



# SAN DIEGO COUNTY

## DEPARTMENT OF PUBLIC WORKS

# DESIGN STANDARDS

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CIP Project Development Section

May 2025

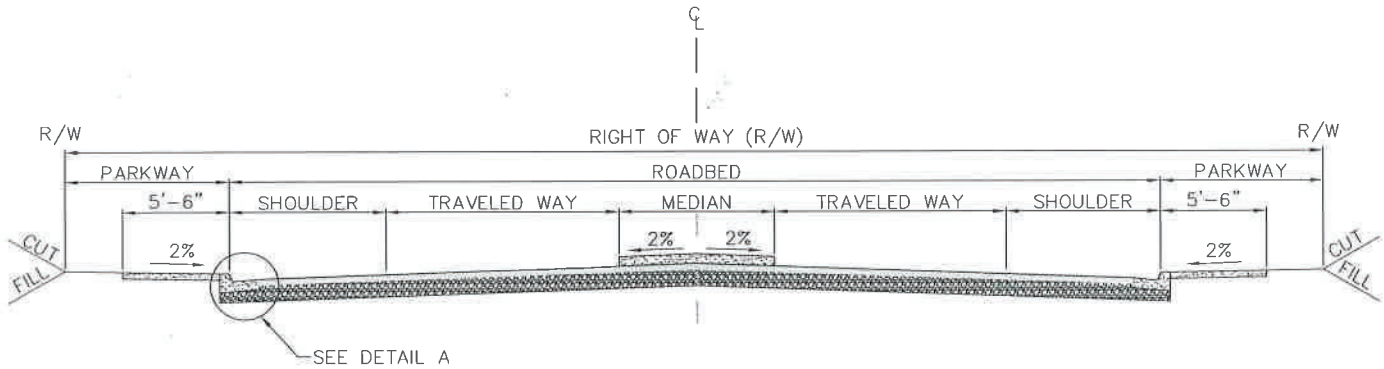
SAN DIEGO COUNTY  
DEPARTMENT OF PUBLIC WORKS

INDEX OF DESIGN STANDARDS

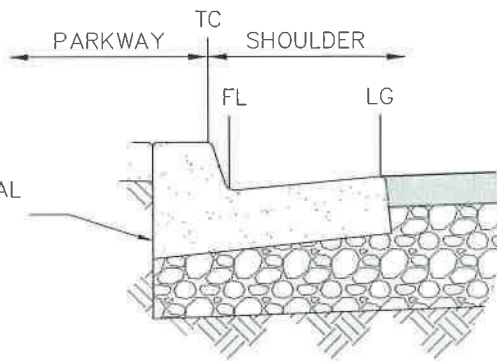
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# ROADWAY SECTION

SYMMETRICAL ABOUT CENTERLINE



PCC CURB & GUTTER  
PER SAN DIEGO REGIONAL  
STANDARD DRAWINGS



TC - TOP OF CURB LINE  
FL - GUTTER FLOW LINE  
LG - LIP OF GUTTER LINE

NOTE: AGGREGATE BASE TO  
EXTEND TO THE OUTSIDE EDGE  
UNDER PCC CURB & GUTTER

**DETAIL A**  
NOT TO SCALE

**NOTES:**

- REFER TO SAN DIEGO COUNTY PUBLIC ROAD STANDARDS (PRS) FOR ADDITIONAL ROADWAY REQUIREMENTS.
- ADDITIONAL ROAD SURFACING AND R/W MAY BE REQUIRED FOR MOBILITY ELEMENT ROADS IN INDUSTRIAL/COMMERCIAL ZONES (4 FEET AND 12 FEET RESPECTIVELY).
- ADDITIONAL 12 TO 14 FEET OF ROAD SURFACING AND R/W IS REQUIRED FOR EACH ADDITIONAL TURN LANE.
- MOBILITY ELEMENT ROADS DESIGNATED WITH BIKE LANES WILL REQUIRE AN ADDITIONAL 10-12 FEET OF ROAD SURFACING AND R/W. THROUGH TRAFFIC LANES ADJACENT TO BIKE LANES REQUIRE 13 FEET WIDE LANES. REFER TO COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS, SECTION 7, "BIKEWAYS".
- INTERIM ROADS SHALL HAVE A MINIMUM WIDTH OF 28 FEET OF A.C. ROAD SURFACING WITHIN 40 FEET OF GRADED ROAD BED. WIDTHS WILL BE LARGER IF TRAFFIC VOLUMES REQUIRE MORE TRAVEL LANES.
- EARTHWORK AND ALL CUT AND FILL SLOPE INCLINATIONS SHALL CONFORM TO THE COUNTY GRADING ORDINANCE.

DRAWN BY: PBM CHECKED BY: JSM

RECOMMENDED BY: JEFF S. MOODY, P.E.

APPROVED BY COUNTY ENGINEER

*Mohamad Fakhreddine* DATE: 10/15/12

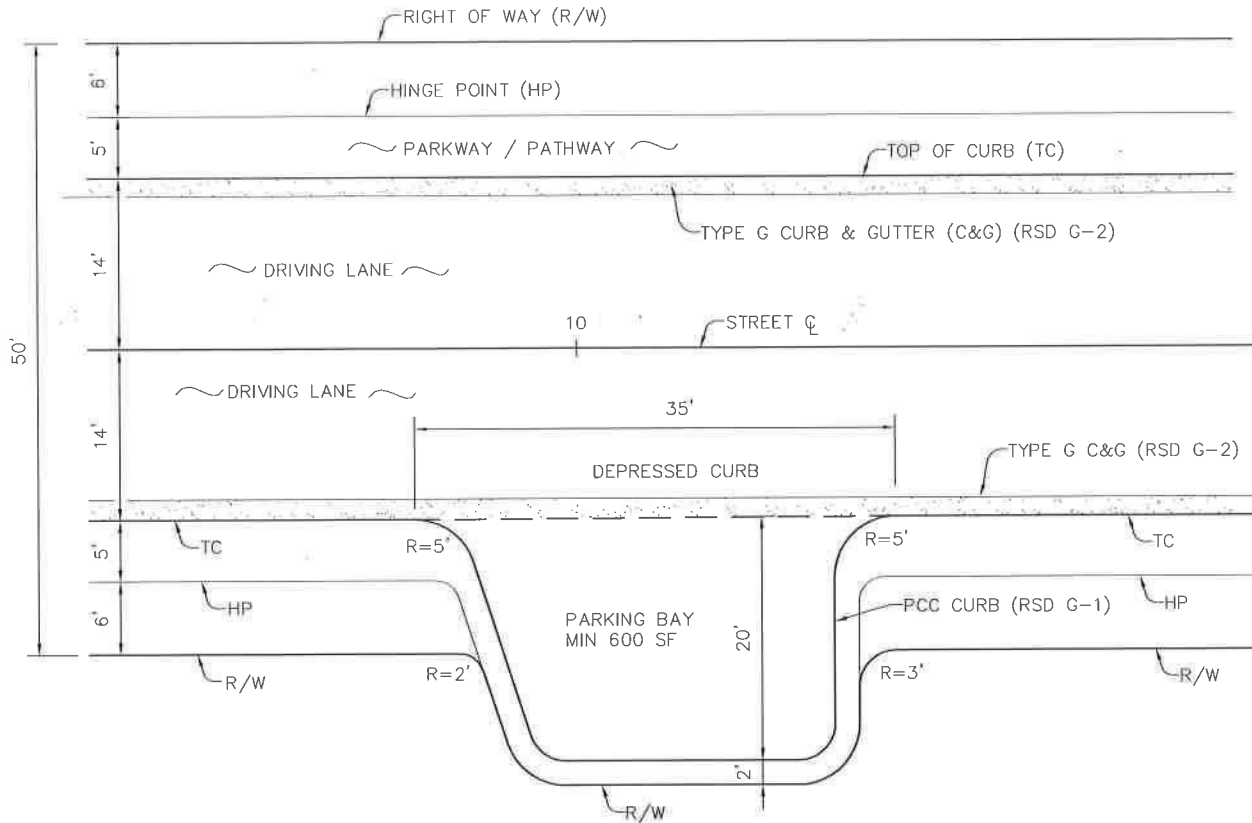
MOHAMAD FAKHREDDINE, P.E.  
R.C.E. NO. 44520, EXP 3/31/2014

SAN DIEGO COUNTY DESIGN STANDARD

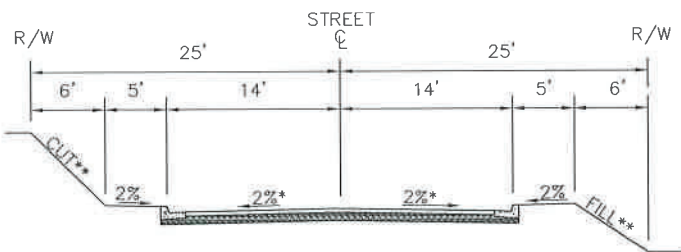
**TYPICAL ROADWAY SECTIONS**

REVISIONS	APPROVED	DATE
REV	JSM	10/2012

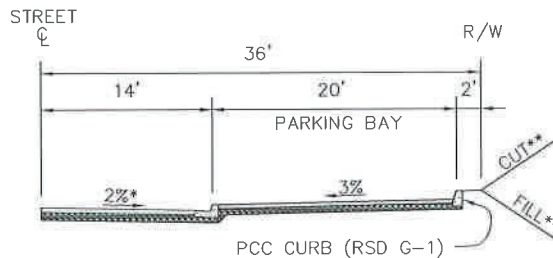
DRAWING NUMBER **DS-01**



PLAN  
NO SCALE



TYPICAL ROADWAY SECTION  
NO SCALE



TYPICAL PARKING BAY SECTION  
NO SCALE

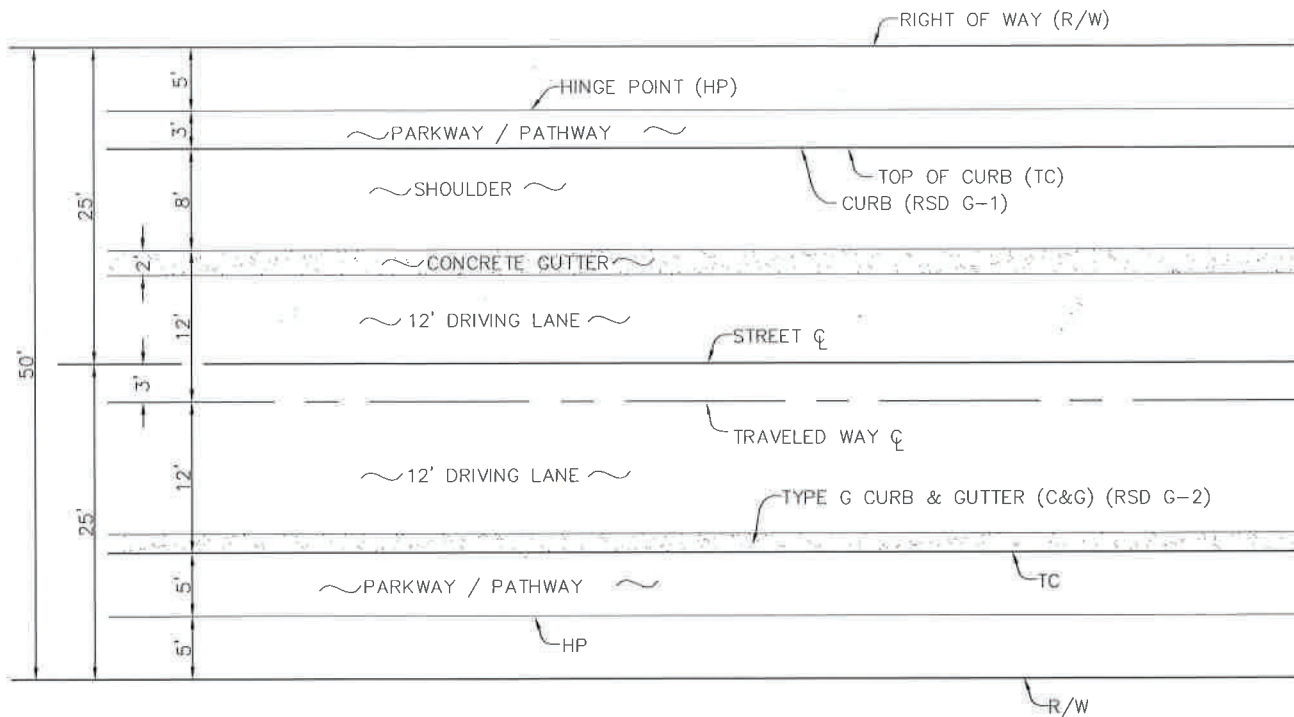
\* MAX 3% CROSSFALL OR SUPERELEVATION

\*\* SLOPE INCLINATION SHALL CONFORM TO THE CURRENT COUNTY OF SAN DIEGO GRADING ORDINANCE

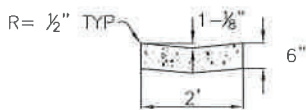
NOTES:

1. THIS STANDARD IS APPLICABLE ONLY TO CATEGORY 2 HILLSIDE RESIDENTIAL STREETS AS DEFINED IN THE COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS.
2. USE OF HILLSIDE RESIDENTIAL STREET STANDARDS ARE APPLICABLE ONLY TO NON-MOBILITY ELEMENT STREETS CLASSIFIED AS RESIDENTIAL, RESIDENTIAL CUL-DE-SAC, OR RESIDENTIAL LOOP STREETS, AND ARE NOT APPLICABLE TO STREETS IN AREAS ZONED FOR COMMERCIAL, INDUSTRIAL OR MULTIPLE RESIDENTIAL USE.
3. CURB AND GUTTER (C&G) SHALL CONFORM TO SAN DIEGO AREA REGIONAL STANDARD DRAWINGS (RSD), COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS, AND THESE DESIGN STANDARDS.
4. ONE 600 SQUARE FEET PERPENDICULAR PARKING BAY REQUIRED PER LOT. THE COUNTY ENGINEER MAY ALSO ESTABLISH ALTERNATE STANDARD TYPICAL SECTIONS WHICH WILL PROVIDE A MINIMUM OF TWO PARKING STALLS PER LOT.
5. EARTHWORK AND CUT AND FILL SLOPES SHALL CONFORM TO REQUIREMENTS OF THE COUNTY OF SAN DIEGO GRADING ORDINANCE.

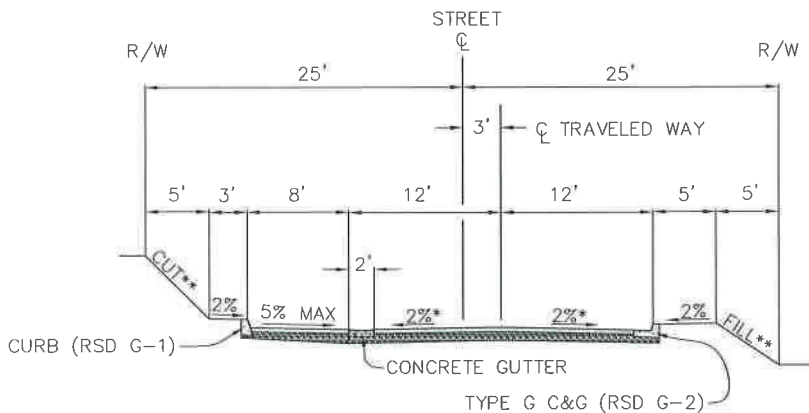
DRAWN BY: PBM	CHECKED BY: JSM	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER		HILLSIDE RESIDENTIAL STREET ALTERNATIVE NO. 1			
<i>Mohamad</i> DATE: 10/15/12 MOHAMAD FAKHRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	DS-02	



**PLAN**  
NO SCALE



**CONCRETE GUTTER DETAIL**  
NO SCALE



\* MAX 3% CROSSFALL OR SUPERELEVATION

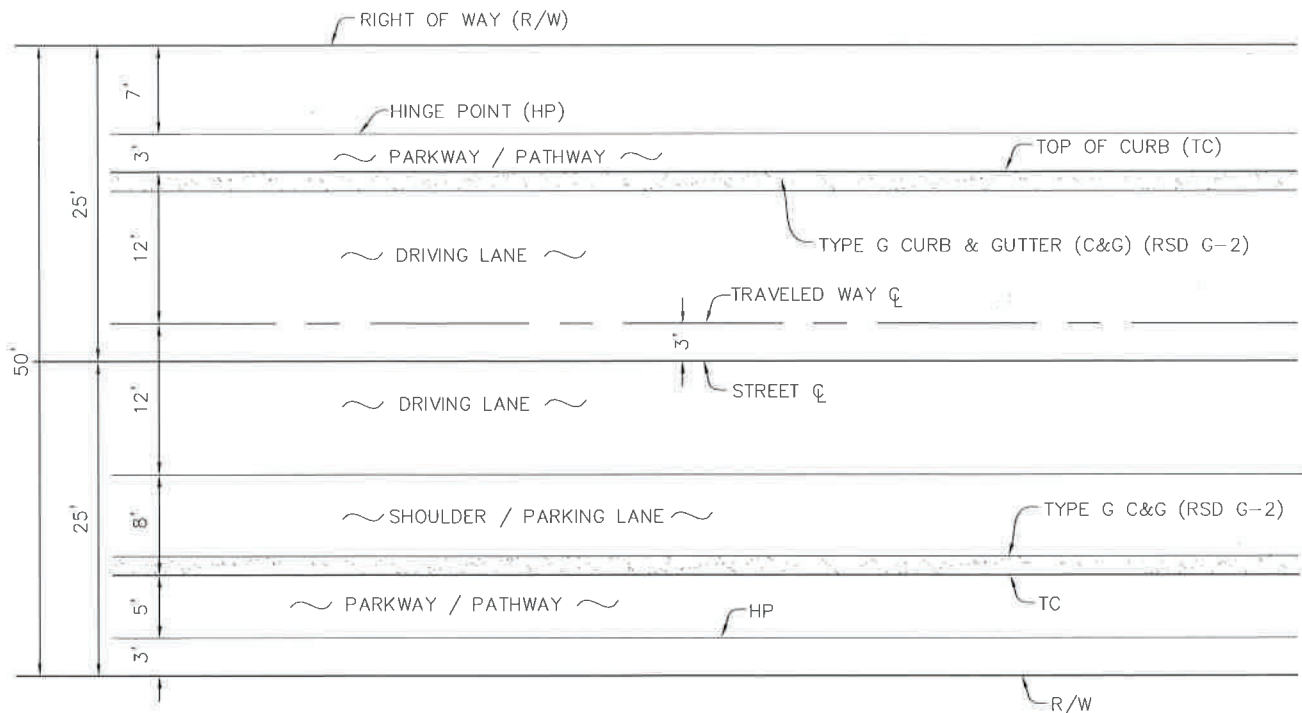
\*\* SLOPE INCLINATION SHALL CONFORM TO THE COUNTY OF SAN DIEGO GRADING ORDINANCE

**TYPICAL ROADWAY SECTION**  
NO SCALE

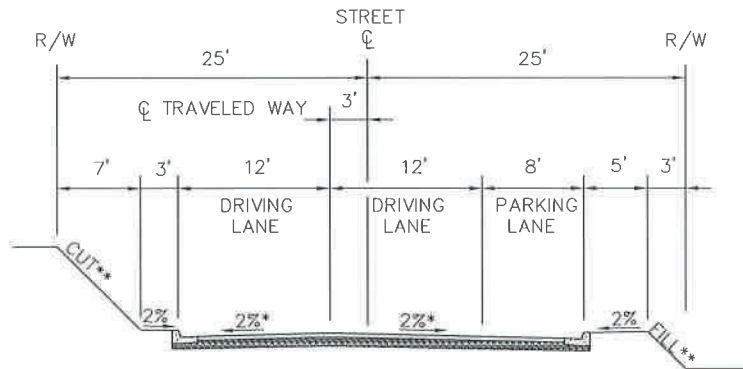
**NOTES:**

1. THIS STANDARD IS APPLICABLE ONLY TO CATEGORY 2 HILLSIDE RESIDENTIAL STREETS AS DEFINED IN THE COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS.
2. USE OF HILLSIDE RESIDENTIAL STREET STANDARDS ARE APPLICABLE ONLY TO NON-MOBILITY ELEMENT STREETS CLASSIFIED AS RESIDENTIAL, RESIDENTIAL CUL-DE-SAC, OR RESIDENTIAL LOOP STREETS, AND ARE NOT APPLICABLE TO STREETS IN AREAS ZONED FOR COMMERCIAL, INDUSTRIAL OR MULTIPLE RESIDENTIAL USE.
3. CURB AND GUTTER (C&G) SHALL CONFORM TO THE SAN DIEGO AREA REGIONAL STANDARD DRAWINGS (RSD), COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS, AND THESE DESIGN STANDARDS.
4. EARTHWORK AND ALL CUT AND FILL SLOPES SHALL CONFORM TO REQUIREMENTS OF THE COUNTY OF SAN DIEGO GRADING ORDINANCE.

DRAWN BY: PBM	CHECKED BY: JSM	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER		<b>HILLSIDE RESIDENTIAL STREET ALTERNATIVE NO. 2</b>			
<i>Mohamad</i> MOHAMAD FAHRI RIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014	DATE: 10/15/12		DRAWING NUMBER	DS-03	



**PLAN**  
NO SCALE



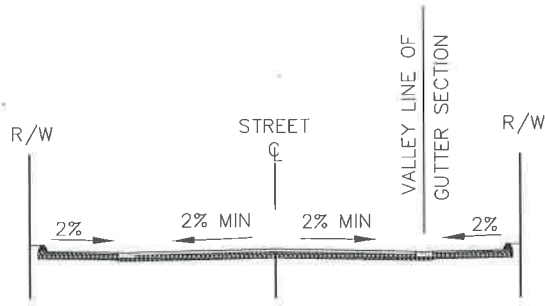
\* MAX 3% CROSSFALL OR SUPERELEVATION  
 \*\* SLOPE INCLINATION SHALL CONFORM TO THE COUNTY OF SAN DIEGO GRADING ORDINANCE.

**TYPICAL ROADWAY SECTION**  
NO SCALE

**NOTES:**

1. THIS STANDARD IS APPLICABLE ONLY TO CATEGORY 2 HILLSIDE RESIDENTIAL STREETS AS DEFINED IN THE COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS (PRS).
2. USE OF HILLSIDE RESIDENTIAL STREET STANDARDS ARE APPLICABLE ONLY TO NON-MOBILITY ELEMENT STREETS CLASSIFIED AS RESIDENTIAL, RESIDENTIAL CUL-DE-SAC, OR RESIDENTIAL LOOP STREETS, AND ARE NOT APPLICABLE TO STREETS IN AREAS ZONED FOR COMMERCIAL, INDUSTRIAL OR MULTIPLE RESIDENTIAL USE.
3. CURB AND GUTTER (C&G) SHALL CONFORM TO THE SAN DIEGO AREA REGIONAL STANDARD DRAWINGS (RSD), THE COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS, AND THESE DESIGN STANDARDS.
4. EARTHWORK AND ALL CUT AND FILL SLOPES SHALL CONFORM TO REQUIREMENTS OF THE COUNTY OF SAN DIEGO GRADING ORDINANCE.

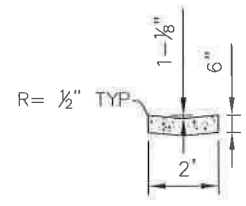
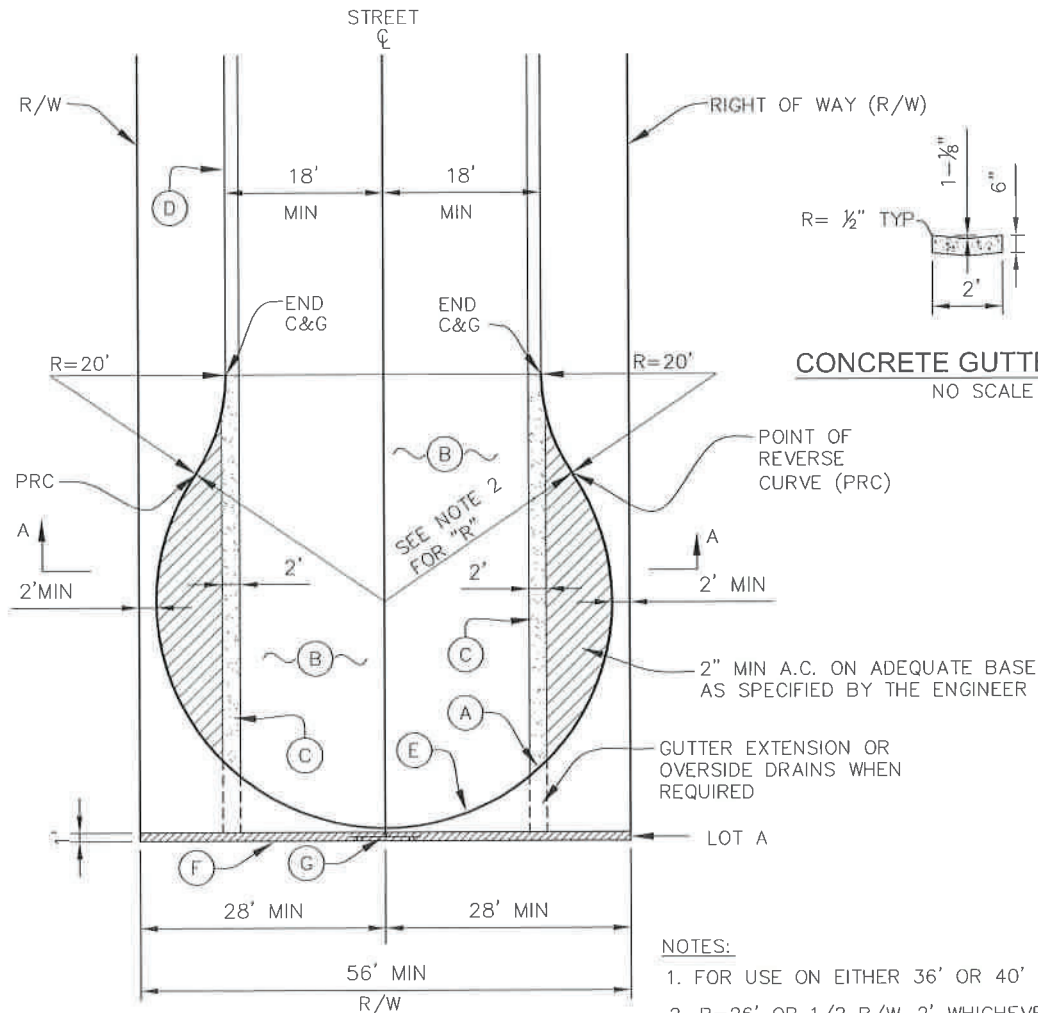
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RECOMMENDED BY: JEFF S. MOODY, P.E.			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER		<b>HILLSIDE RESIDENTIAL STREET ALTERNATIVE NO. 3</b>			
<i>Mohamad</i> MOHAMAD FAKHRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014	DATE: 10/25/12		DRAWING NUMBER	DS-04	



**SECTION A-A**  
NO SCALE

**LEGEND**

- (A) PROVIDE DIKE OPENING FOR DRAINAGE WHEN REQUIRED
- (B) PERMANENT STREET SURFACING
- (C) CONCRETE GUTTER (SEE DETAIL)
- (D) TYPE G CURB & GUTTER (C&G) PER RSD G-2
- (E) TYPE B DIKE PER RSD G-5
- (F) SUBDIVISION LINE
- (G) GUARD POST BARRICADE PER RSD M-9



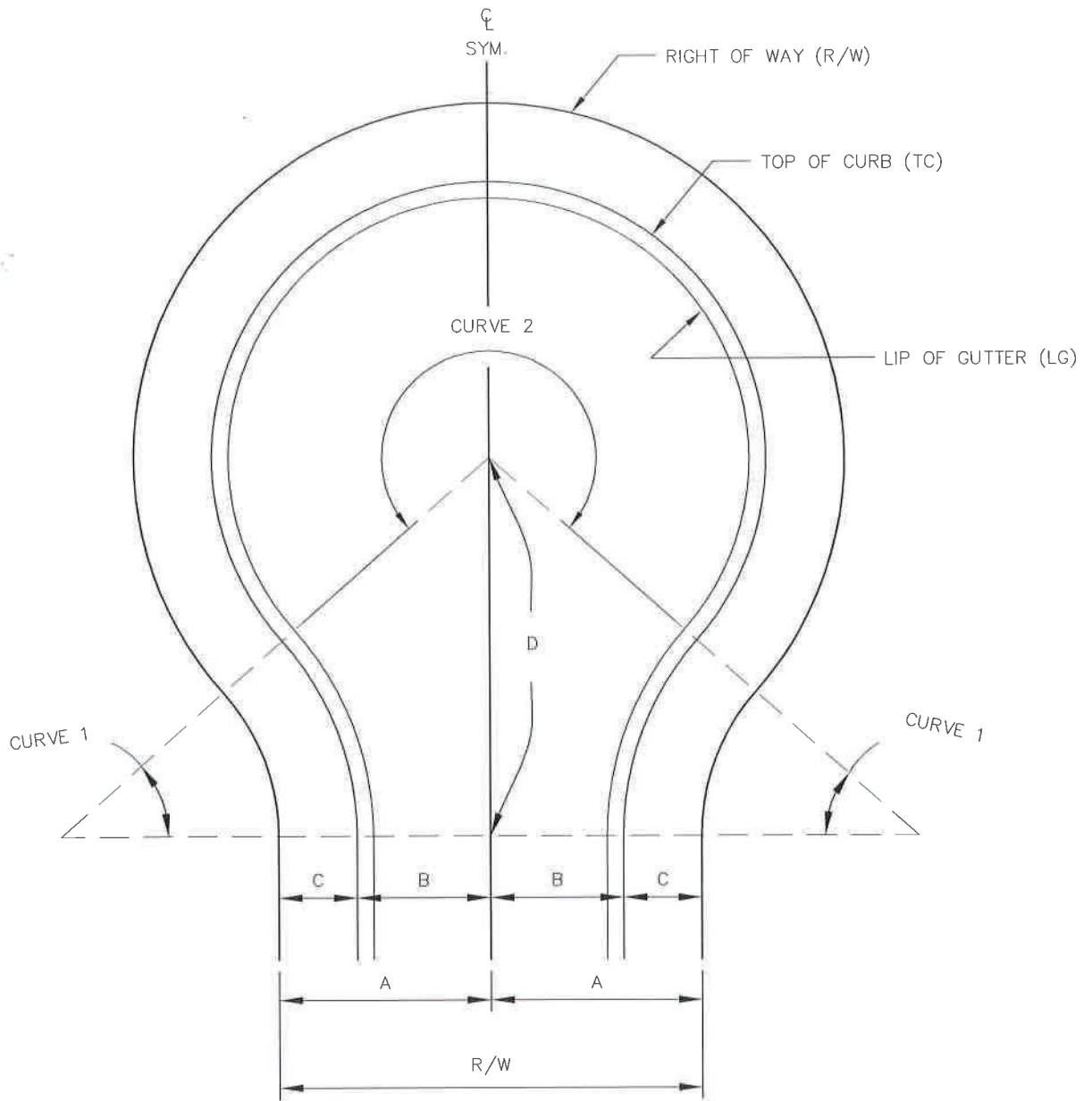
**CONCRETE GUTTER DETAIL**  
NO SCALE

**NOTES:**

1. FOR USE ON EITHER 36' OR 40' WIDE STREETS.
2. R=26' OR 1/2 R/W-2' WHICHEVER IS GREATER.

**TEMPORARY TURNAROUND**  
NO SCALE

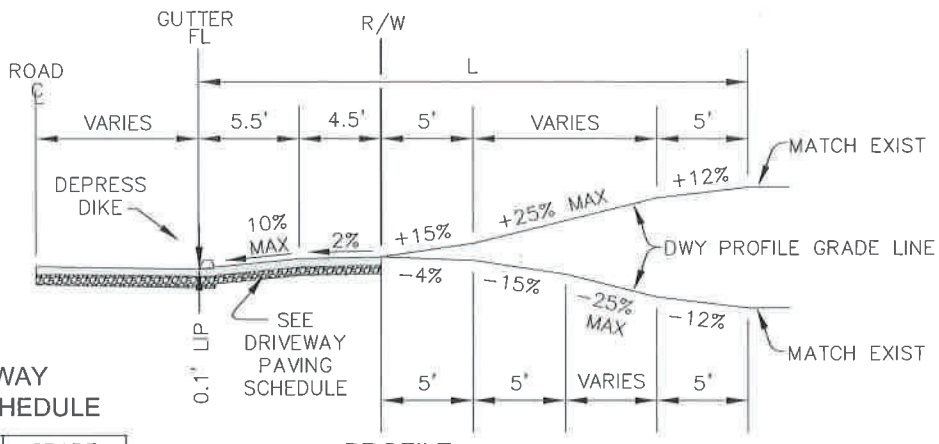
DRAWN BY: PBM CHECKED BY: JSM RECOMMENDED BY: JEFF S. MOODY, P.E. APPROVED BY COUNTY ENGINEER  MOHAMAD FAKHREDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014	SAN DIEGO COUNTY DESIGN STANDARD  <b>TEMPORARY TURNAROUND AT DEAD END STREET</b>	<table border="1"> <tr> <th>REVISIONS</th> <th>APPROVED</th> <th>DATE</th> </tr> <tr> <td>REV</td> <td>JSM</td> <td>10/2012</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	REVISIONS	APPROVED	DATE	REV	JSM	10/2012						
REVISIONS	APPROVED	DATE												
REV	JSM	10/2012												
DRAWING NUMBER <b>DS-05</b>														



**TURNAROUND**  
NO SCALE

DIMENSIONS					CURVE 1						CURVE 2					
R/W	A	B	C	D	△	CURB			PROP.			△	CURB		PROP.	
						R	L	T	R	L	T		R	L		
52'	26'	16'	10'	50.95'	46° 42' 30"	32'	26.09'	13.82'	22'	17.93'	9.50'	273° 25' 00"	38'	181.34'	48'	229.06'
56'	28'	18'	10'	50.99'	42° 50' 00"	37'	27.66'	14.52'	27'	20.18'	10.59'	265° 40' 00"	38'	176.20'	48'	222.56'
60'	30'	20'	10'	68.15'	29° 35' 31"	100'	51.65'	26.41'	90'	46.48'	23.77'	239° 11' 02"	38'	158.63'	48'	200.38'
72'	36'	26'	10'	81.39'	32° 51' 36"	100'	57.35'	29.49'	90'	51.62'	26.54'	245° 43' 12"	50'	214.43'	60'	257.32'

DRAWN BY: PBM	CHECKED BY: JSM	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.	APPROVED BY COUNTY ENGINEER		REV	JSM	10/2012
MOHAMAD FAKHRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014 DATE: 10/15/12		<b>TURNAROUND</b> <b>DETAIL AND CALCULATIONS</b>	DRAWING NUMBER <b>DS-06</b>		

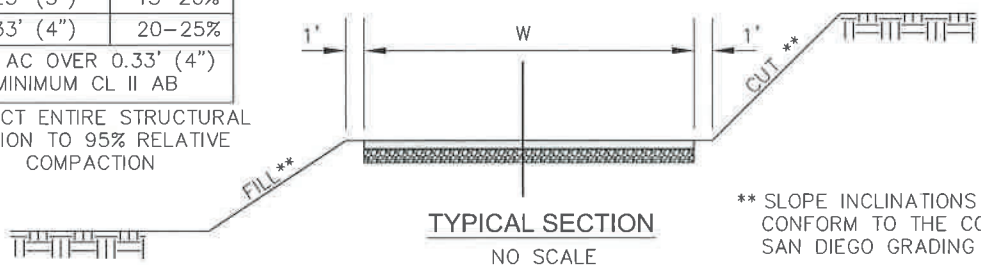


**DRIVEWAY PAVING SCHEDULE**

DEPTH OF A.C.	GRADE
0.17' (2")	0-15%
0.25' (3")	15-20%
0.33' (4")	20-25%
ALL AC OVER 0.33' (4") MINIMUM CL II AB	

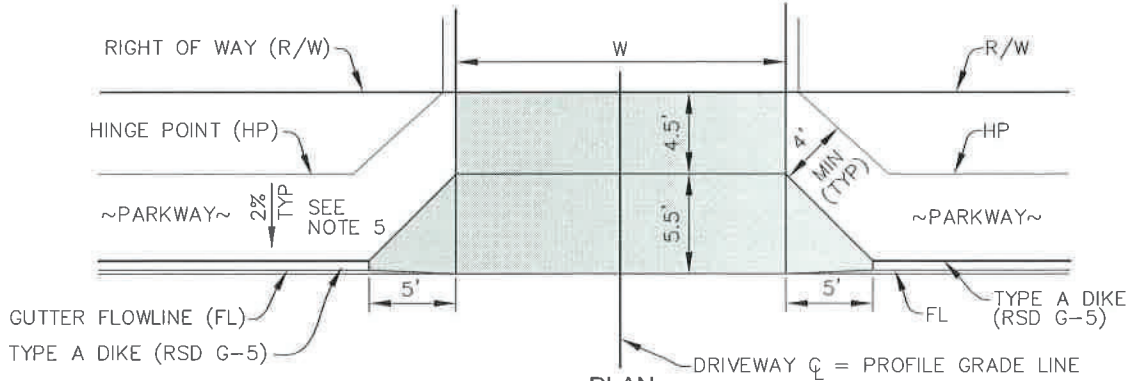
COMPACT ENTIRE STRUCTURAL SECTION TO 95% RELATIVE COMPACTION

**PROFILE**  
NO SCALE



\*\* SLOPE INCLINATIONS SHALL CONFORM TO THE COUNTY OF SAN DIEGO GRADING ORDINANCE

**TYPICAL SECTION**  
NO SCALE

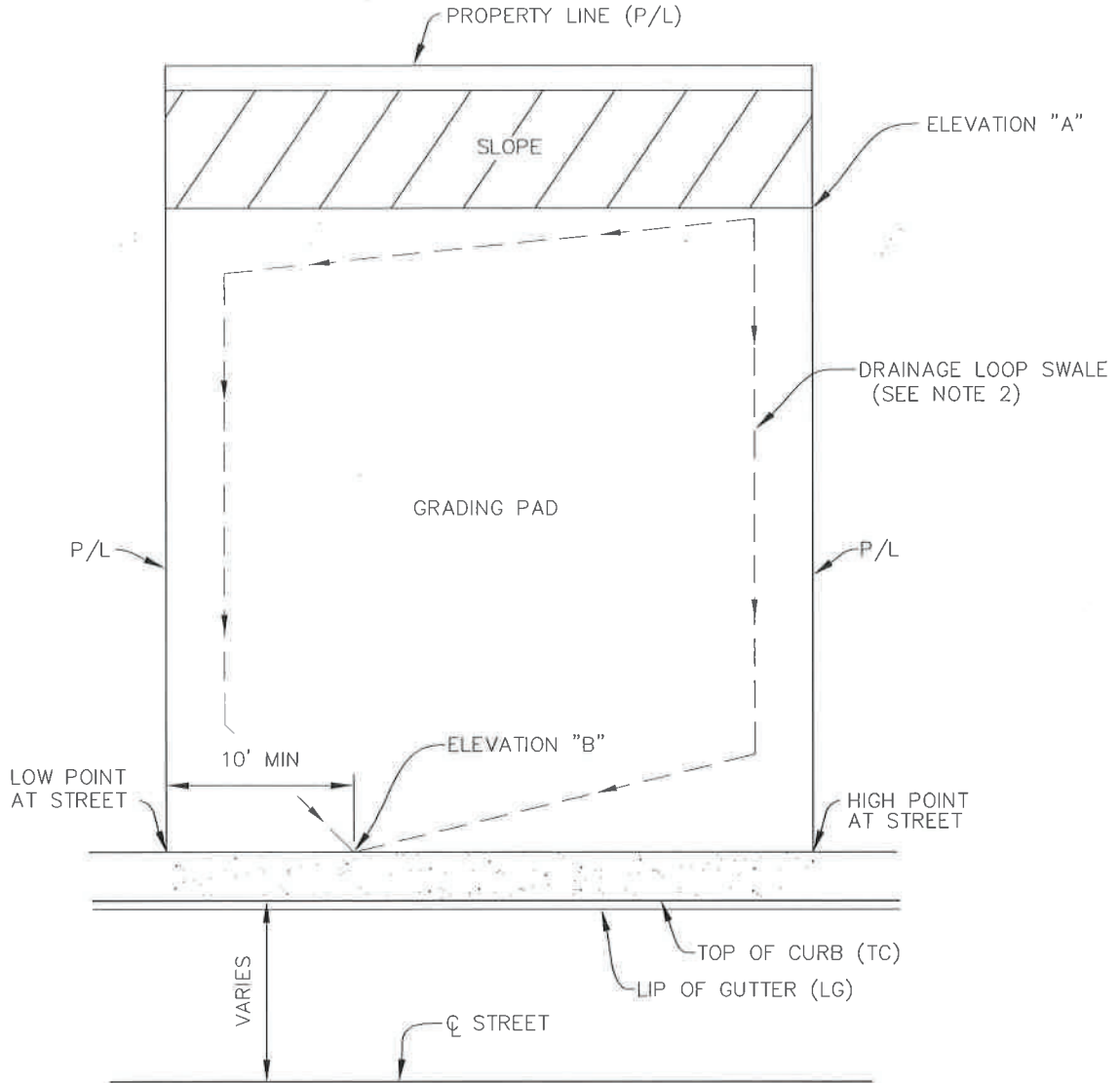


**PLAN**  
NO SCALE

**NOTES:**

1. DRIVEWAY PROFILE, WIDTH (W) AND LENGTH (L) SHALL BE SHOWN ON PLANS.
2. DRIVEWAYS WITH GRADES GREATER THAN 15% SHALL BE SURFACED WITH ASPHALT CONCRETE (AC) OR PORTLAND CEMENT CONCRETE (PCC).
3. MAXIMUM GRADE BREAK 14% (5' MINIMUM VERTICAL CURVE PREFERRED).
4. SEE SAN DIEGO AREA REGIONAL STANDARD DRAWINGS G-15 & G-16 FOR DRIVEWAY LOCATION & WIDTH REQUIREMENTS AND G-14 SERIES FOR PCC DRIVEWAYS.
5. WHEN ROADWAY GRADE EXCEEDS 5% THE DOWNSLOPE PARKWAY SHALL BE SURFACED WITH 0.17' (2") THICK A.C. BETWEEN THE A.C. DIKE AND HINGE POINT FOR A DISTANCE OF 15 LF FROM THE EDGE OF DRIVEWAY. THE A.C. SURFACING SHALL MATCH THE PARKWAY GRADE.
6. ALL DRIVEWAYS SHALL SATISFY COUNTY SIGHT DISTANCE REQUIREMENTS.

DRAWN BY: PBM	CHECKED BY: JSM	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER		<b>ASPHALT CONCRETE DRIVEWAY</b>			
<i>Mohamad</i> MOHAMAD FAKHRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014	DATE: 10/15/12		DRAWING NUMBER	<b>DS-07</b>	



**TYPICAL FINISHED GRADING**

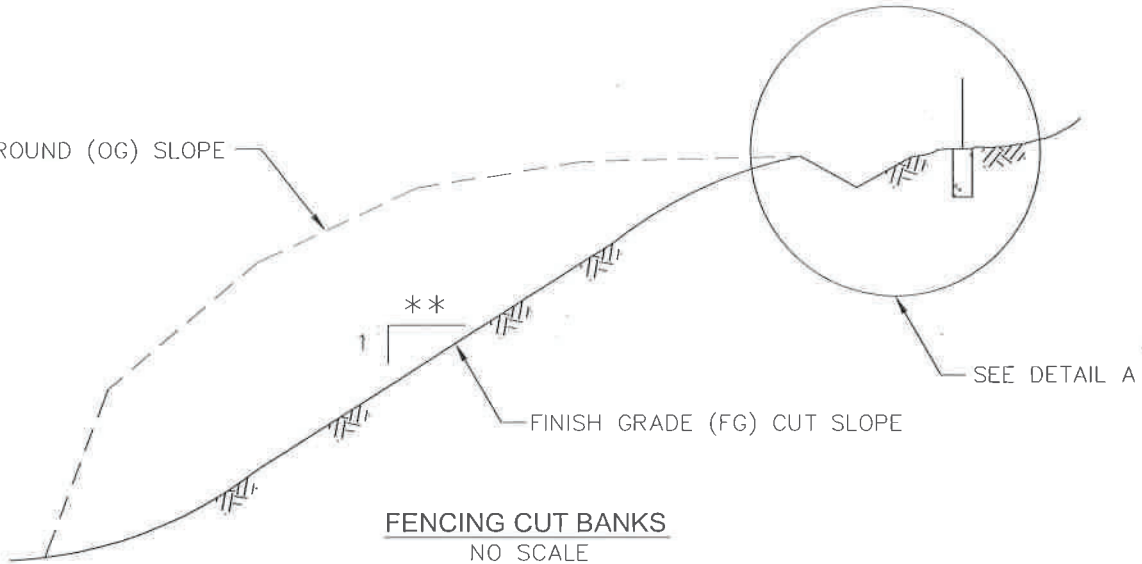
NO SCALE

**NOTES:**

1. ELEVATION "A" IS LOCATED AT THE MOST REMOTE CORNER OF THE LOT FROM THE DRAIN POINT "ELEVATION B". ELEVATION "A" SHALL EQUAL ELEVATION "B" PLUS 1% TIMES ONE-HALF THE PERIMETER OF THE LOT.
2. DRAINAGE LOOP SWALE SHALL HAVE 1% MINIMUM GRADIENT TOWARDS STREET OR OTHER DISCHARGE POINT.
3. ALL SLOPE SURFACES SHALL BE PROTECTED BY APPROVED EROSION CONTROL MATERIAL.

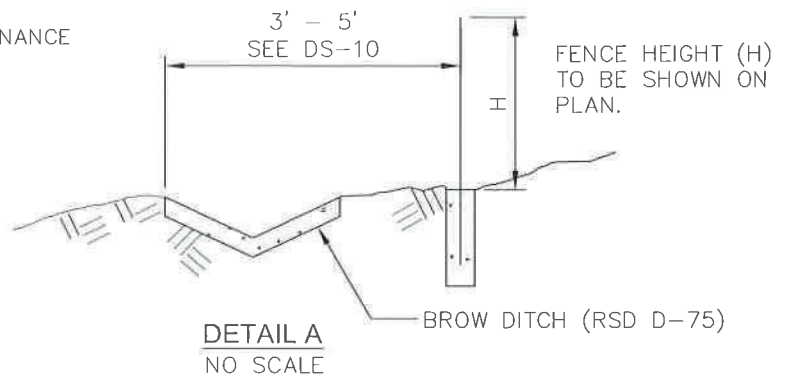
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RECOMMENDED BY: JEFF S. MOODY, P.E.			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER		<b>LOT GRADING</b>			
<i>M. Fakhreddine</i>	DATE: 10/15/12				
MCHAMAD FAKHRRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	<b>DS-08</b>	

ORIGINAL GROUND (OG) SLOPE

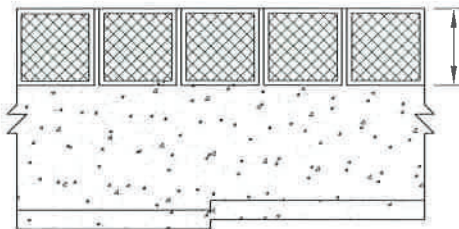


**FENCING CUT BANKS**  
NO SCALE

\*\* SLOPE INCLINATION SHALL CONFORM TO THE CURRENT COUNTY OF SAN DIEGO GRADING ORDINANCE

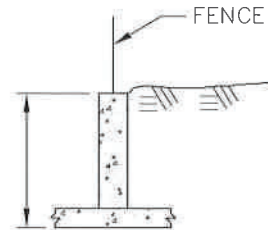


**DETAIL A**  
NO SCALE



FENCE DETAILS TO BE SHOWN ON PLANS

RETAINING WALL DETAILS TO BE SHOWN ON PLANS



**FENCING RETAINING WALLS**  
**FOR WALL HEIGHTS GREATER THAN 4 FT.**  
NO SCALE

**NOTES:**

1. CHAIN LINK FENCE OR ALTERNATE FENCE ACCEPTABLE TO THE COUNTY ENGINEER SHALL BE INSTALLED ALONG THE TOP OF SLOPES EXCEEDING 15 FEET VERTICAL HEIGHT AND 3:1 (HORIZONTAL: VERTICAL) SLOPE AND ALONG THE TOP OF ALL WALLS EXCEEDING 4 FEET VERTICAL HEIGHT.
2. RETAINING WALLS AND FENCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SAN DIEGO COUNTY APPROVED PLANS.

DRAWN BY: PBM CHECKED BY: JSM

RECOMMENDED BY: JEFF S. MOODY, P.E.

APPROVED BY COUNTY ENGINEER

*Mohamad* DATE: 10/15/12  
MOHAMAD FAKHRIIDINE, P.E.  
R.C.E. NO. 44520, EXP 3/31/2014

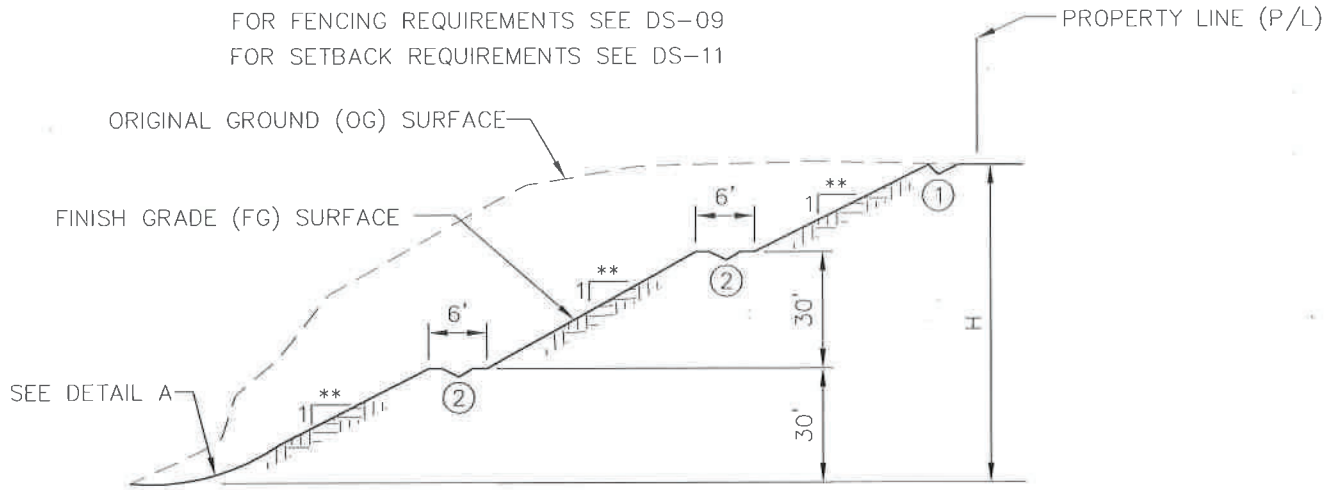
SAN DIEGO COUNTY DESIGN STANDARD

**FENCING**  
**CUT BANKS AND WALLS**

REVISIONS	APPROVED	DATE
REV	JSM	10/2012

DRAWING NUMBER **DS-09**

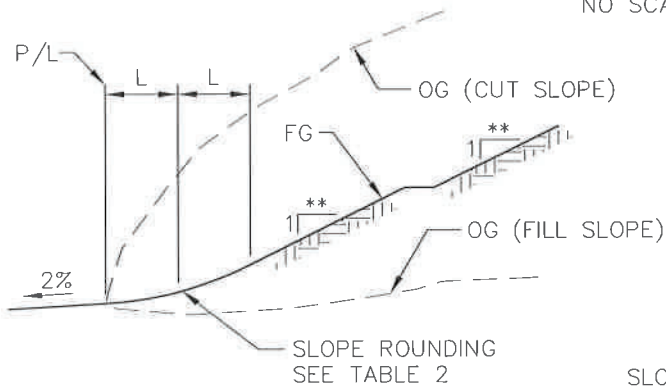
FOR FENCING REQUIREMENTS SEE DS-09  
FOR SETBACK REQUIREMENTS SEE DS-11



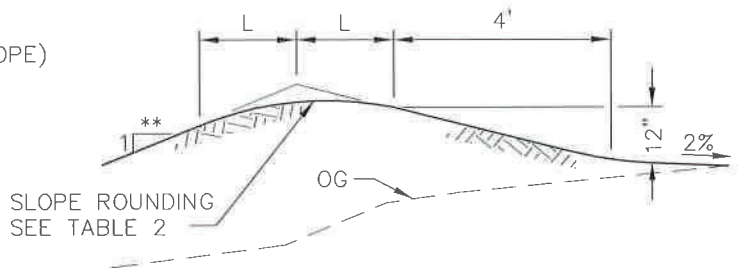
**TYPICAL CUT SLOPE**

NO SCALE

\*\* SLOPE INCLINATION SHALL CONFORM TO THE CURRENT COUNTY OF SAN DIEGO GRADING ORDINANCE



**DETAIL A**  
NO SCALE



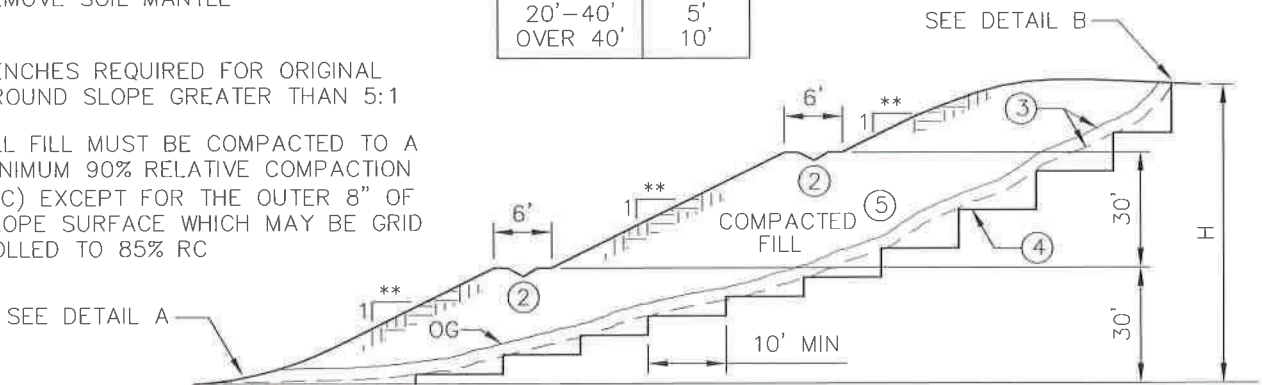
**DETAIL B**  
NO SCALE

**NOTES:**

- ① BROW DITCH PER RSD D-75
- ② TERRACE DITCH PER RSD D-75
- ③ REMOVE SOIL MANTLE
- ④ BENCHES REQUIRED FOR ORIGINAL GROUND SLOPE GREATER THAN 5:1
- ⑤ ALL FILL MUST BE COMPACTED TO A MINIMUM 90% RELATIVE COMPACTION (RC) EXCEPT FOR THE OUTER 8" OF SLOPE SURFACE WHICH MAY BE GRID ROLLED TO 85% RC

**TABLE 2**  
**SLOPE ROUNDING**

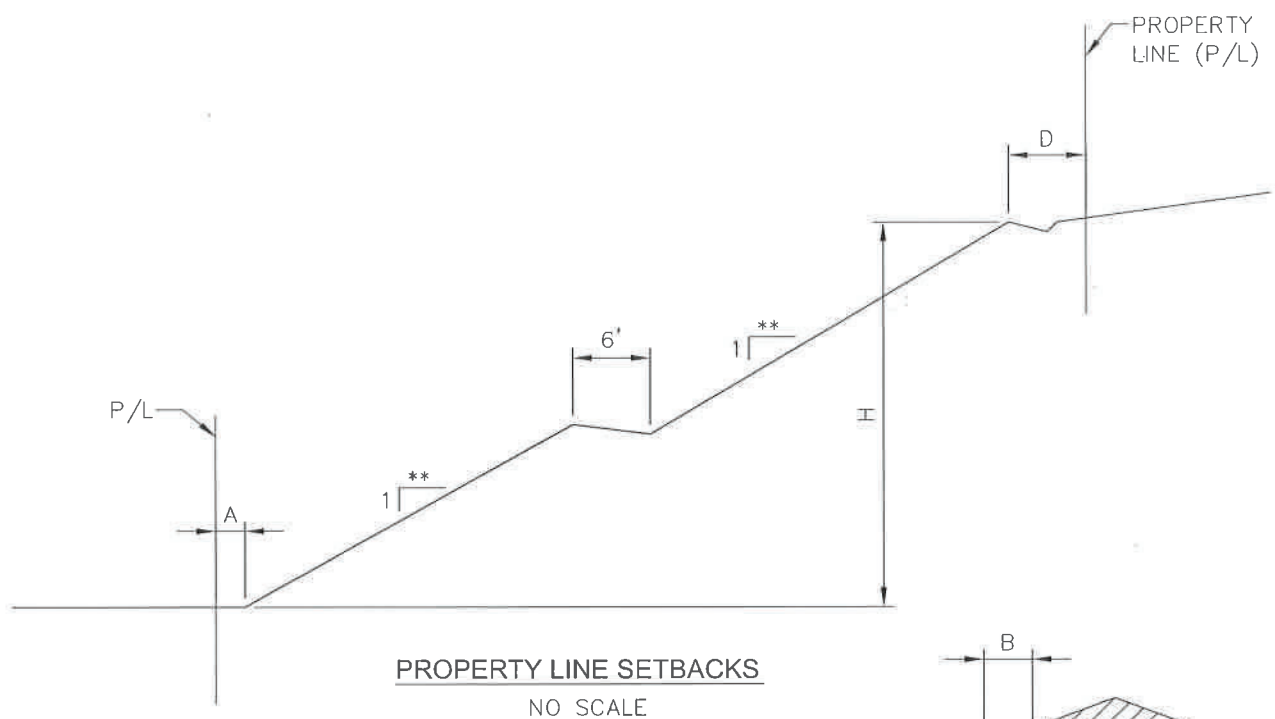
H FEET	L FEET
0'-5'	-
5'-20'	2.5'
20'-40'	5'
OVER 40'	10'



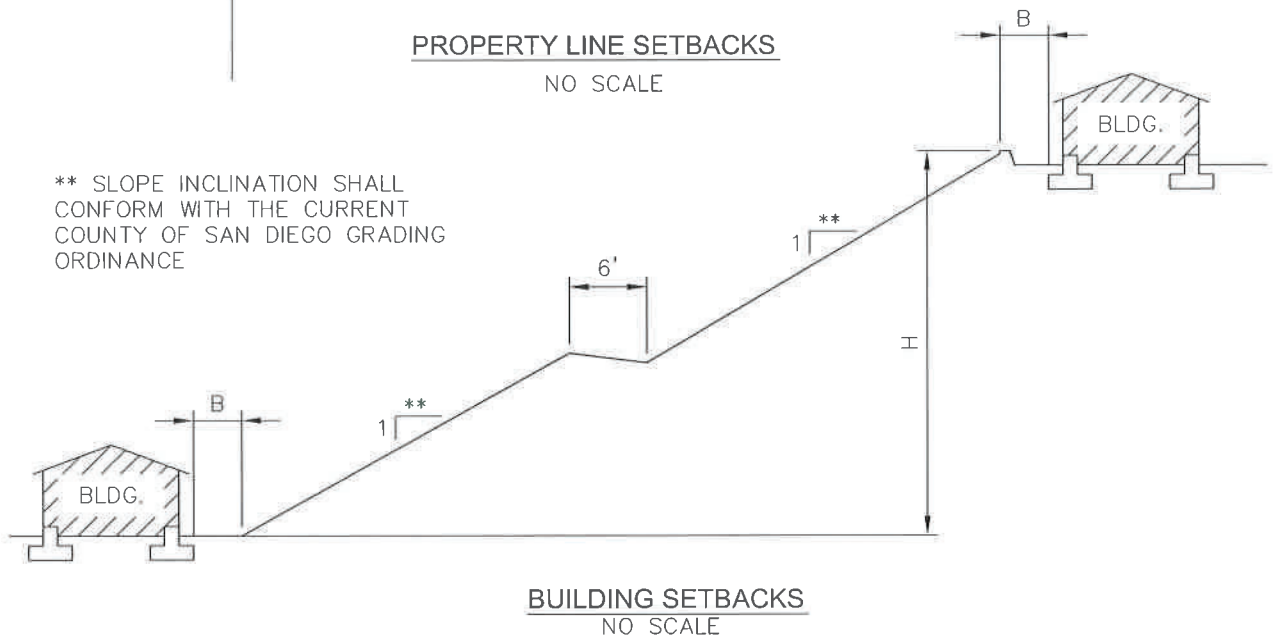
**TYPICAL FILL SLOPE**

NO SCALE

DRAWN BY: PBM	CHECKED BY: JSM	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER		<b>GRADING OF SLOPES</b>			
<i>M. Fakhriddine</i> DATE: 10/15/12			DRAWING NUMBER	<b>DS-10</b>	
MUHAMMAD FAKHRIDDINE, P.E. R.C.E. NO. 44820, EXP 3/31/2014					



\*\* SLOPE INCLINATION SHALL CONFORM WITH THE CURRENT COUNTY OF SAN DIEGO GRADING ORDINANCE



REQUIRED SETBACKS			
H FEET	A	B	D
0-15	1'-6"	5'	3'
15-30	3'	5'	5'
OVER 30	5'	5'	5'

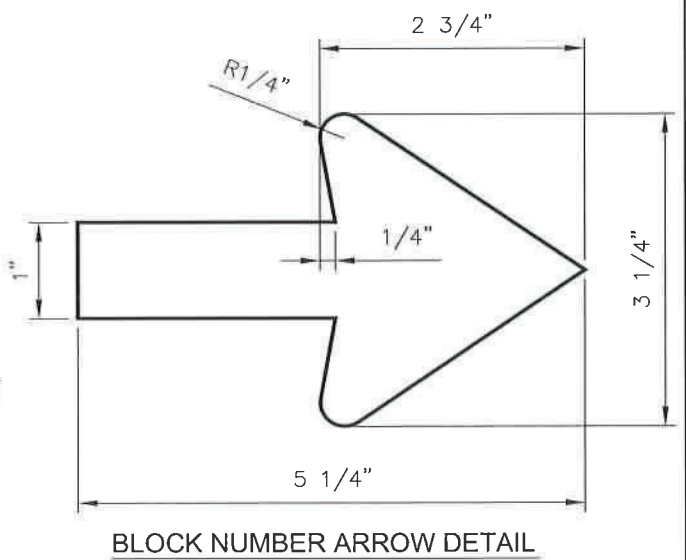
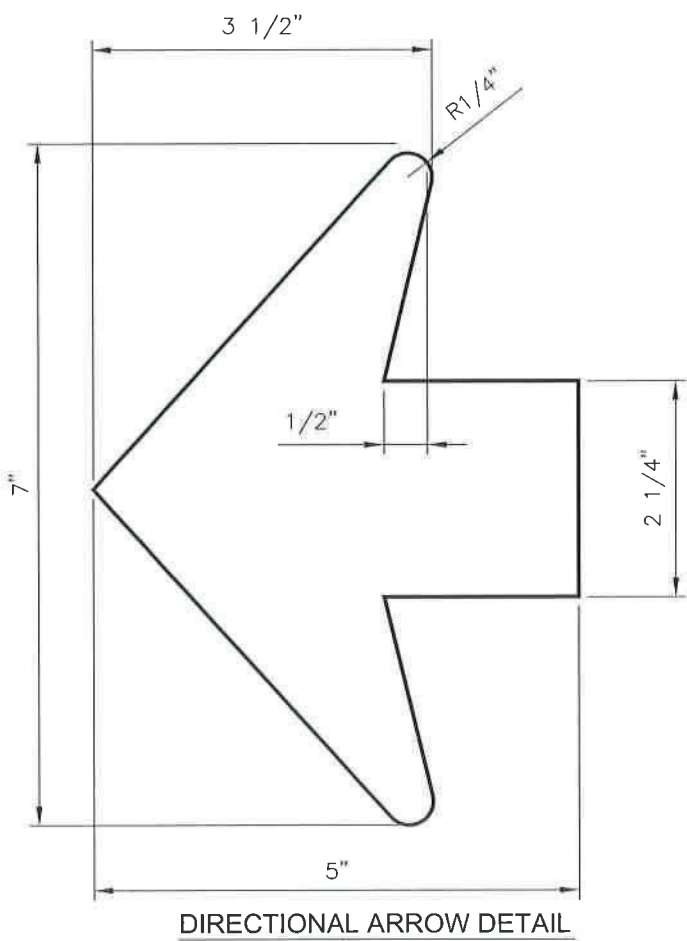
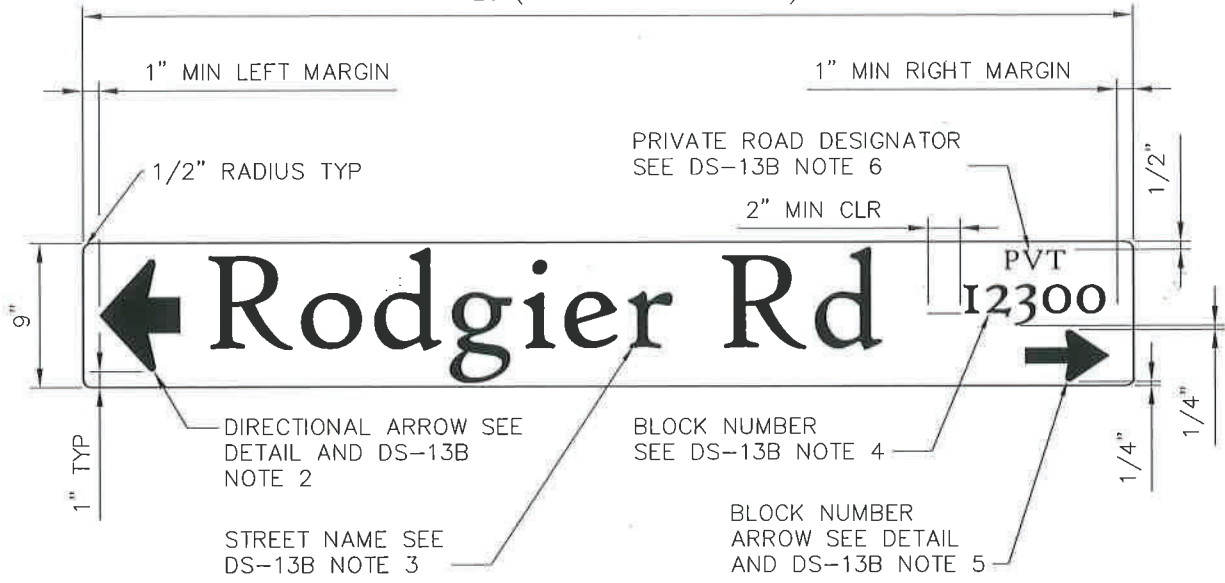
**NOTES:**

- A = DISTANCE FROM TOE OF SLOPE TO PROPERTY LINE.
- B = DISTANCE FROM EDGE OF FOUNDATION TO TOE OR TOP OF SLOPE.
- D = DISTANCE FROM TOP OF SLOPE TO PROPERTY LINE.
- H = TOTAL SLOPE HEIGHT MEASURED VERTICALLY.

DRAWN BY: <u>PBM</u>	CHECKED BY: <u>JSM</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER		<b>REQUIRED SETBACKS</b>			
DATE: <u>10/15/12</u> MOHAMAD FAKHREDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	<b>DS-11</b>	



VARIES (24" MIN. TO 60" MAX)

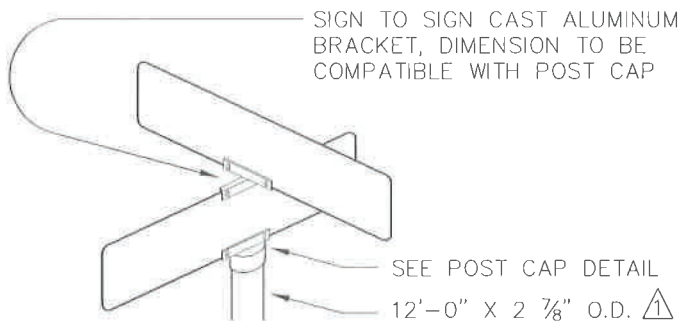


SEE NOTES ON DS-13B FOR ADDITIONAL SPECIFICATIONS AND REQUIREMENTS

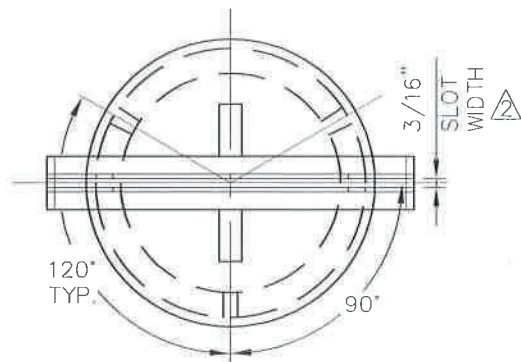
DRAWN BY: <u>GF</u>	CHECKED BY: <u>KVS</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			NEW	JSM	10/2012
APPROVED BY COUNTY ENGINEER <i>Mohamad</i> MOHAMAD FAKHRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014		STREET NAME SIGN FOR UNSIGNALIZED INTERSECTIONS			
DATE: <u>10/15/12</u>			DRAWING NUMBER	DS-13A	

1. THE BLADES OF STREET NAME SIGNS AT UNSIGNALIZED INTERSECTIONS SHALL BE DOUBLE FACED WITH A GREEN BACKGROUND AND WHITE LEGEND. THE STREET NAME SIGN BLADE BLANK SHALL BE 0.125" THICK ALUMINUM ALLOY 6063-T6, 6061-T6, 5052-H38, OR APPROVED EQUAL. UNLESS OTHERWISE SPECIFIED, THE SMALLEST POSSIBLE BLANK WHICH MEETS THESE SPECIFICATIONS AND MAINTAINS AESTHETICS SHALL BE USED FOR EACH STREET NAME SIGN BLADE. BOTH FACES OF THE BLANK SHALL BE COMPLETELY COVERED WITH ~~EITHER WHITE ASTM D4956 TYPE IX SIGN SHEETING (3M DIAMOND GRADE VIP WHITE 3990 OR APPROVED EQUAL) OR PROPOSED~~ 1 TYPE XI SIGN SHEETING (3M DIAMOND GRADE DG3 WHITE 4090 OR APPROVED EQUAL). THEN, 3M ELECTRONIC CUTTABLE TRANSPARENT FILM GREEN 1177 (OR APPROVED EQUAL) WITH THE DESIGNATED STREET NAME SIGN INFORMATION CUT OUT SHALL BE APPLIED TO BOTH SIGN FACES OF THE BLADE. THE YELLOW PRIVATE ROAD DESIGNATOR SHALL BE APPLIED PER NOTE 6. LASTLY, BOTH SIDES OF THE BLADE IS COVERED WITH PREMIUM CLEAR PROTECTIVE OVERLAY FILM (3M 1160 OR EQUIVALENT). ALL SIGN SHEETING AND FILMS USED ON EACH STREET NAME SIGN BLADE SHALL BE COMPATIBLE TO ENSURE MATERIAL WARRANTIES ARE EFFECTIVE.
2. THE DIRECTIONAL ARROW SHALL BE USED AT INTERSECTIONS THAT HAVE STREET NAME CHANGES. THE DIRECTIONAL ARROW INDICATES WHICH LEG OF THE INTERSECTION HAS THE RESPECTIVE STREET NAME. THE DIRECTIONAL ARROW IS DISPLAYED IN WHITE ON THE BLADE. THE COMPASS DIRECTION OF THE DIRECTIONAL ARROW FOR EACH STREET NAME SIGN BLADE SHALL BE SPECIFIED WHEN ORDERED.
3. THE STREET NAME IS DISPLAYED IN WHITE ON THE STREET NAME SIGN BLADE. ONLY THE OFFICIAL COUNTY RECORDED NAME AND SPELLING SHALL BE USED ON THE STREET NAME SIGN. ONLY COUNTY APPROVED ABBREVIATIONS PER DS-13G SHALL BE USED ON THE STREET NAME SIGN BLADES. THE STREET NAME SHALL BE CENTERED VERTICALLY ON EACH STREET NAME SIGN BLADE. THE STREET NAME LETTERING SHALL BE 6" UPPERCASE AND 4.5" LOWERCASE HIGHWAY GOTHIC FONT, WITH STYLE AND SPACING AS ESTABLISHED IN THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), CURRENT EDITION. STROKE WIDTH AND LETTER WIDTH USED FOR THE WHOLE STREET NAME MAY VARY FROM SERIES B TO SERIES E (REFER TO FHWA STANDARD SIGNS AND MARKINGS SIGN FONTS AT [HTTP://MUTCD.FHWA.DOT.GOV/SHSE/ALPHABETS.PDF](http://MUTCD.FHWA.DOT.GOV/SHSE/ALPHABETS.PDF)). THE MINIMUM GAP DISTANCE BETWEEN THE DIRECTIONAL ARROW AND THE STREET NAME SHALL EQUAL THE SPACING USED FOR THE BLANK SPACES IN THE STREET NAME.
4. THE BLOCK NUMBER IS DISPLAYED IN WHITE ON THE STREET NAME SIGN BLADE. THE BLOCK NUMBER LETTERING SHALL BE 3" HIGH HIGHWAY GOTHIC FONT WITH STYLE AND SPACING AS ESTABLISHED BY THE CAMUTCD, CURRENT EDITION. THE SERIES USED FOR THE WHOLE BLOCK NUMBER SHALL BE OF THE SAME SERIES THAT IS USED FOR THE STREET NAME.
5. THE BLOCK NUMBER ARROW IS DISPLAYED IN WHITE ON THE STREET NAME SIGN BLADE. THE BLOCK NUMBER ARROW SHALL BE CENTERED BELOW THE BLOCK NUMBER. THE COMPASS DIRECTION OF THE BLOCK NUMBER ARROW FOR EACH STREET NAME SIGN BLADE SHALL BE SPECIFIED WHEN ORDERED.
6. THE PRIVATE ROAD DESIGNATOR (PVT) IS ONLY USED ON STREET NAME BLADES FOR ROADS THAT ARE NOT MAINTAINED BY THE COUNTY OF SAN DIEGO (PRIVATE ROADS). THE PVT IS DISPLAYED IN YELLOW ON THE STREET NAME BLADE. THE PVT SHALL BE CENTERED ABOVE THE BLOCK NUMBER. THE PVT LETTERING SHALL BE 1 1/4" UPPERCASE HIGHWAY GOTHIC FONT SERIES E WITH STYLE AND SPACING AS ESTABLISHED BY THE CAMUTCD, CURRENT EDITION. THE PVT SHALL BE MADE OF ASTM D4956 TYPE I SHEETING (3M PRISMATIC ENGINEER GRADE YELLOW 3431 OR APPROVED EQUAL) AND PLACED ON THE STREET NAME SIGN BLADE PRIOR TO THE CLEAR PROTECTIVE OVERLAY SHEETING.
7. STREET NAME SIGNS SHALL BE MOUNTED ON POLES PER DS-13C. NO OTHER SIGNS SHALL BE MOUNTED ON STREET NAME SIGN POLES UNLESS TALLER POLES ARE SPECIFIED TO MEET CAMUTCD REQUIRED GROUND CLEARANCES FOR SIGNS.

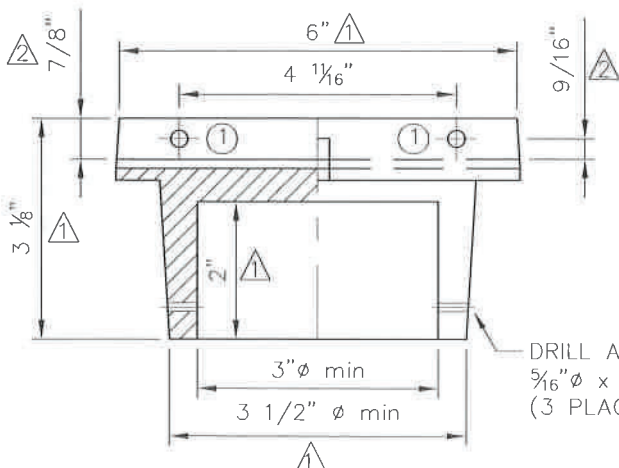
DRAWN BY: <u>GF</u>	CHECKED BY: <u>KVS</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			NEW	JSM	10/2012
APPROVED BY COUNTY ENGINEER 	DATE: <u>10/15/12</u>	<b>STREET NAME SIGN NOTES FOR UNSIGNALIZED INTERSECTIONS</b>	1	GF	8/2014
MOHAMAD FAKHREDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	<b>DS-13B</b>	



12'-0" X 2 7/8" O.D.  $\Delta$   
ALUMINUM ALLOY 6063-T6,  
CLEAR ANODIZED POST



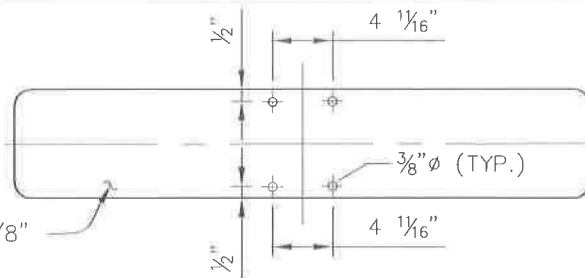
POST CAP DETAIL



POST CAP HALF-SECTION DETAIL

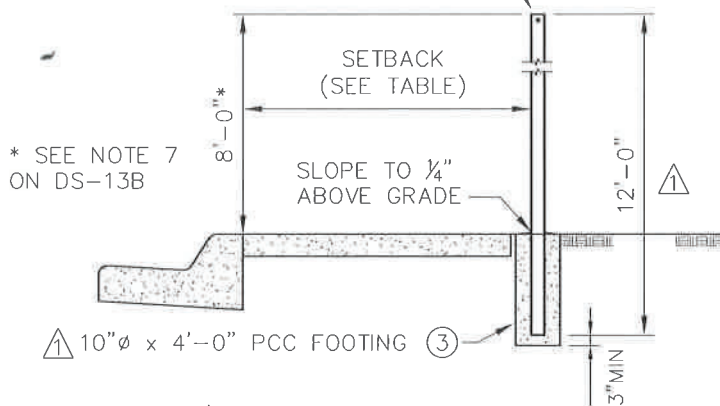
NOTES:

- ① DRILL 11/32"  $\phi$  HOLE THROUGH NEAR SIDE FLANGE (TYP 2 LOCATIONS), DRILL AND TAP FOR 5/16"  $\phi$  x #18 BOLTS IN LINE WITH 11/32"  $\phi$  HOLES.  $\Delta$
- ② ALL ATTACHING SCREWS SHALL BE VANDAL PROOF TYPE AND GREASED BEFORE INSTALLATION.
- ③ CONCRETE SHALL BE EITHER GREENBOOK 520-C-2500 OR MINOR CONCRETE PER CALTRANS STANDARD SPECIFICATIONS AS SPECIFIED BY THE ENGINEER.  $\Delta$



TYPICAL STREET NAME BLADE DETAIL

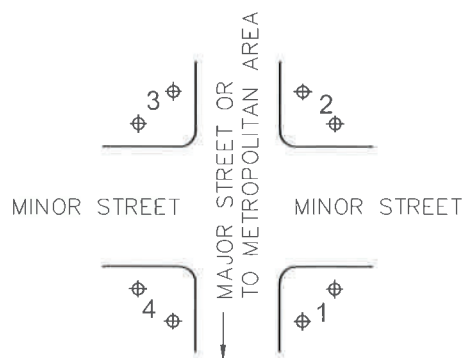
DRILL HOLE TO SECURE CAP TO POST WITH SCREW OR RIVET



$\Delta$  SIGN POST SETBACK TABLE

CURB AND SIDEWALK	MINIMUM POST SETBACK $\text{\textcircled{C}}$
CONTIGUOUS	SIDEWALK WIDTH + 6"
NON CONTIGUOUS	EQUALLY SPACED BETWEEN CURB AND SIDEWALK

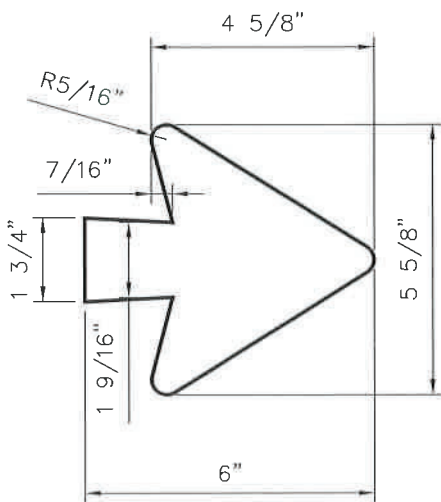
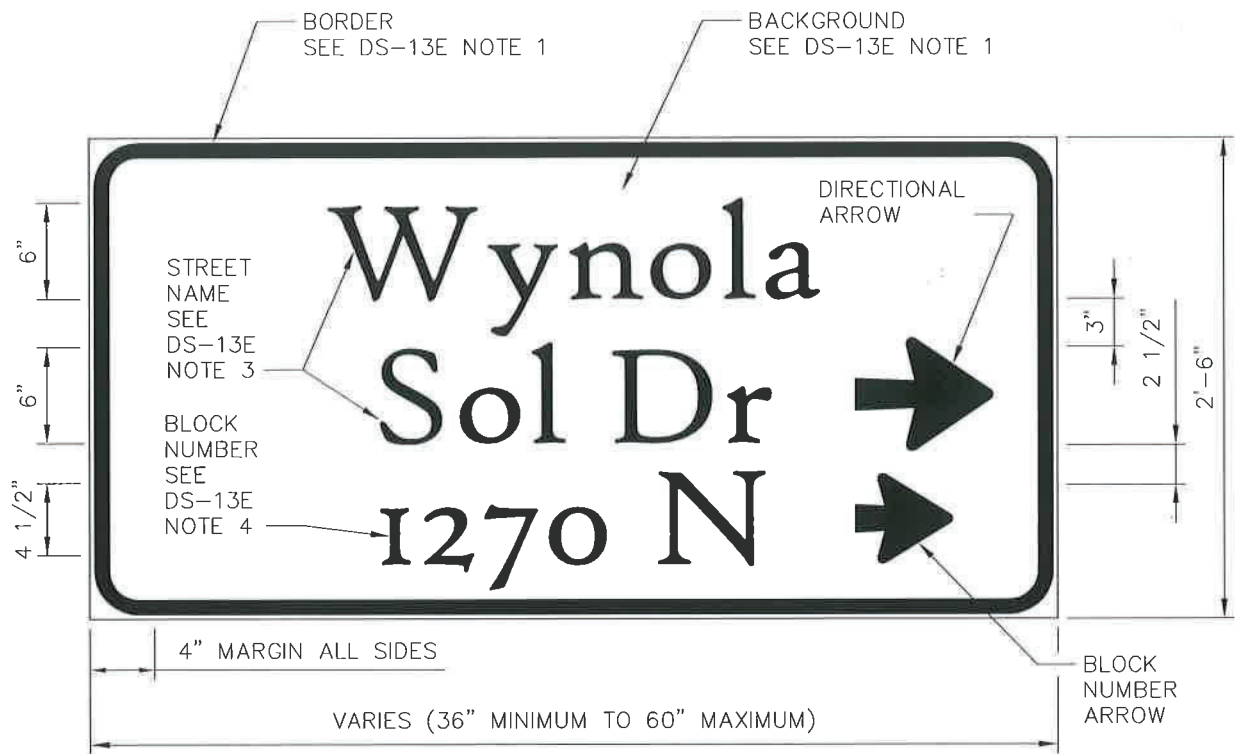
$\text{\textcircled{C}}$  SIGN MUST BE LOCATED WITHIN THE R/W



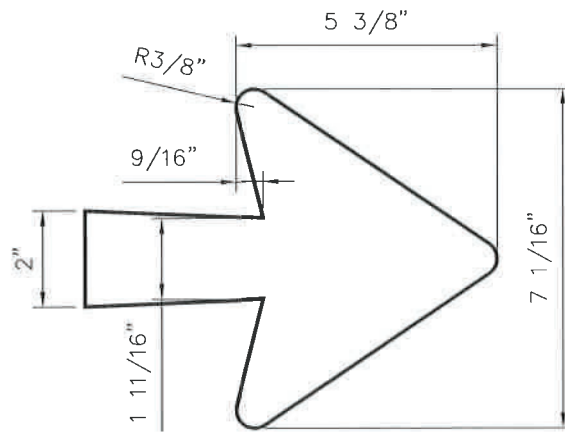
STREET NAME SIGN LOCATION

NUMBER INDICATES PRIORITY OF LOCATION SELECTION

DRAWN BY: <u>GF</u>	CHECKED BY: <u>KVS</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: <u>JEFF S. MOODY, P.E.</u>	APPROVED BY COUNTY ENGINEER		$\Delta$	GF	10/2012
DATE: <u>1/30/15</u> RAMIN ABDI, P.E. R.C.E. NO. 40460, EXP 3/31/2015		STREET NAME SIGN DETAILS FOR UNSIGNALIZED INTERSECTIONS	$\Delta$	GF	1/2015
			DRAWING NUMBER	DS-13C	



BLOCK NUMBER ARROW DETAIL



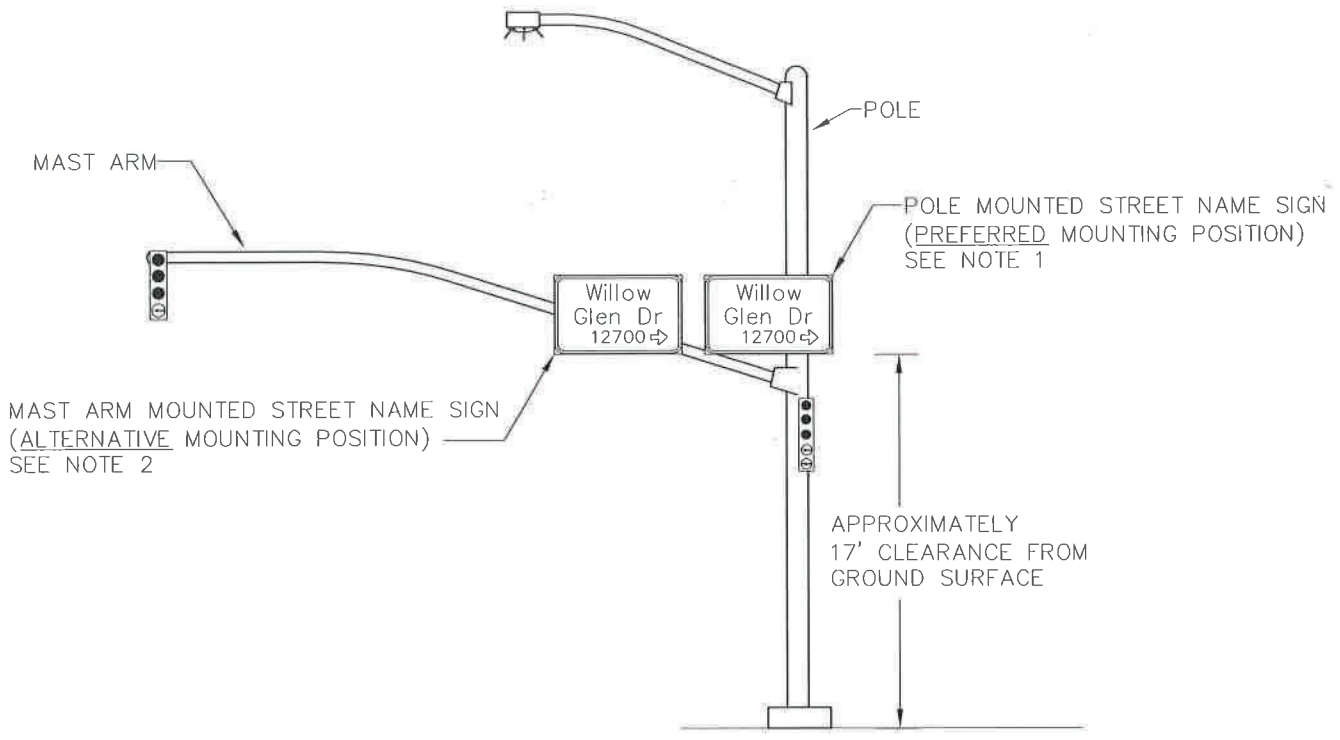
DIRECTIONAL ARROW DETAIL

SEE NOTES ON DS-13E FOR ADDITIONAL SPECIFICATIONS AND REQUIREMENTS

DRAWN BY: <u>GF</u>	CHECKED BY: <u>KVS</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: <u>JEFF S. MOODY, P.E.</u>			NEW	JSM	10/2012
APPROVED BY COUNTY ENGINEER <i>Mohamad</i> MOHAMAD FAKHRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014	DATE: <u>10/15/12</u>	STREET NAME SIGN FOR SIGNALIZED INTERSECTIONS			
			DRAWING NUMBER	DS-13D	

1. STREET NAME SIGNS AT SIGNALIZED INTERSECTIONS SHALL BE SINGLE FACED SIGNS WITH GREEN BACKGROUND, WHITE LEGEND, AND WHITE, 1" WIDE BORDER. THE STREET NAME SIGN BLANK SHALL BE 0.080" THICK ALUMINUM ALLOY 6063-T6, 6061-T6, 5052-H38, OR APPROVED EQUAL. UNLESS OTHERWISE SPECIFIED, THE SMALLEST POSSIBLE BLANK WHICH MEETS THESE SPECIFICATIONS AND MAINTAINS AESTHETICS SHALL BE USED FOR EACH STREET NAME SIGN. THE BLANK SHALL BE COMPLETELY COVERED WITH ~~EITHER WHITE ASTM D4956 TYPE IX SIGN SHEETING (3M DIAMOND GRADE VIF WHITE 3990 OR APPROVED EQUAL) OR TYPE XI SIGN SHEETING (3M DIAMOND~~ 1 ~~GRADE DG3 WHITE 4090 OR APPROVED EQUAL)~~. THEN, A SINGLE SHEET OF 3M ELECTRONIC CUTTABLE TRANSPARENT FILM GREEN 1177 (OR APPROVED EQUAL) WITH THE DESIGNATED STREET NAME SIGN INFORMATION CUT OUT SHALL BE APPLIED TO THE SIGN FACE. THE 1" WIDE BORDER SHALL HAVE ROUNDED CORNERS (3" OUTSIDE RADIUS TYPICAL). LASTLY, THE SIGN FACE SHALL BE COVERED WITH PREMIUM CLEAR PROTECTIVE OVERLAY FILM (3M 1160 OR EQUIVALENT). ALL SHEETING AND FILMS USED ON EACH STREET NAME SIGN SHALL BE COMPATIBLE TO ENSURE MATERIAL WARRANTIES ARE EFFECTIVE.
2. THE DIRECTIONAL ARROW SHALL BE USED AT INTERSECTIONS THAT HAVE STREET NAME CHANGES, AND SHALL INDICATE WHICH LEG OF THE INTERSECTION HAS THE RESPECTIVE STREET NAME. THE DIRECTIONAL ARROW IS DISPLAYED IN WHITE ON THE BLADE. THE DIRECTIONAL ARROW IS CENTERED VERTICALLY WITH RESPECT TO THE ASSOCIATED LINE OF TEXT. THE COMPASS DIRECTION OF THE DIRECTIONAL ARROW FOR EACH STREET NAME SIGN BLADE SHALL BE SPECIFIED WHEN ORDERED.
3. THE STREET NAME IS DISPLAYED IN WHITE ON THE STREET NAME SIGN. ONLY THE OFFICIAL COUNTY RECORDED NAME AND SPELLING SHALL BE USED ON THE STREET NAME SIGN. ONLY COUNTY APPROVED ABBREVIATIONS PER DS-13G SHALL BE USED ON THE STREET NAME SIGNS. THE STREET NAME SIGN LETTERING SHALL BE 6" UPPERCASE AND 4.5" LOWERCASE HIGHWAY GOTHIC FONT, WITH STYLE AND SPACING AS ESTABLISHED IN THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC DEVICES (CAMUTCD), CURRENT EDITION. STROKE WIDTH AND LETTER WIDTH USED FOR THE WHOLE STREET NAME MAY VARY FROM SERIES B TO SERIES E (REFER TO FHWA STANDARD SIGNS AND MARKINGS SIGN FONTS AT [HTTP://MUTCD.FHWA.DOT.GOV/SHSE/ALPHABETS.PDF](http://MUTCD.FHWA.DOT.GOV/SHSE/ALPHABETS.PDF)). THE MINIMUM GAP DISTANCE BETWEEN THE DIRECTIONAL ARROW AND THE STREET NAME SHALL EQUAL THE SPACING USED FOR THE BLANK SPACES IN THE STREET NAME. THE FIRST LINE OF TEXT ON THE SIGN SHALL ONLY CONTAIN THE NAME OF THE STREET. IF THE STREET NAME IS MADE OF PARTS, SOME OF THE PARTS OF THE NAME MAY BE PUT ON THE SECOND LINE OF TEXT TO MINIMIZE THE LENGTH OF THE SIGN. THE STREET NAME SUFFIX (St, Bl, Rd, Av, Dr, Ln, Wy) SHALL BE PLACED ON THE SECOND LINE OF TEXT. BOTH LINES OF TEXT ARE TO BE CENTERED HORIZONTALLY ON THE SIGN.
4. THE BLOCK NUMBER IS DISPLAYED IN WHITE ON THE STREET NAME SIGN. THE BLOCK NUMBER LETTERING SHALL BE 4.5" HIGH HIGHWAY GOTHIC FONT, WITH STYLE AND SPACING PER CAMUTCD, CURRENT EDITION. THE SERIES USED FOR THE WHOLE BLOCK NUMBER SHALL BE THE SAME SERIES THAT IS USED FOR THE STREET NAME. THE BLOCK NUMBER SHALL BE CENTERED HORIZONTALLY ON THE STREET NAME SIGN.
5. IF THE BLOCK NUMBER INCREASES TO THE LEFT OF THE SIGN, THEN USE A LEFT BLOCK NUMBER ARROW ON THE LEFT SIDE OF THE BLOCK NUMBER. BLOCK NUMBER AND THE BLOCK NUMBER ARROW SHALL BE SEPARATED BY 4". THE COMPASS DIRECTION OF THE BLOCK NUMBER ARROW FOR EACH STREET NAME SIGN SHALL BE SPECIFIED WHEN ORDERED.
6. SIGNS SHALL BE MOUNTED ON TRAFFIC SIGNAL POLES PER DS-13F.

DRAWN BY: GF	CHECKED BY: KVS	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			NEW	JSM	10/2012
APPROVED BY COUNTY ENGINEER		<b>STREET NAME SIGN NOTES FOR SIGNALIZED INTERSECTIONS</b>	1	GF	8/2014
	DATE: 10/15/12				
MOHAMAD FAKHREDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	<b>DS-13E</b>	



TYPICAL ELEVATION

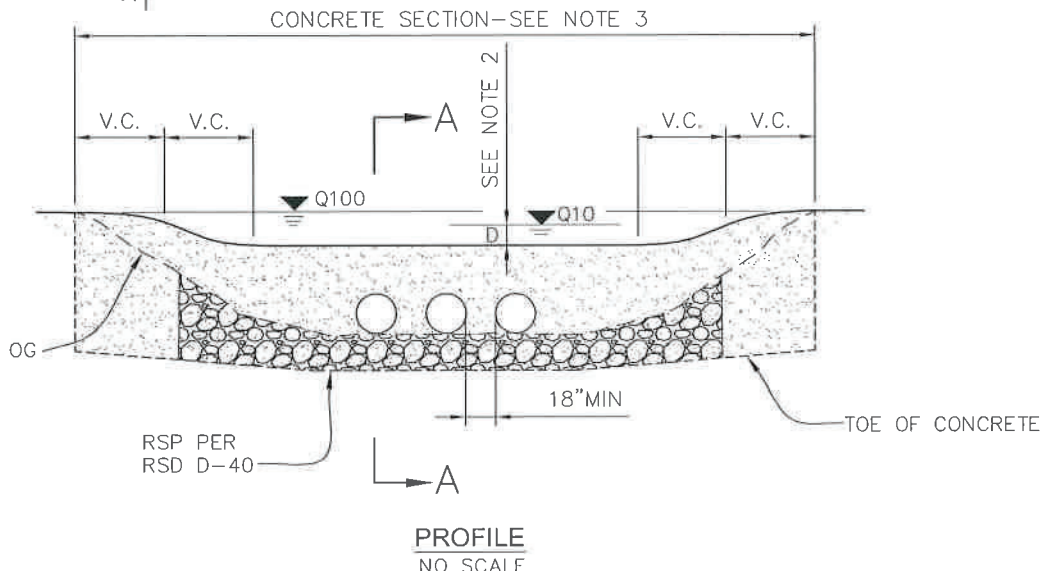
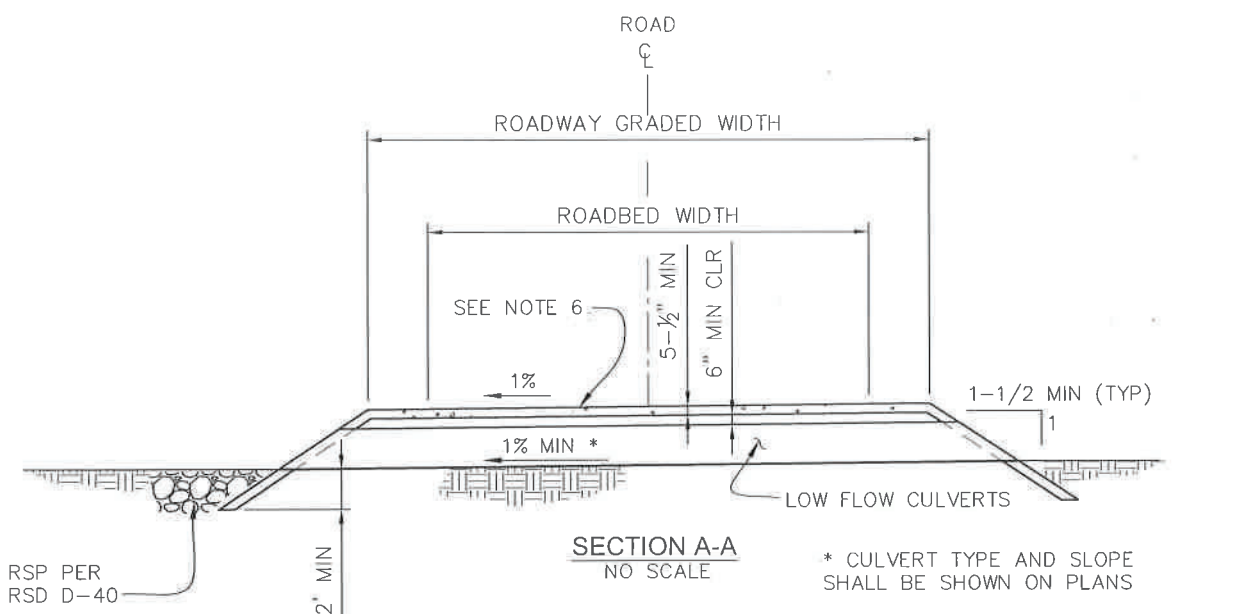
NOTES:

1. THE NEW STREET NAME SIGN SHALL BE MOUNTED ON THE POLE APPROXIMATELY 17 FEET ABOVE THE GROUND SURFACE (ABOVE THE POLE MOUNTED SIGNAL HEAD AND IF POSSIBLE ABOVE THE MAST ARM). THE MOUNTING ASSEMBLY SHALL BE AN ASTRO SIGN-BRAC BAND MOUNT ASSEMBLY OR APPROVED EQUAL. ONE MOUNTING BRACKET ASSEMBLY SHALL BE USED PER 16 SQUARE FEET OF SIGN AREA. SIGNS SHALL BE MOUNTED WITH A 5-DEGREE TILT FROM VERTICAL TOWARD ONCOMING TRAFFIC FOR EASY READING. SIGNS SHALL BE MOUNTED SO THAT THE SIGN TEXT IS LEVEL. SITE PLANS SHALL SHOW THE APPROXIMATE ORIENTATIONS OF INDIVIDUAL SIGNS.
  
2. IF THE NEW STREET NAME SIGN CANNOT BE MOUNTED ON THE POLE AS DESCRIBED ABOVE, THE SIGN SHALL BE MOUNTED ON THE MAST ARM NEXT TO THE POLE. AN ASTRO SIGN-BRAC BAND MOUNT ASSEMBLY OR APPROVED EQUAL SHALL BE USED TO MOUNT THE NEW STREET NAME SIGN ONTO THE TRAFFIC SIGNAL MAST ARM. ONE MOUNTING BRACKET ASSEMBLY SHALL BE USED PER 16 SQUARE FEET OF SIGN AREA. SIGNS SHALL BE MOUNTED WITH A 5-DEGREE TILT FROM VERTICAL TOWARD ONCOMING TRAFFIC FOR EASY READING. SIGNS SHALL BE MOUNTED SO THAT THE SIGN TEXT IS LEVEL. SITE PLANS SHALL SHOW THE APPROXIMATE ORIENTATIONS OF INDIVIDUAL SIGNS.

DRAWN BY: <u>GE</u>	CHECKED BY: <u>KVS</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: <u>JEFF S. MOODY, P.E.</u>			NEW	JSM	10/2012
APPROVED BY COUNTY ENGINEER  DATE: <u>10/15/12</u> MOHAMMAD FAKHRRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014		SIGN MOUNTING DETAIL FOR SIGNALIZED INTERSECTIONS			
			DRAWING NUMBER <b>DS-13F</b>		

NAME TO BE ABBREVIATED	ABBREVIATION	NAME TO ABBREVIATED	ABBREVIATION
Avenida	Avd	Place	Pl
Avenue	Av	Plaza	Plz
Boulevard	Bl	Rombla	Rmbla
Calle	Cl	Ranch	Rch
Callejon	Clj	Rancho	Rcho
Caminito	Cmto	Ridge	Rdg
Camino	Cam	River	Riv
Center	Ctr	Road	Rd
Circle	Cir	Saint – used at the beginning of a name	St
Corte	Cte		
Court	Ct	Santa	Snta
Creek	Ck	South	S
Drive	Dr	Spring	Spg
East	E	Springs	Spgs
Estate	Est	Station	Sta
Freeway	Fwy	Street – used at the end of a name	St
Gardens	Gdns		
Heights	Hts	Summit	Smt
Highlands	Hghlds	Terrace	Ter
Highway	Hwy	Trail	Tr
Lake	Lk	Truck Trail	TT
Lane	Ln	Valley	Vly
Loop	Lp	View	Vw
Meadow	Mdw	Village	Vlg
Mount	Mt	Vista	Vis
Mountain	Mtn	Way	Wy
North	N	West	W
Park	Pk		
Parkway	Pkwy		
Paseo	Pas		

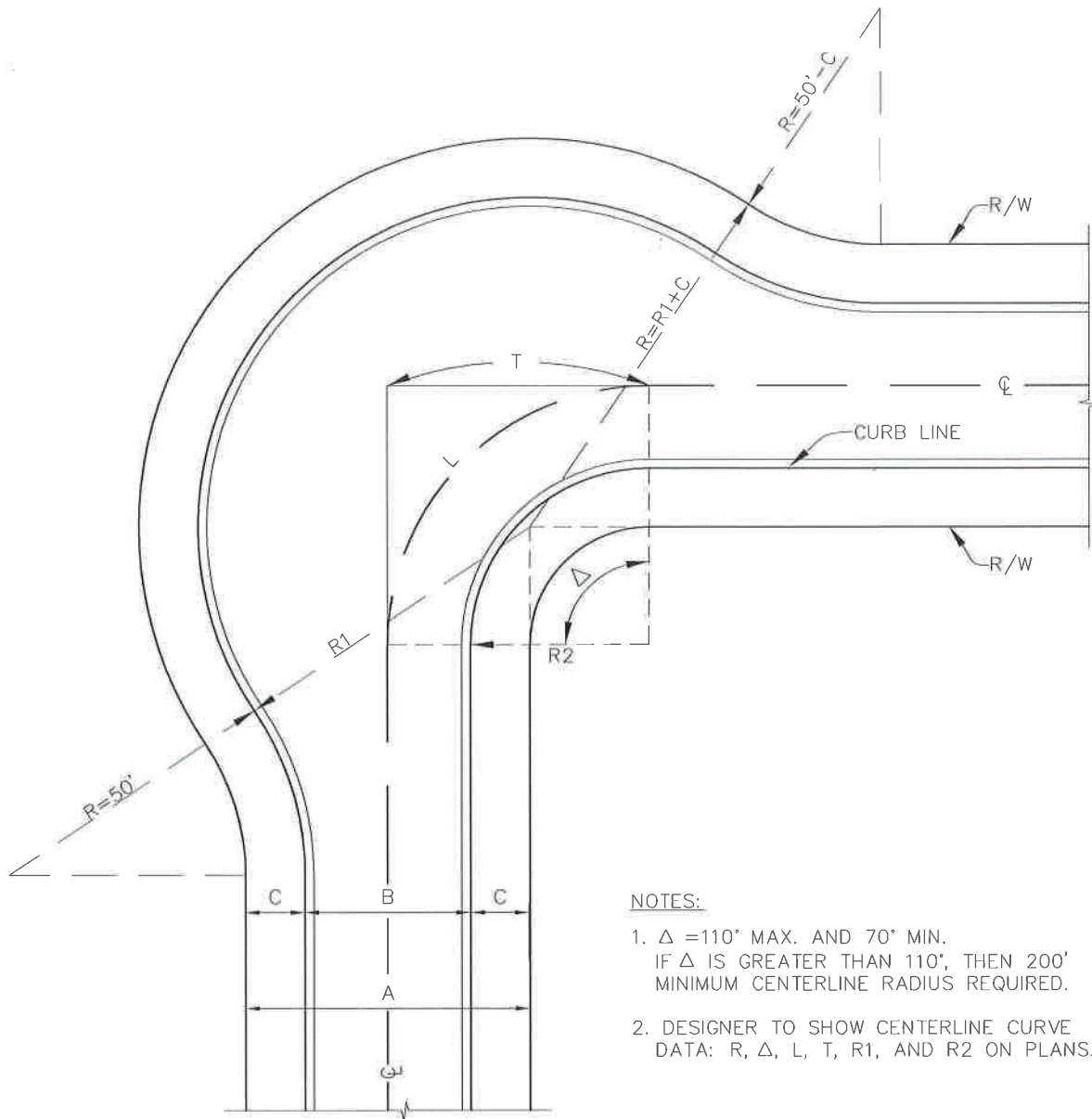
DRAWN BY: <u>GE</u>	CHECKED BY: <u>KVS</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: <u>JEFF S. MOODY, P.E.</u>			NEW	JSM	10/2012
APPROVED BY COUNTY ENGINEER  DATE: <u>10/15/12</u>		ABBREVIATIONS FOR STREET NAME SIGNS			
MOHAMAD FAKHREDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	DS-13G	



**NOTES:**

1. DIP SECTIONS SHALL CONFORM TO SECTION 5.11, "DRAINAGE IMPROVEMENTS" OF THE COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS.
2. THE MAXIMUM WATER DEPTH FOR A Q10 FREQUENCY STORM (D), SHALL NOT EXCEED 10" AND THE DEPTH (D) IN FEET MULTIPLIED BY THE VELOCITY (V) IN FEET PER SECOND SHALL NOT EXCEED 6.
3. PORTLAND CEMENT CONCRETE SHALL EXTEND AT LEAST TO THE LIMITS OF THE Q100 FLOODWAY.
4. VERTICAL CURVES (V.C.) SHALL BE DESIGNED IN ACCORDANCE WITH AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS.
5. LOW FLOW CULVERTS (18" MINIMUM DIAMETER) MAY BE OMITTED IF THE CONDITIONS OF NOTES 2 AND 3 CAN BE SATISFIED WITHOUT THEIR USE.
6. PORTLAND CEMENT CONCRETE SHALL CONFORM TO EITHER GREENBOOK 560-C-3250 OR CALTRANS MINOR CONCRETE. REINFORCING STEEL SHALL CONSIST OF A MINIMUM 6" X 6" X 10 GA WWF.

DRAWN BY: PBM	CHECKED BY: JSM	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.	APPROVED BY COUNTY ENGINEER		REV	JSM	10/2012
MOHAMAD FAKHRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014		<b>DIP SECTION (PRIVATE ROAD)</b>	<b>DRAWING NUMBER DS-14</b>		



**NOTES:**

- $\Delta = 110^\circ$  MAX. AND  $70^\circ$  MIN.  
IF  $\Delta$  IS GREATER THAN  $110^\circ$ , THEN 200' MINIMUM CENTERLINE RADIUS REQUIRED.
- DESIGNER TO SHOW CENTERLINE CURVE DATA:  $R$ ,  $\Delta$ ,  $L$ ,  $T$ ,  $R1$ , AND  $R2$  ON PLANS.

**PLAN**  
NO SCALE

A (R/W)	B	R1*	R2*	C*
72'	52'	80'	40'	10'
60'	40'	68'	30'	10'
56'	36'	64'	30'	10'
52'	32'	60'	30'	10'
48'	28'	56'	30'	10'

\* DIMENSIONS SHOWN ARE MINIMUMS

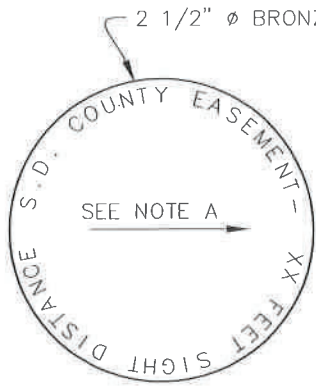
DRAWN BY: PBM    CHECKED BY: JSM  
 RECOMMENDED BY: JEFF S. MOODY, P.E.  
 APPROVED BY COUNTY ENGINEER  
*Mohamad*    DATE: 10/15/12  
 MOHAMAD FAHRRIDDINE, P.E.  
 R.C.E. NO. 44520, EXP 3/31/2014

SAN DIEGO COUNTY DESIGN STANDARD

**STREET KNUCKLE**

REVISIONS	APPROVED	DATE
REV	JSM	10/2012

DRAWING NUMBER **DS-15**

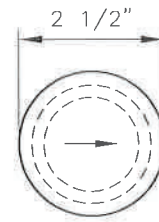


**BRONZE MARKER**

NO SCALE

**NOTE A**

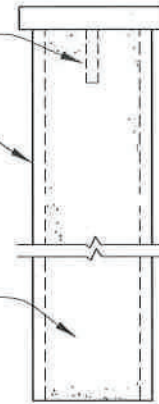
ROTATE ARROW TO INDICATE LOCATION OF TARGET POINT. SHOW SIGHT DISTANCE (XX) IN FEET



SHANK 3/4"  $\phi$  X 2-1/2"

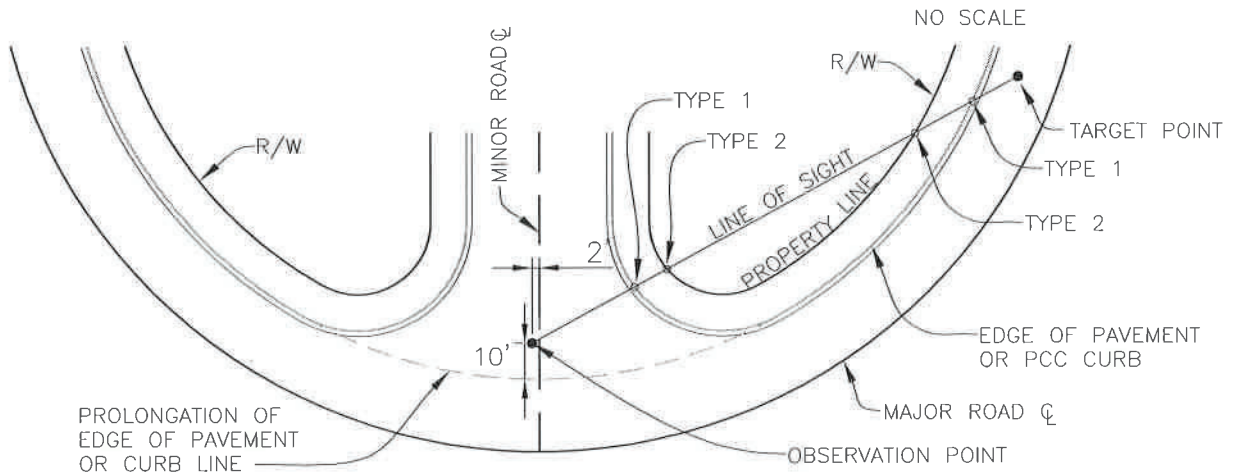
GALVANIZED STEEL PIPE  
2"  $\phi$  I.D. X 24" LONG

QUICK SET  
CONCRETE



**TYPE 2 MARKER**

NO SCALE



**INTERSECTION DETAIL**

NO SCALE

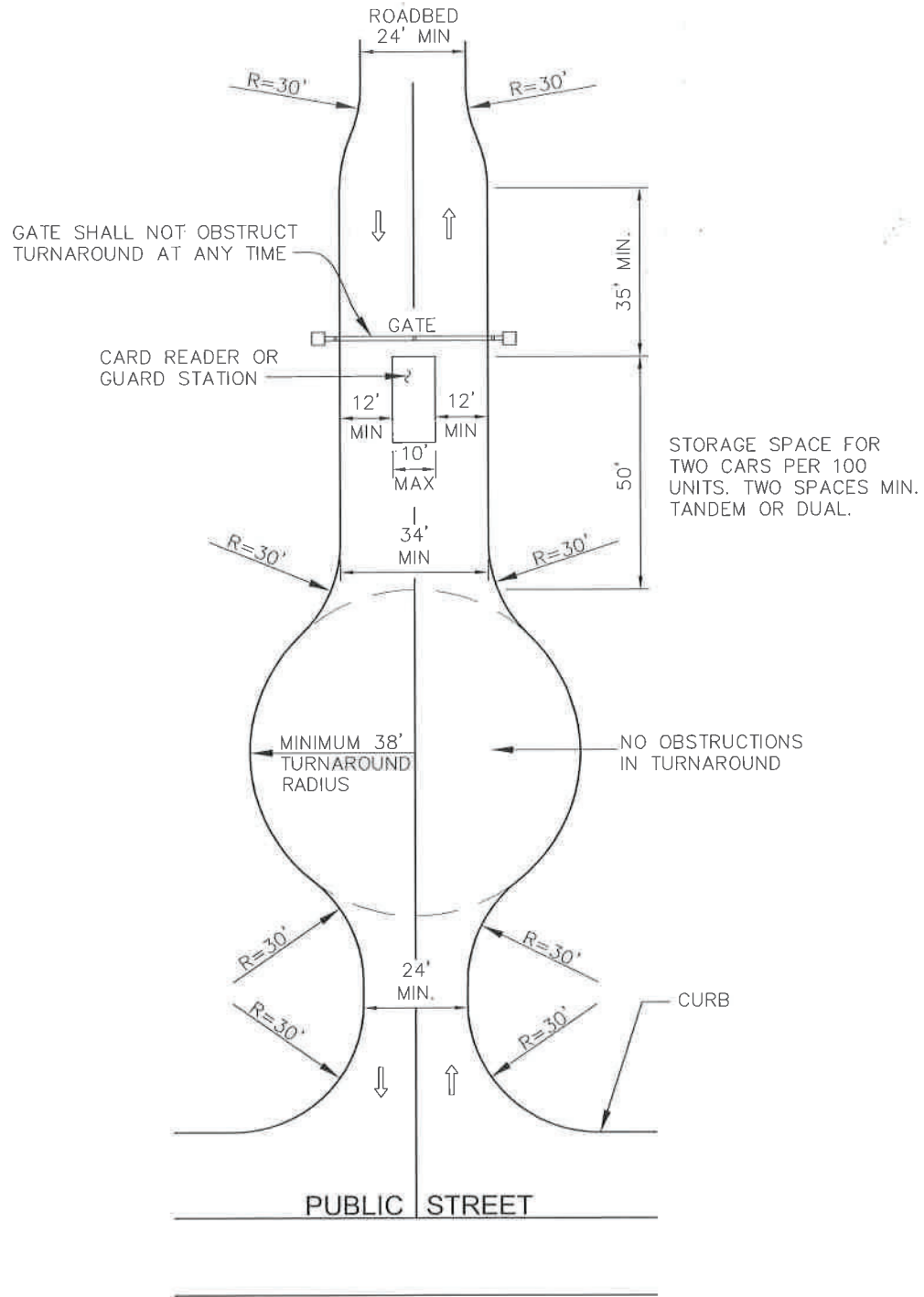
**NOTES:**

TYPE 1: BRONZE MARKER TO BE SET IN PCC CURB WHERE LINE-OF-SIGHT INTERSECTS CURB.

TYPE 2: IF NO PCC CURB, SET BRONZE MARKER IN CONCRETE IN 2"  $\phi$  X 24" LONG GALVANIZED STEEL PIPE AT THE INTERSECTION OF THE LINE-OF-SIGHT AND PROPERTY LINE.

CLEAR SPACE EASEMENTS FOR SIGHT DISTANCE, WHERE SPECIFIED ON PLANS, SHALL BE DESIGNATED BY A BRONZE MARKER ACCORDING TO EITHER TYPE 1 OR TYPE 2 ABOVE.

DRAWN BY: PBM	CHECKED BY: JSM	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER		<b>CLEAR SPACE EASEMENT MARKERS</b>			
<i>Mohamad</i> DATE: 10/15/12					
MOHAMAD FAKHRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	DS-16	



**GATED DRIVEWAY ENTRANCE**

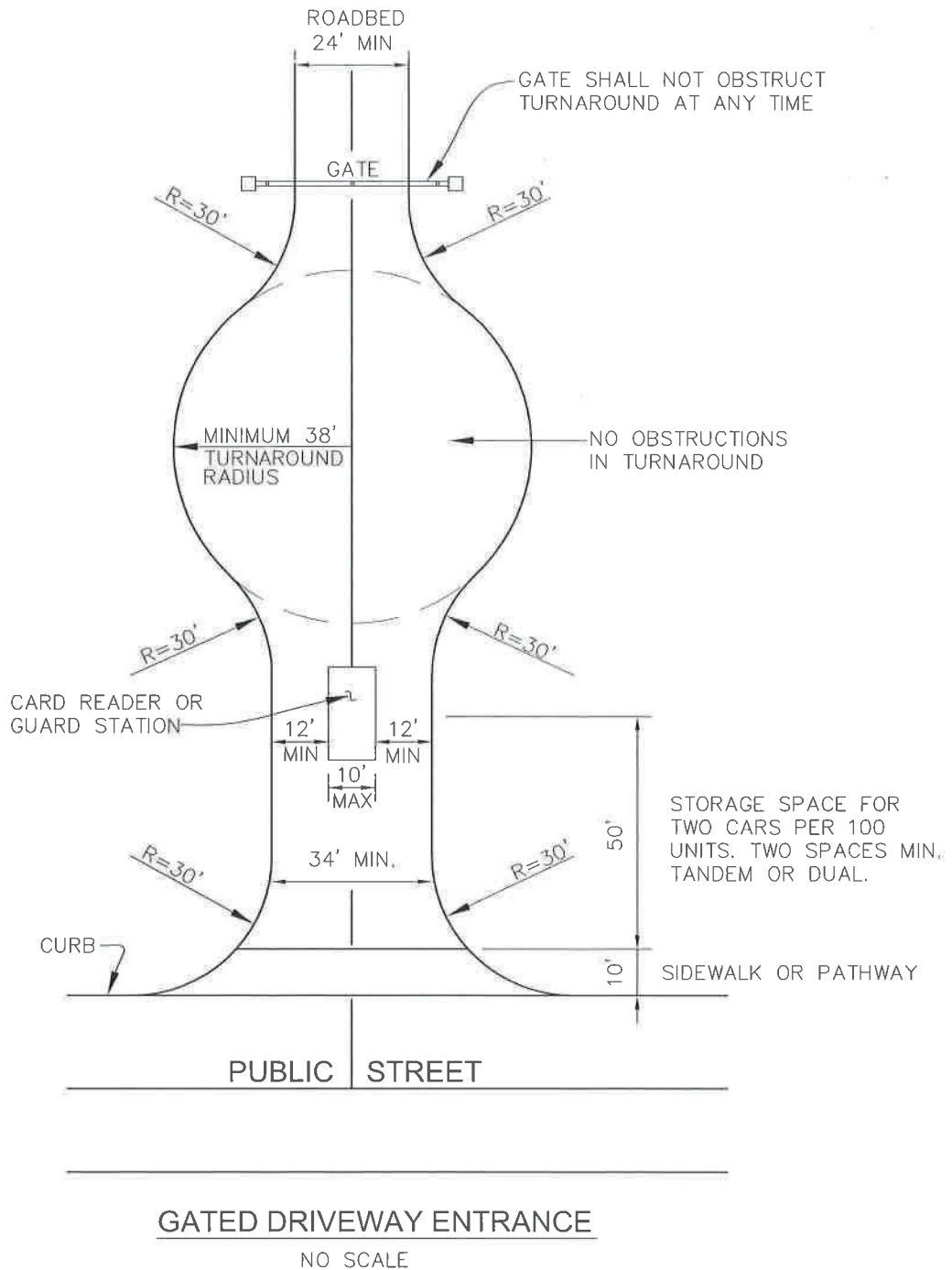
NO SCALE

DRAWN BY: PBM CHECKED BY: JSM  
 RECOMMENDED BY: JEFF S. MOODY, P.E.  
 APPROVED BY COUNTY ENGINEER  
*Mohamad* DATE: 10/15/12  
 MOHAMAD FAKHRIIDINE, P.E.  
 R.C.E. NO. 44520, EXP 3/31/2014

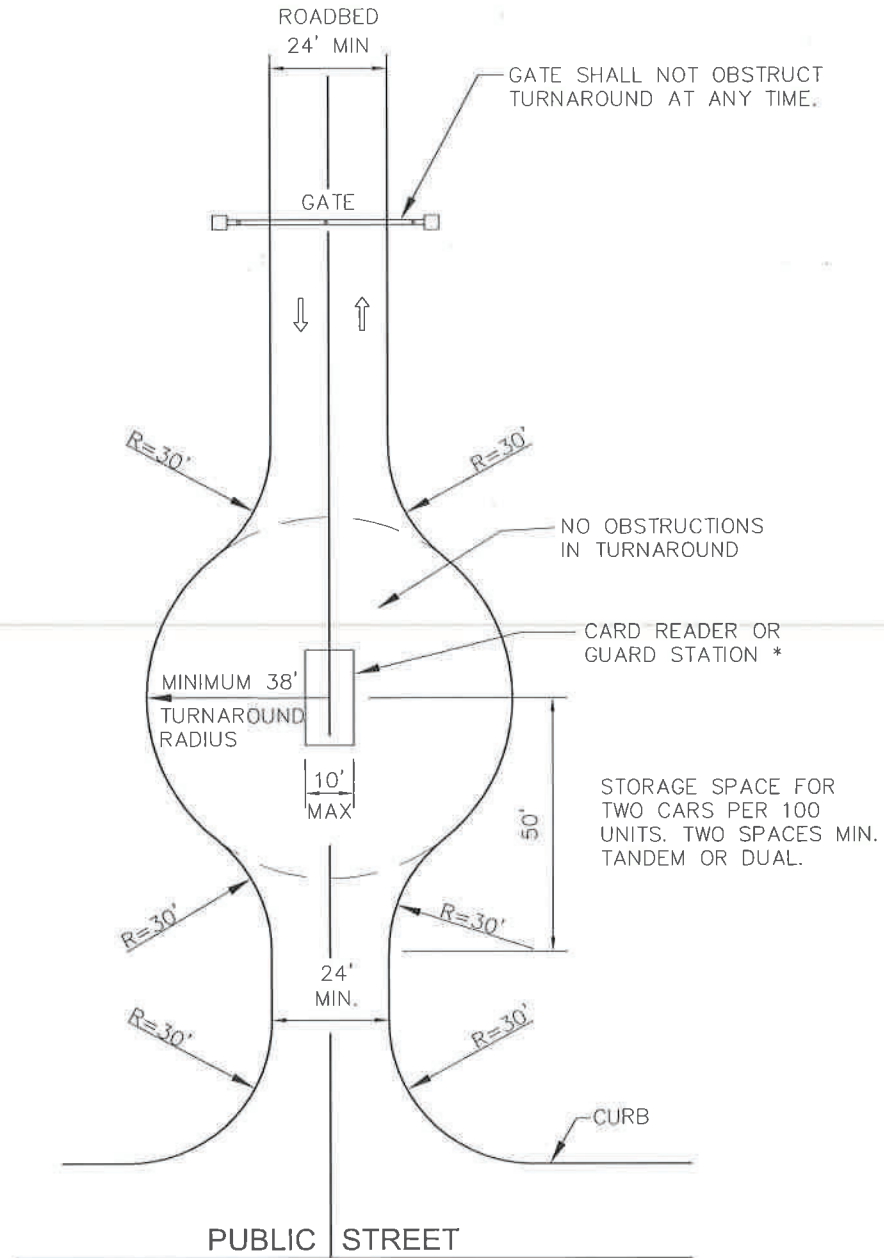
SAN DIEGO COUNTY DESIGN STANDARD

**GATED DRIVEWAY ENTRANCE  
TYPE I**

REVISIONS	APPROVED	DATE
REV	JSM	10/2012
DRAWING NUMBER		<b>DS-17</b>



DRAWN BY: PBM	CHECKED BY: JSM	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER: <i>M. Fakhreddine</i>	DATE: 10/15/12	<b>GATED DRIVEWAY ENTRANCE TYPE II</b>			
MUHAMMAD FAKHREDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	<b>DS-18</b>	



**GATED DRIVEWAY ENTRANCE**

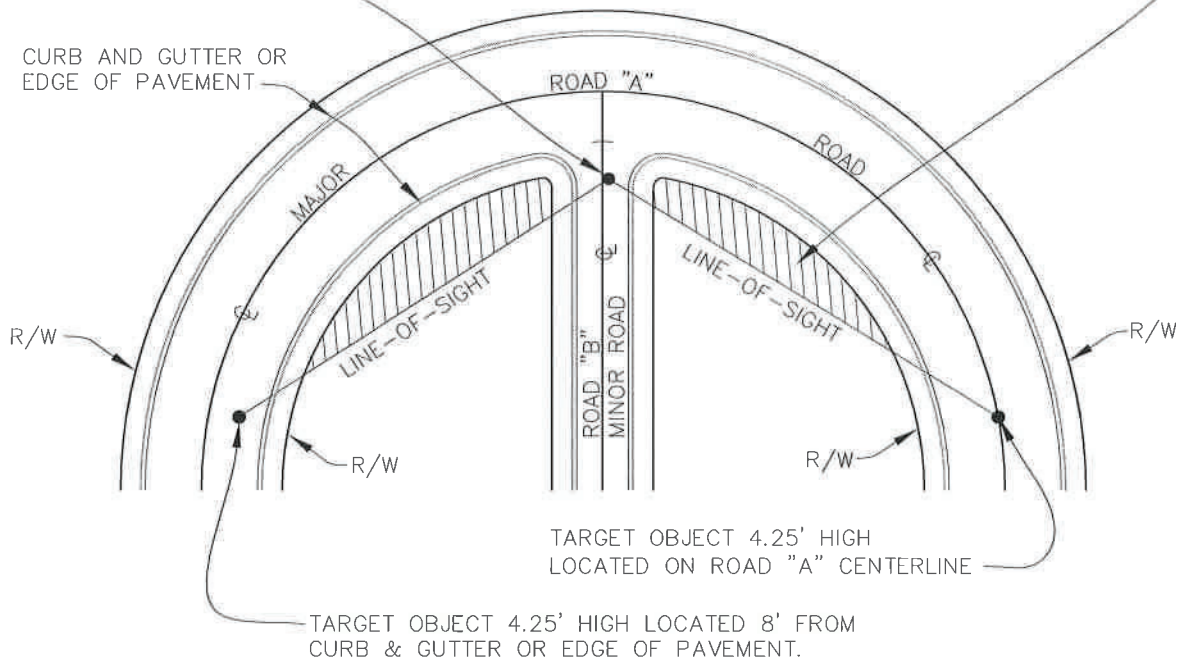
NO SCALE

\* CARD READER OR GUARD STATION MUST PROVIDE SUFFICIENT ROOM FOR AN EMERGENCY VEHICLE TO TURN AROUND.

DRAWN BY: PBM	CHECKED BY: JSM	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER		<b>GATED DRIVEWAY ENTRANCE TYPE III</b>			
<i>Mohamad</i> MOHAMAD FAKHRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014	DATE: 10/15/12		DRAWING NUMBER	DS-19	

OBSERVATION POINT SHALL BE 10' FROM ROAD "A" EDGE OF PAVEMENT (OR PROLONGATION OF CURB LINE) AND 2' RIGHT OF ROAD "B" CENTERLINE AT A HEIGHT OF 3.5'

CLEAR SPACE EASEMENT – NO TREES OR OTHER SIGHT OBSTRUCTIONS WITHIN CLEAR SPACE, LOW GROWING GROUND COVER ONLY. LABEL ON PLANS AS "CLEAR SPACE EASEMENT. NO SIGHT OBSTRUCTIONS WITHIN THIS SPACE". SPECIFY TYPE OF MARKER PER DS-16 AND LIST COORDINATES OF EACH MARKER. SHOW TURNING POINTS AND BEARING OF EASEMENT. RECORD EASEMENT.



 CLEAR SPACE EASEMENT AREA

**INTERSECTION SIGHT DISTANCE**

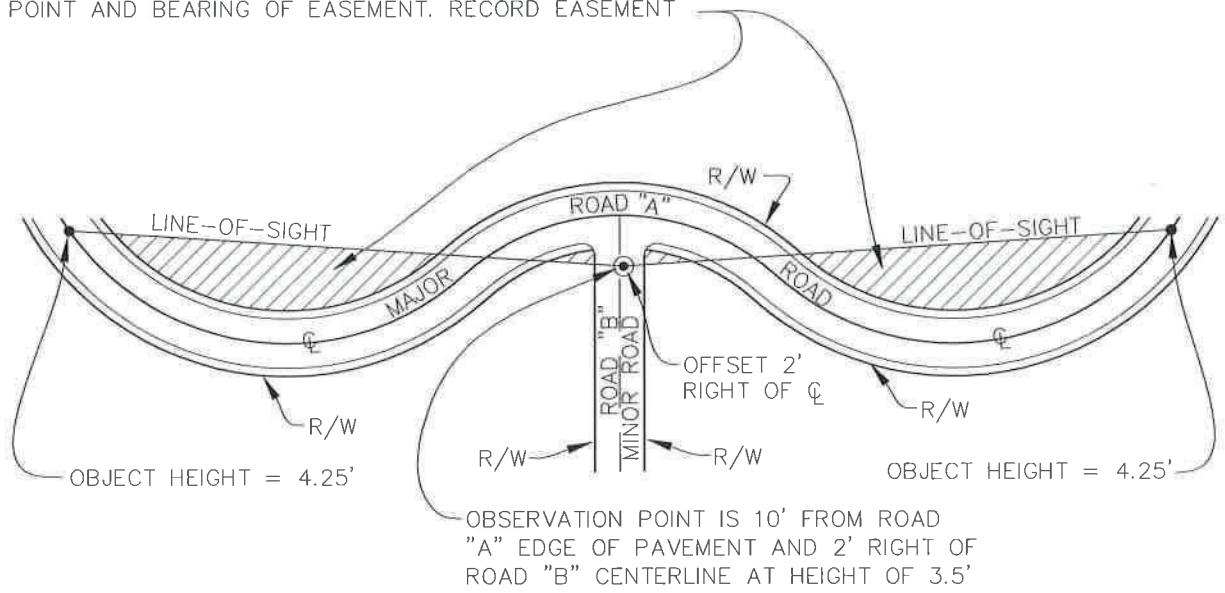
NO SCALE

PER COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS THE REQUIRED MINIMUM INTERSECTION SIGHT DISTANCE SHALL BE TEN TIMES THE DESIGN SPEED OF THE MAJOR ROAD (ROAD "A" DESIGN SPEED (MPH) X 10FT/MPH). INTERSECTION SIGHT DISTANCE IS MEASURED FROM AN OBSERVATION POINT 2 FEET RIGHT OF ROAD "B" CENTERLINE AND 10 FEET BACK FROM ROAD "A" EDGE OF PAVEMENT (OR PROLONGATION OF CURB LINE) AND MEASURED FROM A HEIGHT OF 3.5 FEET TO AN OBJECT HEIGHT OF 4.25 FEET.

NOTE THE REQUIRED SIGHT DISTANCE APPLIES TO BOTH HORIZONTAL AND VERTICAL OBSTRUCTIONS.

DRAWN BY: <u>PBM</u>	CHECKED BY: <u>JSM</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: <u>JEFF S. MOODY, P.E.</u>			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER 	DATE: <u>10/15/12</u>	<b>CLEAR SPACE EASEMENT TYPE A</b>			
<u>MOHAMAD FAKHREDDINE, P.E.</u> R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	<b>DS-20A</b>	

CLEAR SPACE EASEMENTS— NO TREES OR OTHER SIGHT OBSTRUCTIONS WITHIN CLEAR SPACE, LOW GROWING GROUND COVER ONLY. LABEL ON PLANS AS "CLEAR SPACE EASEMENT. NO SIGHT OBSTRUCTIONS WITHIN THIS SPACE." SPECIFY TYPE OF MARKER PER DS-16 AND LIST COORDINATES OF EACH MARKER. SHOW TURNING POINT AND BEARING OF EASEMENT. RECORD EASEMENT




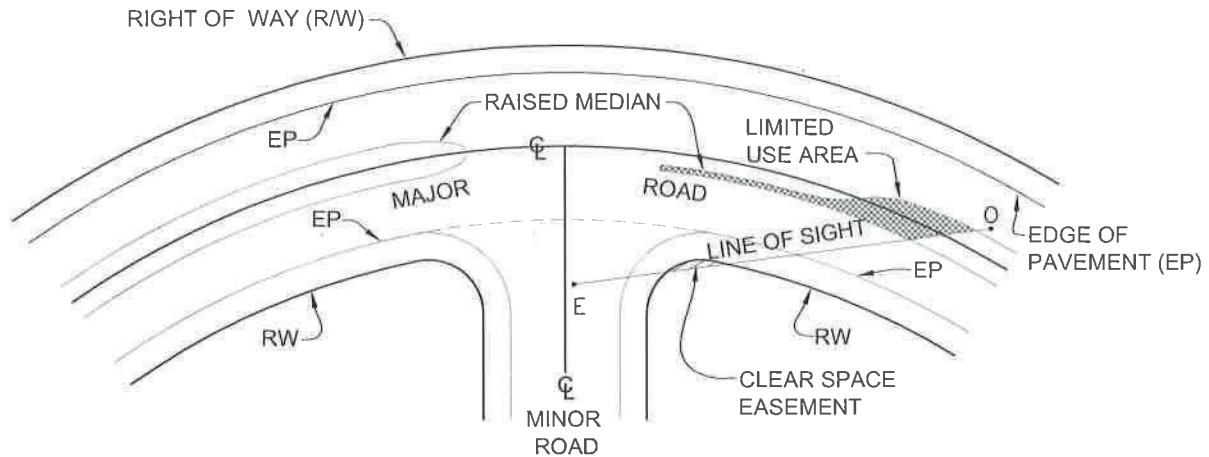
 CLEAR SPACE EASEMENT AREA

**INTERSECTION SIGHT DISTANCE**  
NO SCALE

PER COUNTY PUBLIC ROAD STANDARDS THE REQUIRED MINIMUM INTERSECTION SIGHT DISTANCE SHALL BE TEN TIMES THE DESIGN SPEED OF THE MAJOR ROAD (ROAD "A" DESIGN SPEED (MPH) X 10FT/MPH). INTERSECTION SIGHT DISTANCE IS MEASURED FROM AN OBSERVATION POINT 2 FEET RIGHT OF ROAD "B" CENTERLINE AND 10 FEET BACK FROM ROAD "A" EDGE OF PAVEMENT (OR PROLONGATION OF THE CURB LINE) AND MEASURED FROM A HEIGHT OF 3.5 FEET TO AN OBJECT HEIGHT OF 4.25 FEET.

NOTE THE REQUIRED SIGHT DISTANCE APPLIES TO BOTH HORIZONTAL AND VERTICAL OBSTRUCTIONS

DRAWN BY: <u>PBM</u>	CHECKED BY: <u>JSM</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: <u>JEFF S. MOODY, P.E.</u>			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER 	DATE: <u>10/15/12</u>	<b>CLEAR SPACE EASEMENT TYPE B</b>			
<u>MOHAMAD FAKHREDDINE, P.E.</u> R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	<b>DS-20B</b>	



- LIMITED USE AREA. NO SIGHT OBSTRUCTIONS OR VEGETATION WITHIN THIS AREA.
- CLEAR SPACE EASEMENT. NO SIGHT OBSTRUCTIONS WITHIN THIS AREA. REFER TO DS-16 , DS-20A AND DS-20B OF THESE DESIGN STANDARDS.

E = OBSERVATION POINT OF MOTORIST ON MINOR ROAD. THE OBSERVATION POINT IS LOCATED 10 FEET BACK FROM THE PROLONGATION OF THE EDGE OF PAVEMENT OR CURB LINE OF THE MAJOR ROAD AND 2 FEET RIGHT OF THE MINOR ROAD CENTERLINE. SIGHT DISTANCE IS MEASURED FROM AN EYE HEIGHT OF 3.5 FEET ABOVE THE ROAD SURFACE AT THE OBSERVATION POINT.

O = LOCATION OF THE OBJECT VEHICLE ON THE MAJOR ROAD. THE OBJECT VEHICLE HEIGHT IS 4.25 FEET ABOVE THE ROAD SURFACE AND THE VEHICLE LOCATION IS THE MOST CRITICAL OF EITHER 2 FEET FROM THE MEDIAN OR 8 FEET FROM THE RIGHT EDGE OF TRAVELED WAY DEPENDING ON THE NUMBER OF LANES AND ROAD ALIGNMENT.

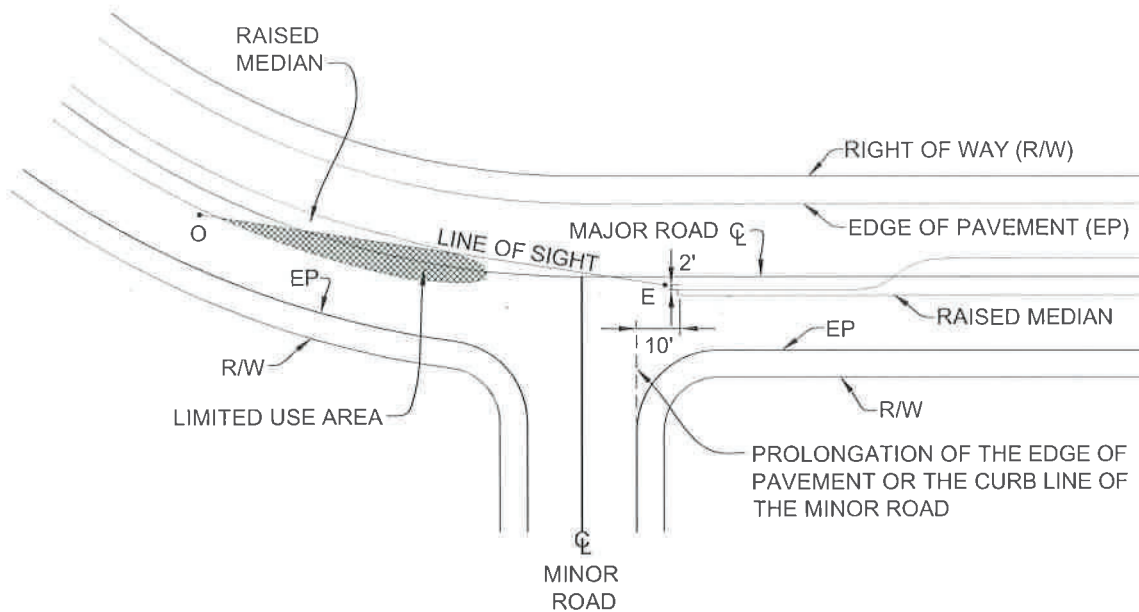
LINE OF SIGHT= LINE ALONG WHICH SIGHT DISTANCE IS MEASURED. THE REQUIRED MINIMUM SIGHT DISTANCE IS SPECIFIED IN THE COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS. ALSO REFER TO DETAILS DS-20A AND DS-20B OF THESE DESIGN STANDARDS.

CLEAR SPACE EASEMENT = AREA OUTSIDE THE ROAD RIGHT OF WAY REQUIRING RESTRICTIONS ON SIGHT DISTANCE OBSTRUCTIONS. CLEAR SPACE EASEMENTS SHALL BE MONUMENTED AND RECORDED IN ACCORDANCE WITH DETAILS DS-16, DS-20A AND DS-20B OF THESE DESIGN STANDARDS.

LIMITED USE AREA = AREA WITHIN RAISED MEDIANS WHERE SIGHT OBSTRUCTIONS AND VEGETATION ARE PROHIBITED.

**NOTE:** ALL LIMITED USE AREAS SHALL BE NOTED ON THE ROAD IMPROVEMENT AND LANDSCAPING PLANS WITH CONSPICUOUS TEXT STATING NO SIGHT OBSTRUCTIONS OR VEGETATION IN THIS AREA.

DRAWN BY: KVS	CHECKED BY: MLK	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			NEW	MLK	10/2012
APPROVED BY COUNTY ENGINEER		<b>LIMITED USE AREA TYPE A</b>			
MOHAMAD FAKHRRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014					
			DRAWING NUMBER	<b>DS-20C</b>	



LIMITED USE AREA. NO SIGHT OBSTRUCTIONS OR VEGETATION WITHIN THIS AREA.

E = OBSERVATION POINT OF MOTORIST ON THE MAJOR ROAD TURNING LEFT. THE OBSERVATION POINT IS LOCATED 10 FEET BACK FROM THE PROLONGATION OF THE EDGE OF PAVEMENT OR CURB LINE OF THE MINOR ROAD AND 2 FEET RIGHT OF THE MAJOR ROAD MEDIAN OR STRIPED CENTERLINE. SIGHT DISTANCE IS MEASURED FROM AN EYE HEIGHT OF 3.5 FEET ABOVE THE ROAD SURFACE AT THE OBSERVATION POINT.

O = LOCATION OF THE OBJECT VEHICLE APPROACHING THE INTERSECTION ON THE MAJOR ROAD. THE APPROACHING VEHICLE OBJECT HEIGHT IS 3.5 FEET ABOVE THE ROAD SURFACE AND THE VEHICLE IS ASSUMED LOCATED AT THE MOST CRITICAL OF EITHER 2 FEET RIGHT OF THE MEDIAN OR 8 FEET FROM THE RIGHT EDGE OF TRAVELED WAY DEPENDING ON THE NUMBER OF LANES AND ROAD ALIGNMENT.

LINE OF SIGHT= LINE ALONG WHICH SIGHT DISTANCE IS MEASURED. SIGHT DISTANCE SHALL BE CALCULATED IN ACCORDANCE WITH THE 2011 AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, TABLE 9.13, "TIME GAP FOR CASE F, LEFT TURNS FROM MAJOR ROAD", BASED ON THE HIGHER OF THE DESIGN SPEED (PER ROAD CLASSIFICATION AND COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS) OR THE PREVAILING SPEED ON THE MAJOR ROAD, WHICHEVER IS GREATER, AND ADJUSTED FOR THE NUMBER OF LANES TO BE CROSSED AND GRADE APPROACHING THE INTERSECTION ON THE MAJOR ROAD. THE AASHTO SIGHT DISTANCE SHALL BE INCREASED BY 50 FEET AND THE RESULTANT SIGHT DISTANCE SHALL BE CONSPICUOUSLY NOTED ON THE PLAN.

LIMITED USE AREA = AREA WITHIN RAISED MEDIANS WHERE SIGHT OBSTRUCTIONS AND VEGETATION ARE PROHIBITED.

NOTE: ALL LIMITED USE AREAS SHALL BE NOTED ON THE ROAD IMPROVEMENT AND LANDSCAPING PLANS WITH CONSPICUOUS TEXT STATING NO SIGHT OBSTRUCTIONS OR VEGETATION IN THIS AREA.

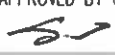
DRAWN BY: <u>KVS</u>	CHECKED BY: <u>MLK</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: <u>JEFF S. MOODY, P.E.</u>			NEW	MLK	10/2012
APPROVED BY COUNTY ENGINEER		<b>LIMITED USE AREA TYPE B</b>			
<i>Mohamad Fakhreddine</i> DATE: <u>10/23/12</u> MOHAMAD FAKHRRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	<b>DS-20D</b>	

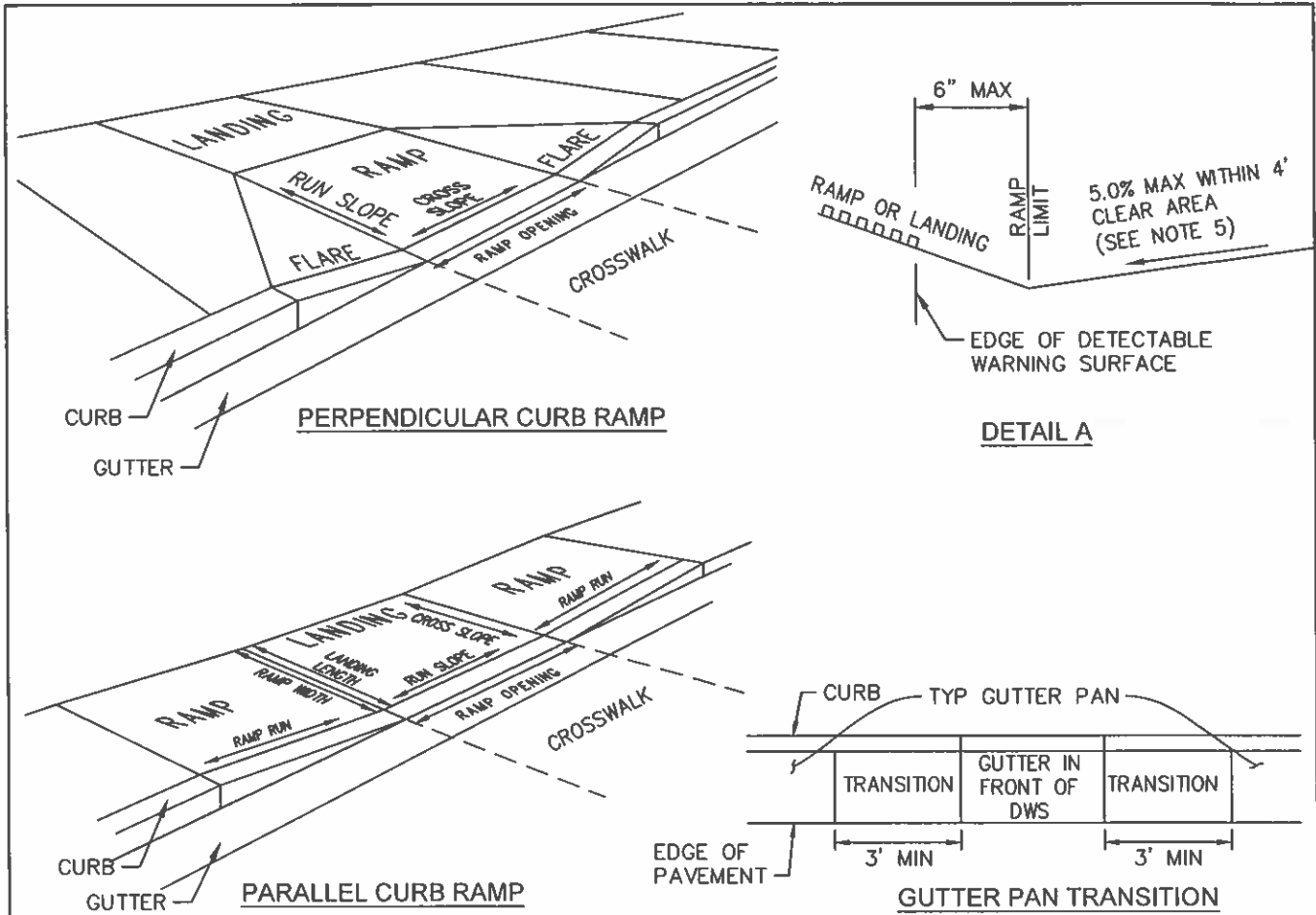
**REFERENCES:**

1. 2024 PROWAG
2. 2022 California Building Code

**ADA NOTES:**

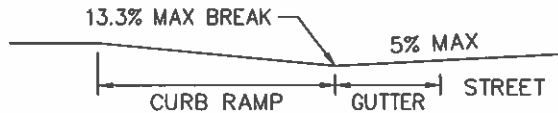
1. THESE DRAWINGS ARE INTENDED TO CONVEY THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS INCLUDING THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) TO PROVIDE RECOMMENDATIONS AND GUIDANCE FOR VARIOUS SITUATIONS IN THE PUBLIC RIGHT-OF-WAY.
2. USERS OF THESE DRAWINGS SHALL USE ENGINEERING JUDGMENT AND PERFORM SITE-SPECIFIC SAFETY EVALUATIONS THAT CONSIDER THE VARIOUS MOBILITY NEEDS OF PEDESTRIANS AS WELL AS SITE CONSTRAINTS TO PROVIDE A SAFE AND ACCESSIBLE RAMP LOCATION, WHICH MAY NOT NECESSARILY BE THE MINIMUM REQUIRED CONFIGURATION PER ADA/PROWAG.
3. CURB RAMPS MUST ALIGN ACCORDING TO THE PEDESTRIAN ACCESSIBLE ROUTE. THE PEDESTRIAN ACCESS ROUTE IS AN ACCESSIBLE, CONTINUOUS, AND UNOBSTRUCTED PATH OF TRAVEL FOR USE BY PEDESTRIANS WITH DISABILITIES WITHIN A PREPARED EXTERIOR OR INTERIOR SURFACE PROVIDED FOR PEDESTRIAN USE IN THE PUBLIC RIGHT-OF-WAY (SUCH AS A SIDEWALK).
4. PROWAG R203.6.1.1 CROSSWALKS AT AN INTERSECTION  
 "AT AN INTERSECTION CORNER, ONE CURB RAMP OR BLENDED TRANSITION SHALL BE PROVIDED FOR EACH CROSSWALK, OR A SINGLE BLENDED TRANSITION THAT SPANS ALL CROSSWALKS AT THE INTERSECTION CORNER MAY BE PROVIDED.  
  
 EXCEPTION: IN ALTERATIONS, WHERE EXISTING PHYSICAL CONSTRAINTS MAKE COMPLIANCE WITH R203.6.1.1 TECHNICALLY INFEASIBLE, A SINGLE CURB RAMP COMPLYING WITH R304 SHALL BE PERMITTED AT THE APEX OF THE INTERSECTION CORNER."
5. PROWAG R203.6.2 ALTERATIONS TO CROSSWALKS  
 "WHEN ALTERATIONS ARE MADE TO CROSSWALKS, CURB RAMPS OR BLENDED TRANSITIONS SHALL BE PROVIDED ON BOTH ENDS OF THE CROSSWALK WHERE THE PEDESTRIAN ACCESS ROUTE CROSSES A CURB."
6. PROWAG DEFINES ALTERATION AS A CHANGE TO OR AN ADDITION OF A PEDESTRIAN FACILITY IN AN EXISTING, DEVELOPED RIGHT-OF-WAY THAT AFFECTS OR COULD AFFECT PEDESTRIAN ACCESS, CIRCULATION, OR USABILITY.
7. PER CBC 2022 11B-202.3 ALTERATIONS  
 "IN ALTERATIONS, WHERE THE ENFORCING AUTHORITY DETERMINES COMPLIANCE WITH APPLICABLE REQUIREMENTS IS TECHNICALLY INFEASIBLE, THE ALTERATION SHALL PROVIDE EQUIVALENT FACILITATION OR COMPLY WITH THE REQUIREMENTS TO THE MAXIMUM EXTENT FEASIBLE. THE DETAILS OF THE FINDINGS THAT FULL COMPLIANCE WITH THE REQUIREMENTS IS TECHNICALLY INFEASIBLE SHALL BE RECORDED AND ENTERED INTO THE FILES OF THE ENFORCING AGENCY."
8. UTILITY PULL BOXES, MANHOLES, VAULTS AND ALL OTHER UTILITY FACILITIES WITHIN THE BOUNDARIES OF THE CURB RAMP SHALL BE RELOCATED OR ADJUSTED TO GRADE IN COORDINATION WITH THE OWNER TO PROVIDE PROPER ADA ACCESS.

DRAWN BY: <u>KE</u> CHECKED BY: <u>PD</u>	SAN DIEGO COUNTY DESIGN STANDARD		REVISIONS	APPROVED	DATE
RECOMMENDED BY: K. EQUIPADO, P.E. APPROVED BY COUNTY ENGINEER  DATE: <u>5/5/25</u>					
SAMIR NUHAIFY, P.E. R.C.E. NO. 45044	ALTERATION - GENERAL NOTES		DRAWING NUMBER	DS-21A	

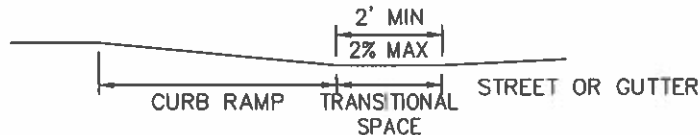



**NOTES:**

1. THE REMOVAL OF EXISTING CONCRETE CURB, GUTTER, SIDEWALK, AND PAVEMENT FOR PEDESTRIAN RAMP INSTALLATION SHALL COMPLY WITH REGIONAL STANDARD DRAWING G-11.
2. CONCRETE SHALL BE CLASS 520-C-2500
3. AREAS SHOWN AS [diagonal hatching] SHALL HAVE A MEDIUM TO HEAVY BROOM TEXTURE FINISH, PERPENDICULAR TO THE AXIS OF THE RAMP. AREAS SHOWN AS [cross-hatching] ARE THE MINIMUM REQUIRED FOR A COMPLETE RAMP INSTALLATION.
4. IF OBSTRUCTIONS SUCH AS INLETS, UTILITY POLES, FIRE HYDRANTS, ETC., ARE ENCOUNTERED, THE RAMP LOCATIONS MAY BE ADJUSTED UPON THE APPROVAL OF THE AGENCY
5. PER PROWAG R304.5.2 CHANGE OF GRADE AT GUTTERS AND STREETS SHALL COMPLY WITH A OR B BELOW:
  - A. THE CHANGE OF GRADE SHALL NOT EXCEED 13.3%



- B. WHERE A CHANGE OF GRADE EXCEEDS 13.3%, A TRANSITIONAL SPACE SHALL BE PROVIDED AT THE BOTTOM OF THE RUNNING SLOPE OF THE CURB RAMP RUN OR BLENDED TRANSITION.



DRAWN BY: <u>KE</u> CHECKED BY: <u>PO</u> RECOMMENDED BY: <u>K. EQUIPADO, P.E.</u> APPROVED BY COUNTY ENGINEER  DATE: <u>5/15/25</u> SAMIR NUHALY, P.E. R.C.E. NO. 45044	<b>SAN DIEGO COUNTY DESIGN STANDARD</b>  <b>ALTERATION GENERAL NOTES FOR CURB RAMPS</b> (1 of 2)	<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>APPROVED</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS	APPROVED	DATE									
REVISIONS	APPROVED	DATE												
		<b>DRAWING NUMBER DS-21B</b>												

**NOTES**

6. PER PROWAG R304.2.2 FOR PERPENDICULAR RAMPS, THE CROSS SLOPE OF CURB RAMP RUN SHALL BE PERMITTED TO BE EQUAL TO OR LESS THAN THE CROSS SLOPE OF THE CROSSWALK.

**DESIGN STANDARD:**

EXISTING CROSSWALK WITH  $\leq 6\%$  CROSS SLOPE, RAMP RUN CROSS SLOPE SHALL BE 2% MAX.  
 EXISTING CROSSWALK WITH  $>6\%$  CROSS SLOPE, RAMP RUN CROSS SLOPE SHALL BE PERMITTED TO BE EQUAL TO OR LESS THAN THE CROSS SLOPE OF THE CROSSWALK.

7. PER PROWAG R304.3.4 FOR PARALLEL RAMPS, RUN SLOPE OF THE LANDING SHALL BE PERMITTED TO BE EQUAL TO OR LESS THAN THE CROSS SLOPE OF THE CROSSWALK.

**DESIGN STANDARD:**

EXISTING CROSSWALKS WITH  $\leq 6\%$  CROSS SLOPE, LANDING RUN SLOPE SHALL BE 2% MAX.  
 EXISTING CROSSWALKS WITH  $>6\%$  CROSS SLOPE, LANDING RUN SLOPE SHALL BE PERMITTED TO BE EQUAL TO OR LESS THAN THE CROSS SLOPE OF THE CROSSWALK.

8. PER PROWAG R304.4.2 FOR BLENDED TRANSITION RAMPS, CROSS SLOPE OF RAMP RUN SHALL BE EQUAL TO OR LESS THAN THE CROSS SLOPE OF THE CROSSWALK.

**DESIGN STANDARD:**

EXISTING CROSSWALK WITH  $\leq 6\%$  CROSS SLOPE, RAMP RUN CROSS SLOPE SHALL BE 2% MAX.  
 EXISTING CROSSWALK WITH  $>6\%$  CROSS SLOPE, RAMP RUN CROSS SLOPE SHALL BE PERMITTED TO BE EQUAL TO OR LESS THAN THE CROSS SLOPE OF THE CROSSWALK.

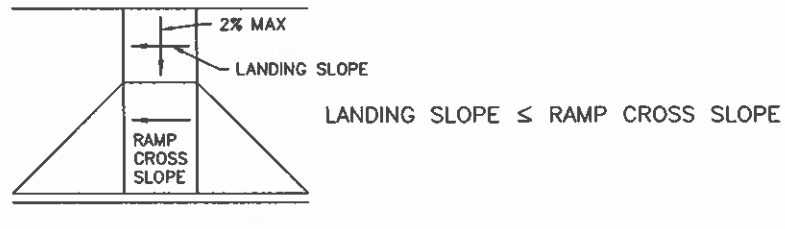
9. PER PROWAG R302.5.2.4 FOR MIDBLOCK CROSSING, THE RUN SLOPE OF LANDING SHALL NOT EXCEED THE STREET GRADE.

**DESIGN STANDARD:**

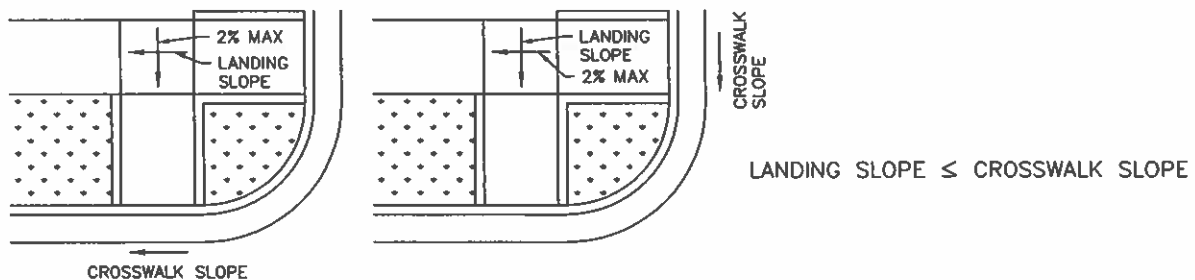
EXISTING STREET GRADE WITH  $\leq 6\%$  GRADE, LANDING RUN SLOPE SHALL BE 2% MAX.  
 EXISTING STREET GRADE WITH  $>6\%$  GRADE, LANDING RUN SLOPE SHALL BE PERMITTED TO BE EQUAL TO OR LESS THAN THE STREET GRADE.


**PERPENDICULAR CURB RAMP LANDING NOTES**

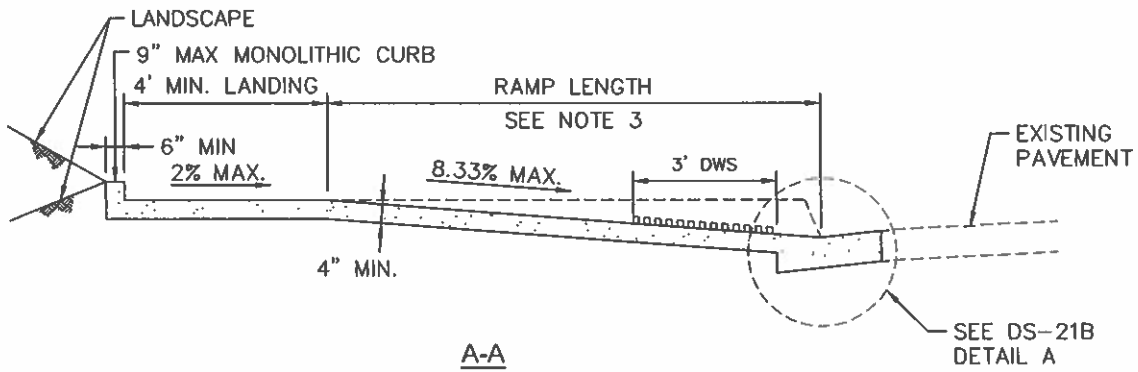
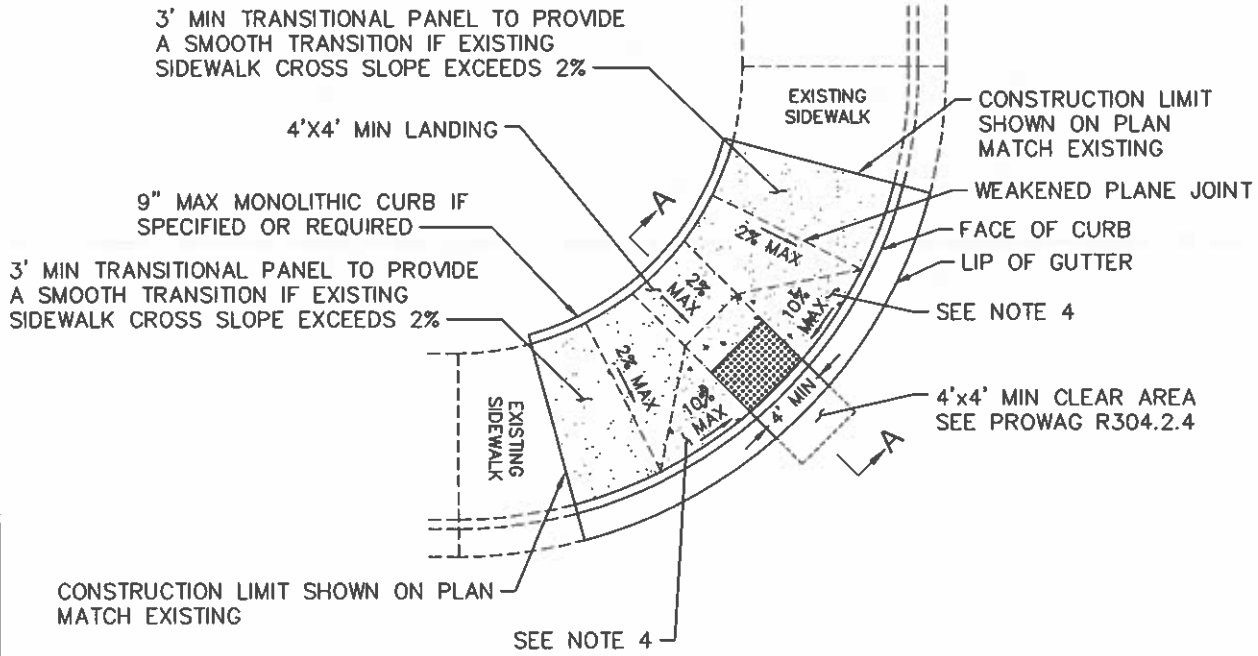
10. WHERE A LANDING SERVES ONLY ONE CURB RAMP, THE LANDING SLOPE MEASURED PERPENDICULAR TO THE CURB RAMP RUN SHALL BE EQUAL TO OR LESS THAN THE CROSS SLOPE OF THE CURB RAMP RUN, AND THE LANDING SLOPE MEASURED PARALLEL TO THE CURB RAMP RUN SHALL BE 2% MAXIMUM.



11. WHERE A LANDING SERVES TWO CURB RAMPS, THE LANDING SLOPE IN EITHER DIRECTION OF TRAVEL SHALL NOT EXCEED THE CROSS SLOPE OF THE CROSSWALK PARALLEL TO THE DIRECTION OF TRAVEL.




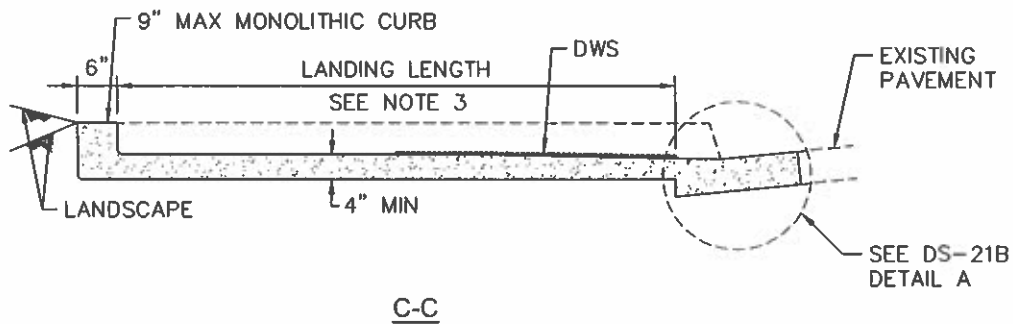
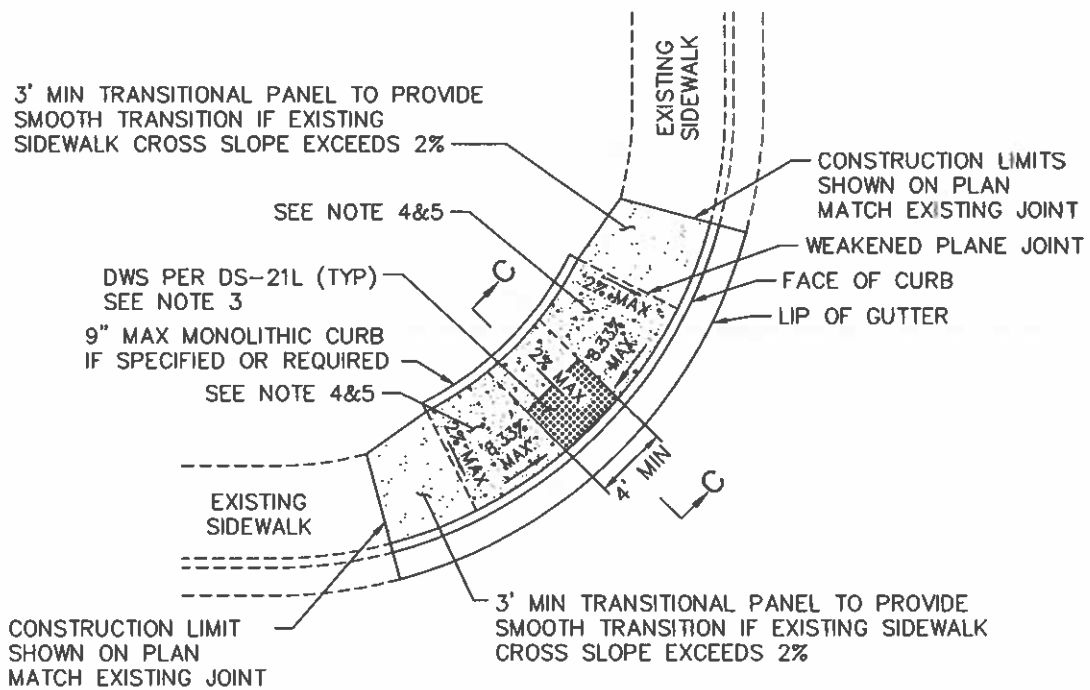
DRAWN BY: <u>KE</u>	CHECKED BY: <u>PD</u>	<b>SAN DIEGO COUNTY DESIGN STANDARD</b>	REVISIONS	APPROVED	DATE
RECOMMENDED BY: <u>K. EQUIPADO, P.E.</u>					
APPROVED BY COUNTY ENGINEER		<b>ALTERATION GENERAL NOTES FOR CURB RAMPS</b> (2 of 2)			
 DATE: <u>5/26/25</u>			DRAWING NUMBER	DS-21C	
SAMIR NUHALY, P.E. R.C.E. NO. 45044					



NOTES:


1. SEE DS-21A FOR GENERAL NOTES
2. SEE DS-21B AND DS-21C FOR CURB RAMP NOTES
3. RAMP LENGTH MUST BE 3.5' MINIMUM BUT WHERE THE CURB RAMP RUN LENGTH MUST EXCEED 15 FT TO ACHIEVE A 8.33% RUNNING SLOPE, THE CURB RAMP LENGTH SHALL EXTEND AT LEAST 15 FT AND MAY HAVE A RUNNING SLOPE GREATER THAN 8.33%
4. WILL NEED COUNTY'S APPROVAL IF IT IS TECHNICALLY INFEASIBLE AND MUST EXCEED THE 10% MAX REQUIREMENT
5. SEE DS-21L FOR DETECTABLE WARNING SURFACE

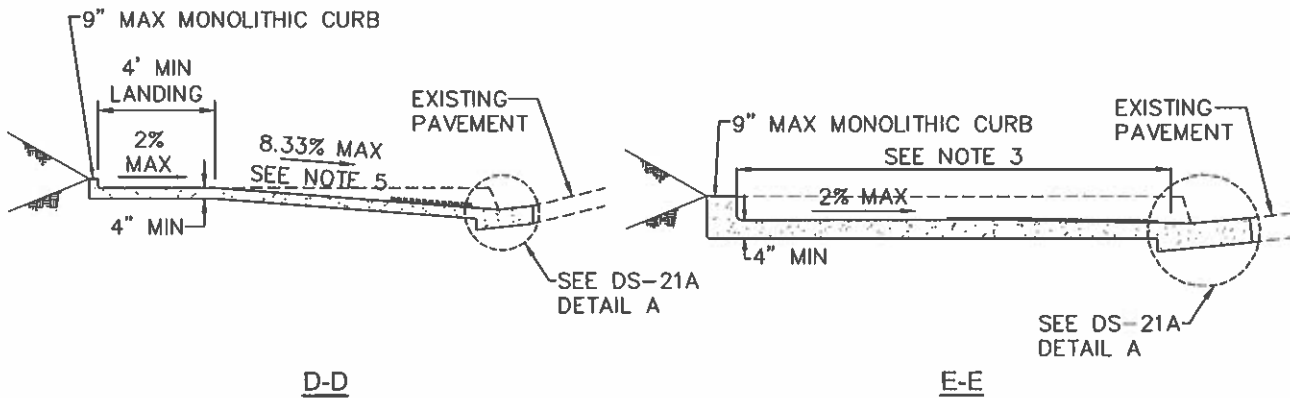
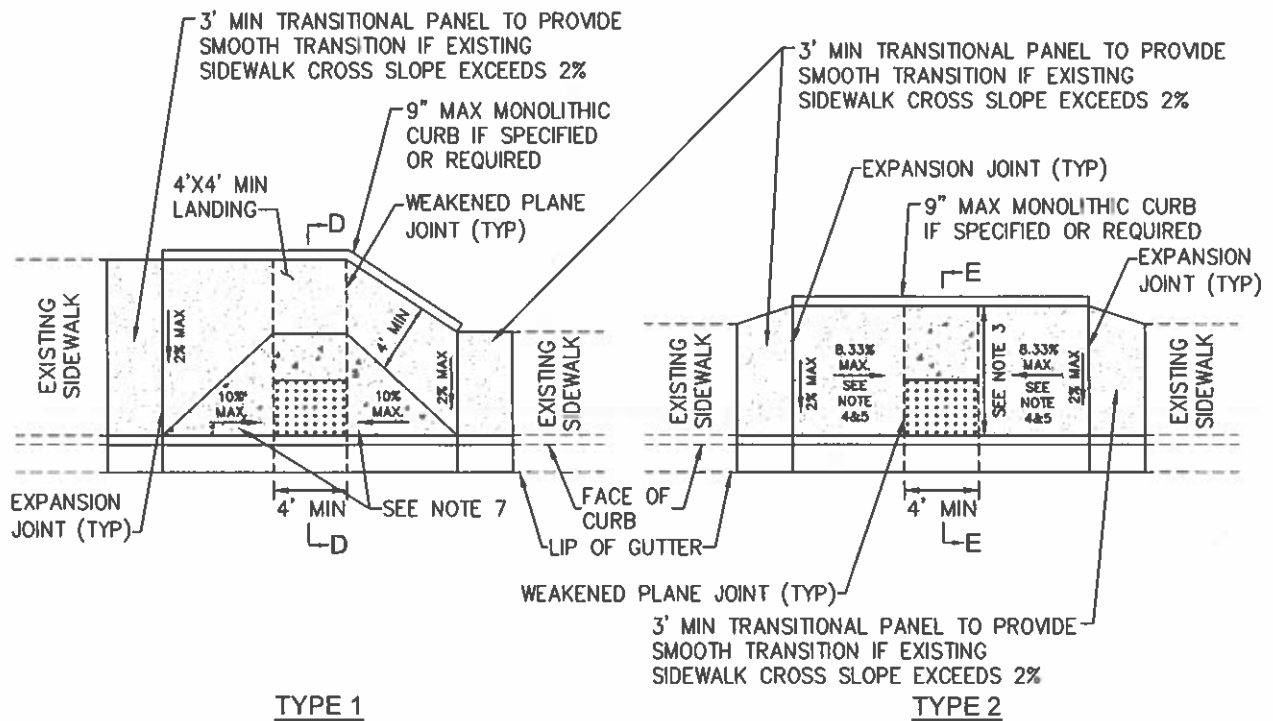
DRAWN BY: <u>KE</u>	CHECKED BY: <u>PO</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: K. EQUIPADO, P.E.	APPROVED BY COUNTY ENGINEER				
 DATE: <u>5/5/05</u> SAMIR NUHALY, P.E. R.C.E. NO. 45044		ALTERATION - PERPENDICULAR CURB RAMP (TYPE A)	DRAWING NUMBER DS-21D		



NOTES:


1. SEE DS-21A FOR GENERAL NOTES
2. SEE DS-21B AND DS-21C FOR RAMP NOTES
3. PER CBC 11B-705.1.2.2.1
  - a. LANDING LENGTH MUST BE 6' MIN WITH 3' DEPTH DETECTABLE WARNING SURFACE
  - b. WHERE IT IS TECHNICALLY INFEASIBLE TO PROVIDE 6' MIN LANDING LENGTH, USE 5' MIN LANDING LENGTH WITH 2' DEEP DWS
  - c. WHERE IT IS TECHNICALLY INFEASIBLE TO PROVIDE 5' MIN LANDING LENGTH, USE 4' MIN LANDING LENGTH WITH 2' DEEP DWS (PROWAG R304.3.4)
4. RAMP WIDTH MUST MATCH LANDING LENGTH
5. RAMP LENGTH MUST BE 3.5' MIN BUT WHERE THE CURB RAMP RUN LENGTH MUST EXCEED 15 FT TO ACHIEVE A 8.3% RUNNING SLOPE, THE CURB RAMP LENGTH SHALL EXTEND AT LEAST 15 FT AND MAY HAVE A RUNNING SLOPE GREATER THAN 8.3%

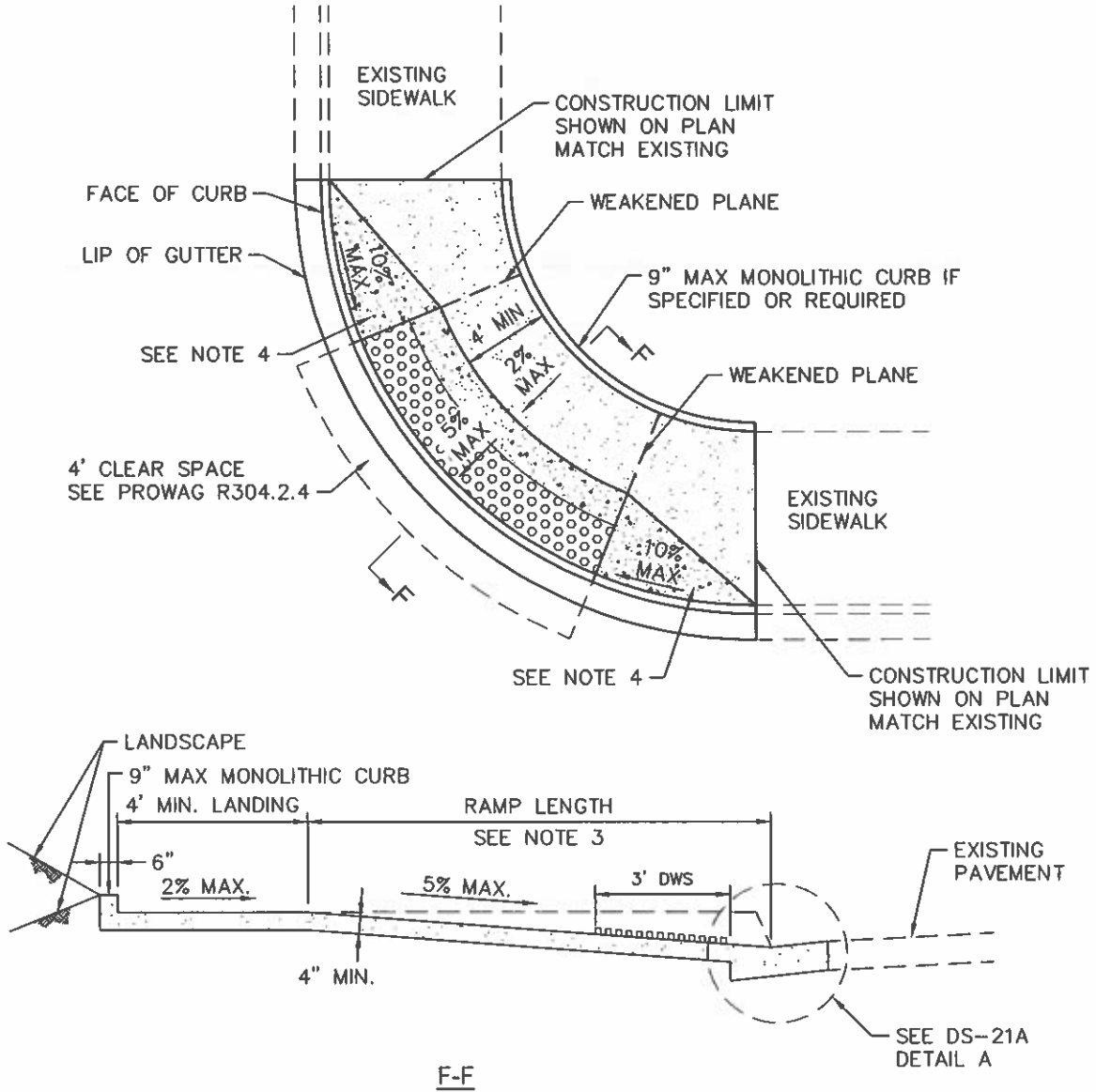
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RECOMMENDED BY: K. EQUIPADO, P.E.	APPROVED BY COUNTY ENGINEER				
 DATE: <u>5/5/25</u>		ALTERATION - PARALLEL CURB RAMP (TYPE C)	DRAWING NUMBER DS-21E		
SAMIR NUHAALY, P.E. R.C.E. NO. 45044					



NOTES:


1. SEE DS-21A FOR GENERAL NOTES
2. SEE DS-21B AND DS-21C FOR RAMP NOTES
3. PER CBC 11B-705.1.2.2.1
  - a. LANDING LENGTH MUST BE 6' MIN WITH 3' DEPTH DETECTABLE WARNING SURFACE
  - b. WHERE IT IS TECHNICALLY INFEASIBLE TO PROVIDE 6' MIN LANDING LENGTH, USE 5' MIN LANDING LENGTH WITH 2' DEEP DWS
  - c. WHERE IT IS TECHNICALLY INFEASIBLE TO PROVIDE 5' MIN LANDING LENGTH, USE 4' MIN LANDING LENGTH WITH 2' DEEP DWS (PROWAG 304.3.4)
4. RAMP WIDTH MUST MATCH LANDING LENGTH
5. RAMP LENGTH MUST BE 3.5' MIN BUT WHERE THE CURB RAMP RUN LENGTH MUST EXCEED 15 FT TO ACHIEVE A 8.3% RUNNING SLOPE, THE CURB RAMP LENGTH SHALL EXTEND AT LEAST 15 FT AND MAY HAVE A RUNNING SLOPE GREATER THAN 8.3%
6. SEE DS-21L FOR DETECTABLE WARNING SURFACE
7. WILL NEED COUNTY'S APPROVAL IF IT IS TECHNICALLY INFEASIBLE AND MUST EXCEED THE 10% MAX REQUIREMENT

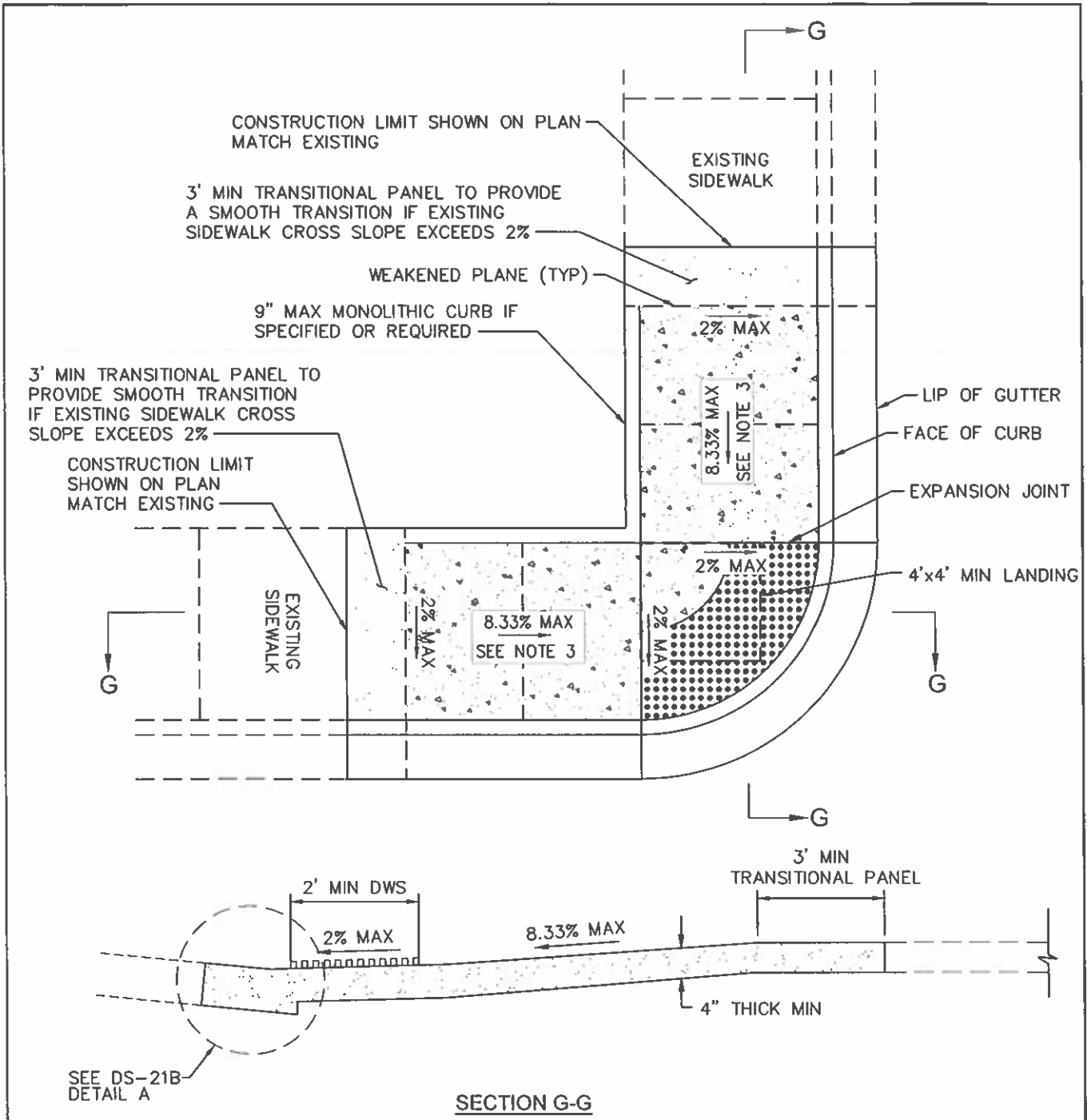
DRAWN BY: <u>KE</u>	CHECKED BY: <u>PO</u>	SAN DIEGO COUNTY DESIGN STANDARD  ALTERATION - MIDBLOCK RAMPS	REVISIONS	APPROVED	DATE
RECOMMENDED BY: K. EQUIPADO, P.E.					
APPROVED BY COUNTY ENGINEER					
 DATE: <u>5/5/20</u> SAMIR NUHALY, P.E. R.C.E. NO. 45044			DRAWING NUMBER <b>DS-21F</b>		



NOTES:

1. SEE DS-21A FOR GENERAL NOTES
2. SEE DS-21B AND DS-21C FOR RAMP NOTES
3. RAMP LENGTH MUST BE 3.5' MINIMUM
4. WILL NEED COUNTY'S APPROVAL IF IT IS TECHNICALLY INFEASIBLE AND MUST EXCEED THE 10% MAX REQUIREMENT
5. SEE DS-21L FOR DETECTABLE WARNING SURFACE

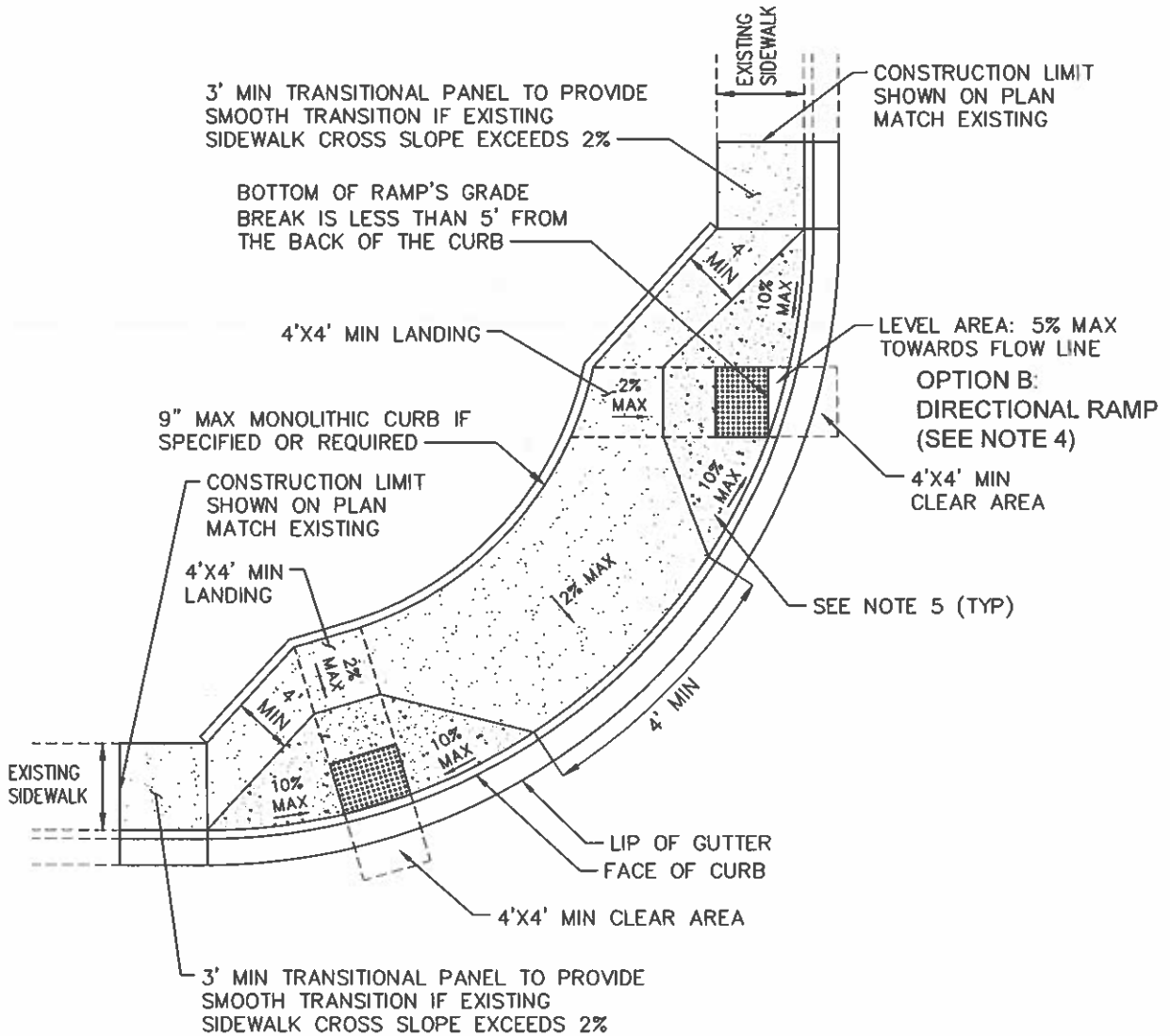
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RECOMMENDED BY: K. EQUIPADO, P.E.	APPROVED BY COUNTY ENGINEER				
 DATE: <u>5/5/05</u>		ALTERATION - BLENDED TRANSITION RAMP	DRAWING NUMBER DS-21G		
SAMR NUHALY, P.E. R.C.E. NO. 45044					



NOTES:

1. SEE DS-21A FOR GENERAL NOTES
2. SEE DS-21B AND DS-21C FOR RAMP NOTES
3. RAMP LENGTH MUST BE 3.5' MINIMUM BUT WHERE THE CURB RAMP RUN LENGTH MUST EXCEED 15 FT TO ACHIEVE A 8.3% RUNNING SLOPE, THE CURB RAMP LENGTH SHALL EXTEND AT LEAST 15 FT AND MAY HAVE A RUNNING SLOPE GREATER THAN 8.3%
4. SEE DS-21L FOR DETECTABLE WARNING SURFACE


DRAWN BY: <u>KE</u>	CHECKED BY: <u>PO</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE	
RECOMMENDED BY: K. EQUIPADO, P.E.						
APPROVED BY COUNTY ENGINEER		ALTERATION - BLENDED TRANSITION RAMP (10' CURB RADIUS OR LESS)				
DATE: <u>5/5/05</u>			DRAWING NUMBER	DS-21H		
SAMIR NUHAILY, P.E. R.C.E. NO. 45044						

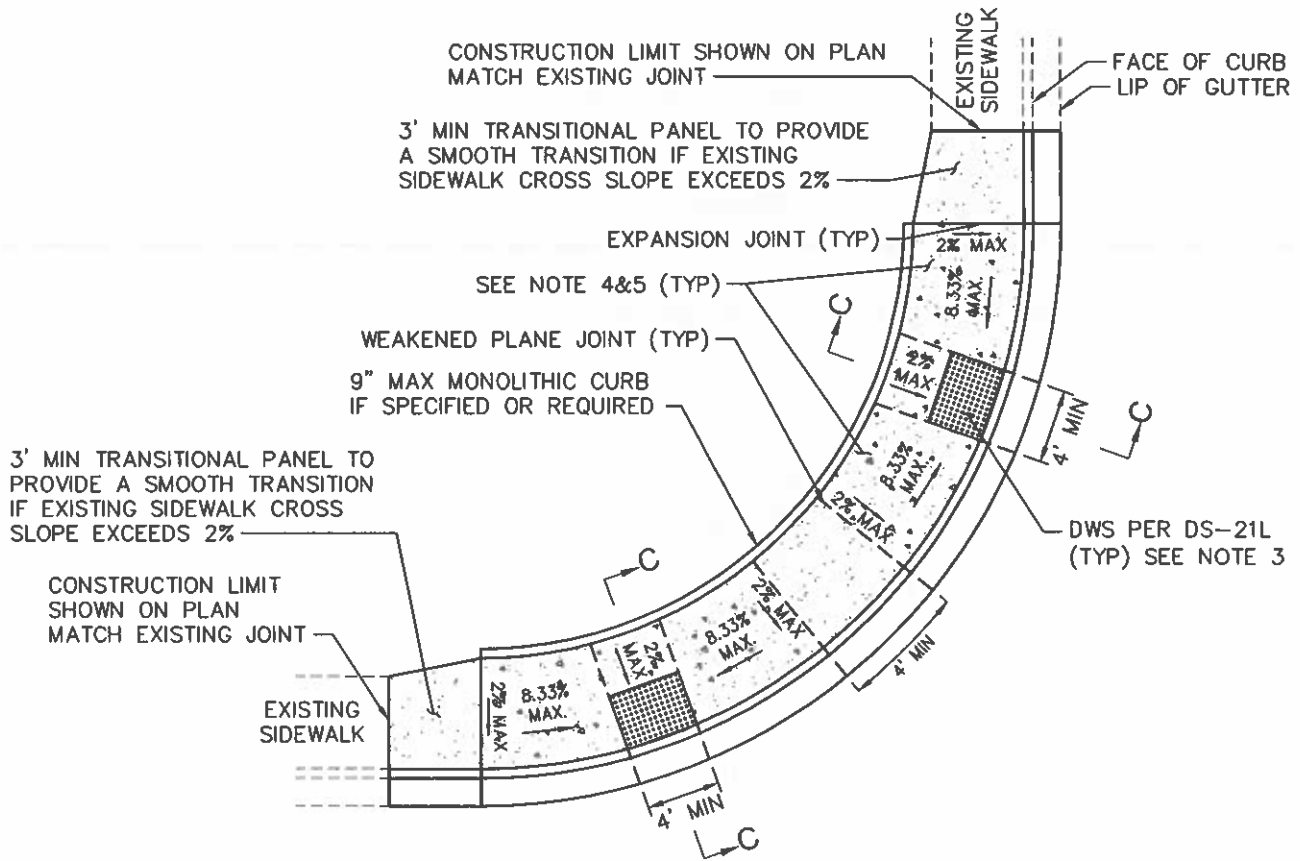


**OPTION A:  
PERPENDICULAR RAMP  
(SEE NOTE 3)**

**NOTES:**


1. SEE DS-21A FOR GENERAL NOTES
2. SEE DS-21B AND DS-21C FOR RAMP NOTES
3. REFER TO DS-21D FOR PERPENDICULAR RAMP CROSS SECTION
4. REFER TO DS-21K FOR DIRECTIONAL RAMP CROSS SECTION
5. WILL NEED COUNTY'S APPROVAL IF IT IS TECHNICALLY INFEASIBLE AND MUST EXCEED THE 10% MAX REQUIREMENT
6. SEE DS-21L FOR DETECTABLE WARNING SURFACE

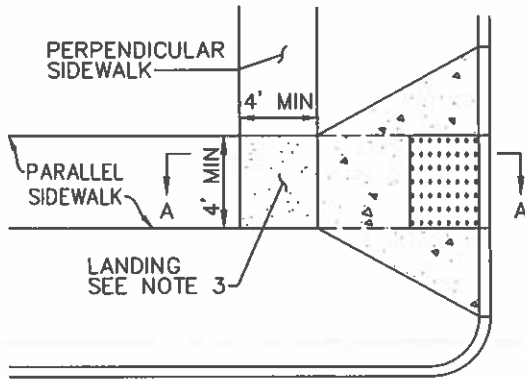
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RECOMMENDED BY: K. EQUIPADO, P.E.					
APPROVED BY COUNTY ENGINEER		ALTERATION - DUAL PERPENDICULAR OR DIRECTIONAL RAMPS			
 DATE: <u>9/5/05</u>			DRAWING NUMBER	DS-211	
SAMIR NUHAILY, P.E. R.C.E. NO. 45044					



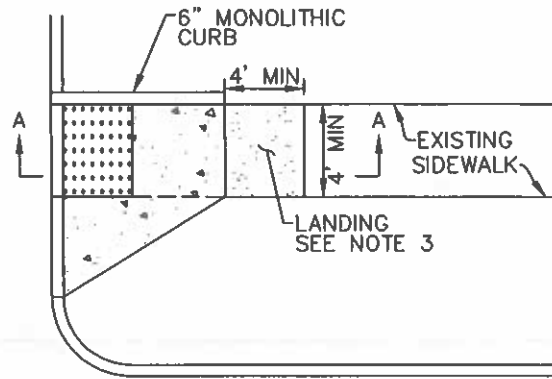
NOTES:

1. SEE DS-21A FOR GENERAL NOTES.
2. SEE DS-21B AND DS-21C FOR RAMP NOTES
3. PER CBC 11B-705.1.2.2.1
  - a. LANDING LENGTH MUST BE 6' MIN WITH 3' DEPTH DETECTABLE WARNING SURFACE
  - b. WHERE IT IS TECHNICALLY INFEASIBLE TO PROVIDE 6' MIN LANDING LENGTH, USE 5' MIN LANDING LENGTH WITH 2' DEEP DWS
  - c. WHERE IT IS TECHNICALLY INFEASIBLE TO PROVIDE 5' MIN LANDING LENGTH, USE 4' MIN LANDING LENGTH WITH 2' DEEP DWS (PROWAG 304.3.4)
4. RAMP WIDTH MUST MATCH LANDING SIDE LENGTH
5. RAMP LENGTH MUST BE 3.5' MINIMUM BUT WHERE THE CURB RAMP RUN LENGTH MUST EXCEED 15 FT TO ACHIEVE A 8.3% RUNNING SLOPE, THE CURB RAMP RUN LENGTH SHALL EXTEND AT LEAST 15 FT AND MAY HAVE A RUNNING SLOPE GREATER THAN 8.3%
6. REFER TO DS-21E FOR SECTION C-C

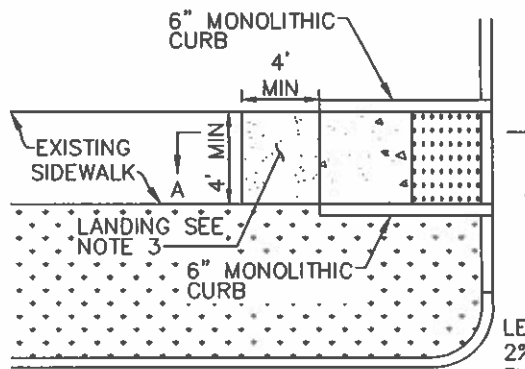
DRAWN BY: <u>KE</u>	CHECKED BY: <u>PO</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: K. EQUIPADO, P.E.					
APPROVED BY COUNTY ENGINEER		ALTERATION - DUAL PARALLEL RAMPS			
 DATE <u>5/5/25</u>			DRAWING NUMBER	DS-21J	
SAMIR NUHAILY, P.E. R.C.E. NO. 45044					



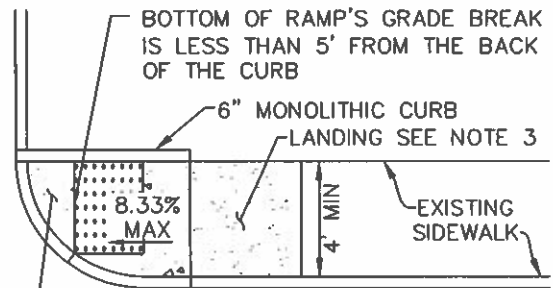
D-1



D-2

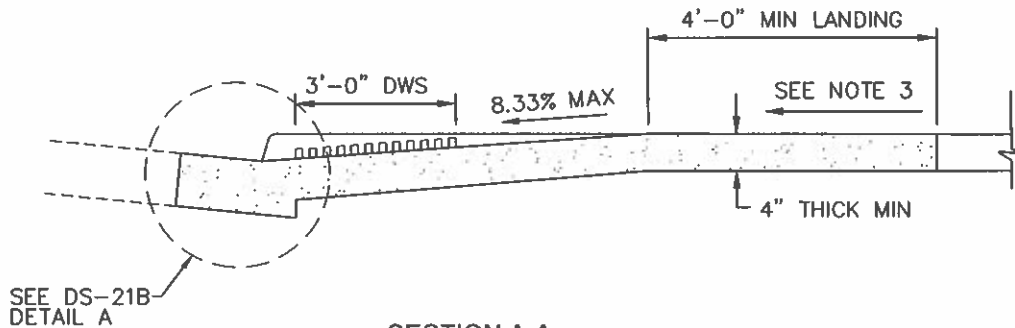


D-3



D-4

LEVEL AREA:  
2% MAX TOWARDS  
FLOW LINE



SECTION A-A

NOTES:

1. SEE DS-21A FOR GENERAL NOTES
2. SEE DS-21B AND DS-21C FOR RAMP NOTES
3. IF THE ONLY CONNECTING SIDEWALK RUNS PARALLEL TO THE RAMP RUN, LANDING MAX SLOPE IS 5% IF THERE'S A CONNECTING PERPENDICULAR SIDEWALK, LANDING MAX SLOPE IS 2% ALL AROUND
4. WILL NEED COUNTY'S APPROVAL IF IT IS TECHNICALLY INFEASIBLE AND MUST EXCEED THE 10% MAX REQUIREMENT
5. SEE DS-21L FOR DETECTABLE WARNING SURFACE

DRAWN BY: KE CHECKED BY: PD

RECOMMENDED BY: K. EQUIPADO, P.E.

APPROVED BY COUNTY ENGINEER

*[Signature]* DATE: 7/5/25

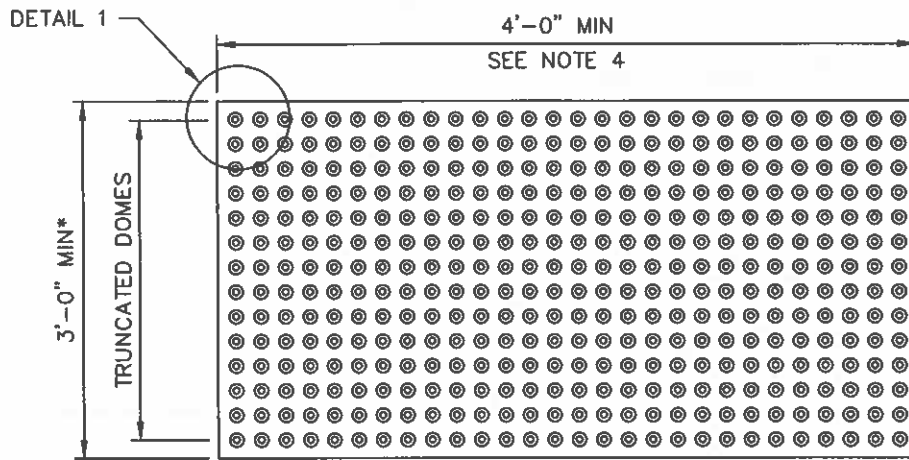
SAMR NUHALY, P.E.  
R.C.E. NO. 45044

SAN DIEGO COUNTY DESIGN STANDARD

ALTERATION - DIRECTIONAL RAMPS  
(TYPE D)

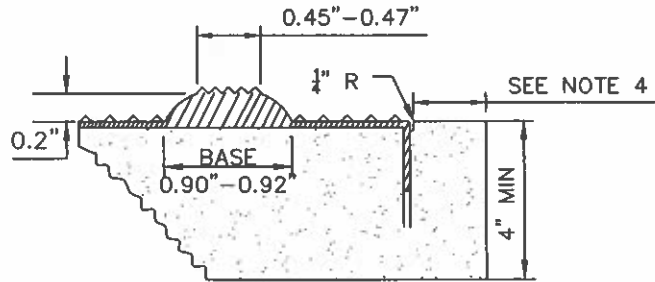
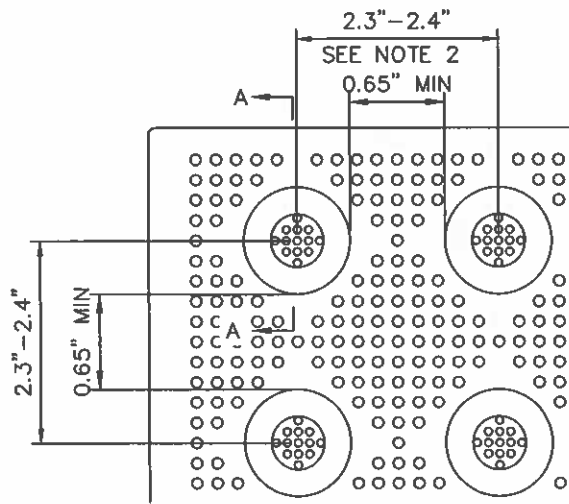
REVISIONS	APPROVED	DATE

DRAWING NUMBER DS-21K



\* EXCEPTION:  
SEE DS-21E, DS-21F,  
DS-21J NOTE 3

PLAN



SECTION A-A


DETAIL 1

NOTES:

1. DETECTABLE WARNING SURFACE (DWS) COLOR SHALL BE YELLOW AND APPROXIMATE 33538 OF SAE AMSSTD-595A OR APPROVED AGENCY COLOR BY DSA. COLOR SHALL BE HOMOGENEOUS THROUGHOUT THE TILE.
2. PER CBC 11B-705.1.1.2, WHERE INSTALLED IN A RADIAL PATTERN, TRUNCATED DOMES SHALL HAVE A CENTER-TO-CENTER SPACING OF 1.6" MIN TO 2.4" MAX.
3. DETECTABLE WARNING TILE PRODUCTS SHALL BE PER AGENCY'S APPROVED CAST-IN-PLACE MATERIAL LIST.
4. PER CBC 11B-705.1.2.2.1 PERPENDICULAR RAMPS  
DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE RAMP RUN LESS 2" MAX ON EACH SIDE, EXCLUDING ANY FLARED SIDES.

PER CBC 11B-705.1.2.2.2 PARALLEL RAMPS

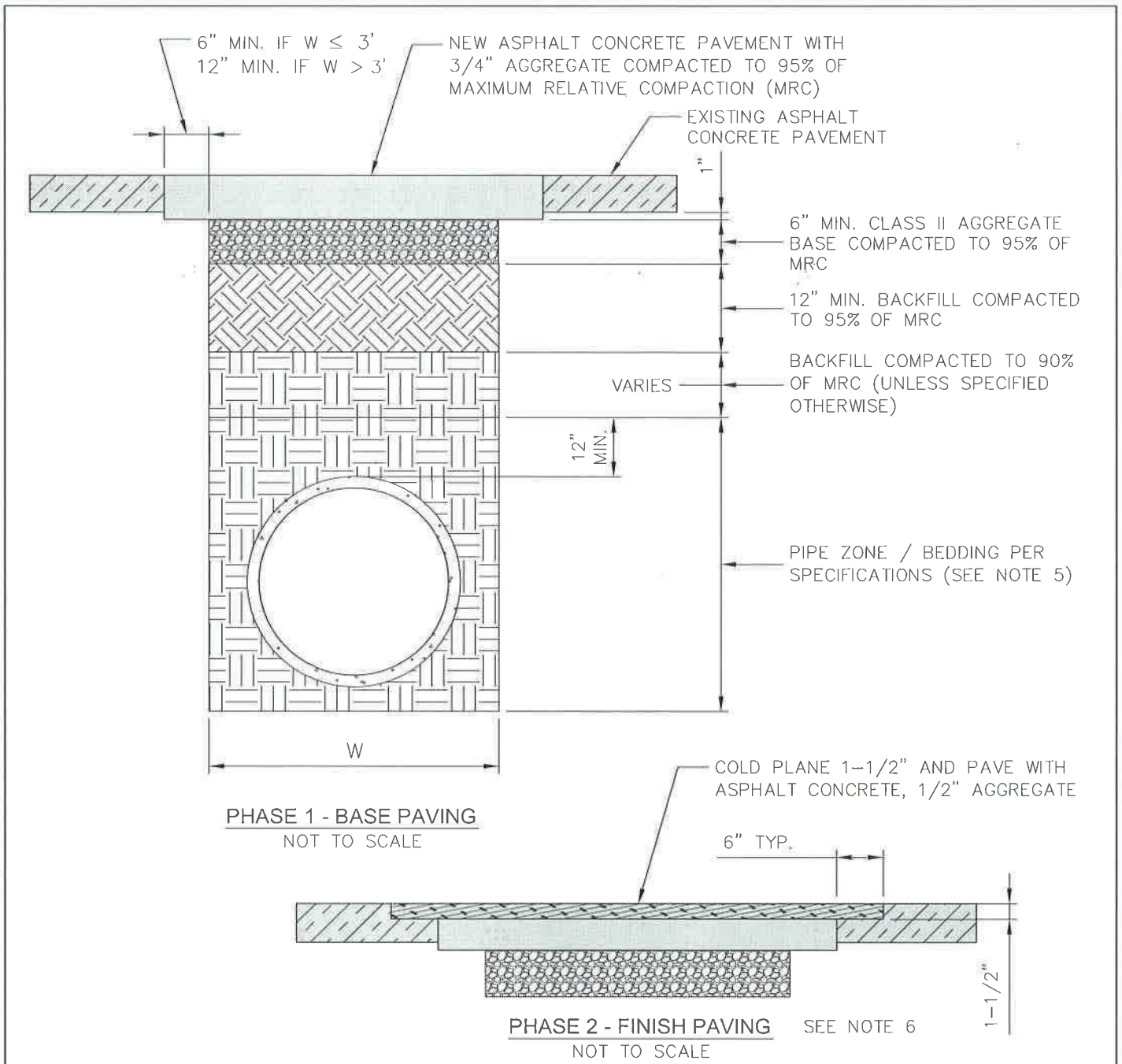
DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE TURNING SPACE AT THE DEMARCATION BETWEEN THE STREET AND THE SIDEWALK LESS 2" MAX ON EACH SIDE.

DRAWN BY: <u>KE</u>	CHECKED BY: <u>PO</u>
RECOMMENDED BY: K. EQUIPADO, P.E.	
APPROVED BY COUNTY ENGINEER	
 DATE: <u>5/5/25</u>	
SAMR NUHALY, P.E. R.C.E. NO. 45044	

SAN DIEGO COUNTY DESIGN STANDARD

DETECTABLE WARNING SURFACE  
(DWS)

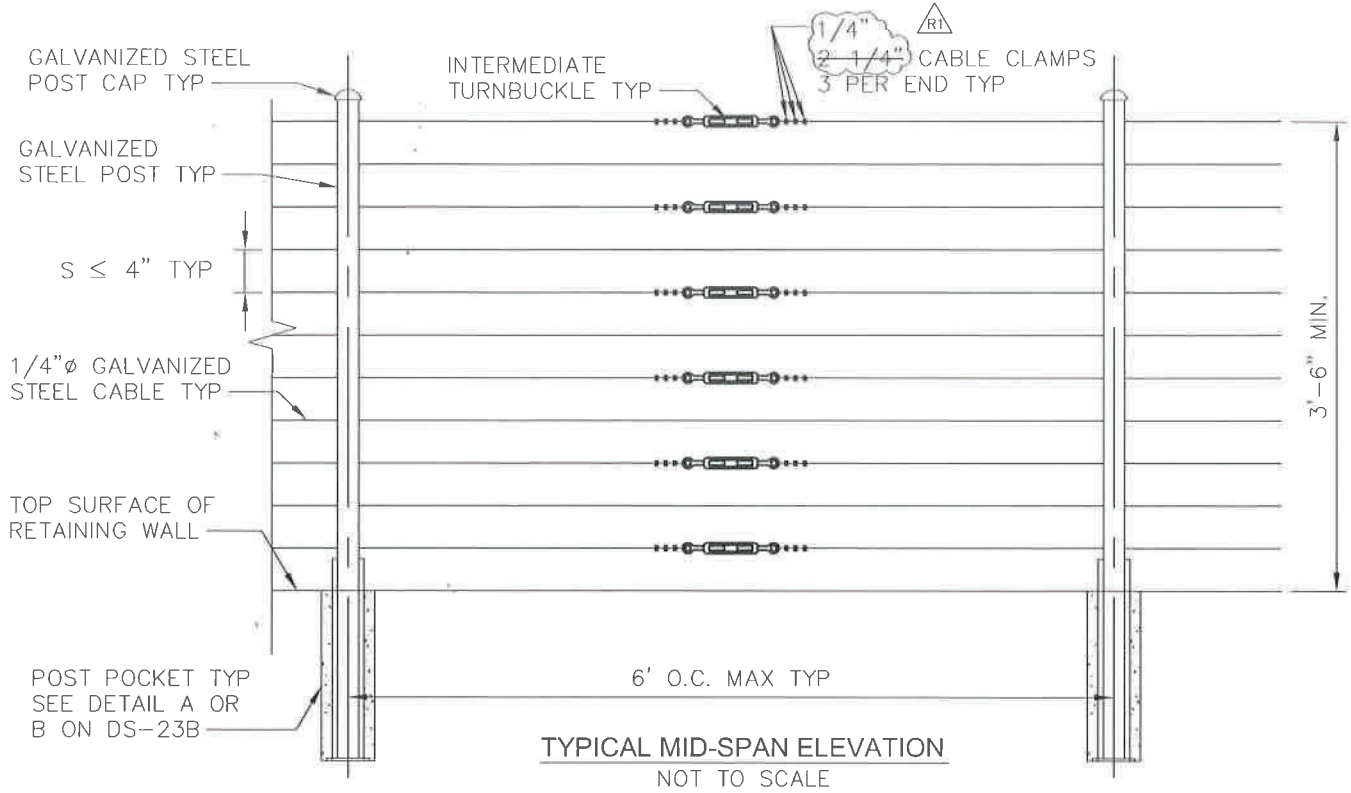
REVISIONS	APPROVED	DATE
DRAWING NUMBER		DS-21L



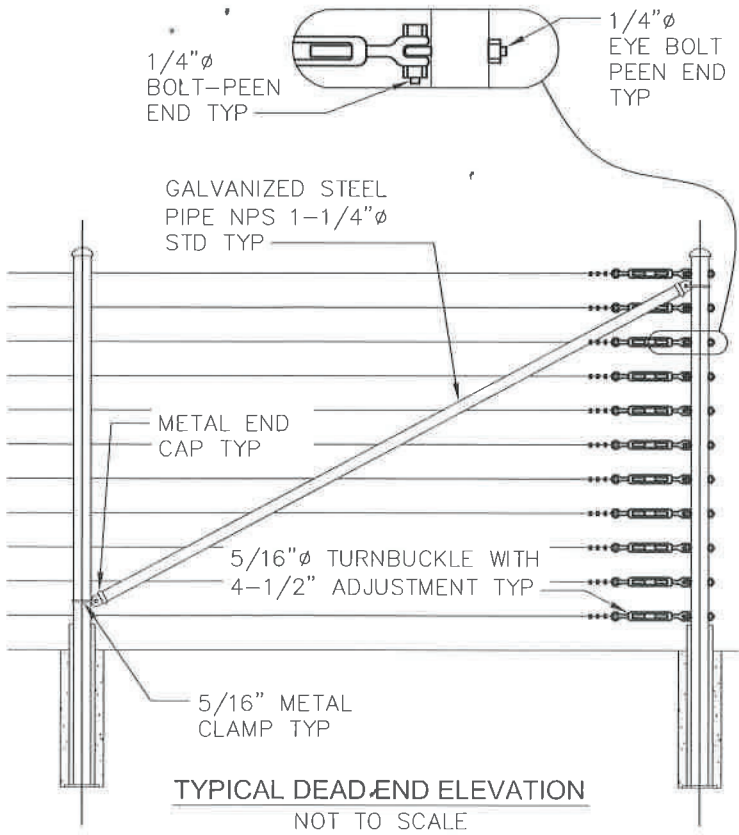
**NOTES:**

1. PAVEMENT MATERIAL AND SURFACING SHALL MATCH EXISTING.
2. ALL REMOVED SURFACE IMPROVEMENTS (CURBS, DIKES, SIDEWALKS, ETC.) SHALL BE REPLACED IN KIND.
3. ALL AREAS OF EXISTING AC LESS THAN 48" WIDE REMAINING AFTER TRENCHING SHALL BE COLD PLANED AND PAVED PER PHASE II FINISH PAVING.
4. PHASE I PAVEMENT THICKNESS SHALL EQUAL EXISTING PAVEMENT THICKNESS PLUS 1" (4" MINIMUM / 7" MAXIMUM).
5. WHEN GRAVEL OR ROCK IS USED WITHIN THE PIPE ZONE, THAT MATERIAL SHALL BE ENCAPSULATED IN A FILTER FABRIC ENVELOPE WITH W/2 > 12" MINIMUM OVERLAP. THIS REQUIREMENT APPLIES ONLY TO TRENCHES UNDER OR WITHIN 10' OF SURFACING.
6. PHASE II PAVING SHALL BE COMPLETED NOT EARLIER THAN 14 CALENDAR DAYS AND NOT LATER THAN 75 CALENDAR DAYS AFTER PHASE 1 PAVING.
7. FOR PCC PAVEMENT REFER TO RSD G25.

DRAWN BY: PBM	CHECKED BY: JSM	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY, P.E.			REV	JSM	10/2012
APPROVED BY COUNTY ENGINEER <i>Mohamad Fakhridine</i>	DATE: 10/15/12	<b>TRENCH SURFACING TYPE R</b>			
MOHAMAD FAKHRIDDINE, P.E. R.C.E. NO. 44520, EXP 3/31/2014			DRAWING NUMBER	<b>DS-22</b>	



TYPICAL MID-SPAN ELEVATION  
NOT TO SCALE



TYPICAL DEAD-END ELEVATION  
NOT TO SCALE

- NOTES:
1. 200 FEET MAXIMUM DISTANCE BETWEEN TURNBUCKLES
  2. STAGGER INTERMEDIATE TURNBUCKLES IN ADJACENT SPANS
  3. NO CABLE SPLICING BETWEEN INTERMEDIATE TURNBUCKLE AND END POST
  4. CABLE ALIGNMENT MAY VARY TO MATCH SLOPE IN TOP SURFACE OF RETAINING WALL
  5. CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS PRIOR TO ORDERING MATERIALS OR FABRICATING ASSEMBLIES
  6. LINE POSTS SHALL BE BRACED HORIZONTALLY AND TRUSSED DIAGONALLY IN BOTH IN LINE DIRECTIONS AT INTERVALS NOT TO EXCEED 1000 FEET
  7. ALL CABLE ENDS SHALL BE CAPPED WITH MECHANICALLY LOCKING, STAINLESS STEEL CAP COVERS (QuickConnect-SS OR EQUAL)
  8. WHERE HORIZONTAL FENCE ALIGNMENT DEFLECTS 15 DEGREES OR MORE, POSTS AT ANGLE POINTS SHALL BE BRACED IN BOTH IN LINE DIRECTIONS WITH DIAGONAL BRACING PER TYPICAL DEAD END ELEVATION DETAIL
  9. THIMBLES SHALL BE INSTALLED ON ALL CABLE LOOPS
  10. SEE DS-23B FOR ADDITIONAL DETAILS
  11. CENTERLINE OF POST MUST BE AT LEAST 9 INCHES FROM NEAREST EXPANSION JOINT

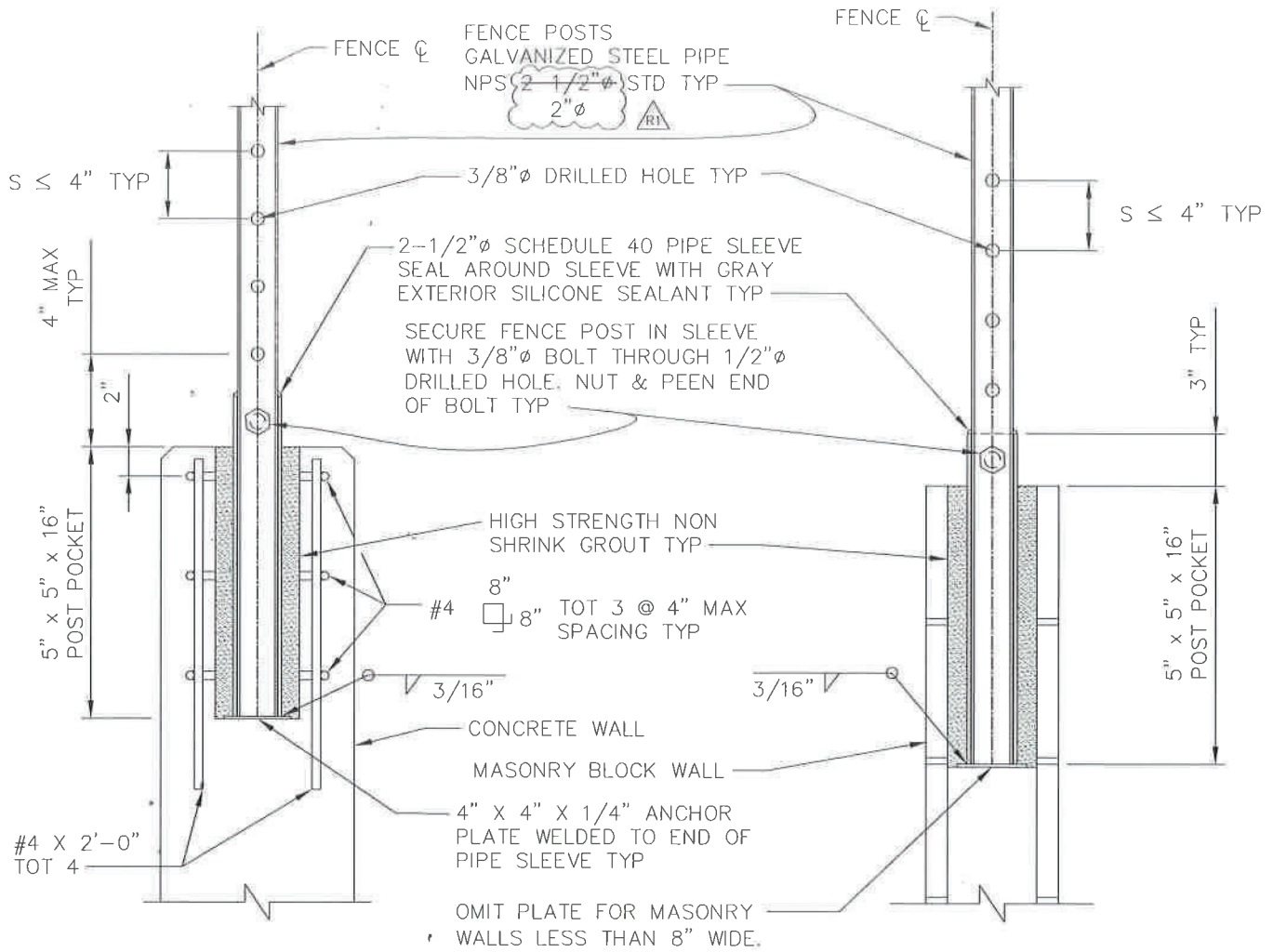
DRAWN BY: EN\_ CHECKED BY: PBM  
 RECOMMENDED BY: JEFF S. MOODY, P.E.  
 APPROVED BY COUNTY ENGINEER  
 MOHAMAD FAKHRIDDINE, P.E.  
 DATE: 3/3/14  
 R.C.E. NO. 44520, EXP 3/31/2014

SAN DIEGO COUNTY DESIGN STANDARD

CABLE RAILING  
FOR RETAINING WALL

REVISIONS	APPROVED	DATE
NEW	JSM	10/2012
	EN	09/2013
	EN	12/2013

DRAWING NUMBER DS-23A

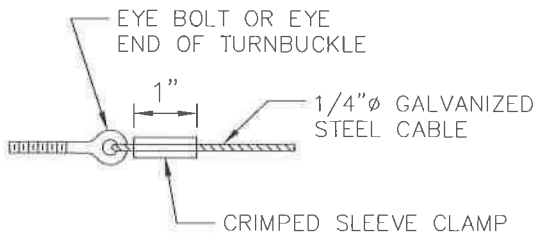


**DETAIL A**  
**CONCRETE RETAINING WALL**

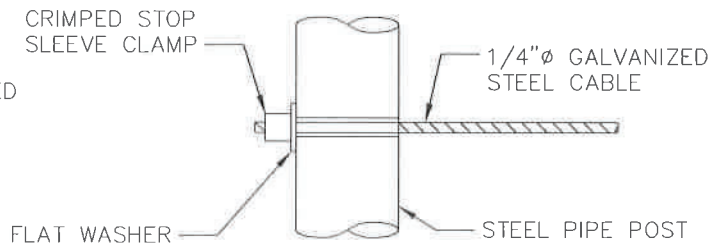
NOT TO SCALE  
EXISTING REINFORCING NOT SHOWN FOR CLARITY

**DETAIL B**  
**MASONRY RETAINING WALL**

NOT TO SCALE  
EXISTING REINFORCING NOT SHOWN FOR CLARITY



**ALTERNATIVE CABLE CONNECTION**  
NOT TO SCALE



**ALTERNATIVE DEAD END ANCHORAGE**  
NOT TO SCALE

**NOTES:**

1. POST SHALL BE CENTERED IN WALL AND PLUMB
2. ALL METAL COMPONENTS AND HARDWARE SHALL BE HOT DIP GALVANIZED AFTER FABRICATION
3. ONLY ONE OF THE TWO ALTERNATIVE CONNECTIONS IS ALLOWED FOR THE SAME CABLE END

DRAWN BY: EN\_ CHECKED BY: PBM

RECOMMENDED BY: JEFF S. MOODY, P.E.

APPROVED BY COUNTY ENGINEER:

*Mohamad Fakhreddine*  
DATE: 3/3/14  
MOHAMAD FAKHREDDINE, P.E.  
R.C.E. NO. 44520, EXP 3/31/2014

SAN DIEGO COUNTY DESIGN STANDARD

**CABLE RAILING  
DETAILS**

REVISIONS	APPROVED	DATE
NEW	JSM	10/2012
RI	EN	09/2013

DRAWING NUMBER **DS-23B**

**CROSSWALK ADA REQUIREMENTS**


1. WHERE A PEDESTRIAN ACCESS ROUTE IS CONTAINED WITHIN A CROSSWALK, THE GRADE OF THE PEDESTRIAN ACCESS ROUTE SHALL BE 1:20 (5.0%) MAXIMUM.

EXCEPTION: WHERE ROADWAY DESIGN REQUIRES SUPERELEVATION GREATER THAN 1:20 (5.0%) AT THE LOCATION OF A CROSSWALK, THE GRADE OF THE PEDESTRIAN ACCESS ROUTE WITHIN THE CROSSWALK MAY BE THE SAME AS THE SUPERELEVATION.

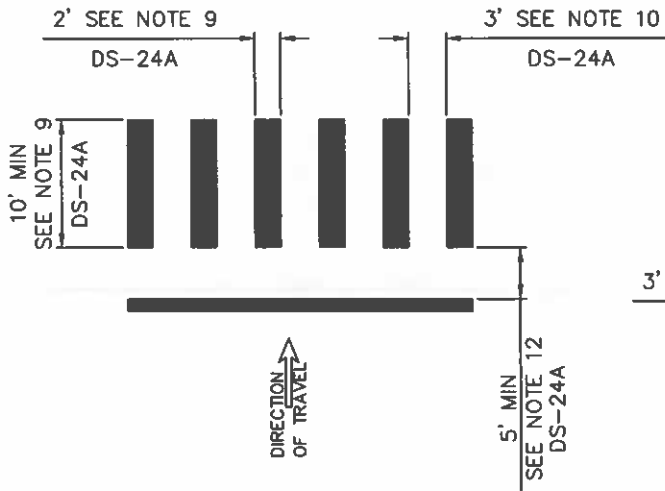
- 2. WHERE A PEDESTRIAN ACCESS ROUTE IS CONTAINED WITHIN A CROSSWALK AT AN INTERSECTION APPROACH WITH YIELD OR STOP CONTROL DEVICES, THE CROSS SLOPE OF THE PEDESTRIAN ACCESS ROUTE SHALL BE 1:48 (2.1%) MAXIMUM.
- 3. WHERE A PEDESTRIAN ACCESS ROUTE IS CONTAINED WITHIN A CROSSWALK AT AN UNCONTROLLED APPROACH, THE CROSS SLOPE OF THE PEDESTRIAN ACCESS ROUTE SHALL BE 1:20 (5.0%) MAXIMUM.
- 4. WHERE A PEDESTRIAN ACCESS ROUTE IS CONTAINED WITHIN A CROSSWALK AT AN INTERSECTION APPROACH CONTROLLED BY A TRAFFIC CONTROL SIGNAL OR PEDESTRIAN HYBRID BEACON, THE CROSS SLOPE OF THE PEDESTRIAN ACCESS ROUTE SHALL BE 1:20 (5.0%) MAXIMUM.
- 5. THE CROSS SLOPE OF A PEDESTRIAN ACCESS ROUTE WITHIN A MIDBLOCK CROSSWALK OR A CROSSWALK AT A ROUNDABOUT SHALL NOT EXCEED THE STREET GRADE.

**CROSSWALK NOTES**

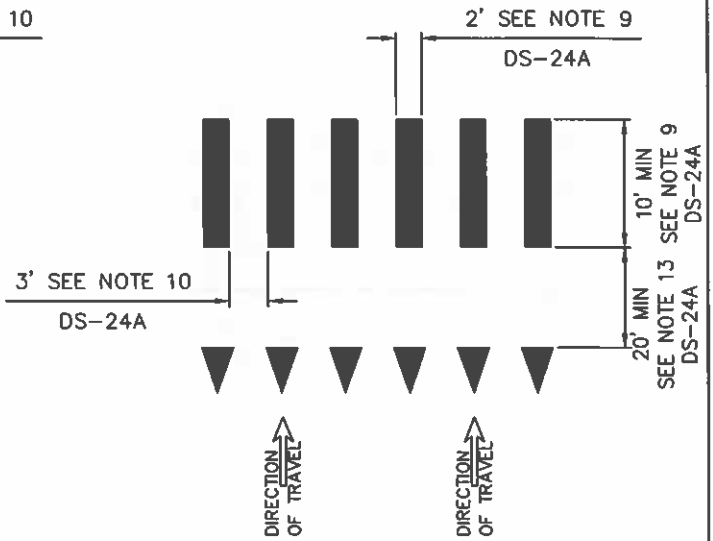
- 1. CONTINENTAL CROSSWALK MARKINGS SHALL COMPLY WITH THESE STANDARDS AND THE AMERICANS WITH DISABILITIES ACT (ADA). ANY DEVIATIONS SHALL BE SHOWN ON PLANS AND SHALL COMPLY WITH THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA-MUTCD).
- 2. ALL MARKED CROSSWALKS, CONTROLLED & UNCONTROLLED, SHALL BE CONTINENTAL CROSSWALK MARKINGS UNLESS OTHERWISE APPROVED.
- 3. SIGNALIZED INTERSECTIONS SHALL BE PROVIDED WITH A CONTINENTAL CROSSWALK MARKING ACROSS EACH LEG WHERE PEDESTRIANS ARE PERMITTED TO CROSS.
- 4. ALL CROSSWALK BARS SHALL BE OF THERMOPLASTIC MATERIAL. PRE-FORMED THERMOPLASTIC SHALL NOT BE USED ON CONCRETE SURFACES.
- 5. CROSSWALK BARS SHALL BE YELLOW IN SCHOOL ZONES. CROSSWALK BARS SHALL BE WHITE IN ALL NON-SCHOOL ZONE LOCATIONS.
- 6. CONTINENTAL CROSSWALK BARS SHALL BE ALIGNED PARALLEL TO THE DIRECTION OF VEHICULAR TRAVEL.
- 7. CONTRACTOR SHALL WORK TO AVOID PLACING CROSSWALK BARS IN THE WHEEL PATHS OF VEHICULAR AND BICYCLIST TRAVEL. INSTALLATION OF INITIAL CROSSWALK BAR SHALL BE CENTERED ALONG YELLOW CENTERLINE OR ALONG THE CENTER OF PAVEMENT UNLESS OTHERWISE NOTED ON PLANS.
- 8. CROSSWALK BARS SHALL BE UNIFORM AND EVENLY SPACED WITHIN THE SAME CROSSING. NO PARTIAL CROSSWALK BARS SHALL BE INSTALLED.
- 9. CROSSWALK BARS SHALL BE 10 FEET LONG AND 2 FEET WIDE. ANY DEVIATION SHALL BE SHOWN ON PLANS.
- 10. CROSSWALK BAR SPACING SHALL NOT EXCEED 5 FEET WHEN TYPICAL GAP SPACING CANNOT BE MET. ANY DEVIATIONS SHALL BE SHOWN ON PLANS.
- 11. CROSSWALK MARKINGS BETWEEN A DUAL RAMP AND A SINGLE RAMP CORNERS SHALL BE 10 FEET WIDE AND SATISFY 2 FEET MINIMUM BEYOND RAMP FLARE.
- 12. LIMIT LINES SHALL BE 5 FEET IN ADVANCE OF MARKED CROSSWALKS FOR NON-SCHOOL ZONE AND 10 FEET IN ADVANCE FOR SCHOOL ZONE. LIMIT LINE SHALL COMPLY WITH CALTRANS STANDARD PLANS A24G. ANY DEVIATIONS SHALL BE SHOWN ON PLANS.
- 13. YIELD LINE SHALL BE 20 FEET IN ADVANCE OF MARKED UNCONTROLLED CROSSWALKS AND SHALL COMPLY WITH CALTRANS STANDARD PLANS A24G. ANY DEVIATIONS SHALL BE SHOWN ON PLANS.
- 14. MARKED CROSSWALK LOCATIONS CONSISTING OF BRICK PAVERS OR OTHER DECORATIVE PAVING SHALL BE PROVIDED WITH A LIMIT LINE ONLY UNLESS OTHERWISE DIRECTED BY THE COUNTY TRAFFIC ENGINEER.

DRAWN BY: <u>KE</u>	CHECKED BY: <u>PO</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: K. EQUIPADO, P.E.					
APPROVED BY COUNTY ENGINEER		CONTINENTAL CROSSWALK MARKINGS NOTES			
	DATE: <u>5/6/25</u>		DRAWING NUMBER	DS-24A	
SAMIR NUHAILEY, P.E. R.C.E. NO. 45044					

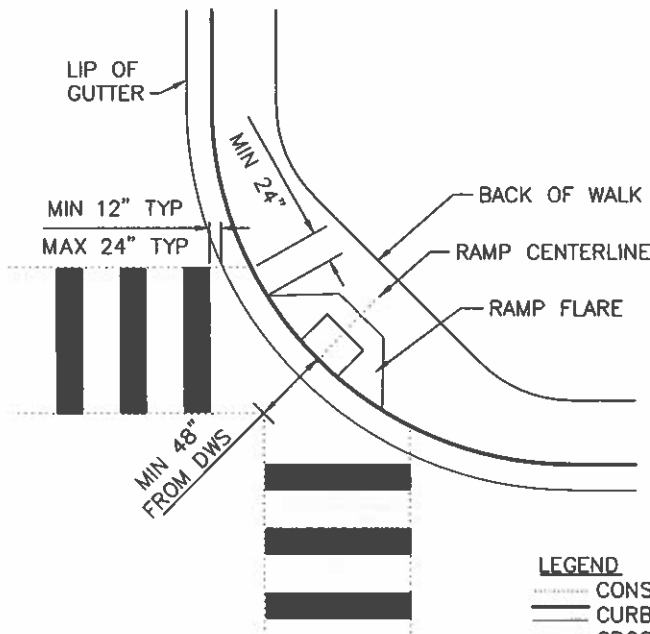
**CONTROLLED CROSSWALK**



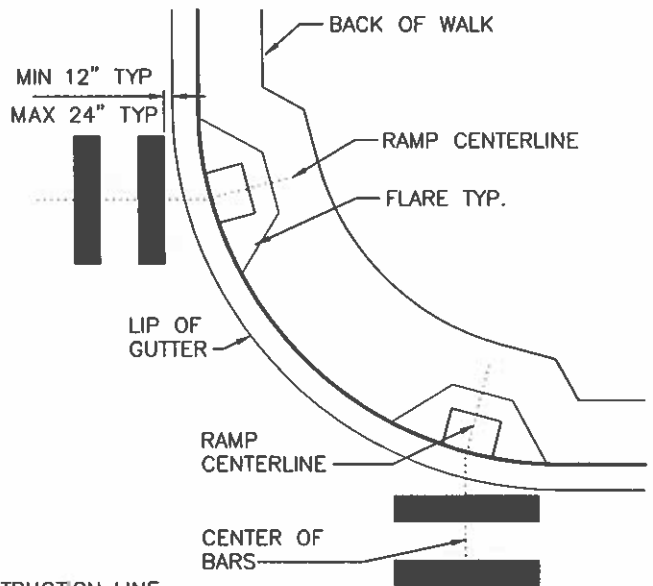
**UNCONTROLLED CROSSWALK**



**SINGLE RAMP CORNER**



**DUAL RAMP CORNER**



**LEGEND**

- CONSTRUCTION LINE
- CURB & GUTTER
- CROSSWALK BAR
- ▼ ▼ ▼ YIELD LINE

DRAWN BY: KE      CHECKED BY: PO

RECOMMENDED BY: K. EQUIPADO, P.E.

APPROVED BY COUNTY ENGINEER

*[Signature]* DATE: 5/15/05

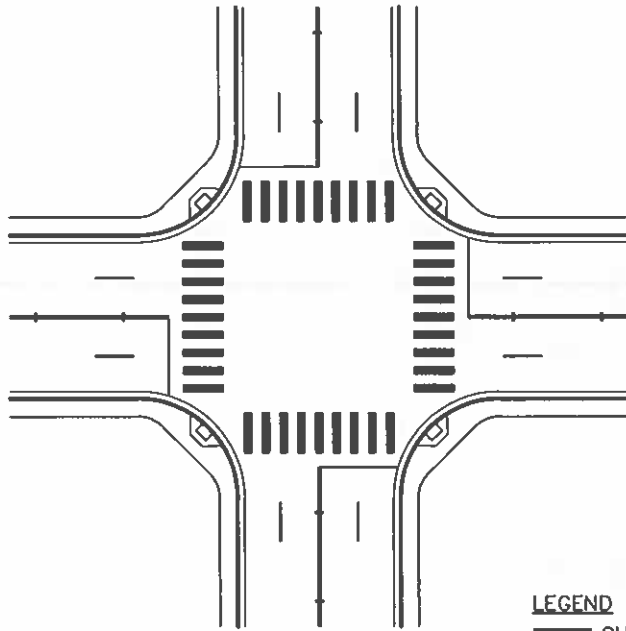
SAMIR NUHAILY, P.E.  
R.C.E. NO. 45044

**SAN DIEGO COUNTY DESIGN STANDARD**

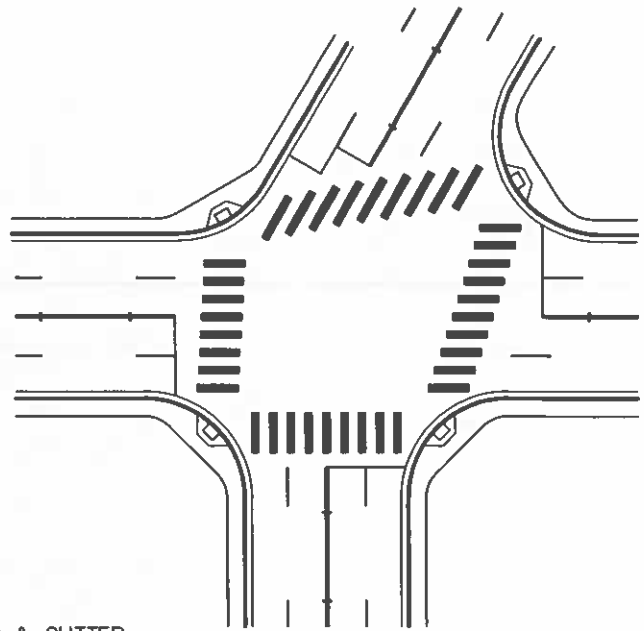
**CONTINENTAL CROSSWALK  
MARKINGS LAYOUT AND NOTES**

REVISIONS	APPROVED	DATE
<b>DRAWING NUMBER</b>		<b>DS-24B</b>

CASE 1 - SINGLE RAMP ORTHOGONAL



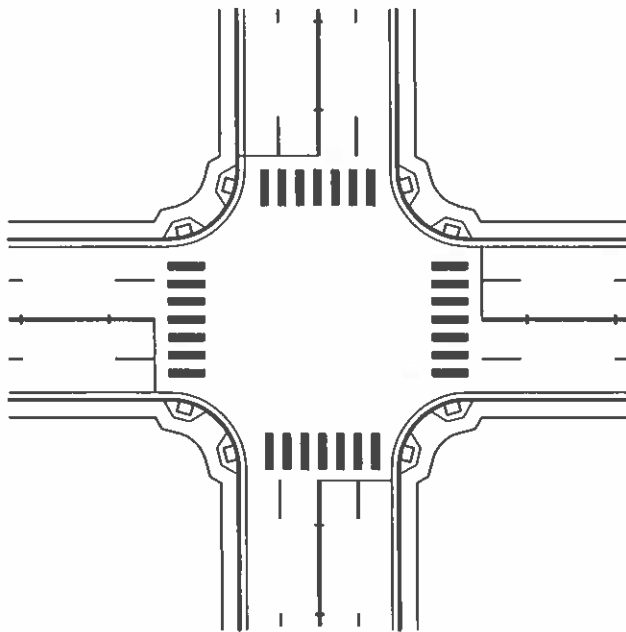
CASE 2 - SINGLE RAMP SKEWED



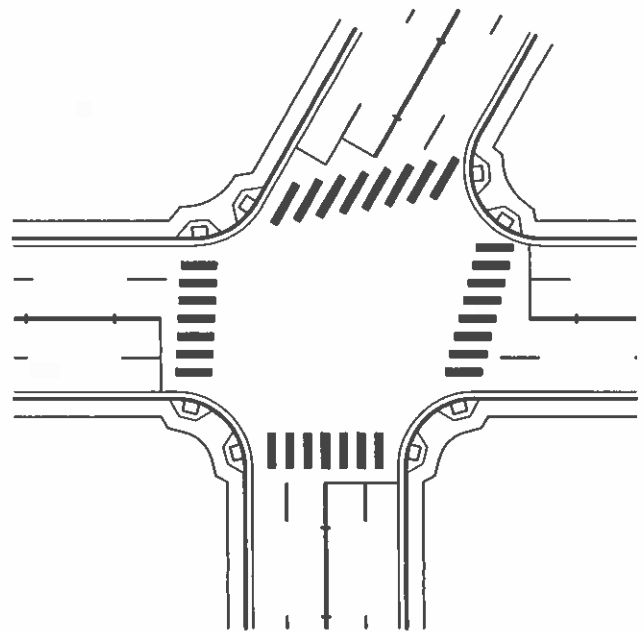
LEGEND

- CURB & GUTTER
- █ CROSSWALK BAR

CASE 3 - DUAL RAMP ORTHOGONAL




CASE 4 - DUAL RAMP SKEWED



DRAWN BY: KE CHECKED BY: PD

RECOMMENDED BY: K. EQUIPADO, P.E.

APPROVED BY COUNTY ENGINEER

 DATE: 5/15/05  
 SAMIR NUHALY, P.E.  
 R.C.E. NO. 45044

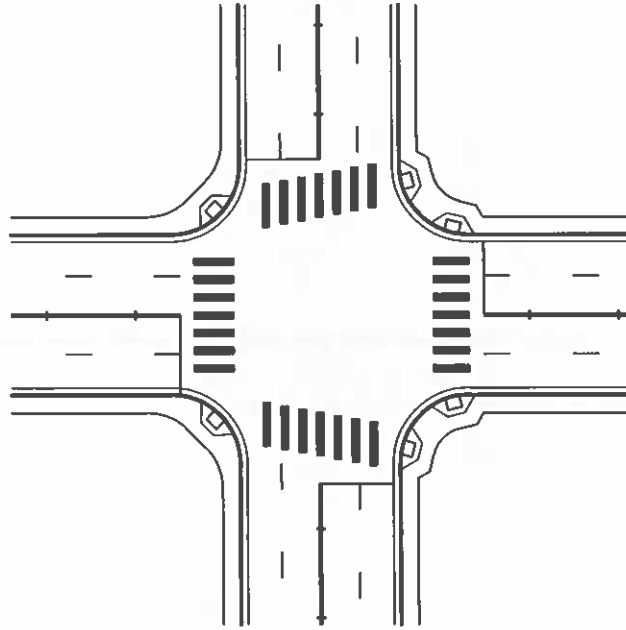
SAN DIEGO COUNTY DESIGN STANDARD

CONTINENTAL CROSSWALK  
 MARKINGS LAYOUT

REVISIONS	APPROVED	DATE

DRAWING NUMBER DS-24C

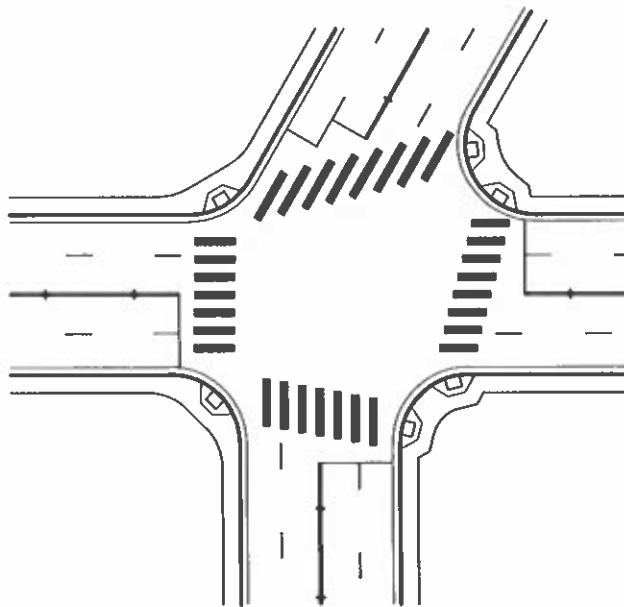
CASE 5 - DUAL AND SINGLE RAMP ORTHOGONAL



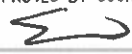
LEGEND

- CURB & GUTTER
- █ CROSSWALK BAR

CASE 6 - DUAL AND SINGLE RAMP SKEWED \*



\* DETAIL DOES NOT REFLECT INTERSECTION TAPER PER COUNTY OF SAN DIEGO PUBLIC ROAD STANDARD 6.1.D

DRAWN BY: <u>KE</u>	CHECKED BY: <u>PO</u>	SAN DIEGO COUNTY DESIGN STANDARD	REVISIONS	APPROVED	DATE
RECOMMENDED BY: K. EQUIPADO, P.E.	APPROVED BY COUNTY ENGINEER				
 DATE: <u>5/5/25</u>		CONTINENTAL CROSSWALK MARKINGS LAYOUT	DRAWING NUMBER DS-24D		
SAMIR NUHAILY, P.E. R.C.E. NO. 45044					

## Revisions to San Diego County Design Standards

DS-#	Name	Detail Revision Number	Revision Date	Revision Description
DS-21A	Alteration - General Notes	R1	5/5/2025	Updated to new ADA Standards (PROWAG)
DS-21B	Alteration - Ramp Notes (1 of 2)	R1	5/5/2025	Updated to new ADA Standards (PROWAG)
DS-21C	Alteration - Ramp Notes (2 of 2)	R1	5/5/2025	Updated to new ADA Standards (PROWAG)
DS-21D	Alteration - Perpendicular Curb Ramp	R1	5/5/2025	Updated to new ADA Standards (PROWAG)
DS-21E	Alteration - Parallel Curb Ramp	R1	5/5/2025	Updated to new ADA Standards (PROWAG)
DS-21F	Alteration - Midblock Ramps	R1	5/5/2025	Updated to new ADA Standards (PROWAG)
DS-21G	Alteration - Blended transition Ramp	New	5/5/2025	New detail per new ADA Standards (PROWAG)
DS-21H	Alteration - Blended Transition Ramp (10' Curb Radius or Less)	New	5/5/2025	New detail per new ADA Standards (PROWAG)
DS-21I	Alteration - Duel Perpendicular or Directional Ramps	New	5/5/2025	New detail per new ADA Standards (PROWAG)
DS-21J	Alteration - Dual Parallel Ramps	New	5/5/2025	New detail per new ADA Standards (PROWAG)
DS-21K	Alteration - Directional Ramp	New	5/5/2025	New detail per new ADA Standards (PROWAG)
DS-21L	Detectable Warning Surface	R1	5/5/2025	Updated to new ADA Standards (PROWAG)
DS-24A	Continental crosswalk marking Notes	R1	5/5/2025	Updated to new ADA Standards (PROWAG)
DS-24B	Continental crosswalk Markings Layout and Notes	R1	5/5/2025	Updated to new ADA Standards (PROWAG)
DS-24	Continental Cross Walk Markings	New	12/9/2020	New Series (DS24 A-D) Proposed by County Traffic Engineer
DS-13C	Street Name Sign Details for Unsignalized Intersections	R2	1/30/2015	A) Added thickness of Blade in Typical Street Name Bade Detail; B) Added Slot width dimension to Post Cap Detail; 3) Revised dimensions on Post Cap Half-Section Detail; 4) Revised note 1 to clarify; 5) Revised Post Setback detail and Table
DS-13C	Street Name Sign Details for Unsignalized Intersections	R1	10/15/2012	A) Increased Post height to 12' and bottom clearance to 3"; B) Revised setback table; C) Added dimension to blade channel in Post Cap Detail; D) Revised dimensions in Post Cap Half Section Detail; E) Revised Notes; F) Drafting corrections.
DS-13B	Street Name Sign Notes for Unsignalized Intersections	R1	8/25/2014	Revised Note 1, 4th sentence to remove White ASTM D4956 Type IX Sign Sheeting.
DS-13E	Street Name Sign Notes for Signalized Intersections	R1	8/25/2014	Revised Note 1, 4th sentence to remove White ASTM D4956 Type IX Sign Sheeting.
DS23-A	Cable Railing For Retaining Wall	R2	3/3/2014	Added Note 7 to require SS mechancially locking caps on all cable ends. Added Detail for cable end connections.
DS-23B	Cable Railing Details	R1	9/17/2013	Correction - Changed fence post diameter from 2.5"ø to 2"ø
DS-23A	Cable Railing For Retaining Wall	R1	9/16/2013	Correction - Changed callout from 2-1/4" Cable Clamps to 1/4" Cable Clamps 3 Per End Typ
DS-13	Street Name Sign	R1	10/24/2012	Detail expanded to a series of 7 details designated DS-13A thru DS-13G. Original Detail DS-13 renamed to DS-13C. See Document titled Changes to 2009 SDC Design Standards for a complete list of changes. Only major change was an increase in post length from 10' to 12'
DS-22	Trench Resurfacing Type-R	New	11/4/2009	NEW DETAIL - Addresses trenching and resurfacing of trenches within the R/W
DS-21A	Curb Ramp - Type A & B (New Construction)	New	9/27/2007	NEW DETAIL - Addresses 3 ft minimum depth for truncated dome panel
DS-21B	Curb Ramp - Type A1 & B1 (For Existing Sidewalk)	New	9/27/2007	NEW DETAIL - Addresses 3 ft minimum depth for truncated dome panel
DS-21C	Curb Ramp - Type C (For Existing Sidewalk)	New	9/27/2007	NEW DETAIL - Addresses 3 ft minimum depth for truncated dome panel
DS-21D	Curb Ramp - Type D	New	9/27/2007	NEW DETAIL - Addresses 3 ft minimum depth for truncated dome panel
DS-21E	General Notes for Curb Ramps	New	9/27/2007	NEW DETAIL - Addresses 3 ft minimum depth for truncated dome panel
DS-21F	Curb Ramp Details	New	9/27/2007	NEW DETAIL - Addresses 3 ft minimum depth for truncated dome panel
DS-07	Asphalt Concrete Driveway	R1	9/14/2006	Replaced Aggregate Base info omitted from previous plan. Changed gutter lip back to 0.1'

### 2012 San Diego County Design Standards Revision History

2012	Oct 2012 SDCDS Uploaded to DPW Website
2012	09/07/2013 SDCDS-R1 Uploaded to DPW Website
2014	03/24/2014 SDCDS-R2 Uploaded to DPW Website
2014	08/25/2014 SDCDS-R3 Uploaded to DPW Website
2015	02/05/2014 SDCDS-R4 Uploaded to DPW Website
2020	12/22/2020 SDCDS-R5 Uploaded to DPW Website
2026	05/05/2025 SDCDC-R6 Uploaded to DPW Website