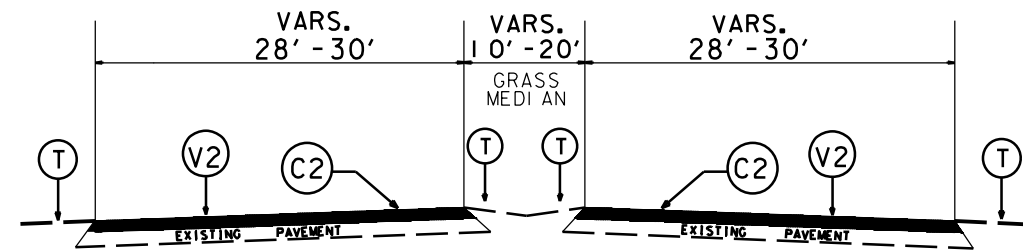
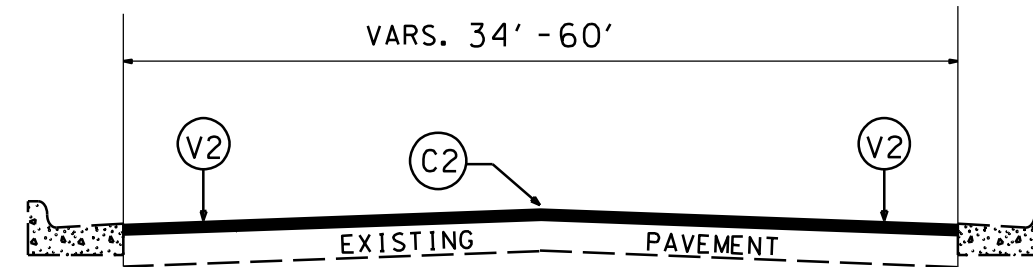


PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
IREDELL COUNTY		
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
2025CPT. 12. 05. 10491	5	PRIMARY RESURFACING
2025CPT. 12. 05. 20491		SECONDARY RESURFACING



**TYPICAL SECTION NO. 1**

Map 1: 0+00 - 7+61



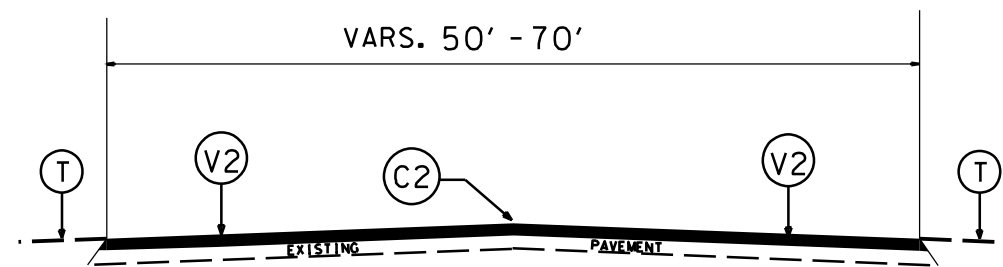
**TYPICAL SECTION NO. 4**

Map 1: 41+17 - 174+61

Map 2: 0+00 - 72+86  
85+96 - 90+29

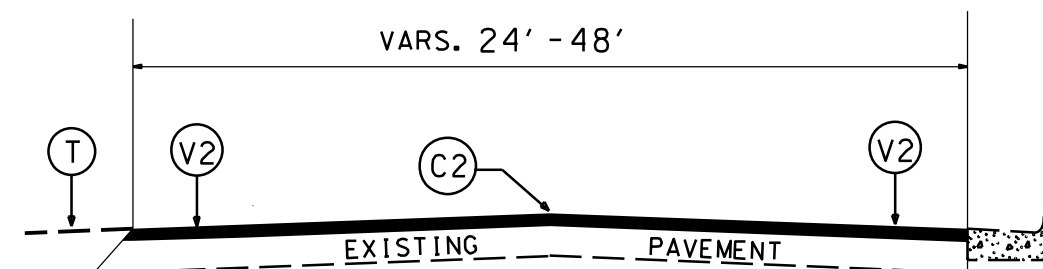
Map 19: 0+00 - 3+00  
31+61 - 34+85

Map 20: 0+00 - 1+75



**TYPICAL SECTION NO. 2**

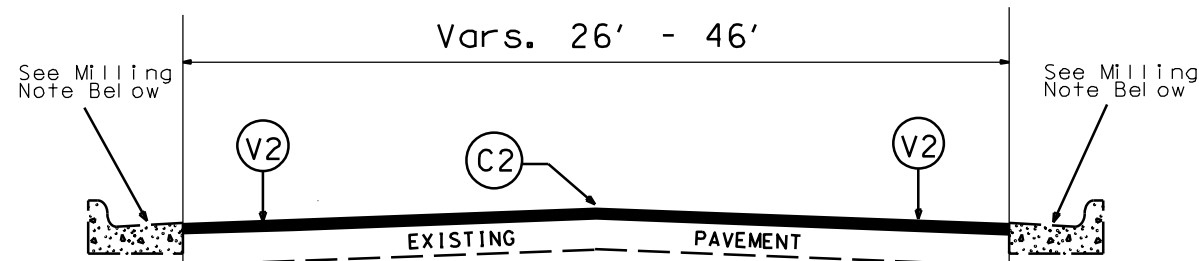
Map 1: 7+61 - 12+92



**TYPICAL SECTION NO. 5**

Map 2: 72+86 - 78+86  
82+46 - 85+96

Map 19: 3+00 - 14+15



**TYPICAL SECTION NO. 3**

Map 1: 12+92 - 41+17

\*Additional milling will be required to remove existing asphalt from gutter pan

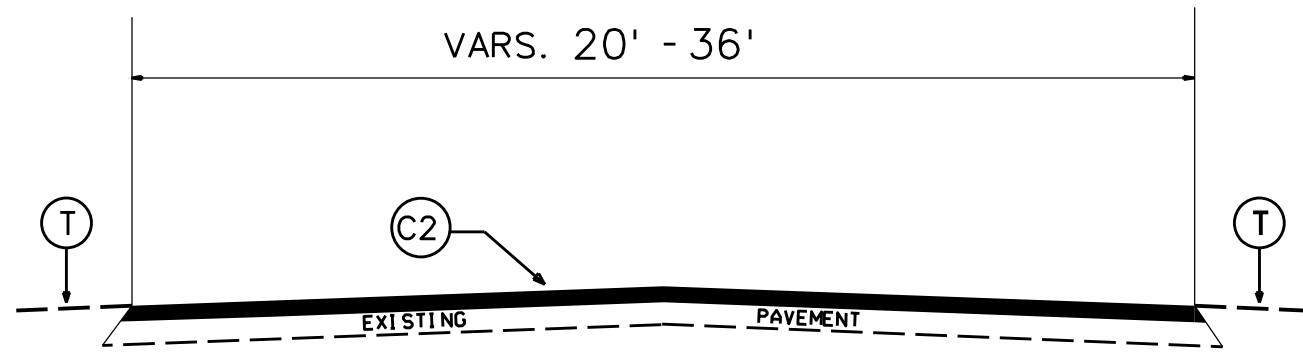
Map 2: 78+86 - 82+46

\*Additional milling will be required to remove existing asphalt from gutter pan

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C,
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V1	MILL EXISTING ASPHALT PAVEMENT APPROX. 1" IN DEPTH
V2	MILL EXISTING ASPHALT PAVEMENT APPROX. 1.5" IN DEPTH
V3	MILL EXISTING ASPHALT PAVEMENT APPROX. 0 TO 1" IN DEPTH

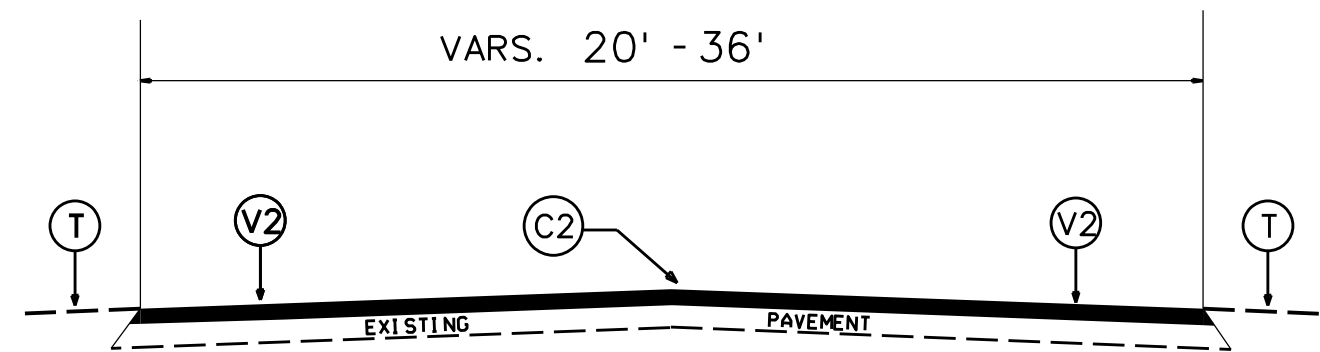
**2025-2026**  
**Resurfacing Program**  
**Typical Sections**  
**Iredell County**

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
IREDELL COUNTY		
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
2025CPT. 12. 05. 1 0491		PRIMARY RESURFACING
2025CPT. 12. 05. 2 0491	6	SECONDARY RESURFACING



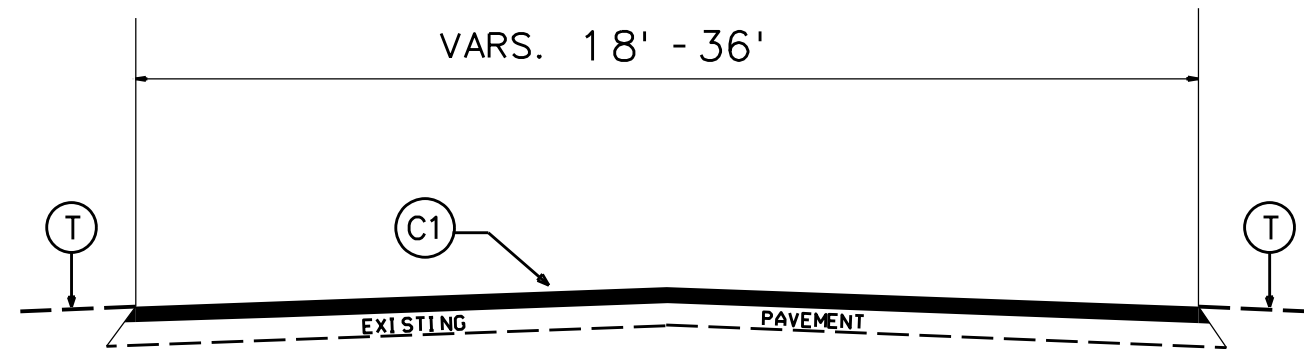
TYPICAL SECTION NO. 6

Maps 17 & 25 (Entire Maps)  
Map 20 1+75- 153+75



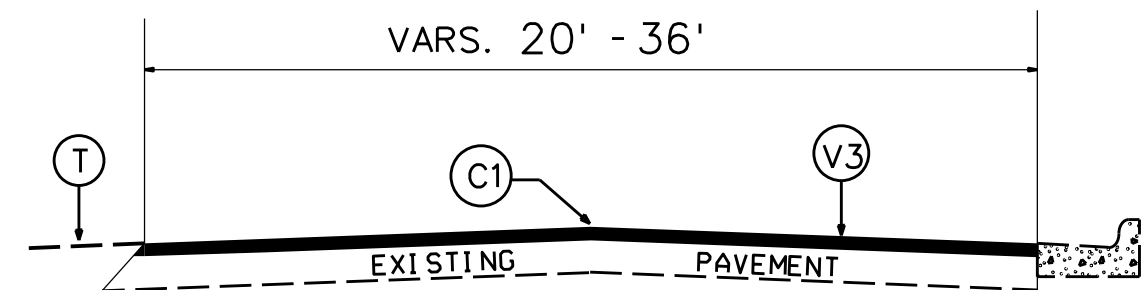
TYPICAL SECTION NO. 8

Maps 19: 14+15 - 31+61



TYPICAL SECTION NO. 7

Map 3 0+00 to 7+25  
8+25 to 67+70  
Maps: 4, 5, 6, 7, 8,  
9, 10, 11, 12,  
13, 14, 15, 16,  
18, 21, 22, 23,  
24, 26, 27, 28,  
29, 30, 31, 32 (Entire Maps)



TYPICAL SECTION NO. 9

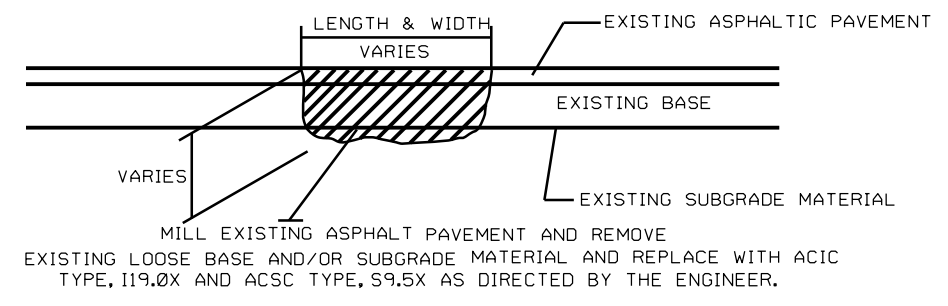
Map 3: 7+25 - 8+25  
(S/D Entrance)

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V1	MILL EXISTING ASPHALT PAVEMENT APPROX. 1" IN DEPTH
V2	MILL EXISTING ASPHALT PAVEMENT APPROX. 1.5" IN DEPTH
V3	MILL EXISTING ASPHALT PAVEMENT APPROX. 0 TO 1" IN DEPTH

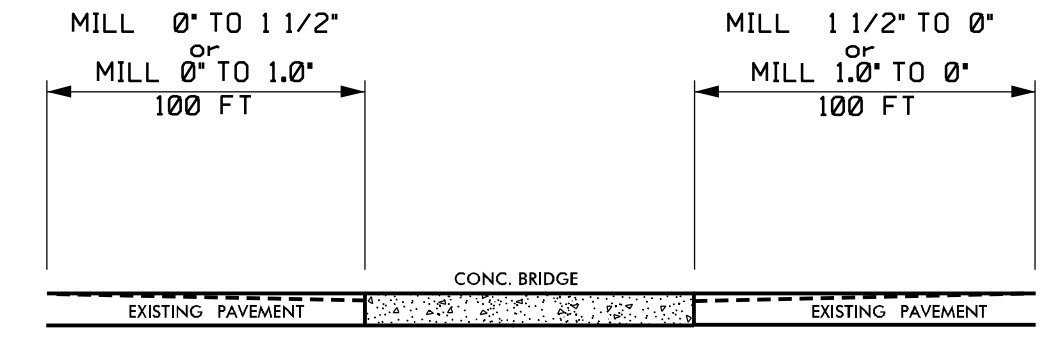
2025-2026  
Resurfacing Program  
Typical Sections  
Iredell County

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
IREDELL COUNTY		
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
2025CPT. 12. 05. 10491		PRIMARY RESURFACING
2025CPT. 12. 05. 20491	7	SECONDARY RESURFACING

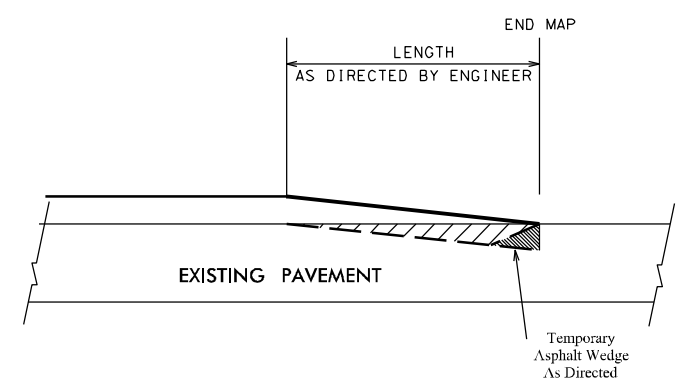
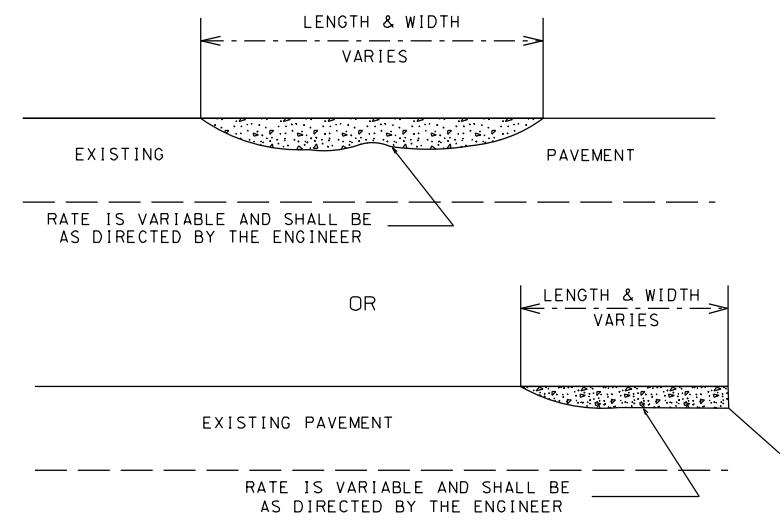
**DETAIL A**  
**PATCHING EXISTING PAVEMENT**



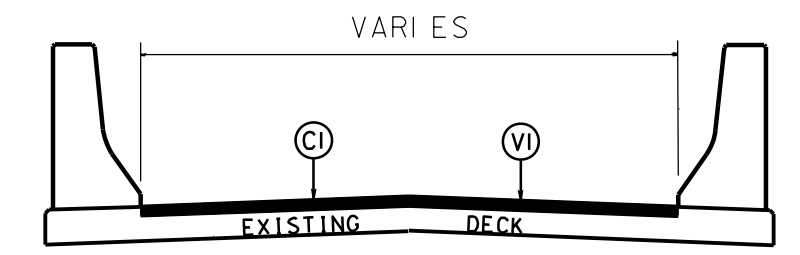
**DETAIL C**  
**MILLING BRIDGE APPROACHES**



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

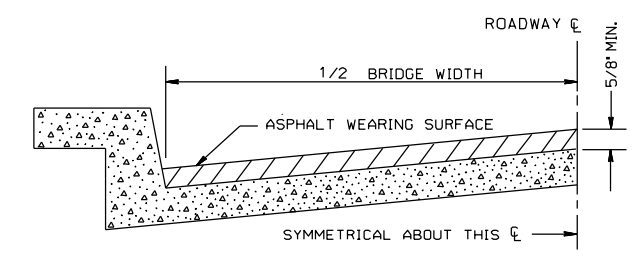


**TIE-IN (INCIDENTAL) MILLING DETAIL**



**ASPHALT BRIDGE SECTION**  
Use for all asphalt bridges  
( Map 3 )

**DETAIL E**  
**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.

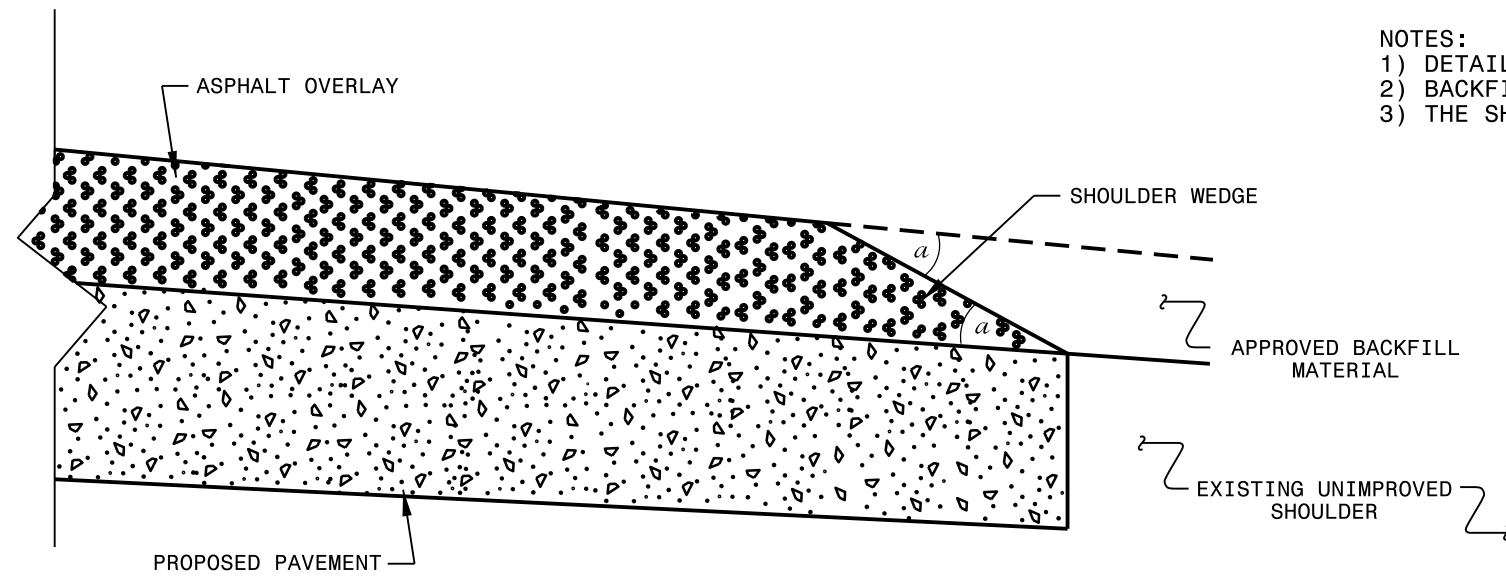
SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE NOTED.

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

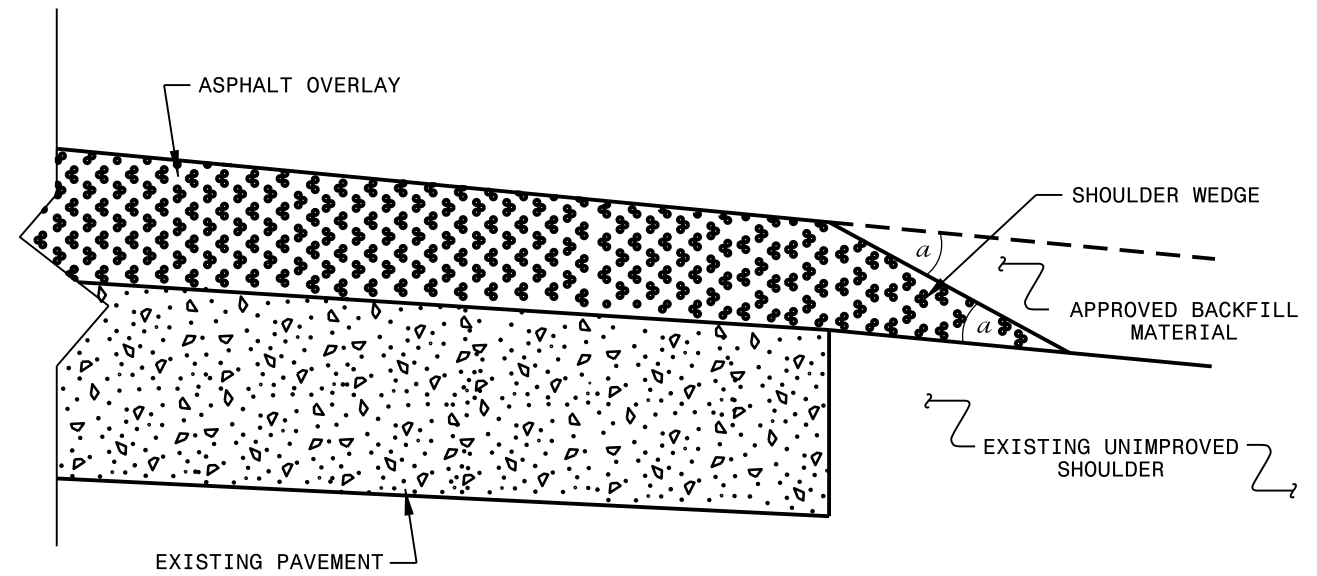
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V1	MILL EXISTING ASPHALT PAVEMENT APPROX. 1" IN DEPTH
V2	MILL EXISTING ASPHALT PAVEMENT APPROX. 1.5" IN DEPTH
V3	MILL EXISTING ASPHALT PAVEMENT APPROX. 0 TO 1" IN DEPTH

**2025 - 2026**  
**Resurfacing Program**  
**Detail Sheet**  
**Iredell County**

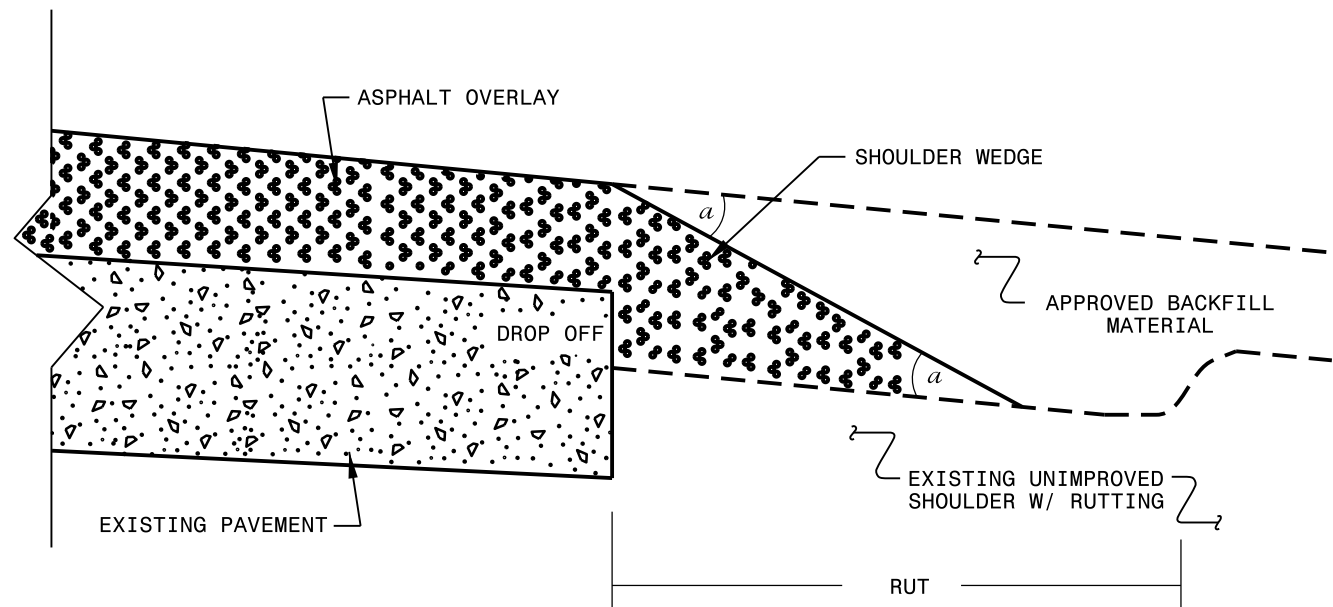
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
  - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
  - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



**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)

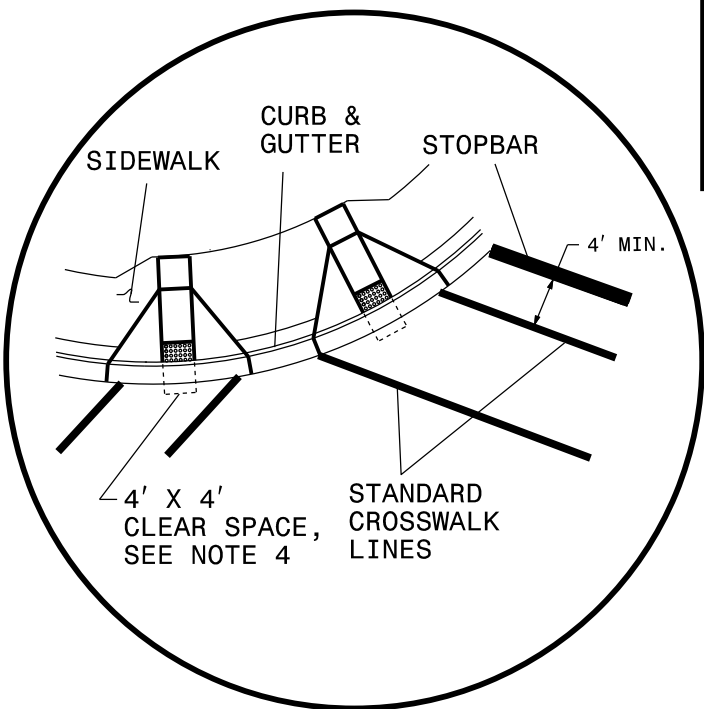
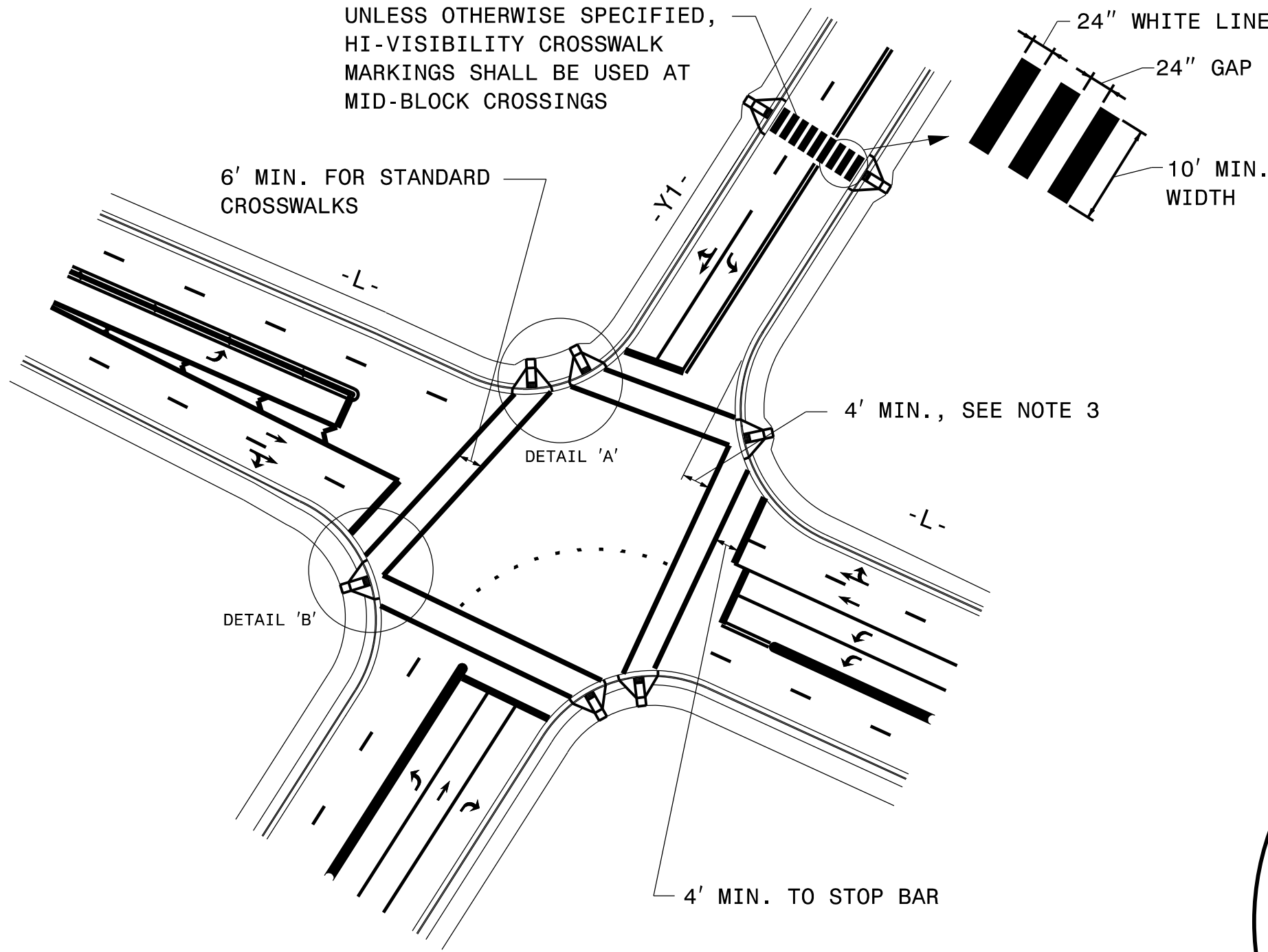
- SHOULDER WEDGE ANGLE = 30°

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>			
Office 919-707-6950		FAX 919-250-4119	
<b>SHOULDER WEDGE DETAILS</b>			
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			

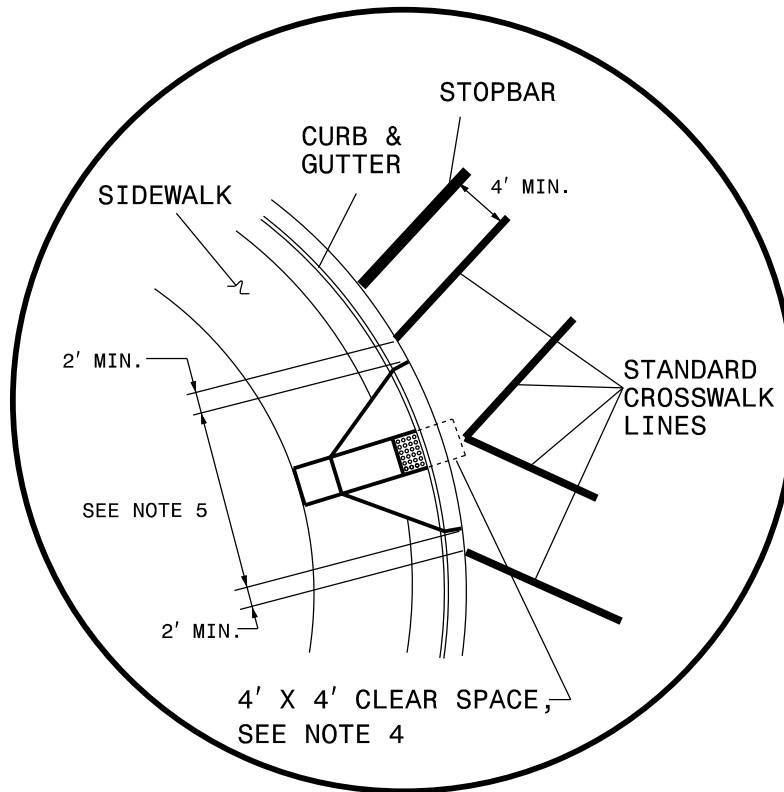
SYSTEMS DESIGN  
 USER NAME







DETAIL 'A'- DUAL CURB RAMPS



DETAIL 'B'- SINGLE DIAGONAL CURB RAMP

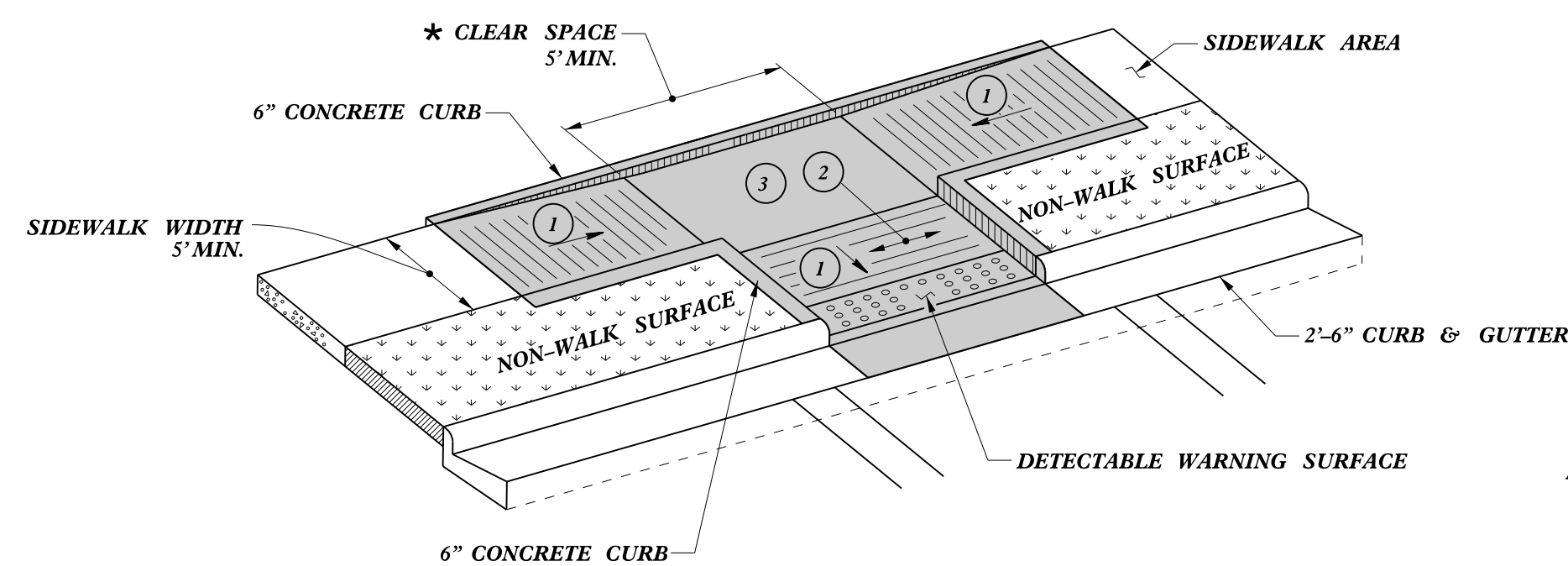
**GUIDANCE DETAIL FOR CROSSWALK MARKINGS**

**NOTES:**

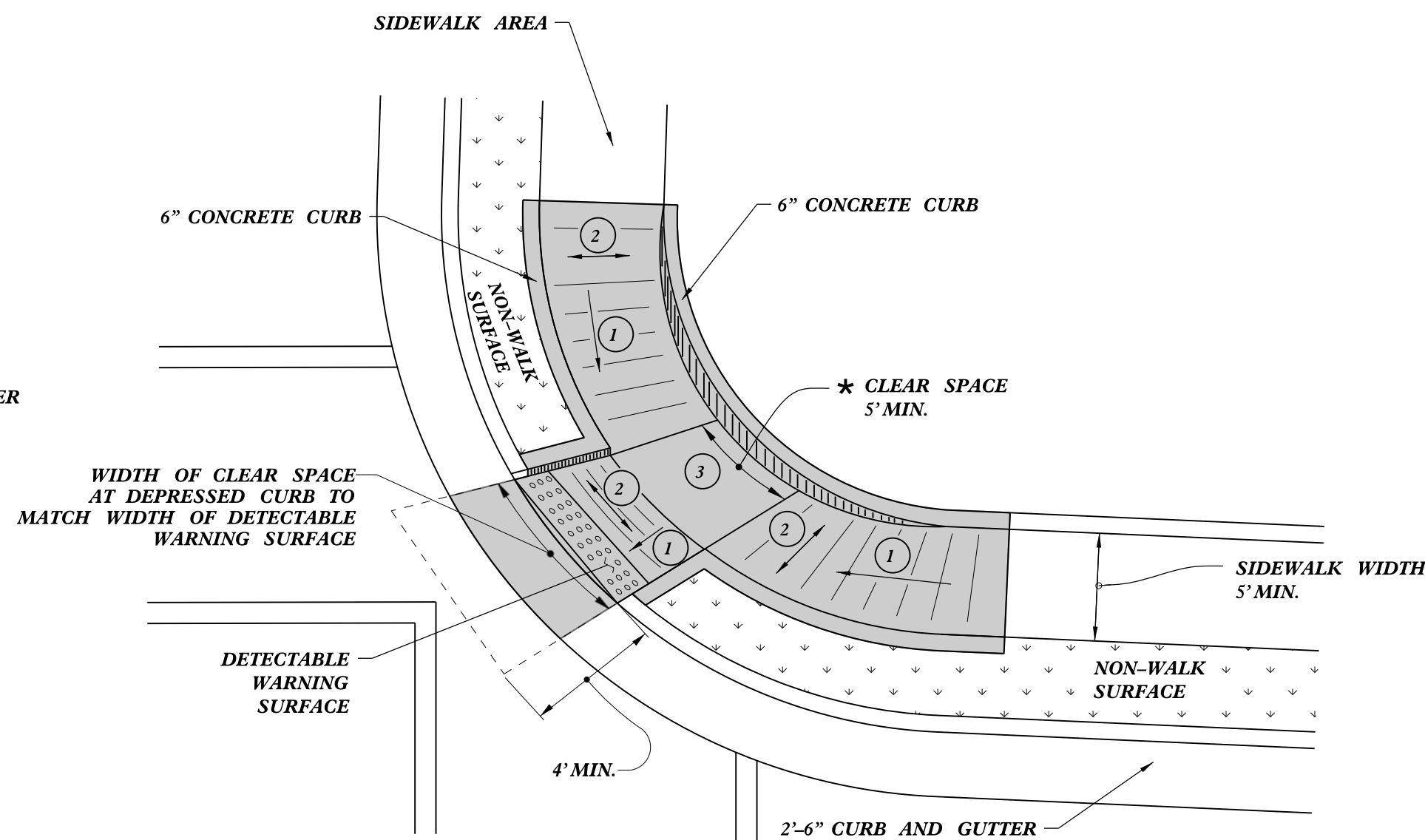
1. USE THE DETAILS ABOVE AND THE FOLLOWING NOTES FOR GUIDANCE IN PLACING CROSSWALK MARKINGS NOT STATIONED ON THE DETAIL SHEETS OR WHEN FIELD ADJUSTMENTS REQUIRED MOVING STATIONED MARKINGS AS DIRECTED BY THE ENGINEER. REFER TO NCDOT ROADWAY STANDARD DRAWINGS, MUTCD AND ADA STANDARDS FOR ADDITIONAL GUIDANCE.
2. THE CROSSWALK MARKINGS SHOWN ON THE ABOVE DETAILS ARE FOR REFERENCE ONLY. ONLY INSTALL CROSSWALK MARKINGS WHERE SHOWN ON THE DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER. THE CROSSWALK MARKING TYPE, STANDARD OR HI-VISIBILITY, SHALL BE INSTALL AS SPECIFIED ON THE DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER.
3. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL IS 4' MIN.
4. BEYOND THE BOTTOM GRADE BRAKE, A CLEAR SPACE OF 4' X 4' MINIMUM SHALL BE PROVIDED WITHIN THE MARKINGS.
5. SINGLE DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 2 FEET LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING, SEE DETAIL 'B'.
6. CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE TO THE LATEST NCDOT ROADWAY STANDARD DRAWINGS.

\$\$\$\$\$SYTIME\$\$\$\$\$  
\$\$\$\$\$DCON\$\$\$\$\$  
\$\$\$\$\$USERNAME\$\$\$\$\$

\* - WHERE CLEAR SPACE IS CONSTRAINED ON TWO OR MORE SIDES, THE CLEAR SPACE SHALL BE 4' MINIMUM X 5' MINIMUM, WITH 5' PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.

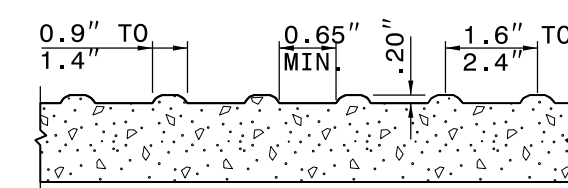
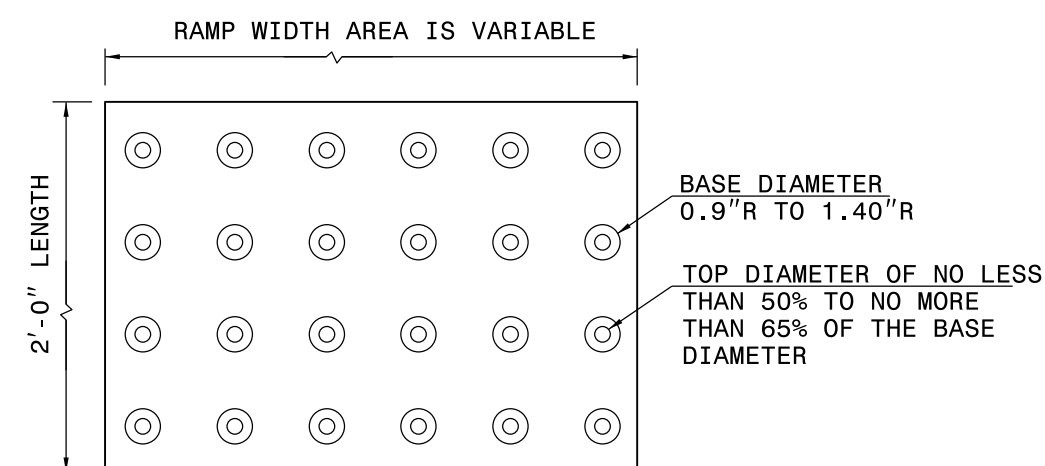


**TYPE 3**



**TYPE 3 MODIFIED  
INSTALLATION IN A RADIUS**

NOTES:  
 1. DETECTABLE WARNING SURFACE SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.  
 2. DETECTABLE WARNING SURFACE SHALL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



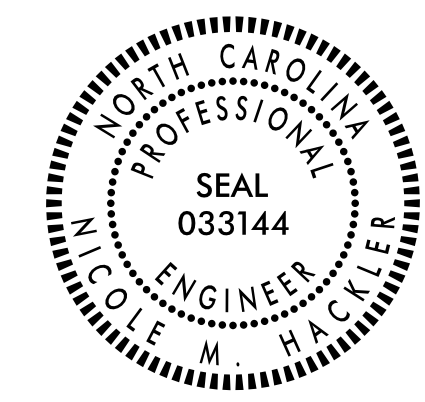
**DETECTABLE WARNING SURFACE**

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00%

PAY LIMITS FOR 1 CURB RAMP

STATE OF  
 NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR  
**CURB RAMP**  
 PARALLEL RAMP



Signed by:  
*Nicole M. Hickler*  
 588432034164CS

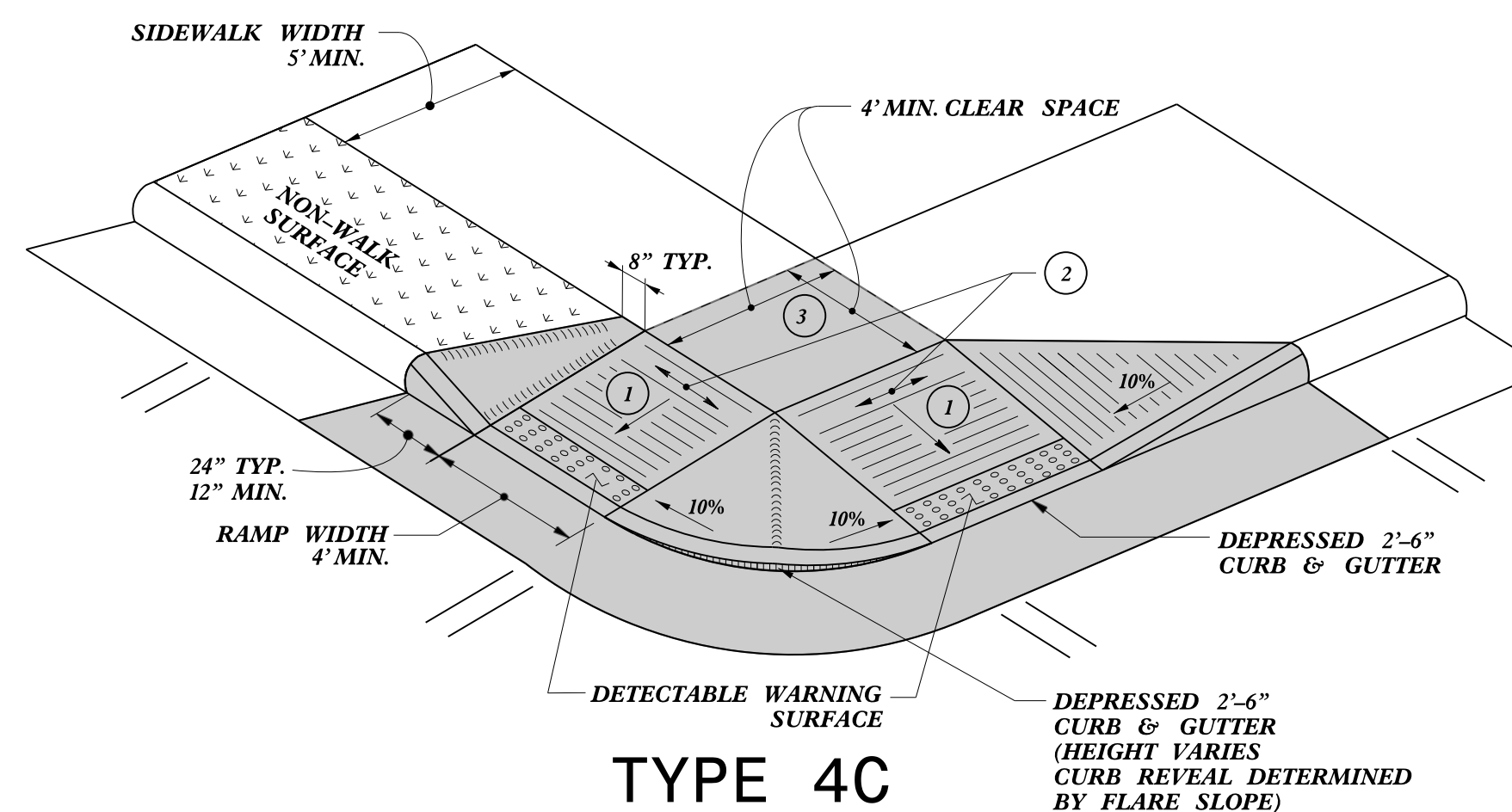
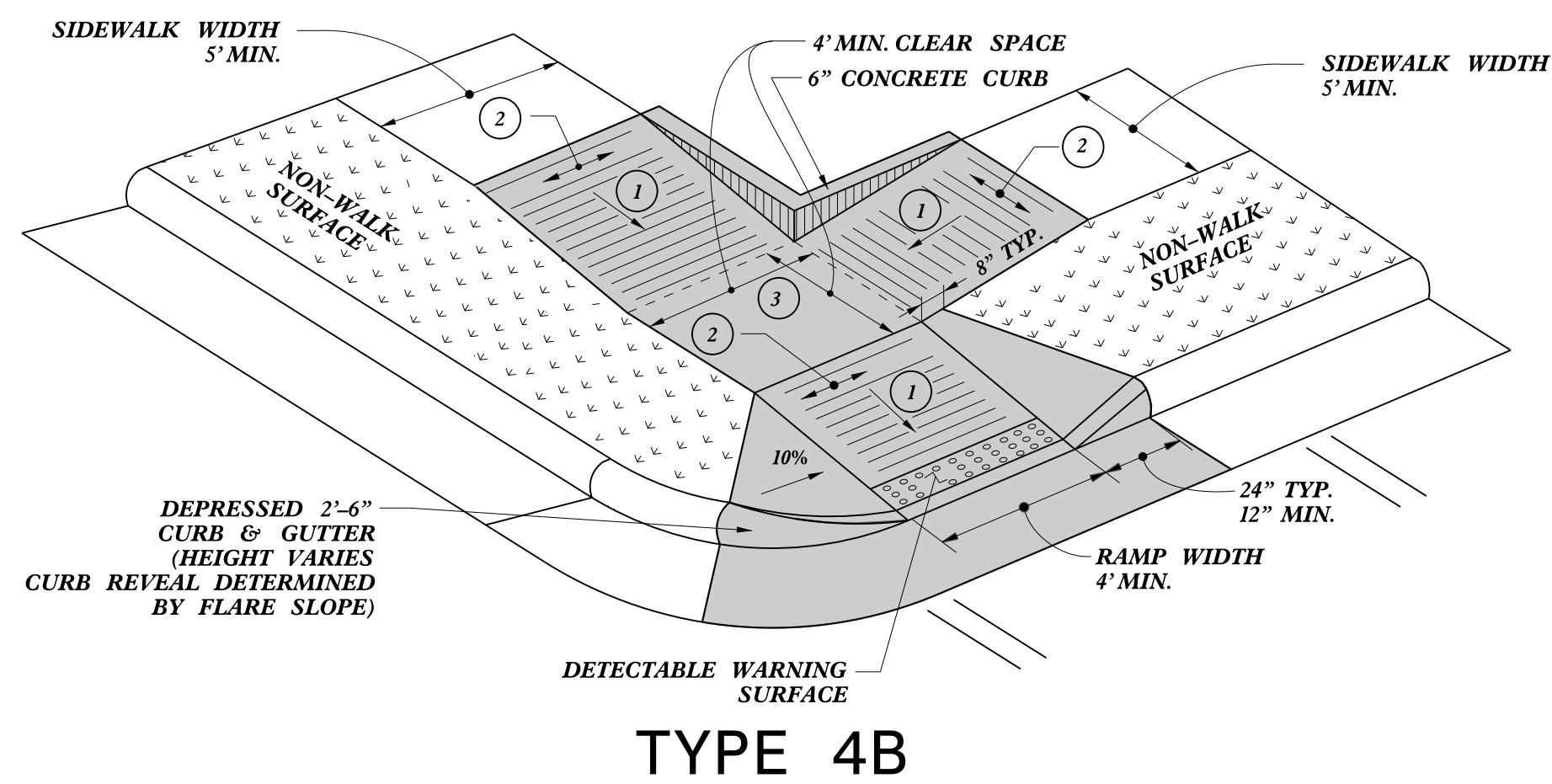
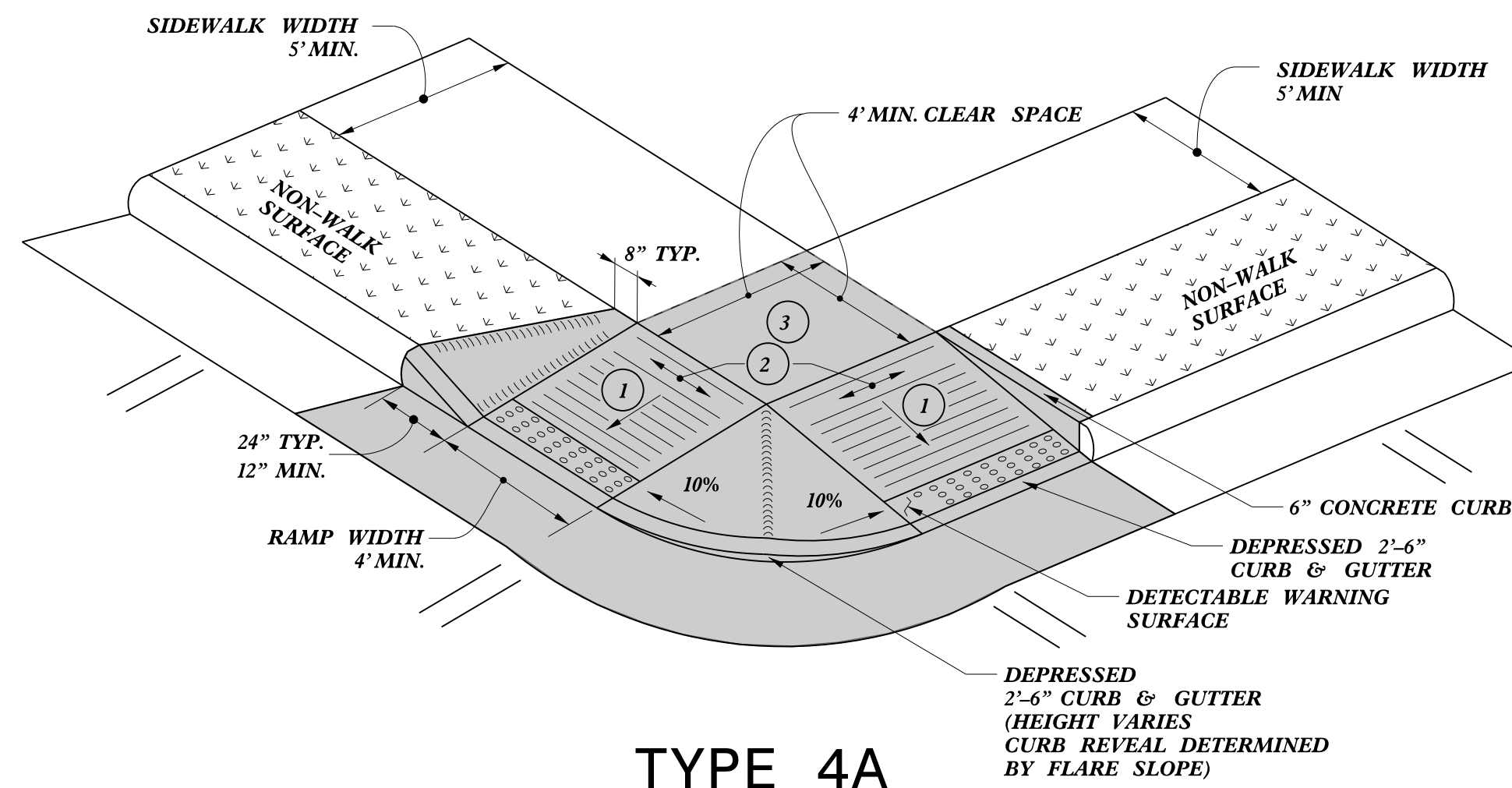
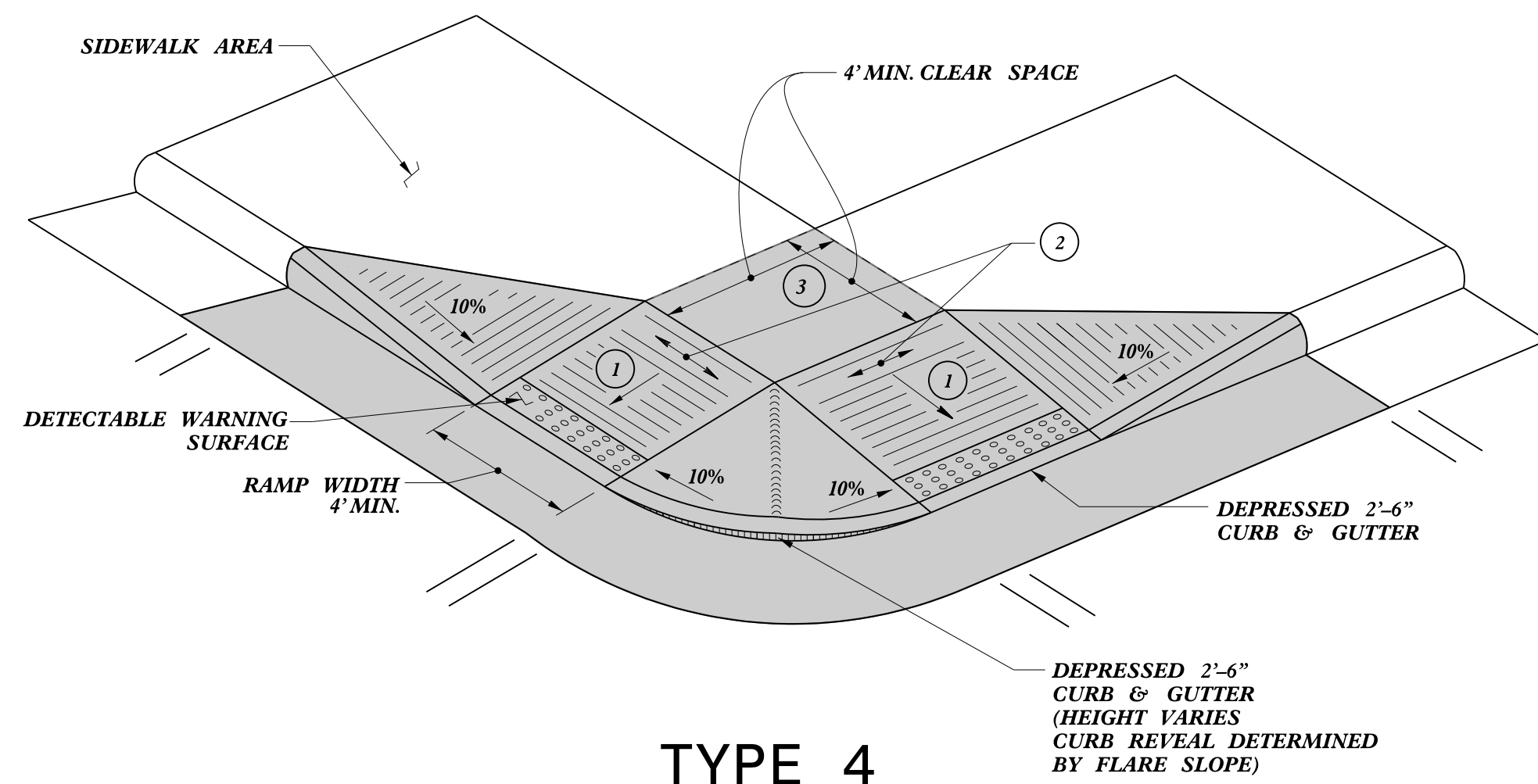
SHEET 9 OF 13  
**848D06**

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED

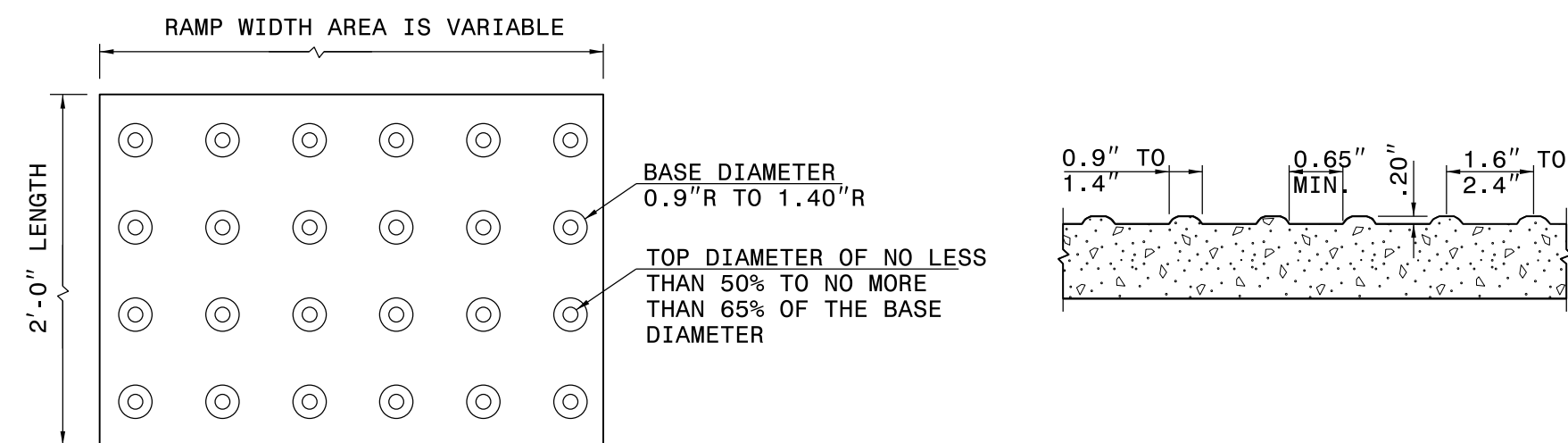
**CONTRACTS STANDARDS  
 AND DEVELOPMENT UNIT**  
 Office 919-707-6950 FAX 919-250-4119

**SEE TITLE BLOCK**

ORIGINAL BY: S.CALHOUN DATE: 12-22-2023  
 MODIFIED BY: DATE:  
 CHECKED BY: DATE:  
 FILE SPEC.: special\_details\nmhackler\0609.dgn



NOTES:  
 DETECTABLE WARNING SURFACE SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.  
 DETECTABLE WARNING SURFACE SHALL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00%

PAY LIMITS FOR 1 OR 2 CURB RAMPS  
 (CALCULATE BASED ON NUMBER OF SETS OF DETECTABLE WARNING SURFACES)

STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR  
**CURB RAMP**  
 SHARED LANDING



Signed by:  
 Nicole M. Heckler  
 088432034164CS

SHEET 10 OF 13  
**848D06**

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED

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

**SEE TITLE BLOCK**

ORIGINAL BY: S.CALHOUN DATE: 12-22-2023  
 MODIFIED BY: DATE: \_\_\_\_\_  
 CHECKED BY: DATE: \_\_\_\_\_  
 FILE SPEC.: special\_details\nmhackler\848D0610.dgn



PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.12.05.10491	14	
2025CPT.12.05.20491		

### SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	1260000000-E	1220000000-E	1245000000-E	1297000000-E	1308000000-E	1330000000-E	1519000000-E	1520000000-E	1523000000-E	1524000000-E	1575000000-E	1704000000-E	2612300000-N	2612500000-N	2815000000-N	2830000000-N	2845000000-N	5255000000-N	7324000000-N	7444000000-E	7456100000-E	
												AGGREGATE SHOULDER BORROW	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	1 1/2" MILLING	1" MILLING	0" TO 1" MILLING	INCIDENTAL MILLING	SURFACE COURSE, \$9.5B	LEVELING COURSE, \$9.5B	SURFACE COURSE, \$9.5C	LEVELING COURSE, \$9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	RETROFIT EXISTING CONCRETE CURB RAMPS	REMOVE AND REPLACE CONCRETE CURB RAMPS	ADJ. OF DROP INLET	ADJ. OF MANHOLES	ADJ. OF METER OR VALVE BOX	PORTABLE LIGHTING	JUNCTION BOX (STANDARD SIZE)	INDUCTIVE LOOP	LEAD-IN CABLE (14-2)
								MI	FT			TONS	TONS	SMI	SY	SY	SY	SY	TONS	TONS	TONS	TONS	TONS	TONS	EA	EA	EA	EA	EA	EA	EA	EA	
2025CPT.12.05.10491	Iredell	1	US-70	FROM SR 2399 WALL ST. TO SR 2357 (NABORS RD.)	1,2,3,4	4		3.307	Vars. 40-70'	13.11	16.419	122	5	0.74	134,775		40			10,075		599	100			1	60	52	1.00	1	620	25	
<b>TOTAL FOR MAP NO. 1</b>								<b>3.307</b>				<b>122</b>	<b>5</b>	<b>0.74</b>	<b>134,775</b>		<b>40</b>			<b>10,075</b>		<b>599</b>	<b>100</b>			<b>1</b>	<b>60</b>	<b>52</b>	<b>1.00</b>	<b>1</b>	<b>620</b>	<b>25</b>	
<b>TOTAL FOR PROJ NO. 2025CPT.12.05.10491</b>								<b>3.307</b>				<b>122</b>	<b>5</b>	<b>0.74</b>	<b>134,775</b>		<b>40</b>			<b>10,075</b>		<b>599</b>	<b>100</b>			<b>1</b>	<b>60</b>	<b>52</b>	<b>1.00</b>	<b>1</b>	<b>620</b>	<b>25</b>	
2025CPT.12.05.20491	Iredell	2	SR-1640 / N RACE ST	FROM SR 1420 (WESTERN AVE.) TO NC 115	3,4,5	2		1.712	Vars. 28-40'	0	1.712	30	5	0.11	33,900		20			3,200		194	100	12	45	1	76	38		1	1,364	25	
<b>TOTAL FOR MAP NO. 2</b>								<b>1.712</b>				<b>30</b>	<b>5</b>	<b>0.11</b>	<b>33,900</b>		<b>20</b>			<b>3,200</b>		<b>194</b>	<b>100</b>	<b>12</b>	<b>45</b>	<b>1</b>	<b>76</b>	<b>38</b>		<b>1</b>	<b>1,364</b>	<b>25</b>	
2025CPT.12.05.20491	Iredell	3	SR-1337 / AREY RD	FROM SR 1004 (BUFFALO SHOALS RD.) TO SR 1338 (WALLACE SPRINGS RD.)	7,9	2		1.282	Vars. 20-36'	0	1.282	422	25	2.56	1,500	800	60	925	525			101	150										
<b>TOTAL FOR MAP NO. 3</b>								<b>1.282</b>				<b>422</b>	<b>25</b>	<b>2.56</b>	<b>1,500</b>	<b>800</b>	<b>60</b>	<b>925</b>	<b>525</b>			<b>101</b>	<b>150</b>										
2025CPT.12.05.20491	Iredell	4	SR-1902 / WILSON FARM RD	FROM NC 115 TO END OF PAVEMENT	7	2		0.51	20	0	0.51	170	5	1.02			360	302	50			25	50										
<b>TOTAL FOR MAP NO. 4</b>								<b>0.51</b>				<b>170</b>	<b>5</b>	<b>1.02</b>			<b>360</b>	<b>302</b>	<b>50</b>			<b>25</b>	<b>50</b>										
2025CPT.12.05.20491	Iredell	5	SR-1900 / HICKS RD	FROM SR 1902 (WILSON FARM RD.) TO CUL-DE-SAC	7	2		0.712	20	0	0.712	234	25	1.42			20	550	150			49	75										
<b>TOTAL FOR MAP NO. 5</b>								<b>0.712</b>				<b>234</b>	<b>25</b>	<b>1.42</b>			<b>20</b>	<b>550</b>	<b>150</b>			<b>49</b>	<b>75</b>										
2025CPT.12.05.20491	Iredell	6	SR-1897 / IVY OAK RD	FROM SR 1874 (BESS RD.) TO DEAD END	7	2		0.99	20	0	0.99	326	20	1.98			20	728	150			68	225										
<b>TOTAL FOR MAP NO. 6</b>								<b>0.99</b>				<b>326</b>	<b>20</b>	<b>1.98</b>			<b>20</b>	<b>728</b>	<b>150</b>			<b>68</b>	<b>225</b>										
2025CPT.12.05.20491	Iredell	7	SR-2043 / FORNEY DR	FROM SR 1845 (TABOR RD.) TO CUL-DE-SAC	7	2		0.292	18	0	0.292	95	25	0.58			40	220	15			17	32										
<b>TOTAL FOR MAP NO. 7</b>								<b>0.292</b>				<b>95</b>	<b>25</b>	<b>0.58</b>			<b>40</b>	<b>220</b>	<b>15</b>			<b>17</b>	<b>32</b>										
2025CPT.12.05.20491	Iredell	8	SR-2044 / ASHFORD DR	FROM SR 1845 (TABOR RD.) TO CUL-DE-SAC	7	2		0.385	18	0	0.385	125	10	0.76			20	275	50			23	30										
<b>TOTAL FOR MAP NO. 8</b>								<b>0.385</b>				<b>125</b>	<b>10</b>	<b>0.76</b>			<b>20</b>	<b>275</b>	<b>50</b>			<b>23</b>	<b>30</b>										
2025CPT.12.05.20491	Iredell	9	SR-2026 / CANFIELD DR	FROM SR 1845 (TABOR RD.) TO CUL-DE-SAC	7	2		0.503	20	0	0.503	165	10	1.00			40	393	125			37	75										
<b>TOTAL FOR MAP NO. 9</b>								<b>0.503</b>				<b>165</b>	<b>10</b>	<b>1.00</b>			<b>40</b>	<b>393</b>	<b>125</b>			<b>37</b>	<b>75</b>										
2025CPT.12.05.20491	Iredell	10	SR-2027 / BRANSON DR	FROM SR 2026 (CANFIELD RD.) TO CUL DE SAC	7	2		0.085	18	0	0.085	30	5	0.18				85	5			7	20										
<b>TOTAL FOR MAP NO. 10</b>								<b>0.085</b>				<b>30</b>	<b>5</b>	<b>0.18</b>				<b>85</b>	<b>5</b>			<b>7</b>	<b>20</b>										
2025CPT.12.05.20491	Iredell	11	SR-1991 / CORNWALL RD	FROM SR 1821 (TRIVITTE RD.) TO CUL DE SAC	7	2		0.609	20	0	0.609	200	10	1.22			20	475	150			45	90										
<b>TOTAL FOR MAP NO. 11</b>								<b>0.609</b>				<b>200</b>	<b>10</b>	<b>1.22</b>			<b>20</b>	<b>475</b>	<b>150</b>			<b>45</b>	<b>90</b>										
2025CPT.12.05.20491	Iredell	12	SR-1834 / ALLEN RD	FROM SR 1833 (W. HOUSTONVILLE RD.) TO NC 901	7	2		1.216	20	0	1.216	400	30	2.44			40	897	150			77	180										
<b>TOTAL FOR MAP NO. 12</b>								<b>1.216</b>				<b>400</b>	<b>30</b>	<b>2.44</b>			<b>40</b>	<b>897</b>	<b>150</b>			<b>77</b>	<b>180</b>										
2025CPT.12.05.20491	Iredell	13	SR-1920 / REEVES RD	FROM SR 1892 (JENNINGS RD.) TO CUL DE SAC	7	2		0.813	20	0	0.813	250	25	1.62			20	620	100			51	95										
<b>TOTAL FOR MAP NO. 13</b>								<b>0.813</b>				<b>250</b>	<b>25</b>	<b>1.62</b>			<b>20</b>	<b>620</b>	<b>100</b>			<b>51</b>	<b>95</b>										
2025CPT.12.05.20491	Iredell	14	SR-2013 / MILLSTONE DR	FROM SR 1920 (REEVES RD.) TO CUL DE SAC	7	2		0.4	18	0	0.4	125	40	0.80				280	30			22	45										
<b>TOTAL FOR MAP NO. 14</b>								<b>0.4</b>				<b>125</b>	<b>40</b>	<b>0.80</b>				<b>280</b>	<b>30</b>			<b>22</b>	<b>45</b>										
2025CPT.12.05.20491	Iredell	15	SR-2028 / RYDEL LN	FROM SR 1920 (REEVES RD.) TO CUL DE SAC	7	2		0.19	18	0	0.19	60	20	0.38				155	30			13	30										
<b>TOTAL FOR MAP NO. 15</b>								<b>0.19</b>				<b>60</b>	<b>20</b>	<b>0.38</b>				<b>155</b>	<b>30</b>			<b>13</b>	<b>30</b>										
2025CPT.12.05.20491	Iredell	16	SR-2144 / HAYES FARM RD	FROM NC 901 TO SR 2145 (SOCIETY CHRUCH RD.)	7	2		1.032	20	0	1.032	340	25	2.06			40	757	125			66	175										
<b>TOTAL FOR MAP NO. 16</b>								<b>1.032</b>				<b>340</b>	<b>25</b>	<b>2.06</b>			<b>40</b>	<b>757</b>	<b>125</b>			<b>66</b>	<b>175</b>										
2025CPT.12.05.20491	Iredell	17	SR-2149 / SUNFLOWER RD	FROM SR 2145 (SOCIETY CHRUCH RD.) TO DEAD END	6	2		1.381	20	0	1.381	455	25	2.76			40			1,525	150	108	185										
<b>TOTAL FOR MAP NO. 17</b>								<b>1.381</b>				<b>455</b>	<b>25</b>	<b>2.76</b>			<b>40</b>			<b>1,525</b>	<b>150</b>	<b>108</b>	<b>185</b>										
2025CPT.12.05.20491	Iredell	18	SR-2151 / GANTT HORN RD	FROM SR 2158 (OLD MOCKSVILLE RD.) TO DEAD END	7	2		1.435	20	0	1.435	475	25	2.88			40	1,060	150			93	300										
<b>TOTAL FOR MAP NO. 18</b>								<b>1.435</b>				<b>475</b>	<b>25</b>	<b>2.88</b>			<b>40</b>	<b>1,060</b>	<b>150</b>			<b>93</b>	<b>300</b>										
2025CPT.12.05.20491	Iredell	19	SR-1135 / E WATERLYNN RD	FROM NC 115 TO US 21	4,5,8	2		0.658	Vars. 20-36'	0	0.658	95	25	0.70	6,645		120			1,290	100	86	75			1				1	248	25	
<b>TOTAL FOR MAP NO. 19</b>								<b>0.658</b>				<b>95</b>	<b>25</b>	<b>0.70</b>	<b>6,645</b>		<b>120</b>			<b>1,290</b>	<b>100</b>	<b>86</b>	<b>75</b>			<b>1</b>			<b>1</b>	<b>248</b>	<b>25</b>		

PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.12.05.10491 2025CPT.12.05.20491	15	

### SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	1260000000-E	1220000000-E	1245000000-E	1297000000-E	1308000000-E	1330000000-E	1519000000-E	1520000000-E	1523000000-E	1524000000-E	1575000000-E	1704000000-E	2612300000-N	2612500000-N	2815000000-N	2830000000-N	2845000000-N	5255000000-N	7324000000-N	7444000000-E	7456100000-E													
												AGGREGATE SHOULDER BORROW	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	1 1/2" MILLING	1" MILLING	0" TO 1" MILLING	INCIDENTAL MILLING	SURFACE COURSE, \$9.5B	LEVELING COURSE, \$9.5B	SURFACE COURSE, \$9.5C	LEVELING COURSE, \$9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	RETROFIT EXISTING CONCRETE CURB RAMPS	REMOVE AND REPLACE CONCRETE CURB RAMPS	ADI. OF DROP INLET	ADI. OF MANHOLES	ADI. OF METER OR VALVE BOX	PORTABLE LIGHTING	JUNCTION BOX (STANDARD SIZE)	INDUCTIVE LOOP	LEAD-IN CABLE (14-2)												
												TON	TONS	SMI	SY	SY	SY	SY	TONS	TONS	TONS	TONS	TONS	TONS	EA	EA	EA	EA	EA	LS	EA	LF	LF												
2025CPT.12.05.20491	Iredell	20	SR-1115 / MCKENDREE RD	FROM SR 1100 (BRAWLEY SCHOOL RD.) TO CUL DE SAC	4,6	2		2.912	Vars. 20 - 36'	0	2.912	960	25	5.82	775		280			3,235	100	202	115									1	248	25											
<b>TOTAL FOR MAP NO. 20</b>												<b>960</b>	<b>25</b>	<b>5.82</b>	<b>775</b>		<b>280</b>			<b>3,235</b>	<b>100</b>	<b>202</b>	<b>115</b>																						
2025CPT.12.05.20491	Iredell	21	SR-1215 / GRASSHOPPER CIR	FROM SR 1115 (MCKENDREE RD.) TO SR 1215 (GRASSHOPPER CIRCLE)	7	2		1.671		0	1.671	550	20	3.34		60	1,228	150				98	175										1	248	25										
<b>TOTAL FOR MAP NO. 21</b>												<b>550</b>	<b>20</b>	<b>3.34</b>		<b>60</b>	<b>1,228</b>	<b>150</b>				<b>98</b>	<b>175</b>																						
2025CPT.12.05.20491	Iredell	22	SR-3304 / CHERRY TREE DR	FROM SR 1215 (GRASSHOPPER CIRCLE) TO DEAD END	7	2		0.191	20	0	0.191	60	10	0.38		20	140	10				11	25																						
<b>TOTAL FOR MAP NO. 22</b>												<b>60</b>	<b>10</b>	<b>0.38</b>		<b>20</b>	<b>140</b>	<b>10</b>				<b>11</b>	<b>25</b>																						
2025CPT.12.05.20491	Iredell	23	SR-3295 / STAMFORD CT	FROM SR 3304 (CHERRY TREE DR.) TO DEAD END	7	2		0.069	20	0	0.069	20	10	0.14			52	10				5	25																						
<b>TOTAL FOR MAP NO. 23</b>												<b>20</b>	<b>10</b>	<b>0.14</b>		<b>52</b>	<b>10</b>					<b>5</b>	<b>25</b>																						
2025CPT.12.05.20491	Iredell	24	SR-1457 / DIGH CIR	FROM SR 1115 (MCKENDREE RD.) TO SR 1457 (DIGH CIRCLE)	7	2		0.831	20	0	0.831	270	20	1.66		80	611	100				51	100																						
<b>TOTAL FOR MAP NO. 24</b>												<b>270</b>	<b>20</b>	<b>1.66</b>		<b>80</b>	<b>611</b>	<b>100</b>				<b>51</b>	<b>100</b>																						
2025CPT.12.05.20491	Iredell	25	SR-2582 / PILCH RD/PEAR TREE RD.	FROM SR 2342 (AMITY HILL RD.) TO CUL-DE-SAC	6	2		1.804	20	0	1.804	550	85	3.80		100			2,005	200		136	125																						
<b>TOTAL FOR MAP NO. 25</b>												<b>550</b>	<b>85</b>	<b>3.80</b>		<b>100</b>			<b>2,005</b>	<b>200</b>		<b>136</b>	<b>125</b>																						
2025CPT.12.05.20491	Iredell	26	SR-2611 / GRAY BARN DR	FROM SR 2582 (PEAR TREE RD) TO SR 2633 (GRAY BARN DR.)	7	2		0.196	20	0	0.196	60	20	0.40			148	20				13	45																						
<b>TOTAL FOR MAP NO. 26</b>												<b>60</b>	<b>20</b>	<b>0.40</b>		<b>148</b>	<b>20</b>					<b>13</b>	<b>45</b>																						
2025CPT.12.05.20491	Iredell	27	SR-2633 / GRAY BARN DR	FROM SR 2611 (GRAY BARN DR.) TO SR 2632 (FIELDHAVEN PL.)	7	2		0.122	20	0	0.122	40	20	0.24			89	20				9	30																						
<b>TOTAL FOR MAP NO. 27</b>												<b>40</b>	<b>20</b>	<b>0.24</b>		<b>89</b>	<b>20</b>					<b>9</b>	<b>30</b>																						
2025CPT.12.05.20491	Iredell	28	SR-2634 / MIDWOOD LN	FROM SR 2611 (GRAY BARN DR.) TO CUL DE SAC	7	2		0.113	20	0	0.113	35	15	0.22			95	20				9	25																						
<b>TOTAL FOR MAP NO. 28</b>												<b>35</b>	<b>15</b>	<b>0.22</b>		<b>95</b>	<b>20</b>					<b>9</b>	<b>25</b>																						
2025CPT.12.05.20491	Iredell	29	SR-2582 / FIELDHAVEN PL	FROM SR 2582 (PEAR TREE RD.) TO END OF MAINTENANCE	7	2		0.108	20	0	0.108	35	15	0.22		20	81	20				8	25																						
<b>TOTAL FOR MAP NO. 29</b>												<b>35</b>	<b>15</b>	<b>0.22</b>		<b>20</b>	<b>81</b>	<b>20</b>				<b>8</b>	<b>25</b>																						
2025CPT.12.05.20491	Iredell	30	SR-3040 / BALLYCASTLE RD	FROM SR 3039 (SYLLABUB LANE) TO SR 3041 (CHASESTONE LANE)	7	2		0.194	18	0	0.194	55	25	0.38			140	25				11	15																						
<b>TOTAL FOR MAP NO. 30</b>												<b>55</b>	<b>25</b>	<b>0.38</b>		<b>140</b>	<b>25</b>					<b>11</b>	<b>15</b>																						
2025CPT.12.05.20491	Iredell	31	SR-3041 / CHASESTONE LN	FROM SR 3040 (BALLYCASTLE RD.) TO CUL DE SAC	7	2		0.124	18	0	0.124	30	20	0.24			105	10				8	10																						
<b>TOTAL FOR MAP NO. 31</b>												<b>30</b>	<b>20</b>	<b>0.24</b>		<b>105</b>	<b>10</b>					<b>8</b>	<b>10</b>																						
2025CPT.12.05.20491	Iredell	32	SR-3039 / SYLLABUB LN	FROM SR 3006 (TUSKARORA TRIAL) TO SR 3040 (BALLY CASTLE RD.)	7	2		0.111	18	0	0.111	30	20	0.22		20	81	5				6	10																						
<b>TOTAL FOR MAP NO. 32</b>												<b>30</b>	<b>20</b>	<b>0.22</b>		<b>20</b>	<b>81</b>	<b>5</b>				<b>6</b>	<b>10</b>																						
<b>TOTAL FOR PROJ NO. 2025CPT.12.05.20491</b>																<b>22,651</b>						<b>6,692</b>	<b>660</b>	<b>41.33</b>	<b>41,320</b>	<b>1,500</b>	<b>800</b>	<b>1,480</b>	<b>10,492</b>	<b>2,195</b>	<b>11,255</b>	<b>550</b>	<b>1,649</b>	<b>2,657</b>	<b>12</b>	<b>45</b>	<b>1</b>	<b>77</b>	<b>38</b>		<b>3</b>	<b>1,860</b>	<b>75</b>		
<b>GRAND TOTAL</b>																<b>25,958</b>						<b>6,814</b>	<b>665</b>	<b>42.07</b>	<b>176,095</b>	<b>1,500</b>	<b>800</b>	<b>1,520</b>	<b>10,492</b>	<b>2,195</b>	<b>21,330</b>	<b>550</b>	<b>2,248</b>	<b>2,757</b>	<b>12</b>	<b>45</b>	<b>2</b>	<b>137</b>	<b>90</b>	<b>1.00</b>	<b>4</b>	<b>2,480</b>	<b>100</b>		





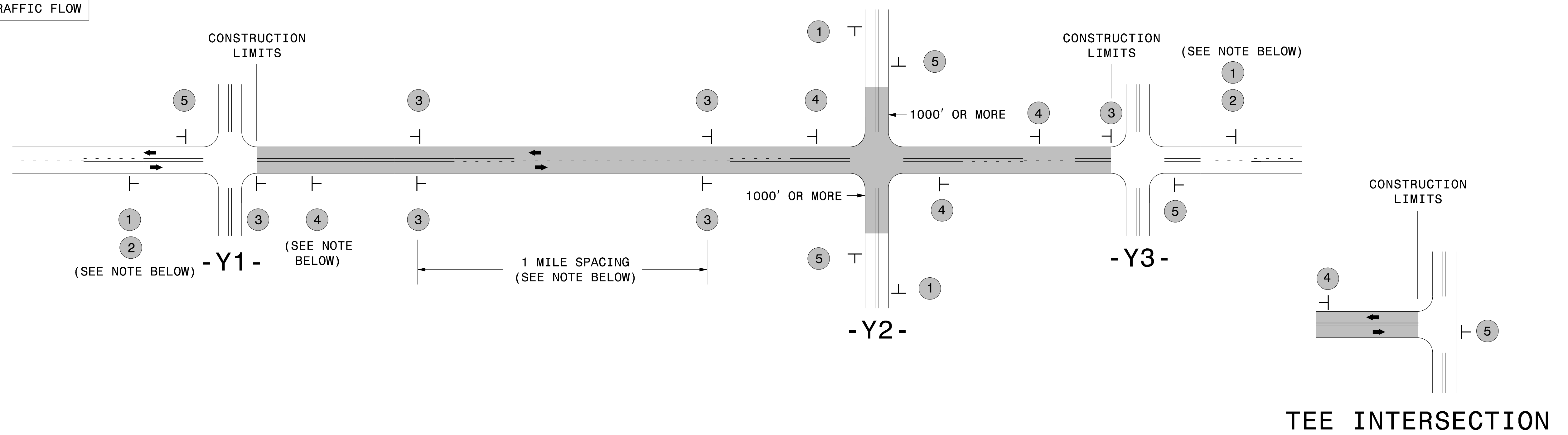
PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.12.05.10491	16	
2025CPT.12.05.20491		

### THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	PEDESTRIAN CHANNELIZING DEVICES	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	4685000000-E		4695000000-E		4700000000-E		4704000000-E		4709000000-E		4720000000-E		4725000000-E					4810000000-E		4895000000-E		
								MI	FT							SF	LF	LS	HR	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
2025CPT.12.05.20491	Iredell	23	SR-3295 / STAMFORD CT	FROM SR 3304(CHERRY TREE DR.) TO DEAD END	7	2		0.069	20	0	0.069	24																									
<b>TOTAL FOR MAP NO. 23</b>								<b>0.069</b>				<b>24</b>																									
2025CPT.12.05.20491	Iredell	24	SR-1457 / DIGH CIR	FROM SR 1115 (MCKENDREE RD.) TO SR 1457 (DIGH CIRCLE)	7	2		0.831	20	0	0.831	80																									
<b>TOTAL FOR MAP NO. 24</b>								<b>0.831</b>				<b>80</b>																									
2025CPT.12.05.20491	Iredell	25	SR-2582 / PILCH RD/PEAR TREE RD.	FROM SR 2342 (AMITY HILL RD.) TO CUL-DE-SAC	6	2		1.804	20	0	1.804	205																									
<b>TOTAL FOR MAP NO. 25</b>								<b>1.804</b>				<b>205</b>																									
2025CPT.12.05.20491	Iredell	26	SR-2611 / GRAY BARN DR	FROM SR 2582 (PEAR TREE RD) TO SR 2633 (GRAY BARN DR.)	7	2		0.196	20	0	0.196	30																									
<b>TOTAL FOR MAP NO. 26</b>								<b>0.196</b>				<b>30</b>																									
2025CPT.12.05.20491	Iredell	27	SR-2633 / GRAY BARN DR	FROM SR 2611 (GRAY BARN DR.) TO SR 2633 (FIELDHAVEN PL.)	7	2		0.122	20	0	0.122	24																									
<b>TOTAL FOR MAP NO. 27</b>								<b>0.122</b>				<b>24</b>																									
2025CPT.12.05.20491	Iredell	28	SR-2634 / MIDWOOD LN	FROM SR 2611 (GRAY BARN DR.) TO CUL DE SAC	7	2		0.113	20	0	0.113	24																									
<b>TOTAL FOR MAP NO. 28</b>								<b>0.113</b>				<b>24</b>																									
2025CPT.12.05.20491	Iredell	29	SR-2632 / FIELDHAVEN PL	FROM SR 2582 (PEAR TREE RD.) TO END OF MAINTENANCE	7	2		0.108	20	0	0.108	24																									
<b>TOTAL FOR MAP NO. 29</b>								<b>0.108</b>				<b>24</b>																									
2025CPT.12.05.20491	Iredell	30	SR-3040 / BALLYCASTLE RD	FROM SR 3039 (SYLLABUB LANE) TO SR 3041 (CHASESTONE LANE)	7	2		0.194	18	0	0.194	24																									
<b>TOTAL FOR MAP NO. 30</b>								<b>0.194</b>				<b>24</b>																									
2025CPT.12.05.20491	Iredell	31	SR-3041 / CHASESTONE LN	FROM SR 3040 (BALLYCASTLE RD.) TO CUL DE SAC	7	2		0.124	18	0	0.124	24																									
<b>TOTAL FOR MAP NO. 31</b>								<b>0.124</b>				<b>24</b>																									
2025CPT.12.05.20491	Iredell	32	SR-3039 / SYLLABUB LN	FROM SR 3006 (TUSKARORA TRIAL) TO SR 3040 (BALLY CASTLE RD.)	7	2		0.111	18	0	0.111	24																									
<b>TOTAL FOR MAP NO. 32</b>								<b>0.111</b>				<b>24</b>																									
<b>TOTAL FOR PROJ NO. 2025CPT.12.05.20491</b>								<b>22.651</b>				<b>2,651</b>	<b>50</b>	<b>1</b>				<b>7,000</b>	<b>7,000</b>	<b>800</b>	<b>325</b>			<b>100</b>	<b>800</b>		<b>4</b>	<b>19</b>	<b>2</b>	<b>8</b>		<b>5</b>		<b>348,395</b>	<b>384,020</b>	<b>110</b>	
<b>GRAND TOTAL</b>								<b>25.958</b>				<b>3,051</b>	<b>50</b>	<b>1</b>	<b>50</b>	<b>53,000</b>	<b>25,900</b>	<b>800</b>	<b>325</b>	<b>475</b>	<b>355</b>	<b>100</b>	<b>1,225</b>	<b>8</b>	<b>4</b>	<b>101</b>	<b>37</b>	<b>14</b>	<b>5</b>	<b>21</b>	<b>4</b>	<b>348,395</b>	<b>384,020</b>	<b>810</b>			
															<b>78,900</b>		<b>1,125</b>		<b>830</b>			<b>12</b>		<b>182</b>							<b>732,415</b>						

# SIGNING FOR RESURFACING PROJECTS

**LEGEND**  
 ┆ STATIONARY SIGN  
 ← DIRECTION OF TRAFFIC FLOW



## MAINLINE (-L-) SIGNING

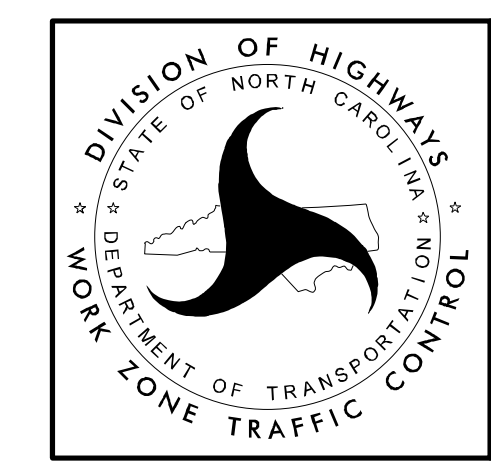
## -Y- LINE SIGNING

<b>SIGNING NOTES AND PLACEMENT PER DIRECTION</b>	1		PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p><b>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>SUBDIVISION ROADS</li> <li>DEAD END ROADS</li> </ol> <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**

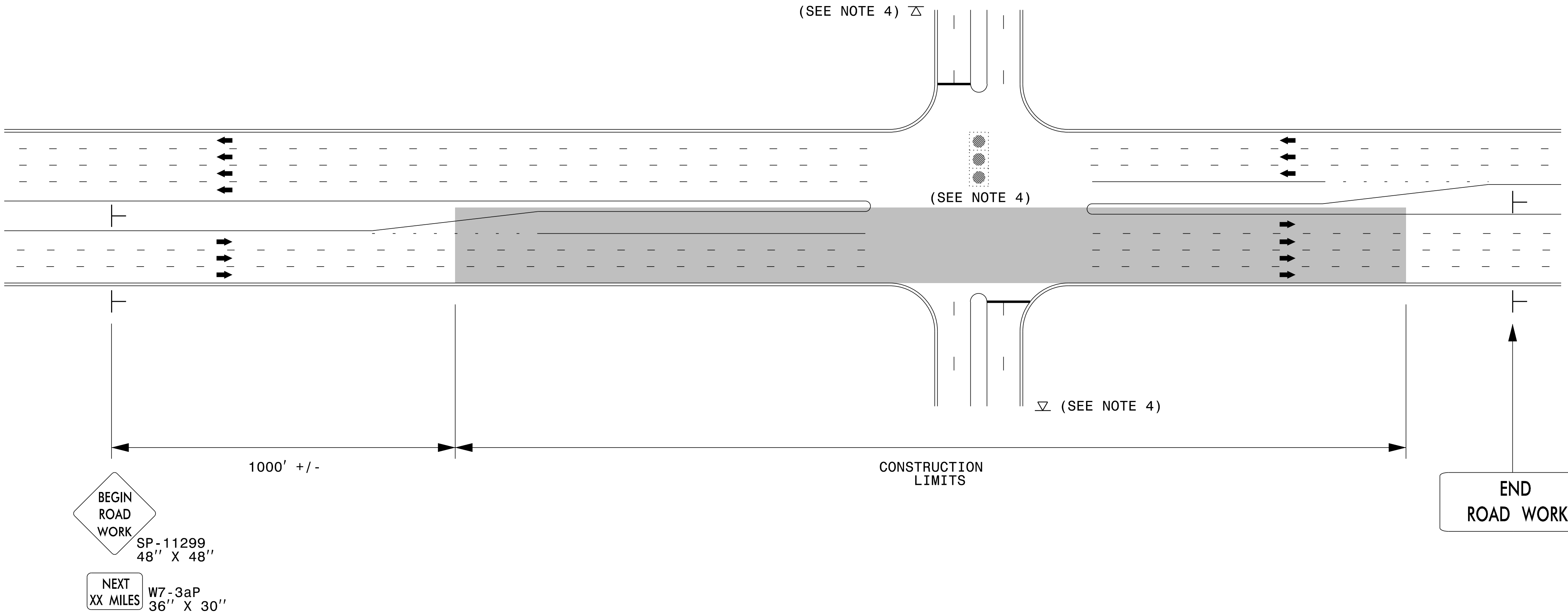
FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



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

5/15/2017 S:\TMU\WZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing\_AdvWarn\_2Ln.dgn User:kadai

# 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**

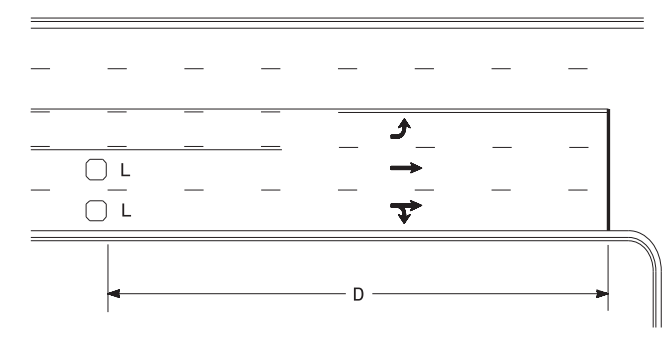
┆ STATIONARY SIGN

➔ DIRECTION OF TRAFFIC FLOW



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

### High Speed Detection (≥40 mph)

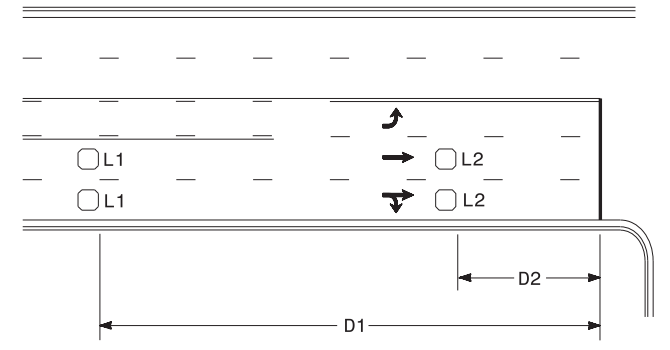


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft  
Wired separately

Volume Density Operation

OR

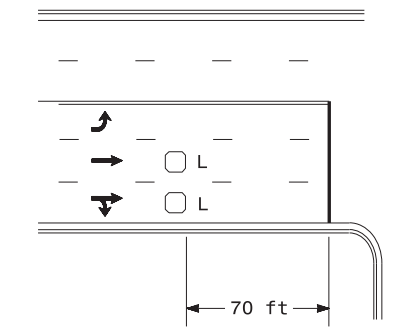


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

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

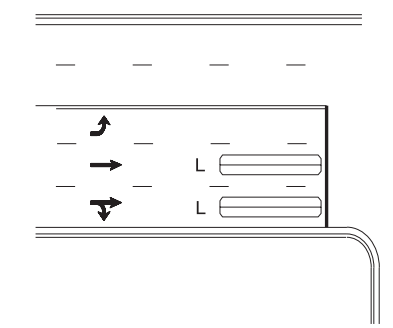
"Stretch" Operation

### Low Speed Detection (≤35 mph)



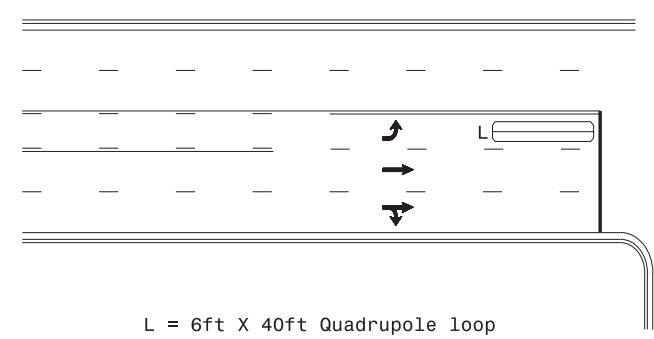
L = 6ft X 6ft  
Wired in series

OR



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

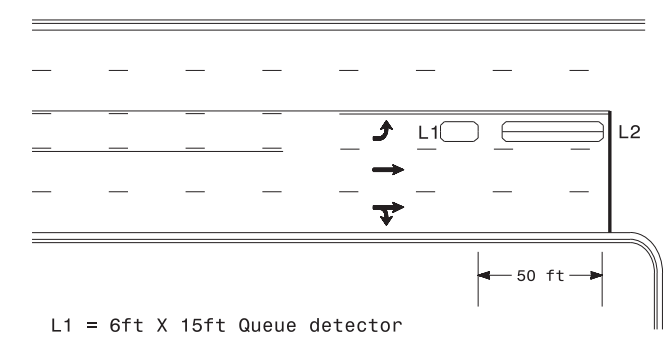
### Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

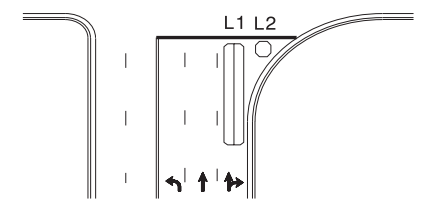
OR



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

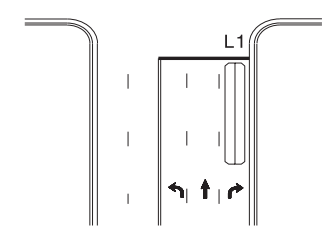
Queue Loop Detection

### Right Turn Lane Detection

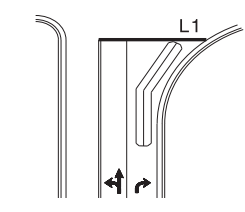


L1 = 6ft X 40ft Quadrupole loop  
L2 = 6ft X 6ft [Minimum] Presence loop  
Wired separately

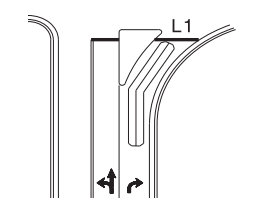
Shared Lane/  
Wide Radius Turn



Standard Turn

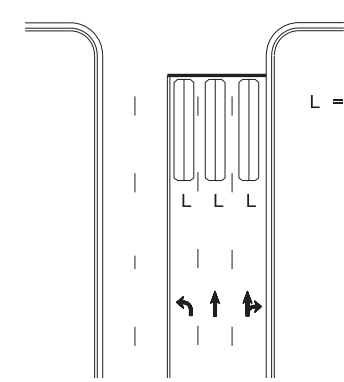


Wide Radius Turn



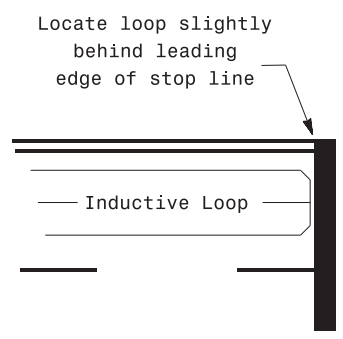
Channelized Turn

### 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  
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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.