1. No signs, poles, anchors or fire hydrants shall be constructed within the curb return whenever possible.

2. The center of all fire hydrants shall be placed 2.0' from curb face.

3. The face of all power poles shall be placed 1.5' from the curb face.

4. All signs shall be placed so as to have a 1.0' clearance from the curb face to the edge of the sign.

5. Traffic signals and stop signs shall have priority over all other structures.

6. A 5.0' minimum clearance shall be maintained between all structures including fire hydrants, signs, driveways, trees, anchors, water vaults, street lights, traffic signals or any other structures. Power poles shall have a 7.0' clearance from all other vertically protruding structures when possible.

7. All underground searches and alerts shall be accomplished by the entity placing the object.

8. Encroachment permit accompanied by a drawing is required prior to starting any work in the public right of way.

STANDARD OFFSET REQUIREMENTS

CITY OF VERNON, CALIFORNIA
COMMUNITY SERVICES DEPARTMENT

NOVEMBER 1994

STANDARD PLAN

PV 2133
NOTES:
1. WEAKENED PLANE JOINTS SHALL BE USED AT REGULAR INTERVALS 10 FEET IN WALKS AND 20 FEET IN CURB AND GUTTERS
2. 7/8" EXPANSION JOINT FELT SHALL BE PLACED AT 60" INTERVALS IN CURB, GUTTER AND WALK, AT THE BCR AND ECR, AT DRIVEWAYS, AND AROUND UTILITY POLES IN SIDEWALK AREAS. SIDEWALK AND CURB JOINTS SHALL BE ALIGNED.
3. ALL CONCRETE WORK SHALL BE ONE COURSE. NO TOPPING PERMITTED.
4. ALL CONCRETE WORK SHALL BE ONE COURSE. NO TOPPING PERMITTED.
5. MATCH JOINT LINES WHEN REPLACING EXISTING SIDEWALK.
6. CURB FACE SHALL BE A STEEL TROWEL AND FINE HAIR BROOM FINISH.
7. FLOWLINE OF THE GUTTER SHALL HAVE A 4" SHINER.
8. ALL GUTTERS SHALL BE 2' UNLESS APPROVED BY CITY ENGINEER
9. REMOVE A 2' WIDE BY 14" SECTION OF PAVEMENT ALONG THE EDGE OF THE EXISTING GUTTER. RE-COMPACT BASE OR SUB-GRADE AND CONSTRUCT 8" AC OVER 6" CMB, ASPHALT SHALL BE FLUSH WITH GUTTER.

STANDARD SIDEWALK, CURB AND GUTTER

CITY OF VERNON, CALIFORNIA
COMMUNITY SERVICES DEPARTMENT
FEBRUARY, 2016
CASE 1 — PLAN VIEW
SEE PARKWAY WIDTH TABLE FOR APPROPRIATE CASE

CASE 1 — ELEVATION

CASE 1 — SECTION AA

PARKWAY WIDTH TABLE

<table>
<thead>
<tr>
<th>PARKWAY WIDTH</th>
<th>6&quot; CURB</th>
<th>8&quot; CURB</th>
<th>10&quot; CURB</th>
</tr>
</thead>
<tbody>
<tr>
<td>LESS THAN 8'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8'</td>
<td>2.2&quot;</td>
<td>4.2&quot;</td>
<td>6.2&quot;</td>
</tr>
<tr>
<td>9'</td>
<td>1.4&quot;</td>
<td>3.4&quot;</td>
<td>5.4&quot;</td>
</tr>
<tr>
<td>10'</td>
<td>0.7&quot;</td>
<td>2.7&quot;</td>
<td>4.7&quot;</td>
</tr>
<tr>
<td>11'</td>
<td>0.0</td>
<td>1.9&quot;</td>
<td>3.9&quot;</td>
</tr>
<tr>
<td>12'</td>
<td>0.0</td>
<td>1.2&quot;</td>
<td>3.2&quot;</td>
</tr>
</tbody>
</table>

* REFER TO CASE 2

STANDARD DRIVEWAY

STANDARD PLAN
PV 693
PAGE 1 OF 2
NOTES:
1. USE CLASS 520–C–2500 CEMENT CONCRETE.
2. DRIVEWAY APRON SHALL BE Poured MONOLITHICALLY WITH CURB AND GUTTER. 6" OF C.M.B SHALL BE PLACED UNDER THE DRIVEWAY, CURB AND GUTTER.
3. ADJACENT SIDEWALKS 5" ON EITHER END OF DRIVEWAY SHALL BE Poured 8" THICK
4. 10" DIAM. PIPE BARRIER MIN. SCHEDULE 30 PER CITY STD. V2122 SHALL BE INSTALLED AS NEEDED TO PROTECT IMPROVEMENTS.
5. ALL CONCRETE SHALL BE ONE COURSE, STEEL TROWEL & MEDIUM HAIR BROOM FINISH. NO TOPPING PERMITTED.
6. DRIVEWAYS MAY BE OPEN TO TRAFFIC:
   A. IN 48 HOURS WITH HIGH STRENGTH CEMENT
   B. IN 5 DAYS WITH STANDARD CLASS 520–C–2500 MIX.
7. ENDS OF DRIVEWAYS TO BE NOT LESS THAN 5' FROM NEAREST FIRE HYDRANT, METER BOX OR VALVE AND 12' FROM UTILITY POLE.
8. 1/2" EXPANSION JOINT FELT SHALL BE PLACED ALONG THE TX.
9. DRIVEWAY ENTRANCE WIDTH (W) SHALL BE:
   A. 25' MIN FOR NON–TRUCK USE.
   B. 40' MIN FOR TRUCK USE.
10. 30" CONCRETE OR MASONRY WALL PER STD. V2122 OR VARIABLE HEIGHT CURB IF WROUGHT IRON FENCE OR LANDSCAPING IS INSTALLED.

STANDARD DRIVEWAY

FINAL PLAN

PV 693

PAGE 2 OF 2
NOTES:

1. FLOOR OF BOX TO BE TROELED SMOOTH.
2. WHEN THE TOE OF SLOPE IS WITHIN THE R/W INLET TYPE I BEGINS AT THE TOE RATHER THAN AT THE R/W LINE.
3. FOR OPEN DITCH APPROACH (TYPE II) THE 2" EXTENSION IS NOT REQUIRED WHEN THE BACK OF WALK IS 2" OR MORE FROM THE R/W LINE.
4. TOP OF INLET STRUCTURE (TYPE I & II) TO BE FLUSH WITH ADJACENT SURFACE WHERE PRACTICABLE.
5. A HEADED STEEL STUD 5/8" X 3/4" WITH HEAD D=1" ATTACHED BY A FULL PENETRATION BUTT WELD MAY BE USED AS AN ALTERNATE ANCHOR.
6. THE 3" LEG OF THE INTERIOR ANCHORS SHALL BE PARALLEL TO THE TOP OF SIDEWALK.
NOTES:

1. MATERIALS FOR TYPE 1 DRAINS SHALL BE STEEL, CAST IRON OR P.V.C. MATERIALS FOR TYPE 2 DRAINS SHALL BE STEEL OR CAST IRON ONLY.

2. REFERENCE IS MADE TO STANDARD PLAN PV 582 - STANDARD SIDEWALK, CURB AND GUTTER.
NOTES:

1. TREE SHALL BE IN 24" X 24" BOX AND HAVE MINIMUM DIMENSIONS OF 8 FT HIGH, 3 FT WIDE AT THE HEAD AND A TRUNK OF 2 INCH.

2. TREE SPACING 100' OR PER CITY ENGINEER'S DIRECTION.

3. PLANT 25' MIN. FROM B.C.R. AT INTERSECTIONS.

4. PLANT 25' MIN. FROM EDGE OF DRIVE APPROACH.

5. PLANT 10' MIN. FROM UTILITY AND SEWER LINES.

6. PLANT 21' MIN. FROM STREET LIGHT STANDARDS.

7. PLANT 15' MIN. FROM POWER POLES.

8. PLANT 10' MIN. FROM FIRE HYDRANTS.

9. ONE YEAR WARRANTY FOR LOSS OR DAMAGE REQUIRED.
TOP OF COVER

BOTTOM OF COVER

SECTION A-A

FRAME DETAIL

SECTION THRU FRAME

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

24" (610 mm) MANHOLE FRAME AND COVER

STANDARD PLAN 630-3

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE PUBLIC WORKS STANDARDS INC.
GREENBOOK COMMITTEE
**EYEBOLT AND ALTERNATE ANCHOR DETAIL FOR FACE PLATE**

Count 0.5" x 8" Stud shall be electrically welded. A Nelson H4F Shear Connector or equal shall be used.

<table>
<thead>
<tr>
<th>Length of Curb Opening</th>
<th>No. of Anchors</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'-6&quot; or less</td>
<td>2</td>
</tr>
<tr>
<td>7'-0&quot;</td>
<td>3</td>
</tr>
<tr>
<td>10'-0&quot;</td>
<td>4</td>
</tr>
<tr>
<td>14'-0&quot;</td>
<td>5</td>
</tr>
<tr>
<td>21'-0&quot;</td>
<td>7</td>
</tr>
</tbody>
</table>
DETAIL A

PROTECTION BAR DETAIL

COUNTY OF ORANGE, OC PUBLIC WORKS DEPARTMENT

Revision: April 2013

Approved Ignacio G. Ochoa, Chief Engineer

COUNTY OF ORANGE, OC PUBLIC WORKS DEPARTMENT

MISCELLANEOUS CURB INLET DETAILS AND NOTES

STD. PLAN

1306

SHT. 2 OF 3
NOTES:

1. One eyebolt shall be placed 12 inches from each end of face plate.

2. Eyebolts shall be symmetrically spaced in the curb opening so that the unsupported span is not more than 4 feet; support bolts, when used, should be considered as eyebolts in the spacing.

3. One coupling shall be placed 6 inches to the right or left of each eyebolt with the exception of the last eyebolt. Couplings shall be threaded to facilitate removal of protection bar.

4. Galvanized steel support bolts shall be installed when length of curb opening exceeds 7-feet and shall be spaced at not more than 7 feet on-center and not less than 5 feet on-center.

5. Face plate anchors shall be uniformly spaced not to exceed 4 feet between centers and shall be placed 4½ inches from each end of the face plate. An anchor shall be placed over each W-beam in a grating inlet.

6. A coupling may be omitted provided the protection bar is removable after installation.

7. All metal shall be galvanized after fabrication.

8. Support bolts, eyebolts, and anchors may be attached by a full penetration butt weld as an alternate.

9. Place a ¾-inch dia. protection bar horizontally across the entire length of the curb opening.

10. See Std. Plan 1307 for additional miscellaneous inlet details and notes.

11. Curb section shall match adjacent curb type.

12. Curb opening shall conform to curb alignment.

13. Height of curb opening will vary with the type of curb and the depth of the local depression (Std. Plan 1308).

14. The angle as shown on detail A shall be allowed only when on approved plans.
NOTES:

1. NEW PAVEMENT THICKNESS SHALL BE 1 INCH BELOW THE EXISTING TO A MAXIMUM OF 10 INCHES, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
3. FINISHED ASPHALT CONCRETE SHALL BE C2–PG70–10, 2" THICK, UNIFORM COLD PANE MINIMUM 1 FOOT FROM SAWCUT LINE OR PER CITY ENGINEER’S APPROVAL, AND PAVED FLUSH WITH ADJACENT PAVEMENT WITHIN SAME DAY AS NEW A.C. PLACEMENT.
4. DAMAGED AND UNDERMINED PAVEMENT SHALL BE REMOVED BY SAW CUTTING FULL DEPTH PARALLEL TO TRENCH AND REPLACED WITH ASPHALT CONCRETE PER ABOVE AT NO COST TO THE CITY.
5. FOR CONCRETE STREET/WIDE THE WIDTH OF CONCRETE TO BE REPLACED SHALL BE FROM COLD JOINT LINE TO COLD JOINT LINE OR APPROVED TRENCH WIDTH WITH CONCRETE DOWELS (MIN. #4 BARS) PLACED EVERY 3 FT STAGGERED.
6. IF THE SAWCUT LINE IS 3 FEET OR LESS FROM GUTTER LINE OR COLD JOINT THE A.C. PAVEMENT OR CONCRETE SHALL BE REMOVED TO GUTTER LINE OR COLD JOINT.
7. ALL TRAFFIC SIGNAL LOOP, DOTS, LANE LINES, PEDESTRIAN LINES, AND OTHER PAINTED MARKINGS ARE TO BE REPLACED IN KIND BY THE CONTRACTOR.
8. AN ENCROachment PERMIT SHALL BE OBTAINED FROM THE CITY OF VERNON COMMUNITY SERVICES AND WATER DEPARTMENT PRIOR TO ANY ENCROachment OR CONSTRUCTION WITHIN A CITY OF VERNON RIGHT–OF–WAY.
9. THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT TICKET AND OBTAIN A CALIFORNIA COMMISION OF OCCUPATIONAL SAFETY AND HEALTH (OSHA) PERMIT IF THE TRENCH IS GREATER THAN 5 FEET DEEP PRIOR TO THE COMMENCEMENT OF WORK.
10. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND MAINTAINING ALL TRAFFIC CONTROLS AND SIGNAGE PER THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) OR THE CALIFORNIA JOINT UTILITY TRAFFIC CONTROL MANUAL (CUUTCM) DURING ENTIRE PROJECT.
11. NO STOCK PILING OF CONSTRUCTION MATERIALS OR EQUIPMENT SHALL BE ALLOWED OVER NIGHT IN THE PUBLIC RIGHT–OF–WAY UNLESS APPROVED BY THE CITY ENGINEER.
12. ALL NECESSARY STEEL PLATES SHALL BE PROVIDED AT THE JOB SITE PRIOR TO ANY REMOVALS. PLATES SHALL BE SKID RESISTANT, RECESSSED AND SECURED FROM ANY MOVEMENT.
13. ALL TRENCHES SHALL BE BACKFILLED WITH 1/2 SACK SAND SLURRY UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
14. THE CONSTRUCTION SHALL COMPLY WITH CITY STANDARDS AND THE GREEN BOOK.

TYPICAL TRENCH PAVING SECTION

STANDARD PLAN V2264
CITY OF VERNON, CALIFORNIA COMMUNITY SERVICES & WATER DEPARTMENT
FEBRUARY 2013
SHEET 1 OF 2
NOTES:

1. NEW PAVEMENT THICKNESS SHALL BE 1 INCH BELOW THE EXISTING TO A MAXIMUM OF 10 INCHES, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

2. ASPHALT CONCRETE SHALL BE B--PG70--10. TACK COAT SHALL BE APPLIED PER LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK).

3. FINISHED ASPHALT CONCRETE SHALL BE C2--PG70--10, 2" THICK, UNIFORM COLD PLANE MINIMUM 1 FOOT FROM SAWCUT LINE OR PER CITY ENGINEER'S APPROVAL AND PAVED FLUSH WITH ADJACENT PAVEMENT WITHIN SAME DAY AS NEW A.C. PLACEMENT.

4. DAMAGED AND UNDERMINED PAVEMENT SHALL BE REMOVED BY SAW CUTTING FULL DEPTH PARALLEL TO TRENCH AND REPLACED WITH ASPHALT CONCRETE PER ABOVE AT NO COST TO THE CITY.

5. FOR CONCRETE STREETS THE WIDTH OF CONCRETE TO BE REPLACED SHALL EITHER BE FROM COLD JOINT LINE TO COLD JOINT LINE OR APPROVED TRENCH WIDTH WITH CONCRETE DOWELS (MIN. #4 BARS) PLACED EVERY 3 FT STAGGERED.

6. IF THE SAWCUT LINE IS 3 FEET OR LESS FROM GUTTER LINE OR COLD JOINT THE A.C. PAVEMENT OR CONCRETE SHALL BE REMOVED TO GUTTER LINE OR COLD JOINT.

7. ALL TRAFFIC SIGNAL LOOP, DOTS, LANE LINES, PEDESTRIAN LINES, AND OTHER PAINTED MARKINGS ARE TO BE REPLACED IN KIND BY THE CONTRACTOR.

8. AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE CITY OF VERNON COMMUNITY SERVICES AND WATER DEPARTMENT PRIOR TO ANY ENCROACHMENT OR CONSTRUCTION WITHIN A CITY OF VERNON RIGHT-OF-WAY.

9. THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT TICKET AND OBTAIN A CALIFORNIA COMMISSION OF OCCUPATIONAL SAFETY AND HEALTH (DOSH) PERMIT IF THE TRENCH IS GREATER THAN 5 FEET DEEP PRIOR TO THE COMMENCEMENT OF WORK.

10. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND MAINTAINING ALL TRAFFIC CONTROLS AND SIGNAGE PER THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) OR THE CALIFORNIA JOINT UTILITY TRAFFIC CONTROL MANUAL (C--JUTCM) DURING ENTIRE PROJECT.

11. NO STOCK PILING OF CONSTRUCTION MATERIALS OR EQUIPMENT SHALL BE ALLOWED OVER NIGHT IN THE PUBLIC RIGHT-OF-WAY UNLESS APPROVED BY THE CITY ENGINEER.

12. ALL NECESSARY STEEL PLATES SHALL BE PROVIDED AT THE JOB SITE PRIOR TO ANY REMOVALS. PLATES SHALL BE SKID RESISTANT, RECESSED AND SECURED FROM ANY MOVEMENT.

13. ALL TRENCHES SHALL BE BACKFILLED WITH 1/2 SACK SAND SLURRY UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

14. THE CONSTRUCTION SHALL COMPLY WITH CITY STANDARDS AND THE GREEN BOOK.

TYPICAL TRENCH PAVING SECTION FOR SEWER LATERAL

STANDARD PLAN V2264

CITY OF VERNON, CALIFORNIA
COMMUNITY SERVICES & WATER DEPARTMENT
FEBRUARY 2013

SHEET 2 OF 2