



GOING FOR GREEN

Independence complex being built to be the most environmentally friendly in Oregon

INDEPENDENCE - For a small city, population 7,500, a lot of big things are happening.

Independence has an eight-screen movie theater set to open in November, a revitalized Riverview Park, with its new outdoor amphitheater and plans for a new water fountain, and major renovations along the main route through town. But there is another project on the horizon that promises to capture a different kind of attention. A residential and commercial building two blocks from Main Street is on track to be the greenest building in the state and one of the greenest in the country. The three-story complex, which is scheduled to be completed by the end of the year, will have condominiums, offices, retail space and a large lobby for a coffee shop or similar business, developer Steven Ribeiro said.

"It's going to provide an urban-living environment in safe, small-town America," he said.

Independence Station, a 57,000-square-foot, mixed-use development, is being built with recycled and nontoxic materials, will be heated and cooled with vegetable oil, has alternatively-fueled vehicles for use by the residents, and will capture rainwater for reuse in toilets and for gardening. Ribeiro sees the building as a green island.

"We will be making our own electricity and creating our own heat," he said. "When the power goes out in Independence, we won't be affected."

Green certification

To be certified as a green building by the U.S. Green Building Council, developers must meet certain criteria on a 69-point rating system. Items including water and energy use, indoor air quality, building materials and construction design are counted. The green certification that Ribeiro aims for, called platinum, is the highest a building can earn. Four hundred and seven buildings nationwide are certified as green by the council, and 17 of those are certified platinum. None of the platinum buildings is in Oregon.

"I think the difficulty (in achieving platinum) comes in thinking outside the box," said Gina Franzosa of the Cascadia Region Green Building Council. "And thinking of new possibilities that are not part of the traditional building design."

Nothing that Ribeiro has designed for Independence Station is traditional:

- Basement generators that run on biodiesel, some of which will be used vegetable oil collected from local restaurants. Ribeiro hopes to have contracts with local farmers to plant oil crops in the future.

·The biodiesel generators will be open to the public, and Oregon State University staff members will use about 900 square feet of the space for a biofuels-research lab and satellite classroom.

·An insulated 20,000-gallon water-storage tank beneath the structure's parking lot will store "waste" heat from the generators. As needed, the water will be circulated through the building for heating. Radiant heating will extend to the courtyards, private condo decks, sidewalks and the area outside the coffee shop so that people can sit outside even in cooler weather.

·A second 20,000-gallon water-storage tank will hold water cooled by a small unit and circulated throughout the building as needed.

·Ribeiro plans to have a vegetable oil-fueled city bus run between Independence and Monmouth and several biofuel or electric cars for residents to use.

·A 9,000-gallon tank will collect rainwater, which will be treated and reused for irrigation and toilet flushing.

·There will be 10 loft residential units between 500 and 1,000 square feet and eight luxury residential units as large as 1,650 square feet available for purchase and rental. The cost has yet to be determined.

Part of the reason that costs are not set is that almost every detail of the building has been mulled over and reconfigured as the architects and engineers figure out the best design - territory not yet charted. "There were things we backed away from," architect Mark Seder said.

For example, the original idea was to store all of the rainwater collected on the building at the site. "We had to balance that idea with the probable use," he said. "It turned out we would have to create another basement almost as big as the basement we have just to store rainwater."

Also, designers wanted a lit "Independence Station" sign at the front of the building. Seder and his team are working on how to light the sign efficiently and without contributing to light pollution. "There is a lot of original invention and design going on in here," he said. "It's not just to earn points (for the green certification). It's a statement of value."

Pioneering ideas from the past

For as futuristic as the design seems, city manager Greg Ellis said it beckons to an older age. During construction, workers found caverns under the road that were used to collect rainwater for fighting fires, Ellis said. "Here (at Independence Station) are things coming back that were common years ago," he said.

City officials hope these ideas make people see Independence as innovative. In turn, the city is putting \$175,000 into lighting and sidewalk improvements around the project. Ribeiro has spent about \$4.5 million on the building; \$875,000 on the concrete structure, which is made partly from an industrial-waste byproduct. Final estimates on the cost of the building will be available in the spring, he said. But the extra costs are worth it in knowing that the building reduces people's dependence on foreign oil and helps the local economy, he said.

The walls of windows, for example, are being made by Westview Products in Dallas. And the wall systems are made from local materials - lumber from Lyons, laminated beams from Eugene and glass from Seattle, said Milt

Serafin, one of Westview Products' owners. These unique aspects have raised eyebrows. Ribeiro said he has received several inquiries about the condominiums and retail space.

Salem resident Shon Hunter included his name on the list of people interested in the condominiums. He said it would be a perfect place for him and his wife to raise their baby. "It's just the experience of being in a building that is self-sustaining and eco-friendly," he said. "It's too bad more homes and buildings aren't being built that way."

Buildings such as Independence Station pave the way for others, said Oregon State University chemical-engineering professor David Hackleman. He plans to use the classroom space in the basement as a biodiesel research and learning area. "Right now it is an experiment," Hackleman said about Independence Station.

"We think it will work, and we hope it will work but it will take people making it happen," he said. "I am excited and, of course, a little apprehensive. I haven't seen this tried out before. But we call ourselves pioneers here in Oregon, so we better take action that way."