

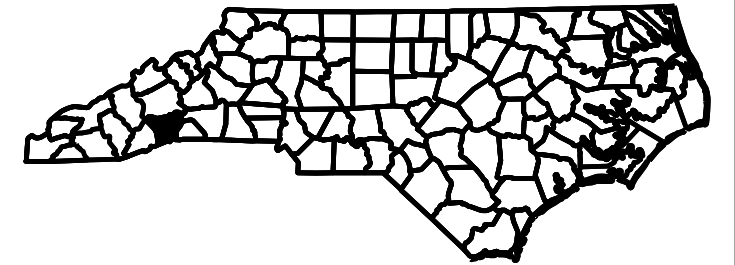
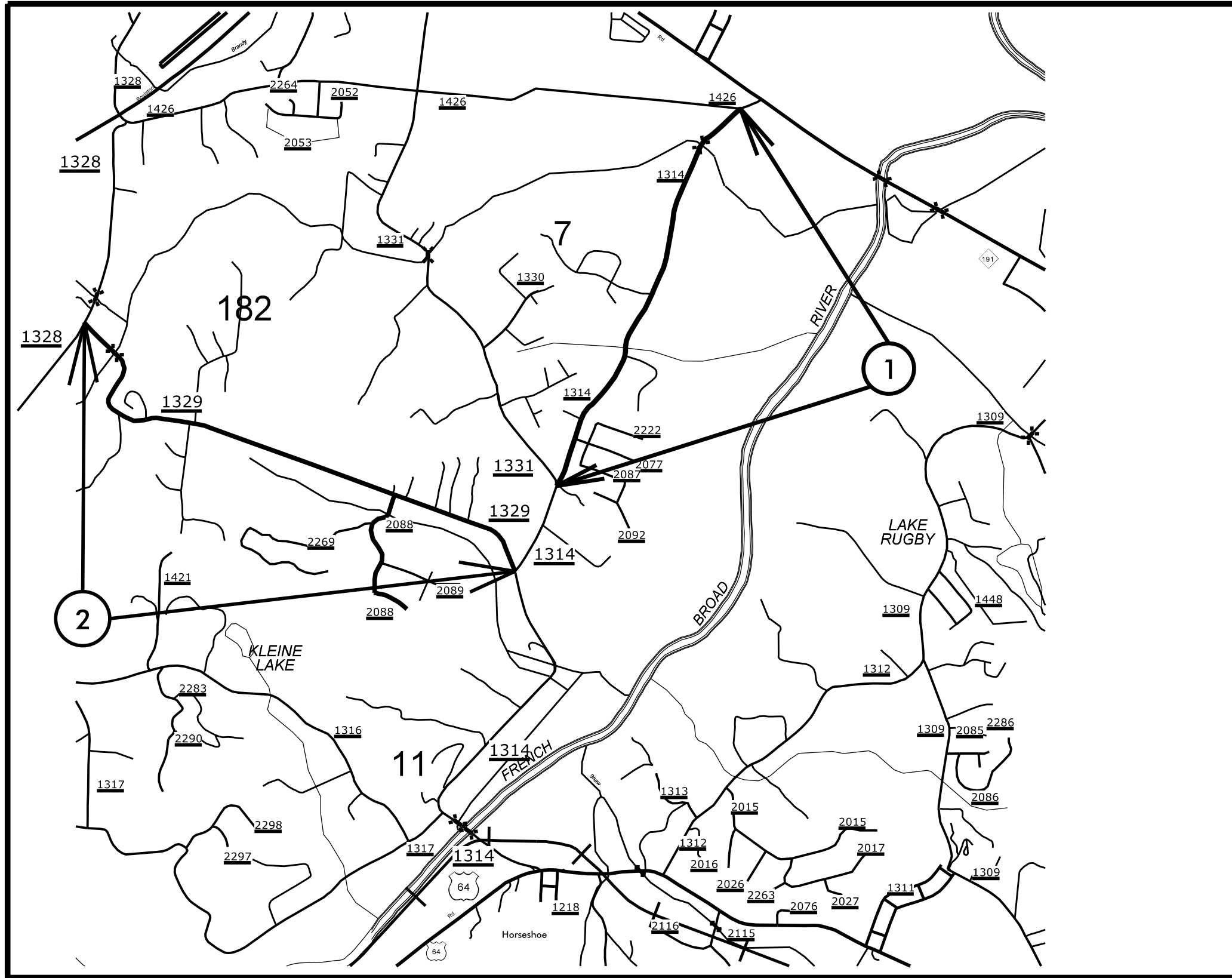
**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

**This file or an individual page
shall not be considered a certified document.**

HENDERSON COUNTY

PROJECT REFERENCE NO.		SHEET NO.
2016CPT.14.21.20451.1		1
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.21.20451.1		



TIP PROJECT:

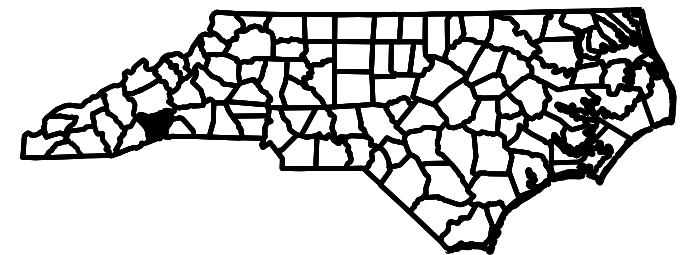
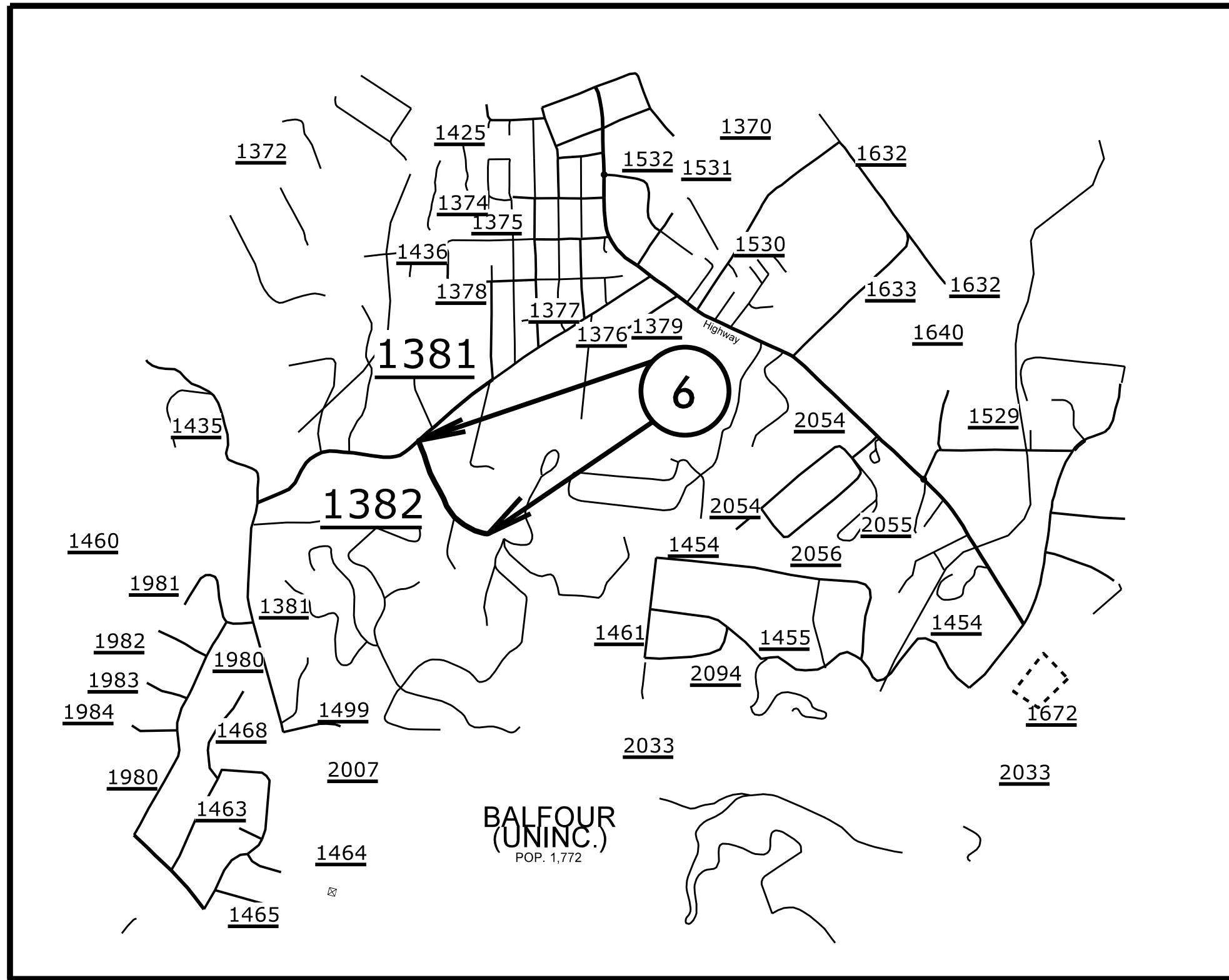
CONTRACT: DN00506

TIP PROJECT: N/A

CONTRACT: DN00506

HENDERSON COUNTY

PROJECT REFERENCE NO.		SHEET NO.
2016CPT.14.21.20451.1		3
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.21.20451.1		

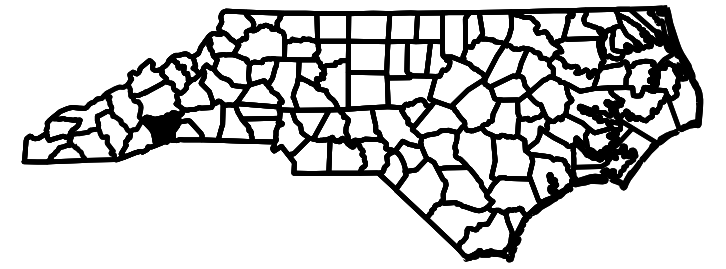
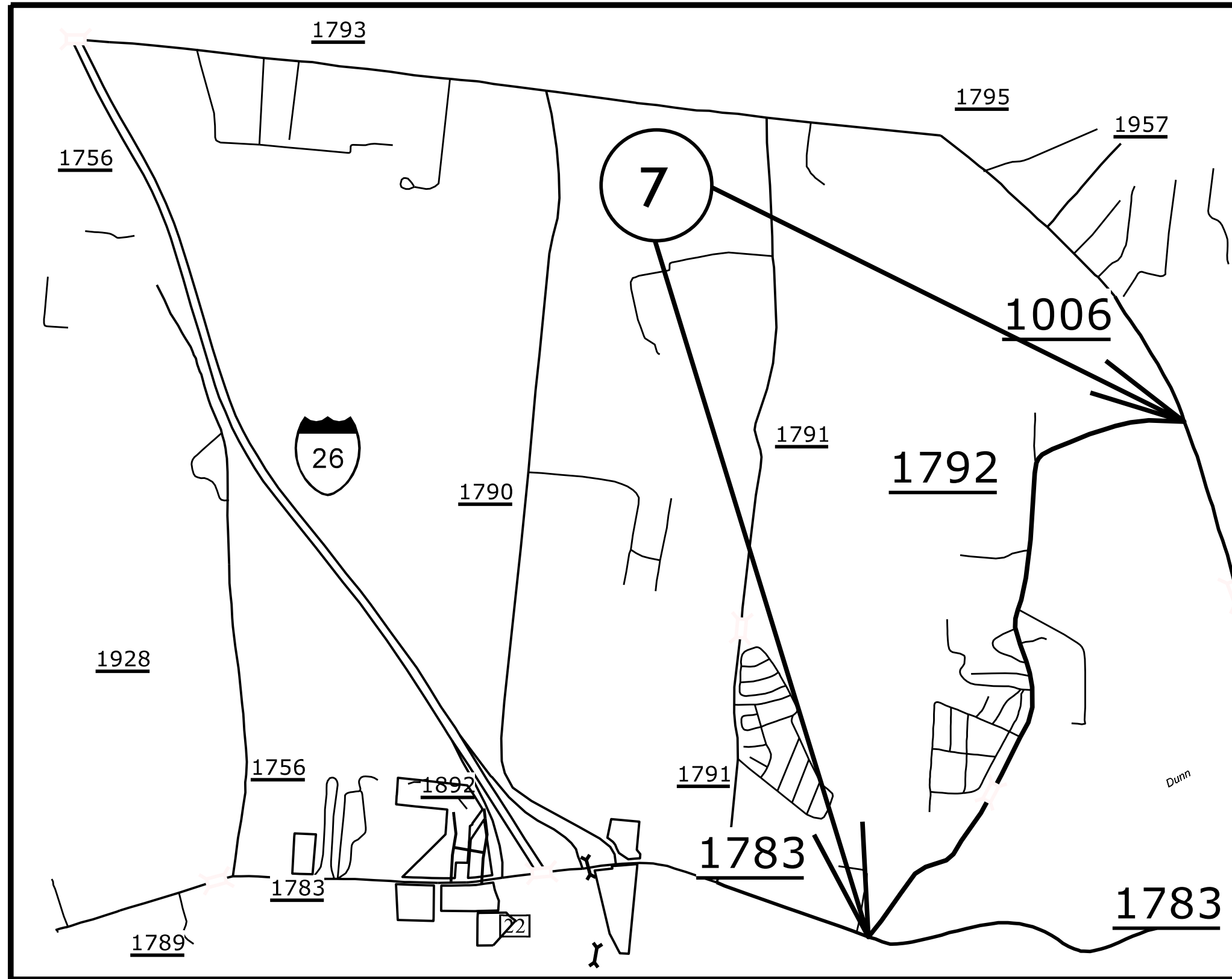


HENDERSON COUNTY

PROJECT REFERENCE NO.		SHEET NO.
2016CPT.14.21.20451.1		4
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.21.20451.1		

TIP PROJECT: N/A

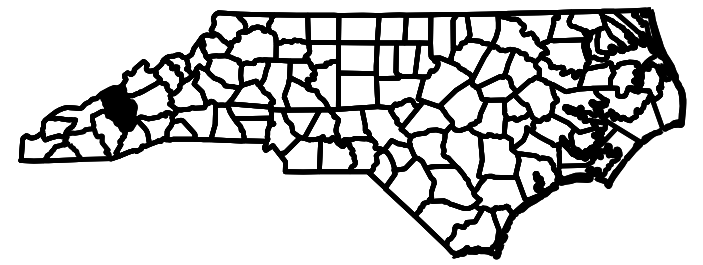
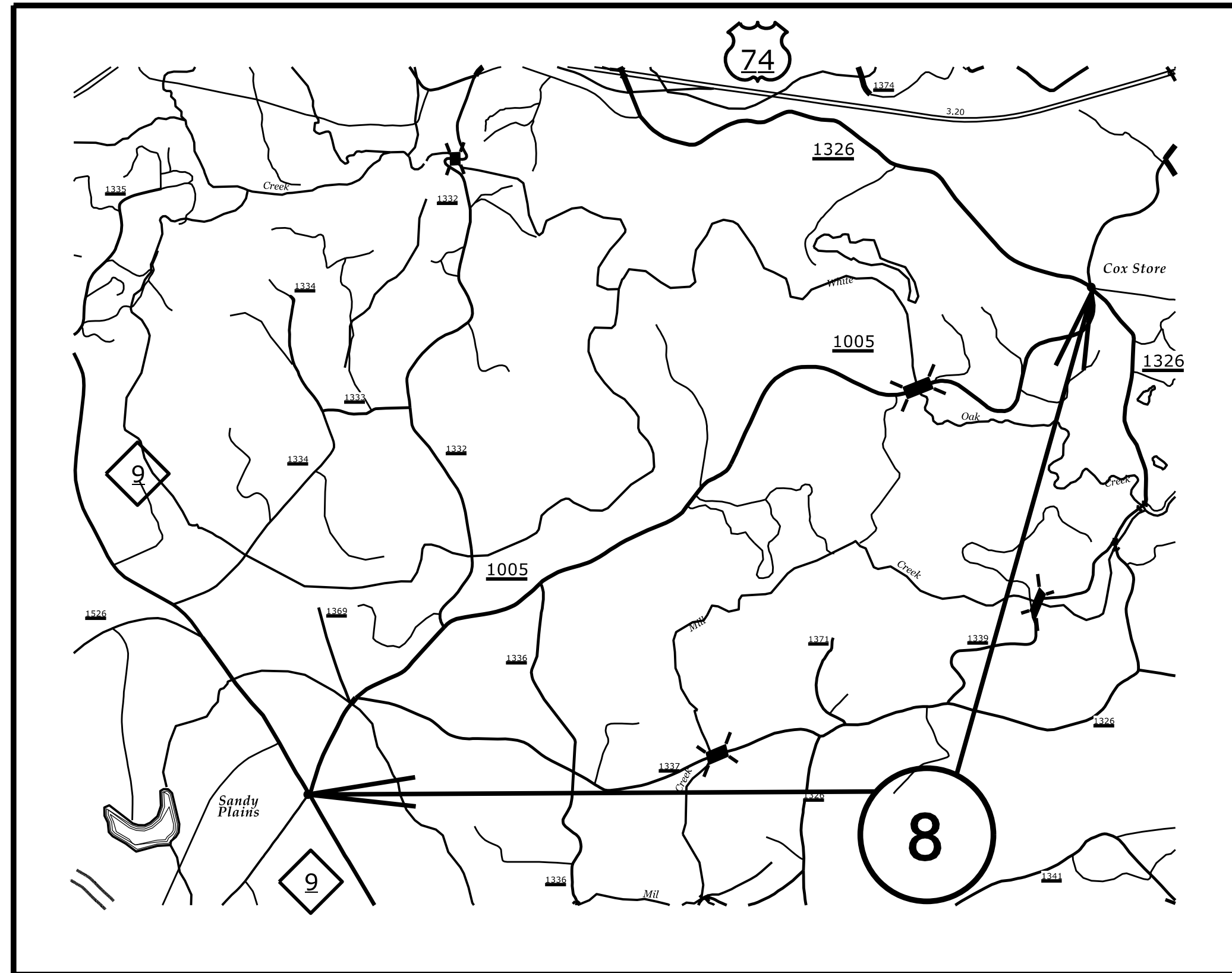
CONTRACT: DN00506



CONTRACT: DN00506 TIP PROJECT: N/A

POLK COUNTY

PROJECT REFERENCE NO.		SHEET NO.
2016CPT.14.21.20751.1		5
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.21.20751.1		

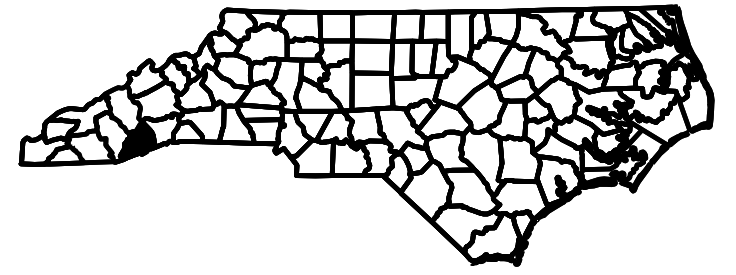
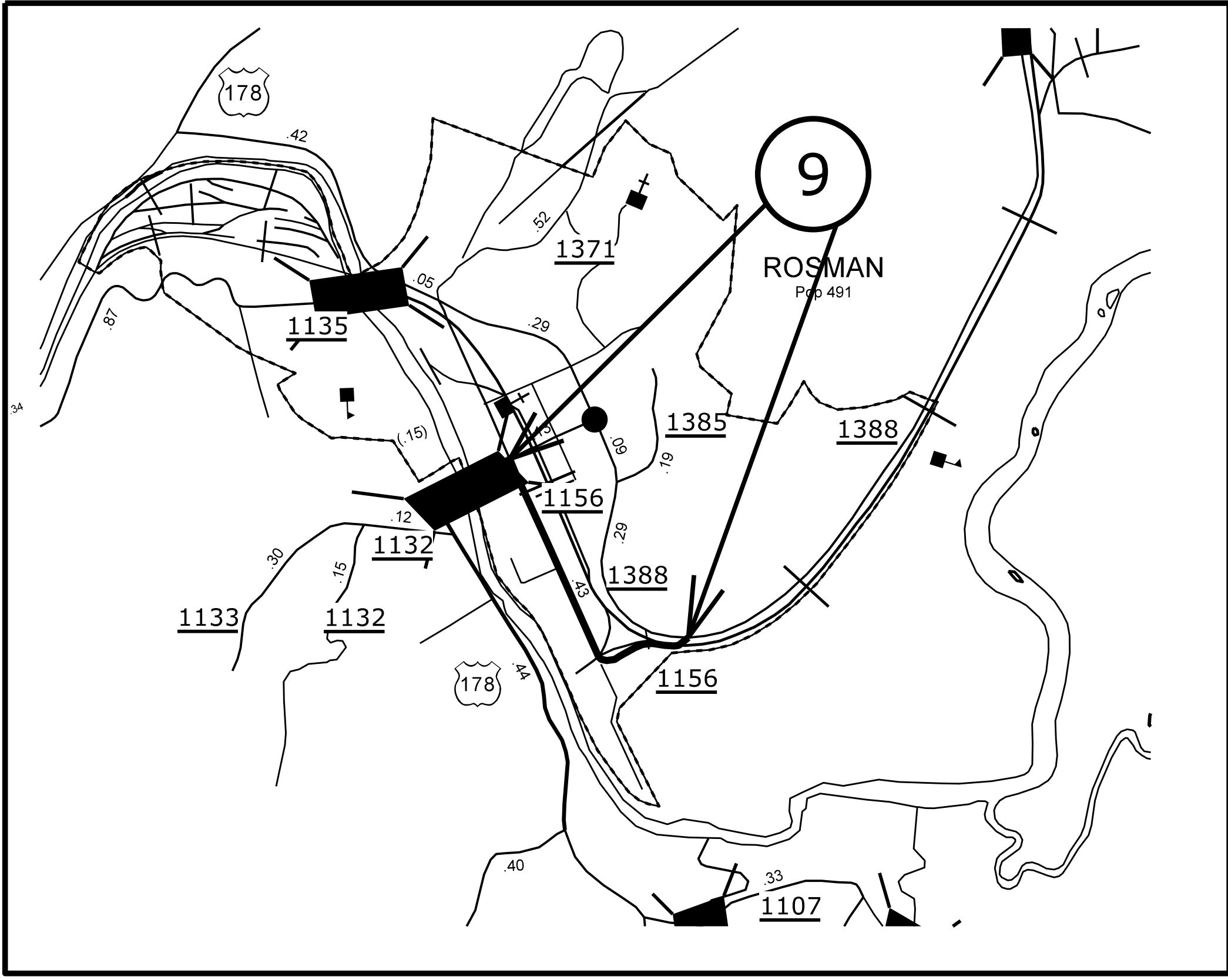


TIP PROJECT: N/A

CONTRACT: DN00506

TRANSYLVANIA COUNTY

PROJECT REFERENCE NO.		SHEET NO.
2016CPT.14.20881.1		6
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.20881.1		

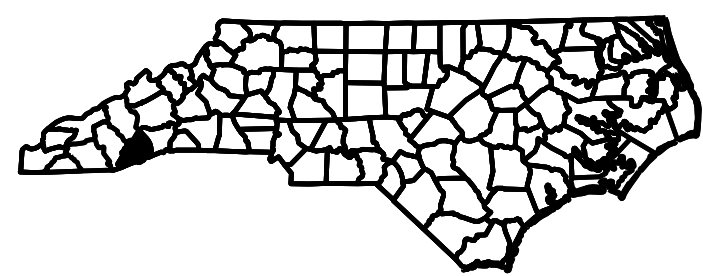
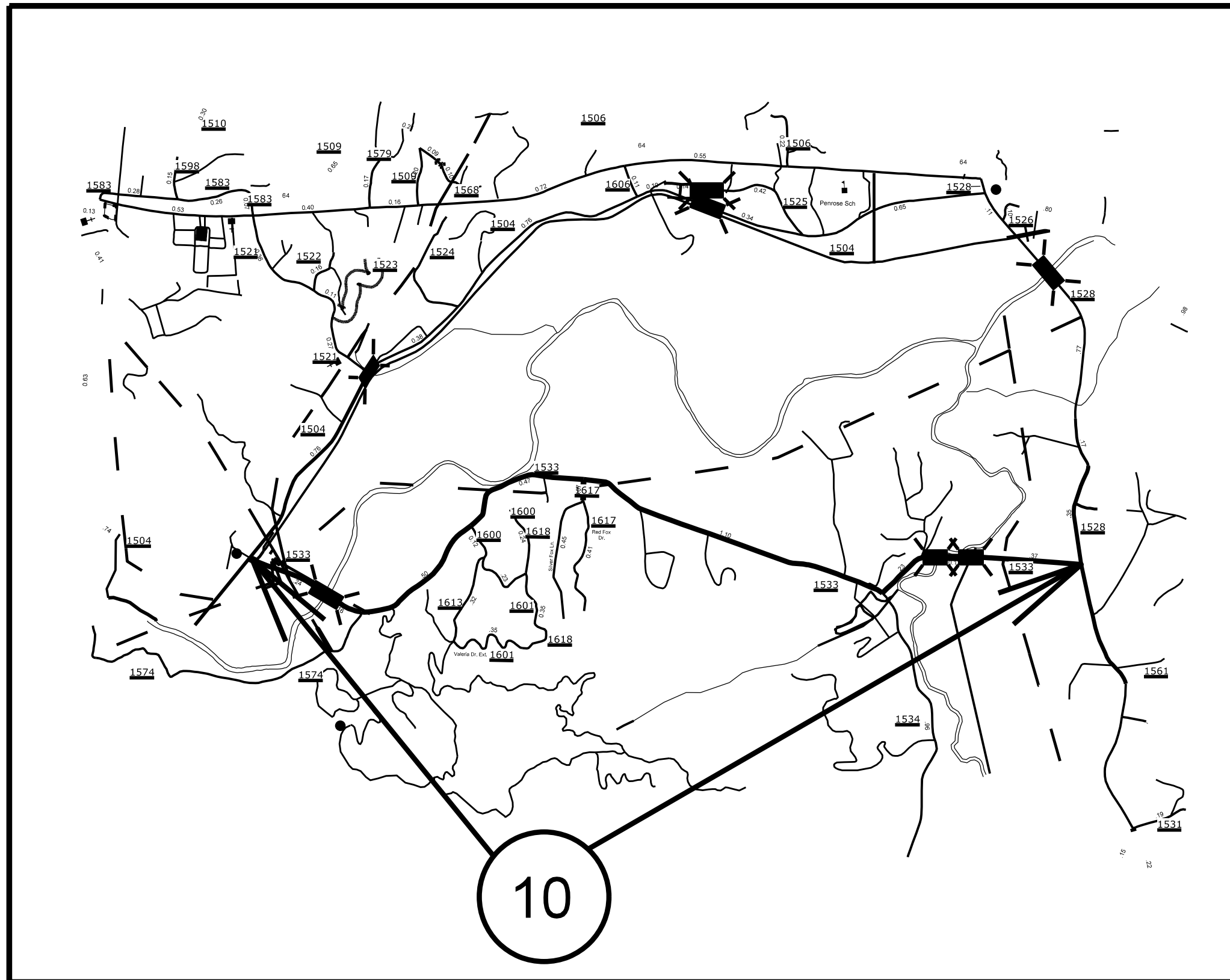


TIP PROJECT: N/A

CONTRACT: DN00506

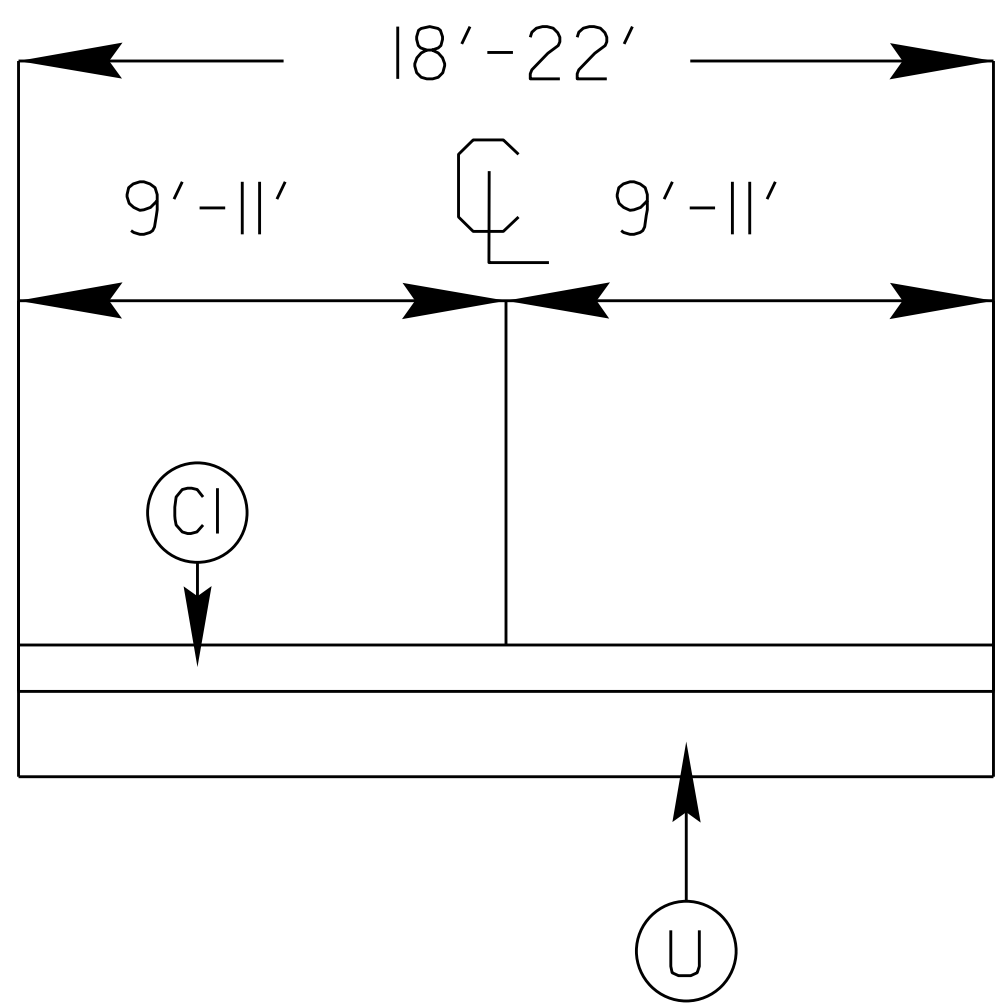
TRANSYLVANIA COUNTY

PROJECT REFERENCE NO.	SHEET NO.	
2016CPT.14.21.20881.1	7	
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.21.20881.1		



PROJECT REFERENCE NO.		SHEET NO.
DN00506		8
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.21.20451.1		
2016CPT.14.21.20751.1		
2016CPT.14.21.20881.1		

TYPICAL 1



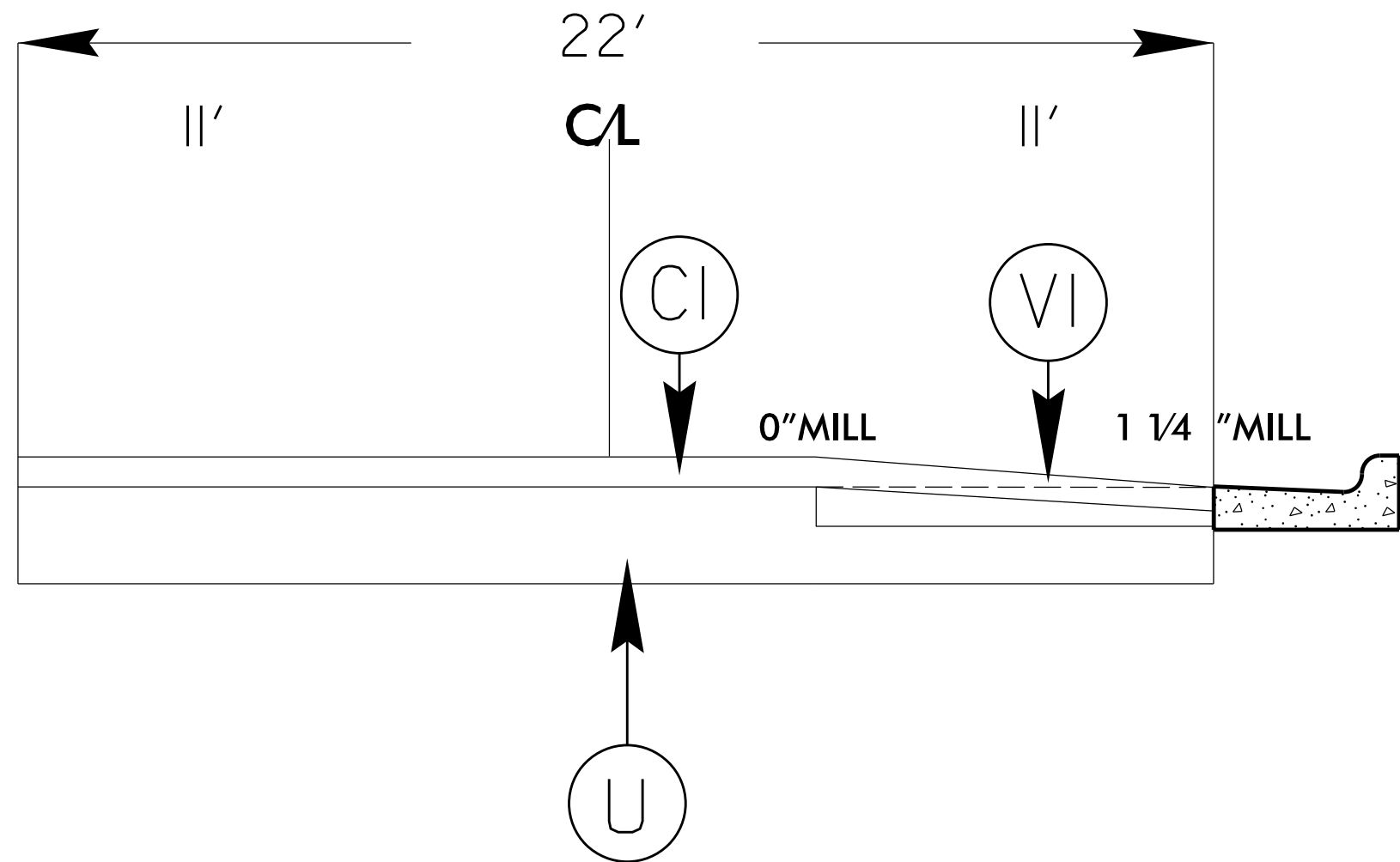
SURFACING SCHEDULE

ITEM NO	DESCRIPTION
C1	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 137.5 LBS.PER.SQ.YD
C2	PROP. APPROX. 3/4" ASPHALT CONCRETE SURFACE COURSE, (LEVELING) TYPE SF9.5A AT AN AVERAGE RATE OF 70 LBS.PER.SQ.YD
C3	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 224 LBS.PER.SQ.YD
V1	MILLING ASPHALT PAVEMENT 0" TO 1 1/4 " IN DEPTH IN CURB AREAS AND OTHER AREAS AS DIRECTED BY PROJECT ENGINEER. SEE SPECIAL PROVISIONS
V2	MILLED ASPHALT PAVEMENT 2" IN DEPTH IN LOCATIONS AS DIRECTED BY PROJECT ENGINEER
U	EXISTING ASPHALT

050197

PROJECT REFERENCE NO.		SHEET NO.
DN00506		9
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.21.20451.1		
2016CPT.14.21.20751.1		
2016CPT.14.21.20881.1		

TYPICAL 2



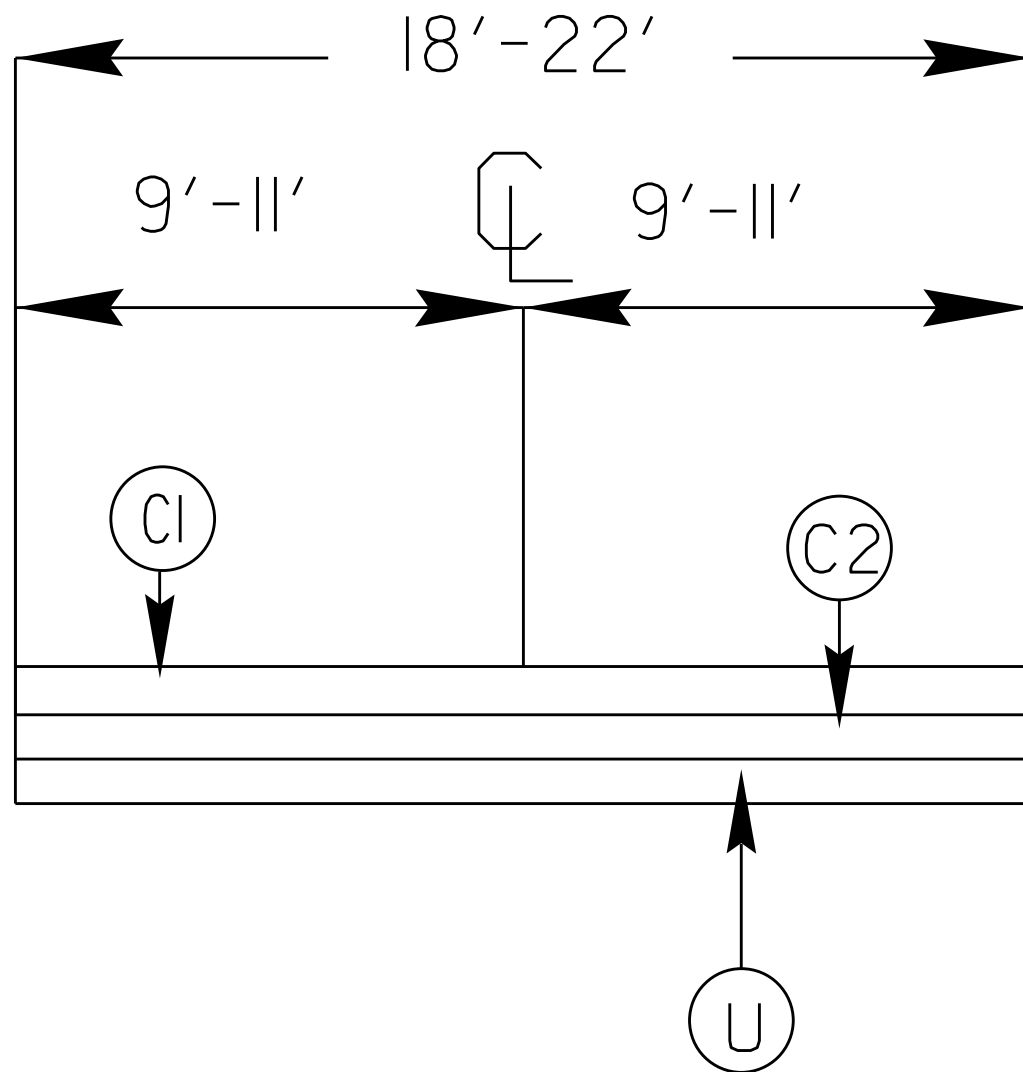
SURFACING SCHEDULE

ITEM NO	DESCRIPTION
C1	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 137.5 LBS.PER.SQ.YD
C2	PROP. APPROX. 3/4" ASPHALT CONCRETE SURFACE COURSE, (LEVELING) TYPE SF9.5A AT AN AVERAGE RATE OF 70 LBS.PER.SQ.YD
C3	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 224 LBS.PER.SQ.YD
V1	MILLING ASPHALT PAVEMENT 0" TO 1 1/4 " IN DEPTH IN CURB AREAS AND OTHER AREAS AS DIRECTED BY PROJECT ENGINEER. SEE SPECIAL PROVISIONS
V2	MILLED ASPHALT PAVEMENT 2" IN DEPTH IN LOCATIONS AS DIRECTED BY PROJECT ENGINEER
U	EXISTING ASPHALT

PROJECT REFERENCE NO.		SHEET NO.
DN00506		10
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.21.20451		
2016CPT.14.21.20751		
2016CPT.14.21.20881		

TYPICAL 3

SURFACING SCHEDULE



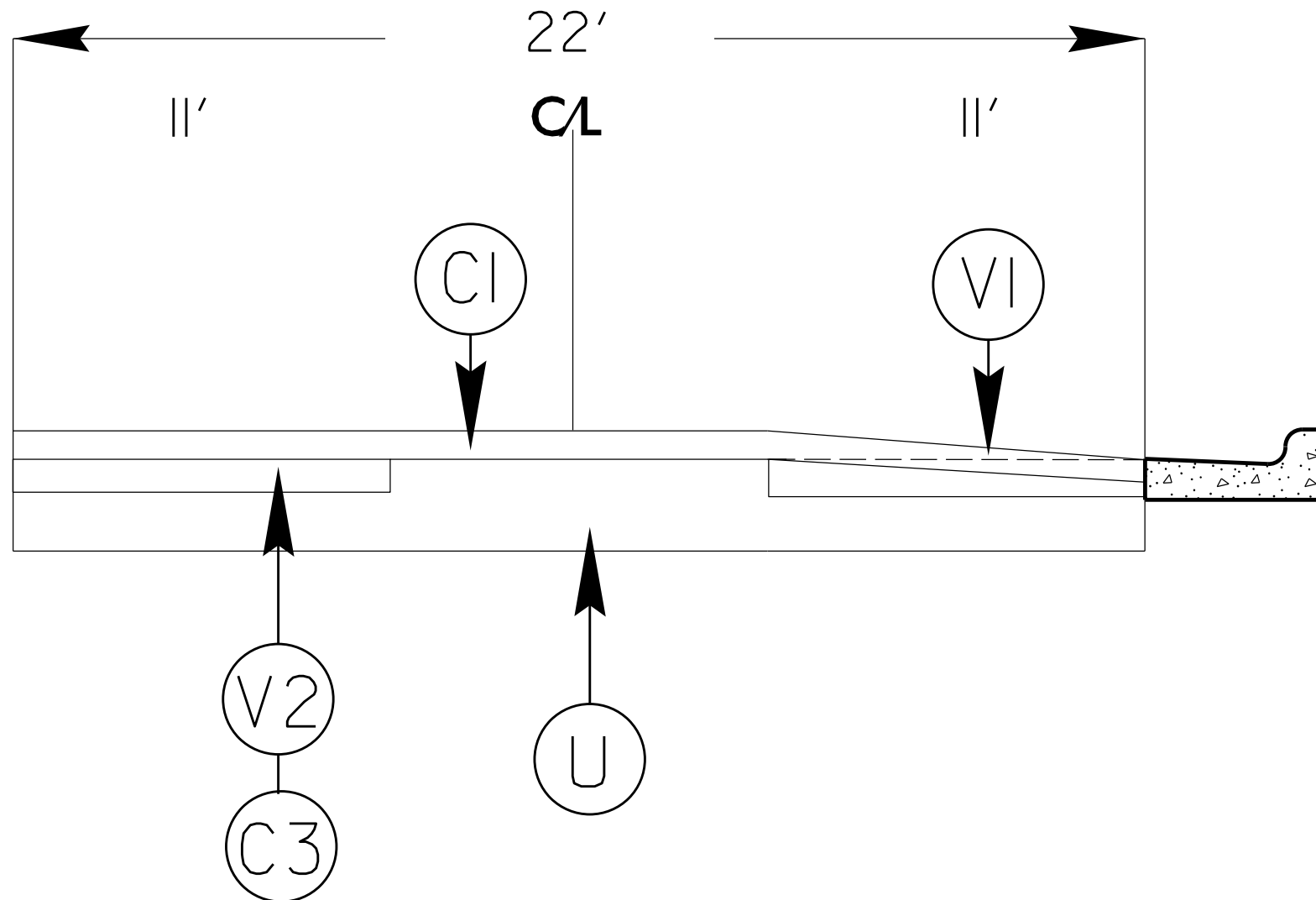
ITEM NO	DESCRIPTION
C1	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 137.5 LBS.PER.SQ.YD
C2	PROP. APPROX. 3/4" ASPHALT CONCRETE SURFACE COURSE, (LEVELING) TYPE SF9.5A AT AN AVERAGE RATE OF 70 LBS.PER.SQ.YD
C3	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 224 LBS.PER.SQ.YD
V1	MILLING ASPHALT PAVEMENT 0" TO 1 1/4 " IN DEPTH IN CURB AREAS AND OTHER AREAS AS DIRECTED BY PROJECT ENGINEER. SEE SPECIAL PROVISIONS
V2	MILLED ASPHALT PAVEMENT 2" IN DEPTH IN LOCATIONS AS DIRECTED BY PROJECT ENGINEER
U	EXISTING ASPHALT

050197

PROJECT REFERENCE NO.		SHEET NO.
DN00506		11
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.21.20451		
2016CPT.14.21.20751		
2016CPT.14.21.20881		

TYPICAL 4

SURFACING SCHEDULE



ITEM NO	DESCRIPTION
C1	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 137.5 LBS.PER.SQ.YD
C2	PROP. APPROX. 3/4" ASPHALT CONCRETE SURFACE COURSE, (LEVELING) TYPE SF9.5A AT AN AVERAGE RATE OF 70 LBS.PER.SQ.YD
C3	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 224 LBS.PER.SQ.YD
V1	MILLING ASPHALT PAVEMENT 0" TO 1 1/4 " IN DEPTH IN CURB AREAS AND OTHER AREAS AS DIRECTED BY PROJECT ENGINEER. SEE SPECIAL PROVISIONS
V2	MILLED ASPHALT PAVEMENT 2" IN DEPTH IN LOCATIONS AS DIRECTED BY PROJECT ENGINEER
U	EXISTING ASPHALT

PROJECT NO.	SHEET NO.	TOTAL NO.
2016CPT.14.21.20451.1	12	
2016CPT.14.21.20751.1		
2016CPT.14.21.20881.1		

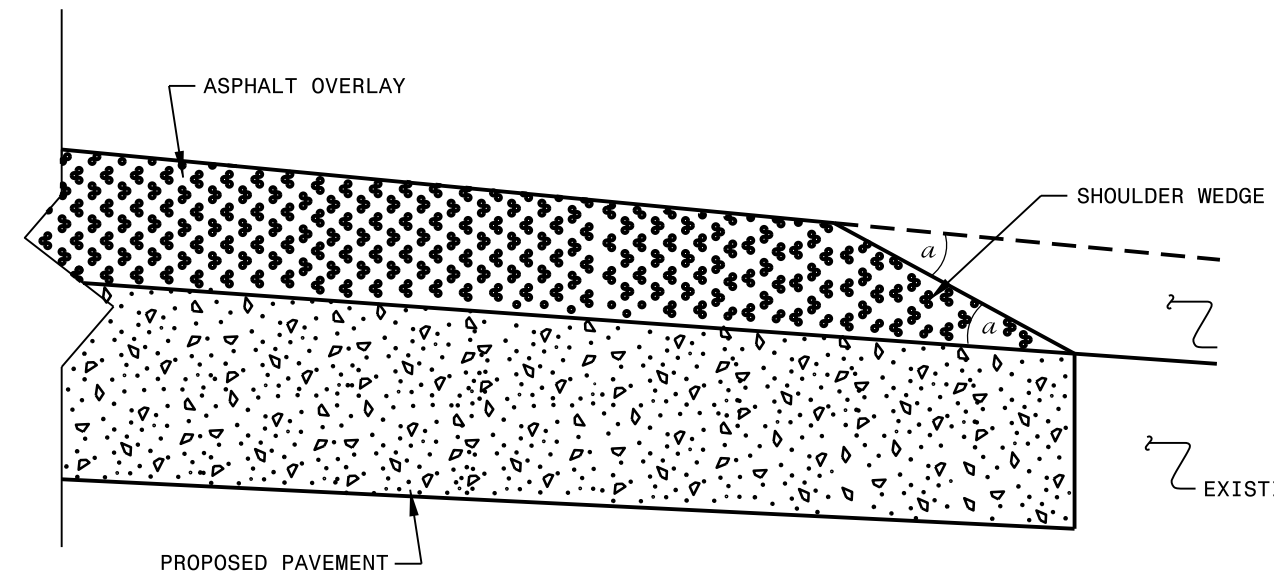
SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	2" MILLING SY	0" TO 1 1/4" MILLING SY	INCIDENTAL MILLING SY	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, SF9.5A TONS	SURFACE COURSE, (LEVELING), SF9.5A TN	ASPHALT BINDER FOR PLANT MIX TONS	CURB RAMPS EA	ADJ. OF CATCH BASIN EA	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	
2016CPT.14.21.20451.1	Henderson	1	SR-1314 LADSON ROAD	FROM SR-1331 TO SR1426	1	2	2WU	NO	NO	1.24	22			400		1,216		81					
TOTAL FOR MAP NO. 1																							
2016CPT.14.21.20451.1	Henderson	2	SR-1329 WARLICK ROAD	FROM SR-1314 TO SR-1328	2	2	2WU	NO	NO	1.84	18		500	190		1,478		99					
TOTAL FOR MAP NO. 2																							
2016CPT.14.21.20451.1	Henderson	3	SR-2088 OAKWOOD DRIVE	FROM SR-1329 TO DEAD END	1	2	2WU	NO	NO	0.35	18					281		19			3		
TOTAL FOR MAP NO. 3																							
2016CPT.14.21.20451.1	Henderson	4	SR-2089 BEECHWOOD DRIVE	FROM SR-2088 TO DEAD END	3	2	2WU	NO	NO	0.25	18					201	111	20					
TOTAL FOR MAP NO. 4																							
2016CPT.14.21.20451.1	Henderson	5	SR-2269 RAVENWOOD LANE	FROM SR-2088 TO DEAD END	1	2	2WU	NO	NO	0.75	18					613		41					
TOTAL FOR MAP NO. 5																							
2016CPT.14.21.20451.1	Henderson	6	SR-1382 GLENWOOD ROAD	FROM SR-1381 TO DEAD END	1	2	2WU	NO	NO	0.2	18					161		11			1		
TOTAL FOR MAP NO. 6																							
2016CPT.14.21.20451.1	Henderson	7	SR-1792 SOUTH ORCHARD ROAD	FROM SR-1006 TO SR-1783	3	2	2WU	NO	NO	1	18			100		803	445	81					
TOTAL FOR MAP NO. 7																							
TOTAL FOR PROJ NO. 2016CPT.14.21.20451.1										5.63			500	690		4,753	556	352			4		
GRAND TOTAL																							
2016CPT.14.21.20751.1	Polk	8	SR-1005 SANDY PLAINS	FROM NC 9 TO SR-1326	3	2	2WU	NO	NO	4.35	24			275		4,737	725	361					
TOTAL FOR MAP NO. 8																							
TOTAL FOR PROJ NO. 2016CPT.14.21.20751.1										4.35				275		4,737	725	361					
GRAND TOTAL																							
2016CPT.14.21.20881.1	Transylvania	9	SR-1156 MAIN ST	FROM SR-1338 TO US 178	2	2	2WU	NO	NO	0.66	22	5,750	1,016		715	677		80	3	2	6	3	
TOTAL FOR MAP NO. 9																							
2016CPT.14.21.20881.1	Transylvania	10	SR-1533 EVERETT ROAD	FROM SR-1504 TO SR-1528	4	2	2WU	NO	NO	4.3	22			275		4,294	825	337					
TOTAL FOR MAP NO. 10																							
TOTAL FOR PROJ NO. 2016CPT.14.21.20881.1										4.96			5,750	1,016	275	715	4,971	825	417	3	2	6	3
GRAND TOTAL																							

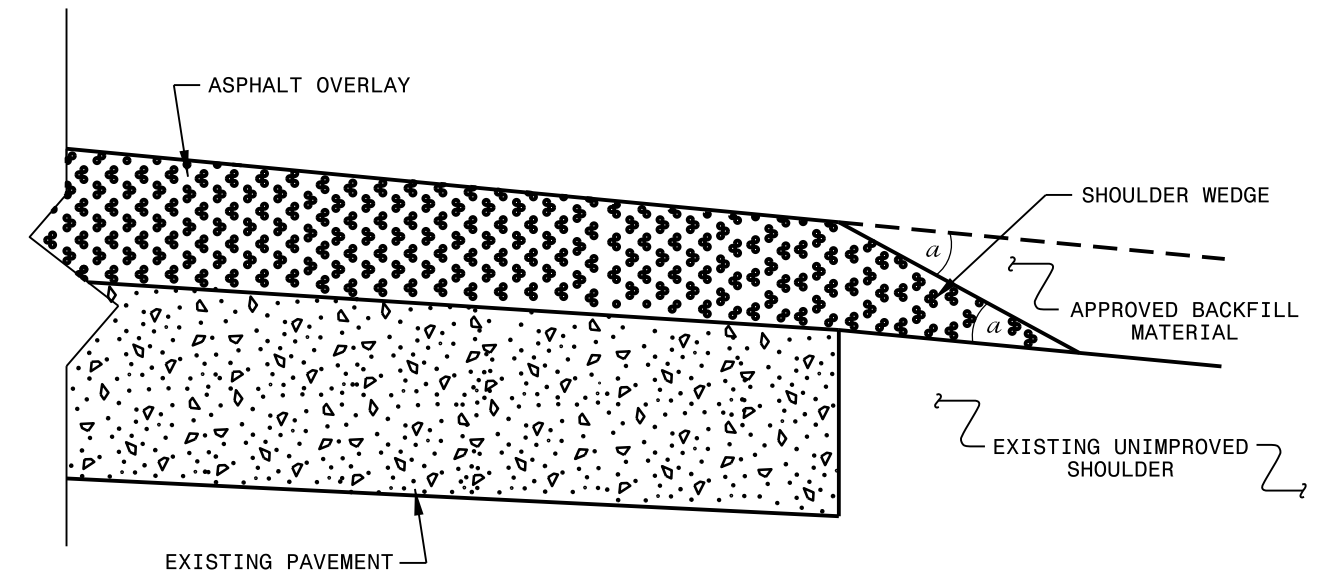
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	4413000000	4457000000	4810000000-E	4825000000-E	4835000000-E	4845000000-N
										WORK ZONE ADVANCE GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	4" WHITE PAINT LF	4" YELLOW PAINT LF	12" WHITE PAINT LF	24" WHITE PAINT LF
2016CPT.14.21.20451.1	Henderson	1	SR-1314 LADSON ROAD	FROM SR-1331 TO SR1426	1	2	2WU	1.24	22	139	1	26,685	29,462		220
TOTAL FOR MAP NO. 1															
2016CPT.14.21.20451.1	Henderson	2	SR-1329 WARLICK ROAD	FROM SR-1314 TO SR-1328	2	2	2WU	1.84	18	206	1	26,685	29,462		220
TOTAL FOR MAP NO. 2															
2016CPT.14.21.20451.1	Henderson	3	SR-2088 OAKWOOD DRIVE	FROM SR-1329 TO DEAD END	1	2	2WU	0.35	18	39		7,532	8,316	20	
TOTAL FOR MAP NO. 3															
2016CPT.14.21.20451.1	Henderson	4	SR-2089 BEECHWOOD DRIVE	FROM SR-2088 TO DEAD END	3	2	2WU	0.25	18	28		5,380	5,940		60
TOTAL FOR MAP NO. 4															
2016CPT.14.21.20451.1	Henderson	5	SR-2269 RAVENWOOD LANE	FROM SR-2088 TO DEAD END	1	2	2WU	0.75	18	84		16,140	17,820		100
TOTAL FOR MAP NO. 5															
2016CPT.14.21.20451.1	Henderson	6	SR-1382 GLENWOOD ROAD	FROM SR-1381 TO DEAD END	1	2	2WU	0.2	18	22		4,304	4,752		
TOTAL FOR MAP NO. 6															
2016CPT.14.21.20451.1	Henderson	7	SR-1792 SOUTH ORCHARD ROAD	FROM SR-1006 TO SR-1783	3	2	2WU	1	18	112		21,520	23,760		120
TOTAL FOR MAP NO. 7															
TOTAL FOR PROJ NO. 2016CPT.14.21.20451.1										630	1	121,158	133,768	20	560
GRAND TOTAL															
2016CPT.14.21.20751.1	Polk	8	SR-1005 SANDY PLAINS	FROM NC 9 TO SR-1326	3	2	2WU	4.35	24	487		188,000	188,000		
TOTAL FOR MAP NO. 8															
TOTAL FOR PROJ NO. 2016CPT.14.21.20751.1										487		188,000	188,000		
GRAND TOTAL															
2016CPT.14.21.20881.1	Transylvania	9	SR-1156 MAIN ST	FROM SR-1338 TO US 178	2	2	2WU	0.66	22	74		28,203	28,682		20
TOTAL FOR MAP NO. 9															
2016CPT.14.21.20881.1	Transylvania	10	SR-1533 EVERETT ROAD	FROM SR-1504 TO SR-1528	4	2	2WU	4.3	22	482		92,536	102,168		200
TOTAL FOR MAP NO. 10															
TOTAL FOR PROJ NO. 2016CPT.14.21.20881.1										556		120,739	130,850		200
GRAND TOTAL															

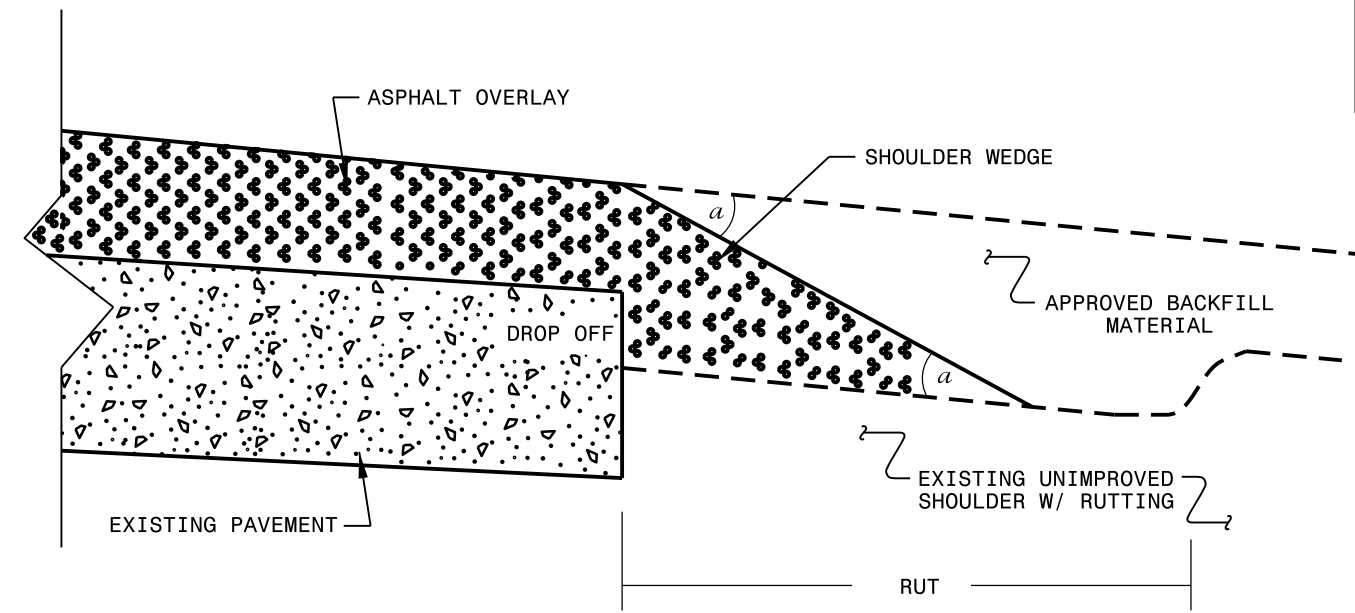
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



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



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)



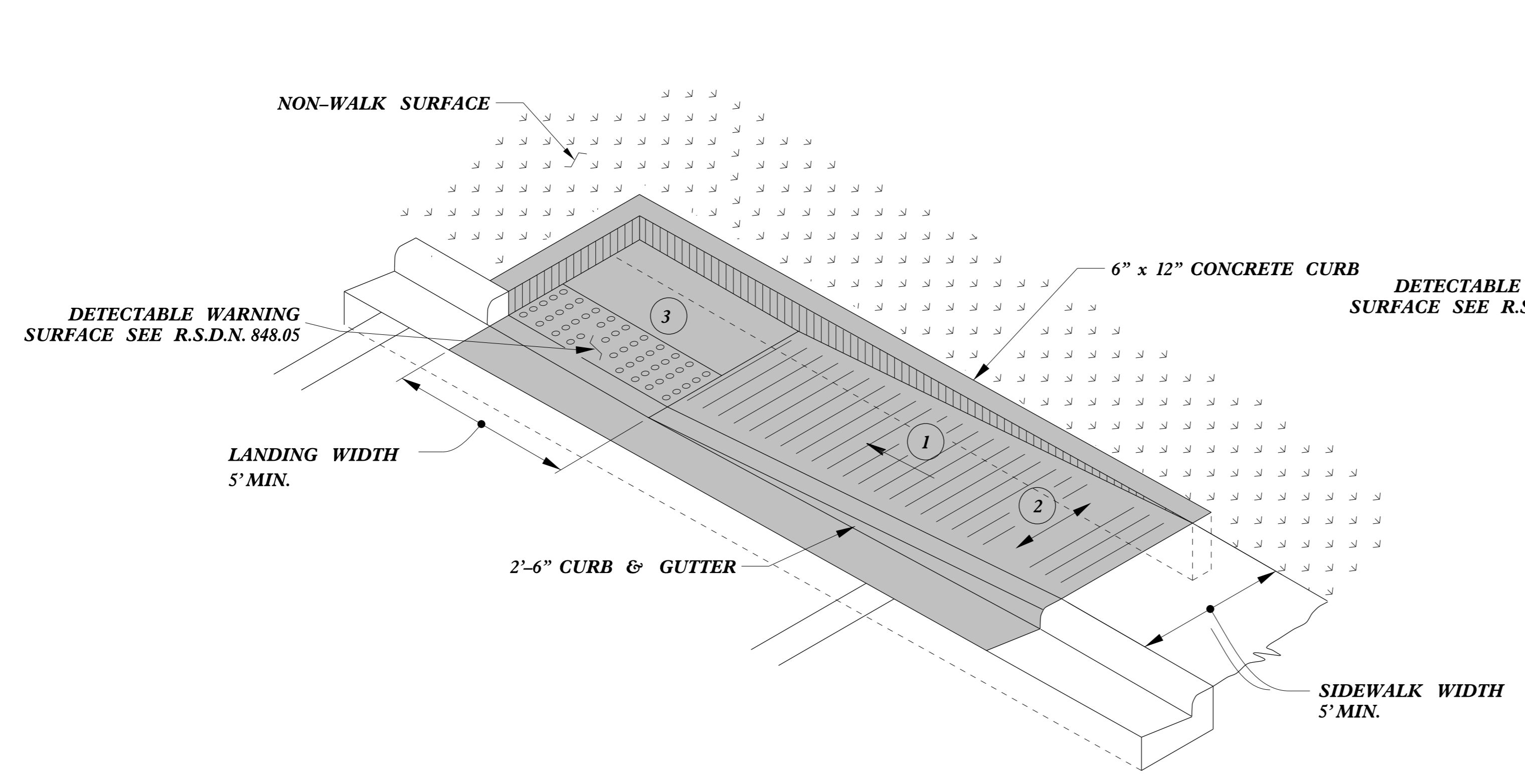
SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

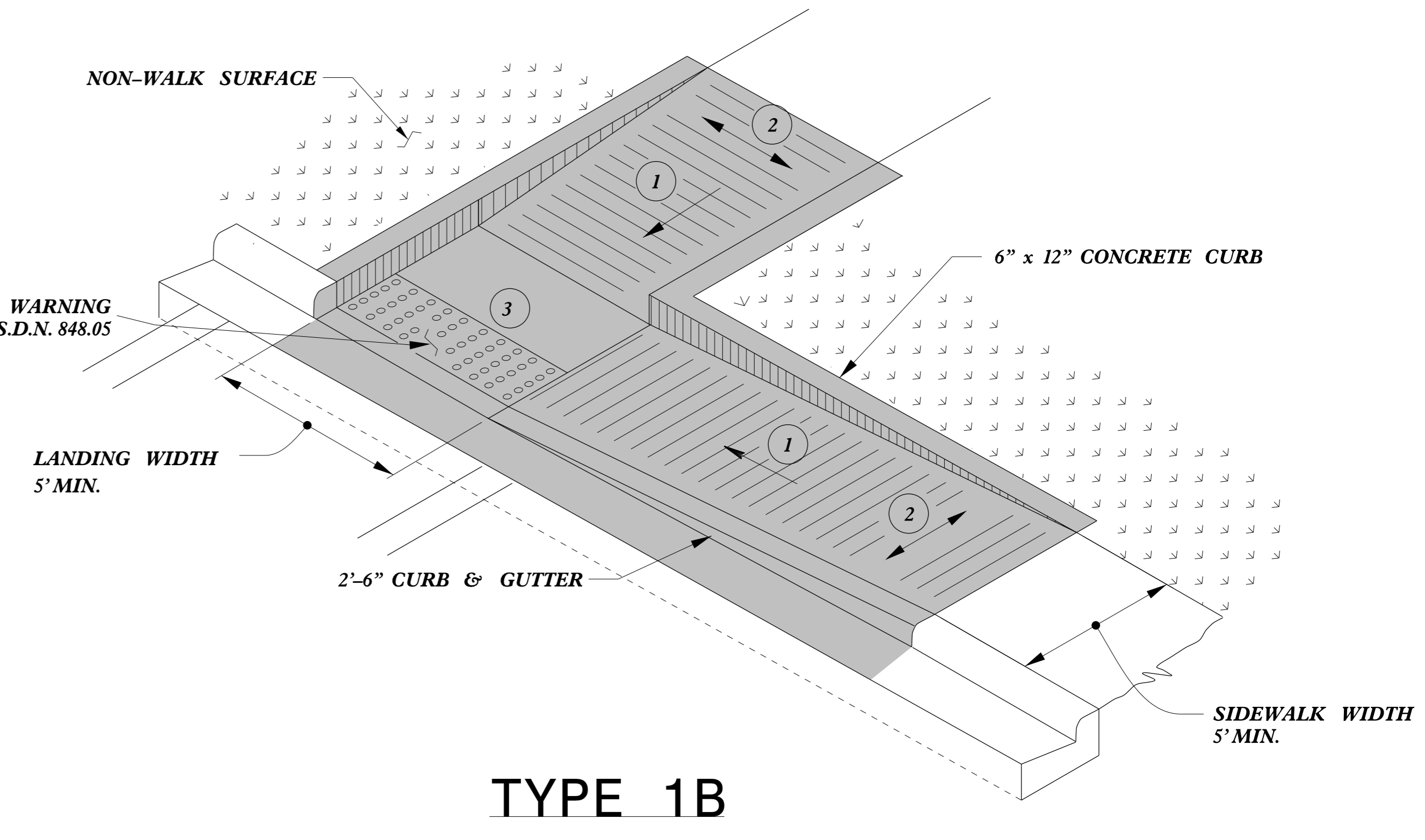
CONTRACT STANDARDS AND DEVELOPMENT UNIT			
Office 919-707-6950		FAX 919-250-4119	
SHOULDER WEDGE DETAILS			
ORIGINAL BY: T.SPELL	DATE: 7-19-11		
MODIFIED BY:	DATE: 2/2/16		
CHECKED BY:	DATE:		
FILE SPEC.: susr/details/stand/shoulderwedgedetail.dgn			

SYSTEMS DESIGN
 USER NAME

5/14/99



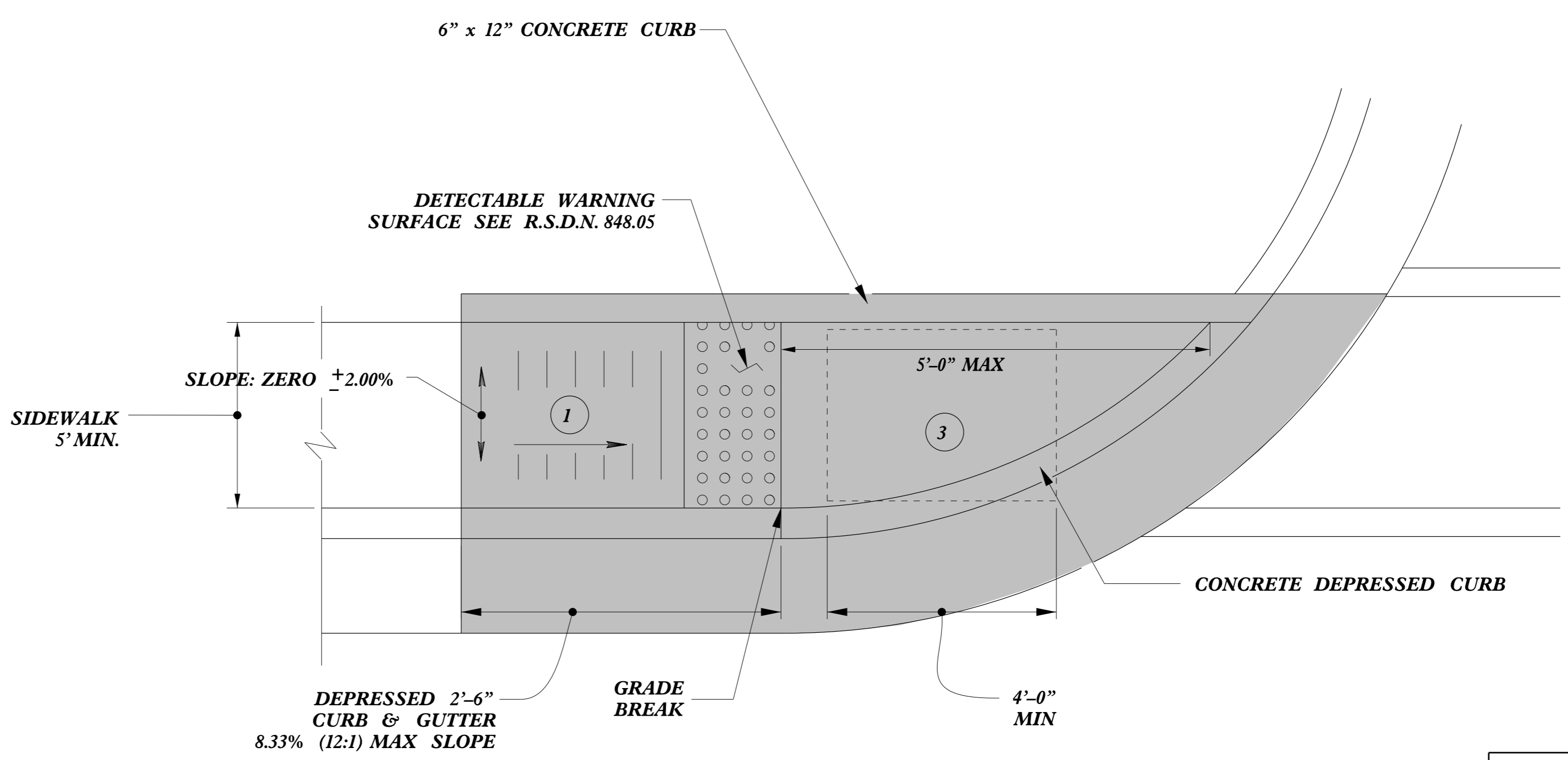
TYPE 1A



TYPE 1B

PAY LIMITS FOR 1 CURB RAMP

- 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.



TYPE 1

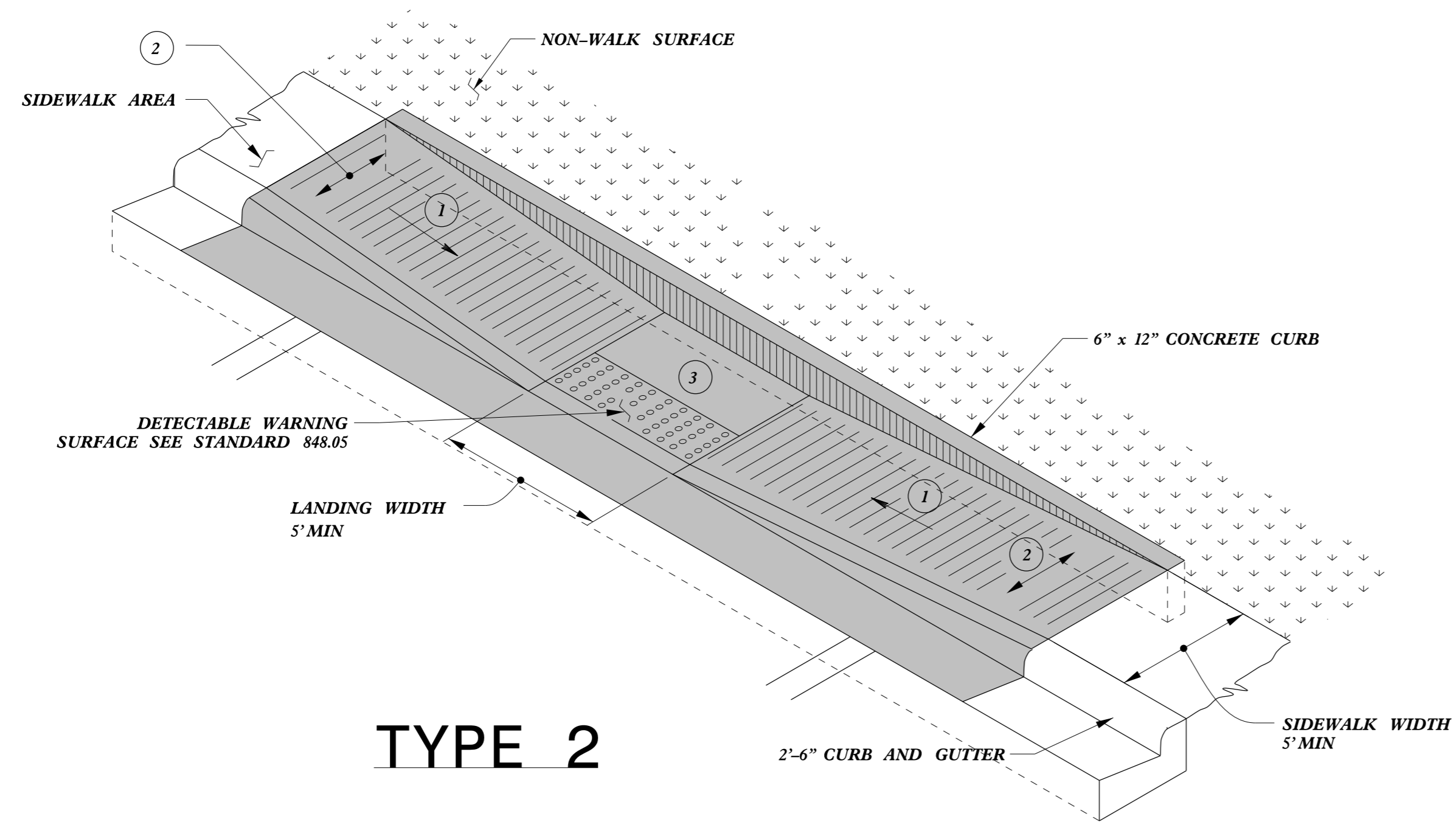


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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	

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

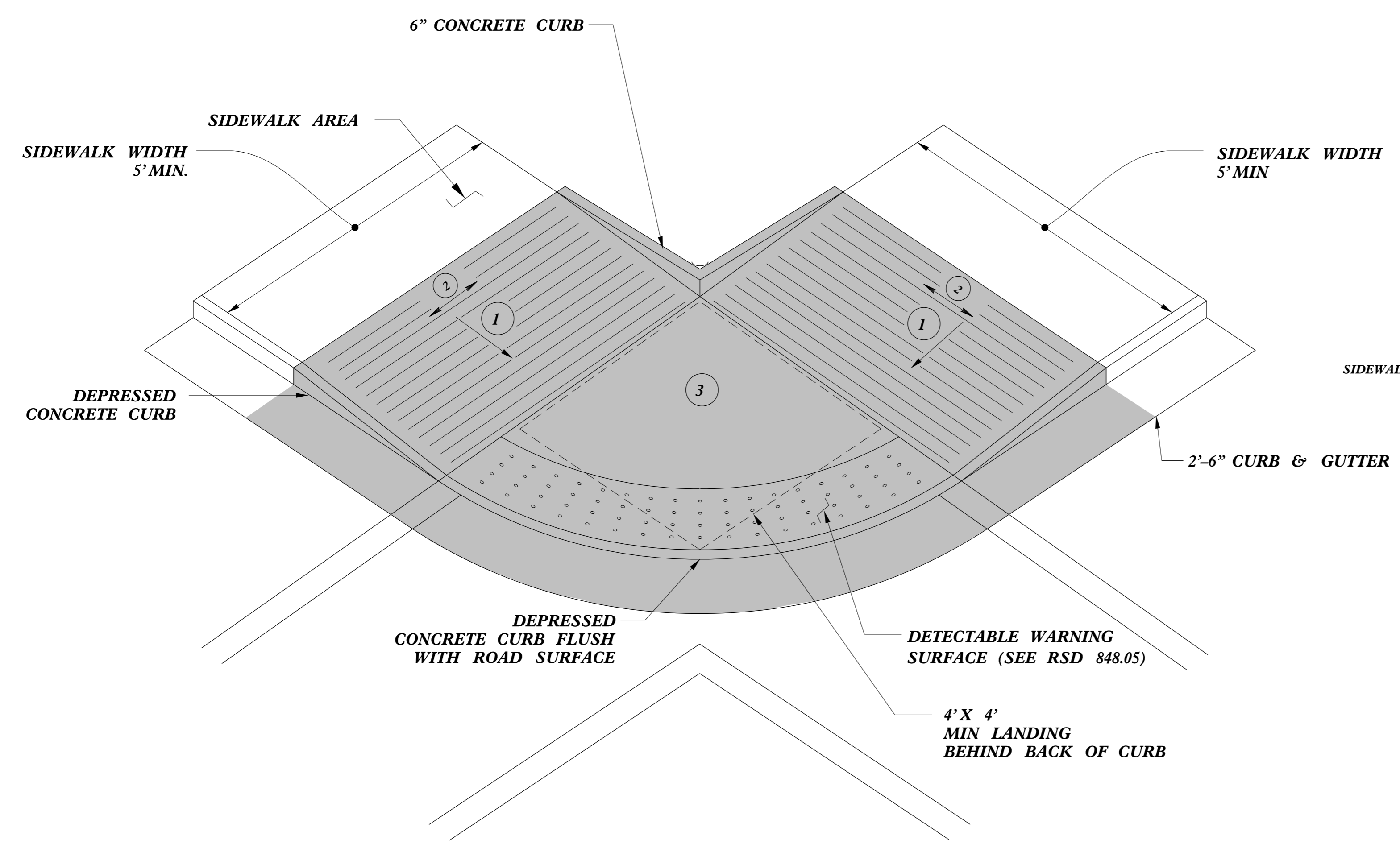
C:\P\2011\20110707\20110707.dwg
 USER: J.S. HOWERTON
 DATE: 7/7/11 10:00 AM
 PLOT: 7/7/11 10:00 AM
 PLOTTER: HP DesignJet T1100e



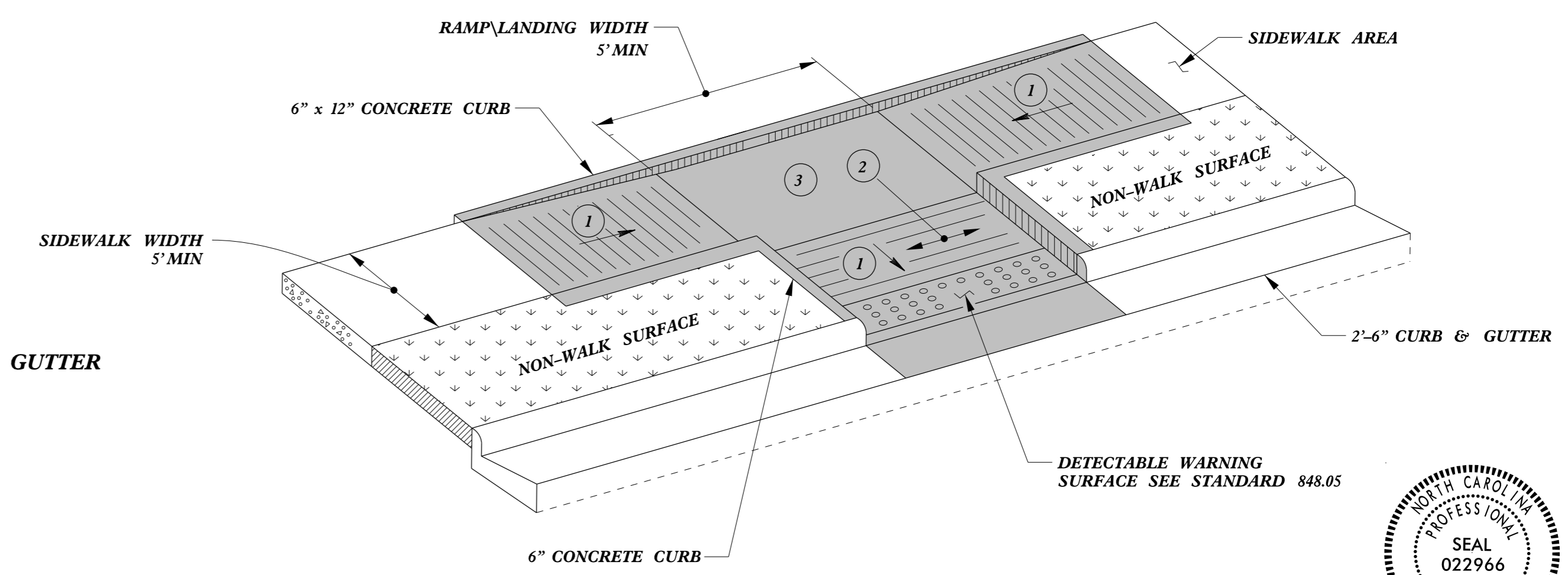
TYPE 2

PAY LIMITS FOR 1 CURB RAMP

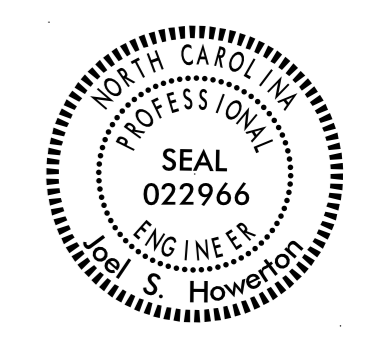
- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



TYPE 2A



TYPE 3

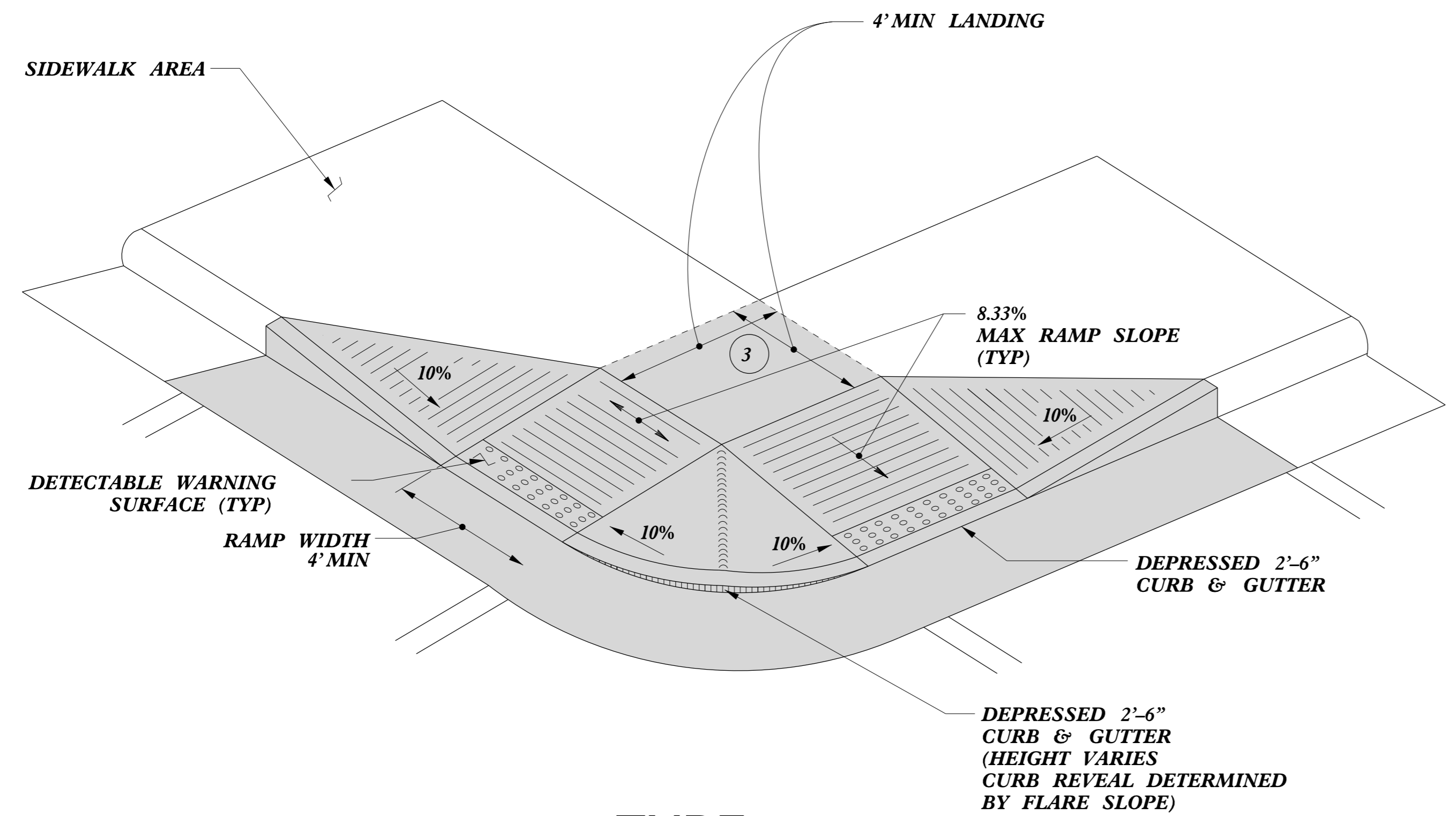


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

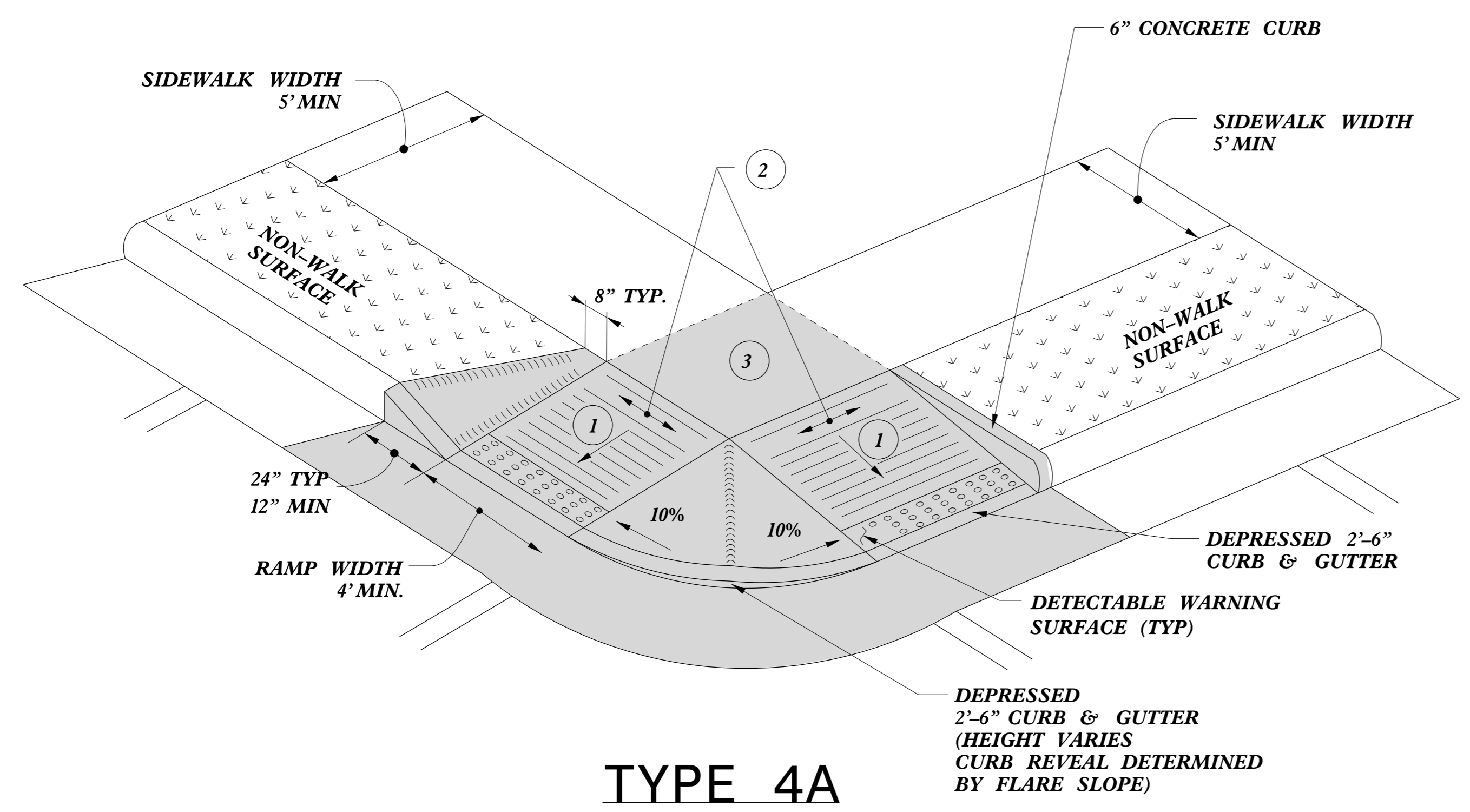
CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Parallel Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn	

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

5/14/99
C:\ME\CS\CON\CON\USER\NAME

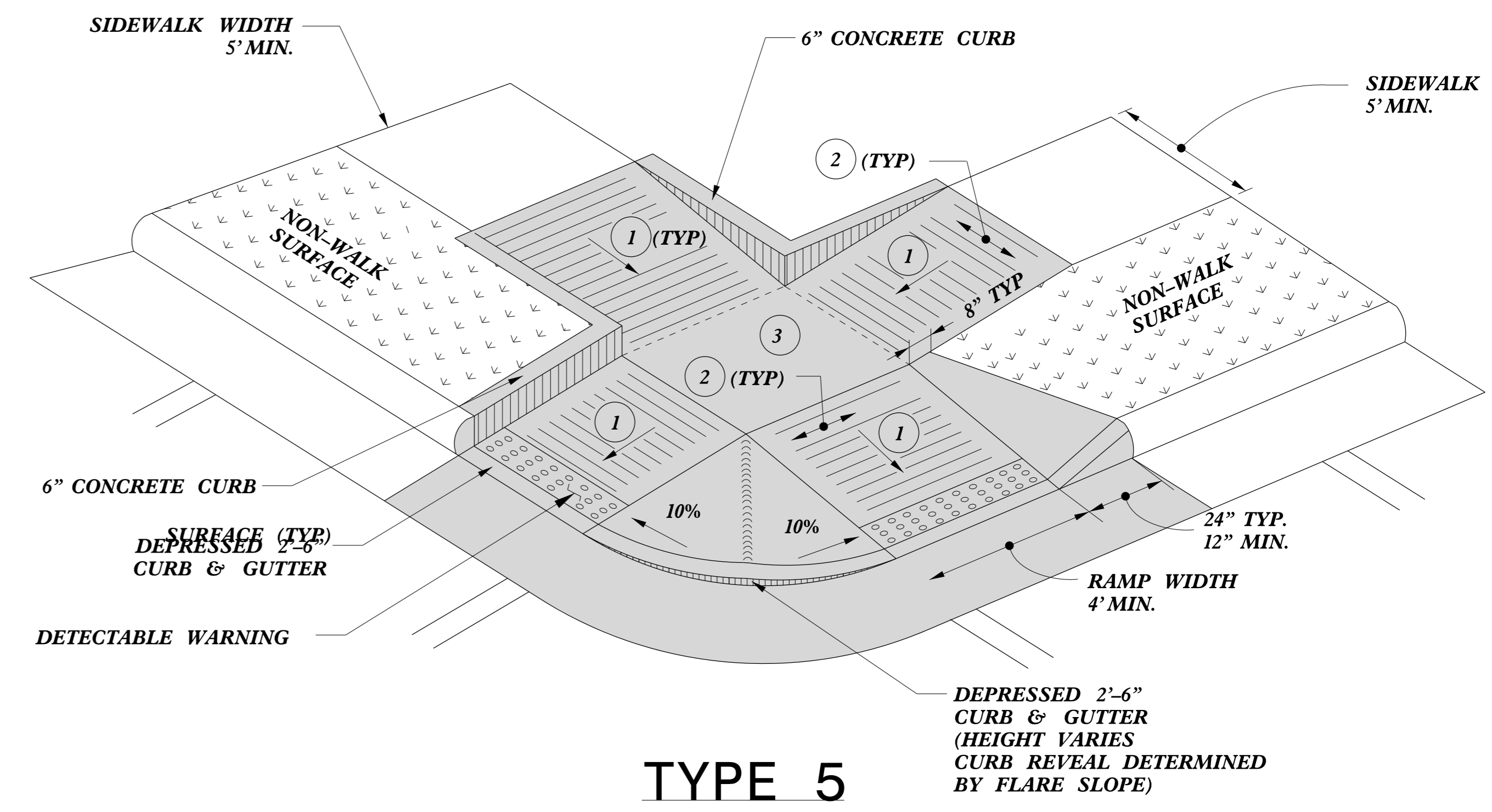


TYPE 4



TYPE 4A

PAY LIMITS FOR 2 CURB RAMPS



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.



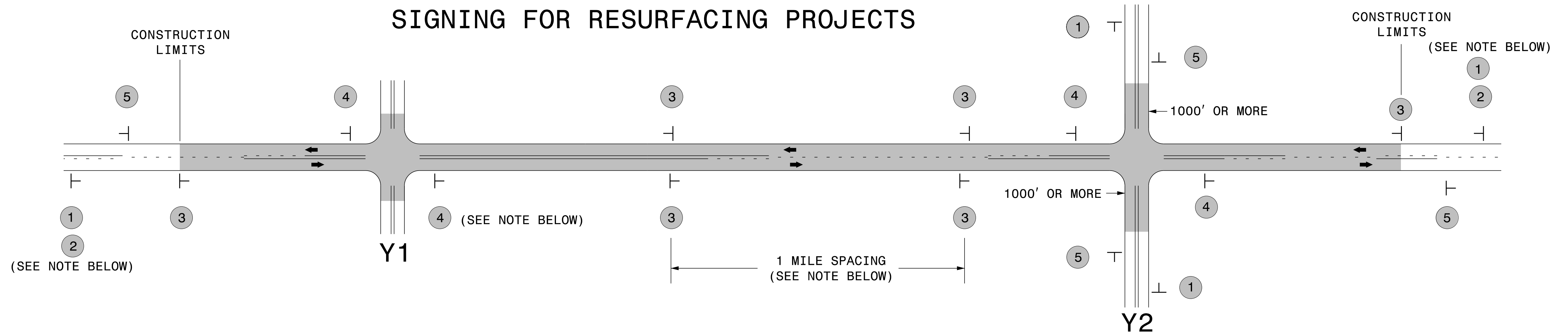
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Shared Landing	
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
C:\TIME\STDS\CON\STDS\USER\NAME

SIGNING FOR RESURFACING PROJECTS

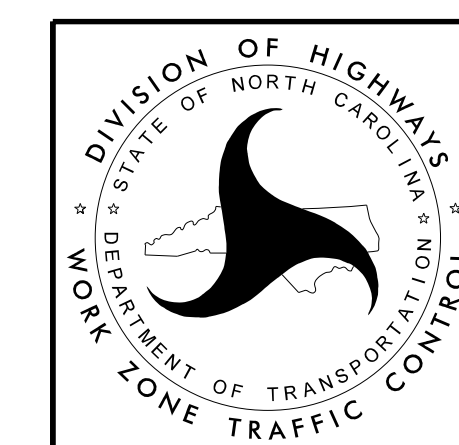


LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	MAINLINE (-L-) SIGNING		-Y- LINE SIGNING		
	1	 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.	NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS: <ol style="list-style-type: none"> LESS THAN 1000' OF RESURFACING ALONG -Y- LINE SUBDIVISION ROADS DEAD END ROADS 	
	2	 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)	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.	
	3	 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 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.	 W20-1 48" X 48"	 W20-7 A 48" X 48"
	4	 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.	PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.	
5	 G20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.			



RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS