



River Dyke Reconstruction Lower Kootenay Indian Band

River erosion had removed nearly 50% of the width of the dyke on a bend in the Kootenay River near Creston. Approximately 175 m of dyke reconstruction was required including resloping the front side of the dyke to 2:1. Following the shaping of the dyke a 0.5m thick layer of well-graded gravel was placed on the riverside slope of the dyke. This material acts as both erosion protection and a filter to retain the fine grained silty material of the dyke core.

Urban Systems had completed a Dyke Failure Investigation Study in March of 1999. High water due to runoff from a record snow pack at higher elevations during the previous winter was anticipated and an emergency was declared for this portion of the Kootenay river passing through the Lower Kootenay Indian Band Lands. Detailed design and construction was then completed in less than four weeks to avert a potential flood.

Urban Systems assembled the necessary team of specialists to inspect the river and existing dyking system and put forward repair recommendations.

Due to the short time frame and emergency nature of the project a general contractor was not hired. Rather, Urban Systems remained hands on and managed the construction. Urban Systems Ltd. was responsible for design, layout, obtaining environmental approvals, hiring equipment, construction inspection, measuring and recommending payments.

Approximate value of project: \$150,000



client

Lower Kootenay Indian Band

project

River Dyke Reconstruction

services

Design, Layout,
Environmental Approvals,
Construction Management
and Construction
Inspection

year

1999

file

4.0834.0016.03