1,245 cubic feet of Foam-Control® EPS22 Geofoam was used as embankment stabilization by the Texas Department of Transportation (TxDOT) for the US67 at SH174 Overpass in Cleburne, Texas.

Within approximately 15 years of being built, the retaining wall system supporting an overpass along US 67 was experiencing severe soil stability issues that required remediation. During the course of 2011, engineers at the Texas Department of Transportation (TxDOT) tried using conventional embankment header rehabilitation methods only to find that settlement and moisture issues remained a problem.

Rethinking the project as a test case, TxDOT decided to try two different alternative rehabilitation methods to assess each solution’s constructability, cost, and long-term effectiveness for future embankments. One set of embankments was rehabilitated using a lightweight aggregate and the other set employed ACH Foam Technologies’ Foam-Control® EPS22 Geofoam. Ultimately, the Geofoam side provided a more stable structural base and the contractor found the Geofoam installation process to be much easier compared to the time, equipment, and effort required to work with the lightweight aggregate. The contractor also noted that it was easy to customize the Geofoam using a hot-wire cutter, resulting in little material waste.

The 120’ long by 44” wide bridge approach was replaced with 6’ of Foam-Control® Geofoam fill beneath the paving section. 10” of flexible base, 4” of hot mix asphalt underlayment, and 10” of continuously reinforced concrete paving was placed on top of the Foam-Control® Geofoam fill which was wrapped in geotextile fabric. An underdrain system was utilized as well as a 4” sand leveling course.