## 1) Sidewalk Transitions

a: Located adjacent to the top of ramp as needed
b: 48" minimum width
c: $\quad 1.5 \%(1: 66)$ maximum cross slope
d: $\quad 4.5 \%(1: 22)$ maximum parallel slope

## 2) Landings

a: Located above the ramp (as shown in details)
b: 48 minimum clear space in all directions
c: $1.5 \%(1: 66)$ maximum parallel and cross slope

## 3) Perpendicular Curb Ramps

a: Located above pan or below landing
b: 48 " minimum width
c: $1.5 \%(1: 66)$ maximum cross slope
$\mathrm{d}: \quad 7.5 \%$ (1:13) maximum slope
e: All ramps shall have a Detectable Warning Surface(truncated domes) and shall be placed on the ramp unless the ramp is connected to a pan.
f: Transition to gutter shall be flush and free of abrupt changes
g: Grade breaks shall be perpendicular to direction of ramp run.

## 4) Parallel Curb Ramps

a: Located below ramp (as shown in details)
b: 60" minimum width at back of pan
c: 54 " minimum depth from back of pan to flow line
d: $\quad 1.5 \%$ (1:66) maximum cross slope
e: On corners, pan boundaries are to be radial
f: Transitions to gutter shall be flush and free of abrupt charges.
g: All pans shall have a Detectable Warning Surface (truncated domes).

## 5) Flares

a: Located adjacent to ramp (as shown in details)
b: Required between ramps where there is no planter area
c: Required on the exterior of ramps where there is an adjacent concrete sidewalk, regardless of obstacles
d: Shall also have at least 24 " long segment of straight curb located on each side of the curb ramp and within marked crossings.
e : Generally triangular in nature
f: $9 \%$ (1:11) maximum slope when not in the path of travel
$\mathrm{g}: 7.5 \%(1: 13)$ maximum slope when flare is in the path of travel

## 6) Gutters

a: Adjacent to ramp or pan
b: $4.5 \%$ (1:22) maximum slope for 4 ' out from face of curb
c: Transition to ramp or pan shall be flush and free of abrupt changes

## 7) Retaining Curbs

a: Required adjacent to sidewalk transitions, landings, ramps and pans where the existing landscape (planter area) is $1^{\prime \prime}$ or higher at any point above the newly constructed curb ramp element
b: Required for existing planter areas between ramps
c: Retaining curbs are to have a 6 " width and a vertical face
d: Retaining curb foundations are to extend 8" below the adjacent ramp element surface
e: Outside corners of retaining curbs must have a 6" radius

## 8) Detectable Warnings

a: Placement of detectable warnings shall be per drawings AR - 3.2
b: 6" - 8" from the face of curb
c: 3' depth x full width
d: Detectable Warning requirements, see AR-3.1

## General Notes:

1. Directional curb ramps are required unless otherwise approved by the Engineer.
2. All elements, except gutters and retaining curbs, must be constructed planar in nature with weakened plane joints scored between each element.
3. Opposing curb ramps shall align unless otherwise approved by the Engineer.
4. These Elements, Definitions and Standards, General Details, and Standard Drawings shall apply to all curb and gutter types.
5. There are variations and adjustments that may be required upon the approval of the Engineer.
6. References to maximum cross slope of $1.5 \%$ are intended to allow for normal construction tolerances in an effort to keep the actual constructed cross slope to less than the required ADA standard of $2.0 \%$ maximum cross slope. Any installations of cross slopes greater than $2.0 \%$ will be unacceptable.

| DATE:$09 / 22 / 2017$ |  | NOT TO SCALE |  | CITY OF ELK GROVE. PUBLIC WORKS | APPROVED BY: Shut Mulod |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revision | ${ }^{\text {BY }}$ | APPROVED | Date |  |  |  |
| 1 | ${ }^{\text {LM }}$ | ${ }^{\text {w }}$ | 07-182019 | CURB RAMP ELEMENTS DEFINITIONS AND STANDARDS | DRAWING NUMBER <br> AR - 2.0 |  |
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