

Sproat Lake CSP Reline

OWNER CONTRACTORS LOCATION BC Ministry of Transportation and Infrastructure Mainroad Mid-Island Contracting and Bridge & Construction Ltd. Sproat Lake, BC

A Multi Plate structure, located along the main highway between Port Alberni and Tofino, BC, was nearing the end of its service life and in need of replacement or rehabilitation. Replacing the structure required a full road closure, which was not feasible given its close proximity to a natural pond and fish habitat. A rehabilitation solution was selected as the only viable option in terms of deadline for project completion and cost effectiveness targets.

TECHNICAL DETAILS

Aluminized Type 2 CSP 3300mm x 48 m long x 3.5mm thick

The Challenge

The project location was difficult to access, with limited right of way. Furthermore, a nearby natural pond required a tight construction window in order to comply with fish habitat protection regulations. Finally, as the only road for reaching local communities, full closure was not an option.

The Solution

Rehabilitation was eventually selected over replacement of the aging structure. Armtec proposed the use of Aluminized Type 2 CSP measuring 3,300mm in diameter with internal couplers. The Aluminized Type 2 coating would provide an extended service life of 75 years. In order to minimize disruption to the fish habitat and maintain environmental compliance, the contractor, Coastal Bridge & Construction, under the direction of Mainroad Mid-Island Contracting, were able to install the pipe using a sliplining technique within less than eight hours inside the host pipe. The pipe was successfully encased in grout utilizing the grout ports provided. Both the Ministry of Transportation and Infrastructure, and the contractor were very pleased with the results. Disruption to traffic was minimized as the majority of the work was kept off the road. Aluminized pipe provided a lightweight, economical choice that fit easily within the existing structure.



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