

Union Carbide

Unique landscaping stresses native plant material in North Carolina's Research Triangle Park

By Sandra Ladendorf



The Union Carbide building sits nestled in a natural setting in Research Triangle Park, NC.

Companies located in the Research Triangle Park of North Carolina have chosen uniquely different styles of landscaping.

One building sits stark and barren in a desert-like setting; another is landscaped formally. Union Carbide has taken yet another approach in designing the new headquarters for its agricultural division. The division is involved in research, development, engineering and marketing of agricultural products, including insecticides, herbicides and

Sandra Ladendorf is a journalist and freelance writer based in Chapel Hill, NC.

plant growth regulators.

Research Triangle Park contains research development and scientifically-oriented production facilities for 40 companies located on 5,200 acres in the triangle formed by Raleigh, Durham and Chapel Hill.

Union Carbide's agricultural division's management, its landscaping committee and architect Bruce Brodt were unanimously in favor of leaving the 51-acre site as untouched as possible.

"We wanted the building to look natural in the landscaping," said Brodt. The building sits in a woodland of loblolly pines, dogwoods, redbuds and other foliage

native to North Carolina.

General project manager Les Paulsen, the Carbider who supervised the construction of the new building, insisted that the destruction of trees be kept to a minimum. The building's contractor was liable up to \$250 for any trees injured or destroyed in the roped off woodland area Paulsen had designated. Paulsen did, however, have to destroy the majority of a colony of redbuds in order to construct the new driveway directly opposite IBM's entrance on T.W. Alexander Drive.

The architects conceded only one markedly formal piece at the

site -- the entrance driveway. Brodt felt strongly that the driveway should be a straight dual carriageway with a line of native willow oaks up the center dividing strip. The slopes on each side of the roadway are turf-covered. The design then returns to the informal, natural woodland setting with irregular drifts of sweet gum, dogwood, redbud, fringe tree, magnolia, sourwood and other native trees.

In designing the driveway entrance and the rest of the grounds, the landscaping committee began with an initial plan from the architect's office. That plan evolved and changed.

Bowing to budgetary pressures, the committee reduced the size specifications of all plantings. Union Carbide declined commenting on the cost of the entire landscaping project. A.B. Rose Co. of Rocky Mount, NC, was chosen as the landscape contractor.

Barbara Emerson, a senior product specialist for Carbide and a member of that landscaping committee, put her Cornell degree in landscape design to good use as she coordinated and expedited the landscaping efforts at the new site.

"Using small trees and shrubs is a blessing in disguise," she said. "Younger plant material adapts more quickly."

The North Carolina Botanical Garden, which specializes in native plants and the North Carolina State University Horticultural Science faculty were consulted before Emerson selected the plant varieties.

A sharp cut between the entrance parking lot and the greenhouse wing presented the greatest challenge to the landscaping team. Native trees and shrubs were literally left "high and dry" atop the 12 by 200-foot peninsula.

The steep bank facing the building is now planted with *Pinus virginiana*, *Juniperus Wiltoni* 'Blue Rug', *J. Sargentii* and *J. chinensis*, 'Sea Foam' to provide varying textures and color while retaining

the slope. Some pyracanthas and wax myrtles have been added for height and color.

Boulders left by the excavation have been judiciously grouped into the slope to look as though they had merely been uncovered.

"They add an informal architectural element and a sense of

seeding with Kentucky 31 fescue. For trees and shrubs, planting high and mulching heavily is generally the rule in the Piedmont. Despite careful planting in the fall of 1981, a number of shrubs drowned during the unusually wet summer that followed. More drainage in several locations and



A stand of native foliage on the Carbide grounds.



Barbara Emerson and Ed Levy of Union Carbide confer with John Walters of A.B. Rose Co., Rocky Mount, NC, who handles maintenance of the grounds.

reason," says Emerson, "They help connect the cultivated plants with the native woodland."

The Carbide site is located in the Piedmont section of North Carolina where the soil is a heavy red clay with low fertility and containing almost no organic matter.

To modify this soil in the lawn areas, A.B. Rose rototilled lime and fertilizer into the top six inches of the clay. Two inches of topsoil was then added before

more irrigation were two corrections Ed Levy, Carbide's maintenance supervisor provided after working at the new location for a year.

"Today, areas of too much or too little water have been eliminated," Levy said.

Levy maintains he is very satisfied with the maintenance of the grounds, which is still handled by A.B. Rose Co. Mowing is done on a weekly basis at a three-inch height during the growing season, using hand mowers and a Toro Groundsmaster 72 diesel. Weed control around mulched trees and shrubs is handled by spot applications of contact herbicides.

Levy and Emerson continue to cooperate on additions to the landscaping. While they have planted hundreds of bulbs and annuals for color near the building's entrance, the emphasis this year remains on the insect-resistant, drought-resistant, adaptable native North Carolina trees and shrubs.

WTT