



Upscale Apartment Homes, Commerce Charter Township, Michigan

Unique Apartment Home Complex Increases Efficiency and Shortens Water Window with Rain Bird® R-VAN Rotary Nozzles

Commerce Charter Township is a suburb located 15 miles northwest of Detroit with a population of approximately 40,000 people. Within this suburb is a sprawling new apartment community with 40 upscale buildings onsite.

THE CHALLENGE

With many small areas of landscaping, this large complex is difficult to water effectively. The area has many trees that do not receive direct sunlight as well as a tight watering window where irrigation must only take place between 10 pm and 6 am. As a result of the property's size and unique landscaping needs, a creative and efficient solution will be necessary.



R-VAN Rotary Nozzles

THE SOLUTION:

Work with Rain Bird to install products that provide more efficient coverage to mid-range areas that are too small for a standard gear rotor, but too large for spray heads. Seek out opportunities to realize significant water savings while optimizing watering windows. Decrease maintenance by mitigating chances for damage with fewer heads.

Core Products Used:

- [R-VAN Rotary Nozzles](#)
- [WR2 Wireless Rain Sensor](#)
- [IQ Central Control](#)
- [ESP-LXIVM 2-Wire Controller with Smart Valve Technology](#)
- [PGA-IVM Series Valves](#)
- [RD1800™ Series Spray Heads](#)
- [5000+ Series Rotors](#)

KEY OBJECTIVES

- ✓ **Conserve Water**
- ✓ **Increase Coverage Efficiencies**
- ✓ **Decrease Maintenance**
- ✓ **Shorten Watering Window**



Site Report: **Upscale Apartment Homes, Commerce Charter Township, Michigan**

Large Apartment Complex Increases Efficiency and Shortens Water Window with Rain Bird R-VAN Rotary Nozzles

APPROACH:

Maximize Efficiency with R-VANs & IQ Central Control

By utilizing R-VAN rotary nozzles as opposed to conventional spray nozzles, will be able to **reduce its water usage by at least 30%**. The complex will be able to both cut the total number of zones and achieve optimal coverage within tight watering windows. Add WR2 Wireless Rain Sensors and IQ Central Control to the equation and management can expect significant water and labor cost savings across the board.

Reduce Wire Connections & Prevent Failures

Utilizing the ESP-LXIVM 2-Wire Controller with Smart Valve Technology will greatly reduce the number of wire connections needed at the property. The new IVM-SOL eliminates the need for a decoder, which means half the number of splices are required. Fewer splices will save time, money and installation costs—plus reduce the risk of zone failures, further decreasing maintenance and repair expenditure.

Maximize Flexibility

As part of the property's parking design, plants are interspersed in small areas and many trees do not receive direct sunlight. The complex will rely heavily on Rain Bird products which provide a great deal of flexibility and room for customization, allowing for the high level of precision necessary to ensure a healthy landscape even under imperfect conditions.



“ Rain Bird is one of the leaders in the industry. I've been in the industry for 40 years and I know what performs well, what doesn't, what tends to have problems...we thank Rain Bird for producing a good product and standing behind it.

MICHIGAN AUTOMATIC SPRINKLER

RESULTS:

Reduced Watering Window

The property successfully reduced the total number of zones by 50%. This, in turn, cut down the water window, which was vital to meeting customer expectations for watering hours. Plus, by using the ESP-LXIVM Controller, the complex was able to run multiple stations at once based on the water sources and water available.

Increased Efficiency & Reduced Maintenance

By using Rain Bird R-VAN rotary nozzles, fewer heads were needed and they could be spaced farther apart. This makes for less targets for snow plows and mowers, which could hit and damage the equipment. As a result, the amount of repairs and maintenance of the system has been significantly reduced and the equipment has been performing well. In fact, the grass stays green even during the hottest months and units are selling as quickly as the developer can build them!