

### Housing and Commercial Development Project, Folsom, CA

**GENERAL CONTRACTOR:**

Greg Houck,  
Ad Land Venture, Rancho Cordova, CA

**COMPLETION DATE:**

2004

**RAIN BIRD SALESPERSON:**

Steve Chaump

**RAIN BIRD PRODUCTS:**

- RWS (Root Watering System)

*"If you're looking for long-term vitality and healthy trees, this is an excellent tool."*

— Greg Houck, Contractor  
Ad Land Venture, Rancho Cordova, CA

**PROJECT OVERVIEW:**

As this housing and commercial development was completed, tree planting became a major undertaking because California state law requires developers to replace all trees removed during construction. The task fell to contractor Greg Houck. With 200 valley oak seedlings to plant on a 20-acre site, he needed an efficient irrigation method that would help the oaks survive in fairly unfriendly terrain and soil conditions.

**CHALLENGE:**

Planting oak seedlings on 20 acres of coarse, rocky soil that prevents uniform distribution of water. Conventional irrigation systems were not an option, due to high levels of water evaporation and inadequate moisture distribution to the roots of the transplanted trees. Drip irrigation was also ruled out because it could not provide enough moisture to establish deep tree roots in this particular application.

**SOLUTION:**

On previous projects, Greg had installed a plastic tube with about a dozen hand-drilled holes and a retrofitted bubbler, but he was never completely satisfied with this do-it-yourself method. Then Rain Bird introduced the Root Watering System (RWS), specifically designed to bring water, air and nutrients to tree roots. Greg selected the RWS with a 1401 bubbler, check valve and grate (RWS-B-C-1401) for his project.

Each RWS unit is made of a 36-inch long perforated mesh tube, which can be cut to length. The tube is perforated with more than 14,000 holes, allowing water to permeate the ground at the root bulb while providing excellent aeration. The design encourages trees to develop long, deep roots, which helps them become established, even in soil that is less than ideal for tree transplants.

**RESULT:**

One year after planting, the trees show "extremely good vitality," according to Greg. In a typical transplant project like this, as many as 20% of the trees do not survive, but Greg only lost one tree out of the 200 planted, thanks to the Rain Bird RWS. "If you're looking for long-term vitality and healthy trees," Greg concluded, "this is an excellent tool."