

Deep Water Outfall/Intertidal Everett, Washington



Client:

Kimberly Clark Corp. &
City of Everett, Washington
Everett, Washington

Contract Value:

\$7,000,000

Project Timeline:

Started: June 2003

Completed: February 2004

Project Highlights:

- 4,600 ft. long x 63-inch diameter HDPE pipe outfall to 350 ft. water depth
- 1,800 lineal feet of intertidal pipeline
- 2,800 lineal feet of controlled submergence deep water pipeline with diffuser
- 1,300 lineal feet of temporary work trestle
- 3,000 lineal feet of temporary sheetpile wall for intertidal pipeline trench shoring
- 10,000 cubic yards of clam excavation and backfill
- Careful consideration to tidal flat flora and fauna

Under a combination lump sum (Intertidal) and cost-reimbursable (Deep Water) contract, Advanced American Construction, Inc. (AAC) successfully completed the challenging Intertidal & Deep Water Outfall project for Kimberly-Clark Corporation – on time and under budget. A “controlled submergence” method of installing the deep water portion of the outfall, anchored to a depth of 350 feet below the water surface with precast concrete weights, was utilized.

The 4,600 foot-long by 63-inch diameter HDPE pipe outfall with diffuser required: 1,300 lineal-feet of temporary work trestle; 3,000 lineal-feet of temporary sheetpile wall for intertidal pipeline trench shoring; 10,000 cubic yards of clam excavation and backfill from the work trestle; AAC in-house diving and surveying; and on-shore fusing and assembling of the HDPE pipe and precast concrete anchors 5 miles upriver from the installation site.

During the final stages of the controlled submergence, the pipe broke adjacent to a flange. After the failure, 2,100 lineal-feet of pipe and anchors settled to the sea floor. AAC responded immediately to this “disaster” by developing and subsequently executing a plan to install the remaining 700 lineal-feet of pipe and repair the break – at the 350 foot water depth – without the use of divers.



Advanced American Construction, Inc.

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