# HARDSCAPE

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>TITLE</th>
<th>NUMBER</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-01.0</td>
<td>GENERAL CONCRETE - NOTES</td>
<td>H-07.0</td>
<td>ACCESS RAMP NOTES</td>
</tr>
<tr>
<td>H-02.0</td>
<td>STANDARD &amp; FAUX SANDSTONE CURB AND GUTTER</td>
<td>H-07.1</td>
<td>ACCESS RAMP - DUAL DIRECTIONAL DETAILS</td>
</tr>
<tr>
<td>H-02.1</td>
<td>NON-STANDARD CURB AND GUTTER</td>
<td>H-07.2</td>
<td>ACCESS RAMP - ONE-WAY DIRECTIONAL DETAILS</td>
</tr>
<tr>
<td>H-02.2</td>
<td>SANDSTONE CURB AND CONCRETE GUTTER</td>
<td>H-07.3</td>
<td>ACCESS RAMP - DIAGONAL RAMP DETAILS</td>
</tr>
<tr>
<td>H-02.3</td>
<td>STEEL CURB</td>
<td>H-08.0</td>
<td>SIGN POST INSTALLATION - SQUARE TUBE</td>
</tr>
<tr>
<td>H-03.0</td>
<td>RESIDENTIAL DRIVEWAY</td>
<td>H-08.1</td>
<td>SIGN INSTALLATION ON STREET LIGHT POLE</td>
</tr>
<tr>
<td>H-03.1</td>
<td>COMMERCIAL DRIVEWAY</td>
<td>H-08.2</td>
<td>SIGN HEIGHTS AND LATERAL CLEARANCES</td>
</tr>
<tr>
<td>H-04.0</td>
<td>ALLEY ENTRANCE</td>
<td>H-09.0</td>
<td>CONCRETE BUS POCKET</td>
</tr>
<tr>
<td>H-05.0</td>
<td>CROSS GUTTER</td>
<td>H-09.1</td>
<td>CONCRETE BUS POCKET - REVERSE TAPER</td>
</tr>
<tr>
<td>H-06.0</td>
<td>SIDEWALK - PLAN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H-06.1</td>
<td>SIDEWALK - SECTIONS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
GENERAL CONCRETE NOTES:

1. Improvements constructed under this Standard shall conform to Section 303-5 and other applicable provisions of the Standard Specifications for Public Works Construction (current adopted addition of Green Book) Title 24, and City Special Districts.

2. Concrete shall be minimum of 520-C-2500 or greater where specified, per Standard Specifications for Public Works Construction (Greenbook).

3. Concrete shall have a light broom finish, except as noted. Broom direction shall be perpendicular to path of travel. All exposed edges shall be tool finished with a 1/2 inch radius.

4. Compact native soil 8 inches deep to 90% relative compaction. Under all concrete improvements except sidewalk, place crushed aggregate base 6 inches compacted to 95% relative compaction before placing concrete. Under sidewalk, place minimum of 4" crushed aggregate base compacted to 95% relative compaction. At City Engineer or designee's discretion, 2" of sand may be allowed under sidewalk in place of crushed aggregate base. Crushed miscellaneous base may be substituted for crushed aggregate base at City Engineer or designee's discretion.

5. Clear drying fugitive dye curing compound shall be applied to all exposed surfaces immediately after finishing.

6. Calcium chloride shall not be added to concrete unless approved by the City Engineer or designee.

7. Sawcut and remove a 18" minimum width or more of existing asphalt concrete pavement adjacent to all new concrete as directed by the City Engineer or designee. After constructing new concrete, replace pavement with asphalt concrete and aggregate base to match existing, but not less than 3 inch asphalt concrete over 8 inch aggregate base. Where concrete section exists, replace to match existing, overlaid with 2 inch minimum asphalt concrete. Tack coat all vertical surfaces with SS-1h emulsion where asphalt is to be placed.

8. All concrete shall be placed within forms except where it is poured directly against existing sawcut concrete.

9. City monuments within the limits of work shall be referenced and tied out prior to construction by a licensed land surveyor. Monuments lost or disturbed shall be replaced at contractor's expense by a licensed land surveyor or civil engineer in accordance with section 8771 of the State of California Professional Land Surveyor's Act.

10. Asphalt concrete shall be laid in courses not exceeding 4 inches in thickness. Asphalt concrete shall be Class C2 Grade PG 64-10 for finish courses, Class D1 Grade PG 64-10 for leveling courses, and Class B Grade PG 64-10 for base courses.
STANDARD NOTES:

1. All curbs and gutters shall be placed monolithically.
2. Premolded 0.25 inch thick expansion joints shall be placed at the ends of curb returns. Provide 1.5 inch deep contraction joints in all curb and gutter at approximately 10 foot intervals to match score marks in existing sidewalk.
3. The top edge of curb, the gutter flow line and the gutter edge shall have 0.5 inch radius, unless otherwise noted.
4. Minimum 6 inch crushed aggregate base under curb and gutter.
5. Compact native soil to a depth of 8 inches beneath aggregate base below curb and gutter, to 90% relative compaction.
6. Standard curb and gutter shall be used for all new construction unless other types are approved by the City Engineer.
7. Cuts in existing curbs and gutters shall be made at right angles to the face of curb.
8. Where existing curb height varies, match existing or adjacent curb for short reaches.
9. Extruded or slip-formed curb and gutter is not permitted.

FAUX SANDSTONE CONCRETE CURB AND GUTTER NOTES:

1. Mix sifted yellow sand into concrete for faux sandstone curb and gutter as needed to match existing sandstone or faux sandstone curbs.
2. Use textured matte finish to achieve faux sandstone finished look on top of curb and curb face portion only. Gutter shall be broom finished with the exception of a 4" steel trowel finish along the gutter flow line.
3. Geometry shall match that of the Standard curb and gutter.

CURB WITH 18 INCH GUTTER

CURB ONLY

STREETS:
REV. DATE: 11/12
DETAIL: H-02.0
TRANS OPS:
APPROVED: Jeff Kelh
FACILITIES:
CITY ENGINEER
WATER RESOURCES:
PUBLIC WORKS DIRECTOR

CURB AND GUTTER
STANDARD & FAUX SANDSTONE
30" ROLLED CURB AND GUTTER

36" ROLLED CURB AND GUTTER

CURB WITH VARIABLE GUTTER

NOTES:
1. Non-Standard curb and gutter should only be used to replace existing non-standard curb and gutter in-kind.
2. For standard curb and gutter notes, see Standard Detail H-02.0.
NOTES:

1. Sandstone curb shall be as dimensioned and shall be of a uniform minimum segment length of 3 feet. Sandstone shall be of a quality, hardness and denseness matching "Montecito Sandstone". Curb edge shall be squared off and joints shall be grouted with a maximum thickness of 3/4 inch.

2. All gutters shall be constructed in accordance with Standard Detail H-02.0.

3. Premolded 0.25 inch thick expansion joints shall be placed in gutter at 30 foot intervals and at curb returns. 1.5 inch deep contraction joints shall be provided in gutter at approximately 10 foot intervals at joints in the stone curb.

4. Cuts in existing curbs and gutters shall be sawcut and made at right angles to the face of curb.

5. Scarify and compact native soil to 90% relative compaction to a depth of 8 inches beneath aggregate base.
ISOMETRIC VIEW

NOTES:

1. Use 9'L x 3/4" thick varied width steel plate. Bevel edge as directed and weld #4 bars to plate using a full penetration weld. Galvanize after fabrication per Greenbook Standard Section 210-3.

2. Mount plate flush with top of curb and curb face.

3. Steel plate width shall be sufficient to extend 0.2' minimum below the lowline.

4. There shall be a minimum of 1.5" concrete cover over all rebar.

TOP VIEW

FRONT VIEW

STEEL CURB
1. This driveway is to be used in residential areas, when plans showing such use are approved by the City Engineer, or designee, and for replacement of driveway only.

2. Driveway width (W) shall be 10 feet minimum and 16 feet maximum. Any driveway or combination of driveways which exceed the maximum width must be approved by the City Transportation Planning Manager, City Engineer, or designee.

3. Where driveway width exceeds 12 feet, provide a 1.5 inch deep contraction joint in center.

4. The driveway slab shall be 6 inches thick. The sidewalk within the driveway width shall be 6 inches thick (see note 5 for exceptions).

5. Driveway with 8 inch slab thickness shall be used when serving three or more residences, or when plans showing such use are approved by the City Engineer or designee.

6. Gutter width shall match adjacent gutter.

7. Flare width (X) shall be 1 foot for each 2 inches of curb height.

8. Driveway flares, slabs and gutters shall be placed monolithically.

9. Where existing gutter has been overlaid, and a new driveway is being installed, the new gutter shall be installed to match existing gutter. Asphalt concrete shall be placed over the new gutter to the grade of the existing pavement.

10. Driveway approach consists of gutter, ramp, and sidewalk portions, placed monolithically.

11. See detail H-06.1 for sidewalk.

12. Where existing gutter exceed 3 feet, and concrete is in good condition, an 18" cut into existing gutter may be made if approved by City inspector.

13. Provide a minimum 5' wide sidewalk across driveway at 2% slope.
NOTES:

1. Driveway width (W) shall be 12 feet minimum and 35 feet maximum.

2. Driveway shall be 8 inches thick. Slab within sidewalk area shall be 8 inches and placed monolithically with driveway.

3. Where driveway width exceeds 16 feet, provide a 2 inch deep contraction joint in center.

4. Gutter width shall match adjacent gutter.

5. Flare width (X) shall be 1 foot for every 2 inches of curb height.

6. Where existing gutter has been overlaid, the new driveway gutter shall be installed to match the existing gutter, and asphalt placed over new gutter to grade of existing pavement.

7. Driveway flares, slabs and gutters shall be placed monolithically.

8. Provide minimum 5 feet of sidewalk width across driveway at 2% slope.

9. Use 560-C-3250 for all commercial driveways.
NOTES:

1. Concrete slab shall be in line with the back of sidewalk and shall conform to alley V-section.

2. Curb returns, slab and gutters shall be placed monolithically.

3. Slab, gutter, and curb returns shall be broom finished and flow lines shall be steel trowel finished.

4. Alley approach slope shall not exceed 8.33%. Depress sidewalk to meet maximum alley approach slope. Sidewalk depression shall not exceed 8.33% maximum slope.

5. Use 560-C-3250 concrete.

6. At discretion of City Engineer or Traffic Operations Supervisor, alley entrance may be constructed in the style of Standard Detail H-03.1 Commercial Driveway.

PLAN VIEW

SECTION A-A

ALLEY ENTRANCE

STREETS:  
REV. DATE: 11/12  DETAIL: H-C4.0
TRANS OPS:  
APPROVED:  
FACILITIES:  
CITY ENGINEER
WATER RESOURCES:  
PUBLIC WORKS DIRECTOR
NOTES:
1. Curb return radius shall be as shown on the plans.
2. Gutter and spandrels shall be 8 inches thick.
3. Curb return and spandrel shall be placed monolithically.
4. Concrete shall be 560-C-3250
5. Finish shall be steel float, lightly broomed on gutter and spandrels, brush on curb returns and steel trowel at flow lines.
6. Asphalt concrete taper from crown section to cross gutter shall be a minimum of 20 feet.
7. Deep score joints shall be a minimum of 2 inches deep.
TYPE A:
(FOR USE IN RESIDENTIAL AREAS)

TYPE B:
(NOT FOR NEW CONSTRUCTION, SPECIAL APPROVAL REQUIRED)

TYPE C:
(FOR USE IN COMMERCIAL AREAS)
1. Type "A" sidewalk shall be used in residential areas.

2. Type "B" sidewalk may be used during reconstruction as an alternate to Type "A" in residential areas, when approved by the City Engineer or designee.

3. Type "C" sidewalk shall be used in commercial areas.

4. Sidewalk width shall be as shown, unless otherwise specified on the plans.

5. Provide 1.5 inch deep score joints @ 10 feet (30 feet if trees present), and 0.25 inch score marks at 5 foot spacing, and isolation joints at all adjacent structures, or match existing score pattern.

6. Exposed edges, joints and score marks shall be round-finish with an approved tool.

7. All survey monuments shall be identified, protected, and reset by a licensed land surveyor. (See General Note 9 on Standard Detail H-01.0).

8. Where necessary to replace existing sidewalk, cold joint shall be made at existing joint, or min. 1.5 inch sawcut at nearest score mark.

9. In special districts of the City, sidewalk shall match scoring and color of existing decorative sidewalk. (i.e., State Street, Carrillo Street, Chapala Street).

10. All utility boxes shall be placed at the back of curb.

11. Minimum of 4' clear space shall be provided around all tree wells, utility boxes/poles, benches, and other obstructions (5' preferred).

*R/W = Right of Way

*PMP = Pedestrian Master Plan

SIDEWALK

SECTION A-A

SECTION B-B

SECTION C-C

---

STREETS: [signature]

REV. DATE: 11/12

DETAIL: H-06.1

TRANS. OPS:

FACILITIES:

WATER RESOURCES:

CITY ENGINEER: [signature]

PUBLIC WORKS DIRECTOR: [signature]
NOTES:

General

1. All access ramps shall be constructed in accordance with Title 24 of the Americans with Disabilities Act (ADA) and these Standard Details.
2. Field layout shall be made by a professional engineer or land surveyor.
3. Ramp thickness shall be 4 inches in residential areas and 6 inches in commercial areas.
4. Transitions from ramps to sidewalks, gutters, or streets shall be flush and free of abrupt changes. Maximum slopes of adjoining gutters and road surface immediately adjacent to the curb ramp shall not exceed 1:20.
5. The minimum width of a diagonal curb ramp shall be 48 inches, exclusive of flared sides. The minimum width of a directional curb ramp shall be 60 inches, exclusive of flared sides.
6. Ten working days prior to commencing demolition activities the Contractor shall contact the City’s Survey Party Chief to tie out any City monuments and other recorded survey markers.
7. Existing survey monuments located adjacent to and outside of construction areas shall be adequately protected from any damage that may result from the Contractor’s operations. Survey monuments damaged or displaced by Contractor shall be replaced in accordance with Section 8771 of the Professional Land Surveyor’s Act.
8. Existing street name stamps located in concrete to be demolished or removed shall be carefully removed, preserved, and relocated into the adjacent parkway area.
9. Existing curb paint shall be repainted to existing condition on all new or retrofit curbs.
10. Use 560-C-3250 concrete.

Style

11. In general, proposed ramps in high volume pedestrian areas in the commercial core, and in areas with sidewalks with no parkways shall generally be diagonal style ramps. In areas with lower pedestrian volumes and sidewalks with parkway, generally, dual directional ramps shall be used. Contact City Traffic Engineer for direction.
12. When constructing one new ramp at an intersection, selected ramp standard shall be most consistent with existing ramps.

Detectable Warnings

1. Dome height and size shall be minimum allowed by ADA, dome spacing shall be maximum allowed by ADA (2.35" spacing from dome to dome center).
2. Detectable warning surfaces shall extend 24 inches minimum in the direction of travel and the full width of the curb ramp.
3. For new construction, detectable warnings shall be Tekway Dome-Tiles or an equivalent approved by the City Engineer.
4. For retrofit installations, detectable warnings shall be SafetyStepTD or an equivalent approved by the City Engineer.
5. Color shall be Terracotta (Tekway) / Colonial Red (SafetyStep TD) for installations in gray concrete. Other colors will be considered for installation anywhere other than in gray concrete.
SECTION A-A
N.T.S.

MATCH EXISTING SIDEWALK

12' MAX.

4' MINIMUM LANDING

VARIES

5%*

TAPER TO GRADE. VARIABLE HEIGHT RETAINING CURB TO BE BUILT ONLY IF DEEMED NECESSARY BY CITY INSPECTOR.

SECTION B-B
N.T.S.

MATCH CURBS HEIGHT AND EXISTING GUTTER WIDTH, TYP.

EXIST. SIDEWALK

CONCRETE PARKWAY (USE FLARED WING)

R=3'

5'MIN.

FLARE WIDTH

B

1.5 INCH DEEP CONTRACTION JOINTS

INSTALL NON-GROUTED RED BRICK PAVERS IN ISLAND. MINIMUM AREA OF PAVERS SHALL BE 10 SQUARE FEET. WHEN APPROPRIATE, CURB RADIUS MAY BE ADJUSTED TO MEET THIS REQUIREMENT.

PACIFIC CLAY BEAR PATH PAVERS, OR AN EQUIVALENT APPROVED BY THE CITY ENGINEER, (2.5/8"X4"WX6"L) IN HERRING BONE PATTERN. VIBRATE SAND INTO VOIDS, SEAL WITH WATER SEALANT.

BETTING SAND (1"x2")

2"-4" (TYP.)

4" THICK CLASS 650-C-3250 P.C. CONCRETE

RECOMPACT EXISTING AGGREGATE BASE OR EXISTING SOIL TO 95% RELATIVE COMPACTION FOR A MINIMUM OF 12".

SECTION C-C
N.T.S.

MATCH CURBS HEIGHT AND EXISTING GUTTER WIDTH, TYP.

REDOUG Curb, 6" AT EDGE OF GUTTER.

Curb Height at landing shall be minimum 2" and maximum 4"

4" MINIMUM LANDING

VARIES

2% MAX.

1% MIN.

6.33% MAX.

Directional curb ramps shall match the width and alignment of adjoining sidewalk.

ACCESS RAMP DETAILS
DUAL DIRECTIONAL

STREETS:
TRANS OPS:
FACILITIES:
WATER RESOURCES:

REV. DATE: 11/12
DETAIL: H-07.1
APPROVED:
PUBLIC WORKS DIRECTOR
Directional curb ramps shall match the width and alignment of adjoining sidewalk.

RETAINING CURB, 6" AT EDGE OF GUTTER. CURB SHALL BE BUILT AS FAR AS NECESSARY TO MAINTAIN POSITIVE PARKWAY SLOPE. SEE SIDEWALK STANDARD DETAIL FOR SIDEWALK SECTIONS.

SECTION A-A
N.T.S.

TAPER TO GRADE. VARIABLE HEIGHT RETAINING CURB TO BE BUILT ONLY IF DEEMED NECESSARY BY CITY INSPECTOR.

EXISTING SIDEWALK

PLANTED PARKWAY

R=3'

MATCH CURB HEIGHT AND EXISTING GUTTER WIDTH, TYP.

5' MIN RAMP WIDTH

A

4'x4' LANDING MIN.

2'

R=1', TYP.

*USE FLARED WING FOR CONCRETE PARKWAY, SEE STANDARD DETAIL H-07.1.

ACCESS RAMP DETAILS
ONE-WAY DIRECTIONAL

STREETS:

REV. DATE: 11/12 DETAIL: H-07.2

TRANS OPS:

APPROVED:

FACILITIES:

WATER RESOURCES:

PUBLIC WORKS DIRECTOR
TAPER TO GRADE. VARIABLE HEIGHT RETAINING CURB TO BE BUILT ONLY IF DEEMED NECESSARY BY CITY INSPECTOR

MATCH EXISTING SIDEWALK

12' MAX.

5'/-

*5% or less desired, but in no case remove more than 12 ft. of existing sidewalk to meet grade requirements unless directed by engineer.

MATCH GRADE

EXIST. SIDEWALK

CONCRETE PARKWAY

12' MAX.

R=3'

MATCH CURB HEIGHT AND EXISTING GUTTER WIDTH, TYP.

5' MIN.

RAMP WIDTH

5' MIN.

FLARE WIDTH

MATCH CURB HEIGHT AND EXISTING GUTTER WIDTH, TYP.

MATCH CURB HEIGHT AND EXISTING GUTTER WIDTH, TYP.

TAPER TO GRADE. VARIABLE HEIGHT RETAINING CURB TO BE BUILT ONLY IF DEEMED NECESSARY BY CITY INSPECTOR

4' MINIMUM LANDING

2% MAX.

VARIES

TAPER TO GRADE. VARIABLE HEIGHT RETAINING CURB TO BE BUILT ONLY IF DEEMED NECESSARY BY CITY INSPECTOR

4' MINIMUM LANDING

2% MAX.

VARIES

MATCH CURB HEIGHT AND EXISTING GUTTER WIDTH, TYP.

TAPER TO GRADE. VARIABLE HEIGHT RETAINING CURB TO BE BUILT ONLY IF DEEMED NECESSARY BY CITY INSPECTOR

2% MAX.

4' MINIMUM LANDING

VARIES

MATCH CURB HEIGHT AND EXISTING GUTTER WIDTH, TYP.

MATCH CURB HEIGHT AND EXISTING GUTTER WIDTH, TYP.
**SIGN POST INSTALLATION**

**SQUARE TUBE**

---

**TABLE**

<table>
<thead>
<tr>
<th>POST, SLEEVE, &amp; ANCHOR SHALL BE GALVANIZED STEEL</th>
<th>POST SIZE</th>
<th>SLEEVE SIZE</th>
<th>ANCHOR SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP TO 2000 SQ. IN. OF SIGN FACE</td>
<td>2” X 2”</td>
<td>2½” X 2½” X 18”</td>
<td>2” X 2” X 18”</td>
</tr>
<tr>
<td></td>
<td>12 GAUGE</td>
<td>12 GAUGE</td>
<td>12 GAUGE</td>
</tr>
<tr>
<td>&gt;2000 SQ. IN. OF SIGN FACE (DOUBLE POST)</td>
<td>2” X 2”</td>
<td>2½” X 2½” X 18”</td>
<td>2” X 2” X 18”</td>
</tr>
<tr>
<td></td>
<td>12 GAUGE</td>
<td>12 GAUGE</td>
<td>12 GAUGE</td>
</tr>
</tbody>
</table>

---

**Sign Mounting**

1. **POST**
2. **SLEEVE**
3. **ANCHOR**

**Anchor Assembly**

1. **POST**
2. **SLEEVE**
3. **ANCHOR**

---

**Lateral Clearance per Standard Detail H-08.2**

**Two Holes Shall Be Exposed**

**Post Shall Be Embedded in Concrete**

---

**City Engineer**

**Public Works Director**

---

**Streets:**

**Rev. Date:** 11/12

**Detail:** H-08.0
NOTES:

1. Secondary sign mounted below another sign shall not be installed less than 7 feet in height.

2. In cases where curbs or sidewalks do not exist, height of signs shall be measured from road surface.

3. A minimum offset of 1 foot may be used where sidewalk width is limited or where existing poles are close to the curb.
NOTES:

1. Secondary sign mounted below another sign shall not be installed less than 7 feet in height.

2. In cases where curbs or sidewalks do not exist, height of signs shall be measured from road surface.

3. A minimum offset of 1 foot may be used where sidewalk width is limited or where existing poles are close to the curb.
NOTES:

1. Concrete shall be Class 560-C-3250 per Standard Specifications for Public Works Construction (Green Book).

2. Bus pocket slab, curb and gutter shall be poured monolithically. Optional - 3 foot gutter may be placed first for control of flowline, however, dowels will be required for second pour.

3. Bus pocket slab shall be 8" thick.

4. Pre-molded 0.25" thick steel expansion joints shall be placed at beginning and end of bus pocket. 1.5 inch deep contraction joints shall be placed at 30' intervals.

5. All concrete edges shall have 0.5 inch radius unless otherwise noted.

6. Clear drying fugitive dye curing compound shall be applied to all exposed surfaces immediately after finishing.

7. Height of the curb face to be 6-inch standard unless otherwise noted.

8. Joints and sawcuts in existing curbs shall be at right angles.

CONCRETE BUS POCKET
CONCRETE BUS POCKET
REVERSE TAPER - GEOMETRICS

<table>
<thead>
<tr>
<th>L</th>
<th>L/6</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.00'</td>
<td>10.00'</td>
<td>8.00'</td>
<td>7.56'</td>
<td>1.76'</td>
<td>4.00'</td>
<td>114.50'</td>
</tr>
<tr>
<td>30.00'</td>
<td>5.00'</td>
<td>8.00'</td>
<td>7.58'</td>
<td>1.71'</td>
<td>4.00'</td>
<td>30.13'</td>
</tr>
</tbody>
</table>