

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE
(TRAFFIC SAFETY DIVISION)

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

RE: IMPROVEMENTS TO ROAD CROSSINGS ALONG THE BC PARKWAY

RECOMMENDATION:

1. **THAT** Council forward a copy of this report to the Bicycle Advisory Committee and the RCMP Burnaby Bike Squad.

R E P O R T

The Traffic and Transportation Committee (Traffic Safety Division), at its Open meeting held on 2001 September 04, received and adopted the *attached* report to respond to concerns raised by the Burnaby RCMP Bike Squad regarding some road crossings along the BC Parkway.

Respectfully submitted,

Councillor D. Evans
Chair

Councillor B. Der
Vice Chair

Councillor G. Begin
Member

<p>: COPY - CITY MANAGER - DIRECTOR ENGINEERING - DIR. PLNG. & BLDG. - OFFICER-IN-CHARGE, R.C.M.P.</p>
--

City of Burnaby

INTER-OFFICE COMMUNICATION

TO: TRAFFIC SAFETY COMMITTEE **DATE:** 2001 07 25
FROM: ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENGINEERING SYSTEMS **FILE:** 55-04-01
SUBJECT: IMPROVEMENTS TO ROAD CROSSINGS ALONG THE BC PARKWAY
PURPOSE: To respond to concerns raised by the Burnaby RCMP bike squad regarding some road crossings along the BC Parkway

RECOMMENDATION:

1. **THAT** a copy of this report be sent to the Bicycle Advisory Committee and the RCMP Burnaby Bike Squad.

R E P O R T

1.0 INTRODUCTION

At the last meeting of the Burnaby Bicycle Advisory Committee the Burnaby RCMP Bike Squad appeared as a delegation. The bike squad representatives routinely patrol the BC Parkway and have noted concerns with a number of roadway crossings of the trail within Burnaby. During their presentation the summary attached (Exhibit #1) was distributed to the Committee members. Staff were asked to report on the concerns raised. This report reviews all road crossings to provide a context for improvements. As a number of the crossing locations have been subject to previous consideration by the Traffic Safety Committee, the report requested by the BAC is of interest to both Committees.

2.0 BACKGROUND

BC Parkway was originally developed by B.C. Transit in conjunction with ALRT construction for Expo 86. The Parkway alignment generally follows the elevated guideway of the 'SkyTrain' line within a BC Hydro right-of-way, however there are sections of the route which utilize City sidewalks, roadways and road crossings. The presence of the then operating freight railway line was

a fundamental constraint on the design of the alignment as was the narrower right-of-way southeast of Buller. The anticipated removal of rail tracks provides the opportunity to improve some of the road crossings.

Burnaby has also constructed a similar bike path/trail facility along the wide abandoned Highland Park rail spur right-of-way. The Highland Park spur connects to the BC Parkway at Buller Avenue and terminates at the northwest corner of the Edmonds - Kingsway intersection. As noted, development of the BC Parkway east of Buller has been constrained by a much more limited right of way. There is a north-south trail link between the two lines just west of Griffiths. This allows users to swap routes.

For greater clarification, the attached map Diagram #1 illustrates both routes, and associated roadway crossings.

3.0 JURISDICTION

As the Highland Park Line trail is a City owned facility under an annual lease agreement with B.C. Hydro, all responsibility for trail maintenance rests with the City departments. Specifically, the Parks Department administers the trail itself, while the Engineering Department is accountable for the roadway crossings along the trail. This also applies to the north/south trail link mentioned above.

All maintenance of the BC Parkway within the BC Hydro right-of-way is the direct responsibility of TransLink as successor to BC Transit. The maintenance includes route signage, landscaping, surface repairs, etc.. The City's maintenance obligation is limited to roadway crossings along the parkway alignment, and the sections of the Parkway which deviate onto City owned property or road rights-of-way. The areas of responsibility for both BC Transit and the City of Burnaby are also shown on Diagram #1.

4.0 ROADWAY CROSSINGS

There are a total of 14 roadway crossings along the portion of the BC Parkway within Burnaby, and the Highland Park Line Trail incorporates 5 roadway crossings along its route. Staff have reviewed each location noting the level of crossing protection, the presence of curb letdowns, and any potential obstacles or obstructions to cyclists. A summary of these findings has been provided in the attached Exhibit #2.

The individual road crossings along both the BC Parkway and Highland Park Line Trail are briefly discussed below, and proposed improvements are outlined. No comments have been included with respect to approach and departure signage along the roads as warning and parking restrictions are provided in conformance with established guidelines. Staff have reviewed each location to ensure that all current application guidelines will be satisfied. Observed minor deficiencies have been remedied.

4.1 BC Parkway Road Crossings

- A. Boundary Rd.** Crossing control at this location is provided by a pedestrian/cyclist signal at Vanness Avenue. An overpass of Boundary following the old rail alignment has been discussed in the past.
- B. Kingsway** The official Parkway crossing of Kingsway is at the Boundary signal but an existing pedestrian overpass 150 m to the west is an optional crossing. Alignment of the Parkway along the rail right-of-way between Boundary and Kingsway has been suggested along with the Boundary overpass (noted in point A). This would require a new Kingsway crossing.
- C. Patterson Ave.** There is a marked crosswalk at this location.
- D. Wilson Ave.** There is no formal crossing at this location as Wilson is a lightly travelled road. For consistency a marked crosswalk is proposed.
- E. Willingdon Ave.** The alignment of the Parkway at Willingdon Avenue encourages facility users to cross at the South Beresford / Willingdon intersection. Ideally the Parkway should be re-aligned to direct users to the existing signalized intersection at Central Boulevard. Staff are currently pursuing the inclusion of the Parkway re-alignment in conjunction with amenity provisions related to a proposed new development northwest of Central Boulevard and Willingdon.
- F. Imperial St.** The existing traffic signal at the Central/Imperial intersection provides a safe crossing location for Parkway users. However no curb letdowns currently exist. They are programmed for installation.

There has been past concern with trail users following the rail right of way and crossing Central Boulevard at a hazardous mid block location, however signage has been installed to correctly direct Parkway users.
- G. Jubilee Ave.** There is no marked crossing control at this location, the stop sign control on Jubilee Ave provides adequate protection for Parkway users. It is proposed that parallel crosswalk markings be installed at this location as an addition to the stop bar to enhance the on street continuity of the trail. From the point where Central

Boulevard crosses under the SkyTrain to east of the Jubilee intersection the Parkway uses City sidewalks. As opportunity arises this pathway should be widened.

H. Nelson Ave. The marked crosswalk at this location is further supplemented with overhead, illuminated signing and crosswalk downlighting.

I. Royal Oak Ave. Parkway users are directed to cross Royal Oak Avenue at the pedestrian / cyclist signal at Beresford Street. This signal also serves Royal Oak Station SkyTrain users.

While this crossing has been the subject of lengthy discussion at previous Committee meetings, little opportunity exists to improve the connection from the Parkway to this signal until the adjacent site to the south redevelops.

J. MacPherson Ave. A marked crosswalk provides crossing protection for Parkway users.

K. Buller Ave. East of Buller Avenue, the Highland Park Line splits from the actual alignment followed by the BC Parkway. The BC Parkway crosses Buller at the South Beresford/Prenter intersection while the Highland Park line users are diverted to the North Beresford intersection. For greater clarification it is proposed that marked crosswalks be installed at the intersections of N and S Beresford Street on Buller Avenue.

The signing at this point of divergence is not altogether clear. Staff are pursuing the placement of a schematic map to show first time users the options. Marked crosswalks will be placed at both crossing points

For about 350 m east of Buller the Parkway is a narrow gravel chipwalk adjacent to Prenter Street. For cyclists this portion is used more as an on-road facility and is more cyclist than pedestrian oriented. With the removal of the rail tracks there will be an opportunity to move the alignment to the old track bed. Staff will pursue discussion of this option with TransLink staff.

L. Gilley Ave. The traffic signal at Rumble and Gilley provides the crossing point for Parkway users.

M. Rumble St. A marked crosswalk provides a crossing point for Parkway and Highland Park link users at the Prenter Street intersection.

N. Southpoint Dr. The vertical alignment of Southpoint Drive to the south of Station Hill Court is constrained by the rail level crossing and contributes to limited visibility of approaching vehicles.

At present the safest crossing is the nearby signal at 20th Street. Parkway users should be directed to it with the appropriate signing. When Southpoint Drive is declassified and the rail tracks are removed a more direct crossing can be considered.

4.2 Highland Park Line

O. Gilley Ave. The City recently installed a marked crosswalk on Gilley Avenue between North and South Beresford Street. However curb modifications for cyclists are approved but yet to be completed.

P. Griffiths St. The traffic signal at the Beresford Street intersection of Griffiths Avenue provides crossing protection for Parkway users.

Q. Salisbury Ave. The mid-block crossing of Salisbury Avenue is identified by a marked crosswalk.

4.3 Trails' Link

R. Prenter St. The marked crosswalk at this location is augmented by overhead illuminated signage.

S. Beresford St. This crossing point is identified by an overhead illuminated crosswalk. Curb modifications for cyclists are provided on the south side of Beresford Street only. However, arrangements have been made to accommodate cyclists on the north side of the roadway.

5.0 DISCUSSION AND CONCLUSION

The development of the BC Parkway and Highland Park Line along rail right-of-way has been advantageous because the number of road crossings of the railway line is limited. Generally the road crossings occur at "mid block" locations where pedestrians do not have the crosswalk "rights" that the Motor Vehicle Act provides at street intersections. Accordingly, where it is reasonable the trail has been diverted to nearby street intersections to enhance crossing protection. This has been particularly beneficial where the trail crosses a busy road and the proximate intersection has signal control.

At other quieter locations, the City has installed marked crosswalk protection irrespective of warrants in order to maintain the integrity and continuity of the trail while providing enhanced pedestrian safety. At a number of locations at times when traffic is light, trail users avoid detouring and take the a straight bee-line path. To respond to this, staff have either moved a crosswalk or at a greater cost sought to realign the trail approach to the crosswalk.

The delegation also noted locations where the rails remain embedded in the roadway where adjacent track has been removed. Staff are working on a program that should address these concerns. While there will be a cost to the City, budgeting for the work cannot proceed until the regulatory formalities of rail line abandonment have been addressed. Southern Railway, B.C. Hydro and the City have been working collaboratively on the proposed abandonment of this rail line. In the interim, rail crossing warning signs will be reviewed. Other proposals for improvement flowing from rail abandonment need further discussion with TransLink. The proposed changes should substantially address the concerns raised by the Bike Squad.



P. Liivamagi, P. Eng.
ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENG. SYSTEMS

AE:
Attach.

cc: City Manager

ROAD CROSSING FACILITIES

Int	Intersection Location	Crossing Protection	Curb Letdowns	Obstacles, Deficiencies, Proposed Improvements
A	Boundary Rd.	Ped/Cycle Signal	Yes	None
B	Kingsway	Traffic Signal	Yes	None
C	Patterson Ave.	Marked Crosswalk	Yes	None
D	Wilson Ave.	Unmarked Crosswalk	Yes	Crosswalk markings proposed
E	Willingdon Ave.	Unmarked Crosswalk at South Beresford)	No	Trail realignment to Central Boulevard - Willingdon Signal
F	Imperial	Traffic Signal	No	Curb Letdowns proposed
G	Jubilee Ave.	Unmarked Crosswalk	Yes	Parallel crosswalk lines proposed
H	Nelson Ave.	Crosswalk with Overhead Illumination	Yes	None
I	Royal Oak Ave.	Ped/Cycle Signal	Yes	None
J	MacPherson Ave.	Marked Crosswalk	Yes	None
K	Buller Ave.	Unmarked Crosswalk	Yes	Trail realignment and improved signing required, marked crosswalks on Buller
L	Gilley Ave.	Traffic Signal	Yes	None
M	Rumble St.	Marked Crosswalk	Yes	None
N	Southpoint Dr.	Unmarked Crosswalk	Yes	Directional signage to the 20th Street Traffic signal
O	Gilley Ave.	Marked Crosswalk	No	Curb Letdowns proposed
P	Griffiths St.	Traffic Signal	Yes	None
Q	Salisbury Ave.	Marked Crosswalk	Yes	None
R	Prenter St.	Marked Crosswalk	Yes	None
S	Beresford St.	Crosswalk with Overhead Illumination	Yes (S. side only)	Curb Letdown on N. side of Beresford

EXHIBIT I RCMP BIKE SQUAD SUBMISSION

Proposed Changes for 7-11 Bike Route in South Burnaby

Willingdon Ave. / Beresford Street

Marked crosswalk would be more effective. The pedestrian light does not stay illuminated long enough for most people to cross the intersection. This particular crossing is awkward as it is disjointed. You must go north a few yards on Willingdon in order to cross and then go back south to the bike route again.

Buller Ave. / Beresford Street

Once again a marked crosswalk would be more effective. The signs are not clear that the path is disjointed. You must go north on Buller a few yards, cross the street and then pick up the path on the north side of Beresford. To do this you must cross two sets of train tracks which pose a safety hazard. It is my understanding these tracks are no longer in service and as such could be filled in to prevent injury to cyclists. (the tracks are filled in at other intersections)

Gilley Ave. / Beresford Street

The curbs on both sides of the street are not flattened making it more difficult for cyclists and not wheel chair accessible.

Griffiths Ave. / Beresford Street

The north side curb on Beresford needs to be flattened for the same reasons as previously mentioned.

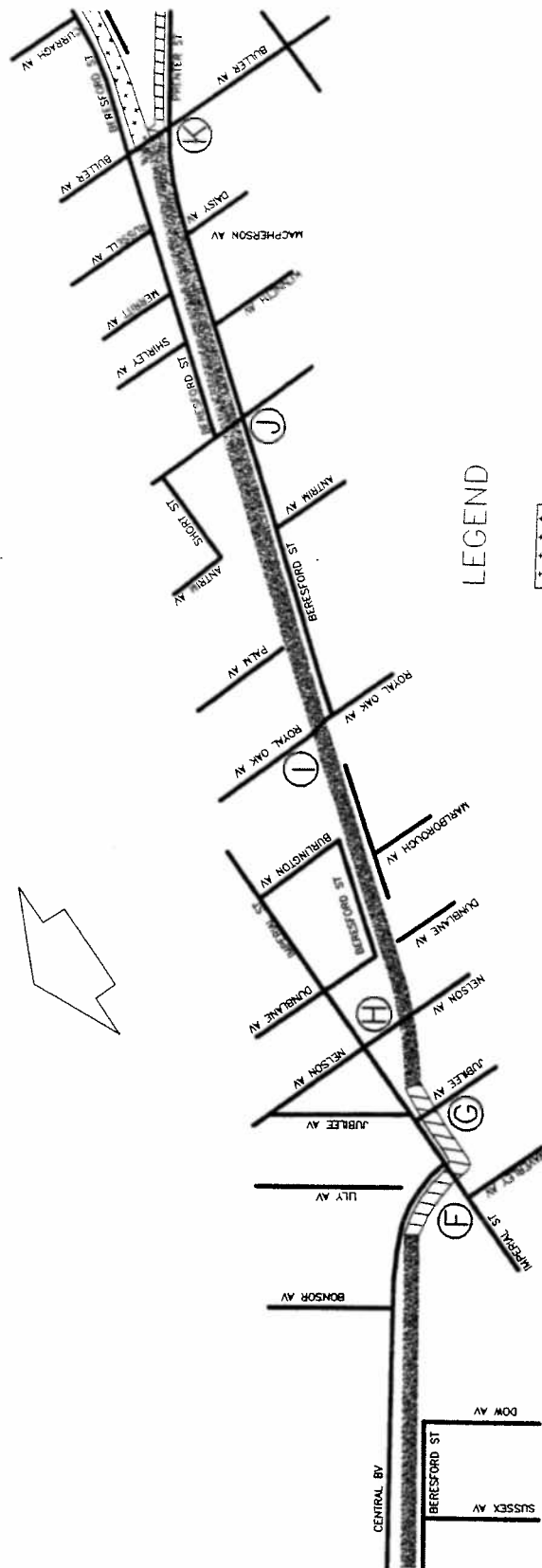
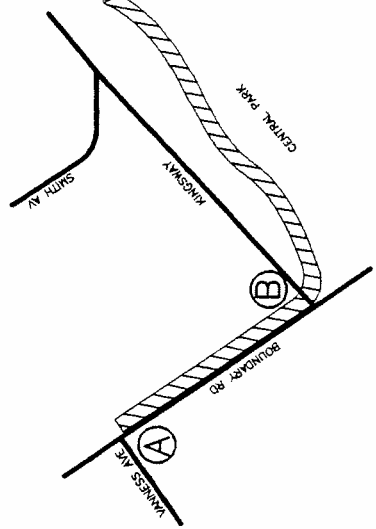
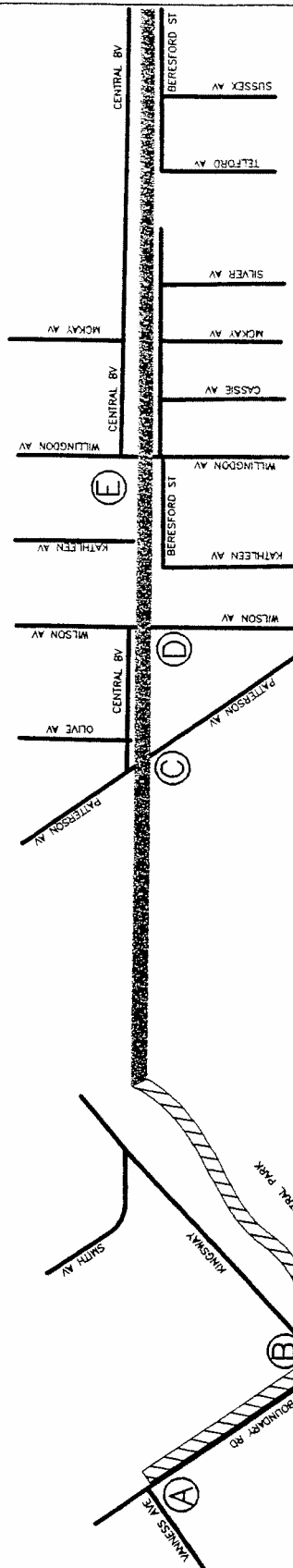
Rumble St. approaching the Edmonds Skytrain area

Once again there is a set of train tracks that could be filled in to prevent injury.





South Point / Station Hill (by BC Hydro)

There should be a marked crosswalk on the street. As you continue down the path behind the Skytrain yard there is a set of train tracks that could be filled in.

C.J. McMILLAN, CPL.
NCO IC Bike Squad
Street Crimes Unit
Burnaby RCMP



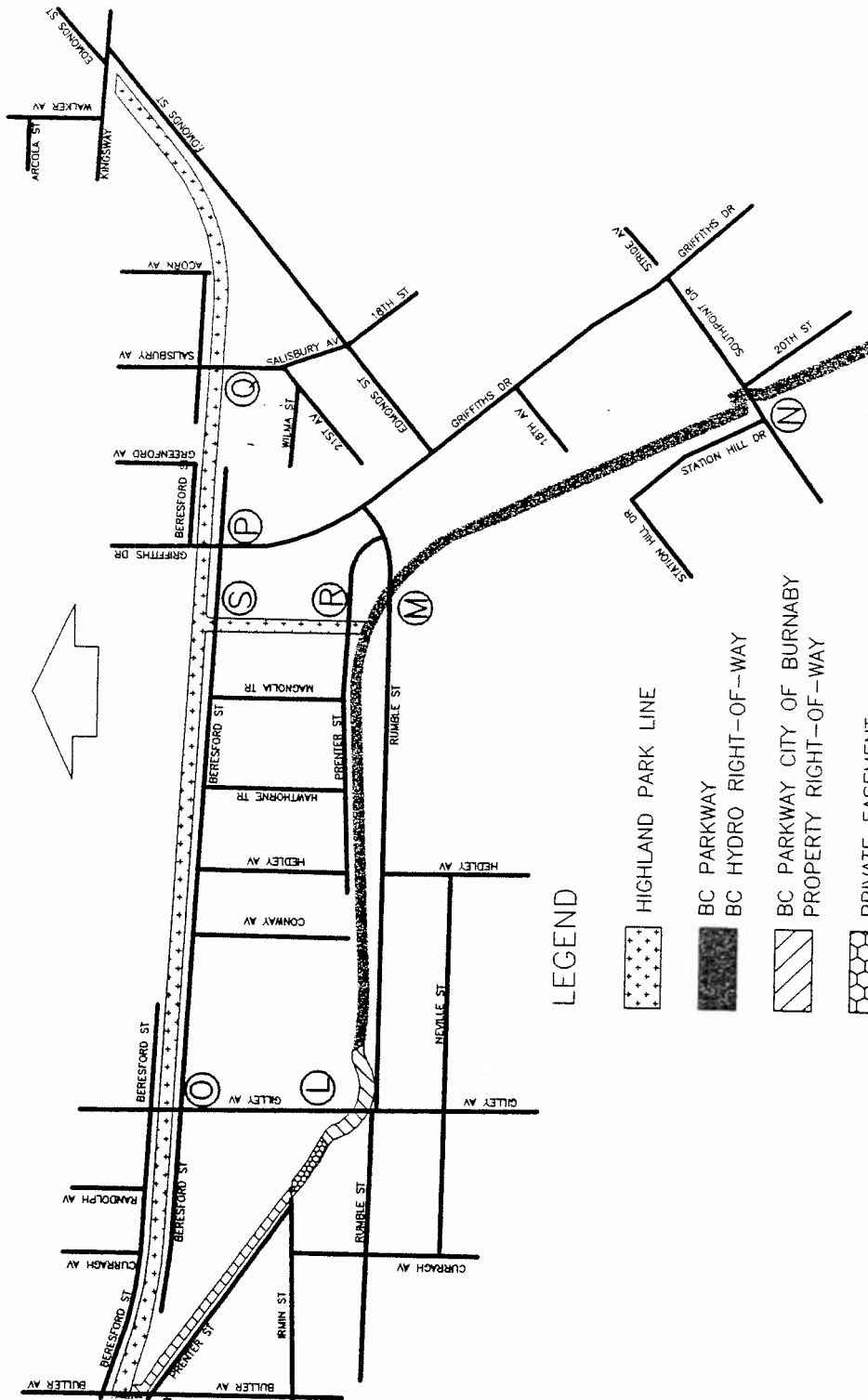
LEGEND

-  HIGHLAND PARK LINE
-  BC PARKWAY
-  BC HYDRO RIGHT-OF-WAY
-  BC PARKWAY CITY OF BURNABY PROPERTY RIGHT-OF-WAY

58



NO.	DATE	REVISION
EXHIBIT 2A BC PARKWAY ALIGNMENT & JURISDICTION		
DRAWN BY:	GWF	SCALE: N.T.S.
APPRV'D BY:		DATE: 01-08-27
		A 568A



LEGEND

- HIGHLAND PARK LINE
- BC PARKWAY
- BC HYDRO RIGHT-OF-WAY
- BC PARKWAY CITY OF BURNABY PROPERTY RIGHT-OF-WAY
- PRIVATE EASEMENT

NO.	DATE	REVISION



EXHIBIT 2B
BC PARKWAY (& HIGHLAND PARK)
ALIGNMENT & JURISDICTION

DRAWN BY: GWF	SCALE: N.T.S.	A 568B
APPRV'D BY:	DATE: 01-08-27	

