

Dep't. of Public Works, Canada  
Western Region  
Mackenzie Highway  
Revised Location Report  
Section "D"  
Mile 725 to 936

July/73



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Contents

DEPARTMENT OF PUBLIC WORKS, CANADA  
WESTERN REGION

Mackenzie Highway  
Revised Location Report  
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Mile 725 to 936

Edmonton, Alberta  
July, 1973

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MACKENZIE HIGHWAY, N.W.T.  
REVISED LOCATION REPORT  
SECTION "D"  
JULY, 1973

MILE 725 (FORT GOOD HOPE)  
TO  
MILE 936 (DEMPSTER HIGHWAY  
JUNCTION)

The following submission is an addendum to the D.P.W. Mackenzie Highway Preliminary Location Report, Section "D", dated April, 1973 and refers to alternate route location sections projected on the attached mosaics. The alternate routes noted are those selected for further study or for field surveys based on the results of the investigative helicopter drilling recently undertaken along routes B/B<sub>1</sub> and C/C<sub>1</sub>.

1. Route "A" and "A<sub>1</sub>" - Mile 726 to Mile 734

Route "A" was selected for survey as a shorter route since Pemcan's granular investigation indicated insufficient material for highway construction in the Esker to justify a longer route via "A<sub>1</sub>".

2. Mile 755 to Mile 757

This revision improves the highway alignment and provides an overview of a rock spillway and the Mackenzie River.

3. Mile 761 to Mile 771 (Tieda R. Crossing)

This revision of the Tieda River Crossing reduces the vertical approach elevation by over 50 feet, thus minimizing the requirement for approach cuts that were apparent on the original projection. Lack of any soil drilling to confirm soil quality would indicate that any cuts would result in serious slope stability problems. A further advantage to this route is that it will improve the route geometrics from the River Crossing to Mile 771.

4. Mile 785 to Mile 801

This revision will reduce the gradient from Mile 785 to 790 and then follow uniform terrain from Mile 790 to 801 over an apparent sand base which is either exposed or near the surface, thus eliminating connecting parallel ridges and crossing between connecting lakes that were encountered on the original projection. A considerable reduction in fill quantities is also expected with the improved geometrics along this route.

5. Mile 808 to Mile 810

This revision was projected to increase the distance between the highway and the lakes in this area.

6. Mile 885 to Mile 903.5 - Route "B" and "B<sub>1</sub>"

Route "B" has been selected for survey from Mile 885 to Mile 903.5, since the preliminary investigative helicopter drilling indicated the availability of shale borrow and possibly gravel. The terrain along this route is generally more uniform topographically than what other possible alternate routes would encounter. From Mile 850 (Thunder R.) to Mile 885 further soils information is necessary before a revised route can be recommended between alternate routes "B" and "B<sub>1</sub>".

7. Mile 907 to Mile 927 (Route "C" and "C<sub>1</sub>"

Route "C" has been selected for survey from Mile 907 to Mile 927 (C.N. Tower) since the investigative drilling and field studies indicated the continuous availability of shale borrow materials and a more gentle terrain. This route will also follow a previously surveyed cut line from Mile 920 to Mile 927 where studies indicate no alternative to avoiding crossing the inter-stream drainage on this tangent.

mile 425 - mile 939

mile 725 TO mile 734



mile 733 to mile 753

mile 755 TO mile 774

mile 770 to mile 785.

mile 785 to mile 790

mile 795 TO mile 814

mile 880 to mile 898

mile 895 to mile 910

mile 912 to mile 927



mile 927 to mile 939