COURSE CONSTRUCTION After 20 years of planning and

What a long, StRaNge trip it's been

golf course instead of an industrial park would be a no-brainer. Two years later, voters gave the go-ahead, and the city began the process. It hired architect Greg Nash to design the layout.

as part of the cast. After 20 years of planning, permitting delays, designs and redesigns to satisfy every regulatory board imaginable, with site constraints that left the grading contractor ready to walk off the job after 24 hours, and a plane crash on the third green that killed three people and necessitated the rebuilding of the entire putting surface just days before its unofficial opening, the 18-hole championship course will have its long-anticipated grand opening Sept. 26.

f a television producer ever comes up with

▲ developers of The Crossings at Carlsbad

(Calif.) municipal golf course should be booked

a reality show based on perseverance, the

"We had more constraints on this site than I've encountered in my entire career," Nash says. "We had endangered plant and bird species, wetland issues, archeological sites, expansive soils and high-power transmission lines. It was a major puzzle putting it all together.

"It's a wonderful feeling to bring it to completion finally," says Skip Hammann, special projects director for the city of Carlsbad. "It has been a long road for a lot of people."

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WHY SO LONG?

The city first floated the idea of building a golf course in 1988. A search for an appropriate location led city planners to the 400-acre site with beautiful ocean views. Yet the city already had received permits for an industrial project there. The belief was that obtaining approval for a

BY PETER BLAIS

percent of the course again."

www.golfcourseindustry.com SEPTEMBER 2007



Although the course is 6,850 yards long, the golf course challenges golfers in various ways. One example is the tiered putting surfaces on several holes. Photo: carlsbadimages.com

The difficulty of dealing with various state and federal regulatory agencies, especially in an environmentally conscious state like California, has left developers yearning for a more streamlined permitting process with a clearinghouse where requirements of the various agencies could be listed for developers to see beforehand. Hammann agrees such a clearinghouse for information is appealing. But the reality is that there are so many conflicting regulatory requirements that even if one agency signs off, developers have to meet the new guidelines as new regulations are adopted.

"Because this project went on for so long, things kept coming up," Hammann says. "It's a reiterative process. You keep going through the grind until you finally get there. It's a long, painful process that takes tremendous willpower. Developers hit a roadblock. By the time they got through the problem at hand, all these other things cropped up. You'd think you have everything figured out and try to put a design together so you can go out to bid, but some significant issue comes up that requires another major redesign. You do the redesign, go through the grind again, and something else comes up."

With some environmental studies, developers have to wait until a certain part of the year for a study to be completed before they could start the redesign.

"Starting and stopping makes it difficult to keep momentum going and get a project completed," Hammann says. "Then you have to allocate additional money, and consultants change, which means starting over again in some areas. Greg Nash was one of the few consultants who stayed with this from the beginning. Greg stuck it out. He did a great job and was great to work with."

Nash's final design basically split the 400-acre parcel in half, with 200 acres set aside for the golf course and 200 preserved for habitat to protect multiple endangered species and help tie together more than 1,000 acres of open space in the central part of the city. The Coastal Commission's requirements meant shaving off another 150 yards, which brought the total yardage closer to 6,850 yards rather than the 7,000 yards the city had anticipated.

Winding through coastal terrain and natural canyons, the 400-acre property was home to wetlands, sage brush and other plant, animal and bird life but also had to be infused with massive pines, oaks and sycamore trees.

Bridges – or crossings, thus the course's name – were designed into the layout to meet specific existing environmental and topographic conditions. Five bridges span protected areas and include environmentally sensitive design elements.

CONSTRUCTION CHALLENGES

Construction finally began in September 2005. SEMA Construction was responsible for the

grading and infrastructure, and Wadsworth Golf Construction took over course construction once the site was rough graded. A Wadsworth subcontractor also was responsible for habitat-restoration areas. Jaynes Contracting oversaw building construction including the maintenance center, clubhouse, halfway house and restrooms.

"Often times, we're challenged by soil conditions, but in this case, the issues were primarily man made, apart from the environmentally sensitive areas," says Steve Harrell, president of Wadsworth. "You couldn't simply apply construction techniques to resolve matters. Instead, you had to work within the governmental agency requirements. Usually, we can solve construction problems by simply throwing horsepower at them, but these had to be solved by people meeting and working out the best solutions for both parties."

Nash's design took the 150 yards lost during the Coastal Commission's final changes into consideration. The last few holes on each nine play directly into wind. The variety of holes also helps keep players off balance, while tiered putting surfaces on several holes provide additional challenges.

"People comment about the huge difference between the two nines," Nash says. "One is up on a hillside with long views toward the ocean. The other is along a canyon with wetlands and vegetation."

One permitting requirement forced Nash to design an unusual hole. The California Coastal Commission and Army Corps of Engineers refused to grant permission to develop a crossing near what was going to be the 12th tee. Instead, they insisted developers use an old country road behind the 12th green. To accommodate the requirement, Nash's design leads golfers along a cart path from the 11th green around the adjacent 12th green and then back along the entire length of the 12th hole to the 12th tee. After playing the 12th hole, golfers exit the 12th green along the country road to the 13th tee.



One nine is up on a hillside with long views toward the ocean. The other nine is along a canyon with wetlands and vegetation. Photo: carlsbadimages.com

"People are going to ask what the heck we were thinking when they play the hole," Nash says. "But it was something we couldn't negotiate or overcome. There was simply no place else we could go."

Revegetation was a big part of the project.

"We spent a lot of money, effort and time to recreate the naturalness of the site," Hammann says. "The result is a great contrast between manicured turf, bunkers, a golf experience and environmentally sensitive areas."

Workers spent as much time revegetating natural areas as they did on course construction in terms of watering and vegetative grow-in, says golf course superintendent Chris Latham.

A requirement to use native soils was challenging. Native soils provide the growing medium for the Tifway 419 Bermudagrass on the tees, roughs, fairways and green surrounds. The only place native soils weren't used is on the 6,500- to 8,000-square-feet greens, which are Dominant bentgrass. The irrigation system provides potable water for the greens and effluent elsewhere.

The builders installed playable and nonplayable rough areas along the edges of the course to serve as buffers, particularly near environmentally sensitive areas. The buffers restrict runoff from pesticides and fertilizers, inputs Latham tries to minimize.

"We've subcontracted with Habitat Restoration Service to take care of the revegetation," Latham says. "They're maintaining the irrigation system devoted to the revegetation for the next five years. After that time, all the irrigation piping will be removed."

Latham works for KemperSports, who the city hired to manage the facility. Kemper will monitor HRS' activities and bridge the gap in those areas to fulfill the permitting requirements and make it hospitable for players.

"For instance, if we're growing-in a coastal area in front of a tee box, we have to make sure the plant life is low enough for players to shoot over," he says.

WHERE DID THE MONEY GO?

In 1988, the city estimated the course would cost \$7 million to build. The final figure was \$63.3 million.

"That includes permitting, design, everything associated with preparing the course for construction and construction itself," Hammann says. "It includes hard and soft costs."

One has to look at the cost from a different

perspective, Harrell says.

"You can't just say it's a \$63-million golf course," he says. "It was the development of a difficult site for recreational enjoyment. Without the golf course it would be vacant property with a bunch of power lines on it. Some people might say that's fine. Other people wanted something different. It's not like the money was spent on greens, tees, bunker sand, storm drains and a fancy irrigation system. It was spent on a number of things unique to that site."

The project required two separate irrigation systems, one for the manicured turf areas of the golf course and a second for the natural revegetated areas, which cost about \$2 million apiece. Then there are several million dollars worth of bridges. Add to that almost 20 years of consultant and permitting costs.

"An untrained eye might ask why it cost so much, but there were many things you wouldn't encounter on most courses," Nash says. "The average guy might ask where they spent all that money, but it can add up quickly.'

The course meshes well with the area's economic base, which consists largely of golfequipment manufactures, such as Callaway, Cobra and Titleist, and tourism. Two hotels are planned - one, the Sheraton Carlsbad Resort & Spa, is scheduled to open in January. The city also is encouraging the development of two manufacturing parks in the immediate area that will generate significant tax revenue.

"It's a good addition to the San Diego North area," Nash says. "The city of Carlsbad is in this for the long haul."

Voters approved this project years ago, and despite the hefty price tag, the city believes it's getting something more than just a golf course.

"We're getting an amenity in the middle of the city that provides linkage for our open space and trails and a 28,000-square-foot clubhouse that's a gathering place for the community," Hammann says. "The city is looking long term rather than short term and believes this will be a tremendous asset to the city, the golf industries in this area, the folks who live in and around Carlsbad, and the tourism industry that comes through here. The long-term goal for the city is that the revenue generated from the course will repay the general fund. The repayment is estimated at 30 years."

DAILY MAINTENANCE

The steepness of the site, distances from hole to

hole, and the fact the course is spread out over 400 acres (counting the revegetated area), means additional maintenance considerations.

"The challenge is traversing the property and getting from place to place," Latham says. "The front nine has quite a few elevation changes. The back nine has more canyons."

Latham plans to use manpower studies, process mapping and multitasking to allocate resources and control costs as best he can. Changeovers from employee to employee and job to job will occur during lunch hours as frequently as possible to avoid unnecessary trips back and forth from the course to the maintenance center. For instance, workers will bring a mechanized blower and trimmer along with them when mowing greens. As they move around the course, they'll also trim curbs, tee-box surrounds, greens and banks rather than simply mowing the greens and then going back to the maintenance center to pick up tools to perform the other functions.

Latham's crew also will maintain a lighted driving range. That job will be somewhat easier thanks to an artificial turf-teeing area that aligns golfers with five target greens. The artificial surface looks and feels like real grass and allows golfers to tee their balls.

"We have a modern maintenance facility and a central-service system similar to a Jiffy Lube," he says. "We'll probably carry 20-plus workers on the crew. In addition to an assistant superintendent, we'll have a second assistant whose job is strictly to monitor the habitat-restoration area."

And the crew will be responsible for maintaining three water features - one on the 18th hole that also will be used for irrigation and two on the seventh hole, an upper one that feeds into a lower one via a waterfall.

PLAYING CHALLENGES

The Crossings' unofficial opening was August 11. Feedback from players has been that the course's dramatic elevation changes on the front nine and canyon setting on the back make it look much harder to play than it actually is, says general manager Jeff Perry. Golfers are encouraged to select an appropriate set of tees to match their abilities and take what the course offers them rather than imposing a certain style of play on the layout.

Slow play was an initial concern because of the elevation changes and long distances from some greens to tees. But foursomes generally

AT A GLANCE The Crossings at Carlsbad

Location: Carlsbad, Calif.

Web site: www.thecrossingatcarlsbad.com Type of project: New construction of a

municipal course **Architect: Greg Nash**

Builder: Wadsworth Golf Construction

Superintendent: Chris Latham

Owner: City of Carlsbad

Project started: Conception 1988;

construction 2005

Project completed: August 2007

Cost: \$63.3 million, which includes all hard

and soft costs

Notable: Conception to construction took almost 20 years because of the coastal location and California's complex regulatory climate. Builders installed a separate irrigation system for the out-of-play revegetated area that will be removed in

five years.

have played the course between four hours and 15 minutes and five hours.

Nash did a nice job of working with the land and making a dramatic but playable course, says Steve Skinner, president of KemperSports.

"We hope it will be playable for all levels of players," Skinner says. "We will know better when the everyday golfer begins getting out there. It's in a great market with great weather. The course could host as many as 60,000 rounds annually."

By area standards, The Crossings should be affordable for most everyday golfers in the San Diego market, where green fees at some facilities exceed \$200. The cost to play will be \$90 Mondays through Thursdays, \$95 Fridays and \$110 Saturdays and Sundays. Carlsbad residents will pay \$30 less and San Diego County residents \$15 less.

"Time will tell how successful and well received the project will be," Hammann says. "It has created a lot of buzz and excitement. It will be a success." GCI

Peter Blais is a freelance writer based in North Yarmouth, Maine. He can be reached at pblais@ maine.rr.com.