

**BULKLEY RIVER AND BUCK CREEK
AT HOUSTON**

"As Constructed"

Left Bank Dyke - Bulkley River and Buck Creek
Right Bank Dyke - Buck Creek

and

Buck Creek
Monitoring Cross Sections 1 - 7, 9 - 12

Project: 9028R026

Time Code: 014026

Requested by: K. Bornemann, Inspector of Dykes - "As Constructed" survey
R. White, Skeena Region - Monitoring Cross sections

Field Time: 60.1 man days (421.0 hours)

Field Book: 2548

Survey Date

July 16 - 18, 1990

July 16 - 28, 1990

Personnel

M. Pronk, R. Barclay, H. Brazier

J. Duncan, T. Stewart

This survey was carried out in favourable conditions under the supervision of M. Pronk.

Accommodation for the crew was in Houston. This project coincided with an "as constructed" dyke survey on the Telkwa River at Telkwa.

Field Survey:

Survey included:

- location, profile and twenty nine (29) cross section of 2.2 km of dyke on left bank of Bulkley River and Buck Creek;
- Location, profile and thirty one (31) cross sections of 2.2 km of dyke on right bank off Buck Creek;
- Reran cross section 1 - 7, 9 - 12 on Buck Creek for comparison with data obtained in July 1978 under Project 76FDC-18;

- traverse, cross sections, dyke details were obtained using a total station theodolite and a semi-total station on a minute reading theodolite;
- vertical control was established by differential levelling and confirmed by reciprocal height traversing;
- established temporary bench marks 4133, 4143, 4145, 4147 and bench marks 90HAW042, 90HAW043 and 90HAW044.

Datum:

Horizontal and vertical control is based on posts 74H2410, 74H2412 and 74H2424 established by Surveys and Resource Mapping Branch, from Data Bank in April, 1989.

Coordinates are universal transverse mercator, zones, central meridian 129 degrees (NAD 27) at ground level (sea level coordinate = ground level coordinate x 0.999720).

Elevations are in metres and are referred to geodetic datum.

Data Returns:

Inspector of Dykes - Attention: R. Henry

One volume of left and right bank dyke data containing:

- Print of drawing No's. 91 - 18 - 1 to 91 - 18 - 4 inclusive
Plan H1:1000 Profile H1:1000 V1:100
- Dyke crest profile statement
- Cross section plots (H1:300 V1:300) with profile statement

Rivers Section - Attention: H. Nesbitt-Porter

One volume of left and right bank dyke data containing:

- Print of drawing No's. 91 - 18 - 1 to 91 - 18 - 4 inclusive
Plan H1:1000 Profile H1:1000 V1:100
- Dyke crest profile statement
- Cross section plots (H1:300 V1:300) with profile statement

Skeena Region - Attention: R. White

Note: Data delivered to R. White by M. Pronk on April 24, 1991 (see memorandum dated April 23, 1991)

One volume of Buck Creek cross sections monitoring data containing:

- Locations of cross sections - air photo enlargement Dwg. No. A5185 - 100 (Scale 1:4354) approx.)
- Cross section profile statement for 1978 and 1990
- Cross section plot (H1:500 V1:50) comparing 1978 and 1990

Technical Support Section:

Two volumes of complete project data and mylar copies of Drawing No's: 91 - 18 - 1 to 91 - 18 - 4 on file.

Volume one contains "As Constructed" dyke data for left bank of Bulkley River and left and right bank of Buck Creek.

Volume two contains Buck Creek cross section monitoring data for 1978 and 1990 and Avalon Creek profile.

M. Pronk,
Projects Manager
Technical Support Section

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