

WILLIAM M. SHARP, P. ENG.
CONSULTING GEOLOGICAL ENGINEER

TEL.: BUS. 682-4144
RES.: 987-9520

801002

Buval

STE. 808, 900 WEST HASTINGS ST.
VANCOUVER 1, B. C.

July 11, 1966.

Mr. W. D. Yorke-Hardy,
Box 874,
Smithers, B.C.

Dear Bill:

Two prints of the 1" - 500' topog. map, as prepared by the McElhanney Survey people from air photos, are being mailed to you. I have checked their scales against geographic features on other maps and find them reasonably accurate - certainly close enough for our purposes.

A review of our earlier discussions re methods of using the map to establish the "contour-type" of ground control follows:

1. Plot the outline of the Buval property on the plan. This does not have to be done with too high a degree of over-all accuracy, as long as the sides next to properties held by others are fairly close. The main idea is to generally delimit the area to be soil-sampled - noting that it may be locally expeditious to go beyond Buval boundaries to establish a trend.
2. Base-line control for any given part of the map area is best established along some well-defined topographic feature on the map - such as a creek course or prominent nose. Set the Thommen pocket altimeter from easily-ascertainable elevation points or references on the map. Traverse up (or down) the creek course (etc.) and set stations (pickets or ribbons) at 100-foot vertical intervals and, at times attempt to "close" your altimeter elevations with those at certain distinctive topographic map features. If there is a discrepancy between your final picket elevation and the map "closing-point", adjust preceding stations on a downhill (or uphill) back-traverse.
3. Contour, or "level" control at any given horizon to be soil-sampled is best maintained by clinometer, or by visual estimate. Individual contour traverses should not exceed, say, 3,000 feet as the line may wander up or downhill rather appreciably. You will note that I have not suggested using

the altimeter to maintain level lines, due to the fact that normal daily variations of atmospheric pressure are sufficient to cause very appreciable departures in elevation. For the same reason the initial elevation control, or setting-off, should be done as quickly as possible - preferably during parts of the day that are generally more stable, atmospherically.

4. I would think that reconnaissance soil-sampling at 200-foot contour intervals and detail work at 100-foot intervals, with sampline on 200' and 100' line-spacing respectively, should be adequate.

5. Over flatter areas, where the above procedures would not provide adequate soil-sampling coverage, or where this control would be hard to establish, I would suggest locally reverting to conventional grid control.

I hope that you are able to follow the above Bill, and that it is generally applicable; however situations will arise where you may find it more advantageous to improvise. Anyway, the best of luck, and results!

Yours sincerely,

Bill

WMS/|m

c.c. Mr. D. W. Small
c/o Griffiths, McLelland & Co.
818 - 470 Granville Street,
Vancouver 2, B.C.

c. cc. W. M. Sharp = file

(*W. M. Sharp*)