Shoal Lake Aqueduct Rehabilitation
Urethane Injection

STRUCTURE: Shoal Lake Aqueduct
LOCATION: Between Indian Bay, MB & Winnipeg, MB

PROJECT DATES – CONTRACT AMOUNTS:
- September 1996 - $380,000
- November 1996 - $430,000
- November 1997 - $430,000
- October 2000 - $370,000
- October 2001 - $455,000
- October 2002 - $450,000
- October 2003 - $500,000

PRODUCTS USED: Flex F1000 & Waterplug

JOB DURATION: 2 weeks per shutdown

CLIENT: City of Winnipeg
CONTRACTOR: Vector Construction Ltd.

PROJECT DESCRIPTION:

The Shoal Lake Aqueduct was built in 1913 to supply Winnipeg with clean potable water. The aqueduct has shifted many times since being built and continues to shift every year creating cracking throughout the entire structure. Originally 20% of water entering the aqueduct was leaking out through these cracks. To prevent groundwater infiltration and water leaking out of the aqueduct, urethane injection of cracks and joints was completed. The city of Winnipeg allowed for 2 weeks of work inside the aqueduct each year starting in 1996 and ending in 2003. The city generally awards 2 contracts each year with each contract stretching anywhere from 1 to 10 miles, depending on the severity of leakage. Approximately 2000m of crack and joint are injected in each contract. Due to the short time frame to complete this work, an immense work force is needed along with many long days.