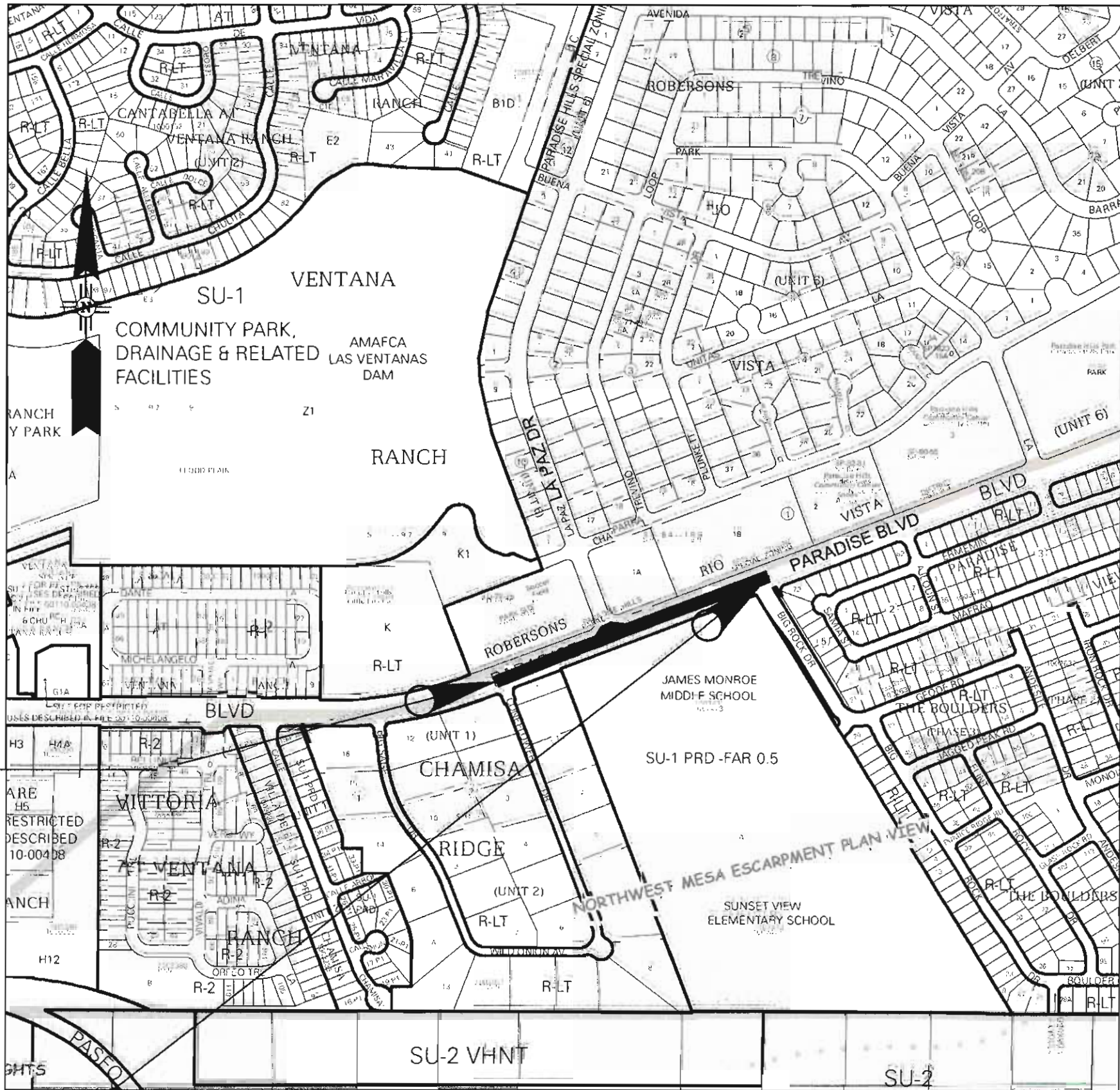


CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
CONSTRUCTION PLANS
PARADISE BOULEVARD AND LA PAZ DRIVE TRAFFIC SIGNAL
COA Project 9045.04



BEGINNING OF PROJECT
PARADISE BOULEVARD
STA. 2+07.10

END OF PROJECT
PARADISE BOULEVARD
STA. 7+51.33




VICINITY MAP
ZONE ATLAS MAPS : B10
SCALE 1:500
PROJECT LENGTH = 550 FT

PROJECT DESCRIPTION:
TRAFFIC SIGNAL INSTALLATION AND
INTERSECTION IMPROVEMENTS




REV.	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE APPROVALS ENGINEER DATE *****						
	DRC Chairman	<i>[Signature]</i>	1/30/17	APPROVED FOR CONSTRUCTION <i>[Signature]</i> 1/31/17 City Engineer Date		
	Transportation	<i>[Signature]</i>	1/24/17			
	Water/Wastewater	<i>[Signature]</i>	1-12-17			
	Hydrology	<i>[Signature]</i>	1/12/17			
	Parks					
	Constr. Coord.			SHEET		
Traffic Eng.			1-1			
AMAFCA						
PROJECT NO. COA 9045.04						

SHEET NO.	DESCRIPTION	GROUP
1-1	COVER SHEET	GENERAL PROJECT INFORMATION
1-2	INDEX OF SHEETS	
1-3	GENERAL NOTES	
1-4	SUMMARY OF QUANTITIES	
1-5	REMOVAL PLAN	
1-6	EXISTING ROADWAY TYPICAL SECTIONS	
1-7	TYPICAL SECTION PAVEMENT DETAILS	
3-1	HORIZONTAL LAYOUT AND SURVEY CONTROL	PERMANENT SIGNING AND STRIPING PLANS
3-2	CURB RAMP DETAILS	
3-3 TO 3-14	NMDOT CURB RAMP AND DRIVEPAD STANDARD DRAWINGS	
5-1	PERMANENT SIGNING AND STRIPING NOTES AND QUANTITIES	
5-2	PERMANENT SIGNING AND STRIPING PLAN	TRAFFIC SIGNAL PLANS
5-3	PERMANENT SIGNING AND STRIPING DETAILS	
5-4 TO 5-6	COA STANDARD SIGNING AND STRIPING DETAILS (2900)	
5-7	TRAFFIC SIGNAL NOTES	
5-8	TRAFFIC SIGNAL LEGEND AND QUANTITIES	UTILITY PLANS
5-9	TRAFFIC SIGNAL PLAN	
5-10	TRAFFIC SIGNAL CONDUITS AND CABLES	
5-11	TRAFFIC SIGNAL FUNCTIONS AND DETECTORS	
7-1	EXISTING UTILITY PLAN	



**PARSONS
BRINCKERHOFF**



CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION
PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL

DESIGN REVIEW COMMITTEE
APPROVED
JAN 3 0 2017
DESIGN REVIEW COMMITTEE

CITY ENGINEER APPROVAL
APPROVED
JAN 3 1 2017
CITY ENGINEER

MO./DAY/YR.

MO./DAY/YR.





City Project No.
9045.04

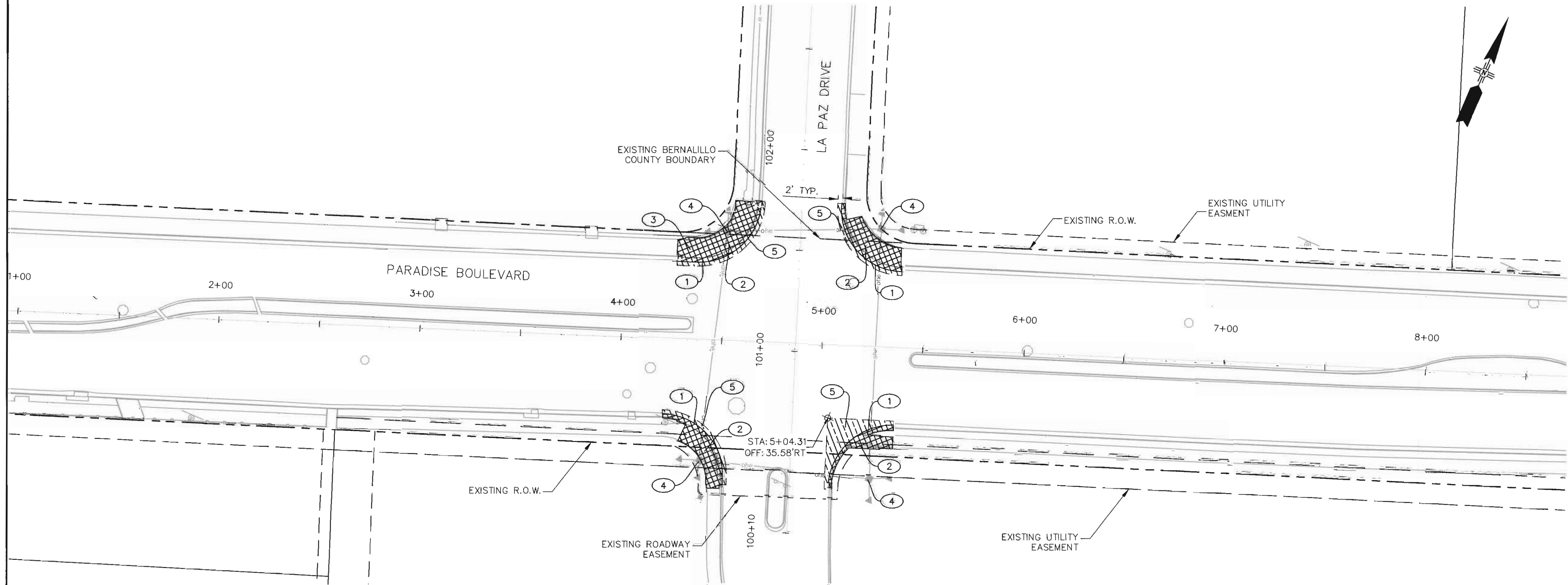
Zone Map No.
B10

Sheet
1-2

SUMMARY OF QUANTITIES			
ITEM NUMBER	LONG DESCRIPTION	UNIT	QUANTITY
CONSTRUCTION			
4.010	CONSTRUCTION STAKING, COMPL.	LS	LS
4.020	CONSTRUCTION SURVEYING, COMPL.	LS	LS
6.050	CONSTRUCTION MOBILIZATION, COMPL.	LS	LS
6.060	CONSTRUCTION DEMOBILIZATION, COMPL.	LS	LS
19.010	CONSTRUCTION TRAFFIC CONTROL & BARRICADING, COMPL.	LS	LS
30.020	NIDES PERMITTING, COMPL.	LS	LS
621.XX1	VIBRATION MONITORING	LS	LS
ROADWAY			
116.012	ARTERIAL ASPHALT CONCRETE, SP-III, MATERIAL, COMPL.	TON	25
301.020	SUBGRADE PREP. 12" AT 95% COMPACTION, CIP.	SY	171
302.010	AGGREGATE BASE COURSE, CRUSHED, 6" AT 95% COMPACTION, CIP. SD 2408	SY	139
336.010	PRIME COAT, EMULSIFIED ASPHALT, CIP.	SY	76
336.080	PLACEMENT ARTERIAL ASPHALT CONCRETE, 3" THICK, WITHOUT MACHINE LAYDOWN, CIP.	SY	152
336.120	TACT COAT, CATIONIC EMULSIFIED ASPHALT, CIP.	SY	76
340.010	SIDEWALK, 4" THICK, PORTLAND CEMENT CONCRETE, INCL. SUBGRADE COMPACTION, CIP. SD 2430	SY	25
340.023	CURB ACCESS RAMP, 4" PCC, STD. CURB, CIP SD 2418	SY	95
340.0231	DETECTABLE WARNING SURFACE, CIP.	SF	60
340.050	CURB & GUTTER, STANDARD, PORTLAND CEMENT CONCRETE, INCL. SUBGRADE PREPARATION, CIP SD 2415	LF	155
340.130	CURB & GUTTER, DEPRESSED, PORTLAND CEMENT CONCRETE, INCL. SUBGRADE PREP., CIP.	LF	45
REMOVALS			
201.010	SITE CLEARING AND GRUBBING, COMPL.	AC	0.10
343.020	EXISTING PAVEMENT, ASPHALT CONCRETE, SAWCUT, REMOVE AND DISPOSE, 6" OR LESS, COMPL.	SY	76
343.080	EXISTING CURB & GUTTER OR VALLEY GUTTER, PC CONCRETE, REMOVE & DISPOSE, COMPL.	LF	200
343.085	EXISTING SIDEWALK AND DRIVEPAD, 4"-6" PC CONCRETE, REMOVE & DISPOSE, COMPL.	SY	120
SIGNALIZATION			
421.005	SERVICE RISER (SIGNAL), CIP.	EA	1
421.010	METER PEDESTAL (SIGNAL), CIP.	EA	1
421.015	SERVICE CONNECTION (SIGNAL), CIP.	EA	1
422.002	TRAFFIC SIGNAL PEDESTAL POLE, 10, CIP.	EA	2
422.004	TRAFFIC SIGNAL PEDESTAL POLE, 15, CIP.	EA	1
422.016	TRAFFIC SIGNAL MASTARM, 30' ARM, TYPE II, TROMBONE, CIP.	EA	1
422.018	TRAFFIC SIGNAL MASTARM, 35' ARM, TYPE II, TROMBONE, CIP.	EA	2
422.020	TRAFFIC SIGNAL MASTARM, 40' ARM, TYPE II, TROMBONE, CIP.	EA	1
423.001	TRAFFIC SIGNAL FOUNDATION FOR PEDESTAL POLE, CIP.	EA	3
423.002	TRAFFIC SIGNAL MASTARM FOUNDATION, CIP.	EA	4
423.003	TRAFFIC SIGNAL CONTROLLER FOUNDATION, (TYPE M & P CABINET), CIP.	EA	1
424.006	ELECTRICAL CONDUIT, 2", ICL. TRENCHING, BACKFILL & PATCHING, PUSHING, BORING, & JACKING, CIP.	LF	20
424.011	ELECTRICAL CONDUIT, 3", ICL. TRENCHING, BACKFILL & PATCHING, PUSHING, BORING, & JACKING, CIP.	LF	965
425.003	ELECTRICAL PULL BOX (LARGE), CIP.	EA	8
426.001	SINGLE CONDUCTOR, #2, CIP.	LF	90
426.003	SINGLE CONDUCTOR, #6, CIP.	LF	1,230
426.005	SINGLE CONDUCTOR, #10, CIP.	LF	115
426.010	MULTI-CONDUCTOR CABLE, #5, CIP.	LF	1,200
426.014	MULTI-CONDUCTOR CABLE, #20, CIP.	LF	1,090
426.10X	REMOVAL, SLAVAGE AND DELIVERY OF EXISTING TEMPORARY SIGNAL EQUIPMENT, COMPL.	LS	LS
427.002	3 SECTION TRAFFIC SIGNAL ASSEMBLY, CIP.	EA	14
427.021	PEDESTRIAN COUNTDOWN SIGNAL (LED), CIP.	EA	6
427.031	3 SECTION BACKPLATE, CIP.	EA	8
428.001	LOOP VEHICLE DETECTOR, CIP.	EA	4
428.010	PUSH BUTTON STATION, CIP.	EA	6
428.022	DUCTED LOOP DETECTOR WIRE, CIP.	LF	3,300
428.060	LOOP LEAD-IN CABLE, CIP.	LF	400
428.060	DETECTOR SAW CUT, COMPL.	LF	1,200
428.070	PHASE SELECTOR RACK 4 CHANNELS, CIP.	EA	1
428.071	PHASE SELECTOR MODULE 2 CHANNEL, CIP.	EA	2
428.075	OPTICAL DETECTOR, 1 DIRECTION, 1 CHANNEL, CIP.	EA	3
428.078	OPTICAL DETECTOR CABLE, CIP.	LF	725
429.001	TRAFFIC ACTUATED CONTROLLER, CIP.	EA	1

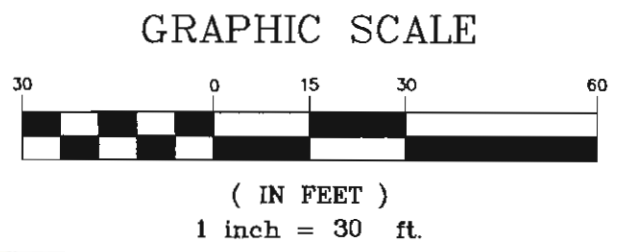
SUMMARY OF QUANTITIES		
	SIGNING AND STRIPING	
440.035	NON-REFLECTORIZED PAINT MARKING, ANY COLOR OR SHAPE INCLUDING CURB FACES, CIP.	SF 60
441.001	RETROREFLECTORIZED PLASTIC PAVEMENT MARKINGS, 4" WIDTH, CIP.	LF 1,900
441.002	REFLECTORIZED PLASTIC PAVEMENT MARKINGS, 6" WIDTH, CIP.	LF 900
441.005	REFLECTORIZED PLASTIC PAVEMENT MARKINGS, 24" WIDTH, CIP.	LF 550
441.031	REFLECTORIZED PLASTIC SYMBOL, BICYCLE, CIP.	EA 2
441.040	REFLECTORIZED PLASTIC ARROW, SYMBOL, OR WORD, CIP.	EA 14
443.101	REMOVAL OF PAVEMENT STRIPE, ANY WIDTH, PAINTED OR PLASTIC, COMPL.	LF 2,300
443.102	REMOVAL OF PAVEMENT ARROW, SYMBOL, OR WORD, PAINTED OR PLASTIC, COMPL.	EA 8
450.001	ALUMINUM PANEL SIGN, CIP.	SF 50
450.010	SQUARE TUBE STEEL POSTS & BASE POSTS FOR ALUMINUM PANEL SIGN, CIP.	LF 40
450.101	SIGN, POST, AND BASE POST, REMOVE AND SALVAGE, COMPL.	EA 5

 PARSONS BRINCKERHOFF			
 CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL			
SUMMARY OF QUANTITIES			
DESIGN REVIEW COMMITTEE  JAN 3 0 2017 DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL  JAN 3 1 2017 CITY ENGINEER	MO./DAY/YR.	MO./DAY/YR.
City Project No. 9045.04		Zone Map No. B10	Sheet 1-4



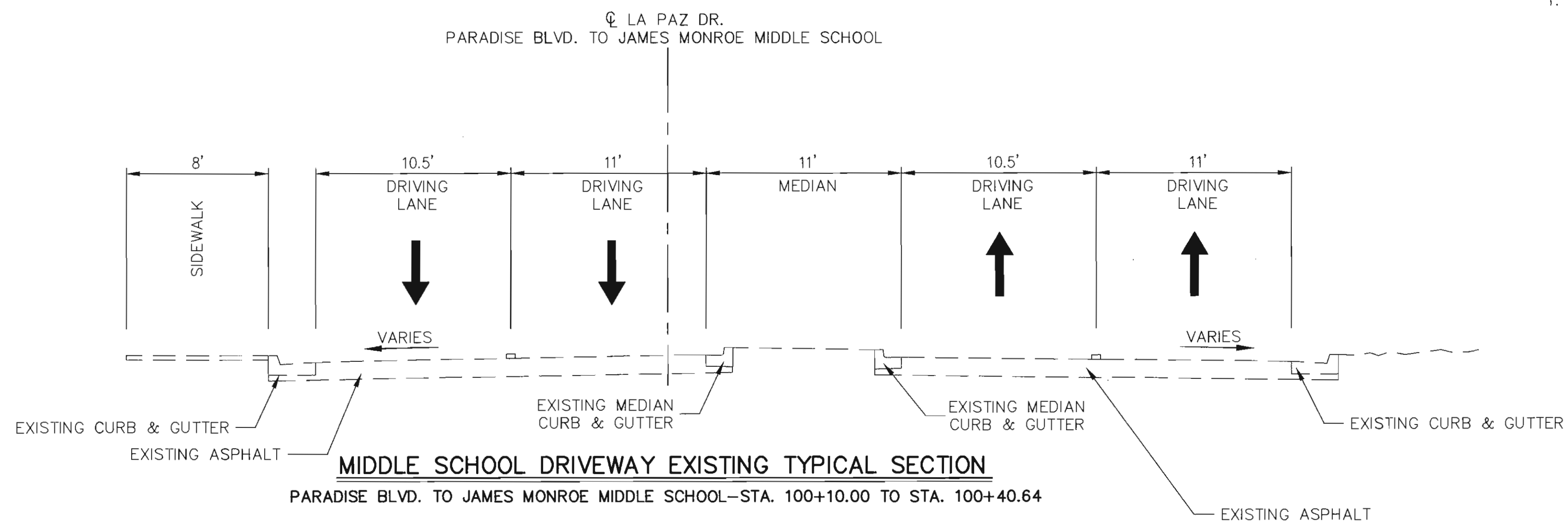
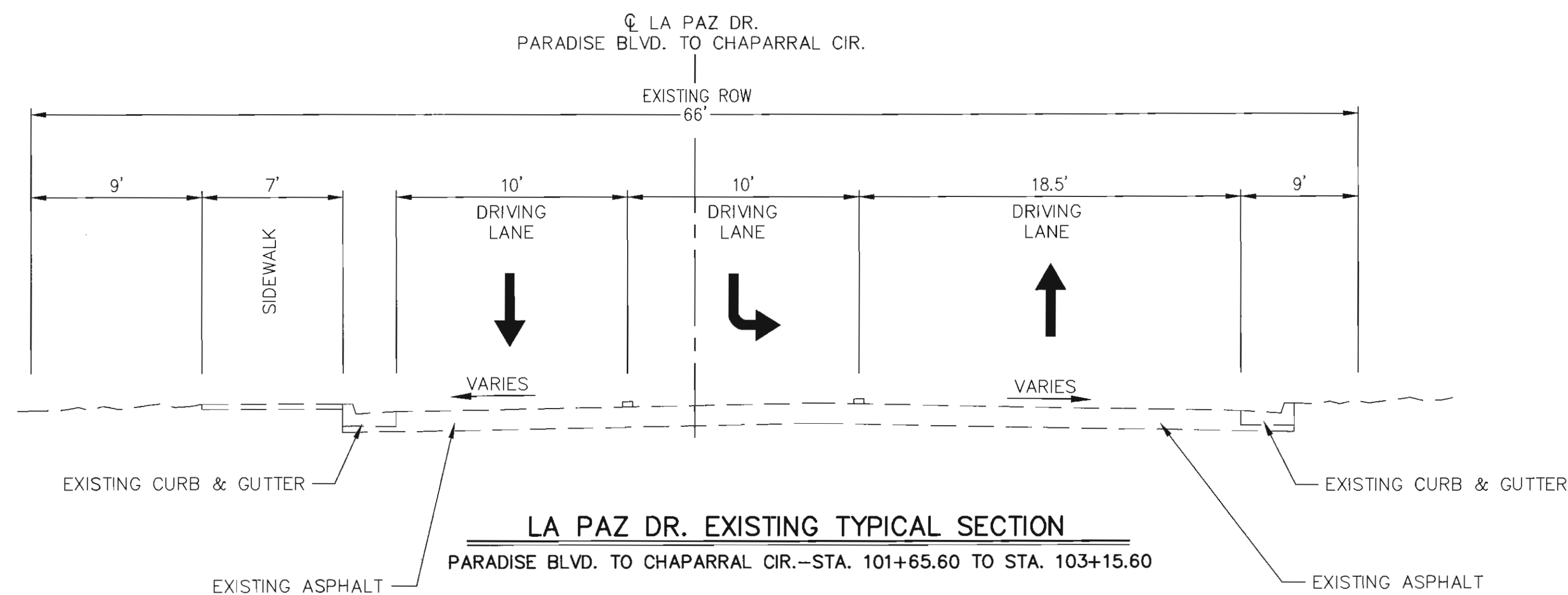
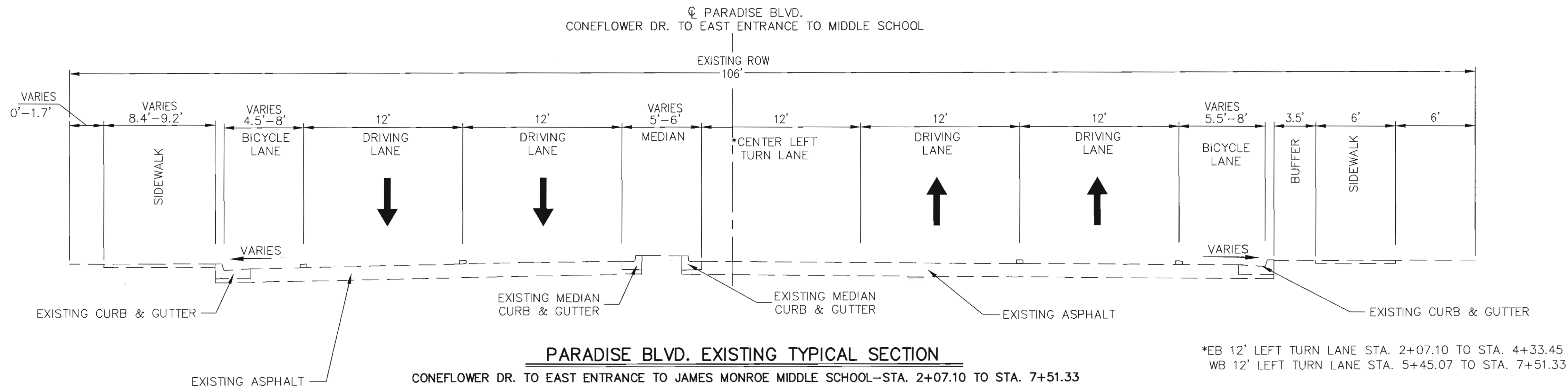
- LEGEND:**
- EXISTING ASPHALT PAVEMENT TO BE REMOVED
 - EXISTING CONCRETE SIDEWALK/CURB AND GUTTER/VALLEY GUTTER TO BE REMOVED
 - ohe — EXISTING SPAN WIRE TEMPORARY SIGNAL

- KEYED NOTES:**
- 1 REMOVE EXISTING STANDARD CURB & GUTTER TO NEAREST JOINT.
 - 2 REMOVE EXISTING CURB RAMP.
 - 3 REMOVE EXISTING CONCRETE SIDEWALK TO NEAREST JOINT.
 - 4 REMOVE EXISTING TEMPORARY SIGNAL. SALVAGE EXISTING SIGNAL EQUIPMENT TO COA PINO YARD.
 - 5 REMOVE EXISTING ASPHALT CONCRETE.

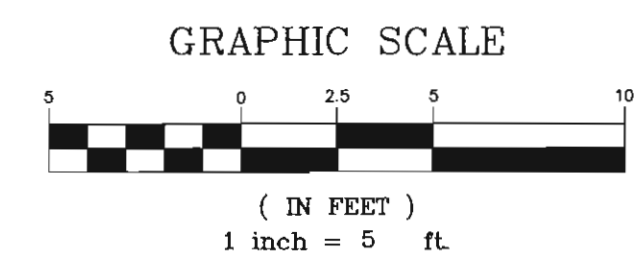


WSP PARSONS BRINCKERHOFF	
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL	
REMOVAL PLAN	
DESIGN REVIEW COMMITTEE APPROVED JAN 3 0 2017 DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL APPROVED JAN 3 1 2017 CITY ENGINEER
City Project No. 9045.04	Zone Map No. B10
Sheet 1-5	

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	COA GEODETIC CONTROL STATION "11-BIT"	DATE	NO.	BY		
WORK BY	DATE	BRASS DISC SET FLUSH IN CONCRETE 272' SOUTH	DATE				
INSPECTOR'S	DATE	OF FORDHAM DRIVE AND WEST OF LYON	DATE				
VERIFICATION BY	DATE	BOULEVARD.	DATE				
RECORDED BY	DATE	NM STATE PLANE COORDS. (NAD 88)	DATE				
MICRO-FILM INFORMATION		N=1528350.344					
RECORDED BY	DATE	E=1504957.688					
	NO.	NAD 88 ELEV. = 5348.5					



- GENERAL NOTES FOR TYPICAL SECTIONS:**
- ALL ROADWAY IMPROVEMENTS WILL BE TO THE EXISTING CURB RETURNS AT THE INTERSECTIONS. THERE WILL BE NO IMPACTS TO THE DRIVING LANES OR SHOULDERS.



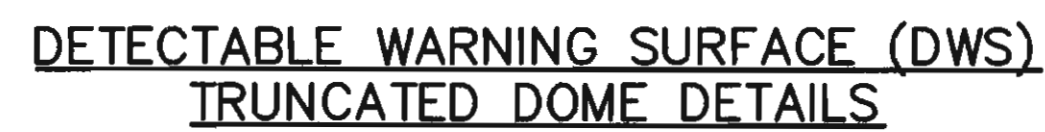
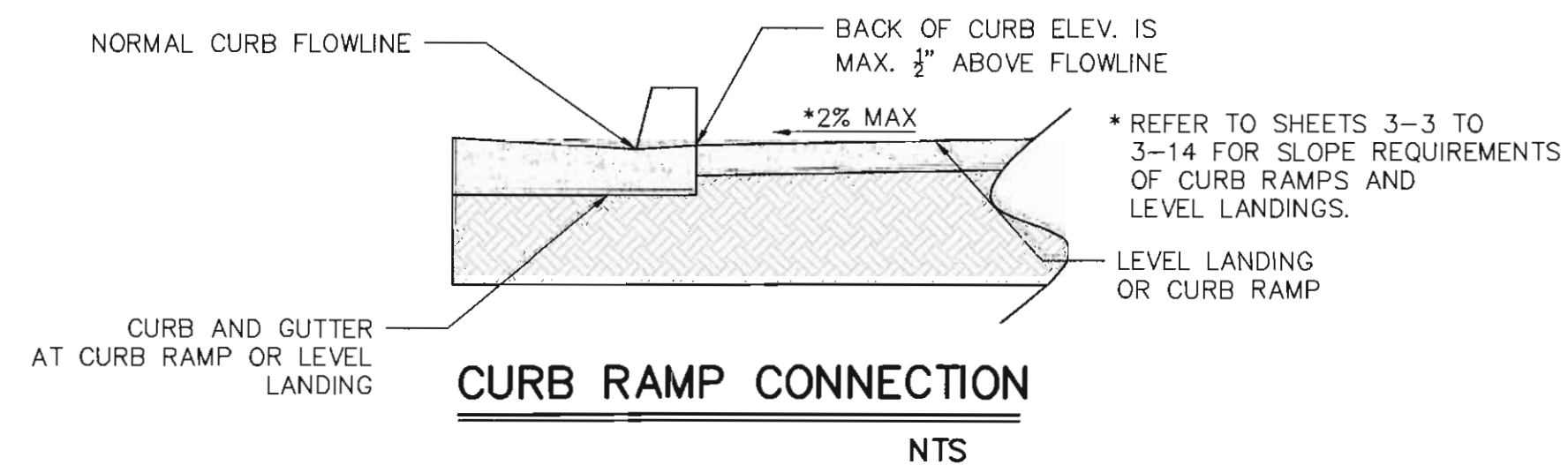
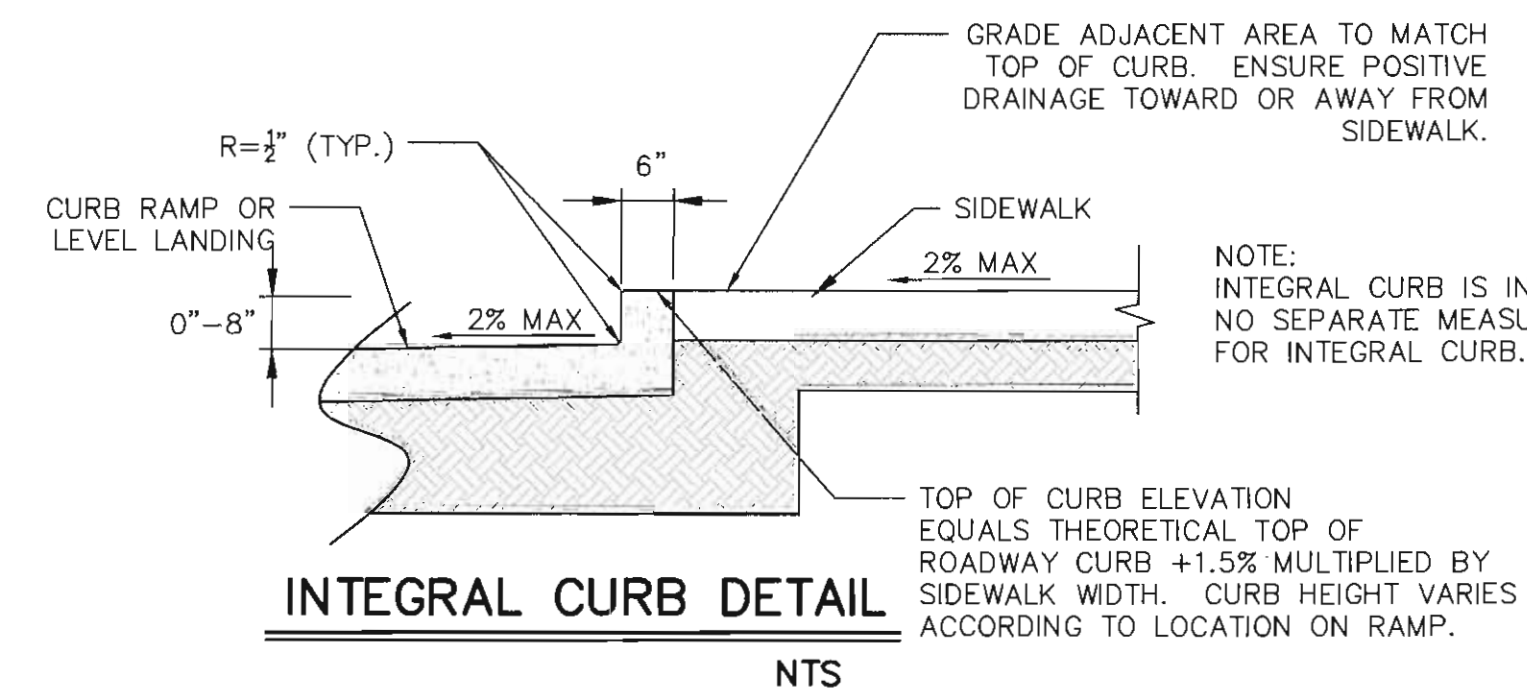
WSP		PARSONS BRINCKERHOFF	
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL			
EXISTING ROADWAY TYPICAL SECTIONS			
DESIGN REVIEW COMMITTEE APPROVED JAN 30 2017 DESIGN REVIEW COMMITTEE	QTY ENGINEER APPROVAL APPROVED JAN 31 2017 CITY ENGINEER	MO./DAY/YR.	MO./DAY/YR.
City Project No. 9045.04	Zone Map No. B10	Sheet 1-6	

SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	BY	DATE	CONTRACTOR	WORK	DATE
			COA GEODETIC CONTROL STATION "11-B11"	STARTED BY	DATE
			BRASS DISC SET FLUSH IN CONCRETE 272' SOUTH OF FORHAM DRIVE AND WEST OF LYON BOULEVARD.	ACCEPTANCE BY	DATE
			NM STATE PLANE COORDS. (NAD 88)	FIELD	DATE
			N=1528350.344	DRAWINGS	DATE
			E=1504957.688	CORRECTED BY	DATE
			NAD 88 ELEV. = 5348.5	RECORDED BY	DATE
				NO.	



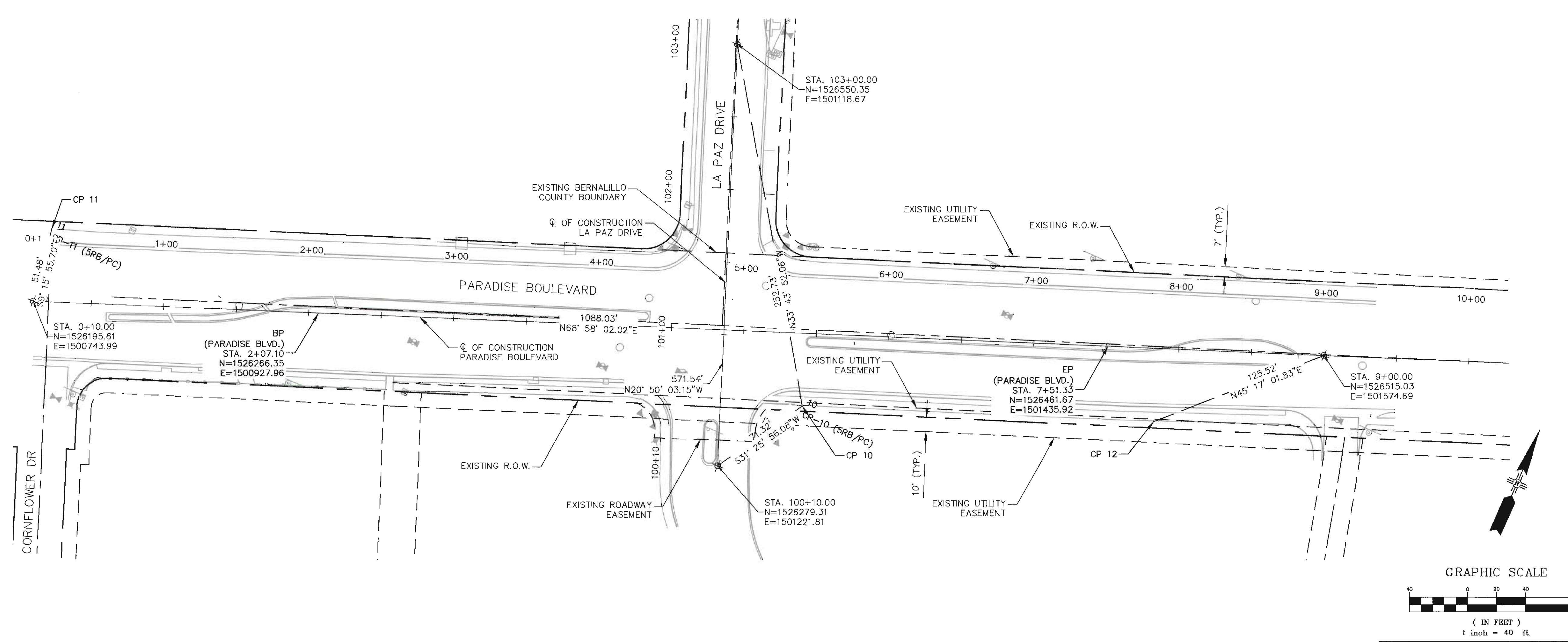


PAVEMENT SECTION FOR QUANTITY ESTIMATING PURPOSES ONLY (TAKEN FROM DPM).
CONTRACTOR TO MATCH EXISTING PAVEMENT SECTION



NOTE: DETECTABLE WARNING SURFACE SHALL BE CAST-IN-PLACE AND REPLACEABLE.

[illegible]



PANEL POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
10	1526340.17	1501256.01	5384.89	10 HVP
11	1526246.42	1500735.70	5392.8	11 HVP
12	1526426.72	1501485.50	5382.19	12 HVP

NOTE: COORDINATES LISTED ARE LOCAL, GROUND PROJECT VALUES

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION					
<div>KENDRA V. CHAVEZ Professional Engineer No. 21574 State of New Mexico</div>		FIELD NOTES		CONTRACTOR		WORK					
		NO.	BY	DATE	NO.	DATE	NO.	DATE			
		REMARKS		COA GEODETIC CONTROL STATION "11-B11"		STARTED BY		ACCEPTANCE BY			
				BRASS DISC SET FLUSH IN CONCRETE 272' SOUTH OF FORDHAM DRIVE AND WEST OF LYON BOULEVARD.		FIELD		FIELD			
DESIGNED BY: SEA, KVC		DATE: 12/20/16		DRAWN BY: SEA, KVC		DATE: 12/20/16		CHECKED BY: PFS		DATE: 12/20/16	
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL		HORIZONTAL LAYOUT AND SURVEY CONTROL		DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		MO./DAY/YR.		MO./DAY/YR.	
City Project No. 9045.04		Zone Map No. B10		Sheet 3-1							

GENERAL NOTES:

- NMDOT IS RECOGNIZED AS A TITLE II PUBLIC ENTITY UNDER THE AMERICANS WITH DISABILITIES ACT (ADA), OF 1990 (PUBLIC LAW 101-336). A TITLE II ENTITY IS DEFINED AS ANY STATE OR LOCAL GOVERNMENT ENTITY AND PROHIBITS DISCRIMINATION ON THE BASIS OF DISABILITY. THE ADA EXTENDS THE PRINCIPLES OF SECTION 504 OF THE REHABILITATION ACT, OF 1973, AS AMENDED, TO PROTECT PERSONS WITH DISABILITIES IN ALL PUBLIC FACILITIES AND PROGRAMS IRRESPECTIVE OF THE FUNDING SOURCE.
- THESE DRAWINGS PROVIDE GUIDANCE FOR COMPLIANCE WITH THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY (PROWAG), JULY 26, 2011, OR LATEST EDITION. THESE GUIDELINES SHALL APPLY TO ALL NEW AND ALTERED PEDESTRIAN ACCESS ROUTES (PAR).
- REFER TO CONSTRUCTION PLANS FOR THE DETAILED LAYOUTS AND DETAILS.
- PEDESTRIAN ACCESS ROUTES (PAR) SHALL BE FIRM, STABLE, AND SLIP RESISTANT. PROVIDE SLIP RESISTANT TEXTURE ON SIDEWALKS AND CURB RAMPS BY BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP AND /OR PERPENDICULAR TO PEDESTRIAN TRAVEL. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING SIDE FLARES. DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATIONS ONLY.
- VERTICAL SURFACE DISCONTINUITIES SHALL BE 0.5 INCHES MAXIMUM. VERTICAL DISCONTINUITIES BETWEEN 0.25 INCHES AND 0.5 INCHES SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 50 PERCENT. THE BEVEL SHALL BE APPLIED ACROSS THE ENTIRE VERTICAL SURFACE DISCONTINUITY.
- HORIZONTAL OPENINGS IN GRATINGS AND JOINTS SHALL NOT PERMIT PASSAGE OF A SPHERE MORE THAN 0.5 INCHES IN DIAMETER. ELONGATED OPENINGS IN GRATES SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.
- PROVIDE EXPANSION JOINT MATERIAL 0.5 INCHES THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
- SEAL ALL JOINTS WITH AN APPROVED SEALING MATERIAL.
- INSTALL JOINTS WHERE CURB RAMPS, TURNING SPACES, FLARES, AND SIDEWALKS ABUT. ALL JOINTS AND TRANSITIONS SHALL BE FLUSH.
- VERTICAL WALLS OR HEADER CURBS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY CURB RAMP FLARES OR GRADING. GRADE NON-WALK AREAS AT 3:1 OR FLATTER.
- CONSTRUCTION TOP / BOTTOM OF CURB TO BE FLUSH WITH ADJACENT SURFACES (CURB RAMPS, SIDEWALKS, AND FLARES). VERTICAL LIPS NOT PERMITTED AT THE BOTTOM OF CURB RAMP WHERE THE RAMP MEETS STREET LEVEL.

SIDEWALKS

- SIDEWALK, AND CURB AND GUTTER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SERIAL 609-01-1/1.
- SIDEWALK CROSS SLOPE IS RECOMMENDED TO BE CONSTRUCTED FOR CROSS SLOPE OF 1.5% TYPICAL, BUT SHALL NOT EXCEED 2.0% CROSS SLOPE ON THE PEDESTRIAN ACCESS ROUTE (PAR).
- SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 5.0 FT, EXCLUSIVE OF THE WIDTH OF THE CURB RETURN.
EXCEPTION: WHERE SIDEWALK WIDTH NEEDS TO BE REDUCED TO NO LESS 4.0 FT, PASSING SPACES SHALL BE PROVIDED AT INTERVALS OF 200 FT MAXIMUM. PASSING SPACES SHALL BE 5.0 FT MINIMUM BY 5.0 FT MINIMUM.
- ANY SIGNS POSTS, UTILITY POLES, FIRE HYDRANTS, TRAFFIC SIGNALS, STREET FURNITURE, AND OTHER OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH TO LESS THAN 4.0 FT.
- THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES (PAR) WITHIN MEDIANS AND PEDESTRIAN REFUGE ISLANDS SHALL BE 5.0 FT MINIMUM.

CURB RAMPS

- FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE FEASIBLE. THE MAXIMUM SLOPE ALLOWABLE IS INDICATED IN NOTE 18 OF THE CURB RAMP STANDARD DETAILS. SLOPES THAT EXCEED THOSE INDICATED IN THE CURB RAMP STANDARD DETAILS, OR CONSTRUCTION PLANS, WILL NOT BE ACCEPTED AND WILL BE REMOVED AND RECONSTRUCTED.
- RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
- CONSTRUCT THE CLEAR WIDTH OF CURB RAMP RUNS (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITIONS, AND TURNING SPACES AS TYPICAL 5.0 FT X 5.0 FT AND MINIMUM 4.0 FT X 4.0 FT CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
- CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
- THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.3%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP RUNS, TURNING SPACE OR BLENDED TRANSITION IS NOT TO EXCEED 5.0%.
- CONSTRUCT CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE.
- GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
- ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF CURB RAMP IS NOT SOLELY DEPENDENT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6.0 FT FOR AN 8.3% SLOPE).

CROSSWALKS

- PROVIDE A SEPARATE CURB RAMP FOR EACH MARKED OR UNMARKED CROSSWALK. CURB RAMP LOCATIONS SHALL BE PLACED WITHIN THE WIDTH OF THE MARKED OR UNMARKED CROSSWALK AS SHOWN IN THE CONSTRUCTION PLANS.

DETECTABLE WARNING

- DETECTABLE WARNING SURFACES (DWS) CONSISTING OF TRUNCATED DOMES SHALL BE UTILIZED WHERE CURB RAMPS, BLENDED TRANSITIONS, OR TURNING SPACE PROVIDE A FLUSH PEDESTRIAN CONNECTION TO THE STREET OR WHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CROSSES A STREET, ALLEY, TRAFFIC ISLAND, MEDIAN, OR RAILROAD. DETECTABLE WARNING SURFACES (DWS) WILL NOT BE INSTALLED AT RESIDENTIAL DRIVEWAYS. DETECTABLE WARNING SURFACE MUST BE PROVIDED AT THE JUNCTION BETWEEN THE PAR AND COMMERCIAL DRIVEWAYS THAT ARE STOP OR YIELD CONTROLLED OR ARE CONTROLLED BY A SIGNAL.
- DETAILS OF DETECTABLE WARNING SURFACE ARE SHOWN IN CONTRACT PLANS AND SHEET 608-001-8/12 OF THE STANDARD DRAWINGS.

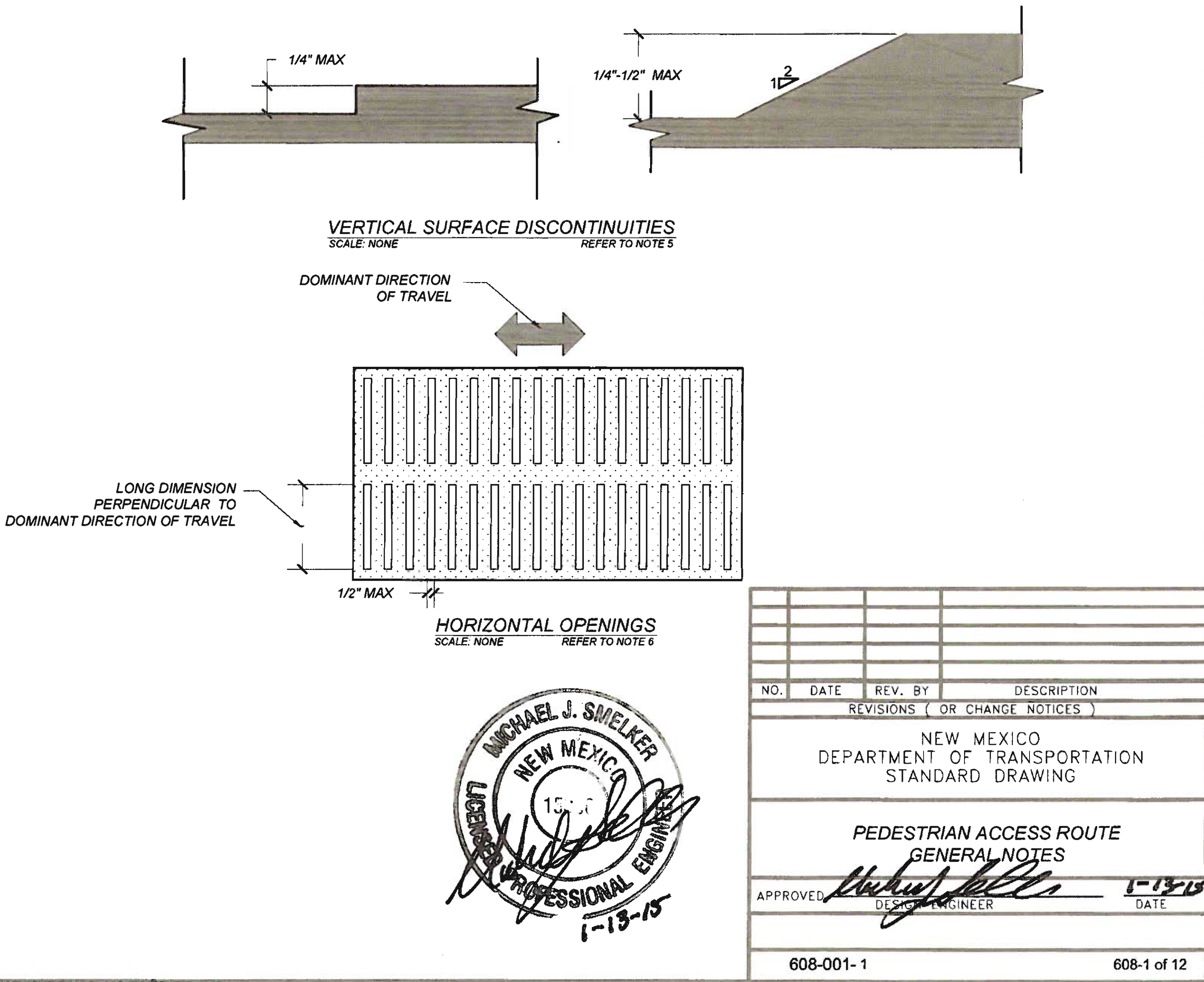
ACCESSIBLE PEDESTRIAN SIGNALS (APS) AND PEDESTRIAN PUSHBUTTONS

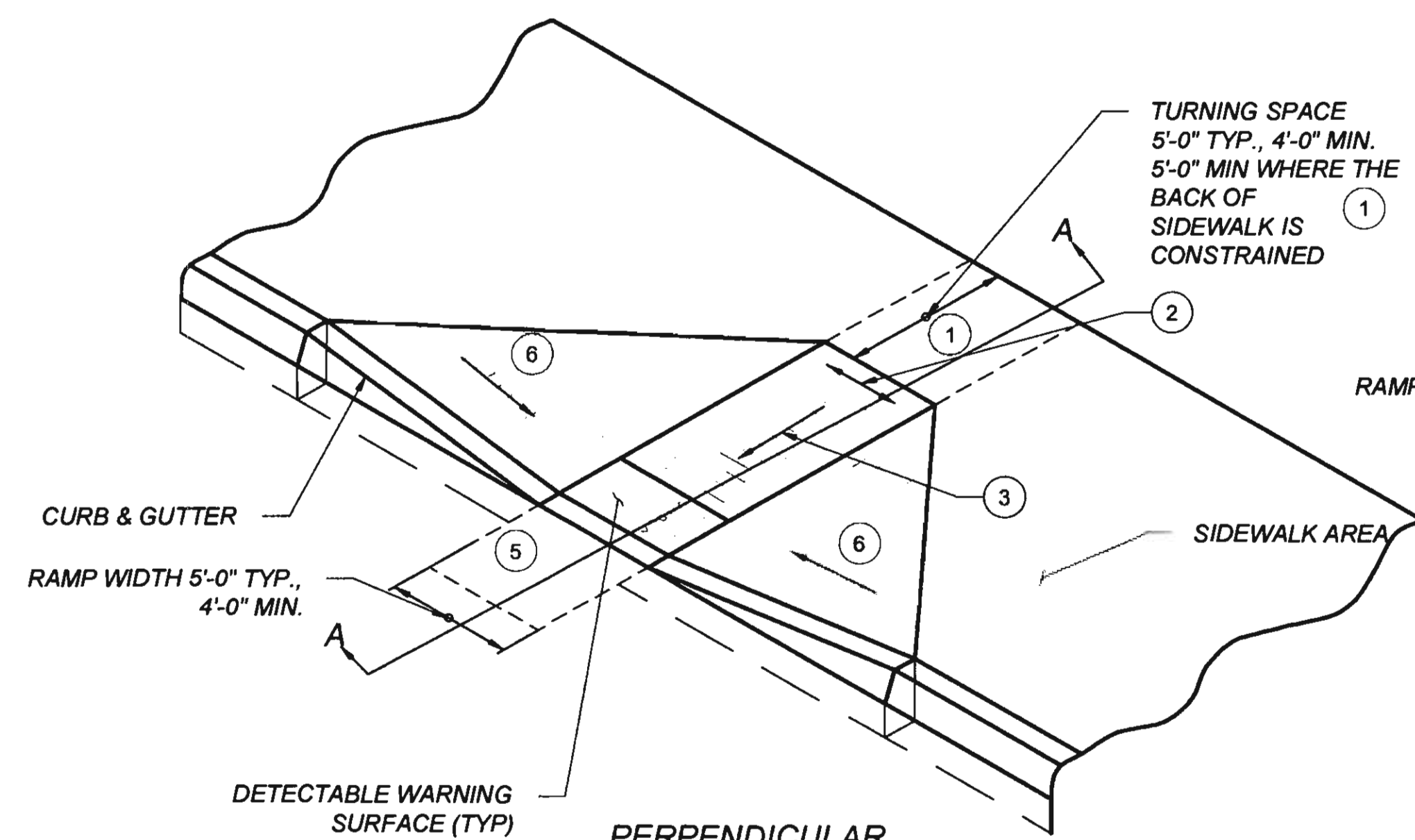
- FOR ALTERATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT PRACTICABLE. INSTALL PEDESTRIAN STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS. REFER TO THE MUTCD FOR FURTHER GUIDANCE.
- PEDESTRIAN SIGNAL PUSH BUTTONS SHALL COMPLY WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCATED WITHIN A HORIZONTAL REACH OF 0" TO 10" AND SHALL BE WITHIN 36" TO 46" ABOVE THE SIDEWALK SURFACE.
- PEDESTRIAN SIGNAL SHALL HAVE 4FTx4FT MIN TURNING SPACE TO PROVIDE ACCESS TO PUSH BUTTONS.

ALTERATIONS TO EXISTING FACILITIES - GENERAL NOTES:

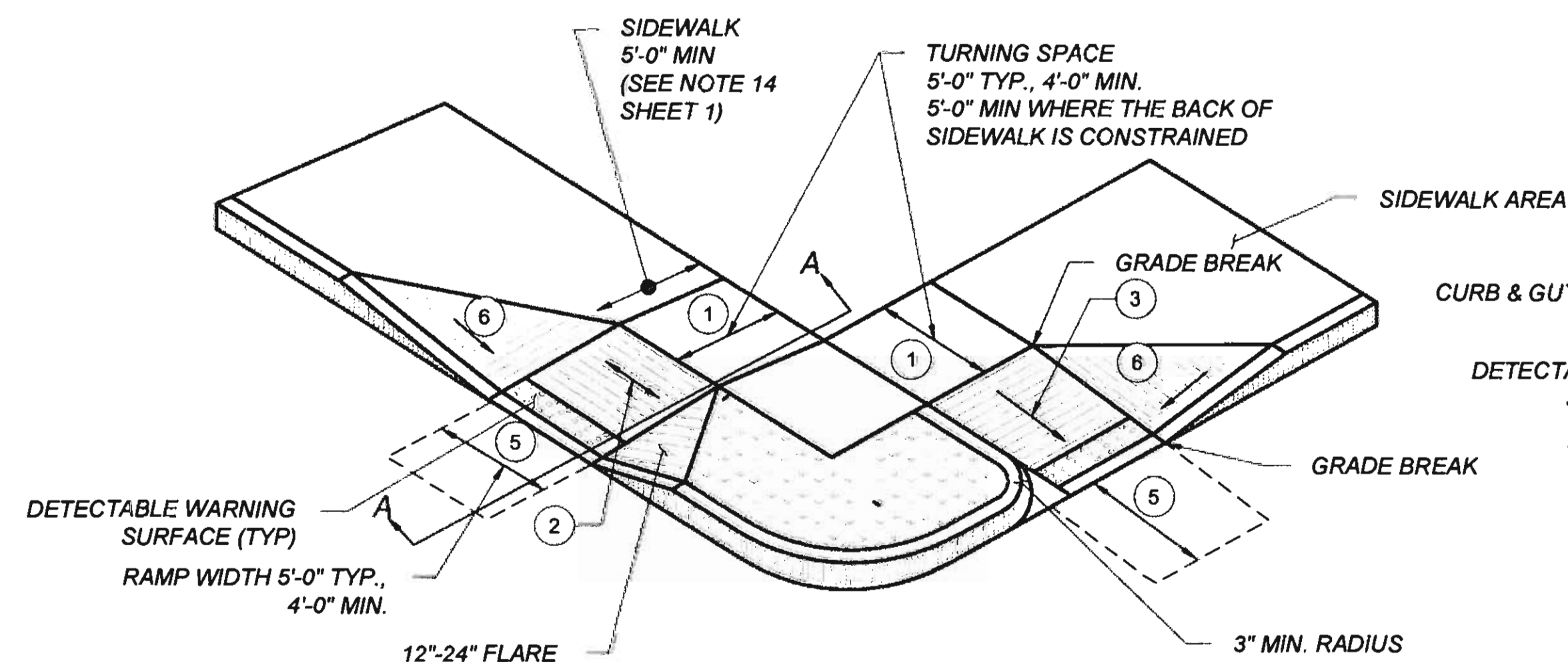
ADDITIONS OR ALTERATIONS TO ANY FACILITY SHALL CONFORM TO THE REQUIREMENTS OF THE NEW CONSTRUCTION STANDARDS WITHIN THE NMDOT PEDESTRIAN ACCESS STANDARDS AND PROWAG 2011 OR LATEST EDITION. ANY DESIGN / CONSTRUCTION DEVIATION THAT IS DEEMED AN VARIANCE OR TECHNICALLY INFEASIBLE BY THE DEFINITION BELOW SHALL REQUIRE SUBMITTAL AND APPROVAL OF ADA DESIGN VARIANCE PROCEDURES.

- EXCEPTION: IN ALTERATION WORK, IF COMPLIANCE IS TECHNICALLY INFEASIBLE, THE ALTERATION SHALL PROVIDE ACCESSIBILITY TO THE MAXIMUM EXTENT PRACTICABLE. ANY ELEMENTS OR FEATURES OF THE BUILDING OR FACILITY THAT IS BEING ALTERED AND CAN BE MADE ACCESSIBLE SHALL BE MADE ACCESSIBLE WITHIN THE SCOPE OF THE ALTERATION.
- TECHNICAL INFEASIBILITY: MEANS, WITH RESPECT TO AN ALTERATION OF A BUILDING OR A FACILITY, THAT IT HAS LITTLE LIKELIHOOD OF BEING ACCOMPLISHED BECAUSE EXISTING STRUCTURAL CONDITIONS WOULD REQUIRE REMOVING OR ALTERING A LOAD-BEARING MEMBER WHICH IS AN ESSENTIAL PART OF THE STRUCTURAL FRAME; OR BECAUSE OTHER EXISTING PHYSICAL OR SITE CONSTRAINTS PROHIBIT.
- IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.

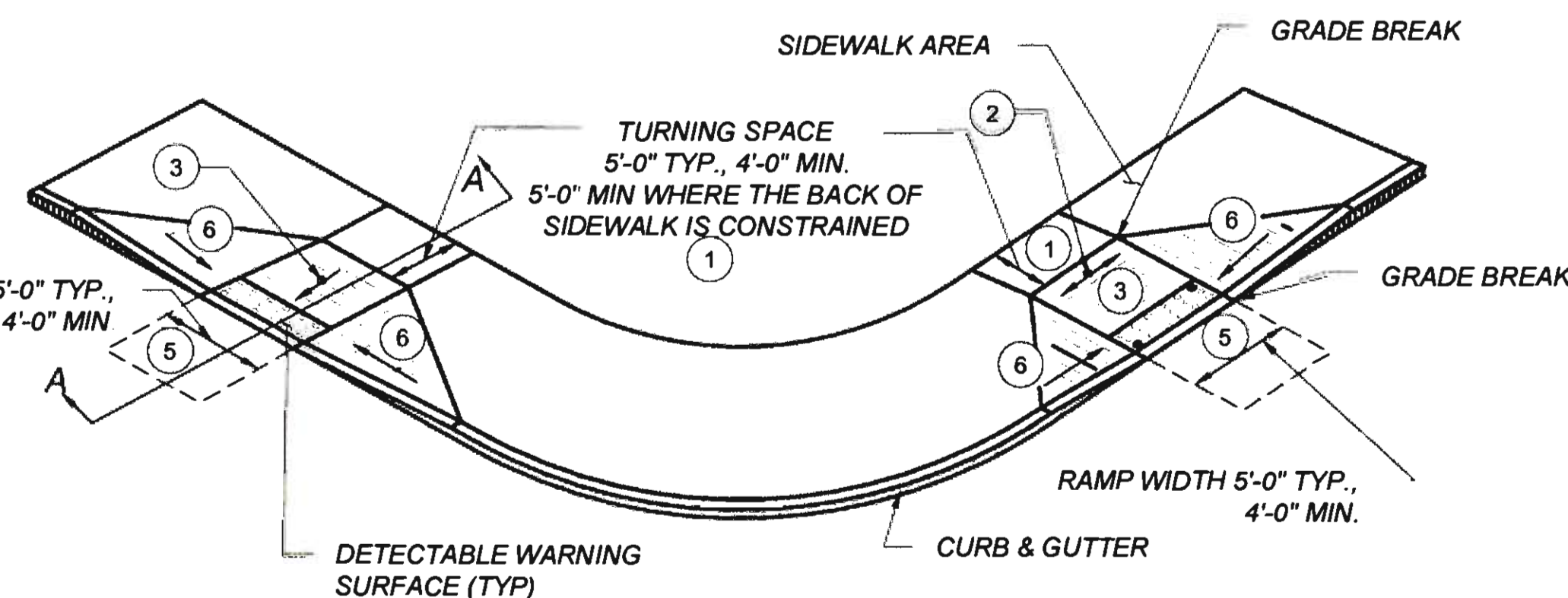




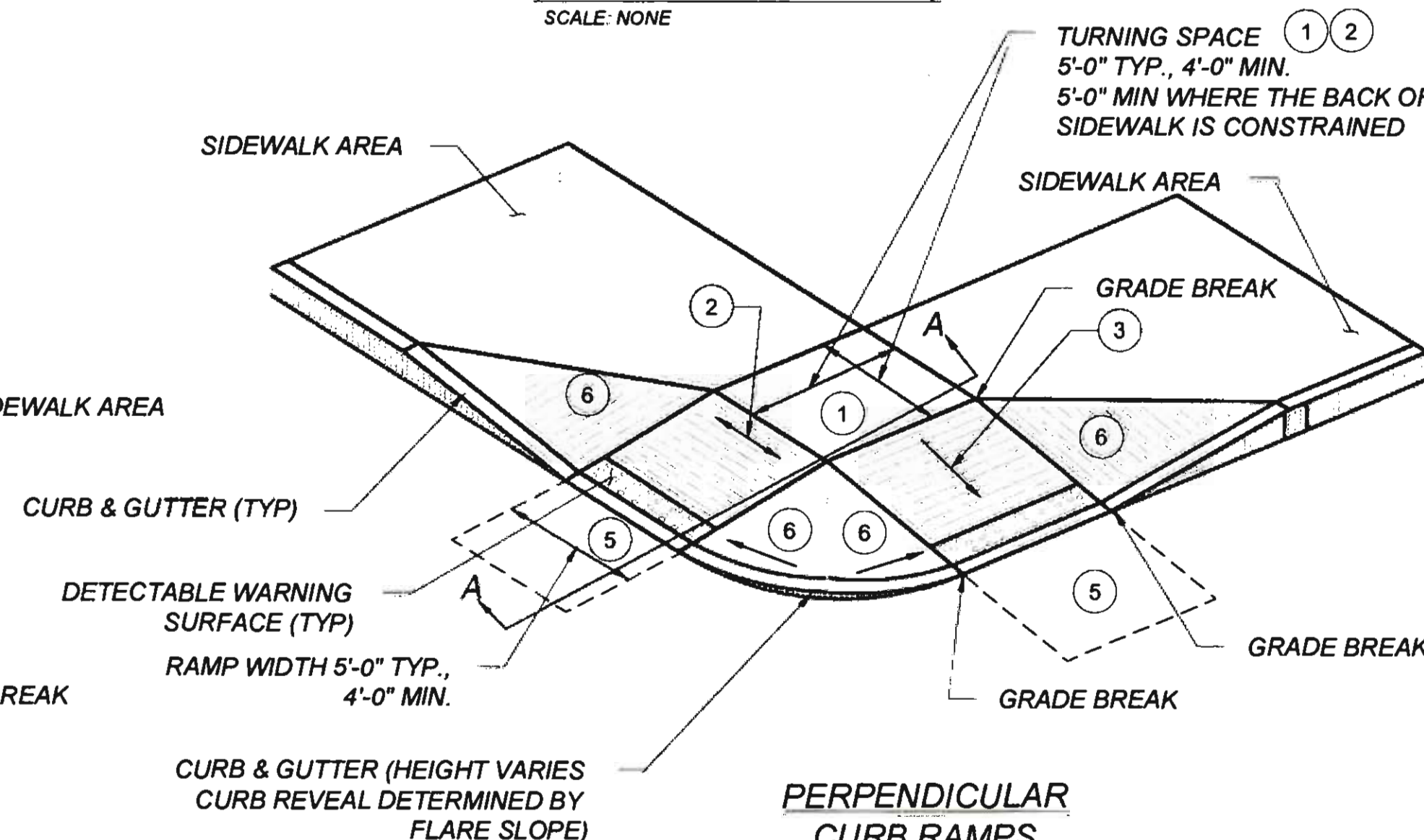
**PERPENDICULAR
CURB RAMP**
SCALE: NONE



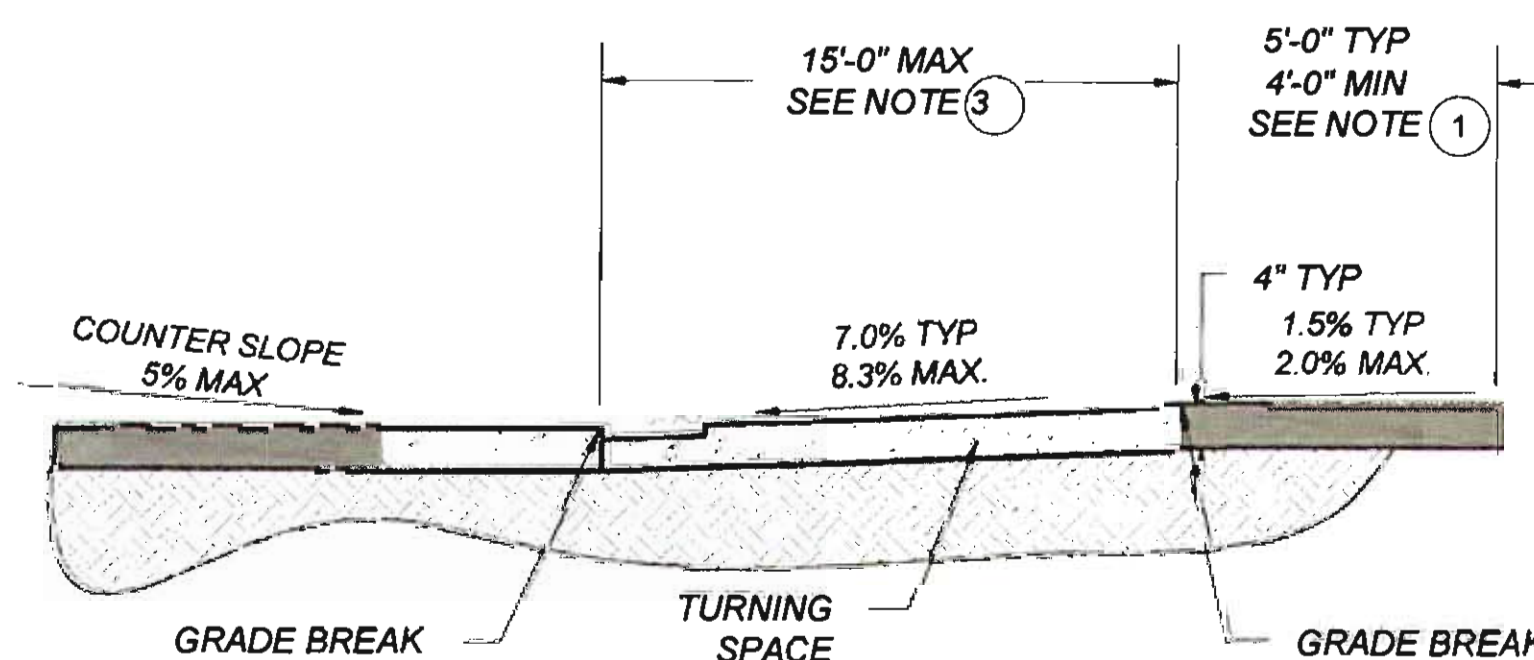
**DUAL PERPENDICULAR
CURB RAMP**
(ALTERNATE INSTALLATION)
SCALE: NONE



**DUAL PERPENDICULAR
CURB RAMP**
(PREFERRED INSTALLATION)
SCALE: NONE



**PERPENDICULAR
CURB RAMP
WITH SHARED TURNING SPACE**
SCALE: NONE



SECTION A-A
SCALE: NONE

KEYED NOTES

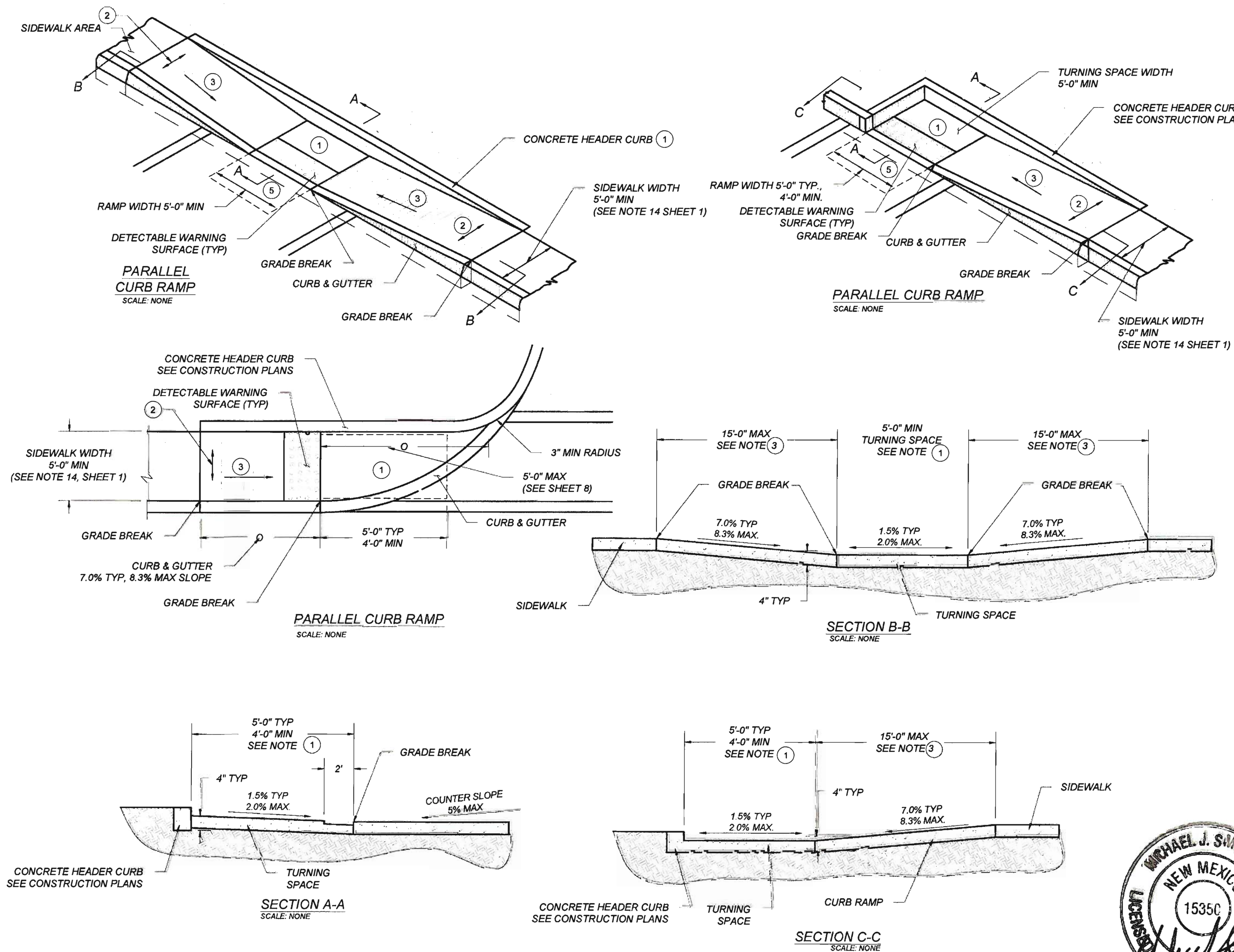
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NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PERPENDICULAR CURB RAMPS			
APPROVED	DESIGN ENGINEER		DATE
608-001-2		608-2 of 12	



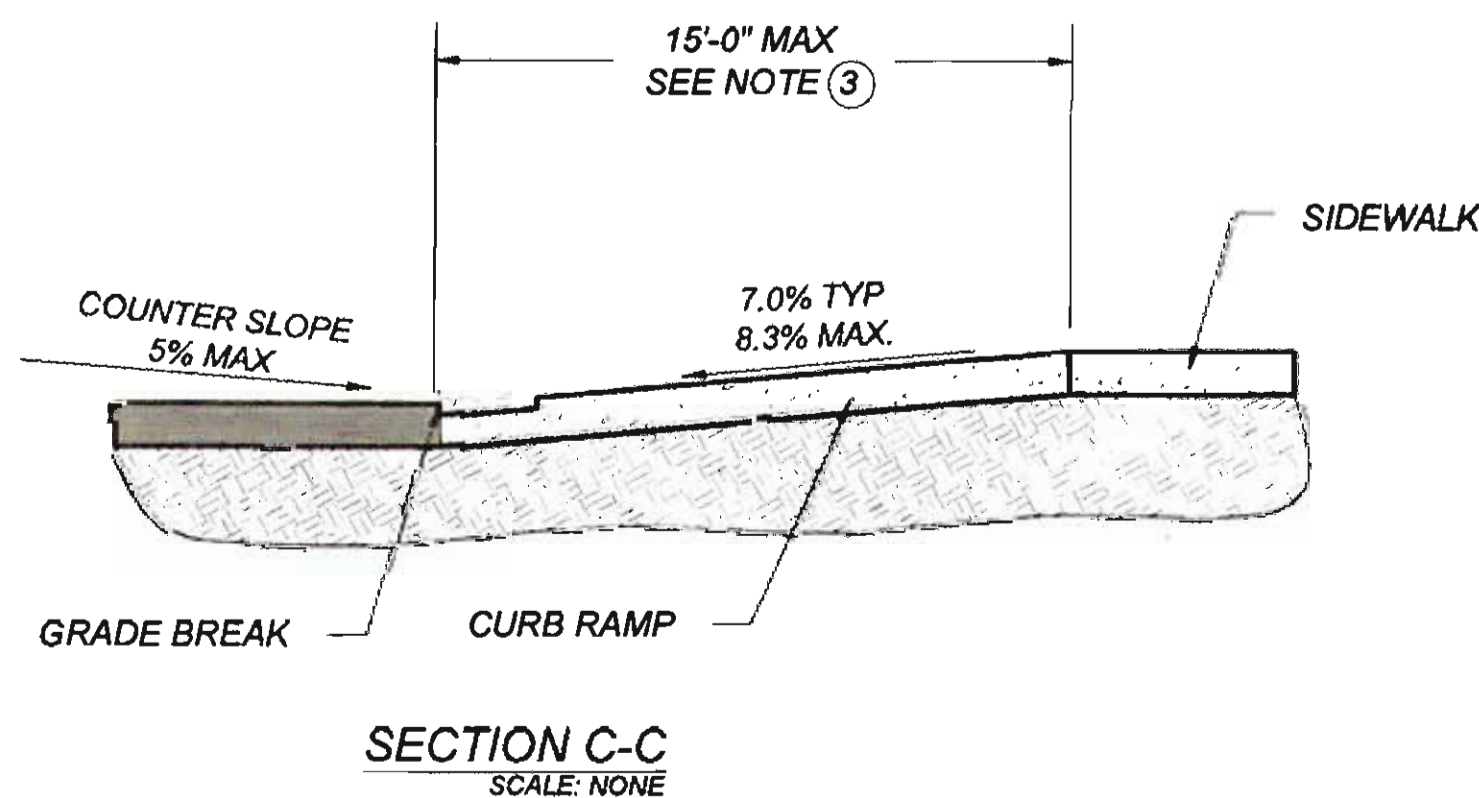
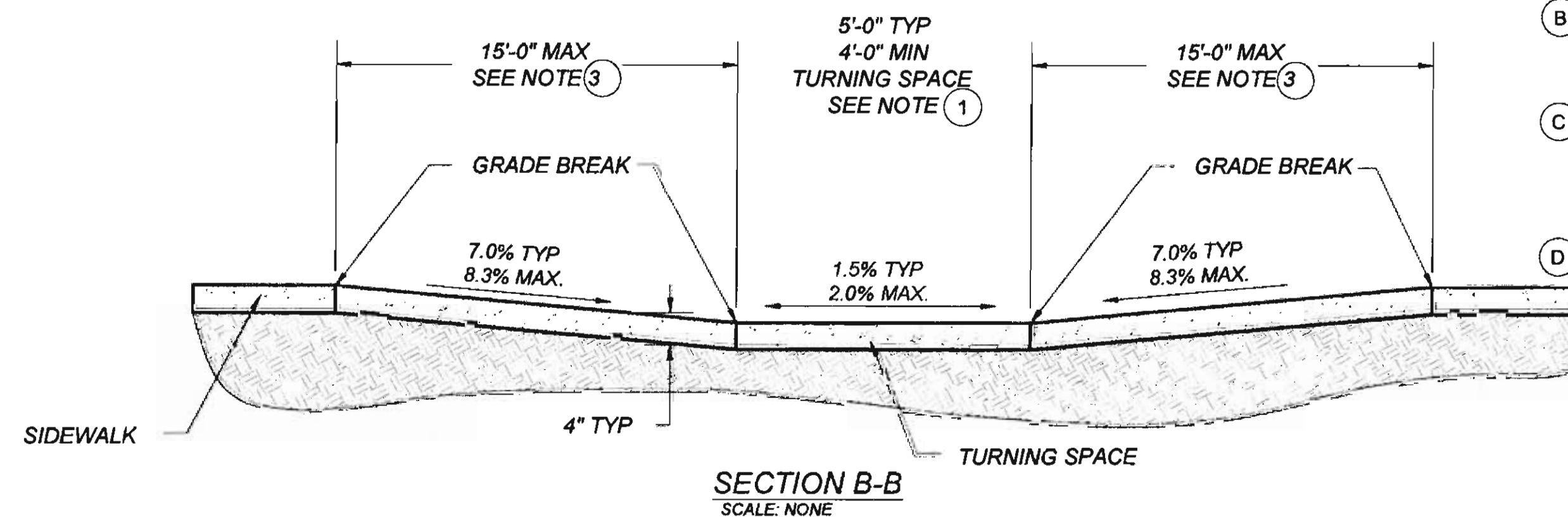
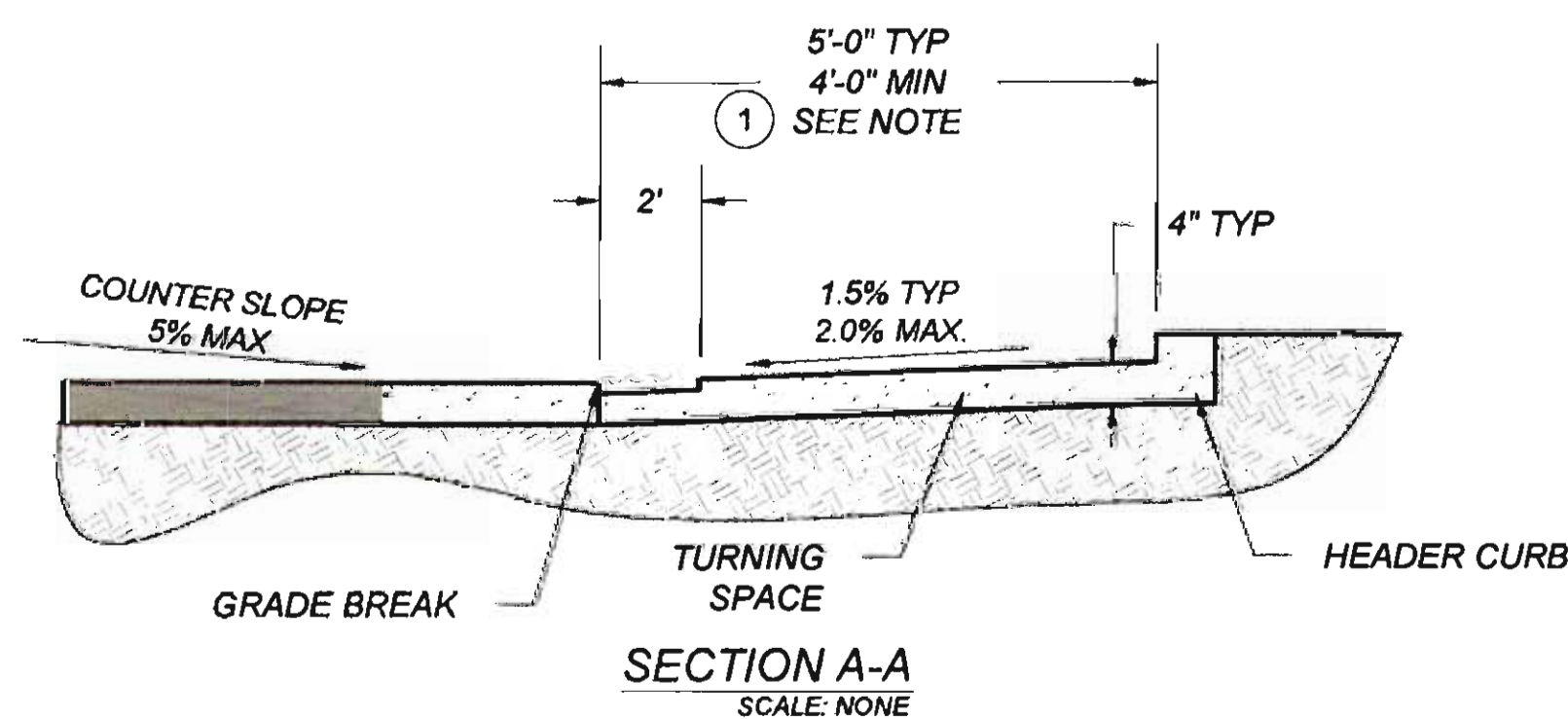
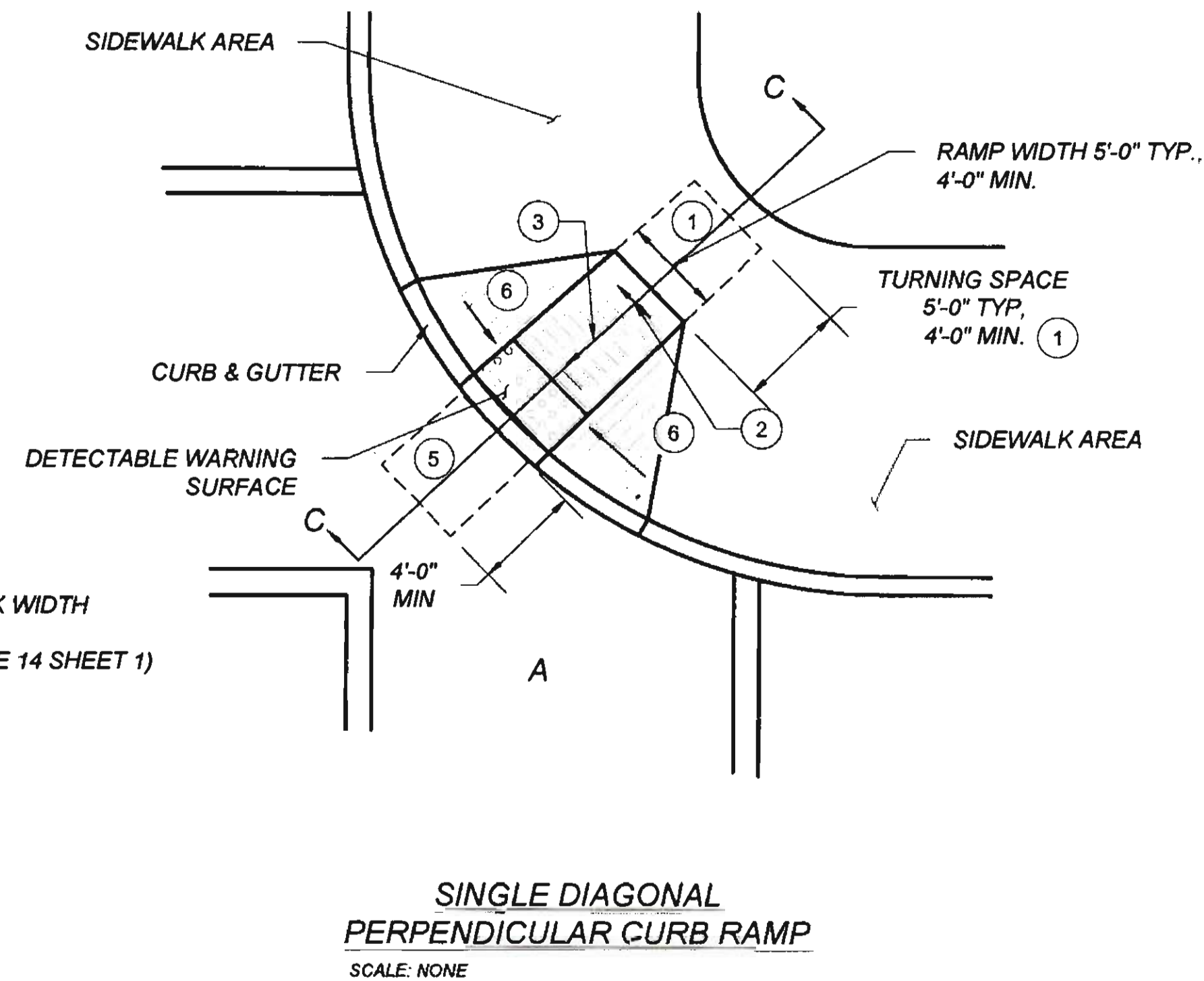
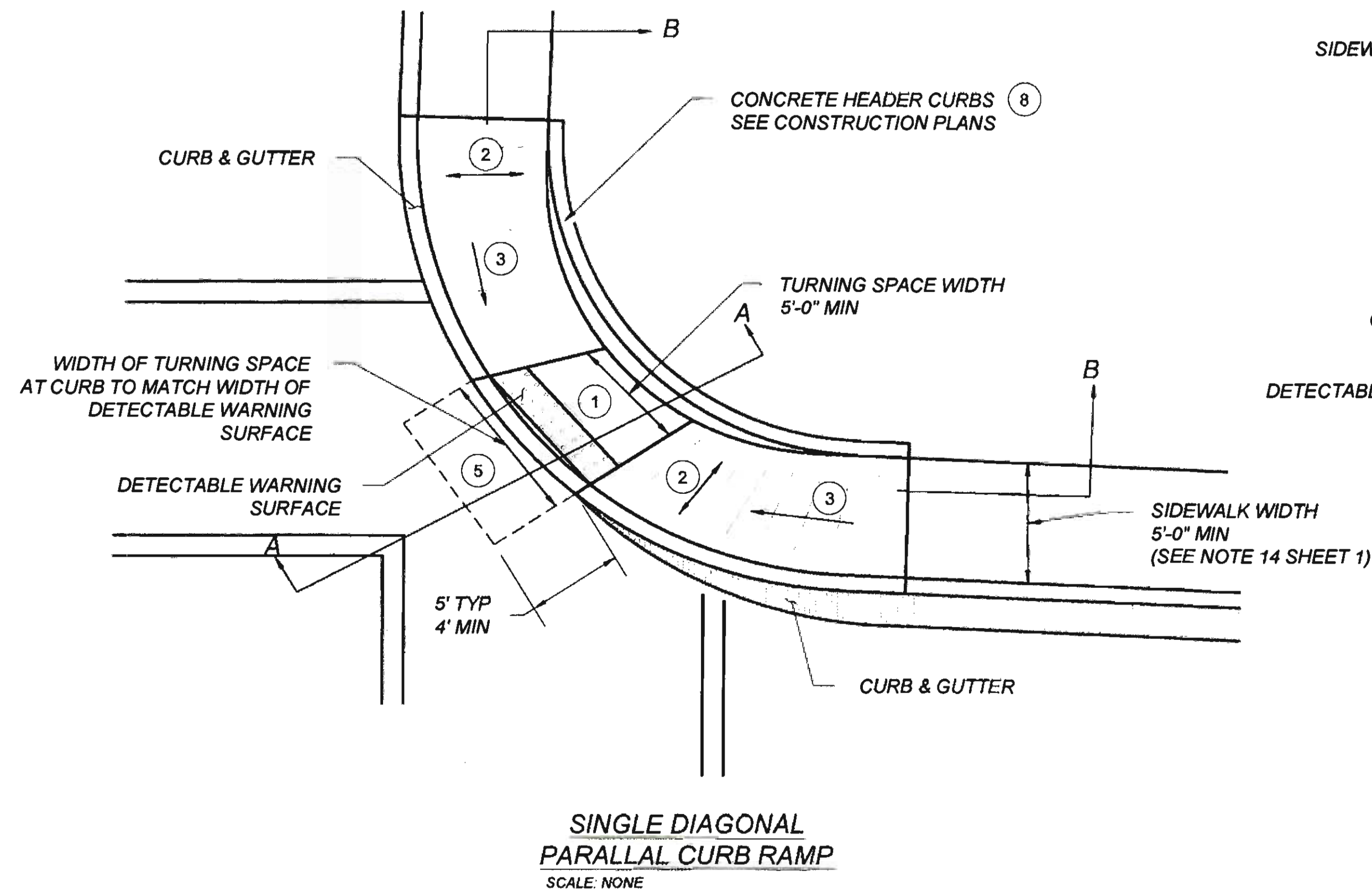
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KEYED NOTES

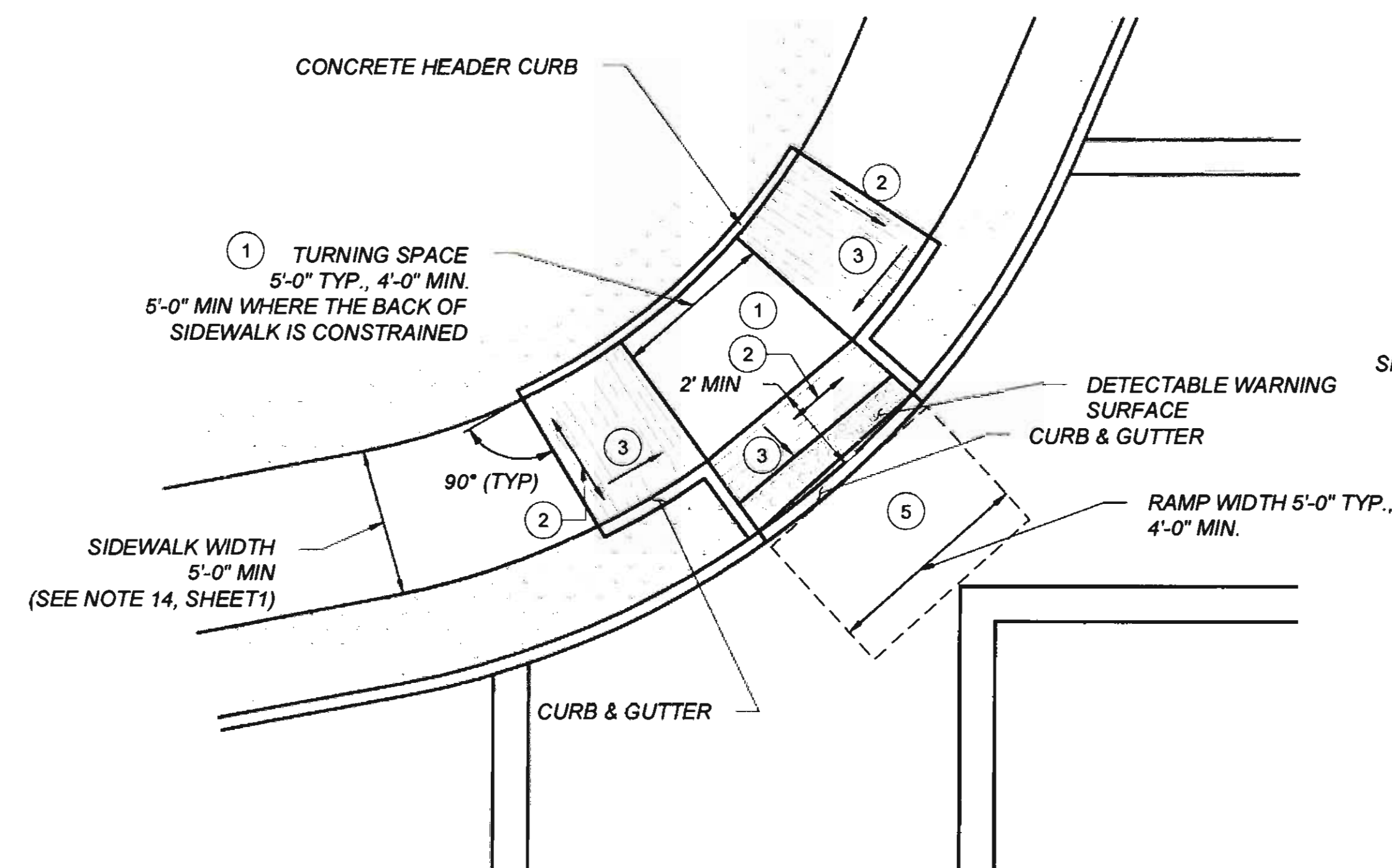
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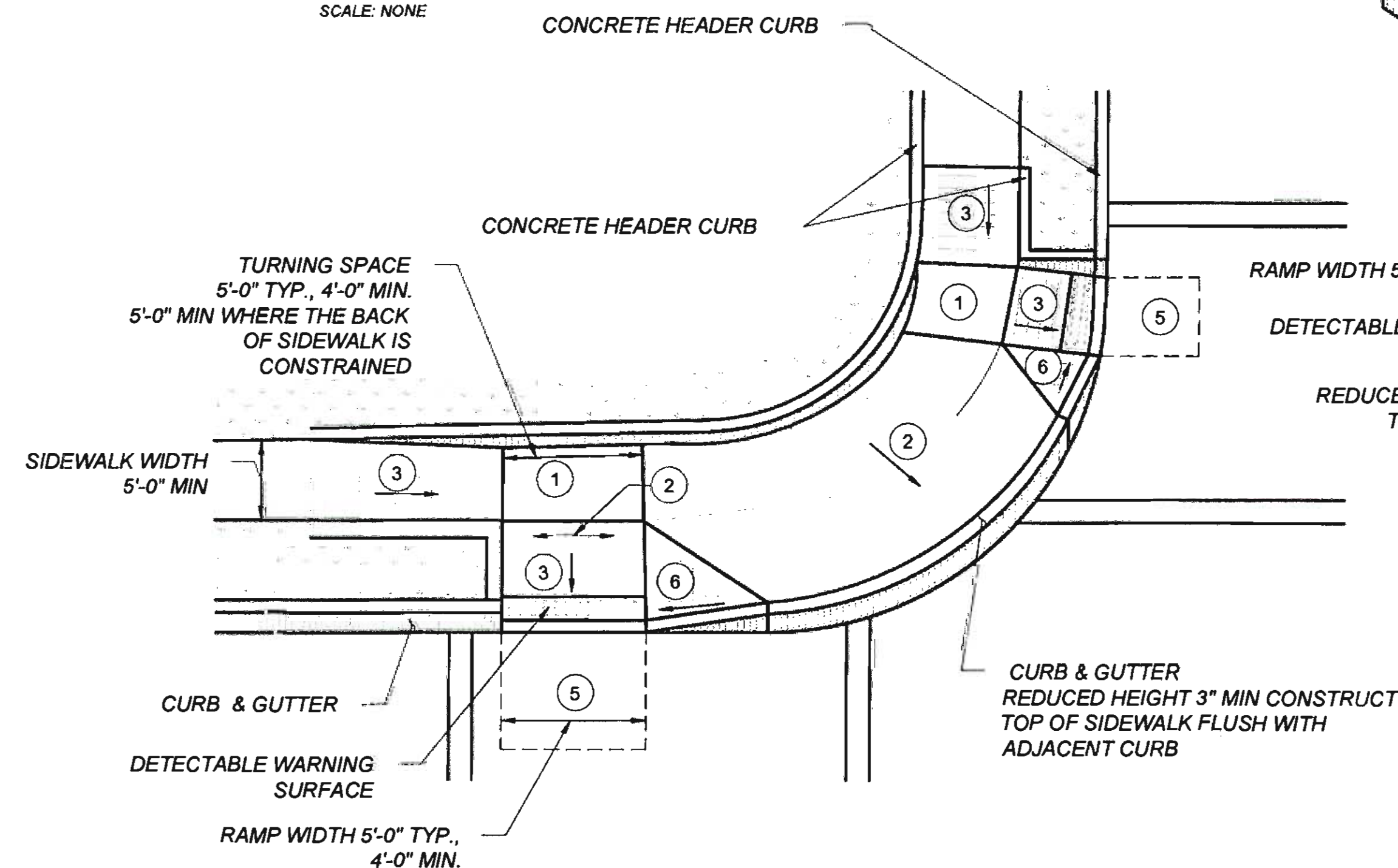


NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
DIAGONAL CURB RAMPS			
APPROVED	DESIGN ENGINEER		DATE
608-001-4		608-4 of 12	



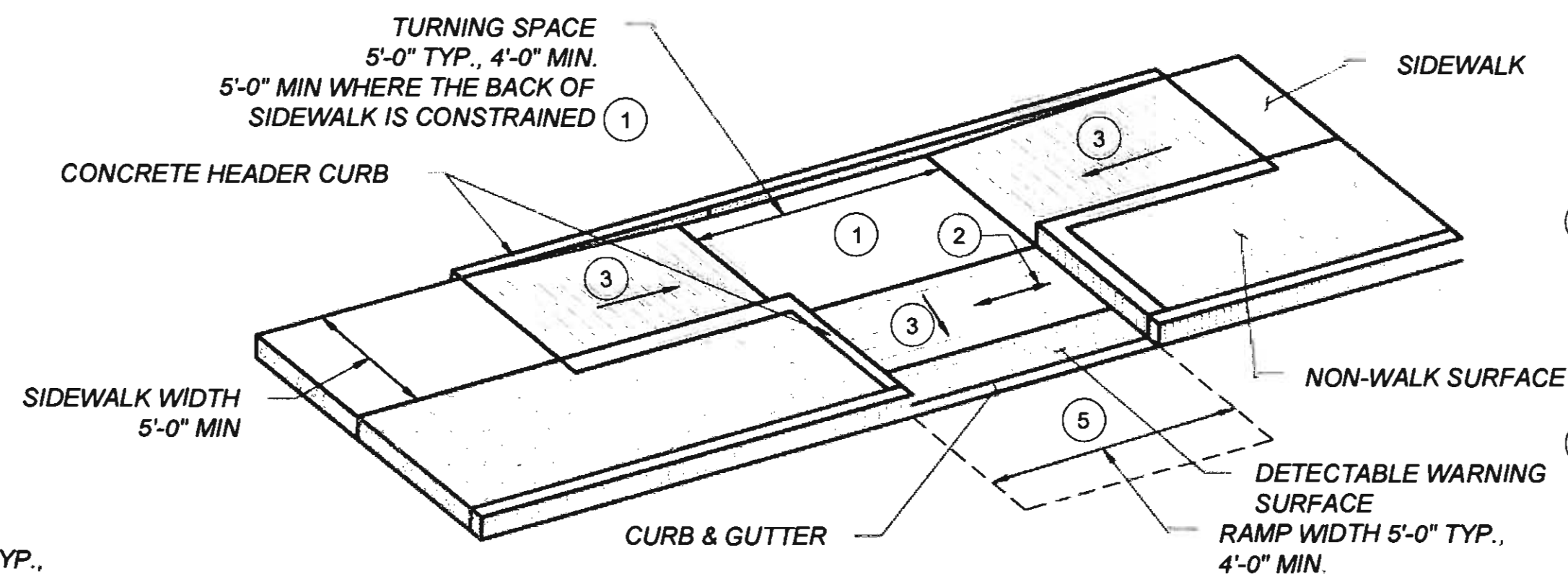
COMBINATION CURB RAMP (A)

DIAGONAL
SCALE: NONE



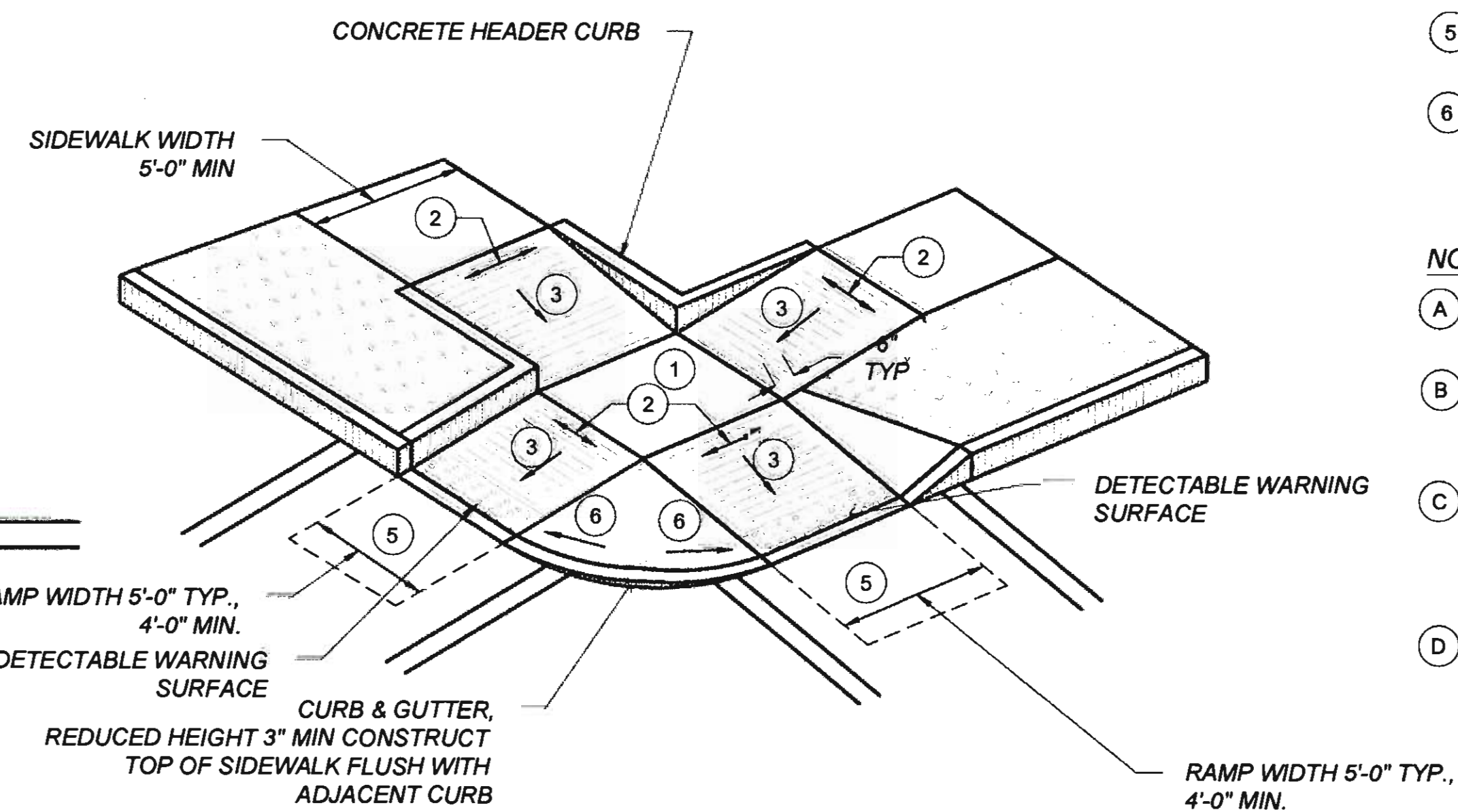
COMBINATION CURB RAMP (C)

SCALE: NONE



COMBINATION CURB RAMP (B)

SCALE: NONE



COMBINATION CURB RAMP (D)

WITH SHARED TURNING SPACE

SCALE: NONE

KEYED NOTES

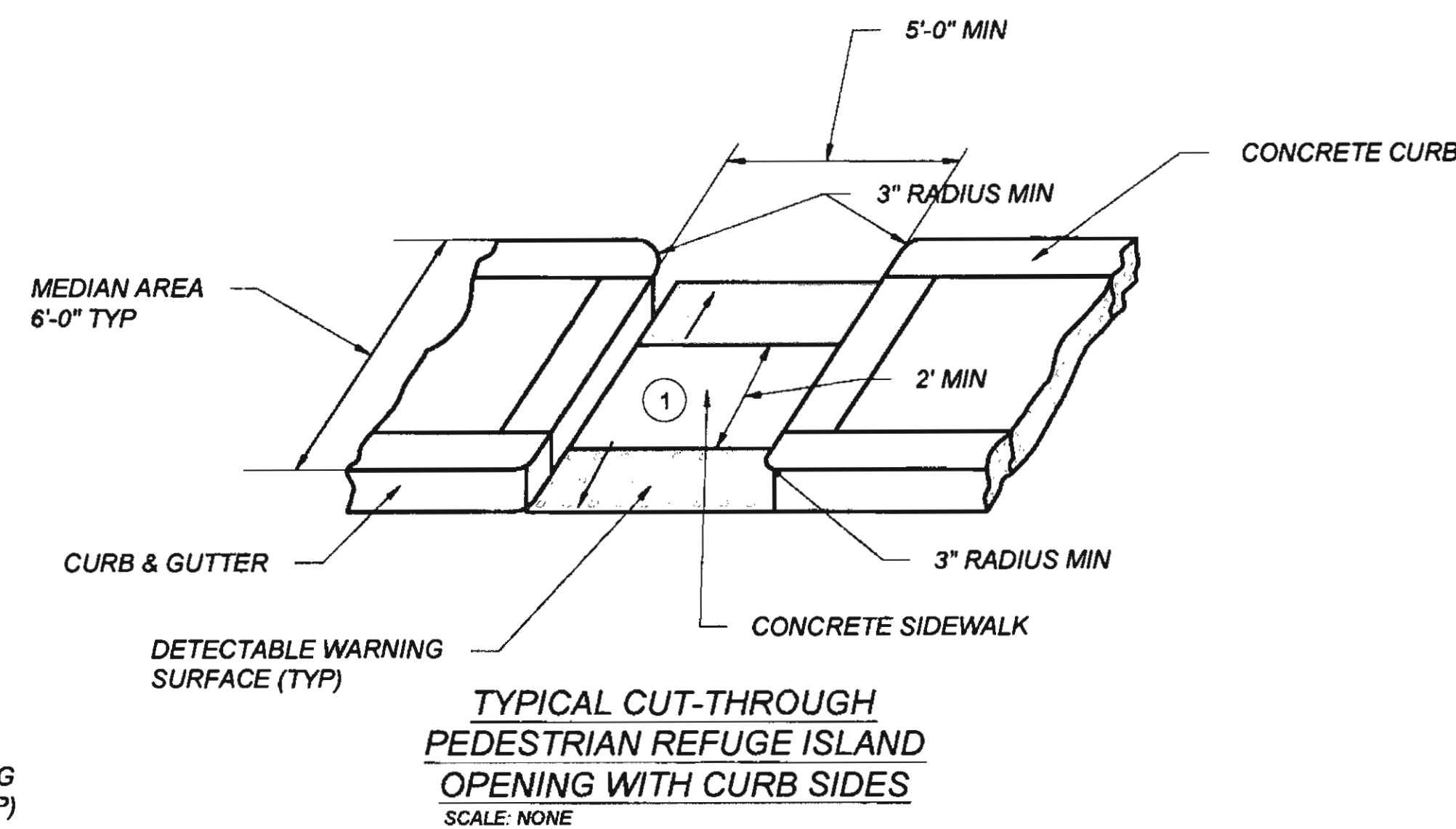
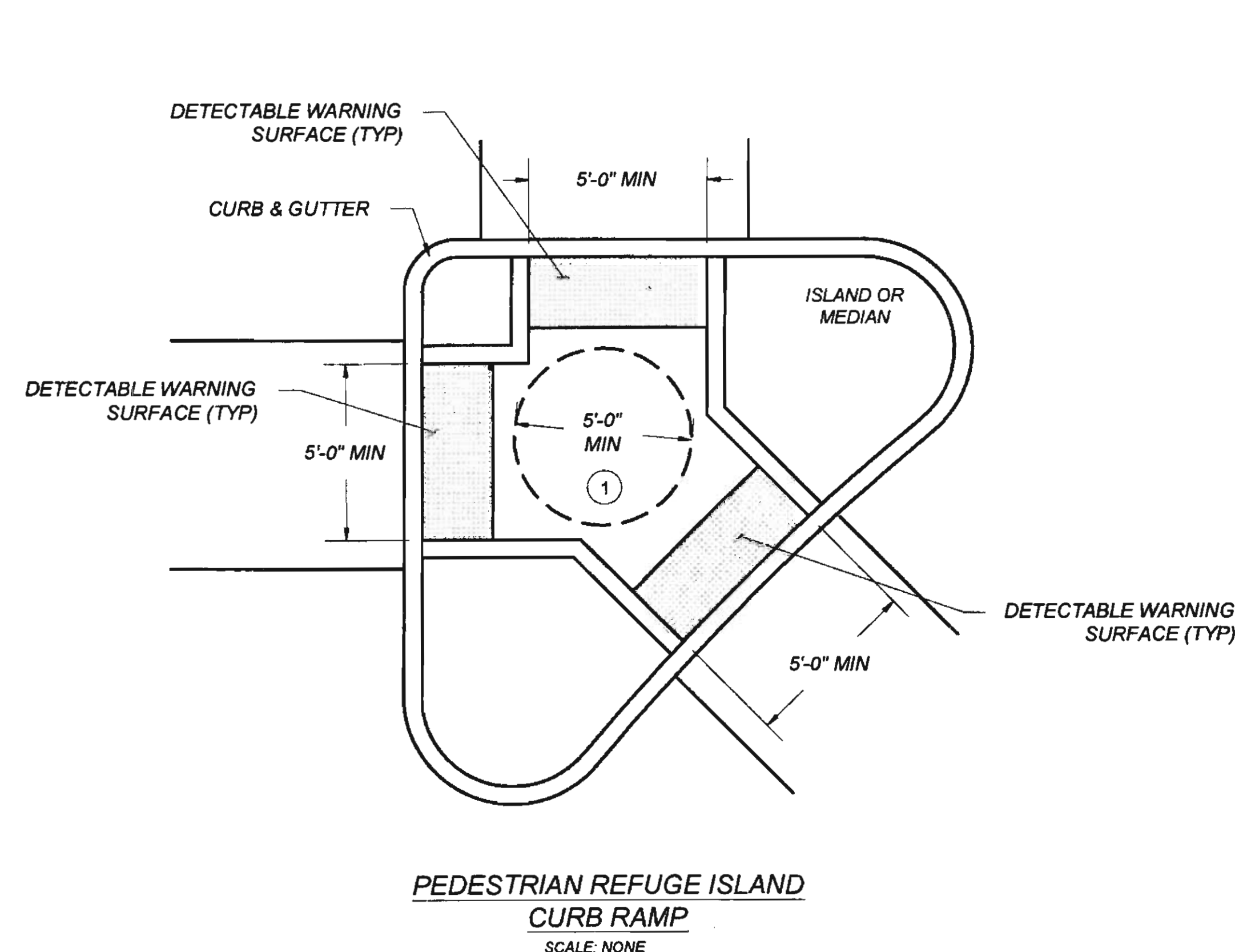
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REVISIONS OR CHANGE NOTICES			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
COMBINATION CURB RAMPS			
APPROVED	DESIGNED/ENGINEER		DATE
608-001-5		608-5 of 12	



KEYED NOTES

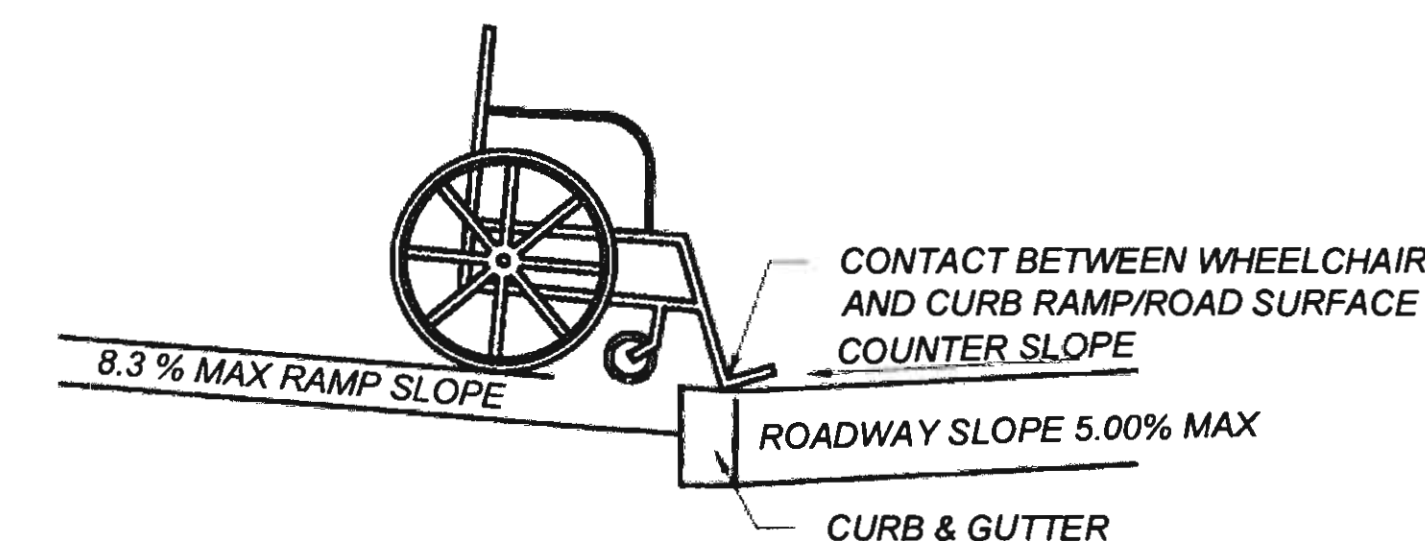
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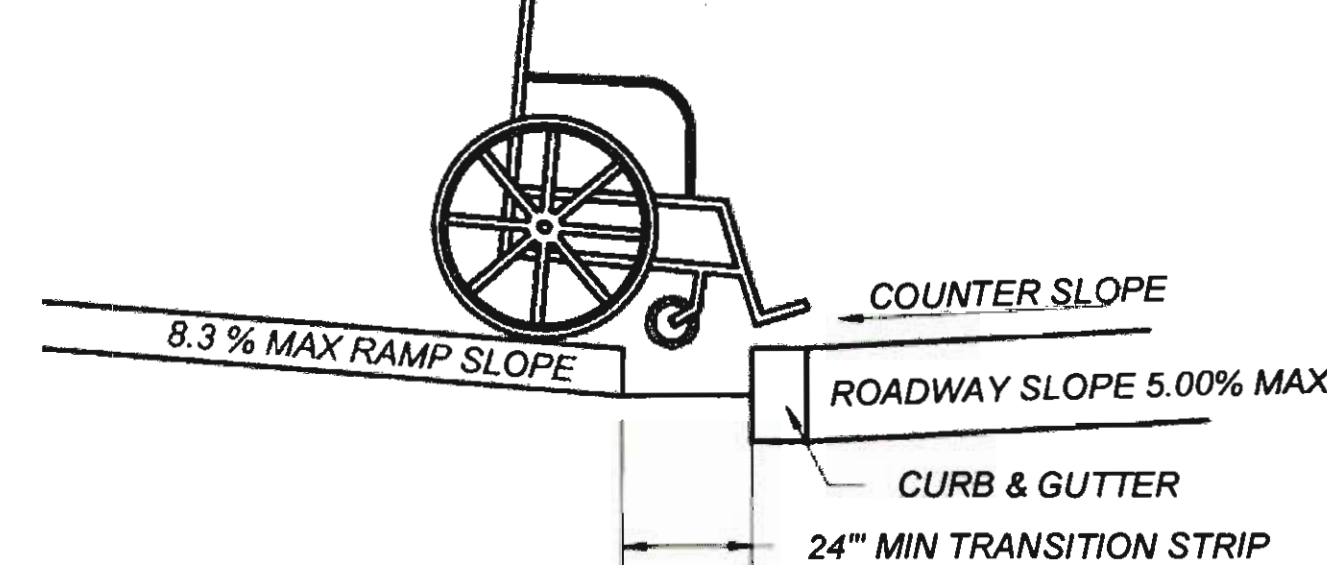
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NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PEDESTRIAN REFUGE ISLAND			
APPROVED	[Signature]		DATE 1-13-15
DESIGN ENGINEER			
608-001-6		608-6 of 12	



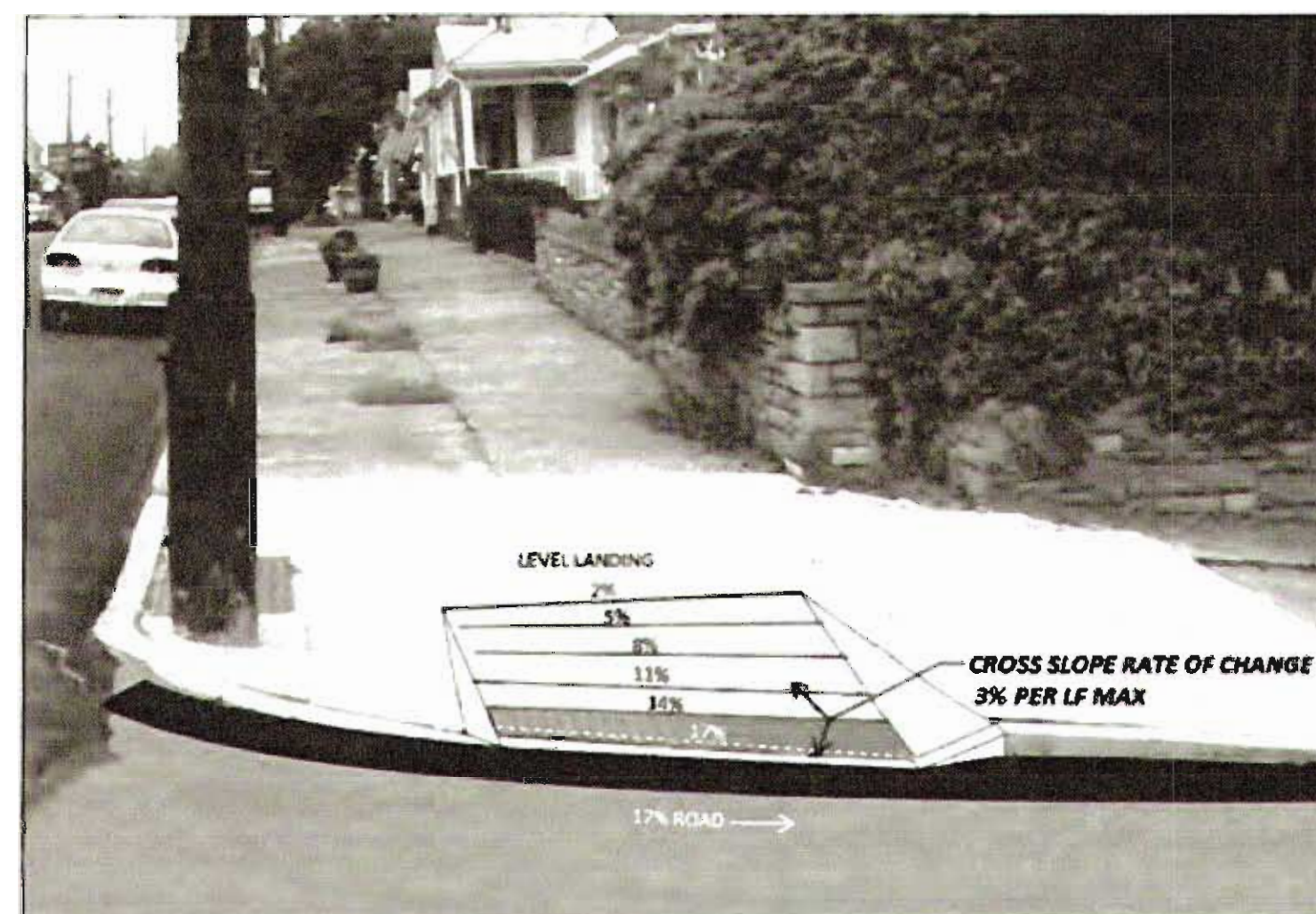
ALGEBRAIC DIFFERENCES BETWEEN ROADWAY SLOPE AND CURB RAMP SLOPE GREATER THAN 13.3% NOT PERMITTED.



PROVIDE A 24" MIN TRANSITION STRIP IF ALGEBRAIC DIFFERENCES BETWEEN ROADWAY SLOPE AND CURB RAMP SLOPE ARE GREATER THAN 13.33%. TRANSITION STRIP SLOPE NOT TO EXCEED 5.00%

CHANGE OF GRADE

LIMITATIONS
SCALE: NONE

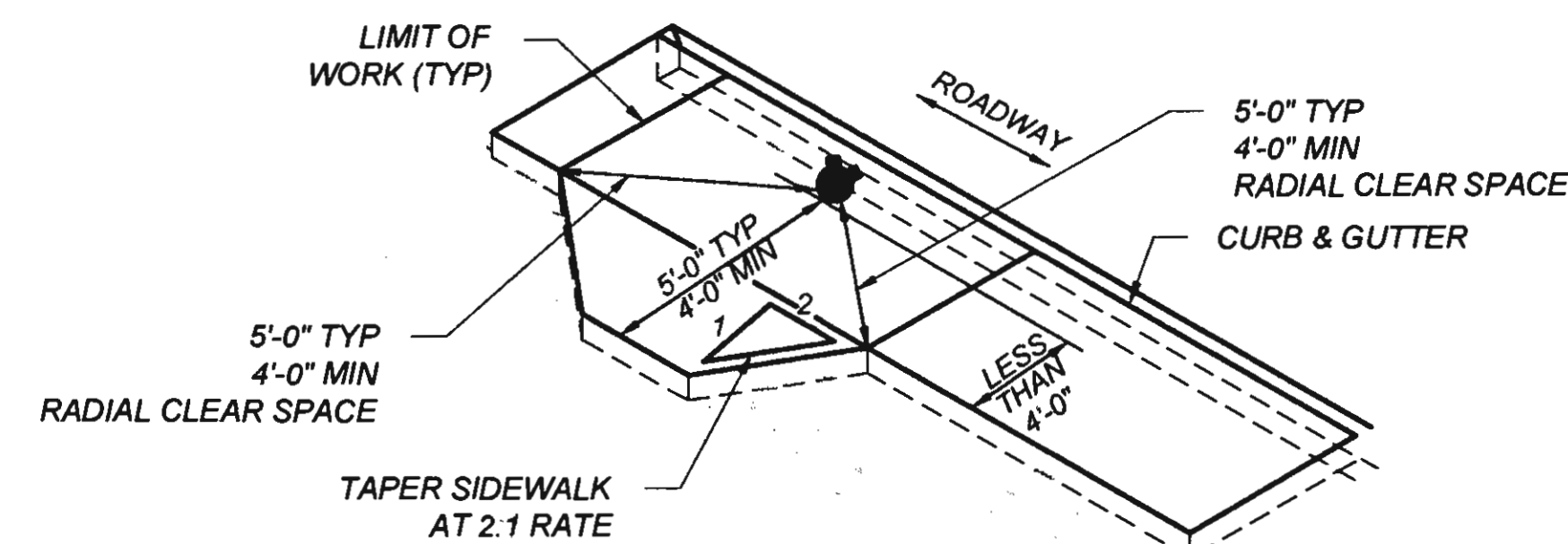


RAMP CROSS SLOPE TRANSITION TO MATCH ROADWAY PROFILE SLOPE

* SLOPES SHOWN ARE FOR ILLUSTRATION ONLY.

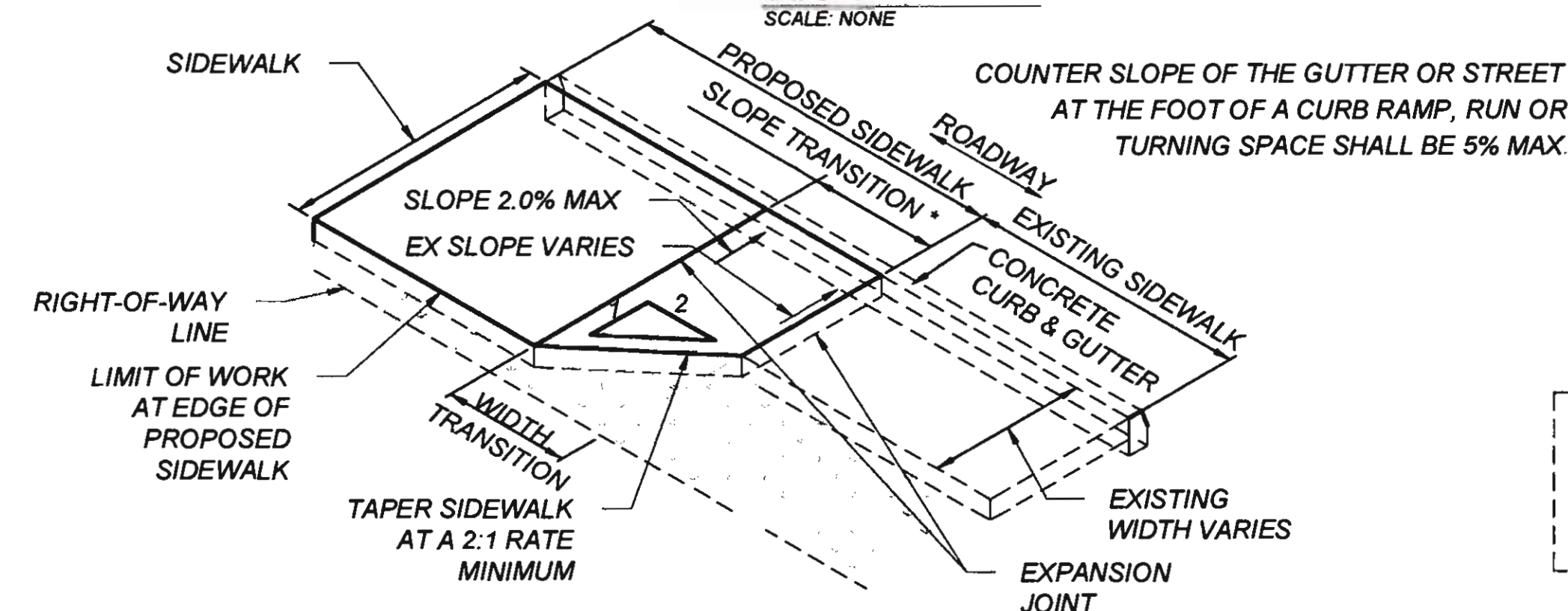
NOTE:

- 1) CROSS SLOPE OF CURB RAMP AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, AND AT MID BLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE ARE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
- 2) CROSS SLOPE IF CURB RAMP IS AT YIELD OR STOP CONTROL REQUIRES 2% MAX CROSS SLOPE AT CURB LINE



SIDEWALK ADDITION DUE TO OBSTRUCTIONS

SCALE: NONE



TRANSITION TO EXISTING SIDEWALK DETAIL

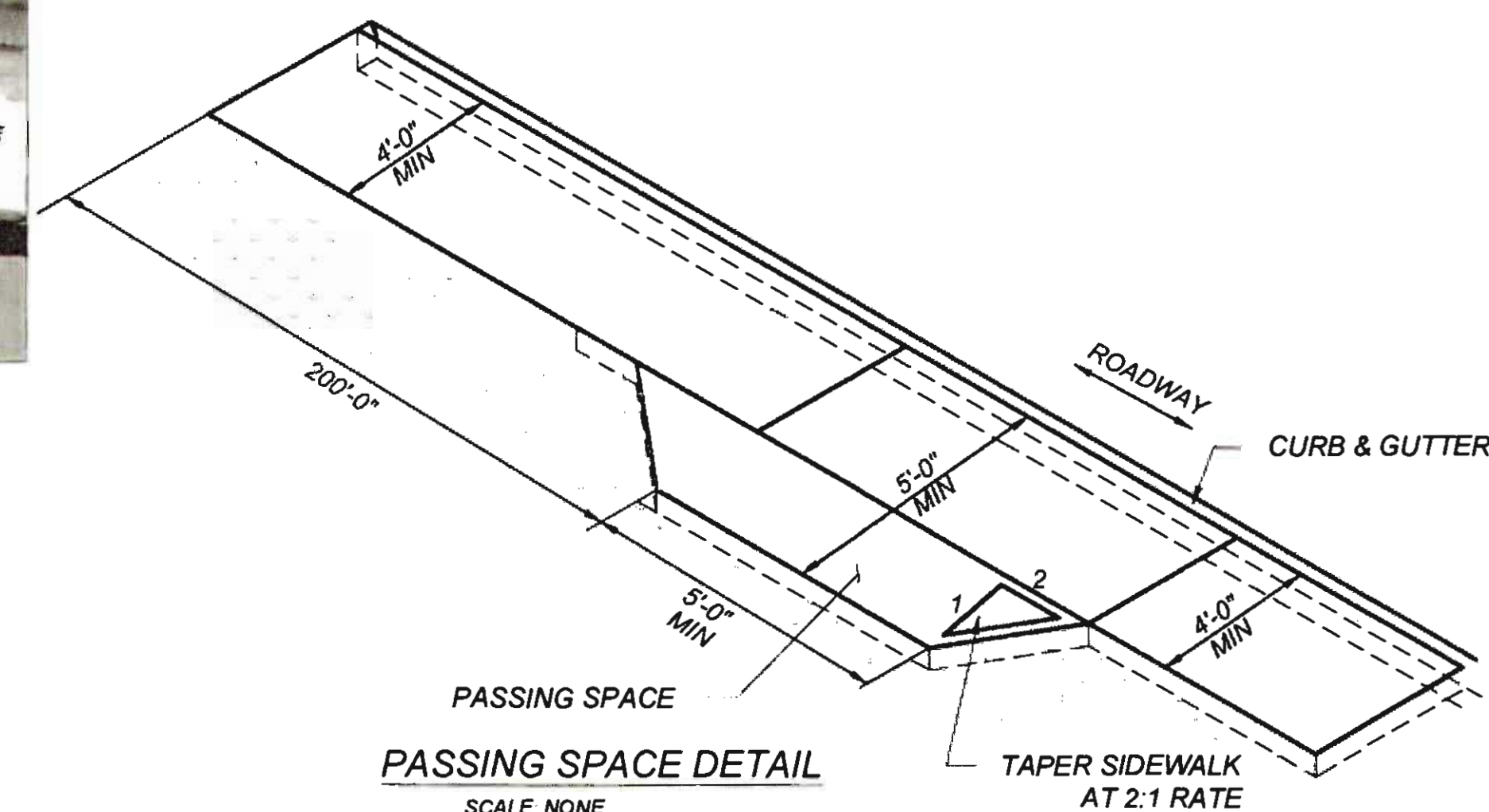
SCALE: NONE

MINIMUM SLOPE TRANSITION LENGTH BASED ON THE DIFFERENCE OF PROPOSED SIDEWALK CROSS SLOPE AND EXISTING SIDEWALK CROSS SLOPE AT THE LOCATION OF TIE IN. THIS MINIMUM LENGTH TO BE DETERMINED BY THE FOLLOWING FORMULA: $\Delta \% \text{ SLOPE} \times 0.5'$ OR MIN WIDTH OF 1 FT.

THE MINIMUM WIDTH TRANSITION SHALL BE CALCULATED USING THE FOLLOWING FORMULA: $\text{CHANGE IN WIDTH} \times 2$.

DEPENDING ON WHICH IS LONGEST, EITHER THE SLOPE TRANSITION OR WIDTH TRANSITION WILL CONTROL THE LENGTH OF SIDEWALK TRANSITION.

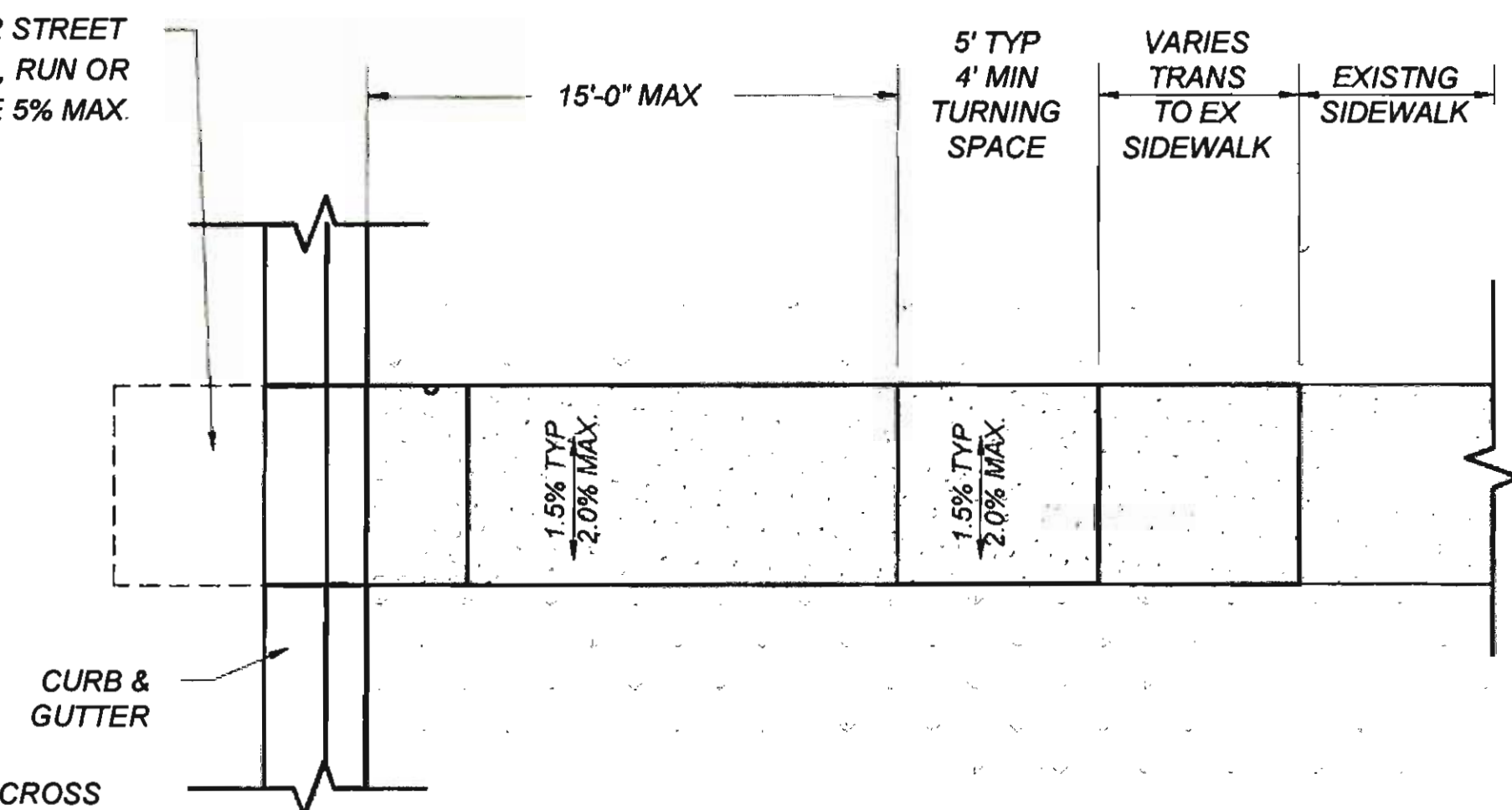
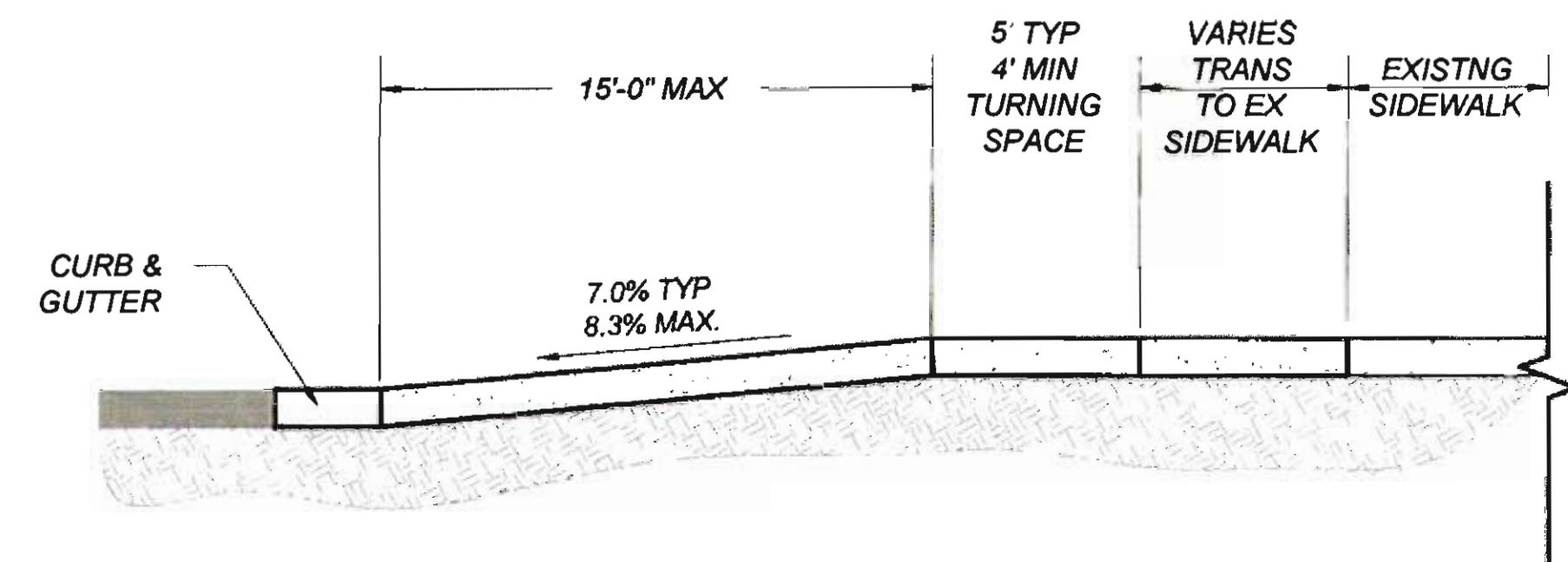
TRANSITION AREAS SERVE AS TEMPORARY CONNECTIONS OF THE PEDESTRIAN ACCESS ROUTE. FUTURE IMPROVEMENTS TO THE REMAINING PORTION OF EXISTING SIDEWALK SHALL INCLUDE REMOVING THE TRANSITION AREA AND CONSTRUCTING A FULLY COMPLIANT SIDEWALK.



PASSING SPACE DETAIL

SCALE: NONE

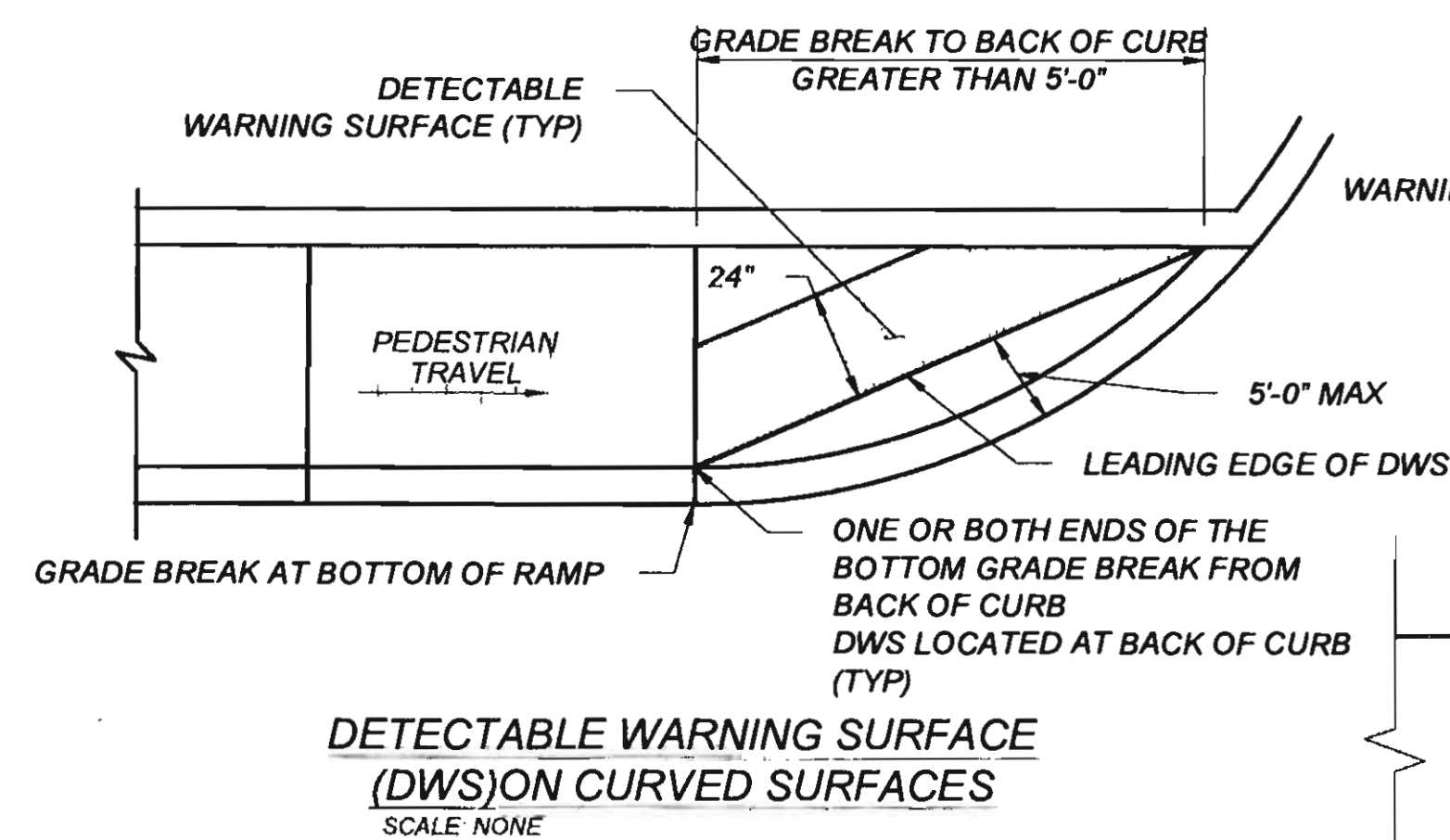
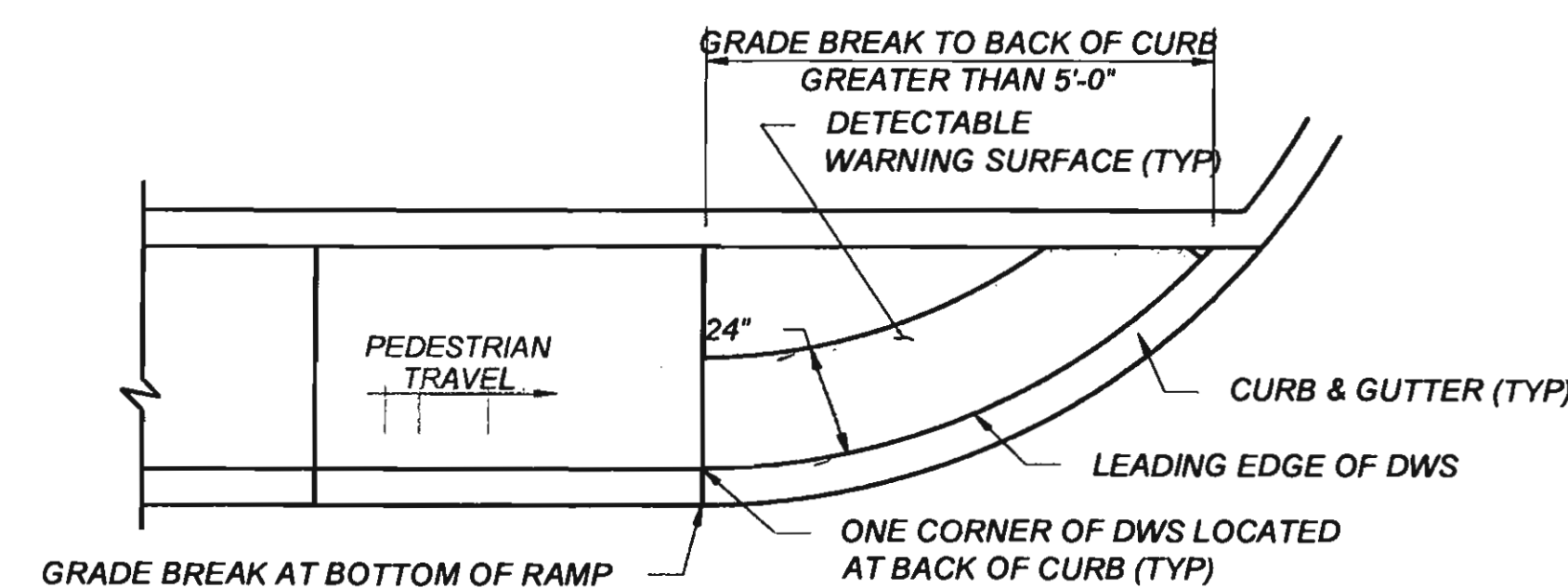
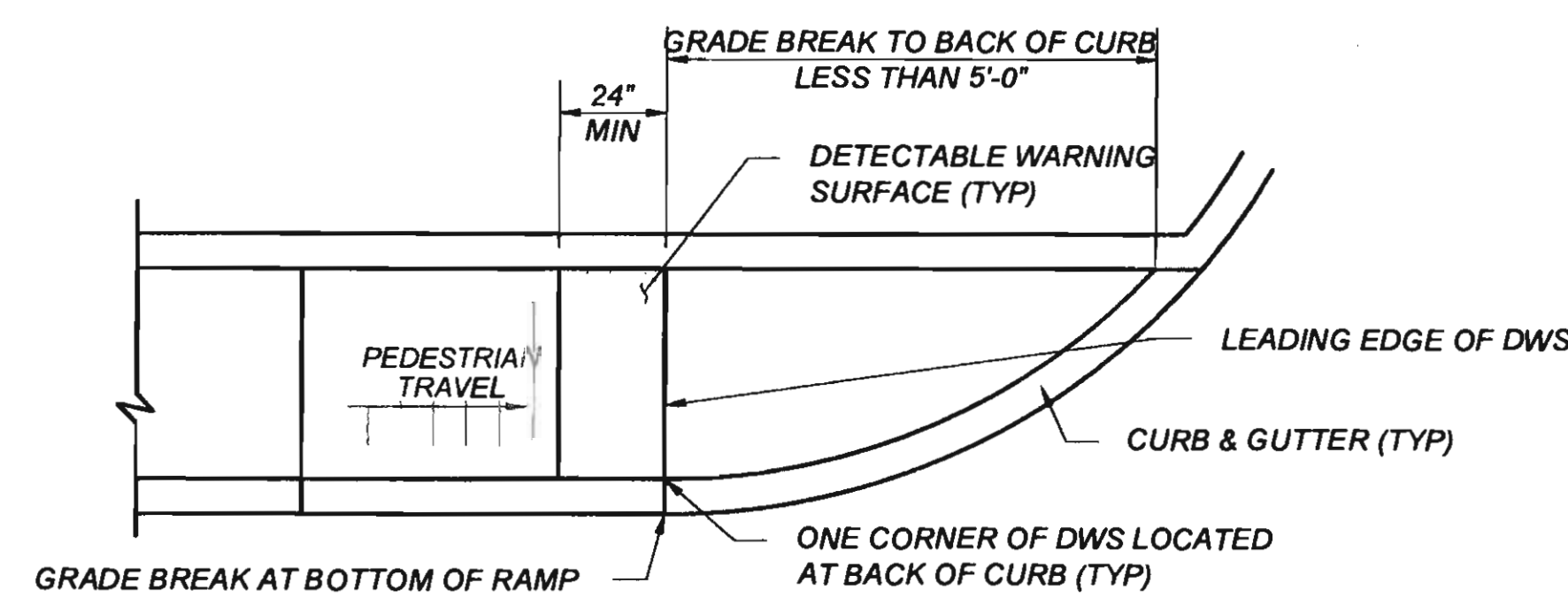
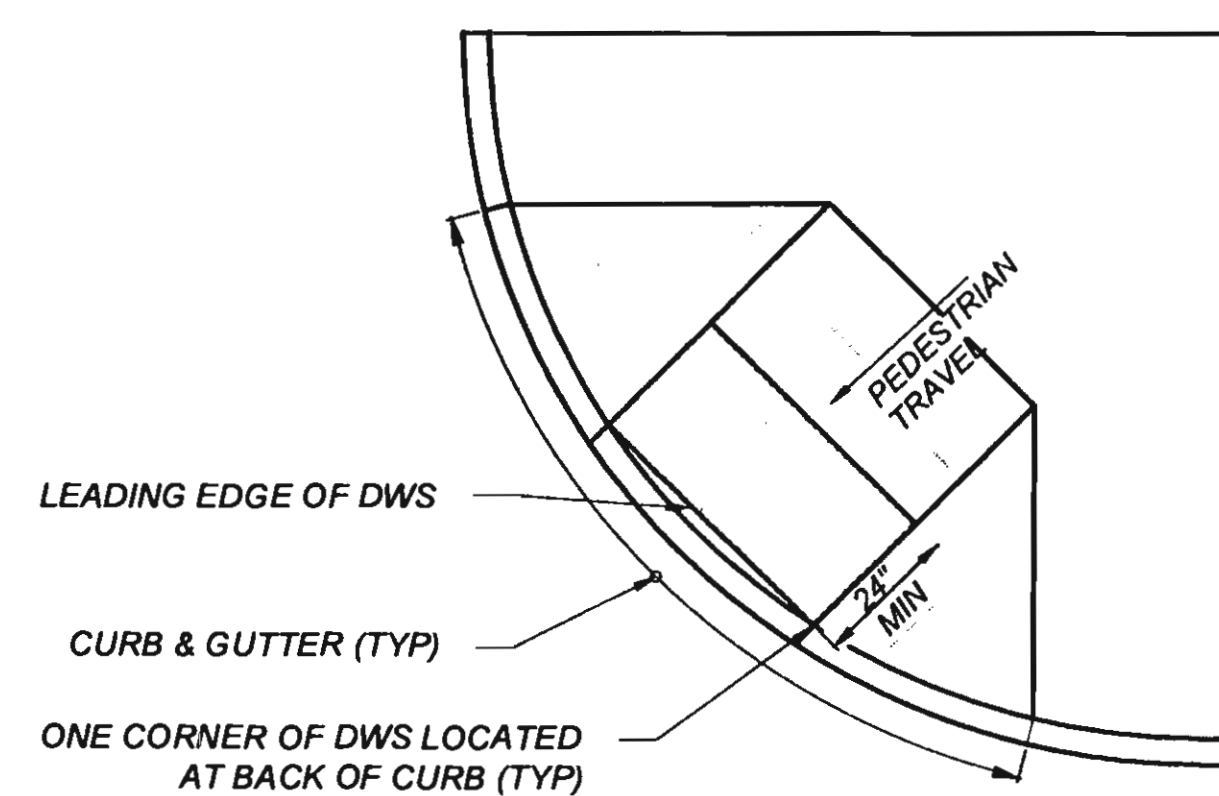
1. WHERE THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES IS GREATER THAN 4ft AND LESS THAN 5ft, PASSING SPACES SHALL BE PROVIDED AT INTERVALS 200ft MAXIMUM.
2. PASSING SPACES ARE PERMITTED TO OVERLAP PEDESTRIAN ACCESS ROUTES.



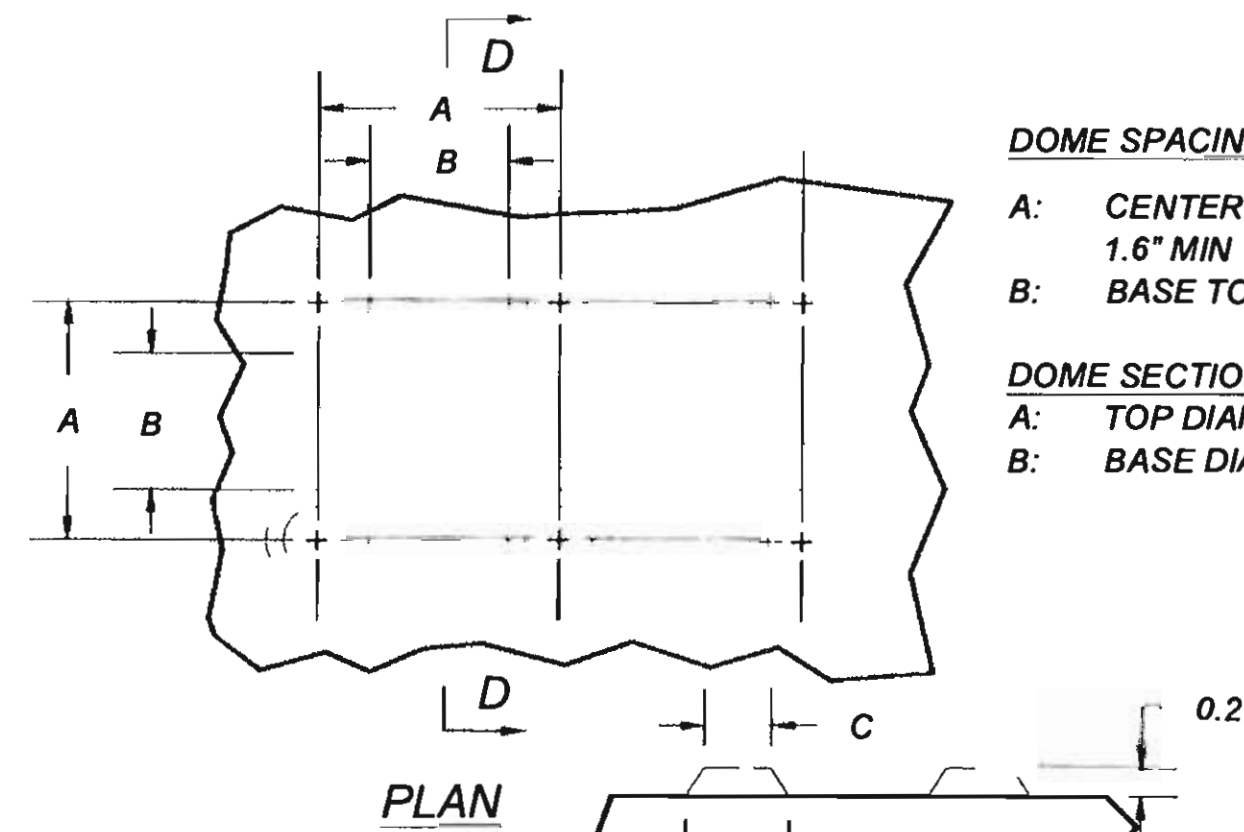
CURB RAMP TRANSITION TO EXISTING SIDEWALK DETAIL



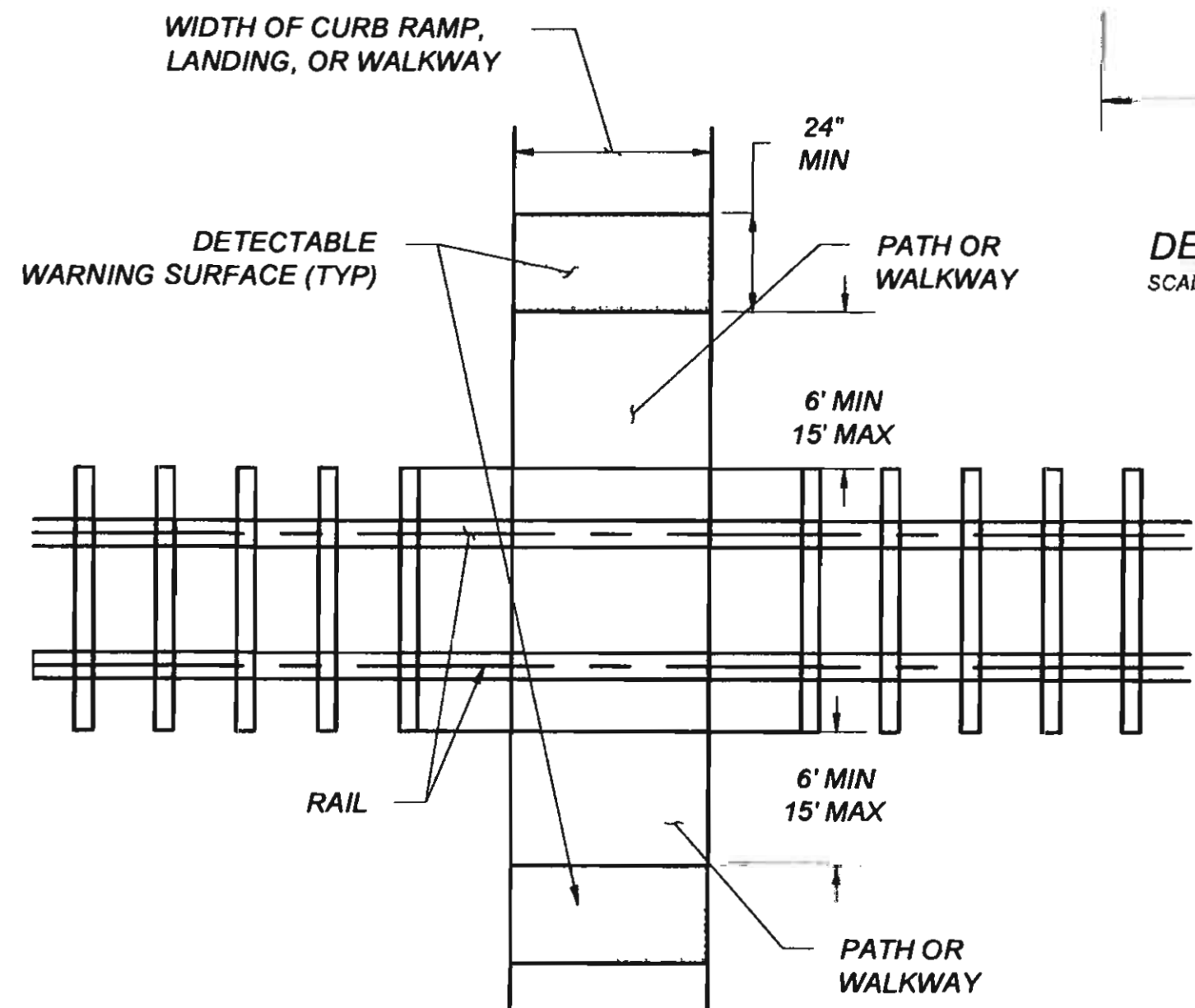
DRAWING SCALE = NOT TO SCALE



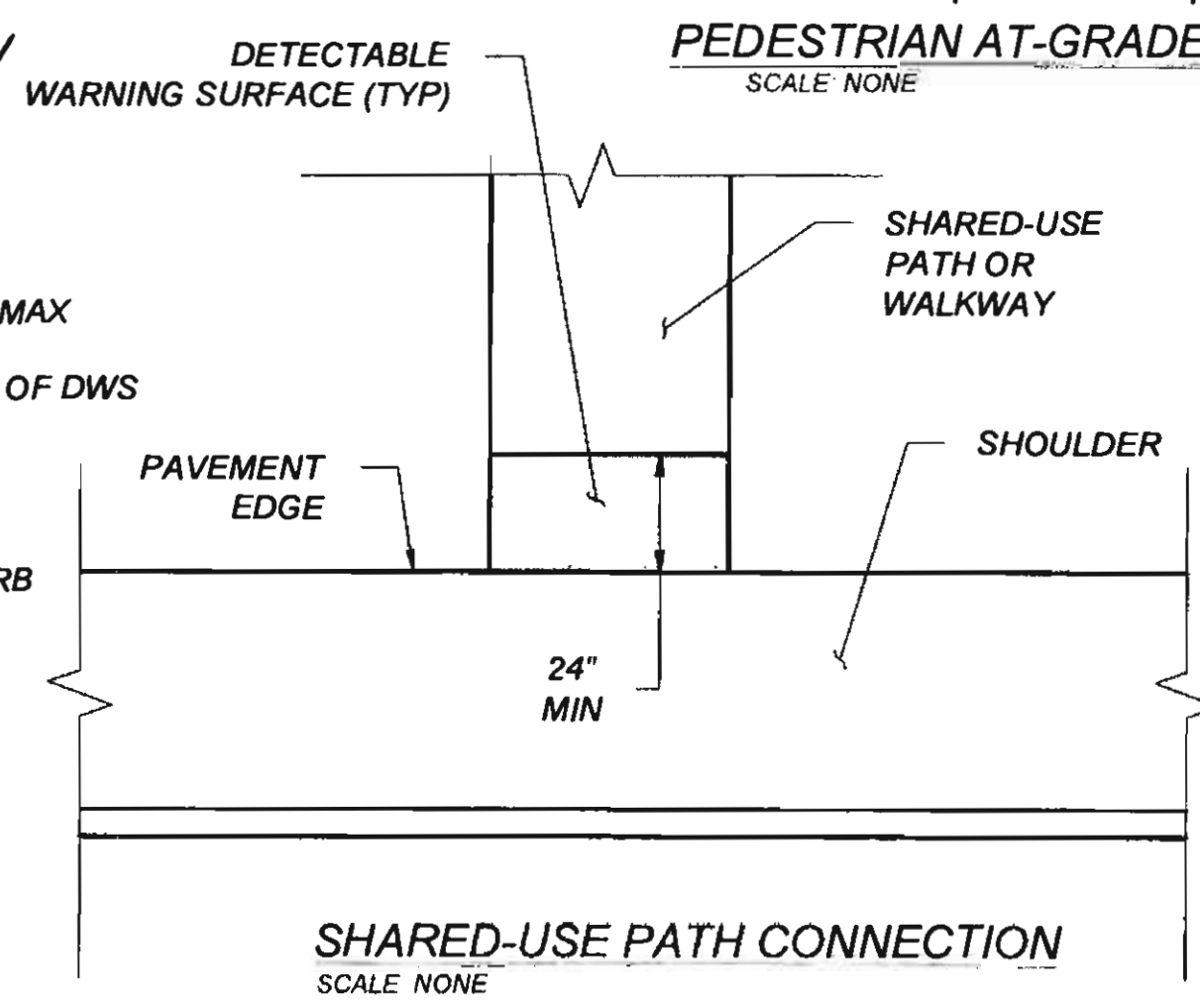
DETECTABLE WARNING SURFACE (DWS) ON CURVED SURFACES
SCALE: NONE



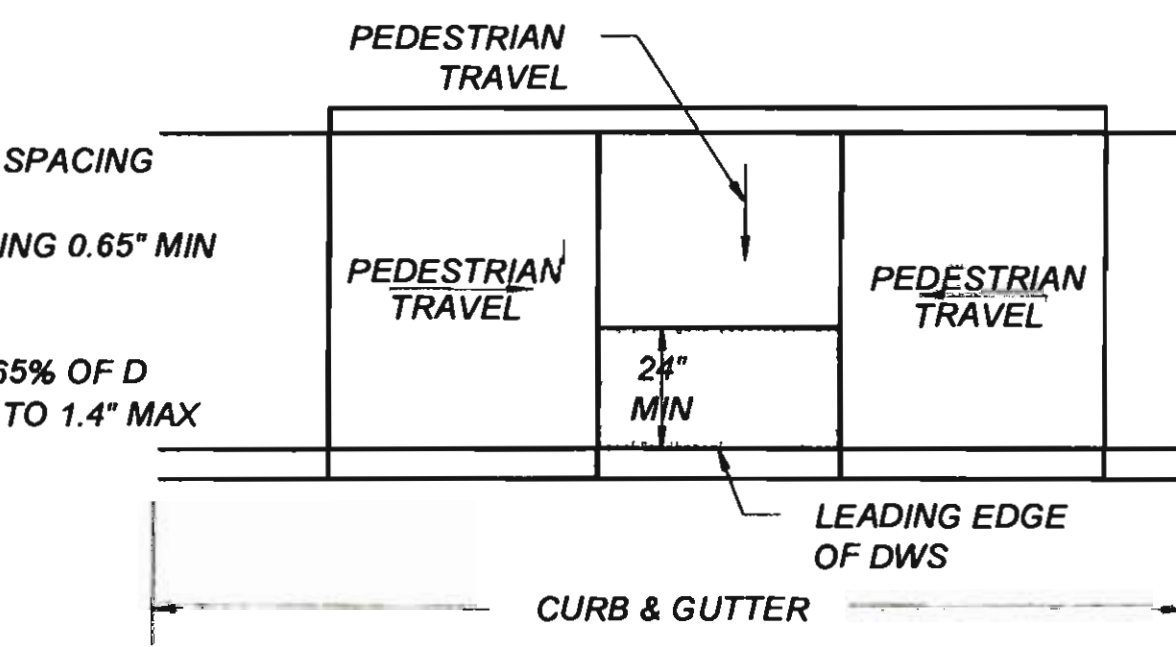
DETECTABLE WARNING SURFACE (DWS) TRUNCATED DOME DETAILS
SCALE: NONE



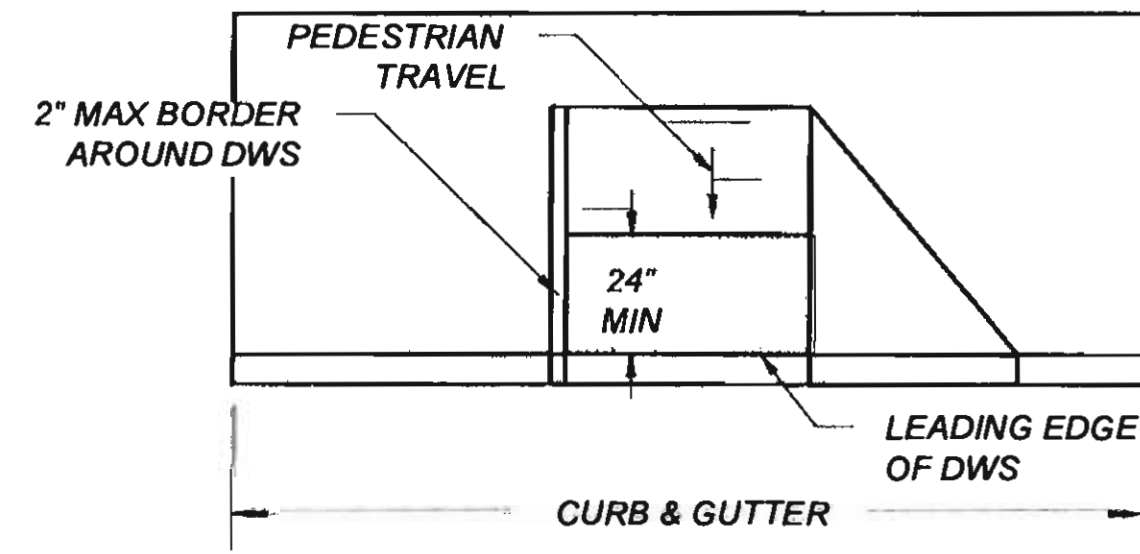
PEDESTRIAN AT-GRADE RAIL CROSSINGS
SCALE: NONE



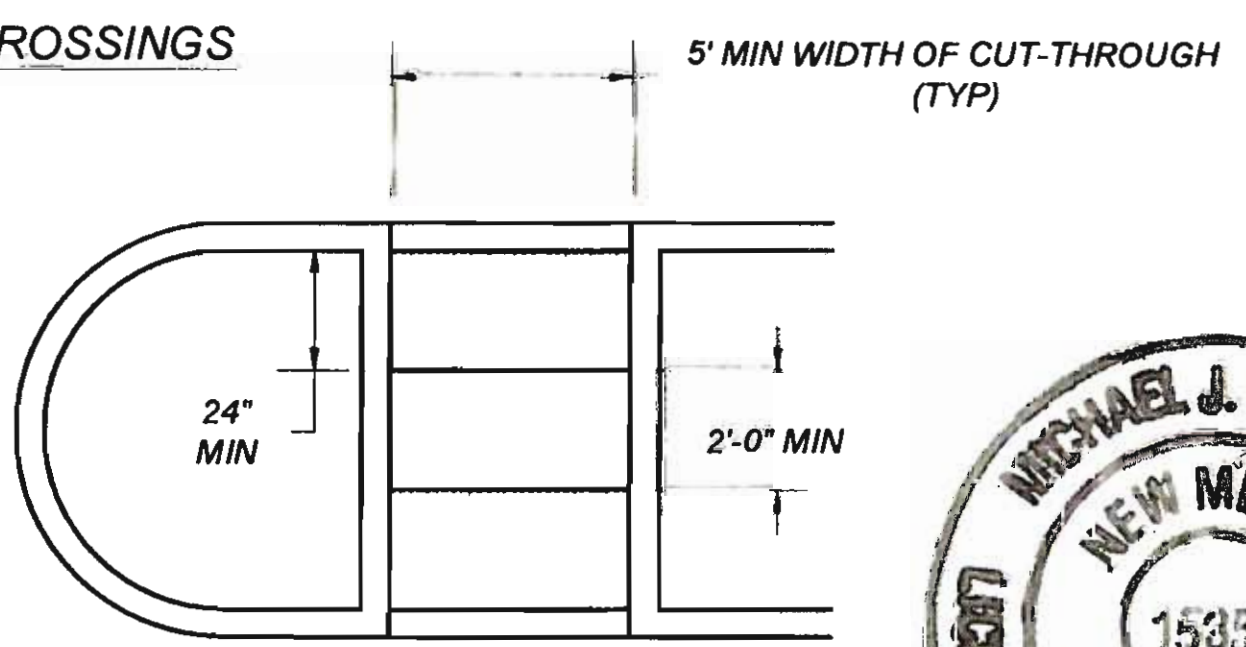
SHARED-USE PATH CONNECTION
SCALE: NONE



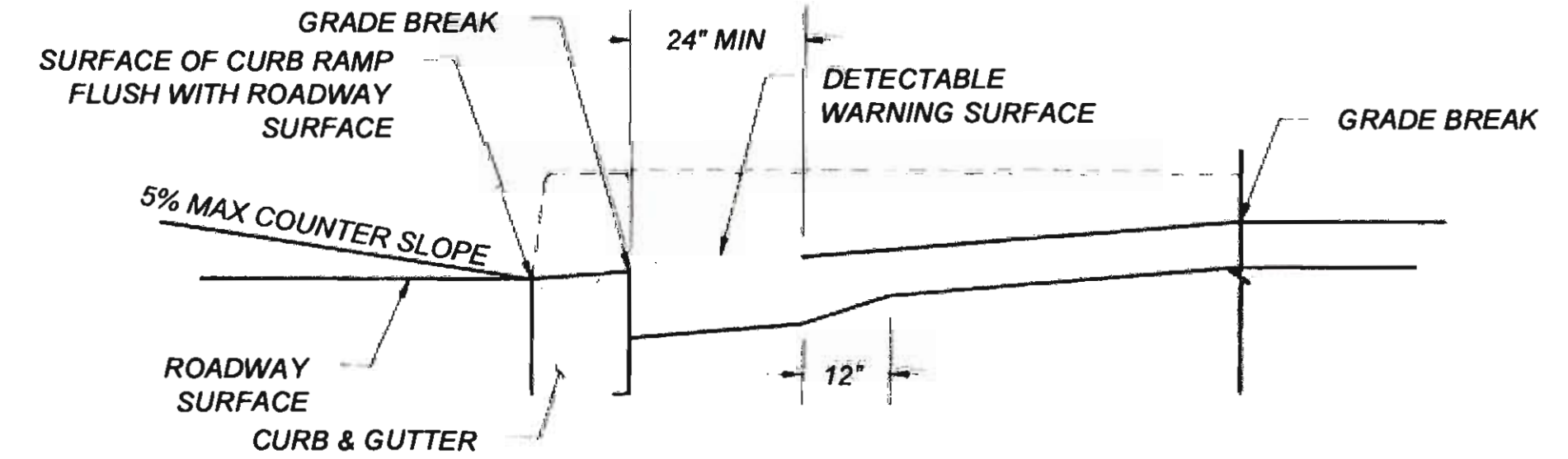
DETECTABLE WARNING SURFACE
SCALE: NONE



DETECTABLE WARNING SURFACE
SCALE: NONE



MEDIAN CUT-THROUGH
SCALE: NONE
EXCEPTION: IF THE LENGTH BETWEEN TWO DWS SURFACE IS LESS THAN 2' THEN DETECTABLE WARNING SURFACE WILL NOT BE INSTALLED



DETECTABLE WARNING SURFACE
SCALE: NONE

DETECTABLE WARNING SURFACE (DWS):

A STANDARDIZED TRUNCATED DOME GRID SURFACE BUILT IN OR APPLIED TO THE PEDESTRIAN ACCESS ROUTE TO WARN VISUALLY IMPAIRED PEOPLE OF HAZARDS. THE SURFACE IS PLACED WHERE DETECTABLE WARNING SURFACE (DWS): A STANDARDIZED TRUNCATED DOME GRID SURFACE BUILT IN OR APPLIED TO THE PEDESTRIAN ACCESS ROUTE TO WARN VISUALLY IMPAIRED PEOPLE OF HAZARDS. THE SURFACE IS PLACED WHERE PEDESTRIANS WILL ENCOUNTER THE PRESENCE OF HAZARDS IN THE LINE OF TRAVEL, SUCH AS THE EDGE OF ROADWAY AND AT-GRADE RAIL CROSSINGS, INDICATING THEY SHOULD STOP AND DETERMINE THE NATURE OF THE HAZARD BEFORE PROCEEDING.

LOCATION:

1. THE DETECTABLE WARNING SURFACE (DWS) SHALL BE 2.0 FT MINIMUM WIDTH AND EXTENDED THE FULL WIDTH OF THE CURB RAMP RUN, TURNING SPACE, BLENDED TRANSITION, AN EXCLUDING ANY THE FLARED SIDES
2. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED TO BE PERPENDICULAR TO THE GRADE BREAK AT THE BACK OF THE CURB.
3. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED TO BE PARALLEL TO THE DIRECTION OF TRAVEL.
4. IF CURB AND GUTTER ARE NOT PRESENT, SUCH AS A SHARED-USE PATH CONNECTION, THE DETECTABLE WARNING SURFACE SHALL BE PLACED AT THE PAVEMENT EDGE.
5. PEDESTRIAN REFUGE ISLANDS SHALL HAVE DETECTABLE WARNINGS. DETECTABLE WARNINGS AT CUT THROUGH ISLANDS SHALL BE SEPARATED BY A 24 INCH MINIMUM LENGTH OF THE WALKWAY WITHOUT MARKINGS.

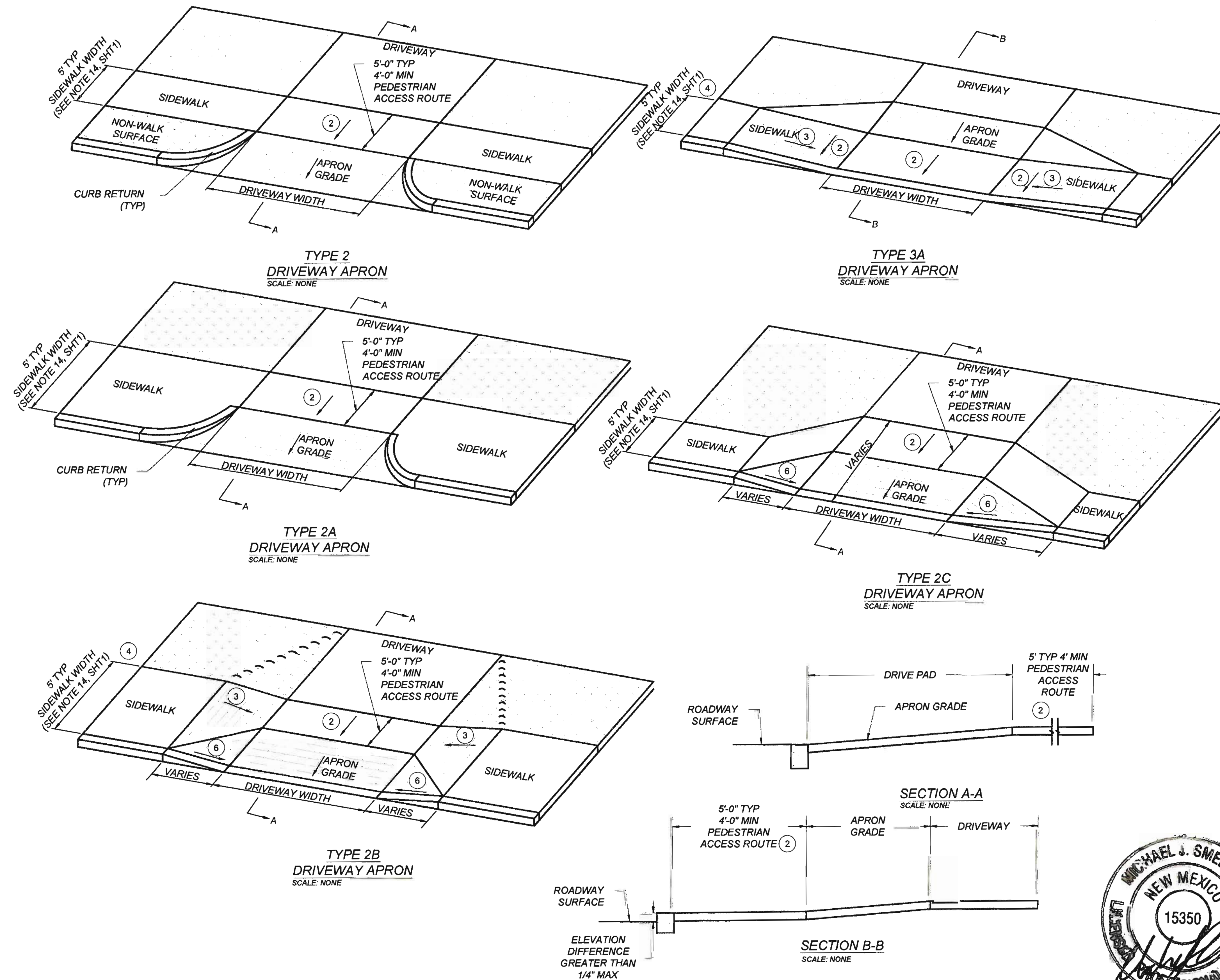
EXCEPTION: DETECTABLE WARNINGS SHALL NOT BE REQUIRED ON CUT THROUGH ISLANDS WHERE THE CROSSING IS LESS THAN 6 FT IN THE DIRECTION OF PEDESTRIAN TRAVEL

NOTES:

1. DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION OR RECONSTRUCTION OF STREETS, CURBS, OR SIDEWALKS BY ALL PUBLIC AGENCIES AND BY ALL PRIVATE ORGANIZATIONS CONSTRUCTING FACILITIES FOR PUBLIC USE.
2. DETECTABLE WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
3. ALL PRODUCTS USED FOR DETECTABLE WARNING SURFACES SHALL BE ON THE DEPARTMENT'S APPROVED PRODUCT LIST.



NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
DETECTABLE WARNING SURFACE			
APPROVED			1-13-15 DATE
608-001-8		608-8 of 12	

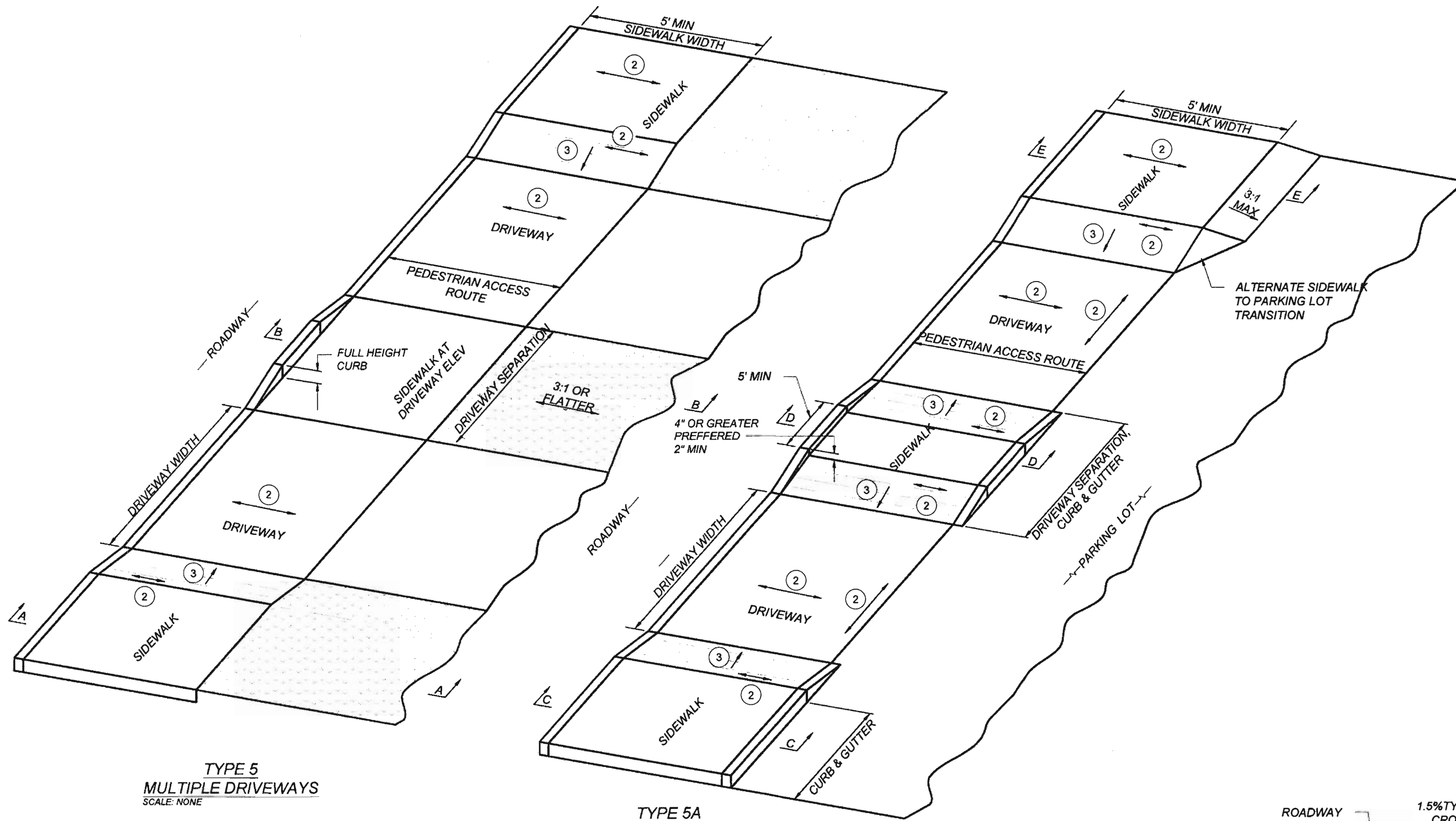


KEYED NOTES

- TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
 - CROSS SLOPE SHALL BE 2.0% MAX (RECOMMENDED 1.5%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.
 - RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
 - GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
 - COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX.
 - FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.
- NOTES:
- DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.
 - DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-8/12 OF THE STANDARD DRAWINGS.
 - IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.
 - CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.

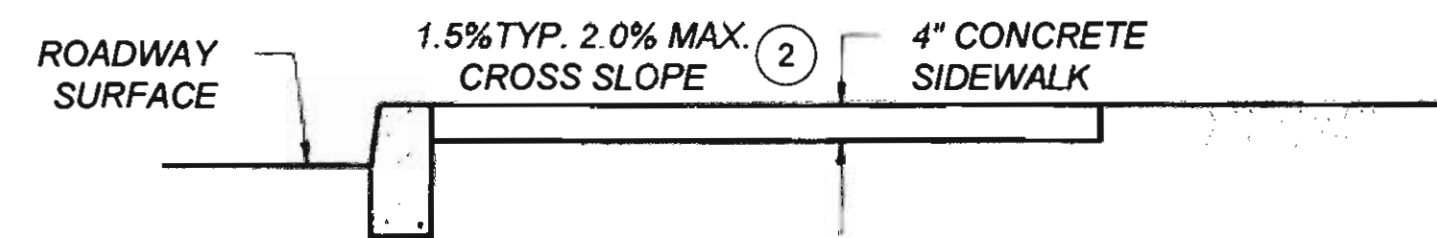


NO.	DATE	REV. BY	DESCRIPTION
REVISIONS: (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
DRIVEWAY APRONS			
APPROVED			DATE 1-18-15
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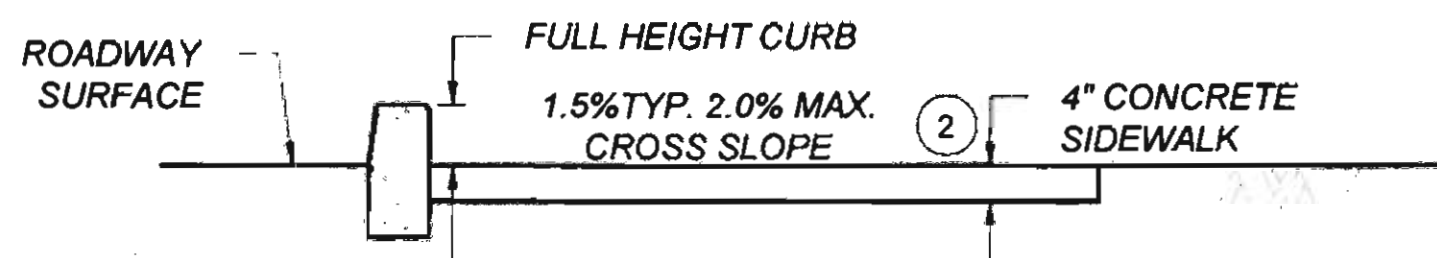


TYPE 5
MULTIPLE DRIVEWAYS
SCALE: NONE

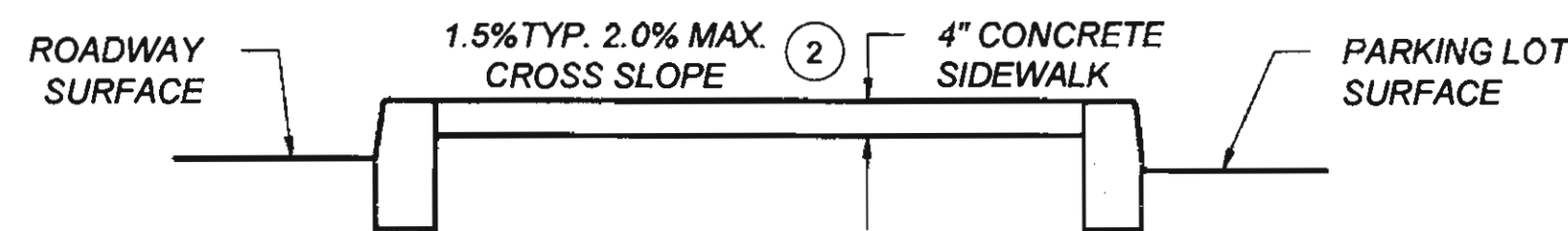
TYPE 5A
MULTIPLE DRIVEWAYS
SCALE: NONE



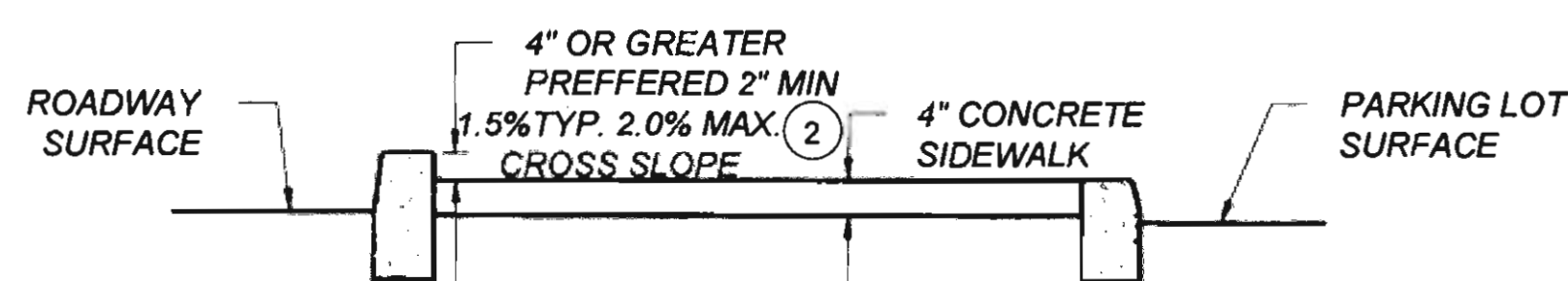
SECTION A-A
SCALE: NONE



SECTION B-B
SCALE: NONE



SECTION C-C
SCALE: NONE



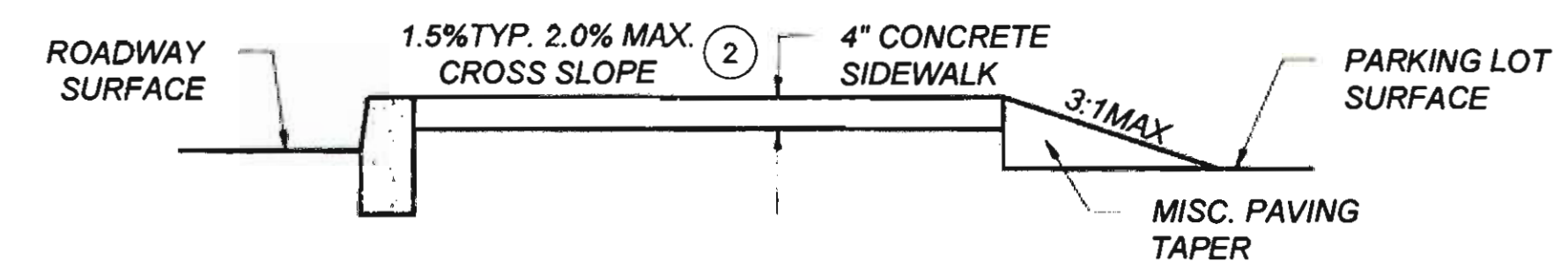
SECTION D-D
SCALE: NONE

KEYED NOTES

- 1 TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
- 2 CROSS SLOPE SHALL BE 2.0% MAX (RECOMMENDED 1.5%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.
- 3 RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3% MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
- 4 GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
- 5 COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX.
- 6 FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

NOTES:

- A DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.
- B DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-8/12 OF THE STANDARD DRAWINGS.
- C IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.
- D CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.



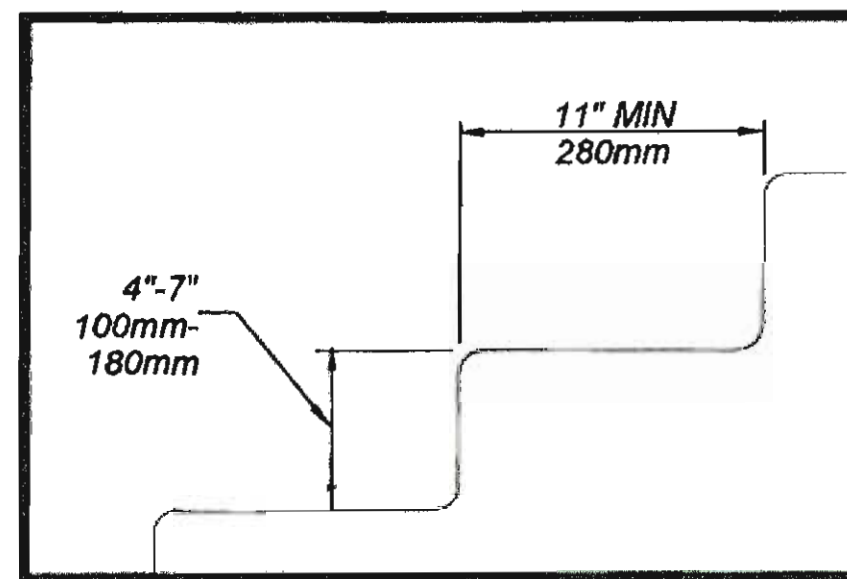
SECTION E-E
SCALE: NONE



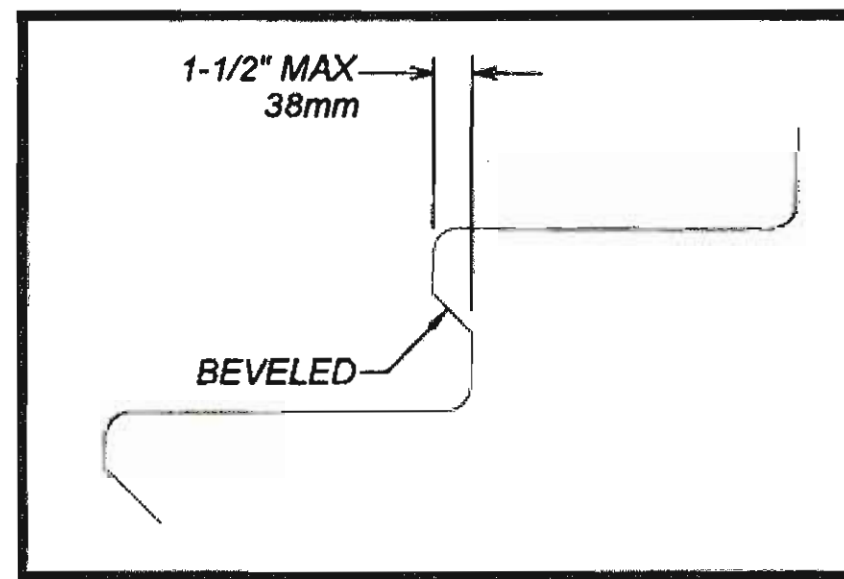
NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
DRIVEWAY APRONS			
APPROVED <i>[Signature]</i> DESIGN ENGINEER			DATE 1-13-15
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STAIRWAY REQUIREMENTS

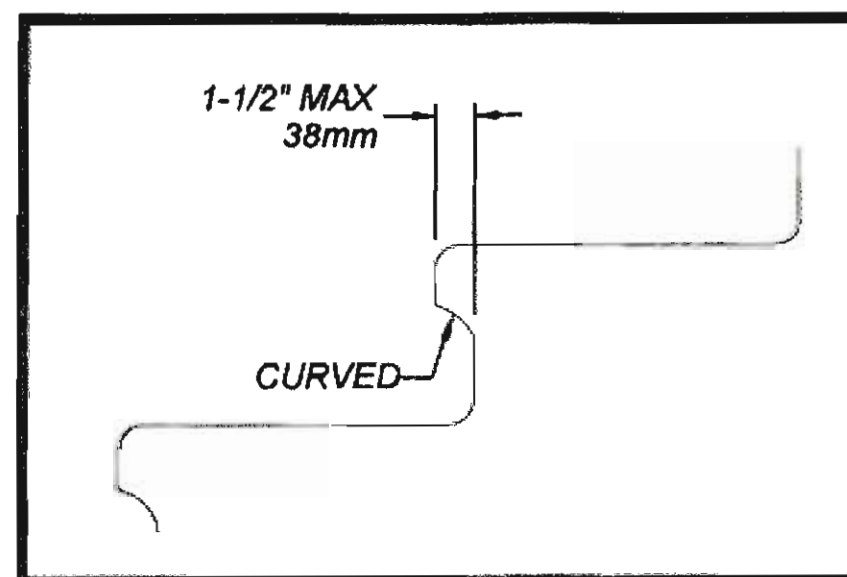
1. STAIRWAYS SHALL BE 4 FT WIDE MINIMUM BETWEEN HANDRAILS.
2. ALL STEPS ON A FLIGHT OF STAIRS SHALL HAVE UNIFORM RISER HEIGHTS AND UNIFORM TREAD DEPTH. RISERS SHALL BE 4 INCHES (100mm) HIGH MINIMUM AND 7 INCHES (180mm) MAXIMUM. TREADS SHALL BE 11 INCHES (280mm) DEEP MINIMUM MEASURED FROM RISER TO RISER.
3. OPEN RISERS SHALL NOT BE PERMITTED.
4. STAIR TREADS SHALL BE STABLE, FIRM, AND SLIP RESISTANT.
5. THE RADIUS OF CURVATURE AT THE LENDING EDGE OF THE TREAD SHALL BE 1/2 INCH (13mm) MAXIMUM. NOSINGS THAT PROJECT BEYOND RISERS SHALL HAVE THE UNDERSIDE OF THE LANDING EDGE CURVED OR BEVELED. RISERS SHALL BE PERMITTED TO SLOPE UNDER THE TREAD AT AN ANGLE OF 30 DEGREES MAXIMUM FROM THE VERTICAL. THE PERMITTED PROJECTION OF THE NOSING SHALL BE 1 INCHES (38mm) MAXIMUM BEYOND THE TREAD BELOW.
6. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS.
7. OUTDOOR STAIRS AND OUTDOOR APPROACHES TO STAIRS SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.



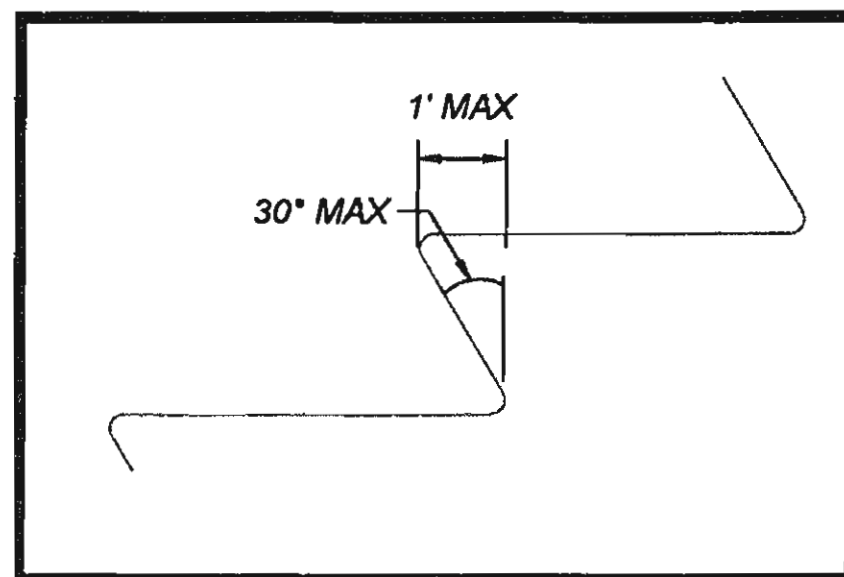
VERTICAL RISER



BEVELED RISER



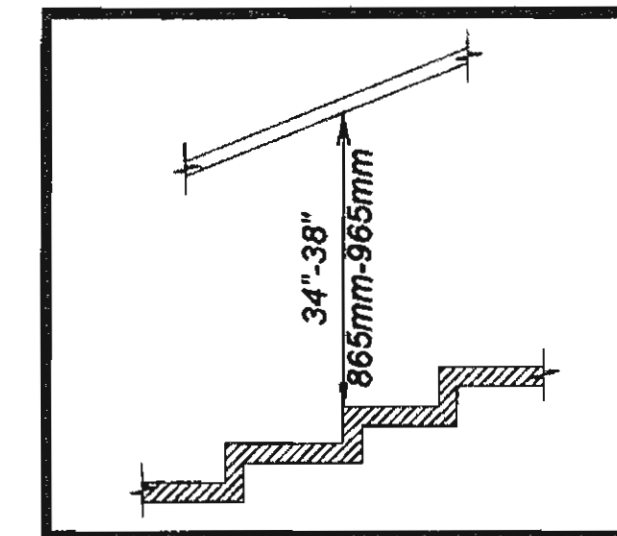
CURVED RISER



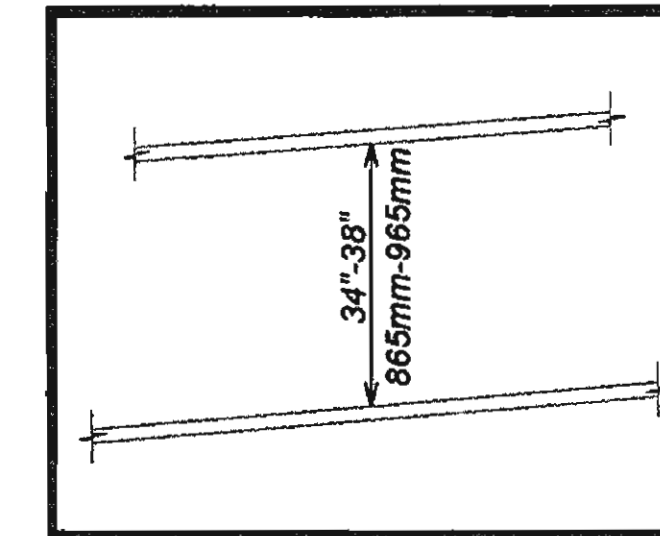
ANGLED RISER

HANDRAIL REQUIREMENTS

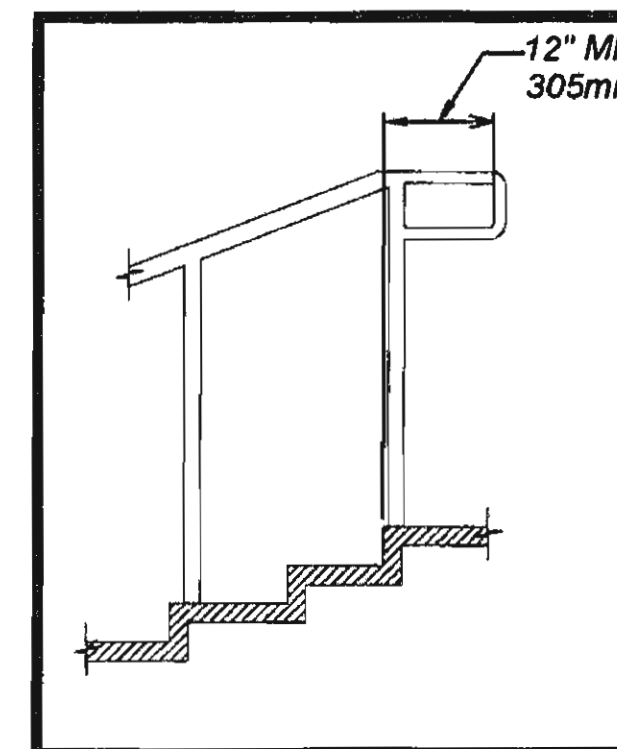
1. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS AND RAMPS.
2. HANDRAILS SHALL BE CONTINUOUS WITHIN THE FULL LENGTH OF EACH STAIR FLIGHT OR RAMP RUN. INSIDE HANDRAILS ON SWITCH BACK OR DOGLEG STAIRS OR RAMPS SHALL BE CONTINUOUS BETWEEN FLIGHTS OR RUNS.
3. TOP GRIPPING SURFACES OF HANDRAILS SHALL BE 34 INCHES (865mm) MINIMUM AND 38 INCHES (965mm) MAXIMUM VERTICALLY ABOVE STAIR NOSINGS AND RAMP SURFACES. HANDRAILS SHALL BE AT A CONSISTENT HEIGHT ABOVE STAIR NOSINGS AND RAMP SURFACES.
4. CLEAR SPACE BETWEEN HANDRAIL AND WALL SHALL BE 1 INCH (38mm) MINIMUM.
5. GRIPPING SURFACES SHALL BE CONTINUOUS WITHOUT INTERRUPTION BY NEW POSTS, OTHER CONSTRUCTION ELEMENTS, OR OBSTRUCTIONS.
EXCEPTION:
HANDRAIL BRACKETS OR BALUSTERS ATTACHED TO THE BOTTOM SURFACE OF THE HANDRAIL SHALL NOT BE CONSIDERED OBSTRUCTIONS PROVIDED THEY COMPLY WITH THE FOLLOWING CRITERIA:
 - A. NOT MORE THAN 20 PERCENT OF THE HANDRAIL LENGTH IS OBSTRUCTED.
 - B. HORIZONTAL PROJECTIONS BEYOND THE SIDES OF THE HANDRAIL OCCUR 2 INCHES (51mm) MINIMUM BELOW THE BOTTOM OF THE HANDRAIL AND
 - C. EDGES HAVE 11 INCH (32mm) MINIMUM RADIUS.
6. HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION WITH AN OUTSIDE DIAMETER OD 1-1/4" or 1.25" INCH (32mm) MINIMUM AND 2 INCH (51mm) MAXIMUM OR SHALL PROVIDE EQUIVALENT GRASPABILITY.
EXCEPTION: HANDRAILS WITH OTHER SHAPES SHALL BE PERMITTED PROVIDED THEY HAVE A PERIMETER DIMENSION OF 4 INCH (100mm) MINIMUM AND A 6.25 INCH (160mm) MAXIMUM AND PROVIDED THEIR LARGEST CROSS SECTION DIMENSION IS 2.25 INCH (57mm) MAXIMUM.
7. HANDRAILS AND ANY WALL OR OTHER SURFACES ADJACENT TO THEM, SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE 1 INCH (32mm) MINIMUM RADIUS.
8. HANDRAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
9. HANDRAILS FOR STAIRS AND RAMPS SHALL HAVE EXTENSIONS.
EXCEPTIONS:
 - A. EXTENSIONS ARE NOT REQUIRED FOR CONTINUOUS HANDRAILS AT THE INSIDE TURN OF STAIRS AND RAMPS
 - B. IN ALTERATIONS FULL EXTENSIONS OF HANDRAILS SHALL NOT BE REQUIRED WHERE SUCH EXTENSIONS WOULD BE HAZARDOUS OR IMPOSSIBLE DUE TO PLAN CONFIGURATION.
10. RAMP HANDRAILS SHALL EXTEND HORIZONTALLY 12 INCHES (305mm) MINIMUM BEYOND OF RAMP RUNS SUCH EXTENSION SHALL RETURN TO WALL GUARD OR THE WALKING SURFACE OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT RAMP RUN.
11. AT THE TOP OF A STAIR FLIGHT HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING FOR 12 INCHES (305mm) MINIMUM BEGINNING DIRECTLY ABOVE THE FIRST RISER NOSING. SUCH EXTENSIONS SHALL RETURN TO A WALL, OR THE WALKING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.
12. AT THE BOTTOM OF THE STAIR FLIGHT HANDRAILS SHALL EXTEND AT THE SLOPE OF THE STAIR FLIGHT FOR A HORIZONTAL DISTANCE AT LEAST EQUAL TO ON TREAD DEPTH BEYOND THE LAST RISER NOSING. EXTENSIONS SHALL RETURN TO A WELL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.



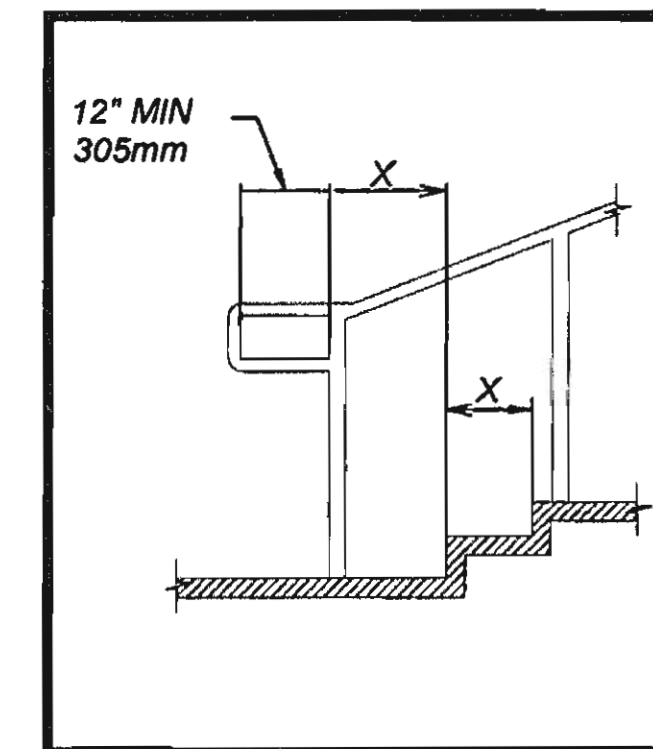
STAIR HANDRAIL HEIGHT



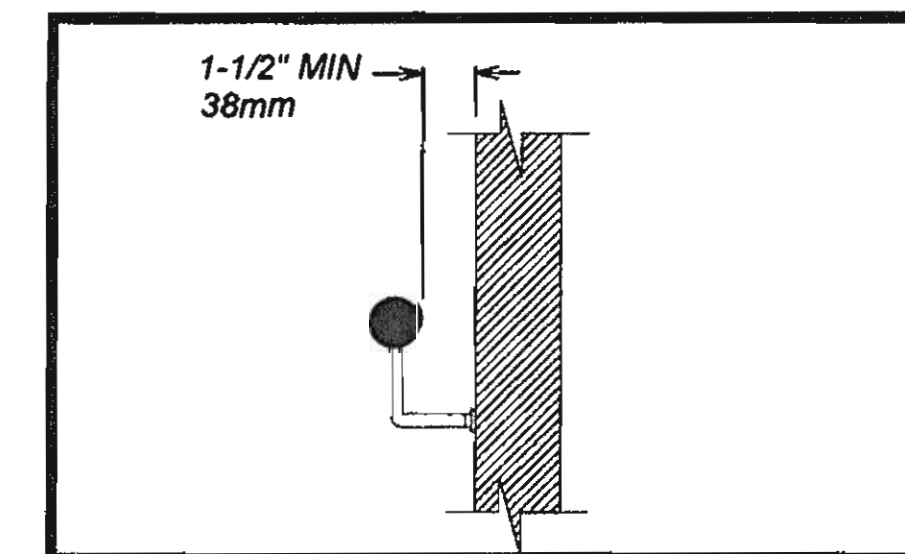
RAMP HANDRAIL HEIGHT



TOP HANDRAIL EXTENSION
AT STAIRS



BOTTOM HANDRAIL EXTENSION
AT STAIRS



HANDRAIL CLEARANCE



NO.	DATE	REV. BY	DESCRIPTION
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NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PEDESTRIAN ACCESS DETAILS STAIRWAY AND HANDRAILS			
APPROVED	DESIGN ENGINEER		DATE 1-13-15
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ACCESSIBLE EXTERIOR ROUTES SHALL BE PROVIDED FROM TRANSPORTATION STOPS, ACCESSIBLE PARKING AND ACCESSIBLE PASSENGER LOADING ZONES AND PUBLIC SIDEWALKS TO THE ACCESSIBLE BUILDING ENTRANCE THEY SERVE. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE BUILDING ENTRANCE OR FACILITY

1. EACH FACILITY SHALL PROVIDE ACCESSIBLE PARKING SPACES IN COMPLIANCE WITH THE FOLLOWING TABLE:

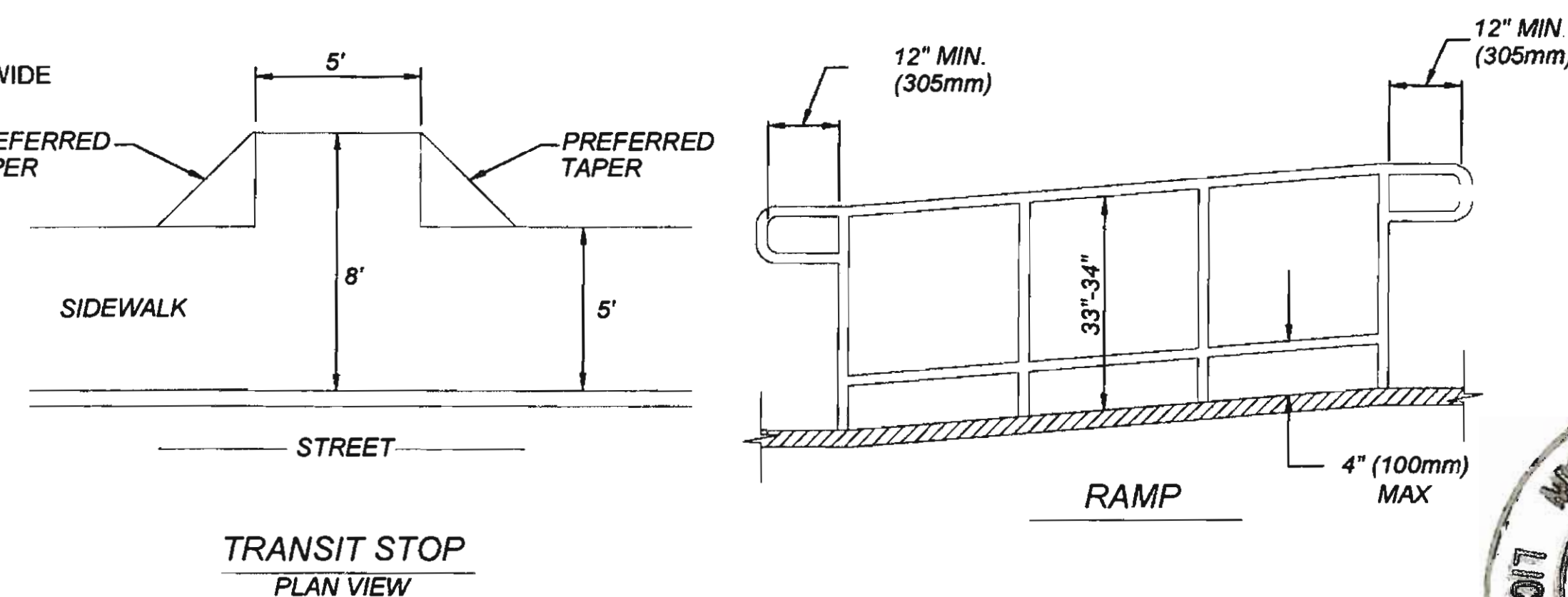
TOTAL PARKING SPACES	TOTAL REQUIRED ACCESSIBLE PARKING SPACES	NUMBER REQUIRED TO BE VAN ACCESSIBLE
1-25	1	1
26-35	2	1
36-50	3	1
51-100	4	1
101-300	8	2
301-500	12	2
501-800	16	3
801-1000	20	4
OVER 1,000	20 SPACES PLUS 1 SPACE FOR EVERY 100 SPACES, OR FRACTION THEREOF, OVER 1,000	1 OF EVERY 6 ACCESSIBLE PARKING SPACES, OR FRACTION THEREOF

-
- DIMENSIONS OF PARKING SPACES**
- SEE NOTE 9
- ACCESSIBLE ROUTE
(ACCESSIBLE ROUTE AND PARKING SPACES SAME ELEVATION)
- 60" WIDE
(1524mm)
ACCESSIBLE
ROUTE
- 24"-36"
(610mm-915mm)
- 96" MIN 96" MIN 96" MIN 132" MIN 132" MIN 96" MIN
2440mm 2440mm 2440mm 3352mm 3352mm 2440mm
- 290' MIN 7320mm
- 60" MIN 1525mm 252' MIN 6400mm
- aisle

1. PASSENGER LOADING ZONES SHALL PROVIDE A 60 INCH (1525mm) WIDE ACCESS AISLE ADJACENT AND PARALLEL TO A VEHICLE PULL-UP SPACE. ACCESS AISLES SHALL BE 20 FEET (6100mm) LONG MINIMUM.
2. ACCESS AISLES SHALL BE PART OF THE ACCESSIBLE ROUTE TO THE BUILDING OR FACILITY ENTRANCE, AND MARKED TO DISCOURAGE PARKING.
3. VEHICLE PULL-UP SPACES IN PASSENGER LOADING ZONES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT STEEPER THAN 50:1. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE VEHICLE PULL-UP SPACE THEY SERVE.
4. VERTICAL CLEARANCE OF 114 INCHES (2895mm) MINIMUM SHALL BE PROVIDED AT PASSENGER LOADING ZONES AND ALONG VEHICLE ACCESS ROUTES TO SUCH AREAS FROM SITE ENTRANCES.
5. EACH ACCESSIBLE PASSENGER LOADING ZONE SHALL BE IDENTIFIED BY A SIGN ON A POST. SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.



1. TRANSIT STOPS SHOULD BE LOCATED SO THAT THERE IS A LEVEL AND STABLE SURFACE FOR BOARDING VEHICLES.
2. LOCATING TRANSIT STOPS AT SIGNALIZED INTERSECTIONS INCREASE THE USABILITY FOR PEDESTRIANS WITH DISABILITIES.
3. WHERE SECURITY BOLLARDS ARE INSTALLED AT TRANSIT STOPS, THEY MUST NOT OBSTRUCT THE CLEAR SPACE AT BOARDING AND ALIGHTING AREAS OR REDUCE THE REQUIRED CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES.
4. TRANSIT STOPS SHALL COMPLY WITH PROWAG SECTION R 308 TRANSIT STOPS AND TRANSIT SHELTERS.



1. RAMP RUNS SHALL HAVE A RUNNING SLOPE GREATER THAN 1:20 AND NOT STEEPER THAN 1:12. THE EXCEPTION SHALL REMAIN AS SHOWN, INCLUDING THE TABLE FOR EXISTING BUILDINGS AND FACILITIES.
2. RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 12:1. EXCEPTION: RAMPS IN OR ON EXISTING BUILDINGS OR FACILITIES SHALL BE PERMITTED TO HAVE SLOPES STEEPER THAN 12:1 AND SHALL COMPLY WITH THE FOLLOWING TABLE WHERE SUCH SLOPES STEEPER THAN 8:1 SHALL NOT BE PERMITTED.

SLOPE	MAXIMUM RISE
STEEPER THAN 10:1 BUT NOT STEEPER THAN 8:1	3 INCHES (75mm)
STEEPER THAN 12:1 BUT NOT STEEPER THAN 10:1	6 INCHES (150mm)

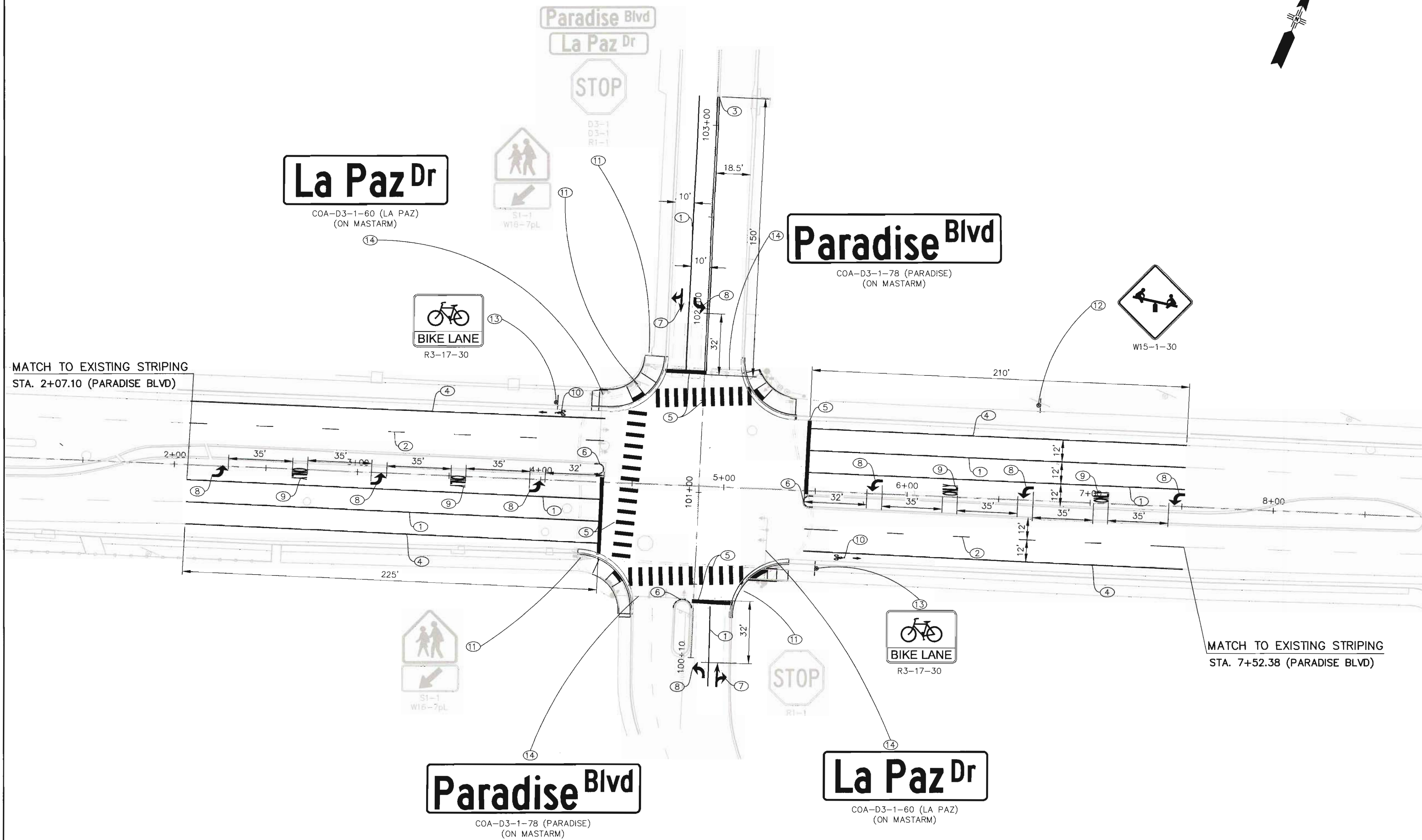
1. CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 50:1.
4. FLOOR OR GROUND SURFACES OF RAMP RUN SHALL BE STABLE, FIRM, AND SLIP RESISTANT.
5. THE CLEAR WIDTH OF A RAMP RUN SHALL BE 48 INCHES (915mm) MINIMUM MEASURED BETWEEN HANDRAILS.
6. THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES (760mm) MAXIMUM.
7. RAMPS SHALL HAVE LANDINGS AT THE BOTTOM AND TOP OF EACH RUN. LANDINGS SHALL COMPLY WITH THE FOLLOWING:
 - A. LANDINGS SHALL HAVE A SOPE NOT STEEPER THAN 50:1.
 - B. CLEAR WIDTH OF LANDINGS SHALL BE AT LEAST AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING.
 - C. LANDING LENGTH SHALL BE 60 INCHES (1525mm) MINIMUM CLEAR.
 - D. RAMPS THAT CHANGE DIRECTION AT LANDINGS SHALL HAVE A 60 INCH BY 60 INCH (1525mm) MINIMUM LANDING.
 - E. WHERE DOORWAYS ARE ADJACENT TO A RAMP LANDING, MANEUVERING CLEARANCES SHALL COMPLY WITH 2010 AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN (2010 ADA) SECTION 404.
8. RAMPS WITH A RISE GREATER THAN 6 INCHES (150mm) SHALL HAVE HANDRAILS. HANDRAILS SHALL NOT REDUCE THE REQUIRED CLEARANCES OF A RAMP RUN OR LANDINGS.
9. EDGE PROTECTION SHALL BE PROVIDED ON EACH SIDE OF RAMP RUNS AND AT EACH SIDE OF RAMP LANDINGS.

EXCEPTIONS:

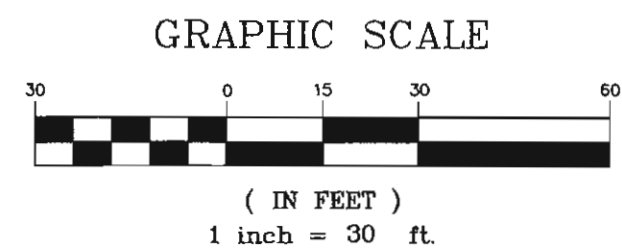
 - A. RAMPS NOT REQUIRED TO HAVE HANDRAILS WHERE SIDE FLARES ARE PROVIDED.
 - B. SIDES OF RAMP LANDINGS SERVING AN ADJOINING RAMP RUN OR STAIRWAY.
 - C. SIDES OF RAMP TURN SPACE HAVING A VERTICAL DROP-OFF OF 1/2 INCH (13mm) MAXIMUM WITHIN 10 INCHES (255mm) HORIZONTALLY OF THE MINIMUM LANDING AREA.
10. EDGE PROTECTION MAY BE PROVIDED BY EXTENDING A FLOOR OR GROUND SURFACE, OF THE RAMP RUN OR LANDING, 12 INCHES (305mm) MINIMUM BEYOND THE INSIDE FACE OF A HANDRAIL OR AN EDGE PROTECTION CURB OR BARRIER SHALL BE PROVIDED THAT PREVENTS THE PASSAGE OF A 4-INCH (100mm) DIAMETER SPHERE BELOW A HEIGHT OF 4 INCHES (100mm).
11. OUTDOOR RAMPS AND APPROACHES TO RAMPS SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.



NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
<p>NEW MEXICO</p> <p>DEPARTMENT OF TRANSPORTATION</p> <p>STANDARD DRAWING</p>			
<p>PEDESTRIAN ACCESS DETAILS PARKING AND PASSENGER LOADING ZONES</p>			
APPROVED	 DESIGN ENGINEER		5-16-13 DATE



- KEYED NOTES:
- ① 4" SOLID WHITE RETROREFLECTORIZED PLASTIC STRIPE.
 - ② 4" DASHED WHITE RETROREFLECTORIZED PLASTIC STRIPE.
 - ③ 4" SOLID DOUBLE YELLOW RETROREFLECTORIZED PLASTIC STRIPE.
 - ④ 6" SOLID WHITE RETROREFLECTORIZED PLASTIC STRIPE.
 - ⑤ 24" SOLID WHITE RETROREFLECTORIZED PLASTIC STRIPE.
 - ⑥ YELLOW RETROREFLECTIVE MEDIAN NOSE.
 - ⑦ REFLECTORIZED PLASTIC MARKING "THRU & RIGHT" ARROW.
 - ⑧ REFLECTORIZED PLASTIC MARKING "LEFT" ARROW.
 - ⑨ REFLECTORIZED PLASTIC MARKING "ONLY".
 - ⑩ REFLECTORIZED PLASTIC MARKING BIKE SYMBOL WITH ARROW (BIKEWAY).
 - ⑪ REMOVE AND SALVAGE EXISTING SIGN AND POST.
 - ⑫ REMOVE, SALVAGE AND REPLACE EXISTING SIGN AND POST.
 - ⑬ NEW SIGN AND POST.
 - ⑭ NEW SIGN, MOUNT ON MASTARM.



CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION
PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL

PERMANENT SIGNING AND STRIPING PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.

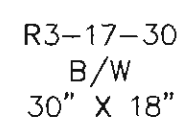
DESIGNED BY: SEA, KVC	DATE 12/20/16
DRAWN BY: SEA, KVC	DATE 12/20/16
CHECKED BY: PFS	DATE 12/20/16

City Project No.	Zone Map No.	Sheet
9045.04	B10	5-2

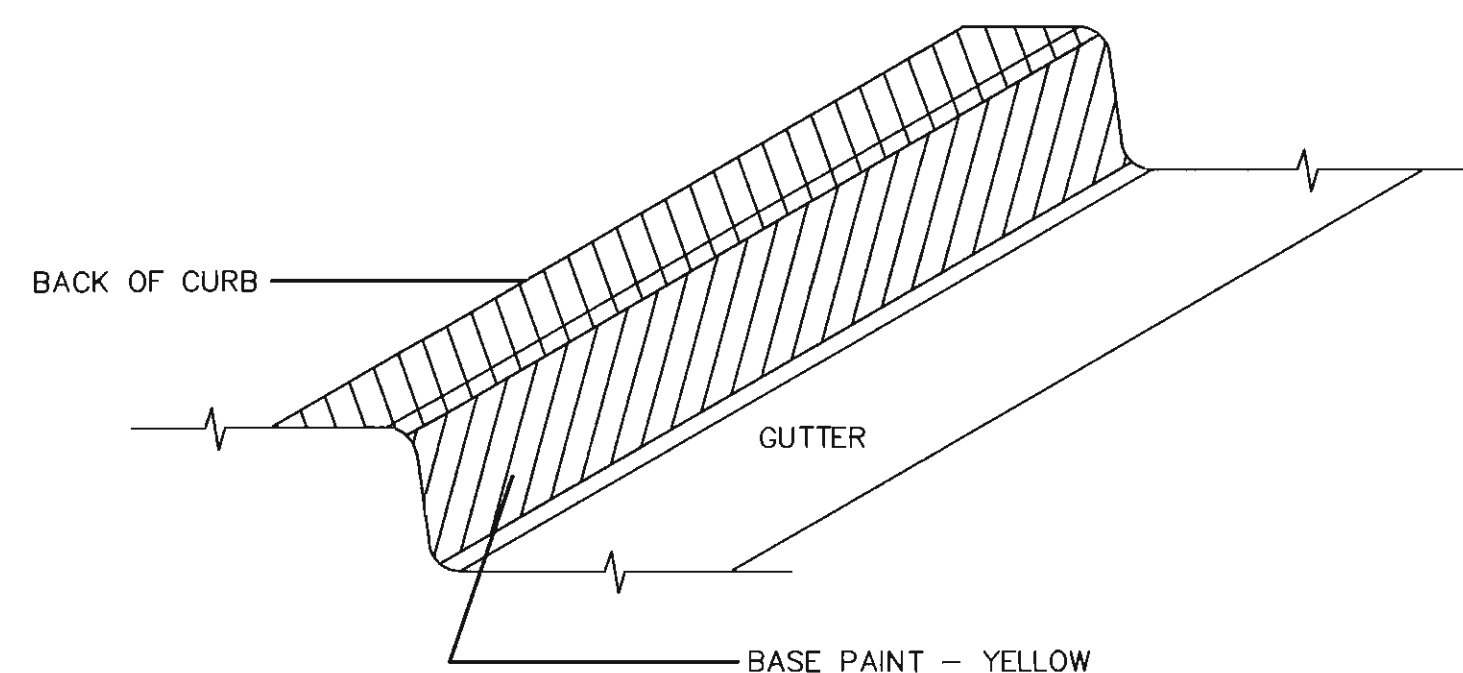
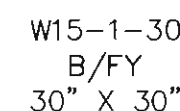
ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION					
	NO.	FIELD NOTES		CONTRACTOR	WORK	DATE	DATE				
		BY	DATE								
						MICRO-FILM INFORMATION					
						RECORDED BY	DATE				
						NO.					
						NAVD 88 ELEV. = 5346.5					

J:\33739 CoA On-Call 2016\03 Task Orders\Task 04 - Paradise-La Paz\04 Engineering - PCN\Plane\7_Sheets\Signing and Striping Plans.dwg Jan 05, 2017 - 3:20pm Saved by: chavez

COA-D3-1(PARADISE)
W/G
78" X 18"



COA-D3-1 (LA PAZ)
W/G
60" X 18"



NOTE:

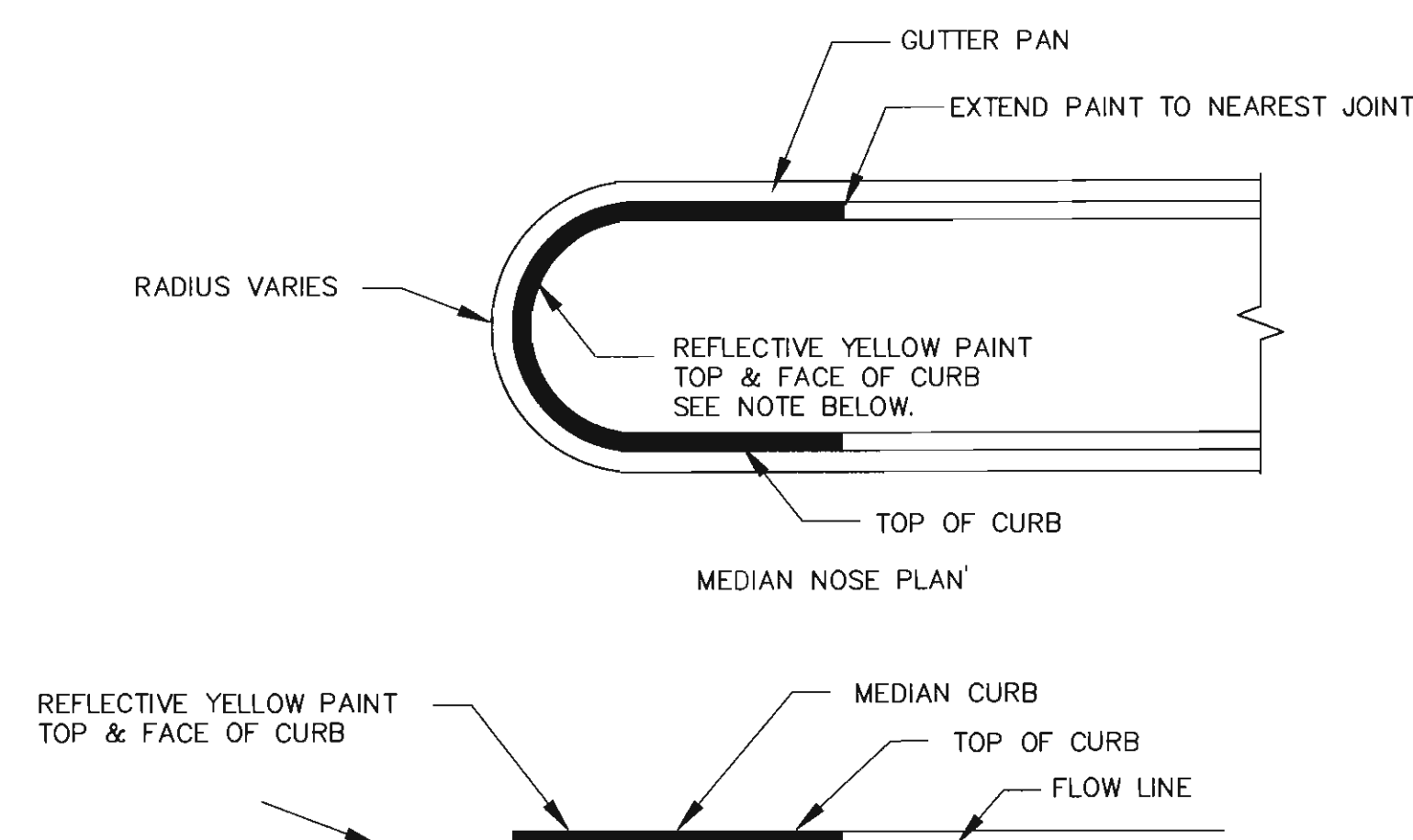
CURB PAINTING BASE:

SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE FOR TRAFFIC LINE PAINTS USED ON CONSTRUCTION PROJECTS.

(COMBINATION ALKYD AND HYPALON – FAST DRY TYPE)

PAINTED SURFACES SHALL INCLUDE THE FULL TOP OF CURB AND FACE OF CURB WITH NEAT FINISHED LINES, ALONG ALL SIDES





PAINTED CURB MARKING DETAIL

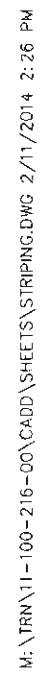
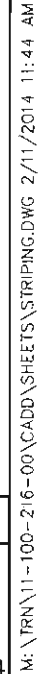






CURB MARKING TYPICAL DETAIL

NOTE:
TOP AND FACE OF MEDIAN CURB SHALL BE PAINTED WITH REFLECTIVE YELLOW PAINT FROM NOSE BACK 5' OR TO THE P.C., WHICH EVER IS GREATER.

SIGN AND POST SCHEDULE									
SIGN CODE	NO. OF SIGNS	SIGN AREA (SQ. FT.)	TOTAL SIGN AREA (SQ. FT.)	POST LENGTHS				BASE POSTS	
				LEFT	CTR.	RIGHT	TOTAL	NO.	TOTAL LENGTH
R3-17-30	2	4	8		9		18	2	7
D3-1-78 (PARADISE-OVERHEAD)	2	10	20		*		*	*	*
D3-1-60 (LA PAZ-OVERHEAD)	2	8	15		*		*	*	*
W15-1-30	1	6	6		10		10	1	4
TOTAL	7		48				28		11
USE			50						40
* NO ADDITIONAL POST NEEDED (SIGN TO BE MOUNTED ON POST WITH ANOTHER SIGN)									

	WSP	PARSONS BRINCKERHOFF							NO.	DESIGN	DRAWN
	CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION										
PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL											
PERMANENT SIGNING AND STRIPING DETAILS											
DESIGN REVIEW COMMITTEE			CITY ENGINEER APPROVAL			MO./DAY/YR.			MO./DAY/YR.		
											
City Project No.			Zone Map No.			Sheet					
9045.04			B10						5-3		



	WSP	PARSONS BRINCKERHOFF							NO.		DESIGN	DRAWN	CHECKED
	CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION												
PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL CITY OF ALBUQUERQUE STANDARD SIGNING & STRIPING DETAILS (2900)													
DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		MO./DAY/YR.		MO./DAY/YR.							
													
DESIGN REVIEW COMMITTEE		CITY ENGINEER											
City Project No. 9045.04				Zone Map No. B10		Sheet		5-4					

R1-1
R/W

Stop Sign Standards			
Street Type	Speed Limit	Letter Height	Sign Size
Single lane	40 MPH or less	10 in.	30 in.
Multi-lane	45 MPH or more	12 in.	36 in.

R1-3F
R/W

1. ALL DIMENSIONS SHOWN IN INCHES.
2. 'STOP' SIGNS (R1-1) SHALL BE AN OCTAGON WITH A WHITE LEGEND AND BORDER ON A RED BACKGROUND.
3. WHEN IT IS DETERMINED THAT A FULL STOP IS REQUIRED ON AN APPROACH TO AN INTERSECTION, A 'STOP' SIGN (R1-1) SHALL BE USED.
4. WHERE SIDE ROADS INTERSECT A MULTI-LANE STREET OR HIGHWAY THAT HAS A SPEED LIMIT OF 45 MPH OR HIGHER, THE MINIMUM SIZE OF THE STOP SIGNS FACING THE SIDE ROAD APPROACHES, EVEN IF THE SIDE ROAD IS A ONE LANE APPROACH, SHALL BE 36 X 36 INCHES.
5. WHERE SIDE ROADS INTERSECT A MULTI-LANE STREET OR HIGHWAY THAT HAS A SPEED LIMIT OF 40 MPH OR LOWER, THE MINIMUM SIZE OF THE STOP SIGN FACING THE SIDE ROAD APPROACHES SHALL BE AS SHOWN IN THE TABLE GIVEN, BASED ON THE NUMBER OF APPROACH LANES ON THE SIDE STREET APPROACH.
6. SECONDARY LEGENDS SHALL NOT BE USED ON 'STOP' SIGN FACES.
7. AT INTERSECTIONS WHERE ALL APPROACHES ARE CONTROLLED BY 'STOP' SIGNS, AN 'ALL WAY' SUPPLEMENTAL PLAQUE (R1-3P) SHALL BE MOUNTED BELOW EACH 'STOP' SIGN. THE 'ALL WAY' PLAQUE SHALL HAVE A WHITE LEGEND AND BORDER ON A RED BACKGROUND.
8. THE 'ALL WAY' (R1-3P) PLAQUE SHALL ONLY BE USED IF ALL INTERSECTION APPROACHES ARE CONTROLLED BY 'STOP' SIGNS.
9. SUPPLEMENTAL PLAQUES WITH LEGENDS SUCH AS '2-WAY', '3-WAY', '4-WAY', OR OTHER NUMBERS OF WAYS SHALL NOT BE USED WITH 'STOP' SIGNS.
10. THE 'CROSS TRAFFIC DOES NOT STOP' (W4-4P) PLAQUE MAY BE USED IN COMBINATION WITH A STOP SIGN WHEN ENGINEERING JUDGEMENT INDICATES THAT CONDITIONS ARE PRESENT THAT ARE CAUSING OR COULD CAUSE DRIVERS TO MISINTERPRET THE INTERSECTION AS AN ALL-WAY STOP.
11. IF A R1-3P OR W4-4P PLAQUE IS USED, IT SHALL BE MOUNTED BELOW THE STOP SIGN.
12. WHEN STREET NAME SIGNS ARE USED, THEY SHALL BE MOUNTED ON TOP OF THE STOP SIGN. MOUNT LARGER HEIGHT STREET NAME SIGN ABOVE SMALLER HEIGHT STREET NAME SIGN. SIGN READ BY THE VEHICLES TRAVELING ON THE ARTERIAL/COLLECTOR ROADWAY SHALL OR 12" IN HEIGHT PER STANDARD DRAWING 2900-606. SIGN READ BY THE VEHICLES TRAVELING ON THE NON-ARTERIAL/LOCAL ROADWAY SHALL BE 10" IN HEIGHT PER STANDARD DRAWING 2900-606. SEE EXAMPLE SHOWN BELOW.

REVISIONS	CITY OF ALBUQUERQUE
	SIGN FACE DETAILS
	REGULATORY SIGN
	DETAILS
	DWG. 2900-601 FEBRUARY 2014



OVERHEAD MAST ARM SIGN AT SIGNALIZED INTERSECTIONS

NOTE: USE FOR INTERNALLY ILLUMINATED STREET NAME SIGNS

ARTERIAL/COLLECTOR ROADWAY SIGN

NON-ARTERIAL ROADWAY SIGN

NOTE: USE FOR RESIDENTIAL STREET NAME SIGNS

Street Name Standards					
Mounting Type	Street Type	Speed Limit	Letter Height		Plate Size
			Upper Case	Lower Case	
Overhead	All types	All speeds	12 in.	9 in.	18 in. *
Post-mounted	Multi-lane	More than 45 MPH	8 in.	6 in.	10 in.
Post-mounted	All types	45 MPH or less	6 in.	4.5 in.	8 in.

*EXCEPT WHEN AN OVERHEAD SIGN WITH TWO DIFFERENT STREET NAME SIGNS IS USED. SEE STANDARD DRAWING 2900-607 FOR FURTHER DETAILS.

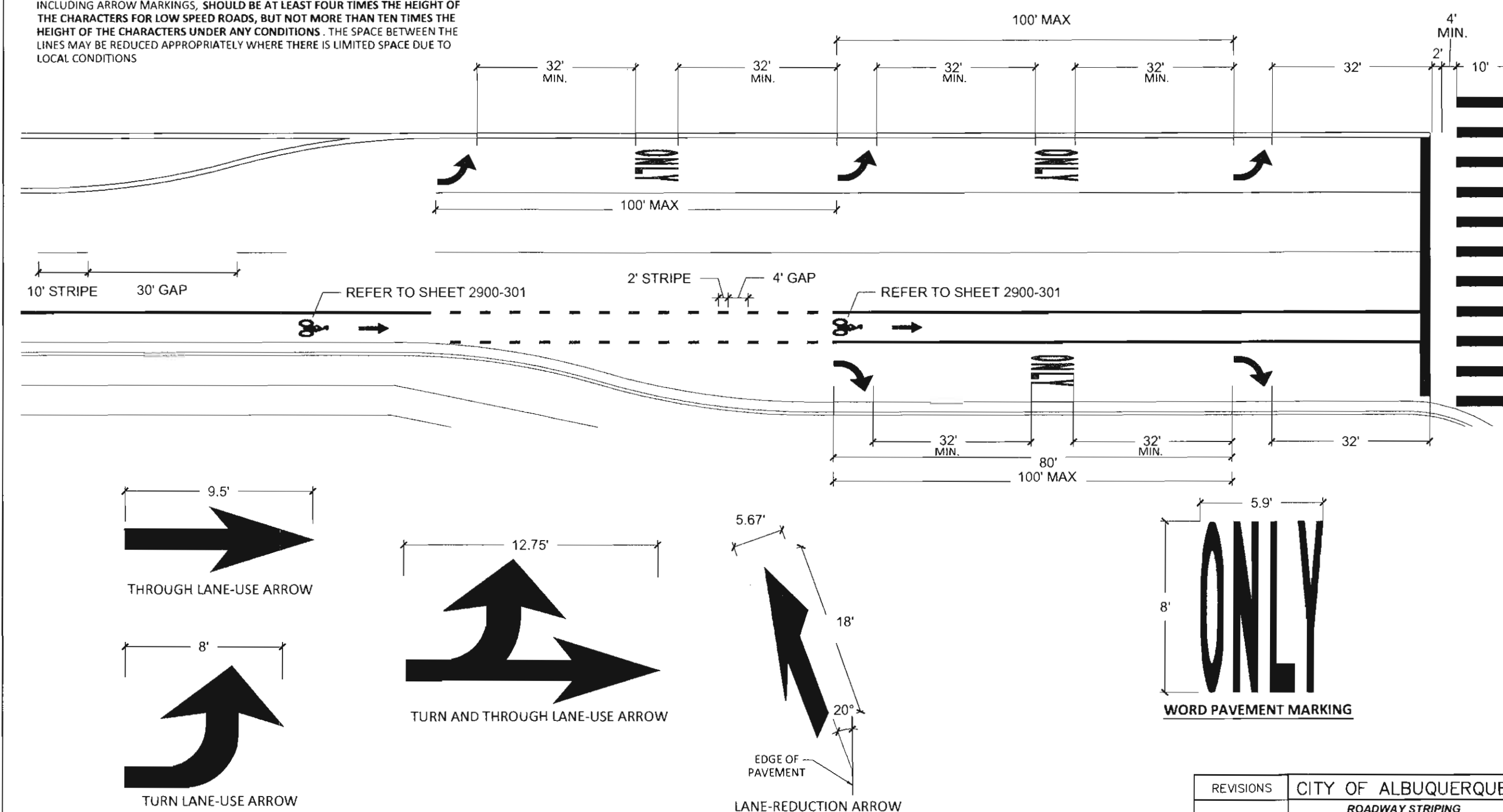
GENERAL NOTES:

1. THE LETTERING FOR NAMES OF STREETS AND HIGHWAYS ON STREET NAME SIGNS SHALL BE COMPOSED OF A COMBINATION OF LOWER-CASE LETTERS WITH INITIAL UPPER-Case LETTERS.
2. A MINIMUM OF 6" LETTER HEIGHT FOR LETTERING ON POST MOUNTED STREET NAME SIGNS SHALL BE USED.
3. A MINIMUM OF 8" LETTER HEIGHT FOR LETTERING ON POST MOUNTED STREET NAME SIGNS ON MULTI-LANE STREETS WITH SPEED LIMITS GREATER THAN 40 MPH SHALL BE USED.
4. A MINIMUM OF 12" LETTER HEIGHT FOR LETTERING ON OVERHEAD STREET NAME SIGNS SHALL BE USED.
5. STREET NAME SIGNS (D3-1 SERIES) SHALL BE RETROREFLECTIVE (TYPE XI) OR INTERNALLY ILLUMINATED TO SHOW THE SAME SHAPE AND SIMILAR COLOR BOTH DAY AND NIGHT. THE COLOR OF THE LEGEND AND BORDER SHALL BE WHITE REGARDLESS OF BACKGROUND COLOR OF THE SIGN.
6. AN ALTERNATIVE BACKGROUND COLOR OTHER THAN THE NORMAL GUIDE SIGN COLOR OF GREEN MAY BE USED FOR STREET NAME SIGNS WHERE THE AGENCY DETERMINES THIS IS NECESSARY. THE ONLY ACCEPTABLE BACKGROUND COLORS SHALL BE BLUE, BROWN, OR WHITE. IF A WHITE BACKGROUND IS USED, THE LEGEND AND BORDER SHALL BE BLACK.
7. SIGNS TO BE SIZED IN 6" INCREMENTS FOR WIDTH.
8. SHIRT LETTERING UPWARD AS NEEDED WHEN LETTERS WITH A TAIL ARE USED AS SHOWN WITH WYOMING BLVD.
9. PUNCTUATION MARKS SUCH AS PERIODS, COMMAS, ETC. SHALL NOT BE USED.
10. ALL STREET NAME SIGNS SHALL USE "HWY C" FONT, SIGNS WITH 3-LETTERS OR LESS AND ALL #/S USE "HWY D" FONT. ANY SIGN GREATER THAN 8-FEET IN WIDTH SHALL USE "HWY B" FONT.

REVISIONS	CITY OF ALBUQUERQUE
	SIGN FACE DETAILS
	STREET NAME SIGN
	DETAILS
	DWG. 2900-606 FEBRUARY 201

PAVEMENT MARKING DETAILS - TURN BAY

1. FOR TURN BAYS LESS THAN 100' IN LENGTH, APPLY JUST ONE (1) ARROW.
2. FOR TURN BAY'S 100' OR GREATER IN LENGTH, APPLY ADDITIONAL ARROWS AS SHOWN.
3. THE LONGITUDINAL SPACE BETWEEN WORD OR SYMBOL MESSAGE MARKINGS , INCLUDING ARROW MARKINGS, SHOULD BE AT LEAST FOUR TIMES THE HEIGHT OF THE CHARACTERS FOR LONG ROAD BAYS, BUT NOT MORE THAN TEN TIMES THE HEIGHT OF THE CHARACTERS UNDER ANY CONDITIONS. THE SPACE BETWEEN LINES MAY BE REDUCED APPROPRIATELY WHERE THERE IS LIMITED SPACE DUE TO LOCAL CONDITIONS.



REVISIONS	CITY OF ALBUQUERQUE
	ROADWAY STRIPING
	TURN BAY & PAVEMENT
	MARKING DETAILS
	DWG. 2900-105 FEBRUARY 201



CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION
PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL
CITY OF ALBUQUERQUE STANDARD
SIGNING & STRIPING DETAILS (2900)

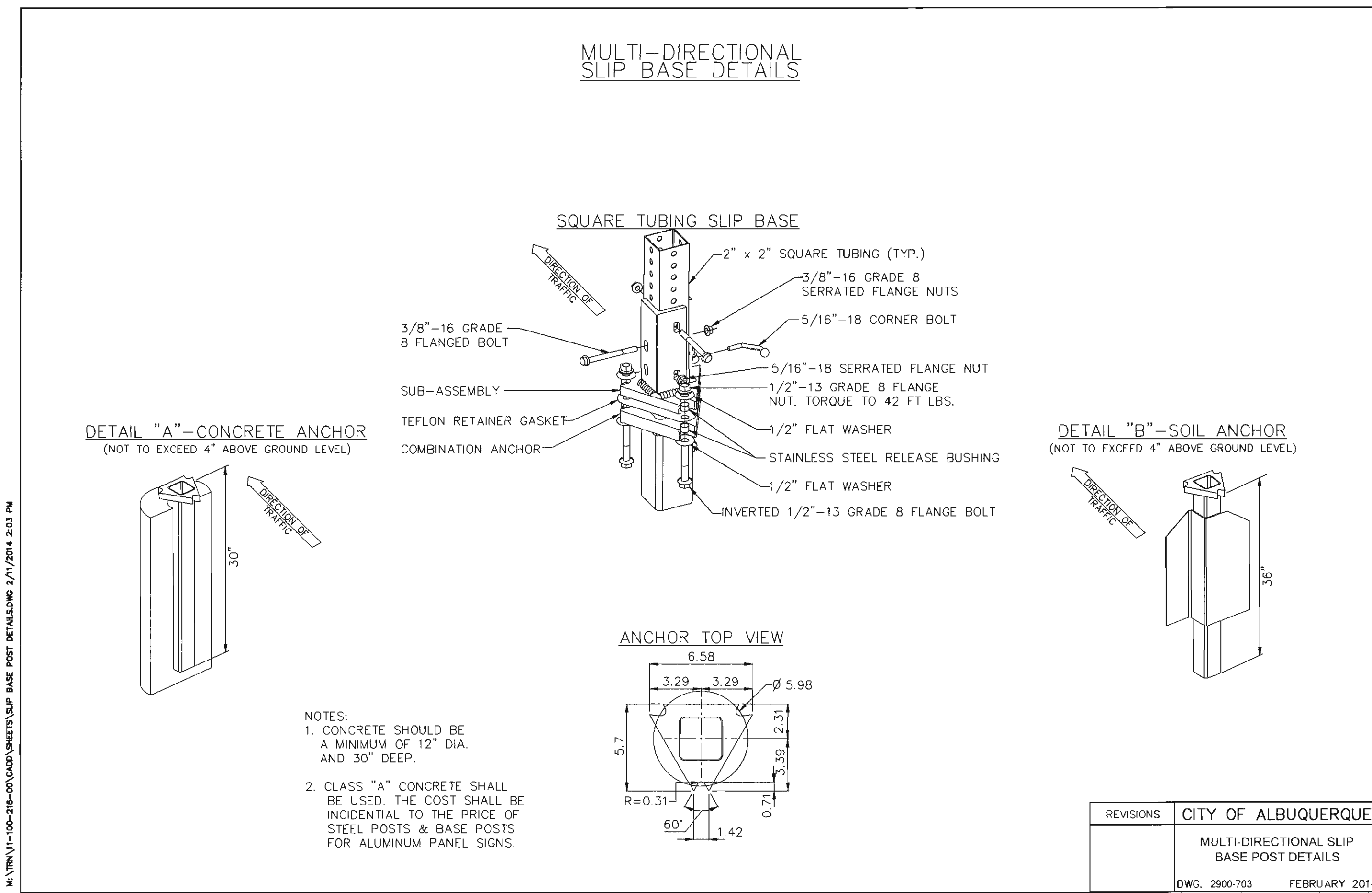
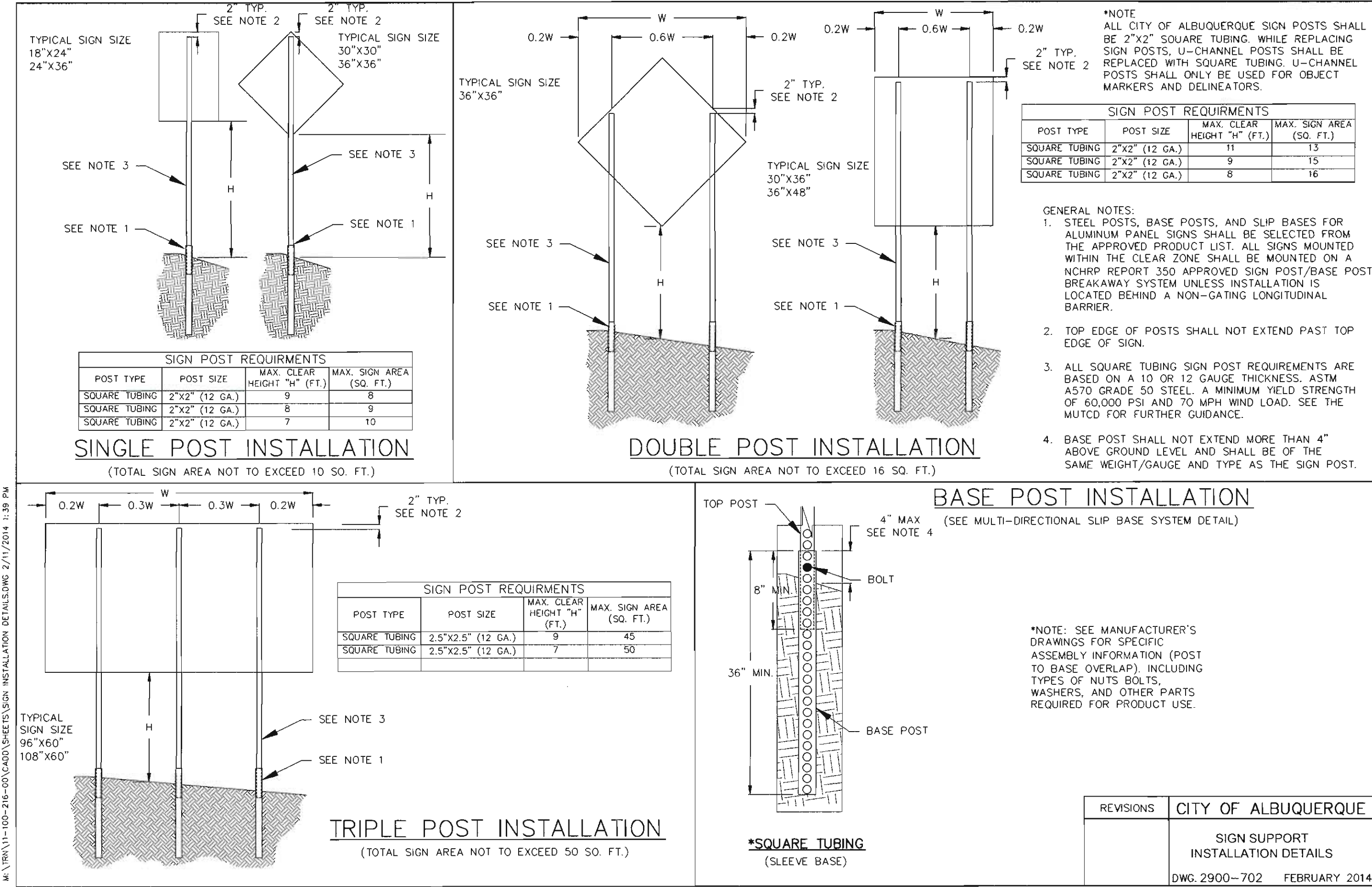
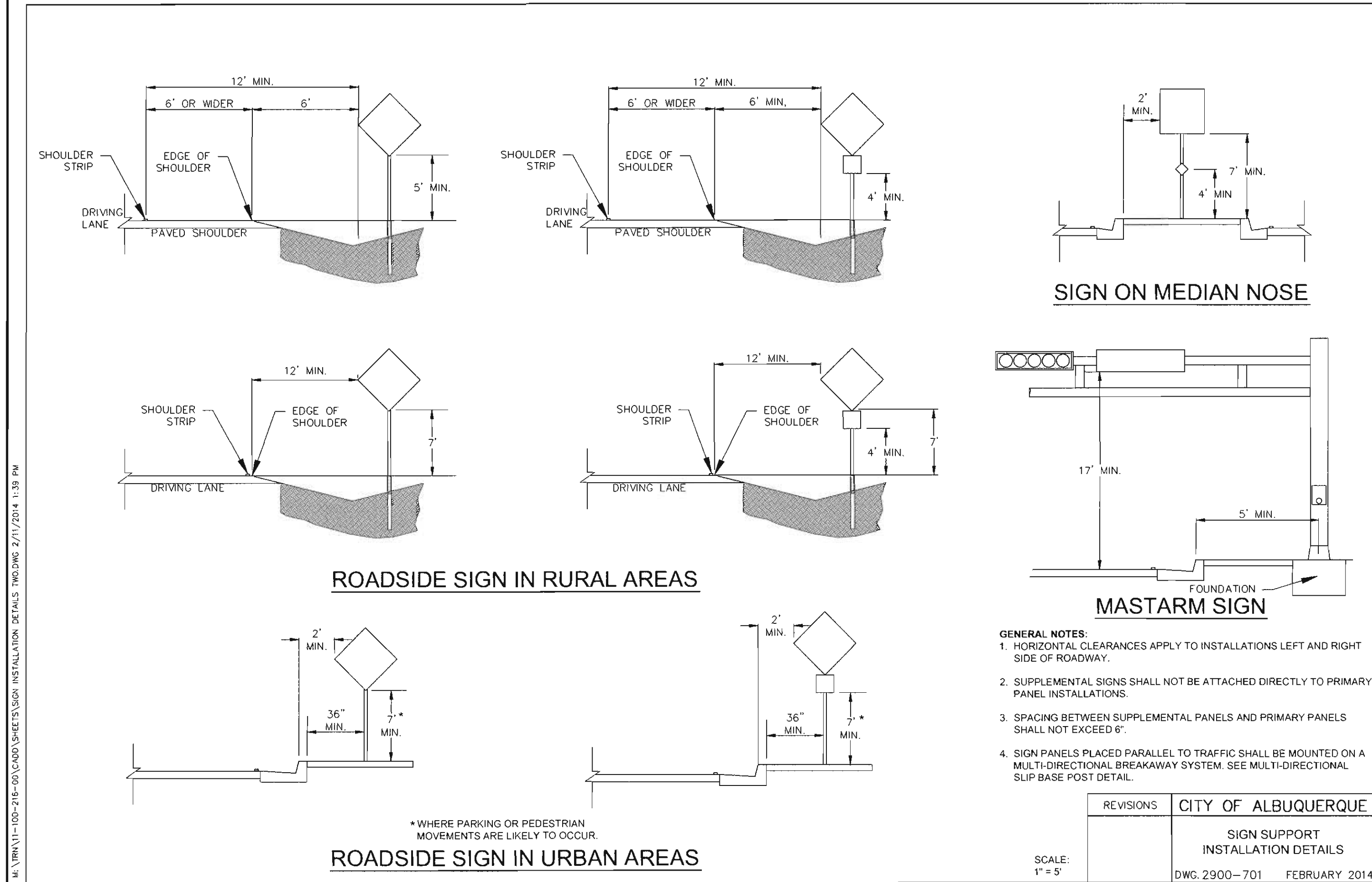


City Project No
9045.04

Zone Map No.
B10

Sheet
5-5

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WSP PARSONS BRINCKERHOFF

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION
PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL
CITY OF ALBUQUERQUE STANDARD
SIGNING & STRIPING DETAILS (2900)

DESIGN REVIEW COMMITTEE
APPROVED
JAN 30 2017

CITY ENGINEER APPROVAL
APPROVED
JAN 31 2017

City Project No. 9045.04 Zone Map No. B10 Sheet 5-6

1. THE CONTRACTOR SHALL CONTACT THE CITY OF ALBUQUERQUE FOR APPROVED PRODUCTS LISTING FOR TRAFFIC SIGNAL COMPONENTS.
2. LOCATIONS OF CONDUITS, FOUNDATIONS, CONTROL CABINETS, POLES, PULL BOXES, MANHOLES, AND SPLICE CABINETS SHOWN ON THE PLANS ARE SCHEMATIC AND SHALL BE AVAILABLE FOR PEDESTRIANS AND WHEELCHAIRS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CONTRACTOR SHALL MEET WITH THE PROJECT MANAGER IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK. ALL SUCH EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY.
3. THE CONTRACTOR IS WARNED THAT EXISTING CONDUITS MAY CONTAIN AC POWER AND CAUTION SHALL BE EXERCISED IN INTERCEPTING OR INSTALLING CABLE IN EXISTING CONDUIT.
4. MASTARMS SHALL BE PLACED 90° TO THE CENTERLINE UNLESS OTHERWISE NOTED.
5. SPLICING OF OPTICAL DETECTOR AND VIDEO CABLE WILL NOT BE PERMITTED FROM THE OPTICAL DETECTOR OR VIDEO CAMERA TO THE CONTROLLER CABINET.
6. ALL OPTICAL DETECTOR CABLES AND VIDEO CABLE SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH BY DIRECTION AND LOCATION.
7. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE FIVE (5) WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON SIGNALS, LIGHTING, AND POWER SERVICES. TRAFFIC ENGINEERING PERSONNEL MUST BE PRESENT WHEN SIGNALS ARE SHUT OFF OR TURNED ON. THE CONTRACTOR SHALL ALSO NOTIFY THE LOCAL MAINTAINING AGENCY EACH TIME A TRAFFIC SIGNAL CONTROL DOOR IS OPENED. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TWO (2) WEEKS PRIOR TO TURNING ON NEW SIGNALS.
8. THE CONTRACTOR SHALL NOTIFY PNM THIRTY (30) DAYS IN ADVANCE OF ANTICIPATED POWER SERVICE CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WITH PNM TO ESTABLISH ELECTRICAL SERVICE IN THE CITY OF ALBUQUERQUE'S NAME. THE CONTRACTOR SHALL PAY PNM ALL COSTS TO PROVIDE ELECTRICAL SERVICE. THIS WORK WILL BE PAID THROUGH ITEM #421.015, SERVICE CONNECTION.
9. THE CONTRACTOR SHALL REMOVE ALL CONFLICTING SIGNING AND DELIVER TO THE COA WHEN TRAFFIC SIGNALS ARE PUT INTO OPERATION.
10. FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATION CABLES, THE REQUIREMENTS FOR SINGLE CONDUCTOR COPPER #6 AWG MAY BE WAIVED WHERE PERMITTED BY THE NATIONAL ELECTRIC CODE.
11. EXISTING CONDUITS TO BE REMOVED OR ABANDONED SHALL HAVE ALL WIRING REMOVED.
12. THE CONTRACTOR SHALL ARRANGE TO HAVE OFF-DUTY POLICE OFFICERS TO DIRECT TRAFFIC WHEN NEW SIGNALS ARE PLACED INTO OPERATION OR WHEN EXISTING SIGNALS ARE TEMPORARILY SHUT OFF. SIGNAL LAB WILL NOT DO THE INITIAL INSPECTION WITHOUT POLICE PRESENCE. OFF-DUTY POLICE OFFICERS FOR TRAFFIC CONTROL WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
13. THE CONTRACTOR SHALL FURNISH FOUNDATION ELEVATIONS TO THE PROJECT MANAGER FOR APPROVAL BEFORE INSTALLATION. THE CONTRACTOR SHALL GRADE AROUND THE FOUNDATIONS TO PROVIDE TRAVERSABLE SLOPES AS DIRECTED BY THE PROJECT MANAGER. THE CONTRACTOR SHALL SUBMIT CROSS-SECTIONS FOR APPROVAL BASED ON ACTUAL FIELD ELEVATIONS. ALL EXCAVATION AND/OR EMBANKMENT REQUIRED WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
14. ALL CONDUIT SHALL BE BORED.
15. ALL NEW SIGNAL CONSTRUCTION SHALL BE ADA COMPLIANT INCLUDING LOCATION OF MASTARMS, PEDESTAL POLES, AND PUSH BUTTONS.
16. SIGNAL HEADS SHALL BE COVERED WHEN NECESSARY WITH AN APPROVED BLACK NON-TRANSPARENT SIGNAL COVER.
17. THE CONTRACTOR IS HEREBY ADVISED THAT THE INTERSECTION SIGNALS SHALL NOT BE TURNED ON UNTIL THE SIGNAL IS COMPLETELY INSTALLED, INCLUDING FULLY ACTUATED OPERATION (PRE-EMPTION, AND ALL PUSH BUTTON WIRING SHALL BE OPERATIONAL).
18. THE CONTRACTOR SHALL INSTALL ALL POLE MOUNT TRAFFIC SIGNALS AND PEDESTRIAN SIGNALS ON THE BACKSIDE OF THE POLE IN REFERENCE TO THE ROAD IN ORDER TO AVOID TRUCK TURNING TRAFFIC.
19. ALL SIGNAL CONSTRUCTION PLANS SHALL BE REVIEWED AND APPROVED BY THE COA PRIOR TO LETTING.
20. CAP UNUSED WIRING.
21. ALL MASTARMS SHALL BE STEEL.
22. ALL CONDUIT INSTALLED IN A TRENCH SHALL BE FLAGGED WITH CAUTION TAPE ONE FOOT ABOVE THE CONDUIT. CAUTION TAPE SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
23. THE CONTRACTOR SHALL ENSURE THAT ALL MASTARM SIGNAL HEADS ARE LOCATED AS NEAR AS POSSIBLE TO THE CENTER OF THE LANE SERVED. ALL VERTICAL POLE MOUNTED DISPLAYS SHALL BE DIRECTED TOWARD THE LANE(S) SERVED.
24. ALL STREET NAME SIGNS SHALL BE INSTALLED WITH THE TRAILING EDGE OF THE SIGN ALIGNED WITH THE FACE OF CURB, OR AS CLOSE AS POSSIBLE.
25. ALL VEHICLE DISPLAYS SHALL BE LED TYPE APPROVED BY THE CITY OF ALBUQUERQUE.

1. THIS PROJECT IS A NEW SIGNAL SYSTEM. THEREFORE THE CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING:
 - A. ALL NEW TRAFFIC SIGNAL CONTROLLERS ON THIS PROJECT SHALL BE ECONOLITE ASC-3, TS1/NTCIP ACTUATED CONTROLLER AS DIRECTED BY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING DEPARTMENT.
 - B. ALL EIGHT PHASE DUAL RING CONTROLLER CABINETS SUPPLIED FOR THIS PROJECT SHALL BE TS-1, "P" SIZE CABINETS WIRED FOR FULL EIGHT PHASE SYSTEM OPERATION, TELEMETRY BOARDS, "IT" TRANSIENT VOLTAGE SURGE SUPPRESSOR AND ALL CONNECTING HARNESSES. THESE CABINETS SHALL BE CAPABLE OF LOOP DETECTION.
2. EMERGENCY VEHICLE PRE-EMPT EQUIPMENT SHALL BE 3M "OPTICOM" MODEL 762 (OR MOST CURRENT ACCEPTABLE MODEL). PHASE SELECTORS MOUNTED ON 3M OPTICOM MODEL 760 RACKS, OR APPROVED EQUAL. ALL RACKS SHALL BE CAPABLE OF PROVIDING FOUR CHANNELS OF DETECTION. PHASE SELECTOR MODULES SHALL BE CAPABLE OF TWO CHANNELS OF DETECTION EACH. A MANUFACTURERS REPRESENTATIVE SHALL ASSIST THE CONTRACTOR IN THE PRE-EMPTION AS WORK PROGRESSES TO COMPLETE THE INSTALLATION OF ALL PRE-EMPTION EQUIPMENT AND TO ASSIST IN SETTING UP, TURNING ON, PROGRAMMING AND FIELD TESTING PREEMPTION EQUIPMENT INCLUDING EMITTERS TO INSURE THAT THE EQUIPMENT IS OPERATIONAL.

1. CABLE TESTING AND DIAGRAMS.
2. BORING, DRILLING, PUSHING, AND TRENCHING, INCLUDING REMOVAL AND REPLACEMENT OF PAVEMENT, SIDEWALKS, DRIVEPADS, VALLEY GUTTERS, WHEELCHAIR RAMPS, AND CURB AND GUTTER FOR INSTALLATION OF PULL BOXES, CONDUITS, AND SIGNAL FOUNDATIONS, EXCEPT AS NOTED ON THE PLANS.
3. LOCATION OF UTILITY LINES INCLUDING EXPLORATORY TRENCHING AND EXPOSING OF GAS LINES WHEN BORING.
4. DESIGN, MATERIALS, INSTALLATION AND REMOVAL OF SAFETY BARRIER FOR SHIELDING EQUIPMENT OR MATERIAL.
5. APPRISING PUBLIC THROUGH THE LOCAL NEWS MEDIA.
6. LEAN FILL FOR CONDUIT TRENCHES.
7. REMOVAL AND REPLACEMENT IN KIND OR BETTER OF LANDSCAPING INCLUDING SPRINKLERS, FOR INSTALLATION OF PULL BOXES, CONDUITS AND SIGNAL FOUNDATIONS.
8. ITEMS LISTED ARE ONLY A GENERAL DESCRIPTION OF THE REQUIRED WORK AND MATERIALS, AND MAY NOT BE COMPLETE. THIS LIST DOES NOT INCLUDE ANY INCIDENTAL WORK OR MATERIALS REQUIRED BY THE SPECIAL PROVISIONS SERIALS (STANDARD DETAILS), SUPPLEMENTAL SPECIFICATIONS, OR THE STANDARD SPECIFICATIONS.
9. LOCATOR WIRES INSTALLED WITH FIBER OPTIC CABLE. THESE LOCATOR WIRES SHALL BE #10 AWG. LOCATOR WIRES SHALL NOT BE REQUIRED TO HAVE MORE THAN FEET OF ADDITIONAL LENGTH IN EACH PULL BOX.
10. FAN-OUT KITS, PATCH CORDS, TEST CONNECTOR TERMINALS, AND ALL MISCELLANEOUS FIBER OPTIC CABLE HARDWARE CONNECTIONS AND HARDWARE NOT SPECIFIED ARE SUBJECT INCIDENTAL TO CONSTRUCTION. THESE ITEMS ARE SUBJECT TO APPROVAL BY THE CITY OF ALBUQUERQUE.
11. FIELD SPLICES.
12. CRIMP CLAMPS (CLOSED END CONNECTORS) ON ALL UNUSED CONDUCTORS.
13. GEL FILLED WIRE NUTS FOR ALL FIELD SPLICES.
14. OFF-DUTY POLICE OFFICER FOR TRAFFIC CONTROL, TRAFFIC SIGNAL NOTE 12.
15. USED WIRING, TRAFFIC SIGNAL NOTE 21.
16. CAUTION TAPE ABOVE CONDUIT, TRAFFIC SIGNAL NOTE 23.
17. REQUIRED EQUIPMENT FOR ADA COMPLIANCE, TRAFFIC SIGNAL PLAN NOTE 5.

Technical drawing of a mast arm foundation showing a cross-section and plan view. The drawing includes dimensions for concrete, reinforcement, and ground level. Callouts identify components like #4 bars, V and H bars, 3/4" x 10' copper weld ground rod, and 4-anchor bolts. Notes specify finished grade and sidewalk slope requirements.














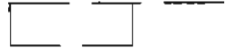





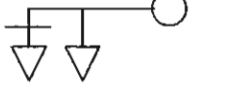

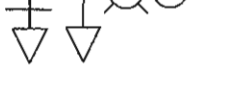











Dimensions and Callouts:

- 2'-0" LEVEL
- 2'-6"
- 5"
- 3'-0"
- 3" CLR.
- 5" CLR.
- 5"
- EQ.
- EQ.
- D
- #4 BARS
- V BARS
- H BARS
- #4 BARE COPPER GROUND CLAMP TO GROUND ROD AND BOLT TO TRANSFORMER BASE
- FINISHED GRADE (SEE NOTE 2). FOUNDATION MAY BE SLOPED TO MATCH SIDEWALK SLOPE SHALL CONFORMED TO THE AMERICANS WITH DISABILITIES ACT
- CONDUIT AS REQ'D
- 3/4"x10' COPPER WELD GROUND ROD
- 4-ANCHOR BOLTS AS REQUIRED SEE TRAFFIC SIGNAL MASTARM DETAILS
- 3500 PSI CONCRETE

1. FINAL 4" ON FOUNDATION SHALL BE POURED WITH ADJACENT SIDEWALK/RAMP AND GRADED AS REQUIRED.
2. CONSTRUCTION JOINT
4" BELOW TOP OF FOUNDATION
FIRST STAGE OF CONSTRUCTION
ROUGHEN SURFACE TO 1/2" AMPLITUDE.
3. PROVIDE ADDITIONAL 4" LENGTH FOR ANCHOR BOLTS FOR STAGING
THE COST OF ADDITIONAL LENGTH BOLTS SHALL BE INCIDENTAL TO THE FOUNDATION ITEMS.


[illegible]

	PARSONS BRINCKERHOFF				No.	DESIGN	DRAWN	CHECK
	CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION							
PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL								
TRAFFIC SIGNAL NOTES								
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL							
 JAN 30 2017 DESIGN REVIEW COMMITTEE	 JAN 31 2017 CITY ENGINEER	MO./DAY/YR.		MO./DAY/YR.				
City Project No. 9045.04	Zone Map No. B10	Sheet 5-7						


TRAFFIC SIGNAL LEGEND		
PROPOSED	EXISTING	ITEM
		PULL BOX
		SERVICE POLE
		METER PEDESTAL
		CONTROLLER CABINET
		SPLICE CABINET
		CONDUIT RUN
		LOOP DETECTOR
		TRAFFIC SIGNAL PEDESTAL POLE
		CONDUIT RUN NUMBER (SIGNAL)
		TYPE II STANDARD W/MASTARM SIGNAL, BACKPLATE & OPTICAL DETECTOR
		TYPE III STANDARD W/MASTARM SIGNAL, BACKPLATE, LUMINAIRE & OPTICAL DETECTOR
		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		TRAFFIC MANHOLE
		CONDUIT RUN ID (POWER SERVICE)
		VIDEO CAMERA
		CCTV CAMERA

TRAFFIC SIGNAL			
ITEM ID NO.	ITEM DESCRIPTION	UNIT	TOTAL
421.005	SERVICE RESER(SIGNAL), CIP.	EACH	1
421.010	METER PEDESTAL (SIGNAL), CIP.	EACH	1
421.015	SERVICE CONNECTION (SIGNAL), CIP.	EACH	1
422.002	TRAFFIC SIGNAL PEDESTAL POLE, 10', CIP.	EACH	2
422.004	TRAFFIC SIGNAL PEDESTAL POLE, 15', CIP.	EACH	1
422.016	TRAFFIC SIGNAL MASTARM, 30' ARM, TYPE II, TROMBOME, CIP.	EACH	1
422.018	TRAFFIC SIGNAL MASTARM, 35' ARM, TYPE II, TROMBOME, CIP.	EACH	2
422.020	TRAFFIC SIGNAL MASTARM, 40' ARM, TYPE II, TROMBOME, CIP.	EACH	1
423.001	TRAFFIC SIGNAL FOUNDATION FOR PEDESTAL POLE, CIP.	EACH	3
423.002	TRAFFIC SIGNAL MASTARM FOUNDATION, CIP.	EACH	4
423.003	TRAFFIC SIGNAL CONTROLLER FOUNDATION, (TYPE M & P CABINET), CIP.	EACH	1
424.006	ELECTRICAL CONDUIT, 2", ICL. TRENCHING, BACKFILL & PATCHING, PUSHING, BORING, & JACKING, CIP.	L.F.	20
424.011	ELECTRICAL CONDUIT, 3", ICL. TRENCHING, BACKFILL & PATCHING, PUSHING, BORING, & JACKING, CIP.	L.F.	965
425.003	ELECTRICAL PULL BOX (LARGE), CIP.	EACH	8
426.001	SINGLE CONDUCTOR, #2, CIP.	L.F.	90
426.003	SINGLE CONDUCTOR, #6, CIP.	L.F.	1,230
426.005	SINGLE CONDUCTOR, #10, CIP.	L.F.	115
426.010	MULTI-CONDUCTOR CABLE, #5, CIP.	L.F.	1,200
426.014	MULTI-CONDUCTOR CABLE, #20, CIP.	L.F.	1,090
427.002	3 SECTION TRAFFIC SIGNAL ASSEMBLY, CIP.	EACH	14
427.021	PEDESTRIAN COUNTDOWN SIGNAL (LED), CIP.	EACH	6
427.031	3 SECTION BACKPLATE, CIP.	EACH	8
428.001	LOOP VEHICLE DETECTOR, CIP.	EACH	4
428.010	PUSH BUTTON STATION, CIP.	EACH	6
428.022	DUCTED LOOP DETECTOR WIRE, CIP.	L.F.	3,300
428.050	LOOP LEAD-IN CABLE, CIP.	L.F.	400
428.060	DETECTOR SAW CUT, COMPL.	L.F.	1,200
428.070	PHASE SELECTOR RACK, 4 CHANNELS, CIP.	EACH	1
428.071	PHASE SELECTOR MODULE 2 CHANNEL, CIP.	EACH	2
428.075	OPTICAL DETECTOR, 1 DIRECTION, 1 CHANNEL, CIP.	EACH	3
428.078	OPTICAL DETECTOR CABLE, CIP.	L.F.	725
429.001	TRAFFIC ACTUATED CONTROLLER, CIP.	EACH	1
429.021	8 PHASE DOUBLE RING CONTROLLER CABINET, CIP.	EACH	1

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REMARKS		DESIGN	
CONTRACTOR	DATE	COA GEODETIC CONTROL STATION "11-B11"	DATE	FIELD NO.	BY	NO.	DATE	NO.	DATE	DESIGNED BY: SEA, KVC	DATE: 12/20/16
WORK STARTED BY	DATE	BRASS DISC SET FLUSH IN CONCRETE 272' SOUTH OF FORDHAM DRIVE AND WEST OF LYON BOULEVARD.	DATE							DRAWN BY: SEA, KVC	DATE: 12/20/16
INSPECTOR'S FIELD VERIFICATION BY	DATE									CHECKED BY: PFS	DATE: 12/20/16
RECORDED BY	DATE	NM STATE PLANE COORDS. (NAD 88)									
		N=1528350.344									
		E=1504957.688									
		NAVD 88 ELEV. = 5346.5									



PARSONS
BRINCKERHOFF



CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION
PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL

DESIGN REVIEW COMMITTEE
APPROVED
JAN 3 0 2017
DESIGN REVIEW COMMITTEE

CITY ENGINEER APPROVAL
APPROVED
JAN 3 1 2017
CITY ENGINEER

City Project No.
9045.04

Zone Map No.
810





Sheet
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ABBREVIATIONS

MA1	MASTARM #
CC	CONTROLLER CABINET #
PB1	PULL BOX # (SIGNALS)
3A	SIGNAL HEAD #
CAM	VIDEO CAMERA
LUM	LUMINAIRE
P1	PEDESTRIAN SIGNAL #
PPB1	PEDESTRIAN PUSH BUTTON #
SP1	ILLUMINATED SIGN #
DL1	DETECTOR LOOP #

SYMBOL KEY

	SIGNAL ID
	PEDESTAL POLE NO.
	CONDUIT RUN ID
	CONDUIT RUN ID (POWER SERVICE)

FLASH CONDITION

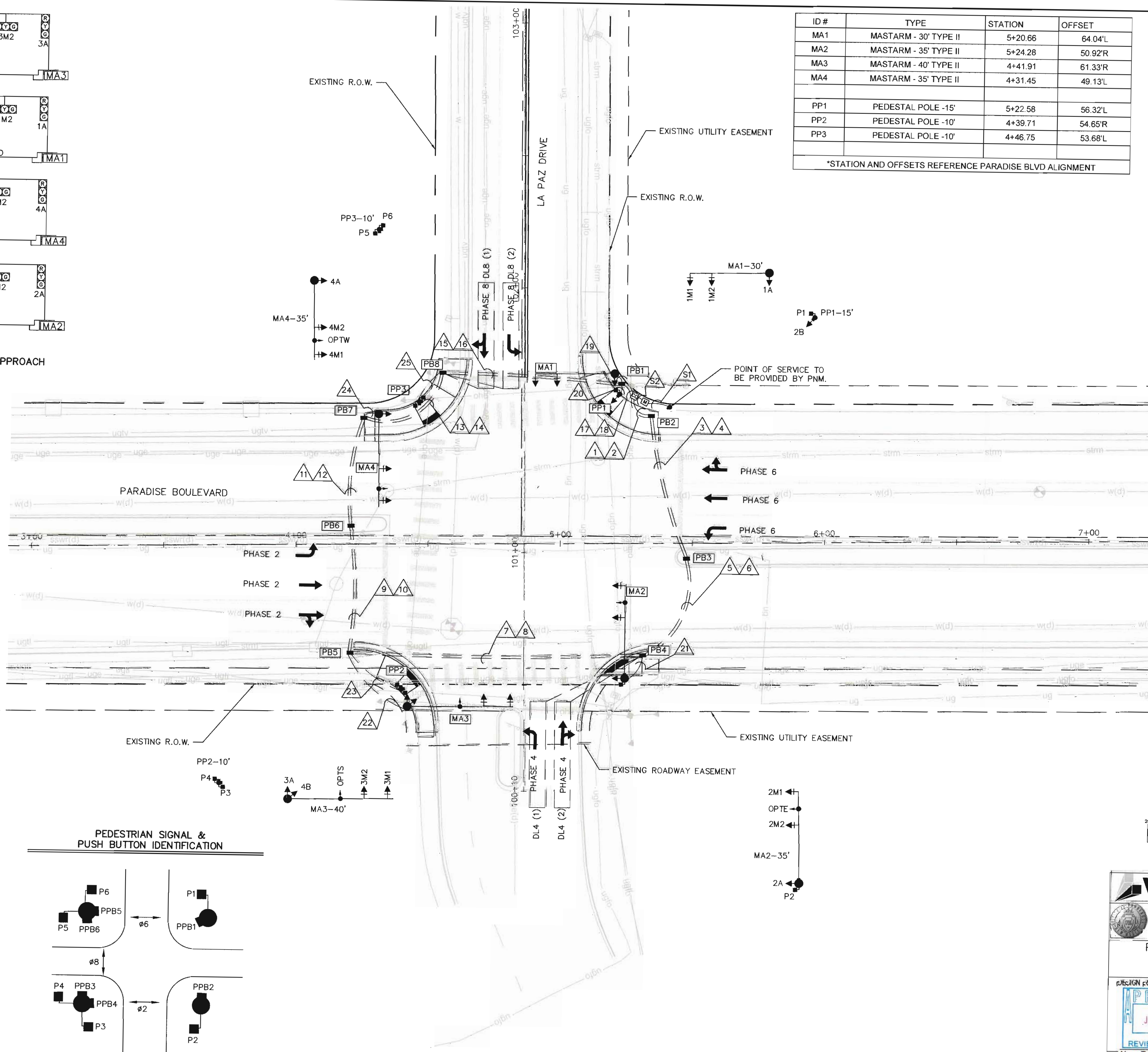
RED BALL	ALL RED 1M1, 1M2, 3M1, 3M2, 1A, 3A
YELLOW BALL	ALL RED 2M1, 2M2, 2B, 4M1, 4M2, 4B, 2A, 4A

INITIALIZATION

ALL RED, THEN PHASES 2 AND 6 GREEN

NOTES:

1. ALL EQUIPMENT SHALL BE CONSTRUCTED WITHIN THE COA RIGHT-OF-WAY
2. ALL SIGNAL POLE AND MASTARM LOCATIONS SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION BY PROJECT MANAGER.
3. ALL PULL BOXES SHALL BE LARGE SIZE.
4. ADJUST SIGN PLACEMENT ON MASTARMS PER COA TRAFFIC ENGINEER.
5. THE PEDESTRIAN PUSH BUTTON MUST BE WITHIN 10" OF LEVEL LANDING. IF THIS IS NOT FEASIBLE THEN A PUSH BUTTON EXTENSION ARM SHALL BE INSTALLED (INCIDENTAL TO CONSTRUCTION). THE LENGTH OF THE EXTENSION ARM SHALL NOT EXCEED 12". THE PROJECT MANAGER SHALL USE ENGINEERING JUDGEMENT WHEN INSTALLING EXTENSION ARMS TO AVOID HAZARDS AND/OR EQUIPMENT DAMAGE.
6. CONTROLLER CABINET AND METER LOCATION ARE APPROXIMATE AND SHALL BE COORDINATED WITH THE PROJECT MANAGER.
7. DETECTOR LOOPS SHALL BE IN COMPLIANCE WITH CITY OF ALBUQUERQUE STANDARD DRAWING 2552.

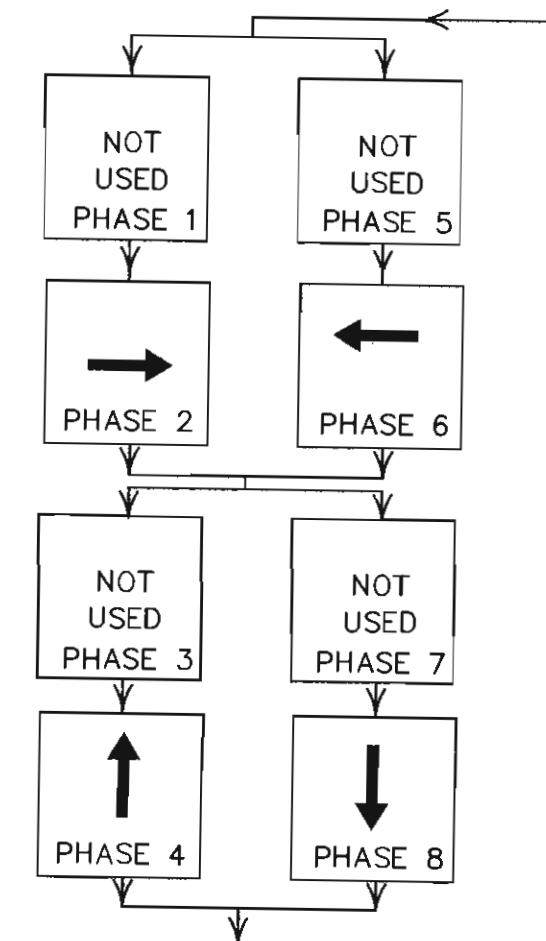


ID #	TYPE	STATION	OFFSET
MA1	MASTARM - 30' TYPE II	5+20.66	64.04'L
MA2	MASTARM - 35' TYPE II	5+24.28	50.92'R
MA3	MASTARM - 40' TYPE II	4+41.91	61.33'R
MA4	MASTARM - 35' TYPE II	4+31.45	49.13'L
PP1	PEDESTAL POLE -15'	5+22.58	56.32'L
PP2	PEDESTAL POLE -10'	4+39.71	54.65'R
PP3	PEDESTAL POLE -10'	4+46.75	53.68'L
*STATION AND OFFSETS REFERENCE PARADISE BLVD ALIGNMENT			

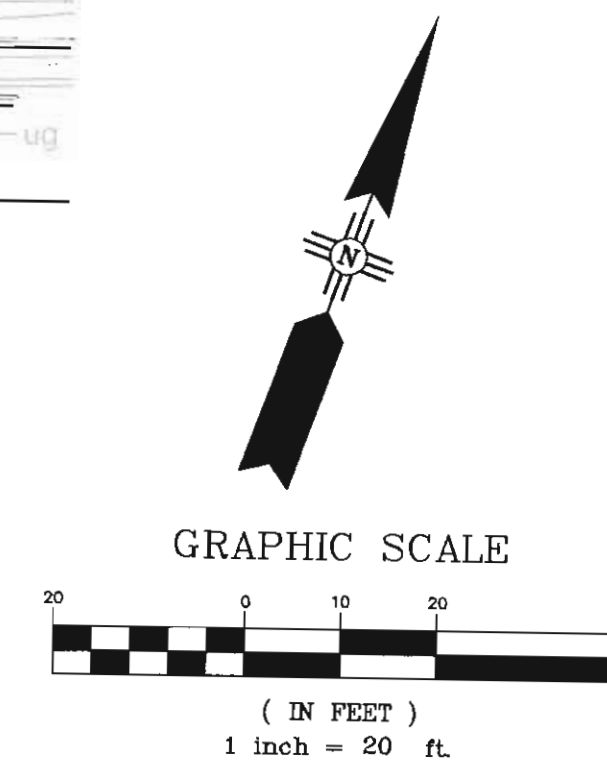
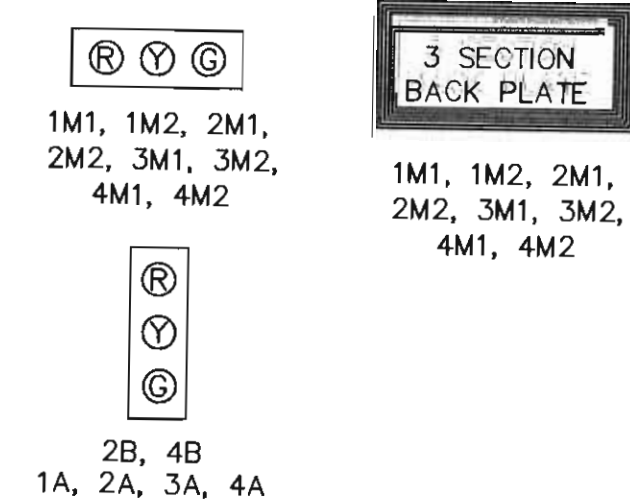


P1,P2,P3,
P4,P5,P6
ALL SHALL BE
COUNTDOWN PED HEADS

SIGNAL PHASING

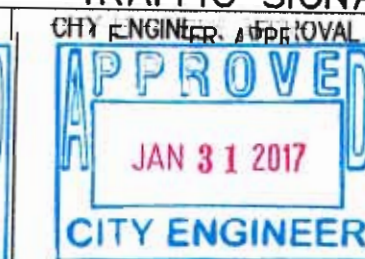


SIGNAL FACE LENS ARRANGEMENTS



CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION
PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL

TRAFFIC SIGNAL PLAN



City Project No
9045.04

Zone Map No.
B10

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CONDUIT AND CONDUCTOR FILL REQUIREMENTS												
RUN ID ##	CONDUIT RUN			REMARKS	CONDUCTOR LENGTH AND TYPE							
	2"	3"	TYPE		MCC 5 (# @ FT)	MCC 20 (# @ FT)	SCC 2 (# @ FT)	SCC 6 (# @ FT)	SCC 10 (# @ FT)	DLLC (# @ FT)	OPTICOM (# @ FT)	STP* (# @ FT)
S1	10'		REC	POS TO METER			3 @ 15'					
S2	10'		REC	METER TO CONTROLLER			3 @ 15'					
1		15'	REC	CONTROLLER TO PB2	1 @ 20'	2 @ 20'		2 @ 20'				
2		15'	REC	CONTROLLER TO PB2						2 @ 20'	1 @ 20'	
3		55'	REC	PB2 TO PB3	1 @ 60'	2 @ 60'		2 @ 60'				
4		55'	REC	PB2 TO PB3						2 @ 60'	1 @ 60'	
5		45'	REC	PB3 TO PB4	1 @ 50'	2 @ 50'		2 @ 50'				
6		45'	REC	PB3 TO PB4						2 @ 50'	1 @ 50'	
7		110'	REC	PB4 TO PB5	1 @ 115'	2 @ 115'		2 @ 115'				
8		110'	REC	PB4 TO PB5					1 @ 115'			
9		50'	REC	PB5 TO PB6	1 @ 55'	2 @ 55'		2 @ 55'				
10		50'	REC	PB5 TO PB6							1 @ 55'	
11		40'	REC	PB6 TO PB7	1 @ 45'	2 @ 45'		2 @ 45'				
12		40'	REC	PB6 TO PB7							1 @ 45'	
13		40'	REC	PB7 TO PB8	1 @ 45'	2 @ 45'		2 @ 45'				
14		40'	REC	PB7 TO PB8							2 @ 45'	
15		65'	REC	PB8 TO PB1	1 @ 70'	2 @ 70'		2 @ 70'				
16		65'	REC	PB8 TO PB1						2 @ 70'	2 @ 70'	
17		10'	REC	PB1 TO CONTROLLER	1 @ 15'	2 @ 15'		2 @ 15'				
18		10'	REC	PB1 TO CONTROLLER						2 @ 15'	2 @ 15'	
19		10'	REC	PB1 TO MA1		1 @ 15'		2 @ 15'				
20		10'	REC	PB1 TO PP1	1 @ 15'	1 @ 15'		2 @ 15'				
21		10'	REC	PB4 TO MA2	1 @ 15'	1 @ 15'		2 @ 15'			1 @ 15'	
22		30'	REC	PB5 TO MA3		1 @ 35'		2 @ 35'			1 @ 35'	
23		20'	REC	PB5 TO PP2	1 @ 25'	1 @ 25'		2 @ 25'				
24		10'	REC	PB7 TO MA4		1 @ 15'		2 @ 15'			1 @ 15'	
25		15'	REC	PB8 TO PP3	1 @ 20'	1 @ 20'		2 @ 20'				
MA1				BASE TO 1M1	1 @ 55'							
MA1				BASE TO 1M2	1 @ 45'							
MA1				BASE TO 1A	1 @ 20'							
MA2				BASE TO 2M1	1 @ 60'							
MA2				BASE TO 2M2	1 @ 50'							
MA2				BASE TO 2A	1 @ 20'							
MA2				BASE TO OPTICOM							1 @ 55'	
MA2				BASE TO P2	1 @ 15'							
MA2				BASE TO PPB2								1 @ 10'
MA3				BASE TO 3M1	1 @ 65'							
MA3				BASE TO 3M2	1 @ 55'							
MA3				BASE TO 3A	1 @ 20'							
MA3				BASE TO OPTICOM							1 @ 60'	
MA3				BASE TO 4B	1 @ 20'							
MA4				BASE TO 4M1	1 @ 60'							
MA4				BASE TO 4M2	1 @ 50'							
MA4				BASE TO 4A	1 @ 20'							
MA4				BASE TO OPTICOM							1 @ 55'	
PP1				BASE TO 2B	1 @ 20'							
PP1				BASE TO P1	1 @ 15'							
PP1				BASE TO PPB1								1 @ 10'
PP2				BASE TO P3	1 @ 15'							
PP2				BASE TO PPB3								1 @ 10'
PP2				BASE TO P4	1 @ 15'							
PP2				BASE TO PPB4								1 @ 10'
PP3				BASE TO P5	1 @ 15'							
PP3				BASE TO PPB5								1 @ 10'
PP3				BASE TO P6	1 @ 15'							
PP3				BASE TO PPB6								1 @ 10'
PROJECT TOTALS	20'	965'			1,200'	1,090'	90'	1,230'	115'	430'	725'	60'
* SHIELDED TWISTED PAIR (STP) FOR CONTRACTORS INFORMATION ONLY. STP IS INCIDENTAL TO PEDESTRIAN PUSH BUTTON STATION.												

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL	
TRAFFIC SIGNAL CONDUITS AND CABLES	
DESIGN REVIEW COMMITTEE 	CITY ENGINEER APPROVAL
City Project No. 9045.04	Zone Map No. 810
Sheet 5-10	

FUNCTION CHART - 115 VOLT CIRCUIT ¹						
CONDUCTOR			RING 1 - MULTI CONDUCTOR CABLE 20		RING 2 - MULTI CONDUCTOR CABLE 20 ²	
CONDUCTOR NUMBER	BASE COLOR	TRACER	FUNCTION	FIELD CONNECTION	FUNCTION	FIELD CONNECTION
1	BLACK	-	SPARE	SPARE	SPARE	SPARE
2	WHITE	-	SPARE	SPARE	SPARE	SPARE
3	RED	-	PHASE 1 RED	SPARE	PHASE 5 RED	SPARE
4	GREEN	-	PHASE 1 GREEN	SPARE	PHASE 5 GREEN	SPARE
5	ORANGE	-	PHASE 1 YELLOW	SPARE	PHASE 5 YELLOW	SPARE
6	BLUE	-	SPARE	SPARE	SPARE	SPARE
7	WHITE	BLACK	SPARE	SPARE	SPARE	SPARE
8	RED	BLACK	PHASE 2 RED	RED BALL 2M1, 2M2, 2A, 2B	PHASE 6 RED	RED BALL 4M1, 4M2, 4A, 4B
9	GREEN	BLACK	PHASE 2 GREEN	GREEN BALL 2M1, 2M2, 2A, 2B	PHASE 6 GREEN	GREEN BALL 4M1, 4M2, 4A, 4B
10	ORANGE	BLACK	PHASE 2 YELLOW	YELLOW BALL 2M1, 2M2, 2A, 2B	PHASE 6 YELLOW	YELLOW BALL 4M1, 4M2, 4A, 4B
11	BLUE	BLACK	PHASE 2 WALK	PEDESTRIAN WALK P2, P3	PHASE 6 WALK	PEDESTRIAN WALK P1, P6
12	BLACK	WHITE	PHASE 2 DON'T WALK	PEDESTRIAN DON'T WALK P2, P3	PHASE 6 DON'T WALK	PEDESTRIAN DON'T WALK P1, P6
13	RED	WHITE	PHASE 3 RED	SPARE	PHASE 7 RED	SPARE
14	GREEN	WHITE	PHASE 3 GREEN	SPARE	PHASE 7 GREEN	SPARE
15	BLUE	WHITE	PHASE 3 YELLOW	SPARE	PHASE 7 YELLOW	SPARE
16	BLACK	RED	PHASE 4 RED	RED BALL 1M1, 1M2, 1A	PHASE 8 RED	RED BALL 3M1, 3M2, 3A
17	WHITE	RED	PHASE 4 GREEN	GREEN BALL 1M1, 1M2, 1A	PHASE 8 GREEN	GREEN BALL 3M1, 3M2, 3A
18	ORANGE	RED	PHASE 4 YELLOW	YELLOW BALL 1M1, 1M2, 1A	PHASE 8 YELLOW	YELLOW BALL 3M1, 3M2, 3A
19	BLUE	RED	PHASE 4 WALK	SPARE	PHASE 8 WALK	PEDESTRIAN WALK P4, P5
20	RED	GREEN	PHASE 4 DON'T WALK	SPARE	PHASE 8 DON'T WALK	PEDESTRIAN DON'T WALK P4, P5

1 IDENTIFY CONDUCTORS LISTED AS "115 VOLTS".

2 WRAP RING 2 CABLE AT EACH SPLICE POINT WITH COLORED ELECTRICAL TAPE. THE IDENTIFICATION MARKING SHALL BE PROVIDED ON EACH RING 2 CABLE AT EACH SPLICE AND LOCATED 6" BACK FROM THE END.

FUNCTION CHART - 24 VOLT CIRCUIT ³			
CONDUCTOR		RING 1 - MULTI CONDUCTOR CABLE 5	
NUMBER	BASE COLOR	FUNCTION	FIELD CONNECTION
1	BLACK	PHASE 2	PPB2, PPB3
2	WHITE	COMMON	COMMON
3	RED	PHASE 4	SPARE
4	GREEN	PHASE 6	PPB1, PPB6
5	ORANGE	PHASE 8	PPB4, PPB5

3 IDENTIFY CONDUCTORS LISTED AS "PP8 - LOW VOLTAGE" AT EACH SPLICE POINT. FIVE (5) CONDUCTOR CABLE SHALL BE 24 VOLTS AND USED FOR PUSH BUTTONS ONLY.

DETECTOR RACK ASSIGNMENTS																			
UNIT NUMBER	POWER SUPPLY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
CHANNEL 1		Φ1	Φ2	Φ6	Φ2 EC	Φ3	Φ4	Φ8	Φ4 EC	DUAL LEFT Φ1	DUAL LEFT Φ3	SD 1	SD 3	SD 5	SD 7	SD 9	PED ISOLATION	OPTICOM 1	OPTICOM 3
CHANNEL 2		Φ5	Φ2	Φ6	Φ6 EC	Φ7	Φ4	Φ8	Φ8 EC	DUAL LEFT Φ5	DUAL LEFT Φ7	SD 2	SD 4	SD 6	SD 8	SD 10		OPTICOM 2	OPTICOM 4
DECTOR MODULE REQUIRED	*						X	X									X	X	X
* INCIDENTAL TO CONSTRUCTION																			

* INCIDENTAL TO CONSTRUCTION

DETECTOR LOOPS											
LOOP ID	VEHICLE DETECTOR				LOOP TYPE	LOOP DIMENSIONS				LOOP WIRE (FT)	PAVEMENT T SAWCUT
	MODE	CALL	UNIT #	CHANNEL		L	W	S	T		
DL4 (1)	PRESENCE		SIX	CH 1	QP	30	6	10	10	309'	112'
DL4 (2)	PRESENCE		SIX	CH2	QP	30	6	15	10	319'	117'
DL8 (1)	PRESENCE		SEVEN	CH1	QP	30	6	10	25	339'	112'
DL8 (2)	PRESENCE		SEVEN	CH2	QP	30	6	20	20	349'	122'
TOTALS										3304'	1185'
USE										3300'	1200'

QUANTITY ESTIMATING ASSUMPTIONS

LOOP WIRE

6' X 30' QUADRUPOLE LOOP = (8 x L) + (4 x W) + (2 x S) + (2 x T) + 5 = 269 + [2 x (S + T)]
6' X 40' QUADRUPOLE LOOP = (8 x L) + (4 x W) + (2 x S) + (2 x T) + 5 = 349 + [2 x (S + T)]

PAVEMENT SAWCUT

6' X 30' QUADRUPOLE LOOP = (3 x L) + (2 x W) + S = 102 + S
6' X 40' QUADRUPOLE LOOP = (3 x L) + (2 x W) + S = 132 + S




WHERE:

L = DETECTOR LOOP LENGTH (FROM PLANS)

W = DETECTOR LOOP WIDTH (FROM PLANS)

S = SAWCUT LENGTH FROM DETECTOR LOOP TO FACE OF CURB (FROM PLANS)

T = LOOP WIRE TERMINAL LENGTH FROM FACE OF CURB TO PULL BOX (FROM PLANS)

		PARSONS BRINCKERHOFF	
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION PARADISE BLVD. AND LA PAZ DR. TRAFFIC SIGNAL			
TRAFFIC SIGNAL FUNCTIONS AND DETECTORS			
DESIGN REVIEW COMMITTEE  JAN 3 0 2017 DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL  JAN 3 1 2017 CITY ENGINEER	MO./DAY/YR.	MO./DAY/YR.
City Project No. 9045.04	Zone Map No. B10	Sheet 5--11	

