The underground parking structure for Phoenix Crime Lab had a unique design challenge. The top level was designed to be a street level plaza that would include a xeriscaped garden, trees and planter boxes.

This environmentally sound design reduces urban heat islands while adding aesthetic appeal to Phoenix’s bustling downtown community.

Self-consolidating lightweight concrete with Utelite Expanded Shale Aggregates was used in the production of prestress double...
tees to accommodate the large amount of structural steel needed to address the project's load requirements.

PROJECT REQUIREMENTS
- Initial concrete stripping strength — 5200 psi/16 hours
- Design F’c strength — 7000 psi/28 days
- Design equilibrium density — 118 lb/ft³
- Structural self consolidating lightweight concrete spread range of 26 – 28”