**L-0.0 PERMIT COVER SHEET**

**NEEDS.**

ADOPTED STATE OF CALIFORNIA MODEL WATER EFFICIENT LANDSCAPE ORDINANCE ("WELO"). COMPLIANCE

1. PROVIDE SEPARATE TREE VALVES SO THE TREE VALVE CAN BE LEFT ON DURING PERIODS OF DROUGHT.

7. ALL AREAS UTILIZE DRIP IRRIGATION ASSEMBLIES TO ENABLE THE SCALING OF PLANS.

THE IRRIGATION SYSTEM IS DESIGNED TO COMPLY WITH THE PRESCRIPTIVE COMPLIANCE OPTION OF WELO:

1. MEDIUM WATER USE PLANTINGS DO NOT EXCEED 25 PERCENT OF THE TOTAL PLANTED AND IRRIGATED.

H. SEE SONOMA-MARIN SAVING WATER PARTNERSHIP WEBSITE FOR FURTHER INFORMATION AND FAQ:

F. RAINWATER AND STORMWATER ELEMENTS SHOULD BE REVIEWED WITH SITE DESIGN TEAM AND

E. PLANTS ARE GROUPED IN IRRIGATION ZONES ("HYDROZONES") BASED ON SIMILAR WATER NEEDS AS

B. CONVENTIONAL TURF IS NOT PROVIDED DUE TO HIGH WATER USE.

SOIL MANAGEMENT REQUIREMENTS

THE PLANTINGS ARE DESIGNED TO COMPLY WITH THE APPENDIX D "PRESCRIPTIVE COMPLIANCE" OPTION

2. LOW WATER USE OR CLIMATE-ADAPTED SPECIES THAT REQUIRE LITTLE OR NO SUMMER WATER ARE

4. PLANS ARE INTENDED FOR USE ON SITES WITH LESS THAN 8% SLOPES.

2. AFTER PLANTING, A MINIMUM THREE INCH LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL

GROWTH AND TO PREVENT RUNOFF.

SENSOR DATA.

I HAVE COMPLIED WITH THE REQUIREMENTS OF THE PRESCRIPTIVE COMPLIANCE OPTION OF THE

APPLICANT NAME (PLEASE PRINT)

POST-CONSTRUCTION REQUIREMENTS

STEP 5: POST-CONSTRUCTION CERTIFICATION

TO BE SIGNED BY APPLICANT

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE PRESCRIPTIVE COMPLIANCE OPTION OF THE

WATER EFFICIENT LANDSCAPE ORDINANCE

APPLICANT NAME (PLEASE PRINT)

STEP 6: WELO FINAL INSPECTION CHECKLIST

YES NO NA

1. ALL PLANTS INSTALLED ARE LISTED ON PLANS OR ON APPROVED PLANT SUBSTITUTION LIST

2. 75% OR MORE OF THE PLANTS ARE LOW WATER USE PER WILDLIFE REGION 1

3. NO STANDARD HIGH WATER USE TURF HAS BEEN INSTALLED

4. COMPOST HAS BEEN APPLIED AT A RATE OF AT LEAST FOUR (4) CUBIC YARDS PER ONE THOUSAND (1000) SQUARE FEET AREA OF LAWN ASSOCIATED TO A DEPTH OF SIX (6) INCHES INTO THE LANDSCAPE AREA

5. A TREE (3) INCH DIA. ORGANIC MULCH HAS BEEN APPLIED OVER ALL SHRUB PLANTING AREAS

IRRIGATION

1. NO SPRAY IRRIGATION IS USED

2. STATIC AND DYNAMIC WATER PRESSURE NOTED AT THE POINT OF CONNECTION

3. WEATHER BASED SELF ADJUSTING CONTROLLER WITH NON-VOLATILE MEMORY IS INSTALLED PER MANUFACTURER SPECIFICATIONS

4. RAINSENSOR AND WEATHER SENSOR ARE REQUIRED FOR WEATHER DATA; INSTALL PER MANUFACTURER SPECIFICATION AS FUNCTIONING

5. CONTROLLER IS ADPERMINIESTY PROGRAMMED

6. CONTROLLER CHART IS PLACED IN CONTROLLER HOUSING OR ADJACENT TO CONTROLLER

7. CONTROLLER CHART CLEARLY INDICATES JULY IRRIGATION SCHEDULE FOR EACH ZONE AND INCLUDES PROGRAMS, DAYS PER WEEK, START TIME, AND RUN TIMES

8. IRRIGATION SYSTEM SHUT OFF VALVE INSTALLED

9. IRRIGATION SYSTEM SHUT OFF VALVE LOCATION IS AS SHOWN ON PLAN OR ON AS-BUILT

10. IRRIGATION CONTROLLER RETAIL COSTS ARE SHOWN ON AS-BUILT

11. EQUIPMENT INSTALLED IS AS SHOWN ON APPROVED IRRIGATION EQUIPMENT LIST OR EQUAL.

GENERAL

1. CHANGES ARE NOTED ON AS-BUILT PLAN AND IS PROVIDED AT TIME OF INSPECTION

SYMBOLS & DEFINITIONS

1. CLIMATE ADAPTIVE: NON NATIVE PLANTS WHICH ARE ADAPTED TO LOCAL MICROCLIMATES.

2. IMAGINE PLANTS CALIFORNIA IN LANDSCAPE DESIGN CONSULTANTS TACKLE ANY AND EVERY LANDSCAPE DESIGN CHALLENGE, TOGETHER WITH A CLUSTER OF TALENTED DESIGN CONSULTANTS THEY CAN TAKE ON THE MOST COMPLEX PROJECTS AND WILL

3. LOCAL WATER PURVEYOR: __________________________________________________

WATER SUPPLY TYPE :  _____________________________________________________

LOCAL WATER PURVEYOR: __________________________________________________

L-0.0 PERMIT COVER SHEET  RW-1.0

GW-1.0

OPTIONAL PLANS

L-0.0 PERMIT COVER SHEET

L-0.0 LANDSCAPE DESIGN PLAN

L-0.0 IRRIGATION DESIGN PLAN

L-0.0 GRADING PLAN

L-0.0 MATERIALS PLAN

L-0.0 CUTS AND FILLS PLAN

L-0.0 PLANTING DETAILS

L-0.0陸 PLANTING DETAILS

L-0.0 LANDSCAPE PLAN

L-0.0 GRADING PLAN

L-0.0 MATERIALS PLAN

L-0.0 LANDSCAPE PLAN

L-0.0 GRADING PLAN

L-0.0 MATERIALS PLAN

L-0.0 LANDSCAPE PLAN

L-0.0 GRADING PLAN

AGENCY STAMP

REFERENCE

TITLE 23 CHAPTER 2.7 MWELO: THE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE

MWELO SECTIONS:

491 L.0 AND 4.9 U.0. APPLICATION

491 DISTRIBUTION

(b) [H. PROJECT INFORMATION

(b) [H. LANDSCAPE DOCUMENTATION PACKAGE

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN

(b) [H. IRRIGATION DESIGN PLAN
REVIEW IRRIGATION SHEETS AND INSTALL SLEEVES UNDER PAVING SURFACES IN THEIR CORRECT LOCATION.

MEASURE ENTIRE FRONT YARD AREA. SUBTRACT HARDSCAPE AREAS TO GET THE TOTAL SQUARE FEET OF PLANTED AND IRRIGATED AREA. ENTER THIS IN THE PLANT WATER USE TABLE.

INDICATE ANY SUBSTITUTIONS TO THE PLANTINGS BY CROSSING OUT THE LISTED PLANTS AND WRITING THE SUBSTITUTION BELOW IN RED INK. MAKE SURE IN THE LEGEND, CIRCLE THE HARDSCAPE MATERIALS YOU WILL BE USING AND ON DETAIL SHEETS L3.0, L3.1 & L3.2.

IF NEEDED USE A RED PEN TO ADJUST THE LAYOUT OF DRIVEWAY, PATHS AND PLANTING AREAS TO FIT YOUR YARD.

ADD ANY EXISTING TREES IN RED ON THE PLAN. ADJUST TREE LOCATIONS IF NEEDED TO FIT YOUR SITE.

ESTABLISH DRIVEWAY STRIP PLANTINGS IN WINTER WITH OCCASIONAL HAND WATERING.

MOVE TO THE IRRIGATION PLAN AND FILL IN THE AREAS INDICATED ON THAT SHEET.

REFER TO PLANTING DETAILS ON SHEET L3.2.

THE GARDEN IS DESIGNED TO CAPTURE AND INFILTRATE SOME STORM WATER ON SITE. WHEN THE FLOW IS DIRECTED TO A SWALE OR RAIN GARDEN, IT MEANS TO SPREAD THE FLOW TO SHEETFLOW OVER PLANTING AREAS AND NO OVERFLOW DEVICE IS NEEDED.

*SEE SHEETS L10.0-2 FOR MATERIALS OPTIONS.

STORM WATER ELEMENTS (OPTIONAL):

1. STORM DRAIN PIPE LF 20
2. STORM DRAINAGE ACROSS OR UNDER PATH, EA 1
3. CONCRETE SF 420
4. AGGREGATE PATH, CHOOSE FROM DETAILS 5 - 7 ON SHEET L3.1
5. CONCRETE (POURED IN PLACE)
6. GROUNDCOVER
7. PERENNIALS 0-2' SUN
8. MEADOW
9. PAVEMENT (PARK STRIP)
10. DECORATIVE GRAVEL (FREE DRAINING)
11. MONITORING DEVICES

OPTIONAL DECORATIVE GRAVEL, MULCH WITH OPTIONAL NON-IRRIGATED PLANTING

*SEE WATER PLANT LIST FOR PLANT SUBSTITUTIONS AND SHADY ALTERNATIVES. AVAILABLE FROM SONOMA-MARIN SAVING WATER PARTNERSHIP: http://www.savingwaterpartnership.org

PLANTING NOTES:

- STORM DRAIN PIPE LF 20
- STORM DRAINAGE ACROSS OR UNDER PATH, EA 1
- CONCRETE (POURED IN PLACE)
- GROUNDCOVER
- PERENNIALS 0-2' SUN
- MEADOW
- PAVEMENT (PARK STRIP)
- DECORATIVE GRAVEL (FREE DRAINING)
- MONITORING DEVICES

MATERIALS LEGEND

APPLICANT INSTRUCTIONS:

1. MEASURE ENTIRE FRONT YARD AREA. SUBTRACT HARDSCAPE AREAS TO GET THE TOTAL SQUARE FEET OF PLANTED AND IRRIGATED AREA. ENTER THIS NUMBER IN THE PLANT WATER USE TABLE ON THIS SHEET.
2. IF NEEDED USE A RED PENCIL TO ADJUST THE LAYOUT OF DRIVEWAY, PATHS AND PLANTING AREAS TO FIT YOUR YARD.
3. ADJUST ORIENTATION OF NORTH ARROWS TO SITE CONDITIONS.
4. AVOID ANY EXISTING TREES IN RED ON THE PLAN. ADJUST TREE LOCATIONS IF NEEDED TO FIT YOUR SITE.
5. FILL IN PLANT WATER USE TABLE.
6. USE THE PLANT WATER USE TABLE TO GET THE TOTAL SQUARE FEET OF PLANTED AREAS.
7. IN THE LEGEND, CIRCLE THE HARDSCAPE MATERIALS YOU WILL BE USING AND ON DETAIL SHEETS L3.0, L3.1 & L3.2.
8. CHECK ANY SUBSTITUTIONS TO THE PLANTINGS BY CROSSING OUT THE LISTED PLANTS AND WRITING THE SUBSTITUTION BELOW IN RED INK. MAKE SURE THE PLANTS USED HAVE MATCHING WATER USE AND ARE ROUGHLY THE SAME SIZE (SEE SONOMA-MARIN SAVING WATER PARTNERSHIP.)
9. MOVE TO THE IRRIGATION PLAN AND FILL IN THE AREAS INDICATED ON THAT SHEET.

NOTE:

- PLANTING DESIGN FOR FULL COVERAGE WITHIN 3 YEARS
- THE GARDEN IS DESIGNED TO CAPTURE THE BROAD GARDEN...
1. Adjust layout of planting beds if changed on layout sheet 1.0.

2. Review irrigation valve table to adjust SF areas of valve zones if areas exceed max zone flow (7 GPM) add a valve and enter SF area next to new applicant.

3. Transition to drip zone see detail.

4. Verify location with owner.

5. Outline new subzone and/or valve zone area on plan in new color.

6. Add valve as needed to valve manifold.

7. Review irrigation legend and check off that all components are shown on adjusted plan.

8. Note any equipment substitutions.

9. Keep tubing 3' to min back from tree, typ.

10. Note any irrigation legend and check off that all components are shown on adjusted plan.

11. Verify location with owner.

12. Draw out new subzone and/or valve zone area on plan in new color.

13. Adjust layout of planting beds if changed on layout sheet 1.0.

14. Review irrigation valve table to adjust SF areas of valve zones if areas exceed max zone flow (7 GPM) add a valve and enter SF area next to new applicant.

15. Transition to drip zone see detail.

16. Keep tubing 3' to min back from tree, typ.

17. Verify location with owner.

18. Draw out new subzone and/or valve zone area on plan in new color.

19. Adjust layout of planting beds if changed on layout sheet 1.0.

20. Review irrigation valve table to adjust SF areas of valve zones if areas exceed max zone flow (7 GPM) add a valve and enter SF area next to new applicant.

21. Transition to drip zone see detail.

22. Keep tubing 3' to min back from tree, typ.

23. Verify location with owner.

24. Draw out new subzone and/or valve zone area on plan in new color.

25. Adjust layout of planting beds if changed on layout sheet 1.0.

26. Review irrigation valve table to adjust SF areas of valve zones if areas exceed max zone flow (7 GPM) add a valve and enter SF area next to new applicant.

27. Transition to drip zone see detail.

28. Keep tubing 3' to min back from tree, typ.

29. Verify location with owner.

30. Draw out new subzone and/or valve zone area on plan in new color.

31. Adjust layout of planting beds if changed on layout sheet 1.0.

32. Review irrigation valve table to adjust SF areas of valve zones if areas exceed max zone flow (7 GPM) add a valve and enter SF area next to new applicant.

33. Transition to drip zone see detail.

34. Keep tubing 3' to min back from tree, typ.

35. Verify location with owner.

36. Draw out new subzone and/or valve zone area on plan in new color.
IRRIGATION NOTES

1. INSTALLATION TO BE BY CONTRACTOR WITH A VALID CURRENT CALIFORNIA C-7 LICENSED DRY HOMEOWNER WITH RELEVANT KNOWLEDGE, SKILLS & EXPERIENCE.

2. THE IRRIGATION PLAN IS DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE COMPLETED. IRRIGATION EQUIPMENT OR EMISSIONS MAY BE SHOWN IN PROPORTION TO THE SIZE OF THE SPACE ONLY.

3. VERIFY LOCATION OF SUBSURFACE UTILITIES, PIPES AND STRUCTURES. NOTIFY OWNERS REPRESENTATIVE. ENSURE THAT ALL COMPONENTS ARE CONNECTED AND OPERATIONAL PRIOR TO START OF WORK.

4. CAREFULLY INVESTIGATE EXISTING FIELD CONDITIONS AND NOTIFY OWNER’S REPRESENTATIVE. ENSURE THAT ALL COMPONENTS ARE CONNECTED AND OPERATIONAL PRIOR TO START OF WORK.

5. CONFIRM THAT ALL COMPLETED TRENCHES ARE EXPOSED TO UNOBSTRUCTED RAINFALL. INSTALL PER MANUFACTURER’S INSTRUCTIONS. ENSURE THAT SLEEVES ARE SIZED ADEQUATELY TO CONTAIN PIPES BEING SLEEVED.

6. CONFIRM MINIMUM STATIC PRESSURE AT THE POINT OF CONNECTION PRIOR TO INSTALLATION.

7. NOTE OWNERS REPRESENTATIVE IF STATIC PRESSURE IS LOWER THAN REQUIRED. IF STATIC PRESSURE IS HIGHER THAN REQUIRED, INSTALL A WATERSHED PRESSURE REGULATOR DOWNSTREAM OF BACKFLOW PREVEN"
### Permeable Aggregate Paving - Path or Patio

**SCALE: 1”=1'-0”**

- **Permeable aggregate paving**
- **Path or patio**
- **Material per manufacturers instructions**
- **Concrete mix**
- **Optional concrete curb**
- **Metal edge, 1/8” x 4”, aluminum, steel or alternate**
- **Remove 1/8” of 3/8” or smaller pathway aggregate**

### Permeable Infiltration - Pedestrian

**SCALE: 1”=1'-0”**

- **Permeable Infiltration - Pedestrian**
- **Material per manufacturers instructions**
- **Concrete mix**
- **Optional concrete curb**
- **Metal edge, 1/8” x 4”, aluminum, steel or alternate**
- **Remove 1/8” of 3/8” or smaller pathway aggregate**

### Aggregate Paving - Pedestrian

**SCALE: 1”=1'-0”**

- **Aggregate paving**
- **Pedestrian**
- **Concrete mix**
- **Optional concrete curb**
- **Metal edge, 1/8” x 4”, aluminum, steel or alternate**
- **Remove 1/8” of 3/8” or smaller pathway aggregate**

### Stabilized Aggregate - Path or Patio

**SCALE: 1”=1'-0”**

- **Stabilized aggregate**
- **Path or patio**
- **Concrete mix**
- **Optional concrete curb**
- **Metal edge, 1/8” x 4”, aluminum, steel or alternate**
- **Remove 1/8” of 3/8” or smaller pathway aggregate**

### Permeable Pavers - Path or Patio

**SCALE: 1”=1'-0”**

- **Permeable pavers**
- **Path or patio**
- **Concrete mix**
- **Optional concrete curb**
- **Metal edge, 1/8” x 4”, aluminum, steel or alternate**
- **Remove 1/8” of 3/8” or smaller pathway aggregate**

### Pervious or Permeable Unit Paver - Vehicle

**SCALE: 1”=1'-0”**

- **Pervious or permeable unit paver**
- **Vehicle**
- **Concrete mix**
- **Optional concrete curb**
- **Metal edge, 1/8” x 4”, aluminum, steel or alternate**
- **Remove 1/8” of 3/8” or smaller pathway aggregate**

### Stabilized Aggregate - Vehicle

**SCALE: 1”=1'-0”**

- **Stabilized aggregate**
- **Vehicle**
- **Concrete mix**
- **Optional concrete curb**
- **Metal edge, 1/8” x 4”, aluminum, steel or alternate**
- **Remove 1/8” of 3/8” or smaller pathway aggregate**

### Rectangular Drainage Sleeve In Paths

**SCALE: NOT TO SCALE**

- **Rectangular drainage sleeve in paths**
- **Concrete mix**
- **Optional concrete curb**
- **Metal edge, 1/8” x 4”, aluminum, steel or alternate**
- **Remove 1/8” of 3/8” or smaller pathway aggregate**

---

**GENERAL NOTES:**

1. **Design strategy:** These details are provided to create options for permeable paving, infiltration strategies that promote stormwater infiltration in landscapes. These strategies help filter water, reduce run-off of hot groundwater, and provide more soil moisture availability for landscape health.

2. **Equipment:** Paving depths, depth of base gravel, sub-base preparation, and concrete reinforcement should all be evaluated and adjusted as needed by a geotechnical engineer.

3. **Soil type:** Affects the performance of these details. Clay soils do not infiltrate well. So there is a need to evaluate whether the pervious/pervade pervious paving details and appropriate for specific sites and adjust them as appropriate to protect buildings and other improvements.

4. **Accessible paving is smooth, firm, and has a cross slope not to exceed 2% running slope.** Slab should be 5/8” thick or thicker for paving, ramp with handrails. See Title 24 of California Code of Accessibility Requirements and Standards.
NOTES:

SEE DETAIL #7 ON SHEET L3.2

GEOTECHNICAL ENGINEER

1/2" = 1'-0"

VARIES WITH DEPTH

SLOPE AWAY FROM BLDG AT 5% INTO SWALE OR DRAINAGE ELEMENT

RAINGARDEN

MULCH (OPTIONAL)

DOWNSPOUT

STORM BLOCK

STORMWATER FILTER

RAINFEDER

RAINFEDER OVERFLOWING OVER PAVEMENT SECTION

RAINWATER FLOW THROUGH PERMEABLE PAVING SECTION

VEGETATED RAINGARDEN W/ OVERLAND FLOW INLET & OUTLET

RAINGARDEN OVERFLOWING OVER PAVEMENT SECTION

RAINFEDER OVERFLOWING OVER PAVEMENT SECTION

RAINWATER FLOW THROUGH PERMEABLE PAVING SECTION

VEGETATED RAINGARDEN W/ PIPED INLET

SMALL, MEDIUM & LARGE AGGREGATES (OPT)
**NOT TO SCALE**

**SECTION A**

1. **TREE PLANTING**

- Tree, Central Leader
- Synthetic Strapping, Loop Around Central Leader Below First Branch, One Strap Per Stake, Attach to Stake B/W Sheet & DL Screws
- Wood Stake, 1 ft. Per Tree, Set PLUMB, Outside Of Rootball, Stakes Parallel To Direction Of Prevailing Wind
- Atleast 3 Diameters Exterior To Tree Branches Do Not Touch Stakes: Stakes Shall Be Spaced Min. 10 ft. Distance From The Central Leader
- Wetting Berm, 2 ft
- Topsill, Native, Use Design Form To Remove Compaction, Do Not Till
- Crown Of Rootball, Set 2” Above Finish Grade
- Planting Pit: Backfill, Per Spec
- Planting Pit: Scarify Edges, Insert Rootball, Rests On Firm Soil, Will Not Sink Over Time
- Watering Basin
- Mulch, Per Spec.
- Sheet Mulch: 2 Layers Cardboard, Or 3 Layers of Compost Under Paper
- Direction Of Prevailing Wind
- Rootball, Scarify Outer 1”

**NOTES:**

1. Make Stakes As Short As Possible, But High Enough To Hold The Tree Upright Under Calm Conditions. The Tree Should Return To Vertical After The Wind Has Bent The Trunk.
2. Support The Trunk At Just One Level, Close To The Tops Of The Stakes.
3. Provide Flexible Movement At The Point Where Strapping Wraps Loosely Around The Central Leader Of The Tree.
4. Take Care Not To Cause Rubbing Or Girdling Injuries
5. Stakes Are For Protection Of The Tree For A Period After Planting. Remove Stakes As Soon As Tree Establishes Its Root System - Within 18 Months Max.

**SECTION B**

1. **PLANTING - SHRUBS, PERENNIALS, GRASSES**

- Use Tools To Create A Hole Slightly Larger Than Plug. Insert In A Hole Of Amended Soil, In A Firm Hole, Level With Surrounding Area
- Water Holes: Topsoil, Native. Use Digging Fork To Remove Uncompacted Site Soil
- Watering Basin: Use Dibble To Create A Hole Slightly Larger Than Plug. Insert In A Hole Of Amended Soil, In A Firm Hole, Level With Surrounding Area
- Watering Pit: Use Dibble To Create A Hole Slightly Larger Than Plug. Insert In A Hole Of Amended Soil, In A Firm Hole, Level With Surrounding Area
- Watering Berm: Use Dibble To Create A Hole Slightly Larger Than Plug. Insert In A Hole Of Amended Soil, In A Firm Hole, Level With Surrounding Area

**PLANT PIT & WATERING BERM TABLE**

<table>
<thead>
<tr>
<th>Container Size</th>
<th>Plant Pit Diameter</th>
<th>Watering Berm Height</th>
<th>Watering Berm Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gal Can</td>
<td>1&quot; Min</td>
<td>3&quot; Min</td>
<td>18&quot; Min</td>
</tr>
<tr>
<td>5 Gal Can</td>
<td>3&quot; Min</td>
<td>4&quot; Min</td>
<td>30&quot; Min</td>
</tr>
<tr>
<td>15 Gal Can</td>
<td>3&quot; Min</td>
<td>5&quot; Min</td>
<td>3&quot; Min</td>
</tr>
<tr>
<td>24&quot; Box</td>
<td>5&quot; Min</td>
<td>5&quot; Min</td>
<td>5&quot; Min</td>
</tr>
</tbody>
</table>

**GROUNDCOVER PLANTING - TRI-SPACING**

1. **PLUG PLANTING**

- Plug, If For-Dam Plug: 8" | Pulling Rootplug Hole With Side Stump On S/I Of Compost
- 2 Plug Or Stubby, Plant 10" Above Finish Grade
- 3" Amended Soil, Red Mulch Requirements

**SHEET MULCH**

1. **PLANT PLOT AND WATERING BERM**

- Make 2" Deeper Than Surrounding Holes, Not Equal To The Depth Of Compost
- Make 3" Above Finishing Grade
- Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix
- Sheeting: Layer Of 3/8" Recycled Newspapers Or 1/2 Sheets Of Corrugates
- Layer Of Amendments Under Sheet Mulch
- Visible Site Soil In A Circular Mixed Compost Per 100 sf
- Watering Berm: Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix
- Watering Berm: Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix

**NOT TO SCALE**

**PLANTING - SHRUBS, PERENNIALS, GRASSES**

- Pulling Rootplug Hole With Side Stump On S/I Of Compost
- 2 Plug Or Stubby, Plant 10" Above Finish Grade
- 3" Amended Soil, Red Mulch Requirements

**PLANTING HOLE USEABLE TO CREATE A HOLE Slightly LARGER THAN PLUG. INSERT IN A HOLE OF AMENDED SOIL, IN A FIRM HOLE, LEVEL WITH SURROUNDING AREA
- Watering Basin: Topsoil, Native. Use Digging Fork To Remove Uncompacted Site Soil
- Watering Pit: Use Dibble To Create A Hole Slightly Larger Than Plug. Insert In A Hole Of Amended Soil, In A Firm Hole, Level With Surrounding Area
- Watering Berm: Use Dibble To Create A Hole Slightly Larger Than Plug. Insert In A Hole Of Amended Soil, In A Firm Hole, Level With Surrounding Area

**GROUNDCOVER PLANTING - TRI-SPACING**

- Make 2" Deeper Than Surrounding Holes, Not Equal To The Depth Of Compost
- Make 3" Above Finishing Grade
- Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix
- Watering Berm: Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix

**SHEET MULCH**

- Make 2" Deeper Than Surrounding Holes, Not Equal To The Depth Of Compost
- Make 3" Above Finishing Grade
- Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix
- Watering Berm: Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix

**NOT TO SCALE**

**PLANT PLOT AND WATERING BERM**

- Make 2" Deeper Than Surrounding Holes, Not Equal To The Depth Of Compost
- Make 3" Above Finishing Grade
- Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix
- Watering Berm: Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix

**GROUNDCOVER PLANTING - TRI-SPACING**

- Make 2" Deeper Than Surrounding Holes, Not Equal To The Depth Of Compost
- Make 3" Above Finishing Grade
- Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix
- Watering Berm: Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix

**SHEET MULCH**

- Make 2" Deeper Than Surrounding Holes, Not Equal To The Depth Of Compost
- Make 3" Above Finishing Grade
- Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix
- Watering Berm: Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix

**NOT TO SCALE**

**PLANT PLOT AND WATERING BERM**

- Make 2" Deeper Than Surrounding Holes, Not Equal To The Depth Of Compost
- Make 3" Above Finishing Grade
- Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix
- Watering Berm: Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix

**GROUNDCOVER PLANTING - TRI-SPACING**

- Make 2" Deeper Than Surrounding Holes, Not Equal To The Depth Of Compost
- Make 3" Above Finishing Grade
- Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix
- Watering Berm: Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix

**SHEET MULCH**

- Make 2" Deeper Than Surrounding Holes, Not Equal To The Depth Of Compost
- Make 3" Above Finishing Grade
- Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix
- Watering Berm: Use 3" High Berm Of Amended Site Soil/Topsoil Waters Mix
**Laundry to Landscape: Graywater System Example**

**Laundry to Landscape systems are ideally suited for downsized, energy-conserving homes to economize water and energy.**

**The key to proper irrigation with Graywater is to know how much the chosen plants need given evapotranspiration rates, potable water needs, and existing canopy.**

**Design of Six Soil Types**: 100 Gallons of Estimated Graywater per SQ FT of Irrigation/Leaching Area for each soil type:

- Coarse sand or gravel
- Clay with small amounts of sand or gravel
- Loam
- Silty clay
- Silty clay loam
- Clay loam

**Laundry to Landscape: Graywater System Example**

**Graywater System Design Calculations**

1. **Weekly Water Needs**
   
   \[ \text{Weekly Water needs} = \left( 0.62 \times \text{Area} \times \text{Eta} \times \text{Pf} \right) / 4 \text{ weeks} = \_ \times 0.62 = \# \text{of gal in 1" of water covering 1 ft}^{-2} \]

2. **Determining Weekly Water Needs**
   
   - \( \text{Weekly Water needs} \)
   - \( \text{Evapotranspiration rates (ETo)} \)
   - \( \text{Choose ETo for hottest month - July} = 6.51"/month \)

3. **Callfornia Plumbing Code Estimate**
   
   Assign 2 occupants to master bedroom and 1 occupant to each additional bedroom.

4. **California Plumbing Code Estimate**
   
   \( \text{Laundry: } 2 \text{ occupants} \times 15 \text{ gallons/day} = \_ \text{ gal/day} \)

5. **Determining Maximum Absorption Capacity**
   
   - From 1 above
   - \( \text{Maximum Absorption Capacity (from column 3 in table below)} \)

6. **PVC to HOSE**
   
   - PVC to HOSE
   - HOSE to PVC
   - PVC to HOSE
   - HOSE to PVC
   - PVC to HOSE
   - PVC to HOSE

7. **Hydrozone**
   
   - 
   - \( \text{Laundry: } \_ \text{ occupants} \times 15 \text{ gallons/day} \)

8. **System Clean-out**
   
   - \( \text{El} \)
   - \( \text{Diverter (3-way) Valve} \)
   - \( \text{Diverter (3-way) Valve} \)

9. **Laundry System Clean-out**
   
   - System Clean-out
   - \( \text{El} \)
   - \( \text{Diverter (3-way) Valve} \)
   - \( \text{El} \)

10. **Mulch Basin**
    
    - \( \text{Drip line} \)
    - \( \text{System Clean-out} \)
    - \( \text{Mulch Basin} \)
    - \( \text{Mulch Basin} \)

**Applicant Instructions**

1. **Estimate Your Graywater Supply Using the Calculation Process in Calculations Section Below**
2. **Complete Calculations to Determine the Minimum Required Mulch Basin Size per Your Soil Type**
3. **Measure Actual Irrigation Field Areas**
4. **Review Required Setbacks Shown in CPC Table 1524 This Sheet**
5. **Develop a Site Plan Illustrating the Following**
6. **Consult Health, Plumbing, Electrical, and Fire Code Officials**

**Laundry to Landscape: Graywater System Example**

**Laundry to Landscape systems are ideally suited for downsized, energy-conserving homes to economize water and energy.**

**The key to proper irrigation with Graywater is to know how much the chosen plants need given evapotranspiration rates, potable water needs, and existing canopy.**

**Design of Six Soil Types**: 100 Gallons of Estimated Graywater per SQ FT of Irrigation/Leaching Area for each soil type:

- Coarse sand or gravel
- Clay with small amounts of sand or gravel
- Loam
- Silty clay
- Silty clay loam
- Clay loam

**Laundry to Landscape: Graywater System Example**

**Graywater System Design Calculations**

1. **Weekly Water Needs**
   
   \[ \text{Weekly Water needs} = \left( 0.62 \times \text{Area} \times \text{Eta} \times \text{Pf} \right) / 4 \text{ weeks} = \_ \times 0.62 = \# \text{of gal in 1" of water covering 1 ft}^{-2} \]

2. **Determining Weekly Water Needs**
   
   - \( \text{Evapotranspiration rates (ETo)} \)
   - \( \text{Choose ETo for hottest month - July} = 6.51"/month \)

3. **Callfornia Plumbing Code Estimate**
   
   Assign 2 occupants to master bedroom and 1 occupant to each additional bedroom.

4. **California Plumbing Code Estimate**
   
   \( \text{Laundry: } 2 \text{ occupants} \times 15 \text{ gallons/day} = \_ \text{ gal/day} \)

5. **Determining Maximum Absorption Capacity**
   
   - From 1 above
   - \( \text{Maximum Absorption Capacity (from column 3 in table below)} \)

6. **PVC to HOSE**
   
   - PVC to HOSE
   - HOSE to PVC
   - PVC to HOSE
   - HOSE to PVC
   - PVC to HOSE
   - PVC to HOSE

7. **Hydrozone**
   
   - 
   - \( \text{Laundry: } \_ \text{ occupants} \times 15 \text{ gallons/day} \)

8. **System Clean-out**
   
   - System Clean-out
   - \( \text{El} \)
   - \( \text{Diverter (3-way) Valve} \)
   - \( \text{El} \)

9. **Mulch Basin**
    
    - \( \text{Drip line} \)
    - \( \text{System Clean-out} \)
    - \( \text{Mulch Basin} \)
    - \( \text{Mulch Basin} \)

**Applicant Instructions**

1. **Estimate Your Graywater Supply Using the Calculation Process in Calculations Section Below**
2. **Complete Calculations to Determine the Minimum Required Mulch Basin Size per Your Soil Type**
3. **Measure Actual Irrigation Field Areas**
4. **Review Required Setbacks Shown in CPC Table 1524 This Sheet**
5. **Develop a Site Plan Illustrating the Following**
6. **Consult Health, Plumbing, Electrical, and Fire Code Officials**
LANDSCAPE VIA MULCH BASIN OUTLETS. PLUMBING FOR GRAYWATER SOURCES MUST BE PERENNIAL PLANTS. THIS IS A SIMPLE SYSTEM AND DOES NOT REQUIRE ELECTRICITY OR A PUMP.

AS THIS SYSTEM REQUIRES CUTTING INTO EXISTING SEWER PIPES FROM SHOWER DRAINS OR SINKS, IT DOES REQUIRE A SIMPLE OVER THE COUNTER PLUMBING PERMIT. IF INSTALLING AS PART OF NEW BUILDING CONSTRUCTION OR REMODEL, SHOW SEPARATED PLUMBING IN PLAN SETS AND STUB OUT PIPING FOR EXTERIOR GRAYWATER SYSTEM COMPONENTS DURING BUILDING CONSTRUCTION.

BRANCHED DRAIN GRAYWATER REQUIREMENTS TO COMPLY WITH CALIFORNIA PLUMBING CODE.

<table>
<thead>
<tr>
<th>DPC STANDARDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTIFY ENFORCING AGENCY AND SECURE PERMIT FOR INTERIOR PLUMBING COMPONENTS</td>
</tr>
<tr>
<td>BE ABLE TO REDIRECT TO SEWER</td>
</tr>
<tr>
<td>NO POTABLE WATER CONNECTION</td>
</tr>
<tr>
<td>CONTAIN GRAYWATER ONSITE</td>
</tr>
<tr>
<td>DIRECT AND CONTAIN GRAYWATER WITHIN MULCH BASINS (IRRIGATION OR DISPOSAL FIELD) BELOW THE GROUND SURFACE</td>
</tr>
<tr>
<td>NO PONDING OR RUNOFF</td>
</tr>
<tr>
<td>OUTLETS COVERED AT LEAST 2 INCHES OF MULCH, ROCK, OR A SHIELD (E.G. VALVE BOX LID)</td>
</tr>
<tr>
<td>MINIMIZE CONTACT WITH HUMANS AND ANIMALS</td>
</tr>
<tr>
<td>DIVERT WATER TO THE SEWER IF IT CONTAINS DIAPERS, OIL, OTHER CHEMICALS</td>
</tr>
<tr>
<td>GRAYWATER DIVERTED TO LANDSCAPE SHALL NOT CONTAIN HAZARDOUS CHEMICALS</td>
</tr>
<tr>
<td>FOLLOW ALL APPLICABLE CODE OR LAWS</td>
</tr>
<tr>
<td>POST OPERATION AND MAINTENANCE MANUAL</td>
</tr>
<tr>
<td>THE SYSTEM SHALL HAVE A DISCHARGE CAPACITY OF 250 GALLONS PER DAY OR LESS</td>
</tr>
</tbody>
</table>

INSTALLATION & DESIGN CONSIDERATIONS:

WITH A HIGHER POTENTIAL VOLUME OF WATER COMING FROM A SHOWER AND SINK, A BRANCHED DRAIN SYSTEM IS BEST SUITED FOR IRRIGATING TREES, BUSHES, SHRUBS, AND OTHER LARGER PERENNIAL PLANTS. THIS IS A SIMPLE SYSTEM AND DOES NOT REQUIRE ELECTRICITY OR A PUMP; HOWEVER, THE LANDSCAPE AREA MUST BE LOWER IN ELEVATION THAN THE GRAYWATER SOURCE, AND THE ENTIRE SYSTEM MUST HAVE A DOWNWARD SLOPE OF 2% (1/5 INCH PER FOOT) TO ENSURE EVEN DISTRIBUTION.

INSTALLATION DIFFICULTY DEPENDS ON THE EXISTING HOUSEHOLD PLUMBING, ACCESS TO PIPES AND THE SLOPE OF LANDSCAPE. WHILE OUTDOOR COMPONENTS CAN BE INSTALLED BY A HOMEOWNER, A PROFESSIONAL PLUMBER IS NEEDED FOR INSTALLATION OF 3-WAY DIVERTER VALVE ON THE SEWER LINE. THE HOMEOWNER HAS THE OPTION TO INSTALL AN ACTUATOR, WHICH ALLOWS EASY DIVERSION OF GRAYWATER BETWEEN LANDSCAPE AND THE SEWER LINE.

SYSTEM COSTS & REBATES: THE COSTS CAN RANGE FROM A THOUSAND DOLLARS WHEN PRIMARILY INSTALLED BY A HOMEOWNER TO SEVERAL THOUSAND IF INSTALLED BY A PROFESSIONAL. WHILE MORE COSTLY TO CONSTRUCT THAN A LAUNDRY TO LANDSCAPE SYSTEM, A BRANCHED DRAIN SYSTEM REQUIRES LITTLE MAINTENANCE AND LASTS A LONG TIME, SINCE IT HAS NO MOVING PARTS TO BREAK.

RECOMMENDED SOAPS:
MORE SOAPS ARE COMING OUT ALL THE TIME, BUT IT IS ALWAYS IMPORTANT TO READ THE INGREDIENTS LIST BELOW. SEVERAL THAT ARE KNOWN TO BE GRAYWATER COMPLIANT:

- OASIS - ALL-PURPOSE CLEANER FOR HAND-WASHING, BODY & SHAMPOO
- DR. BRONNER’S MAGIC SOAPS (LIQUID)
- AUBREY ORGANICS SHAMPOO

APPICLANT INSTRUCTIONS:

1. ESTIMATE YOUR GRAYWATER SUPPLY USING THE CALCULATION SECTION THIS SHEET.
2. ESTIMATE MULCH BASIN SIZES, AREA, AND VOLUME USING TABLE 3.
3. DEVELOP A GRAYWATER SITE PLAN SHOWING THE ONLY APPROPRIATE SIZE FOR THE PERMIT APPLICATION. SHOW ALL THE PLAN ELEMENTS LISTED IN #4 - GRAYWATER PLAN BELOW.
4. REVIEW THE SAMPLE PLAN SHOWN IN DETAIL #1 THIS SHEET. SHOW TREE AND PLANT LOCATIONS TO BENEFIT FROM GRAYWATER.
5. SUBMIT FOR BUILDING PERMIT EITHER WITH FULL SITE DRAWINGS OR AS A SEPARATE SUBMITTAL.

RECOMMENDED HOUSING FOR GRAYWATER SOURCES:

1. BRANCHED DRAIN SITE PLAN SHEET
2. BRANCHED DRAIN SYSTEM DIAGRAM AND INSTALL PHOTO

BEAT THE WATER SAVING WATER PARTNERSHIP, ITS MEMBERS AND LANDSCAPE DESIGN CONSULTANTS MAKE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING AN WARRANTY OF QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PROPERTY RIGHTS OF THIRD PARTIES.

PLAN. I UNDERSTAND THAT IT IS MY RESPONSIBILITY AS THE APPLICANT TO DEFEND, INDEMNIFY 
AND HOLD HARMLESS CALIFORNIA WATER PARTNERSHIP, ITS MEMBERS AND LANDSCAPE DESIGN CONSULTANTS FROM ANY AND ALL COSTS, LIABILITIES, DAMAGES, JUDGMENTS, AND EXPENSES THAT MAY BE INCURRED IN ANY ACTION OR PROCEEDING BY ANY PERSON OR ENTITY IN THE PROSECUTION OR DEFENSE OF ANY ACTION OR PROCEEDING ARISING FROM OR RELATED TO THE DESIGN OR CONSTRUCTION OF THE GRAYWATER SYSTEM.

EVEN DISTRIBUTION.
HAS NO MOVING PARTS TO BREAK.
RECOMMENDED SOAPS:
SYSTEM COSTS & REBATES: THE COSTS CAN RANGE FROM A THOUSAND DOLLARS WHEN PRIMARILY INSTALLED BY A HOMEOWNER TO SEVERAL THOUSAND IF INSTALLED BY A PROFESSIONAL. WHILE MORE COSTLY TO CONSTRUCT THAN A LAUNDRY TO LANDSCAPE SYSTEM, A BRANCHED DRAIN SYSTEM REQUIRES LITTLE MAINTENANCE AND LASTS A LONG TIME, SINCE IT HAS NO MOVING PARTS TO BREAK.

RECOMMENDED SOAPS:
MORE SOAPS ARE COMING OUT ALL THE TIME, BUT IT IS ALWAYS IMPORTANT TO READ THE INGREDIENTS LIST BELOW. SEVERAL THAT ARE KNOWN TO BE GRAYWATER COMPLIANT:

- OASIS - ALL-PURPOSE CLEANER FOR HAND-WASHING, BODY & SHAMPOO
- DR. BRONNER’S MAGIC SOAPS (LIQUID)
- AUBREY ORGANICS SHAMPOO

APPICLANT INSTRUCTIONS:

1. ESTIMATE YOUR GRAYWATER SUPPLY USING THE CALCULATION SECTION THIS SHEET.
2. ESTIMATE MULCH BASIN SIZES, AREA, AND VOLUME USING TABLE 3.
3. DEVELOP A GRAYWATER SITE PLAN SHOWING THE ONLY APPROPRIATE SIZE FOR THE PERMIT APPLICATION. SHOW ALL THE PLAN ELEMENTS LISTED IN #4 - GRAYWATER PLAN BELOW.
4. REVIEW THE SAMPLE PLAN SHOWN IN DETAIL #1 THIS SHEET. SHOW TREE AND PLANT LOCATIONS TO BENEFIT FROM GRAYWATER.
5. SUBMIT FOR BUILDING PERMIT EITHER WITH FULL SITE DRAWINGS OR AS A SEPARATE SUBMITTAL.

RECOMMENDED HOUSING FOR GRAYWATER SOURCES:

1. BRANCHED DRAIN SITE PLAN SHEET
2. BRANCHED DRAIN SYSTEM DIAGRAM AND INSTALL PHOTO

BEAT THE WATER SAVING WATER PARTNERSHIP, ITS MEMBERS AND LANDSCAPE DESIGN CONSULTANTS MAKE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING AN WARRANTY OF QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PROPERTY RIGHTS OF THIRD PARTIES.

PLAN. I UNDERSTAND THAT IT IS MY RESPONSIBILITY AS THE APPLICANT TO DEFEND, INDEMNIFY 
AND HOLD HARMLESS CALIFORNIA WATER PARTNERSHIP, ITS MEMBERS AND LANDSCAPE DESIGN CONSULTANTS FROM ANY AND ALL COSTS, LIABILITIES, DAMAGES, JUDGMENTS, AND EXPENSES THAT MAY BE INCURRED IN ANY ACTION OR PROCEEDING BY ANY PERSON OR ENTITY IN THE PROSECUTION OR DEFENSE OF ANY ACTION OR PROCEEDING ARISING FROM OR RELATED TO THE DESIGN OR CONSTRUCTION OF THE GRAYWATER SYSTEM.
ALL OTHER RAINWATER CATCHMENT SYSTEMS MUST BE SUBMITTED FOR BUILDING PERMIT.

- WATER WILL BE USED FOR OUTDOOR NON-SPRAY IRRIGATION

3. IF CITY WATER PLUMBED TO TANK FOR MAKE UP USING FLOAT VALVE OR MANUALLY OPERATED VALVE, THEN A PERMIT IS REQUIRED AND AN AIR GAP IS REQUIRED

- RATIO OF HEIGHT TO DIAMETER OR WIDTH DOES NOT EXCEED 2 TO 1

- TANK IS SUPPORTED DIRECTLY UPON GRADE

5. THERE ARE NO REQUIRED SETBACKS FROM BUILDINGS OR SIDE/BACK PROPERTY LINES, THOUGH A CONVERSATION WITH YOUR NEIGHBOR COULD BE HELPFUL.

BETWEEN RAINWATER HARVESTING SYSTEM AND DOMESTIC WATER SYSTEM.

MAXIMUM STORAGE CAPACITY OF 5,000 GALLONS

NOTES:
1. A RAINWATER CATCHMENT SYSTEM MAY NOT REQUIRE A BUILDING PERMIT PROVIDED ALL OF THE FOLLOWING ARE MET (CALIFORNIA PLUMBING CODE 1601.3 (I):

   - 1/2" = 1'-0"

   - DASHED LINE ----­

   - IS BOTTOM OF

   - RAINGARDEN RAIN GARDEN

   - 2 PERCENT SLOPE

   - MIN. VERTICAL DISTANCE BETWEEN LEAF GUARDING AND TANK (SEE NOTE 3)

   - LEVEL PAD

   - 20X20 STAINLESS STEEL MESH

   - INLET AND OUTLET COBBLE TO HIDE PIPE

   - B ---+--- D

   - 6' 5 1/2"

   - G. 5 INCHES OF DECORATIVE GRAVEL WITH 2 INCHES OF PONDED WATER ABOVE

   - C. 530 GALLON BUSHMAN SLIMLINE RAIN HARVESTING TANK OR EQUIVALENT

   - 8" & 1/2" RAIN GARDEN

   - TANKS ARE NEXT TO DOWNSPOUT

   - OVERFLOW: 3 IN. DRAINAGE PIPE: SLOPED 2 PERCENT FOR HORIZONTAL SECTIONS

   - E. 4 INCHES COMPACTED BASEROCK WITH 2 INCHES OF PEA GRAVEL ON TOP

   - H. 12 INCHES AMENDED SOIL: 1/2 COMPOST, 1/2 NATIVE SOIL

   - D. HOSE BIB OR OPTIONAL CONNECTION TO PUMP AND PRESSURE TANK (SEE NOTE 2)

   - F. 4 IN. DRAINAGE PIPE FOR THE FIRST FLUSH (THIS REMOVES THE FIRST, DIRTY WATER FROM A RAINSTORM)

   - J. FIRE SAFER LEAF GUARD

   - K. GUTTER

   - L. NORMAL DOWNSPOUT

   - M. OPTIONAL BUSHMAN LEAF DIVERTER (WITH 20X20 SCREEN IF USING WET CONVEYANCE) (REDUNDANT WITH LEAF GUARD ON GUTTERS)

   - N. 3 IN. PVC DRAINAGE TEE

   - O. 4 IN. TO 3 IN. PVC DRAINAGE REDUCER

   - R. BUSHMAN FIRST FLUSH FILTERS (TO KEEP EMITTER FROM CLOGGING)

   - U. THREE SEPARATE 3/32 INCH HOLES TO DRAIN WATER FOR MOSQUITO CONTROL

   - V. CLEAN GRAVEL TO IMPROVE DRAINAGE FROM DRILLED HOLES

   - W. "WET" CONVEYANCE 3 IN. DRAINAGE PIPE

   - X. 5 INCHES OF DECORATIVE GRAVEL WITH 2 INCHES OF PONDED WATER ABOVE

   - Y. "WET" CONVEYANCE 3 IN. DRAINAGE PIPE

   - Z. "WET" CONVEYANCE 3 IN. DRAINAGE PIPE

   - A. PREFERRED DRY CONVEYANCE IF TANKS ARE NEXT TO DOWNSPOUT

   - B. OVERFLOW: 3 IN. DRAINAGE PIPE: SLOPED 2 PERCENT FOR HORIZONTAL SECTIONS

   - C. 530 GALLON BUSHMAN SLIMLINE RAIN HARVESTING TANK OR EQUIVALENT

   - D. HOSE BIB OR OPTIONAL CONNECTION TO PUMP AND PRESSURE TANK (SEE NOTE 2)

   - E. 4 INCHES COMPACTED BASEROCK WITH 2 INCHES OF PEA GRAVEL ON TOP

   - H. 12 INCHES AMENDED SOIL: 1/2 COMPOST, 1/2 NATIVE SOIL

   - D. HOSE BIB OR OPTIONAL CONNECTION TO PUMP AND PRESSURE TANK (SEE NOTE 2)

   - E. 4 INCHES COMPACTED BASEROCK WITH 2 INCHES OF PEA GRAVEL ON TOP

   - H. 12 INCHES AMENDED SOIL: 1/2 COMPOST, 1/2 NATIVE SOIL

   - D. HOSE BIB OR OPTIONAL CONNECTION TO PUMP AND PRESSURE TANK (SEE NOTE 2)