

REF NO	ADDRESS	DESCRIPTION	CAT	AUTHORITY
284	Motorway	The designation is to include, and allow for, the control of this State Highway, including planning, design, supervision, construction and maintenance in accordance with the provisions of the Government Roding Powers Act 1989	A4	NZTA

### Condition 1

Prior to the lodgement of any outline plan of works for activities on the following sites:

- 11 Stanley Street (Lot 11 DP 19627)
- 13-15 Stanley Street (Part Allotment 19 Section 9 Auckland City)
- 17 Stanley Street (Lot 3 DP 19627)
- 21 Stanley Street (Lots 1 and 2 DP 19627)
- 1-3 Beach Road (Lot 15 DP 19627)
- 17-35 Beach Road (Lots 8, 9 and 10 DP 19627)
- 20 Churchill Street (Lot 7 DP 19627)

the NZTA will consult with the NZ Historic Places Trust and Ngati Whatua o Orakei regarding the effects of the works on historic features on the affected sites.

286	Electrical Works (substation), Liverpool Street	Designation	A4	VL
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Development to be in accordance with the following:

- The work shall be undertaken in general accordance with Plans Ref.58201 A055, dated 21.08.97, and A130 and A131 dated July 97. No outline plan shall be required under Section 176A of the Resource Management Act 1991 for work undertaken in general accordance with these Plans.

287	Electrical Works (substation), Plummer Street	Designation	A4	VL
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Development to be in accordance with the following:

- Development of the site shall comply with the underlying height and special height controls.

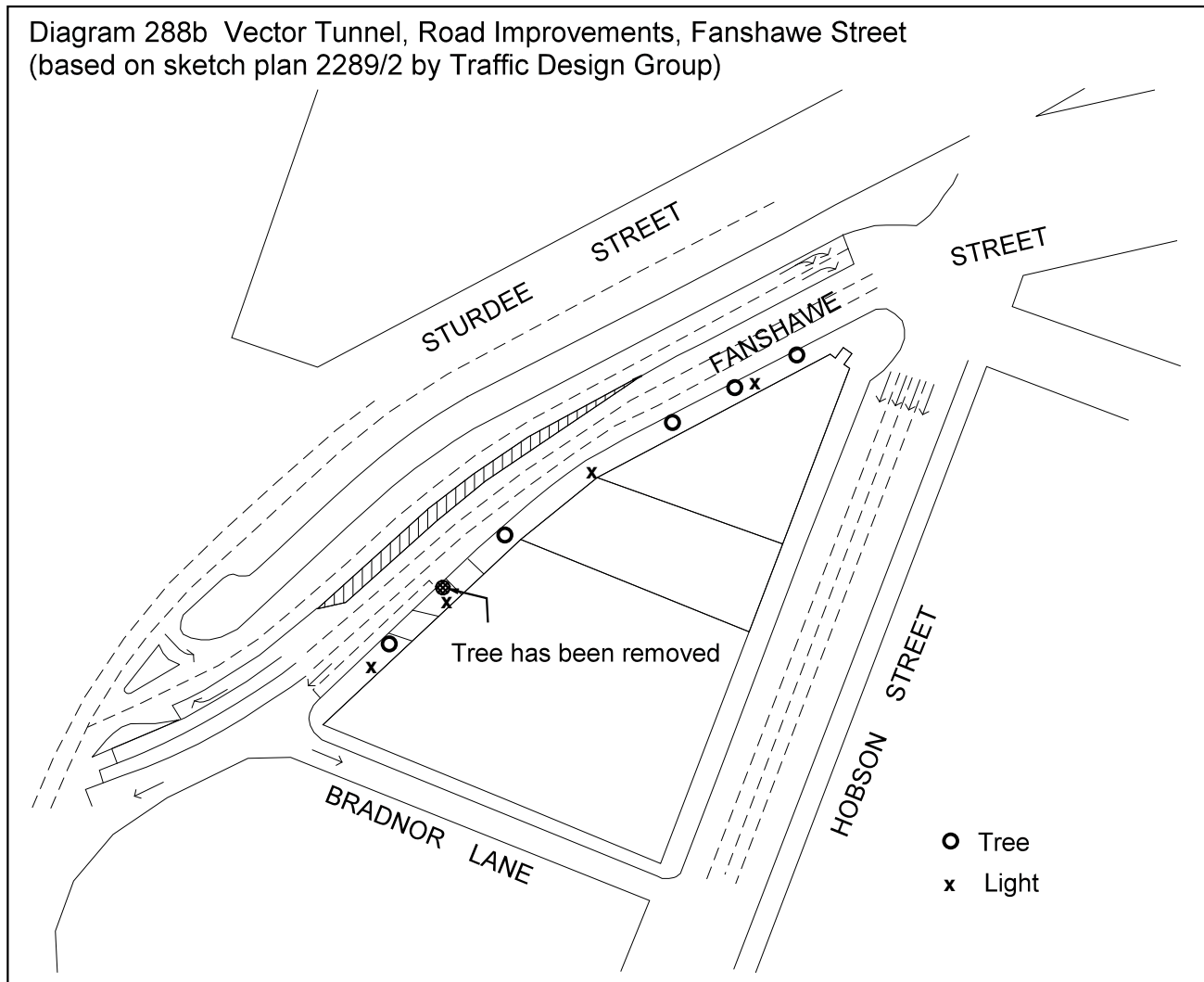
288	Electricity Transmission Purposes Penrose to Hobson Street tunnel, for the purposes of conveying electricity to the Auckland CBD	Designation	A4	VL
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Diagram 288a Electricity Transmission Purposes



Diagram 288b Vector Tunnel, Road Improvements, Fanshawe Street  
(based on sketch plan 2289/2 by Traffic Design Group)



The construction, operation and maintenance of:

- a) An underground tunnel from Trans Power New Zealand Limited's ("Trans Power") existing substation at Gavin Street, Penrose, to Vector Limited's ("Vector") existing substations at Liverpool Street and Hobson Street for the purpose of conveying electricity to the Auckland Central Business District ("CBD"), together with all ancillary and related infrastructure including portals and ventilation fans. The tunnel will contain electric cables, with a maximum anticipated capacity of three 220kV circuits of 500MVA each and ancillary equipment.
- b) Electric cables contained within the tunnel. It is initially proposed to install two circuits of 110kV circuits at 230MVA each, and ancillary equipment. It is intended to upgrade the electricity supply carried through the tunnel over the next 10-20 years in response to load growth and other alterations to the network. It is anticipated that any future upgrades will result in a maximum capacity of three 220kV circuits at 500MVA each and ancillary equipment.
- c) The construction and operation of a building containing 110kV and future 220kV gas insulated switch gear and three future 220/110kV transformers at an extension to Vector's Liverpool substation site.

## DEVELOPMENT TO BE IN ACCORDANCE WITH THE FOLLOWING:

### 1. GENERAL

- 1.1 Except as modified by the conditions below, the work shall be undertaken in general accordance with the information provided by Vector at the hearing; the notice of requirement and supporting documents, namely: "Electricity Reinforcement Project, Tunnel to Auckland Central Business District, Assessment of Environmental Effects", February 1996, Tonkin and Taylor Ltd, and the associated Addendum dated 8 March 1996.
- 1.2 All activities, works and buildings not able to be fully disclosed in the notice of requirement (including the associated Assessment of Effects) and not provided for as a permitted activity shall be the subject of either:
  - a) a new notice of requirement, which shall be publicly notified, pursuant to section 168 of the Resource Management Act; or
  - b) a notice to alter the designation, pursuant to section 181 of the Resource Management Act, which notice shall be publicly notified unless the alteration is minor and the affected persons agree in accordance with the provisions of section 181(3) of the Act; or
  - c) a resource consent.
- 1.3 The term for implementation of this designation shall be 12 years from the inclusion of the designation in the District Plan, in accordance with section 184 of the Resource Management Act 1991.
- 1.4 During the construction of the tunnel and associated works this designation shall include that area of the Trans Power site at Penrose ("All that parcel of land containing 7.7452 hectares more or less being Lot 1 Deposited Plan 141417 situated in Block 1 Otahuhu Survey District" being all the land comprised in Certificate of Title 83D/707 North Auckland Registry) ("**Trans Power Site**") which is shown as shaded on the **attached** plan marked "A" together with the land for the tunnel alignment.
- 1.5 On the completion of construction Vector shall advise in writing the Manager: Development Planning and Trans Power that construction is complete. On the date on which this advice is given the extent of this designation as it relates to the Trans Power Site shall be reduced to the area which is shown as shaded on the **attached** plan marked "B", together with the land for the tunnel alignment.
- 1.6 The design of the tunnel and associated works shall be sufficient to ensure that the tunnel structure lasts for a minimum life of 200 years.
- 1.7 The tunnel shall be constructed in such a way as to prevent damage, loss of amenity or injury to people, buildings, and other property due to erosion, subsidence, or loss of support of the land adjacent to the tunnel.
- 1.8 When the tunnel, or any length of it, is no longer required, the length no longer required shall be backfilled to prevent subsidence.
- 1.9 All heated air and contaminated air from the tunnel and associated work shall be disposed of in a way which avoids creating a nuisance or hazard to people and other property.
- 1.10 The cables and associated equipment shall be designed, installed, and operated so as to, as far as practicable, minimise public exposure to electric and magnetic fields.



- 1.11 Upon request from Council, at no lesser intervals than annually, Vector shall provide written confirmation that the maximum levels of the electric and magnetic fields set out in the AEE are not exceeded.
- 1.12 Dust arising from construction activities shall be suppressed by the use of water sprays and other appropriate methods so as to prevent nuisance to adjacent occupiers and landowners.
- 1.13 Prior to the commencement of construction at each of the following tunnel sites, management plans shall be produced to the satisfaction of the Manager: Development Planning regulating construction activities at the Penrose Portal, Ellerslie Portal, Newmarket Portal, Liverpool substation, and Hobson substation. The management plans shall address the following issues:
- traffic movements;
  - dust, including the effect of dust on the operation of electrical equipment at the Penrose site;
  - stock piling and storage of excavated material;
  - storage of construction equipment;
  - hours of operation by trucks;
  - the effect of any vibration on sensitive plant (whether from blasting or otherwise) such as printing presses, and electrical equipment at the Trans Power Site;
  - wheel wash facilities;
  - screening of construction activities from residential properties and public places;
  - parking of workers' vehicles;
  - security fencing;
  - lighting in relation to adjacent residential properties.
- 1.14 Without limiting the effect of condition 1.13 above the management plan relating to the Penrose Portal shall comply with conditions 6.19 and 6.20.
- 1.15 All internal and external Council costs of monitoring the conditions are to be borne by the requiring authority.
- 1.16 Vector shall not permit access to the tunnel for use by any third party which would negate the opportunity for Vector, Trans Power New Zealand Limited, Power New Zealand Limited, Northpower Limited and/or Top Energy Limited (or their successors) to use the tunnel for the purpose of installing transmission lines at a voltage at or exceeding 110 kV and up to 220 kV, without first advising each of such companies.

## **2. NOISE (EXCLUDING BLASTING)**

- 2.1 During the period of tunnel construction the daytime (7.30am to 8.00pm)  $L_{10}$  noise levels measured at 1m from the most exposed window or door of any occupied building on any land which is not the subject of this designation as shown on the attached plan marked "A" and which is not zoned business activity shall not exceed 70 dBA.

### **2.1(a) For the Penrose and Hobson sites only**

During the period of tunnel construction the day time (7.00am to 8.00pm)  $L_{10}$  noise levels measured at 1m for the most exposed window or door of any occupied building on any land which is not the subject of this designation as shown on the attached plan marked "A" and which is not zoned business activity shall not exceed 70dBa.

- 2.2 During the period of tunnel construction the night time (8.00pm to 7.30am) noise levels as measured at 1m from the most exposed window or door of any occupied building on any land which is not the subject of this designation as shown on the attached plan marked "A" and which is not zoned business activity shall not exceed 45 dBA  $L_{10}$  and a maximum level ( $L_{max}$ ) of 75 dBA.

### **2.2(a) For the Penrose and Hobson sites only**

During the period of tunnel construction the night time noise levels as measured at 1m from the most exposed window or door of any occupied building on any land which is not the subject of this designation as shown on the attached plan marked "A" and which is not zoned business activity shall not exceed the following noise levels and a maximum level ( $L_{max}$ ) of 75 dBa:



Penrose site:

Monday to Saturday	8.00pm to 11.00pm	60dBAL10
Monday to Saturday	11.00pm to 7.00am	50dBAL10
Sunday night to Monday morning	8.00pm to 7.00am	45dBAL10

Hobson site:

Monday to Saturday	8.00pm to 9.00pm	60dBAL10
Monday to Saturday	9.00pm to 11.00pm	55dBAL10
Monday to Saturday	11.00pm to 5.00am	55dBAL10
Monday to Saturday	5.00am to 7.00am	55dBAL10
Sunday night to Monday morning	8.00pm to 7.00am	55dBAL10

Other sites:

Unless otherwise stated all other sites shall comply with the noise levels contained in conditions 2.1 and 2.2.

2.2(b) That, on confirmation by a Council Noise Control Officer that noise complaints received are correctly attributed to activities associated with the Tunnel project, Vector will undertake whatever steps are necessary to ensure that night time noise levels at the Hobson site comply with Condition 2.2A, and will undertake whatever monitoring the Council may reasonably require. Records shall be made available to the Council on request.

2.3 During the period of tunnel construction, subject to conditions 2.1 and 2.2 above, the  $L_{10}$  noise level generated by the project as measured at any time at 1m from the most exposed window or door of any occupied building on any land which is not the subject of this designation as shown on the attached plan marked "A", and which has a business activity zoning shall not exceed 80 dBA.

2.4 All plant associated with the long term operation of the tunnel (not including Trans Power's operations at the Trans Power Site) is to be designed, constructed, and maintained to ensure that the following noise levels are not exceeded:

a) noise measured at or within the boundary of any property except those with a business activity zoning:

Monday to Saturday	7.00am-10.00pm	L <sub>10</sub> 55 dBA
Sunday and Public Holidays	9.00am-6.00pm	
At all other times	L <sub>10</sub> 45 dBA  Lmax 75 dBA, or background (L95) plus 30 dBA, whichever is the lower	

b) noise measured at any time at or within the boundary of any property zoned business activity:  $L_{10}$  65 dBA.

2.5 Measurement and assessment shall be in accordance with the requirements of NZS6801:1991 "Measurement of Sound" and NZS6802:1991 "Assessment of Environmental Sound". The noise shall be measured with a sound level meter complying at least with the International Standard IEC651 (1979) Sound Level Meters, Type 1.

### 3. BLASTING

3.1 For the purpose of conditions 3.1A - 3.8 blasting means the use of explosives to loosen or dislodge rock material.

3.1A Prior to blasting within the tunnel, Vector shall give at least 12 hours written notice of the location and timing of the blast(s) to the following parties;

a) occupants of buildings within 100m of the blast site.



## b) the Manager: City Planning

- 3.2 Notwithstanding condition 3.1 hereof trial blasting shall be undertaken in accordance with conditions 6.1 - 6.4 inclusive.
- 3.3 Blasting activities shall be so controlled as to ensure that any ground vibration as the result of any blasting will not adversely affect the structural stability of any building or structure including electrical equipment (that is not connected with the site covered by this designation) or cause a reduction in its utility value. Peak particle velocities measured on any foundation or uppermost full storey of any building not related to the site, which do not exceed the limits set out in Table 1 of German Standard DIN 4150 Part 3:1986 "Structural Vibration in Buildings - Effect on Structures", will be deemed to meet these requirements. Peak particle velocity means the maximum particle velocity in any of the three mutually perpendicular directions. The units are millimetres per second (mm/s).
- 3.4 The noise created by the use of explosives for blasting shall either not exceed a peak overall sound pressure level of 128 dB (ie a peak over pressure of 0.05 kPa) or alternatively the noise shall not exceed a peak sound level of 122 dBC. The measurement shall be made in either case at 1m from the most exposed window or door of any occupied building (that is not connected with the Trans Power Site).
- 3.5 The maximum number of blasts shall be limited to three times per day per location. The locations are on land included in this designation and comprise the following places where the tunnel exits to ground level: Hobson substation, Liverpool substation, Newmarket portal, Ellerslie egress shaft and Penrose portal.
- 3.6 Except with the permission of Manager: City Planning, and subject to condition 3.5, blasting for the Penrose Portal shall only occur between the hours of 7.30am and 8.00pm Monday to Sunday and no blasting shall occur on public holidays.
- 3.7 Except with the permission of Manager: City Planning, blasting at all other tunnel sites shall only occur between the hours of 7.30am and 8.00pm Monday to Saturday and no blasting shall occur on Sundays and public holidays.
- 3.8 Vector will take whatever steps are necessary to ensure that blasting complies with conditions 3.3 and 3.4, and will undertake whatever monitoring the Council may reasonably require. Records shall be made available to Council on request. The monitoring sites and methods shall be agreed with Council's Manager: City Planning prior to the commencement of work.
- 3.9 The requirement for monitoring and recording may be relaxed at the discretion of Manager: City Planning after Vector has provided written evidence of consultation by Vector with Trans Power in respect of the Trans Power Site if it is considered that the noise and vibration level from blasting at any one location has decreased sufficiently. Any blast undertaken on Sundays and public holidays, or between the hours of 8.00pm and 7.30am, shall be monitored.

**4. VIBRATION**

- 4.1 Activities other than blasting shall not generate vibrations which may cause discomfort or adversely affect the health and well being of the occupants of premises outside the designation as shown on the attached plan marked "A" during construction and the attached plan marked "B" after construction is completed. Vibrations which do not exceed the limits referred to below as set out in the provisions of International Standard ISO 2631-2:1989 "Evaluation of human exposure to whole body vibration - Part 2 Continuous and shock-induced vibration in buildings (1 to 80 Hz)" will be deemed to meet this requirement. These particular limits are that the vibration levels (acceleration measured in metres per second) relative to the frequency shall not exceed the base curves of Figure 2A (z axis), 3a (x, y and z axes) and 4a (combined x, y and z axes) of ISO 2631-2:1989.
- 4.2 The assessment of continuous, intermittent and transient (impulsive) vibrations shall be carried out by a suitably qualified and experienced person in accordance with Annex A and Table 2 of ISO 2631-2:1989.
- 4.3 The instruments used to measure vibrations and the methods of measurement shall comply with a recognised standard such as Australian Standard AS2973: 1987 Vibration and Shock - Human response.
- 4.4 Subject to conditions 4.5 and 6.2, Manager: City Planning may approve vibration levels above the standards specified in condition 4.1 where he/she is satisfied that they are necessary for construction or demolition work of a limited duration.
- 4.5 All tunnel construction activities shall be so controlled as to ensure that any ground vibration created will not adversely affect the structural stability of any building or structure (that is not connected with the land covered by this designation) or cause a reduction in its utility value. Peak particle velocities measured on any foundation or uppermost full storey of any building not related to the site, which do not exceed the limits set out in Table 1 of



German Standard DIN 4150 Part 3: 1986 "Structural Vibration in Buildings - Effects on Structures", will be deemed to meet these requirements. Such monitoring as is necessary to ensure compliance with this condition shall be undertaken. Records shall be made to the Council on request.

## **5. TRAFFIC**

- 5.1 On site manoeuvring for trucks shall be provided so that no reverse manoeuvring onto the street will occur at any of the tunnel sites.
- 5.2 Wheel-wash facilities shall be provided for all trucks exiting the tunnel sites so that no excavation material is tracked onto the streets.
- 5.3 Vector will undertake measures to keep the roads in the vicinity of the tunnel construction sites free from any debris resulting from the construction work.
- 5.4 Programming of truck movements shall be arranged so that trucks do not wait or queue on the street other than for normal traffic movements when their way is obstructed by opposing traffic. The movements of trucks and other construction traffic shall be regulated in accordance with the management plans referred to in condition 1.13.

### **5.5 Hobson Portal**

- a) There shall be no right turn movements into Fanshawe Street for trucks leaving the site at any time. There shall be no right turn movements from vehicles entering the site from Fanshawe Street between the hours of 4.30pm to 6.00pm, Monday to Friday.
- b) The right turn pocket on Fanshawe St shall be widened and lengthened by Vector in accordance with the attached sketch plan 2289/2 by Traffic Design Group (see Diagram 288b) in order to facilitate the right turn movement of trucks during permitted hours. The costs of these roadworks are to be borne by Vector.
- c) A sign to warn Fanshawe St traffic of slow trucks merging shall be installed to the satisfaction of Council's Manager: Traffic and Parking Services.

### **5.6 Newmarket Portal**

- a) The primary truck routes to and from the site shall be as indicated in the attached plan B08-03(c) being Figure 6, page 16 of the report entitled Assessment of Effects on the Environment: Traffic, January 1996, Traffic Design Group, or such alternative truck routes as agreed by Council as part of the management plan required under condition 1.13.

### **5.7 Penrose Portal**

- a) Right turn movements of trucks at the Gavin St/Penrose Rd intersection shall not be permitted between 7.00am to 9.00am and 4.00pm to 6.00pm, Monday to Friday.
- b) There shall be no use by heavy construction vehicles of the northern section of Gavin St which serves residential zoned properties, or of any of Eaglehurst Road.

### **5.8 Liverpool St Substation**

- a) No trucks shall be permitted to use City Rd or Liverpool St between Karangahape Road and Turner St.

## **6. PENROSE SITE**

### **Wilson and Horton Limited**

- 6.1 Notwithstanding the requirements of conditions 3.3, the following conditions shall apply in respect of the Herald printing press site owned by Wilson and Horton:
  - a) That vibration at the boundary of the Herald site during the construction of the Penrose Portal shall not exceed 5mm per second or half of any vibration level that is found to interfere with the operation or printing quality of presses on the Herald site, whichever is the lesser.
  - b) Subject to the requirements of condition 3.6 and the requirements as to trial blasting in condition 6.4 hereof, the first blast following the completion of trial blasting at the Penrose Portal and as many subsequent blasts as possible shall occur between the hours of 3.30pm on Saturday and 10.30pm on Sunday.
  - c) That Vector shall prior to the commencement of the construction of the Penrose Portal install and monitor equipment where agreed with Wilson & Horton to gauge the level of vibration experienced at the Herald site as a



result of blasting. If Vector and Wilson & Horton are unable to reach agreement, then monitoring shall occur at the direction of the Manager: City Planning. Records shall be made available to the Council on request.

- d) That if monitoring at any stage shows a level of vibration induced by the tunnel blasting which is interfering with an accepted standard of print register for those presses, then Vector shall use an alternative method of excavation which does not interfere with the printing process; or blast only between the hours of 3.30pm Saturday and 10.30pm Sunday (subject to the Condition 3.6 hereof).

#### **Trans Power New Zealand Limited**

- 6.2 Vector shall undertake the construction of the tunnel, portal and associated equipment (including plant room) at the Trans Power Site in such a manner that avoids as far as practicable a level of vibration induced by such activities which causes or is likely to cause a partial or total shut down of transmission of electricity through the substation.
- 6.3 Prior to the commencement of construction, Vector shall undertake trial blasting and trial truck movements for the purpose of determining levels of vibration which, if not exceeded, would ensure that the obligation arising under Condition 6.2 hereof is satisfied. Such trials shall be undertaken in the presence of a representative or representatives of Trans Power New Zealand Limited. Records shall be made available to the Council on request.
- 6.4 Such trial blasts as required by Condition 6.3, shall occur between the hours of 3:30 pm to 6:00 pm Saturday and 9:00 am to 6:00 pm Sunday over four consecutive weekends. Three days notice of such trial blasting shall be given to the Manager: City Planning.
- 6.5 Vector shall install equipment for the purpose of measuring and monitoring the level of vibration induced at Trans Power's Penrose substation site as a result of construction, the location of such equipment to be agreed with Trans Power New Zealand Ltd. If Vector and Trans Power are unable to reach agreement about the location, such monitoring shall be undertaken as required by the Manager: City Planning, Auckland City Council. Records shall be made available to Council on request.
- 6.6 In the event that the monitoring undertaken pursuant to Condition 6.4 hereof indicates that levels of vibration induced by construction activities have resulted in or are likely to result in a failure to comply with Condition 6.2 hereof, Vector shall adopt alternative methods to ensure that Condition 6.2 is satisfied.

#### **Dust**

- 6.7 Vector shall undertake the construction of the tunnel, portal and associated equipment (including plant room) at the Trans Power Site in such a manner that avoids as far as practicable the generation of dust from such activities which causes or is likely to cause a partial or total shutdown of transmission of electricity through the substation.
- 6.8 Without limiting the effect of Condition 6.7, no construction activity shall generate more than 60 micrograms per cubic metre of dust or air suspended particulate matter, as measured over any 5 day period at the boundary of the Trans Power site.
- 6.9 Any measures adopted to remedy the effects of dust generation (including live line washing) shall be undertaken so as to avoid or mitigate as far as practicable any potential adverse effects of such activities on adjacent residential properties in Gavin Street.
- 6.10 Vector shall undertake monitoring of any dust generated by construction activities, for the purpose of determining whether Conditions 6.7 and 6.8 hereof are being complied with. Monitoring will be undertaken daily for the first month of tunnel blasting (not including any trial blasting). Further monitoring shall be undertaken during the construction period to determine compliance with conditions 6.7 and 6.8 hereof as appropriate or as a result of any complaints by owners and/or occupiers of adjoining residential properties. The further monitoring shall be at the discretion of the Manager: City Planning. Copies of the monitoring results shall be provided to Trans Power. Records shall be made available to Council on request.
- 6.11 In the event that the monitoring undertaken in accordance with Condition 6.10 hereof indicates a failure to comply with Conditions 6.7 and 6.8 hereof, Vector shall adopt alternative methods to ensure that those conditions are satisfied.

#### **Visual**

- 6.12 Any visual effects of construction activities on adjoining residential properties in Gavin Street, including the effects of any stockpile, shall be minimised.



- 6.13 Without limiting Condition 6.12, prior to the commencement of other work on the site Vector shall construct an acoustical fence of a height not less than 1.8 metres (being at least a concrete block wall of a single block width) on Trans Power's site, in the location shown on the attached plan marked "A".
- 6.14 As soon as practicable after construction of the fence referred to in paragraph 6.13 hereof, permanent landscaping of the area between this fence and the boundary of adjacent residential properties in Gavin Street shall be undertaken, to the satisfaction of the Manager: City Planning.

#### **Access**

- 6.15 The construction area shall be separated from the balance of Trans Power's site by an appropriate security fence.
- 6.16 The only access and egress to the construction site shall be via a gate as shown on the attached plan marked "A" as Trans Power's Gate 2 on Gavin Street.

#### **Management Plan**

- 6.17 Condition 1.13 shall apply to any management plan developed under conditions 6.19 and 6.20 below.
- 6.18 Vector shall, at least 20 working days before the commencement of construction on the Trans Power Site, submit to the Manager: City Planning, for approval, a Penrose Portal and Plantroom Construction Management Plan for the land as shown on the attached plan marked "A" setting out:
- a) Portal and plantroom design details (including site development, landscaping, and access details), construction plans and methods, and proposed maintenance methods and practices.
  - b) The manner in which the requirements of the above Conditions relating to vibration, dust, lighting and access are to be complied with and shall include a driver awareness programme.
- 6.19 The Management Plan submitted in accordance with Condition 6.18 hereof shall:
- a) Be to a standard satisfactory to the Manager: City Planning, Auckland City Council.
  - b) Be prepared in consultation with Trans Power New Zealand Limited.
  - c) Contain a statement from Trans Power acknowledging that consultation in accordance with paragraph (b) hereof has been undertaken.
- 6.20 The Council shall approve the plan or advise Vector of any recommended amendments thereto or additional information required within 10 working days of the receipt of the Management Plan.
- 6.21 The portal and plantroom and associated activities shall be constructed in general accordance with the requirements of the Management Plan approved by the Council.

### **7. LIVERPOOL ST AND HOBSON ST SITES**

- 7.1 Prior to the installation of transformers at these sites, a hazard mitigation plan shall be produced for the transformers at the Liverpool and Hobson substations to the satisfaction of Manager: City Planning. The plan shall cover operating and maintenance procedures to prevent oil leaks from contaminating the environment and detail cleanup procedures including disposal of any wastes in the event of an oil leak.
- 7.2 An archaeologist shall be present during the initial stages of work at Liverpool St and Hobson St egresses. The archaeologist shall remain at the sites until the archaeologist considers his/her presence is no longer required. The archaeologist shall advise the Manager: City Planning in writing when his/her attendance is no longer required.
- 7.3 The extension to the Liverpool St substation shall comply with the bulk and location requirements applying in the Commercial 8B zone of the Auckland City Operative District Plan, and any development controls under any relevant District Plan.
- 7.4 Prior to any building occurring across the boundaries of Lot 1 DP 112657, Lot 1 51978 and Lot 1 DP 52038 in conjunction with the extension to the Liverpool St substation, the affected Certificates of Title shall be held together in such a way they cannot be dealt with separately without the prior written consent of Council.
- 7.5 Prior to commencing work under Hobson St:
- a) Vector, in consultation with a representative of the Roman Catholic Bishop of Auckland, shall arrange for establishment of survey measuring points at St Patrick's Cathedral and the Cathedral Presbytery; and



- b) Vector shall participate with the Bishop's representative in updating the existing survey of the physical condition of St Patrick's Cathedral.
- 7.6 The survey measuring points established in accordance with condition 7.5(a) above shall be surveyed regularly by an independent surveyor during construction works until sufficient time has elapsed to give a high level of confidence that no deformations are likely to occur.
- 7.7 The survey measurements taken in accordance with conditions 7.5(a) and 7.6 above shall be supplied to the Roman Catholic Bishop of Auckland and to Manager: City Planning.
- 7.8 If the survey measurements taken in accordance with conditions 7.5(a) and 7.6 above indicate that movement has occurred then Vector shall, in conjunction with the Bishop's representative, resurvey St Patrick's Cathedral and any new physical damage which is verified by an independent engineer as being caused by the construction of the tunnel shall be rectified at Vector's expense.

#### **7A HAZARDOUS SUBSTANCES**

- 7A.1 The storage and use of hazardous substances at the Hobson, Newmarket, and Penrose Portals shall be in accordance with the "Vector Tunnel Project Hazardous Substances Assessment of Environmental Effects" undertaken by Tonkin and Taylor Ltd and dated May 1999.
- 7A.2 The areas of Hobson, Newmarket and Penrose Portals immediately involved in the storage, loading, unloading, using or otherwise handling of waste and other hazardous substances, shall be protected by spill containment systems that shall comply with the following:
  - a) be constructed of impervious material that are resistant to the hazardous substances involved;
  - b) be able to contain the maximum volume of the largest tank used;
  - c) be designed, constructed and managed so that any spill or release of any hazardous substance and any stormwater that may have entered and become contaminated in the spill containment system is prevented from entering the stormwater system and is prevented from discharging into or onto the land or groundwater, any water body, or potable water supply.
- 7A.3 Prior to construction of the spill containment systems referred to in Condition 7A.2 above Vector shall produce a spill contingency plan, an emergency evacuation plan, a health and safety plan, and a fire safety plan for the Hobson, Newmarket and Penrose Portals to the satisfaction of Council. Vector shall comply with these plans at all times.

#### **8. ADVICE NOTES**

- a) The requiring authority needs to obtain all other necessary consents and permits, including those under the Building Act 1991, and comply with all relevant Council bylaws.
- b) The Penrose sub-station site is subject to an existing Trans Power designation (Penrose Substation) and an existing Council designation (Proposed Accessway, Gavin St to McNab St Subway). As such the Vector designation is to be identified as the later designation in the District Plan. The provisions of Section 177 of the Resource Management Act 1991 apply accordingly.



REF NO	ADDRESS	DESCRIPTION	CAT	AUTHORITY
289	Electrical Works (substation) Hobson Street/Fanshawe Street	Designation	A4	VL
	Development to be in accordance with the following:			
	1) Development of the site shall comply with the underlying development controls.			
290	Central Police Station, Corner Cook Street & Vincent Street	Designation	A2	MPOLICE
	Development to be in accordance with the following condition:			
	That development of the site shall comply with the underlying development controls for the site.			
291	Auckland University of Technology, Wellesley Street & St Pauls Street	Designation	A2	MED
	Description:			
	The Auckland University of Technology (AUT) is a tertiary education facility providing education activities and ancillary uses. Education means activities that provide for regular instruction or training. Ancillary activities includes activities, structures and buildings supporting education such as (but not limited to) administration, research & development needs, accommodation, meeting & assembly areas, commercial, retail and services.			
	Development to be in accordance with the following:			
	The Development of the site legally described as Lot 1 DP 114029 (CT: NA64C/602) shall comply with the underlying development controls for the site, including parking.			
292	Wastewater Purposes, Churchill Street and Constitution Hill	Designation	A4	WSL
	Development to be in accordance with the following:			
	i) Development of the site shall comply:			
	a) with the underlying development controls for the site: and			
	b) be assessed in accordance with the provisions of Part 10, Heritage.			
	(ii) "That the term for implementation of the designation be 35 years from the inclusion of the designation in the District Plan, in accordance with Section 184 of the Act."			
293	Wastewater Purposes, Hardinge St	Designation	A4	WSL
	Development to be in accordance with the following:			
	(i) "That the term for implementation of the designation be 35 years from the inclusion of the designation in the District Plan, in accordance with Section 184 of the Act."			
294	Auckland District Court & Public Administrative Facility	Designation	A2	MCOURTS
	Development to be in accordance with the following:			
	(i) That development of the site shall comply with the underlying development controls for the site.			



REF NO	ADDRESS	DESCRIPTION	CAT	AUTHORITY
295	Auckland High Court, Waterloo Quadrant	Designation	A2	MCOURTS
	Development to be in accordance with the following:			
	i) Development of the site shall comply with the underlying development controls for the site.			
	ii) No alteration shall be made to the interior or exterior of the original courthouse building other than in accordance with an outline plan submitted and processed in terms of Section 176A of the Resource Management Act 1991.			
	(iii) In light of the fact that security remains a paramount consideration within the Courthouse, nothing in these conditions shall preclude the alterations and works necessary for maintaining security except that with respect to the original courthouse building, early consultation with the Council is required in order that the heritage impact of the alterations and works may be determined.			
296	Land uses for telecommunication & radiocommunication purposes, Airedale Street, Exchange Block 1A	Designation	A4	TC
	Development to be in accordance with the following:			
	(a) All masts, antennas, aerials and other radiocommunication facilities must comply with New Zealand Standard NZS6609: 1990 or any amendments, at all times.			
297	Land uses for telecommunication & radiocommunication purposes, Airedale Street, Exchange Block 1	Designation	A4	TC
	Development to be in accordance with the following:			
	a) All masts, antennas, aerials and other radio communication facilities must comply with New Zealand Standard NZS6609: 1990 or any amendments. at all times."			
298	Land uses for telecommunications & radiocommunication purposes, Kensington House	Designation	A4	TC
	Development to be in accordance with the following:			
	a) All masts, antennas, aerials and other radio communication facilities must comply with New Zealand Standard NZS6609: 1990 or any amendments, at all times."			
299	Land uses for telecommunications & radiocommunication purposes, Mayoral Drive Exchange	Designation	A4	TC
	Development to be in accordance with the following:			
	a) All masts, antennas, aerials and other radiocommunication facilities must comply with New Zealand Standard NZS6609: 1990 or any amendments at all times."			



REF NO	ADDRESS	DESCRIPTION	CAT	AUTHORITY
300	Television Broadcasting Centre (TBC), Victoria Street	Designation	A4	TVNZ
	Including offices, studios, production facilities, technical services and facilities, transmission equipment, and associated storage and carparking. Development of the site shall be in accordance with the following:-			
	a) The development controls of Part 6 of this District Plan, except that a transmission tower (not exceeding 25m <sup>2</sup> in plan area) may be erected to a height not exceeding 72m above mean sea level.			
	b) The floor area ratio for the site shall not exceed 4:1 provided that the floor area ratio for the site may be increased to a maximum total floor area ratio of 6:1 through the provision of bonuses in accordance with Rule 6.7.2 of this District Plan.			
	c) Carparking and loading shall comply with the provisions of Part 9 of this District Plan.			
301	Microwave Transmission Corridor (MTC). The designation is for that part of the MTC extending from the Television Broadcasting Centre building situated at the corner of Hobson and Victoria Streets, Auckland City which is located within the Central Area of Auckland City to Waiaatarua Transmission Station in the Waitakere ranges.	Designation	A4	BCL and TVNZ
	Development to be in accordance with the following:			
	a) All masts, antennas, aerials and other facilities must comply with New Zealand Standard NZS6609: 1990 or any amendments, at all times.			
	The following table shows, at specific points along the path of the corridor, the width of the corridor and the base-height of the corridor. Intermediate widths and heights shall be determined by extending straight lines between adjacent points.			

Path Length (KM)	Corridor Width (m)	Maximum Obstruction Height above Mean Sea Level (m)
0.000	6.8	62.6 Network Centre
0.025	6.8	63.0
0.050	6.8	63.4
0.075	6.8	63.8
0.100	6.8	64.2
0.125	6.8	64.6
0.150	6.8	65.0
0.175	6.8	65.4
0.200	6.8	65.8



Path Length (KM)	Corridor Width (m)	Maximum Obstruction Height above Mean Sea Level (m)
0.225	6.8	66.2
0.250	6.8	66.6
0.275	6.8	67.0
0.300	6.8	67.3
0.325	6.8	67.7
0.350	6.8	68.1
0.375	6.8	68.5
0.400	6.8	68.9
0.425	6.8	69.3
0.450	6.8	69.7
0.475	6.8	70.1
0.500	6.8	70.5
0.525	6.8	70.9
0.550	6.8	71.3
0.575	6.8	71.7
0.600	6.8	72.1
0.625	6.8	72.5
0.650	6.8	72.9
0.675	6.8	73.3
0.700	6.8	73.7
0.725	6.8	74.1
0.750	6.8	74.5
0.775	6.8	74.9
0.800	6.8	75.3
0.825	6.8	75.7
0.850	6.8	76.1
0.875	6.8	76.5
0.900	6.9	76.8
0.925	7.0	77.2
0.950	7.1	77.6
0.975	7.2	77.9
1.000	7.3	78.3



Path Length (KM)	Corridor Width (m)	Maximum Obstruction Height above Mean Sea Level (m)
1.10	7.6	79.7
1.20	7.9	81.1
1.30	8.2	82.6
1.40	8.5	84.1
1.50	8.8	85.5
Ponsonby Road		



REF NO	ADDRESS	DESCRIPTION	CAT	AUTHORITY
302	TVNZ Satellite Earth Station	Designation	A4	TVNZ
	Transmission Paths see diagrams			
	302a, 302b, 302c, 302d			

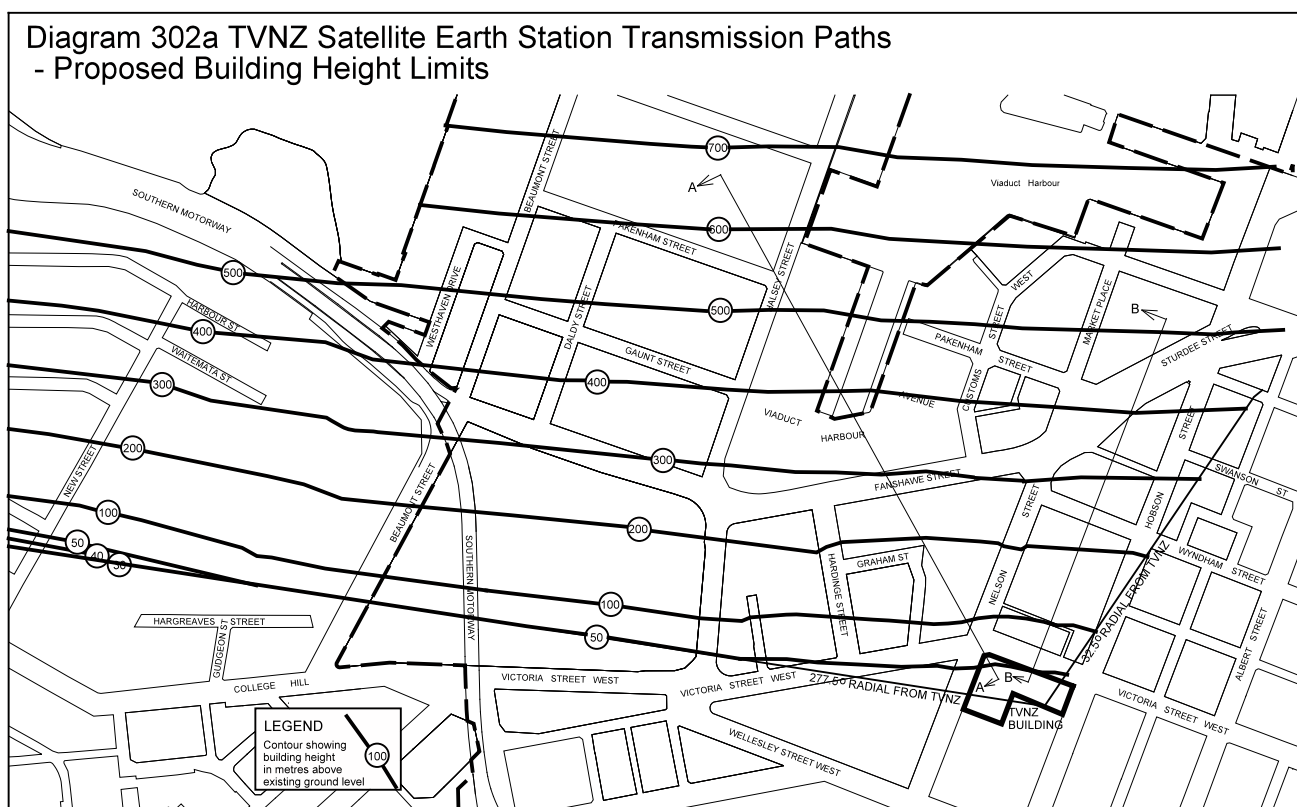
Development to be in accordance with the following:

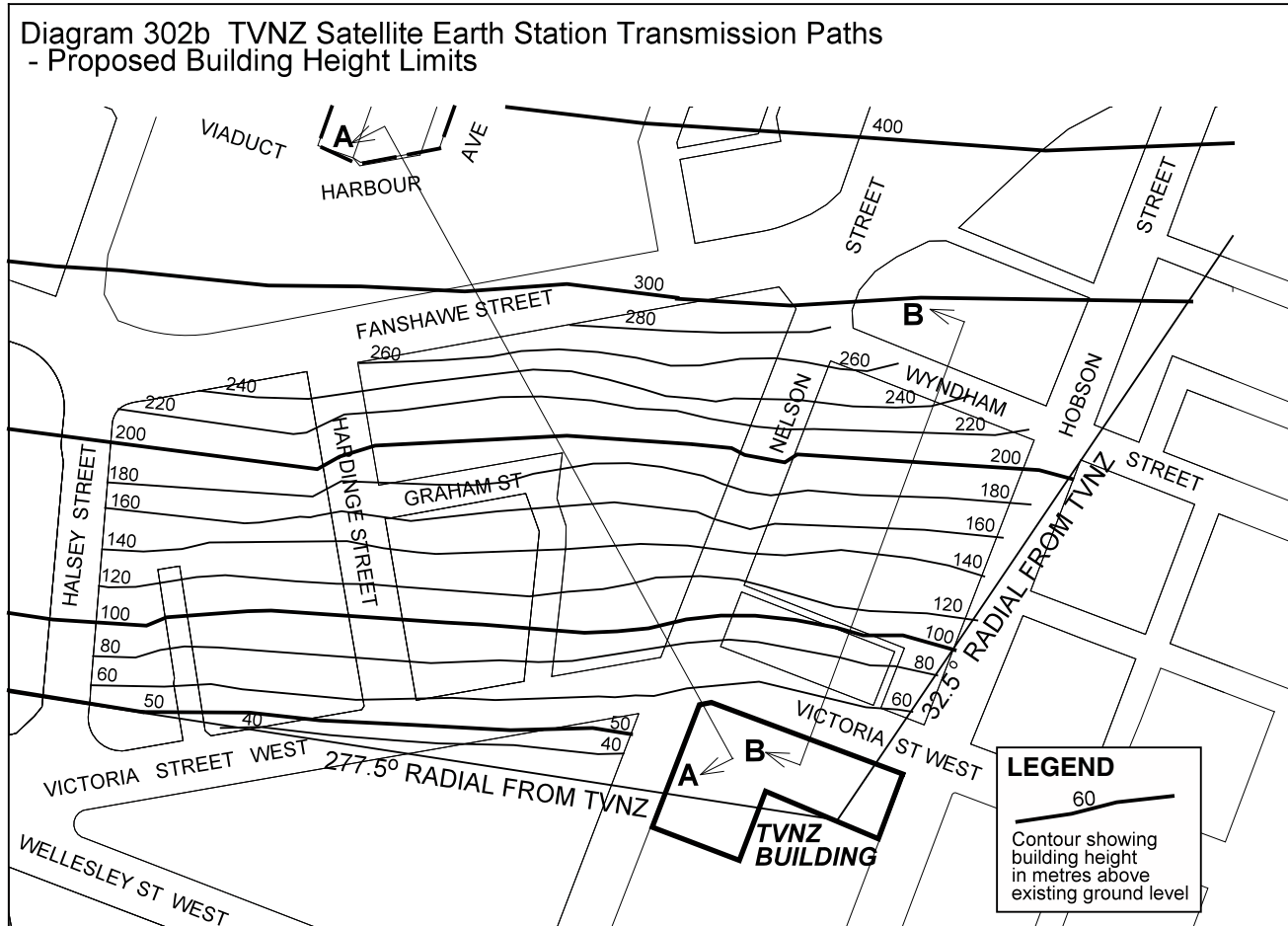
- All masts, antennas, aerials and other radiocommunication facilities must comply with New Zealand Standard NZS6609: 1990 or any amendments, at all times.

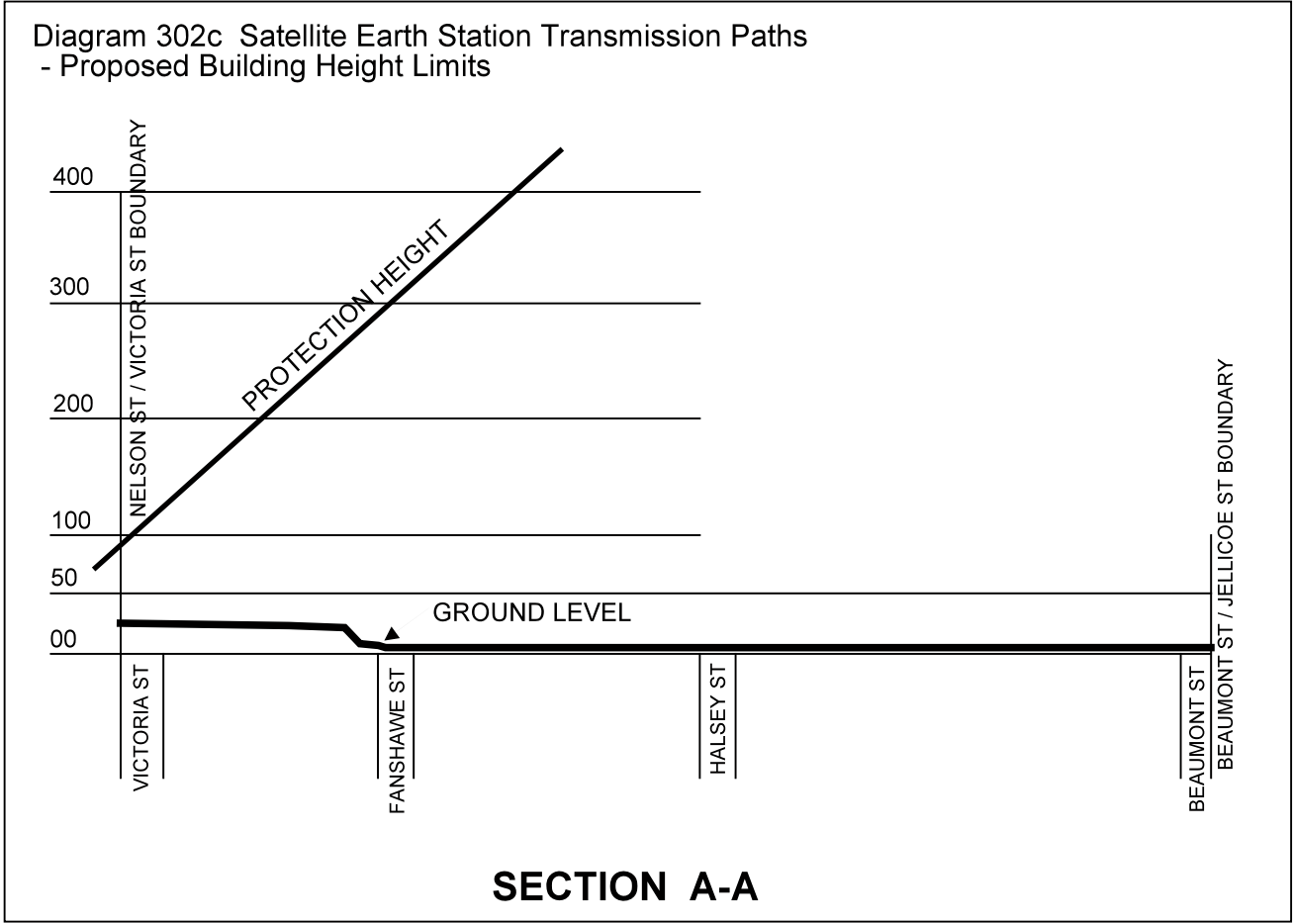
#### Areas subject to height restrictions - TVNZ satellite earth station transmission paths.

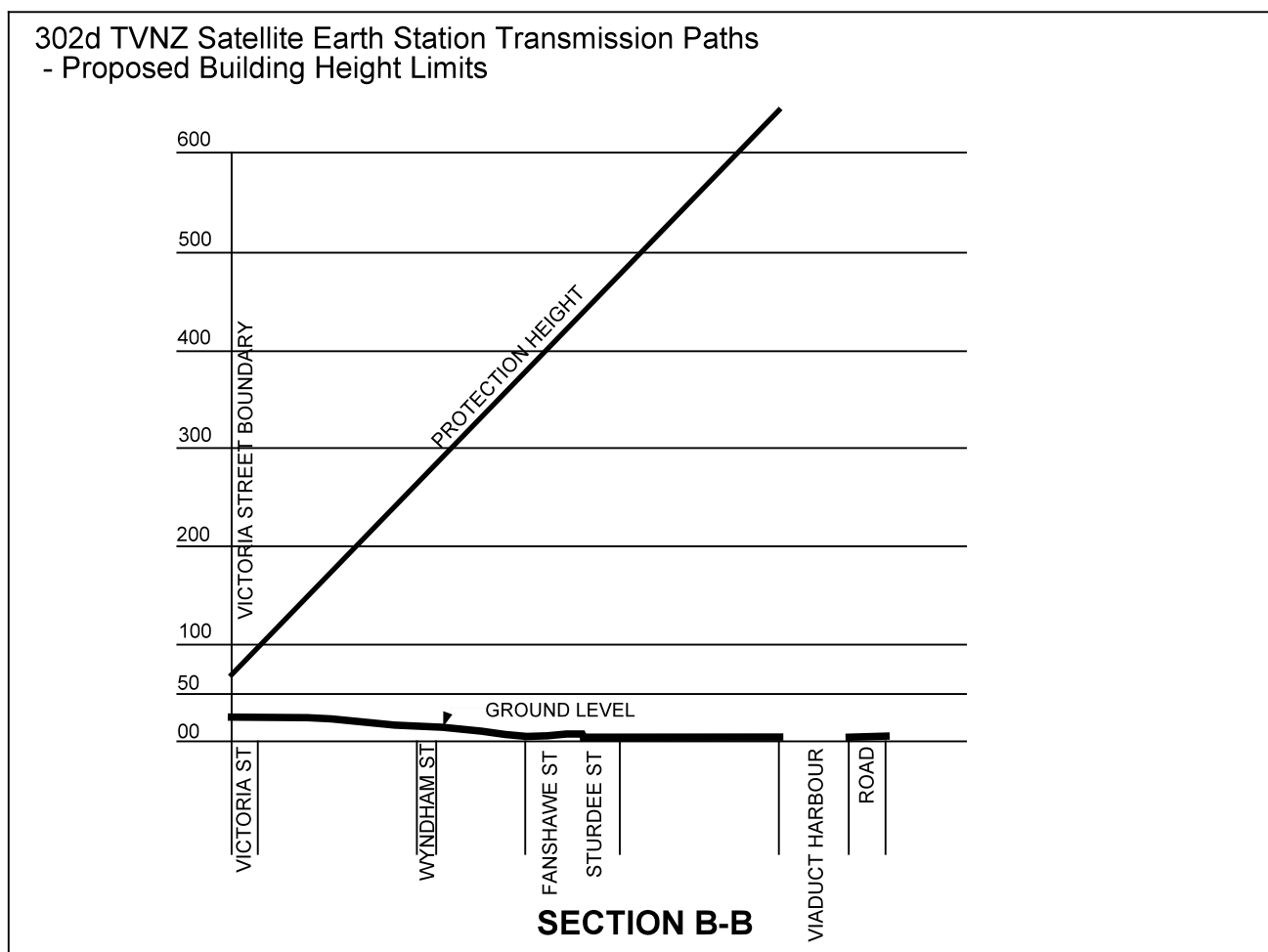
#### Diagram 302a TVNZ Satellite Earth Station Transmission Paths - Proposed Building Height Limits

NB: The base for these diagrams is the "Television New Zealand - Proposed Building Height Limits" maps prepared by Harrison Grierson Consultants. Reference should be made to those maps if further clarification is required. These maps are held in the office of the City Planning Group. The figures on the diagrams relate to allowable building heights in metres above existing ground level.









SECTION CONTINUED

