

ITEM	12
MANAGER'S REPORT NO.	33
COUNCIL MEETING	1981 07 13

RE: A.L.R.T. ALIGNMENTS AND STATION LOCATIONS IN BURNABY

Because the implementation of rapid transit will be of considerable importance to the Municipality, it is considered imperative that Council be kept abreast of ongoing developments. It is for this reason that the Director of Planning has submitted the following report.

RECOMMENDATION:

1. THAT the report of the Director of Planning be received for information purposes.

* * * * *

TO: MUNICIPAL MANAGER 1981 July 02
 FROM: DIRECTOR OF PLANNING
 SUBJECT: A.L.R.T. ALIGNMENTS AND STATION LOCATIONS IN BURNABY

RECOMMENDATION

1. THAT this report be received for the information of Council.

SUMMARY

In its previous consideration of rapid transit in 1980, Council reviewed the preliminary design for a Light Rapid Transit (LRT) system produced by the GVRD. Since that time the Province, through the UTA, has taken the initiative in specifying the implementation of an Advanced Light Rapid Transit (ALRT) system for the lower mainland. Staff review indicates that alignment and station location specifications proposed by the UTA substantially address municipal requirements including concerns previously considered by Council relative to the LRT system. Staff have written to the UTA (and GVRD) relative to issues unresolved by the ALRT alignment and will endeavour to work with the UTA to obviate these concerns.

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R E P O R T

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1.0 BACKGROUND: LRT

The final reports of the GVRD rapid transit project were presented to the GVRD board in December 1979. At its meeting of 80 02 25, Burnaby Council considered a staff report on the station locations and alignments in Burnaby and referred it to the Transportation Committee for its consideration. Subsequent to a public meeting at McPherson school, the Transportation Committee reported on this issue to Council. Council at its meeting of 80 04 14 adopted committee recommendations regarding concerns about station locations and the alignment of light rapid transit through Burnaby. The GVRD was requested to work with municipal staff towards the resolution of these outstanding issues. Previously (80 03 24) Council had endorsed in principle the light rapid transit routing through Burnaby and Council had indicated earlier support for light rapid transit proposals in its adoption of Comprehensive Transportation Plan.

2.0 RECENT DEVELOPMENTS: ALRT

Recently the provincial government (through the UTA) has taken the initiative in the development of rapid transit in the lower mainland but has specified that an advanced light rapid transit (ALRT) system will be built rather than the 'conventional' system proposed by the GVRD study. Because the ALRT is fully automated it must be fully segregated from vehicular cross traffic and public access. Hence a substantial proportion of its length must be elevated. This grade separation reduces the potential for accidents and provides a higher overall system speed than could be achieved by the LRT system previously proposed. The ALRT trains will also run more frequently than the LRT.

Thus, if the ALRT performs according to expectation, it will offer a considerably superior service as passenger travel times will be decreased through increased overall system speed and reduced waiting time.

The UTA has contracted for the construction of the ALRT with the system developer and completion of the first priority line from downtown Vancouver to New Westminster is expected by 1986. Presumably, as work proceeds on this line, decisions will be made as to the timing of the implementation of the branch line extensions to Lougheed Mall and Surrey as proposed in the GVRD rapid transit study.

3.0 ALRT ALIGNMENT IN BURNABY

As part of the contract for construction of ALRT, the UTA has specified an alignment plan with station locations. This alignment plan substantially accords with the LRT alignment previously considered and is shown on Fig. 1 attached. This alignment is considered a baseline against which the cost of substantial changes to the design of the system will be judged. The baseline system, which is used to gauge the extra costs, should adequately meet fundamental system requirements which, inter alia, must include the needs of respective Municipalities.

Staff have reviewed the baseline ALRT alignment relative to previous proposals and identified a number of concerns as discussed below. These concerns have been forwarded to UTA staff and to GVRD staff who have been proceeding independently with a preliminary design for ALRT. (No response has been received to date).

The baseline ALRT alignment specification in Burnaby is shown in detail on Figs. 2 to 7 attached. The ALRT line would run along the B.C. Hydro right-of-way as was proposed in the GVRD's LRT study but would be elevated for a substantial proportion of its length. This extensive grade separation addresses concerns regarding severance, safety, congestion etc. held by staff and expressed by the public about the at grade alignment. The elevated alignment will also afford the opportunity of improving the appearance of the B.C. Hydro Rail right-of-way as the existing overhead wiring can be segregated with the ALRT guideway.

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4.0 STATION LOCATIONS

The UTA baseline plan specifies four (4) stations in Burnaby as discussed below.

4.1 Central Park Station

The UTA has proposed a station location, at grade, south of Kingsway within Central Park (see Fig. 2). In its previous consideration of the LRT study Council endorsed station locations bracketing Central Park at Smith Avenue north of Kingsway and at Patterson. In the preliminary plan for LRT the GVRD considered the station at Smith as an alternative to the one at Patterson because of the proximity of the two station locations. Clearly the location specified by the UTA was chosen as a compromise. Staff have requested that the UTA include both Council endorsed station locations in the baseline specification. Nonetheless it is considered that the number and location of stations in this vicinity should be further evaluated when there is a firm indication as to the final location of adjacent stations in Vancouver and the Metrotown core area. Pending this evaluation the option of having stations at both Smith and Patterson should be maintained.

4.2 Metrotown Station

The UTA has sited a Metrotown core area station in the vicinity of Dow and at the same location where the GVRD proposed an 'interim' station. The interim station was to serve this area pending the redevelopment of Metrotown commercial core, at which time a major transit interchange and station would be integrated into the development. The Municipality has opposed the development of any interim station, not only because of the added cost involved in ultimately relocating it but also because the interim arrangement would not function adequately as a major transit focus and primary station for the regional town centre.

Staff have recently been considering the possibility of locating the core area station along the B.C. Hydro right-of-way in the vicinity of Silver. This location has been considered because it adjoins a large piece of vacant property upon which a major bus interchange* could readily be developed. On their alignment plans (see Fig. 3) the UTA will adopt a station location that will meet municipal needs. Staff have requested that the relationship of the core area station to the Metrotown development plan be finalized as soon as possible by discussions involving the UTA, GVRD and Burnaby.

4.3 Royal Oak Station

The alignment specification indicates that the LRT station is to be sited (Fig. 4) in accordance with the GVRD's preliminary design for LRT as endorsed by Council. The greater flexibility afforded by the aerial alignment for ALRT suggests that further consideration should be given to the precise siting of the station at Royal Oak. For example a station straddling the Royal Oak right-of-way might offer greater ease of access. It is presumed that such minor adjustment to the micro location of a station would be accommodated within baseline costs.

4.4 Edmonds Station

This station as shown in Fig. 5 is also being sited in general accordance with the endorsed LRT preliminary design concept. It is expected that a bus interchange will be developed adjacent to the station.

* Note: The development of bus interchange facilities etc. is outside of the scope of contract for the ALRT system per se. The UTA will be responsible for concurrent development of such items.

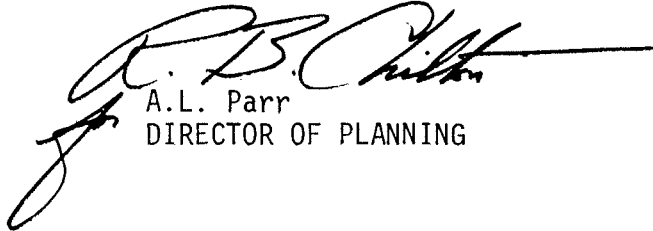
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5.0 ALRT YARD SITE

Planning staff have some concerns relative to locating a use such as an ALRT yard within the Municipality but it is generally agreed that the proposed site would be the best one. Obviously care will have to be taken and a close liaison maintained with municipal staff in order to minimize any adverse impact of such a facility. The layout of the ALRT yard site shown in Fig. 7 will need to be modified to accommodate the Marine Way-Tenth Avenue road proposal.

6.0 CONCLUSIONS

Although there are unallayed concerns (primarily involving station locations) relative to the development of the ALRT system in Burnaby, it is reasonable to assume that the outstanding issues will be satisfactorily resolved as the detail design of system proceeds. Staff will endeavour to maintain a close liaison with the UTA (and the GVRD) in order to work towards an acceptable design and Council will be apprised of future developments.



A.L. Parr
DIRECTOR OF PLANNING

PL/mcb
Attachs:

cc: Municipal Engineer

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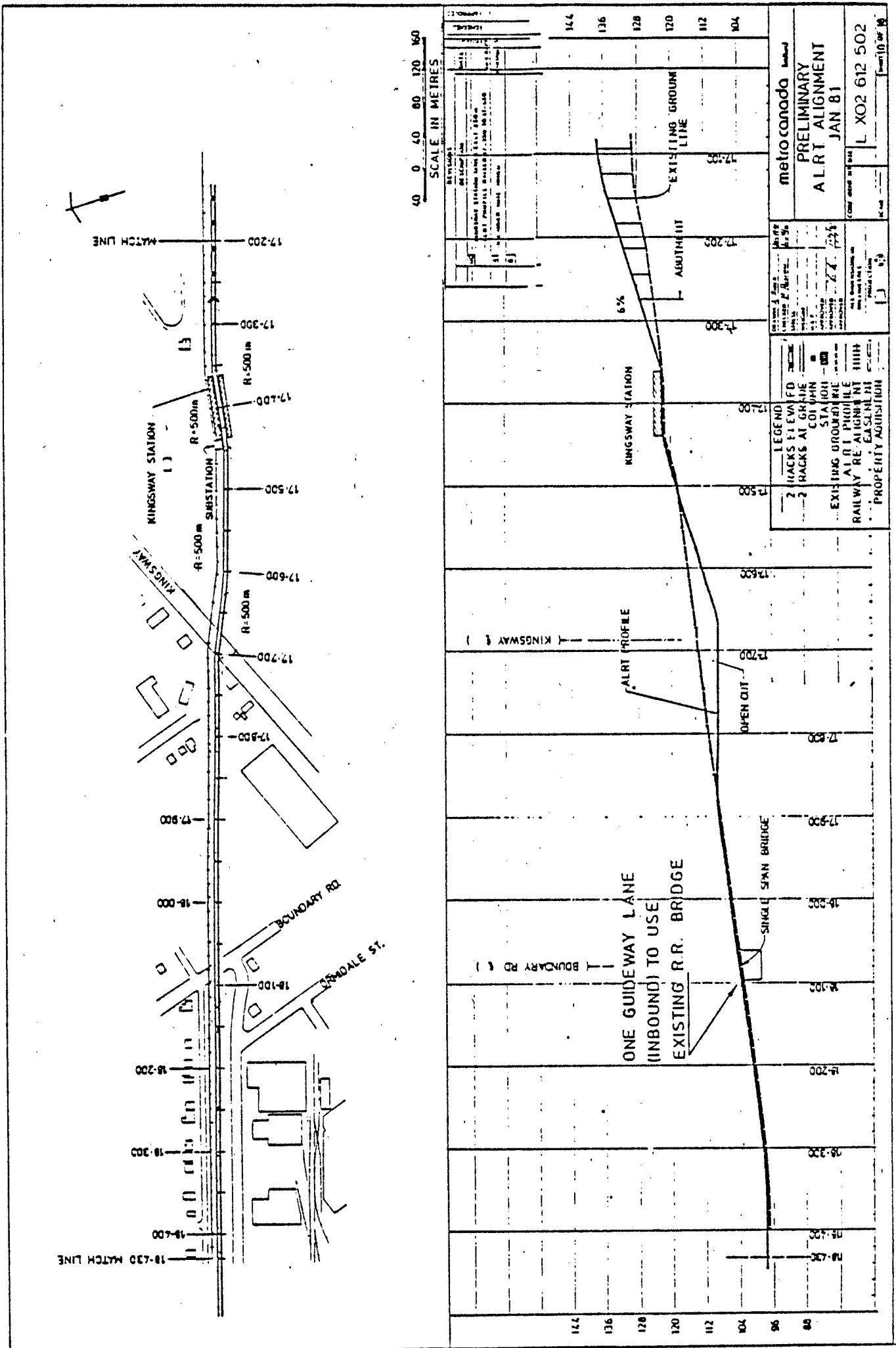


FIG. 2

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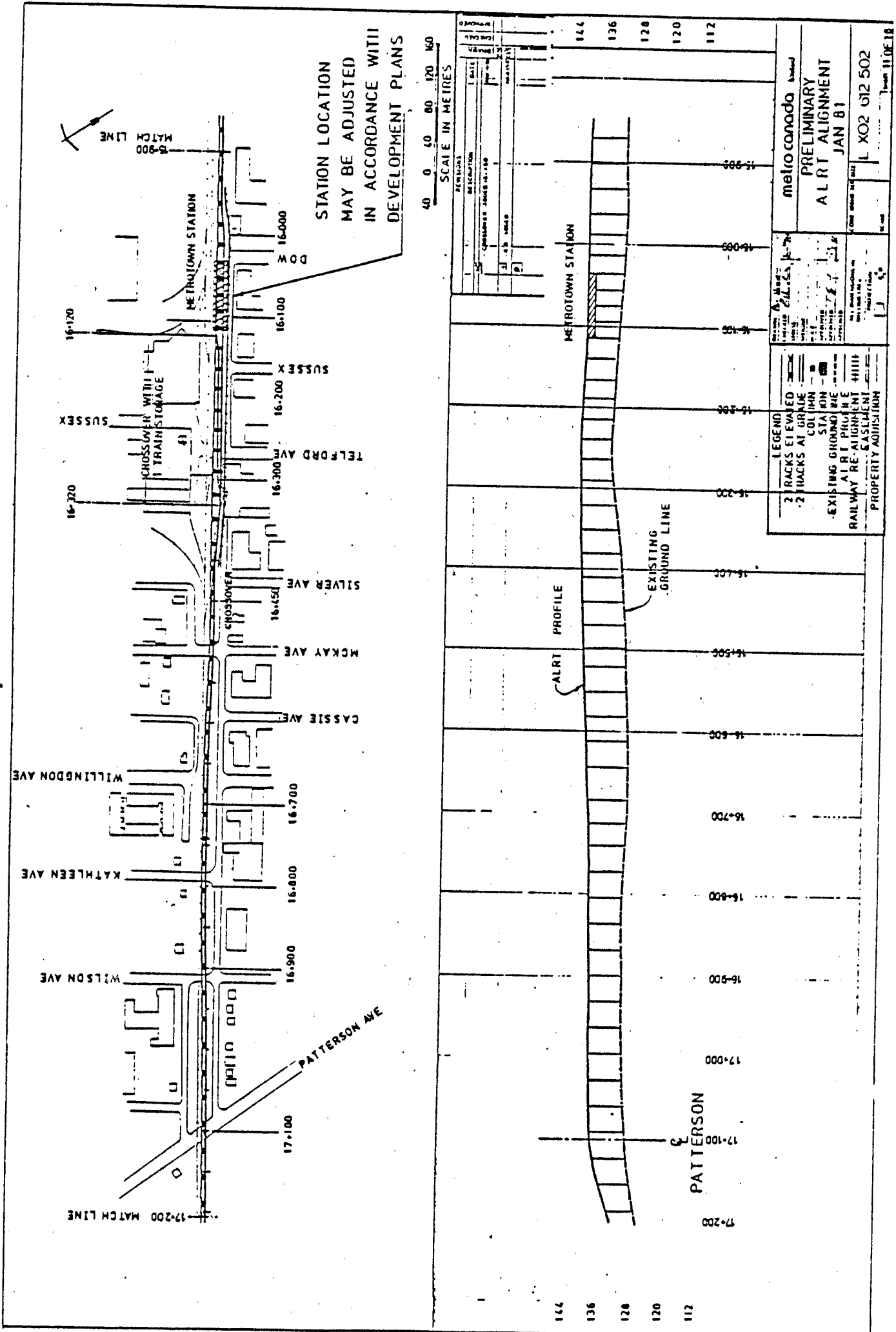


FIG. 3

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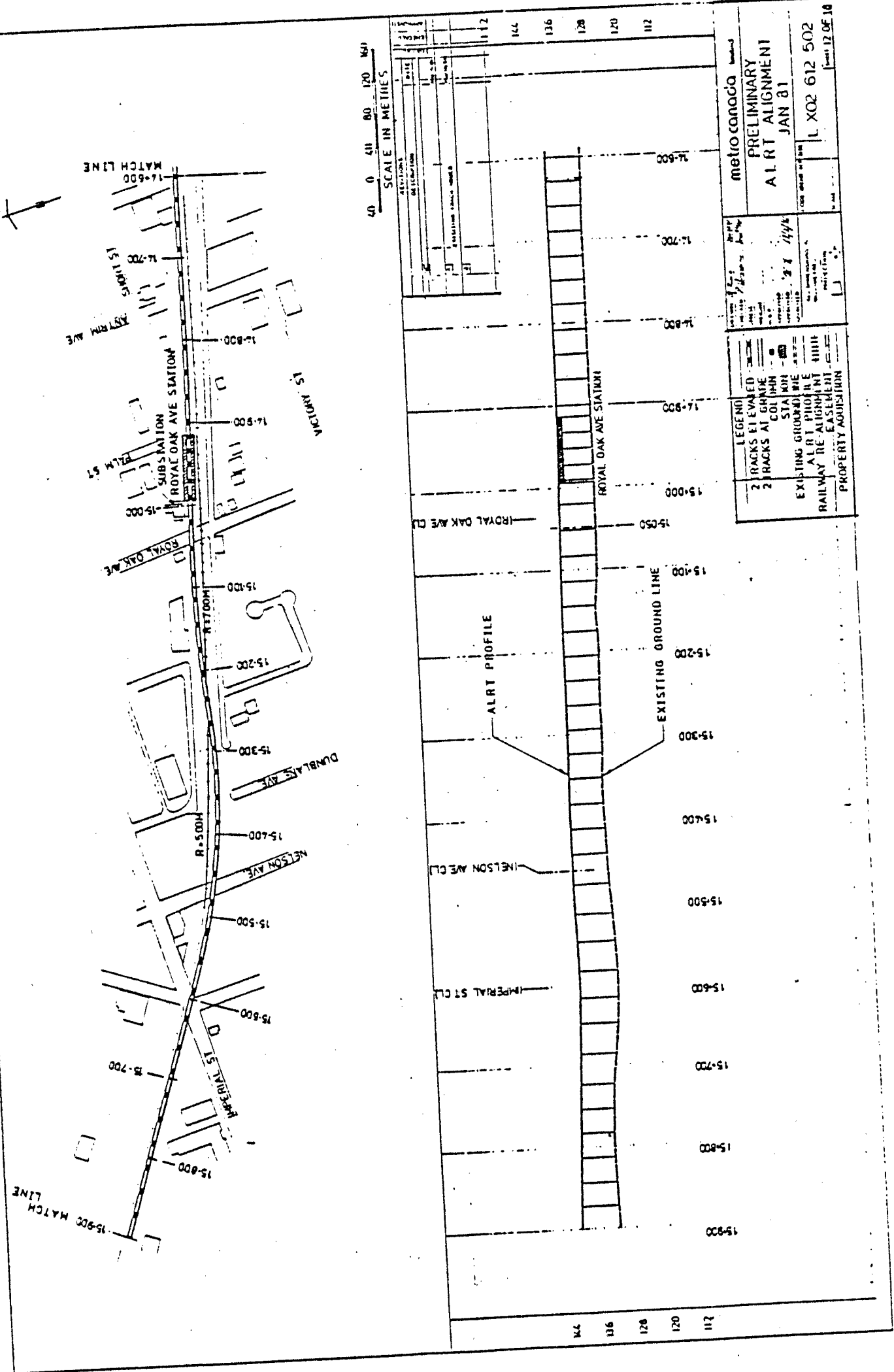


FIG. 4

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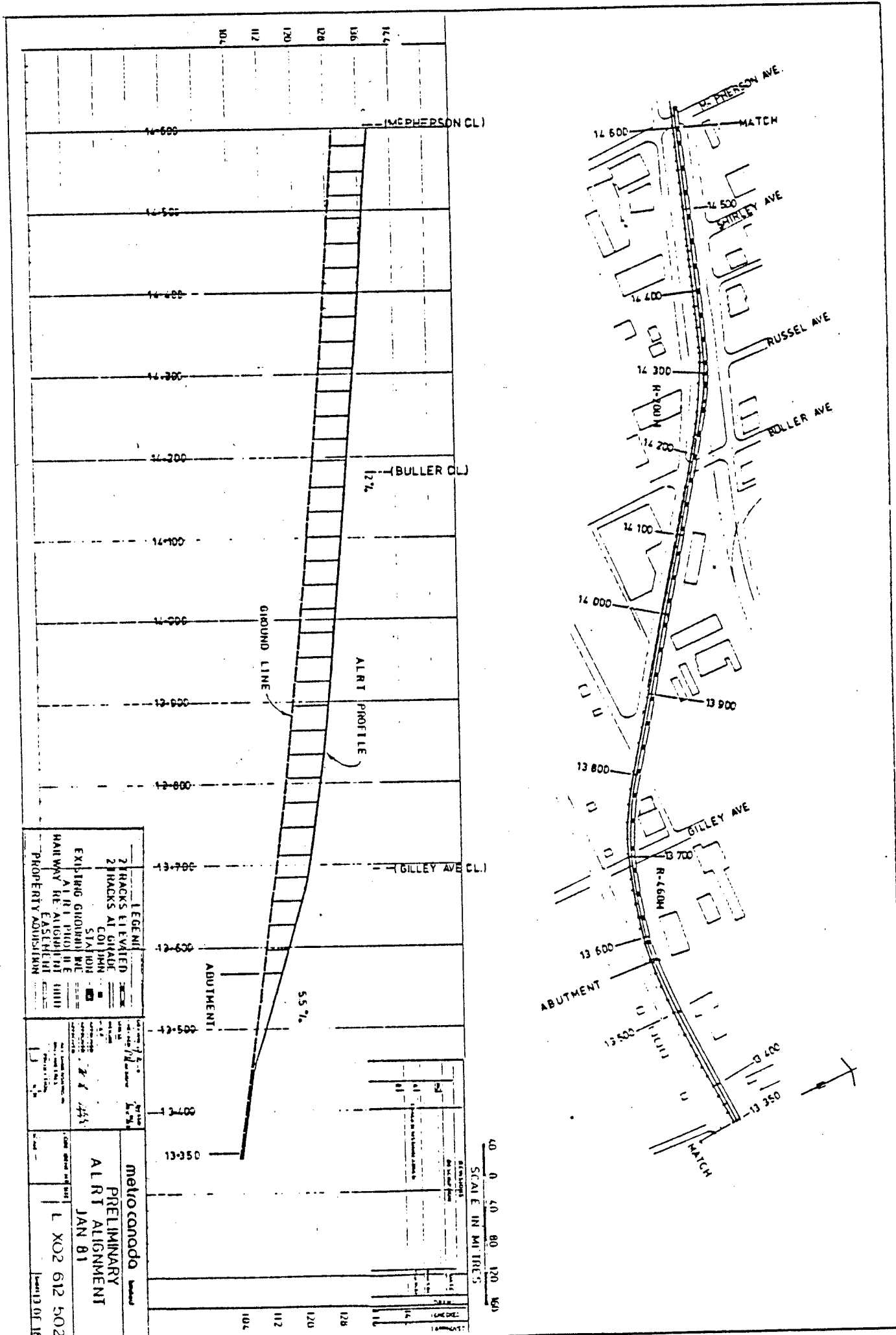


FIG. 5

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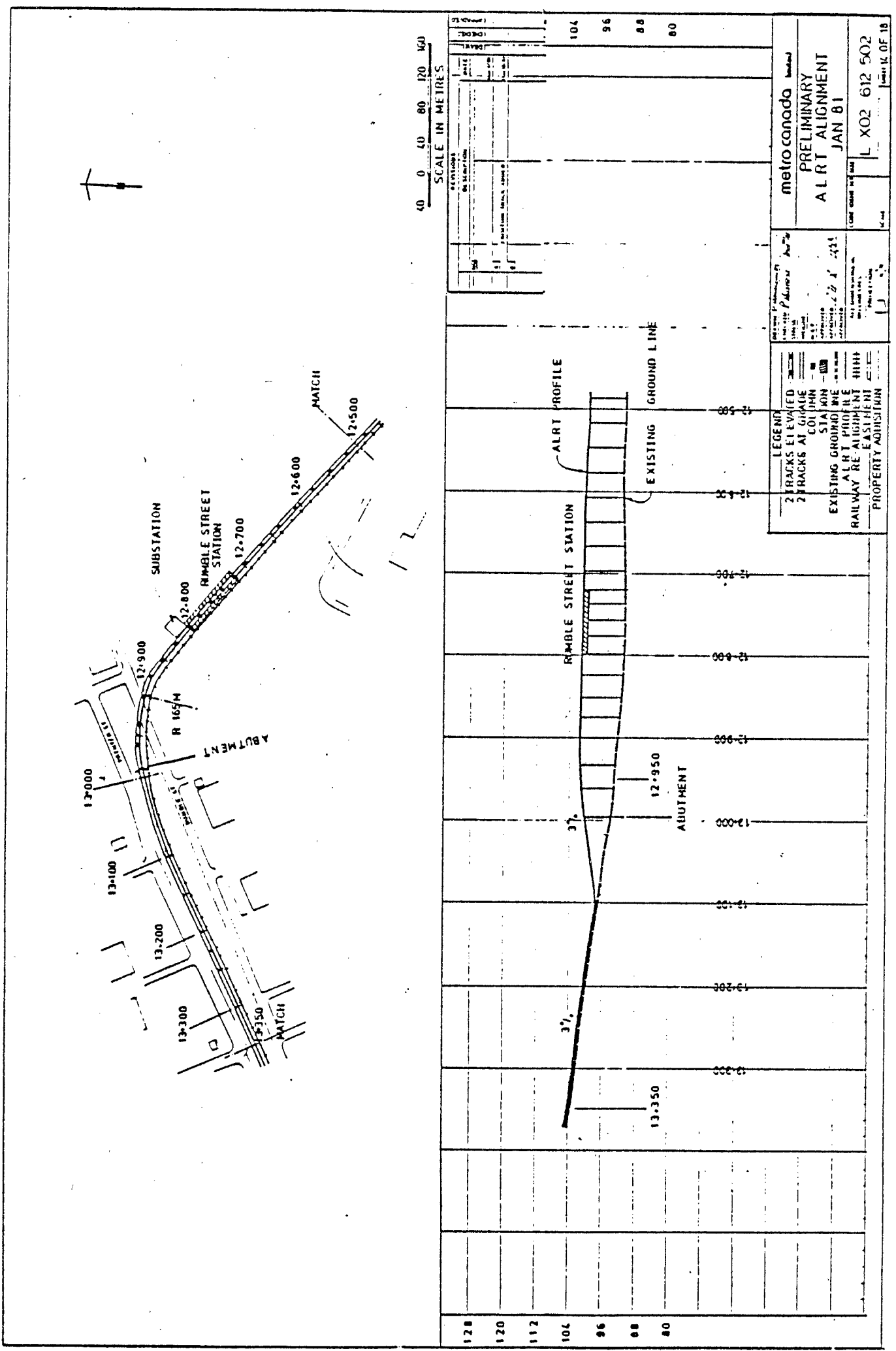


FIG. 6

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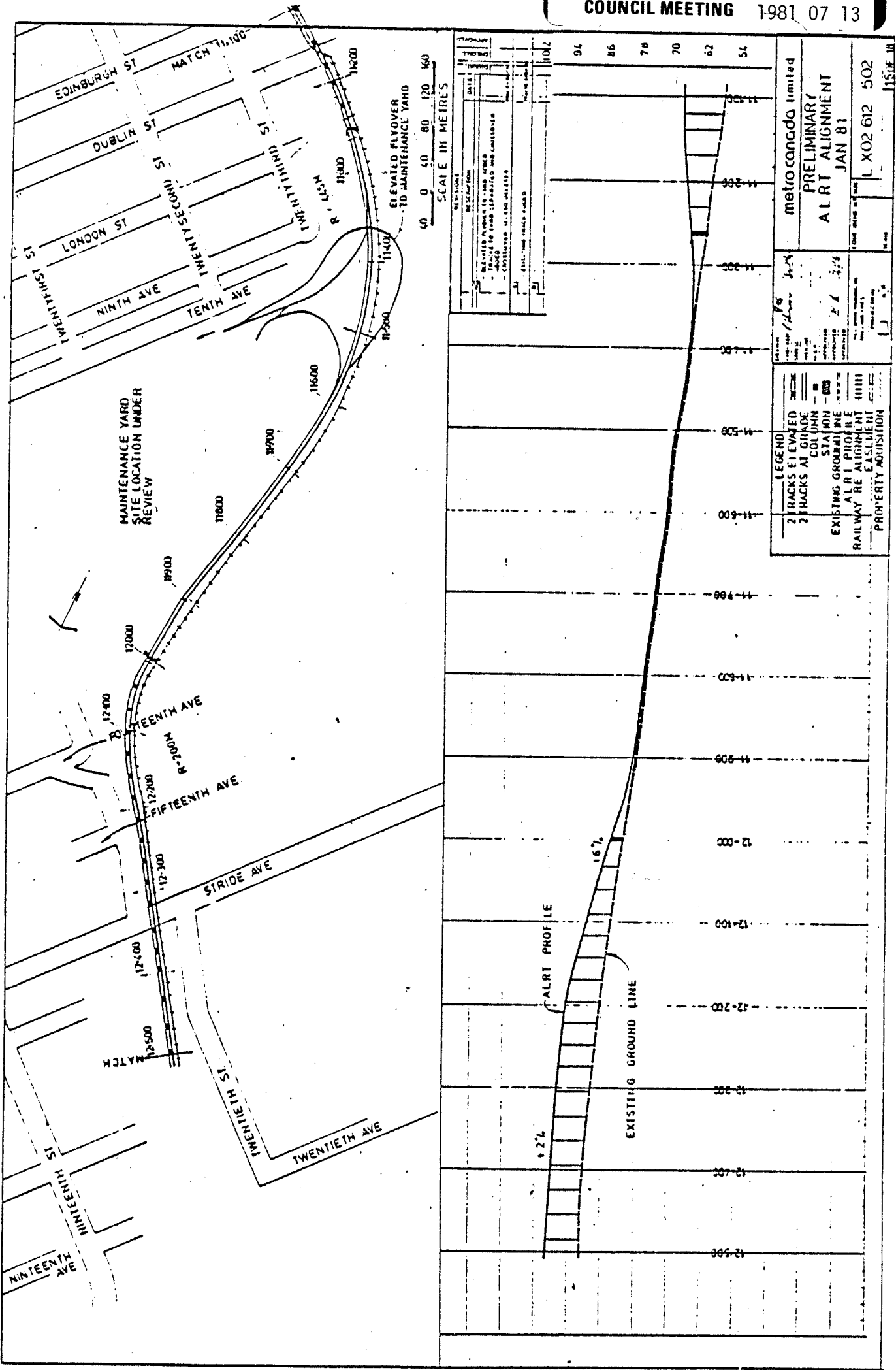


FIG. 7

