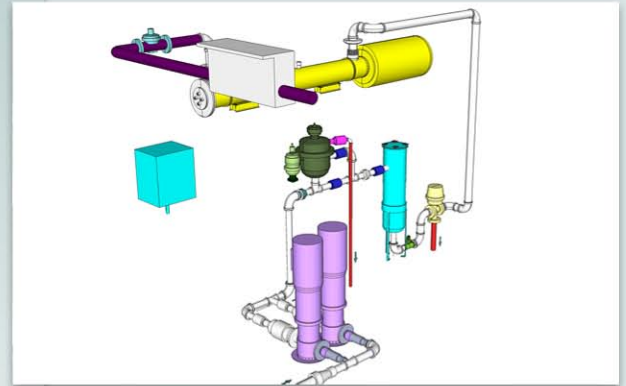




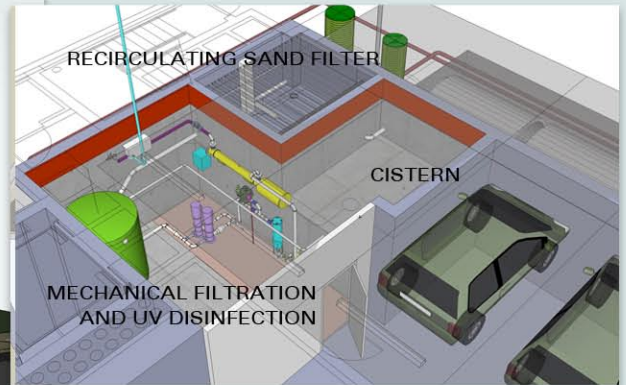
200 S. Ashley Street, Ann Arbor, MI



Building modeling: Integrative Architecture



Mechanical Filtration Diagram



Treatment components in building basement (NSI)

Urban Redevelopment with Sustainable Water Management

The 200 S. Ashley Street Redevelopment Project, in Ann Arbor, MI is an urban brownfield redevelopment project. A seven-story mixed use residential, office and retail space is planned for the site. The building incorporates numerous 'green' features, including onsite wastewater treatment and reuse, rainwater harvesting, storage and reuse, green roofs, heat exchangers and environmentally-sound building practices. The integrated design team is aiming for LEED-Platinum certification.

To minimize water consumption and maximize reuse, NSI integrated wastewater and rainwater harvesting with treatment, reuse and recharge processes. NSI's design approach includes an onsite wastewater treatment system to produce reuse-quality water for toilet flushing or irrigation. Since this is an urban setting, space is at a high premium. To minimize the treatment system footprint, we placed the primary treatment tank, rainwater harvesting tank, polishing sand filter, mechanical filtration, disinfection and reuse equipment beneath the building

Reclaimed wastewater will be utilized for toilet flushing. In the event of a reclaimed water shortage, harvested rainwater will be filtered and disinfected as a backup source, with potable water supplied only as a last resort. Excess water generated at the site will be used for aquifer recharge.