

RESIDENCES AT LA CANTERA

Texas Green Infrastructure Case Study

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The Residences at La Canterra was built with a focus on water management.
Photo Credit: LRK

PROJECT COMPONENTS

Practice

Rainwater Harvesting: Collecting and storing runoff from an impervious surface for later non-potable use.

Stormwater Pond: Collects rainwater from the surrounding area and allows the water to slowly be filtered out by plants to improve water quality in the watershed.

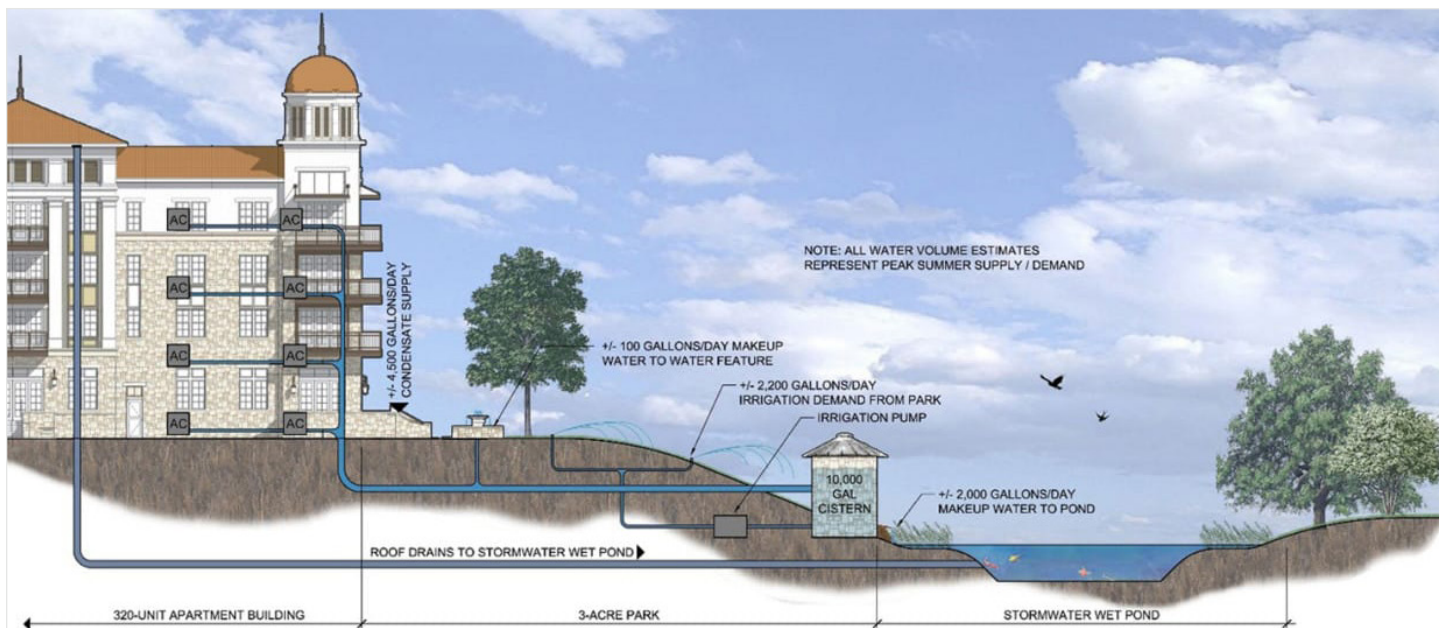
Scale

Site: A practice designed to collect and naturally treat rainwater falling on a single site, such as an individual home or business. Examples: bio-swale, pervious pavement.

Green infrastructure practices are designed and engineered to work with nature to capture, store, and treat stormwater runoff in ways that provide both water quantity and water quality benefits. These practices are used throughout Texas. One example is found in San Antonio at the Residences at La Canterra.

PROJECT OVERVIEW

The Residences at La Canterra was designed and constructed by a team consisting of LRK architecture firm, Jordon Foster Construction, landscape architect J. Robert Anderson, United Services Automobile Association (USAA) Real Estate Company, and Cambridge Development Group. Completed in 2014, the 425,697-square-foot building was designed with a resilient, drought-resistant landscape.¹ A 1.5-acre park was also built on the grounds to provide green space for residents. Irrigating vegetation and maintaining the stormwater pond was a concern during design. To accommodate this, a cistern was installed to collect rainwater and air conditioning (AC) condensation.¹ To further drought-proof the park, native plants and other drought-resistant plants were used. The stormwater pond also helps reduce pollution. Whenever it rains, pollutants on roadways and roofs are picked up by flowing water and can affect local wildlife. The pond collects water, allowing debris to settle out and other pollutants to be filtered by wetland vegetation.



Rainwater and AC condensation are used as irrigation and to maintain the pond's water level.
Photo Credit: LRK

PROJECT IN-DEPTH

To ensure proper functionality of the Residences at La Cantera water resources and outdoor areas, the developers put attention toward water collection systems. One major water collection system is a 10,000-gallon cistern that collects roof runoff. In addition to rainwater, AC condensation is also captured. On average, AC units condense 5 gallons of water each day. Therefore, with 323 units occupied, condensation adds up to approximately 50,000 gallons of water a month.¹ With 50,000 gallons, the apartment complex meets irrigation needs most of the year, reducing water costs and dependence on City water.¹ Excess water from the cistern overflows into the stormwater pond. In addition, 2,000 gallons of water per day is released to maintain the pond level and sustain the wetland vegetation. The stormwater pond is planted with bulrush that can filter pollutants like nitrogen and phosphorus. The multi-functionality of the cistern system allows the complex to be flexible to environmental conditions, improving its resiliency.

FIND OUT MORE

The Residences at La Cantera is located near the University of Texas at San Antonio and Six Flags Fiesta Texas at 6215 Via La Cantera, San Antonio, TX 78256.

FINANCING

The apartment building complex cost \$47 million, of which \$1.4 million was allocated for the park's cistern, pond, lawn, and landscaping. It was funded by private investments comprising:

- ▶ USAA Real Estate Company
- ▶ Cambridge Development Group

- * Rent premiums of park-facing rooms help recover costs by generating approximately \$25,000 a year.
- * Reduced maintenance costs help to further recover the initial cost.

¹ <https://developingresilience.uli.org/case/the-residences-at-la-cantera/>

² <https://www.lrk.com/news/posts/residences-at-la-cantera-featured-in-urban-land-magazine>



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