NOTE:
GUARDSHACK SHALL BE:
1. 30" CLEAR FROM ANY DRIVEWAY APRON AND 18" CLEAR FROM FACE OF CURB.
2. COLOR SHALL BE FOREST GREEN SPFC.
CLEARANCE: 2" FROM PAVING AND HEADER BOARD, 6" FROM FACE OF WALL OR FENCE, AND 12" FROM FACE OF BUILDING.

POP-UP SPRAY HEAD OR ROTOR HEAD

1" IN LAWN AREAS, 1 1/2" IN PLANTING AREAS

FINISH GRADE

6' MIN TURF SHRUB
12" STRUB

ELBOWS AND NIPPLES SHALL BE SCHEDULE 40 PVC DOUBLE SWING JOINTS, TYP,

NIPPLES PIPE SHALL BE SCHEDULE 80 LENGTH AS REQUIRED

TEFLON TAPE ALL THREADED CONNECTIONS, 3 WRAP MINIMUM

LATERAL LINE WITH SCHEDULE 40 PVC FITTING
NOTES:

1. LOCATE Q.C.V. ADJACENT TO R.C.V. IN GROUND COVER AREAS WHERE POSSIBLE.

2. LOCATE Q.C.V. WITHIN LOCKING CIRCULAR PLASTIC BOX. INSTALL FLUSH WITH FINISH GRADE IN LAWN AREAS AND 2" ABOVE FINISHED GRADE IN SHRUB/GROUND COVER AREAS.

3. LOCATE 12" AWAY FROM ADJACENT BUILDINGS OR FENCES. LOCATE MIN. 6" AWAY FROM ADJACENT SIDEWALKS CURBS, OR HEADERBOARDS.
NOTES:

1. PLACE VALVES 12” FROM ADJACENT SIDEWALK, CURB, HEADERBOARD, ETC.
2. VALVE NUMBER ON BOX LID. ENGRAVED OR BRANDED.
3. PLACE SHORT SIDE OF VALVE BOX PARALLEL TO ADJACENT WALK, CURB, ETC.
4. GROUP VALVE BOXES AND LOCATE IN TURF AREAS WHERE POSSIBLE.
5. TAPE AND BUNDLE CONTROL WIRE EVERY 10 FEET. ALLOW SLACK FOR CONTRACTION. EXPANSION LOOP @ 90°.
6. LOOP A MINIMUM OF 3 FEET OF EXTRA CONTROL WIRE IN EACH VALVE BOX; BOTH CONTROL WIRE AND GROUND WIRE.
7. RUN 2 EXTRA WIRES TO LAST VALVES AT EACH END OF PROJECT. LOOPED INTO EVERY BOX. THESE SPARES ARE TO BE A DIFFERENT COLOR FROM THE ONES IN USE.
8. ALL VALVE CONTROL WIRE SHALL BE COPPER UL APPROVED FOR DIRECT BURIAL IN GROUND.
9. LIMIT OF ONE RCV PER VALVE BOX.
10. THOROUGHLY FLUSH MAIN LINE BEFORE INSTALLING VALVE.
NOTES:
1. MIN. 30" DEPTH REQUIRED FOR BOTH MAINLINES AND LATERALS AT MAIN ENTRY
   DRIVEWAYS OR TRUCK ENTRY DRIVEWAYS.
2. ALL MAINLINE (SUPPLY LINE) PIPE 3" IN DIA. AND LESS TO BE SCH. 40 PVC,
   IF LARGER THAN 3" IN DIA. PIPE TO BE AWWA C-900 CLASS 200 PIPE.
3. ALL LATERAL LINES TO BE MIN. SCH. 40 PVC PIPE.
4. ALL MAINLINES AND LATERALS TO BE INSTALLED IN SCH. 40 PVC SLEEving UNDER
   ALL PAVEMENT MATERIAL (NON-LANDSCAPED). EXTEND SLEEVE 6" BEYOND EDGE
   OF PAVEMENT OR CURB.
5. COMPLETE MAIN LINE FLUSHING PRIOR TO VALVE INSTALLATION. CITY ENGINEER
   TO BE PRESENT DURING FLUSHING.
6. STATION WIRE RUNS ALONG MAIN LINE SHALL INCLUDE A 1" SERVICE LOOP AT ALL TEEs AND 90'S.
7. NO VERTICAL STACKINGS OF IRRIGATION. INSTALL 4" MIN. APART SIDE BY SIDE.

CITY OF REDWOOD CITY
ENGINEERING AND TRANSPORTATION
IRRIGATION TRENCH BACKFILL

STANDARD DETAIL
Z - 9
SHT 1 OF 1
PLANT QUANTITY CHART  (For Groundcover)

<table>
<thead>
<tr>
<th>SPACING 'A'</th>
<th>SPACING 'B'</th>
<th>NO. OF PLANTS/SQ. FOOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot; O.C.</td>
<td>5.2&quot;</td>
<td>4.60</td>
</tr>
<tr>
<td>8&quot; O.C.</td>
<td>6.9&quot;</td>
<td>2.60</td>
</tr>
<tr>
<td>9&quot; O.C.</td>
<td>7.8&quot;</td>
<td>1.78</td>
</tr>
<tr>
<td>10&quot; O.C.</td>
<td>8.7&quot;</td>
<td>1.66</td>
</tr>
<tr>
<td>12&quot; O.C.</td>
<td>10.4&quot;</td>
<td>1.15</td>
</tr>
<tr>
<td>15&quot; O.C.</td>
<td>13.0&quot;</td>
<td>.74</td>
</tr>
<tr>
<td>18&quot; O.C.</td>
<td>15.6&quot;</td>
<td>.51</td>
</tr>
<tr>
<td>24&quot; O.C.</td>
<td>20.8&quot;</td>
<td>.29</td>
</tr>
<tr>
<td>30&quot; O.C.</td>
<td>26.0&quot;</td>
<td>.19</td>
</tr>
<tr>
<td>36&quot; O.C.</td>
<td>30.0&quot;</td>
<td>.12</td>
</tr>
</tbody>
</table>

See Groundcover plant key for maximum triangular spacing 'A'. This chart is to be used to determine number of groundcover plants required in a given area.

PLANT SPACING CHART

For use when plants are spaced equally from each other as in all groundcover plantings and massed shrub plantings.

GROUNDCOVER

3"–6" Layer Bark Chip Mulch  
(Per Plan)  
6" Layer Amended Topsoil  
Natural Subgrade  
(See Specs.)  

NOT TO SCALE
NOTES:
1. Install header boards to divide turf from ground cover areas.
2. All stakes shall be installed on ground cover side of header except on curved sections.
SHRUB PLANTING ON SLOPES 3:1

Note: Plant Pit To Be Minimum 2 x Width

SHRUB PLANTING ON SLOPES LESS THAN 3:1
NOTES:

1. Plant pit to be min. 2 times the diameter of the rootball and no deeper than original container.
2. In lawn areas, edge of sod/seed to be outside of watering berm (2' min. diameter).
3. Plant trees no closer than 5' from water services, 5' from sewer laterals, 3' from walkways, 5' from driveways and nearest utility.
4. Stakes shall be pounded 24" minimum into undisturbed soil.
5. Stakes shall be installed to protect from prevailing wind. One stake may be required and located upwind of tree.
NOTES:
1. Plant pit to be min. 2 times the diameter of the rootball and no deeper than original container.
2. In lawn areas, edge of sodseeds to be outside of rooting ball (2 min. diameter).
3. Plant trees not to be closer than 5' from water services, 5' from sewer laterals, center in Planting Strip.
4. Stakes shall be poured 24" minimum into undisturbed soil.
5. Stakes shall be installed to protect from prevailing wind. One stake may be required and shall be located upwind of tree.
6. Grade and tree guards required for street trees in Downtown. See City Landscape Architect.
Existing Tree
To Be Protected

2x4x8 Around
Entire Perimeter

2" Wide Nylon
Strapping

48" Height Orange
Snow Fencing At
Tree Drip Line Or
Around Fence
(Per Plan)

NOTE:
1. Provide 2x4x8 "S 12" O.C.
   (Measured at the ground plane),
   around perimeter of tree trunk.

2. Provide 2" nylon strap and nail
   to each 2x4 with 1" length
   roofing nail for stability.

3. Provide 48" height orange
   snow fence.

4. Do not nail protective fence
   directly into any portion of
   the tree.

5. Tree protection fence is to be
   installed prior to proceeding
   with demolition.
** South Bay Foundry Inc. can be reached at 1-(209) 367-1940.

** * Larger square grates may be approved by the City Landscape Architect.

---

**NOTE TO SCALE**

CITY OF REDWOOD CITY
ENGINEERING AND TRANSPORTATION

TREE WELL DETAIL

Z - 15
SHT 1 OF 2

DATE: 06/23/14

Redwood City, California
Founded 1857

TREE WELL WITH IRON GRATE
AND STEEL FRAME ASSEMBLY

For Private Property
Irrigation Of Street Tree,
Water Supply Line Shall Be
Clear Of Public Street
CONCRETE FOOTING DETAIL

VENT PIPE DETAIL

ADA ACCESS DETAIL

* South Bay Foundry Inc. can be reached at 1-(209) 367-1940
NOTE: 1. ADD TRACEABLE WIRE (14GA. AWG) TO SUPPLY LINE. DAYLIGHT AT METER AND FOUNTAIN.
SOIL

FILTER FABRIC
WRAP, FWFF67

GRAVEL

2" PVC DRAIN FROM DRINKING FOUNTAIN

FLO-WELL
NDS # FWAS24

PROVIDE CLEANOUT WITH THREADED CAP IN IT'S OWN CHRISTY B9 BOX (OR EQUAL) NEXT TO FOUNTAIN

PLAN

2" PVC DRAINLINE FROM DRINKING FOUNTAIN TO FLOWELL

SECTION

SLOPE 1% MIN.

NOTE: 1. MUST BE INSTALLED 10' AWAY FROM STRUCTURE OR FOUNDATION.

CITY OF REDWOOD CITY
ENGINEERING AND TRANSPORTATION

DRINKING FOUNTAIN
SUMP

STANDARD DETAIL
Z - 16
SHT 2 OF 2

DATE: 06/23/14

NOT TO SCALE
NOTES:
1. TRENCHES: PLAINWELL 60" ALUMINUM BLK AS MANUFACTURED BY LANDSCAPE FORMS.
2. WASTE RECEPTACLES AND RECYCLERS: BLK SIDE OPENING AND LOAD BAND: AS MANUFACTURED BY LANDSCAPE FORMS.
3. BIKE RACKS: INVERTED WITH 2" ROUND STAINLESS STEEL TUBING, IN GROUND MOUNT.
4. ALL FURNITURE AND ABOVE GROUND UTILITIES PLACEMENT TO BE COORDINATED WITH THE CITY OF REDWOOD CITY PLANNING & HOUSING SERVICES.

PEDESTRIAN SCALE LIGHTS POLES CENTERED ON SCREW JOINT, SEE DETAIL Z-18

TREES 24" BOX, SPECIES TO BE DETERMINED BY CITY OF REDWOOD CITY PLANNING & HOUSING SERVICES.

CROSSWALKS; CONTINENTAL STRIPING DESIGN 24" WIDE STRIPES SEPARATED BY 24".

WHEEL CHAIR RAMPS; CITY STANDARD DESIGN WITH YELLOW COLOR TRUNCATED DOMES.

PEDESTRIAN LIGHTS PLACED EQUAL DISTANCE SPACING BETWEEN TREE WELLS.

TREE GRATES AND GUARDS, SEE DETAIL Z-19 AND DETAIL Z-20

TREE WELLS MIN 35° O.C.
PAINT SPECIFICATION
ALL CAST IRON STEEL LIGHT POLE PARTS ARE TO BE FACTORY POWDER COATED "RAL #9017" TRAFFIC BLACK

22C GOLD FINAL
#199 ACRYLIC GLOBE
24C BRASS FILIGREE RING
85 W. QL INDUCTION LAMP, 120 V.
GENERATOR & LAMP ASSEMBLY
21C/8" GLOBE FITTER
19C CAPITAL

11 GA., 5 3/4" BASE DIA.,
STEEL FLUTED TAPERED POLE
0.14"/FT. TAPER

(4) 1 1/4" SLOTS ACCEPTING:
(4) 3/4" x 24" A307 GALVANIZED
ANCHOR BOLTS

1" A36 STEEL PLATE
9" Ø BOLT CIRCLE

BASE PLATE DETAIL
SCALE: 2X

APPLY SILICONE SEALANT
AT INSTALLATION

C18 SPLIT CAST IRON BASE
WITH REMOVABLE ACCESS DOOR

DISTRIBUTOR:
CONTRACTOR:
REPRESENTATIVE: ASSOCIATED LIGHTING REPRESENTATIVES
SPECIFIED BY:

CITY OF REDWOOD CITY
ENGINEERING AND TRANSPORTATION
EL CAMINO REAL
PEDESTRIAL LIGHT

Z - 18
SHT 1 OF 1

DATE: 1/1/18
NOT TO SCALE

CITY OF REDWOOD CITY
ENGINEERING AND TRANSPORTATION

SMALL BACKFLOW DEVICE
TREE ENCLOSURE

DATE: 11/25/19
NOTES:
1. ORDER 1 EA. SBF ID# 00080 "BOLT DOWN KIT" FOR EVERY 5 TREE GRATE FRAMES TO BE INSTALLED. (EACH KIT INCLUDES #7 DRILL BIT, T-30 TORX® DRIVER BIT, AND 20 TORX® 1-4-20 X 1-12" SCREWS FOR 5 TREE GRATE FRAMES.)
2. INSTALLER TO DRILL FRAME AND BOLT DOWN BLOCK IN FIELD.

SECTION A-A

SECTION B-B

SOUTH BAY FOUNDRY
944 ABRAHAM SANTEE, CA 92071, USA

NOTE: FOR EXISTING SLAB INSTALLATION

SOUTH BAY FOUNDRY
944 ABRAHAM SANTEE, CA 92071, USA

NOT TO SCALE
CITY OF REDWOOD CITY
ENGINEERING AND TRANSPORTATION
EL CAMINO REAL
STREET TREE PLANTING
(SIDEWALK)

DATE: 11/25/19

(3) RUBBER TIES AT TOP OF TREE GUARD BAND. TIES SHALL BE SPACED EQUAL DISTANCE AROUND CIRCUMFERENCE OF TREE GUARD BAND.

TREE GUARD ATTACHMENT, INSTALL PER MFR’S SPECS.

TREE GUARD, SEE DETAIL Z-19

TREE GRATE, SEE DETAIL Z-20

TREE GRATE FRAME, SEE DETAIL Z-20

PEDESTRIAN CONCRETE PAVING PER CITY’S STANDARD

AMENDED SOIL MIX PER SOIL AND PLANT LAB REPORT

UNDISTURBED NATIVE SOIL

CONCRETE CURB/GUTTER

TREE BUBBLER, SEE IRRIGATION PLAN

GRAVEL MULCH

TREE TIES

PLAN VIEW

ROOT BALL

DATE: 11/25/19

STREET TREE PLANTING
SHT 1 OF 1

Z - 21

NOT TO SCALE