

Client Contact:
Mr. Chris Colburn
**National Institute of
Standards and
Technology**
303-497-4353

Services Provided:

- **Construction Observation**
- **Materials Testing**
- **Engineering Consultation**

Project Summary:

Cesare, Inc. (Cesare) provided construction observation, materials testing and engineering consultation for the central utility plant located on the National Institute of Standards and Technology (NIST) campus in Boulder, Colorado. It is an approximate 1,000 square foot facility with an associated 2,600 linear feet utility tunnel. Materials testing consisted of testing on concrete and hot mixed asphalt. The building was constructed using masonry block, tilt-up concrete panels, and structural steel. The structure was founded on spread-footings bearing on 6 feet of structural fill. The tunnel was a cut-and-cover, poured-in-place concrete facility.

Difficulties

encountered during construction consisted of boulders during excavation, the use of on-site materials that had to be placed as rock-fills due to their granular nature, and dewatering of the excavations.

