



Photos courtesy of Plymouth Foam

Salt Lake City Light Rail Expands With Geofoam

In the nation's second-largest application ever of its kind, approximately 2,131,256 cubic feet of expanded polystyrene geofoam blocks expedited an expansion of Salt Lake City's Transit Express (TRAX) light-rail system.

Geofoam has an established track record worldwide as a cost-effective engineering solution for difficult embankment stability and foundation settlement applications. It was selected in place of soil to save time and money constructing the embankment, which is up to 40 feet high in some areas. The Utah Transit Authority (UTA) will save at least \$20 million and eight months of construction time by avoiding soil settlement issues.

The density of geofoam being used on the project will withstand over a thousand pounds per square foot. Each block weighs approximately 150 pounds, allowing easy movement and installation around the job site. The blocks were stacked up to a height of 40 feet, capped with a concrete slab, road base, pavement and then the light-rail tracks. Geofoam's lightweight will allow UTA to build bridges over already existing utility lines without having to dig them up.

The project, which spans 5.1 miles and will cost \$250 million, began in February 2009. UTA used geofoam in seven locations in the West Valley line, which could open as early as 2013. The UTA light-rail project is second only to I-15 construction 10 years ago. A recent study on that project shows the geofoam is performing well.

On the UW Athletics Department website, there is a photo gallery showing day-by-day construction of the rink. Go to www.uwbadgers.com/sports/w-hockey/spec-rel/020110aab.html

Plymouth Foam supplied a combination of 40 and 60 psi EPS geofoam to SGA Staging Services. SGA's expertise helped determine the types of EPS that would be required to adequately support the weight of the Zamboni. Three truckloads of EPS foam were needed for the job. The rink has a base layer of T&G OSB subflooring, a layer of 40 psi EPS sloped to reverse the slope of the field, a 2" layer of 60 psi EPS and a final top layer of the T&G subflooring.

According to Nugent, "to our knowledge, this is the first time EPS has been used in this type of application."

However, to the athletes who played in the Classic, it was just a rink ready for a good game ■