



# Real Estate Development, Huntsville, Alabama

## Vibrant Commercial Development Minimizes Recurring Costs and Boosts Sustainability with Rain Bird Smart Controllers

As the second most populous metropolitan area in Huntsville, Alabama, this commercial real estate development offers Class A office, high bay, R&D, data center, retail, and hotel properties.

### THE CHALLENGE

A sprawling commercial community with many areas of landscaping can be difficult to water efficiently. This development needs a solution that will conserve resources, foster sustainability, and ensure plants are not overwatered. Project managers also hope to maximize the budget and minimize costs in any way possible.

### THE SOLUTION:

A hybrid communication system with ethernet and radio will be used to minimize recurring costs from cellular connections for each controller. Weather-based data sent to the controllers will ensure that the programs update automatically, thereby reducing unnecessary watering and increasing sustainability.



IQ™ Central Control

#### Core Products Used:

- [ESP-LX Series Modular Controllers](#)
- [ESP-LXD Series Two-Wire Decoder Controllers](#)
- [IQ Ethernet Cartridge](#)
- [IQ Central Control](#)
- [WR2 Wireless Rain Sensor](#)
- [Flow Sensors](#)
- [IQ Spread Spectrum Radio](#)

#### KEY OBJECTIVES

- ✓ **Minimize Recurring Costs**
- ✓ **Boost Sustainability**
- ✓ **Conserve Water**
- ✓ **Improve Plant Health**



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### APPROACH:

## Reduce Cellular Connection Costs with Ethernet & Radio

Over 20 **ESP-LX Series Modular** and **ESP-LXD controllers** enabled with cellular network connection will be installed throughout the development. These unique controllers offer a variety of network communications options, including Direct Connect Cable, phone, GPRS/cellular, Ethernet, WiFi, radio, and IQNet Communication Cable. By using a hybrid of ethernet and radio connection as opposed to cellular for this project, recurring costs for each controller will be significantly reduced.

## Leverage Rain Bird IQ Technology for Weather Data

Using LX Modular and LXD Controllers upgraded with **NCC-EN Ethernet Network Communication Cartridges**, the development can now leverage Rain Bird **IQ technology** to interpret data from **WR2 Wireless Rain Sensors** and make automatic weather-based adjustments to irrigation schedules. This will not only conserve resources, save time, and minimize human error, but it will also ensure optimum plant health.

## Capitalize on Flow Sensing

Intelligent **Flow Sensors** will monitor for low or excess flow conditions caused by broken lines or heads and will automatically quarantine the problem area in the event of a leak. This early detection system will prevent liability, water waste, and tenant emergencies. Should an issue arise, Rain Bird IQ will immediately shut down the compromised line and send an alert.



### RESULTS:

## Water Savings & Sustainability

By utilizing flow sensors and weather-based data for smarter watering, this metropolitan area now irrigates with maximum efficiency. Water is only applied as weather dictates, preventing overwatering while flow sensors monitor for leaks.

## Decreased Recurring Costs

Since this is such a large property it doesn't make sense to be paying cellular costs for each controller. By using a smarter network of ethernet and radio communication, **the development now has no cellular connections, greatly reducing their recurring costs for communication!**

