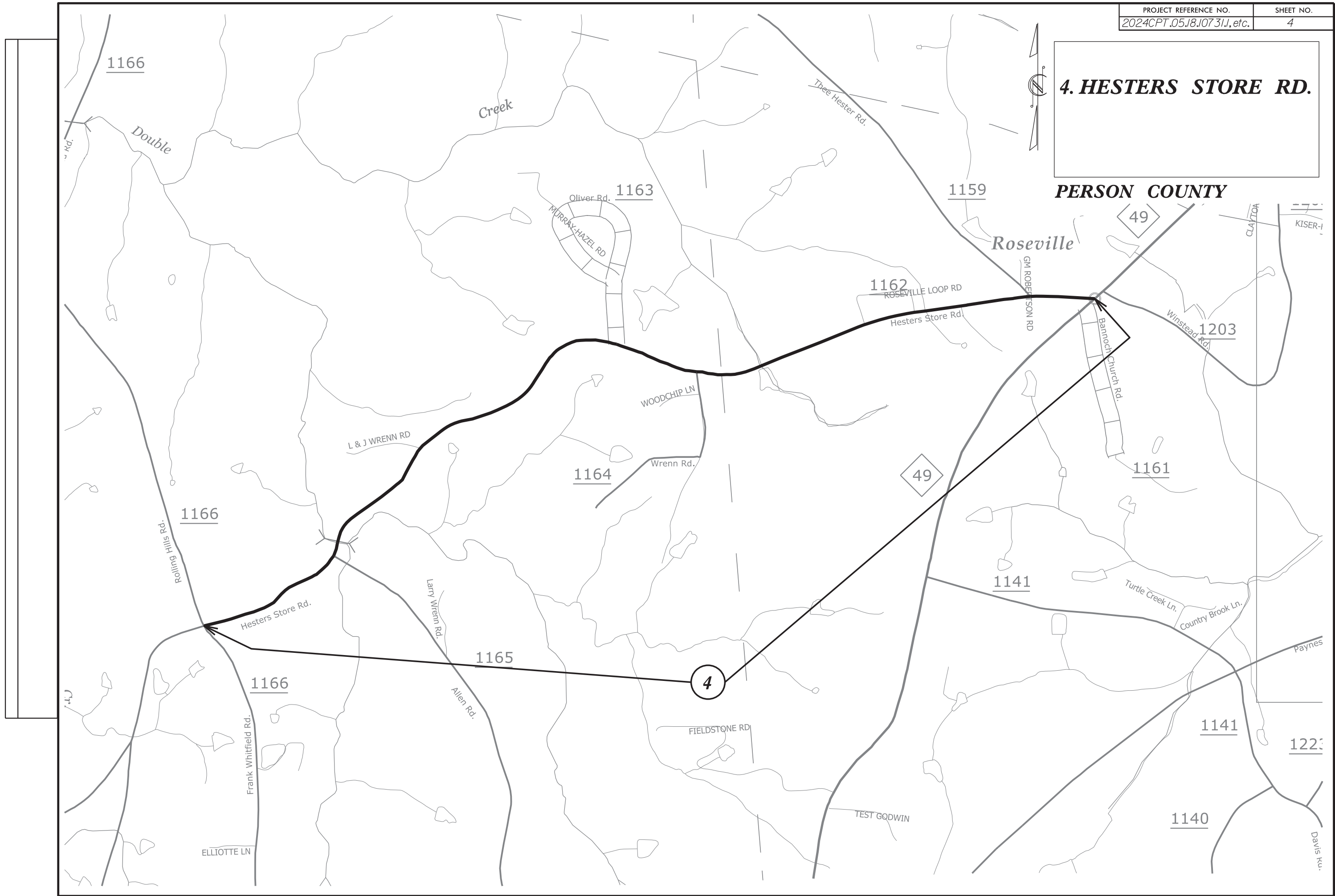
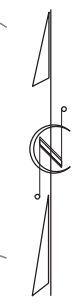
3. BLALOCK DAIRY RD.

PERSON COUNTY



4. HESTERS STORE RD.

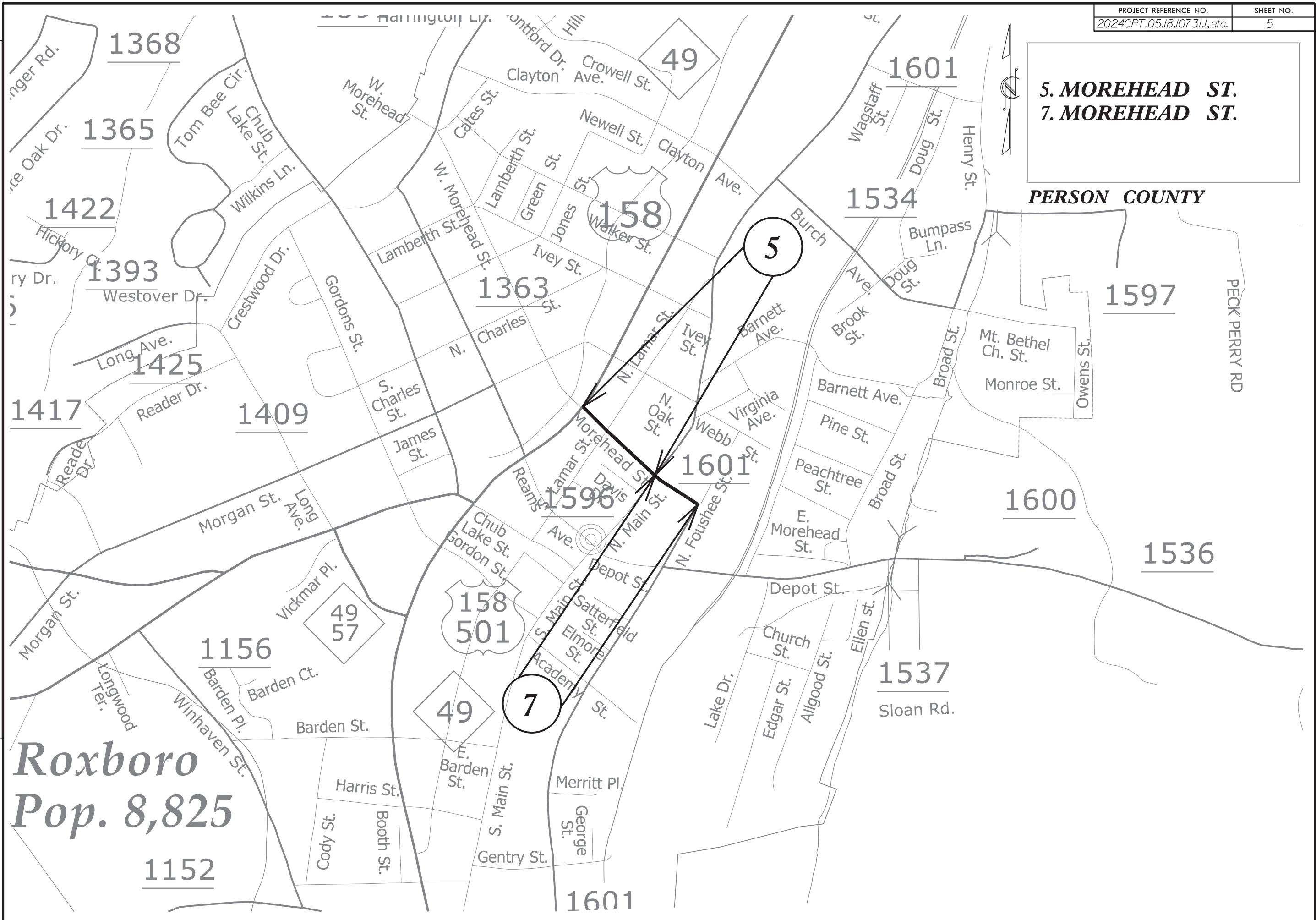
PERSON COUNTY



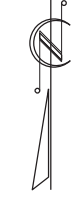
5. MOREHEAD ST.
7. MOREHEAD ST.

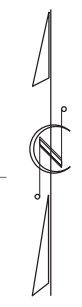
PERSON COUNTY

PECK PERRY RD



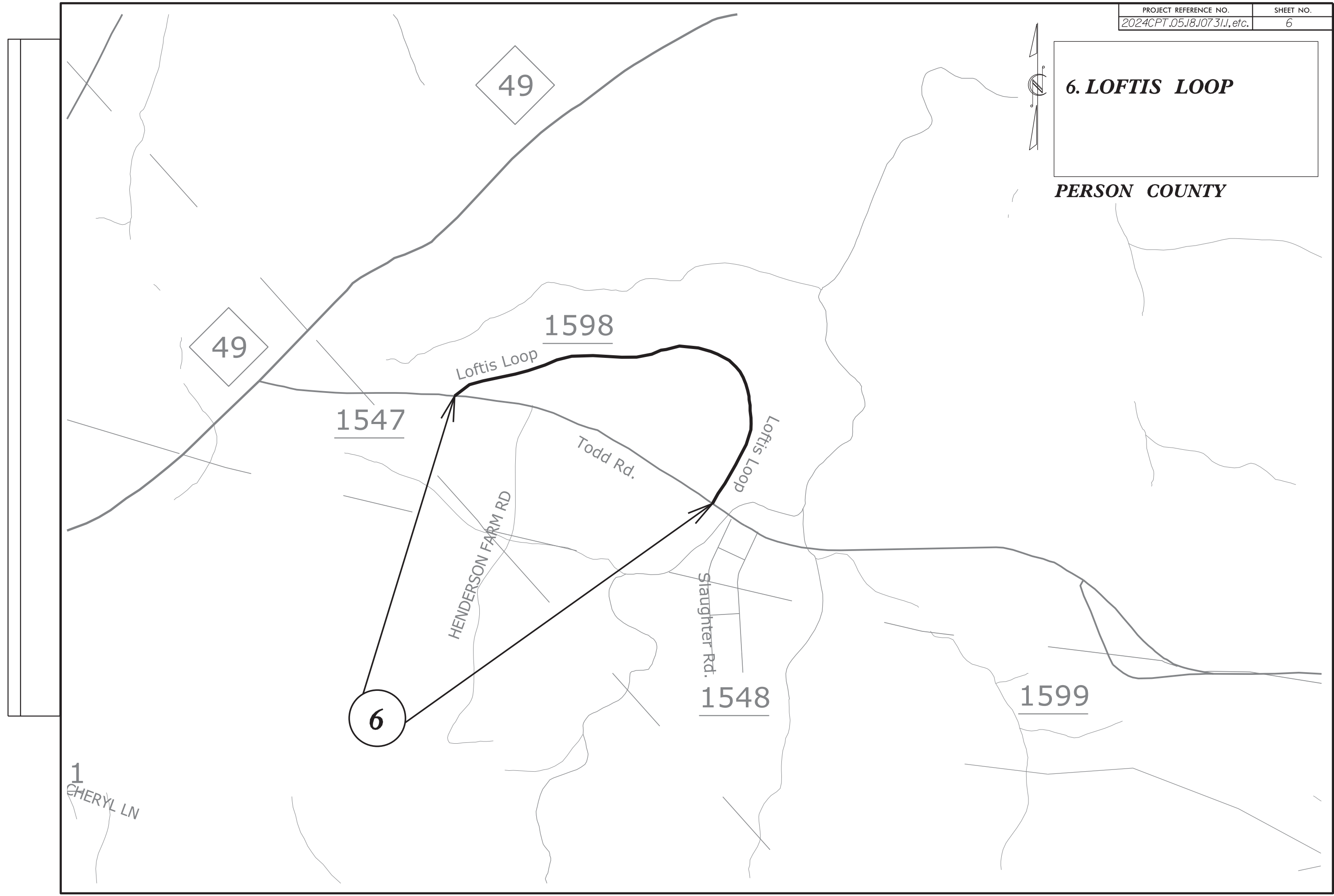
Roxboro
Pop. 8,825





6. LOFTIS LOOP

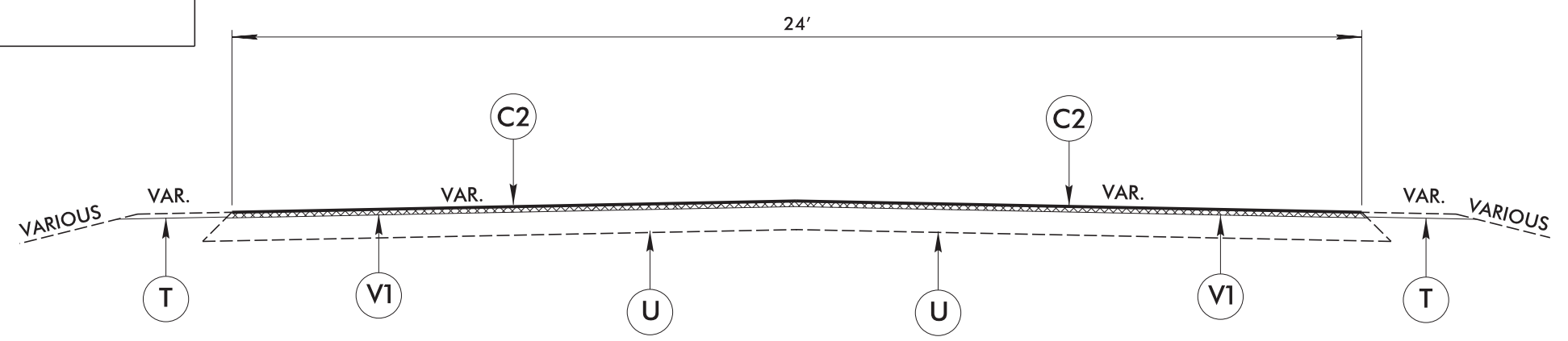
PERSON COUNTY



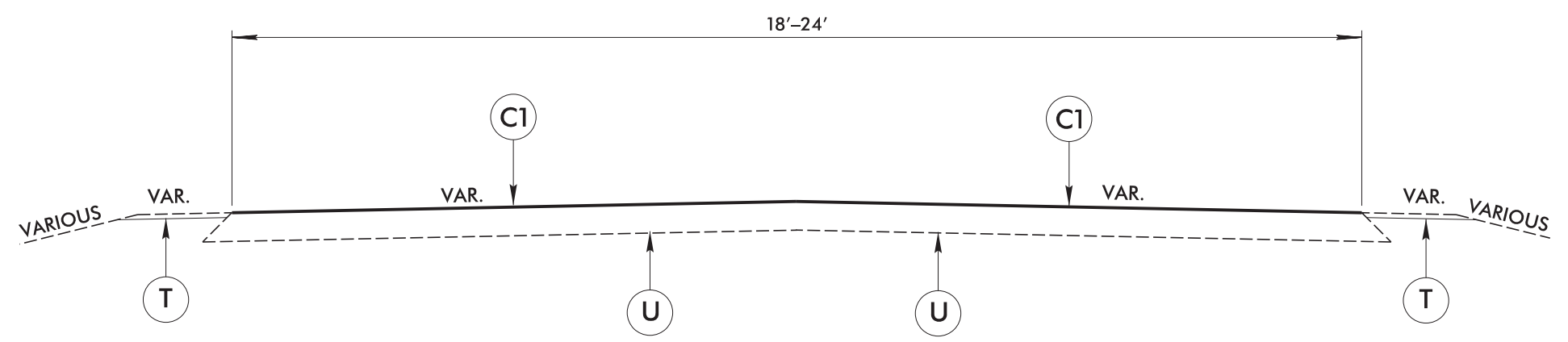
8/17/99

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 2½"
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT

PROJECT REFERENCE NO.	SHEET NO.
2024CPT.05J8J0731J, etc.	7



TYPICAL SECTION NO. 1



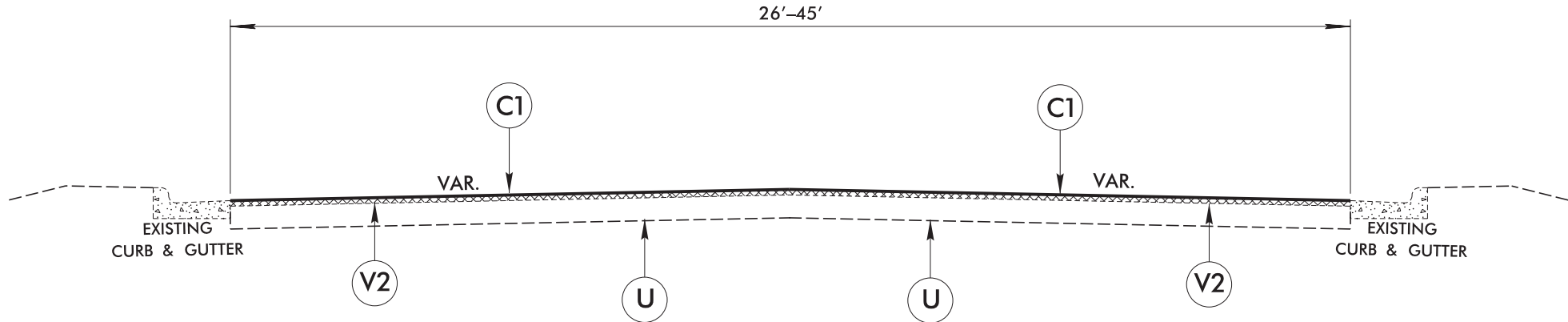
TYPICAL SECTION NO. 2

NOTE:
 AGGREGATE SHOULDER BORROW IS TO BE CONSIDERED A CONTINGENCY ITEM.
 EXACT QUANTITIES ARE NOT DETERMINED.
 USE AS NEEDED FOR SHOULDER TREATMENT.

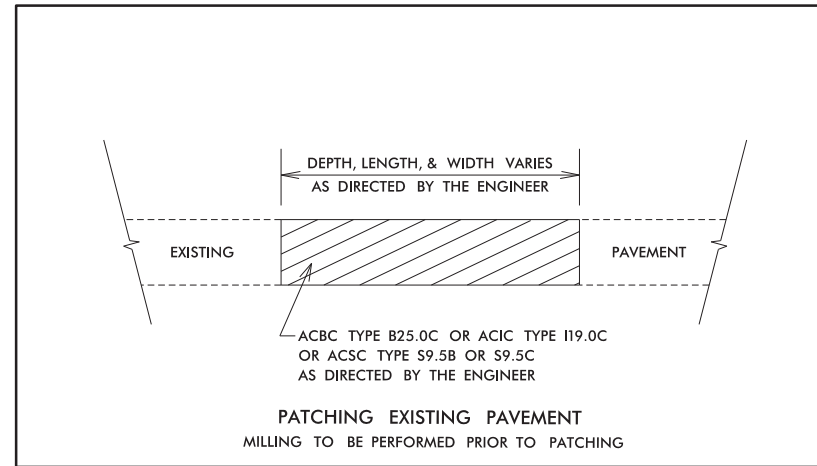
8/17/99

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
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V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 2½"
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT

PROJECT REFERENCE NO.	SHEET NO.
2024CPT.05J8J0731J, etc.	8

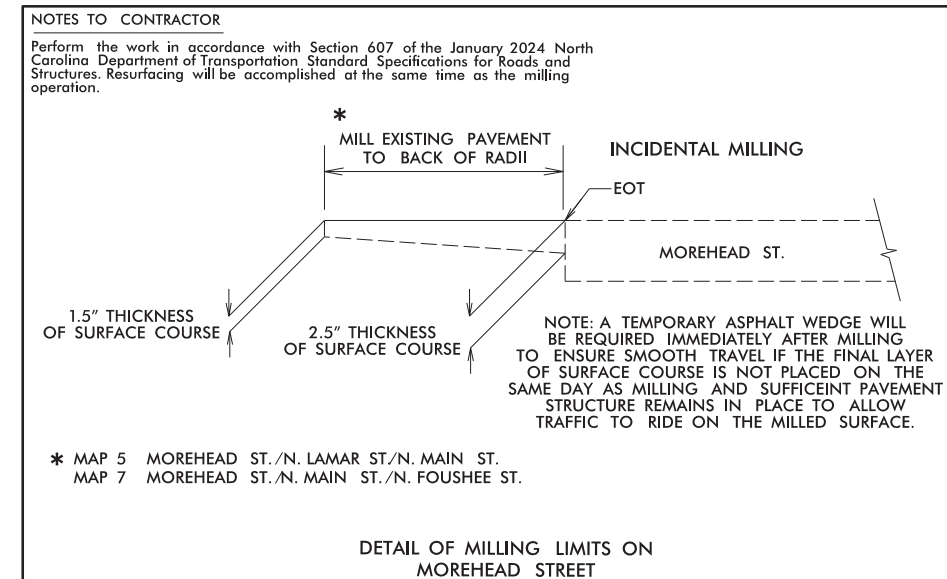
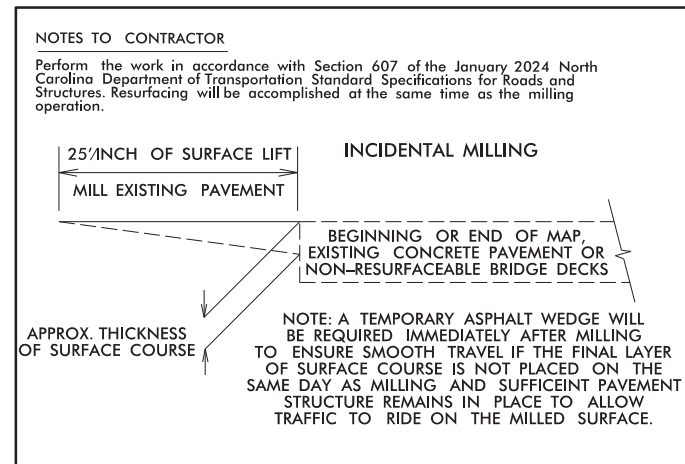


TYPICAL SECTION NO. 3



NOTES

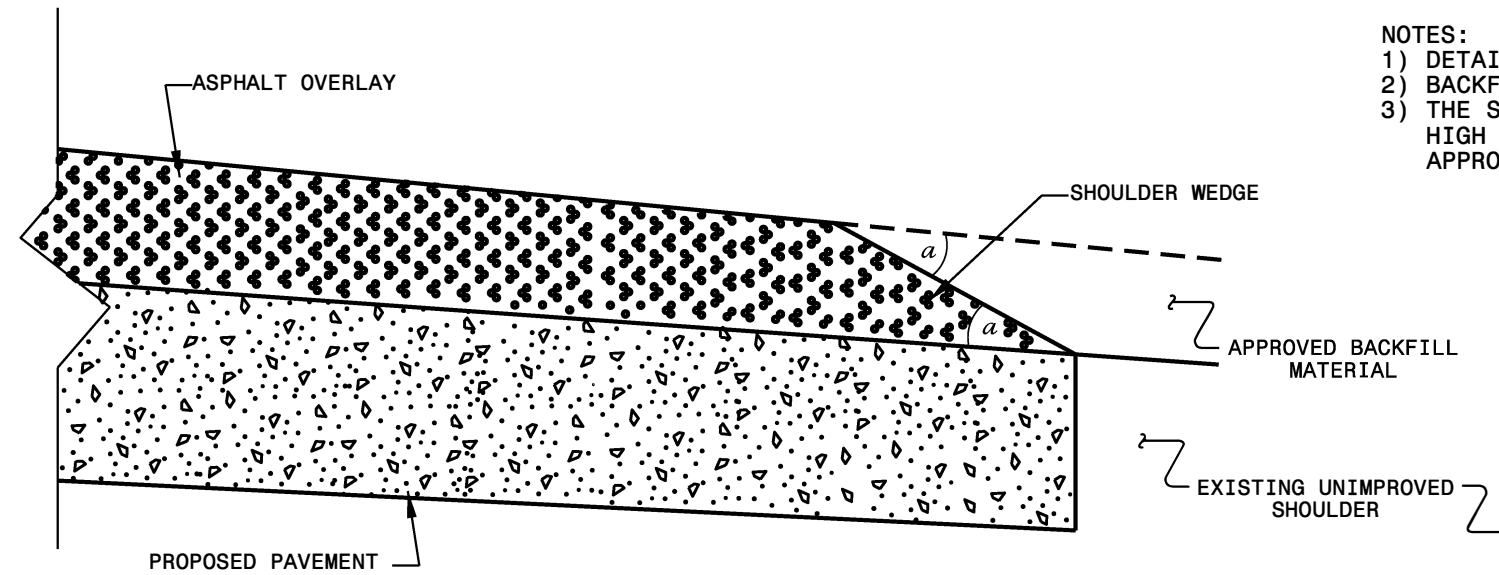
ALL UNPAVED S.R. ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.
 ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.
 EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.
 BRIDGES TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.



MAPS 5 AND 7, PAVE INTERSECTIONS AT MAIN STREET.

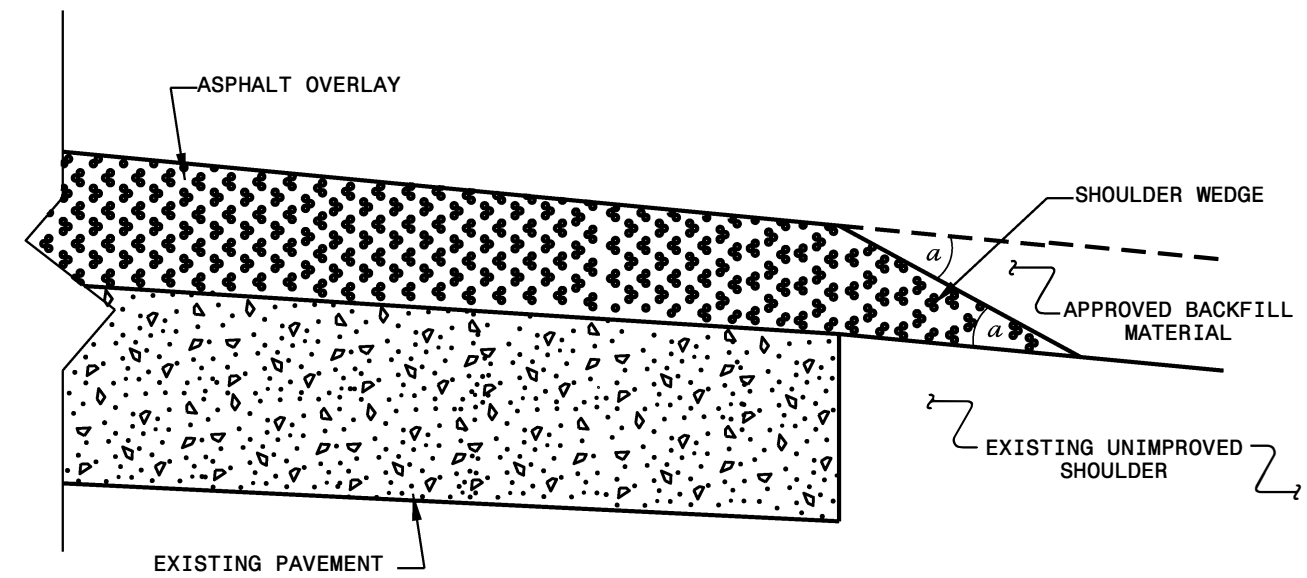
NOTES:

- 1) DETAIL DOES NOT APPLY TO OGAFB 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.



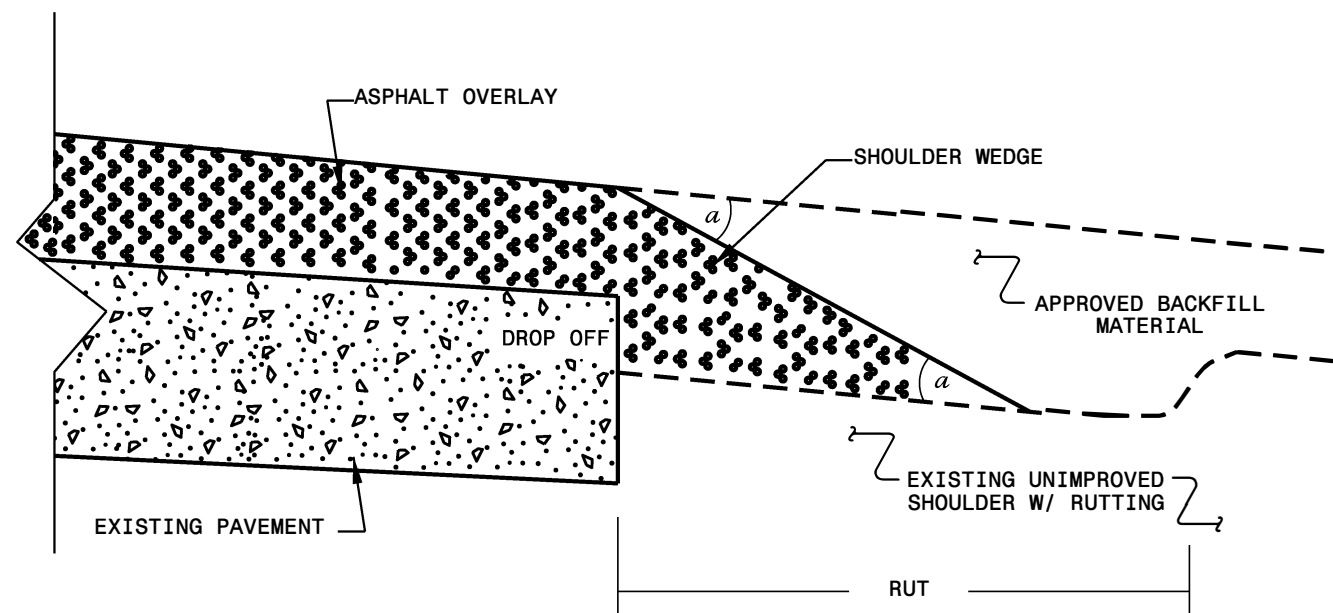
SHOULDER WEDGE DETAIL

(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: 2/2/16		
CHECKED BY: _____	DATE: _____		
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn			

22-JAN-2018 09:41
 S:\Contracts\2018\Resurfacing Projects\Division 4\1-5937 Wilson March 2018\Revised Shoulder Wedge Detail.dgn
 PJporter AT CSD-292592

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	1245000000-E	1260000000-E	1297000000-E	1308000000-E	1330000000-E	1519000000-E	1523000000-E	1575000000-E	1704000000-E	2830000000-N	2845000000-N	7444000000-E			
												INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	1 1/2" MILLING	2 1/2" MILLING	1.5" TO 2.5" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5B	SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ADJUST MANHOLES	ADJUST METER OR VALVE BOX	INDUCTIVE LOOP SAWCUT		
											MI	FT	TONS	SMI	TON	SY	SY	SY	SY	TONS	TONS	TON	TONS	EA	EA	LF	
2024CPT.05.18.10731.1	Person	1	US-158 E / LEASBURG RD	FROM CASWELL COUNTY TO SR 1307	1	2	2WU	NO	NO	5.87	24	4	11.00	2,070	84,550			2,992		7,584	448	7					
TOTAL FOR PROJ NO. 2024CPT.05.18.10731.1											5.87		4	11.00	2,070	84,550			2,992		7,584	448	7				
2024CPT.05.18.20731.1	Person	2	SR-1109 / JIM MORTON RD	FROM SR 1107 TO NC 49	2	2	2WU	NO	NO	2.252	20	2	4.50	794				408	2,265		148	12					
2024CPT.05.18.20731.1	Person	3	SR-1158 / BLALOCK DAIRY RD	FROM NC 49 TO US 158	2	2	2WU	NO	NO	2.472	20	2	4.50	872				186	2,482		161	2					
2024CPT.05.18.20731.1	Person	4	SR-1162 / HESTER'S STORE RD	FROM SR 1166 TO NC 49	2	2	2WU	NO	NO	3.023	20	2	6.00	1,066				1,225	3,135		205	25					
2024CPT.05.18.20731.1	Person	5	SR-1596 / MOREHEAD ST	FROM US 501 TO SR 1601	3	2	2WU	NO	NO	0.156	45							3,555	345		308	20	1	7	750		
2024CPT.05.18.20731.1	Person	6	SR-1598 / LOFTIS LOOP	FROM SR 1547 TO SR 1547	2	2	2WU	NO	NO	0.708	18	1	1.50	250				148	630		42	29					
2024CPT.05.18.20731.1	Person	7	SR-1601 / MOREHEAD ST	FROM FOUSHEE ST TO SR 1596	3	2	2WU	NO	NO	0.083	30							1,470	472		128	8	5	2			
TOTAL FOR PROJ NO. 2024CPT.05.18.20731.1											8.694		7	16.50	2,982	5,025	817	1,967	8,948		584	68	6	9	750		
GRAND TOTAL												14.564		11	27.50	5,052	84,550	5,025	817	4,959	8,948	7,584	1,032	75	6	9	750

REVISIONS

8/17/99
4/16/2024
I:\Projects\2025_Person_S00_PSH.dgn
I:\Projects\2025_Person_S00_PSH.dgn

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4510000000-N	4685000000-E		4709000000-E	4720000000-E	4725000000-E		4770000000-E		4810000000-E	4850000000-E	4905100000-N		
										WORK ZONE ADVANCE/ GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	THERMOPLASTIC MARKING LINES (24" X 90 M) WHITE	THERMO MSG SCHOOL 90 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR & LT ARROW 90 M	4" WHITE COLD APPLIED PLASTIC, TYPE III	4" YELLOW COLD APPLIED PLASTIC, TYPE III	4" YELLOW PAINT	4" LINE REMOVAL	NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKER	
									MI	FT	SF	LS	HR	LF	LF	LF	EA	EA	EA	EA		LF	EA		
2024CPT.05.18.10731.1	Person	1	US-158 E / LEASBURG RD	FROM CASWELL COUNTY TO SR 1307	1	2	2WU	5.87	24	657	*		68,740	67,830	260					500	500	67,830	952	430	
TOTAL FOR PROJ NO. 2024CPT.05.18.10731.1									5.87		657	1		68,740	67,830	260				500	500	67,830	952	430	
													136,570												
2024CPT.05.18.20731.1	Person	2	SR-1109 / JIM MORTON RD	FROM SR 1107 TO NC 49	2	2	2WU	2.252	20	252			25,680	25,530	110	12									
2024CPT.05.18.20731.1	Person	3	SR-1158 / BLALOCK DAIRY RD	FROM NC 49 TO US 158	2	2	2WU	2.472	20	277			28,340	28,350											
2024CPT.05.18.20731.1	Person	4	SR-1162 / HESTER'S STORE RD	FROM SR 1166 TO NC 49	2	2	2WU	3.023	20	339	*		35,010	34,430											
2024CPT.05.18.20731.1	Person	5	SR-1596 / MOREHEAD ST	FROM US 501 TO SR 1601	3	2	2WU	0.156	45	126		40	380	1,500	30		3	3	3			1,500			
2024CPT.05.18.20731.1	Person	6	SR-1598 / LOFTIS LOOP	FROM SR 1547 TO SR 1547	2	2	2WU	0.708	18	80															
2024CPT.05.18.20731.1	Person	7	SR-1601 / MOREHEAD ST	FROM FOUSHEE ST TO SR 1596	3	2	2WU	0.083	30	126				810	40							810			
TOTAL FOR PROJ NO. 2024CPT.05.18.20731.1									8.694		1,200	1	40	89,410	90,620	180	12	3	3	3			2,310		
													180,030												
													9												
GRAND TOTAL									14.564		1,857	1	40	158,150	158,450	440	12	3	3	3	500	500	70,140	952	430
													316,600												
													9												
													1,000												

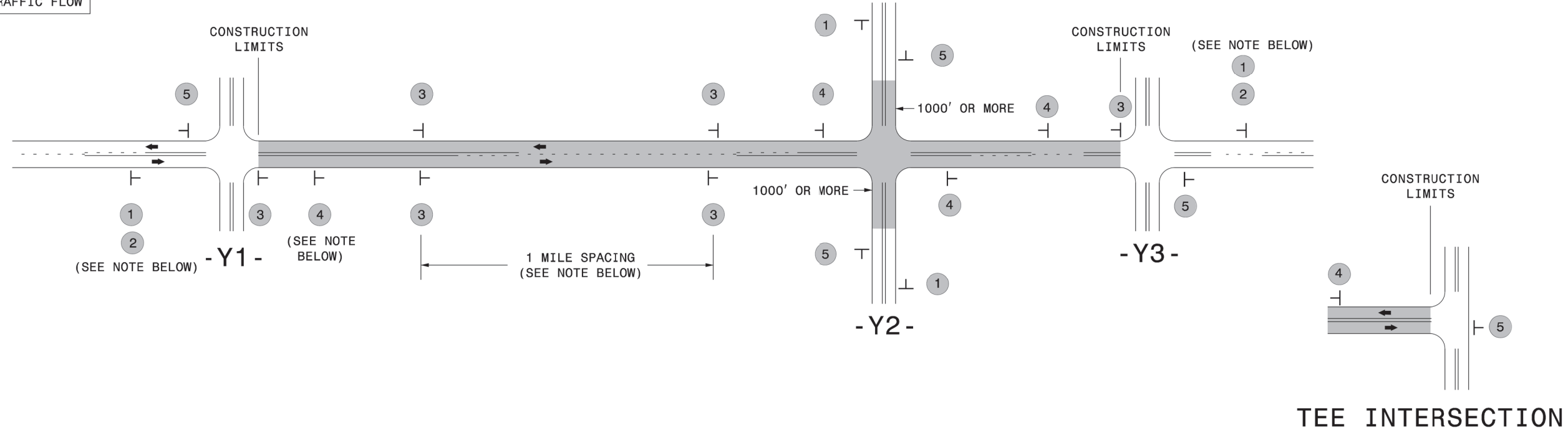
REVISIONS

8/17/99

4/24/2024
 P:\Proj\2025_Person_S00_PSH.dgn
 USF\stcenneth

SIGNING FOR RESURFACING PROJECTS

LEGEND
 ┆ STATIONARY SIGN
 ← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	 	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>#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)</p>	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> LESS THAN 1000' OF RESURFACING ALONG -Y- LINE SUBDIVISION ROADS 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> PLACED 500' IN ADVANCE OF FLAGGER. </div> <div> PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
		<p>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</p> <p>- AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</p>	
		<p>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS.</p> <p>- DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</p> <p>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</p> <p>- 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.</p> <p>- A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</p> <p>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</p>	
		<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	
	<p>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.</p>		

MAPS LESS THAN 2 MILES

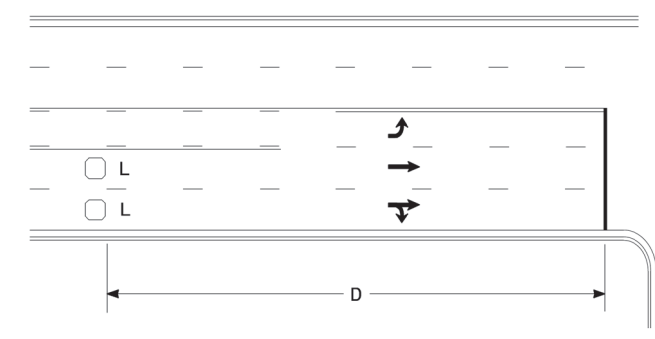
FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



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

5/15/2017 S:\TMD\WZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing_AdvWarn_2Ln.dgn User:keddis

High Speed Detection (≥40 mph)

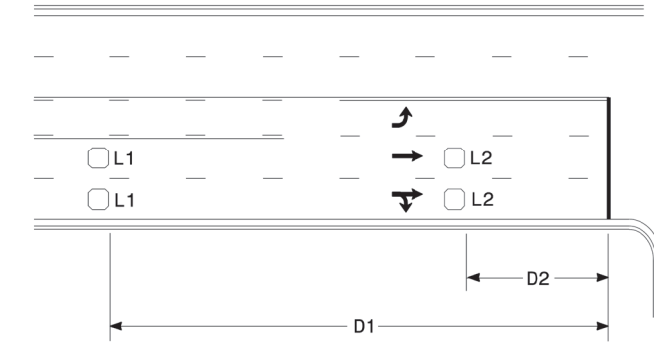


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired in series for TS1
Controllers
Wired separately for TS2,
170, and 2070L Controllers

Volume Density Operation

OR

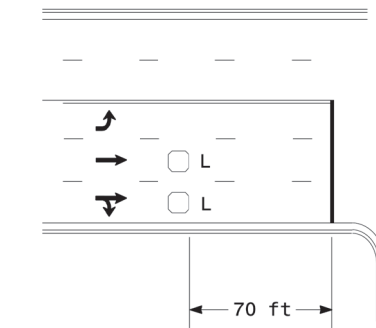


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series
L2 = 6ft X 6ft
Wired in series

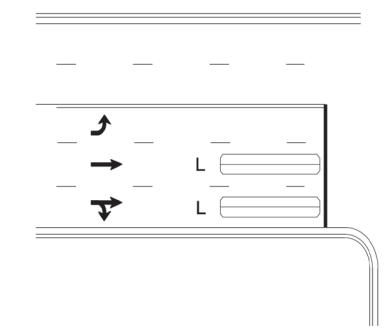
"Stretch" Operation

Low Speed Detection (≤35 mph)



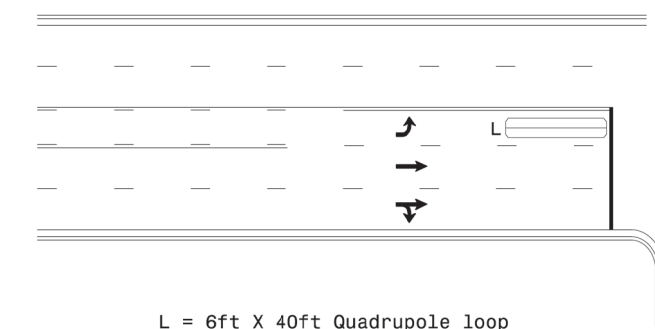
L = 6ft X 6ft
Wired in series

OR



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

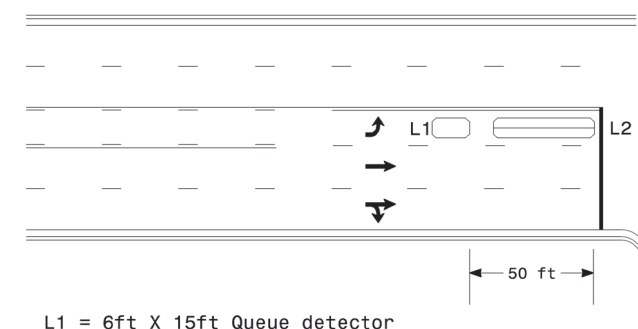
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

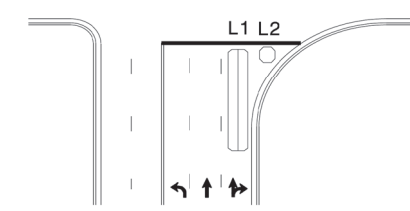
OR



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

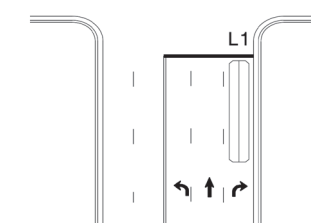
Queue Loop Detection

Right Turn Lane Detection

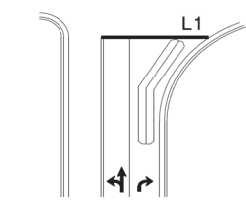


Shared Lane/
Wide Radius Turn

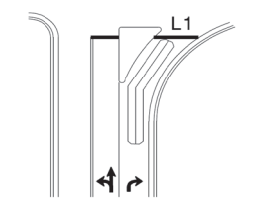
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

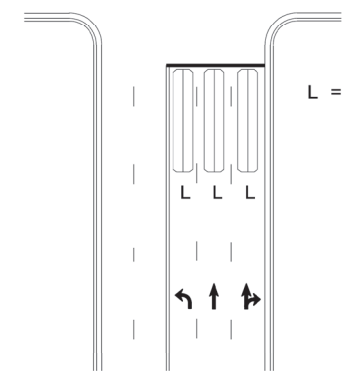


Wide Radius Turn



Channelized Turn

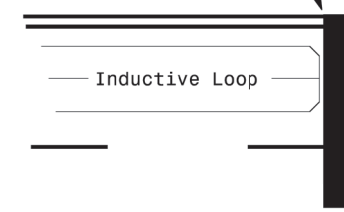
Side Street Detection



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

	Prepared In the Offices of: TRANSPORTATION MOBILITY AND SAFETY DIVISION NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SIGNAL DESIGN SECTION 750 N. Greenfield Pkwy, Garner, NC 27529		SEAL 23489 ENGINEER PAMELA L. ALEXANDER
	Typical Signal Loop Locations		
SCALE N/A	PLAN DATE: January 2015 PREPARED BY: PLA	REVIEWED BY: JPG REVIEWED BY:	DocuSigned by: P. Alexander 1/30/2015 DATE SIG. INVENTORY NO.

30-Jan-2015 12:29
 S:\ITS\ASIM\TS - Signal\sig1\TS - Signal\sig1\Region1\tophypl\ca12015.dgn
 pal alexander