

STUMP DUMP RESERVOIR AND WATER SUPPLY MAIN DISTRICT OF TOFINO



Completed reservoir looking northeast across Clayoquot Sound

The reservoir was connected to the existing water distribution system with 1,900 m of 400 mm diameter HDPE pipe laid adjacent to the shoulder of the Pacific Rim Highway.

330 m of 400 mm dia piping was installed by directional drilling to avoid disturbing sensitive fish streams and unstable road fills. The project also involved multiple open cut crossings of fish bearing creeks, involving creek bypasses and reinstatement of fish habitat.

The piping was sized to suit future regional water supply from Kennedy Lake.

The piping was installed under heavy summer traffic conditions, with two-way traffic having to be maintained as much as possible. Clearing was kept to a minimum, resulting in a narrow working area.

The District of Tofino retained Koers & Associates Engineering Ltd. to provide a new 5.0 ML capacity water reservoir to provide improved fire protection for the resort developments south of Tofino and reduce the peak demands on the central Tofino distribution system. A rectangular, partially buried, two-cell configuration was selected as the most cost-effective for this steeply sloped site. The reservoir is expandable to double the present size.

The reservoir complex also incorporates a re-chlorination station to improve chlorine residual at the south end of the system.

Associated Engineering was retained as a sub-consultant to provide structural, electrical, and instrumentation engineering services to the project.



400 mm diameter HDPE pipe being installed in the road shoulder of the Pacific Rim Highway

**Contractors: Knappett Projects Inc. – Reservoir
Fournier Excavating Ltd. – Supply Main**
Construction Cost: \$3,800,000 (reservoir and piping only)
Project Completion: 2008



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