

"NORTH TO ALASKA" OR "CALL OF THE WILD"

Caldwell Marine International, a UTCA member, recently installed portions of a major submarine cable system in Alaska for Alcatel Submarine Networks of Paris. The Kodiak Kenai Fiber Link is a Fiber Optic Submarine Telecom Cable system that stretches over nearly 1000 kilometers (600 miles) under the ocean between 6 different landing sites. Starting in Anchorage the cable runs down Cook Inlet to the Kenai Peninsula landing in the towns of Kenai and Homer, and from there the system crosses the Gulf of Alaska to Kodiak Island where there are two landing sites. From Kodiak Island the cable turns north and heads back across the Gulf of Alaska to its final landing point in Seward on the southern coast of the Kenai Peninsula.

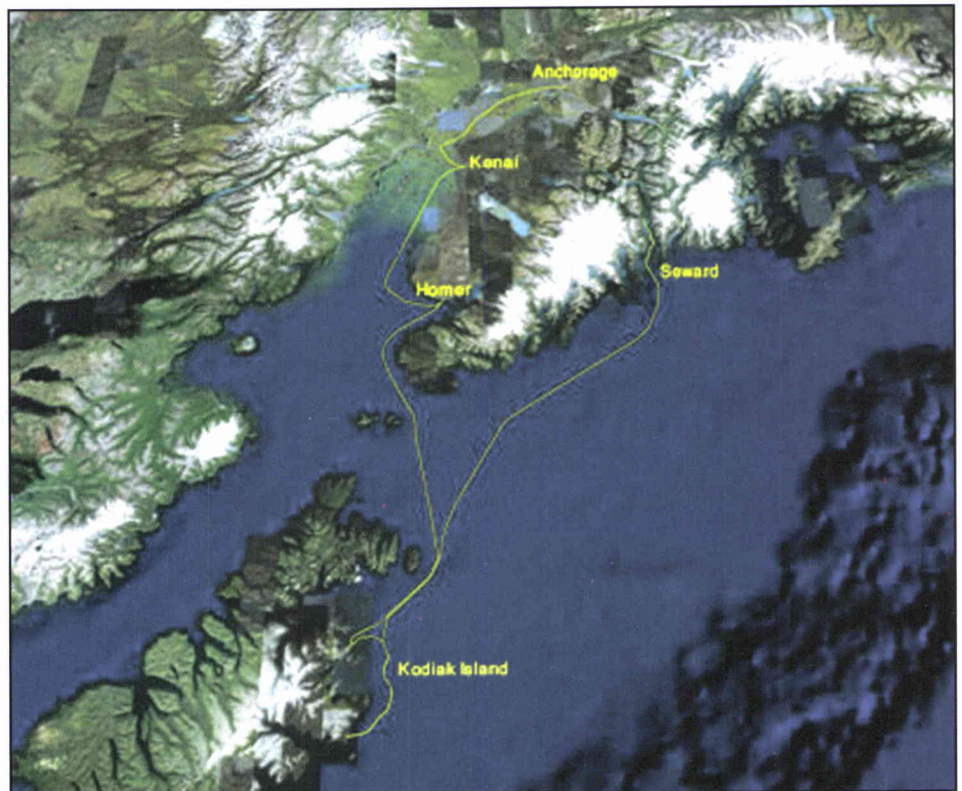
The main, deep water sections of the cable system were laid by an Alcatel Cable Ship from Europe. Caldwell was responsible for laying and burying the shallow water sections out from the beach to a point where the depth of water allows the larger Cable Ship to approach the landing safely. These sections of cable are called "Shore Ends", and their installation is called a "Pre Laid Shore End" or PLSE. Once the Shore Ends are installed, the main lay cable ship will come in and pick up the PLSE cable, splice on the main cable and lay the deep water section out to the next landing site where the process is done in reverse.

The shore end cable sections were manufactured at the Alcatel Submarine Cable Factory in Calais, France. Once ready they were loaded onto a specially modified cargo freighter which then started the long haul from Calais across the Atlantic, through the Panama Canal and up to Washington State.

The Caldwell team mobilized its specialist submarine cable spread at a yard in Seattle, WA where they have previously mobilized for other west coast projects. The cable spread is modular and was containerized and shipped out from the Caldwell yard at New Gretna, NJ on a dozen flat beds heading for Seattle. The mob crew flew from Newark to meet the spread. Caldwell had previously chartered a deck barge in Alaska which was



Caldwell Marine's Jet Plow is loaded for the journey to Anchorage.



The route of the Kodiak Kenai Fiber Link installed by Caldwell Marine.

towed down to Seattle to meet the spread and the crew.

This mobilization had to be closely coordinated with the freighter coming from Europe in order to avoid having down time

for the freighter in Washington State. The Caldwell superintendent and the freighter Captain were in daily communication. Once the cable lay equipment was mobilized onto the barge and the freighter was heading in

TRAP ROCK

Industries, Inc.

Brings You

- * Better Service
- * Larger Capacity
- * Improved Reliability
- * Same High Quality Mix

at the

NEW RUNNEMEDE

Hot Mix Facility

Route 168 at the NJ Turnpike, Interchange 3

We look forward to the opportunity to

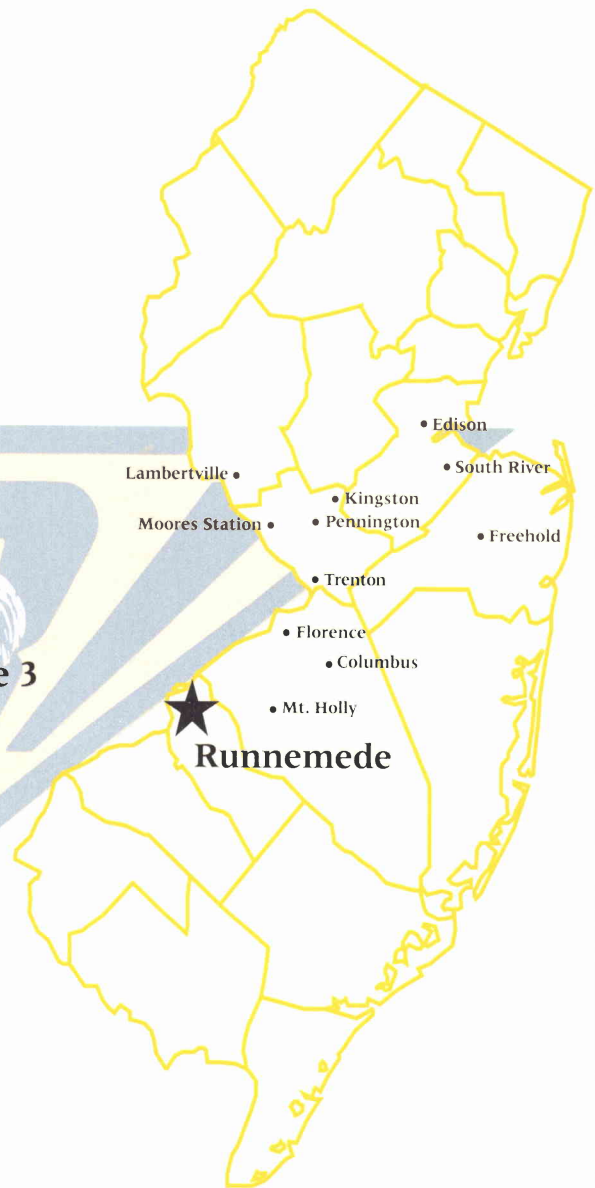
SERVE YOU BETTER!

609-924-0300

Quality Service

Quality Aggregates

Quality Hot Mix Asphalt



Class B Recycling Centers: Kingston, Trenton, Mt. Holly

Crushed Stone: Kingston, Pennington, Lambertville, Moores Station, Freehold

Hot Mix Asphalt Plants: Kingston, Pennington, Lambertville, Trenton, Edison, South River, Florence, Columbus, Mt. Holly, Runnemedde

to port, the Caldwell cable lay barge was towed to Anacortes, WA to rendezvous with the freighter.

The shore end cable lengths, approximately 37km (20 miles), were transferred from the freighter to the Caldwell lay barge. Once loaded the barge was "Sea Fastened" and headed North to Alaska for the 10 day passage by tow to Homer, AK while the crew headed north by plane to get the job sites ready.

INSTALLATION AND BURIAL

The range of tides in this part of Alaska can be quite huge up to 7.5 meters (25 feet) in some areas. Caldwell utilized a shallow draft deck barge for its cable lay and burial spread. This barge could be safely grounded and left "High & Dry" at low tide on the beach.

The Caldwell team worked the tides to their advantage by coming in to each site on a high tide, positioning the barge as close as possible to the beach landing, beaching the barge at the next low tide then landing the cable at the next high tide and heading out to sea burying cable. In this fashion each shore end cable was laid and buried out to a water depth of 20 meters (65 feet), in preparation for the main lay cable ship.

Caldwell's Jet Plow is a sophisticated submarine cable burial system that can embed submarine cables up to 5 meters (16.4 feet) deep into the sea bed. (Submarine cables are buried in the sea bed to protect them from external aggression such as fishing or clam dredging). On this project,



This shallow draft deck barge was utilized by Caldwell Marine for landing the fiber cable at several locations in Alaska.

the Scope of Work called for burial between 1 & 2 meters in to the sea bed. With the 2 meter plow stinger fitted and 900hp of jetting power, the Caldwell Jet plow system was ready for action.

Today the amount of telecom traffic that can be carried on these high speed digital submarine cables is phenomenal. With the advent of the internet, the majority of the traffic carried these days is data or video rather than phone calls. These cables can

carry the equivalent bandwidth of millions of simultaneous telephone calls and are another exit ramp on the information super highway.

Starting in June the job stretched out from summer to fall and into early winter, and our Jersey Boys saw the full spectrum of the Alaskan climate. The last part of the crew to leave had their first snowfall, saw the season's first ice floes forming and felt the -20 degree chill!