

NOTEBOOK

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Builders Face the Sprawl-Busters

The fight against sprawl has become a rallying cry for environmental activists frustrated by traffic congestion and loss of open land. Increasingly, groups fighting sprawl portray home construction in a harsh light. In a new book, *Suburban Nation: The Rise of Sprawl*, architects Andres Duany and Elizabeth Plater-Zyberk write, "As you creep along a highway that was widened just three years ago, you pass that awful new billboard: 'Coming Soon: New Homes!' Already the bulldozers are plowing down pine trees, and a thin layer of mud is oozing onto the roadway." Such images depict home building as an environmental affront, like factory smoke. "We can do something to manage growth now," says Sandy Bahr, conservation outreach director for the Sierra Club in Arizona. "Or we can wait until everything is just a sea of red tile roofs."

But many builders feel that they are being unfairly blamed for the strong demand for new homes. "Those of us in the homebuilding business are reactive to what people want," says Stuart Price, a builder and partner at Granor Price in Horsham, Pa. "We can't create a market."

"Smart growth." Reacting to traditional suburban development, sprawl opponents advocate "new urbanism" or "smart growth" — a type of planning that directs new development to existing neighborhoods, encouraging high-density housing mixed with commercial properties. Smart-growth advocates often urge increased regional planning, the establishment of urban growth boundaries, and higher impact fees imposed on builders.

Surprisingly, the National Association of Home Builders has joined the Sierra Club in calling for smart growth. "We're taking an activist position on promoting the concept of infill development," says Mike Shibley, NAHB's smart-growth spokesperson. The organization has sent speakers to promote its policy at national conferences and encourages local chapters to work with mayors to develop urban infill sites.

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INVESTIGATORS

BAFFLED BY

OAK CASE

County officials in the small community of Avila Beach, Calif., are investigating the poisoning of 21 mature Coast Live Oaks (*Quercus agrifolia*) that stand between a new hillside subdivision and the Pacific. Under the subdivision plan, the oaks — which are thought to be several hundred years old — were to have been left undisturbed to screen the development from the sight of those on the beach below.

Of course, the stately trees also blocked those in the subdivision from a grand view of the sea. That, authorities believe, is why someone secretly drilled a series of 3/4-inch auger holes around the base of each tree and poured herbicide into them. All of the poisoned trees are now apparently dead, and because county regulations prohibit the destruction of trees within the coastal zone, the perpetrator could face fines of up to \$1,000 and six months in jail for each tree. Angry local residents, meanwhile, have posted a \$5,000 reward for information leading to the arrest and conviction of the offender.

So far, little progress has been made. "It would be easier if we'd found a body on the hillside," says San Luis Obispo County code enforcement supervisor Art Trinidad. "There's not a whole lot of forensic science devoted to trees." But while investigators

Whodunit? Investigators in California are searching for the person who poisoned a grove of protected oaks that had screened a hillside housing development from a value-enhancing view of the Pacific Ocean.



have little in the way of hard evidence, they do have an obvious suspect — the owner of the lot directly above the poisoned oaks, who stands to profit handsomely from their absence. Trinidad notes that without the oaks to screen the far-reaching view of the Pacific, the \$400,000 lot will more than double in value.

The property owner continues to maintain his innocence, however, and a search of his home has not turned up any incriminating evidence. "We don't have a smoking drill," Trinidad admits. "Unless we come up with some evidence or elicit a confession in the next 90 days or so, the case may never be solved."

Sprawl-Busters

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But predictably, the NAHB's definition of smart growth makes no mention of urban growth boundaries or higher impact fees. "We just don't think urban growth boundaries are part of smart growth," says Shibley. "That is a definitional difference that we have." The Sierra Club's Sandy Bahr is not impressed. "They can call it smart growth, but it's the same old game," she says. "George Orwell would be proud of them."

"Growing Smarter" in Pennsylvania. In response to concerns about sprawl, Pennsylvania governor Tom Ridge actively pushed new land-use planning legislation in his state. The so-called "Growing Smarter" bill, which was adopted on June 22, provides \$2.6 million of state money to encourage municipalities to engage in regional planning.

Because the legislation does not include any new impact fees or urban growth boundaries, most builders support it. "I'm satisfied with the legislation," says Brad Elliott, president of the Home Builders Association of Bucks and Montgomery Counties. The Pennsylvania Builders Association (PBA) had an active role in developing the new law. "There was some discussion along the lines of urban growth boundaries," says PBA president Michael Schultz. "However, we got that language taken out."

Showdown in Phoenix. Although Pennsylvania builders are comfortable with their state's new land-use legislation, Arizona builders face a tougher battle. In Phoenix, rapid population growth has led to traffic congestion and air pollution, contributing to an anti-growth backlash.

This November, Arizona voters will be considering a land-use planning initiative called Proposition 202. The citizens' initiative would require every community with a population of

2,500 or more to have a growth management plan that includes defined growth boundaries. The proposal also calls for builders to pay impact fees totaling 100% of the cost of any new roads, schools, or extensions of water and sewer lines attributable to new housing projects.

"To say that builders have reacted strongly and negatively would be an understatement," says the Sierra Club's Bahr. "The Home Builders Association says they have commitments of between three and four million dollars to defeat the initiative." Even so, polls indicate that Prop 202 is likely to pass.



In many areas of the country, environmental activists are actively opposing new suburban development, calling for limits on sprawl.

Draconian measures. Many Arizona builders feel threatened by the proposition's requirement for urban growth boundaries, a planning tool that was first adopted over 20 years ago in Portland, Ore. (see *Notebook*, 5/00). "When Prop 202 first came out, people compared it to Portland, but this is significantly more draconian," says Scott Higginson, vice president of government affairs at Del Webb, a large builder in Phoenix. "What is being attempted here in Phoenix is a ratcheting up. It's the next level of growth restraint."

Many Arizona builders feel that their livelihoods are at stake. "If the initiative passes, it would be devastating," says Higginson. "It would mean a screeching halt to growth in

Maricopa County. The analogy I've used is, it's like the safety test where you put the dummies in the front seat and drive the car into a brick wall. That's what it would be like if this proposition passes."

Supporters of Prop 202 assert that such concerns are overblown. "It's a growth management measure — it's not going to stop growth," says Bahr. "People won't stop moving to Arizona unless the quality of life deteriorates to the point where people don't want to move here."

Fueled by the boom. Whatever the outcome in Arizona, it's clear that the

congestion arising from rapid suburban development can lead to calls for limits to new housing. In many areas of the country, land shortages are already affecting new home construction. "We'll see more teardowns and rebuilding of older neighborhoods," predicts Brad Elliott. "Here in Pennsylvania, there are people pulling down a \$300,000 house to build a \$750,000 house. I see that trend continuing, as long as we have a booming economy."

The economic boom, in fact, is an important factor in the call to limit sprawl. "We have had one of the biggest economic expansions in our history," says Elliott. "If the economy turns down, there will be a lot less anti-growth movement."



OFFCUTS

An innovative technique for retrofitting older masonry buildings against earthquakes is being used in California. The new method — which involves spraying existing masonry with penetrating epoxy and wrapping it in fiberglass cloth before applying additional epoxy — has already undergone extensive laboratory tests and was recently used to strengthen a 142-year-old, 139,000-square-foot brick building in San Francisco's Ghirardelli Square.

Builders in Austin, Texas, have been building record numbers of luxury spec houses, according to *Construction News Alert*. One builder was reported to be developing plans for a \$5 million, 13,300-square-foot house that will be built without a buyer. "They work very hard for that big money," one realtor said of his high-tech clients. "They want to walk in, look at the house, and buy it."

Slow service is normal — fast service costs extra. In response to complaints from builders who sometimes wait weeks for a building inspection, city officials in Westminster, Colo., are considering a plan to charge builders twice the usual fee to have their name bumped up to the top of the waiting list. According to the *Rocky Mountain News*, "The fee increase could generate \$78,000 for the city next year."

Finger-jointed lumber sales have increased 78% in just three years.

According to *Random Lengths* newsletter, output of finger-jointed lumber has increased from 219 million board feet in 1996 to 391 million board feet in 1999.

Americans are driving to Canada to buy contraband big-flush toilets, according to the *New York Times*. The article quoted Mario Muglia, a builder from Michigan shopping for toilets in Windsor, Ont., as saying that a quarter of his clients demand toilets with a 3 1/2-gallon flush.

TRADETALK

Labor-Saving Copper Fittings

For generations, sweated copper has been seen as the gold standard of water-supply plumbing. A new system of compression fittings, however, may soon begin nibbling away at soldered copper's market share. The Ridge Tool Company's ProPress system — which was launched in the U.S. in February 2000 — makes use of special crimp fittings with integral elastomeric seals. The fittings are slipped onto standard type K, L, or M tubing and crimped in place with an electro-hydraulic tool, which operates on standard 120-volt current. The tool's interchangeable jaws will accept 1/2-inch to 2-inch pipe. According to the manufacturer, the system meets U.S. and European codes, including NSF-61 approval and IAPMO listing. The crimped joints are rated to 200 psi and have been tested to 600 psi.

Early results show promise. "I'm impressed with it," says Pittsburgh plumbing contractor Rick Mongiovi, who used the ProPress system on a recent fast-track commercial job. Mongiovi was especially pleased with its simplicity and ease of use. "Guys who had never seen it before were able to pick it up and use it right away," he says. "There's a groove in the jaws that aligns with the fitting; then you just push the trigger. The jaws close and stop automatically when the crimp is done, so you can't overcrimp or undercrimp."

Tony Sant' Elia, a plumber in Boynton Beach, Fla., reports good results from a luxury residential job. "It was sometimes a little cumbersome working with the tool up in the ceiling," he says, "but it worked very well. We pumped the system up to 200 psi for the plumbing inspector, and everyone was smiling and happy." He speculates that the system might work especially well for service-

oriented companies, since it's not necessary to drain the system before installing the crimp fittings.

Labor savings. Both men agreed that the system has the potential to dramatically cut labor costs. "It takes about 20 seconds to press all three ends of a large-diameter copper tee that it would take ten minutes to solder," Mongiovi says. The proprietary fittings, however, are about four times the cost of ordinary sweat fittings, and the required crimping tool — which must be returned to the dealer for recalibration after 20,000 crimps — costs about \$1,000. Tony Sant' Elia doubts that the new system will become widely popular in his area,



The manufacturer hopes that a new crimping tool and fittings will become the plumber's equivalent of the pneumatic nailer.

where cost considerations make CPVC the piping of choice in most new homes. "But if you can bid the job with copper, this cuts your manpower needs in half," he says.

Time will tell. So far, the crimped joints seem very reliable. Rick Mongiovi notes that the only leak he found in the plumbing for more than 100 fixtures occurred at a threaded fitting. But even though the system has been widely used in Europe since 1994, its long-term durability is still unproven. "I'm more or less taking their word for it," Mongiovi says.

OFFCUTS

Lowe's announced that it will no longer sell lumber from "endangered" forests. Lowe's Home Improvement Warehouse has joined Home Depot in promising to phase out the sale of lumber from some environmentally sensitive forests. The first step of the new policy includes an end to the sale of ramin dowels from Indonesia, as well as all lumber from the Great Bear Rain Forest of British Columbia.

The Celotex corporation has sold 75% of its business operations, as measured by revenue. In June, the company announced the sale of its ceiling products and gypsum board divisions to the British company BPB, and in August, the CertainTeed corporation purchased its roofing products operations. The remaining Celotex operations, including rigid foam insulation and fiber-board products, remain on the market.

Ninety-three construction workers were killed in job-site accidents in California last year, according to federal government figures released in August. A booming economy, fast-paced work environments, and a shortage of skilled workers have been blamed for the record number of deaths.

Softwood lumber prices fell to "rock bottom" levels in the Northwest this past summer, according to a report from the Associated Press. The USDA Forest Products Laboratory estimated that 160 softwood lumber mills curtailed their production over the summer, as housing starts continued to decline.

Asbestos-tainted vermiculite insulation "poses a substantial health risk to workers and residents," according to a recent memo from the U.S. Public Health Service. The agency has asked the National Institute for Occupational Safety and Health (NIOSH) to investigate the level of worker exposure to the material and issue an alert if necessary.

Nine-foot studs are increasingly popular, according to *Random Lengths* newsletter. So-called "longer trim" studs, defined as studs over 104 inches long, accounted for 25.7% of stud production in 1999, up from only 10.4% in 1993. The most common size of precut 8-foot stud, the 92⁵/₈ inch stud, accounted for 31.5% of studs sold in 1999, down from 41.4% in 1996.

Foiling Termites with Borate Treatment

Two companies, Louisiana-Pacific and Osmose, are promoting borate-treated building products for "whole-house treatment" in areas of the country plagued by the voracious Formosan termite (see *Notebook*, 11/99). Louisiana-Pacific has developed BarrierPanel, a borate-treated OSB, while Osmose is now promoting its Advance Guard borate-treated lumber, sold in Hawaii for years, in the continental United States.

Borate-treated lumber may have an advantage over conventional CCA-treated lumber, which is also immune to termite attack.



Louisiana-Pacific's BarrierPanel sheathing is OSB treated with borates. The treatment system, called SmartGuard, protects the sheathing from termite attack.

"Termites will come up and take a taste of CCA and move on, but it won't kill them," says Gary Converse, vice president of marketing at Osmose. "With borates, the termites will lick or nibble the wood, ingest the borates, and the borates will kill the termites." However, because borates are water soluble and can be leached from lumber by rain, borate-treated lumber cannot be exposed to the weather.

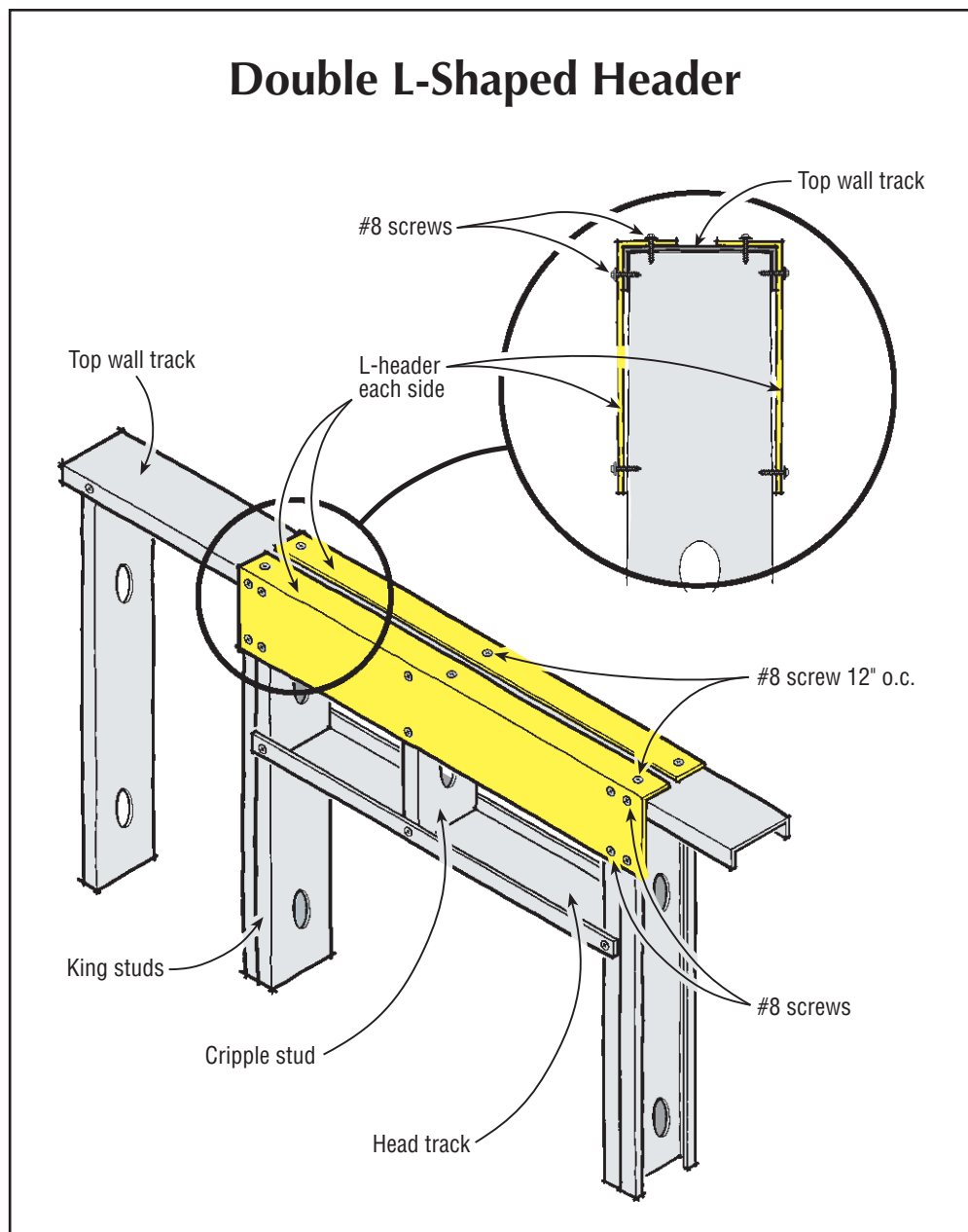
For more information on BarrierPanel, contact Louisiana-Pacific (800/580-4296; www.smartguard.lpcorp.com/home.asp). Information on Advance Guard lumber is available from Osmose (800/241-0240; www.osmose.com/advance/advance.html).

L-Shaped Headers Speed Steel Framing

One of the most time-consuming aspects of light-gauge steel framing has always been assembling headers for door and window openings. That recently became easier with the introduction of what the industry calls the L-shaped header. As the name suggests, an L-shaped header is a section of cold-formed steel in the shape of a letter L, which is screwed to the top track, king studs, and cripple studs above an opening. Depending on the structural load and the span, the L-header material may be required on only one side of the opening (single L-header) or on both sides (double L-header, see illustration).

According to Scott Shaddix, an Anaheim, Calif., builder who has been using L-shaped headers for over a year, the new method of heading off openings is significantly faster than assembling back-to-back or box-beam headers from C-section material. "I'd say it takes 30% less time," he says. While Shaddix frames exclusively with steel, he notes that L-headers can also be used with wood framing by screwing the steel to the plate and studs with the correct screws. "The material itself is cheaper if it can be used in place of 4x6 or larger timber headers," he says. "It should also prevent the shrinkage cracks and nail pops you get with wood headers."

For more information, including span tables and construction details, consult the *L-Shaped Header Field*



Guide, published late last year by the North American Steel Framing Alliance (NASFA). The guide is free, and can be ordered by calling NASFA at 800/797-8335. It can also be downloaded from the NASFA web site, www.steel framing alliance.com.

L-shaped headers substantially reduce the time required to frame around openings. The new header also works with wood framing, where it may cut material costs and reduces shrinkage cracking of the interior wall finish.