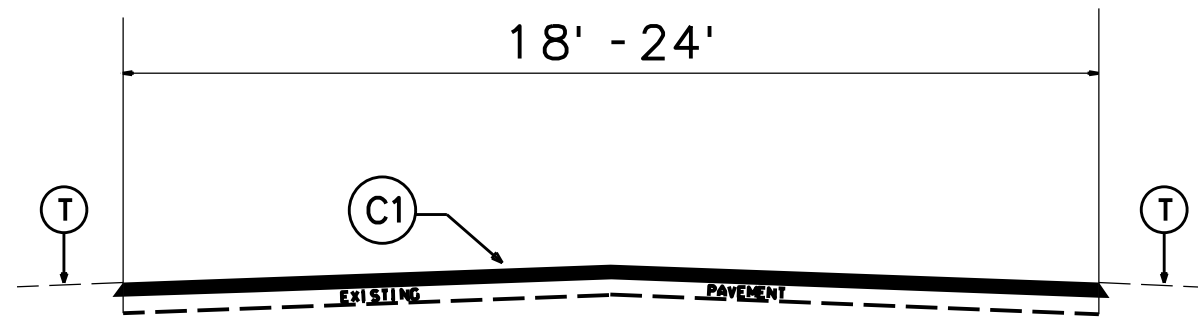
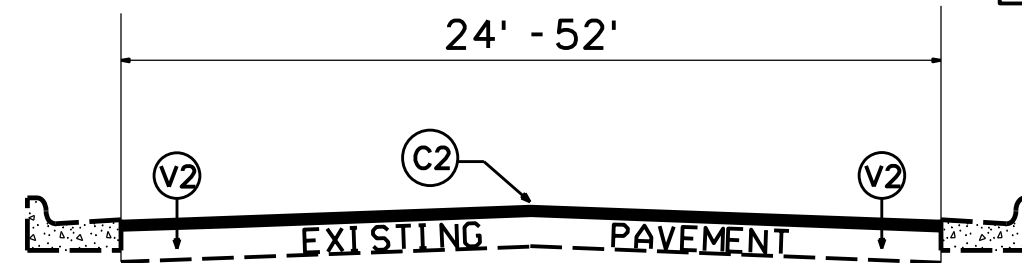


PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
IREDELL COUNTY	5	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
2024CPT.12.05.20491		SECONDARY RESURFACING



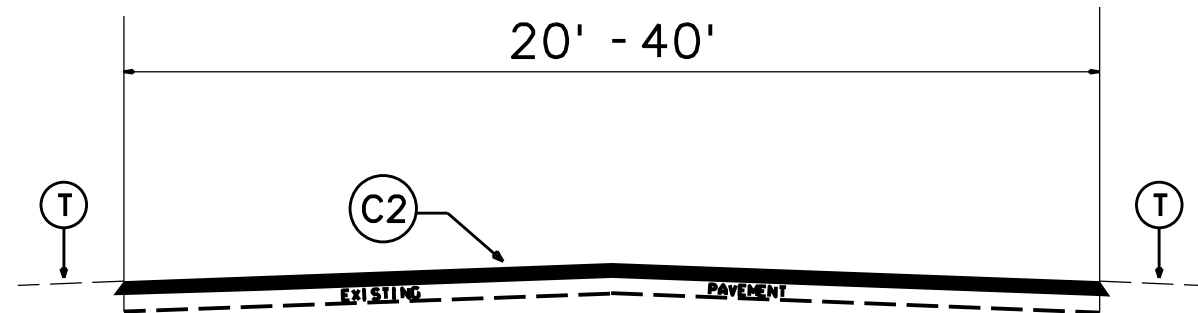
TYPICAL SECTION NO. 1

Maps 1-9: (ALL)



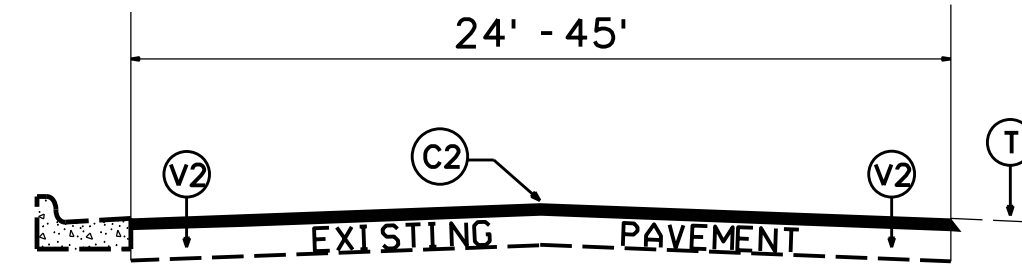
TYPICAL SECTION NO. 4

Maps 10: 252+25-259+25
13: 0+00-8+90
15: 20+08-31+68



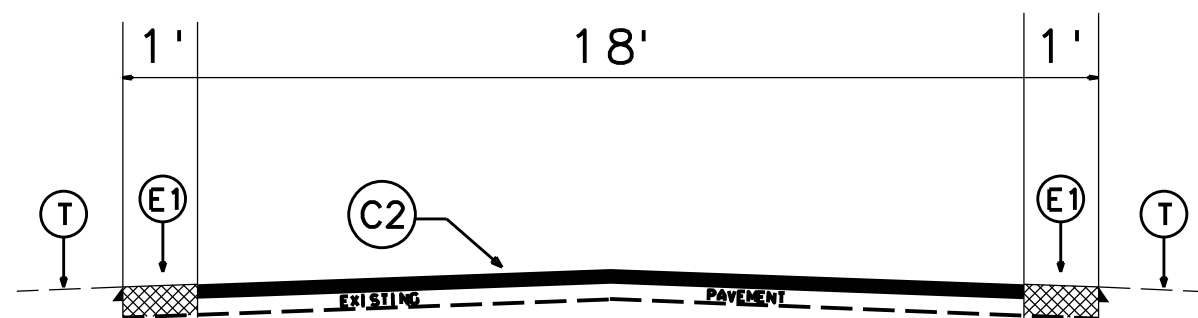
TYPICAL SECTION NO. 2

Maps 12: (ALL)
10: 0+00-252+25
13: 15+15-79+73
14: 0+00-21+46
27+81-33+37
37+95-54+91
16: 0+00-3+20



TYPICAL SECTION NO. 5

Maps 13: 8+90-15+15
14: 33+37-36+05
15: 16+50-20+08



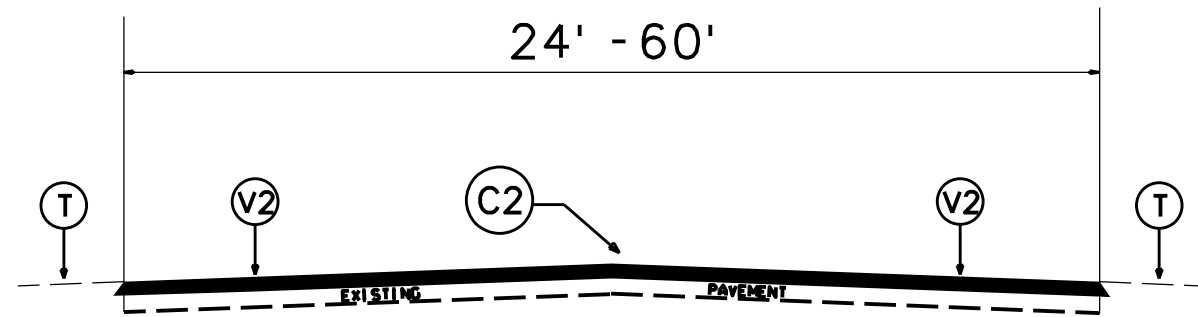
TYPICAL SECTION NO. 3

Maps 11: (ALL)

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E1	PROP. APPROX. 8.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, PLACED IN TWO 4" LIFTS AT AN AVERAGE RATE OF 456 LBS. PER SQ. YDS. PER LIFT
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V1	MILL EXISTING ASPHALT PAVEMENT APPROX. 1" IN DEPTH
V2	MILL EXISTING ASPHALT PAVEMENT APPROX. 1.5" IN DEPTH
*	ADDITIONAL MILLING WILL BE REQUIRED TO REMOVE EXISTING ASPHALT FROM GUTTER PAN

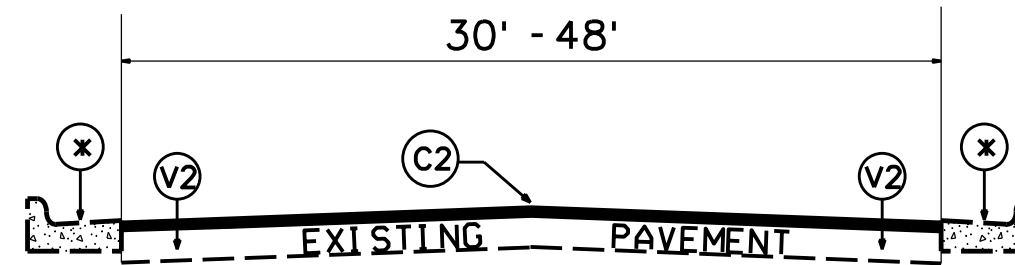
2024-2025
Resurfacing Program
Typical Sections
Iredell County

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
IREDELL COUNTY	6	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
2024CPT.12.05.20491		SECONDARY RESURFACING



TYPICAL SECTION NO. 6

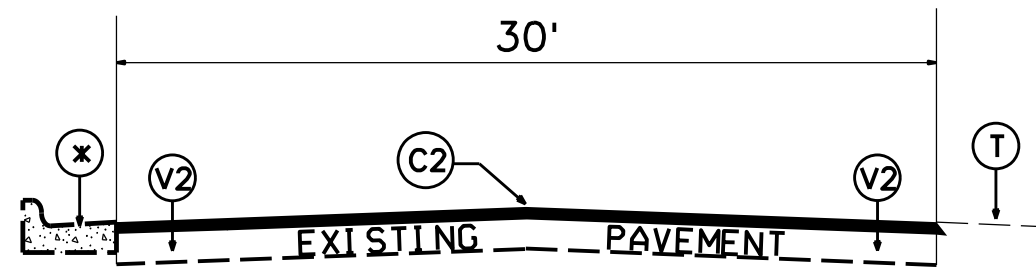
Maps 14: 21+46-27+81
15: 12+24-16+50



TYPICAL SECTION NO. 9

Maps 16: 3+20-50+16

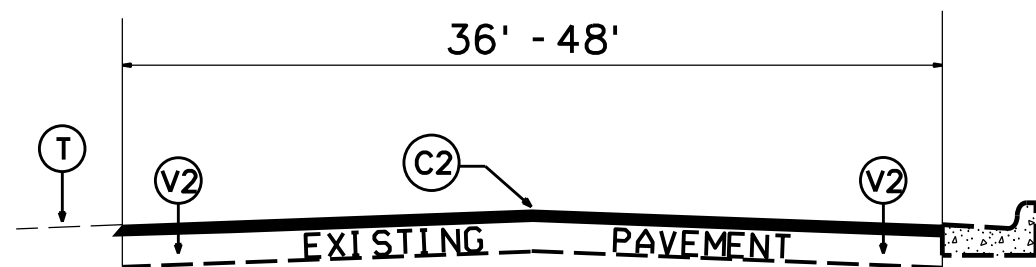
*Additional milling will be required to remove existing asphalt from gutter pan



TYPICAL SECTION NO. 7

Maps 14: 36+05-37+95

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



TYPICAL SECTION NO. 8

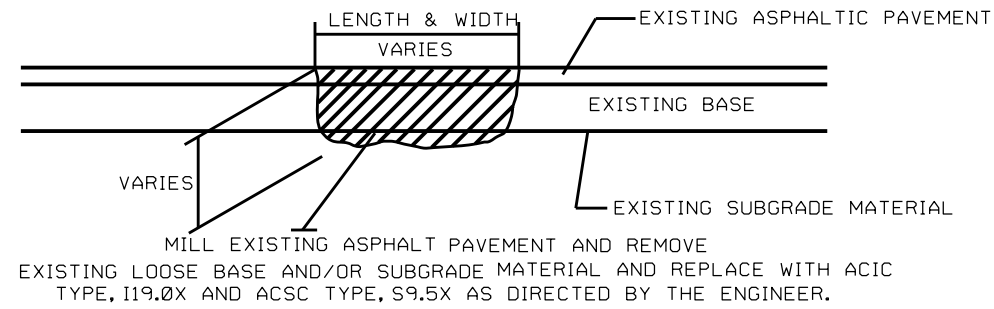
Maps 15: 0+00-12+24

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E1	PROP. APPROX. 8.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, PLACED IN TWO 4" LIFTS AT AN AVERAGE RATE OF 456 LBS. PER SQ. YDS. PER LIFT
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V1	MILL EXISTING ASPHALT PAVEMENT APPROX. 1" IN DEPTH
V2	MILL EXISTING ASPHALT PAVEMENT APPROX. 1.5" IN DEPTH
*	ADDITIONAL MILLING WILL BE REQUIRED TO REMOVE EXISTING ASPHALT FROM GUTTER PAN

2024-2025
Resurfacing Program
Typical Sections
Iredell County

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
IREDELL COUNTY	7	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
2024CPT. 12. 05. 20491		SECONDARY RESURFACING

DETAIL A
PATCHING EXISTING PAVEMENT

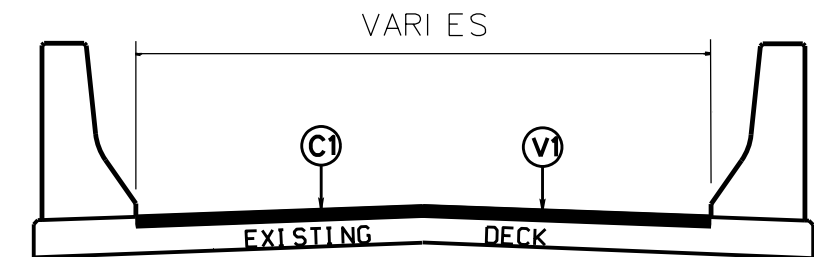
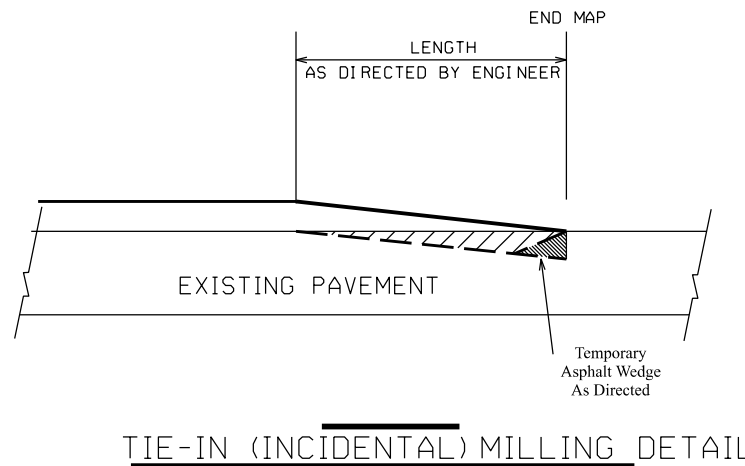
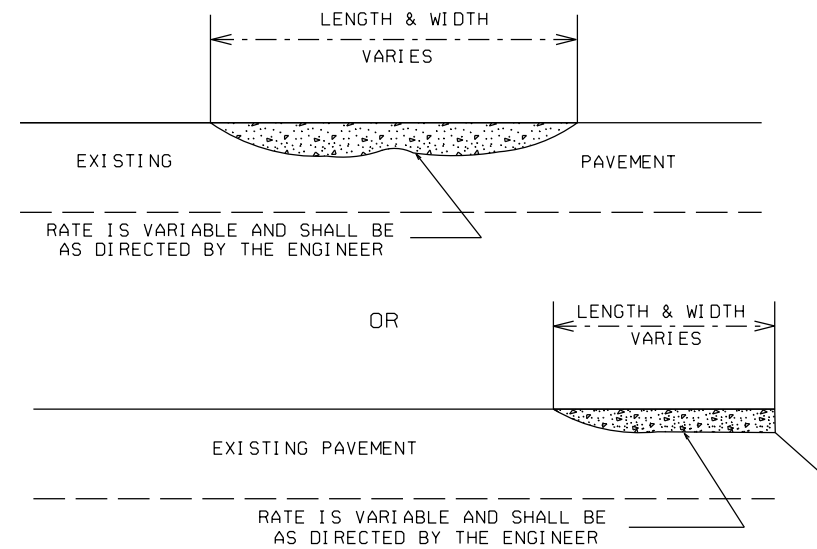


DETAIL C
MILLING BRIDGE APPROACHES



DETAIL B

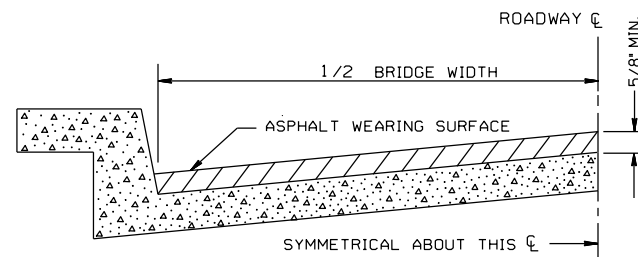
ASPHALT CONCRETE SURFACE COURSE
TYPE S9.5B & S9.5C (LEVELING COURSE)



ASPHALT BRIDGE SECTION
Use for all asphalt bridges
(Maps 6, 8, 9)

DETAIL E

BRIDGE HALF TYPICAL SECTION



FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN.

THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. A THICKNESS OF NOT LESS THAN 5/8" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1-1/2" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.

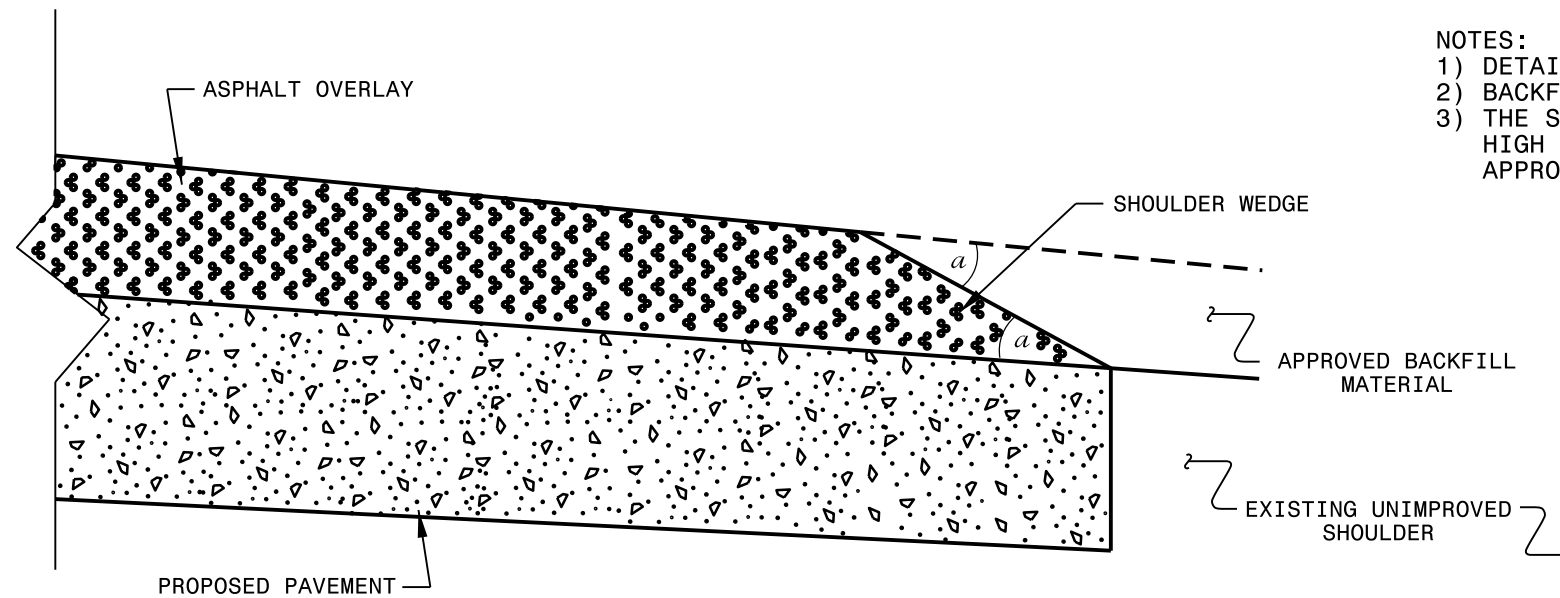
NOTES

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

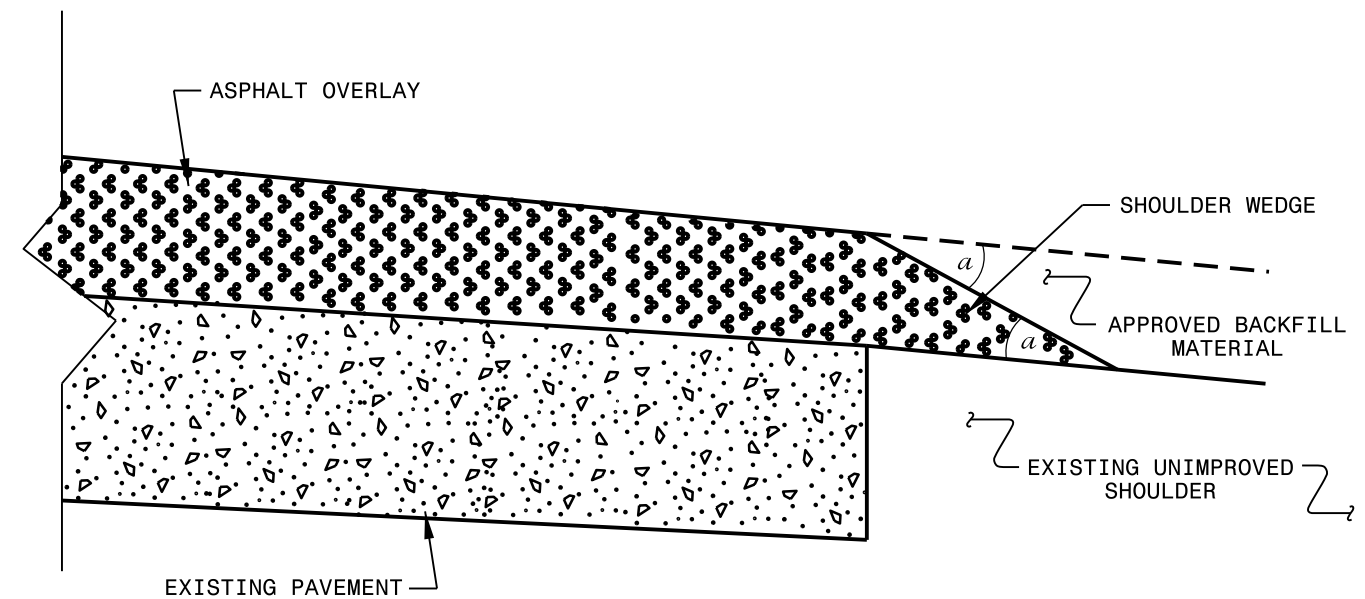
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E1	PROP. APPROX. 8.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, PLACED IN TWO 4" LIFTS AT AN AVERAGE RATE OF 456 LBS. PER SQ. YDS. PER LIFT
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V1	MILL EXISTING ASPHALT PAVEMENT APPROX. 1" IN DEPTH
V2	MILL EXISTING ASPHALT PAVEMENT APPROX. 1.5" IN DEPTH
*	ADDITIONAL MILLING WILL BE REQUIRED TO REMOVE EXISTING ASPHALT FROM GUTTER PAN

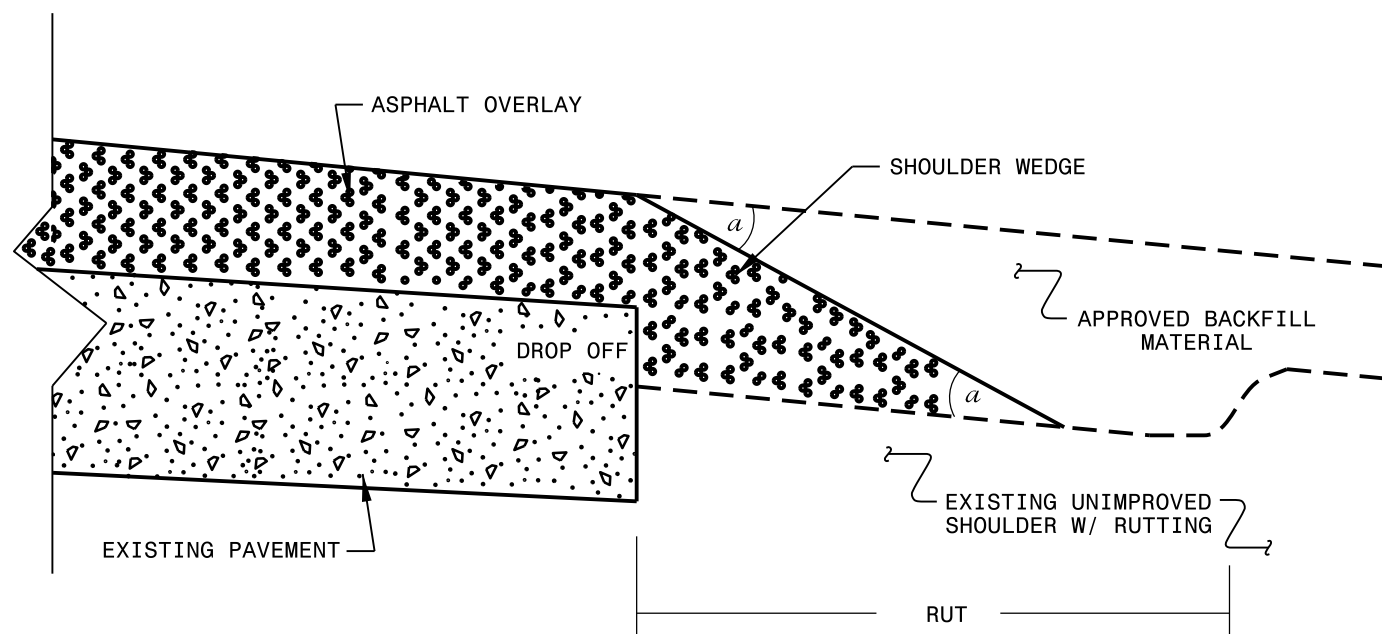
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



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)

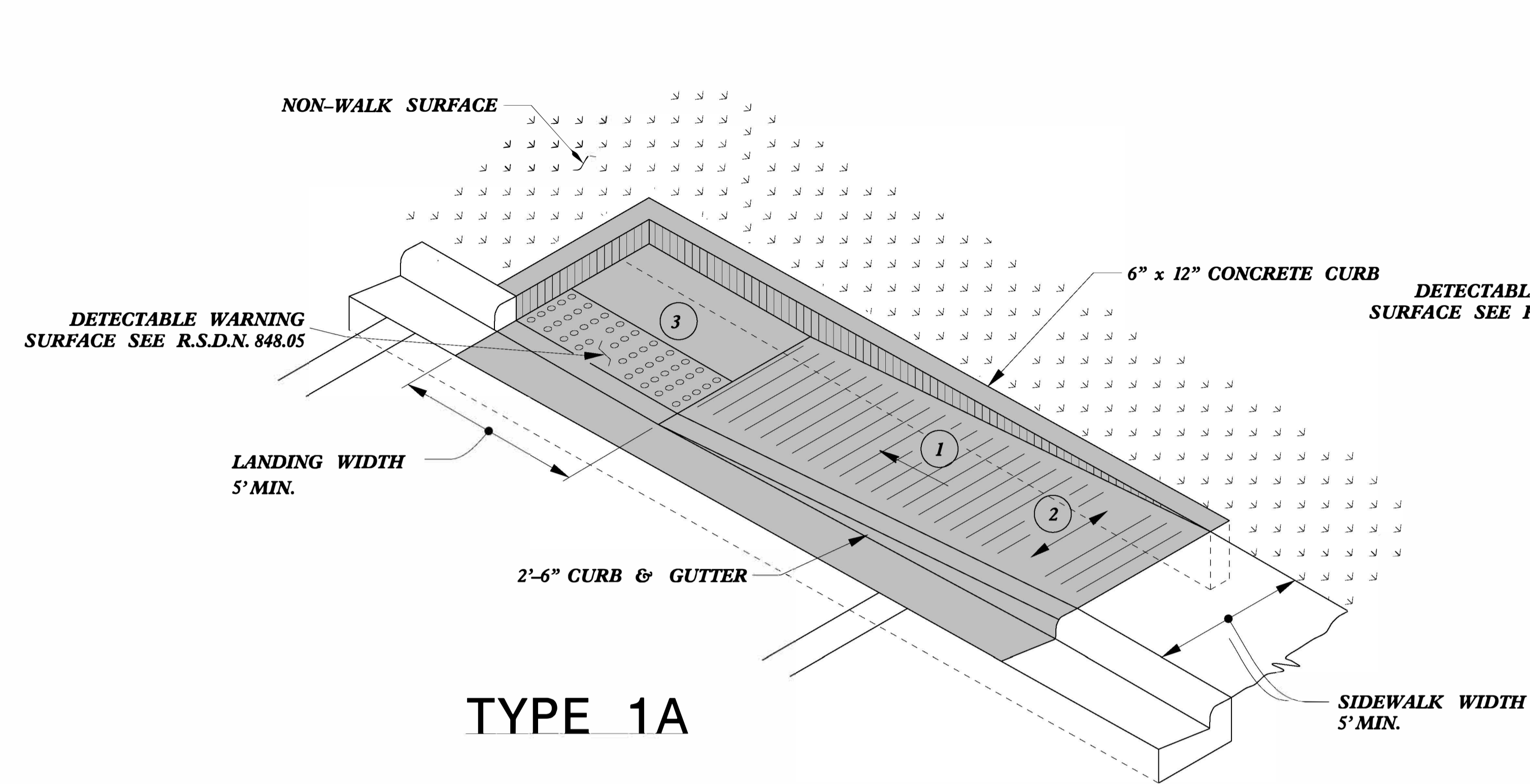
- SHOULDER WEDGE ANGLE = 30°

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\detatl1s\stand\shoulderwedgedeta11.dgn	

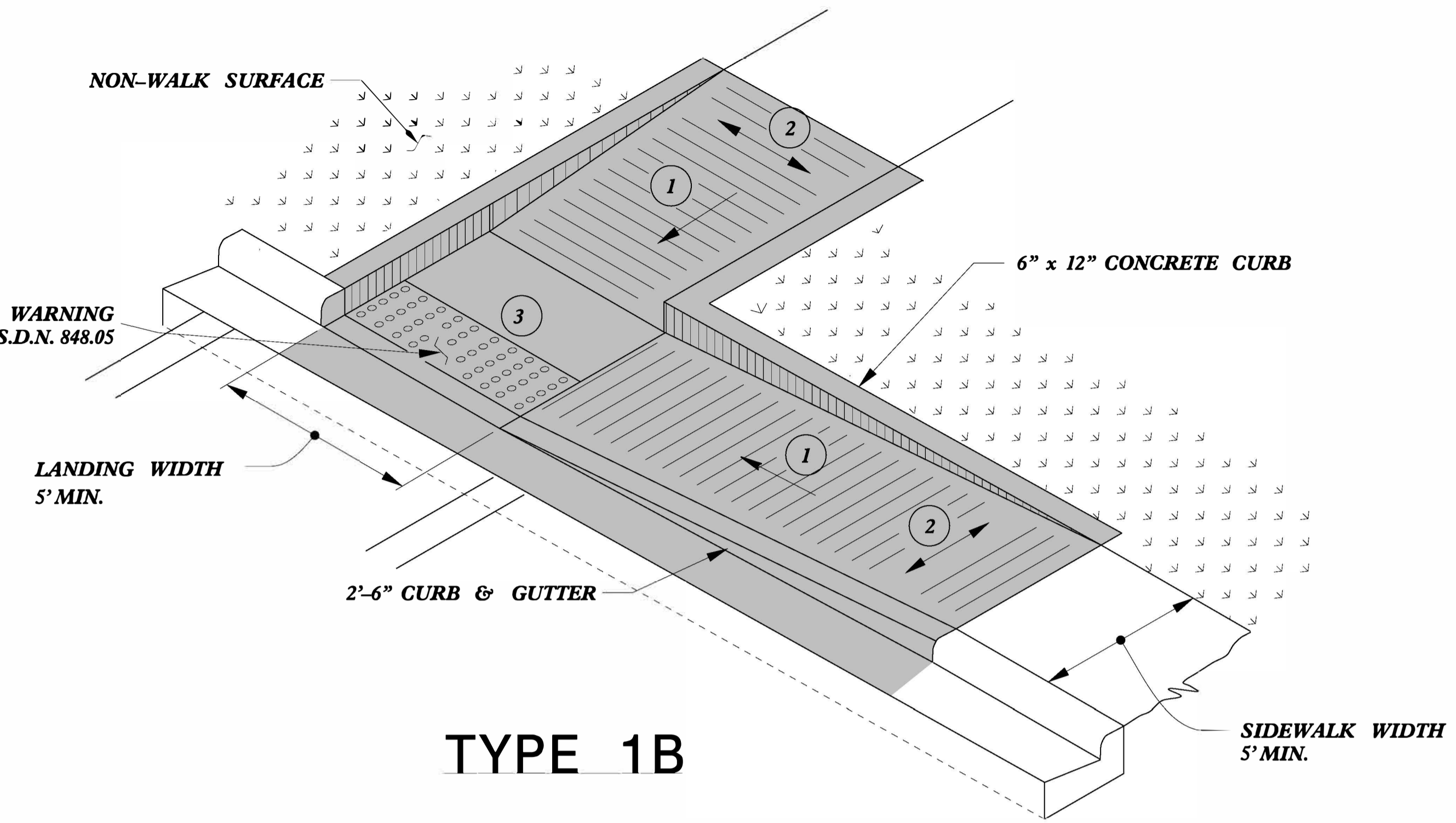
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UNLESS ALL SIGNATURES COMPLETED

\$\$\$\$SYTIME\$\$\$\$
 \$\$\$SERVNAME\$\$\$
 \$\$\$USERNAME\$\$\$

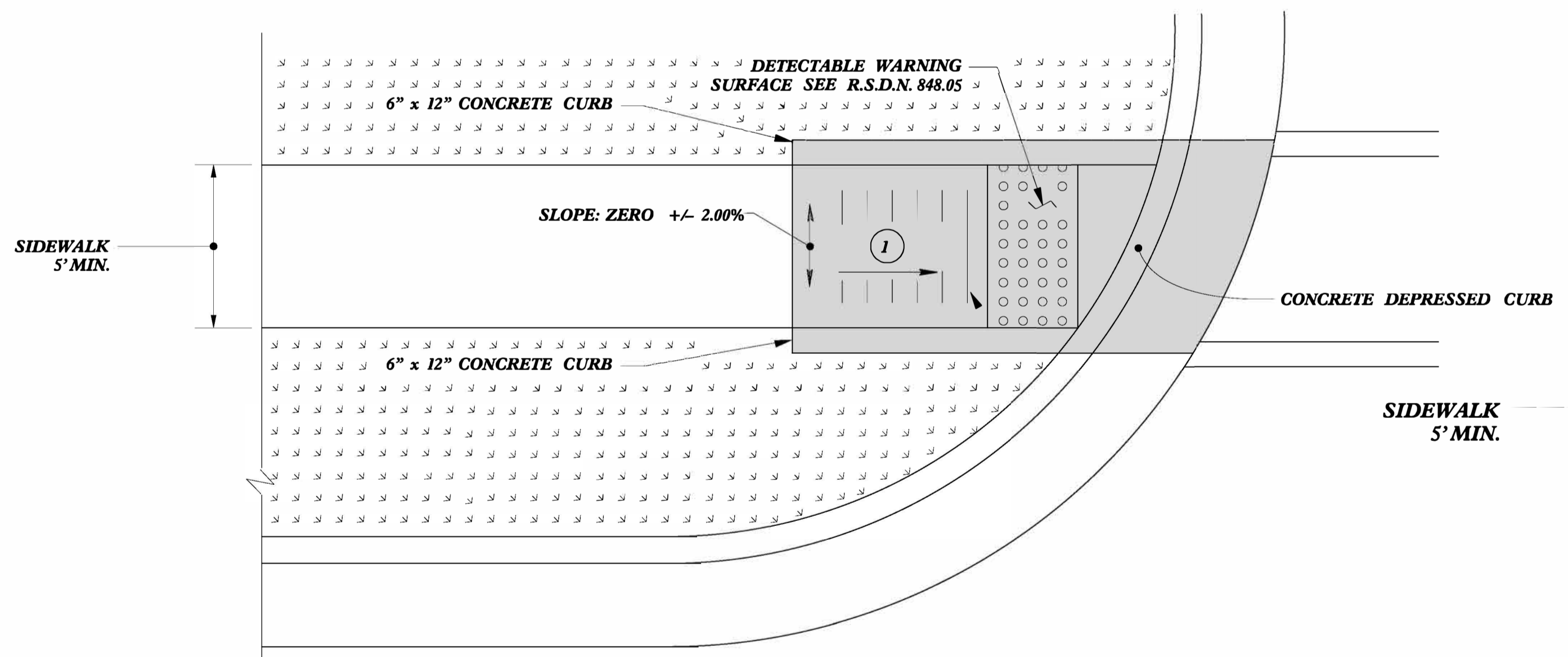
5/14/99



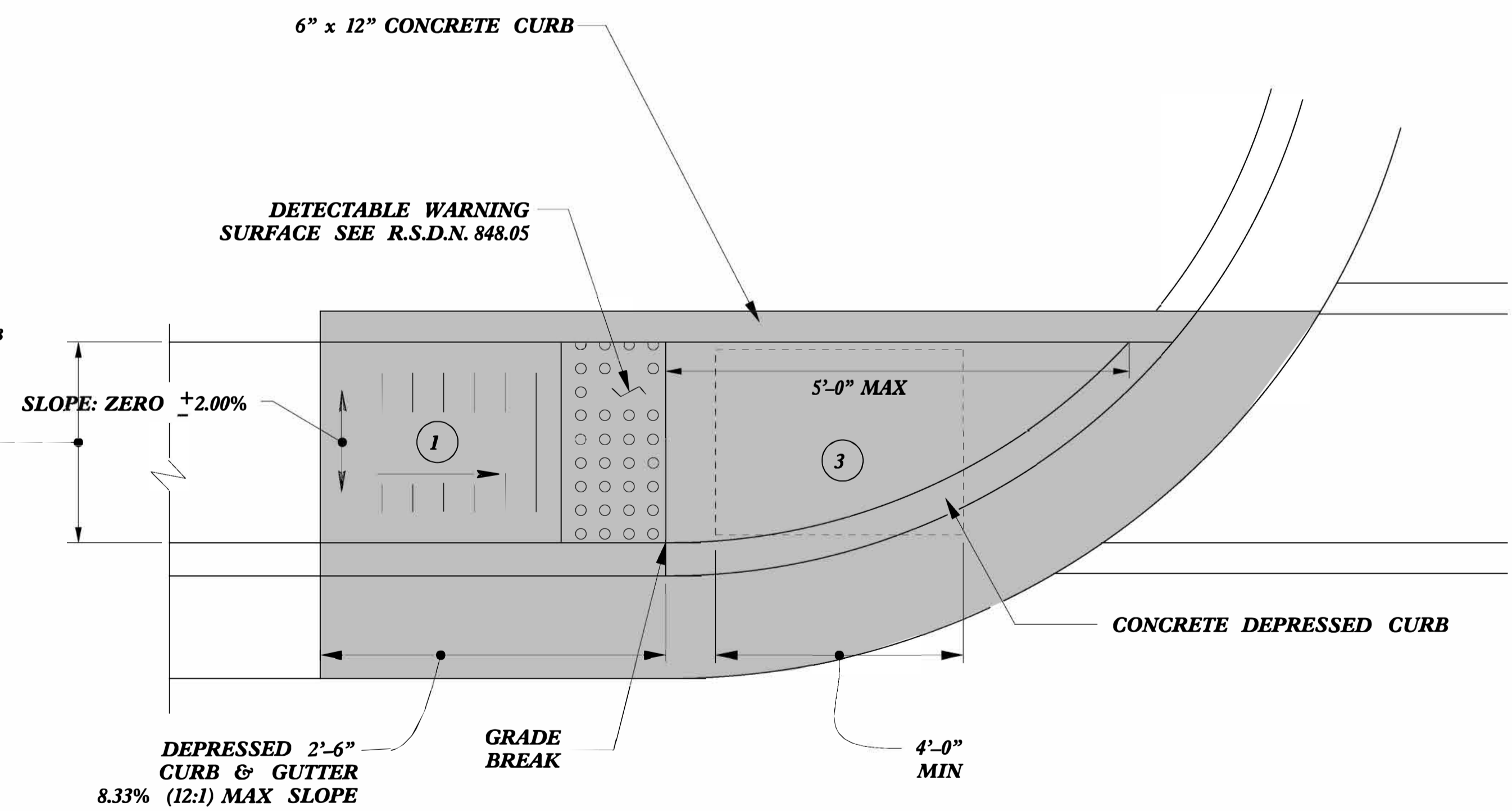
TYPE 1A



TYPE 1B



TYPE 1 Modified



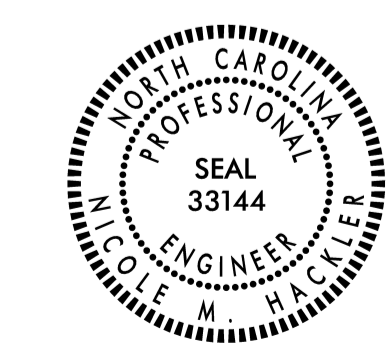
TYPE 1

- 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



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

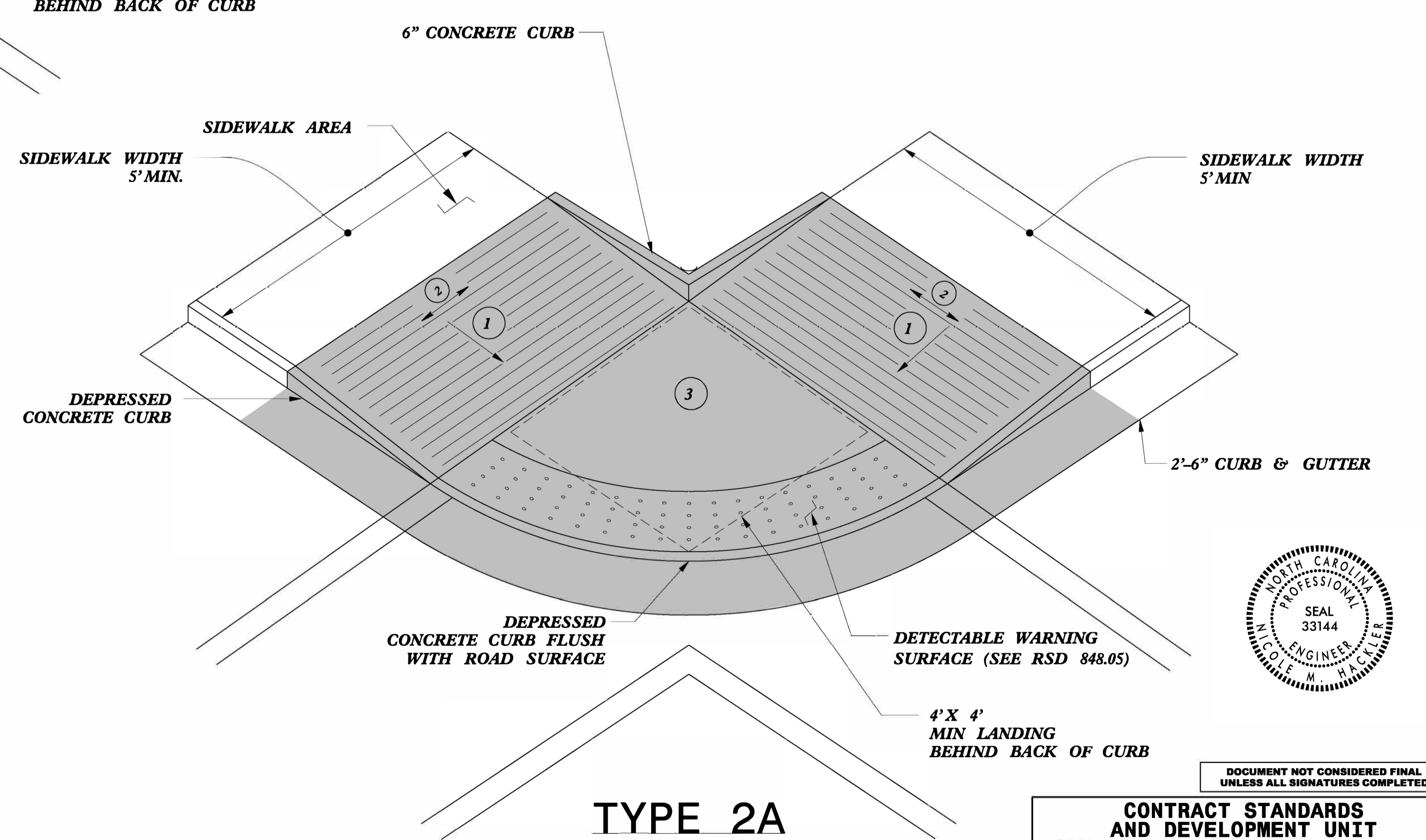
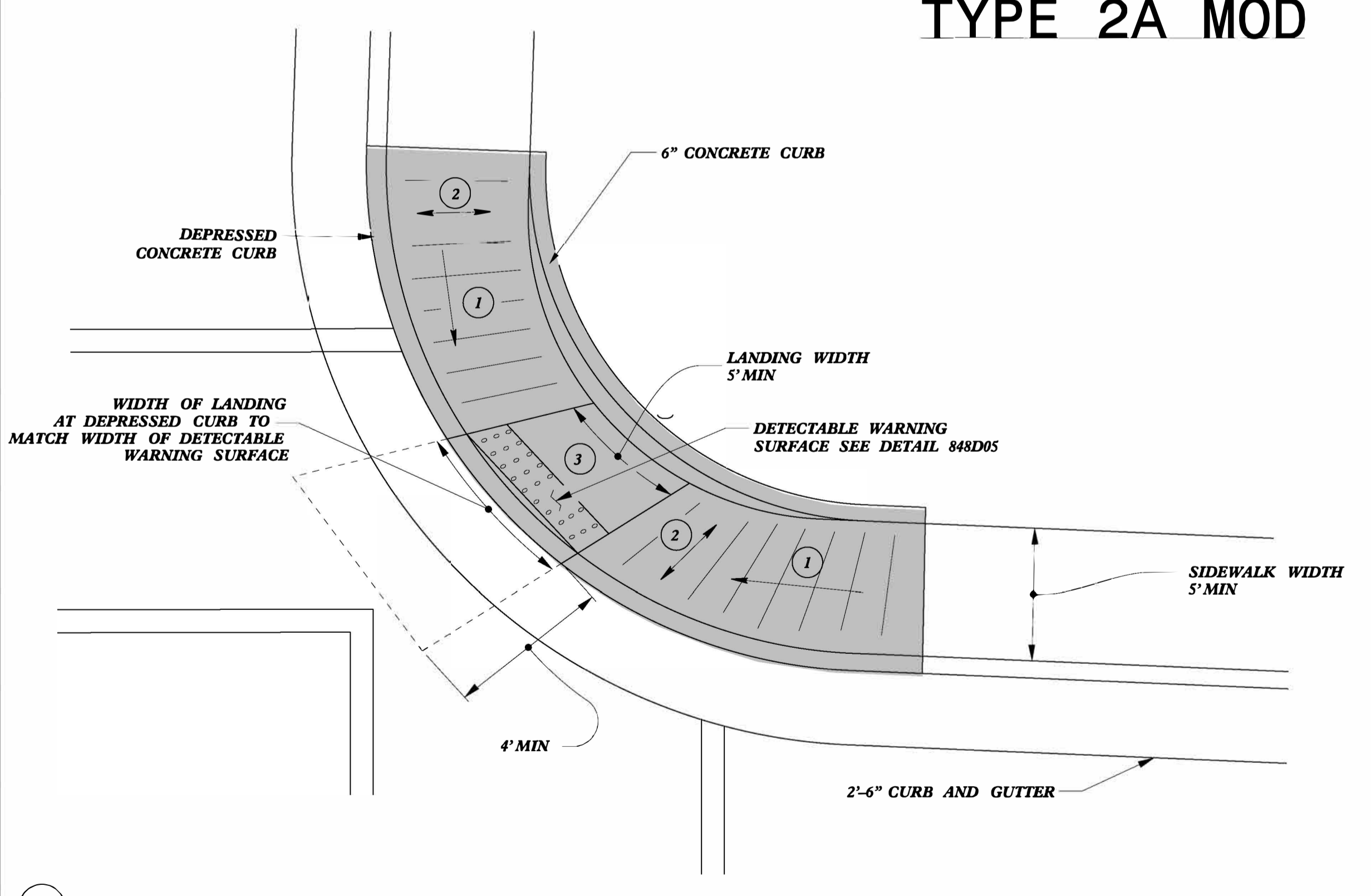
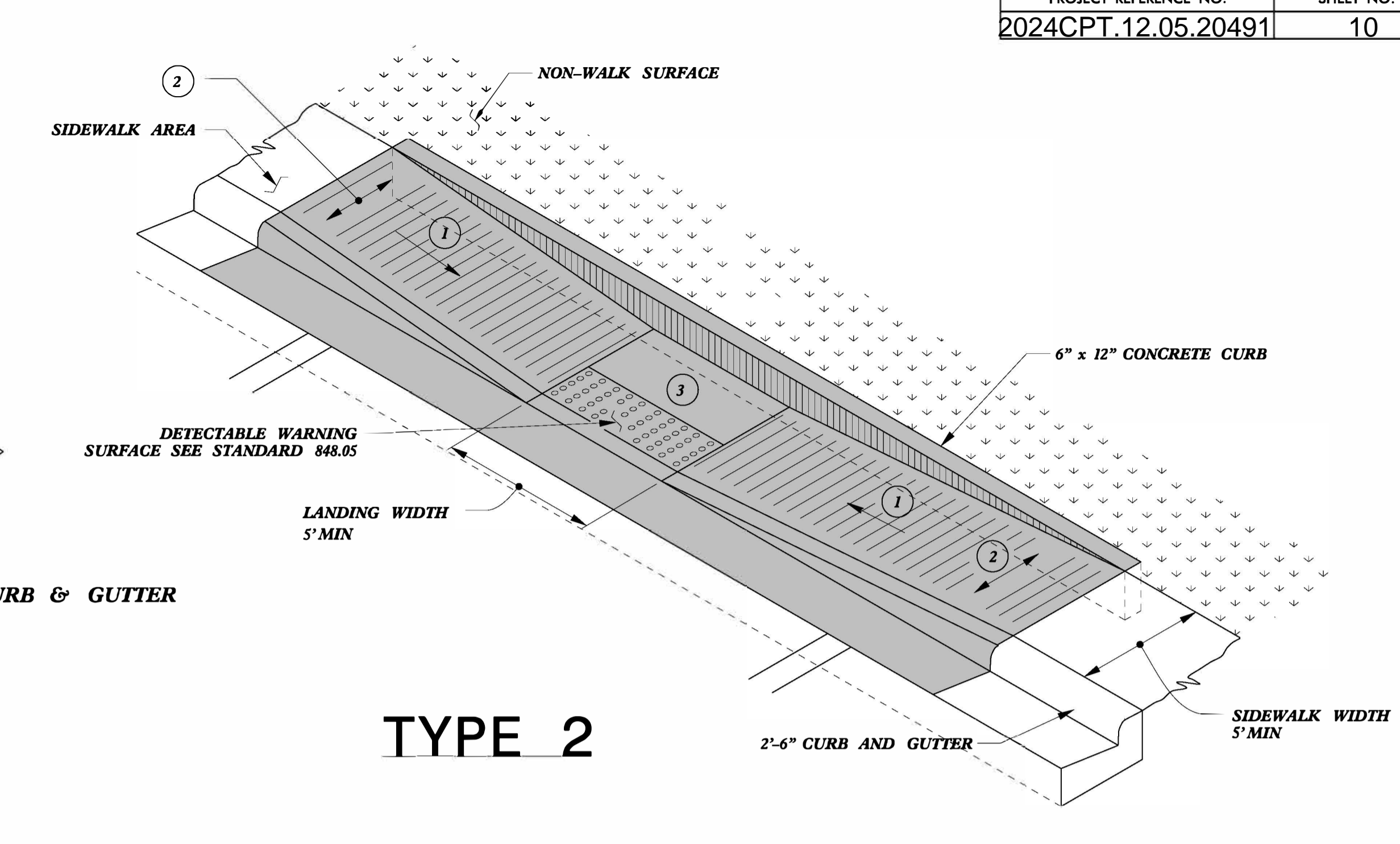
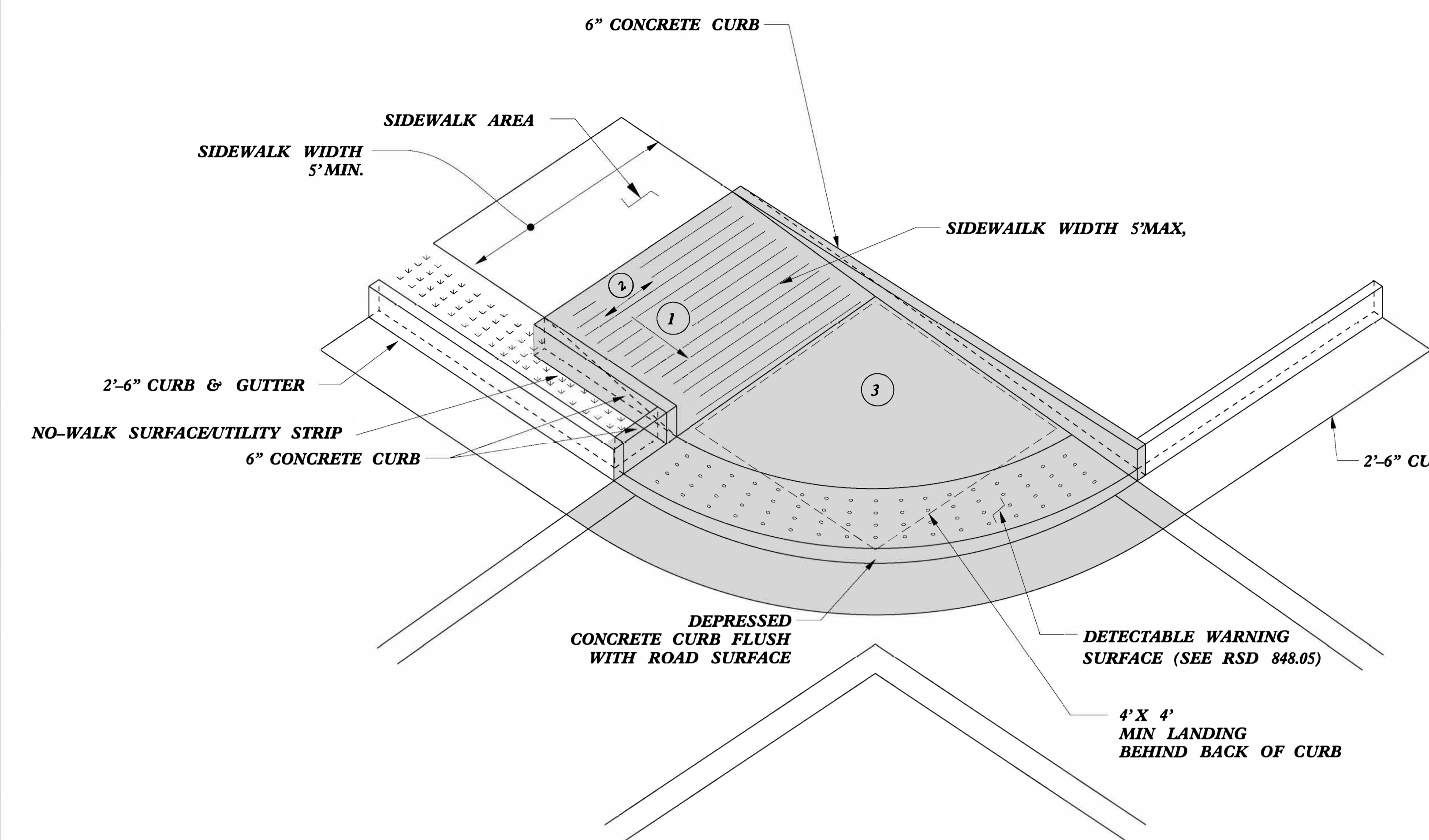
**CONTRACT STANDARDS
AND DEVELOPMENT UNIT**
Office 919-707-6950 FAX 919-250-4119

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

C:\TEMP\6666\DWG\2012CurbRamp\CurbRampDetails.dgn
 USER: JSMITH
 PLOT DATE: 7/7/11 10:00 AM
 PLOT BY: JSMITH

5/14/99



- 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



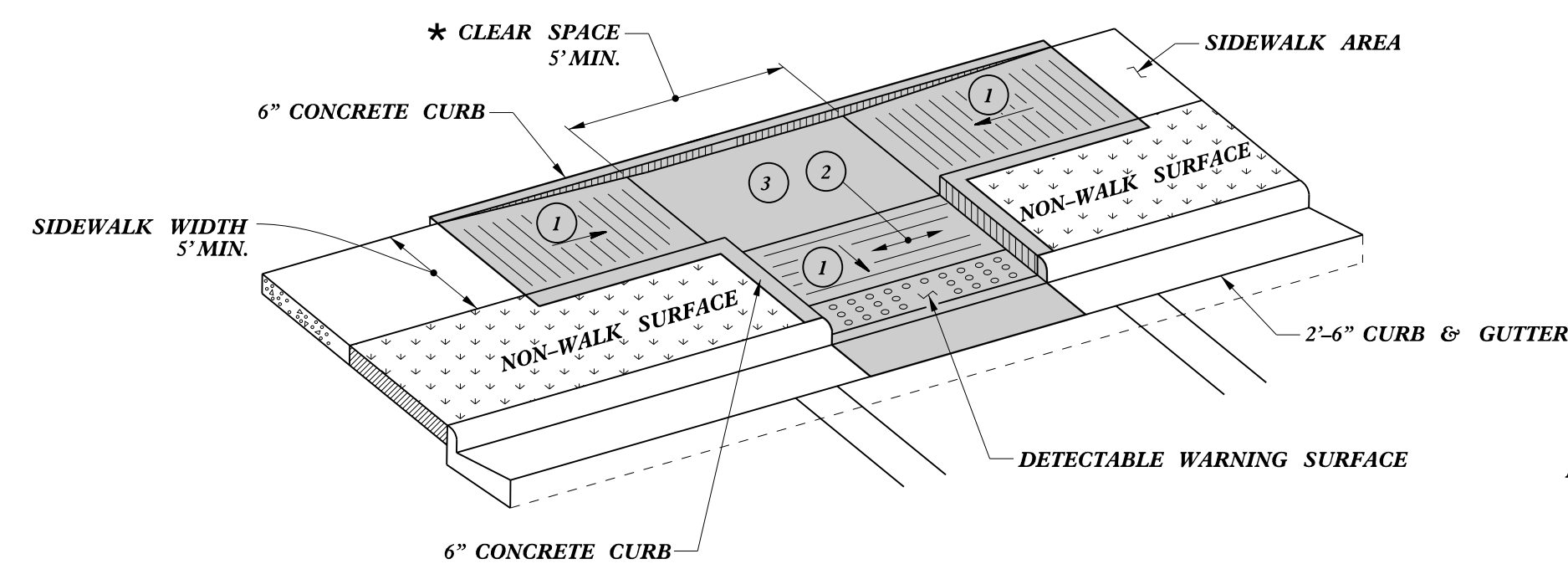
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CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

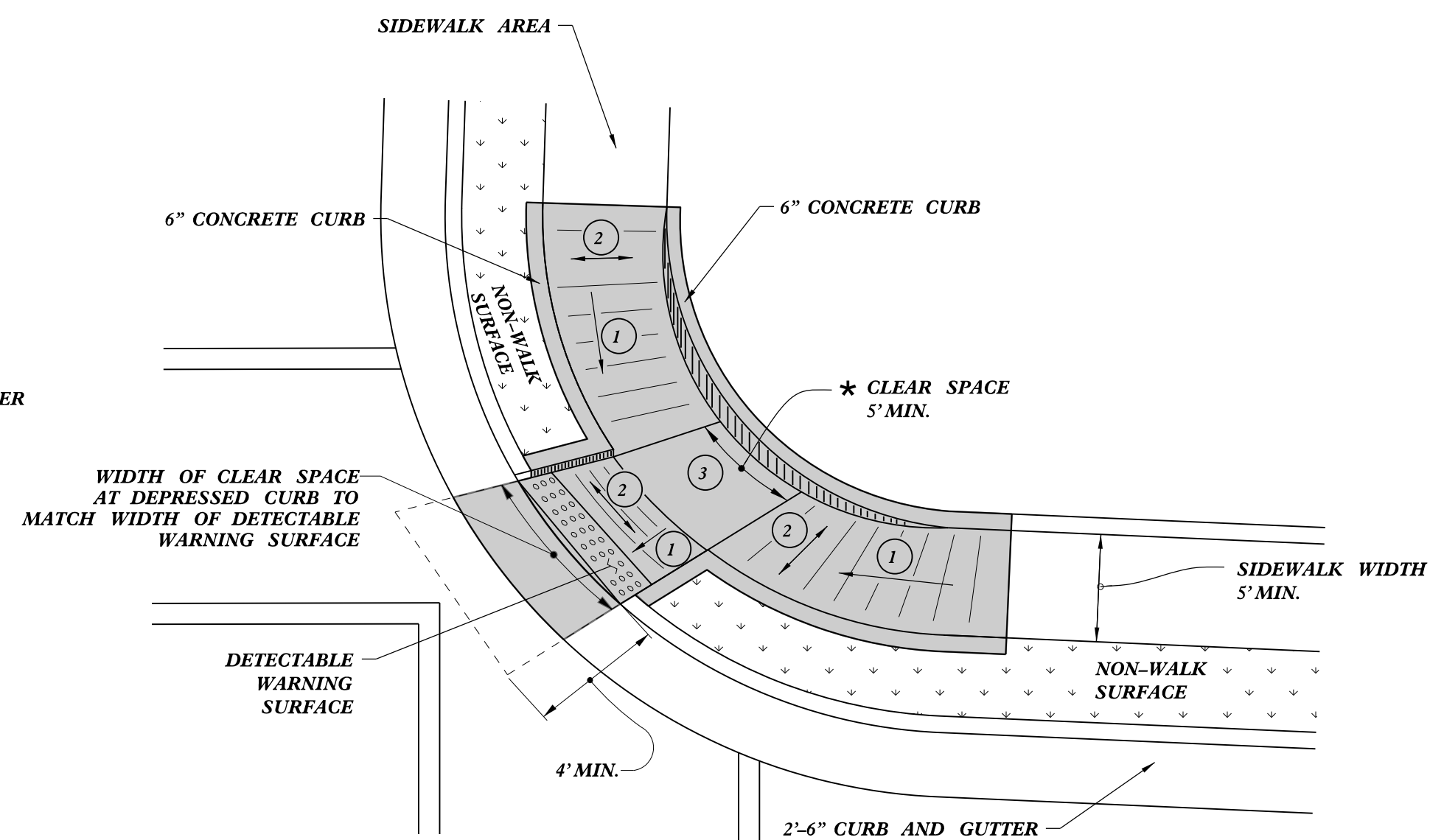
CURB RAMPS

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

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

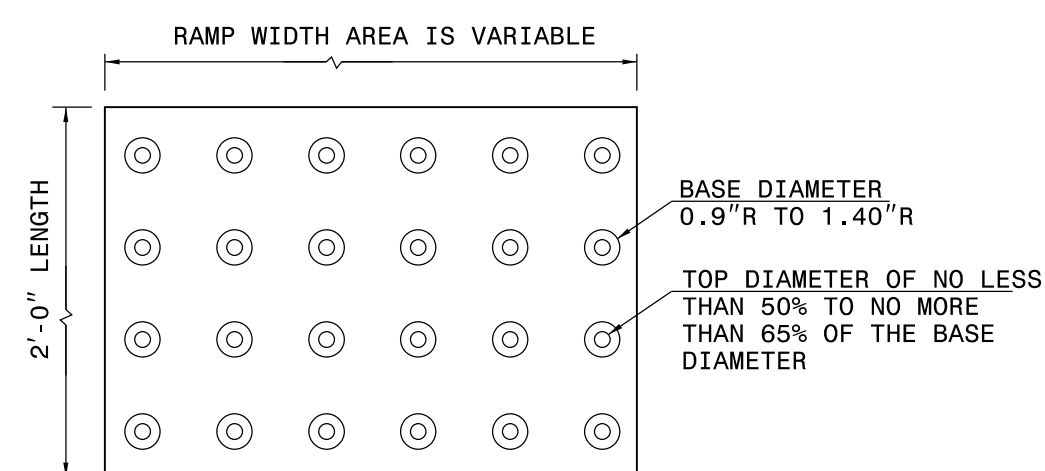


TYPE 3

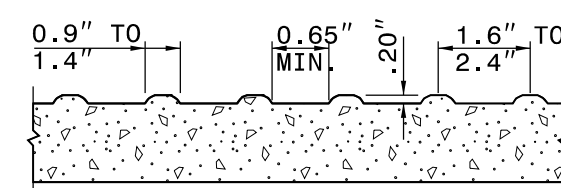


**TYPE 3 MODIFIED
INSTALLATION IN A RADIUS**

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



DETECTABLE WARNING SURFACE



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

PAY LIMITS FOR 1 CURB RAMP

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

ROADWAY STANDARD DRAWING FOR
CURB RAMP
 PARALLEL RAMP



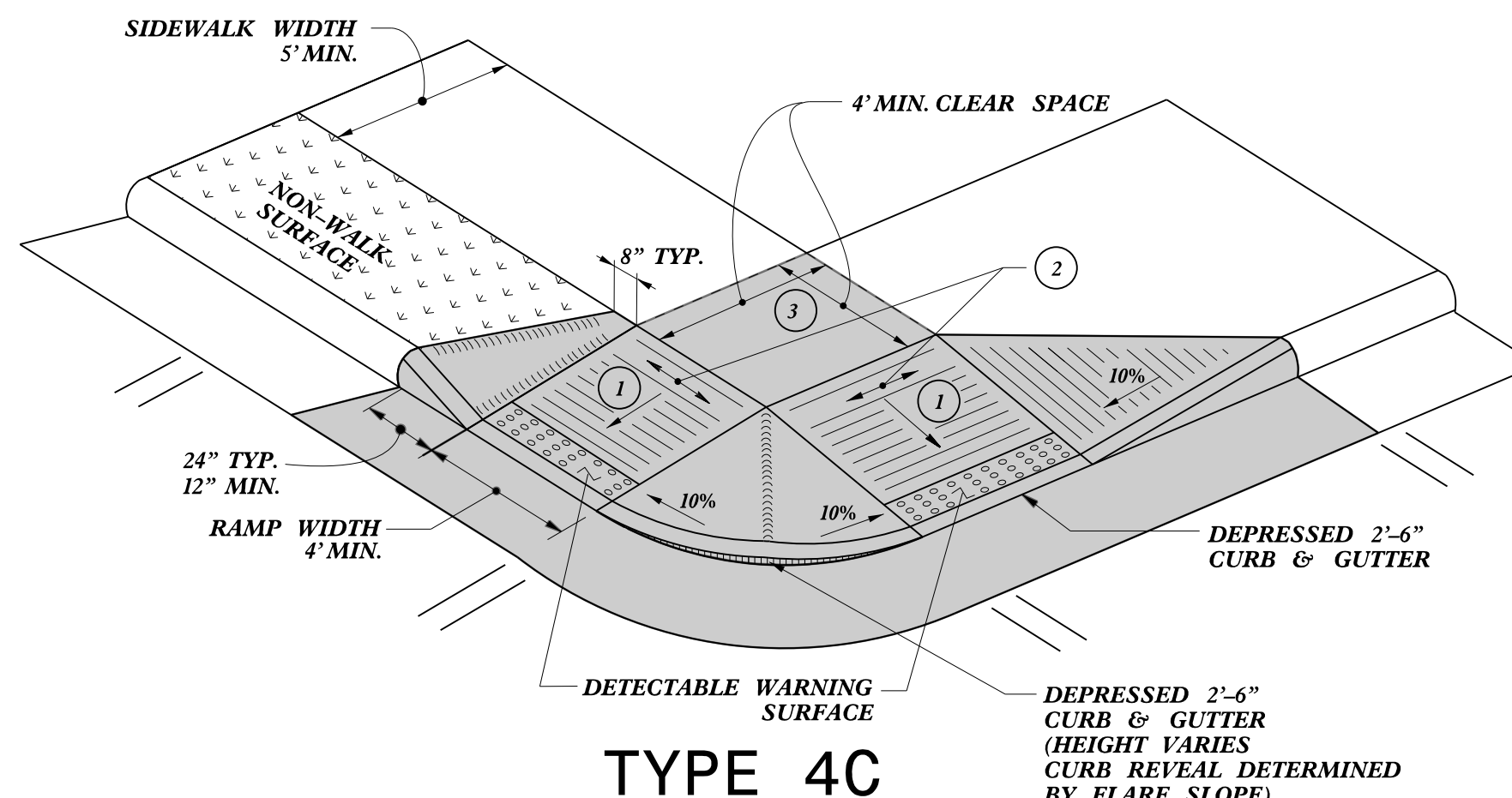
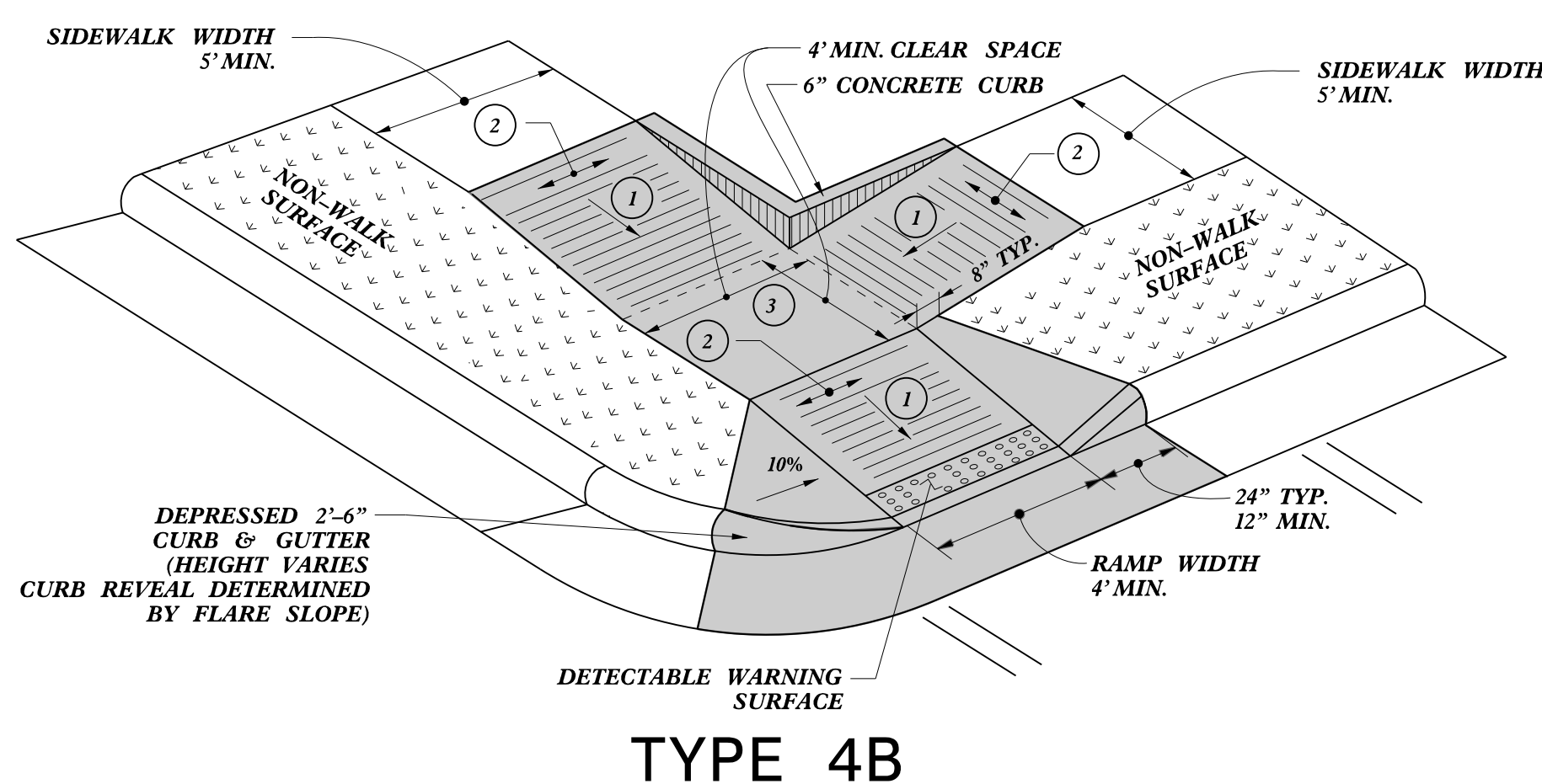
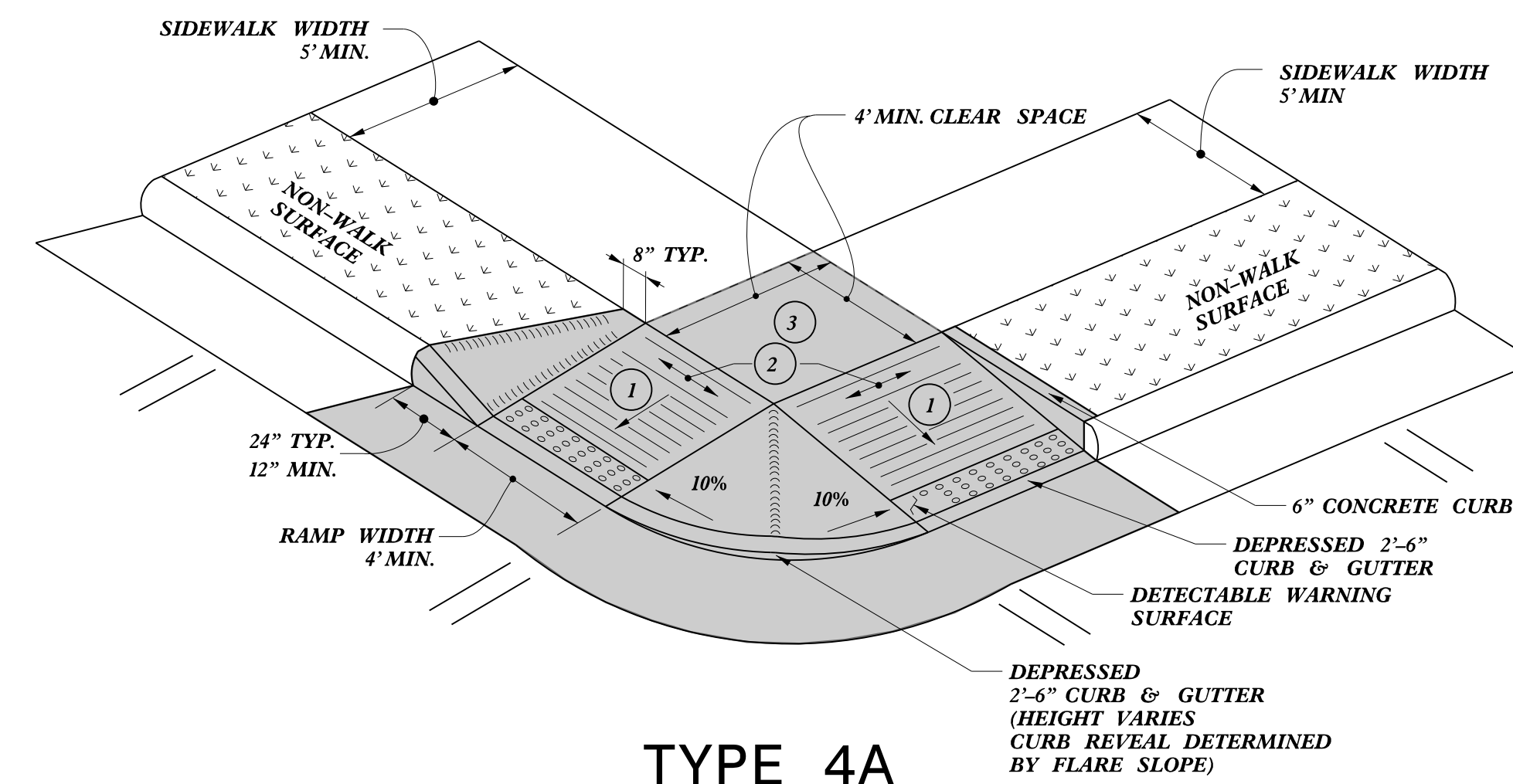
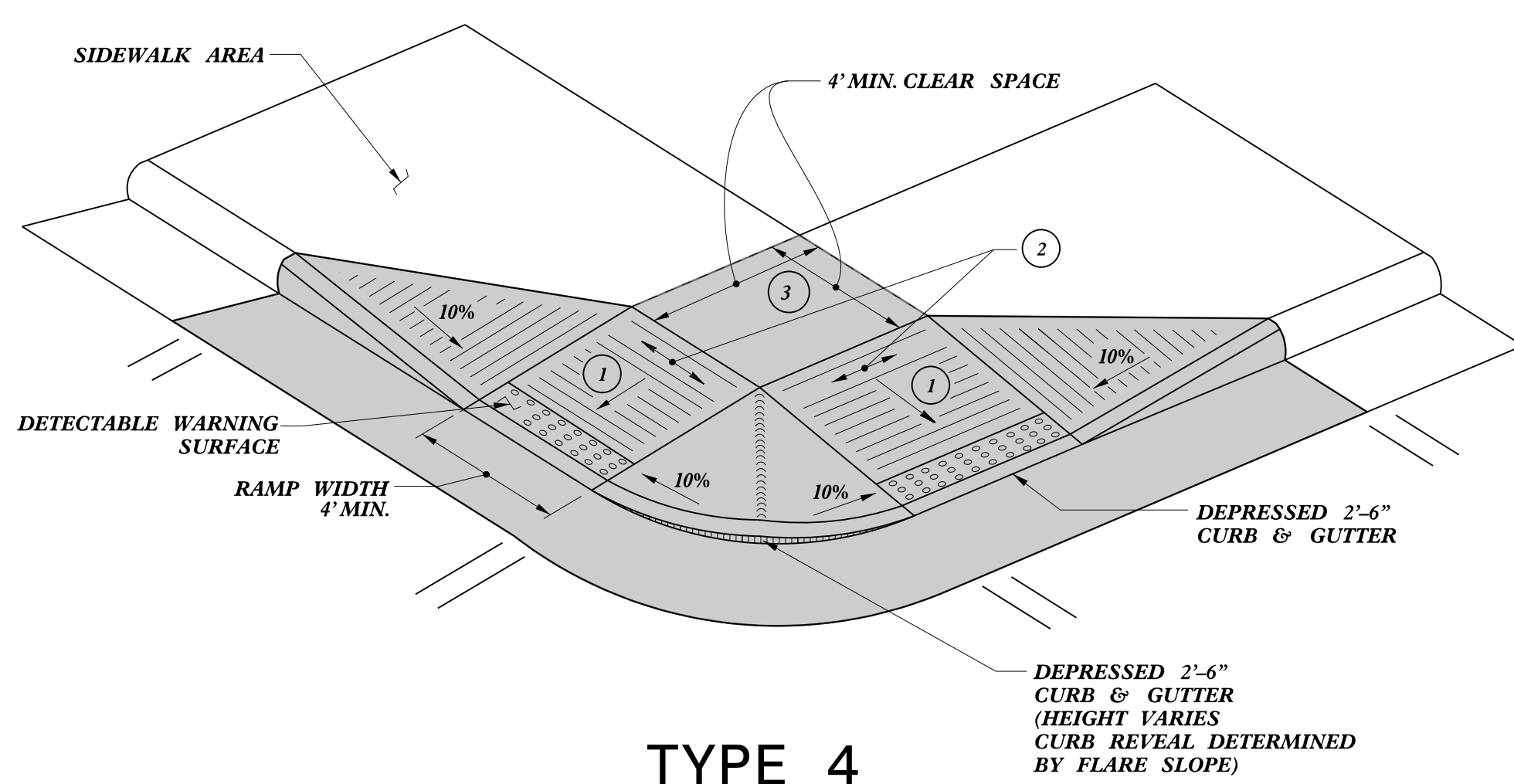
SHEET 9 OF 13
848D06

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

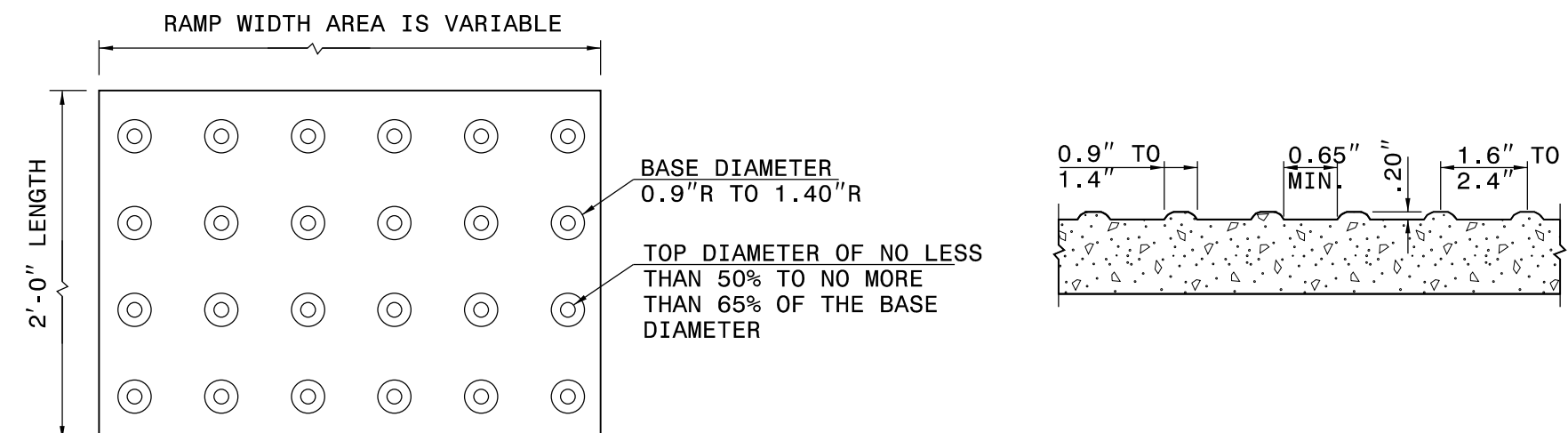
CONTRACTS STANDARDS
 AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

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



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



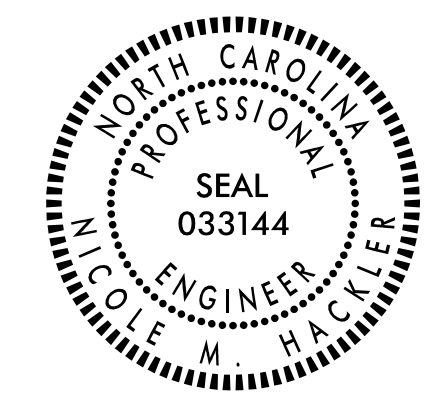
DETECTABLE WARNING SURFACE

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

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

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

ROADWAY STANDARD DRAWING FOR
CURB RAMP
 SHARED LANDING



SHEET 10 OF 13
848D06

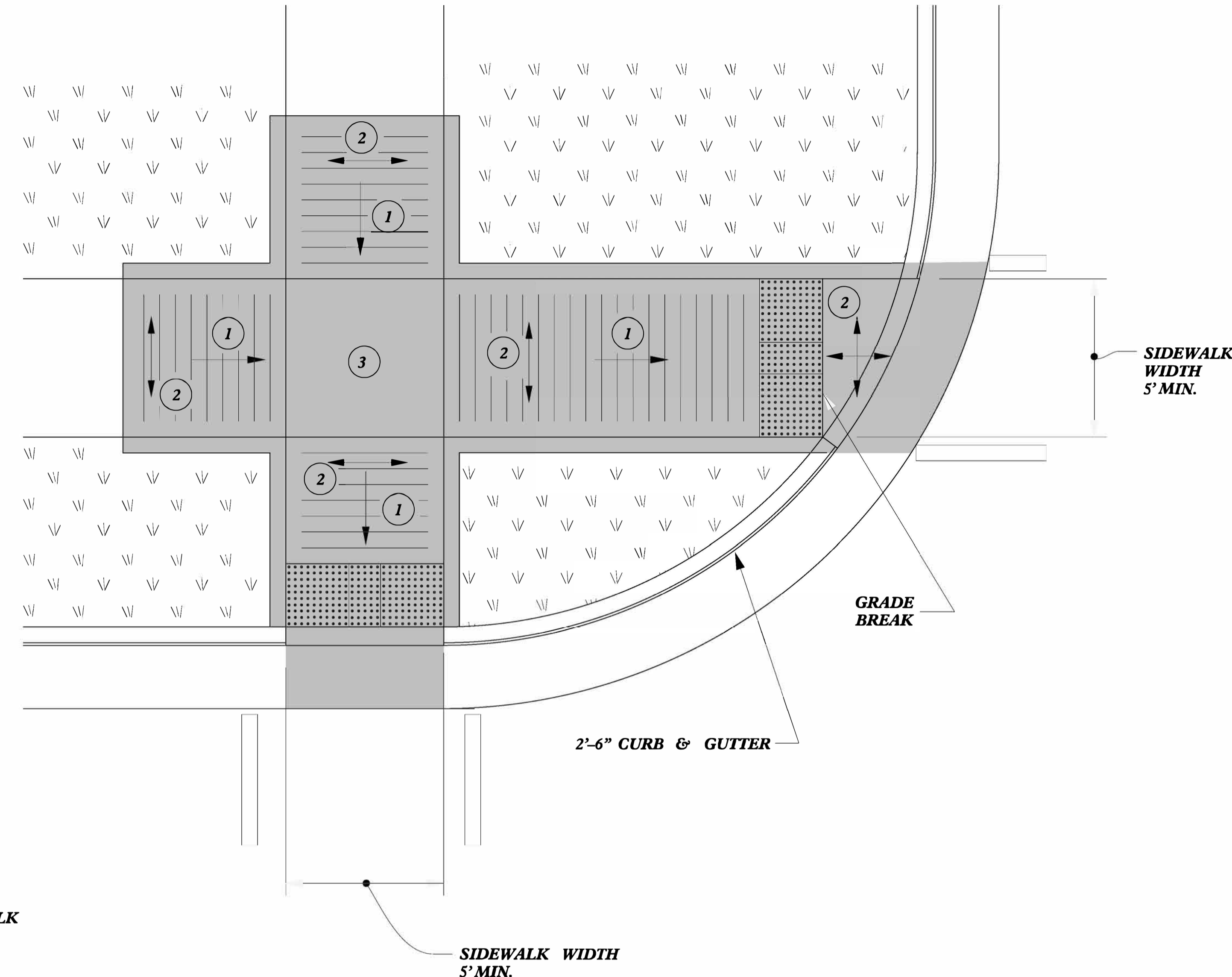
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CONTRACTS STANDARDS AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119

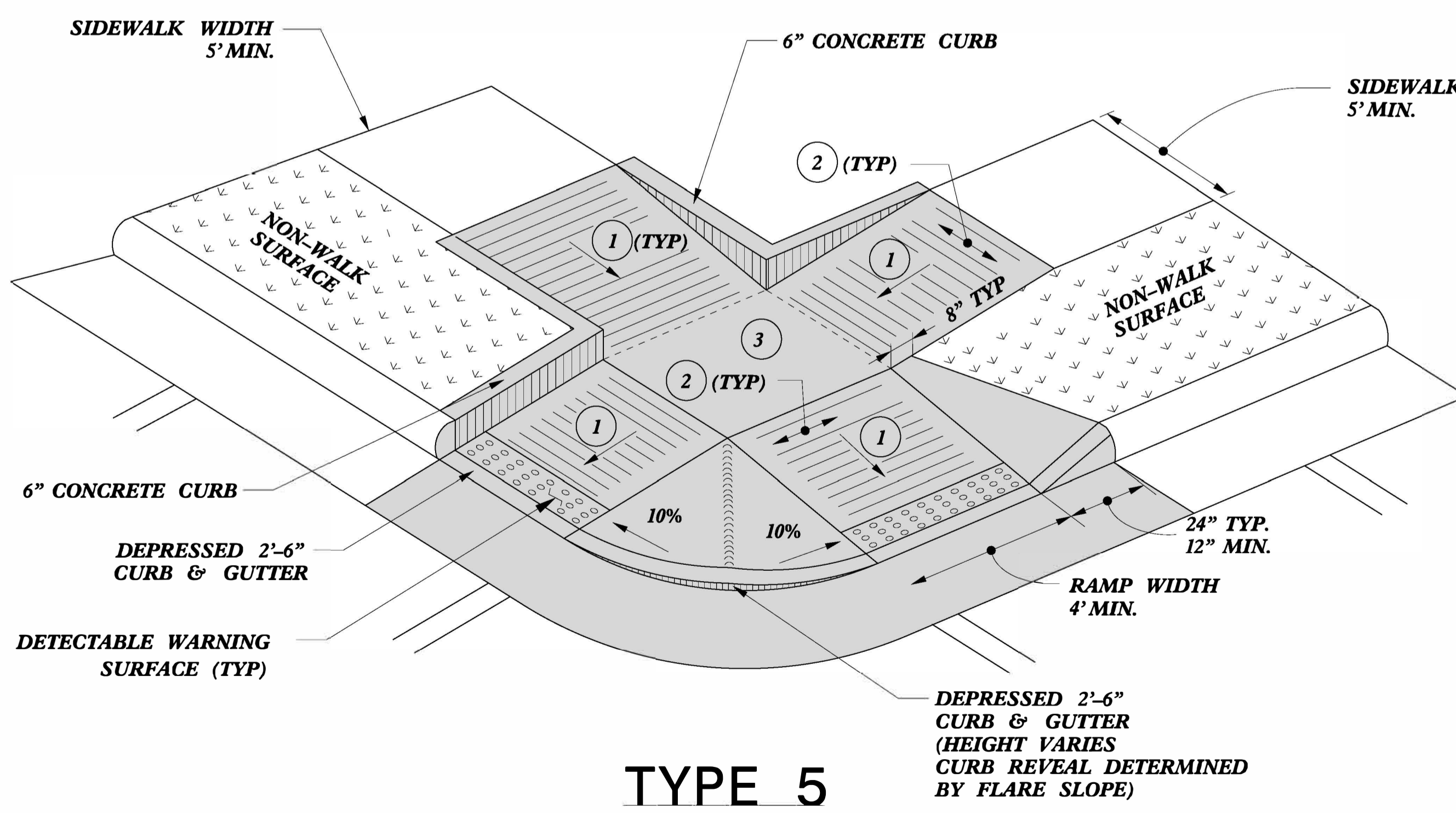
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ORIGINAL BY: S.CALHOUN DATE: 12-22-2023
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC.: special_details\nmhackler\848D0610.dgn

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.



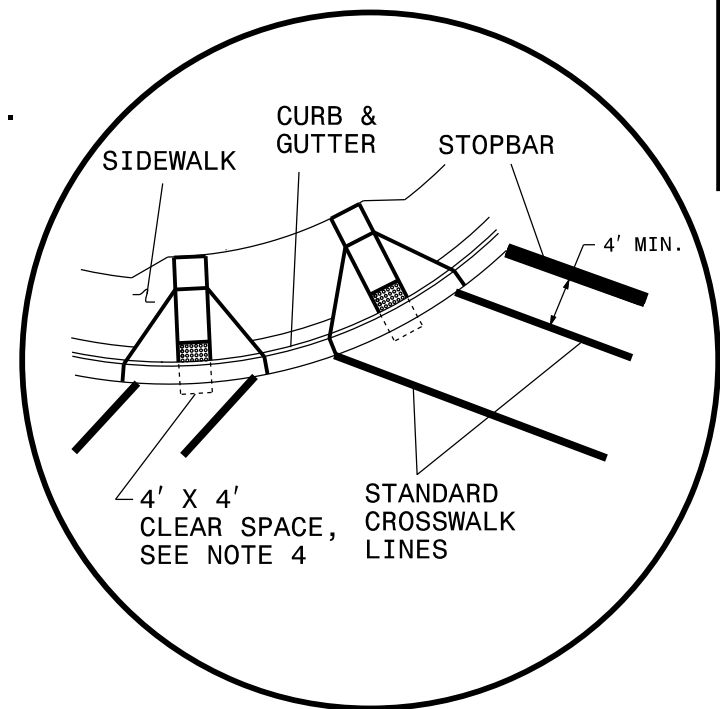
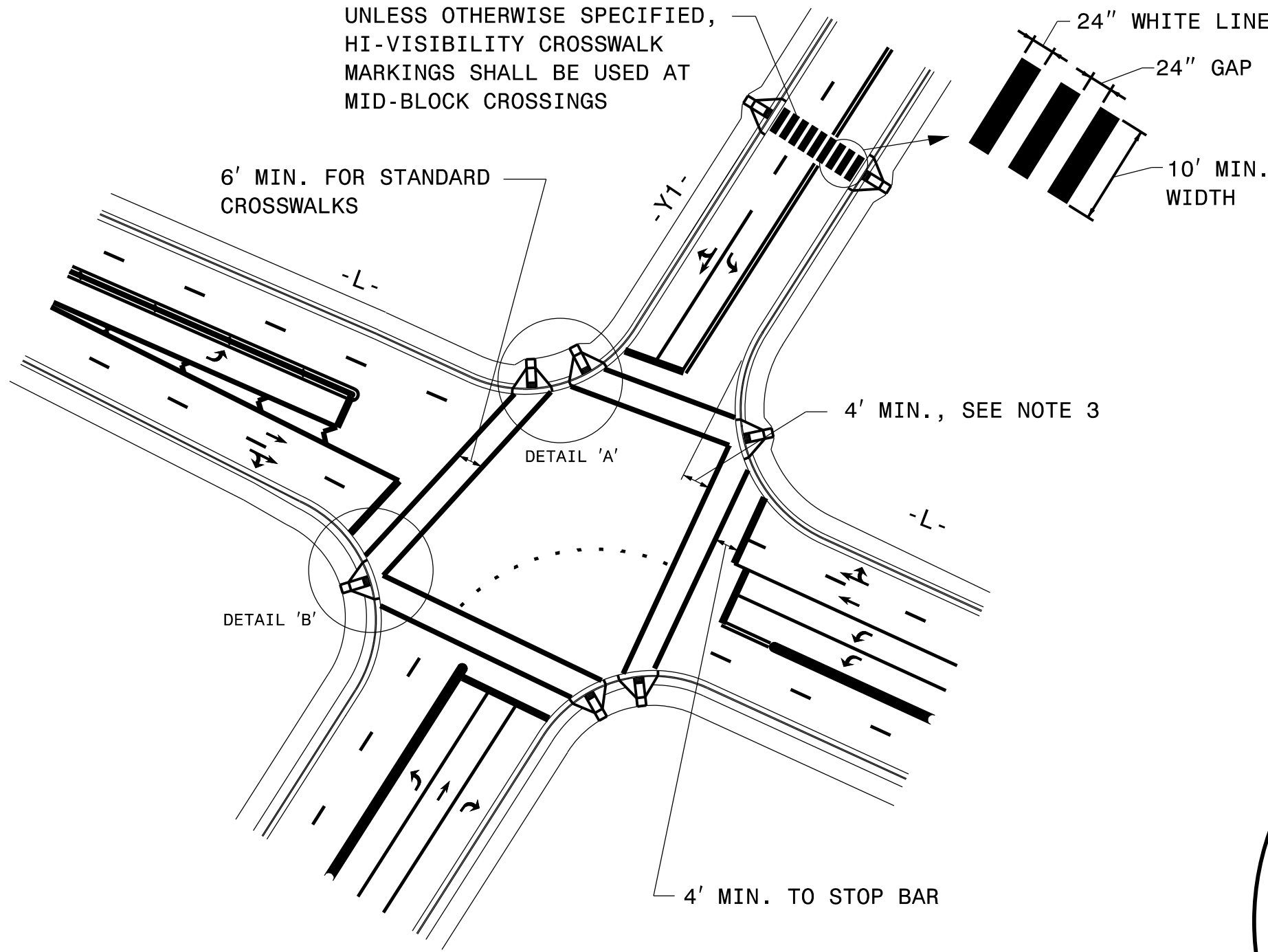
CONTRACT STANDARDS AND DEVELOPMENT UNIT
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CURB RAMPS

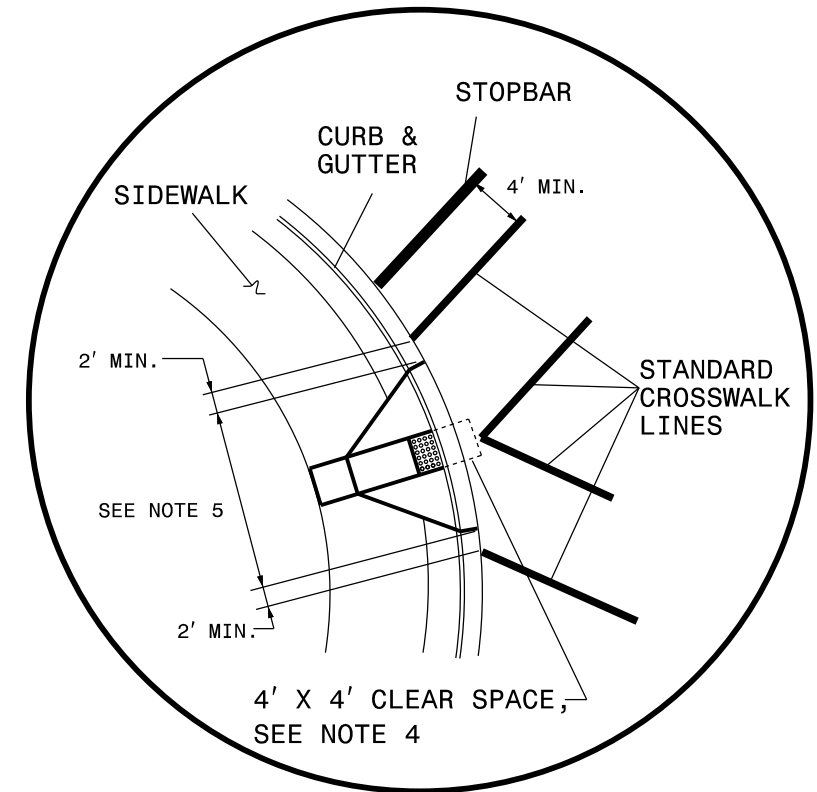
ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn

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

5/14/99
SYTIME
DU
SUGERNAVE



DETAIL 'A'- DUAL CURB RAMPS



DETAIL 'B'- SINGLE DIAGONAL CURB RAMP

GUIDANCE DETAIL FOR CROSSWALK MARKINGS

NOTES:

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

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

PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.12.05.20491	16	

SUMMARY OF QUANTITIES

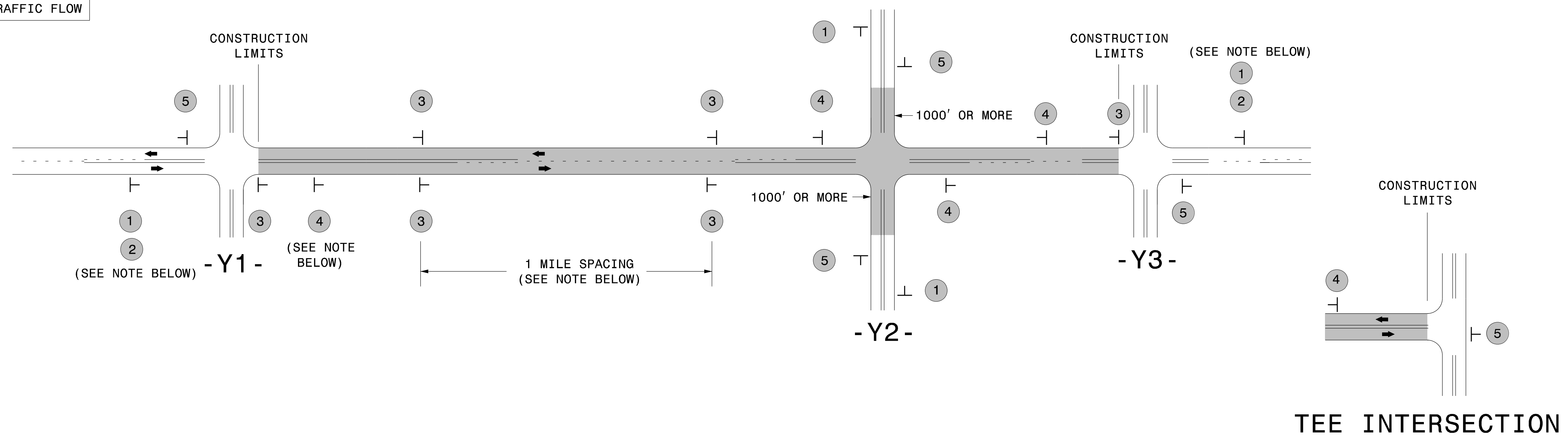
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	BEGIN MP	END MP	2605000000-N	2612300000-N	2800000000-N	2815000000-N	2830000000-N	2845000000-N	5255000000-N	7324000000-N	7444000000-E	7456100000-E			
														CONCRETE CURB RAMPS	RETROFIT EXISTING CONCRETE CURB RAMPS	ADJ. OF CATCH BASIN	ADJ. OF DROP INLET	ADJ. OF MANHOLES	ADJ. OF METER BOXES OR VALVE BOXES	PORTABLE LIGHTING	JUNCTION BOX (STANDARD SIZE)	INDUCTIVE LOOP	LEAD-IN CABLE (14-2)			
														EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	
														MI	FT											
2024CPT.12.05.20491	Iredell	1	SR-1446 / COOLEY RD	FROM SR 1445 (KEMP RD.) TO DEAD END	1	2		NO	NO	0.261	18	1.757	2.018													
TOTAL FOR MAP NO. 1										0.261																
2024CPT.12.05.20491	Iredell	2	SR-1445 / KEMP RD	FROM SR 1446 (COOLEY RD.) TO SR 1115 (MCKENDREE RD.)	1	2		NO	NO	0.721	20	0	0.721													
TOTAL FOR MAP NO. 2										0.721																
2024CPT.12.05.20491	Iredell	3	SR-2923 / CHATWORTH LN	FROM SR 1179 (CANVASBACK RD.) TO CUL-DE-SAC	1	2		NO	NO	0.069	20	0	0.069													
TOTAL FOR MAP NO. 3										0.069																
2024CPT.12.05.20491	Iredell	4	SR-2361 / MCNESS RD	FROM SR 2638 (SALISBURY HWY.) TO END OF MAINTANANCE	1	2		NO	NO	0.076	24	0	0.076													
TOTAL FOR MAP NO. 4										0.076																
2024CPT.12.05.20491	Iredell	5	SR-2141 / DUNLAP GATE RD	FROM US 21 TO SR 2158 (OLD MOCKSVILLE RD.)	1	2		NO	NO	1.504	20	0	1.504													
TOTAL FOR MAP NO. 5										1.504																
2024CPT.12.05.20491	Iredell	6	SR-2366 / PERRY RD./HOOVER RD./CREEKS EDGE LN	FROM US 21 TO CUL-DE-SAC	1	2		NO	NO	1.582	20	0	1.582													
TOTAL FOR MAP NO. 6										1.582																
2024CPT.12.05.20491	Iredell	7	SR-1916 / LENTZ RD	FROM SR 1890 (TOMLIN MILL RD.) TO SR 1892 (JENNINGS RD.)	1	2		NO	NO	1.956	20	0	1.956													
TOTAL FOR MAP NO. 7										1.956																
2024CPT.12.05.20491	Iredell	8	SR-1873 / N CHIPLEY FORD RD	FROM SR 1896 (FRIENDSHIP RD.) TO SR 1898 (DOBSON FARM RD)	1	2		NO	NO	2.031	20	0	2.031													
TOTAL FOR MAP NO. 8										2.031																
2024CPT.12.05.20491	Iredell	9	SR-1898 / N CHIPLEY FORD RD	FROM SR 1873 (NORTH CHIPLEY FORD RD.) TO SR 1903 (SNOW CREEK RD.)	1	2		NO	NO	1.743	20	2.39	4.133													
TOTAL FOR MAP NO. 9										1.743																
2024CPT.12.05.20491	Iredell	10	SR-1328 / EAST MONBO RD	FROM SR 1005 (OLD MOUNTAIN RD.) TO SR 2801 (HIGHLAND VIEW DR.)	2, 4	2		NO	NO	4.91	20	0	4.91													
TOTAL FOR MAP NO. 10										4.91																
2024CPT.12.05.20491	Iredell	11	SR-1903 / SNOW CREEK RD	FROM NC 115 TO SR 1892 (JENNINGS RD.)	3	2		NO	NO	4.555	20	0	4.555													
TOTAL FOR MAP NO. 11										4.555																
2024CPT.12.05.20491	Iredell	12	SR-1005 / OLD MOUNTAIN RD	FROM ALEXANDER COUNTY LINE TO BRIDGE #90 OVER I-40	2	2		NO	NO	5.732	20	0	5.732								1	624	80			
TOTAL FOR MAP NO. 12										5.732											1	624	80			
2024CPT.12.05.20491	Iredell	13	SR-2321 OI / E BROAD ST	FROM I-3819B PROJECT LIMITS TO SR 2320 (S.GREENBRIAR)	2, 4, 5	2		NO	NO	1.51	20	1.973	3.483						5	2	1	1	1,404	120		
TOTAL FOR MAP NO. 13										1.51									5	2	1	1	1,404	120		
2024CPT.12.05.20491	Iredell	14	SR-2333 / EASTSIDE DR	FROM I-3819B PROJECT LIMITS TO SR 2735 (SALISBURY RD.)	2, 5, 6, 7	2		NO	NO	1.04	22	0.124	1.164				1	1	14	6		1	1,248	60		
TOTAL FOR MAP NO. 14										1.04							1	1	14	6		1	1,248	60		
2024CPT.12.05.20491	Iredell	15	SR-1245 / MEDICAL PARK RD	FROM US 21 TO SR 1246 (FAIRVIEW RD)	4, 5, 6, 8	2		NO	NO	0.601	35	0	0.601									1	780	40		
TOTAL FOR MAP NO. 15										0.601													1	780	40	
2024CPT.12.05.20491	Iredell	16	SR-1421 / WILSON W LEE BLVD	FROM SR 1338 (WALLACE SPRINGS RD.) TO PAVEMENT CHANGE NORTH OF US 70	2, 9	2		NO	NO	0.701	30	0.251	0.952	1	1				13	13		1	624	40		
TOTAL FOR MAP NO. 16										0.701				1	1				13	13		1	624	40		
TOTAL FOR PROJ NO. 2024CPT.12.05.20491										28.992				1	1	1	1	32	21	1	5	4,680	340			
GRAND TOTAL										28.992				1	1	1	1	32	21	1	5	4,680	340			

SIGNING FOR RESURFACING PROJECTS

LEGEND

┆ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

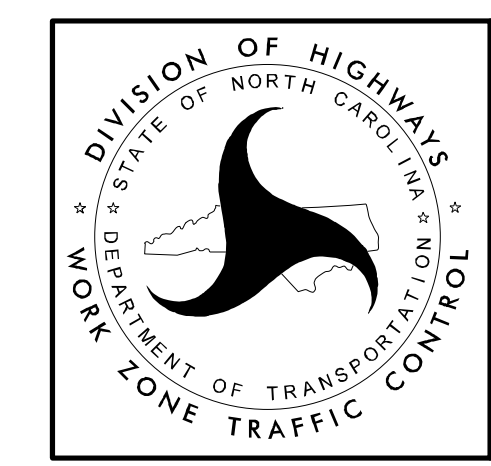
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1		PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
	2		#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	3		- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.	
	4		- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. - DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. - INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. - FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. - A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.	
	5		PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	

THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.

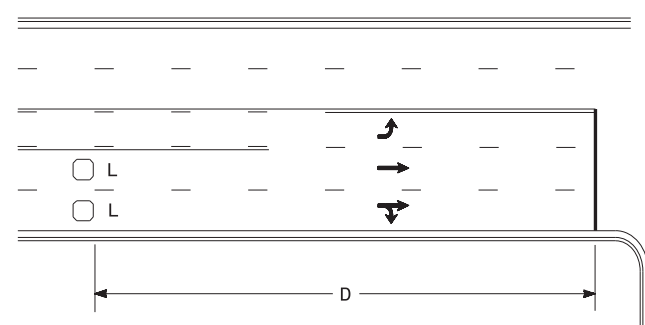
MAPS LESS THAN 2 MILES

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



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

High Speed Detection (≥40 mph)

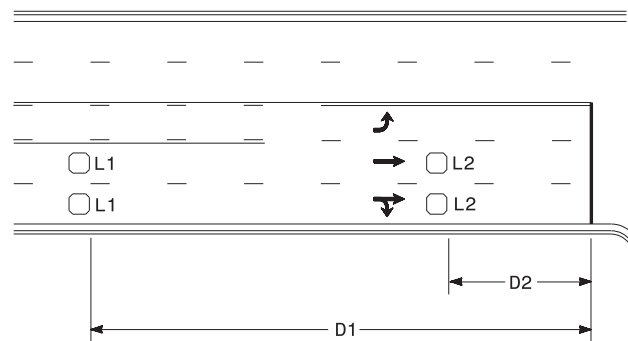


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired separately

Volume Density Operation

OR

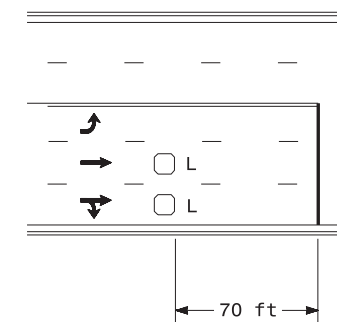


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

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

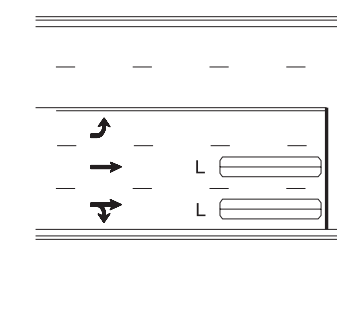
"Stretch" Operation

Low Speed Detection (≤35 mph)



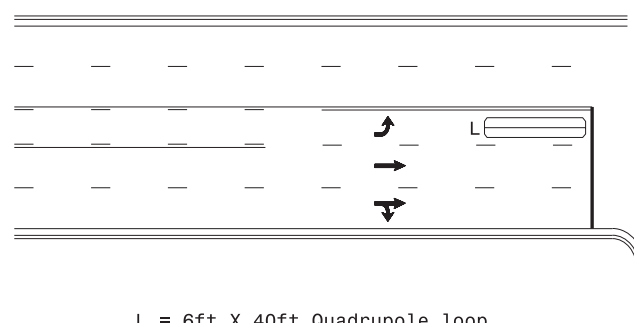
L = 6ft X 6ft
Wired in series

OR



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

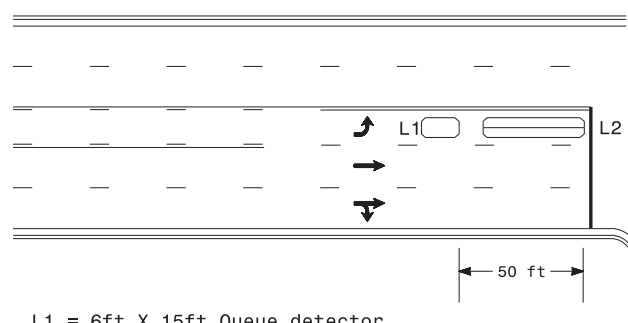
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

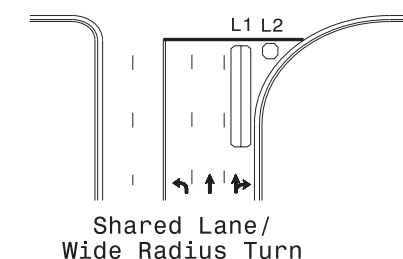
OR



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

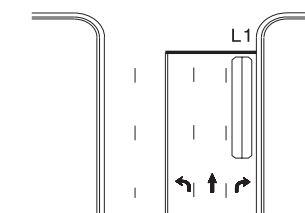
Queue Loop Detection

Right Turn Lane Detection

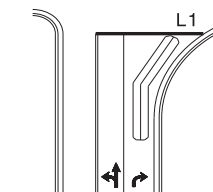


L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately

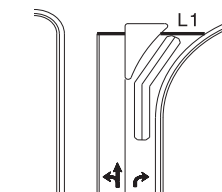
Shared Lane/
Wide Radius Turn



Standard Turn

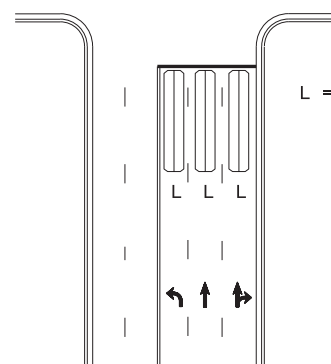


Wide Radius Turn



Channelized Turn

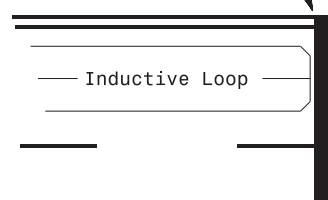
Side Street Detection



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

Presence Loop Placement at Stop Lines

Locate loop slightly
behind leading
edge of stop line



Note:
Loop may be located in advance
of stop line under any of the
following conditions:
1) stop line is greater than 15'
from edge of intersecting
roadway
2) loop detects a permissive or
protected/permissive left turn
3) for an exclusive right turn
lane

Recommended Number of Turns

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

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

Quadrupole loops: Use 2-4-2 turns

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

	<p>Prepared In the Offices of:</p> <p>PLANNING, MOBILITY AND SAFETY DIVISION STATE OF NORTH CAROLINA SIGNAL DESIGN SECTION 750 N. Greenfield Pkwy, Garner, NC 27529</p>		<p>SEAL NORTH CAROLINA PROFESSIONAL ENGINEER JASON P. GALLOWAY 029904</p>	
	<p>PLAN DATE: September 2020</p>		<p>REVIEWED BY: JPG</p>	
<p>PREPARED BY: PLA</p>		<p>REVIEWED BY:</p>		
<p>SCALE N/A</p>	<p>REVISIONS</p>	<p>INIT.</p>	<p>DATE</p>	
<p>Typical Signal Loop Locations</p>		<p>9/8/2020</p>		