

Environmentally sound building adds value

By Bendix Anderson

Seattle – Workers broke ground in December on the \$10.7 million Denny Park Apartments, the first project to receive funding under the Green Communities Initiative, a five-year, \$550 million commitment to invest in environmentally sound affordable rental and for-sale housing projects.

The initiative is a partnership of The Enterprise Foundation/Enterprise Social Investment Corp. (ESIC) and the National Resources Defense Council (see sidebar).

Most affordable housing projects already have tight budgets, without adding a lot of expensive green building techniques. But Denny Park's developers at the Low Income Housing Institute (LIHI), based here, have a whole series of green building ideas that add value to the project, save on operating expenses and sometimes even cost less to implement than the usual techniques.

"Even given the tight constraints of the [low-income housing tax credit]

program, it's still possible to build a project that respects the environment," said Brian Sweeney, manager of housing development for LIHI. "It can be done with a little bit of imagination."

Storm-water solutions

For example, Denny Park has found a way to handle its storm water that is good for the environment but that costs about the same as this city's usual solution.

Seattle has a serious problem with storm water – the combined sewers here tend to overflow during big storms. To help solve the problem, the city asks developers in most neighborhoods to construct huge underground tanks to hold the rain and release it slowly into sewers, so that the system won't overflow. Underground tanks, however, are very expensive.

Other green builders have found a way to funnel storm water into the ground beneath their landscaping. But this wouldn't work at Denny Park

because the building will take up the whole lot. "We didn't have any ground," Sweeney said.

Fortunately, LIHI came up with a solution. The rain that strikes the roof of Denny Park will run down gutters into three planters, which will slow the water down and soak up some of it before releasing it into the sewer. The largest of these planters is 75 feet long and five feet wide. This solution will cost about \$15,000 in piping and landscaping.

LIHI also needed to spend an extra \$50,000 on a 6,000-square-foot metal roof, because the composition shingles developers typically put onto a building like Denny Park would add poisonous petrochemicals to the rain runoff.

It would have cost up to \$60,000 to build an underground tank, and the additional costs of the metal roof and attractive landscaping don't exceed that by very much.

The fact that a roof made of composite shingles will probably need replacing after about 20 years while a steel roof should last at least 50 years will also help to offset the extra expense in the long run.

More green ideas

Denny Park is also designed to make the most of sunlight with its large windows. The extra costs for these big windows are hard for the LIHI builders to quantify because it's difficult for them to imagine designing the building any other way. "It's just good design," Sweeney said.

The building has a large southern exposure, which takes advantage of the

Green Communities Initiative

The Green Communities Initiative is a partnership of The Enterprise Foundation/Enterprise Social Investment Corp. (ESIC) and the Natural Resources Defense Council, along with leading corporate, financial, professional and philanthropic organizations.

The initiative is a five-year, \$550 million commitment to build more than 8,500 environmentally friendly affordable homes across the country. Green Communities offers incentives to developers for affordable rental and for-sale housing that promotes health, conserves energy and natural resources, and provides easy access to jobs, schools and services. The incentives include favorably priced financing, tax credit investments, grants and technical assistance.

Denny Park Apartments is the first project in the nation to receive funding through the Green Communities Initiative, and it came in the form of \$5.5 million in equity from the sale of low-income housing tax credits to ESIC. This was a big chunk of its \$10.7 million development cost.

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oversize windows.

LIHI also spent an extra \$250,000 to heat all of the hot water for the project in large, efficient boilers located in Denny Park's mechanical room.

In contrast, most new affordable apartments have individual hot water heaters tucked away in a closet. These smaller heaters need more maintenance than central water heaters and because they are in the apartments, it's more difficult for maintenance workers to get to them.

Denny Park's central boilers also provide hot water for the building's central hydronic heating system. Hot water runs through the baseboard of each apartment to provide heat.

The efficient boilers will benefit the tenants at Denny Park, even though the project is not submetered. Because the cost of utilities is added to an apartment's rent, more efficient means of providing heat and hot water translate into lower rents. The project will also be easier to market to new tenants because of these low rents.

Denny Park will also save on the cost of heating common areas, and Sweeney calculates that these expensive, efficient central boilers will pay for themselves over the 30-year life of the project.

A breath of fresh air

The air quality at Denny Park will benefit from well-built fans that run all the time, though building codes require these fans to run only 12 hours a day. The fans are more efficient than regular ventilation fans and they will last longer, but they are also more expensive, costing \$100 apiece instead of \$30. The extra \$70 for the project's 70 fans added \$4,900 to the total cost of the project.

That's a small price to pay, Sweeney said, especially considering that the project is less likely to suffer from problems with toxic mold, thanks to the fans. That's especially important during Seattle's wet season.



Denny Park Apartments: Sources of funding

- **9% low-income housing tax credit equity from the Enterprise Social Investment Corp. (\$6.7 million allocation):** \$5.5 million
- **Soft financing from city's Office of Housing at 0% interest:** \$2.1 million
- **Deferred loans provided by the Washington State Housing Trust Fund at 1% interest:** \$1.4 million
- **Permanent 30-year loan at 1% interest from Washington Community Reinvestment Association:** \$796,000
- **Grant from developer with funds raised from general partner loan from Federal Home Loan Bank of Seattle:** \$499,950
- **Soft financing from Seattle Housing Authority at 0% interest:** \$250,000
- **Grant from Bill & Melinda Gates Foundation's Sound Families Program:** \$160,000

Total development cost: \$10.7 million

"There's a lot of moisture in the wintertime and a lot of mold," Sweeney said.

Some of the green features at Denny Park were expensive, but LIHI typically builds many of these features into its projects as a matter of course. As a result, it cost the developer only a little more to meet the standards of ESIC's program. "We haven't spent 3% [more than for] a typical project," Sweeney said.

LIHI used a variety of financing

(see sources of funding box) for the project's 25 studios, 10 one-bedrooms, 10 two-bedrooms and five three-bedroom apartments. The units range in size from 420 to 1,100 square feet.

All 50 apartments are rent-restricted. Ten will be reserved for households earning up to 60% of the area median income (AMI); 20 are for those earning up to 50% of AMI; and 20 are for those earning up to 30% of AMI. Some tenants will probably receive Sec. 8 vouchers. ■