



**LITEACCESS**  
TECHNOLOGIES INC

## **Lite Access –120+ kilometer Fibre Optic deployment in Haida Gwaii**

### Project Background

Haida Gwaii is a remote community located in Northwest coast of BC., approximately 120km off the coast of British Columbia. It is the most remote archipelago in Canada and consists of about 150 individual islands of various sizes, of which only two of the islands largest areas are developed. In the Fall of 2015, GwaiiTel Society (a non-project wholesale\internet supplier) in Haida Gwaii was looking to extend their terrestrial backbone from Masset to Skidegate and to integrate existing fibre within these two municipal areas.

There were several obstacles facing this project including the remote location of Haida Gwai and the need for winter construction; the unique nature of the road construction in the area (many areas were originally built upon logs); 10 creek/river crossings and an ocean inlet crossing along the 128 kilometer route; sensitive environmental issues and multiple archeological areas as well as the need for a fixed bid contract. Lite Access Technologies was the solution.



### Solution

Lite Access Technologies (LAT) provided a fixed bid and delivered 23% more fibre than promised. The overall project finished under budget. Construction of the backbone took approximately three months, with total completion, including POP infrastructure, completed in six months. A combination of plow and micro-drill installation was used. Rapid deployment included using four kilometer long manufactured

lengths of Microduct, pre-populated with 96F SM G652D fiber cable. The fibre was pre-installed to eliminate any stress and potential fracture of the fiber. The system was completely sealed and included a spare tube for future growth, high tensile strength and crush test characteristics. As well, an aluminum layer provided traceability and added product integrity. Since completion, GwaiiTel connection speeds are 5-10 times faster than the original 3<sup>rd</sup> party network. Environmental and archaeological impacts were kept to a minimum during the build, a primary concern in Haida Gwaii, which is home to Hanaas National Park and heritage sites.

“We received multiple bids from contractors and in the end Lite Access Technologies got the job done on time and under budget” – Mark Halwa – GwaiiTel Project Manager