

The Meadows

Project Information

- Square Footage: 70,000 sf
- Completion Date: Spring 2008

Design Engineering

- Four parallel 1500 ft standing column geo-exchange wells.
- Variable frequency drive engaged for well water flow control and energy efficiency.
- Automatic purge of well water filters.
- Distributed ground source heat pumps utilized throughout the building.
- Industrial grade geo-exchange control system with an extremely user friendly interface.
- High efficiency modulating boiler installed for back-up emergency heat, if needed. Periodic automatic operational tests included to ensure the emergency back-up boiler will operate if emergency heat is required.

System Integration

- Control panel design and fabrication
- Controller programming
- Furnished all instrumentation
- Commissioning the geo-exchange system.

Rental Unit Housing For Low Income Seniors North Smithfield, RI

One of the primary goals of this project was to provide an extremely economical HVAC system keeping in mind the occupants are low income elderly. This project consisted of a new 80 unit housing complex of approximately 70,000 square feet using high efficiency ground source heat pumps. A geo-exchange (a.k.a. geothermal) system was designed which included four 1500 foot standing column wells piped into a central plant to support a water-source heat pump loop. In addition to preparing the Geo-exchange construction documents, we gladly provided technical assistance to the well drilling contractors on the means and methods of the open loop well design/operation.



ICDS

Innovative Construction & Design Solutions, LLC

419A Whitfield Street
Guilford, CT 06437
P: (203) 453-8596
F: (203) 453-7012
info@icdsllc.com