

Tempe Transportation Center, Tempe, AZ



architectural rendering: OTAK

An Urban Water Reuse Model

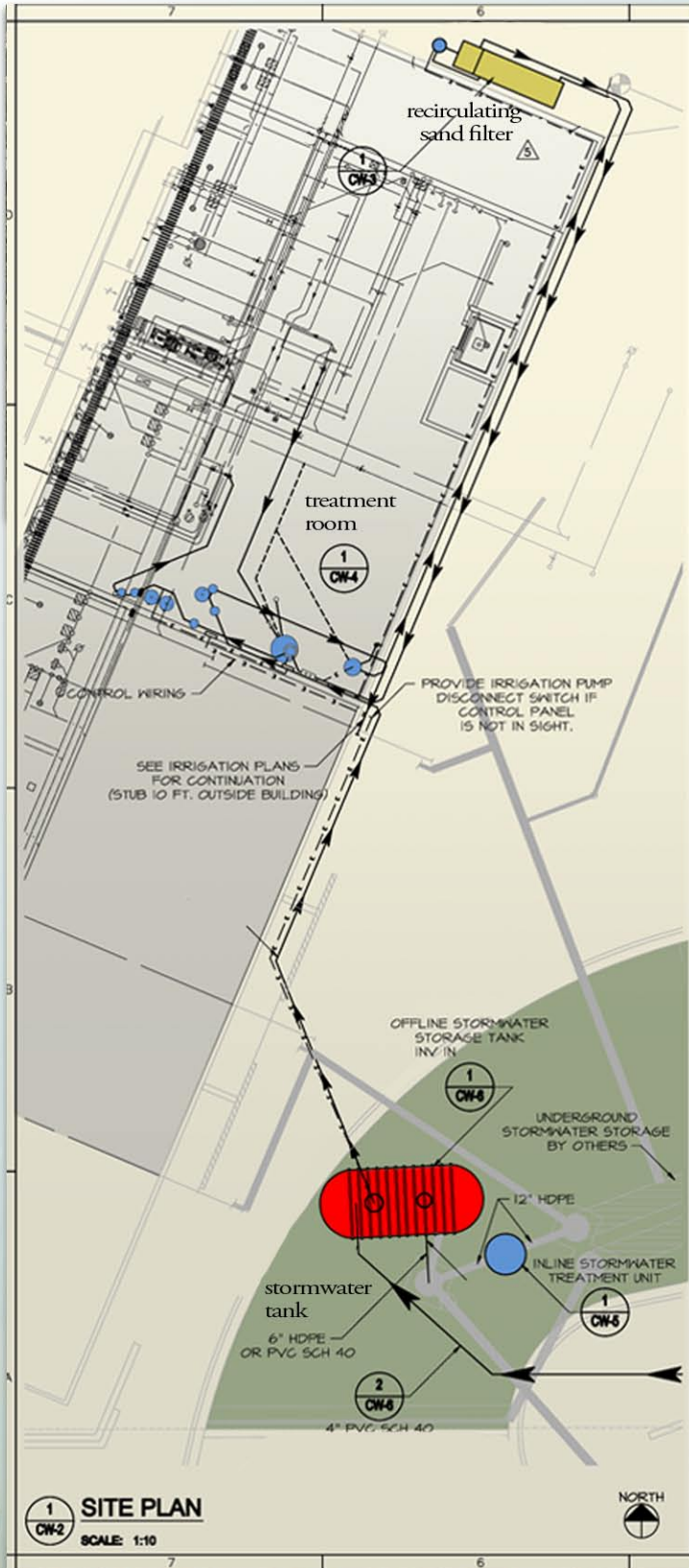
The new LEED-certified Tempe Transit Center building features stormwater and graywater reuse in an urban setting. NSI designed a treatment system to produce reclaimed, non-potable water by processing graywater, 'cooling tower blowdown', and stormwater runoff. These building systems that harvest and recycle water in this arid region will serve as a model for urban water reuse.

Graywater from building sinks (approximately 400 gallons per day) and cooling tower bleed water (up to 1,000 gallons per day) are treated in a recirculating sand filter, disinfected and reused for toilet flushing within the building. Stormwater from roofs and parking surfaces is captured, filtered for sediment and oil reduction, stored in a 12,000 gallon underground cistern and then used to supply the site irrigation system.

The two systems provide a constant supply of high-quality reuse water for water closets and irrigation. Potable water is used as a back-up supply only when reclaimed water is not available. NSI emphasizes simplicity, ease of maintenance, and energy efficiency as crucial design criteria for development of this urban water reuse model.

<http://www.tempe.gov/greenprograms/transitcenter.htm>

<http://www.otak.com>



site plan