STANDARD CURB AND GUTTER DETAILS

CURB & GUTTER TYPE 1

CURB & GUTTER TYPE 2

CURB & GUTTER TYPE 3
BARRIER CURB
PLANTER AREA

CURB TYPE 4

NOTES:
1. 12" MIN. A.B. SHALL BE PLACED IF SUBGRADE IS EXPANSIVE CLAY (R-VALUE LESS THAN 12).
2. TOP 6" OF SUBGRADE SHALL BE COMPACTED TO 95% MIN., UNLESS OTHERWISE APPROVED
3. 1/2" RADIUS ON EXPOSED EDGES.
4. ALL CONCRETE SHALL BE CLASS B.
5. ALL CONSTRUCTION & MATERIALS IN CONFORMANCE WITH SECTION 24 OF STD. SPECIFICATIONS.
6. ACROSS THE PEDESTRIAN ROUTE AT CURB RAMP LOCATIONS, THE GUTTER PAN SLOPE SHALL NOT EXCEED 1° OF RISE FOR EACH 2'-0" OF WIDTH.

Abbreviations:
FOC...FACE OF CURB
BOC...BACK OF CURB
FL......FLOWLINE
TFC.....TOP FACE OF CURB

MEDIAN CURB TYPE 14
NONLANDSCAPED OR HARDSCAPED AREA

MEDIAN CURB TYPE 14A
LANDSCAPED AREA

REVIEW
DATE
DESCRIPTION

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

STANDARD CURB AND GUTTER DETAILS

APPROVED BY: [Signature]
DATE: APRIL 2020
DWG. NO. T-11
MODIFIED REINFORCED CURB AND GUTTER TYPE 2 AT BUS STOP LOCATION FOR 50 FEET ON EITHER SIDE OF THE CENTER OF THE BUS STOP OR AS DIRECTED BY THE ENGINEER.

NOTE:
REINFORCING STEEL SHALL BE GRADE 60

SECTION A-A

REV. DATE DESCRIPTION

CITY OF SACRAMENTO DEPARTMENT OF PUBLIC WORKS

BUS STOP REINFORCED CURB & GUTTER DETAIL

APPROVED BY: DATE: APRIL 2020 DWG. NO. T-12
If tree roots are not over the curb and gutter, then narrow the thickness of curb to 3" and place 2 No. 4 rebars in curb in front of the tree.

EXIST. TREE ROOTS

TYPE 2

EXPANSION JOINT

STREET SECTION

CURB AND GUTTER TYPE 2 MODIFIED (3" TO 6")

EXPANSION JOINT

CURB AND GUTTER TYPE 2

CURB AND GUTTER TYPE 2 MODIFIED (3")

3"

1"
NOTES:

A. DRIVEWAY WIDTH AS PER SEC. 18 CITY CODE.

B. WEAKENED PLANE JOINTS (WPJ) REQUIRED ON CENTERLINE FOR DRIVEWAYS 10' TO 20' WIDE. DRIVEWAYS 22' TO 35' WIDE SHALL HAVE TWO WPJ EVENLY SPACED AT 1/3 AND 2/3 POINTS.

C. ALL CONSTRUCTION AND MATERIALS IN CONFORMANCE WITH SECTION 24 OF STANDARD SPECIFICATIONS.

D. THICKNESS OF APRONS SHALL BE 4" ON RESIDENTIAL DRIVEWAYS AND 6" ON COMMERCIAL DRIVEWAYS. ON COMMERCIAL DRIVEWAYS SIDEWALK SHALL BE REMOVED AND REPLACED WITH 6" OF CONCRETE.

E. APRON WILL BE DEPRESSED ON CURB AND GUTTER No.13 WHEN RECONSTRUCTING EXISTING COMMERCIAL DRIVEWAYS.

* IF CURB & GUTTER ARE POURED SEPARATE OF APRON THEN DOWELS ARE REQUIRED AT BACK OF CURB. 3" IN CURB AND 9" IN CENTER OF APRON.

EXPANSION (WPJ) JOINT (3/8" THICK, 2 1/2" DEEP MIN.) SHALL BE PLACED EVERY 60"

DEEP-SCORE LINE (1 1/2" DEEP, 1/8"-1/4" IN WIDTH) SHALL BE PLACED EVERY 12" WITH A STANDARD 4' BITE SCORE IN BETWEEN

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

SIDEWALK DRIVEWAY DETAILS

APPROVED BY: [Signature]
DATE: APRIL 2020  DWG. NO. T-21
NOTES:
A. DRIVEWAY WIDTH AS PER SEC. 18 CITY CODE.
B. WEAKENED PLANE JOINTS (WPJ) REQUIRED ON CENTERLINE FOR DRIVEWAYS 10' TO 20' WIDE. DRIVEWAYS 22' TO 35' WIDE SHALL HAVE TWO WPJ EVENLY SPACED AT 1/3 AND 2/3 POINTS.
C. ALL CONSTRUCTION AND MATERIALS IN CONFORMANCE WITH SECTION 24 OF STANDARD SPECIFICATIONS.
D. THICKNESS OF APRONS SHALL BE 4" ON RESIDENTIAL DRIVEWAYS AND 6" ON COMMERCIAL DRIVEWAYS. SIDEWALK SHALL BE REMOVED AND REPLACED WITH 6" OF CONCRETE.
*IF CURB AND GUTTER ARE Poured SEPARATE OF APRON THEN DOWELS ARE REQUIRED AT BACK OF CURB. 3" IN CURB AND 9" IN CENTER OF APRON.
NOTES:

1. MINIMUM DRIVEWAY PAVEMENT SECTION SHALL CONSIST OF 2" ASPHALT CONCRETE OVER 4" AGGREGATE BASE OR 4" ASPHALT CONCRETE OVER NATIVE.

2. FURNISH AND PLACE CULVERT AS REQUIRED BY CITY OF SACRAMENTO, DEPARTMENT OF PUBLIC WORKS, STREET DIVISION.

3. MINIMUM 18" COVER FROM TOP OF PIPE UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
PORTLAND CEMENT CONCRETE (PCC) IS THE CITY STANDARD PAVEMENT FOR ALLEYS. THE EXTENT OF THE IMPROVEMENTS SHALL BE THE ENTIRE ALLEY FRONTAGE (FULL WIDTH OF THE ALLEY) OF THE SUBJECT SITE TO THE NEAREST ALLEY ENTRANCE. ALLEYS SHALL HAVE 6 IN. OF PCC WITH AN APPROPRIATE SUBGRADE AS DETERMINED BY TI AND R-VALUES FOR THE AREA IN WHICH THE ALLEY IS LOCATED.

MINIMUM LONGITUDINAL GRADES ON ALLEYS SHALL BE 0.50 PERCENT. THE CROSS SLOPE SHALL BE 2 PERCENT FROM THE PROPERTY LINE TO THE CENTER OF THE ALLEY.
NOTES:

1. CONTRACTOR IS TO REQUEST APPROVAL OF THE SCORING PATTERN PRIOR TO PLACEMENT OF CONCRETE.

2. SCORE MARKS ARE $\frac{3}{8}$" - $\frac{3}{4}$" WIDE AND $\frac{3}{4}$" DEEP.

3. EXPANSION JOINTS REQUIRED PER STANDARD SPECIFICATIONS.

4. USE COLOR ADDITIVE AS DIRECTED BY THE ENGINEER (APPROX. 1 LB/CY OF LAMP BLACK COLOR).

5. HISTORIC SCORING PATTERN SHALL BE USED ONLY WHERE APPROVED IN ADOPTED CITY GUIDELINES OR ADJACENT TO EXISTING HISTORIC SCORING PATTERNS.
NOTE:
GALVANIZE AFTER FABRICATION AND ASSEMBLY

DEPARTMENT OF PUBLIC WORKS

CITY OF SACRAMENTO

THROUGH SDWK DRAIN DETAIL (C&G TYPE 1)

DATE: APRIL 2020  DWG. NO. T - 31
CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

THROUGH SDWK DRAIN DETAIL (C&G TYPE 2)

DEPARTMENT OF PUBLIC WORKS

NOTE:
GALVANIZE AFTER FABRICATION AND ASSEMBLY

SECTION A-A
N.T.S.

REV. DATE DESCRIPTION

APPROVED BY: Nadel  
DATE: APRIL 2020  DWG. NO. T - 32
SPECIFICATIONS FOR THE SUBDRAIN TRENCH SYSTEM:

1. **CRUSHED ROCK:** CONTRACTOR SHALL PLACE CLEAN TYPE C CRUSHED ROCK CONFORMING TO SECTION 10-17 OF THE STANDARD SPECIFICATIONS.

2. **PERFORATED DRAIN PIPE:** PERFORATED PIPE SHALL BE POLYVINYL CHLORIDE (PVC) PIPE WITH PERFORATIONS THROUGHOUT THE LENGTH OF THE PIPE AND CONFORMING TO THE APPLICABLE PORTIONS OF AASHTO M252. ALTERNATIVELY, PIPE MAY BE PERFORATED CORRUGATED POLYETHYLENE TUBING CONFORMING TO THE APPLICABLE PORTIONS OF AASHTO M252 OR M294.

3. **FILTER FABRIC:** FILTER FABRIC SHALL CONFORM WITH SECTIONS 68-1.03, 88-1.01, AND 88-1.03 OF THE CALTRANS STANDARD SPECIFICATIONS.
1) SIDEWALK TRANSITIONS
   - Located above ramp or landing
   - 48" minimum width
   - 2% (1:50) maximum cross slope at ramp or landing
   - 8.33% (1:12) maximum slope

2) LANDINGS
   - Located above ramp
   - 48" minimum dimension in all directions
   - 2% (1:50) maximum cross slope or slope in all directions, including diagonal

3) RAMPS
   - Located above pan or below landing
   - 48" minimum width
   - 2% (1:50) maximum cross slope
   - 8.33% (1:12) maximum slope
   - Transition to gutter shall be flush and free of abrupt changes

4) PANS
   - Located below ramp
   - 48" minimum at back of pan
   - 48" minimum from back of pan to back of curb line (BOC)
   - 1% (1:100) minimum slope from back of pan to flow line
   - 2% (1:50) maximum cross slope or slope in all directions, including diagonal
   - On corners, pan boundaries are to be radial
   - Transition to gutter shall be flush and free of abrupt changes

5) GUTTERS
   - Located adjacent to ramp or pan
   - 5% (1:20) maximum slope measured 4' from front out to street pavement for full width of ramp.
   - Transition to gutter shall be flush and free of abrupt changes

6) FLARES
   - Located adjacent to ramp
   - Required between ramps where there is no planter area
   - Required on the exterior of ramps where there is an adjacent concrete sidewalk, regardless of obstacles
   - Generally triangular in nature
   - 10% (1:10) maximum slope

7) RETAINING CURBS
   - Required adjacent to sidewalk transitions, landings, ramps and pans where the existing landscape (planter area) is 4' or higher at any point above the newly constructed curb ramp element
   - Required for existing planter areas between ramps
   - Retaining curbs are to have a 6" width and a vertical face
   - Retaining curb foundations are to extend 8" below the adjacent ramp element surface
   - Outside corners of retaining curbs must have a 6" radius

8) CONCRETE COLORING
   - Lamp black or other coloring shall be added to new concrete as necessary to match existing color. This applies to all infill locations

9) GENERAL NOTES:
   - Dual curb ramps are required unless otherwise approved by the engineer.
   - All elements, except gutters and retaining curbs, must be constructed planar in nature with weakened plane joints scored between each element.
   - When feasible, opposing curb ramps shall align.
   - These definitions and standards, general details, and standard drawings shall apply to all curb and gutter types.
   - There are variations and adjustments that may be required upon the approval of the engineer.
   - There are no variances to the maximum allowable slopes and cross slopes.
SURFACE OF RAMPS AND PANS SHALL HAVE A TRANSVERSE BROOM SURFACE TEXTURE ROUGHER THAN ADJACENT SIDEWALK
A. All slopes shown are maximums.
B. All dimensions shown are minimums.
C. All pans must be located inside crosswalks or in front of stop bars.
D. All joints between elements are radial.
E. Single ramps can be constructed on a tangent.
F. 1:20 gutter pan slope shall be for full width of curb ramp or common pan ramp constructed if required by existing conditions.

** Minimum slope of 1% (1:100) from back of pan to flow line.

--- Designates in plan views that element may be constructed.
NOTES:

A. ALL SLOPES SHOWN ARE MAXIMUMS.

B. ALL DIMENSIONS SHOWN ARE MINIMUMS.

C. ALL PANS MUST BE LOCATED INSIDE CROSSWALKS OR IN FRONT OF STOP BARS.

D. ALL JOINTS BETWEEN ELEMENTS ARE RADIAL.

E. 1:20 GUTTER PAN SLOPE SHALL BE FOR FULL WIDTH OF CURB RAMP OR COMMON PAN RAMP

* CONSTRUCTED IF REQUIRED BY EXISTING CONDITIONS.

** MINIMUM SLOPE OF 1% (1:100) FROM BACK OF PAN TO FLOW LINE.

1 4" MINIMUM CURB HEIGHT, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

---

DESIGNATES IN PLAN VIEWS THAT ELEMENT MAY BE CONSTRUCTED.
THE WIDTH OF RAMP SHALL BE SAME AS LANDING.

NOTES:

A. ALL SLOPES SHOWN ARE MAXIMUMS.

B. ALL DIMENSIONS SHOWN ARE MINIMUMS.

C. ALL RAMPS MUST BE LOCATED INSIDE CROSSWALKS OR IN FRONT OF STOP BARS.

D. ALL JOINTS BETWEEN ELEMENTS, EXCEPT BETWEEN RAMP AND FLARE, ARE RADIAL. RAMP WIDTH REMAINS CONSTANT.

E. SINGLE RAMPS CAN BE CONSTRUCTED ON A TANGENT.

F. 1:20 GUTTER PAN SLOPE SHALL BE FOR FULL WIDTH OF CURB RAMP OR COMMON PAN RAMP CONSTRUCTED IF REQUIRED BY EXISTING CONDITIONS.

* DESIGNATES IN PLAN VIEWS THAT ELEMENT MAY BE CONSTRUCTED.

---

TRUNCATED DOME. SEE DETAIL T-79

THE WIDTH OF RAMP SHALL BE SAME AS LANDING

PRIVATE PROPERTY

R/W (RIGHT OF WAY)

BACK OF RETAINING CURB (BOC)*

CURB RAMP T - 7
NOTES:
A. ALL SLOPES SHOWN ARE MAXIMUMS.
B. ALL DIMENSIONS SHOWN ARE MINIMUMS.
C. ALL RAMPS MUST BE LOCATED INSIDE CROSSWALKS OR IN FRONT OF STOP BARS.
D. 1:20 GUTTER PAN SLOPE SHALL BE FOR FULL WIDTH OF CURB RAMP OR COMMON PAN RAMP
* CONSTRUCTED IF REQUIRED BY EXISTING CONDITIONS.

DESIGNATES IN PLAN VIEWS THAT ELEMENT MAY BE CONSTRUCTED.

NOTES:
1. 4" MINIMUM CURB HEIGHT, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. NO MINIMUM DIMENSION. GROOVE PATTERNS OR FLARES CAN INTERSECT.
3. IF LANDING CONSTRUCTED, 60" MIN. LANDING DIMENSIONS AND 60" MIN. WIDTH OF RAMP REQUIRED.

REV.  DATE  DESCRIPTION

APPROVED BY:  Nader Kamel  DATE: APRIL 2020  DWG. NO. T-74
NOTES:

A. All slopes shown are maximums.

B. All dimensions shown are minimums.

C. All ramps must be located inside crosswalks or in front of stop bars.

D. All joints between elements, except between ramp and flare, are radial. Ramp width remains constant.

E. Single ramps can be constructed on a tangent.

F. 1:20 gutter pan slope shall be for full width of curb ramp or common pan ramp constructed if required by existing conditions.

---

* Designates in plan views that element may be constructed.

---

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

SINGLE COMBINATION CURB RAMP

APPROVED BY: [Signature]
DATE: APRIL 2020 DWG. NO. T-75
4" MINIMUM CURB HEIGHT, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

NO MINIMUM DIMENSION.
NOTES:

A. ALL SLOPES SHOWN ARE MAXIMUMS.

B. ALL DIMENSIONS SHOWN ARE MINIMUMS.

C. ALL RAMPS MUST BE LOCATED INSIDE CROSSWALKS OR IN FRONT OF STOP BARS.

D. 1:20 GUTTER PAN SLOPE SHALL BE FOR FULL WIDTH OF CURB RAMP OR COMMON PAN RAMP CONSTRUCTED IF REQUIRED BY EXISTING CONDITIONS.

---

ELEMENT MAY BE CONSTRUCTED.
---

DESIGNATES IN PLAN VIEWS THAT ELEMENT MAY BE CONSTRUCTED.
---

A. 4" MINIMUM CURB HEIGHT, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

B. NO MINIMUM DIMENSION.

---

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

STANDARD CURB AND CURB RAMPS

DATE: APRIL 2020 DWG. NO. T - 76A
NOTES:

A. ALL SLOPES SHOWN ARE MAXIMUMS.
B. ALL DIMENSIONS SHOWN ARE MINIMUMS.
C. ALL RAMPS MUST BE LOCATED INSIDE CROSSWALKS OR IN FRONT OF STOP BARS.
D. 1:20 GUTTER PAN SLOPE SHALL BE FOR FULL WIDTH OF CURB RAMP OR COMMON PAN RAMP
   * CONSTRUCTED IF REQUIRED BY EXISTING CONDITIONS.
   ** CONTINUE TO MATCH SIDEWALK WIDTH AND SCORE PATTERN (MIN. 48" WIDE).
   *** DESIGNATES IN PLAN VIEWS THAT ELEMENT MAY BE CONSTRUCTED.

1. STANDARD CURB HEIGHT TO MATCH EXISTING.
2. TOP OF RETAINING CURB TO MATCH ADJACENT RETAINING CURB ELEVATIONS. CAN BE FLUSH WITH LANDING.
NOTES:

1. TRUNCATED DOMES REQUIRED IN PAN
2. TRUNCATED DOMES REQUIRED ON RAMP

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS
TRUNCATED DOME STANDARD LAYOUT

REV. DATE DESCRIPTION

APPROVED BY: Nader Kamal
DATE: APRIL 2020 DWG. NO. T - 78
NOTES:

SURFACE MOUNTED TILE
DETAILS SHOWN. DETAILS ARE APPLICABLE TO TILE SURFACE SECTION ONLY. SHALL NOT BE USED IN NEW RAMP CONSTRUCTION.

CAST-IN-PLACE TILE
UNIT DESIGN AND DETAILS TO BE APPROVED BY THE ENGINEER. TILE MATERIAL, FASTENERS, AND ADHESIVE TO BE APPROVED BY THE ENGINEER.

1/4" DIA. COUNTERSUNK (CTSK) HOLES (TYP. 12 LOCATIONS)

0.5" (TYP. AROUND PERIMETER)

2.5" WIDE BOSS AT UNDERSIDE OF TILE FOR STRUCTURAL ADHESIVE AT FULL PERIMETER AND THROUGH CENTER TILE

PLQ

PLAN - TILE
N.T.S.

VARIES

0.5"

VARIES

2.5"

BOSS AROUND FULL PERIMETER

SECTION A-A
N.T.S.

1/4" DIA. COUNTERSINK (CTSK) HOLES

VARIES

2.3" - 2.4"

1/4" DIA. COUNTERSINK (CTSK) HOLES FOR BOLTED FASTENER

DETAILED 1

DETAILED 2

1/4" DIA.

0.375"

DIA.

0.08"

0.25"

DIA.

0.07"

DETAILED 2

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS
TRUNCATED DOME DETAIL

APPROVED BY: Nader Farsad
DATE: APRIL 2020

REV. DATE DESCRIPTION
△
△
△
1. **SEWER/DRAINAGE:**
   - Type 'A' clean crushed rock per Section 10-17.

2. **WATER:**
   - Pipe Dia<12": River sand per Section 10-13. Pipe Dia>12": River sand per 10-13 or crushed rock per Section 10-14.

### TYPICAL TRENCH SECTION

#### NOTES:
1. Excavation, backfill and re-paving of trenches shall conform to the standard specifications unless otherwise indicated by the plans, permit, special provisions, or the engineer.
2. Trench backfill shall consist of Class 2 aggregate base (AB) or job excavated, native soil. No additional compensation shall be paid for stockpiling, drying, wetting or processing the native soil or AB to meet the minimum stability and relative compaction criteria.
3. Unless otherwise indicated in the special provisions, the new permanent pavement shall conform to the type and thickness of the pavement removed. In no case shall the new pavement section be less than four inches (4") of AC on twelve inches (12") of Class 2 aggregate base (AB).
4. Existing AC > 4" thick: Grind existing AC 2" deep and 6" wider than trench on both sides. Place new AC.
5. Existing AC < 4" thick: Saw cut and place new AC 6" wider than trench as shown on both sides.
6. Non-pavement areas: In non-pavement areas, the pavement section shall be replaced with job excavated native soil or other approved backfill compacted to at least 90% relative compaction per ASTM D1557.
7. Shovel slice, tamp, and/or vibrate material under and around the pipe to a firm non-yielding condition to satisfaction of the engineer.
8. Twelve inch (12") wide flash coat centered between the trench pavement and the existing street pavement.

#### TABLE A

<table>
<thead>
<tr>
<th>PIPE TYPE</th>
<th>PIPE I.D.</th>
<th>MINIMUM DIMENSION</th>
<th>MAXIMUM DIMENSION(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIGID(1)</td>
<td>&lt;12&quot;</td>
<td>PIPE O.D. + 16&quot;</td>
<td>PIPE O.D. + 24&quot;</td>
</tr>
<tr>
<td></td>
<td>&gt;12&quot;</td>
<td>PIPE O.D. + 20&quot;</td>
<td>PIPE O.D. + 36&quot;</td>
</tr>
<tr>
<td>FLEXIBLE(2)</td>
<td>ALL</td>
<td>PER ASTM D2321(3)</td>
<td>OR THE PIPE MANUFACTURER'S RECOMMENDATIONS, WHICHER IS GREATER.</td>
</tr>
</tbody>
</table>

(1) RIGID PIPE = RCP, VCP & DIP.
(2) FLEXIBLE PIPE = ALL PIPE OTHER THAN RIGID PIPE.
(3) ASTM D2321 STATES THAT THE MINIMUM TRENCH WIDTH SHALL BE EQUAL TO THE PIPE O.D. PLUS 16" OR THE PIPE O.D. TIMES 1.25 PLUS 12", WHICHER IS GREATER.
(4) IF THE MAXIMUM DIMENSION AT THE TOP OF THE PIPE IS EXCEEDED, CONTRACTOR SHALL PROVIDE STRONGER PIPE OR IMPROVED BEDDING AND BACKFILL CONDITIONS, AS APPROVED BY THE ENGINEER, TO MEET THE NEW LOADING.

---

**CITY OF SACRAMENTO**
**DEPARTMENT OF PUBLIC WORKS**
**BACKFILL AND RESURFACING IN PAVED AREAS**
**APPROVED BY: [Signature] Nader Kamel**
**DATE: APRIL 2020**
**DWG. NO. T - 80**
NOTES:
- FENCE LOCATION AS SHOWN ON PLANS
- LINE POSTS AT 500' MAX. INTERVALS
- BRACED & TRUSSED IN BOTH DIRECTIONS.
- ALL CONSTRUCTION AND MATERIALS IN CONFORMANCE WITH SECTION 10-38 OF THE STANDARD SPECIFICATIONS.
NOTES:

1. MATERIALS
   3-2"x6"x16' WOOD PLANKS - TREATED DOUGLAS FIR
   2-6"x6"x7' WOOD POSTS - TREATED DOUGLAS FIR
   1-18"x18" TYPE N (RED) REFLECTORIZED SIGN

   IN CONFORMANCE WITH SEC. 56-2.02
   CALTRANS STANDARD SPECIFICATIONS

2. INSTALLATION
   PLANKS SHALL BE FASTENED TO
   POSTS WITH 5/16" CARRIAGE BOLTS.
   CUT WASHERS, AND SAFETY NUTS.
   ALL HARDWARE GALVANIZED.

3. LOCATION
   THE LOCATION SHALL BE AS
   SHOWN ON THE PLANS OR
   DESIGNATED BY THE ENGINEER.

4. PAINT
   TWO COATS OF EXTERIOR GRADE WHITE PAINT
   CONFORMING TO CALTRANS STANDARD SPECIFICATIONS
   SECTION 91-3.02 SHALL BE APPLIED TO ALL
   EXPOSED WOOD SURFACES.

5. BARRICADE MUST BE FULL WIDTH BETWEEN
   FACES OF CURBS WHERE REQUIRED.
NOTES:

1. SIDEWALK BARRICADE TO BE ERECTED AT EACH LOCATION WHERE SATISFACTORY PROVISION CANNOT BE MADE FOR PEDESTRIANS TO CONTINUE BEYOND THE TERMINUS OF A SIDEWALK AND STREET. 2. 2.

2. ALL EXPOSED SURFACES TO BE PAINTED WITH TWO (2) COATS OF WHITE PAINT. ALL PAINT TO CONFORM TO SEC. 91-3.02 OF CALTRANS STANDARD SPECIFICATIONS.

3. ALL MATERIAL USED IN THE CONSTRUCTION OF BARRICADE SHALL BE TREATED DOUGLAS FIR IN CONFORMANCE WITH SEC 56-2.02 OF CALTRANS STANDARD SPECIFICATIONS.
NOTES:

1. SIDEWALK BARRICADE TO BE ERECTED AT EACH LOCATION WHERE SATISFACTORY PROVISION CANNOT BE MADE FOR PEDESTRIANS TO CONTINUE BEYOND THE TERMINUS OF A SIDEWALK.

2. ALL EXPOSED SURFACES TO BE PAINTED WITH TWO (2) COATS OF WHITE PAINT. ALL PAINT TO CONFORM TO SEC. 91-3.02 OF CALTRANS STANDARD SPECIFICATIONS.

3. ALL MATERIAL USED IN THE CONSTRUCTION OF BARRICADE SHALL BE TREATED DOUGLAS FIR IN CONFORMANCE WITH SEC 56-2.02 OF CALTRANS STANDARD SPECIFICATIONS.
NOTES:
ALL EXPOSED SURFACES SHALL BE PAINTED WITH TWO (2) COATS OF WHITE PAINT. ALL PAINT TO CONFORM WITH SECTION 91-3.02 OF THE CALTRANS STANDARD SPECIFICATIONS.
CONSTRUCT WHERE THE BEGINNING OR ENDING LIMIT OF WORK IS A CROSS STREET

50'-0" CONFORM DETAIL

NOTE:
DEPTH OF PLANED PAVEMENT SHALL BE 0.17" AT CROSS STREET AND SHALL PROGRESSIVELY DECREASE TO 0" OVER 50'
DEPTH OF PLANED PAVEMENT SHALL BE 0.17' AT CROSS STREET AND SHALL PROGRESSIVELY DECREASE TO 0' OVER 18'.

CROSS STREET

CONSTRUCT WHERE THE BEGINNING OR ENDING LIMIT OF WORK IS A CROSS STREET

18'-0" CONFORM DETAIL

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

18'-0" CONFORM DETAIL

APPROVED BY: Nader Kamel
DATE: APRIL 2020 DWG. NO. T - 130
CONSTRUCT WHERE THE BEGINNING OR ENDING LIMIT OF WORK IS A CROSS STREET

18'-0" CONFORM DETAIL
(WITHOUT KEY CUT)
NOTE:
DEPT+ OF
PAVEMENT SHALL BE 0.17" AT MAIN STREET AND SHALL PROGRESSIVELY DECREASE TO 0" AT CURB RETURN OF SIDE STREET

* THIS CONFORM WILL BE APPLIED WHERE THE ENTIRE MAIN STREET IS BEING PLANED OR KEYCUT.

SIDE STREET CONFORM DETAIL
CURB AND GUTTER TYPE 1

CURB AND GUTTER TYPE 2

NOTES:

A  THIS DISTANCE VARIES. IT SHOULD EXTEND TO THE LOWER LIMITS OF THE FACE OF CURB.

B  INDICATES PAINTED SURFACES
12" WHITE/YELLOW CROSSWALK LINES

WITH MARKED CROSSWALK

N.T.S.

R28(R)(CA)

FLOWLINE

W

CENTERLINE MARKING
(CA MUTCD DETAIL No.)

< 36’

35 (MOD)

PER THIS DWG

≥ 36’

22

R28(CA)

FLOWLINE

DETAIL 35 (MOD.),
50 LF LONG

WITHOUT MARKED CROSSWALK

N.T.S.

R28(R)(CA)

FLOWLINE

W

R1-1

12" WHITE STOP BAR

CENTER IN TRAVEL LANE

R28(CA)

FLOWLINE

DETAIL 35 (MOD.),
50 LF LONG

FLOWLINE

STOP CONTROLLED
INTERSECTION APPROACH

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

STANDARD PROVISIONS

REV. DATE DESCRIPTION

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△

APPROVED BY:    DATE: APRIL 2020    DWG. NO. T - 180

DEPARTMENT OF PUBLIC WORKS
INSTALL TWO TYPE G REFLECTIVE MARKERS IN FRONT OF EACH LADDER STRIPE ON THE APPROACH SIDES OF THE CROSSWALK. NO MARKERS TO BE INSTALLED IN BIKE LANES.
NOTES:
METAL POST TO BE AS SHOWN EXCEPT THAT MINOR VARIATIONS IN DESIGN AND DIMENSIONS WILL BE PERMITTED TO MEET MANUFACTURER’S STANDARDS

SECTION A-A

DETAIL A

SEE DETAIL A

OPTIONAL

TYPE L (CA) MARKER

6” x 12” WHITE REFLECTIVE SHEETING

METAL POST DETAIL

DEPARTMENT OF PUBLIC WORKS

CITY OF SACRAMENTO

OBJECT MARKER

DETAIL

REV. DESCRIPTION

DATE

APPROVED BY:

DATE: APRIL 2020 DWG. NO. T - 210
NOTES:
1. BOLLARD TO BE INSTALLED ON SIDEWALKS WITH ROLLED CURBS. SEE CITY STANDARD DWG. NO. T-230.
2. TYPE L-1(CA) MARKER TO BE INSTALLED ON PLANTER/DIRT WITH ROLLED CURBS OR UNIMPROVED STREETS. SEE CITY STANDARD DWG. NO. T-210.
3. NO BOLLARD OR TYPE L-1(CA) MARKER IS NEEDED WHERE TYPE 2 CURB & GUTTER IS PRESENT.

LEGEND:
C&G - CURB AND GUTTER
LIP/EP - EDGE OF PAVEMENT
FOC - FACE OF CURB
BOC - BACK OF CURB
SWK - SIDEWALK

Hump Width  |  (W)  |  (D)
-------------|-------|-------
20' - 32'    | 2'-0" |       
32'+         | 3'-0" |       

DEPARTMENT OF PUBLIC WORKS
CITY OF SACRAMENTO
SPEED HUMP DETAIL
APPROVED BY: Nader Kamal
DATE: APRIL 2020  DWG. NO. T - 221
NOTES:
1. BOLLARD TO BE INSTALLED ON SIDEWALKS WITH ROLLED CURBS. SEE CITY STANDARD DWG. NO. T-230.
2. TYPE L-1(CA) MARKER TO BE INSTALLED ON PLANTER/DIRT WITH ROLLED CURBS OR UNIMPROVED STREETS. SEE CITY STANDARD DWG. NO. T-210.
3. NO BOLLARD OR TYPE L-1(CA) MARKER IS NEEDED WHERE TYPE 2 CURB & GUTTER IS PRESENT.
4. CENTER LUMP ON ROADWAY UNLESS OTHERWISE NOTED BY THE ENGINEER.
1. BOLLARD TO BE INSTALLED ON SIDEWALKS WITH ROLLED CURBS. SEE CITY STANDARD DWG. NO. T-230.
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NOTES:

LEGEND:
- C&G - CURB AND GUTTER
- LIP/EP - EDGE OF PAVEMENT
- FOC - FACE OF CURB
- BOC - BACK OF CURB
- SWK - SIDEWALK

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

SPEED LUMP DETAIL (C) (W) ≥ 34' & ≤ 40'

APPROVED BY: Nader Kamel
DATE: APRIL 2020
DWG. NO. T - 224
1. BOLLARD TO BE INSTALLED ON SIDEWALKS WITH ROLLED CURBS. SEE CITY STANDARD DWG. NO. T-230.
2. TYPE L-1(CA) MARKER TO BE INSTALLED ON PLANTER/DIRT WITH ROLLED CURBS OR UNIMPROVED STREETS. SEE CITY STANDARD DWG. NO. T-210.
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C&G - CURB AND GUTTER
LIP/EP - EDGE OF PAVEMENT
FOC - FACE OF CURB
BOC - BACK OF CURB
SWK - SIDEWALK

DEPARTMENT OF PUBLIC WORKS

SPEED LUMP DETAIL (D)

(W) ≥ 40°
2 1/2" INSIDE DIAMETER SCH40 GALVANIZED PIPE

5/16" BOLT 4 1/2" TO 6" LONG

3/8" HOLE MUST FACE THE STREET WHEN INSTALLED

2" INSIDE DIAMETER SCH40 GALVANIZED PIPE

5/16" X 3/4" BOLT IS INSERTED TO ATTACH BOLLARD TO SLEEVE

3/8" HOLE MUST BE FACING STREET

3/8" HOLE MUST BE FACING STREET

SLEEVE FOR BOLLARD

SECTION A
BOLLARD MATERIAL:
SCHEDULE 40
CARBON STEEL
ADHERE TO THE SURFACE USING ADHESIVE

TYPE D MARKERS WITH 4" SPACING

YELLOW CITY POST CHANNELIZER OR EQUIVALENT

TYPE D MARKERS (RPM) (2 TO 4)

EMBEDDED ANCHOR CUP INSTALLED PER MANUFACTURER’S SPECIFICATION

ADHERE TO THE SURFACE USING ADHESIVE

YELLOW CITY POST CHANNELIZER WITH REFLECTIVE BANDS OR EQUIVALENT CENTERED ON MEDIAN

DETAILED AT 1/2 SPACING

DETAILED AT 1/2 SPACING

DETAILED AT 1/2 SPACING
<table>
<thead>
<tr>
<th>A</th>
<th>ISLAND WIDTH</th>
<th>3'</th>
<th>4+</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>(NO. OF RPM'S)</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>C</td>
<td>R4-7 (SIZE)</td>
<td>R4-7c 18x30</td>
<td>R4-7 24x30</td>
</tr>
</tbody>
</table>

DETAIL A

NOTES:
A  2" GALVANIZED Threaded pipe coupling, installed flush to concrete surface secured to 2" pipe by threads and attached to subterranean portion by either a bolt or tack welding.
B  2" SCHEDULE 40 GALVANIZED pipe not less than 8" long or more than 12" long, crosspinned with either 5/16" x 6" bolts or 5/16" x 6" rebar.
C  EXCAVATED portion to be filled with portland cement, minimum 4 bag mix, smooth finished at grade.
D  GRADE: WHERE AN UNEQUAL GRADE IS ENCOUNTERED, THE HIGHER PORTION OF THE 2" PIPE COUPLING SET AT GRADE IS ACCEPTABLE.
E  IF COBBLESTONE OR UNEVEN HARDSCAPE MATERIAL, PROVIDE 8" Dia. flat surface for pole installation.

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS
MEDIAN ISLAND NOSE DETAIL

APPROVED BY:  DP Edmundo
DATE: APRIL 2020  DWG. NO. T - 260
2" PIPE SADDLE FOR CENTERMOUNT

INSTALL THROUGH BOLT 4" - 6" FROM BOTTOM OF PIPE. USE 5/16 BOLT WITH NUT, MINIMUM 5" LENGTH TO PREVENT TURNING AND REMOVAL.

END OF PIPE MUST BE SMASHED TO PREVENT TURNING AND REMOVAL.

NOTE:
ALL FASTENERS AND HARDWARE GALVANIZED, UNLESS OTHERWISE NOTED.

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS
STANDARD 2" PIPE SIGN MOUNTING
APPROVED BY: DP Ed姆s
DATE: APRIL 2020 DWG. NO. T-270
SIGN BLANK SHALL NOT BE LESS THAN .080 INCHES THICK ALUMINUM (5052-H38)

NOTE:
7" MIN. CLEARANCE FROM BOTTOM OF SIGN TO GROUND

TOP VIEW

REV. DATE DESCRIPTION

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

STANDARD ELECTROLIER SIGN MOUNTING

APPROVED BY: DP Edmisten
DATE: APRIL 2020 DWG. NO. T-280
Del Paso BLVD 2900

STREET NAME SIGN (SNS)

LETTER PER BLANKS

<table>
<thead>
<tr>
<th>Letter</th>
<th>Per Blanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>24&quot;</td>
<td>1 TO 4</td>
</tr>
<tr>
<td>30&quot;</td>
<td>5 TO 6</td>
</tr>
<tr>
<td>36&quot;</td>
<td>7 TO 8</td>
</tr>
<tr>
<td>42&quot;</td>
<td>9 TO 10</td>
</tr>
<tr>
<td>48&quot;</td>
<td>11 TO 13</td>
</tr>
</tbody>
</table>

NOTE:

SPACE IS THE SAME AS LETTER BLOCK REQUIRED ON ALL SIGNS

HEAVY DUTY 3/4" X .032" STAINLESS STEEL STRAP
HEAVY DUTY 3/4" STAINLESS STEEL BUCKLE FOR .032" STRAP

NOTE:

- BLANK .125" THICKNESS
- GREEN BACKGROUND WITH WHITE LETTERS
- TYPE ELEVEN SHEETING

ALL HARDWARE IS STAINLESS STEEL. ALL SET SCREWS MUST BE STAINLESS STEEL TAMPER PROOF DESIGN.
USING TYPE XI RETROREFLECTIVE SHEETING ONLY
- GREEN BACKGROUND WITH WHITE LETTERS
- .080" ALUMINUM 5052 H38 SIGN BLANK
- 1" BRACE ON BACK (HORIZONTAL)

72" X 30" SIGN BLANK

72" X 18" SIGN BLANK

- 1" BORDER
- 4" HIGH ARROW

NOTES:
- 1" BRACE ON BACK (HORIZONTAL)
- GREEN BACKGROUND WITH WHITE LETTERS
- USING TYPE XI RETROREFLECTIVE SHEETING ONLY
- .080" ALUMINUM 5052 H38 SIGN BLANK
- HIGHWAY FONT "C" ONLY

HEAVY DUTY 3/4" X .032" STAINLESS STEEL STRAPS ON EACH SIGN BRACKET
HEAVY DUTY 3/4" STAINLESS STEEL BUCKLE FOR .032" STRAP

EXTENSIONS TO BE USED TO MAINTAIN LEVEL WHEN NEEDED

EACH SIGN BRACKET MUST BE ATTACHED WITH TWO SEPARATE STRAPS AND BUCKLES
MOUNT SIGNS AS CLOSE AS POSSIBLE TO VERTICAL STANCHIONS, OR PER CURRENT CALTRANS STANDARD PLANS
SEE SWING ARM BRACKET DETAILS BELOW
MAKE BOTTOM OF SIGN LEVEL UNLESS OTHERWISE INSTRUCTED

SWING ARM BRACKETS

REV.  DATE  DESCRIPTION
△
△
△

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

STANDARD OVERHEAD STREET NAME SIGN

APPROVED BY:  DP Edmuelan
DATE: APRIL 2020  DWG. NO. T-301
EXAMPLE

30" x 18"
SIGN BLANK

NOTE:
THIS TYPE OF SIGN MOUNT IS TO BE USED WHEN SPECIFIED BY THE ENGINEER

DIRECT SIGN MOUNTING
FOR SMALL SIGNS

ELECTROLIER SIGN BRACKET

ELECTROLIER BRACKET

STAINLESS STEEL STRAP

ELECTROLIER POLE

SIGN

WASHER

CAP SCREW

DETAIL G7-A
ELECTROLIER POLE

DOUBLE STRAP BANDING, BAND-IT STRAP, OR APPROVED EQUAL

EXTENSION BRACKET

BRACKET PIVET MUST HAVE A BRONZE BUSHING TO SEPARATE STEEL BOLT FROM ALUMINUM BRACKET

ALUMINUM ANGLE ATTACHED TO SIGN AND BOLTED BETWEEN BACK OF SIGN AND BRACKET

SIGN

BRACKET SIDE VIEW
LETTERED STREETS

CONTRACTOR SHALL VERIFY EXACT STREET ADDRESS FOR PLACEMENT ON STREET NAME SIGNS

GREEN BACKGROUND
STREET ADDRESS
1" BORDER
STANDARD DIMENSIONS

NOTE:

NUMBERED STREETS

CENTERED TO BLOCK NUMBER

TWO TO THREE LETTERS
IN STREET NAME

30" X 18"

30" X 18"

FOUR OR MORE LETTERS
IN STREET NAME

4" 3"
5"
8"
6"
5"
3"

30" X 18"

72" X 18"

Tisdale

Detroit

AT LEAST ONE STREET IS FOUR OR MORE LETTERS

CENTERED TO BLOCK NUMBER

CENTERED TO BLOCK NUMBER

CENTERED TO BLOCK NUMBER

GREEN BACKGROUND WITH WHITE LETTERS
HIGHWAY FONT "C" TYPE ONLY
TYPE XI RETROREFLECTIVE SHEETING ONLY
.080" ALUMINUM 5052 H38 SIGN BLANK

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

OVERHEAD STREET NAME SIGN SPECIFICATIONS

APPROVED BY: DP Edresulan
DATE: APRIL 2020  DWG. NO. T-304
NOTE:
ALL METER PIPES MUST BE AT A HEIGHT OF 34" ABOVE THE GROUND
NOTES:

1. MONUMENT COVERS AND FRAMES SHALL BE FORni "IRON SIDES", TYPE 80-60-03; PHOENIX, TYPE P-2001, OR APPROVED EQUAL. EACH COVER SHALL BE GROUND OR OTHERWISE FINISHED SO THAT IT WILL FIT ITS FRAME WITHOUT ROCKING. BRONZE PLAQUE NOT TO EXTEND MORE THAN 1/4" ABOVE CONCRETE BASE. MONUMENT TO BE SET BY A REGISTERED LAND SURVEYOR OR PROFESSIONAL ENGINEER.

2. UNLESS OTHERWISE SPECIFIED, 4" MIN. CLEARANCE OF CONCRETE OVER WATER MAINS.

3. ALL CONCRETE IN CONFORMANCE WITH SEC. 10 OF STANDARD SPECIFICATIONS.