

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE					
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					

REGISTERED PROFESSIONAL ENGINEER

No. _____
Exp. _____
CIVIL

STATE OF CALIFORNIA

SLOPE RUN	ELEVATION DIFFERENCE			
	PERCENT SLOPE			
	1.5%	5.0%	7.5%	9.0%
2'	0.03	0.10	0.15	0.18
4'	0.06	0.20	0.30	0.36
6'	0.09	0.30	0.45	0.54
8'	0.12	0.40	0.60	0.72
10'	0.15	0.50	0.75	0.90
12'	0.18	0.60	0.90	1.08
15'	0.22	0.75	1.12	1.35

The numbering for curb ramp curve data information shown on Construction Details sheet(s) usually starts with the No. 1 for each detail sheet. The numbering for the curve data information for each alignment shown on the Layout sheets, are NOT to be repeated on the Construction Details sheet(s).

MANDATORY FOR CONSTRUCTION OF CURB RAMPS

- Station, offset and elevation of the BCR and ECR at the gutter flowline.
- Station, offset and elevation of the 1/2 Delta Line at the flowline.
- Show centerline of curb ramp with station, offset and elevation at the gutter flowline. A section view along the curb ramp centerline is included to show slopes and additional elevations.

Additional elevations should include the curb lip (at roadway surface), the back of landing and the top of curb.
- Showing a section view(s) will assist the contractor to better understand the design slopes for ADA compliance.
- Elevation where the top of the ramp and back of sidewalk meet (or begin and end of retaining curb).
- Length of curb ramp running slope(s).
- Curb ramps shall have a running slope not steeper than 8.3% Max, but shall not require the ramp length to exceed 15 feet (see DIB 82 Section 4.3.8 (1)).
- Width of curb ramp, landing (turning space) and adjacent sidewalk.
- Running slope and cross slope of curb ramp. Slope and cross slope of bottom landing. Cross slope of sidewalk. Gutter pan slope (counter slope) within width of landing.
- Alignment line for state highway or ramps, with stationing labeled every full station.
- Alignment line for local street when used for station and offsets.

RECOMMENDED FOR CONSTRUCTION OF CURB RAMPS

- If the gutter flowline is not a constant grade, then additional elevations may need to be shown beyond just the BCR and ECR, such as grade breaks or both sides of the bottom landing.
- Elevation at top of curb (TOC) at both ends of the curb and gutter.
- Showing the radius point and the delta lines.

Depending on the length of curve, show the 1/4 and 3/4 Delta Lines for longer length curb returns (see Surveys Manual).
- Showing additional distances to key points will better enable the contractor to achieve the design values for ADA compliance.

Such as the length from the BCR and ECR to the begin of the curb ramp or centerline of the curb ramp.
- Drainage inlets should not be located within the curb ramp accessible pathway.
- At each curb ramp, check if there is any existing survey monumentation that may be obliterated by the construction of the new curb ramp. If found, contact Right of Way Engineering.
- Provide only those pavement elevations that are directly related to the slopes affecting the construction of the curb ramps and crosswalks.
- Label all slopes, lengths and dimensions of the curb ramp, even if they meet the design standards shown in the Revised Standard Plans. Place a note referring to the Revised Standard Plans for details not shown.
- Label the type of curb and the retaining curb.
- Show symbol for pedestrian push button locations with a reference to see the Electrical Systems plan sheets for further details.
- Utility features (poles and covers) should not be located within the limits of the curb ramp, and should not restrict the pedestrian route.

NOTE:

FOR DETAILS NOT SHOWN, SEE REVISED STANDARD PLANS A88A.

The curb ramps drawn on Construction Details sheets are to show all the information needed to construct the curb ramp. The Layout sheets should only show the location of the curb ramp with its identifying number.

Elevation difference (in feet) between two points for a given distance at percent slopes used when designing to design standards.

No.	Δ	R	Δ	T	L
1	33.00'	90°0'0"	33.00'	51.84'	

CURVE DATA

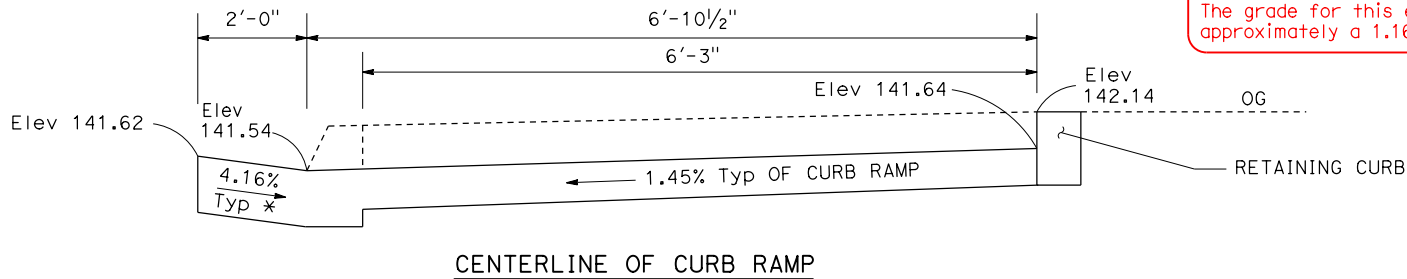
Showing a detail for each curb ramp allows the designer and bidder or contractor to determine the various quantities for constructing the curb ramp.

The detectable warning surface placement shall be drawn with each curb ramp detail per DIB 82, but labeling is not necessary since the specifics are clearly shown and identified in the Revised Standard Plans. Detectable warning surface products are typically a rectangle, but may vary according to DIB 82.

This example is designed to meet or be more conservative than the design standards shown in the Revised Standard Plans. Even though this curb ramp meets or is more conservative than the design standards shown in the Revised Standard Plans, the slopes, dimensions and elevations need to be shown in order for the contractor to build the curb ramp per the design.

This example is NOT to be included in the "PRE/POST CONSTRUCTION SURVEYS" bid item, as all of the curb ramp slopes and widths meet the design standards shown in the Revised Standard Plans.

CURB RAMP #5
CASE C



* Typical for the width of the bottom landing (accessible pathway). For additional information on Counter Slopes, see Revised Standard Plan A88A (Note 9), or DIB 82 Section 4.3.8 - (4) and (8).

NEW CURB RAMP WHERE CURB, GUTTER AND SIDEWALK DOES NOT CURRENTLY EXIST