



NovaHills Mui Ne Resort & Villas, Phan Thiet, Vietnam

New Housing Development Saves Up to 70% on Labor Costs and Water Consumption with Rain Bird® Irrigation

NovaHills is a Mediterranean-inspired housing development featuring 600 upscale villas with beautiful gardens. The site includes more than 100 acres overlooking the South China Sea. Even in this tropical climate, about 50 acres require irrigation to keep the landscaping looking lush.

THE CHALLENGE

NovaHills' unique cone topography makes watering difficult. An irrigation system must accommodate large variations in elevation and a 10% slope to avoid low-point drainage issues. A pump will need to operate at the bottom of one side of each cone and push water almost vertically to the top while controlling the natural pressure from top to bottom on the other side.

THE SOLUTION:

The Rain Bird® team will need to design a unique irrigation system that can deliver precise, uniform watering across the varied elevations and steep slopes. An intelligent control system will be necessary to maximize efficiency of water, electricity and labor costs. The new, centralized controls will also enable easy management of all watering zones from one location.



ESP-LXIVM 2-Wire Controller with
Smart Valve Technology

Core Products Used:

- [ESP-LXIVM 2-Wire Controller with Smart Valve Technology](#)
- [300-BPES Valves](#)
- [PE-IVM Series Valves](#)
- [R-VAN Rotary Nozzles](#)
- [5000+ Series Rotors](#)
- [PRS Dial Valve Pressure Regulator](#)
- [IQ Central Control](#)
- [FS Series Flow Sensors](#)

KEY OBJECTIVES

- ✓ **Irrigate Across Challenging Topography**
- ✓ **Avoid Low-Point Drainage**
- ✓ **Conserve Water**
- ✓ **Minimize Installation Costs**



Site Report: **NovaHills Mui Ne Resort & Villas, Phan Thiet, Vietnam**

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APPROACH:

Design for Varied Elevations

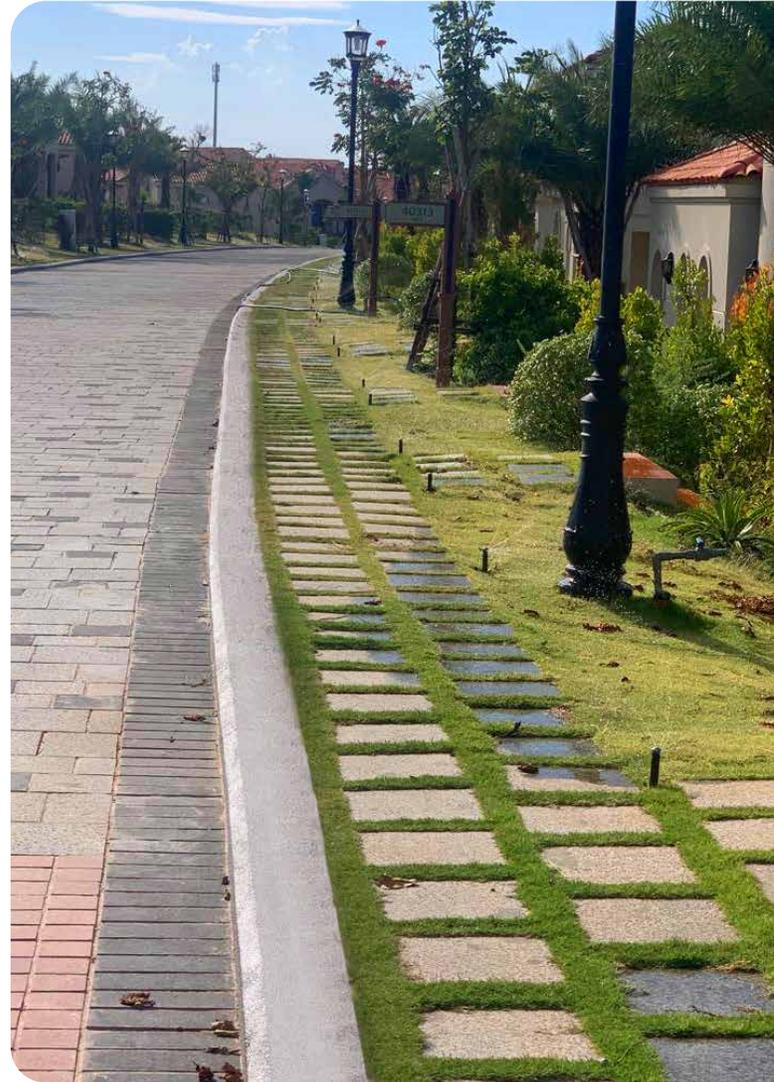
Rain Bird's **5000+ Series Rotors** equipped with Seal-A-Matic (SAM) Check Valves and a pressure regulating stem (PRS) will be ideal for the property's varied elevations. More than 100 rotors and high-efficiency **R-VAN Rotary Nozzles** will work in tandem to provide uniform coverage at a constant 45 psi without misting and fogging. The rotors' check valves will eliminate low-point drainage issues, holding back up to 2 m (7 ft) of elevation change. At the same time, **PRS Dial Valve Pressure Regulators** will go even further to ensure consistent pressure regardless of whether water is being pumped uphill or coming down.

Enhance Efficiency

Rain Bird's **ESP-LXIVM 2-Wire Controller** will be used to provide precise watering for the property's welcome center and villas. The 2-Wire system will require 50% fewer electrical wire splices during installation, significantly reducing the cost of associated labor and materials. Furthermore, LXIVM is compatible with **IQ4 Central Control**, so all of the controller's flow sensing and advanced flow management tools will be available on-the-go, from a computer or mobile device.

Improve Control with IVM

Integrated Valve Module (IVM) technology will also enable two-way communication with the **300-BPES Valves** specified, giving irrigation managers 24/7 visibility into the health of the irrigation system. For additional protection, BPES Valves are built for durability; equipped with a patented scrubber mechanism to actively fight dirt and particles in effluent water.



RESULTS:

Efficient Performance

Thanks to the purpose-built Rain Bird system with intelligent technology, **NovaHills estimates a 60-70% savings on irrigation labor costs as well as another 60-70% reduction in water consumption.** With help from on-site training provided by Rain Bird, the NovaHills maintenance staff created more than 40 automated programs they use to conveniently control watering from anywhere.