

Kelsey Generating Station Spillway Rollway Grouting and Deck Repairs

STRUCTURE:	Kelsey Generating Station Spillway and Powerhouse
LOCATION:	Kelsey, Manitoba
PROJECT DATE:	1984 & 1985
JOB DURATION:	2 Years
CONTRACT AMOUNT:	\$ 775,000
CLIENT:	Manitoba Hydro
CONTRACTOR:	Vector Construction Group



PROJECT DESCRIPTION:

Due to poor concrete consolidation during the original construction there were voids in the concrete of the Spillway Rollways. To complicate matters, water was leaking through the concrete, causing further deterioration. In another area, on the Powerhouse deck, the concrete had deteriorated from freeze-thaw action which had been accelerated by de-icing salts.

To fill the void in the Spillway Rollways cementitious grouting was chosen. Holes were drilled on a grid pattern through the concrete and into the bedrock below. The holes were then watertested to establish the location of the voids and their size. A fluid cement grout was pumped under pressure through the holes, filling the voids and any cracks in the rollway concrete. This provided a solid leakproof rollway.

The Powerhouse deck was repaired by removing the deteriorated concrete and pouring new air-entrained higher strength concrete to replace it. Also, at the same time the leaking expansion joints were replaced with new compressive seal type joints.

For this project, Vector worked with the Split Lake First Nation to provide employment and training for several of its band members. They were hired and provided with on the job training in construction labour, rock drilling, concrete work, and cementitious grouting.



CORPORATE OFFICE

474 Dovercourt Drive
Winnipeg, Manitoba, R3Y 1G4
Ph. (204) 489-6300
Fax (204) 489-6033
Email: vector@vectorgroup.com

REGIONAL OFFICES

Manitoba Winnipeg (204) 489-6300
Ontario (North) Thunder Bay (807) 346-4405
Ontario (South) Stoney Creek (905) 662-4020
Saskatchewan Saskatoon (306) 934-3533
Alberta Spruce Grove (780) 962-6778

North Dakota Fargo (701) 280-9697
Nebraska Sioux City (402) 494-9305
Iowa Cedar Rapids (319) 364-5355