

BECHTEL/CHENIERE LIQUEFACTION CORPUS CHRISTI, TX

CHALLENGE

A section of a 60-inch product transfer line was to be installed beneath the road near the main entrance of the Corpus Christi Liquefaction plant. The pipeline contractor drove sheet piles and excavated a bore pit approximately 20FT deep. The bore head was set, and they began to cut a pilot hole for the 60-inch diameter pipeline. The bore pits were approximately 100LF apart. As the contractor advanced the cutting head water began to infiltrate the bore pit at an extremely high flow rate, making it difficult for the high-volume trash pumps to dewater the pit. Boring was suspended.



SOLUTION

Superior Grouting was contacted, then selected to perform the chemical grouting procedure to cut-off water infiltration. A series of 5/8 inch holes were cut through the sheet pile on a grid pattern throughout the face wall and two side walls. A 12" injection probe was pushed into the soils and Avanti AV-100 was injected, permeating the soil fines. The procedure was repeated at each area from bottom up. As the chemical injections progressed the water infiltration was significantly reduced.



PROJECT SUMMARY

- » The water infiltration was reduced to a manageable flow and the pipeline contractor was able to bore the 60-inch diameter hole and pull the pipe.
- » The work was performed in a timely manner and the project remained on schedule.

