



SMCCCD - Cañada College

Appendix J: Curb Ramps

Access Compliance Survey Report

DRAFT



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NAVIGATION & LEGEND

NAVIGATION

Cañada College Access Compliance Survey Report - Curb/Ramps																																																																										
Year Completed	Survey Street	Cross Street	Priority																																																																							
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413	Perpendicular Ramp Flare	<ul style="list-style-type: none"> As-Built Description: Slope of flare(s) along curb at perpendicular curb ramp exceed(s) 10%. As-is Left: 11.6% Right: 14.1% Proposed Solution: Demolish existing and provide new, perpendicular curb ramp, including detectable warning surfaces, and top and bottom landings as required. 	CBC 2016 11B-406.2.2 CBC 2007 1127B.5.3 ADAAG 4.7.5 ADA-2010 406.3 PROWAG R304.2.3	<table border="1"> <tr><td>Width of Ramp / Pad</td><td>(in)</td><td>48.0</td></tr> <tr><td>Length of Ramp / Pad</td><td>(in)</td><td>84.0</td></tr> <tr><td>Slope of the Ramp / Pad</td><td>(%)</td><td>7.8</td></tr> <tr><td>X Slope of the Ramp / Pad</td><td>(%)</td><td>0.9</td></tr> <tr><td>Top Landing Length</td><td>(in)</td><td>48.0</td></tr> <tr><td>Top Landing Slope</td><td>(%)</td><td>0.9</td></tr> <tr><td>Top Landing X Slope</td><td>(%)</td><td>2.1</td></tr> </table> <table border="1"> <tr><td>Left Flare</td><td>(%)</td><td>11.6</td></tr> <tr><td>Right Flare</td><td>(%)</td><td>14.1</td></tr> <tr><td>Gutter Slope</td><td>(%)</td><td>3.3</td></tr> <tr><td>Gutter XSlope</td><td>(%)</td><td>2.0</td></tr> <tr><td>Gutter Lip</td><td>(in)</td><td>0.0</td></tr> <tr><td>Truncated Domes</td><td>(y/n)</td><td>YES</td></tr> <tr><td>Dome Setback</td><td>(in)</td><td>8.0</td></tr> </table> <table border="1"> <tr><td>Street Grade (Left / Right)</td><td>(%)</td><td>2.1</td><td>N/A</td></tr> <tr><td>Stop/Yield Control:</td><td></td><td>No</td><td></td></tr> <tr><td>Within Crosswalk</td><td>(y/n)</td><td>YES</td><td></td></tr> <tr><td>Crosswalks Served:</td><td></td><td>1 X-walk</td><td></td></tr> <tr><td>Tee Intersection:</td><td></td><td>No</td><td></td></tr> <tr><td>Vertical Curb:</td><td></td><td>Vertical</td><td></td></tr> <tr><td>Sidewalk Width:</td><td>(ft)</td><td>5.0</td><td></td></tr> </table>	Width of Ramp / Pad	(in)	48.0	Length of Ramp / Pad	(in)	84.0	Slope of the Ramp / Pad	(%)	7.8	X Slope of the Ramp / Pad	(%)	0.9	Top Landing Length	(in)	48.0	Top Landing Slope	(%)	0.9	Top Landing X Slope	(%)	2.1	Left Flare	(%)	11.6	Right Flare	(%)	14.1	Gutter Slope	(%)	3.3	Gutter XSlope	(%)	2.0	Gutter Lip	(in)	0.0	Truncated Domes	(y/n)	YES	Dome Setback	(in)	8.0	Street Grade (Left / Right)	(%)	2.1	N/A	Stop/Yield Control:		No		Within Crosswalk	(y/n)	YES		Crosswalks Served:		1 X-walk		Tee Intersection:		No		Vertical Curb:		Vertical		Sidewalk Width:	(ft)	5.0	
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- Locator Number:** Corresponds to a unique database record tied to the specific curb ramp which can be crossreferenced across this database and its corresponding GIS database.
- Ramp Type:** Identifies the type of curb ramp (parallel, perpendicular, curb ramp required, etc.).
- Specific Item:** Category of accessible feature in which the barrier belongs.
- Survey Street:** Survey street name.
- Field Condition:** Description of as-built barrier based on applicable accessibility codes.
- Measurement:** Existing condition/dimension featured on the ramp measured as the most severe barrier on the particular ramp.
- Proposed Solution:** Description of steps necessary to remove barrier and, if applicable, an interim solution or notes.
- Cross Street:** Cross/intersecting street name.
- Codes / Info:**
 - PROWAG: Guidelines to enforce Federal accessibility standards in the public rights-of-way.
 - ADAAG/ADA 2010: The Federal Standard for accessibility adopted by the Department of Justice.
 - CBC 2007/ CBC 2016 The California Building Codes.
- Unit Cost:** Estimated cost specific solution per one unit. (The final cost of barrier removal may exceed this estimate based on the year of mitigation, design approach and chosen method of mitigation)
- Ramp Features:** Features of curb ramp measured to determine accessibility.
- Measurements:** Existing condition/dimension determined for each ramp.
 - (in) measurement in inches
 - (%) measurement in percentage grade
 - **BOLD** text indicate non-compliant dimensions.
 - Normal text indicate compliant dimensions
- Priority:** Priority number assigned to specific barrier based on prioritization criteria which include: expected frequency of use and severity of the barrier. Measured on a scale of 0 to 200, with 200 being the highest priority and 0 being the least.

LEGEND ABBREVIATIONS

ADA	Americans with Disabilities Act
ADAAG	ADA Accessibility Guidelines
E	East
Fig.	Figure
JOB	per one job (lump sum)
lbs.	Pounds
LF	Linear foot
MUTCD	Manual on Uniform Traffic Control Devices
N	North
NE	Northeast
NW	Northwest
NWn	Northwest: North side
NWs	Northwest: South side
POT	Path of travel
PROW	Public Right-of-Way
PROWAG	Public Right-of-Way Accesible Guidelines
Qty	Quantity
REF	Reference; Provided in locations with overlapping issue; indicates no addition cost required for mitigation
S	South
SE	Southeast
SF	Square foot
SW	Southwest
TBD	To be determined
W	West

MEASUREMENT BREAKDOWN

FEATURE:	ADA/CBC GUIDELINE
Street Grade	<i>Used for reference in regards to possible exceptions</i>
Width of Ramp	The clear width of curb ramp runs (excluding any flared sides), blended transitions, and turning spaces shall be 48 inches minimum.
Slope of the Ramp	Ramp runs shall have a running slope not steeper than 1:12 (8.3%).
X Slope of the Ramp	The cross slope of curb ramps and blended transitions shall be 1:48 (2.0%) maximum.
Top Landing Length	Landings shall be provided at the tops of curb ramps and blended transitions. The landing clear length shall be 48 inches minimum.
Top Landing Slope	The slope of the landing in all directions shall be 1:48 (2.0%) maximum.
Top Landing X Slope	The slope of the landing in all directions shall be 1:48 (2.0%) maximum.
Bottom Landing Length	(Parallel Curb Ramp) A turning space 48 inches minimum by 48 inches minimum shall be provided at the bottom of the curb ramp.
Bottom Landing Slope	(Parallel Curb Ramp) The slope of the turning space in all directions shall be 1:48 (2.0%) maximum.
Bottom Landing X Slope	(Parallel Curb Ramp) The slope of the turning space in all directions shall be 1:48 (2.0%) maximum.
Left Flare	Where provided, curb ramp flares shall not be steeper than 1:10 (10.0%).
Right Flare	Where provided, curb ramp flares shall not be steeper than 1:10 (10.0%).
Gutter Lip	The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.
Gutter Slope	Counter slopes of adjoining gutters and road surfaces immediately adjacent to and within 24 inches of the curb ramp shall not be steeper than 1:20 (5.0%).
Gutter X Slope	The cross slope of curb ramps and blended transitions shall be 1:48 (2.0%) maximum.
Truncated Domes	Curb ramps and blended transitions shall have detectable warnings.
Dome Setback	Detectable warnings shall be located so the edge nearest the curb is 6 inches minimum and 8 inches maximum from the line at the face of the curb marking the transition between the curb and the gutter, street or highway or flush at the transition for a parallel curb ramp and island cut-through.
Within Crosswalk	The bottom of curb ramps shall have a clear space 48 inches minimum outside active traffic lanes of the roadway



COST SUMMARY

Total Cost for Street: Campus Cir			\$6,500.00
Street Names:	ID:	Type:	
Campus Cir and Building 3			\$6,500.00
	415	Blended Transition	\$6,500.00
Total Cost for Street: Lot 1			\$23,500.00
Street Names:	ID:	Type:	
Lot 1 and Building 9			\$20,000.00
	421	Parallel	\$20,000.00
Lot 1 and Lot 1			\$3,500.00
	422	Blended Transition	\$3,500.00
Total Cost for Curb Ramps:			\$30,000.00



SURVEY DATA



Legend

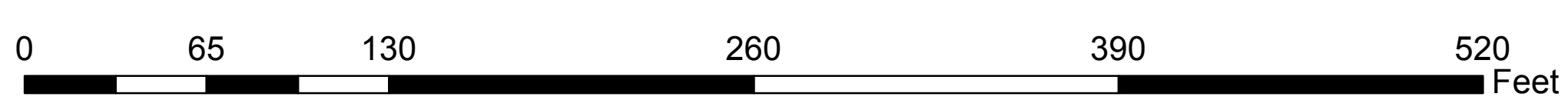
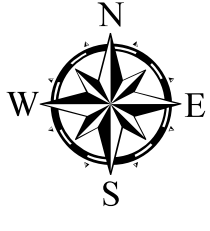
- Nodes
- Ramps

Curb Ramps Priority

- 100.000000
- 100.000001 - 111.250000
- 111.250001 - 118.000000

Path of Travel Route Priority

- 100.000000 - 111.250000
- 111.250001 - 122.500000
- 122.500001 - 132.500000



Cañada Path of Travel Routes

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Year Completed	Survey Street	Cross Street		
TBD	Campus Cir	Building 3		
ID #	Ramp Type	Existing Access Barrier and Proposed Solution	Codes / Mitigation Info	Measurements

Perpendicular

413 Ramp Flare

As-Built Description:

Slope of flare(s) along curb at perpendicular curb ramp exceed(s) 10%.

• *As-is* **Left: 11.6% Right: 14.1%**

Proposed Solution:

Demolish existing and provide new, perpendicular curb ramp, including detectable warning surfaces, and top and bottom landings as required.

CBC 2016 **11B-406.2.2**

CBC 2007 **1127B.5.3**

ADAAG **4.7.5**

ADA-2010 **406.3**

PROWAG **R304.2.3**

Unit Cost **\$6500.00**

Priority

116.5



Width of Ramp / Pad	(in)	48.0
Length of Ramp / Pad	(in)	84.0
Slope of the Ramp / Pad	(%)	7.8
X Slope of the Ramp / Pad	(%)	0.9
Top Landing Length	(in)	48.0
Top Landing Slope	(%)	0.9
Top Landing X Slope	(%)	2.1

Left Flare	(%)	11.6
Right Flare	(%)	14.1
Gutter Slope	(%)	3.3
Gutter XSlope	(%)	2.0
Gutter Lip	(in)	0.0
Truncated Domes	(y/n)	YES
Dome Setback	(in)	8.0

Street Grade (Left / Right)	(%)	2.1	N/A
Stop/Yield Control:		No	
Within Crosswalk	(y/n)	YES	
Crosswalks Served:		1 X-walk	
Tee Intersection:		No	
Vertical Curb:		Vertical	
Sidewalk Width:	(ft)	5.0	

Under Construction

414 Existing Curb Ramp

As-Built Description:

At time of the survey, curb ramp, pedestrian pad, or island is currently under construction and/or renovation.

Proposed Solution:

Ensure compliance with ADAAG 4.1.6 and CBC 1134B.2.1.

CBC 2007 **1134B.2.1**

ADAAG **4.1.6**

Unit Cost **\$0.00**

Priority

100



Stop/Yield Control:		No
Crosswalks Served:		1 X-walk
Tee Intersection:		No
Vertical Curb:		Vertical
Sidewalk Width:	(ft)	10.0

Blended Transition

415 Compliant Curb Ramp

As-Built Description:

Curb ramp, blended transition, island cut-through, island perpendicular, or pedestrian pad surveyed for the following items are in compliance with the ADA and applicable building codes.

Proposed Solution:

Provide routine inspection and maintenance to maintain accessible access route.

Unit Cost **\$0.00**

**Priority
100**

Bottom Landing Length	(in)	900.0
Bottom Landing Slope	(%)	1.0
Bottom Landing X Slope	(%)	2.0
Gutter Lip	(in)	N/A
Truncated Domes	(y/n)	YES
Dome Setback	(in)	6.0



Street Grade (Left / Right)	(%)	1.7	N/A
Stop/Yield Control:		No	
Crosswalks Served:		No X-walk	
Tee Intersection:		No	
Vertical Curb:		Vertical	
Sidewalk Width:	(ft)	20.0	

Total Costs for Curb Ramps at : Campus Cir and Building 3 \$6,500.00

Total Costs for Curb Ramps along : Campus Cir \$6,500.00

Year Completed	Survey Street	Cross Street		
TBD	Lot 1	Building 9		
ID #	Ramp Type	Existing Access Barrier and Proposed Solution	Codes / Mitigation Info	Measurements

Perpendicular

404 Ramp Width

- *As-Built Description:*
Clear width of ramp run is less than 48". (ADAAG requires 36" min)
- *As-is* **45.0"**
- *Proposed Solution:*
Demolish existing and provide new, perpendicular curb ramp, including detectable warning surfaces, and top and bottom landings as required.

CBC 2016 **11B-406.5.2**
 CBC 2007 **1127B.5.2**
 ADAAG **4.7.3**
 PROWAG **R304.5.1**

Unit Cost **\$6500.00**

Priority
111.2



Width of Ramp / Pad	(in)	45.0
Length of Ramp / Pad	(in)	77.0
Slope of the Ramp / Pad	(%)	3.7
X Slope of the Ramp / Pad	(%)	1.8
Top Landing Length	(in)	48.0
Top Landing Slope	(%)	1.9
Top Landing X Slope	(%)	3.6

Left Flare	(%)	10.5
Right Flare	(%)	0.3
Gutter Slope	(%)	2.8
Gutter XSlope	(%)	2.0
Gutter Lip	(in)	0.0
Truncated Domes	(y/n)	YES
Dome Setback	(in)	6.0

Street Grade (Left / Right)	(%)	2.7	N/A
Stop/Yield Control:		No	
Within Crosswalk	(y/n)	YES	
Crosswalks Served:		1 X-walk	
Tee Intersection:		No	
Vertical Curb:		Vertical	
Sidewalk Width:	(ft)		

Perpendicular

405 Ramp Slope

- *As-Built Description:*
Cross slope of an existing perpendicular curb ramp exceeds 1:48 (2%).
- *As-is* **2.5%**
- *Proposed Solution:*
Demolish existing and provide new, perpendicular curb ramp, including detectable warning surfaces, and top and bottom landings as required.

CBC 2016 **11B-406.5.7**
 CBC 2007 **1133B.5.3.1**
 ADAAG **4.8.6**
 ADA-2010 **405.3**
 PROWAG **R304.5.3**

Unit Cost **\$6500.00**

Priority
116



Width of Ramp / Pad	(in)	48.0
Length of Ramp / Pad	(in)	73.0
Slope of the Ramp / Pad	(%)	6.1
X Slope of the Ramp / Pad	(%)	2.5
Top Landing Length	(in)	48.0
Top Landing Slope	(%)	0.6
Top Landing X Slope	(%)	2.5

Left Flare	(%)	7.1
Right Flare	(%)	14.7
Gutter Slope	(%)	5.0
Gutter XSlope	(%)	0.3
Gutter Lip	(in)	0.5
Truncated Domes	(y/n)	YES
Dome Setback	(in)	6.0

Street Grade (Left / Right)	(%)	0.6	N/A
Stop/Yield Control:		No	
Within Crosswalk	(y/n)	YES	
Crosswalks Served:		1 X-walk	
Tee Intersection:		No	
Vertical Curb:		Vertical	
Sidewalk Width:	(ft)	12.0	

Parallel

421 Ramp Slope

• *As-Built Description:*

Running slope of existing parallel curb ramp, where the run is less than 15' in length, is less than 5% or more than 8.3%.

• *As-is* **Right: 9.8%**

• *Proposed Solution:*

Demolish existing and provide new parallel curb ramp including detectable warning surfaces, and top and bottom landings as required.

CBC 2016 **11B-406.3.1**

CBC 2007 **1127B.5.3**

ADAAG **4.8.2**

PROWAG **R304.3.2**

Unit Cost **\$7000.00**

**Priority
118**

		LEFT	RIGHT
Width of Ramp / Pad	(in)	72.0	72.0
Length of Ramp / Pad	(in)	79.0	76.0
Slope of the Ramp / Pad	(%)	4.1	9.8
X Slope of the Ramp / Pad	(%)	0.1	1.2
Top Landing Slope	(%)	5.6	9.4
Top Landing X Slope	(%)	1.2	0.9

Bottom Landing Length	(in)	60.0
Bottom Landing Slope	(%)	0.3
Bottom Landing X Slope	(%)	0.3
Gutter Slope	(%)	2.4
Gutter XSlope	(%)	1.5
Gutter Lip	(in)	0.0
Truncated Domes	(y/n)	YES
Dome Setback	(in)	6.0

Street Grade (Left / Right)	(%)	8.0	N/A
Stop/Yield Control:		No	
Within Crosswalk	(y/n)	YES	
Crosswalks Served:		1 X-walk	
Tee Intersection:		No	
Vertical Curb:		Vertical	
Sidewalk Width:	(ft)	5.0	



Total Costs for Curb Ramps at : Lot 1 and Building 9

\$20,000.00

Blended Transition

422 Ramp Landing

• *As-Built Description:*

Cross slope at bottom landing of existing blended transition exceeds 2%.

• *As-is* **2.4%**

• *Proposed Solution:*

Demolish existing and provide new, blended transition, including detectable warning surfaces, and top and bottom landings as required.

CBC 2016 **11B-406.3.2**

ADAAG **4.8.4; 4.8.6**

PROWAG **R304.3.2**

Unit Cost **\$3500.00**

**Priority
100**

Bottom Landing Length	(in)	60.0
Bottom Landing Slope	(%)	0.2
Bottom Landing X Slope	(%)	2.4
Gutter Lip	(in)	N/A
Truncated Domes	(y/n)	YES
Dome Setback	(in)	6.0

Street Grade (Left / Right)	(%)	2.2	N/A
Stop/Yield Control:		No	
Within Crosswalk	(y/n)	YES	
Crosswalks Served:		1 X-walk	
Tee Intersection:		No	
Vertical Curb:		Vertical	
Sidewalk Width:	(ft)	5.0	



Total Costs for Curb Ramps at : Lot 1 and Lot 1

\$3,500.00

Total Costs for Curb Ramps along : Lot 1

\$23,500.00

Grand Total for Curb Ramps:

\$30,000.00