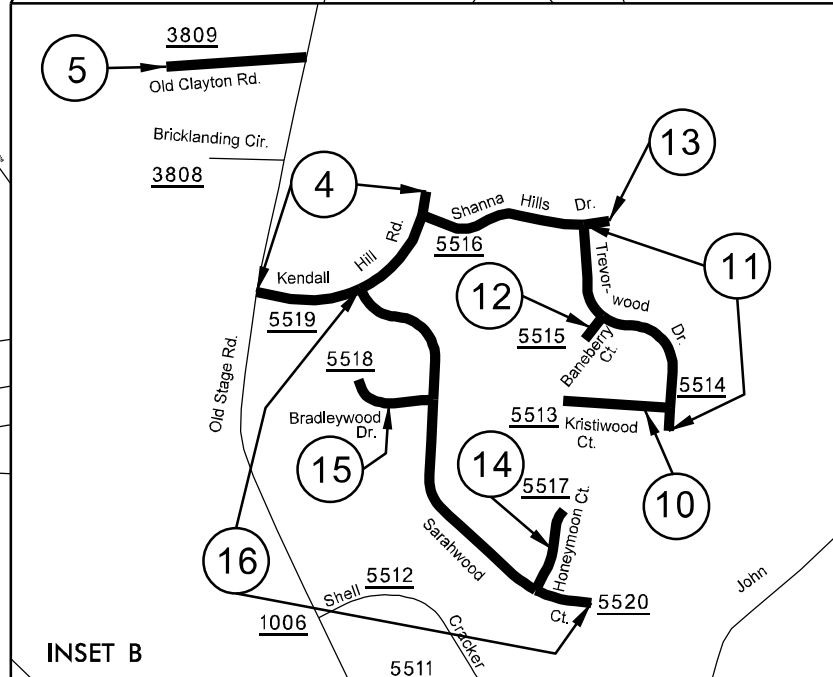
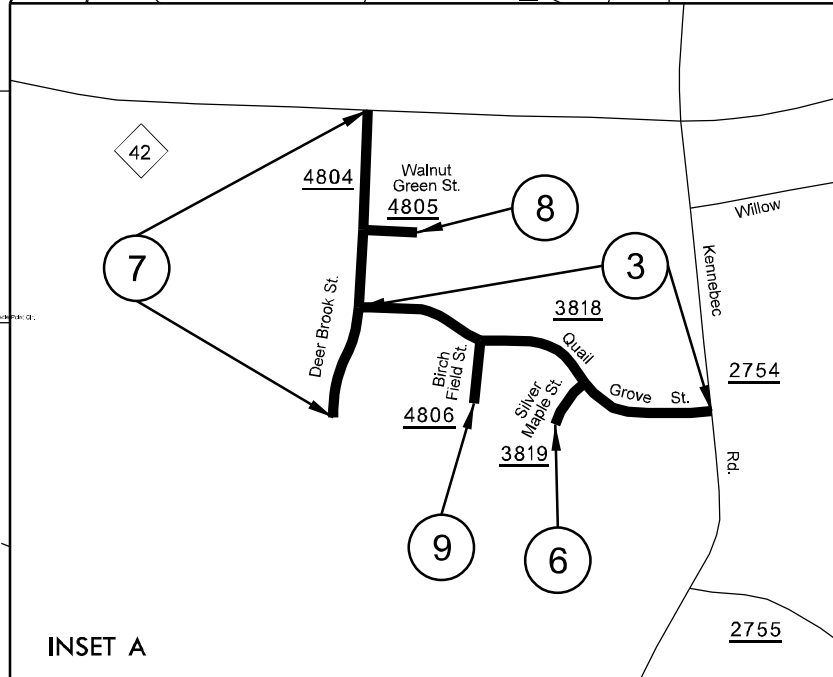
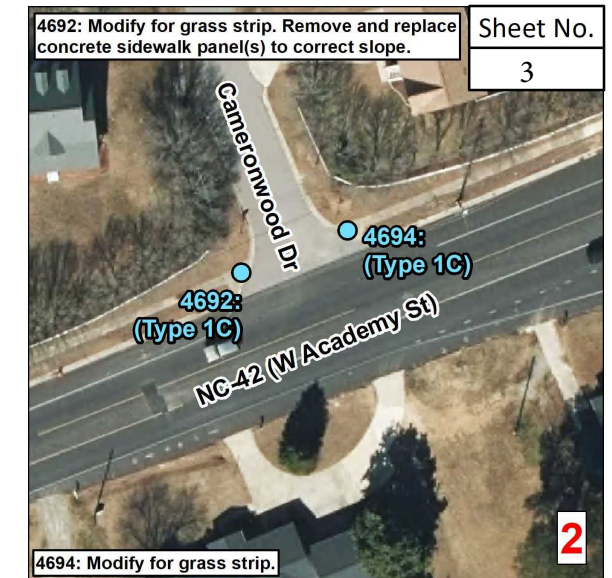
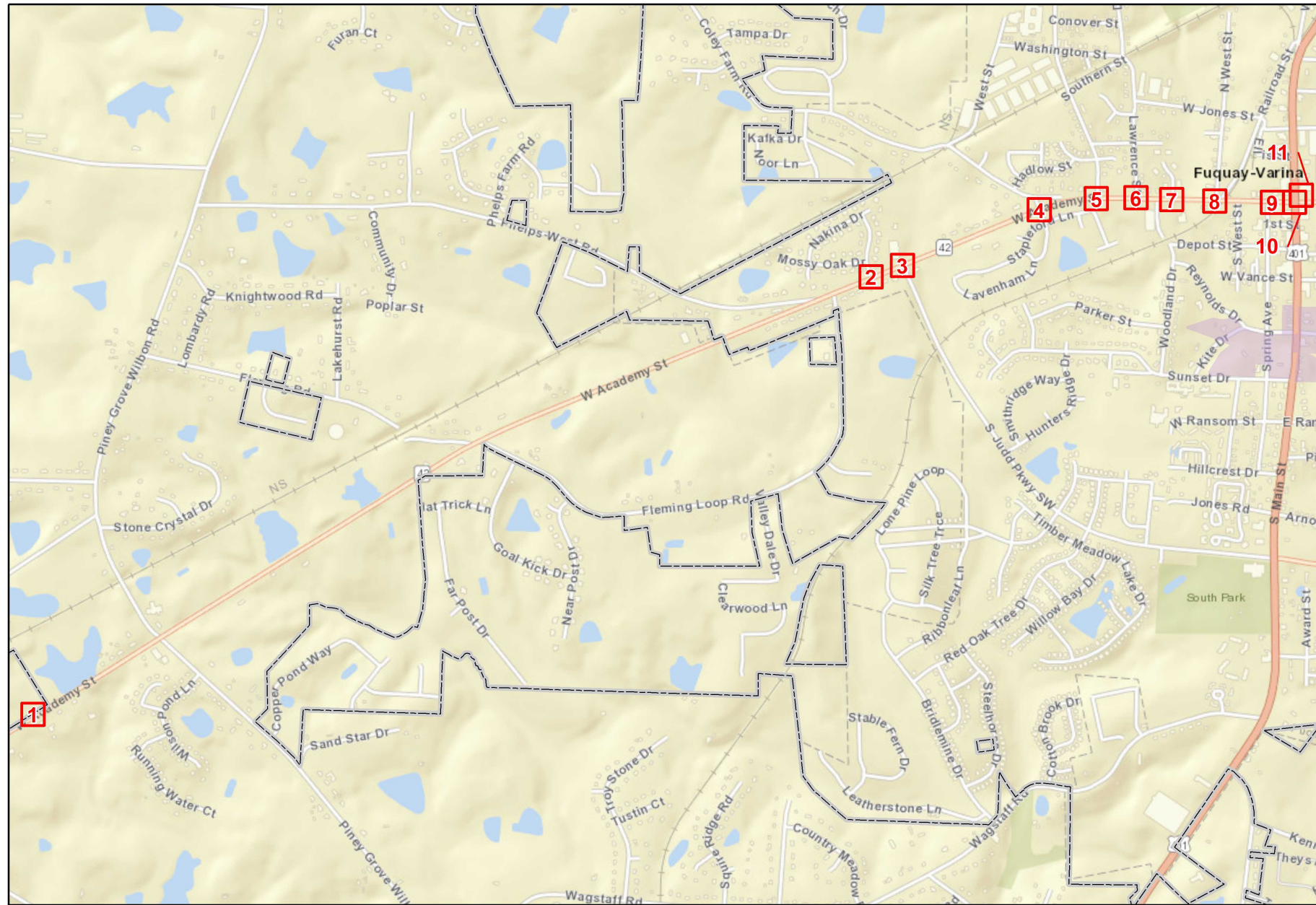


SEE INSET A

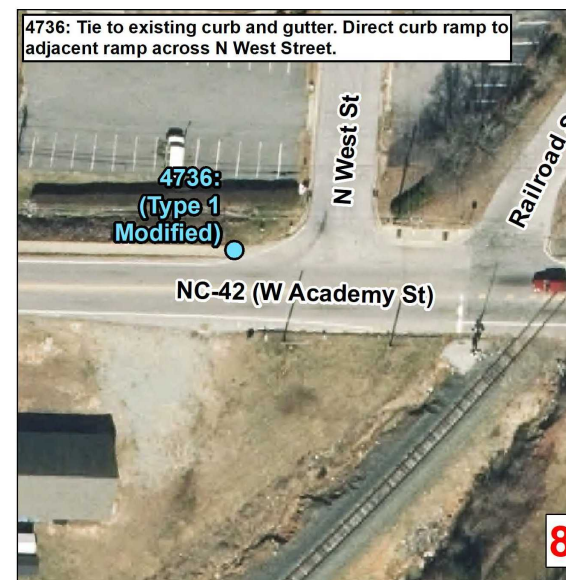
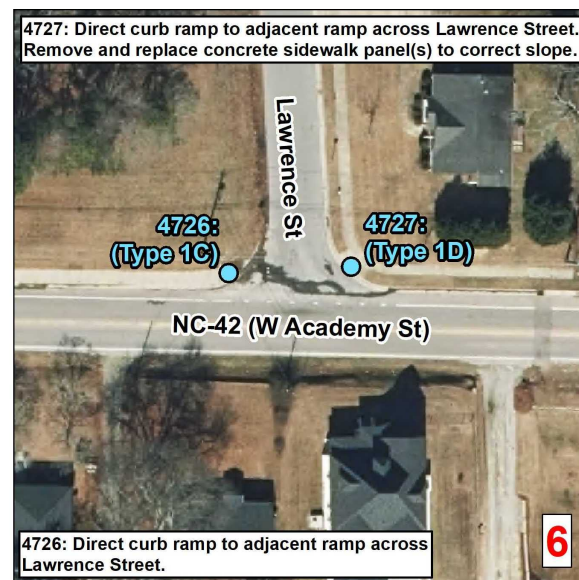
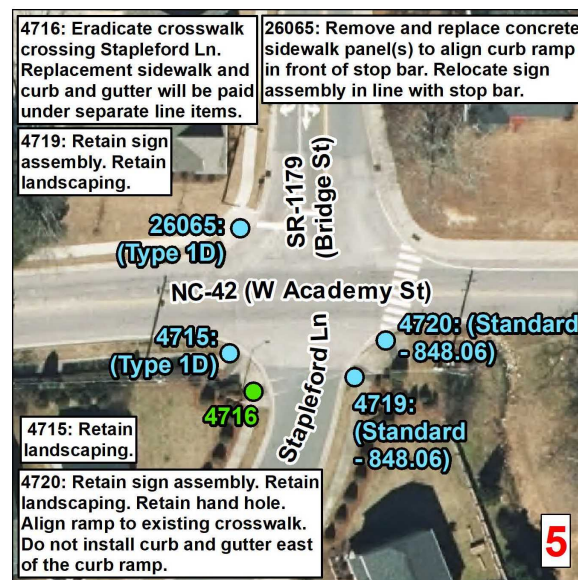
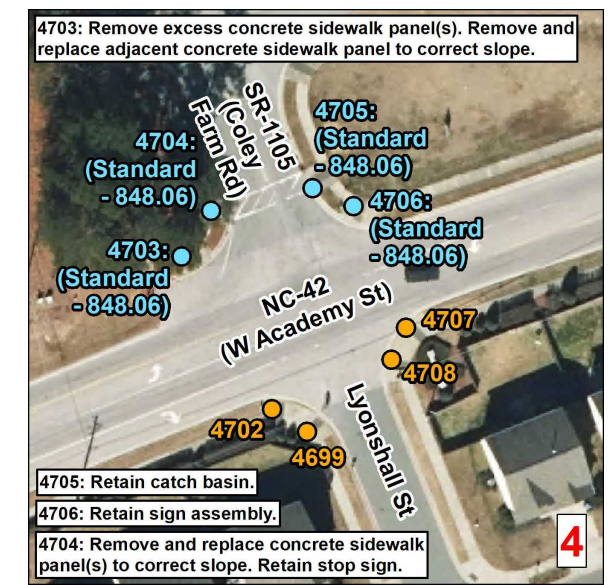
SEE INSET B



C:\PROJECTS\2025CPT\2025CPT.DWG



Sheet No.
3



Curb Ramps To Be Repaired

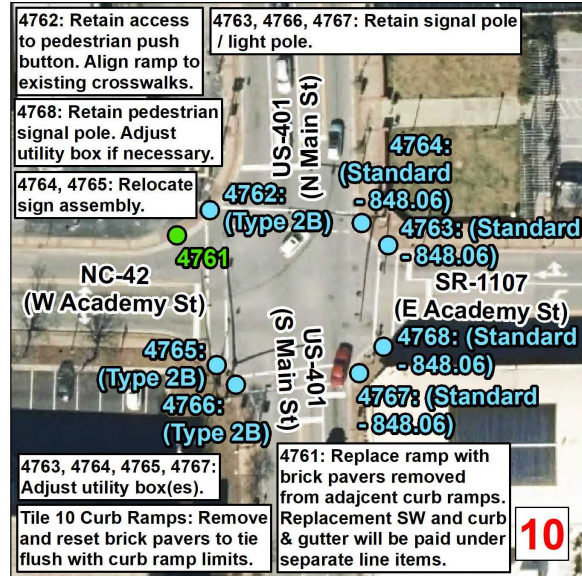
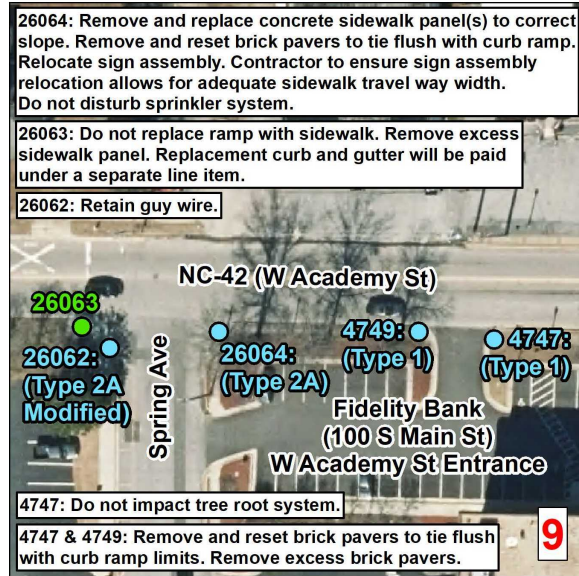
- Retrofit
- Remove and Replace
- New Curb Ramp
- Remove Ramp
- Other

Municipal Boundary
 NCHPO Historic Boundary (NR and LHD)

Wake 42
Project Number: 2025CPT.05.07.10921.1
NC 42
From Harnett County To US 401

NORTH CAROLINA DEPARTMENT
 OF TRANSPORTATION
 DIVISION 5

Source: NV5 Engineers and Consultants Inc., ESRI, NC OneMap, NCDOT, NCHPO



Curb Ramps To Be Repaired

- Retrofit
- Remove and Replace
- New Curb Ramp
- Remove Ramp
- Other

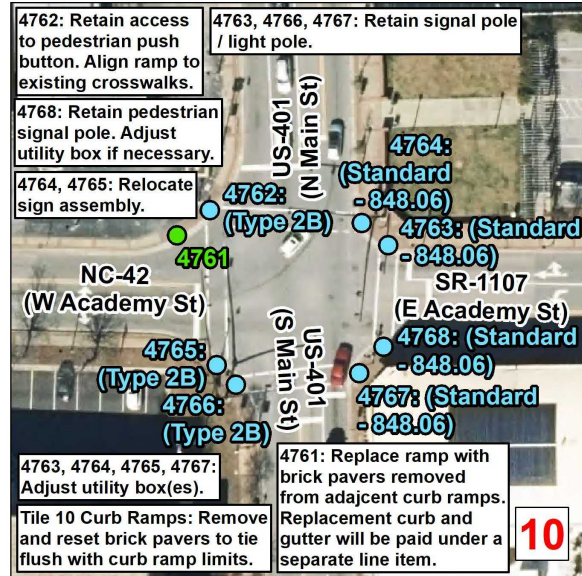
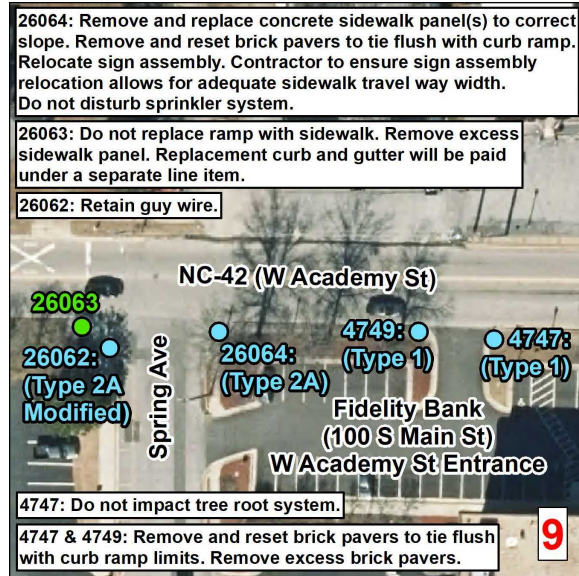
Municipal Boundary

NCHPO Historic Boundary (NR and LHD)

Wake 42
Project Number: 2025CPT.05.07.10921.1
NC 42
From Harnett County To US 401

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION 5

Source: NV5 Engineers and Consultants Inc., ESRI, NC OneMap, NCDOT, NCHPO



Curb Ramps To Be Repaired

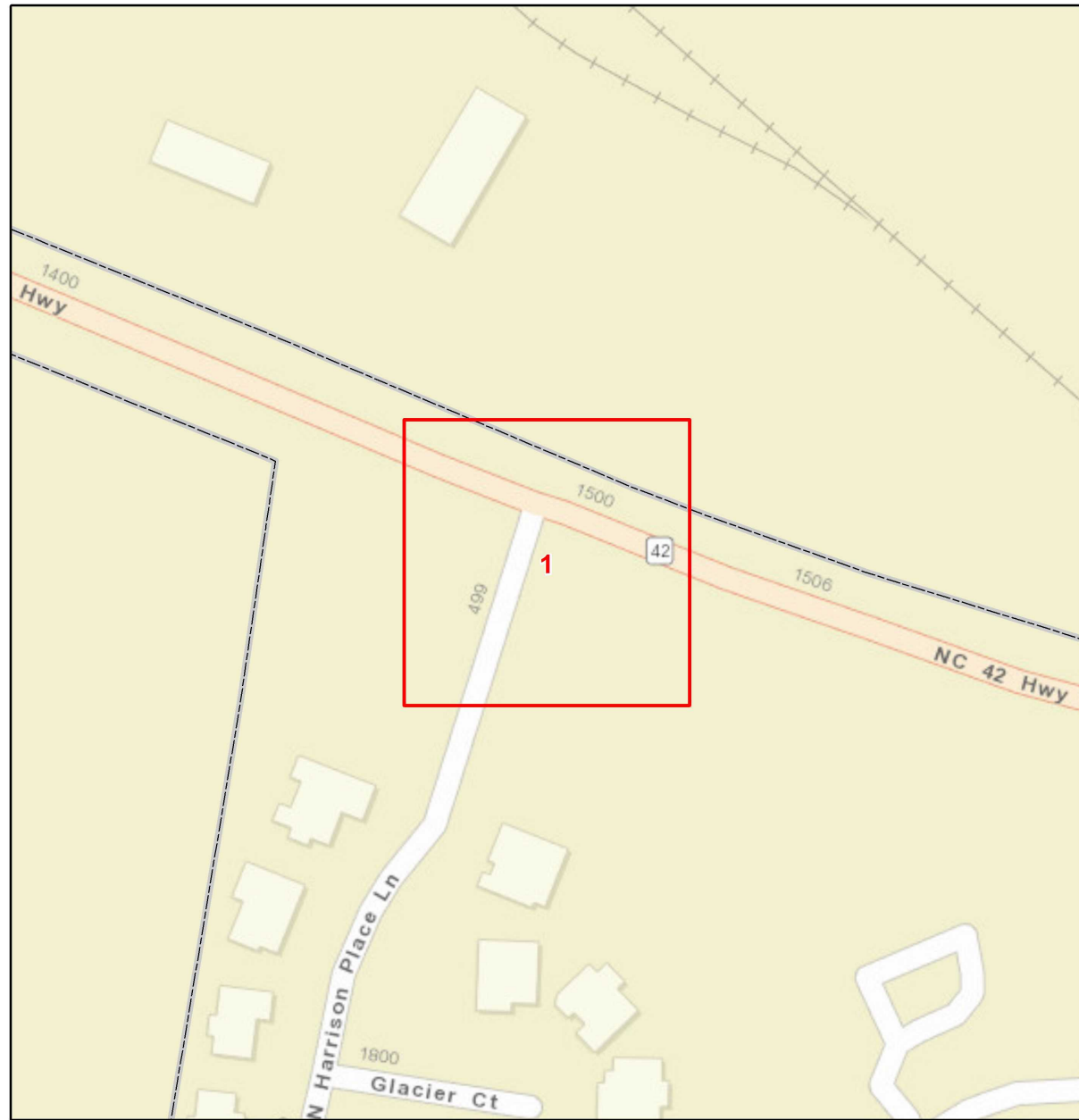
- Retrofit
- Remove and Replace
- New Curb Ramp
- Remove Ramp
- Other

Municipal Boundary
 NCHPO Historic Boundary (NR and LHD)

Wake 42
Project Number: 2025CPT.05.07.10921.1
NC 42
From Harnett County To US 401

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION 5

Source: NV5 Engineers and Consultants Inc., ESRI, NC OneMap, NCDOT, NCHPO



26061: Retain sign assembly. Retain landscaping. Remove and replace concrete sidewalk panel(s) to correct slope.

<p>Curb Ramps To Be Repaired</p> <ul style="list-style-type: none"> ● Retrofit ● Remove and Replace ● New Curb Ramp ● Remove Ramp ■ Other <p> Municipal Boundary</p> <p> NCHPO Historic Boundary (NR and LHD)</p>	
<p>Wake 42 Project Number: 2025CPT.05.07.10921.1 NC 42 From Johnston County To NC 55</p>	
<p> NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 5</p> <p><small>Source: NV5 Engineers and Consultants Inc., ESRI, NC OneMap, NCDOT, NCHPO</small></p>	

PAVEMENT SCHEDULE

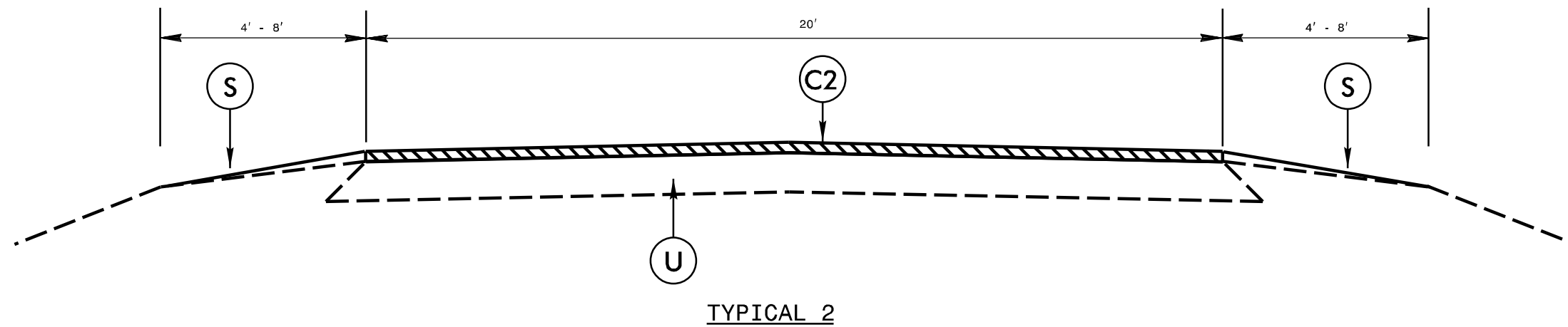
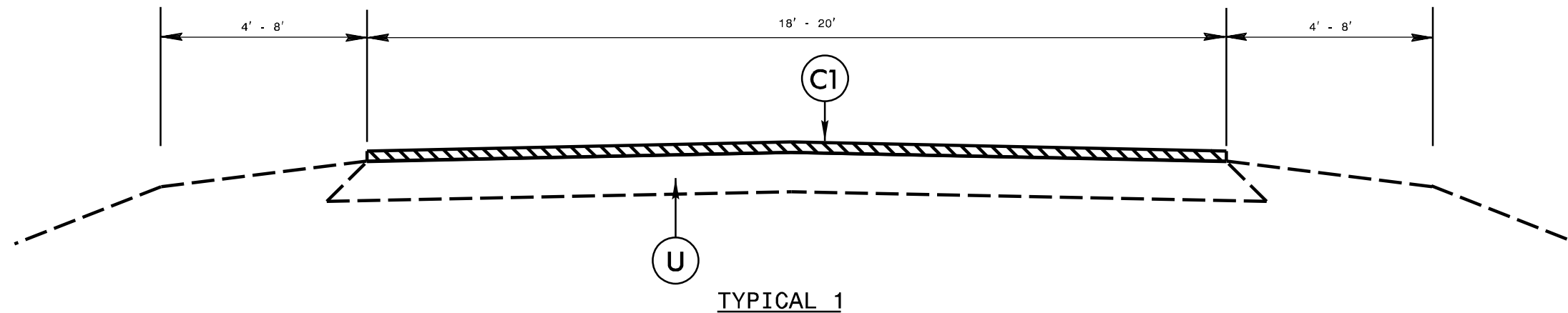
PROJECT REFERENCE NO.

SHEET NO.

2025CPT.05.07.10921.1, ect.

6

C1	1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.	S	SHOULDER RECONSTRUCTION
C2	1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	U	EXISTING PAVEMENT
C3	1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	V	MILL ASPHALT PAVEMENT, 1 1/2" DEPTH



PAVEMENT SCHEDULE

S SHOULDER RECONSTRUCTION

PROJECT REFERENCE NO.

SHEET NO.

2025CPT.05.07.10921.1, ect.

7

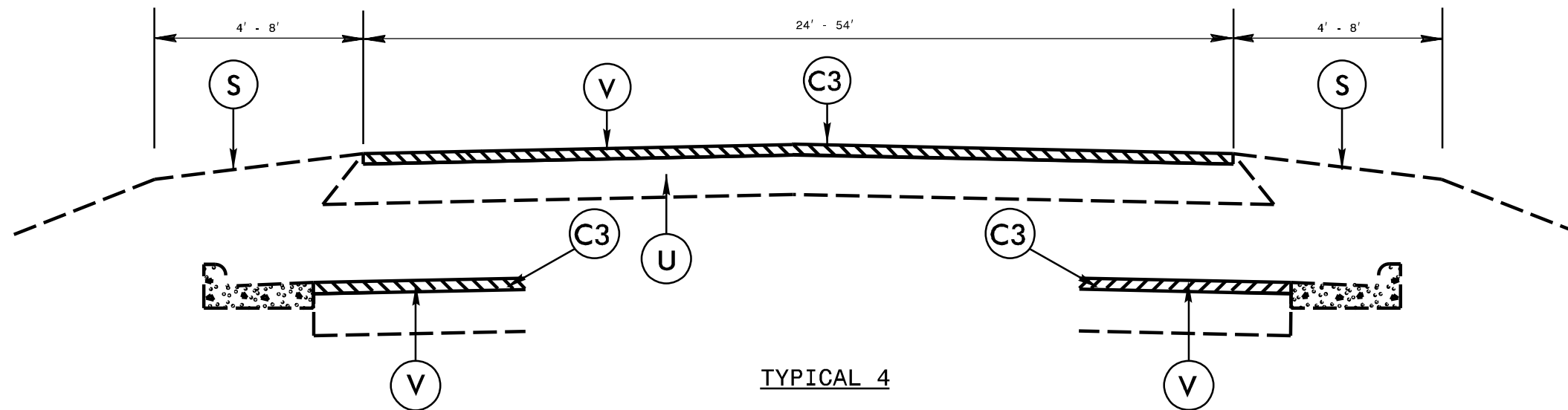
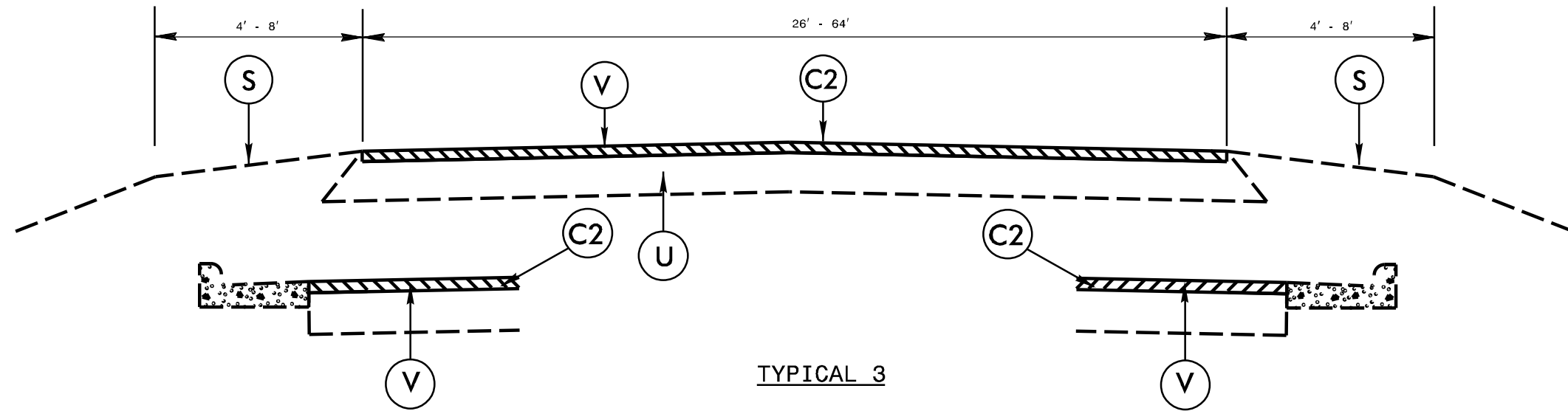
C1 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.

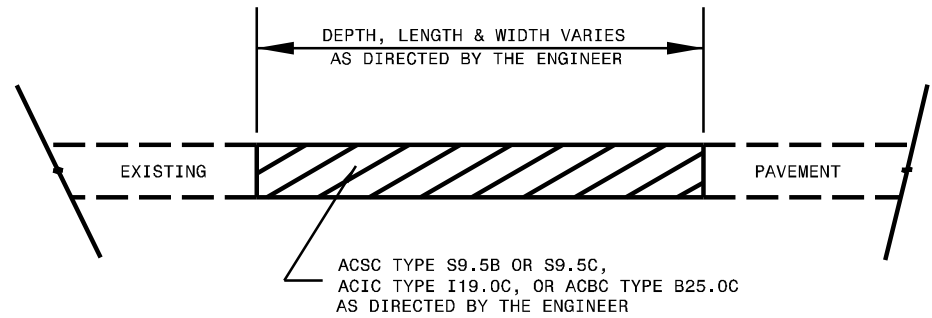
U EXISTING PAVEMENT

C2 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.

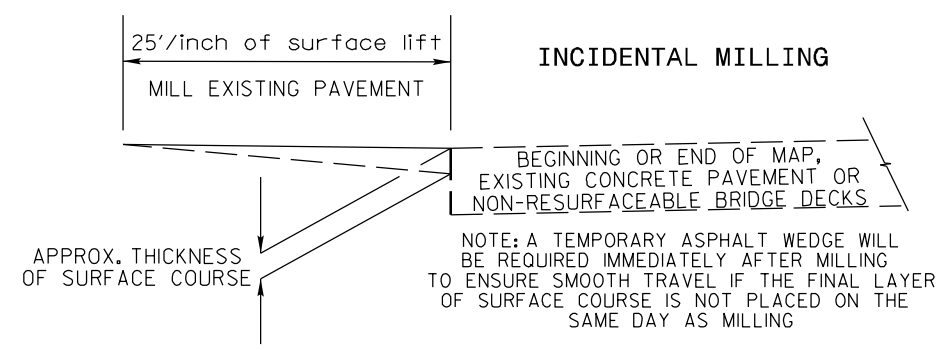
V MILL ASPHALT PAVEMENT, 1 1/2" DEPTH

C3 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.



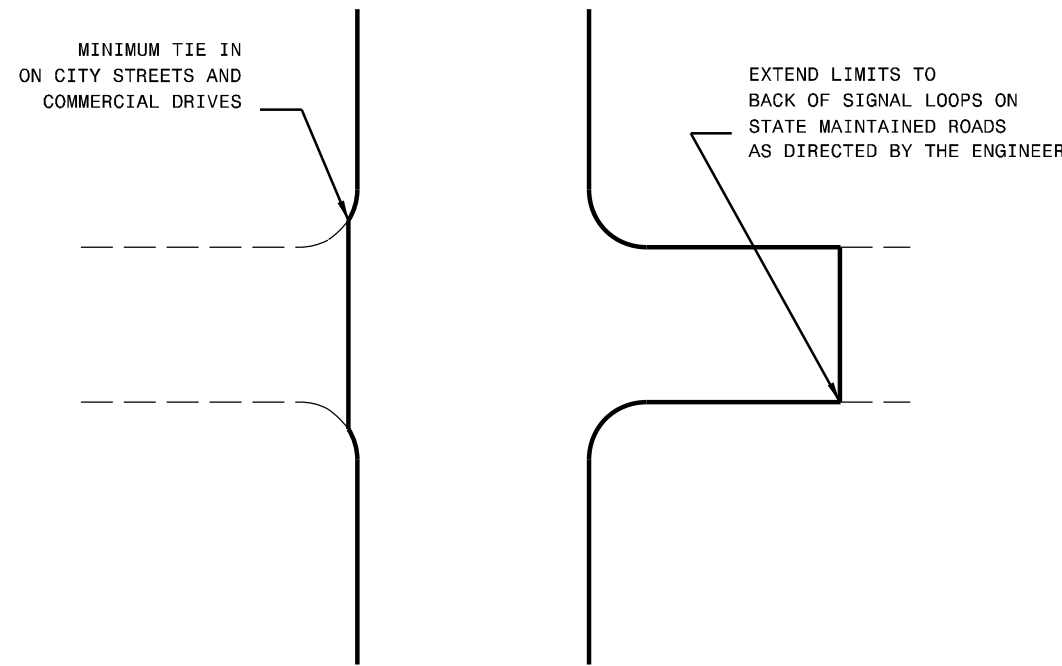


PATCHING EXISTING PAVEMENT
MILLING TO BE PERFORMED PRIOR TO PATCHING

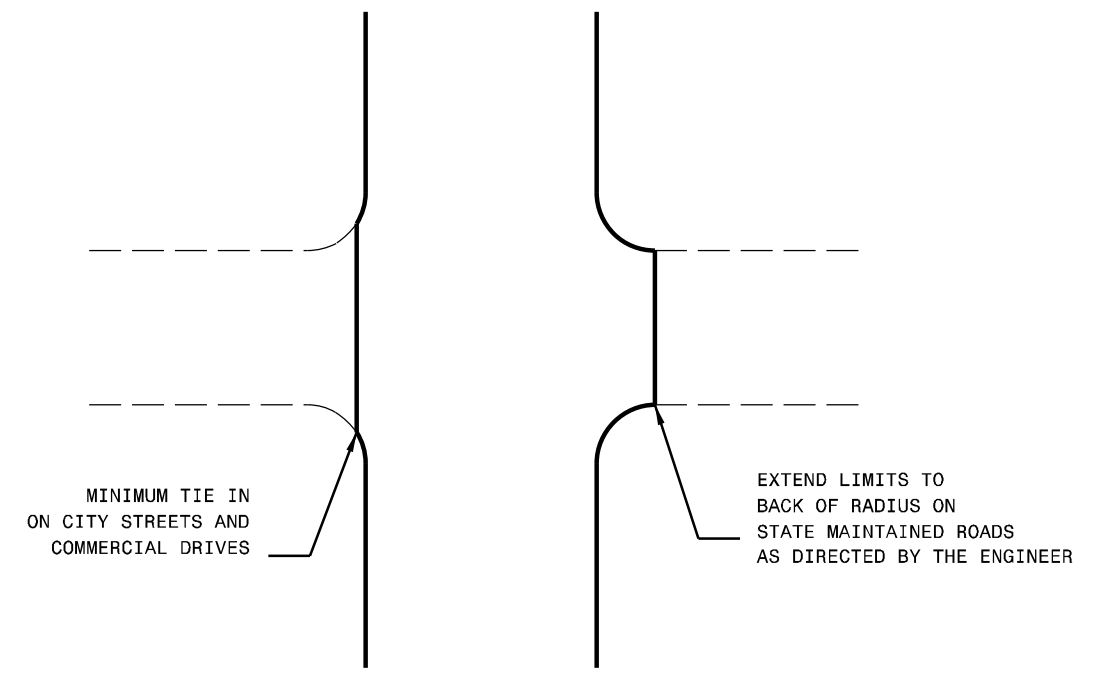


NOTES

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 RADIUS, 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.



TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES

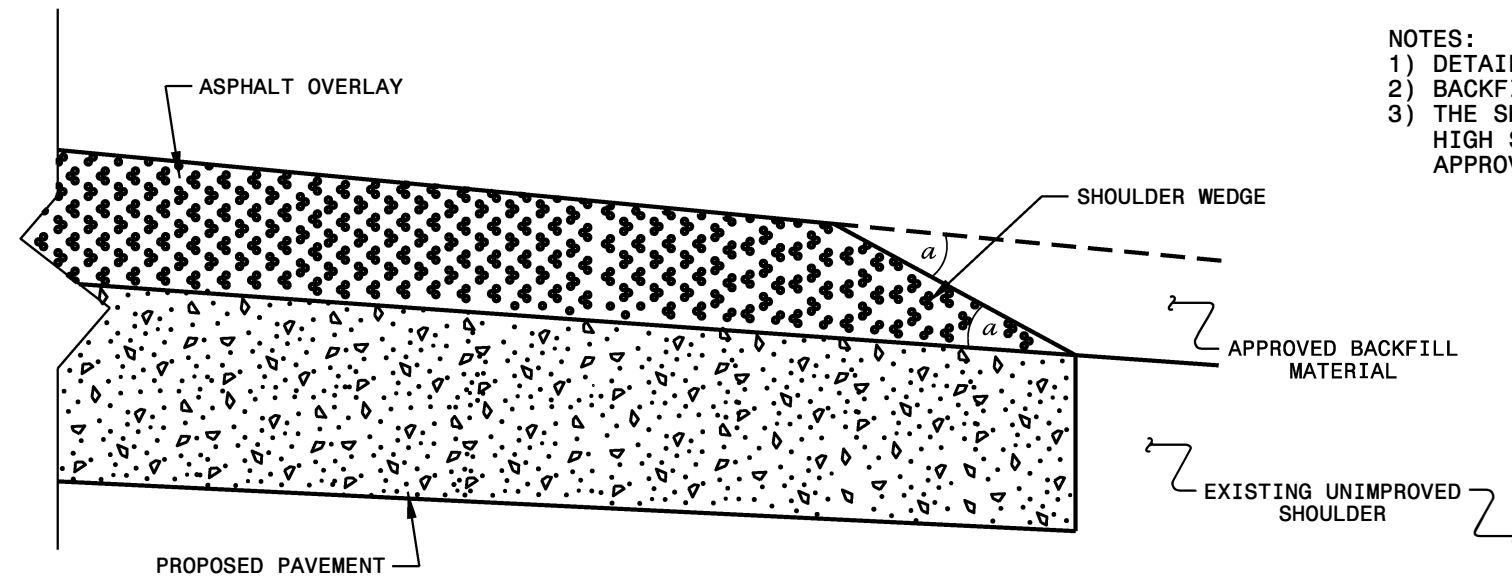


TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

ADDITIONAL INTERSECTIONS (NON-TYPICAL)		
Extend paving limits to back of radius or loop on the following intersections:		
MAP#	STREET NAME	COMMENTS
N/A		

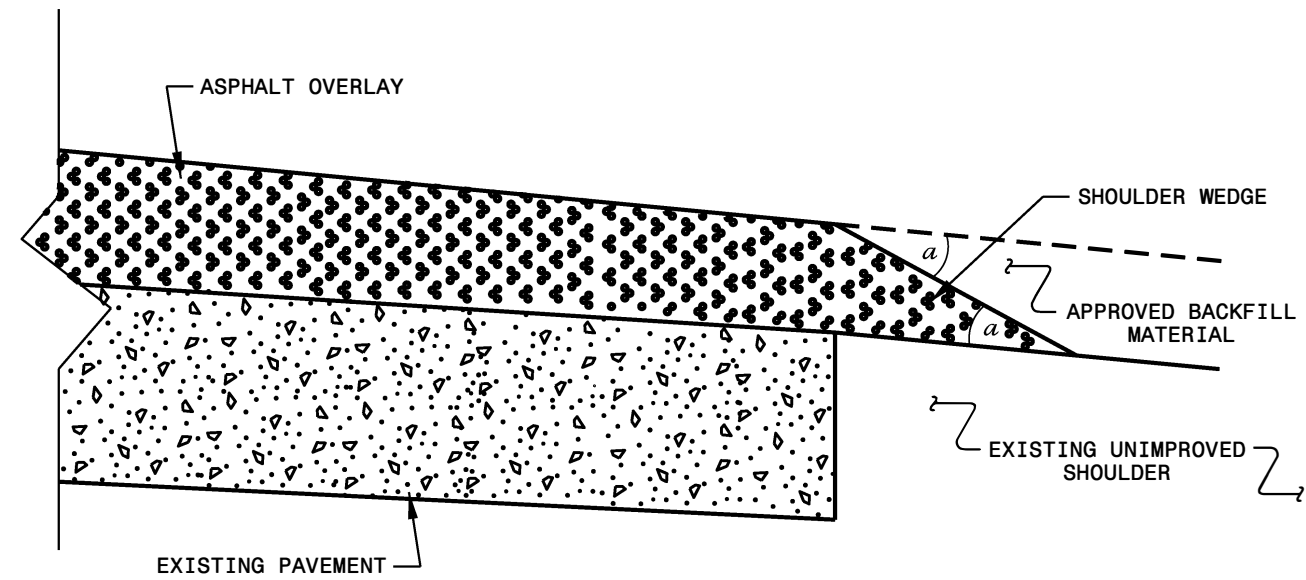
NOTES:

- 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.



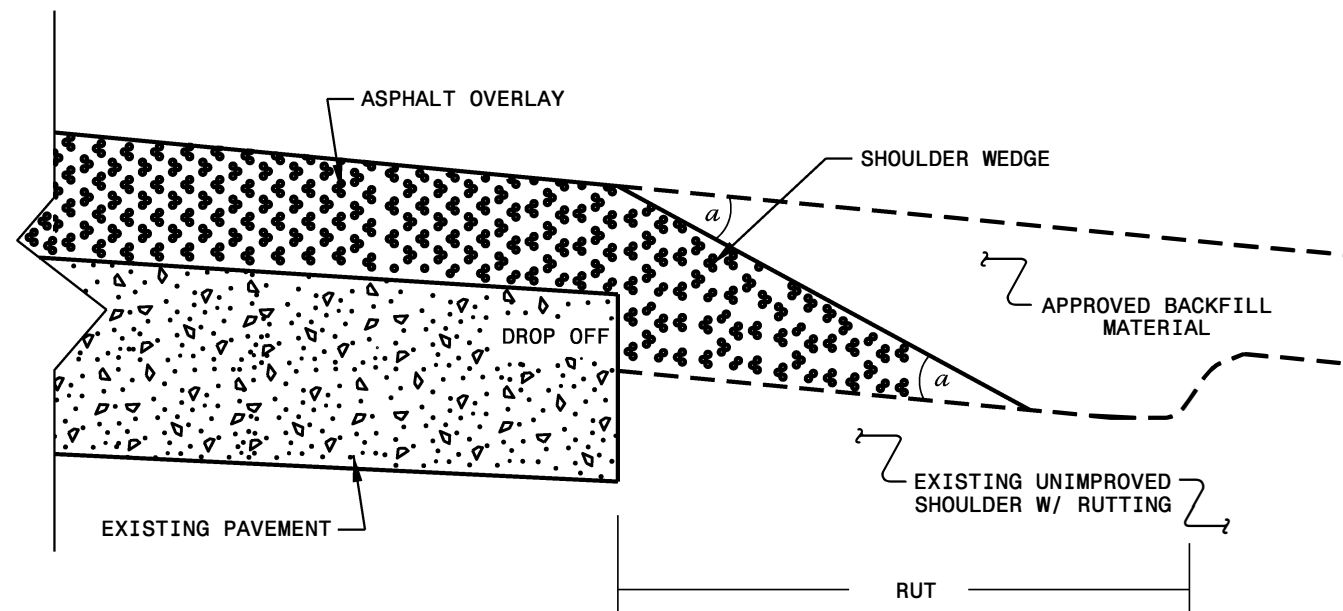
SHOULDER WEDGE DETAIL

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



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ NO Widening)

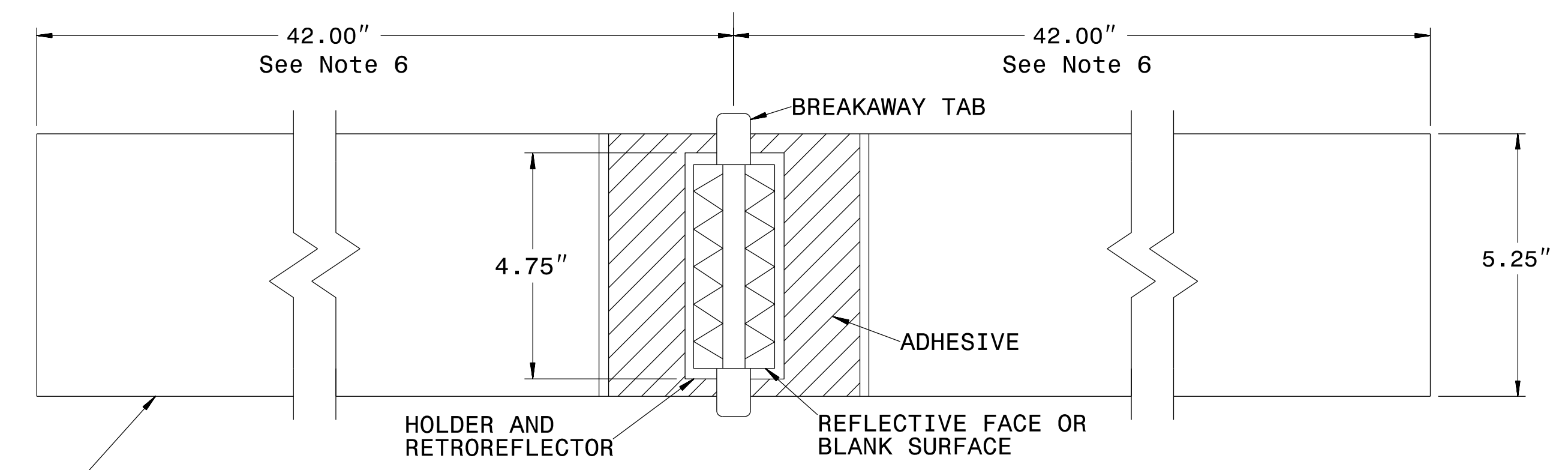


SHOULDER WEDGE DETAIL

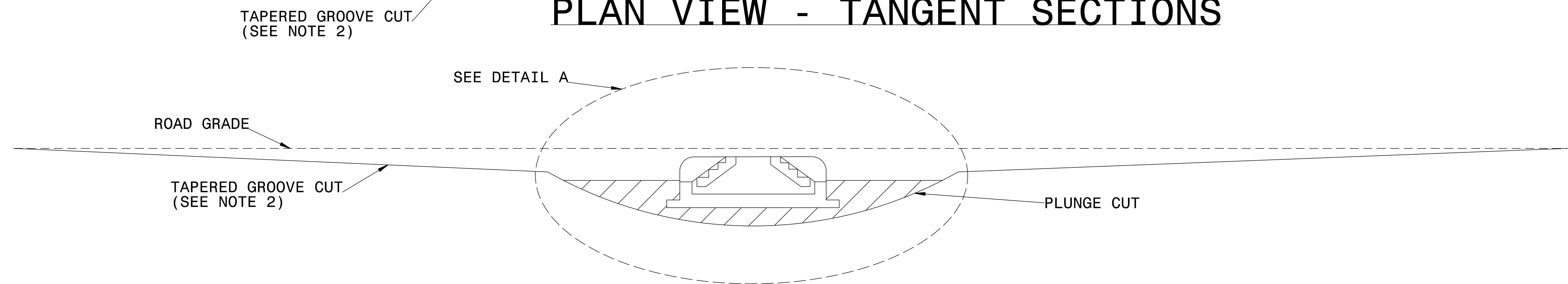
(Resurfacing Adjacent to Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

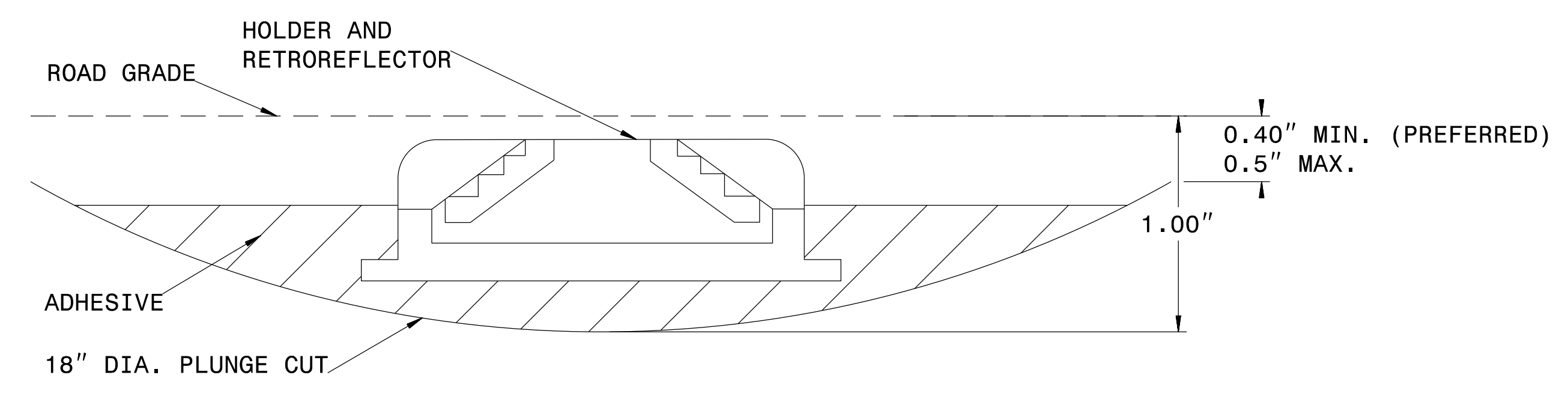
CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950 FAX 919-250-4119	
SHOULDER WEDGE DETAILS	
ORIGINAL BY: T.SPELL	DATE: 7-19-11
MODIFIED BY:	DATE: 2/2/16
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn	



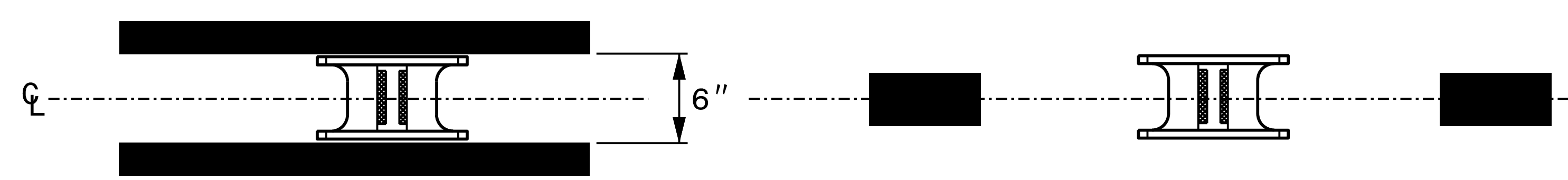
PLAN VIEW - TANGENT SECTIONS



PROFILE VIEW



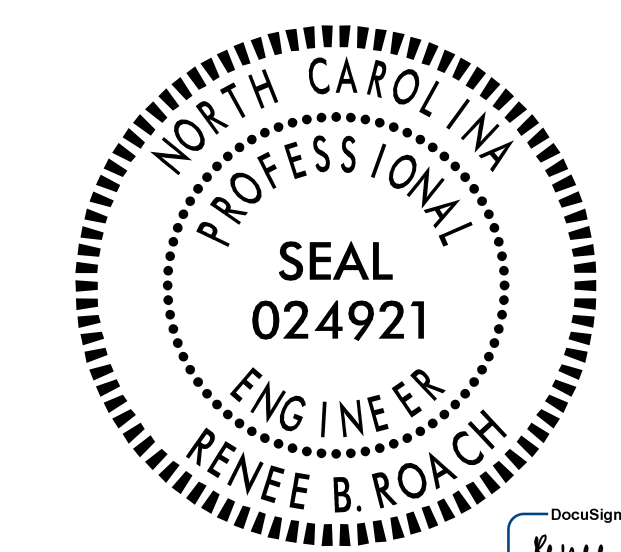
DETAIL A



MARKER SPACING

NOTES:

1. ALL GROOVE EDGES SHALL BE AT LEAST 2 INCHES FROM ANY SEAM OR PAVEMENT JOINT
2. GROOVE CUTS MAY BE TAPERED OR BEVELED. TAPERED CUTS SHALL START AT ROAD LEVEL ON EACH END AND TAPER AT A FIXED RATE AS SHOWN ON THE PROFILE VIEW. BEVELED GROOVE CUTS SHALL BE 0.5" MAXIMUM DEPTH (0.4" PREFERRED), AND SHALL BE 0.4" MINIMUM DEPTH AT BOTH ENDS OF THE PLUNGE CUT.
3. GROOVE AND PLUNGE CUT SHALL BE CLEAN AND DRY PRIOR TO PLACEMENT OF ADHESIVE.
4. THE EPOXY ADHESIVE SHALL BE THOROUGHLY MIXED UNTIL IT IS UNIFORM IN COLOR, AND APPLIED IN COLOR, AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
5. MARKER SHALL BE INSTALLED AS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS WITH THE BREAKWAY TABS RESTING ON THE PAVEMENT SURFACE. THE EPOXY SHALL BE FILLED TO THE LEVEL OF THE TOP OF THE MARKER HOLDER. EPOXY SHALL NOT TOUCH THE RETROREFLECTOR.
6. TOTAL GROOVE LENGTH MAY BE SHORTENED TO 54" ON SHARP CURVES IF APPROVED BY THE ENGINEER. GROOVES SHALL NOT OVERLAP WITH LOOP DETECTOR WIRES.



DocuSigned by:
Renee B. Roach, PE
097259202418431

CONTRACTS STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-8950 FAX 919-250-4119	
DETAIL OF INLAID CRADLE MARKER	
ORIGINAL BY: rgwatson	DATE: 02-06-2024
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC.:	

ADA SUMMARY OF QUANTITIES - TOTALS

Project Number:	2025CPT.05.07.10921.1
County:	Wake

Sheet No.	11
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Project Number	County	Municipality	Resurfacing Route	4447000000-E (LF) Pedestrian Channelizing Devices	4600000000-N (EA) Generic Traffic Control Item - Pedestrian Transport Service (Per Trip)	4600000000-N (EA) Generic Traffic Control Item - Audible Warning Devices	0156000000-E (SY) Removal of Existing Asphalt Pavement	2549000000-E (LF) 2'-6" Concrete Curb & Gutter	2752000000-E (LF) Remove Curb & Gutter	2591000000-E (SY) 4" Concrete Sidewalk	2738000000-E (SY) Remove and Replace Sidewalk	2738000000-E (SY) Remove Sidewalk	2738000000-E (SY) Non-Standard Sidewalk	2738000000-E (SY) Remove and Reset Brick Pavers	2845000000-N (EA) Adjustment of Meter Boxes or Valve Boxes	4116100000-N (EA) Sign Erection, relocate Type E (Ground Mounted)	4860000000-E (LF) 8" Line Removal	2738000000-E (SY) Remove and Replace Island	2612300000-N (EA) Retrofit Existing Concrete Curb Ramps	2612500000-N (EA) Remove and Replace Concrete Curb Ramps	2759000000-N (EA) Remove Curb Ramps
2025CPT.05.07.10921.1	Wake	Fuquay-Varina	NC 42 From Harnett County To US 401				42	60	15	63	27	39	14	15	6	4	70	4	6	30	3
2025CPT.05.07.10921.1	Wake	Fuquay-Varina	NC 42 From Johnston County To NC 55				0	0	0	0	6	0	0	0	0	0	0	0	0	1	0
-	-	-	-	60	10	2	-	93*	-	-	-	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL				60	10	2	42	153	15	63	33	39	14	15	6	4	70	4	6	31	3

* Contingency line item amount provided for adjustments outside of curb ramp paylimits.

ADA SUMMARY OF QUANTITIES - NC 42 FROM HARNETT COUNTY TO US 401

Municipality:	Fuquay-Varina
Project Number:	2025CPT.05.07.10921.1
County:	Wake

Sheet No.	12
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Ramp ID	Inset Map Number	Route 1	Route 2	0156000000-E (SY) Removal of Existing Asphalt Pavement	2549000000-E (LF) 2'-6" Concrete Curb & Gutter	2752000000-E (LF) Remove Curb & Gutter	2591000000-E (SY) 4" Concrete Sidewalk	2738000000-E (SY) Remove and Replace Sidewalk	2738000000-E (SY) Remove Sidewalk	2738000000-E (SY) Non-Standard Sidewalk	2738000000-E (SY) Remove and Reset Brick Pavers	2845000000-N (EA) Adjustment of Meter Boxes or Valve Boxes	4116100000-N (EA) Sign Erection, relocate Type E (Ground Mounted)	4860000000-E (LF) 8" Line Removal	2738000000-E (SY) Remove and Replace Island	2612300000-N (EA) Retrofit Existing Concrete Curb Ramps	2612500000-N (EA) Remove and Replace Concrete Curb Ramps	2759000000-N (EA) Remove Curb Ramps	Improvement Type
26075	1	NC-42 (W Academy St)	Crimson Ridge Trl	24			24										1		Type 1 Modified - 848.06
26076	1	NC-42 (W Academy St)	Crimson Ridge Trl	18			18										1		Type 1 Modified - 848.06
4692	2	NC-42 (W Academy St)	Cameronwood Dr					6									1		Type 1C - 848.06
4694	2	NC-42 (W Academy St)	Cameronwood Dr														1		Type 1C - 848.06
26066	3	NC-42 (W Academy St)	SR-6108 (S Judd Pkwy SW)														1		Standard - 848.06
26067	3	NC-42 (W Academy St)	SR-6108 (S Judd Pkwy SW)						12								1		Standard - 848.06
26070	3	NC-42 (W Academy St)	SR-6108 (S Judd Pkwy SW)												4				Other
26071	3	NC-42 (W Academy St)	SR-6108 (S Judd Pkwy SW)													1			Retrofit Warnings
26072	3	NC-42 (W Academy St)	SR-6108 (S Judd Pkwy SW)						9							1			Retrofit Warnings
4699	4	NC-42 (W Academy St)	Lyonshall St													1			Retrofit Warnings
4702	4	NC-42 (W Academy St)	Lyonshall St													1			Retrofit Warnings
4703	4	NC-42 (W Academy St)	SR-1105 (Coley Farm Rd)					3	9								1		Standard - 848.06
4704	4	NC-42 (W Academy St)	SR-1105 (Coley Farm Rd)					9									1		Standard - 848.06
4705	4	NC-42 (W Academy St)	SR-1105 (Coley Farm Rd)														1		Standard - 848.06
4706	4	NC-42 (W Academy St)	SR-1105 (Coley Farm Rd)														1		Standard - 848.06
4707	4	NC-42 (W Academy St)	Lyonshall St													1			Retrofit Warnings
4708	4	NC-42 (W Academy St)	Lyonshall St													1			Retrofit Warnings
4715	5	NC-42 (W Academy St)	Stapleford Ln														1		Type 1D - 848.06
4716	5	NC-42 (W Academy St)	Stapleford Ln		15		9							70				1	Remove Ramp
4719	5	NC-42 (W Academy St)	Stapleford Ln														1		Standard - 848.06
4720	5	NC-42 (W Academy St)	Stapleford Ln														1		Standard - 848.06
26065	5	NC-42 (W Academy St)	SR-1179 (Bridge St)		10	10	6		6				1				1		Type 1D - 848.06
4726	6	NC-42 (W Academy St)	Lawrence St														1		Type 1C - 848.06
4727	6	NC-42 (W Academy St)	Lawrence St		5	5	3	3									1		Type 1D - 848.06
4732	7	NC-42 (W Academy St)	Bay Tree St														1		Type 1C - 848.06
5043	7	NC-42 (W Academy St)	Bay Tree St														1		Type 1 Modified - 848.06
4736	8	NC-42 (W Academy St)	N West St				3										1		Type 1 Modified - 848.06
4747	9	NC-42 (W Academy St)	Fidelity Bank (100 S Main St) W Academy St Entrance								1						1		Type 1 - 848.06
4749	9	NC-42 (W Academy St)	Fidelity Bank (100 S Main St) W Academy St Entrance								1						1		Type 1 - 848.06
26063	9	NC-42 (W Academy St)	Spring Ave		12				3									1	Remove Ramp
Sub-Total				42	42	15	63	21	39	0	2	0	1	70	4	6	21	2	

Notes: (1) ADA quantity totals are provided on the project 'ADA SUMMARY OF QUANTITIES - TOTALS' page.; (2) Curb ramp work done in areas with brick paver sidewalk are to be constructed with concrete. Brick pavers are to be removed only as necessary. Any existing brick outside of the limits of the work are to be neatly sawcut along the edge of the curb ramp and reset in order to tie flush with the work itself.; (3) Excess removed brick pavers are to be neatly stacked along the North wall of the city owned lot located Northeast of the E Academy St and Main St intersection. See map inset 11 for more details.

ADA SUMMARY OF QUANTITIES - NC 42 FROM HARNETT COUNTY TO US 401

Municipality:	Fuquay-Varina
Project Number:	2025CPT.05.07.10921.1
County:	Wake

Sheet No.
13

Ramp ID	Inset Map Number	Route 1	Route 2	015600000-E (SY) Removal of Existing Asphalt Pavement	254900000-E (LF) 2'-6" Concrete Curb & Gutter	275200000-E (LF) Remove Curb & Gutter	259100000-E (SY) 4" Concrete Sidewalk	273800000-E (SY) Remove and Replace Sidewalk	273800000-E (SY) Remove Sidewalk	273800000-E (SY) Non-Standard Sidewalk	273800000-E (SY) Remove and Reset Brick Pavers	284500000-N (EA) Adjustment of Meter Boxes or Valve Boxes	411610000-N (EA) Sign Erection, relocate Type E (Ground Mounted)	486000000-E (LF) 8" Line Removal	273800000-E (SY) Remove and Replace Island	261230000-N (EA) Retrofit Existing Concrete Curb Ramps	261250000-N (EA) Remove and Replace Concrete Curb Ramps	275900000-N (EA) Remove Curb Ramps	Improvement Type
26062	9	NC-42 (W Academy St)	Spring Ave														1		Type 2A Modified - 848.06
26064	9	NC-42 (W Academy St)	Spring Ave					6			1		1				1		Type 2A - 848.06
4761	10	US-401 (N Main St)	NC-42 (W Academy St)		18					14								1	Remove Ramp
4762	10	US-401 (N Main St)	NC-42 (W Academy St)								2						1		Type 2B - 848.06
4763	10	US-401 (N Main St)	SR-1107 (E Academy St)								2	1					1		Standard - 848.06
4764	10	US-401 (N Main St)	SR-1107 (E Academy St)								2	2	1				1		Standard - 848.06
4765	10	US-401 (N Main St)	NC-42 (W Academy St)								1	1	1				1		Type 2B - 848.06
4766	10	US-401 (N Main St)	NC-42 (W Academy St)								1						1		Type 2B - 848.06
4767	10	US-401 (N Main St)	SR-1107 (E Academy St)								2	1					1		Standard - 848.06
4768	10	US-401 (N Main St)	SR-1107 (E Academy St)								2	1					1		Standard - 848.06
Sub-Total				0	18	0	0	6	0	14	13	6	3	0	0	0	9	1	
Sub-Total for NC 42 From Harnett County To US 401				42	60	15	63	27	39	14	15	6	4	70	4	6	30	3	

Notes: (1) ADA quantity totals are provided on the project 'ADA SUMMARY OF QUANTITIES - TOTALS' page.; (2) Curb ramp work done in areas with brick paver sidewalk are to be constructed with concrete. Brick pavers are to be removed only as necessary. Any existing brick outside of the limits of the work are to be neatly sawcut along the edge of the curb ramp and reset in order to tie flush with the work itself.; (3) Excess removed brick pavers are to be neatly stacked along the North wall of the city owned lot located Northeast of the E Academy St and Main St intersection. See map inset 11 for more details.

ADA SUMMARY OF QUANTITIES - NC 42 FROM JOHNSTON COUNTY TO NC 55

Municipality:	Fuquay-Varina
Project Number:	2025CPT.05.07.10921.1
County:	Wake

Sheet No.
14

Ramp ID	Inset Map Number	Route 1	Route 2	015600000-E (SY) Removal of Existing Asphalt Pavement	254900000-E (LF) 2'-6" Concrete Curb & Gutter	275200000-E (LF) Remove Curb & Gutter	259100000-E (SY) 4" Concrete Sidewalk	273800000-E (SY) Remove and Replace Sidewalk	273800000-E (SY) Remove Sidewalk	273800000-E (SY) Non-Standard Sidewalk	273800000-E (SY) Remove and Reset Brick Pavers	284500000-N (EA) Adjustment of Meter Boxes or Valve Boxes	411610000-N (EA) Sign Erection, relocate Type E (Ground Mounted)	486000000-E (LF) 8" Line Removal	273800000-E (SY) Remove and Replace Island	261230000-N (EA) Retrofit Existing Concrete Curb Ramps	261250000-N (EA) Remove and Replace Concrete Curb Ramps	275900000-N (EA) Remove Curb Ramps	Improvement Type
26061	1	NC-42	N Harrison Place Ln					6									1		Standard - 848.06
Sub-Total for NC 42 From Johnston County To NC 55				0	0	0	0	6	0	0	0	0	0	0	0	0	1	0	

Note: ADA quantity totals are provided on the project 'ADA SUMMARY OF QUANTITIES - TOTALS' page.

PROJECT NO.	SHEET NO.
2025CPT.05.07.10921.1, ETC.	15

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LENGTH	WIDTH	0156000000-E	1220000000-E	1245000000-E	1260000000-E	1297000000-E	1330000000-E	1519000000-E	1523000000-E	1575000000-E	1704000000-E	2549000000-E	2591000000-E	2612500000-N
							MI	FT	REMOVAL OF EXISTING ASPHALT PAVEMENT	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	1½" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5B	SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	2'-6" CURB & GUTTER	4" CONCRETE SIDEWALK	REMOVE AND REPLACE CONCRETE CURB RAMPS
									SY	TONS	SMI	TON	SY	SY	TONS	TONS	TON	TONS	LF	SY	EA
2025CPT.05.07.10921.1	Wake	1	NC-42 E / W ACADEMY ST	FROM HARNETT COUNTY TO US 401	3	2	3.442	26-64	42.00	143	5.70	527	57,267	6,482	5,544		369	174	120	63	30
		2	NC-42 E / NC 42 HWY	FROM SR 1006 TO NC 55	4	2	3.97	24-54		199	7.94	733	62,099	10,862		6,461	383	40	33		1
TOTAL FOR PROJ NO. 2025CPT.05.07.10921.1							7.412		42.00	342	13.64	1,260	119,366	17,344	5,544	6,461	752	214	153	63	31
2025CPT.05.07.20921.1	Wake	3	SR-3818 / QUAIL GROVE ST	FROM SR 2754 TO SR 4804	2	2	0.41	20		21	0.82	75		526	450		30	14			
		4	SR-5519 / KENDALL HILL RD	FROM SR 1006 TO DEAD END	2	2	0.237	20		12	0.47	43		574	292		31	250			
TOTAL FOR PROJ NO. 2025CPT.05.07.20921.1							0.647			33	1.29	118		1,100	742		61	264			
2025CPT.05.07.20922.1	Wake	5	SR-3809 / OLD CLAYTON RD	FROM SR 1006 TO CUL-DE-SAC	1	2	0.15	20		8				118	112		9	29			
		6	SR-3819 / SILVER MAPLE ST	FROM SR 3818 TO CUL-DE-SAC	1	2	0.05	20		3					51		4	19			
		7	SR-4804 / DEER BROOK ST	FROM NC 42 TO CUL-DE-SAC	1	2	0.328	20		16					254		17	10			
		8	SR-4805 / WALNUT GREEN ST	FROM SR 4804 TO CUL-DE-SAC	1	2	0.06	20		3					58		4	10			
		9	SR-4806 / BIRCH FIELD ST	FROM SR 3818 TO CUL-DE-SAC	1	2	0.07	20		4					68		5	10			
		10	SR-5513 / KRISTIWOOD CT	FROM SR 5514 TO CUL-DE-SAC	1	2	0.114	20		6					95		12	124			
		11	SR-5514 / TREVORWOOD DR	FROM SR 5516 TO DEAD END	1	2	0.268	20		14					193		19	142			
		12	SR-5515 / BANE BERRY CT	FROM SR 5514 TO CUL-DE-SAC	1	2	0.031	18		2					36		3	12			
		13	SR-5516 / SHANNA HILLS DR	FROM SR 5519 TO DEAD END	1	2	0.199	20		10					142		33	502			
		14	SR-5517 / HONEYMOON CT	FROM SR 5520 TO CUL-DE-SAC	1	2	0.094	20		5					82		6	10			
TOTAL FOR PROJ NO. 2025CPT.05.07.20922.1							1.934		100				118	1,514		146	1,004				
GRAND TOTAL							9.993		42.00	475	14.93	1,378	119,366	18,562	7,800	6,461	959	1,482	153	63	31

PROJECT NO.	SHEET NO.
2025CPT.05.07.10921.1, ETC.	16

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LENGTH	WIDTH	2738000000-E				2738000000-E	2752000000-E	2759000000-N	2612300000-E	2845000000-N	4116100000-N	4600000000-N	7444000000-E		
									REMOVE AND REPLACE SIDEWALK	REMOVE AND REPLACE ISLAND	REMOVE AND RESET BRICK PAVERS	NONSTANDARD SIDEWALK	REMOVE SIDEWALK	REMOVE CURB AND GUTTER	REMOVE CURB RAMP	RETROFIT EXISTING CONCRETE CURB RAMPS	ADJUST METER OR VALVE BOX	SIGN ERECTION, RELOCATE TYPE E (GROUND MOUNTED)	PEDESTRIAN TRANSPORT SERVICE	AUDIBLE WARNING DEVICES	INDUCTIVE LOOP SAWCUT	
									MI	FT	SY	SY	SY	SY	EA	EA	EA	EA	EA	EA	EA	
2025CPT.05.07.10921.1	Wake	1	NC-42 E / W ACADEMY ST	FROM HARNETT COUNTY TO US 401	3	2	3.442	26-64	27	4	15	14	39	15	3	6	6	4	5	1	1,740	
		2	NC-42 E / NC 42 HWY	FROM SR 1006 TO NC 55	4	2	3.97	24-54	6										5	1	2,045	
TOTAL FOR PROJ NO. 2025CPT.05.07.10921.1							7.412		33	4	15	14	39	15	3	6	6	4	10	2	3,785	
2025CPT.05.07.20921.1	Wake	3	SR-3818 / QUAIL GROVE ST	FROM SR 2754 TO SR 4804	2	2	0.41	20														
		4	SR-5519 / KENDALL HILL RD	FROM SR 1006 TO DEAD END	2	2	0.237	20														
TOTAL FOR PROJ NO. 2025CPT.05.07.20921.1							0.647															
2025CPT.05.07.20922.1	Wake	5	SR-3809 / OLD CLAYTON RD	FROM SR 1006 TO CUL-DE-SAC	1	2	0.15	20														
		6	SR-3819 / SILVER MAPLE ST	FROM SR 3818 TO CUL-DE-SAC	1	2	0.05	20														
		7	SR-4804 / DEER BROOK ST	FROM NC 42 TO CUL-DE-SAC	1	2	0.328	20														
		8	SR-4805 / WALNUT GREEN ST	FROM SR 4804 TO CUL-DE-SAC	1	2	0.06	20														
		9	SR-4806 / BIRCH FIELD ST	FROM SR 3818 TO CUL-DE-SAC	1	2	0.07	20														
		10	SR-5513 / KRISTIWOOD CT	FROM SR 5514 TO CUL-DE-SAC	1	2	0.114	20														
		11	SR-5514 / TREVORWOOD DR	FROM SR 5516 TO DEAD END	1	2	0.268	20														
		12	SR-5515 / BANE BERRY CT	FROM SR 5514 TO CUL-DE-SAC	1	2	0.031	18										1				
		13	SR-5516 / SHANNA HILLS DR	FROM SR 5519 TO DEAD END	1	2	0.199	20														
TOTAL FOR PROJ NO. 2025CPT.05.07.20922.1							1.934									2						
GRAND TOTAL							9.993		33	4	15	14	39	15	3	6	8	4	10	2	3,785	

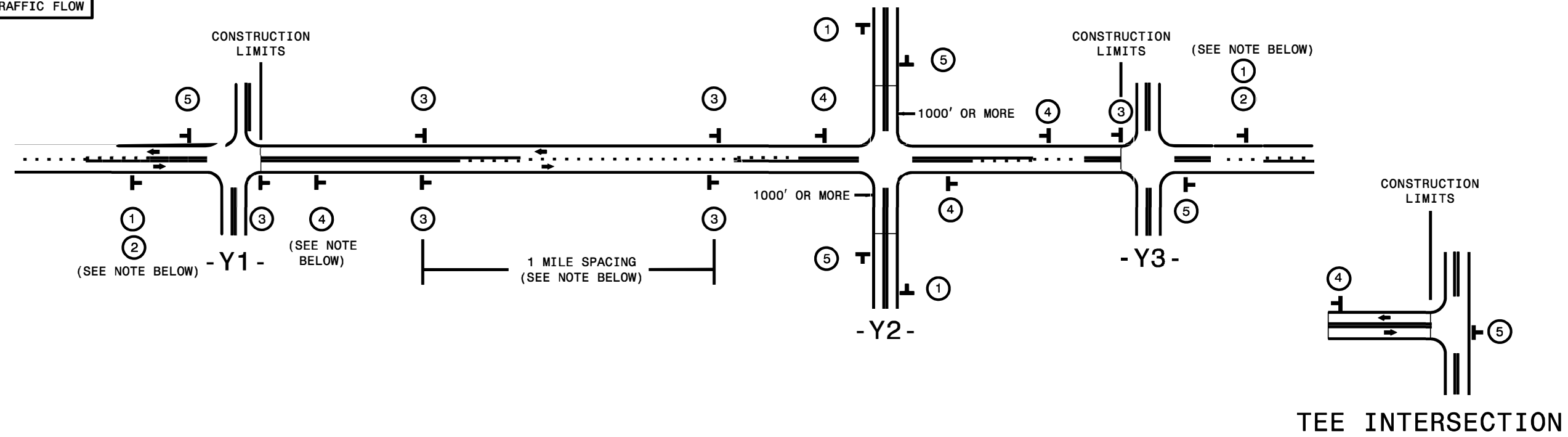
PROJECT NO.	SHEET NO.
2025CPT.05.07.10921.1, E	17

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LENGTH	WIDTH	4413000000-E	4447000000-E	4457000000-N	4688000000-E	4695000000-E	4700000000-E	4704000000-E	4709000000-E	4720000000-E	4725000000-E				4860000000-E	4895000000-N			
									WORK ZONE ADVANCE/GENERAL WARNING SIGNING	PEDESTRIAN CHANNELIZING DEVICES	TEMPORARY TRAFFIC CONTROL	6" X 90 M WHITE THERMO	6" X 90 M YELLOW THERMO	8" X 90 M WHITE THERMO	12" X 90 M YELLOW THERMO	12" X 90 M WHITE THERMO	16" X 90 M WHITE THERMO	24" X 90 M WHITE THERMO	THERMO MSG RXR 90 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR ARROW 90 M	THERMO STR & RT ARROW 90 M	8" LINE REMOVAL	INLAID CRADLE MARKERS	
									MI	FT	SF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA
2025CPT.05.07.10921.1	Wake	1	NC-42 E / W ACADEMY ST	FROM HARNETT COUNTY TO US 401	3	2	3.442	26-64	386	30	*	33,322	48,490	696	387	228	100	485	4	11	7	4	1	70	290	
2025CPT.05.07.10921.1	Wake	2	NC-42 E / NC 42 HWY	FROM SR 1006 TO NC 55	4	2	3.97	24-54	445	30	*	49,729	57,739		780	167		440		23	1	2	6		700	
TOTAL FOR PROJ NO. 2025CPT.05.07.10921.1							7.412		831	60	1.00	83,051	106,229	696	1,167	395	100	925	4	34	8	6	7	70	990	
												189,280			1,562						55					
2025CPT.05.07.20921.1	Wake	3	SR-3818 / QUAIL GROVE ST	FROM SR 2754 TO SR 4804	2	2	0.41	20	46		*															
2025CPT.05.07.20921.1	Wake	4	SR-5519 / KENDALL HILL RD	FROM SR 1006 TO DEAD END	2	2	0.237	20	27		*															
TOTAL FOR PROJ NO. 2025CPT.05.07.20921.1							0.647		73		1.00															
2025CPT.05.07.20922.1	Wake	5	SR-3809 / OLD CLAYTON RD	FROM SR 1006 TO CUL-DE-SAC	1	2	0.15	20	17		*															
2025CPT.05.07.20922.1	Wake	6	SR-3819 / SILVER MAPLE ST	FROM SR 3818 TO CUL-DE-SAC	1	2	0.05	20	6		*															
2025CPT.05.07.20922.1	Wake	7	SR-4804 / DEER BROOK ST	FROM NC 42 TO CUL-DE-SAC	1	2	0.328	20	37		*															
2025CPT.05.07.20922.1	Wake	8	SR-4805 / WALNUT GREEN ST	FROM SR 4804 TO CUL-DE-SAC	1	2	0.06	20	7		*															
2025CPT.05.07.20922.1	Wake	9	SR-4806 / BIRCH FIELD ST	FROM SR 3818 TO CUL-DE-SAC	1	2	0.07	20	8		*															
2025CPT.05.07.20922.1	Wake	10	SR-5513 / KRISTIWOOD CT	FROM SR 5514 TO CUL-DE-SAC	1	2	0.114	20	13		*															
2025CPT.05.07.20922.1	Wake	11	SR-5514 / TREVORWOOD DR	FROM SR 5516 TO DEAD END	1	2	0.268	20	31		*															
2025CPT.05.07.20922.1	Wake	12	SR-5515 / BANE BERRY CT	FROM SR 5514 TO CUL-DE-SAC	1	2	0.031	18	4		*															
2025CPT.05.07.20922.1	Wake	13	SR-5516 / SHANNA HILLS DR	FROM SR 5519 TO DEAD END	1	2	0.199	20	23		*															
2025CPT.05.07.20922.1	Wake	14	SR-5517 / HONEYMOON CT	FROM SR 5520 TO CUL-DE-SAC	1	2	0.094	20	11		*															
2025CPT.05.07.20922.1	Wake	15	SR-5518 / BRADLEYWOOD DR	FROM SR 5520 TO CUL-DE-SAC	1	2	0.094	20	11		*															
2025CPT.05.07.20922.1	Wake	16	SR-5520 / SARAHWOOD CT	FROM SR 5519 TO DEAD END	1	2	0.476	20	54		*															
TOTAL FOR PROJ NO. 2025CPT.05.07.20922.1							1.934		222		1.000															
GRAND TOTAL							9.993		1,126	60	1.000		83,051	106,229	696	1,167	395	100	925	4	34	8	6	7	70	990
												189,280			1,562					55						







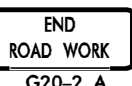
SIGNING FOR RESURFACING PROJECTS

LEGEND
 STATIONARY SIGN
 DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

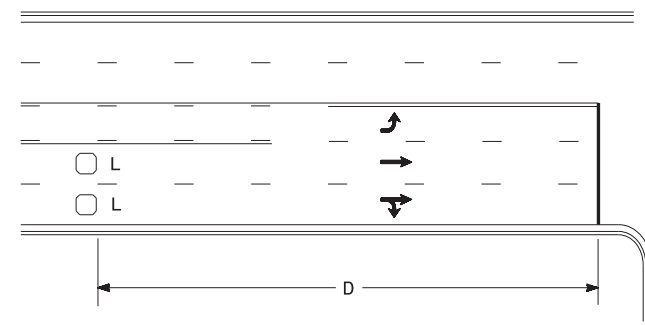
SIGNING NOTES AND PLACEMENT PER DIRECTION	 	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL 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 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>
		<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>		
<p>MAPS LESS THAN 2 MILES</p>	<p>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.</p>		



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

\$\$\$\$\$SYTIME\$\$\$\$\$
 \$\$\$\$\$\$DGN\$\$\$\$\$
 \$\$\$\$\$\$USERNAME\$\$\$\$\$

High Speed Detection (≥40 mph)

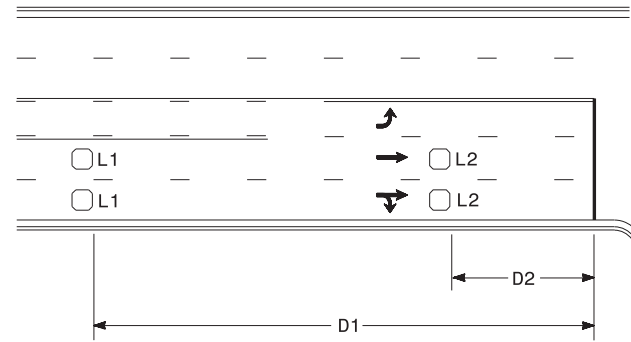


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired separately

Volume Density Operation

OR

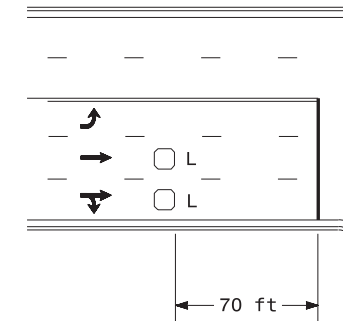


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

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

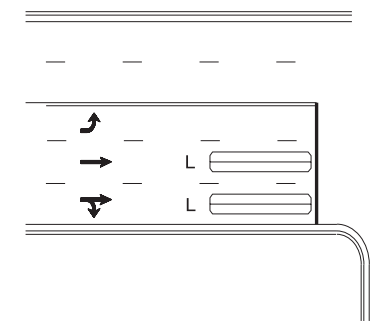
"Stretch" Operation

Low Speed Detection (≤35 mph)



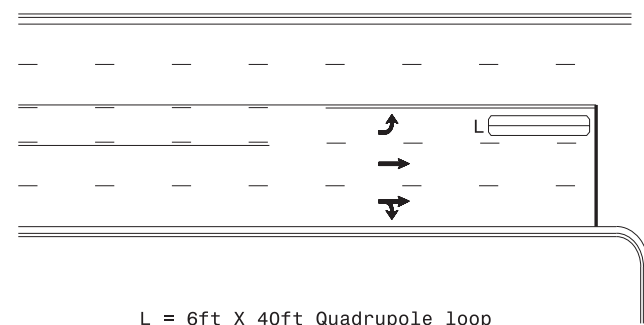
L = 6ft X 6ft
Wired in series

OR



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

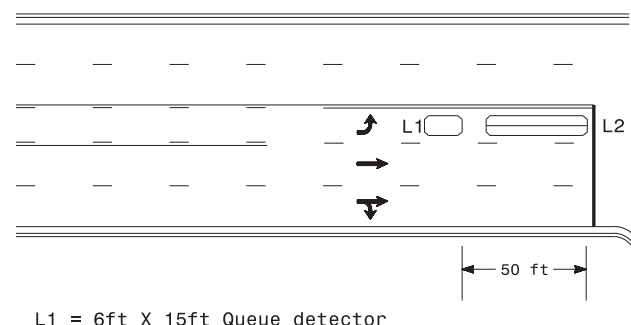
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

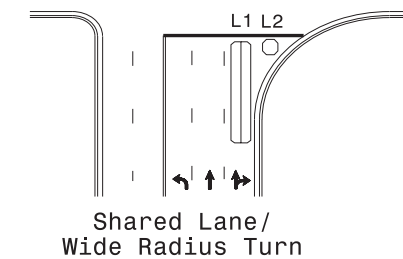
OR



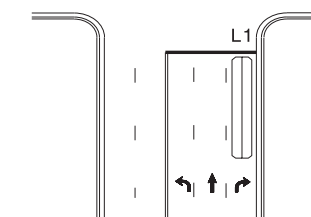
L1 = 6ft X 15ft Queue detector
L2 = 6ft X 40ft Quadrupole loop

Queue Loop Detection

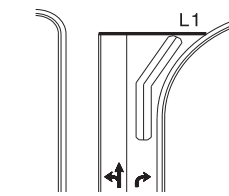
Right Turn Lane Detection



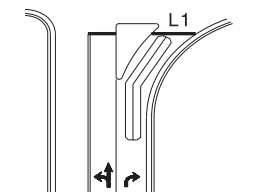
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

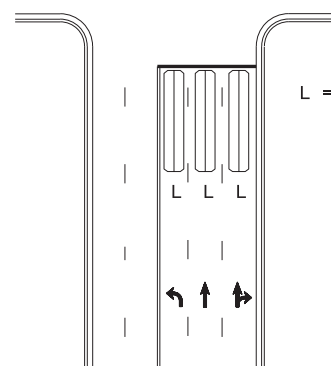


Wide Radius Turn



Channelized Turn

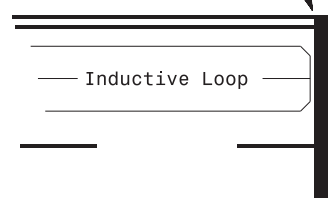
Side Street Detection



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
STATE OF TRANSPORTATION
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:
REVISIONS	INIT. DATE

SCALE
N/A

DATE
9/8/2020

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**

SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES.