Pete V. Domenici Courthouse Sustainable Landscape
Albuquerque, NM

This landscape renovation project drew on the history of both the site and the region to transform an environmentally unfriendly federal courthouse plaza into a model of sustainable urban design. The creative re-use of materials, comprehensive water management program, and use of solar power demonstrates how retrofitted sites can use public and natural resources more efficiently, and better connect with users.

To transform this forlorn public plaza into a showpiece of modern urban sustainability, the designers went back to ancient traditions. Water-intensive lawns were removed and replaced with plants that have survived for millennia in the unique climate and hydrology of New Mexico's Rio Grande Basin. Rainwater was harvested for irrigation, using a system based on Pueblo drainage canals known as acequias, and the indigenous chevron pattern found in Pueblo blanket weaving was used to arrange native plants according to the amount of water they need.

21,000 sq. ft. of concrete was dug up, which was preventing stormwater from replenishing the water table and it was cut into 10,000 8"x 16" blocks. The blocks were stacked to create terracing and seatwalls, which divide different program areas of the plaza, and provide a place to sit. Repurposing these materials kept nearly 500 tons of waste out of landfills and increased site permeability by 120%. The lead contractor initially questioned the wisdom and the feasibility of re-purposing old concrete, but by project's end, they were touting it to other clients.

An aging fountain that leaked 6,000 gallons of water a month was removed and replaced by a 16,000-gallon underground cistern that stores rainwater harvested from the courthouse rooftops. A system of bioswales and rain gardens capture over 95% of stormwater runoff, filtering pollutants before they leave the site. Replacing outdated light fixtures with efficient LED lighting reduced energy use by 30%. New solar panels now generate 100% of the site's electricity use.

Best of all, this public space was returned to the people, not to mention the birds and the butterflies. Gone are the 31-foot-wide concrete sidewalks devoid of shade and character. In their place are permeable, ADA-accessible pathways, shaded by honey locust trees that encourage the public to stroll through the site and learn about its natural and sustainable features.

A single lawn remains an oasis amid all the xeriscaping, serving as a reminder of a more recent history. Before the Courthouse, this was McClellan Park, downtown Albuquerque's only public green space. The lawn is also home to another historical artifact: Albuquerque's 1928 Madonna of the Trail. Listed on the National Register of Historic Places in 2006, the August Leimbach sculpture celebrates of the hardiness of pioneer women.

Weaving together art, ecology, engineering, and cultural history, the project creates a new story for this site while sustaining a dignified setting for court operations. The result demonstrates how a site can be retrofitted to better connect with users, employ resources more efficiently, and celebrate the contributions of the federal government to local communities.

In early 2014, the design for the plaza earned two-star certification from the Sustainable Sites Initiative (SITES), a nationwide program to promote sustainable land development and management practices.