

## Alberici Corporate Headquarters

Overland, MO (2004)

### Background:

When company growth led to the decision to move the Alberici Corporate headquarters, the company CEO "wanted to be in a place that fosters teamwork and creativity." After investigating 45 different sites, a Brownfield site became available with a 1950s office building and a 155,633 ft<sup>2</sup> former metal manufacturing facility. Alberici is one of St. Louis' oldest and largest construction companies, and their architect decided upon the adaptive reuse of the existing manufacturing plant converting it into a corporate headquarters.



The 13.6-acre site originally had 9.0 acres of impervious surface, including 3.7 acres under roof. The restoration process began by reducing pavements to a bare minimum. The development footprint was a fraction of that allowed by local zoning. The suburban, Brownfield site was restored with native, drought-resistant plantings, including six acres of Missouri prairie grass and wetland plants. Over 250 native trees and 4,200 perennial plants and bushes were planted, placed by type, growth rate, and shade requirements. The site has become a seed bank for the St. Louis area, providing the resources to establish other native landscapes at properties owned by nonprofit organizations and local government.

### Monitoring:

The company reports that retention ponds and constructed wetlands retain all of the stormwater runoff and form a filtration process in the forebay pool, removing 80% of total suspended solids and 40% of total phosphorous from stormwater discharged into the ponds. The site, once 50% impervious surface, is now its own watershed.

Rainwater from 60% of the garage roof area (42,200 ft<sup>2</sup>) is stored in a 30,900-gallon cistern. From there it is filtered through a strainer and sand filter, chlorinated, held in a secondary 500-gallon tank, and used for 100% of sewage conveyance. The captured rainwater is also used in the mechanical system's cooling tower. The sizing of the cistern was informed by 27 years of local rainfall records. The cistern's overflow drains into the north retention pond, one of two ponds on site. This pond is a living ecosystem with fish, frogs, and predacious aquatic invertebrates. Native plants combine forces with flowing, infiltrating water to promote biodiversity.

The reuse of rainwater, along with the use of water-efficient fixtures, results in a 70% reduction in potable water use, saving 500,000 gallons of water annually.

### Conclusions:

There is no monitoring data available to substantiate the no runoff assertion. However, the restoration of this Brownfields site is a great example of what can be done to return an eyesore to an ecologically sensitive property in an industrial environment.