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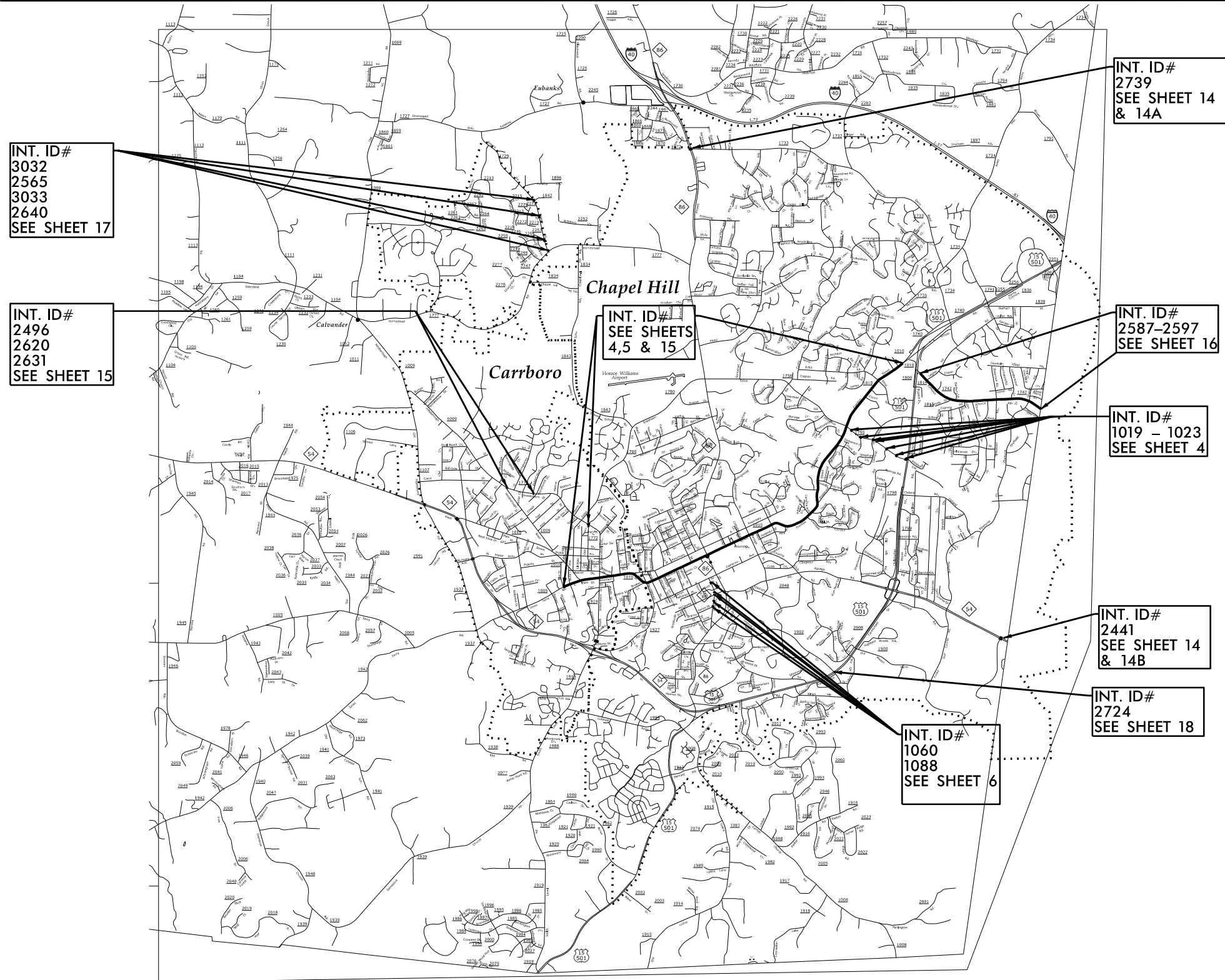
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with their signature on that page.**

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TIP PROJECT: R-5787FA

CONTRACT:

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5787FA	1	50
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
44917.1.2	TAP-0708(087)	P.E.	
44917.3.14	TAP-0708(116)	CONSTRUCTION	



CARRBORO/CHAPEL HILL, ORANGE COUNTY

STATE OF NORTH CAROLINA - DIVISION OF HIGHWAYS

ALAMANCE & ORANGE COUNTIES

LOCATION: VARIOUS INTERSECTIONS IN ALAMANCE & ORANGE COUNTIES
 TYPE OF WORK: INSTALLATION OF ADA COMPLIANT CURB RAMPS

Prepared in the Office of:
DIVISION OF HIGHWAYS
 1584 YANCEYVILLE STREET, GREENSBORO, NC 27405

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: Not Applicable

LETTING DATE: NOVEMBER 16, 2023

HYDRAULICS ENGINEER

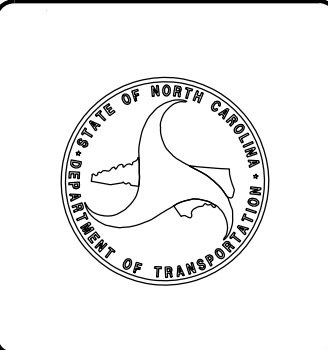
 P.E.

SIGNATURE: _____

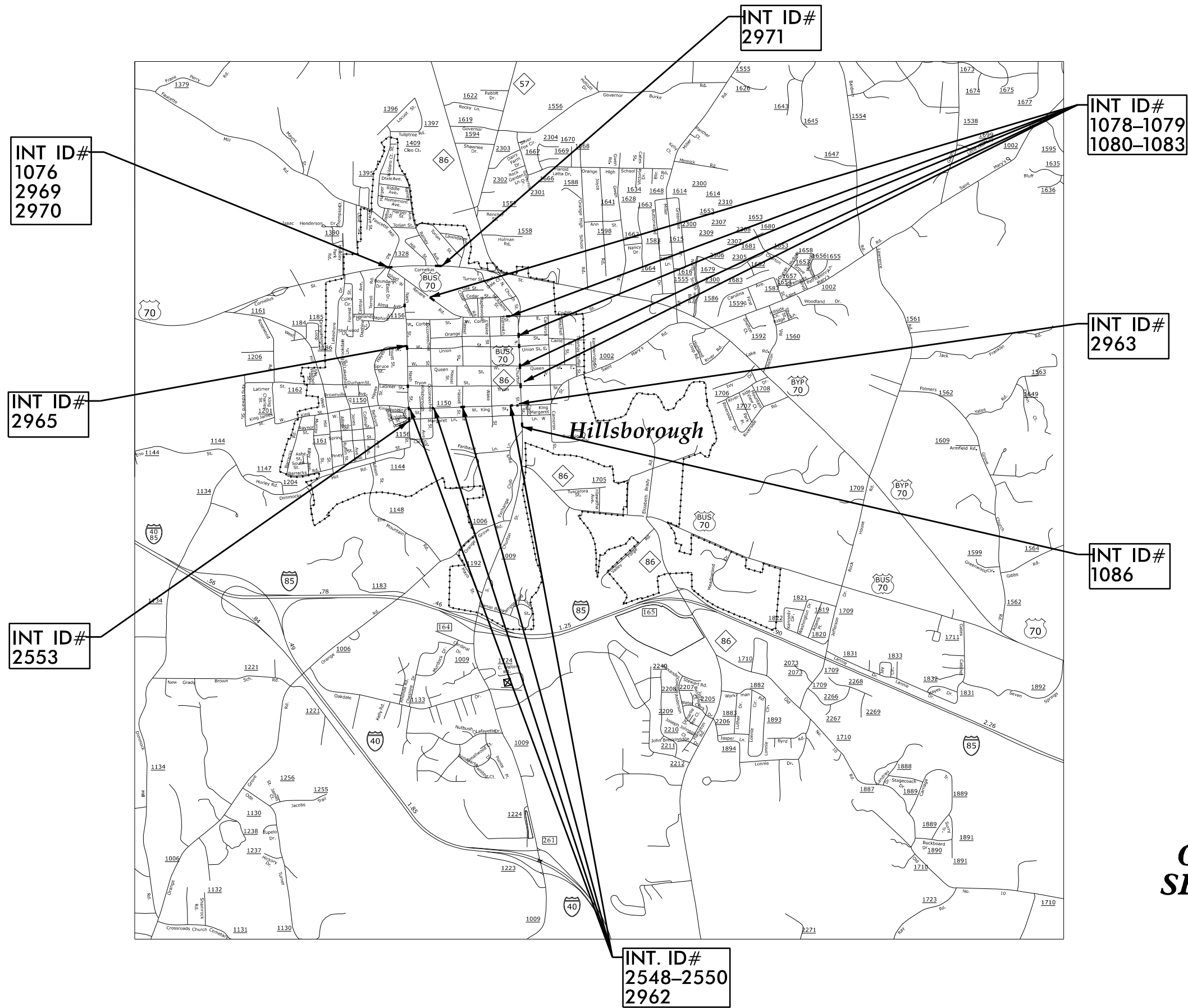
ROADWAY DESIGN ENGINEER

 P.E.

SIGNATURE: _____



CURB RAMP CONTRACT – ORANGE & ALAMANCE COUNTIES

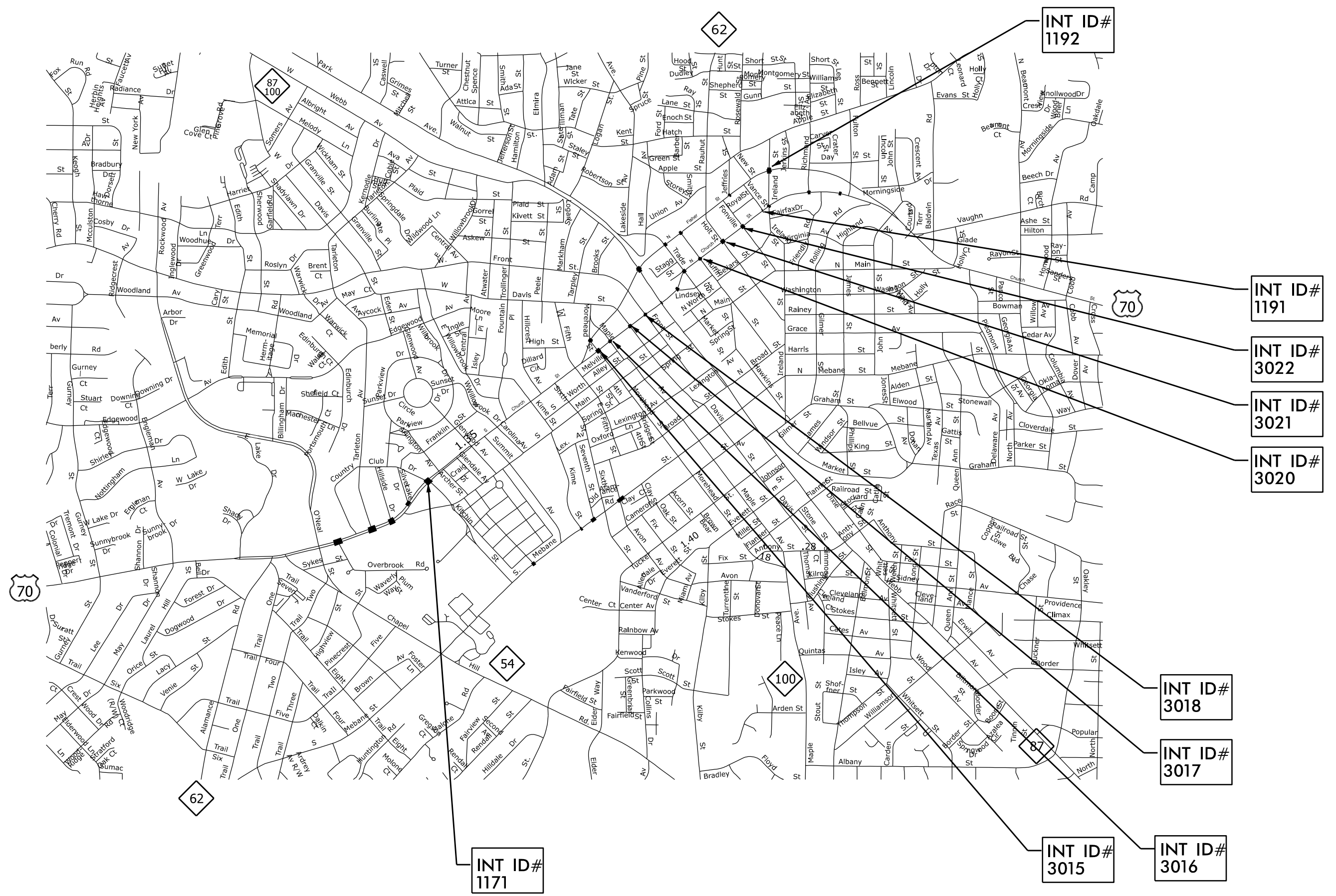


**HILLSBOROUGH,
ORANGE COUNTY
SEE SHEETS 8 & 9**

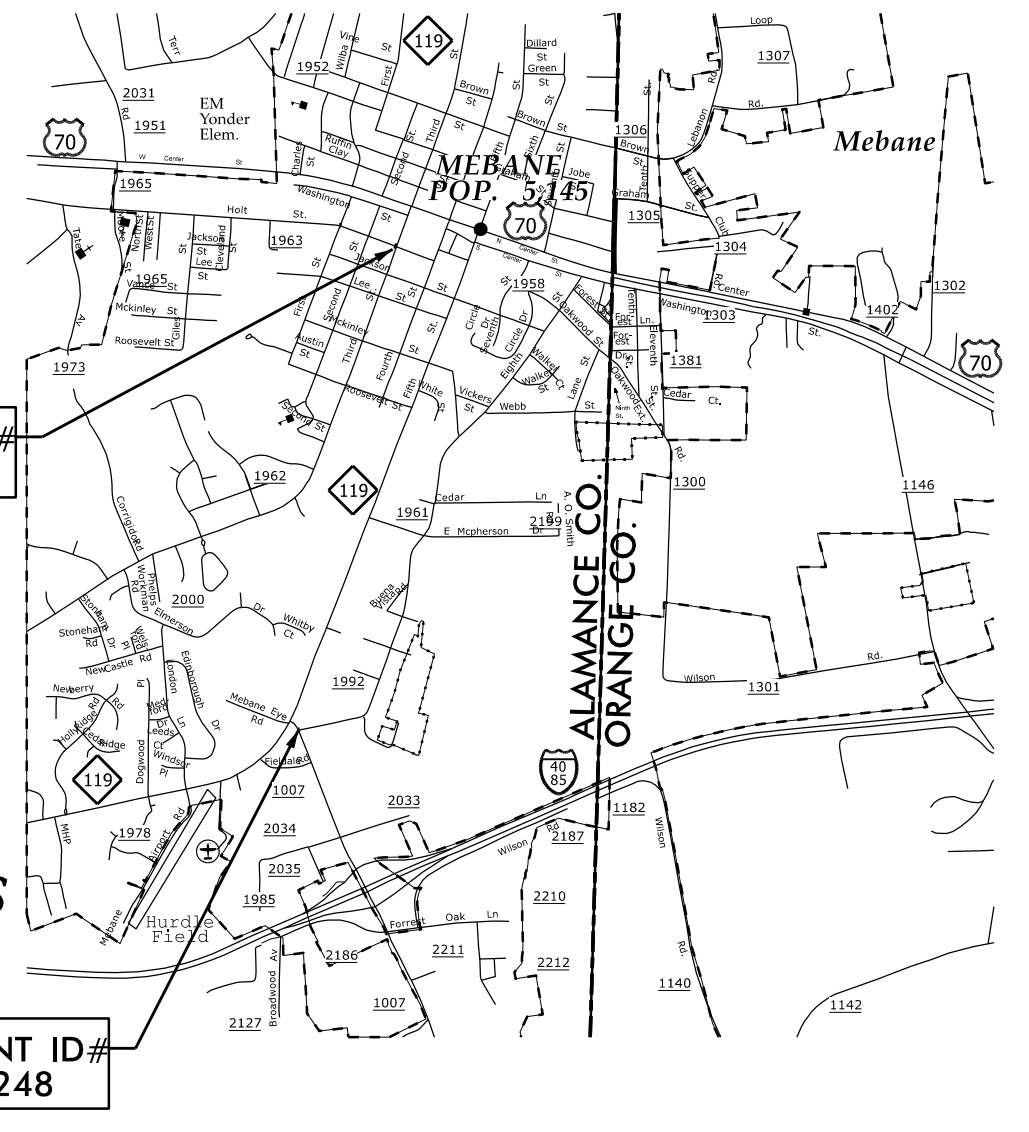
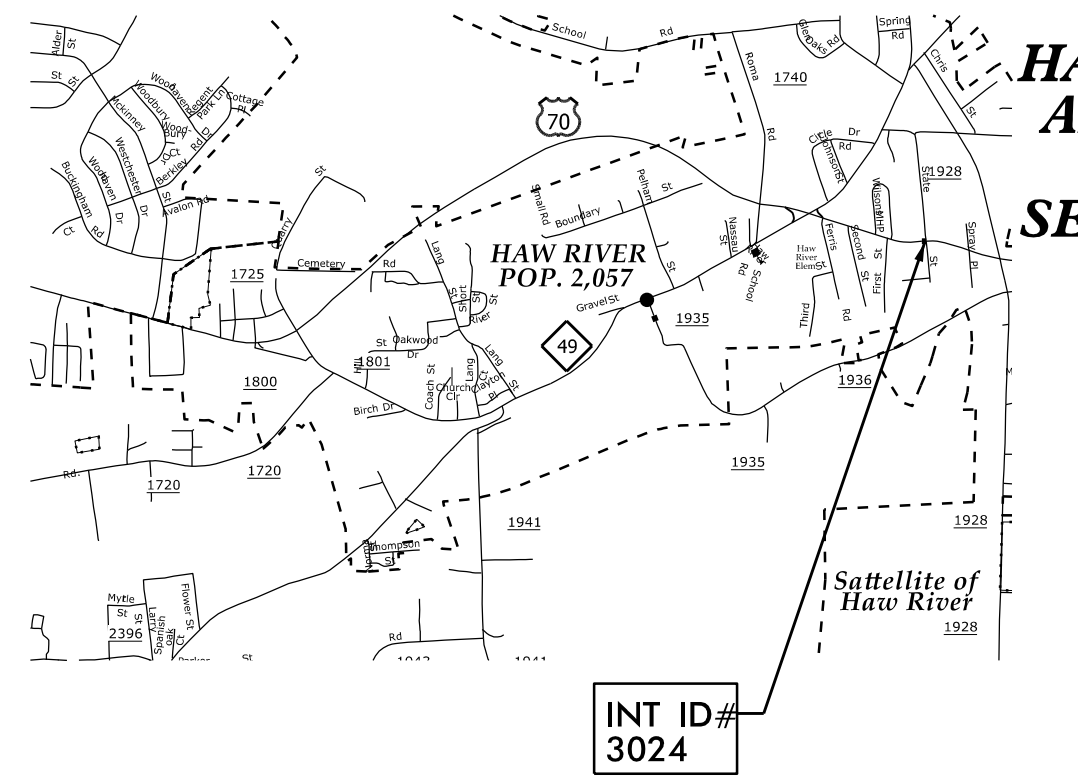
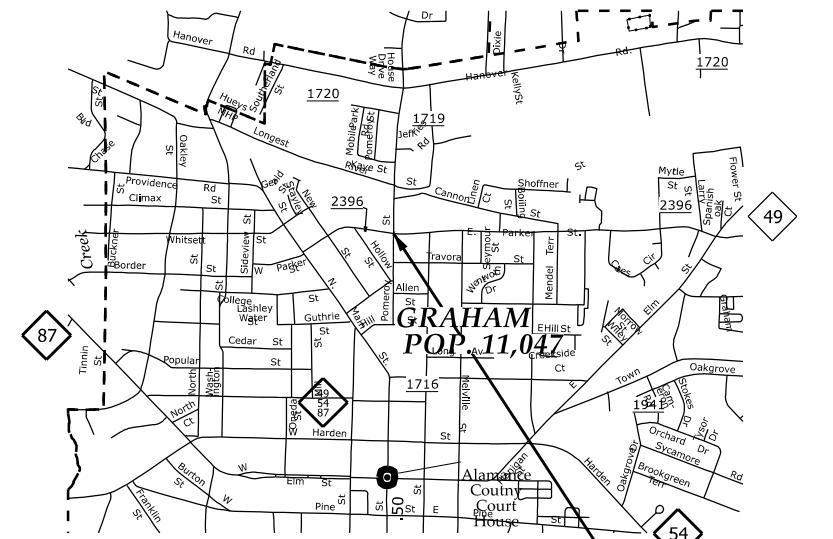
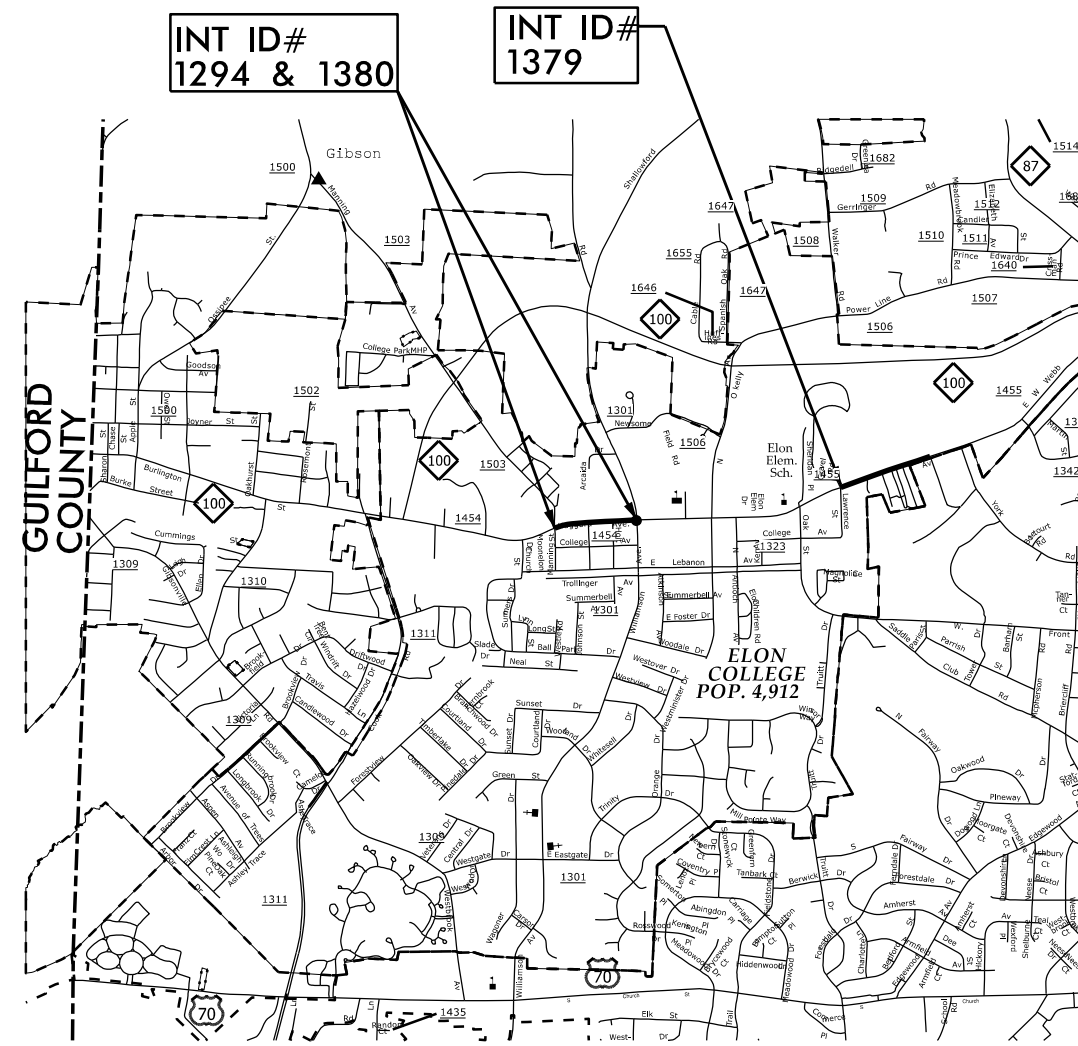
CURB RAMP CONTRACT – ORANGE & ALAMANCE COUNTIES

BURLINGTON, ALAMANCE COUNTY

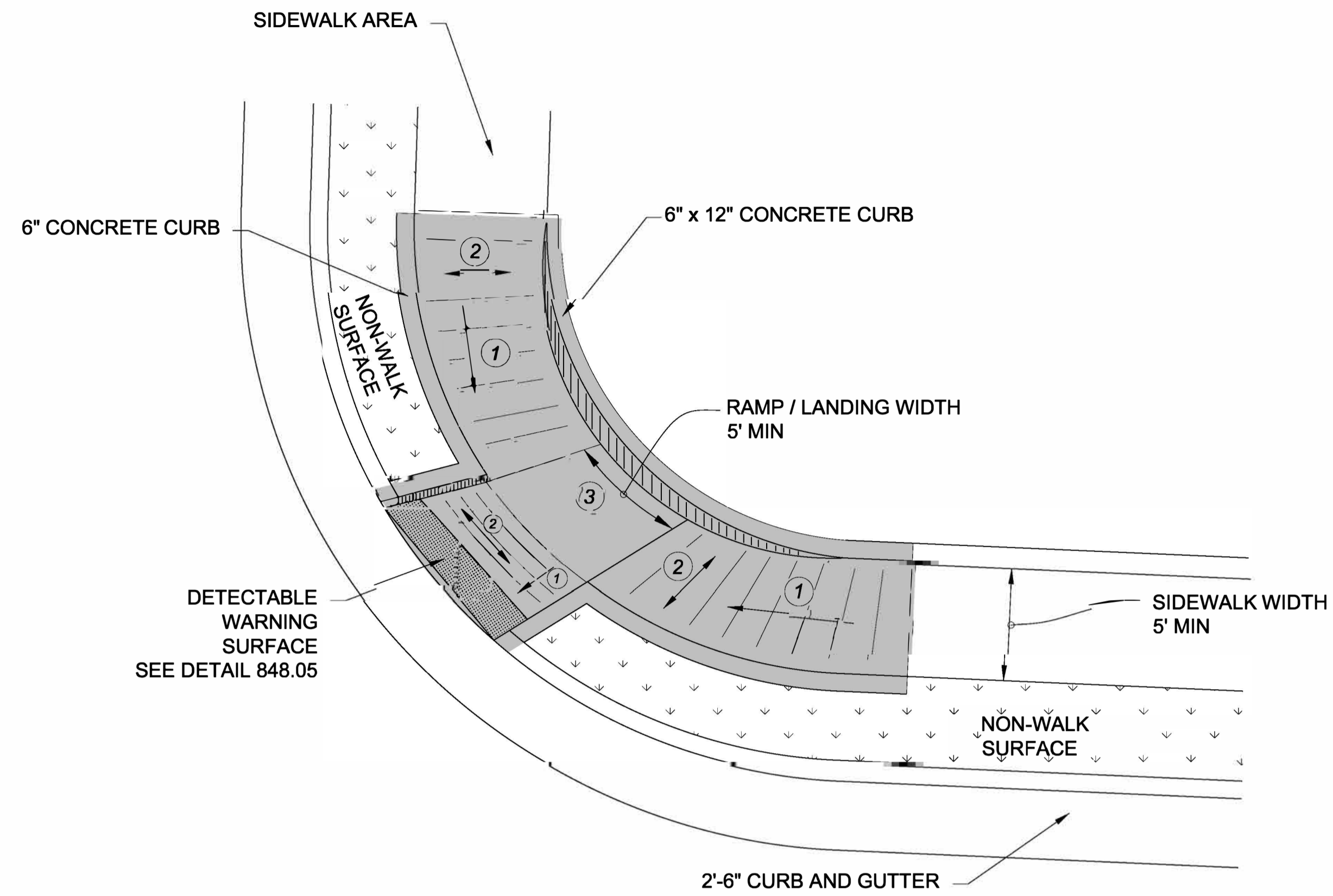
SEE SHEETS 11, 12 & 13



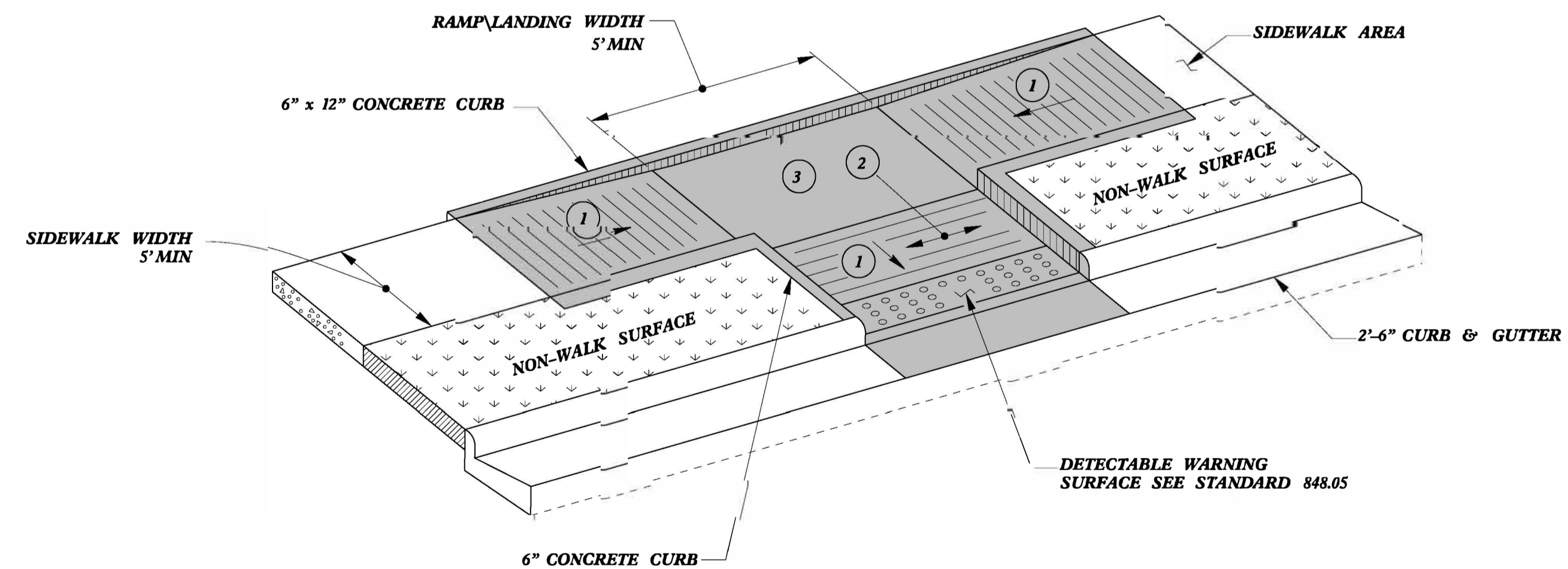
CURB RAMP CONTRACT – ORANGE & ALAMANCE COUNTIES



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.



DocuSigned by:

Nicole M. Heckler, P.E.

5884323D34164CS...

08/03/2022

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

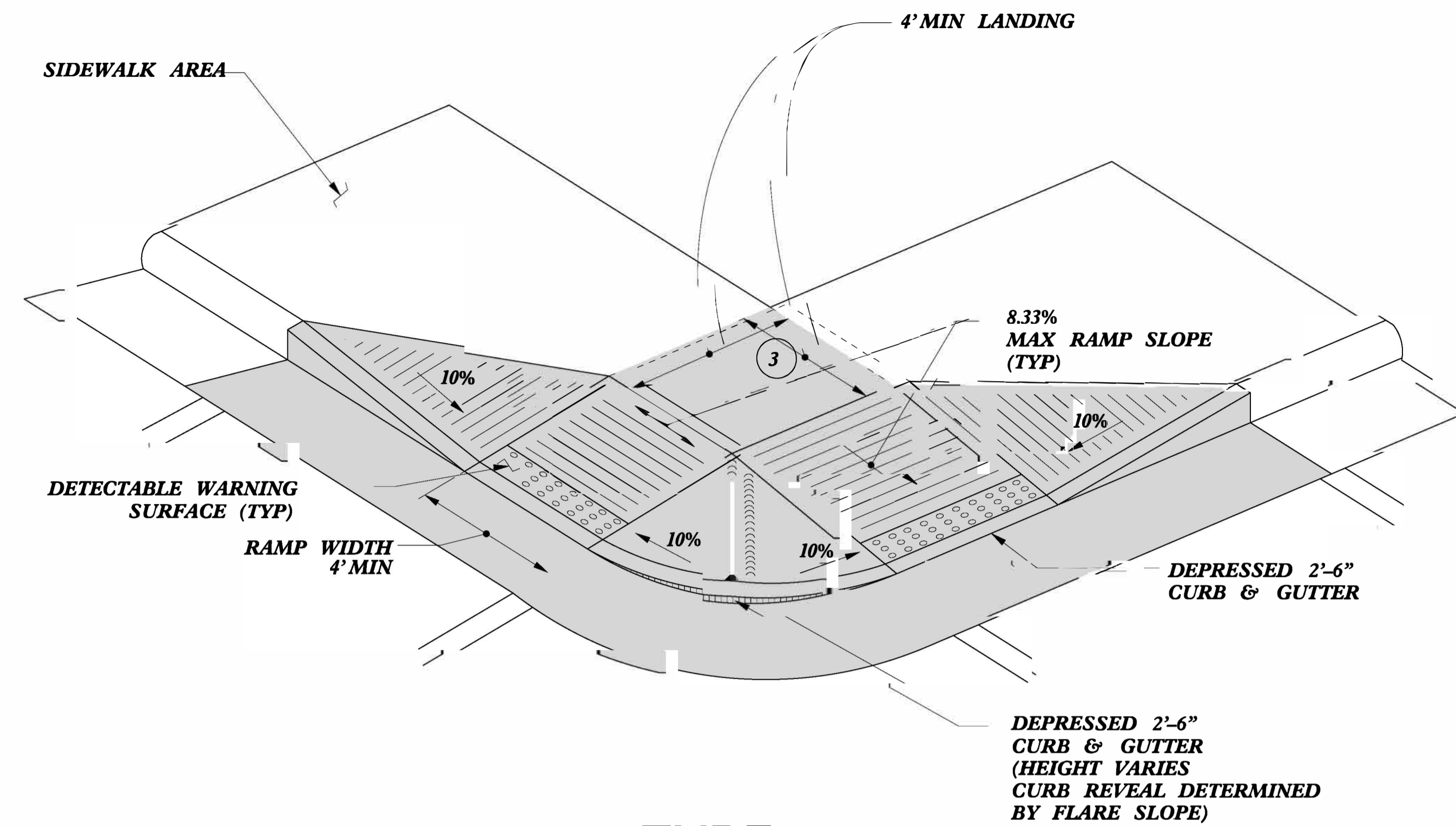
**CONTRACT STANDARDS
AND DEVELOPMENT UNIT**
Office 919-707-6950 FAX 919-250-4119

CURB RAMPS

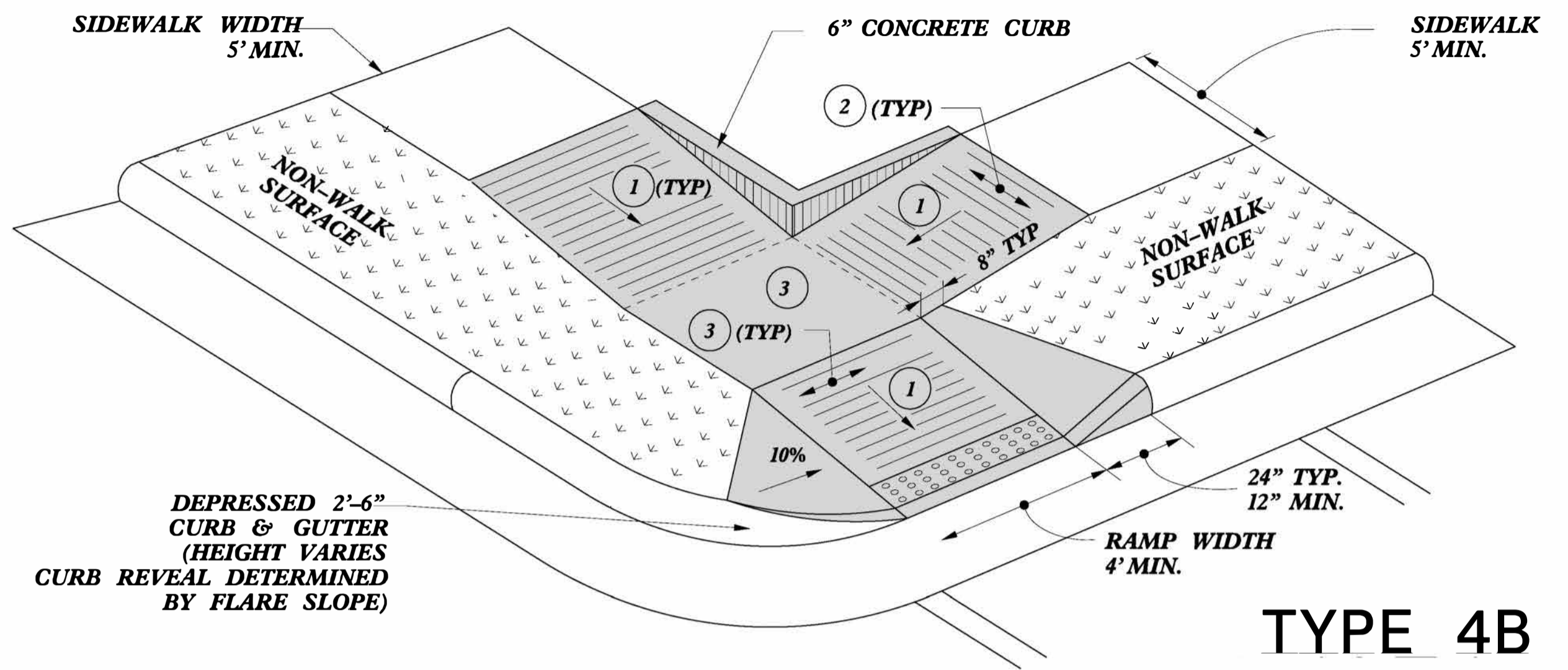
ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC. stds/2012CurbRamp/CurbRampDetails.dgn

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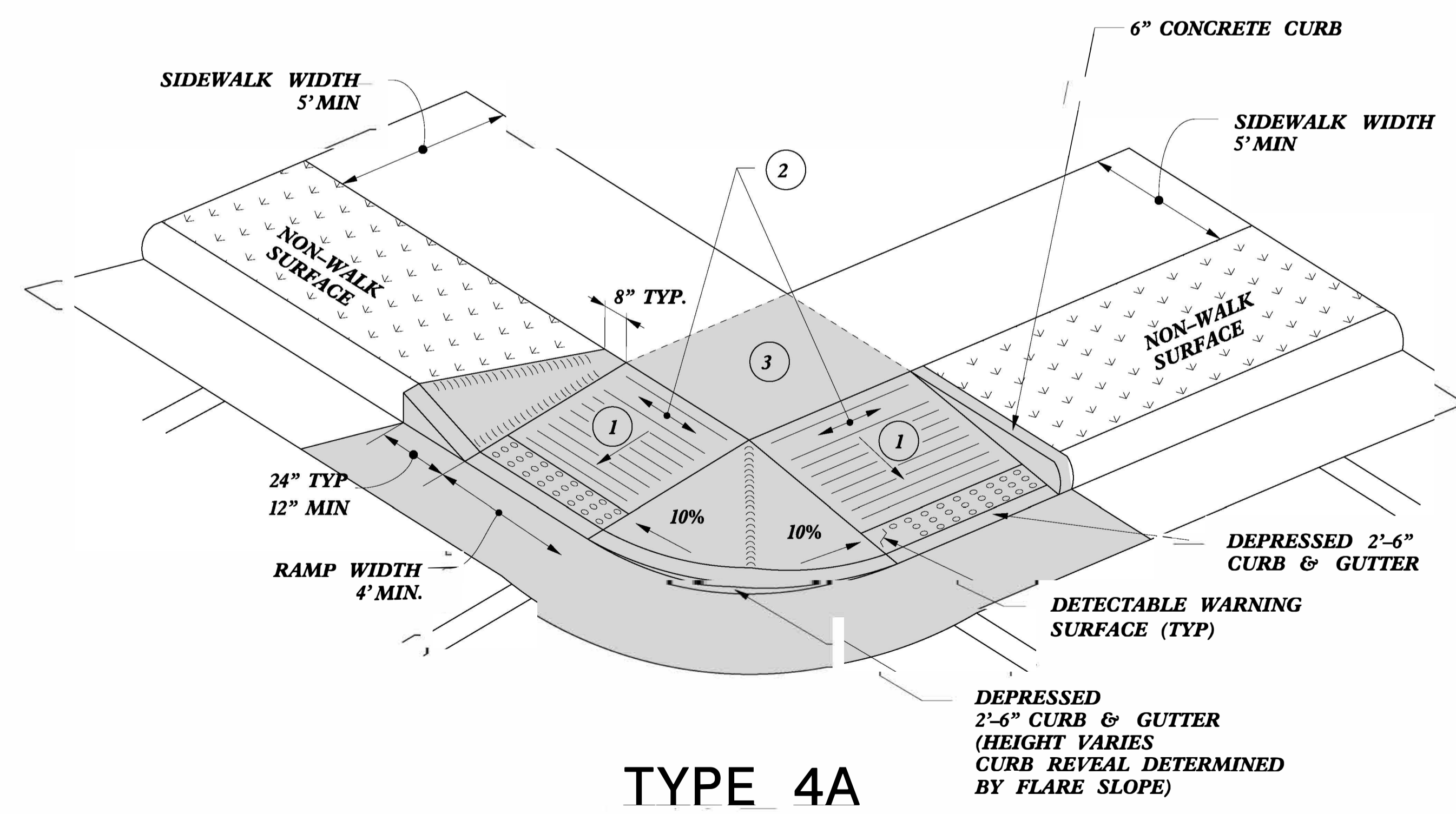
PAY LIMITS FOR 1 OR 2 CURB RAMPS
(CALCULATE BASED ON NUMBER OF SETS
OF TRUNCATED DOMES)



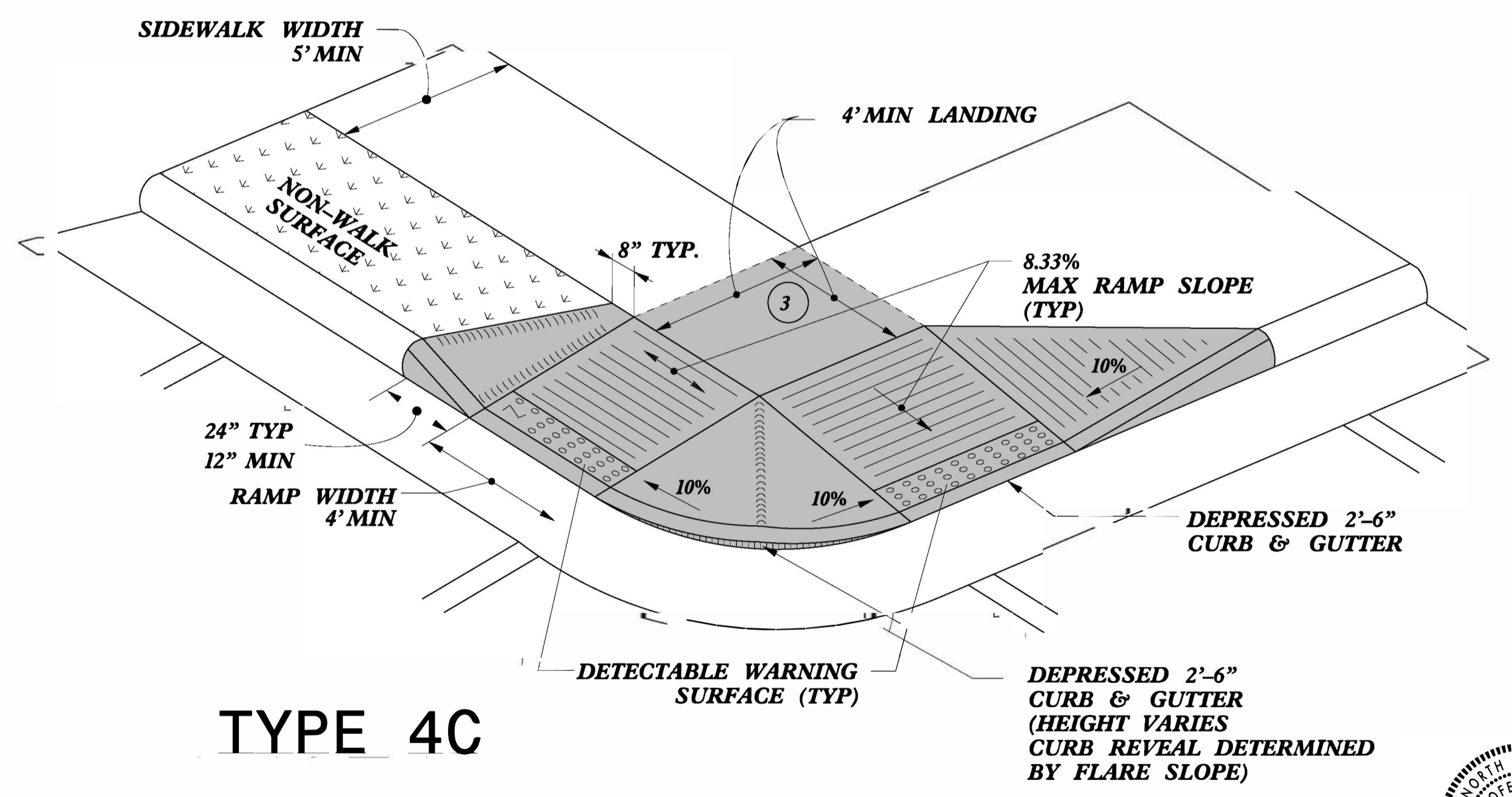
TYPE 4



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.



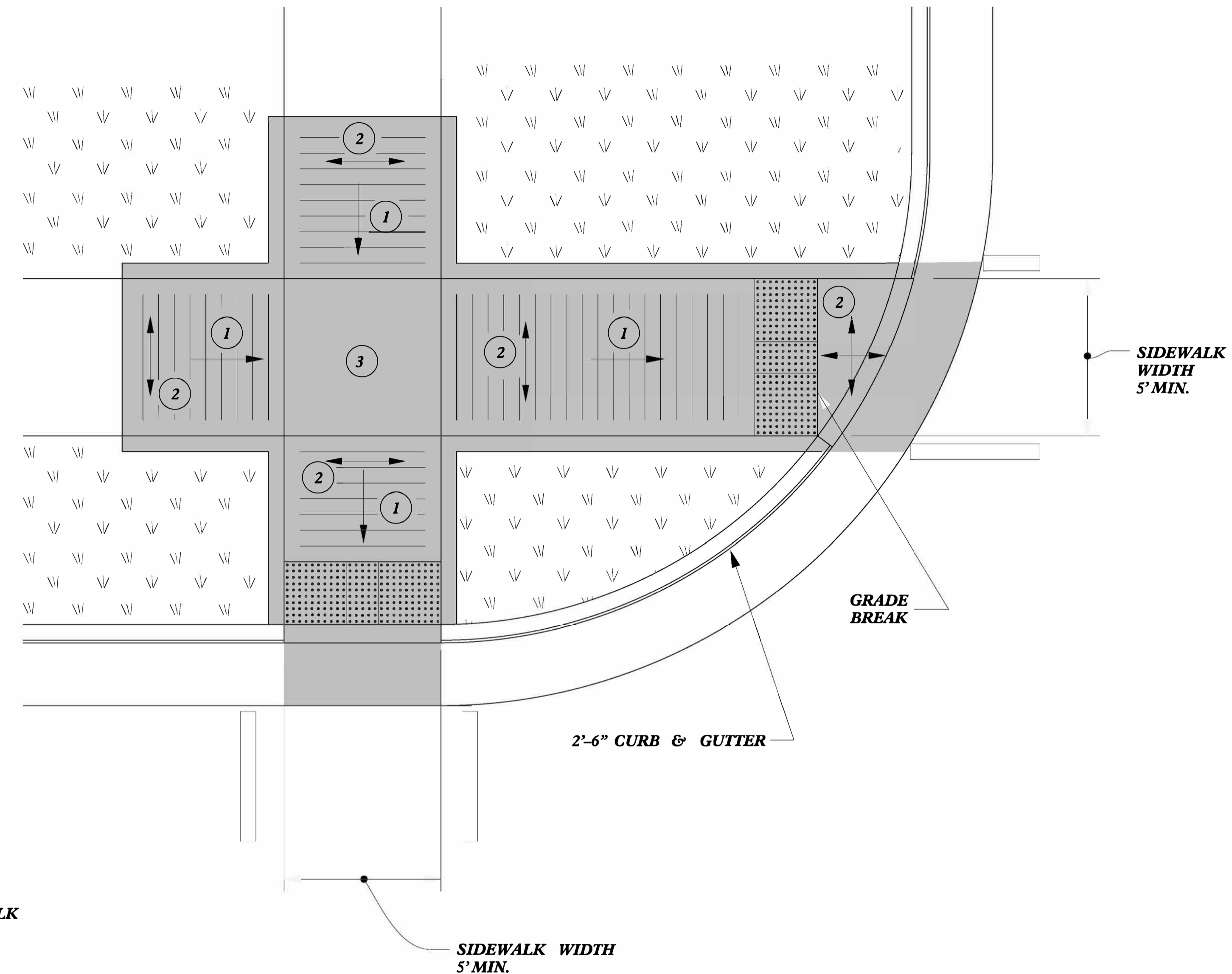
DocuSign by
Nicole M. Hockler, P.E.
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UNLESS ALL SIGNATURES COMPLETED
08/03/2022

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	

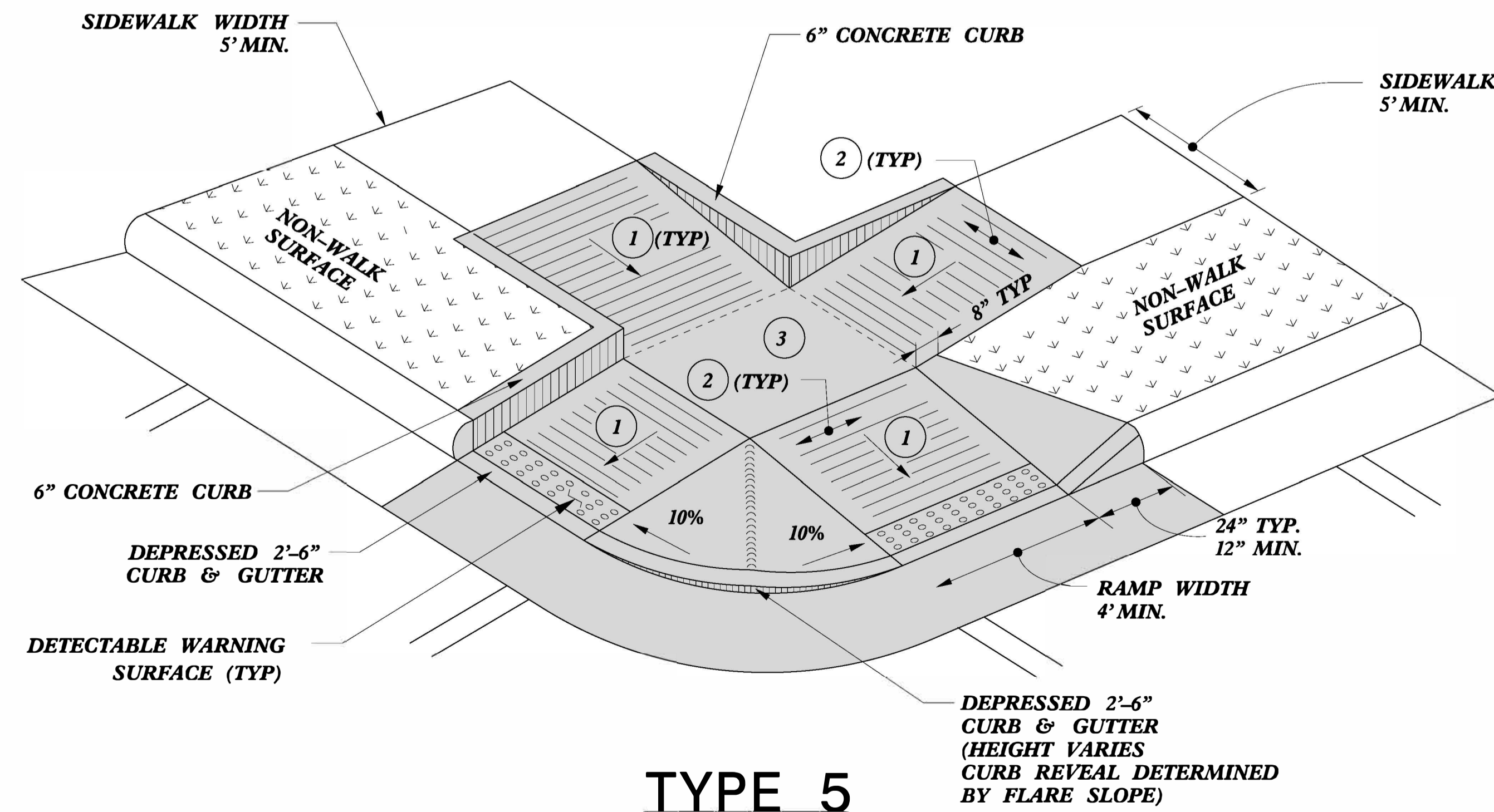
REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

5/14/19
 C:\P\2012\848.05\848.05.dwg
 11/11/11
 J.S. HOWERTON
 11/11/11
 J.S. HOWERTON

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.



DocuSigned by:
Nicole M. Hackler, P.E.
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**CONTRACT STANDARDS
AND DEVELOPMENT UNIT**
Office 919-707-6950 FAX 919-250-4119

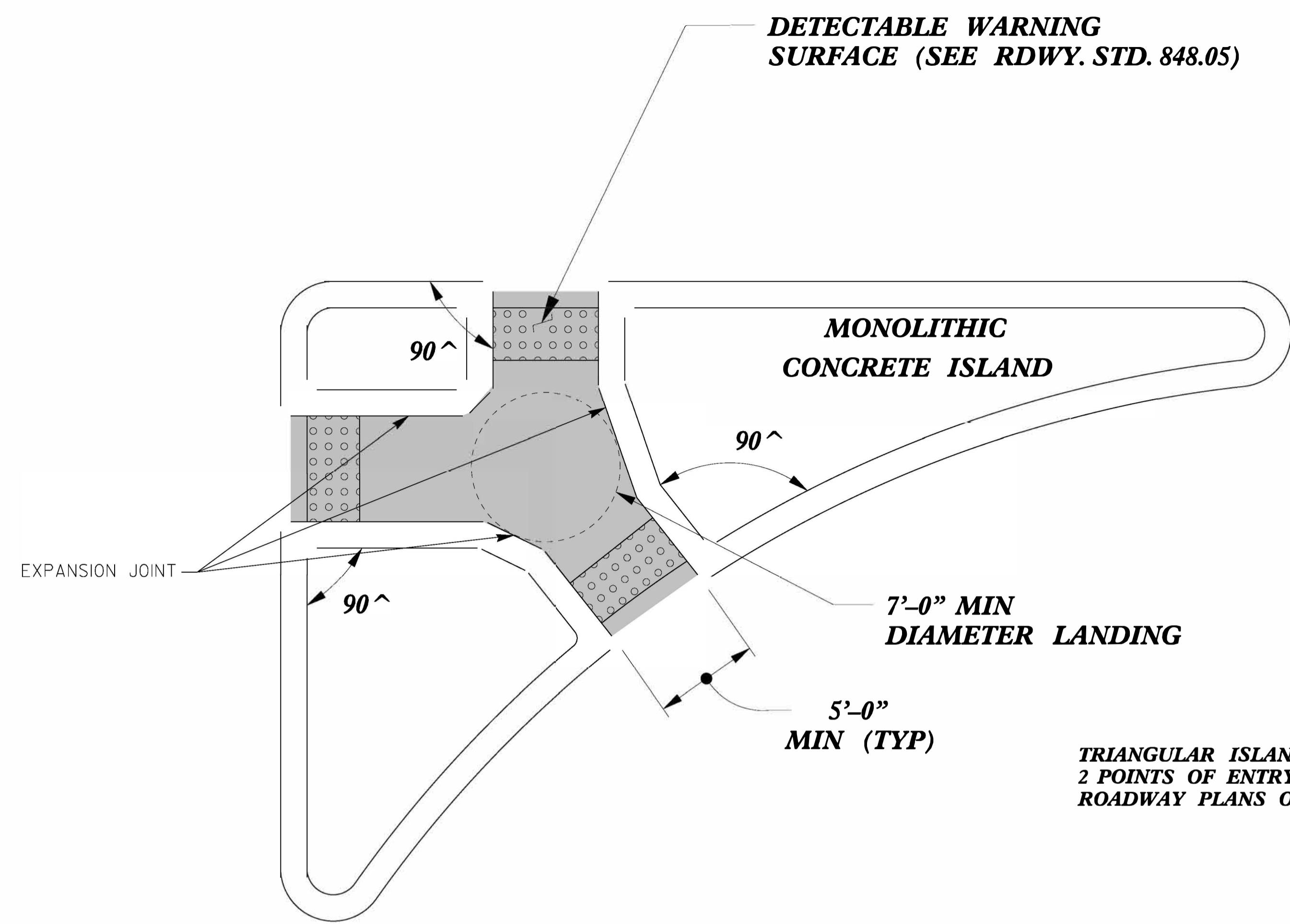
CURB RAMPS

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

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

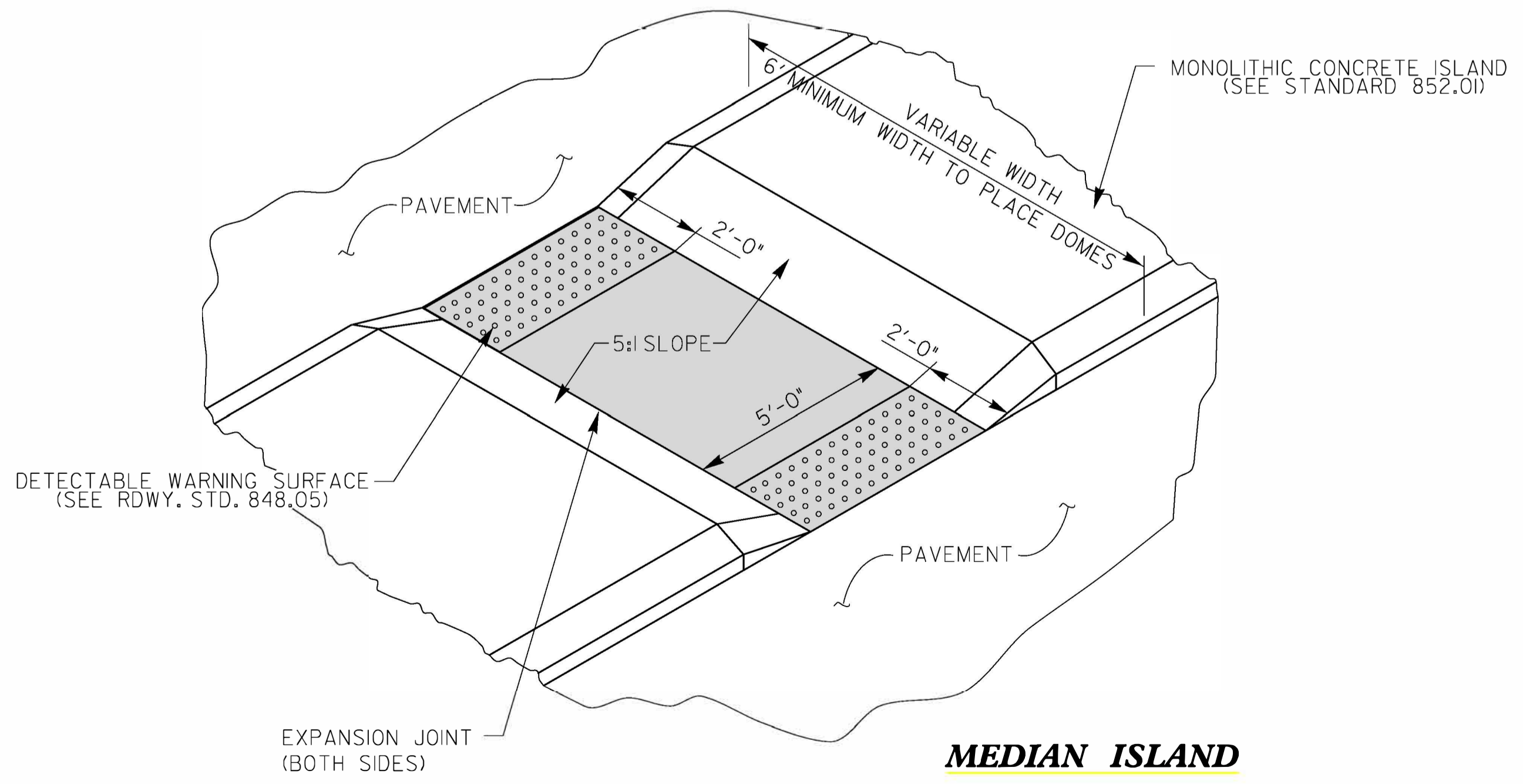
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PAY LIMITS FOR 2 OR 3 CURB RAMPS
(CALCULATE BASED ON NUMBER OF
SETS OF TRUNCATED DOMES)

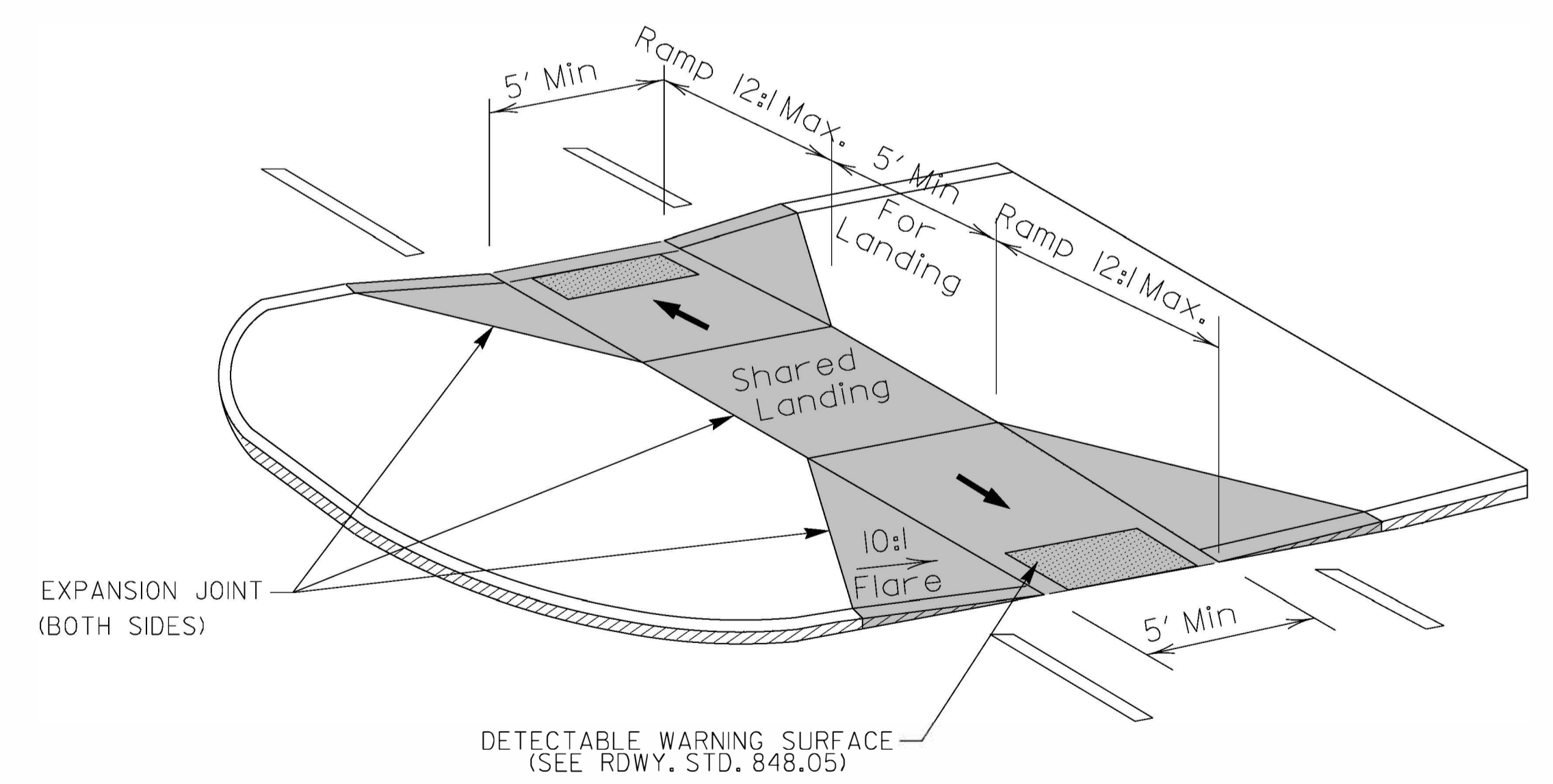


TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY
2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE
ROADWAY PLANS OR AS DIRECTED BY THE ENGINEER.

**TRIANGULAR ISLAND
WITH CUT THROUGH
TYPE 6**



**MEDIAN ISLAND
WITH CUT THROUGH
TYPE 7**



**MEDIAN ISLAND
CURB RAMPS
TYPE 8**

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UNLESS ALL SIGNATURES COMPLETED

**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



DocuSigned by:
Nicole M. Hacker, P.E.
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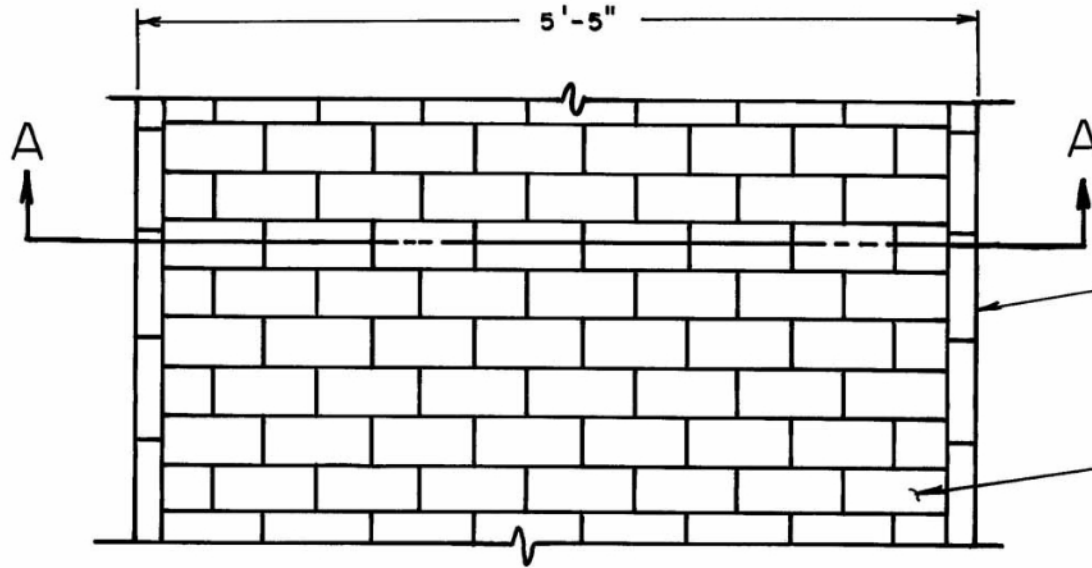
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ENGINEERING DEPARTMENT
STANDARD DETAILS

THIS DETAIL TO BE USED IN CONJUNCTION WITH THE INSTALLATION OF BRICK PAVERS IN CHAPEL HILL, CARRBORO AND BURLINGTON

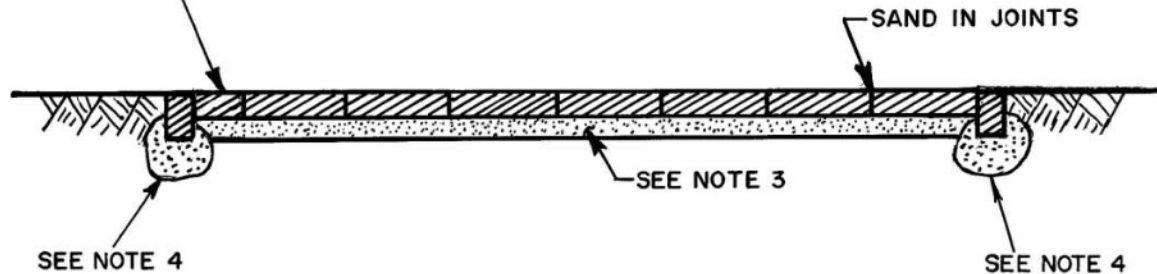


BORDER: RUNNING COURSE WITH PORTLAND CEMENT MORTARED JOINTS

PATTERN: RUNNING BOND (PERPENDICULAR TO BORDER)

PLAN
(NO SCALE)

PATTERN TO BE 1/8" HIGHER THAN BOTH BORDERS



SECTION "A"- "A"
(NO SCALE)

NOTES:

1. PROPOSED BRICK PAVERS MUST BE SUBMITTED FOR APPROVAL PRIOR TO USE
2. 1/4" PER FOOT SLOPE TO STREET.
3. 1 1/2" SAND, COMPACTED - MECHANICALLY COMPACTED.
4. RUNNING COURSE SET WITH PORTLAND CEMENT MORTAR BETWEEN & BELOW OR WITH CURB.

TITLE

BRICK SIDEWALK

REVISIONS

NO	DATE	BY

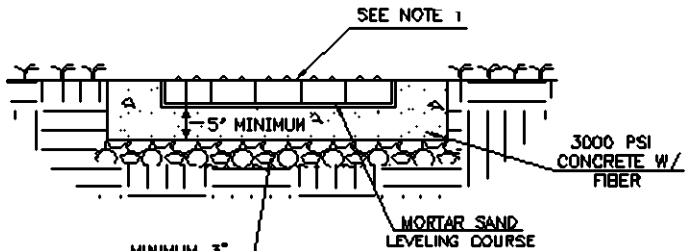
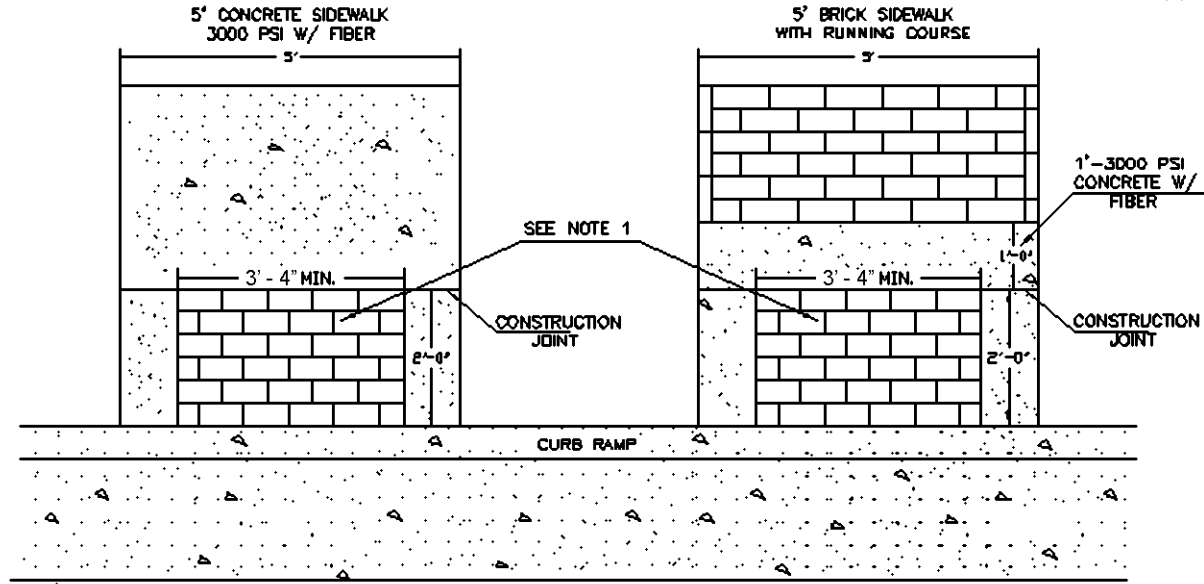
DET.NO.

ST-6

R-5787FA



ENGINEERING DEPARTMENT
STANDARD DETAILS



NOTES:

1. USE PRODUCT DETECTABLE WARNING DOMED BRICK (RED) OR EQUAL DOMES TO MEET CURRENT A.D.A. SPECIFICATIONS.

NOTE: DRAWING NOT TO SCALE

TITLE		
ACCESSIBLE RAMP WITH DETECTABLE WARNING DOMES		

REVISIONS		
NO	DATE	BY
4/11/06		MGR
5/8/07		LRT

DET.NO
ST-5.1

THIS DETAIL TO BE USED IN CONJUNCTION WITH THE REMOVE & REPLACE CURB RAMPS, RETROFIT AND CONCRETE CURB RAMPS IN CHAPEL HILL, CARRBORO AND BURLINGTON.

R-5787FA: ALAMANCE AND ORANGE ADA CURB RAMPS

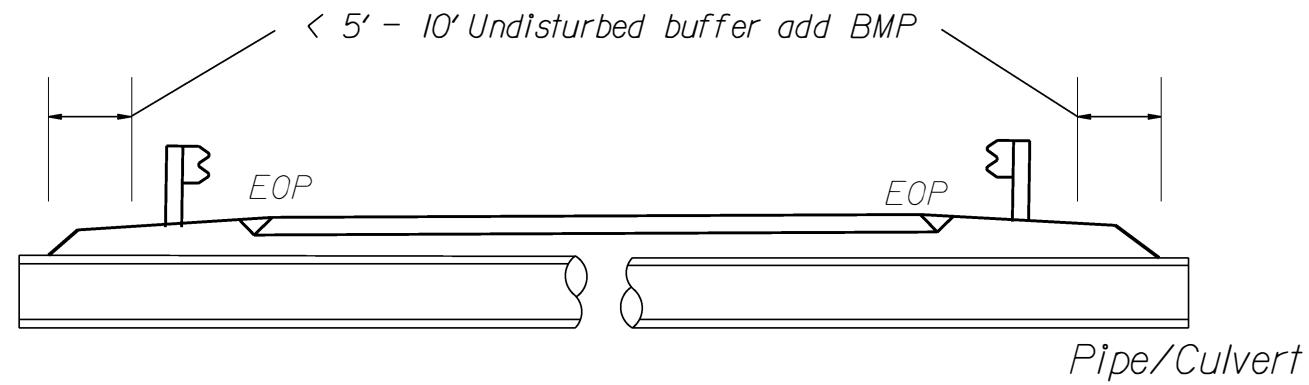
PROJECT NO.	SHEET TOTAL
44917.3.14	3M

COUNTY	CITY/TOWN	INT. ID.	ROUTE	SHEET NO.	DESCRIPTION	RELOCATE BOLLARDS	ASPHALT CONC BASE COURSE, TYPE B25.0C	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	ASPHALT BINDER FOR PLANT MIX	FRAME WITH GRATE AND HOOD, STD 840.03, TYPE E	2'-6" CONCRETE CURB AND GUTTER REPAIR	4" CONCRETE SIDEWALK	RETROFIT EXISTING CURB RAMPS	CONCRETE CURB RAMPS	REMOVE AND REPLACE CURB RAMPS	REINSTALL TOWN STANDARD BRICK PAVERS	REMOVE BRICK PAVERS	REMOVE AND DISPOSE CURB RAMPS	REMOVE AND DISPOSE OF EXISTING CONCRETE SIDEWALK	ADJUSTMENT OF CB	ADJUSTMENT OF MH	ADJUSTMENT OF MB OR VB	PEDESSTRIAN CHANNELIZING DEVICES	TEMPORARY TRAFFIC CONTROL	GENERIC TRAFFIC CONTROL ITEM - PEDESTRIAN	TRANSPORT SERVICE	GENERIC TRAFFIC CONTROL ITEM - AUDIBLE WARNING DEVICE	GENERIC TRAFFIC CONTROL ITEM - TEMPORARY CURB RAMP	THERMOPLASTIC PAVEMENT MARKING (8", 90 MILS)	THERMOPLASTIC PAVEMENT MARKING (24", 120 MILS)	REMOVAL OF PAVEMENT MARKING LINES (24")	TEMPORARY SILT FENCE	WATTLE	SEEDING AND MULCHING	JUNCTION BOX (PULL BOX, STANDARD SIZE)	TYPE	NOTES				
						EA	TONS	TONS	TONS	EA	LF	SY	EA	EA	EA	SF	SF	EA	SY	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA			EA	EA	EA	EA
Alamance	Burlington	3021	3021A	12	US-70 (N Church St) & W Holt St					1	10	5.56			1					1																				TYPE 2A	
Alamance	Burlington	3021	3021B	12	US-70 (N Church St) & W Holt St					2	10	5.56			1					2																				TYPE 2A	
TOTAL INT. ID #3021										3	20	11.12			2					3																					
Alamance	Burlington	3022	3022C	12	US-70 (N Church St) & Fonville St						10	5.56			1																									TYPE 2A	
Alamance	Burlington	3022	3022D	12	US-70 (N Church St) & Fonville St						10	5.56			1																									TYPE 2A	
Alamance	Burlington	3022	3022E	12	US-70 (N Church St) & Fonville St						10	5.56			1																									TYPE 2A	
TOTAL INT. ID #3022											30	16.68			3																										
Alamance	Haw River	3024	3024A	18	US-70 (E Main St) & N State St / S State St								1																											RETROFIT	
TOTAL INT. ID #3024													1																												
Orange	Carrboro	3032	3032A	17	SR-1729 (Rogers Rd) & Zieger Ln										1																									TYPE 3	
TOTAL INT. ID #3032															1																										
Orange	Carrboro	3033	3033A	17	SR-1729 (Rogers Rd) & Sylvan Way										1																									TYPE 1 MOD	
Orange	Carrboro	3033	3033B	17	SR-1729 (Rogers Rd) & Sylvan Way								1																											RETROFIT	
TOTAL INT. ID #3033													1		1																										
Orange	Chapel Hill	3036	3036A	15	SR-1010 (W Franklin St) & Panera Bread Exit								1																											RETROFIT	
TOTAL INT. ID #3036													1																												
Orange	Chapel Hill	3037	3037D	15	SR-1010 (W Franklin St) & 124 W Franklin Exit								1																											RETROFIT	
Orange	Chapel Hill	3037	3037E	15	SR-1010 (W Franklin St) & 124 W Franklin Exit								1																											RETROFIT	
TOTAL INT. ID #3037													2																												
TOTAL PROJECT 44917.3.14						3	51	108	9	13	342	211	46	14	169	475	475	7	10	14	5	5	90	1	21	15	3	408	1,373	716	1,842	1,474	1.5	1							

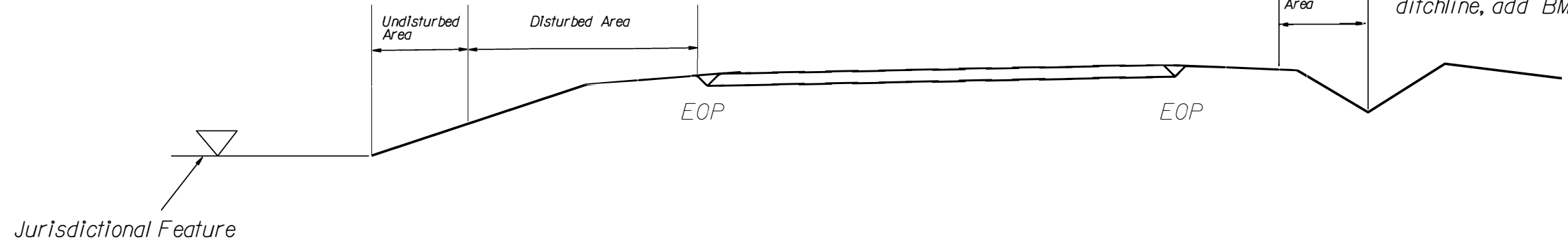
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

EROSION CONTROL DETAIL

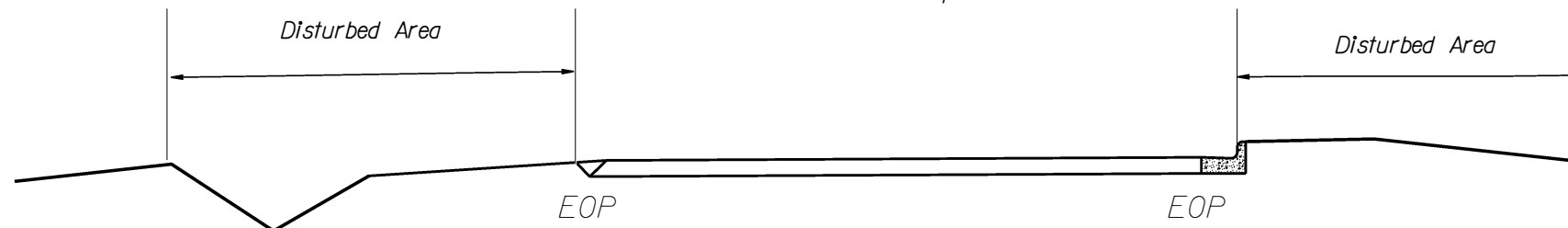
BMP Options: Wattle or Silt Fence



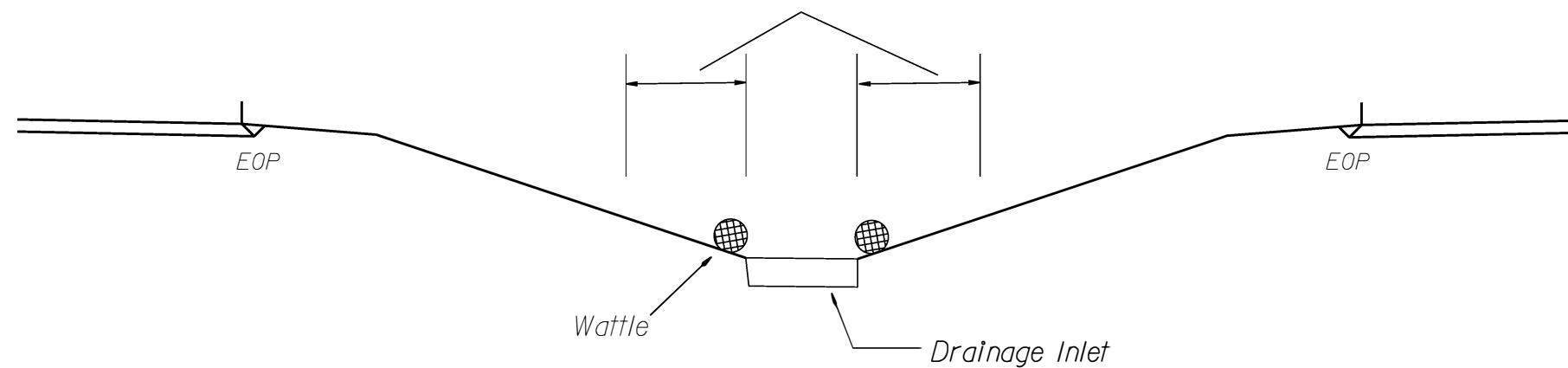
< 5' - 10' Undisturbed buffer from jurisdictional feature add BMP



Use BMP's if berms, shoulders and/or front slopes and/or ditchline and/or backslopes are disturbed



< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

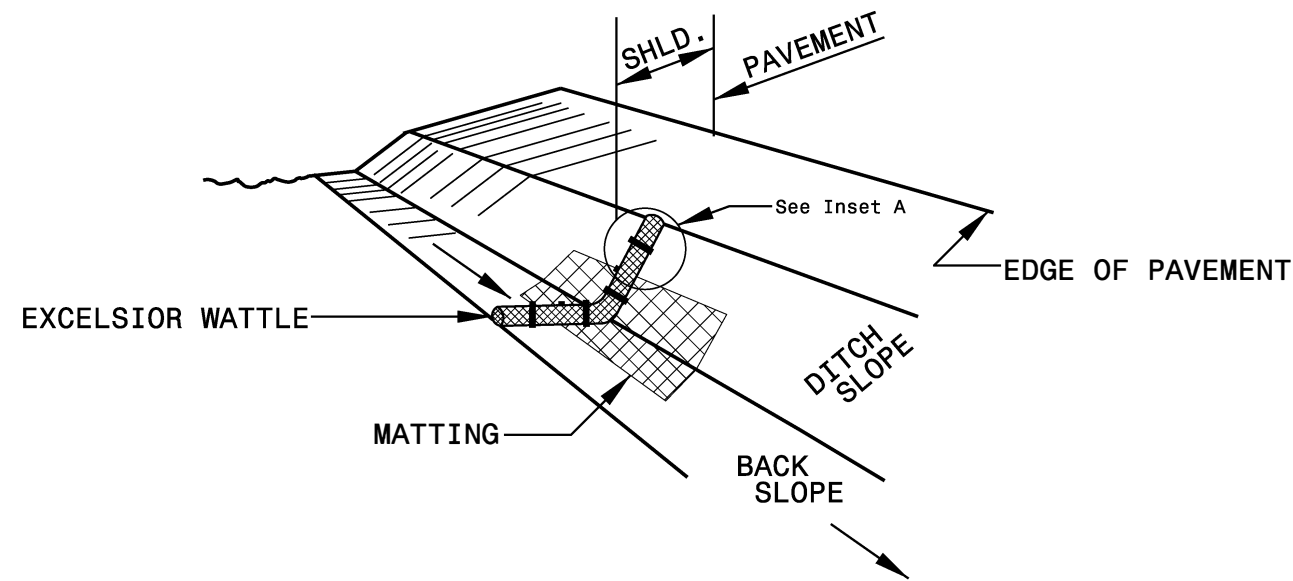
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

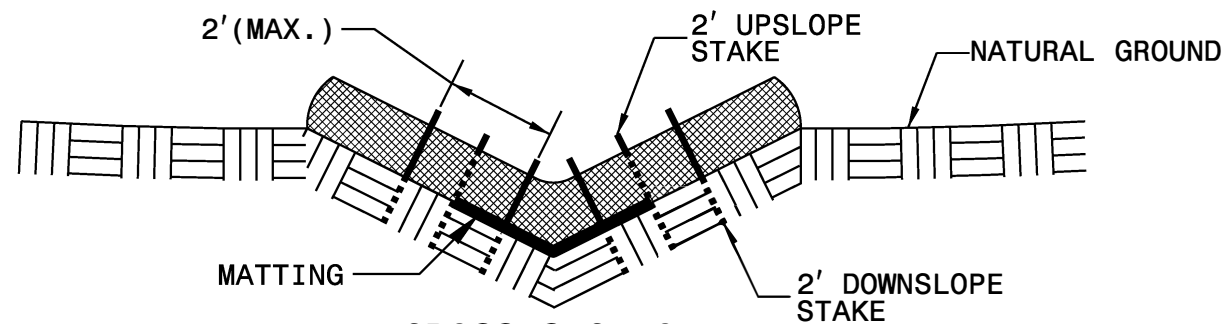
SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	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 HQW ZONES.

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY
WITH THE REGULATIONS SET FORTH BY THE
NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011
ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES DIVISION OF WATER QUALITY.

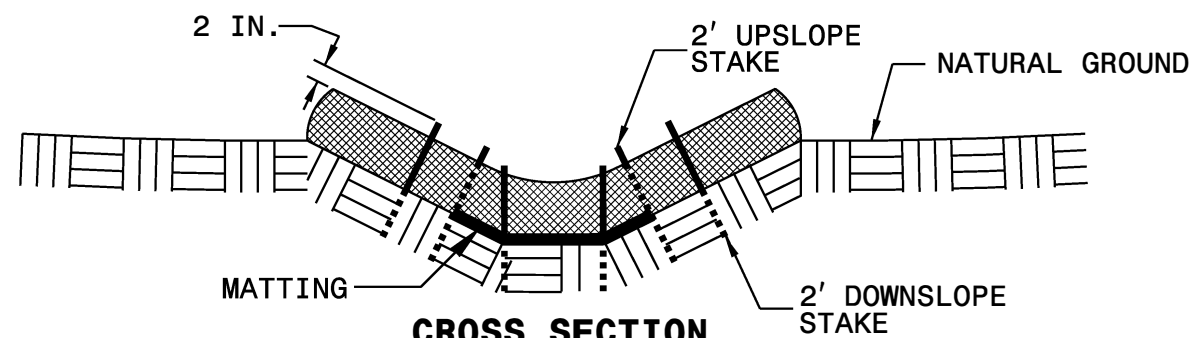
WATTLE DETAIL



ISOMETRIC VIEW



**CROSS SECTION
VEE DITCH**



**CROSS SECTION
TRAPEZOIDAL DITCH**

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

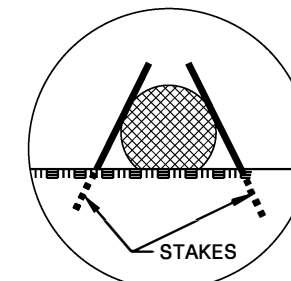
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

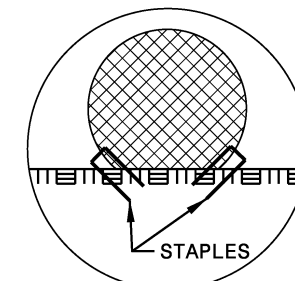
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

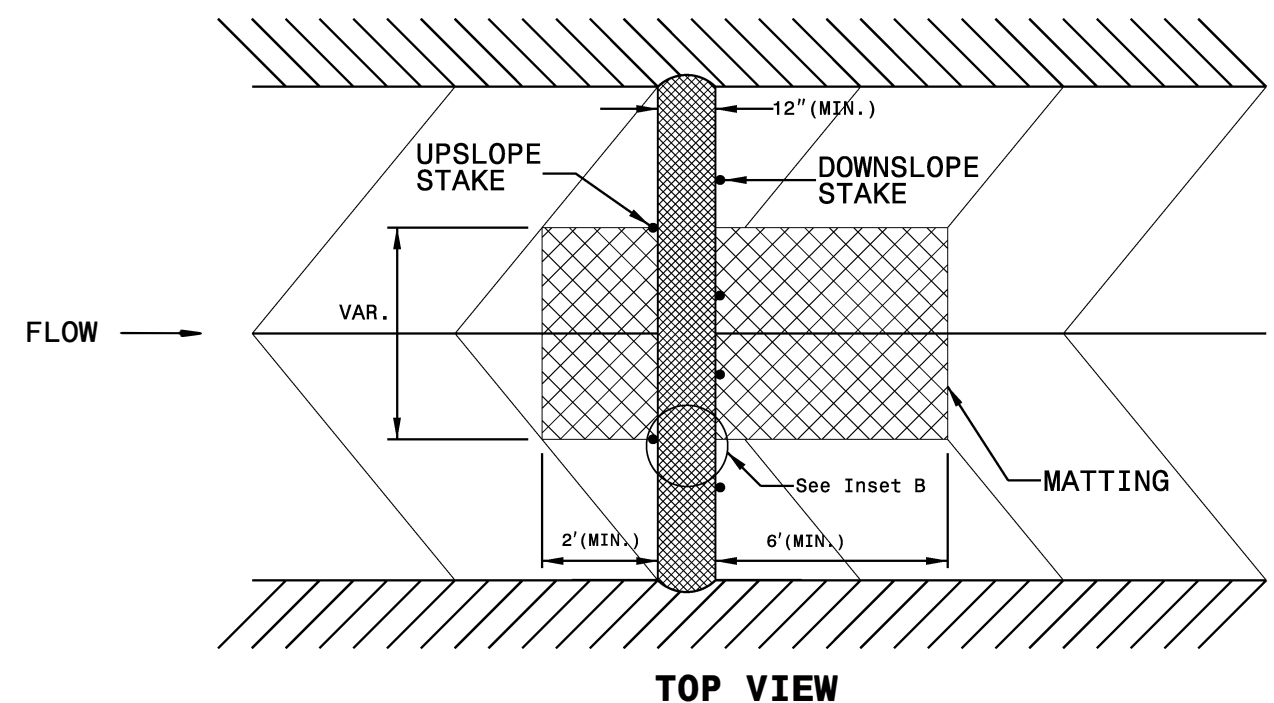
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



INSET A



INSET B



TOP VIEW