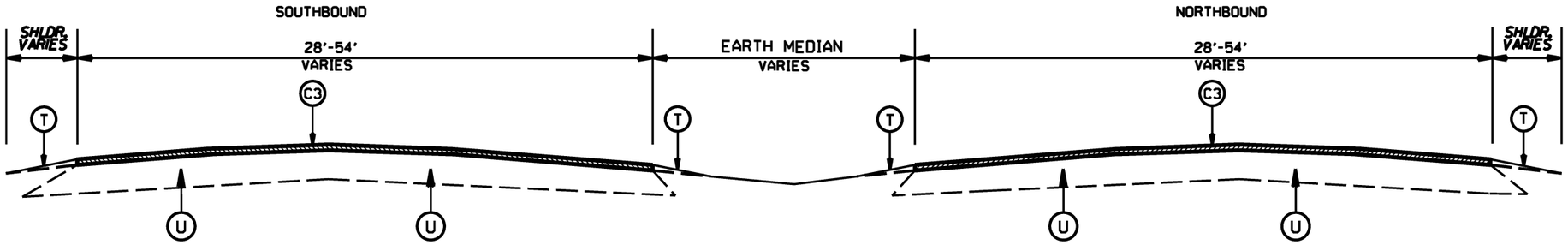
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.J0.06.J060I 2024CPT.J0.06.2060I		

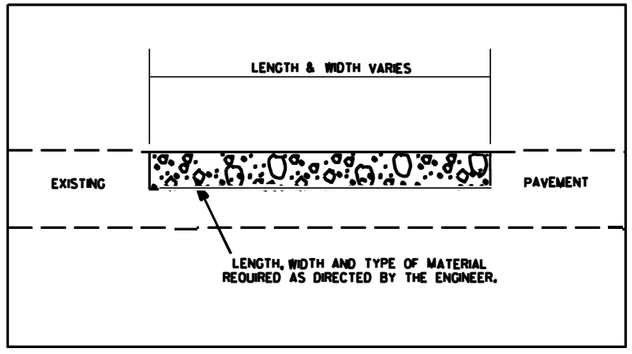
BROOKSHIRE BLVD



TYPICAL SECTION NO. 1

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
N	NONWOVEN GEOTEXTILE PAVEMENT INTERLAYER
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING 1.5" DEPTH
V2	MILLING 2.0" DEPTH
V3	PROFILE MILLING 0" TO 1.5"
V4	INCIDENTAL MILLING

PATCHING DETAIL



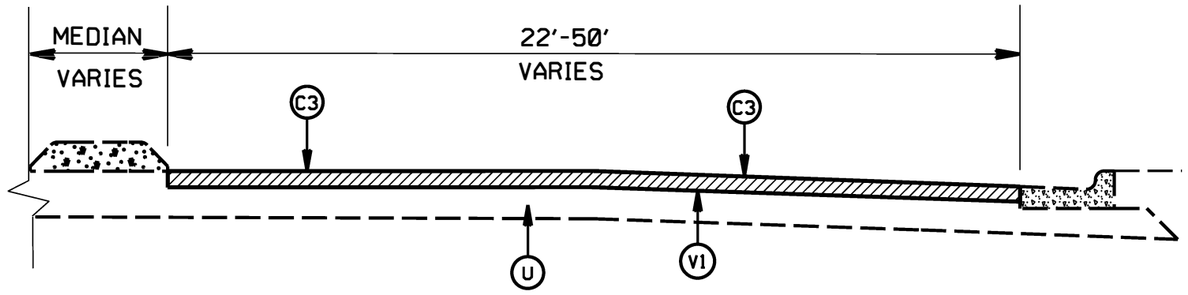
2024 MECKLENBURG COUNTY RESURFACING CONTRACT 2

		REVISIONS	
SCALE	-NA-		
DATE			
DWG. BY	JHE		
DESIGN BY			
APPROVED			

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		

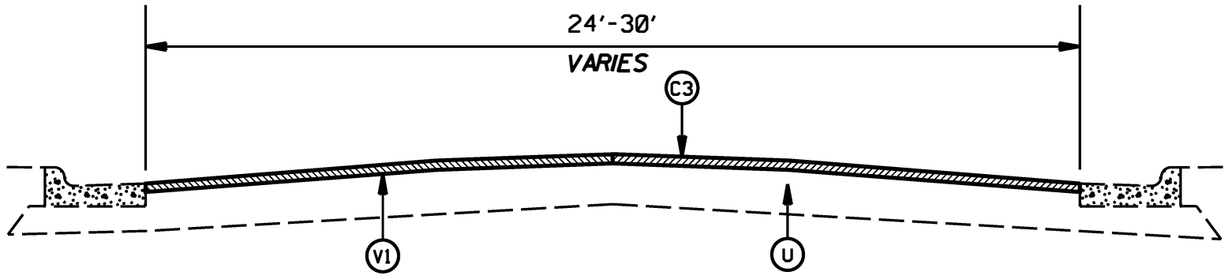
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
N	NONWOVEN GEOTEXTILE PAVEMENT INTERLAYER
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING 1.5" DEPTH
V2	MILLING 2.0" DEPTH
V3	PROFILE MILLING 0" TO 1.5"
V4	INCIDENTAL MILLING

N. GRAHAM ST/DALTON AVE



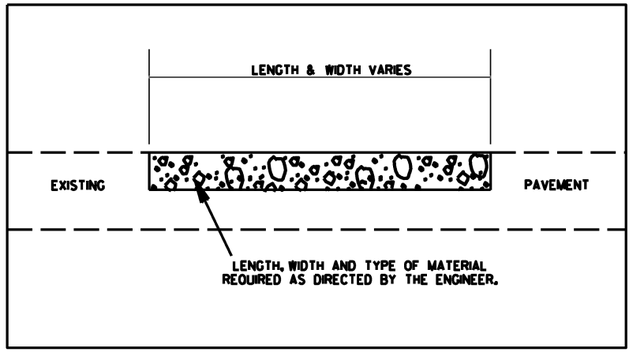
TYPICAL SECTION NO. 2

N. GRAHAM ST/DALTON AVE



TYPICAL SECTION NO. 3

PATCHING DETAIL



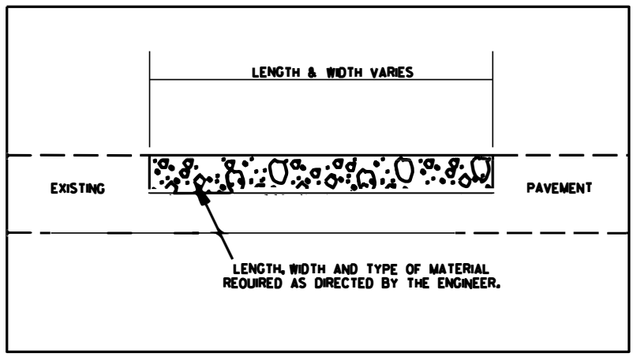
2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

		REVISIONS	
SCALE	-NA-		
DATE			
DWG. BY	JHE		
DESIGN BY			
APPROVED			

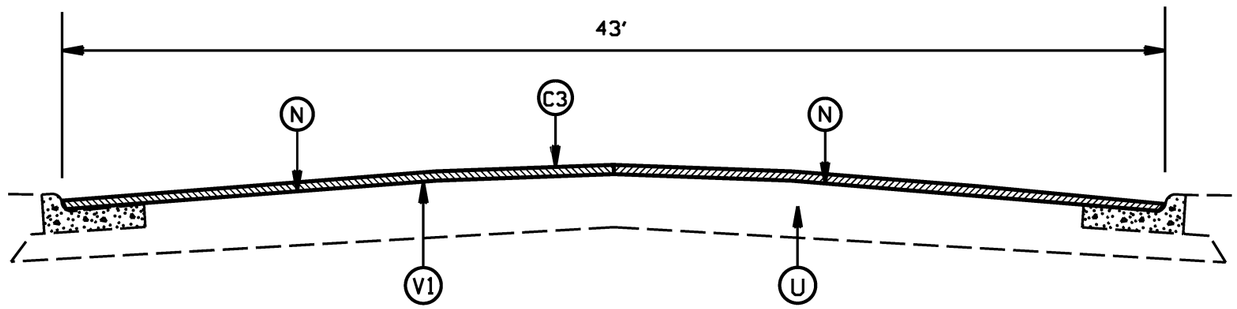
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
N	NONWOVEN GEOTEXTILE PAVEMENT INTERLAYER
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING 1.5" DEPTH
V2	MILLING 2.0" DEPTH
V3	PROFILE MILLING 0" TO 1.5"
V4	INCIDENTAL MILLING

PATCHING DETAIL

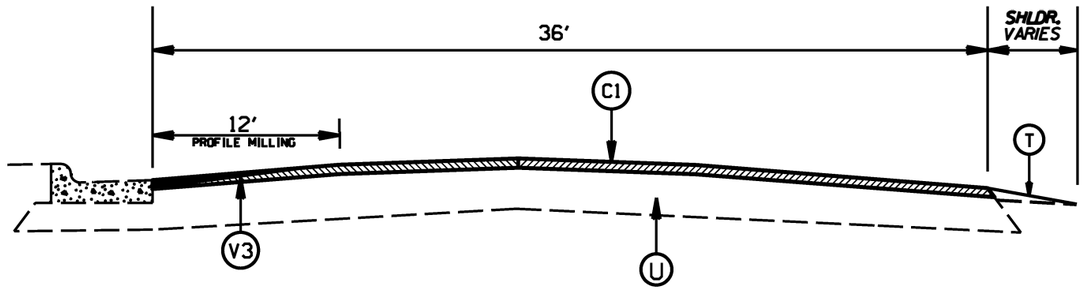


DALTON AVE



TYPICAL SECTION NO. 4

HAMILTON ROAD



TYPICAL SECTION NO. 5

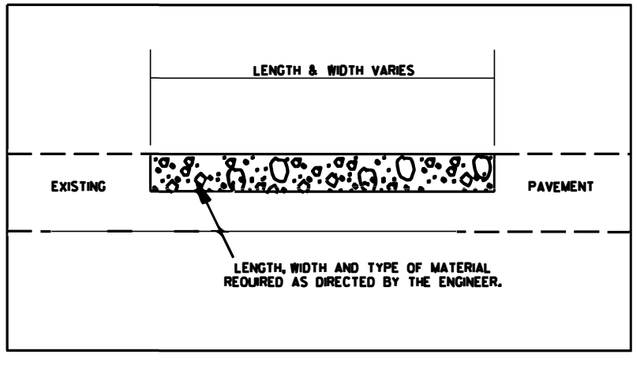
2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

		REVISIONS	
SCALE	-NA-		
DATE			
DWG. BY	JHE		
DESIGN BY			
APPROVED			

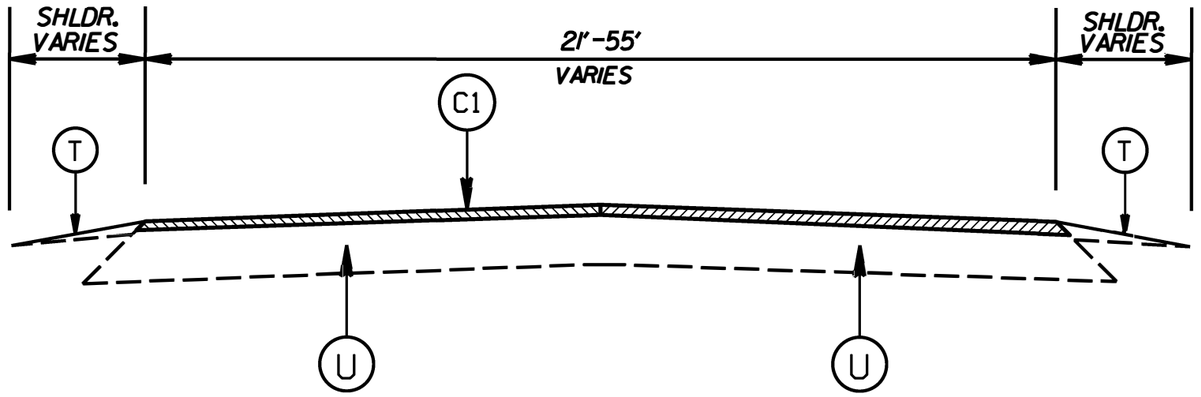
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
N	NONWOVEN GEOTEXTILE PAVEMENT INTERLAYER
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING 1.5" DEPTH
V2	MILLING 2.0" DEPTH
V3	PROFILE MILLING 0" TO 1.5"
V4	INCIDENTAL MILLING

PATCHING DETAIL

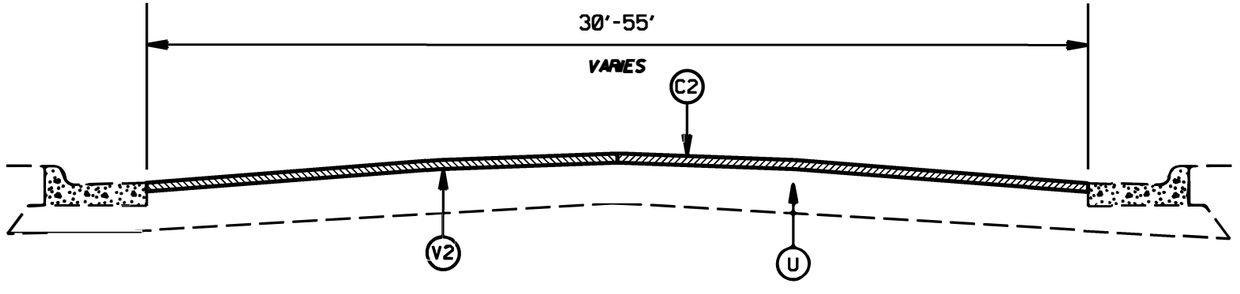


HAMILTON ROAD



TYPICAL SECTION NO. 6

TRAILER DRIVE



TYPICAL SECTION NO. 7

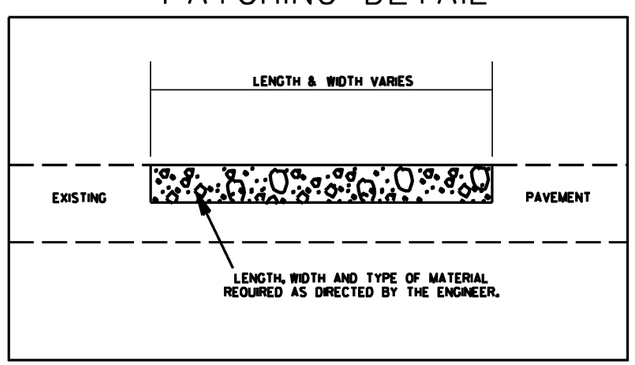
2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

		REVISIONS	
SCALE	-NA-		
DATE			
DWG. BY	JHE		
DESIGN BY	JHE		
APPROVED			

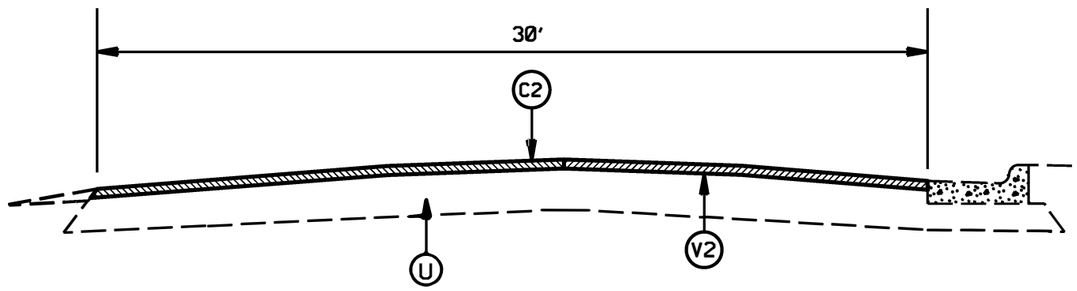
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
N	NONWOVEN GEOTEXTILE PAVEMENT INTERLAYER
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING 1.5" DEPTH
V2	MILLING 2.0" DEPTH
V3	PROFILE MILLING 0" TO 1.5"
V4	INCIDENTAL MILLING

PATCHING DETAIL

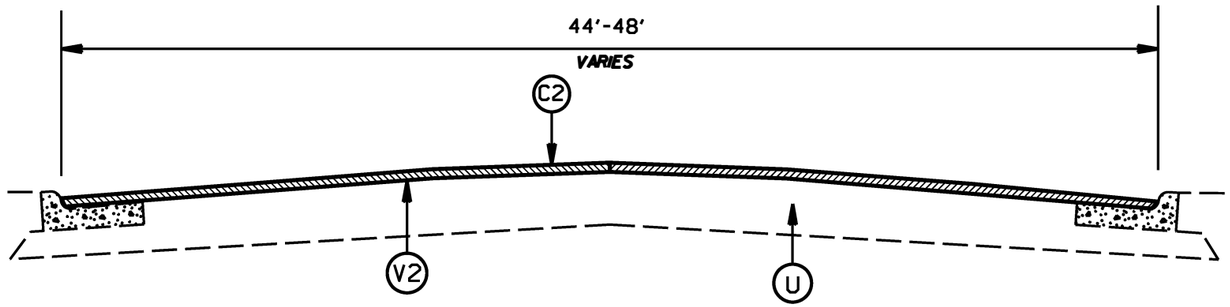


TRAILER DRIVE



TYPICAL SECTION NO. 8

TRAILER DRIVE



TYPICAL SECTION NO. 9

2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

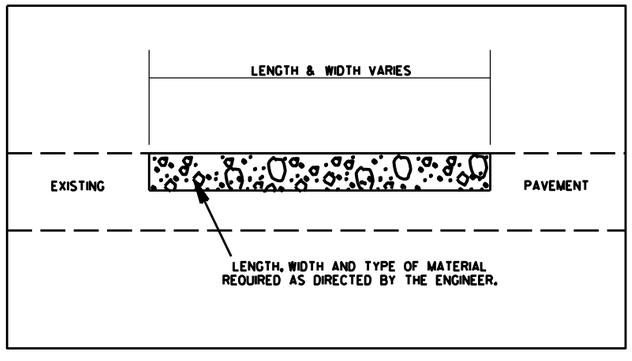
		REVISIONS	
SCALE	-NA-		
DATE			
DWG. BY	JHE		
DESIGN BY	JHE		
APPROVED			

DIVISION OF HIGHWAYS
DISTRICT 2

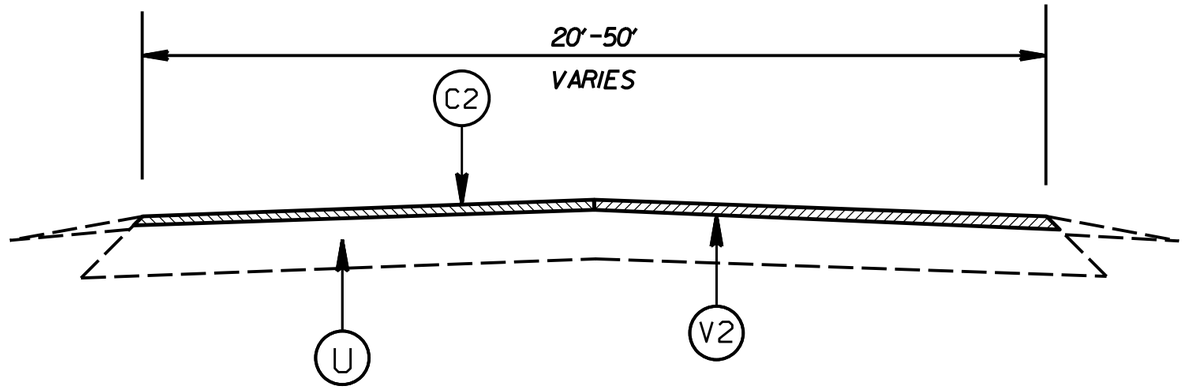
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
N	NONWOVEN GEOTEXTILE PAVEMENT INTERLAYER
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING 1.5" DEPTH
V2	MILLING 2.0" DEPTH
V3	PROFILE MILLING 0" TO 1.5"
V4	INCIDENTAL MILLING

PATCHING DETAIL

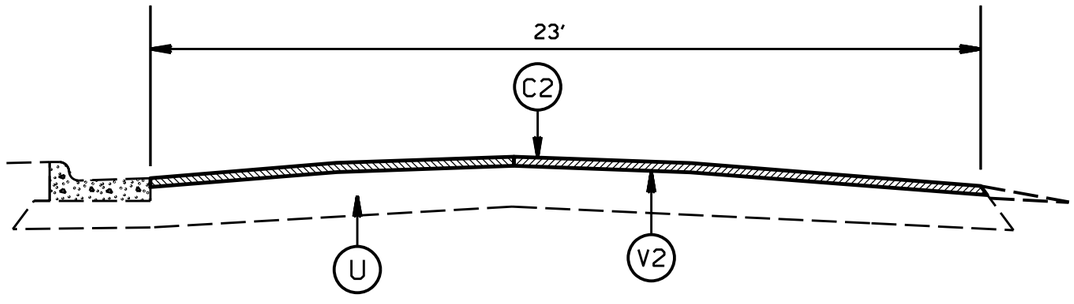


ROTARY DRIVE



TYPICAL SECTION NO. 10

ROTARY DRIVE



TYPICAL SECTION NO. 11

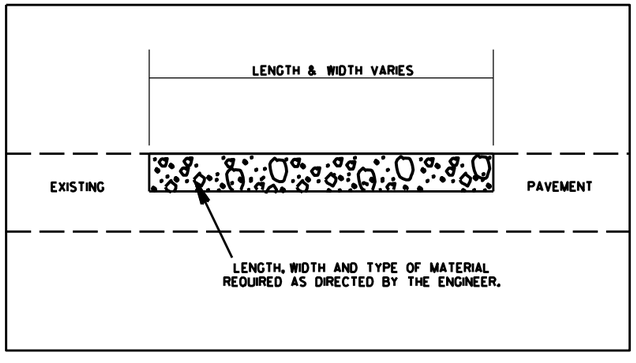
2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

		REVISIONS	
SCALE	-NA-		
DATE			
DWG. BY	JHE		
DESIGN BY			
APPROVED			

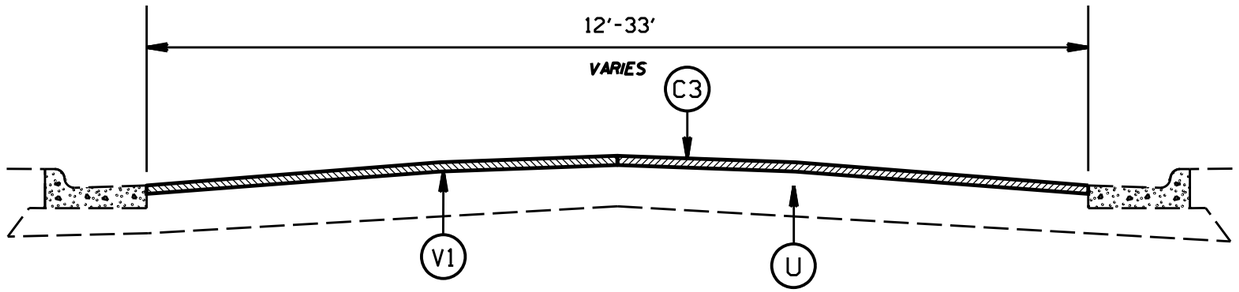
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
N	NONWOVEN GEOTEXTILE PAVEMENT INTERLAYER
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING 1.5" DEPTH
V2	MILLING 2.0" DEPTH
V3	PROFILE MILLING 0" TO 1.5"
V4	INCIDENTAL MILLING

PATCHING DETAIL

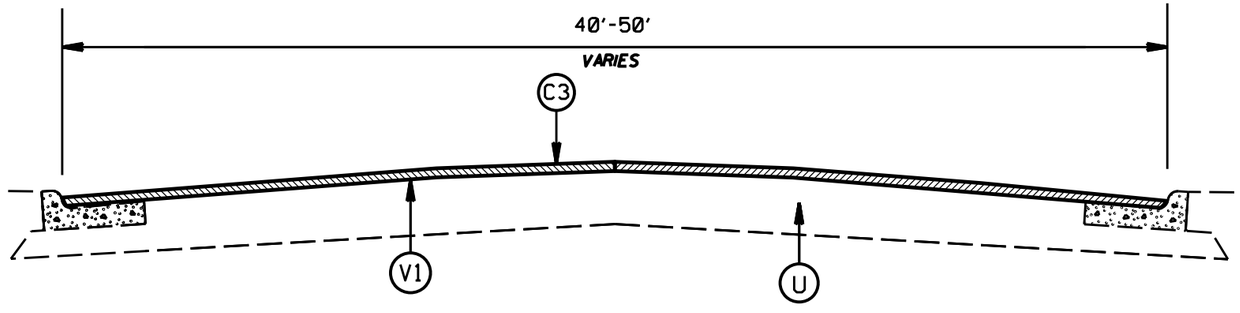


DALTON AVE



TYPICAL SECTION NO. 12

GRAHAM STREET



TYPICAL SECTION NO.13

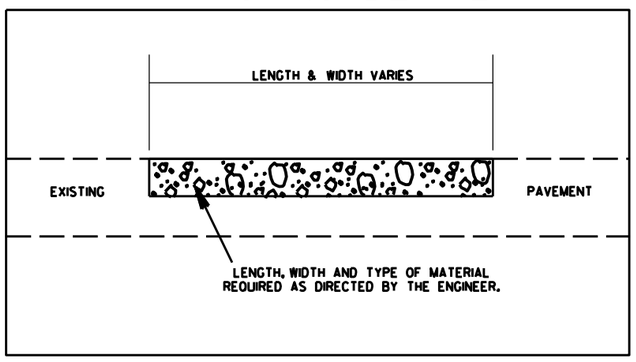
2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

		REVISIONS	
SCALE	-NA-		
DATE			
DWG. BY	JHE		
DESIGN BY			
APPROVED			

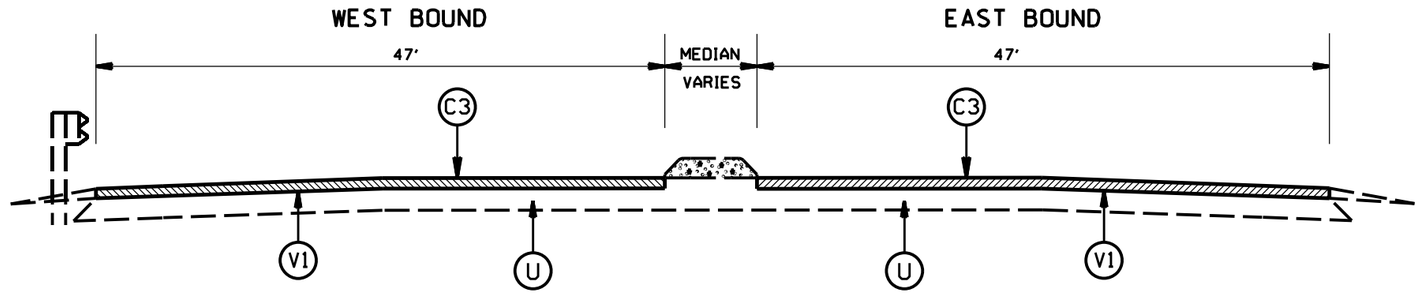
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
N	NONWOVEN GEOTEXTILE PAVEMENT INTERLAYER
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING 1.5" DEPTH
V2	MILLING 2.0" DEPTH
V3	PROFILE MILLING 0" TO 1.5"
V4	INCIDENTAL MILLING

PATCHING DETAIL

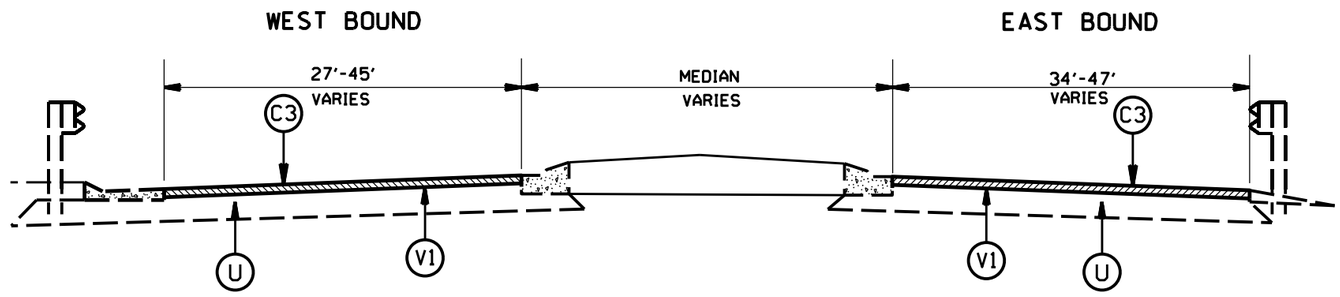


UNIVERSITY CITY BLVD



TYPICAL SECTION NO. 14

UNIVERSITY CITY BLVD



TYPICAL SECTION NO. 15

2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

		REVISIONS	
SCALE	-NA-		
DATE			
DWG. BY	JHE		
DESIGN BY			
APPROVED			

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		

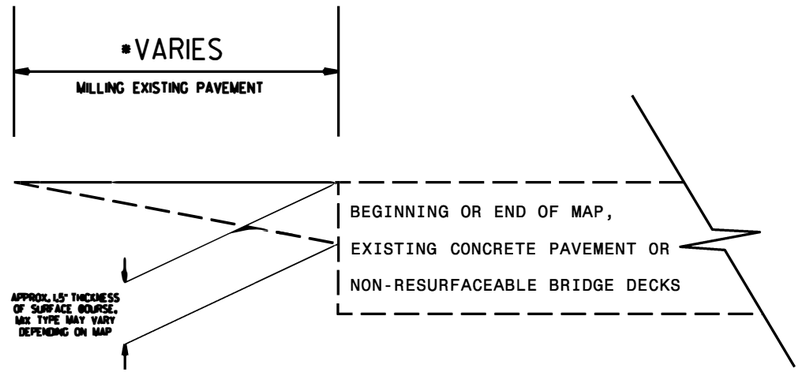
INCIDENTAL MILLING

NOTE:

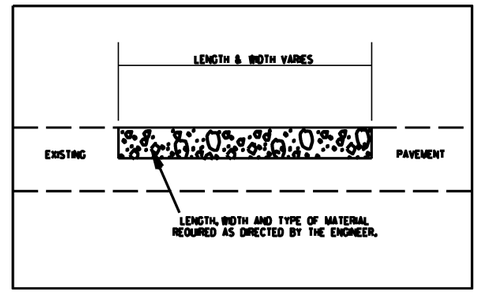
FOR SURFACE MIXES OVER 1" IN THICKNESS, MILL THE EXISTING PAVEMENT IN ACCORDANCE WITH THE FOLLOWING SKETCH AS DIRECTED BY THE ENGINEER.

LOCATIONS SHALL INCLUDE TIES INTO EXISTING CONCRETE PAVEMENT AT BRIDGE APPROACHES WHERE THE BRIDGE WILL NOT BE RESURFACED, AND AT THE BEGINNING AND END POINT OF EACH RESURFACING MAP.

PERFORM THE WORK IN ACCORDANCE WITH SECTION 607 OF THE JANUARY 2018 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. RESURFACING WILL BE ACCOMPLISHED AT THE SAME TIME AS THE MILLING OPERATION.



PATCHING DETAIL



2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

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SCALE	-NA-		
DATE			
DWG. BY	JHE		
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APPROVED			

DIVISION OF HIGHWAYS
DISTRICT 2

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
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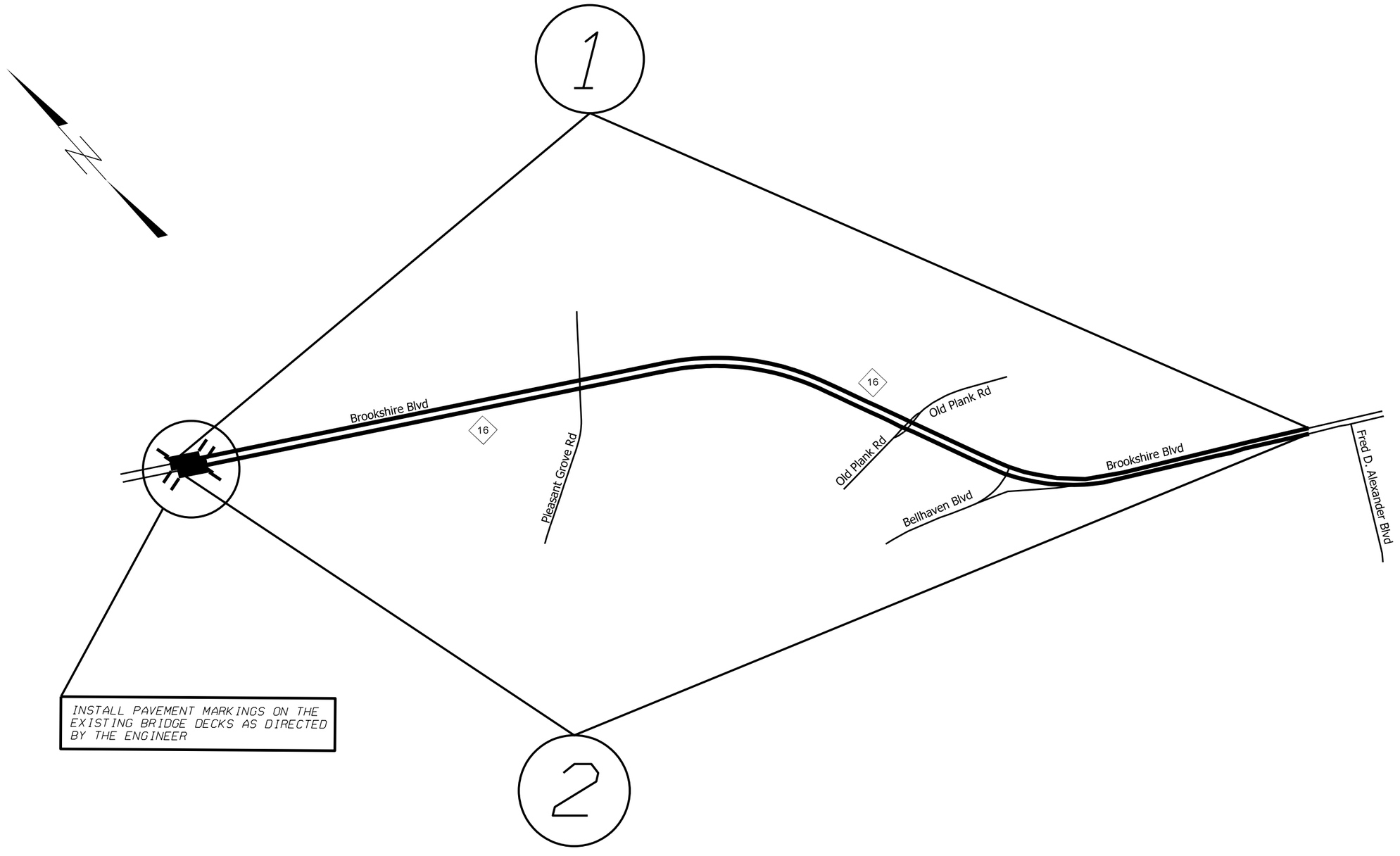
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		

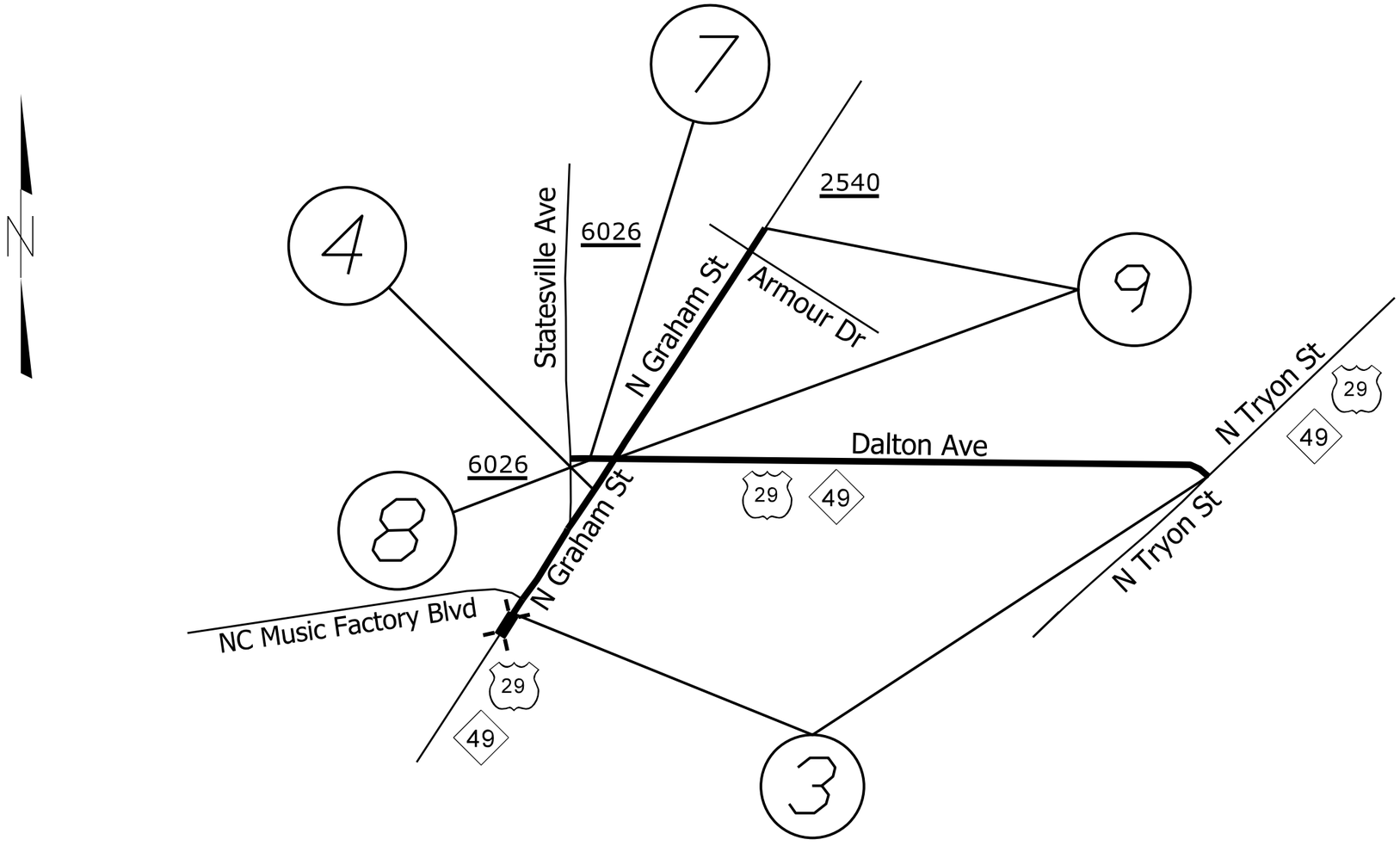


MAP	DESCRIPTION
#1 NB NC 16 BROOKSHIRE BLVD	FROM PVT. JOINT BEYOND FRED D. ALEXANDER BLVD TO BRIDGE OVER LONG CREEK
#2 SB NC 16 BROOKSHIRE BLVD	FROM BRIDGE OVER LONG CREEK TO PVT. JOINT PRIOR TO FRED D. ALEXANDER BLVD

2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

		REVISIONS	
SCALE	-NA-		
DATE	9/23		
DWG. BY	JHE		
DESIGN BY	JHE		
APPROVED			

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		



MAP	DESCRIPTION
#3 US 29 N. GRAHAM ST/DALTON AVE	FROM BRIDGE DECK AT NC MUSIC FACTORY BLVD TO N TRYON ST
#4 US 29 DALTON AVE/N. GRAHAM ST	FROM BEGIN DIVIDE TO END DIVIDE AT NC MUSIC FACTORY BLVD
#7 SR 6026 DALTON AVE	FROM N GRAHAM ST TO STATESVILLE AVE
#8 SR 6026 DALTON AVE	FROM STATESVILLE AVE TO N. GRAHAM ST
#9 SR 2540 GRAHAM ST	FROM 0.03 MILE PRIOR TO ARMOUR DR TO DALTON AVE

2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

		REVISIONS	
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DATE	9/23		
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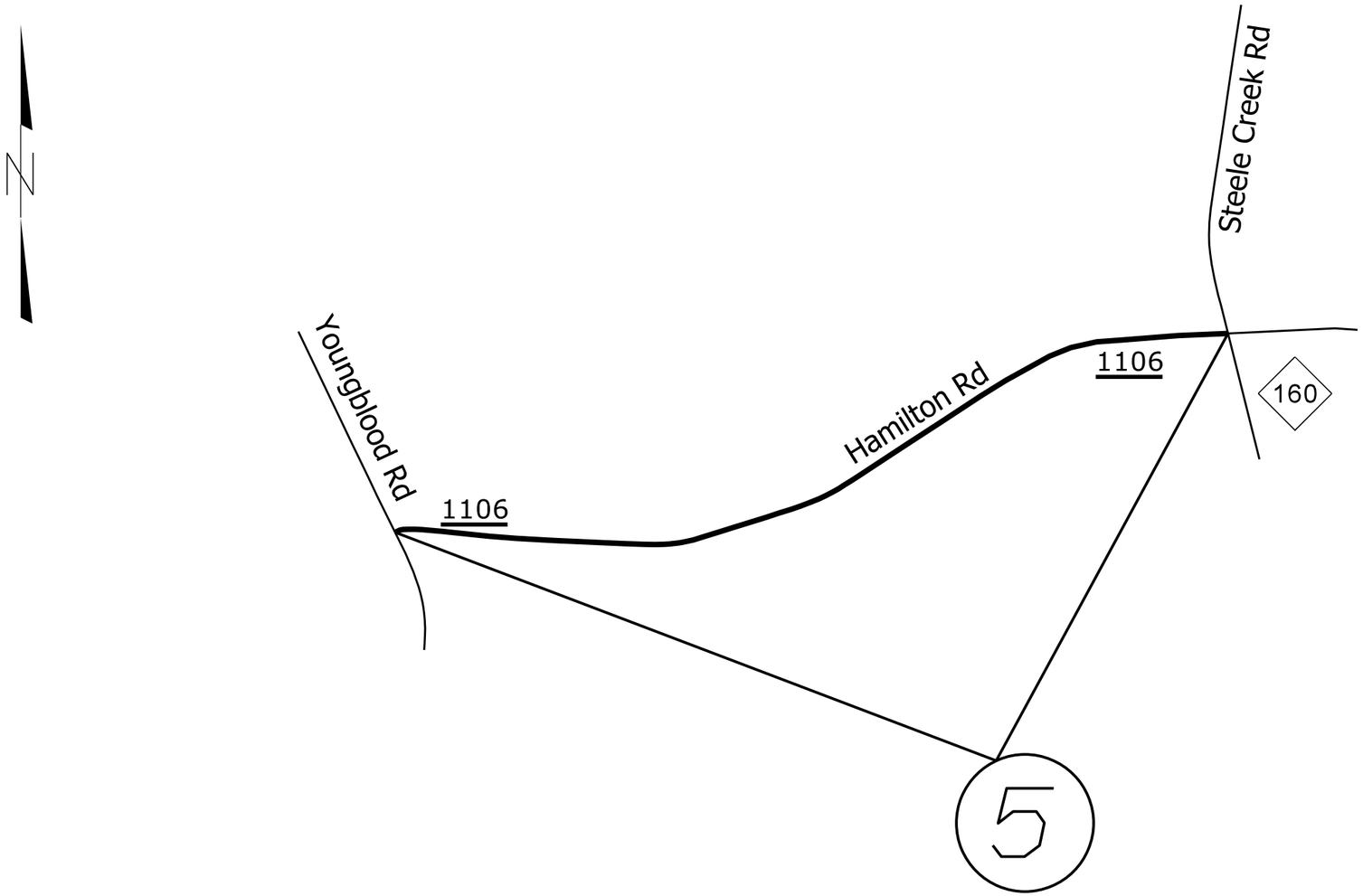
DESIGN BY	JHE		
APPROVED			

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		



MAP

#5 SR 1106 HAMILTON ROAD

DESCRIPTION

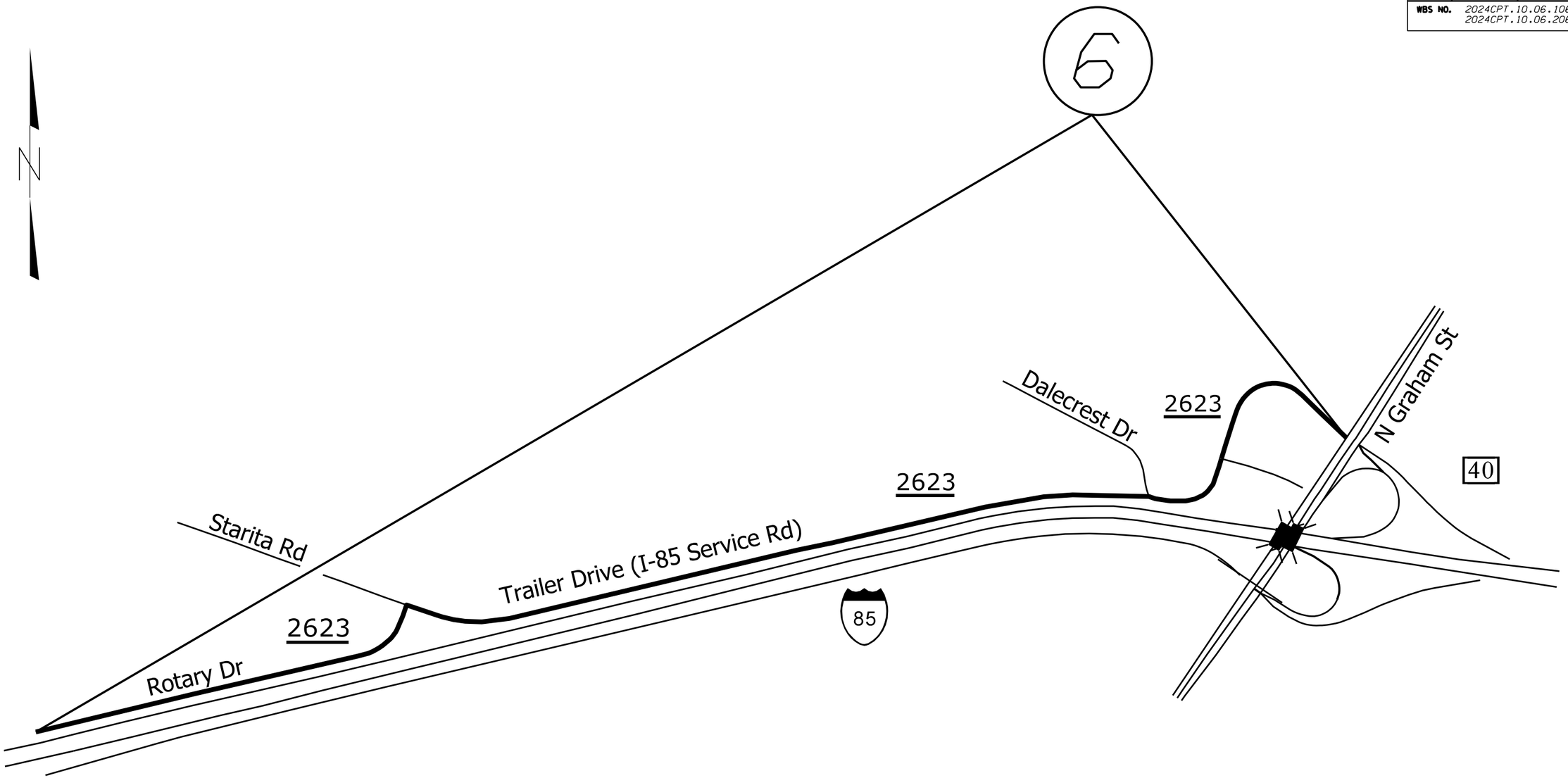
FROM YOUNGBLOOD RD TO STEELE CREEK RD

2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

SCALE	-NA-
DATE	9/23
DWG. BY	JHE
DESIGN BY	JHE
APPROVED	

REVISIONS	

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		



MAP

#6 SR 2623 TRAILER DR/ROTARY DR

DESCRIPTION

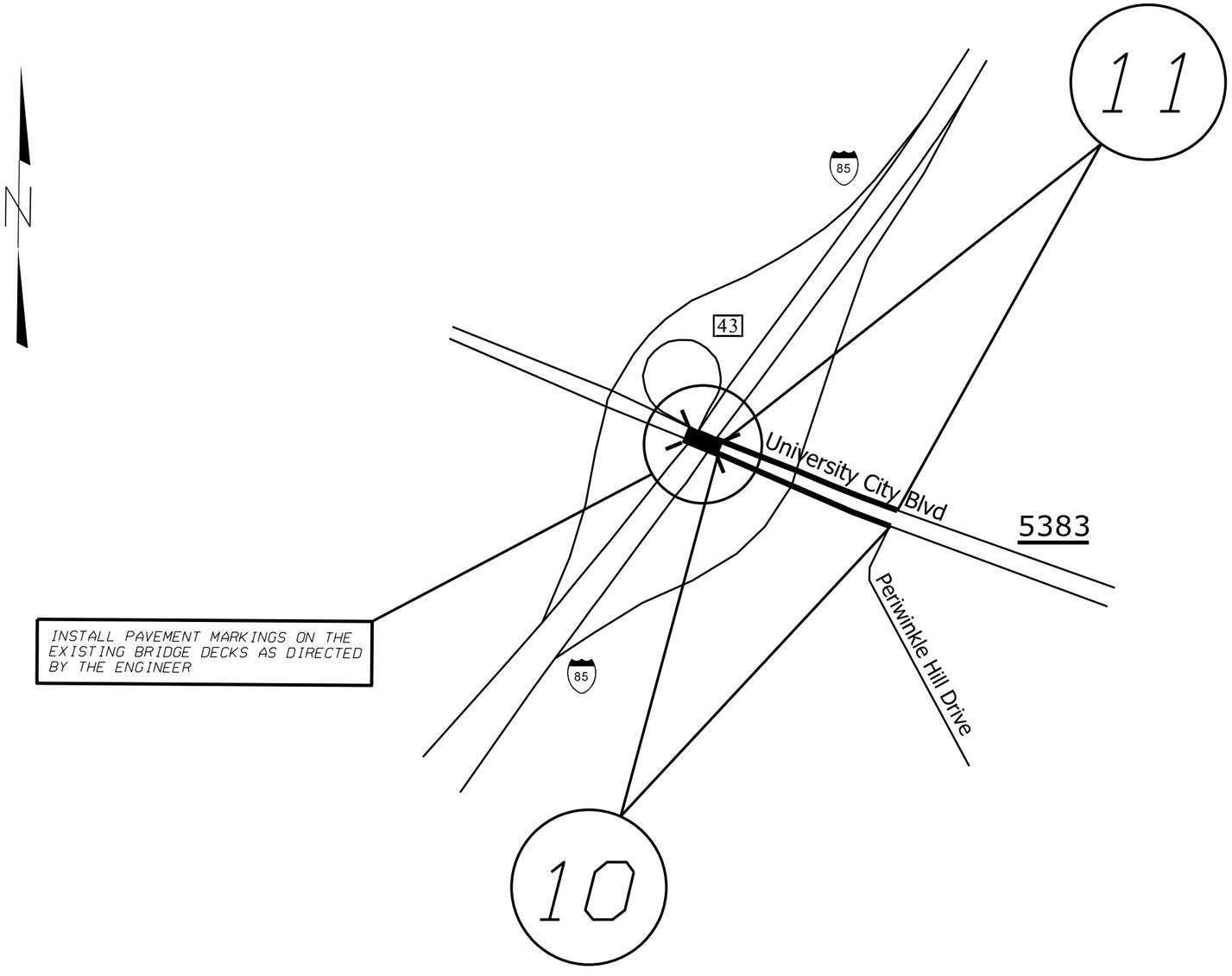
FROM N GRAHAM ST TO END OF MAINTENANCE

2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

SCALE	-NA-
DATE	9/23
DWG. BY	JHE
DESIGN BY	JHE
APPROVED	

REVISIONS

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.			
WBS NO.	2024CPT.10.06.10601 2024CPT.10.06.20601		



INSTALL PAVEMENT MARKINGS ON THE EXISTING BRIDGE DECKS AS DIRECTED BY THE ENGINEER

MAP		DESCRIPTION
#10	SR 5383 EB UNIVERSITY CITY BLVD	FROM I-85 BRIDGE TO PERIWINKLE HILL AVE
#11	SR 5383 WB UNIVERSITY CITY BLVD	FROM PERIWINKLE HILL AVE TO I-85 BRIDGE

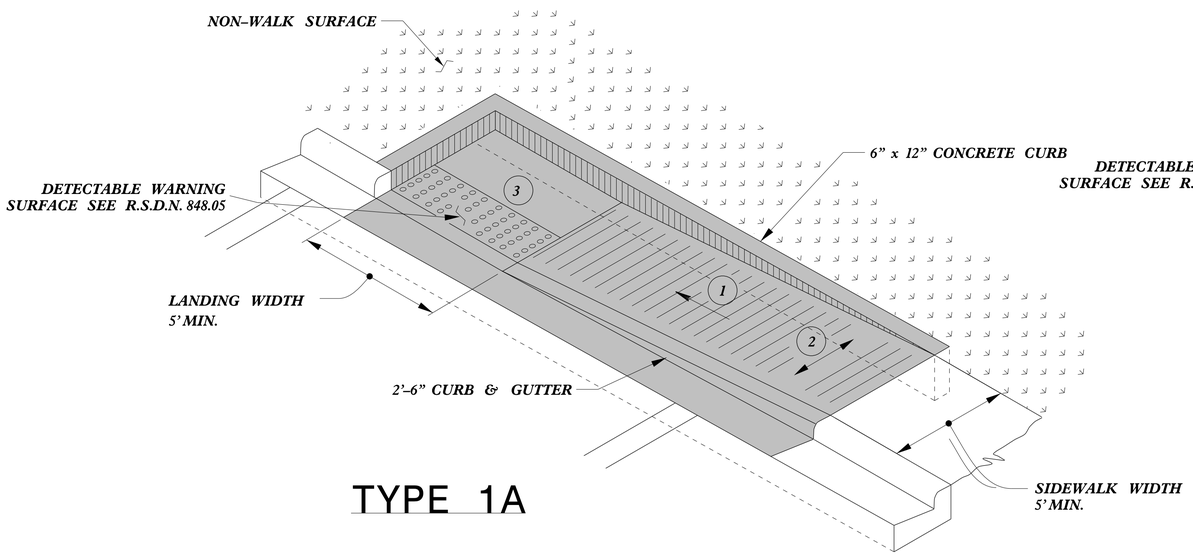
2024 MECKLENBURG COUNTY
RESURFACING CONTRACT 2

SCALE	-NA-
DATE	
DWG. BY	JHE
DESIGN BY	
APPROVED	

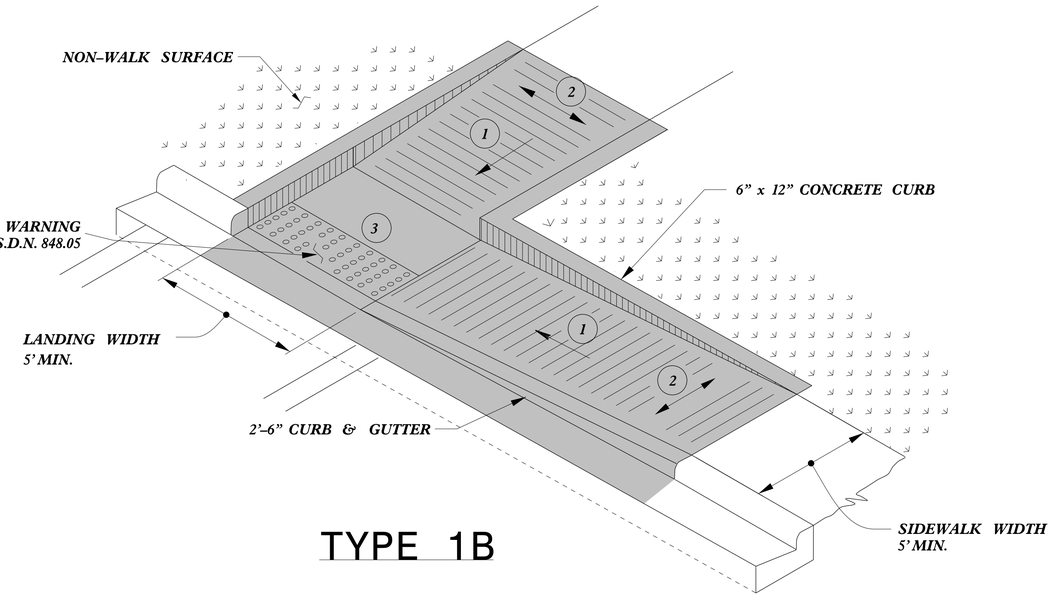
REVISIONS	

5/14/99

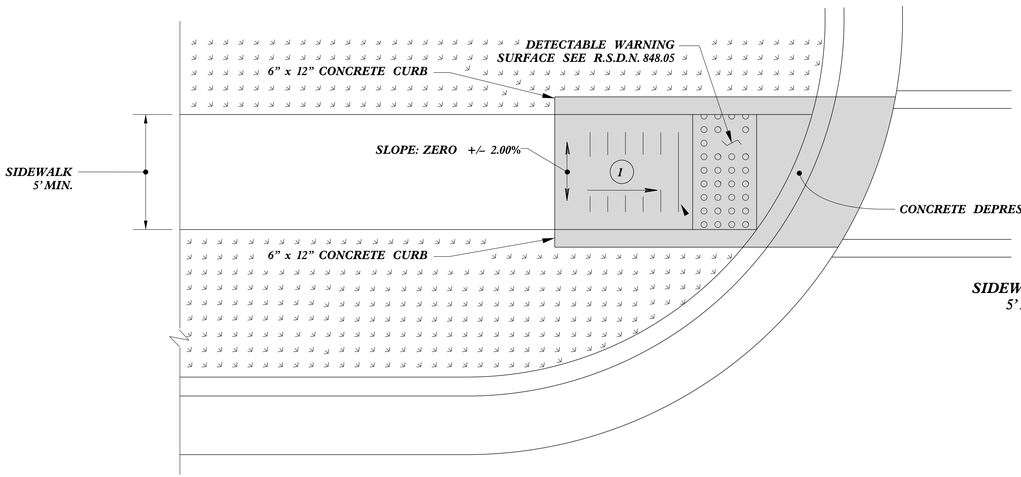
PROJECT REFERENCE NO.	SHEET NO.



TYPE 1A



TYPE 1B



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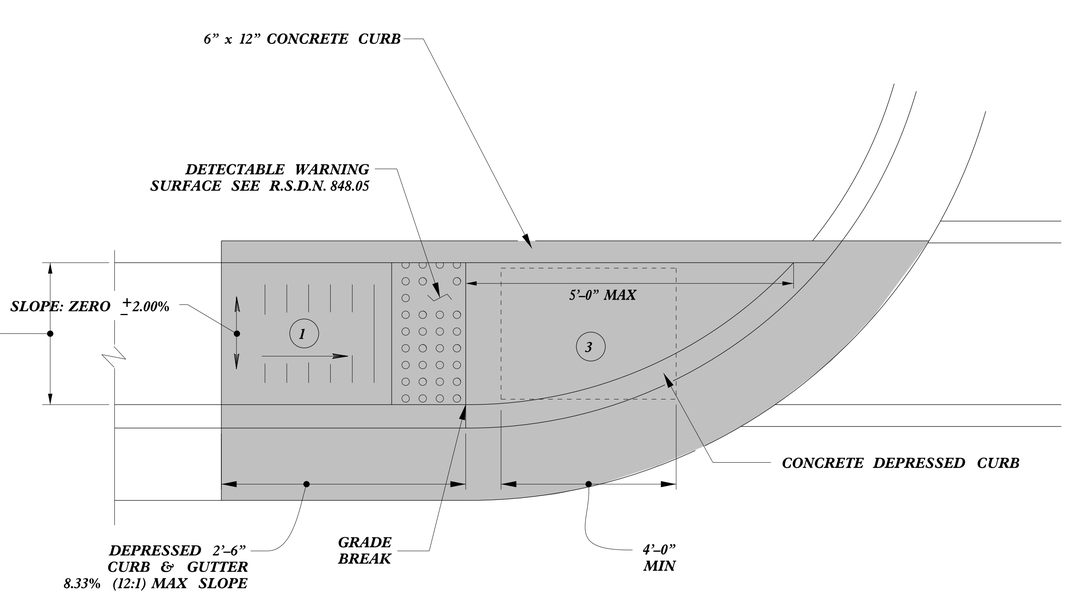


TYPE 1

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

PAY LIMITS FOR 1 CURB RAMP

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

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER
Joel S. Howerton
B73F3D17DCDC45F...
10/30/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

CURB RAMPS

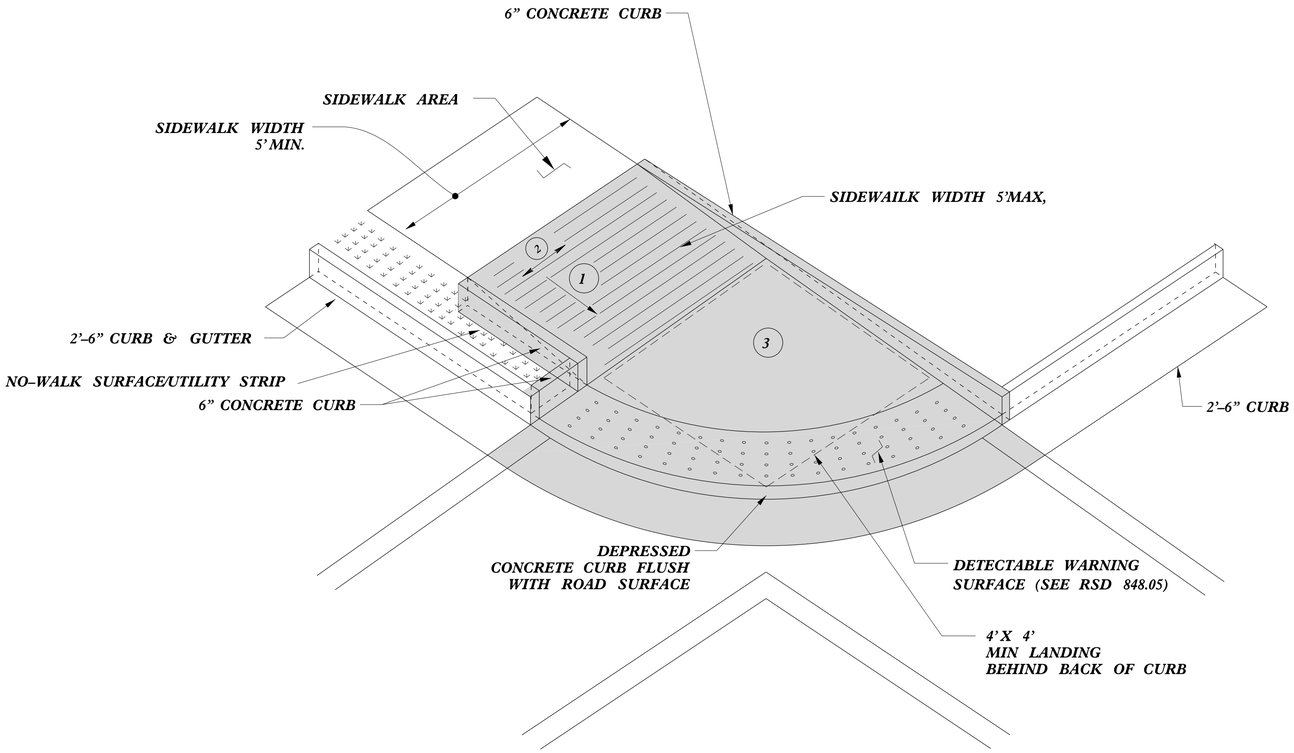
Directional Ramps

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC.: stds/2012CurbRamp/CurbRampDetails.dgn

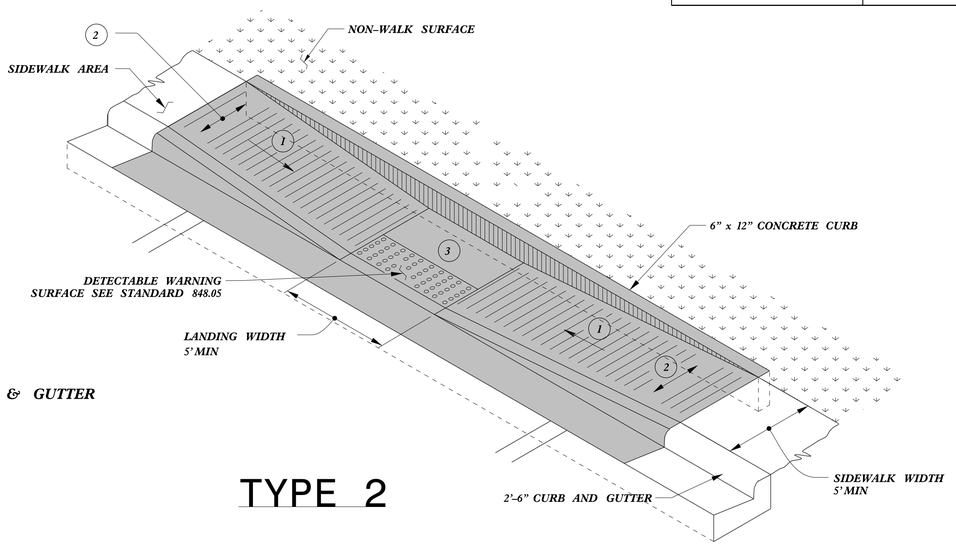
$$$$USERNAME$$$$
$$$$DESIGN$$$$
$$$$TIME$$$$
$$$$SYSTEM$$$$

5/14/99

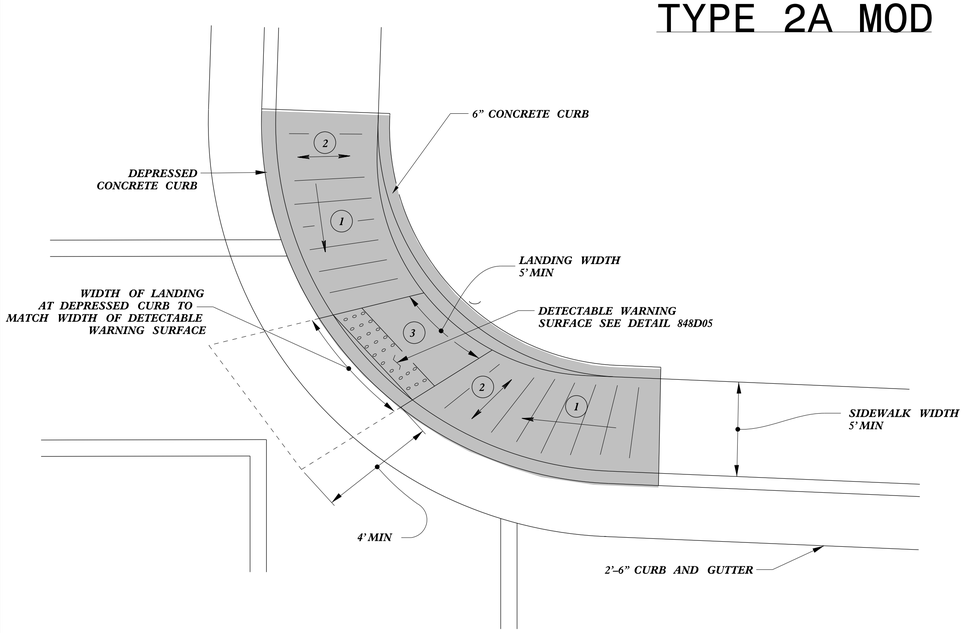
PROJECT REFERENCE NO.	SHEET NO.



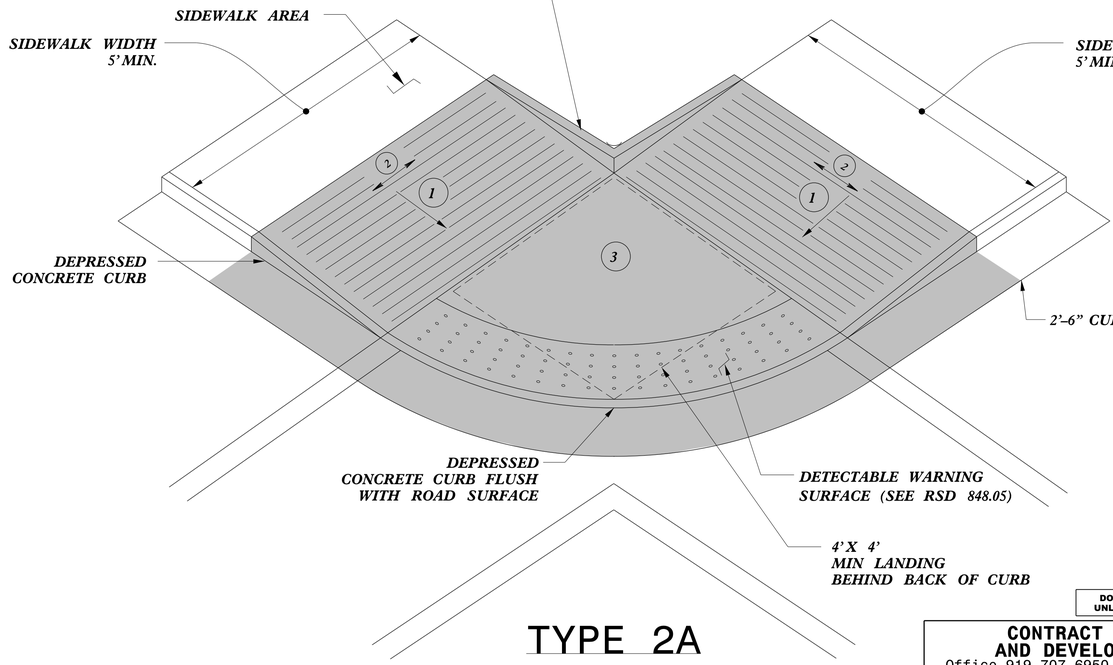
TYPE 2A MOD



TYPE 2



TYPE 2B



TYPE 2A

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

PAY LIMITS FOR 1 CURB RAMP

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER Joel Stephen Howerton
Joel S. Howerton
873F3D170CDC46F...
10/30/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

CURB RAMPS

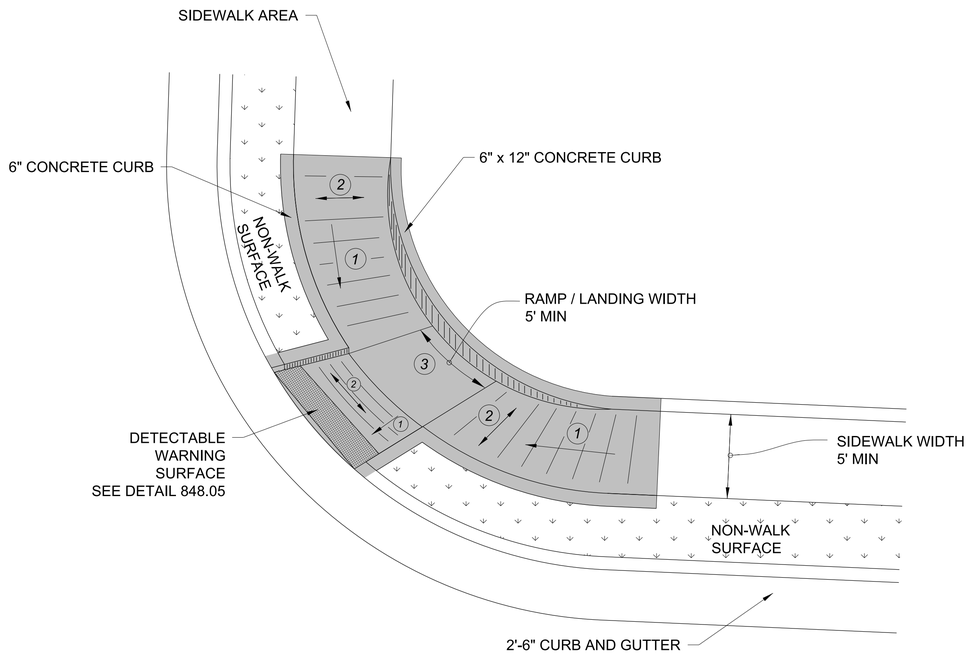
ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.: stds/2012CurbRamp/CurbRampDetails.dgn

$$$$USERNAME$$$$ $$$$TIME$$$$ $$$$DGNS$$$$

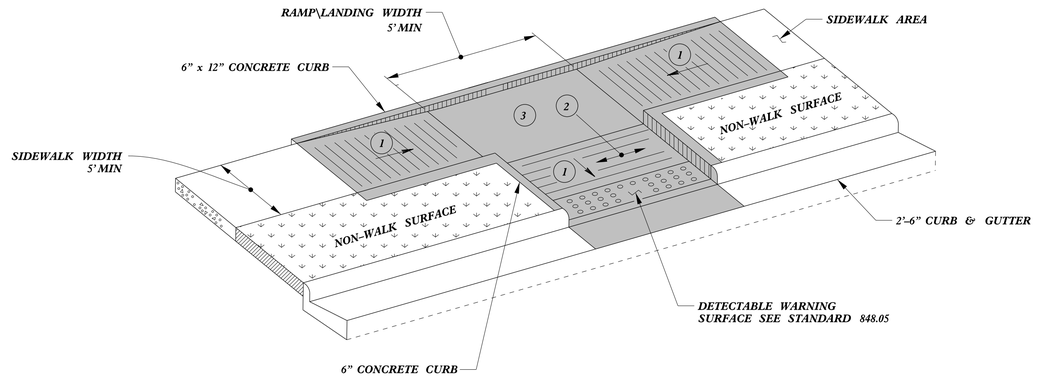
5/14/99

PROJECT REFERENCE NO.	SHEET NO.

PAY LIMITS FOR 1 CURB RAMP



TYPE 3 MODIFIED
INSTALLATION IN A RADIUS



TYPE 3

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

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER Joel S. Howerton
Joel S. Howerton
87F9D1TDCDC45F
10/30/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

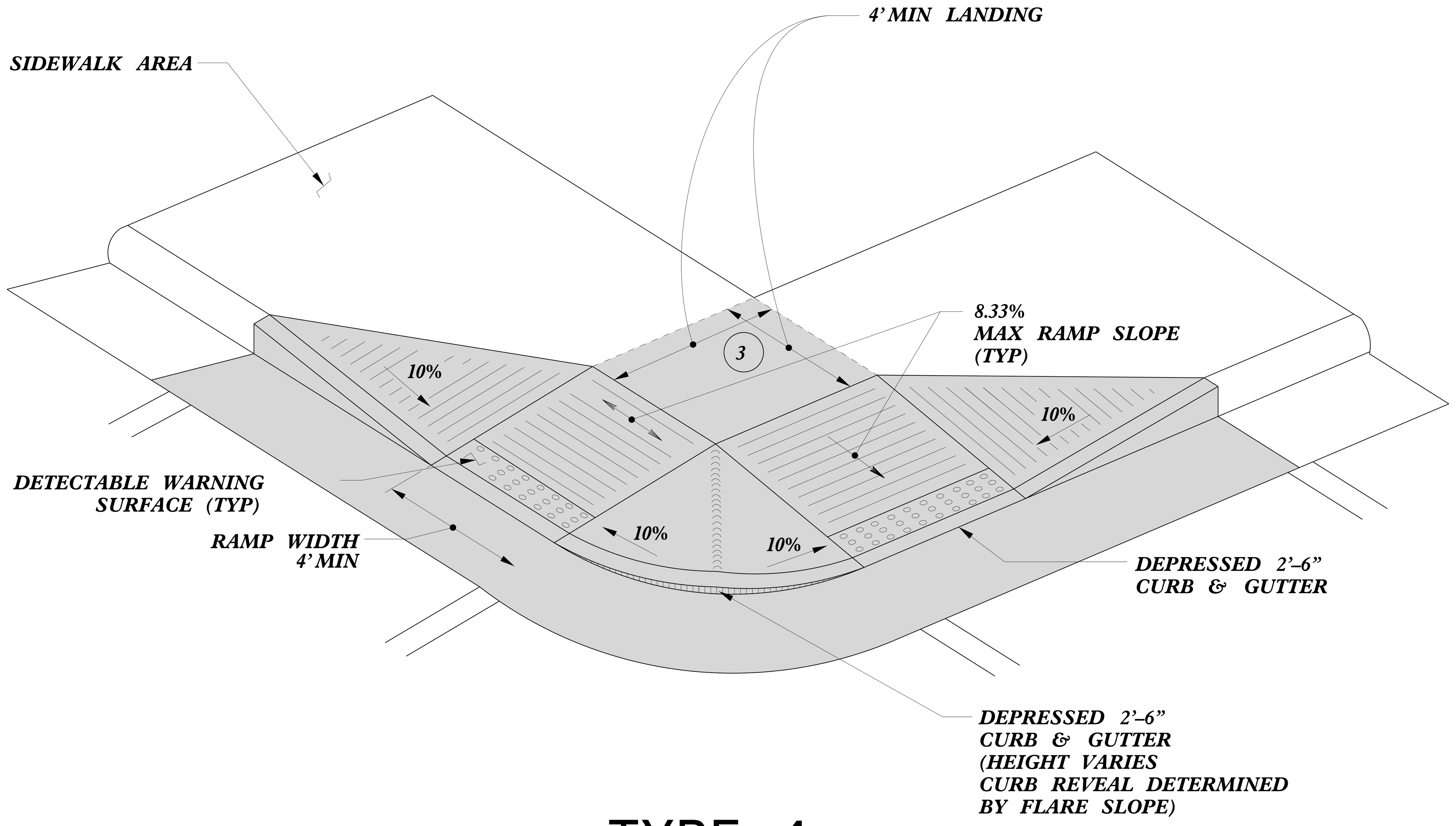
CURB RAMPS

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC.: stds/2012CurbRamp/CurbRampDetails.dgn

$$$$SYSTIME$$$$
$$$$USERNAME$$$$
$$$$DGNFILE$$$$
$$$$MODEL$$$$
$$$$LAYOUT$$$$
$$$$SCALE$$$$
$$$$PLOTSCALE$$$$
$$$$PLOTDATE$$$$

PROJECT REFERENCE NO.	SHEET NO.

PAY LIMITS FOR 1 OR 2 CURB RAMPS (CALCULATE BASED ON NUMBER OF SETS OF TRUNCATED DOMES)



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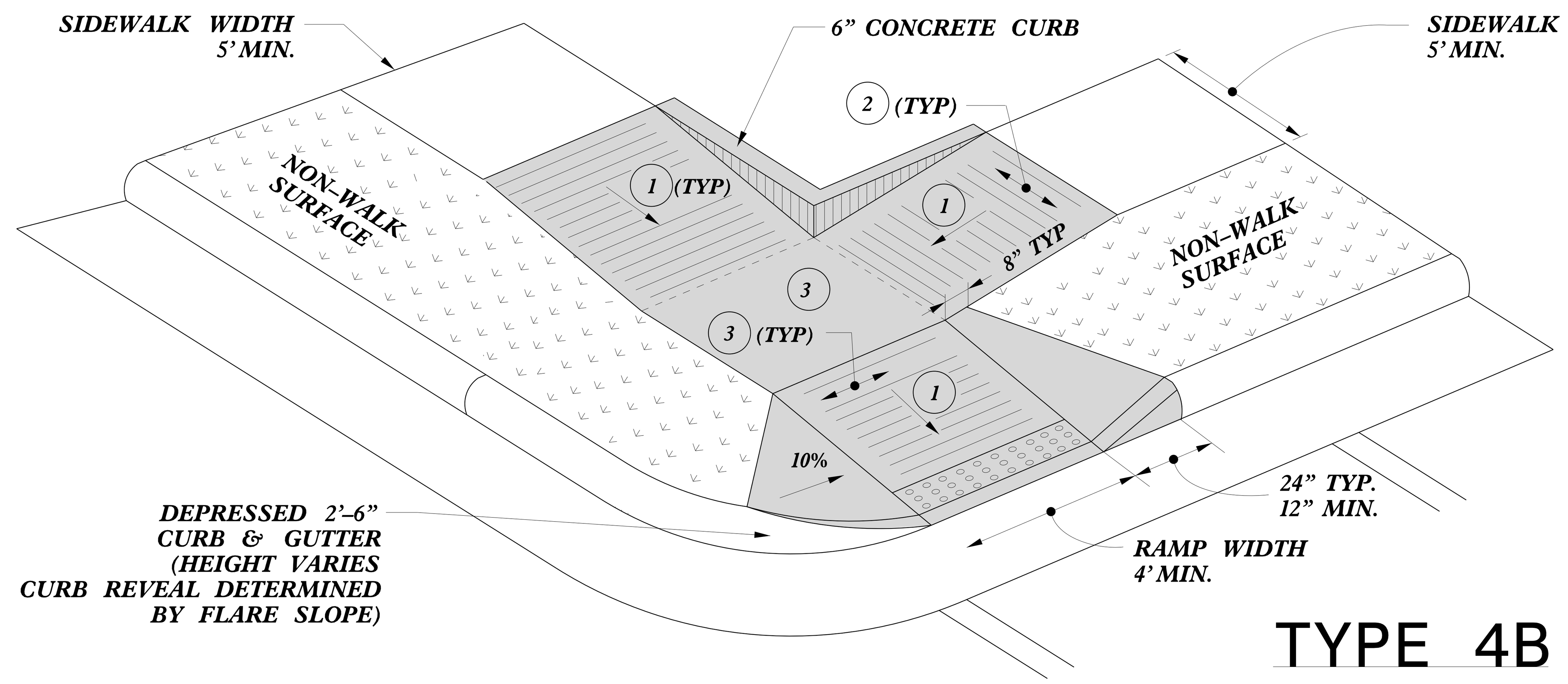
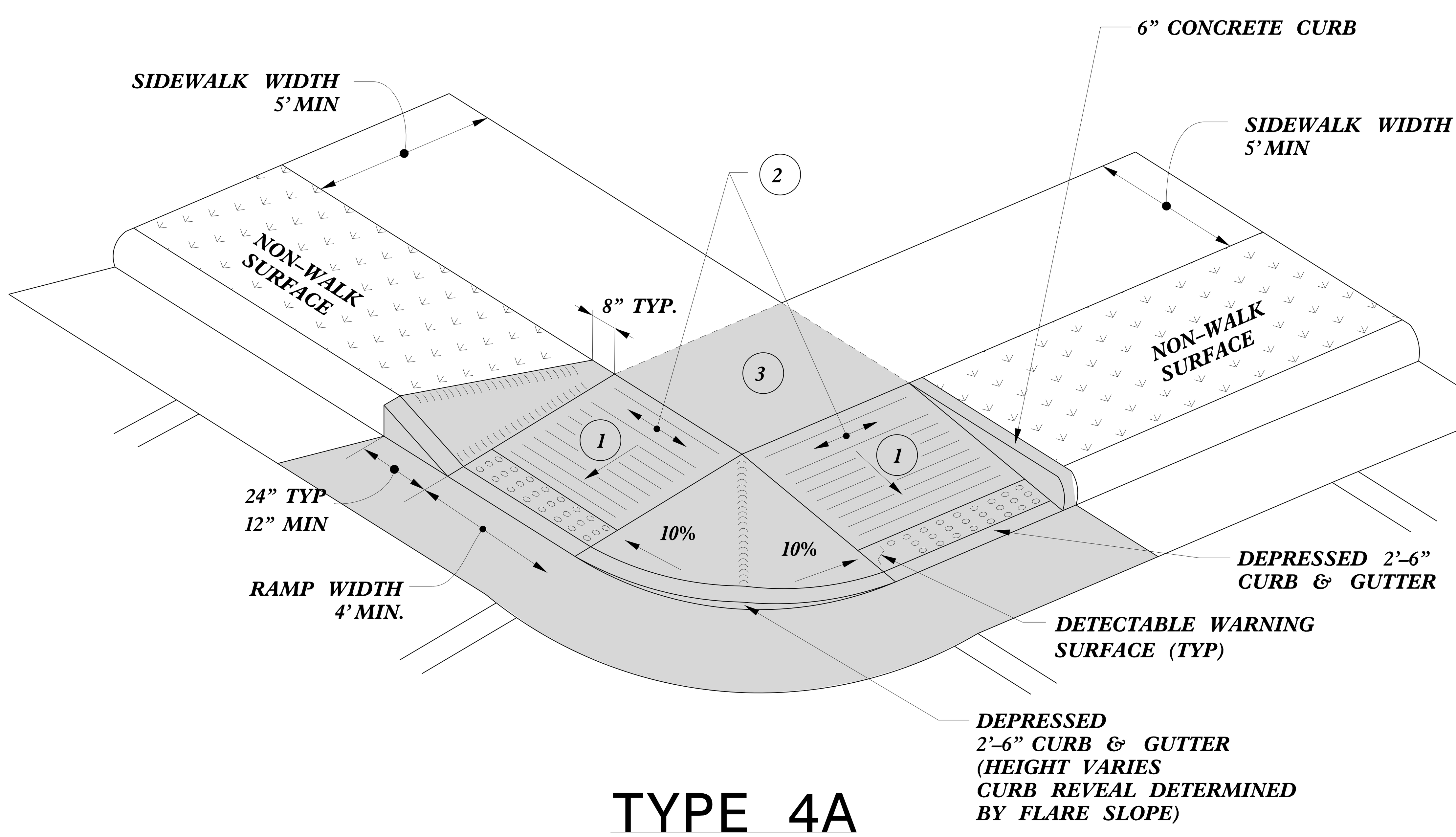
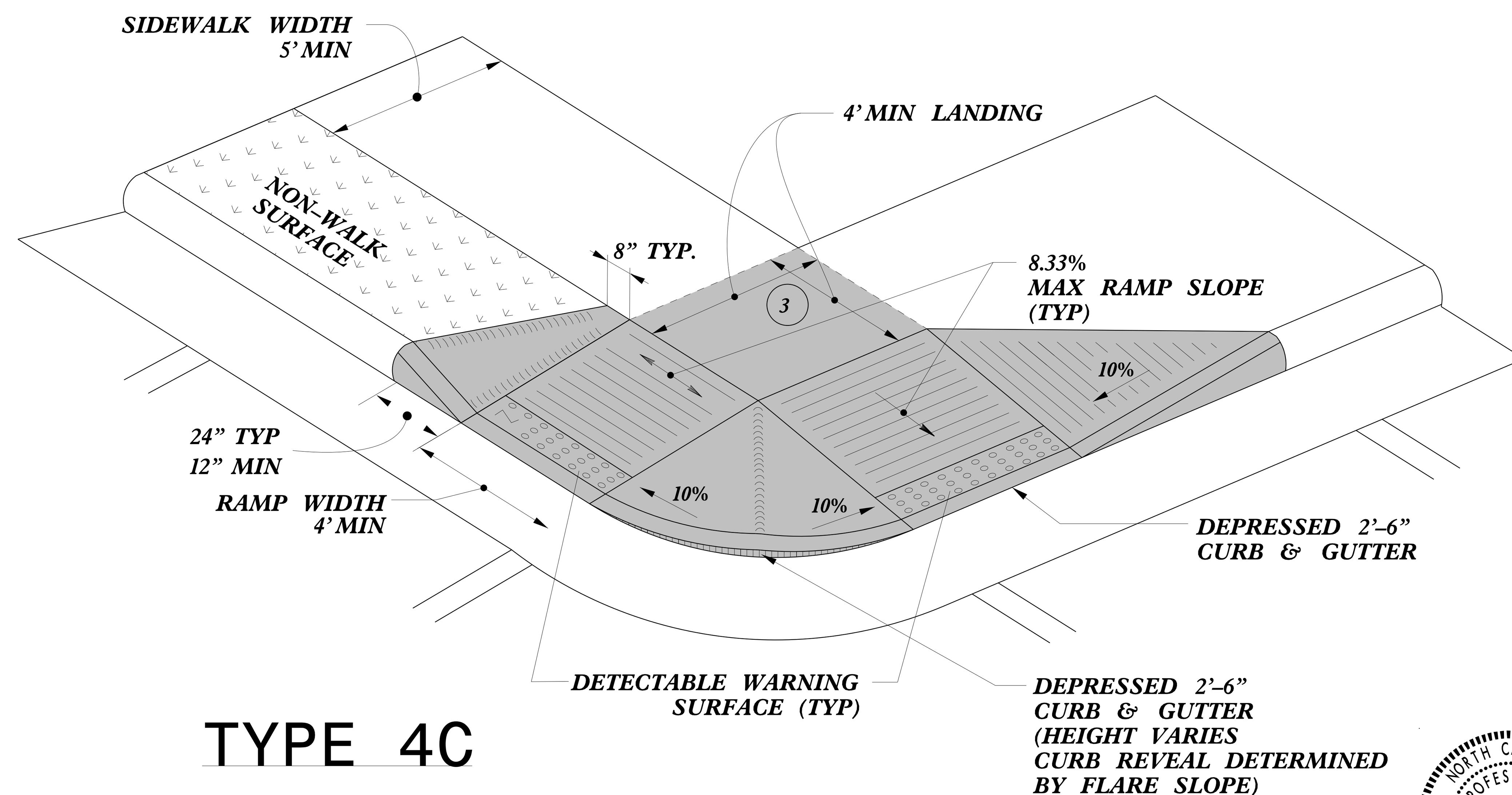


TYPE 4B



TYPE 4A



TYPE 4C

(1) 8.33% (12:1) MAX RAMP SLOPE

(2) CROSS SLOPE: 2.00%

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

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

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER Joel S. Howerton
DocuSigned by: Joel S. Howerton
873F3D17DCDC45F...
10/30/2019

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

CURB RAMPS

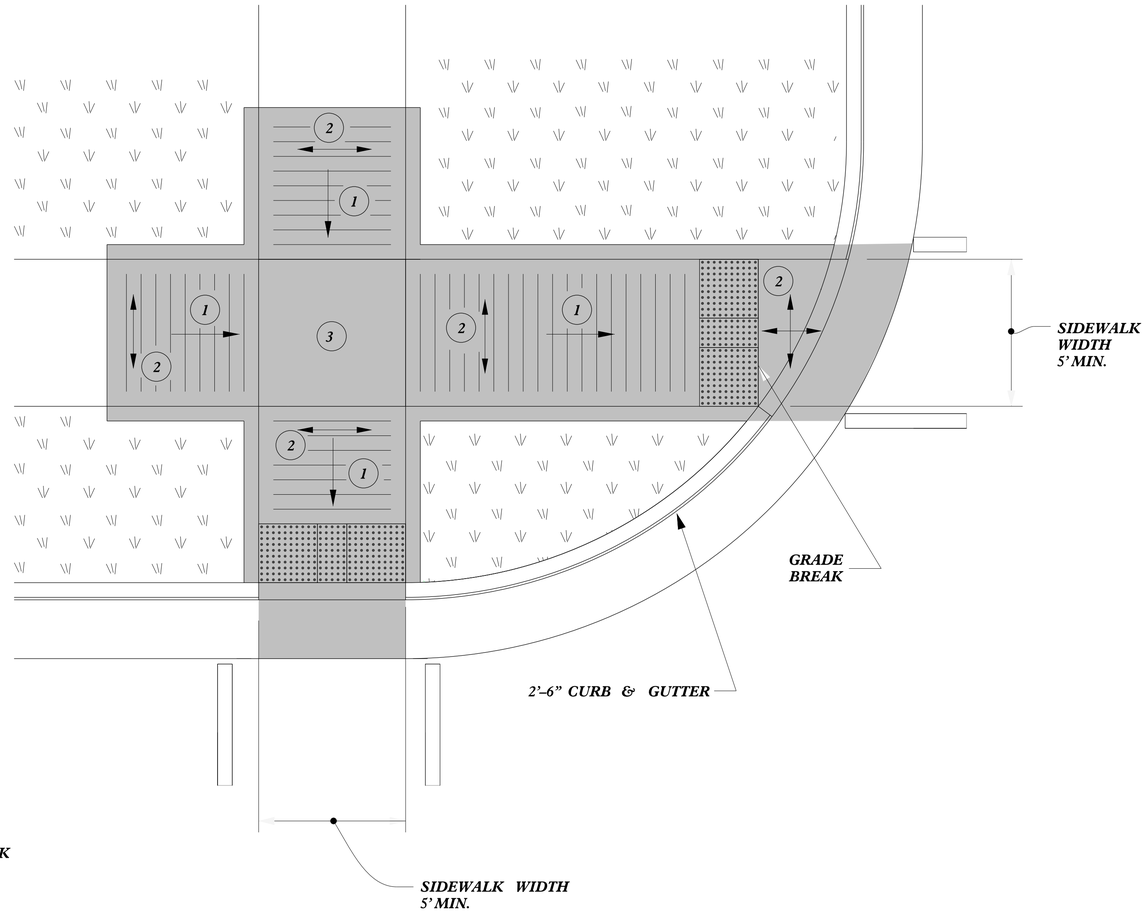
ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.: stds/2012CurbRamp/CurbRampDetails.dgn

5/14/99
$$$$$$SYSTIME$$$$$
$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

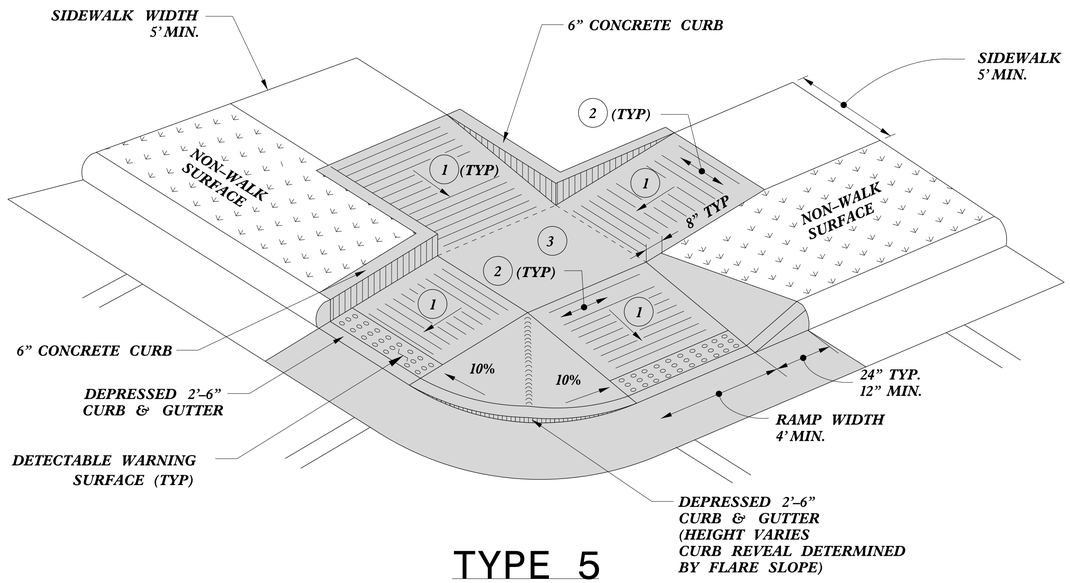
5/14/99

PROJECT REFERENCE NO.	SHEET NO.

PAY LIMITS FOR 1 OR 2 CURB RAMPS
(CALCULATE BASED ON NUMBER OF SETS
OF TRUNCATED DOMES)



TYPE 5A



TYPE 5

(1) 8.33% (12:1) MAX RAMP SLOPE

(2) CROSS SLOPE: 2.00%

(3) CURB RAMPS REQUIRE A (4'–0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

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

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 022966 Joel S. Howerton
873F2D7D7DC64DE
10/30/2019

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

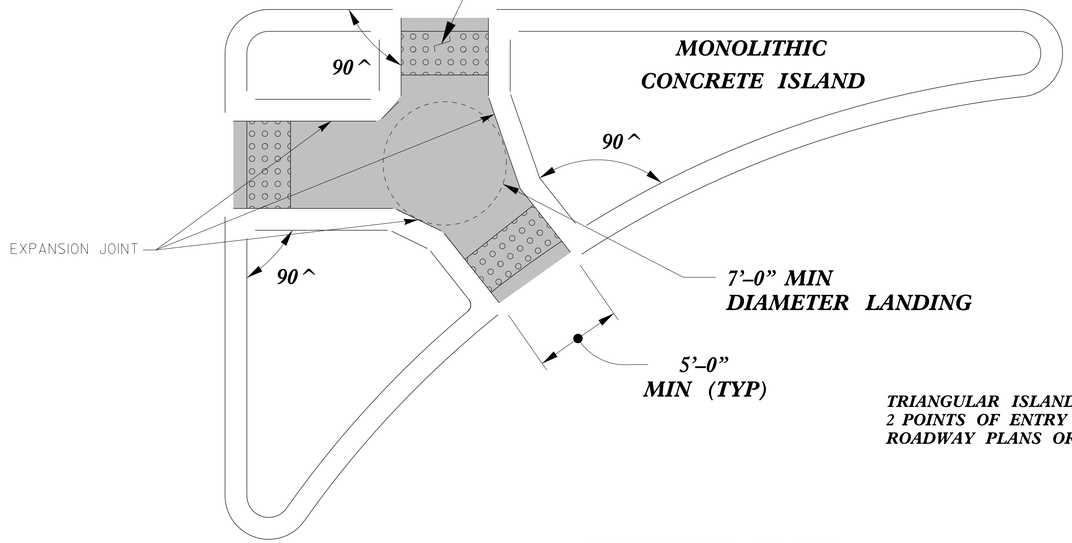
CURB RAMPS

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC.: stds/2012CurbRamp/CurbRampDetails.dgn

$$$$USERNAME$$$$ $$$$SYSTIME$$$$ $$$$ICON$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.

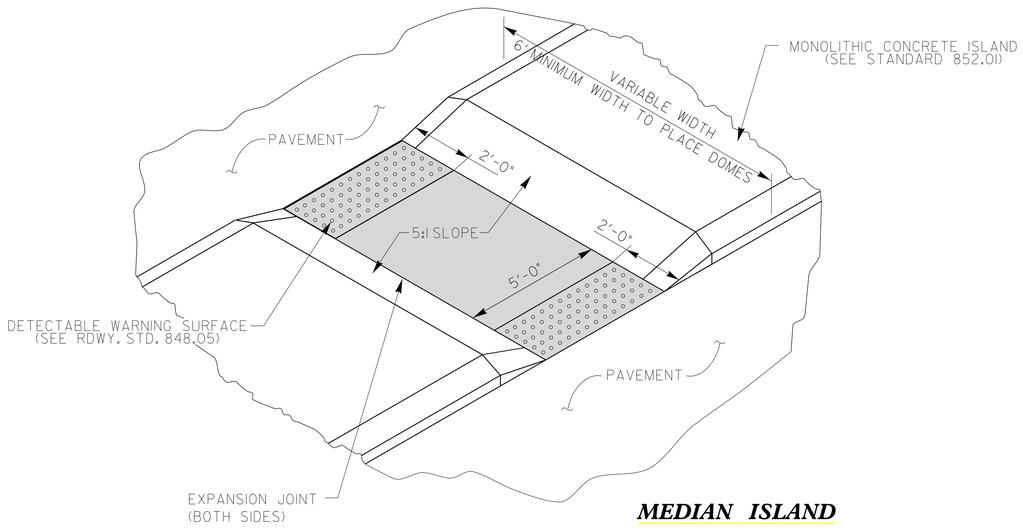


PAY LIMITS FOR 2 OR 3 CURB RAMPS (CALCULATE BASED ON NUMBER OF SETS OF TRUNCATED DOMES)

TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY 2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE ROADWAY PLANS OR AS DIRECTED BY THE ENGINEER.

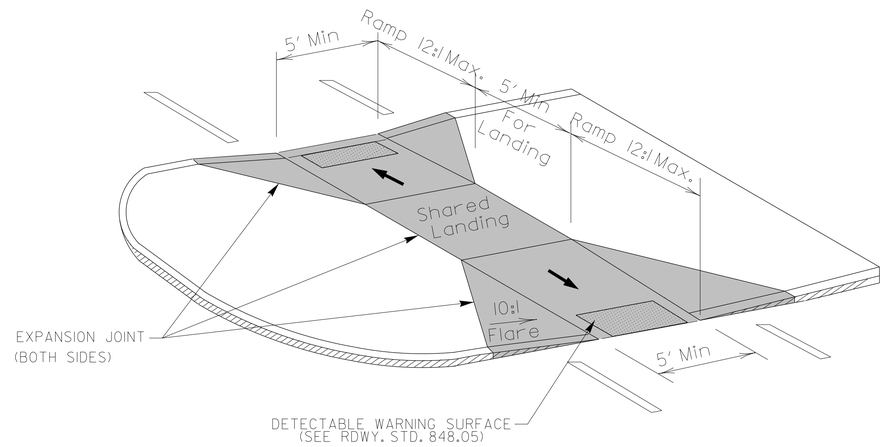
TRIANGULAR ISLAND WITH CUT THROUGH

TYPE 6



MEDIAN ISLAND WITH CUT THROUGH

TYPE 7



MEDIAN ISLAND CURB RAMPS

TYPE 8

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER Joel S. Howerton
Joel S. Howerton
B23F3D37D5D0485
10/30/2019

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

CURB RAMPS

Median or Turn Lane Islands

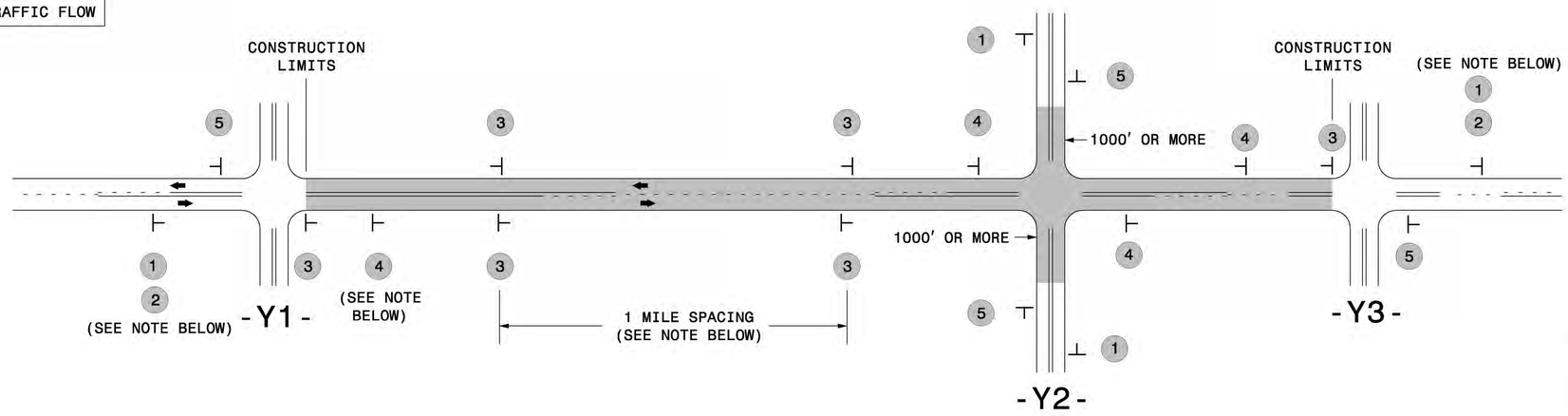
ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC.: stds/2012CurbRamp/CurbRampDetails.dgn

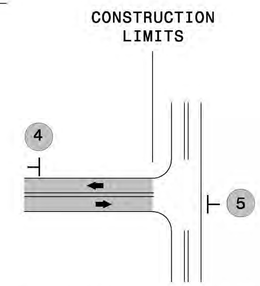
$$$$(SYSTIME)$$$$
$$$$(SIGN)$$$$
$$$$(USERNAME)$$$$

PROJ. REFERENCE NO.	SHEET NO.

SIGNING FOR RESURFACING PROJECTS

LEGEND
- ⊢ STATIONARY SIGN
- ⬅ DIRECTION OF TRAFFIC FLOW





TEE INTERSECTION

MAINLINE (-L-) SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION

1 & 2 — ROAD WORK AHEAD W20-1 48" X 48" / NEXT XX MILES W7-3aP 24" X 18"

PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.

#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER.(NO FRACTIONAL OR DECIMAL NUMBERS)

3 — LOW/SOFT SHOULDER SP 13107 48" X 48"

- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.
- AT TEE INTERSECTIONS INSTALL INITIALLY ½ MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.

4 — ROAD UNDER CONST SP 13106 48" X 48"

- 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 — END ROAD WORK G20-2 A 48" X 24"

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.

-Y- LINE SIGNING

NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE
2) SUBDIVISION ROADS
3) DEAD END ROADS

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.

ROAD WORK AHEAD W20-1 48" X 48"
PLACED 500' IN ADVANCE OF FLAGGER.

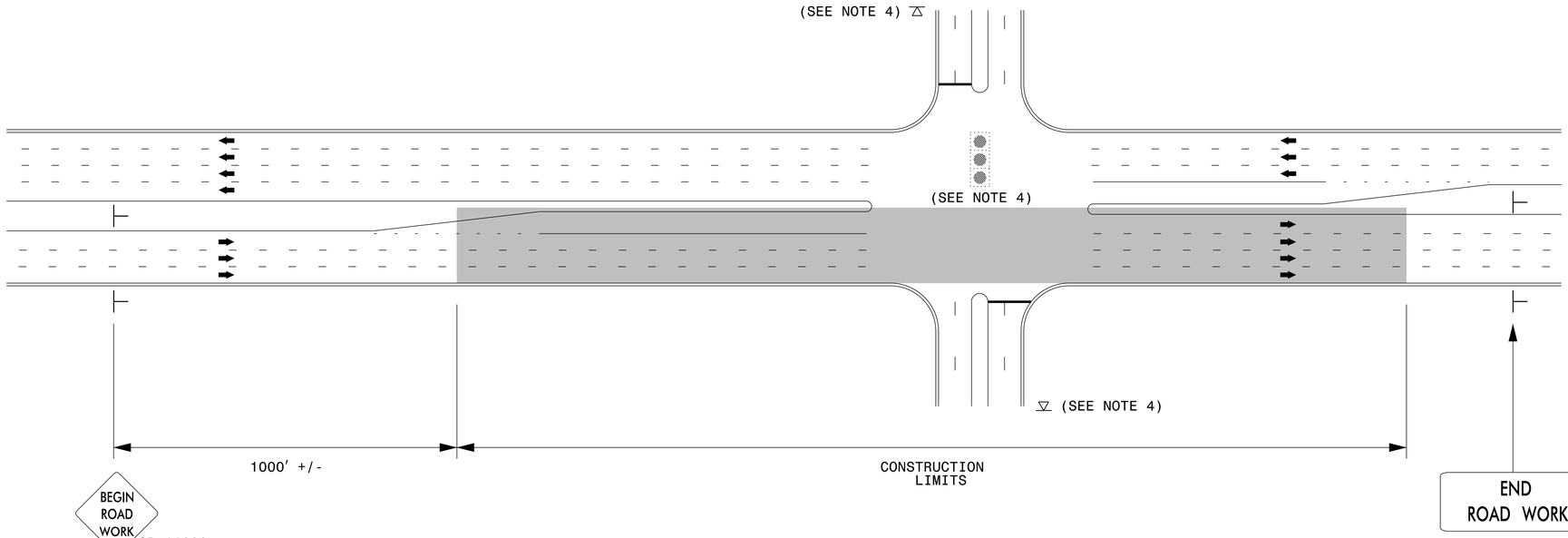
W20-7 A 48" X 48"
PLACED 250' IN ADVANCE OF FLAGGER.

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

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

PROJ. REFERENCE NO.	SHEET NO.

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

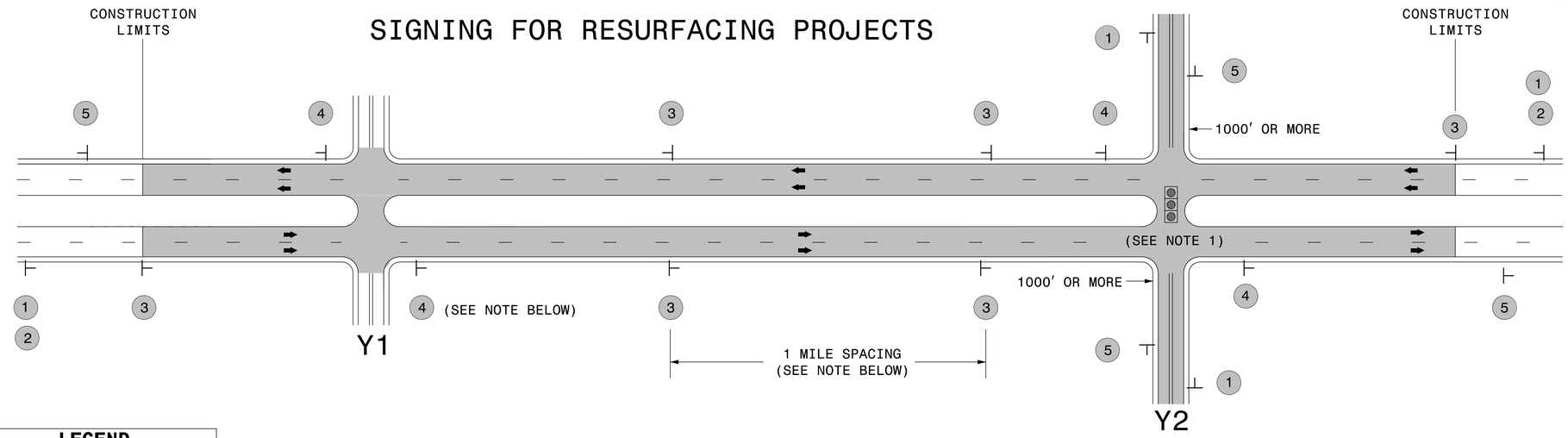
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

RESURFACING ADVANCE WARNING SIGNS FOR URBAN / SUBURBAN FACILITIES

4/8/2015
C:\Users\rmgarrett\Downloads\Resurfacing_AdvWarn_UrSu (2).dgn
User:rmgarrett

PROJ. REFERENCE NO.	SHEET NO.

SIGNING FOR RESURFACING PROJECTS



LEGEND

⊢ STATIONARY SIGN

⬅ DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION

1	ROAD WORK AHEAD W20-1 48″ X 48″	PLACE 1000′ PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000′ ALONG -Y- LINE.
2	NEXT XX MILES W7-3aP 24″ X 18″	#2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER.(NO FRACTIONAL OR DECIMAL NUMBERS)
3	LOW/SOFT SHOULDER SP 13107 48″ X 48″	PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET ½ MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.
4	ROAD UNDER CONST SP 13106 48″ X 48″	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.
5	END ROAD WORK G20-2 A 48″ X 24″	PLACE 500′ FOLLOWING THE END OF CONSTRUCTION LIMITS.

-Y- LINE SIGNING

NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

1) LESS THAN 1000′ OF RESURFACING ALONG -Y- LINE
2) SUBDIVISION ROADS
3) DEAD END ROADS

WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.

ROAD WORK AHEAD W20-1 48″ X 48″ — PLACED 500′ IN ADVANCE OF FLAGGER.

W20-7 A 48″ X 48″ — PLACED 250′ IN ADVANCE OF FLAGGER.

NOTES:

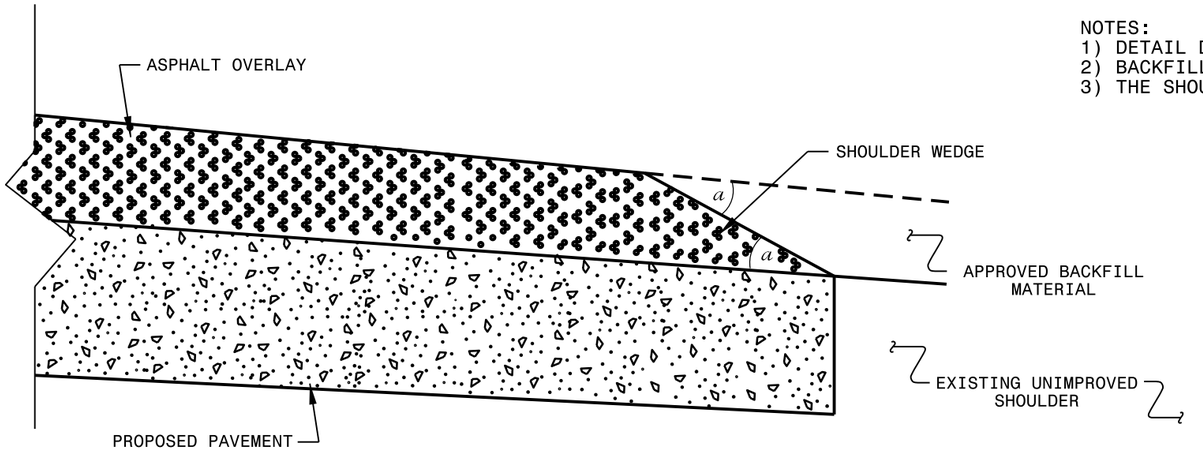
1) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500′ IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

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

3/23/2015
C:\Users\rmgarrett\Downloads\Resurfacing_AdvWarn_UrSu_Shldr.dgn
User:rmgarrett

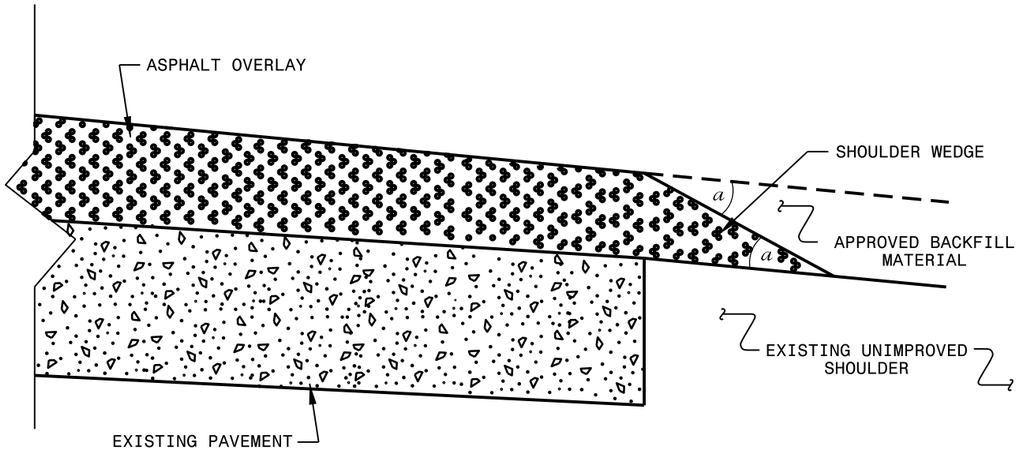
PROJECT REFERENCE NO.	SHEET NO.



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

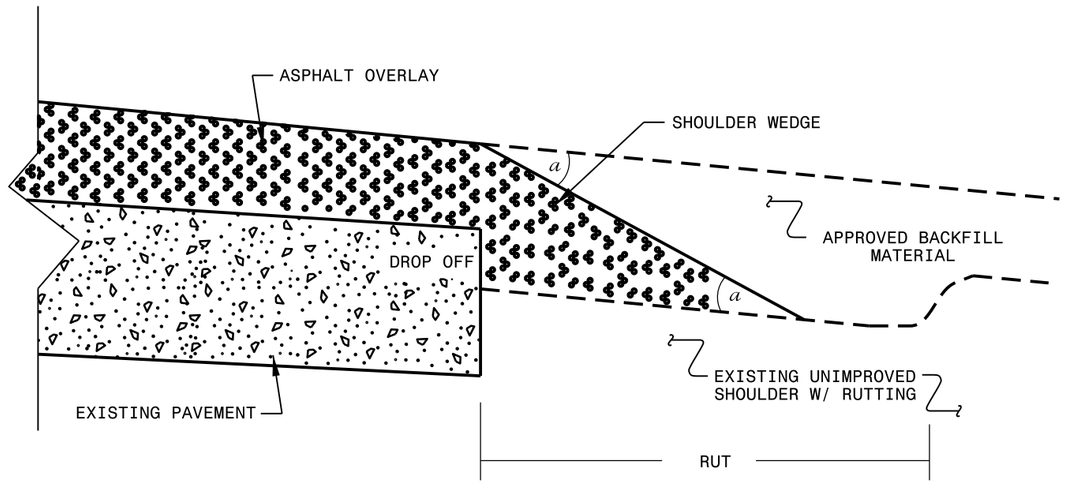
SHOULDER WEDGE DETAIL

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



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL

(Resurfacing Adjacent to Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

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

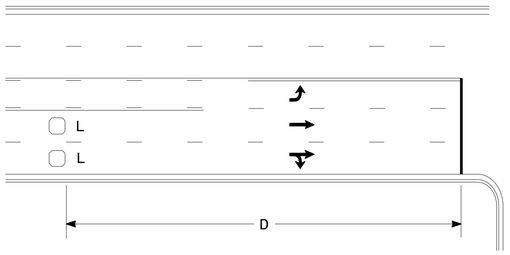
SHOULDER WEDGE DETAILS

ORIGINAL BY:	T.SPELL	DATE:	7-19-11
MODIFIED BY:		DATE:	10/16/12
CHECKED BY:		DATE:	
FILE SPEC.:	s:usr/details/stand/shoulderwedgedetail.dgn		

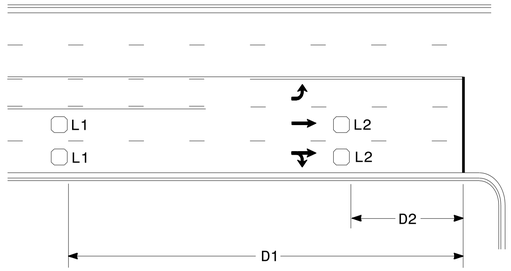
$$$$$$SYSTIME$$$$$
$$$$$$USERNAME$$$$$

PROJECT REFERENCE NO.	SHEET NO.

High Speed Detection
(≥40 mph)



OR



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

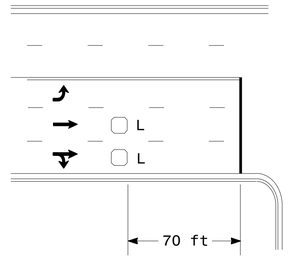
Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series

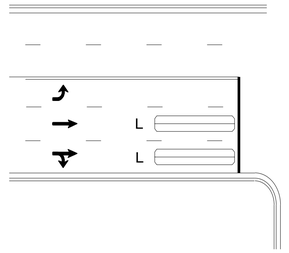
L2 = 6ft X 6ft
Wired in series

"Stretch" Operation

Low Speed Detection
(≤35 mph)



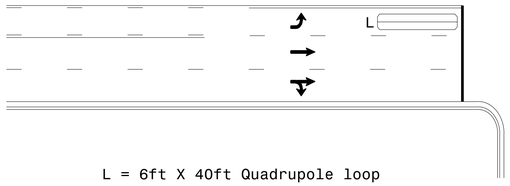
OR



L = 6ft X 6ft
Wired in series

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

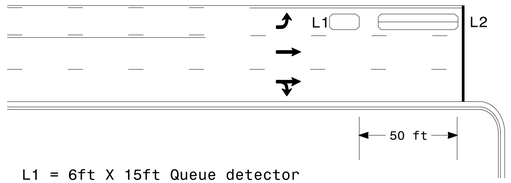
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

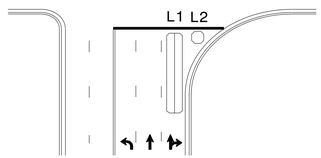
OR



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

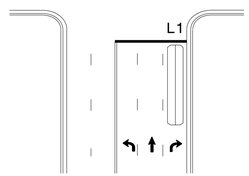
Queue Loop Detection

Right Turn Lane Detection

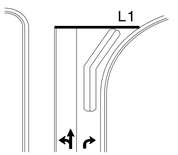


Shared Lane/
Wide Radius Turn

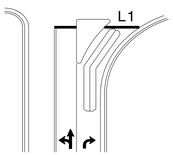
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

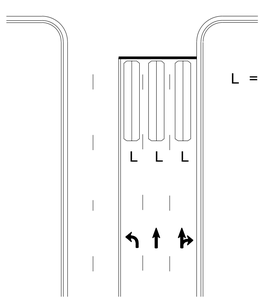


Wide Radius Turn



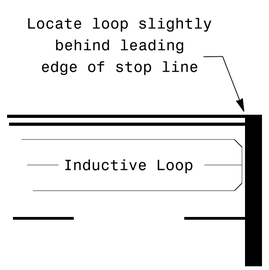
Channelized Turn

Side Street Detection



L = 6ft X 40ft
Quadrupole loop
Wired to separate detectors/channels

Presence Loop Placement at Stop Lines



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

Typical Signal Loop Locations

PLAN DATE: January 2015	REVIEWED BY: JPG
PREPARED BY: PLA	REVIEWED BY:

SCALE
N/A

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 23489 ENGINEER PAMELA L. ALEXANDER

DocuSigned by: P L Alexander B4756E00CE4E46D...
1/30/2015
DATE

SIG. INVENTORY NO.

30-JAN-2015 12:39
S:\NCDOT\Traffic Signal\Signal Design Section\Eastern Region\loop typical 2015.dgn
palexander

PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.10.06.10601		
2024CPT.10.06.20601		

THERMOPLASTIC AND PAINT QUANTITIES

												4413000000-E	4447000000-E	4457000000-N	4510000000-N	4600000000-N		4685000000-E		4695000000-E		4704000000-E	4709000000-E	4720000000-E			4725000000-E				4726110000-E		4770000000-E		4810000000-E	4820000000-E		4830000000-E	4835000000-E	4840000000-N			4845000000-N				4850000000-E	4890000000-E	4905100000-N
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	AUDIBLE WARNING DEVICES	TEMPORARY CURB RAMPS	THERMOPLASTIC PAVEMENT MARKING LINES WHITE (4", 90 MILS)	THERMOPLASTIC PAVEMENT MARKING LINES YELLOW (4", 90 MILS)	THERMOPLASTIC PAVEMENT MARKING LINES WHITE (8", 90 MILS)	THERMOPLASTIC PAVEMENT MARKINGLINES YELLOW LINES II (8", 90 MILS)	THERMOPLASTIC PAVEMENT MARKING LINES (16", 90 MILS)	THERMOPLASTIC PAVEMENT MARKING LINES WHITE (24", 90 MILS)	THERMO RXR 90 M	THERMO MSG SCHOOL 90 M	THERMO MSG ONLY 90 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO MERGE ARROW (90 MILS)	THERMO STR & RT ARROW 90 M	THERMO STR ARROW 90 M	HEATED-IN-PLACE THERMOPLASTIC PAVEMENT MARKING SYMBOL LT (90 MILS)	HEATED-IN-PLACE THERMOPLASTIC PAVEMENT MARKING SYMBOL LT ARROW (90 MILS)	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, WHITE ,TYPE II (4")	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, YELLOW TYPE II (4")	4" WHITE PAINT	4" YELLOW PAINT	8" YELLOW PAINT	8" WHITE PAINT	16" WHITE PAINT	24" WHITE PAINT	PAINT MSG RXR	PAINT MSG SCHOOL	PAINT MSG ONLY	PAINT LT ARROW	PAINT RT ARROW	PAINT STR & RT ARROW	PAINT STR ARROW	4" LINE REMOVAL	CONTRAST COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE II (6")	NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKER
								MI	FT			SF	LF	LS	HR	EA	EA	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	LF	LF	EA
2024CPT.10.06.10601	Mecklenburg	1	NB NC-16 BROOKSHIRE BLVD (30000016060)	FROM PVT. JOINT BEYOND FRED D. ALEXANDER BLVD TO BRIDGE OVER LONG CREEK	1	2	MD	2.31	28	21.25	23.56	260		0.09	140			17,721	13,151				115				8	2							225	225												60	205
TOTAL FOR MAP NO. 1								**2.31**				**260**		**0.09**	**140**			**17,721**	**13,151**				**115**				**8**	**2**						**225**	**225**												**60**	**205**
2024CPT.10.06.10601	Mecklenburg	2	SB NC-16 BROOKSHIRE BLVD (30400016060)	FROM BRIDGE OVER LONG CREEK TO PVT JOINT PRIOR TO FRED D ALEXANDER BLVD	1	2	MD	2.28	27	3.04	5.32	260		0.09	140			17,706	13,138	441			125				6	3	3						225	225												60	232
TOTAL FOR MAP NO. 2								**2.28**				**260**		**0.09**	**140**			**17,706**	**13,138**	**441**			**125**				**6**	**3**	**3**						**225**	**225**												**60**	**232**
2024CPT.10.06.10601	Mecklenburg	3	US-29 N. GRAHAM ST/DALTON AVE (20000029060)	FROM BRIDGE DECK AT MUSIC FACTORY BLVD TO N. TRYON ST.	2,3,4	4	MU	0.67	46	10.8	11.47	126		0.09	200			2,311	5,870	1,432	40		135				6	3		1	2						2,311	5,870	40	1,432		135					6	3	1	2			133
TOTAL FOR MAP NO. 3								**0.67**				**126**		**0.09**	**200**			**2,311**	**5,870**	**1,432**	**40**		**135**				**6**	**3**		**1**	**2**						**2,311**	**5,870**	**40**	**1,432**		**135**					**6**	**3**	**1**	**2**			**133**
2024CPT.10.06.10601	Mecklenburg	4	US-29 N. DALTON AVE/N. GRAHAM ST (20400029060)	FROM BEGIN DIVIDE TO END DIVIDE AT MUSIC FACTORY BLVD	2	2	MU	0.2	23	11.76	11.96	126		0.09	120			640	501	670			56				4	2		2	2						640	501		670		56					4	2	2	2			23
TOTAL FOR MAP NO. 4								**0.2**				**126**		**0.09**	**120**			**640**	**501**	**670**			**56**				**4**	**2**		**2**	**2**						**640**	**501**		**670**		**56**					**4**	**2**	**2**	**2**			**23**
TOTAL FOR PROJ NO. 2024CPT.10.06.10601								**5.46**				**772**		**0.36**	**600**			**38,378**	**32,660**	**2,543**	**40**		**431**				**24**	**10**	**3**	**3**	**4**						**2,951**	**6,371**	**40**	**2,102**		**191**					**10**	**5**	**3**	**4**		**120**	**593**
																		71,038		**2,583**									**44**						**9,322**		**2,142**								**22**			
2024CPT.10.06.20601	Mecklenburg	5	SR-1106 HAMILTON ROAD (40001106060)	FROM YOUNGBLOOD RD TO STEELE CREEK RD	5,6	2	2WU	0.73	20	0	0.73	82		0.09	40			8,800	8,800	500	200		65				5	3			2																				
TOTAL FOR MAP NO. 5								**0.73**				**82**		**0.09**	**40**			**8,800**	**8,800**	**500**	**200**		**65**				**5**	**3**			**2**																				
2024CPT.10.06.20601	Mecklenburg	6	SR-2623 TRAILER DR/ROTARY DR (40002623060)	FROM N. GRAHAM ST TO END OF MAINTENANCE	7,8,9,10,11	2	2WU	1.44	24	0	1.44	162		0.09	80			3,626	14,680		93	44	62	2			9	3			3						3,626	14,680	93		94	87	2			9	3		3			
TOTAL FOR MAP NO. 6								**1.44**				**162**		**0.09**	**80**			**3,626**	**14,680**		**93**	**44**	**62**	**2**			**9**	**3**			**3**						**3,626**	**14,680**	**93**		**94**	**87**	**2**			**9**	**3**		**3**			
2024CPT.10.06.20601	Mecklenburg	7	SR-6026 DALTON AVE (40406026060)	FROM N. GRAHAM ST TO STATESVILLE AVE	12	1		0.04	12	0	0.04	24		0.09	20					115			13					2											115		13						2					
TOTAL FOR MAP NO. 7								**0.04**				**24**		**0.09**	**20**					**115**			**13**					**2**											**115**		**13**						**2**					
2024CPT.10.06.20601	Mecklenburg	8	SR-6026 DALTON AVE (40006026060)	FROM STATESVILLE AVE TO N. GRAHAM ST	12	3	MU	0.04	25	0	0.04	24		0.09	20			91		227			33				1										91			227		33					1					
TOTAL FOR MAP NO. 8								**0.04**				**24**		**0.09**	**20**			**91**		**227**			**33**				**1**										**91**			**227**		**33**					**1**					
2024CPT.10.06.20601	Mecklenburg	9	SR-2540 N. GRAHAM ST (40002540060)	FROM 0.03 MILE PRIOR TO ARMOUR DR TO DALTON AVE	13	4	MU	0.23	39	5.18	5.41	126		0.09	80			865	1,750	307			30		6		2										965	1,750		307		80	6			2						
TOTAL FOR MAP NO. 9								**0.23**				**126**		**0.09**	**80**			**865**	**1,750**	**307**			**30**		**6**		**2**										**965**	**1,750**		**307**		**80**	**6**			**2**						
2024CPT.10.06.20601	Mecklenburg	10	SR-5383 EB UNIVERSITY CITY BLVD (40005383060)	FROM I-85 BRIDGE TO PERIWINKLE HILL AVE	14,15	2	MD	0.23	25	0.76	0.99	126		0.09	60			1,390	1,078				35			4	4	2		4	1		250	250	1,390	1,078				35			4	4	2		4	620	120	
TOTAL FOR MAP NO. 10								**0.23**				**126**		**0.09**	**60**			**1,390**	**1,078**				**35**			**4**	**4**	**2**		**4**	**1**		**250**	**250**	**1,390**	**1,078**				**35**			**4**	**4**	**2**		**4**	**620**	**120**	
2024CPT.10.06.20601	Mecklenburg	11	SR-5383 WB UNIVERSITY CITY BLVD (40405383060)	FROM PERIWINKLE HILL AVE TO I-85 BRIDGE	14,15	2	MD	0.22	24	0.46	0.68	126		0.09	60			1,710	1,070	30			26					2		4		1	250	250	1,710	1,070		30		26					2		4	620	120	
TOTAL FOR MAP NO. 11								**0.22**				**126**		**0.09**	**60**			**1,710**	**1,070**	**30**			**26**					**2**		**4**		**1**	**250**	**250**	**1,710**	**1,070**		**30**		**26**					**2**		**4**	**620**	**120**	
TOTAL FOR PROJ NO. 2024CPT.10.06.20601								**2.93**				**670**		**0.64**	**360**			**16,482**	**27,378**	**1,179**	**293**	**44**	**264**	**2**	**6**	**4**	**21**	**12**		**13**	**1**	**1**	**500**	**500**	**7,782**	**18,578**	**93**	**679**	**94**	**274**	**2**	**6**	**4**	**16**	**9**		**11**	**1,240**	**240**	
																		43,860		**1,472**				**12**			**46**			**2**			**1,000**		**26,360**		**772**			**12**				**36**				
GRAND TOTAL								**8.39**				**1,442**	**22**	**1.0**	**960**	**4**	**4**	**54,860**	**60,038**	**3,722**	**333**	**44**	**695**	**2**	**6**	**4**	**45**	**22**	**3**	**3**	**17**	**1**	**1**	**950**	**950**	**10,733**	**24,949**	**133**	**2,781**	**94**	**465**	**2**	**6**	**4**	**26**	**14**	**3**	**15**	**1,240**	**360**	**593**
																		114,898		**4,055**				**12**			**90**			**2**			**1,900**		**35,682**		**2,914**			**12**				**58**				

PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.10.06.10601		
2024CPT.10.06.20601		

SUMMARY OF QUANTITIES

														1220000000-E	1245000000-E	1260000000-E	1297000000-E		1308000000-E	1330000000-E	1519000000-E	1523000000-E	1575000000-E	1704000000-E	1920000000-E	2600000000-N	2612000000-E	2830000000-N	2845000000-N	5255000000-N	6071002000-E	6071010000-E	7444000000-E
PROJECT NO	**COUNTY**	**MAP NO**	**ROUTE**	**DESCRIPTION**	**TYP NO**	**LANES**	**LANE TYPE**	**FINAL SURFACE TESTING REQUIRED**	**WARM MIX ASPHALT REQUIRED**	**LENGTH**	**WIDTH**	**BEGIN MP**	**END MP**	**INCIDENTAL STONE BASE**	**SHOULDER RECONSTRUCTION**	**AGGREGATE SHOULDER BORROW**	**1½" MILLING**	**2" MILLING**	**0" TO 1.5" MILLING**	**INCIDENTAL MILLING**	**SURFACE COURSE, S9.5B**	**SURFACE COURSE, S9.5C**	**ASPHALT BINDER FOR PLANT MIX**	**PATCHING EXISTING PAVEMENT**	**NONWOVEN GEOTEXTILE PAVEMENT INTERLAYER**	**RETROFIT EXISTING CURB RAMPS**	**6" DRIVEWAYS**	**ADJ. OF MANHOLES**	**ADJ. OF METER OR VALVE BOX**	**PORTABLE LIGHTING**	**FLOCCULANT**	**WATTLE**	**INDUCTIVE LOOP SAWCUT**
										MI	**FT**			**TONS**	**SMI**	**TON**	**SY**	**SY**	**SY**	**SY**	**TONS**	**TONS**	**TONS**	**TONS**	**SY**	**EA**	**SY**	**EA**	**EA**	**LS**	**LB**	**LF**	**LF**
2024CPT.10.06.10601	Mecklenburg	1	NB NC-16 BROOKSHIRE BLVD (30000016060)	FROM PVT. JOINT BEYOND FRED D. ALEXANDER BLVD TO BRIDGE OVER LONG CREEK	1	2	MD	NO	NO	2.31	28	21.25	23.56		4.62	476			483	954		4,035	272	600						0.09	1	20	
TOTAL FOR MAP NO. 1										**2.31**					**4.62**	**476**			**483**	**954**		**4,035**	**272**	**600**						**0.09**	**1**	**20**	
2024CPT.10.06.10601	Mecklenburg	2	SB NC-16 BROOKSHIRE BLVD (30400016060)	FROM BRIDGE OVER LONG CREEK TO PVT JOINT PRIOR TO FRED D ALEXANDER BLVD	1	2	MD	NO	NO	2.28	27	3.04	5.32		4.56	470				1,588		4,135	273	500						0.09	1	20	
TOTAL FOR MAP NO. 2										**2.28**					**4.56**	**470**				**1,588**		**4,135**	**273**	**500**						**0.09**	**1**	**20**	
2024CPT.10.06.10601	Mecklenburg	3	US-29 N. GRAHAM ST/DALTON AVE (20000029060)	FROM BRIDGE DECK AT MUSIC FACTORY BLVD TO N. TRYON ST.	2,3,4	4	MU	NO	NO	0.67	46	10.8	11.47				14,552			2,098		1,540	122	600	516			1		0.09			1,413
TOTAL FOR MAP NO. 3										**0.67**							**14,552**			**2,098**		**1,540**	**122**	**600**	**516**			**1**		**0.09**			**1,413**
2024CPT.10.06.10601	Mecklenburg	4	US-29 N. DALTON AVE/N. GRAHAM ST (20400029060)	FROM BEGIN DIVIDE TO END DIVIDE AT MUSIC FACTORY BLVD	2	2	MU	NO	NO	0.2	23	11.76	11.96				2,265			1,231		323	20							0.09			1,100
TOTAL FOR MAP NO. 4										**0.2**							**2,265**			**1,231**		**323**	**20**		**0**					**0.09**			**1,100**
TOTAL FOR PROJ NO. 2024CPT.10.06.10601										**5.46**					**9.18**	**946**	**16,817**		**483**	**5,871**		**10,033**	**687**	**1,700**	**516**			**1**		**0.36**	**2**	**40**	**2,513**
																	16,817																
2024CPT.10.06.20601	Mecklenburg	5	SR-1106 HAMILTON ROAD (40001106060)	FROM YOUNGBLOOD RD TO STEELE CREEK RD	5,6	2	2WU	NO	NO	0.73	20	0	0.73	25	1.46	151			290	524	1,038		94	500		1	20	1	2	0.09			1,100
TOTAL FOR MAP NO. 5										**0.73**				**25**	**1.46**	**151**			**290**	**524**	**1,038**		**94**	**500**		**1**	**20**	**1**	**2**	**0.09**			**1,100**
2024CPT.10.06.20601	Mecklenburg	6	SR-2623 TRAILER DR/ROTARY DR (40002623060)	FROM N. GRAHAM ST TO END OF MAINTENANCE	7,8,9,10,11	2	2WU	NO	NO	1.44	24	0	1.44					28,791		1,031	3,484		282	1,000				1	4	0.09			496
TOTAL FOR MAP NO. 6										**1.44**								**28,791**		**1,031**	**3,484**		**282**	**1,000**				**1**	**4**	**0.09**			**496**
2024CPT.10.06.20601	Mecklenburg	7	SR-6026 DALTON AVE (40406026060)	FROM N. GRAHAM ST TO STATESVILLE AVE	12	1		NO	NO	0.04	12	0	0.04				311					30	2							0.09			
TOTAL FOR MAP NO. 7										**0.04**							**311**					**30**	**2**							**0.09**			
2024CPT.10.06.20601	Mecklenburg	8	SR-6026 DALTON AVE (40006026060)	FROM STATESVILLE AVE TO N. GRAHAM ST	12	3	MU	NO	NO	0.04	25	0	0.04				569					53	4							0.09			324
TOTAL FOR MAP NO. 8										**0.04**							**569**					**53**	**4**							**0.09**			**324**
2024CPT.10.06.20601	Mecklenburg	9	SR-2540 N. GRAHAM ST (40002540060)	FROM 0.03 MILE PRIOR TO ARMOUR DR TO DALTON AVE	13	4	MU	NO	NO	0.23	39	5.18	5.41				6,589					609	42	100				1	3	0.09			446
TOTAL FOR MAP NO. 9										**0.23**							**6,589**					**609**	**42**	**100**				**1**	**3**	**0.09**			**446**
2024CPT.10.06.20601	Mecklenburg	10	SR-5383 EB UNIVERSITY CITY BLVD (40005383060)	FROM I-85 BRIDGE TO PERIWINKLE HILL AVE	14,15	2	MD	NO	NO	0.23	25	0.76	0.99				5,578			547		516	36							0.09			471
TOTAL FOR MAP NO. 10										**0.23**							**5,578**			**547**		**516**	**36**							**0.09**			**471**
2024CPT.10.06.20601	Mecklenburg	11	SR-5383 WB UNIVERSITY CITY BLVD (40405383060)	FROM PERIWINKLE HILL AVE TO I-85 BRIDGE	14,15	2	MD	NO	NO	0.22	24	0.46	0.68				5,250			736		486	30							0.09			414
TOTAL FOR MAP NO. 11										**0.22**							**5,250**			**736**		**486**	**30**							**0.09**			**414**
TOTAL FOR PROJ NO. 2024CPT.10.06.20601										**2.93**				**25**	**1.46**	**151**	**18,297**	**28,791**	**290**	**2,838**	**4,522**	**1,694**	**490**	**1,600**		**1**	**20**	**3**	**9**	**0.64**	**0**	**0**	**3,251**
																	47,088																
GRAND TOTAL										**8.39**				**25**	**10.64**	**1,097**	**35,114**	**28,791**	**773**	**8,709**	**4,522**	**11,727**	**1,177**	**3,300**	**516**	**1**	**20**	**4**	**9**	**1.0**	**2**	**40**	**5,764**
																	63,905																