

# Landscape Specifications

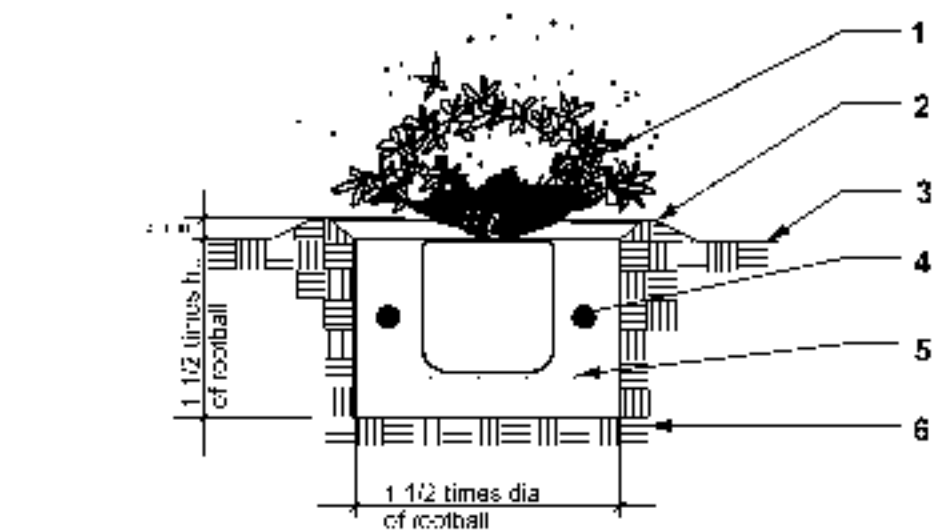
- WORK SHALL INCLUDE
  - Soil preparation
  - Placement of topsoil in all planting areas as required.
  - Furnishing of all plant material and planting of boxed specimens as specified.
  - Installation of plant materials, trees, shrubs, vines, groundcovers, seed and sod.
  - Staking of trees.
  - Protection, maintenance, and guarantee as specified.
- WORK NOT INCLUDED
- PRODUCT DELIVERY
  - Deliver fertilizer to site in original, unopened containers bearing manufacturer's guaranteed chemical analysis, name, trade name, trademark, and in conformance with State laws.
  - Deliver parts with legible identification labels.
  - All trees, shrubs, and other plants shall be labeled with botanical and common names. State correct plant names and size indicated on plant tags only. Use durable waterproof labels with water resistant ink, which will remain legible for at least 90 days.
  - Protect during delivery to prevent damage to root ball or desiccation of leaves or windburn.
  - Notify the Owner of delivery schedule in advance so plant materials may be inspected upon arrival at job site.
  - Remove unacceptable or damaged plant materials immediately from site and replace per replacement specifications.
- PRODUCT STORAGE
  - Store plants in a partially shaded area and protect from harsh weather (wind, sun).
  - Maintain and protect plant material not to be planted within four (4) hours, water as necessary to maintain optimum plant health.
- PRODUCT HANDLING
  - Do not drop plants.
  - Do not stack up container plants by stems or trunks.
- GUARANTEE
  - Guarantee new trees through one (1) full year after plants are installed and the Owner has made his final acceptance.
  - Guarantee shrubs through 90 days after plants are installed and the Owner has made his final acceptance.
  - Replacement trees, 5 gallon and larger, shall be guaranteed for one (1) full year, from date of replacement installation.
  - Replacement shrubs under this guarantee shall be guaranteed for a period of 90 days, from date of replacement installation.
  - Guarantee 100% coverage and healthy growing condition of all sodded areas or areas at the end of the maintenance period.
- PLANTING MATERIALS
  - Plants shall be well formed and shipped, free from disease, insects and defects such as known sunscald, windburn, broken branches and scamed bark.
  - Plants shall be true to botanical and common name variety according to American Joint Committee on Horticultural Nomenclature.
  - All plants shall be nursery grown and collected stock.
  - All plants shall be grown under climatic conditions similar to those in locality of project.
  - All plants shall be container grown stock and shall be established and in vigorous healthy condition and shall not be rootbound.
  - Planting Methods - Apply 1/2" to 5/8" 21 gram and 10 gram tablets per details.
  - Tree Tying and Staking Materials
    - Stakes for tree support, Lodge pole pine, ten (10) foot lengths.
    - Corded Cinch-Tie material and connecting galvanized deck screws.
  - Tree Guying Materials
    - Duckbill tree guying anchor kits, 5 wires minimum.
    - Plastic safety sleeves for all wires.
- INSPECTION
  - Verify final grades which have been established prior to beginning of planting operations.
  - Inspect trees and shrubs for injury, insect infestation and for improper pruning.
  - Do not begin planting of trees until deficiencies are corrected, or plants replaced.
- WATER
  - Quality: City water - district supplied at site.
  - Source: Provided by Owner on site.
- PREPARATION
  - Stake out locations of all trees and shrubs.
  - Do not begin excavation until stake out of trees & shrub locations are acceptable to Owner prior to excavation of pits.
- EXCAVATION FOR PLANTING
  - Pits
    - Shape: Vertical sides and flat bottom. Plant pits to be square or circular, rougher sides.
    - Size of tree pits: see tree planting detail.
    - Size of shrub pits: see shrub planting detail.
  - Planting Beds and Turf Grass Areas
    - Prepare existing soil for planting beds and turf grass areas to a depth of six (6) inches with Disc or Rototill. Add soil preparation mix as stated in these specifications.
    - Bring areas to smooth, even surface conforming to established grades after full settlement has occurred.
    - Finish planting surface shall be 1-1/2" below walks and curbs for all turf areas and two (2) inches for all ground cover areas.
  - Dispose of Excess Soil
    - Use acceptable excess excavated topsoil to form four (4) inch high watering basins around plants.
    - Dispose of unacceptable or unsound excess soil in a legal manner.
  - Herbicide Application
    - Pre-emergent herbicides shall be applied to all planting areas, apply in accordance with manufacturer's recommendation.
  - Weeding
    - Prior to all landscape work, all weeds and grasses shall be dug out, by roots and disposed of, off the site, in a legal manner.
- PLANTING
  - General
    - Center plant in pit. Face plants with best growth in prevailing wind. Set plant plumb and hold rigidly in position until soil has been tamped firmly around the ball of roots. Use only amended planting soil as specified for backfill. Place sufficient planting soil under plant to bring top of rootball, after settlement, one (1) inch above finish grade.
    - Place Scott's Agriform fertilizer tablets evenly distributed in plant pits when backfilled 2/3 and 3" away from the rootball according to the following schedule:
 

1 gallon container	1-21 gram tablets
5 gallon container	3-21 gram tablets
15 gal on container	8-21 gram tablets
2" box	20-21 gram tablets
    - Watering basin: Construct a basin four (4) inches above finish grade, forming a watering basin with a level bottom around each plant. Construct basin so water drains through the rootball of the plant.
  - Container Grown Plants
    - Can removal: Cut metal cans in two (2) sides with an acceptable can cutter. Do not injure rootball. Carefully remove parts from plastic containers without injury or damage to the rootball.
    - Box Removal: Remove bottom of plant boxes before planting. Remove sides of box without damage to roots after positioning plant and partially backfilling.
  - Staking of Trees
    - Stake trees on plant list using wood stakes as noted on plans.
    - Stake installation: Drive stakes perpendicularly, two (2) feet into ground at the edge of rootball. Number of stakes: one (1) stake for 5 gallon trees. Two stakes per 15 gallon trees.
  - Pruning New Plant Material: Prune minimum necessary to remove injured twigs and branches, deadwood, and suckers.
- MAINTENANCE
  - General
    - Begin maintenance immediately after each item is planted.
    - Maintain a healthy growing condition by watering, pruning, spraying, weeding, and other necessary maintenance operations for a period of 90 days after the Owner's final acceptance of the work.
    - Payment for the maintenance period shall be made after the owner gives final acceptance of the maintenance work performed.
    - Keep landscaped areas free from weeds, grass, and other undesired vegetation growth. Cultivate beds during maintenance per detail.
    - Replace damaged or dead plants promptly.
    - Inspect plants at least once a week and perform maintenance promptly.
    - Remove soil berm from around watering basins prior to end of maintenance period.
    - Water all plants to maintain optimum level for best plant growth.
  - CLEANING
    - Remove planting and construction debris and clean adjacent surfaces daily during construction.
- PLANT INSTALLATION INSPECTION, FINAL INSPECTION AND ACCEPTANCE
  - Request plant inspector and location spotting prior to installation.
  - Request plant installation inspection after completion of all planting prior to start of maintenance period.
  - Replace rejected material with acceptable plant materials as soon as possible with an acceptable planting rates prior to end of maintenance period.

END OF SECTION

# Irrigation Specifications

- All workmanship and materials shall conform to local building and plumbing codes having jurisdiction.
- Prior to submitting bid, examine the site and the conditions thereof.
- The work to be performed under this contract shall include furnishing all labor, materials, tools, machinery, and equipment necessary to install a complete sprinkler system as shown on the irrigation plans, including trenching, backfilling, etc.
- Protect this work and the Owner's property from damage as a result of this work.
- Prior to commencing work on the project, arrange an on-site conference with the Owner, or his duly appointed representative.
- Apply any and all permits required for this portion of the work.
- The installation and operation of the system must be approved by the Owner.
- If it is found during installation that the site varies from the drawings, notify the Owner before proceeding with the work.
- Coordinate the installation of all sprinkler materials, including pipe, with the landscape drawings to avoid interfering with the planting of trees, shrubs, or other plants.
- It is the intent of these drawings and specifications to indicate a complete sprinkler system installed and ready for use without further cost to the Owner.
- Record accurately on one set of reproducible prints of the drawings, a record plan showing any changes. Keep it up to date as the project is under construction. In addition, dimension from two permanent points of reference the location of the pressure supply line, valves, plug trees, and controllers.
- All sprinkler head and piping shall be installed per their details, in their respective locations and shall be of the manufacturer noted unless otherwise approved by the Owner.
- The sprinkler system shall be unconditionally guaranteed for a period of one year from the date of acceptance. Manufacturer warranties shall not replace this guarantee and Contractor shall be liable for repairs and replacement of failed material.
- Upon completion of the work, remove all excess material, equipment and waste to the satisfaction of the Owner.
- The sprinkler installation shall be deemed incomplete until all sprinkler heads, valves, and all related irrigation equipment have been checked and adjusted to best conform to the conditions and requirements that will prevail at the finish site, and approved record drawings have been submitted.
- Trenches shall be excavated to sufficient depth to provide coverage of 10-inch overall pressure supply lines and 12-inch overall non-pressure lines. For all lines, pressure and non-pressure, under vehicular pavement, provide minimum coverage of 24".
- All pipe under vehicular pavement to be sleeved with schedule 40 sleeve, 1" minimum larger than the pipe. All pipe under regular non-vehicular pavement to be sleeved with schedule 40 sleeve, 1" minimum larger than the pipe.
- Backfill for trenching shall be compacted to a dry density equal to the adjacent undisturbed soil, and shall conform to adjacent grades without dips, surken areas, humps, or other irregularities.
- Plastic fitting shall be of schedule 40 polyethylene injection molded and side galled. Where threads are required, these shall be injection molded and schedule 40.
- Initial backfill on pipe joints shall be of a fine granular material with no foreign matter larger than 1/2-inch in size, with a minimum of 2 inches over and 2 inches under piping.
- Copper pipe shall be copper water tube type "K". Fittings shall be wrought copper or cast bronze so der joint.
- All material required for the project shall be as indicated in the legend and installed according to construction details.
- Supply as part of this contract the following tools:
  - One wrench for disassembling each type of sprinkler head supplied.
  - Two keys for each controller.
  - One controller chart for each controller supplied. This chart shall be a reduced drawing of the actual record system with each station indicated in a different color. Chart shall be hermetically sealed between two pieces of plastic, 20 mils each, placed in controller at the end of construction.

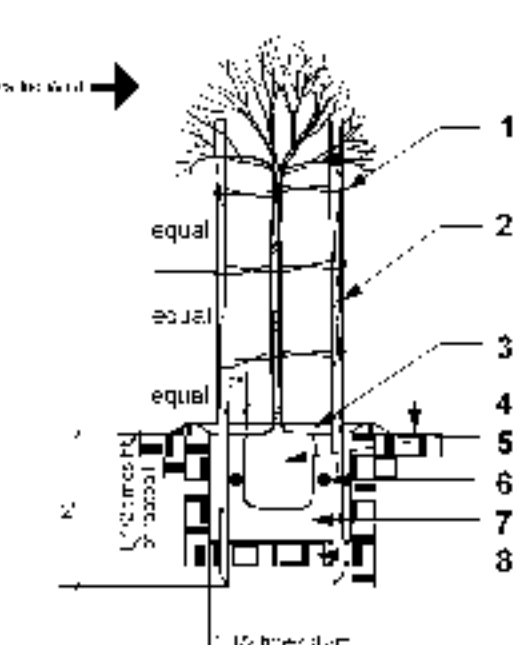


Legend:

- One or five gallon shrub.
- Soil water basin, 3" min. depth. Remove after maintenance period.
- Finish grade.
- For one gallon shrub, one (1) 21 gram Scott's Agriform plant tablets. For five gallon shrubs, three (3) 21 gram Scott's Agriform plant tablets. Space evenly around rootball, keep 3" clear of rootball.
- Amended backfill, 50% existing soil, 50% weed free nitrized redwood compost.
- Native soil.

## P-1 Shrub Planting Detail

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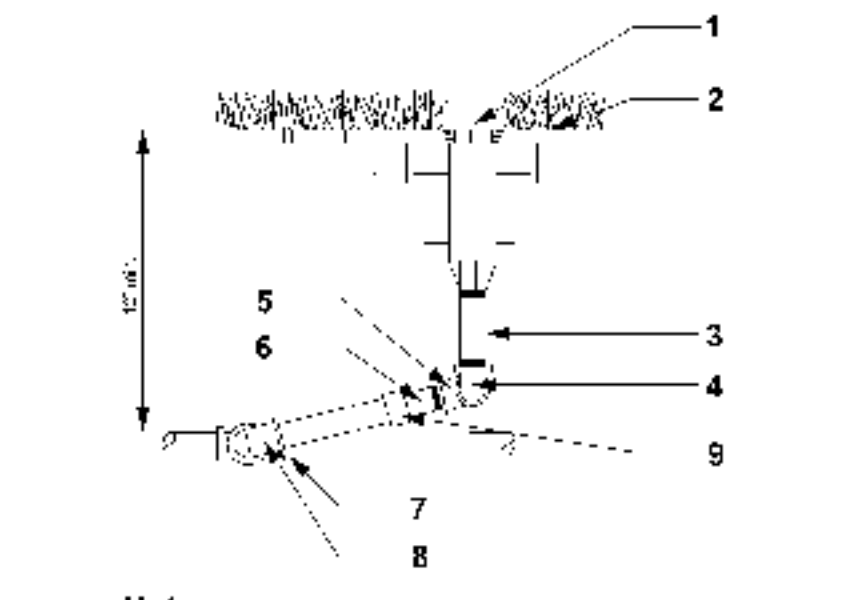


Legend

- 6-24" corded cinch ties or approved equal, attach to stake with 1-1/2" long deck screws.
- Untreated Redwood stake, keep 2" clear of rootball, 10' long for 15 gallon, 8' long for 5 gallon.
- Soil water basin, 4" high, after initial watering. Remove basins in lawn area.
- Finish grade.
- Rootball.
- 21 gram plant tablet, 20 tablets per 24" box, 8 per 15 gallon, 3 per 5 gallon.
- Amended backfill, 50% existing soil, 50% weed free nitrized redwood compost, or approved equal.
- Native soil.
- Tree trunk.
- Tree stake.
- Cinch tie.

## P-2 Double Stake Detail

n.s.



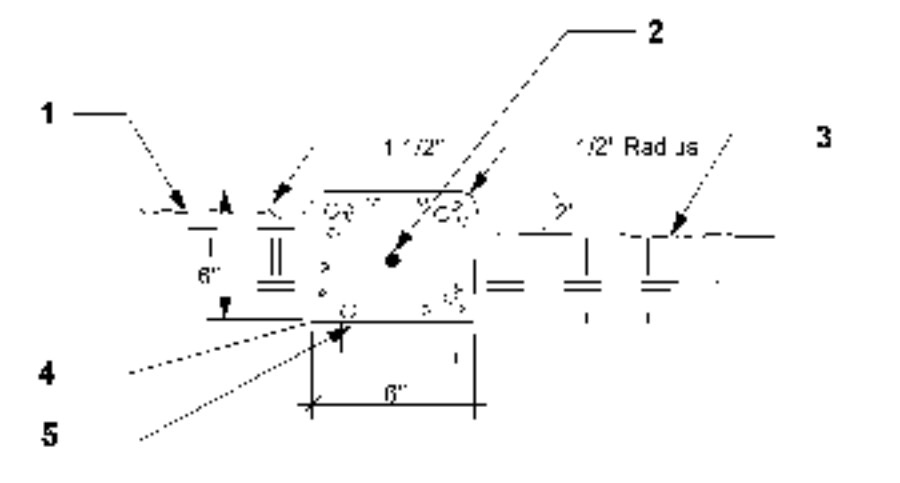
Legend

- Pop-up Head
- Finish Grade
- Sch. 80 PVC Nipple length as necessary
- Sch. 40 PVC TxT 90 degree ell.
- Marlex 90 degree street ell.
- Sch. 80 PVC nipple (6" long)
- Non-pressure lateral line and tee fitting.
- Marlex 90 degree ell.
- Anti-drain valve-all down slope heads if not installed in heads.

Notes  
 1) Locate head 4" from hardscaping, in turf-5" minimum in planters, 12" from walls.  
 2) Use Teflon tape on all threads.

## I-1 6" Pop Up Spray Head Detail

n.s.

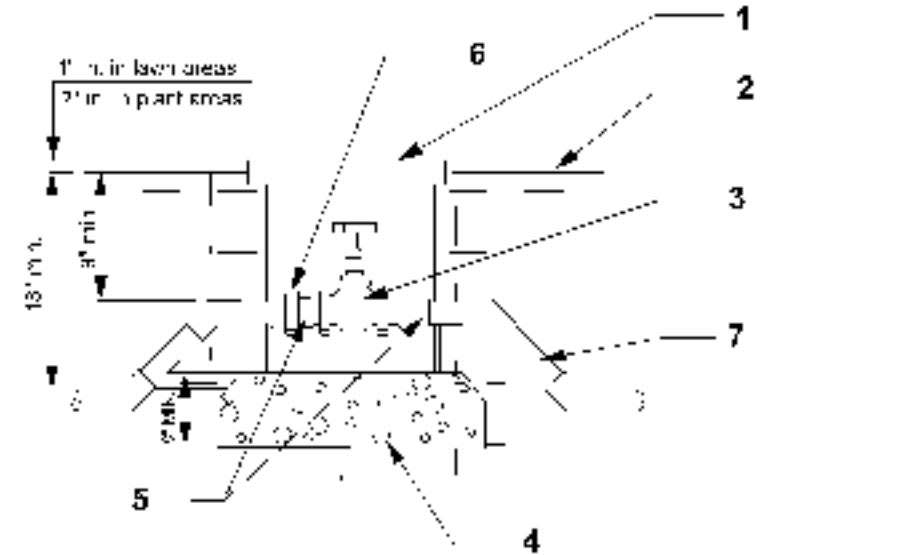


Legend

- Finish grade at turf areas 1-1/2" below top of max strip.
- No. 3 rebar cont. (centered). Lap bar 18" at splices and tie.
- Finish grade at groundcover 2" below top of mow strip.
- 2,000 PSI 1/2" radius at all edges. Install 1/2" preformed expansion joints at 15' o.c. max and at radius.
- Compacted subgrade at 90%
- See L-1 notes for color.

## H-1 Concrete Header Detail

n.s.



Legend

- 10" round plastic valve box with lid.
- Finish grade.
- Brass gate valve with bronze hand wheel.
- 3/4" washed crushed aggregate base.
- SCH 80 PVC toe nipple assemblies.
- SCH 80 PVC union, slip x slip.
- SCH 40 PVC mainline.

Notes

- Place aggregate prior to installation of valve box.
- If ball valves are used, a jumbo rectangular box shall be installed.
- Cast iron and/or flanged valves will require a poured-in-place concrete support (not shown).

## I-2 Gate Valve Detail

n.s.

No.	Date	Revisions / Submissions
Design Firm		
<b>Greenscape</b> 27475 Inez Road Temecula, CA 92591 Tel. 951.302.6345 Cell. 951.907.3277		
Project Title		
Landscape Plan For: <b>Bonaventure Residence</b>		
Project No.		
<b>Details &amp; Specifications</b>		
Project No.	LAB	Drawn by: G050609
Drawn by:	LK	Scale: As Noted
Checked by:	KI	Sheet No.:
Date:	10/21/05	<b>4</b> of <b>4</b> Total Sheets 4