## Water Resources Engineering Flood Protection and Erosion Control

## Parlby Creek Erosion Control Project Alberta Infrastructure and Transportation

Sameng Inc. prepared the detailed designs, prepared required environmental approval documentation and provided construction engineering services for a slope stabilization project in the Buffalo Lake Water Management System area. This system was constructed in the mid to late 1980s and was designed to convey water from the Red Deer River to Buffalo Lake before returning to the Red Deer River. The original system was constructed to stabilize the water levels in Buffalo Lake, to provide a reliable water supply for the Town of Mirror, to improve agriculture through backflooding, and to enhance the fish and wildlife habitat of the area.

## Location

Mirror, Alberta

## **Client Contact**

Shaun Harley, Bridge Engineer By 2006/2007, significant erosion had been occuring along Parly Creek and protection methods were identified to reduce the rate of erosion. Erosion protection works in the form of gravel/cobble lining were proposed for certain sections of imminent concern and in 2012, Sameng Inc. was retained to prepare plans and provide construction specifications for the completion of the proposed erosion protection works.

The main work items completed for this project included:

- Review of ESRD project implementation report and previous works;
- Site inspections with ESRD and Alberta Transportation project manager;
- Review of the design parameters;
- Preparation of tender drawings and contract specifications;
- Provision of construction period services;
- Completion of record drawings and contract completion report.

The construction period stretched from Octber 19<sup>th</sup> to December 15, 2012. During this period of time, weather presented some challenges to the constructability of the erosion works. Sameng Inc. worked with the contractors to complete the work in a timely manner.

Prior to Erosion Control





