

Hebrew SeniorLife builds 408 geothermal wells for heating, cooling system for NewBridge on the Charles development

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Hebrew SeniorLife has begun construction of a geothermal heating and cooling system at its NewBridge on the Charles development that will be the largest system of its kind in New England and is believed to be one of the largest in North America.

The high-efficiency system, designed by Chesapeake Geosystems, will include 408 geothermal wells, each approximately 500 feet deep, on the 162-acre Dr. Miriam and Sheldon Adelson Campus. All wells will be located outside of environmentally sensitive areas and will contain circulating water loops that will use the earth as a heating source in the winter and cooling in the summer. The NewBridge system uses a closed-loop piping network, so no water will be discharged or withdrawn from the ground or the nearby Charles River.

Suffolk Construction is the contractor for the NewBridge on the Charles project.

"We designed NewBridge on the Charles with the highest attention paid to the environment because we want residents to enjoy the beauty of their natural surroundings and know that they live in an environmentally friendly, green community," said Len Fishman, president and CEO at Hebrew SeniorLife. "A key component of NewBridge on the Charles will be its multigenerational aspect, with a K-8 school at the heart of the campus. Young students can see we are leading by example, and our residents will know we are helping to protect the environment for future generations."

NewBridge on the Charles, a state-of-the-art continuing care retirement community, is bordered on two sides by the Charles River and is seen as a model for environmentally responsible development along this important waterway. The campus will include green development elements such as a rainwater collection system that supplies all external irrigation needs and recharges the groundwater aquifer, drought-resistant landscaping, low-flow toilet facilities, kitchen countertops made from recycled materials, high-efficiency lighting and appliances, and low-maintenance exteriors. One hundred acres of the NewBridge campus will be preserved as permanent open space, forming a natural buffer around the buildings, and more than 1,800 trees will be planted across the campus to replace those lost during the construction process.

The geothermal system will supply all NewBridge campus facilities and most residences with high-efficiency heating and cooling. The savings will reduce the campus's heating-related CO2 emissions by 34 percent - the equivalent of taking more than 1,700 cars off of Massachusetts roads for a full year. In addition to lowering the carbon footprint of the campus, the NewBridge geothermal system will have lower operating and maintenance costs, increased reliability, and a longer life cycle than other alternative heating and cooling systems.

Drilling of the 408 geothermal wells on the NewBridge campus is expected to continue throughout the spring.

NewBridge on the Charles, off West St, is being developed by Hebrew SeniorLife, an organization

that has worked for the advancement and care of older adults for more than 100 years. When completed in the fall of 2009, NewBridge on the Charles will provide a continuum of state-of-the-art residences and health care services for seniors starting at age 62. For independent and active older adults, the campus includes 256 homes in cottages, villas, and apartments that are supported with senior services. NewBridge will also have 51 units in the Jack Satter Assisted Living Center Residence and 40 beds in the Alfred and Gilda Slifka Memory Supported Assisted Living Residence; 268 short-term rehabilitation and long-term care beds in the Gloria Adelson Field Health Care Center. The campus features the Rashi Jewish Day School, the Carl and Ruth Shapiro Residential and Community Centers, recreation facilities, 17 miles of walking trails, and 100 acres of preserved open space.

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