Housing Carved In Rock

BY PAUL FOURNIER

Dracut, Mass., subdivision is typical of tougher sites being faced by developers today

subdivision under construction in Dracut, Mass., illustrates the challenge facing developers today as they build houses on increasingly difficult terrain while complying with affordable housing laws.

Jakon Development Inc. of Dracut is literally carving foundations in rock for Forest Glen, a development for senior citizens that consists of 28 single-family homes, including eight units of affordable housing.

According to Jakon owner, John Swiniarski, rock accounts for roughly 35,000 cubic yards of the 100,000 cubic yards of material to be excavated at the six-acre site.

Jakon's job superintendent Tim Orio, put it into perspective:

"There's plenty of rock on this site. Much of it is ledge sticking out above ground. And the rest is very close to the surface, with just 3 feet or 4 feet of overburden. We're blasting almost every cellar hole."

In addition to building the 1,400-square-foot houses, Jakon is putting in

underground utilities and constructing a 1,070-foot by 30-foot-wide roadway – with rock accounting for much of the excavation.

Maine Drilling & Blasting's (MDB) Auburn, N.H., division is performing the blasting for Jakon. With many existing homes surrounding the site, it's a tricky operation according to blasting foreman Mark Siders.

"The homes in the neighborhood are on the same vein of rock we're blasting," said Siders. "So we're making small shots. We have to be very careful not to damage foundations."

MDB is using an Atlas Copco ROC F7 drill with an enclosed cab to bore blast holes, and covering the shots with extra heavy rubber blankets. Shot rock is excavated by a Hyundai 450LC-3 and loaded on a Cat 250D off-highway truck for depositing in separate piles according to the size of the fragments. Work crews break up larger pieces using demolition hammers mounted on excavators, while they feed smaller chunks of rock through a portable crusher that periodically vis-

its the site. Operated by Ralph Caruso of Revere, Mass., the Pegasus self-propelled crusher pulverizes much of the rock into minus-6-inch material. This is being used to fill in low spots around the site. In addition, the crusher is producing minus-1-1/2-inch aggregate for use as road base and under sidewalks.

Since most of the ideal building sites in Massachusetts have become a distant memory, dealing with tracts like this one puts a developer between a rock and a hard place (pardon the pun). And building an affordable housing project on a costly site is particularly challenging.

"It's the new cost of doing business," said Swiniarski.

Jakon is developing the subdivision as a Local Initiative Program (LIP) under Chapter 40B, Massachusetts' Affordable Housing Zoning Law.

Massachusetts Chapter 40B enables local Zoning Boards of Appeals (ZBAs) to approve affordable housing developments under flexible rules if 20 percent to 25 percent of the units have long-term affordability restrictions. Enacted



Maine Drilling & Blasting crew loads ANFO explosives into holes bored by Atlas Copco drill at rocky site for Jakon Development Inc. subdivision in Dracut, Mass.



Subcontractor Maine Drilling & Blasting's Atlas Copco ROC F7 drills holes on exceptionally rocky site.



Blaster checks depth of ANFO explosives in one of the drilled holes.



Extra heavy rubber-tire blankets are used to muffle shots.

in 1969, the statute was intended to ameliorate a shortage of affordable housing statewide by reducing such obstacles as local approval processes, local zoning and other restrictions.

In most 40B developments, sales of market rate units are supposed to subsidize the lower prices of the affordable units. Thus, Chapter 40B was expected to encourage the construction of affordable housing units with minimum or no cost to the state or federal government.

In theory, while developers absorb the costs in terms of lost profits, they reap benefits, for example, a streamlining of the permitting process. In line with this, ZBAs are authorized to apply more flexible standards than the usual local zoning by-law requirements. For instance, a local zoning code may require two acres of land for each house or prohibit multifamily housing, but under Chapter 40B, the ZBAs can approve a project with greater density, thereby making it financially feasible to develop the affordable housing.

Under LIP, the permitting process is supposed to be further hastened. The highest elected city or town official "signs off" on the project, an action that is meant to expedite the application process. In the case of Forest Glen, Swiniarski said, the application process began in mid-2003 and it took about a year to get approval to build the project.

The developer got the notice to proceed in August 2004. In November, as shown in the accompanying photos, site blasting and excavation were well under way.

In a mid-April 2005 interview, Swiniarski said that half the road was in, three of the homes were already framed and four of the affordable units were sold as were seven of the market-rate homes.



Hyundai excavator loads blasted rock fragments into Cat 250D off-highway hauler.



John Swiniarski, owner, and Tim Orio, job superintendent, of Jakon Development Inc., discuss progress of site work.

Help For Developers And New Homeowners

According to Matthew G. Feher, legislative analyst for the Massachusetts Municipal Association (MMA), on March 29, the Legislature's Joint Committee on Housing and Urban Development released a \$200-million bond bill that includes funding for affordable housing over the next five years.

The bill would provide \$100 million in new authorizations to fund the state's Affordable Housing Trust Fund and would provide \$100 million in new authorizations for the Housing Stabilization Fund.

The Housing Stabilization Fund was created in 1993 to help developers purchase, preserve and rehabilitate affordable housing. The fund focuses on new home ownership development and first-time home ownership support. All program funding applications are approved by the cities and towns where the project is located.

The Affordable Housing Trust Fund was created as part of the fiscal 2001 state budget and supports projects that build or preserve housing throughout the state for households that do not exceed 110 percent of the area median income. Housing units developed using these funds must remain affordable for no less than 30 years. Out of the fund, \$5 million is spent each year to repair and modernize existing state-assisted public housing.

Over the past five years, \$83 million in AHTF funds have been used to construct or preserve more than 4,500 units of affordable housing. Of those, 1,341 units were affordable to persons earning 30 percent or less of area median income.