



Construction Method:
Horizontal Directional Drilling

Project: Furie Kitchen Lights Unit #3

Location: Cook Inlet, Alaska

Date: 2014

Job Scope:

- ❖ Risk Analysis
- ❖ Hydrofracture Analysis
- ❖ Contract Documents
- ❖ Casing Design
- ❖ Specialty Inspection

Project Description:

Staheli Trenchless Consultants provided design assistance on the installation of a 10-inch gas pipeline by HDD on the northwest coast of Kenai Peninsula in Alaska's Cook Inlet. The HDD consisted of a 2,850-foot long at-shore crossing, with the remainder of the 16 miles of pipeline laid directly onto the seabed. This challenging drill was designed to accommodate a 270-foot elevation difference between the entry and exit points, leading to the installation of 16-inch washover casing through the entirety of the borehole to mitigate instability risk.

STC completed a detailed hydrofracture analysis, performed theoretical mud loss and spoil volume calculations to assist with permitting, and designed the thickness and yield strength of the washover casing in order to withstand anticipated installation loading. STC also provided on-site specialty inspection during the construction of this high-risk drill.



Reference:

Stephen Acreneaux, Crowley Solutions, Inc. (713) 360-9073.