PROJECT PROFILE



The natural beauty of Sun Valley, Arizona, exists without the benefit of plentiful rainfall.

ON A DESERTED HIGHWAY

Will a 32-mile highway median in Arizona—with more than 37,000 plants,17 million square feet of hydroseed mix and a \$2.6 million budget—attract business? You can bank on it.

he Sun Valley Parkway is an unusual project in many respects.

The 32-mile, six-lane highway in the western section of metropolitan Phoenix, Arizona, is a major link in the regional transportation network. Construction of the parkway was privately funded by members of the Sun Valley Owners Association (SVOA), one of the few such projects in the country.

The parkway runs through a new 48,000-acre mixed-use development that is planned to include residential, office, commercial and industrial property. As an industrial site, the location is ideal for manufacturing and distribution centers because the parkway provides the development with easy access to major transportation routes to Southern California, Phoenix and major cities to the north and east.

Since the parkway is a major drawing card for future development, the SVOA wanted an attractive landscape design for the parkway corridor, but because the road is to be deeded to Maricopa County, the landscape had to be frugal in its maintenance needs.

Figuring climate

In the hot, dry, Southwest deserts, where daytime temperatures exceed 100 degrees more than 100 days each year, landscape designers are greatly challenged to find some middle ground between low maintenance requirements and high visual appeal. Major projects such as roadways seem to be an all-or-nothing proposition.

On the one side are various styles of irrigated landscapes with high installation and maintenance costs. Even when plantings have low water-use requirements, some irrigation must be provided. Because of the year-round warm weather, trees and shrubs grow rapidly and need frequent trimming and pruning. The alternative is "desert" landscaping, a concept that for many years was interpreted with sparse plantings of cactus specimens set in a sterile expanse of granite ground cover.

Developers usually order landscapes designed with irrigation, accepting the maintenance burden as the price of an attractive property. Only in very recent years have designers and landscape contractors experimented with the full range of native plants, creating settings that blend naturally with the desert environment and manage to look attractive—without irrigation.

The desert design

It seems obvious that desertdwellers would have learned how to design landscapes modeled on the surrounding scenery. And yet, the Sonoran Desert around Phoenix doesn't look anything like the stony barrens that have often been created in the name of desert landscapes. The desert is green and lush in the spring, filled with spectacularly colorful wildflowers after the winter rains. In summer, it is more subdued in color, but still shows shades of green in grasses, shrubs and cactus specimens.

In the fall, a few scattered wildflowers bloom and grasses green up following the summer monsoon rains. Most plants stay green through the brief, mild winter, with flowers and trees showing their first blooms in late January. All of this with a total of about seven inches of annual rainfall.

It is this concept of the desert that designers Pat Nash and Laura Paty of the Planting Center in Phoenix have taken as the inspiration for the Sun Valley Parkway. They used a combination of cactus specimens, native shrubs and a hydroseed mixture with native grasses and wildflowers as ground cover. Those elements helped create a design that makes full use of a broad spectrum of native plant resources without the need for irrigation.

"We are really just discovering the potential of desert plants to provide greenery and color," Paty says. "The early desert landscapes were considered a convenience, but few designers really explored the full potential of desert plants to provide beauty in a landscape design."

Easy and safe

The design for the Sun Valley Parkway median blends easily with the surrounding desert. It has an open look that is compatible with the spaciousness of the land around it and ideal for traffic safety. Varieties selected are slow-growing, which will keep maintenance low. Plantings will not need irrigation once established, while seasonal color will provide visual interest.

Brittlebrush, a small, shrubby plant, starts the seasonal show with yellow flowers beginning in midwinter. Bursage, another small shrub, provides the contrast of silvery foliage. Representative cactus varieties lend interesting shapes and bright spring color to the design.

Prickly pear cactus has round or oval pads that are green or tinged with purple. Spring blooms are bright yellow, followed by fruit that turns purplish as it matures.

The barrel cactus has a massive, round shape when young, with prominent ribs. It features a crown of yellow or magenta blossoms in the spring. Red-violet blooms top the smaller hedge-hog cactus, which grows as a cluster of cylindrical shapes.

Ĉholla introduces a sharp contrast in shape, producing spiny angular branches that resemble antlers.

Another striking silhouette is the yucca, a round cluster of swordshaped leaves that puts out very tall, blooming stalks covered with green leaves and tipped with bright orange blooms after periods of rain. The leaves and blooms drop after a few weeks, leaving the branches completely bare.

The Sahuaro cactus, the tall massive type with "arms" that most people associate with the Sonoran desert, is not used here because the median is edged with a six-inch mountable curb. With typical Sahuraos weighing in at at least more than one ton, safety considerations rule out their use.

Choosing ground cover

Instead of using granite for a ground cover, Paty selected a hydrosed mixture that includes native grasses and wildflowers. The mix will be applied at the sides of the road to restore native vegetation destroyed by road construction and protect the area from erosion. Creosote, brittlebrush, buck wheat and a variety of low-growing grasses will be used for the roadside. In the median, a slightly different mix emphasizes low-growing and

It has an open look that is compatible with the spaciousness of the land around it and ideal for traffic safety.

flowering plants, including desert marigold (gold to yellow-orange), sand verbana (purple) and dyssodia (yellow-white).

"The total effect will be natural. but the overall impression made by the landscaping is that it is a desert showcase," says Robert M. Williams. president of the SVOA. "The concept is perfect for the impact we want for Sun Valley. We have devoted a lot of effort to making the whole development compatible with the environment and at the same time convenient for the future residents and businesses that will locate here. The design of the road is based on those guidelines. This landscape has exactly the same quality.

Installation is a massive undertaking. The 32-mile median will use more than 37,000 individual plants, ranging in size from onegallon containers to 30-inch box specimens. In the median and along the roadside, 17 million square feet of hydroseed mix will be needed. Total budget for the project, including fine grading and watering until the plantings become established, is \$2.6 million.

Landscaping of the median begins this month. The project is expected to be completed late this fall. LM

The Sun Valley Parkway in Arizona as it looked before undergoing a \$2.6 million facelift that includes more than 37,000 native plantings. Developers hope the landscaping will attract business to the area.

