


By Randy Wahlen, P.E.
Mountain States Concrete Pipe Association
Sandy City, Utah
(801) 942-7552

Utah Residents Are All Smiles with Miles of RCP Storm Drain

The Mountain States Concrete Pipe Association awarded its "2002 Project of the Year" Award to the 8600 South Storm Drain Project in Sandy City, Utah. This project included the construction of approximately 20,000 linear feet of storm drain trunk line that extends from 1700

East to the Jordan River and 9,000 linear feet of lateral pipeline facilities. The project made extensive use of multiple class 24-inch to 66-inch diameter reinforced concrete pipe (RCP), and other precast concrete drainage products supplied by Amcor Precast (an Oldcastle Precast, Inc. company), Ogden, Utah and Geneva Pipe Company. Orem, Utah.

Designed by Bowen, Collins & Associates as a storm drain outfall, reinforced concrete pipe's versatility of use was shown throughout the project. The project included constructing or modifying three storm drain detention facilities, constructing water quality enhancement features, jacking and boring



An extremely tight fit required the use of a 60" elbow section in a deep trench in this section of the 8600 South Storm Drain Project in Sandy City, Utah.

under the TRAX railroad, and crossing three canals, Interstate 15, two state roads, and two capped superfund sites. The project was completed in six months by December 2002 – one month ahead of schedule.

Precast concrete products associated with the RCP included manholes, catch basins, 45-degree bends, box sections for culverts, elliptical pipe, jacking pipe, and drop structures. There were some cast-in-place drop structures and other facilities. The jacking pipe placed under the TRAX railroad followed construction of the Utah Transit Authority (UTA) TRAX Light Rail line connecting Sandy City to downtown Salt Lake City. The TRAX Light Rail system moves nearly 22,000 passengers per day along this line and was a major transportation facility for the 2002 Winter Olympic Games.

“The project presented plenty of installation challenges,” said Craig Bagley, P.E., project manager for Bowen, Collins & Associates, “including open cut installation in sensitive areas and boring and jacking under a commuter rail line. The adaptability of precast concrete pipe and the contractors’ familiarity of the products enabled us to overcome these obstacles to provide a quality system that will benefit local residents for many, many years to come.”

During construction it was vital to the neighborhoods that all residents had appropriate access to their property. The local contractor and local pipe suppliers were determined to keep their neighbors happy by moving construction along quickly to avoid unnecessary delays. The project required close coordination with Midvale City, Salt Lake City, Utah DOT, multiple sewer districts, Salt Lake County, several state agencies, several Sandy City Departments, multiple private property owners, and many

utility companies to meet the aggressive design and construction schedule for the \$8.3 million construction project.

Divided into five bid construction contracts, the project was awarded to three local contractors, and constructed in 6 months.

Mr. Rod Sorensen, Engineering Manager for Sandy City Public Utilities was in charge of the project. Concerning the project, Rod said. “It was amazing to have a project with such an aggressive schedule come together so well. A key factor in the successful completion was that concrete pipe producers were important partners and they were right on top of the schedule.”

Mr. Bagley reinforced Sorensen’s comments, adding, “One of the things that I appreciated most was the support and cooperation we got from the local precast concrete product suppliers. While we were in the design phase we felt that simultaneously providing the required volume of precast concrete products to multiple contractors would be a challenge for the local concrete pipe suppliers. But we met with them and were assured that their production and delivery schedule would keep up with contractor demands for the product.

“The local suppliers also provided valuable support in helping us resolve a few installation problems and concerns that were experienced during construction. I believe the coordination between the suppliers, the engineer, and the contractors were a key factor in making this project so successful.”

Drop manholes were cast into a hill to reduce velocities and pressures on the connecting 60" reinforced concrete pipe.





60-inch and 48-inch diameter RCP was staged for installation along Interstate 15 in Sandy City. Utah's Oquirrh Mountains provided a scenic backdrop for crews.

To celebrate the success of the project and the involvement of two of its member firms, the Mountain States Concrete Pipe Association named the project its first "Project of the Year" and presented framed posters to the officials involved in the project. In six months, the general contractor and its sub contractors installed three miles of pipe without any major construction delays or disruption to businesses and local neighborhoods. This is indeed testimony to the ease of installation of precast reinforced concrete products and the trust that contractors and government agencies have in the performance of such products. ☺

Amcor Precast's Ogden Utah facility has been in service over 50 years. Along with a full line of concrete pipe and manhole products, Amcor also produces utility vaults, catch basin products, box sections, and a wide variety of other precast concrete products. See www.oldcastle-precast.com.

Geneva Pipe Company, located on 13 acres in Orem Utah, has been supplying RCP for 47 years. It recently upgraded its Orem Plant to improve productivity and product quality. The plant produces a wide range of sizes of reinforced concrete pipe, as well as manholes, catch basins, boxes and associated drainage products. It also supplies non reinforced concrete pipe up to 36 inches in diameter. See www.geneva-pipe.com.

- Project:** 8600 South Storm Drain Project
Sandy City, Utah
- Owner:** Sandy City Department of Public Utilities
Sandy City Corporation
- Consulting Engineer:** Bowen, Collins & Associates
Draper, Utah
- Contractors:** COP Construction Co., South Jordan, Utah
HK Construction, Idaho Falls, Idaho
Noland & Son, West Jordan, Utah
- Quantities:** 1,105 feet of 66-inch diameter RCP
4,520 feet of 60-inch diameter RCP
1,060 feet of 54-inch diameter RCP
1,400 feet of 48-inch diameter RCP
1,200 feet of 42-inch diameter RCP
3,380 feet of 36-inch diameter RCP
2,188 feet of 30-inch diameter RCP
1,370 feet of 24-inch diameter RCP
7,000 feet of miscellaneous smaller diameter RCP
506 feet of 48-inch x 76-inch elliptical RCP
3,250 feet of 38-inch x 60-inch elliptical RCP
591 feet of 34-inch x 54-inch elliptical RCP
60 feet of 29-inch x 45-inch elliptical RCP
750 feet of 24-inch x 38-inch elliptical RCP
315 feet of 7-foot x 5-foot (span and rise) precast box sections
- Producers:** Amcor Precast (a division of Oldcastle Precast, Inc.)
Ogden, Utah
Geneva Pipe Company
Orem, Utah