CLC Landscape Renovation Project
Rancho Santa Margarita, California

Site Report
PROPERTY:
Community Lutheran Church & Saddleback
Children’s Center located in Rancho Santa
Margarita, California

ARCHITECT:
Peter Mowery, C2 Collaborative

CONTRACTOR:
George Alonzo, Advanced Patio & Landscape

RAIN BIRD PRODUCTS USED:
• 1806-SAM-P45 Spray Heads
• 5006-Plus-PRS Rotors
• 5000 MPR Rotor Nozzles
• R-VAN17-24 Rotary Nozzles
• ESP-LXMEF Modular Controllers
• ESPLXMSM Expansion Modules
• WR2 Wireless Rain Sensor
• FS100B Brass Flow Sensor
• PESB Series Valves
• IQ-Cloud v. 3.0 Remote Water Management
• XFD Series Dripline
• XFS Series Subsurface Dripline
• QF Dripline Header
• XF Series Insert Fittings
• ARV050 Air Relief Valves
• XQ1000B Quarter Inch Drip Tubing
• Xeri-Bug Pressure Compensating Drip Emitters
• PCT Pressure Compensating Bubblers
• 1800 Spray-to-Drip Retrofit Kits
• 1800XC Xeri Caps
• Quick Check Basket Filter
• PRF Pressure Regulating Filter
• LFV Series Low Flow Valves
• PRS-Dial Pressure Regulator
• EFB-CP Series Valves
• RWS Mini Root Watering System
• SPX-Flex Swing Pipe
• SB Series Spiral Barb Fittings
• VB Series Valve Boxes

PROJECT PARTNERS
• Rain Bird Corporation
• Santa Margarita Water District
• C2 Collaborative Landscape Design
• Advanced Patio & Landscape
• Mountain States Wholesale Nursery
• Apollo Wood Products
• A-G Sod Farms
• Compact Power Equipment Rental
• Community Lutheran Church

RAIN BIRD
C2 Collaborative
LANDSCAPE ARCHITECTURE

COMMUNITY LUTHERAN CHURCH
Just More Convenient.
Charitable landscape renovation project expected to deliver outdoor water savings of more than 500,000 gallons per year. Rain Bird products help community church and preschool transform their 30-year-old campus into a model of water efficiency and sustainable landscaping.

The Challenge
Community Lutheran Church (CLC) and Saddleback Children’s Center in Rancho Santa Margarita, CA, was struggling with an outdated 30-year-old landscape and inefficient irrigation system. Annual water usage was averaging 1.2 million gallons per year, water bills were climbing, and overspray and runoff were regularly damaging the parking lot and walkways.

“I would see places where it was just soaking, where water was standing in the parking lot,” said Pastor Marty Jacobson. “There were other places where the grass was dying. It didn’t look very good and the maintenance issues were a nightmare.”

The recent drought affecting all of California made the situation even worse. Faced with emergency watering restrictions, the church turned to the local water district for help. A free commercial landscape irrigation survey offered by the Metropolitan Water District of Southern California revealed a multitude of watering problems. Broken heads, leaky seals, excessive pressure and poor coverage were found throughout the property. Much of the plant material was higher water use turf grass with substantial thatch build-up. The control system was outdated, with no weather sensing or rain shutoff devices, and inefficient nozzles were causing a lot of overspray and runoff.

Rain Bird Corporation saw an opportunity to transform the property into a model of water efficiency and sustainable landscaping. With donations and discounts from the partner organizations and a lot of volunteer help, work began on a beautiful new water-efficient landscape that everyone at the church and preschool could enjoy while saving water for years to come.

The Plan
Pete Mowery, design director with C2 Collaborative Landscape Design, created a professional landscape plan outlining a modern and water-efficient new landscape with plenty of native plants, colorful flowers and beautiful trees.

Students at the adjoining Saddleback Children’s Center preschool will soon be able to watch butterflies and hummingbirds as they walk through the new garden and landscape learning about water conservation and native plants.

Many of the plants used on the site are recommended by Santa Margarita Water District’s SustainaBlue Landscapes program.
The Renovation
Rain Bird Corporation donated all of the water-saving irrigation products needed to transform the old sprinkler system. Professional contractor George Alonzo and his crew at Advanced Patio & Landscape began the challenging task of analyzing and upgrading the existing irrigation system. They chased down leaks, capped off unused heads, repaired and moved existing valves, fixed broken pipes, rerouted control wires and began the extensive conversion to new water-efficient irrigation throughout the property.

The new landscape is a showcase of Rain Bird water-efficiency solutions. XFD dripline and QF dripline header were used to convert much of the site to water-saving drip. Rain Bird 1800 Spray-to-Drip Retrofit Kits were used throughout the site to quickly create connection points for drip tubing, especially on difficult areas like the parking lot medians. An existing Rain Bird 1.5 inch brass valve was adapted to control the new drip zone thanks to the addition of a PRS-Dial pressure regulator and Quick Check basket filter.

The two old controllers were replaced with a brand new Rain Bird ESP-LXMEF modular controller, complete with a new PESB master valve and FS100B flow sensor, WR2 wireless rain sensor and Rain Bird IQ-Cloud v3.0 remote management. The new system will automatically adjust the irrigation schedule using weather data and can be stopped and started via a smart phone or tablet from anywhere in the world with Internet access.

Rain Bird RWS root watering systems are helping the new trees flourish and Rain Bird VB series valve boxes were used throughout the site to keep the valves protected.

The Plants
Another project partner, Mountain States Wholesale Nursery, saw the opportunity to showcase its beautiful native and low-water-use plants to help demonstrate that a water-efficient “New California Landscape” doesn’t just mean rocks and cacti anymore. Parkinsonia “Desert Museum” Palo Verde trees with their green trunks and gorgeous yellow flowers sit alongside Pink Parade hesperaloe, agave and more.
All of the mulch used on the project is from recycled wood products. It provides many advantages including keeping in moisture, reducing weeds and keeping plant roots cooler.

Out with the old, in with the new (grass).
Much of the old turf grass areas were replaced with native plants and trees; however, the church members and preschool kids still needed grassy areas for events, gatherings and playtime. The new landscape plan called for three areas of fresh new water-efficient “Ballpark Blend” sod from A-G Sod Farms. The new grass is a combination of warm-season Hybrid Bermuda overseeded with a blend of cool-season Ryegrass and Kentucky Bluegrass and requires 20-30% less water.

“Turf has a lot of advantages: it cools the environment down, it creates oxygen and provides safe areas for kids to play,” said Paul Gaudet, sales representative with A-G Sod Farms. “By doing wise management of water and putting in the right type of turf, maybe downsizing a little bit, you can pretty much have your cake and eat it too.”

All of the new grass is being efficiently watered in three different ways: Rain Bird’s 5000 Plus PRS pressure regulating rotors in a large back patio area, Rain Bird 1800-SAM-P45 pressure regulating sprays with high efficiency R-VAN rotary nozzles in the front, and Rain Bird XFS subsurface drip emitter tubing in the preschool kids’ play area.

The Result: A Community Celebration
By incorporating the latest irrigation products and smart watering practices from Rain Bird’s 25 Ways to Save initiative, they will enjoy a vibrant landscape with projected water savings of more than 500,000 gallons of water annually. The new landscape not only looks good, it will save the church and preschool money and water for years to come.

“We in Rancho Santa Margarita are committed to water conservation and the City commends Community Lutheran Church and its partners in the CLC Landscape Renovation Project for their efforts to make our community more water wise,” said the Honorable Tony Beall, Mayor of Rancho Santa Margarita.

The water district and other project partners are planning to use the site for education and demonstrations in the months ahead, showing others in the community how to improve their own landscapes, save countless gallons of water and manage our precious natural resources wisely.

Visit 25ways.rainbird.com for more water-saving ideas.
At Rain Bird, we believe it is our responsibility to develop products and technologies that use water efficiently. Our commitment also extends to education, training and services for our industry and our communities.

The need to conserve water has never been greater. We want to do even more, and with your help, we can. Visit www.rainbird.com for more information about The Intelligent Use of Water.