

City of Villena Parks, Spain

Root Watering System (RWS) Improves Health of the Greenery in Villena, Spain From Rain Bird®

Villena, a small city in southeastern Spain's Alicante region, has long been concerned about sustainability practices. In recent years, the city has faced increasingly unbearable summer temperatures, causing the health of its greenery, parks, and particularly trees, to be at risk.

The Challenge

“We need to create climate refuges to be able to make the city more walkable,” says Rain Bird Area Specification Manager for Spain, Vicente C. He explains the need for these areas to be “a place where the ground is cooler. It’s really about families, children, and their pets—they need green spaces to absorb the heat, and keeping them healthy requires irrigation. They need trees to be a refuge from the heat, to create shade.”

The Solution

To make its parks more accessible for people of all ages and to create sustainable climate refuges, the City Council of Villena implemented the innovative Rain Bird Root Watering System (RWS) in several key parks and squares, including the renovated Parque del Mercado and two smaller squares: Plaza del Pintor Juan Gris and Plaza del País Valenciano, to irrigate the trees.

Key objectives

- ✓ Mitigate the impact of rising temperatures
- ✓ Create accessible climate refuges
- ✓ Implement innovative irrigation system
- ✓ Conserve water



Products used

- Root Watering System (RWS)
- ESP-9V Battery Operated Controller



Approach

The installation of the RWS began in 2022 and was completed by July 2023. Rain Bird collaborated closely with irrigation company Cullhidro, ensuring seamless project execution with the help of Rain Bird's Area Specification Manager in Spain, Vicente, who studied architecture for seven years—six at the University of Alicante and one year at Northumbria University in England. He then traveled to Sweden to work on green-certified buildings, and on to South America, where he toured half the Amazon River. This experience, in addition to co-creating the first social network for architects in Spain, made him able to contribute directly to this effort.

Results

During his last visit to these parks in May 2024, he observed the success of the RWS project. "You can see the person who designed the project thought about the final look and outcome," he remarks. "It's pristine, well-finished, and the trees are in an irrigation infrastructure that will efficiently deliver water to the roots for continued growth and health." Rain Bird's RWS initiative demonstrates how cities like Villena can adapt to rising temperatures. Tree conservation is a priority, and with the RWS, Villena is safeguarding its investment and ensuring a sustainable future for its parks. "These networks of green spaces help the city stay lively."

