



Rock, Paper, Scissors

With skyrocketing material prices and land scarce, architects are drawing innovative designs to help satisfy trimmed budgets.

BY MINDY GRILL

Developed by Legacy Partners, Foster City, Calif., and designed by Humphreys & Partners Architects, L.P., Dallas, the Delano (above) is a four-story with basement community with 258 units. Located in Las Colinas, Texas, and scheduled for completion in the summer of 2007, the Delano has a 4.5-level structured, above-grade garage.

Building apartment homes in recent years has presented a constantly changing series of challenges. As the Federal Reserve Bank steadily dropped interest rates in the early part of the decade, apartment owners saw the rental market decline as renters seized the opportunity to buy houses.

The record low interest rates drove some owners and apartment developers to adapt by converting their rental stock and development projects to condos, adding fuel to the home-buying craze. But by 2005, then-Chairman of the Federal Reserve Alan Greenspan slowly began to raise interest rates. The result: an ebb in the condo conversion market and single-family home sales.

But industry professionals shouldn't expect an apartment development boom just yet, according to architect Greg Faulkner, a partner in the Dallas-based Humphreys & Partners Architects L.P. While home sales and condo markets may be tapering off slowly, people are still struggling to get rental deals to work, he said.

But a lot has changed during the past few years. Land prices have almost tripled. The costs of construction materials have climbed, and the demographic of the typical renter in 2006 may indicate that urban projects are the wave of the future. That adds up to a paradigm shift

that requires developers to take new factors into consideration to emerge profitable.

Land: Going, Going, Gone

Apartment developers want to make their numbers work when plotting projects, and they have new concerns in light of the changed market conditions of the past few years. Developers must analyze many new trends before going forward.

A huge obstacle is the cost of land, Faulkner said. In the past few years, with interest rates so low, single-family homeowners have scooped up the larger parcels of land that apartment builders scout out for garden-style apartments, he said.

"It's very hard to find a high-quality, 15-acre site to develop a garden-style community nowadays," said Richard Munger, Regional Vice President of Investments for Gables Residential. Even if land is available, thanks to the land cost per home site allocation for town-home developers, land is selling for up to three times more than what an apartment developer would have paid for similar properties five years ago, he said.

With land costs so high—and rents still low in most markets—it has become financially unfeasible for many developers to build a low-density, garden-style apartment community, Faulkner said. To do so, an owner would have to be able to

realize at least \$1.50 per square foot in rents—and that's in a suburban setting, where land may be slightly less expensive. In most markets, especially in the secondary markets, this is simply not happening, Faulkner said.

The traditional wood-frame garden apartment that has been the mainstay of apartment development projects is being phased out under the current conditions, said Pete Rocereto, Vice President of Construction for BRE Properties.

Construction Costs Escalate

With land so expensive, developers are looking at what they can build on smaller parcels to accommodate more units. Naturally, towering skyscrapers come to mind.

However, those types of structures come with an increasingly hefty price tag.

Once developers exceed what is known as a Type 5, or wood-frame construction, which supports only four floors according to code, they must build with concrete or steel, said Donald Meeks, Principal of Meeks + Partners, a Houston-based architecture and land-planning firm that specializes in apartment and commercial design.

But, according to Meeks, in the past 12 to 18 months, the cost of those building materials has increased between 20 percent and 30 percent as the result of a combination of factors, including the war

in Iraq, the need to rebuild after Hurricane Katrina and increased need for building materials in China.

Building an apartment community out of concrete and steel is a losing proposition in almost every market, Faulkner said.

"These certainly aren't the types of projects that are acceptable in suburban settings," Munger said. Most apartment developers are confronted with NIMBYism or resistance to density when introducing a new apartment community in a suburban setting, he said.

Previously, Gables Residential has been able to placate local community groups, planning boards and other organizations by agreeing to stick to low-density, garden-style construction with plenty of green space, Munger said. Though a garden-style community wouldn't be profitable in many markets, it would be hard to get approval for mid-rise construction in a suburban setting. Plus, suburban residents aren't typically looking for densely populated buildings with covered parking garages like most city-dwellers are, he said.

But even in urban settings, the costs inherent with steel and concrete structures don't spell profits for an apartment project, Faulkner said. It now costs approximately \$175 to \$200 per square foot to build using steel and concrete, and unless a developer is building subsidized housing or can legitimately demand

extremely high rents, such a structure would almost never be profitable, he said.

Innovations in Wood

Given the variables dealt to the apartment housing market in the past several years, developers who wish to put profitable, new products into the market place have had to get "more and more creative," Munger said.

Unlike steel or concrete structures, wood-frame construction offers a lot of flexibility in layout, Rocereto said, and apartment developers are learning how to use that to their advantage.

Although Meeks has seen the demand for wood-frame building plans soar in the past couple years, the designs are nothing like what they used to be.

Recently, apartment architects have succeeded in using wood-frame in higher density projects—an increase that enables developers to remain profitable, Meeks said. A typical garden-style, wood-frame construction had maybe 30 maximum units per acre, Munger said. Now, design innovations allow architects to build wood-frame construction that can fit as many as 75—even up to 100—units per acre, Meeks said.

Developers are requesting plans for four-story wood-frame buildings that are built atop above-grade or below-grade parking lots—sometimes called podium-style con-

struction, Faulkner said. Although those designs are more expensive to build than traditional wood-frame, they allow the developer to maximize allowable height, and therefore the density, in a wood-frame construction, while still leaving room for parking, he said. Another technique gaining popularity is the wrap-around style, in which apartments are wrapped around a parking structure, rather than simply wrapping around a courtyard or breezeway—both areas of unusable space.

And architects are finding other ways to maximize useable square footage.

"Garden apartments are historically inefficient," Meeks said. The net rentable square footage versus the gross square footage usually works out to about 70/30, he said. Now, design economies enable developers to approach 90 percent rentable square footage, Faulkner said.

In new buildings, breezeways are usually eliminated, Meeks said. The core is tighter with little space for hallways, stairs or elevators, Faulkner said. There are many benefits: With fewer hallways, there is less maintenance for owners, he said. Plus, these compact buildings can fit on a smaller footprint, reducing the amount of expensive concrete needed for the foundation, Meeks said. ■

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