

U. S. GENERAL SERVICES ADMINISTRATION (GSA)

Pete V. Domenici United States Courthouse— Arid Region Urban Landscape & Water Harvesting Retrofit

Albuquerque, New Mexico

Rios Clementi Hale Studios (RCHS)



The Pete V. Domenici Federal Courthouse is located in the central business district of Albuquerque, New Mexico. Managed by the U.S. General Services Administration (GSA), the seven-story building houses more than 200 federal employees.

In an effort to enhance the sustainability of the Courthouse landscape and achieve certification from the Sustainable Sites Initiative (SITES), the GSA initiated a substantial renovation of the Courthouse's three-acre landscape. The innovative and provocative new landscape features low-impact

stormwater/green infrastructure techniques, rainwater harvesting for irrigation reuse, and photovoltaic power generation. Vast expanses of turf grass, impermeable paving, and high water-use plants were replaced with xeric plantings and materials appropriate for the site. The removed paving was repurposed to creation of new landscape and stormwater management features.

As the civil engineer and rainwater harvesting designer, Biohabitats worked closely with the lead landscape architecture firm RCHS to create a model for arid region urban landscape water conservation, harvesting and reuse. Biohabitats designed a 16,000 gallon rainwater harvesting system

which captures and reuses rooftop rainwater for landscape irrigation. This has reduced potable water use by more than 75%.

The existing site had limited stormwater attenuation and filtration, so Biohabitats used green infrastructure/low-impact stormwater techniques such as vegetated swales and biofiltration beds to filter and slow runoff from the parking surfaces and plaza area. A new underground vortex filter intercepts the majority of sediment, hydrocarbons, oils and grease, further protecting water quality in the nearby Rio Grande. An efficient drip irrigation system, fed primarily by rainwater harvested from the Courthouse rooftop replaces a spray irrigation system.

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