

# JOB TALK

## Design team borrows from nature's palette

**The Nichols Institute of San Juan Capistrano was designed and built with the natural environment in mind.**

■ Nestled in the middle of a serene desert wilderness, the corporate headquarters of the Nichols Institute in San Juan Capistrano, Calif., is an example of modern-day landscape design that blends in perfectly with its natural surroundings. The building is modern-day, but the landscape is as native as it gets.

The landscape, with its meandering walkways, ponds and outdoor seating areas, was designed to provide a campus-like atmosphere which would encourage discussion, study and thought.

To extend the natural look, curbs and sidewalks are either stained or poured with color concrete to match the existing soil.

According to landscape architect Charles Wilson, of the Mountain View, Calif.-based Wilson-Van Deirse, the landscape was hydroseeded for erosion control with a variety of indigenous plant materials, including needle-grass, California poppies, lupins, clover, coyote bush and lotus.

Much indigenous plant life was used in the design. There are 900 trees on site, including many oaks and sycamores, some from Dr. Nichols' private collection, which had been stored in area nurseries.

**Fighting fire**—One design challenge was posed by local fire department authorities, who thought the numerous dry native plants presented a fire hazard.

"(The fire department) wanted us to use more ice plants, which are naturally moist weed-like plants," says lead designer, David Pyle, of The Krausz Companies, San Francisco. On the other side of the issue were the county authorities, who wanted the predominantly indigenous plant life to remain. The compromise resulted in a four-zone design, with a gradual thinning of the native grasses combined with irrigated sod grasses. Some of the sage, buckwheat and other very dry plants were also removed.

According to Wilson, the innovative use of waste water is a trend in California, a state, long plagued by drought.

"We're seeing more and more reuse of waste water," says Wilson. "It poses a whole new set of problems related to sewage treatment and various biological components"

Irrigation throughout the landscape is a combination of drip and spray sprinkler systems.

One problem encountered during the final stages was due to overwatering of the newly-planted sod. As a result, nearby oaks were overwatered. Pyle said the excess water was pumped out and the trees saved.

Not so lucky were a few trees weakened by drought, which fell prey to marauding beetles.

Another of the design criteria was to minimize the visual



**Goal of the Nichols Institute design and build teams was to incorporate a meandering campus-type look and an orderly arrangement of spatial relationships.**

impact of automobiles on the site. To accomplish this design goal, the parking lot was placed on a plateau about 20 feet below the horizon of the building, and the concrete was burnished with a rock salt dusting for texture.

**The institute**—Completed in September 1991, Nichols Institute is a diagnostic testing facility that applies new medical technology to practical applications for patients, in collaboration with its Academic Associates, who are internationally acclaimed physicians and scientists.

The Institute is surrounded by 7600 acres of park land. It consists of a pair of two-story 98,000-sq. ft. structures of curved, linear design and reflective glass. Additional structures include a 33,000-sq. ft. warehouse, a recreation center and a water reclamation plant.

Dr. Albert Nichols, founder of the Institute, wanted the design to blend in well with the natural setting by preserving vistas and the natural vegetation. "And it was also critical for the structure itself to be flexible, modular and energy efficient," says Nichols.

"We spent six years in the planning process, and the result is an extraordinarily harmonious balance. We believe that with this site we have achieved our mission to provide a dynamic work place in which the efforts and achievements of our staff members are encouraged."

The building design allows it to blend in and reflect the surrounding terrain. The roof and exterior walls of the warehouse are patterned with redwood lattice covers, providing a camouflage effect that blends the structure into the hillside.

Between the buildings, hardscape and concrete were colored to match the adjoining hills. "We tried to keep away from a man-made look," says Pyle. "For example, the amphitheatre was shaped to match contours of the land."

All site preparation and utilities were included in the first phase of the project, which contains a 100,000-sq. ft. lab and office buildings, a warehouse and staff center.

The water system includes the well equipment, a three-mile pipeline, storage reservoirs, fire system, sewage treatment plant and a landscape pond.

—Terry McIver