#### UNITARY PLAN UPDATE REQUEST MEMORANDUM

TO Warren Maclennan, Manager Planning, Regional, North, West & Islands



- **FROM** Jo Hart, Senior Policy Planner, Regional, North, West & Islands
- **DATE** 25 June 2021

SUBJECT Alteration to a designation in accordance with section 181(2) of the Resource Management Act 1991 to the Auckland Unitary Plan(AUP) Operative in part (15 November 2016)

This memorandum requests an update to Auckland Unitary Plan Operative in part

Reason for update – Alteration to designation 8511			
Chapter	Chapter K Designations AUP GIS viewer		
Section	Schedules and Designations – Transpower New Zealand Ltd AUP GIS Viewer		
Designation only			
Designation #8511	Bombay Electricity Substation		
Location:	153 Barber Road, Bombay		
Lapse Date	Given effect to (i.e. no lapse date)		
Purpose	Electricity transmission – Bombay Electricity Substation		
Changes to text (shown in underline and strikethrough)	Text changes found in attachment B.		
Changes to diagrams	Inclusion of Aerial map entitled 'Landscape strip and height restriction area map'		
Changes to spatial data	Alteration to the designation boundary to include the site of 153 Barber Road in its entirety.		
Attachments	Attachment A: s171 Report		
	Attachment B: Changes to text		
	Attachment C: Updated Text		
	Attachment D: Updated GIS Viewer		

<b>Prepared by</b> : Jo Hart Senior Policy Planner	<b>Text Entered by:</b> Harry Barnes Planning Technician
Signature:	Signature:
Maps prepared by:	Reviewed by:
Mitesh Bhula	Jo Hart
Geospatial Specialist	Senior Policy Planner
Signature:	Signature:

**Signed off by:** Warren Maclennan Manager Planning, Regional, North, West & Islands

Signature:

Warrat Macliman.

Attachment A: s171 Report

Combined section 169 notification report and section 171 recommendation - notice of requirement for an alteration to Transpower Designation 8511 Bombay Electricity Substation, 153 Barber Road, Bombay, under the Resource Management Act 1991 in the Auckland Unitary Plan Operative in Part



To: Craig Cairncross Team Leader Planning Central and South
From: Jo Hart, Senior Policy Planner – Regional, North, West and Islands Planning
Date: 15 June 2021

Notice of Requirement/Designation Number:	Notice of Requirement for an alteration to Designation 8511 (Bombay Electricity Substation) for 'Electricity transmission purposes' at Barber Road, Bombay	
Requiring authority:	Transpower	
Site address:	153 Barber Road, Bombay	
Legal description:	Lot 3 DP 439460 and Lot 1 DP 162890	

## Summary

Transpower New Zealand Limited (Transpower), as the requiring authority, has lodged a notice of requirement (NoR) to alter Designation 8511 in Barber Road, Bombay (Lot 3 DP 439460 and Lot 1 DP 162890) in the Auckland Unitary Plan (operative in part) (AUP) under Section 181 of the Resource Management Act 1991 (RMA).

Transpower requires an alteration to Designation 8511 to upgrade the existing substation to provide for predicted electrical load growth in the area. The project includes the installation of two 220/110 kV 150 MVA transformers, a new switchyard, new lines, related infrastructure and the removal of structure no longer required. The upgrade will increase supply for a growing load and ensure ongoing power supply to the local and wider area.

Transpower has requested that the NoR be non-notified.

Auckland Council (the council) must assess a NoR in two broad steps under the RMA:

#### Step 1: Notification (s169)

Within 10 working days of receiving the notice of requirement, and where a requiring authority has not requested that a NoR be fully notified, or has requested limited notification or non-notification, a notification decision must be made by the council

under, s149ZCB(1) to (4), 149ZCC(1) to (4), 149ZCE, and 149ZCF (which need to be read alongside s169).

If the council requests further information from the requiring authority under section 92(1), but the requiring authority does not provide the information before the deadline concerned, or refuses to provide the information, public notification is required (s169(1A)).

#### Step 2: Recommendation by Territorial Authority (s171) (s181 if an alteration)

The territorial authority must provide a recommendation on the NoR, avoiding all unreasonable delay (s21). The territorial authority can decide to recommend to the requiring authority that the requirement be confirmed, modified, subject to conditions or withdrawn (s171(2)).

This report is set out in 3 parts:

- Part A being the notification recommendation under s169
- Part B being an assessment report to the Team Leader Planning Central and South under s171 to confirm the requirement, modify the requirement, impose conditions or withdraw the requirement
- Part C being the recommendation under s176A(2) Outline Plan of Works

The recommendations for Part A, Part B and Part C are shown below:

#### Part A: Section 169 Recommendation

- That in accordance with section 169 of the Resource Management Act 1991, notice of requirement (NoR) to alter Designation 8511 for the purpose of *Electricity transmission* -*Bombay electricity substation, line connections and associated infrastructure,* Barber Road, Bombay Lot 3 DP 439460 and Lot 1 DP 162890 in the Auckland Unitary Plan (operative in part) (AUP) shall proceed on a **NON-NOTIFIED** basis for the following reasons.
  - Under section 149ZCB(2)(a): Overall the adverse effects are likely to be no more than minor. The potential effects are predominantly related to those generated by construction activities which are temporary and localised in nature. The requiring authority has proposed conditions suitable to avoid, remedy or mitigate these effects. The effects associated with the operation of the facilities, which relate primarily to visual, noise and amenity effects are considered to be no more than minor.
  - Under section 149ZCB(2)(b): The applicant has not requested public notification.
  - Under section 149ZCB(2)(c): There is no rule in the AUP or a National Environmental Standard that requires public notification.
  - Under section 149ZCB(4): There are no special circumstances that warrant notification.

- Under sections 149ZCC(1)(a) and 149ZCF: There are no affected persons for the purposes of these sections of the Act.
- Under section s149ZCC(1)(b): there are no affected protected customary rights groups or affected customary marine title groups (limited notification) s149ZCC(1)(b)).

#### Part B: Section 171 Recommendation

That in accordance with section 171(2) of the Resource Management Act 1991, Auckland Council makes the following recommendation to Transpower New Zealand Limited to:

- confirm the notice of requirement for an alteration to Transpower designation 8511, for *Electricity transmission, line connections and associated infrastructure* in the Auckland Unitary Plan (Operative in Part)
- 2. impose conditions, as amended by the alteration and additional proposed amendments, and include in Chapter K Designations of the Auckland Unitary Plan (Operative in Part).

The recommended conditions are shown in Section 10.1 of this report.

#### Part C: Section 176A Outline Plan of Works Recommendation

That pursuant to Section 176A(2)(b), an Outline Plan of Works need not be submitted for the proposed works provided for in Transpower Limited's section 181 Notice of Requirement, 'Bombay Substation alteration to designation, dated 16 April 2021.

## **1** PART A – Section 169 notification recommendation

## 2 The proposal, site and locality description

### 2.1 Proposal

Transpower, as the requiring authority, has served a NoR to alter Designation 8511 Bombay Electricity Substation Barber Road in the Auckland Unitary Plan (Operative in part) (AUP(OP)) under Section 181 of the RMA (refer to Attachment A).

The Bombay Substation is located at 153 Barber Road, Bombay (Lot 3 DP 439460 and Lot 1 DP 162890) and is designated in the AUP(OP) for electricity transmission purposes (designation reference: 8511). The substation was developed circa 1961 and is a critical component of the National Grid. It is a point of supply (a Grid Exit Point (GXP) or substation) and a node on the 110 kilovolt (kV) electricity network between Hamilton and Auckland.

Transpower requires an alteration to Designation 8511 to upgrade the existing substation to provide for predicted electrical load growth in the area. The project includes the installation of two 220/110 kV 150 MVA transformers, a new switchyard, new lines, related infrastructure and the removal of structure no longer required. The upgrade will increase supply for a growing load and ensure ongoing power supply to the local and wider area.

Phase 1 of the Bombay Interconnecting Transformer Project ('Bombay ICT Project' / 'the Project') entails enabling earthworks around the existing substation located on Lot 3 DP 439460, and across the adjacent Transpower-owned property (Lot 1 DP 162890), to allow for additional infrastructure to be installed at the site as part of the Phase 2 works. Resource consents for the Phase 1 works were granted by Auckland Council on 8 June 2020 (BUN60353821).

Phase 2 of the Bombay ICT Project entails the installation of two 220/110 kV transformers on a new 220 kV switchyard platform, directly adjacent to the existing substation. This new equipment will be connected by a new line, referred to as a "hard-tee", into the adjacent Huntly-Otahuhu A 220 kV transmission line allowing for the Bombay Substation to upgrade from the 110 kV network to the 220 kV network.

In order to undertake the Bombay ICT Project, Transpower needs to relocate tower HLY-ATA-A0124 approximately 70 m from its existing location to enable space for the hard-tee connection. A resource consent application for the tower relocation under Regulation 16 of the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 (NESETA) has been lodged concurrently with Auckland Council.

Designation ref: 8511 covers most of Lot 3 DP 439460 (refer Figure 1.1 below). The Bombay ICT Project is mainly located within this designation, with a small part of the Project works located outside of this designation on adjoining Lot 1 DP 162890.

To provide for the Bombay ICT Project as well as future potential upgrade requirements, Transpower proposes to alter the existing designation to include the remainder of Lot 3 DP 439460 and adjoining Lot 1 DP 162890 immediately to the east. Both land parcels are owned by Transpower. Currently, the purpose of the designation is for *"Electricity transmission - Bombay electricity substation"*. Transpower is also seeking to alter the purpose of the designation to *"Electricity transmission - Bombay electricity substation, <u>line connections and associated infrastructure</u>"*.

Transpower also considers that an outline plan of works (OPW) for Phase 2 of the Bombay ICT Project is not required under section 176A(2). This is discussed further in Part C of this report.

Transpower are proposing amendments to the existing conditions of Designation 8511, as well as additional conditions relating to Phase 2 of the Bombay ICT Project.

Transpower has requested that the NoR be non-notified.

#### 2.2 Locality Plan

The site is owned by Transpower and legally described as Lot 3 DP 439460 and Lot 1 DP 162890 as identified in Figure 1 below.

The site is accessed via a single entry/exit point off Barber Road which is a no exit road that is primarily used by local residents. Barber Road is accessed from off Paparata Road, approximately 350 m to the north. State Highway 1 is located approximately 1.5 km to the west of the site and the Auckland-Waikato boundary is located approximately 1 km to the south. More broadly the site is located to the south-east of the Bombay township.



Figure 1: Aerial photo of the site and surrounds (location site shown outlined in red)

Figure 2 below shows the AUP zones, designations and electricity transmission overlays which apply locally:

- Designation 8511 Transpower Bombay Electricity Substation
- Designation 3010 Counties Power Barber Road Substation
- Designation 9546 Bombay Wastewater Treatment Plant (Watercare)

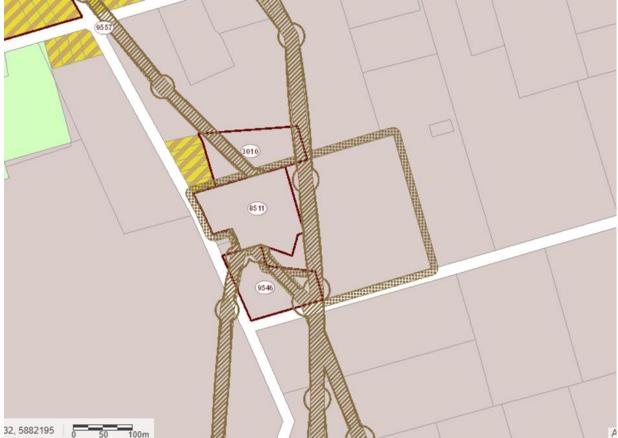


Figure 2: Zoning of site (Rural – Rural Production Zone) with existing designations and transmission overlays)

Figure 3 shows the proposed boundary of the designation, being the land owned by Transpower at Barber Road, Bombay.



Figure 3: Map showing proposed boundary of the NoR, wider site and adjacent Transpower substation

#### 2.3 Site and surrounding environment description

The requiring authority has provided a description of the subject site, in a form and manner that is acceptable to the council. Having undertaken a site visit 7 May 2021, I concur with the description of the site and have no further comment. This can be found in Section 2: Environmental setting of the assessment of environmental effects (AEE) submitted as part of the NoR.

The requiring authority has also identified the zoning, overlays, controls and designations of the AUP, in section 2.3 of the AEE, which are relevant to the subject site. I concur and have no further comment.

#### 2.4 Resource consents

In addition to the designation alteration, Transpower have sought resource consent for a tower relocation under Regulation 16 of the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 (NESETA). This was lodged on 16 April 2021 and is being processed separately by Resource Consents South. Where relevant, the reporting planner for the resource consent will engage the same specialists as for the notice of requirement.

Resource consents for enabling earthworks were granted by the council on 8 June 2020 (BUN60353821). This work is almost complete apart from some elements of the finished surface not being completed due to lack of materials (refer to Photo 1 and 2 below).



Photo 1 and 2: Platform created by enabling works (taken May 2021)

### 2.5 Section 92 further information request

A section 92 request for further information was sent to Transpower on 17 May 2021 (refer to Attachment B). Transpower's response was received on 2 June 2021 (refer to Attachment C).

## **3** Notification

The council must assess a NoR in two broad steps under the RMA. Firstly, where a requiring authority has not requested that a NoR be fully notified, or has requested limited notification or non-notification, a notification decision must be made under s149ZCB(1) to (4), 149ZCC(1) to (4), 149ZCF, and 149ZCF of the RMA (these sections must be read alongside section 169 of the RMA, which modifies these sections for the purposes of designations).

Secondly, a recommendation to the requiring authority needs to be made under s171(2) of the RMA, on whether the NoR should be confirmed, modified, or withdrawn or conditions are to be imposed.

#### 3.1 Public notification assessment (s149ZCB, and 149ZCD)

A NoR must be publicly notified if:

- the adverse effects on the environment are likely to be more than minor (s149ZCB(2)(a))
- the requiring authority has requested public notification (s149ZCB(2)(b)); or
- there is a rule or national environmental standard that requires public notification (s149ZCB(2)(c)).

A notice of requirement <u>may</u> be publicly notified if there are special circumstances (s149ZCB(4)).

A notice of requirement must not be publicly notified if:

 a rule or national environmental standard precludes public notification (s149ZCB(3)). However, public notification can still be recommended if: (a) the requiring authority requests it (s149ZCB(2)(b) and s149ZCB(3)(b)); or (b) special circumstances exist (s149ZCB(4)).

The requiring authority has not requested public notification.

No rules in the relevant plans (or in any national environmental standard) preclude or require public notification of this application.

If the council requests further information from the requiring authority under section 92(1), but the requiring authority does not provide the information before the deadline concerned, or refuses to provide the information, public notification is required (s169(1A)(b)).

#### 3.1.1 Adverse effects assessment (section 149ZCE)

The following assessment addresses the adverse effects of the activities on the environment.

# Effects that must be disregarded - effects on persons who are owners and occupiers of the land in, on or over which the notice of requirement relates, or of land adjacent to that land.

Under s149ZCE, the council is to disregard any effects on person who own or occupy any adjacent land. The adjacent land includes the following properties:

#### Table 1

#### Address

Unnumbered lot of Barber Road, Bombay (Lot 2 DP 504664)

Unnumbered lot of Barber Road, Bombay (Lot 4 DP 134365)

159 Barber Road, Bombay

163 Barber Road, Bombay

Unnumbered lot of Barber Road, Bombay (Lot 10 DP 134365) (Watercare site)

27 Razorback Road Bombay

106A Paparata Road Bombay

# Effects that must be disregarded - any effect on a person who has given written approval to the notice of requirement and not withdrawn that approval prior to the notification decision being made. (s149ZCE(e) and s149ZCF(3))

The following persons have provided their written approval and any adverse effects on them have been disregarded:

#### Table 2

Address	Legal Description	Owner/Occupier
Part of Paparata Road, Bombay 2675	Part of Lot 2 DP 504664	Counties Power
Paparata Road, Bombay 2675 (no street number)	Lot 2 DP 504664	P Master, N Master, and RG Willis

Under section 149ZCF(3) the council must decide that a person is not an affected person if:

- the person has given, and not withdrawn, approval for the activity in the written notice before council has decided whether there are any affected persons
- it is unreasonable in the circumstances to seek the person's written approval.

The written approvals received with the NoR have not been withdrawn before a decision has been made by council on whether there are any affected persons.

I consider that there are no circumstances in which it is unreasonable to seek any written approvals. Transpower has sought written approvals as listed above in Table 2.

An assessment of adversely affected persons is discussed further in Section 3.2.1 of this report.

#### Effects that must be disregarded - effects of trade competition

Under section s149ZCE(d) the council must disregard trade competition and the effects of trade competition.

#### Effects that may be disregarded - permitted baseline assessment

Sections 149ZCE(b) and 149ZCF(2)(a) provide that a territorial authority may disregard an adverse effect of the activity if a rule or national environmental standard permits an activity with that effect (this is referred to as the permitted baseline).

The permitted baseline refers to the adverse effects of permitted activities on the subject site.

The Environment Court in Beadle v Minister of Corrections A074/02 accepted that the obligation to apply permitted baseline comparisons extended to NoRs. In Nelson Intermediate School v Transit NZ (2004) 10 ELRNZ 369, the Court accepted that the permitted baseline must define the "environment" under section 5(2) (b) and (c) and from that section 171(1). When considering the adverse environmental effects of a proposal, the effects may be considered against those from permitted baseline activities. As the effects resultant from permitted baseline activities may be disregarded, only those environmental effects which are of greater significance need be considered.

In Lloyd v Gisborne District Council [2005] W106/05, the Court summed up the three categories of activity that needed to be considered as part of the permitted baseline as being:

- 1. what lawfully exists on the site at present;
- activities (being non-fanciful activities) which could be conducted on the site as of right;
   i.e., without having to obtain a resource consent (see for example Barrett v Wellington City Council [2000] CP31/00); and
- 3. activities which could be carried out under granted, but as yet unexercised, resource consents.

Application of the permitted baseline approach is at the discretion of the council and depends on the circumstances of the NoR. The permitted baseline in this case has been assessed against the above tests and includes but is not limited to the following:

 the subject site includes existing activities for electricity supply and transmission and is subject to the overlay provisions for the National Grid Corridor which provides for Transpower's infrastructure for electricity transmission • substations are a permitted activity in E26 Infrastructure within the Rural - Rural Production Zone.

#### 3.1.2 Assessment of adverse effects

The requiring authority has provided an AEE with the NoR. Each of the technical reports attached to the requiring authority's AEE has assessed the environmental effects of the alteration. The following effects have been assessed:

- positive effects
- landscape and visual amenity
- noise
- traffic
- electric and magnetic fields
- radio frequency interference
- earth potential rise
- lighting
- earthworks
- potential contaminants and hazardous substances
- overland flow paths and flooding
- heritage and archaeology.

The requiring authority, in section 4.14 Conclusion of the AEE, states:

The assessment set out above concludes that the effects from the Bombay ICT Project and any future development can be appropriately avoided, remedied and mitigated such that they are no more than minor'.

Each of the effects listed above is discussed further below in Sections 3.1.2.1 to 3.1.2.13.

#### 3.1.2.1 Positive effects

Section 4.2 of the AEE provides an assessment of the positive effects. In summary, the requiring authority considers that by enabling the necessary activities at the site, the designation will:

- contribute to the economic and social aspirations of New Zealanders by continuing to provide a safe, reliable and economic electricity transmission service to meet customer and wider community needs now and in the future
- provide long-term certainty, including for the additional land area, to Transpower and the community regarding the activities that could occur within the designation. This is particularly important given the growth within the southern Auckland area and that the Bombay Substation has the largest forecasted load growth in the country.

• enable the efficient use of natural and physical resources by continuing an established and existing land use on the site which is well serviced by physical resources, such as transport infrastructure. This avoids the need for new infrastructure in an alternative 'greenfield' location which may generate additional environmental effects.

#### Comments:

I concur with the requiring authority in that the alteration to the designation will:

- provide certainty to Transpower that the land can, and in the case of the community will, be used for the purpose of 'Electricity transmission Bombay electricity substation, line connections and associated infrastructure'
- contribute to the economic and social aspirations of New Zealanders by providing a safe, reliable, and economic electricity supply now and for future generations
- enable the efficient use of natural and physical resources by utilising existing infrastructure, including transport infrastructure and Transpower's existing electricity network.

#### 3.1.2.2 Landscape and visual amenity effects

The requiring authority has provided an assessment on landscape and visual amenity effects (LVA) with a summary in Section 4.3 of its AEE, and associated technical report, undertaken by Isthmus Group Limited, in Appendix E. The LVA addresses the short-term effects associated with construction activities, cumulative effects, and the long-term landscape and visual effects of new electricity infrastructure. Section 4.3.6 Overall landscape and visual amenity effects conclusion of the AEE states:

The LVA concludes that the Bombay ICT Project and future development associated with the alteration to designation will be seen as appropriate elements within the context of the Bombay Substation, and that overall adverse effects in relation to landscape and visual amenity will be less than minor.

#### Comment:

Mr Stephen Brown, Brown NZ Limited, on behalf of Auckland Council has undertaken an assessment of the requiring authority's NoR, AEE and associated technical report (refer to Attachment D).

In regard to his review of the Isthmus Group Limited report, he considers that:

Overall, the assessment of effects is considered to be technically competent. It describes the context for the application in an appropriate manner – both in terms of the site and its landscape setting and the AUP framework for assessment of the proposal – and reaches conclusions that are justified by the assessment process.

Mr Brown's report considers the following:

• the character and amenity in the context of the existing environment both on the site and as viewed from adjacent properties and from further afield

- the permitted baseline of effects on the site provided by the existing designation (and the underlying AUP(OP) zoning)
- the potential effects of the alteration on the residential dwellings located adjacent, or within close vicinity to the site, including 141-149, 159 and 163 Barber Road
- the proposed landscaping for mitigation of any potential adverse effects on visual and landscape amenity.

His report concludes:

As indicated above, it is my opinion that the project's longer term effects would be of a low to very low order and I agree with the Isthmus Group's key finding and conclusions in Appendix *E* of Transpower's application.

I adopt the findings of Mr Brown, in that he agrees with the LVA's conclusions that the landscape and visual effects associated with the alteration are less than minor.

The requiring authority has proposed new conditions for the existing designation to provide mitigation of the landscape and visual amenity effects. This includes a drawing, showing the mitigation principles, as part of the designation conditions in the AUP(OP).

#### 3.1.2.3 Noise effects

The requiring authority has provided an assessment on noise effects with a summary in Section 4.4 of its AEE, and associated technical report, undertaken by Marshall Day Acoustics, in Appendix F. The assessment addresses both construction noise and operational noise.

In regard to construction noise, section 4.4.1 of the AEE states:

The Acoustic Assessment Report predicts sound from construction of the Bombay ICT Project will readily comply with the NZS6803:1999. Where construction occurs during normal hours of work, no adverse effects would occur. The effects of noise during construction of the Bombay ICT Project are therefore expected to be less than minor.

In terms of any potential future works provided for through the alteration to the designation, future construction works will also be subject to Condition 2 of Designation 8511 which requires compliance with NZS6803:1999. Conditions 3 and 4 also require a Construction Noise Management Plan be prepared and submitted to Council prior to works commencing. In this way any noise effects from future construction activities will be managed and mitigated such that they are no more than minor.

In regard to operational noise, section 4.4.2 of the AEE states:

Based on the Acoustic Assessment Report, the operational noise effects from the Bombay ICT Project are considered to be no more than minor.

At this point in time, the only project planned is the Bombay ICT Project, with the remainder of the site to remain undeveloped for the time being. However, the alteration to the designation will provide for the ongoing operation, maintenance, development and potential upgrade of the substation across the site. While the scale, location and extent of any future works at the site (with the exception of the Bombay ICT Project) has not been confirmed, it is expected to be similar to the activities already occurring at the existing Bombay Substation or proposed through the Bombay ICT Project. The operational noise effects of any future works provided for through the alteration to the designation are expected to be no more than minor on the basis that:

- The predicted sound levels set out in the MDA report for existing infrastructure and the Bombay ICT Project once the Counties Power project has been commissioned are well below the guideline AUP day time limits and lower night time limits at the two closest receiver locations.
- Any future works in the extent of the alteration to the designation will be located 'behind' or the east of the existing substation and at a greater distance from the closest receiver locations along Barber Road.
- While future works will extend out to the east of the existing substation, there is still considerable setback distance to properties to the north and north east off Paparata Road (over 150m from property boundaries). Furthermore the MDA report shows that the predicted noise levels for these properties with the Bombay ICT Project are well below the AUP night-time permitted activity levels. Any future works are unlikely to result in these limits being exceeded.
- It is reasonable to expect that new technology will not be any noisier than existing infrastructure, and if anything is likely to be quieter. This is evidenced by the current situation whereby existing operational sound is controlled by older transformers T2 and T3 and once replaced by Counties Power with newer, quieter units, predicted sound levels perceptibly reduce.

#### Comments:

Mr Andrew Gordon, Specialist, Contamination, Air and Noise Team, Resource Consents has undertaken an assessment of the requiring authority's AEE and associated technical report. His comments are as follows:

#### **Construction**

Typical plant and machinery, associated sound power levels and setback distances with predicted noise levels are set out in Table 8. Based on reviews of similar works on other sites this information looks representative of the proposal.

*I agree given the predicted noise levels and setback distances from the works to the nearest dwellings, compliance with noise standards will be achieved with a good safety allowance providing noisy works are restricted to between 7.30am – 6pm, Monday to Saturday.* 

I note that delivery of large machinery (e.g. crane) and plant (e.g. transformer) may need to occur outside the above times and would need to be managed via a management plan.

Although not mentioned in the report, I expect construction vibration standards in E25.6.30 (1) will be met given the adequate setback distances from the works to the nearest dwellings.

#### **Operation**

The project works are adequately described in order to assess noise effects.

A survey of the existing noise environment was completed on 17 April 2019.

Predicted noise levels are compared to the night time noise standard of 45 dB LAeq. I note predicted noise levels include a +5 dBA adjustment to account for special audible characteristics in accordance with NZS 6802:2008.

Noise from the existing substation is predicted to currently exceed the 45 dB LAeq limit by 2 dB at the notional boundary of 159 Barber Rd.

Total noise (existing + proposed) is predicted to continue to exceed the limit by 2 dB at the notional boundary of 159 Barber Rd and by 1 dB at 163 Barber Rd.

I note a +3 dB increase is predicted at 27 Razorback Rd and 106A Paparata Rd however the levels are very low (≤33 dB LAeq) and would not give rise to any adverse effects.

It is important to note that existing transformers (T2 and T3) which control the above noise levels, are planned for decommissioning once the new Counties Power substation comprising two new transformers are commissioned. Therefore, MDA have provided additional noise predictions based on this realistic scenario. Results specified in Table 4 demonstrate that compliance with 45 dB LAeq will be readily achieved at all neighbouring dwellings with the highest predicted noise level of 36 dB LAeq at 159 Barber Rd. This scenario will also result in a significant reduction in total noise compared to the existing situation.

In regard to corona noise, I agree any change in noise levels would be imperceptible (i.e.  $\leq 2$  dB at 4 sites). Note I understand some corona noise is unavoidable during wet weather but agree aging of the conductor surfaces will reduce audible noise over time.

I rely on the specialist expertise of Mr Gordon in that the overall noise during construction and operation will be less than minor.

I consider that the conditions, as amended by the alteration and additional recommended amendments, will ensure that the adverse effects of noise can be avoided, remedied or mitigated.

Existing designation conditions (Conditions 2 to 4) relate to construction and maintenance noise. Condition 2 requires that all construction works are to comply with the limits in NZS6803:1999. Condition 3 requires the preparation of a noise management plan (NMP) for any significant construction work, including earthworks. Condition 4 requires the NMP to be submitted to Councils Consent Manager for approval at least 20 working days prior to the works commencing.

Mr Gordon has also identified that vibration effects have not been specifically addressed in the AEE but expects that the vibration standards in E25.6.30 (1) will be met given the adequate setback distances from the works to the nearest dwellings.

AUP(OP) provisions for both noise and vibration are at the district plan level which designations are not subject to. However, there is an existing condition (Condition 5) which relates to vibration from all construction activities and the requirement not to exceed the limits of German Standard DIN 4150-3 (1999-02) Structural Vibration – Effects of Vibration on Structures. The requiring authority has not proposed any amendments to this condition.

#### 3.1.2.4 Traffic effects

The requiring authority has provided an assessment on traffic effects with a summary in Section 4.5 of its AEE, and associated technical report, in Appendix G. This assessment addresses the traffic volumes entering and exiting the site, currently and post construction, as well as during construction of Phase 2 of the Bombay ICT Project. In its AEE, the requiring authority considers that 'the traffic effects of the Bombay ICT Project and alteration to designation are less than minor' for the following reasons:

- the existing traffic volumes associated with the ongoing operation and maintenance of the site are minimal (maximum two vehicles per week). The site is currently unmanned and is only usually occupied when maintenance or routine inspections are occurring.
- once construction of Phase 2 of the ICT Project is complete, the number of operational vehicles visiting the site will generally remain the same, at a maximum of approximately two vehicles per week
- the additional traffic movements during construction are considered to be negligible, and no modifications or traffic management is considered to be required to accommodate construction traffic
- construction and operational traffic will continue to use the existing access which provides safe and efficient exist to and from the site
- the Bombay ICT Project represents the installation of significant new infrastructure. Construction traffic effects with any future works is likely to be similar or less than this.
- there are no cumulative effects with the construction occurring at the adjacent Counties Power site programmed to be undertaken well in advance of the Bombay ICT Project.

#### Comments:

Auckland Transport (AT) has undertaken a review of the AEE and associated technical reports. Further information was requested by AT (refer to Attachment B). Transpower's response was received on 2 June 2021 (refer to Attachment C). AT was satisfied with the response, including Transpower's proposed construction traffic management plan condition to address the school safety issue raised (as shown below).

#### **Construction Traffic Management Plan**

At least 20 days prior to the commencement of any significant construction activities on the site, Transpower shall submit a Construction Traffic Management Plan (CTMP) to the Council for certification. The CTMP shall detail traffic management and mitigation measures for delivery of substation equipment and materials and general construction activities including, but not limited to, restricting over dimension loads and otherwise limiting heavy vehicle movements wherever practicable to outside of Bombay School peak drop off and pick up times (being 8:15 to 9 am and 2:30 to 3:15 pm Monday to Friday, excluding school and public holidays).

AT had no further questions but considered, for completeness, that the following advice note should also be included:

#### Advice Note:

1. The requiring authority will obtain an over dimension/ overweight load permit from Waka Kotahi NZ Transport Authority with input from Auckland Transport.

I agree, subject to the additional condition proposed by Transpower, and advice note proposed by Auckland Transport, that the effects are less than minor.

A set of amended conditions was forwarded to Transpower on 4 June 2021. Transpower responded on 8 June 2021 and proposed further minor amendments (refer to Attachment E). This included Condition 22. Transpower considered that the requirement applies in

proximity to the site and not from the Port of Auckland (which is addressed through an over dimension permitting process).

The agreed set of conditions is shown in Section 10 of this report.

#### 3.1.2.5 Electric Magnetic Fields (EMF)

The requiring authority has provided an assessment on the effects of electric and magnetic fields (EMF) in Section 4.6 of its AEE. The assessment includes an explanation of EMF as well as in the context of Transpower's substations. In relation to the Bombay Substation, the AEE states:

With respect to the Bombay Substation, the existing substation has been in operation since approximately 1961, with secure fencing surrounding it and large physical spacing between conductors and areas accessible to the public. For the Bombay ICT Project, the worst case predicted EMF occurs directly below the line and is well below international guidelines levels<sup>1</sup>. This also rapidly reduces with distance from the source. Away from the line EMF levels will be much reduced. The alteration to the designation is located to the east (back) of the existing substation site at an even greater distance from publicly accessible areas.

The designation conditions ensure that any new works or infrastructure at the site are designed and operated to limit the electric and magnetic field exposures at or beyond the secure boundary of the site in accordance with international guidelines (as required by condition 7 of Designation 8511). International guidelines provide for the protection of public health with regard to EMF. As such, this is considered appropriate to mitigate potential adverse effects of EMF.

#### Comment:

Mr Ruben Naidoo, Specialist Environmental Health, Resource Consents, has undertaken an assessment of the requiring authority's AEE and associated technical report. His comments are as follows:

The applicant states that any new equipment shall be designed and operated to limit the electric and magnetic field exposures at or beyond the secure boundary of the substation site to the International Commission on Non-Ionising Radiation Protection, Guidelines for limiting exposure to time-varying electric and magnetic fields (1Hz - 100kHz), (Health Physics 99(6):818-836; 2010) (ICNIRP Guidelines). That is the public exposure reference levels of 5 kV/m for electric fields and 200 µT for magnetic flux density at one metre above ground level under maximum normal operating conditions (ie, when there are no faults in the transmission system).

Furthermore extensive modelling and measurements on existing substations have been undertaken that concluded that Transpower substations have both low magnetic and electric field exposures which are well within the Ministry of Health (MoH) recommended EMF public exposure guidelines. This is typically due to the large physical spacings between electrical equipment and areas accessible to the public.

<sup>&</sup>lt;sup>1</sup> For the Bombay ICT Project, hard-tee line, the worst case magnetic field strength below the line at 1m above the ground is predicted to be 4.89  $\mu$ T, which is well below the International Commission for Non-Ionising Radiation Protection (ICNIRP) reference level for public exposure of 200  $\mu$ T. The worst case electric field strength at the same position is predicted to be 2.3 kV/m. Again, this is well below the ICNIRP reference level for public exposure for electric fields of 5 kV/m.

In this regard it is recommended that the applicant provides Auckland Council with a post commissioning report demonstrating compliance with EMF guidelines.

Mr Naidoo considers that the effects associated with alteration are less than minor effects. However, he has recommended an amendment to the existing Condition 7 as shown below:

7. Any new equipment, <u>including the installation of new infrastructure required for Phase 2</u> of the Bombay ICT Project, shall be designed.....

Transpower shall within 3 months of the new infrastructure required for Phase 2 of the Bombay ICT Project engage an electrical engineer (a suitably qualified and experienced person) to confirm compliance with the ICNIRP guidelines as evidenced by actual measurements of electric and magnetic fields in relevant locations. The engineer's report shall be submitted to the Council's Team Leader Southern Compliance Monitoring. In the event of any non-compliance, the report shall demonstrate how compliance can be achieved and the timeline for completion.

I adopt the findings of Mr Naidoo, in that the effects of EMF are less than minor. I agree that the conditions, with the proposed amendments and additional recommended amendment, will ensure that any adverse environmental effects can be avoided, remedied or mitigated.

A set of amended conditions was forwarded to Transpower on 4 June 2021. Transpower responded on 8 June 2021 and proposed further minor amendments (refer to Attachment E). This included Condition 9 (formerly Condition 7). The proposed amendments were minor and did not change the intent of the condition.

The agreed set of conditions is shown in Section 10 of this report.

#### 3.1.2.6 Effects of radio frequency interference and earth potential rise

The requiring authority has provided an assessment of the effects of radio frequency interference (RFI) and earth potential rise (EPR) in Sections 4.7 and 4.8 in it AEE respectively. This includes an explanation on both of these effects and in the context of the Bombay Substation.

#### Comments:

I rely on the expertise of the requiring authority in that the Bombay Substation meets the relevant New Zealand and Transpower standards. Existing conditions on the designation apply to any new works or equipment (Condition 8. Radio Frequency Interference) and any new substation earth grids (Condition 9. Earth Potential Rise).

I have no further comments. The existing conditions will ensure that, for any future works, any potential adverse effects of RFI and EPR are suitably mitigated.

#### 3.1.2.7 Lighting effects

The requiring authority has provided an assessment of lighting effects in Section 4.9 of its AEE. The assessment includes an explanation that lighting is required to comply with Transpower's lighting standards. These require a minimum level of lighting to ensure a safe environment for operating and maintain a substation. The minimum lighting level applies specifically to areas containing equipment, walkways, ingress and/or access points.

In regard to the lighting on neighbouring properties, the AEE states:

The potential for adverse lighting effects on nearby residential properties from the Bombay ICT Project and future works provided for by the alteration to designation is not anticipated due to distance from residential uses. Further to this, due to configuration of the site any future lighting will be located further away from dwellings than any existing lighting on the site.

In accordance with the existing conditions of Designation 8511 (condition 10), any new exterior lighting at the site will also need to be designed to comply with Transpower's lighting standards, as well as AS/NZS 1158.3.1:2020 Light for Roads and Public Spaces, and AS/NZ 4282 2019 Control of Obtrusive Effects of Outdoor Lighting. The potential for adverse lighting effects associated with the Bombay ICT Project and future works provided for by the alteration to designation can be mitigated through compliance with the forementioned design standards, as required by condition 10 (refer to Appendix B) and will be less than minor.

#### Comments:

Mr Vaughan Turner, Specialist, Contamination Air and Noise, Auckland Council has undertaken a review of the AEE and associated plans. His comments are below:

I have reviewed the Bombay Substation alteration to designation Notice of Requirement and AEE, dated 16 April 2021 and prepared by Tonkin and Taylor ('the AEE') with respect to the provisions of chapter E24 of the AUP(OP); in particular section 4.9 and table B1 section 10 relating to light spill.

Based on the information in the AEE I understand that the proposal is to alter the existing designation for the Bombay Substation at 153 Barber Road, Bombay to allow for the installation of new infrastructure and future works on an adjacent Transpower-owned property. No additional lighting is proposed, although section 4.9 notes the possibility of more lighting being installed in the future. The AEE considers that adverse effects of future lighting are unlikely as new lighting will likely be installed further from nearby dwellings. The nearest dwellings are 16 and 20 m to the west of the Site at 159 and 163 Barber Rd. Additional dwellings are located 70 m to the north. The AEE also notes the controls on lighting in condition 10 of the existing designation and proposes this condition be carried over (with minor amendments). The AEE concludes that any adverse effects will be less than minor.

Overall I agree with the findings of the AEE that there are unlikely to be any adverse lighting effects arising from the proposal at any location beyond the Site, and any effects will be less than minor. The application proposes to update the wording of condition 10 to reference updated standards, this is because the AS/NZS 4282:1997 Control of Obtrusive Effects of Outdoor Lighting was updated in 2019. I support this change to the wording.

I rely on the expertise of Mr Turner, in that the effects of lighting will be less than minor. Existing Condition 10, as amended by the requiring authority, will ensure that any adverse effects can be avoided, remedied or mitigated.

#### 3.1.2.8 Earthwork effects

Section 4.10 of the requiring authority's AEE addresses earthwork effects. Resource consents for the Bombay ICT Project enabling earthworks (Phase 1) were granted by Auckland Council on 8 June 2020 (BUN60353821).

In regard to future works, the requiring authority considers that these can be managed and mitigated in such that they are no more than minor and can be addressed at the time through the

OPW process. Or through an application for a land use consent for earthworks under the regional provisions of the AUP(OP).

Best practice erosion and sediment control methodologies will be employed for any future earthworks. Sediment run-off will be contained within the site, and dust and sedimentation control measures installed prior to earthworks commencing and only removed once the site is stabilised. This is consistent with the AUP(OP) district plan permitted activity standards. All earthworks will be done in accordance with the Auckland Council Guideline Document 2016/005, *"Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region"* to manage any potential effects from erosion and sediment. Comments:

Mr Arun Niravath, Senior Development Engineer, Auckland Council Regulatory Services has undertaken an assessment of the requiring authority's NoR, AEE and associated technical report.

The Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 (NESTA) applies to the operation, maintenance, upgrading, relocation or removal of existing transmission lines. There is a consent being processed separately to the NoR which relates to the relocation of one of the towers. As this NoR relates to a substation and hard-tee line, the NESETA does not apply to these. Mr Niravath considers the earthworks for the works provided for by the alteration 'are not of a major scale'.

I consider that the earthwork effects will be less than minor associated with the alteration to the designation. I agree with the requiring authority that any potential effects from future works can be addressed through either an OPW or a regional consent (if required under the regional provisions of the AUP(OP)).

#### 3.1.2.9 Effects of potential contaminants and hazardous substances

Section 4.11 of the requiring authority's AEE addresses the effects of potential contaminants and hazardous substances. This includes an explanation of electrical substations being included in the Hazardous Activities and Industry List (HAIL), as defined by the Ministry for the Environment (MfE). The AEE states:

The activities on this list are subject to the National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES Soil). The NES Soil regulations require that any part of the land that may be affected by contaminants in soil is appropriately identified and assessed when soil disturbance and /or land development activities take place and, if necessary, remediated or the contaminants contained to make the land safe for human use<sup>2</sup>. Resource consent for the Bombay ICT Project has been granted under the NES Soil (ref: BUN60353821). This includes a Site Management Plan (SMP) to manage the potential effects of contaminants in soil on the environment and human health, which will be adhered to for the duration of works on the site. Where relevant, any future development will be subject to NES Soil and associated SMP requirements to manage effects.

In relation to hazardous substances, the AEE states:

<sup>&</sup>lt;sup>2</sup> In accordance with Section 43D of the RMA, the NES Soil prevails over the designation where an Outline Plan is required. Except for minor works and maintenance activities, an Outline Plan is typically required in which case the NES Soil would apply.

...the existing substation uses insulating oil in power transformers, circuit breakers and other transmission infrastructure. Transpower has its own standards for oil spill management to avoid, remedy or mitigate any adverse effects, which may occur in the unlikely event of an accident. These standards provide guidelines, including requirements for bunding and requires the preparation of an Oil Spill Management and Contingency Plan. Condition 6 of Designation 8511 requires that any new facility containing oil is designed to comply with Transpower's standards.

Considering the above, the Bombay ICT Project and alteration to the designation is not expected to result in adverse effects in terms of potential contaminants or hazardous substances.

#### Comment:

Mr Ruben Naidoo, Specialist Environmental Health, Resource Consents, has undertaken an assessment of the requiring authority's NoR, AEE and associated technical reports. His comments are as follows:

The existing substation uses insulating oil in power transformers, circuit breakers and other transmission infrastructure. Transpower has its own standards for oil spill management to avoid, remedy or mitigate any adverse effects, which may occur in the unlikely event of an accident. These standards provide design guidelines, including requirements for bunding and requires the preparation of an Oil Spill Management and Contingency Plan.

The installation of a new oil interceptor system will be installed for transformers T4 and T5. The design has been sized to meet the requirements of Transpower standard TP.DS 54.01 Issue 1 – Substation Oil Containment Systems. in this regard condition 6 shall be retained. Condition 6 of existing Designation 8511 requires that any new facility containing oil shall be designed to comply with Transpower's Oil Spill Management Policy

Mr Naidoo considers that the effects associated with the alteration are less than minor.

I adopt the findings of Mr Naidoo in that the effects will be less than minor. I agree with the requiring authority that the existing condition (Condition 6) and regional consents in accordance with NES Soils will ensure that the effects of any future works will be mitigated.

#### 3.1.2.10 Effects on overland flow paths and flooding

Section 3.1.5 of the requiring authority's AEE discusses the proposed stormwater drainage while Section 4.12 provides a brief summary of the effects on overland flow paths and flooding. Section 4.12 states:

An overland flow path identified on the Auckland Council GeoMaps traverses through the site. These overland flow paths are identified as the predicted path that stormwater takes in a rain event as it flows downhill over the land. The specific overland flow path that is identified runs through the operational substation site and an adjacent building. The site has already been heavily modified and includes drainage to manage stormwater flows so as to minimise flooding on the site. On this basis it is unlikely that the flow path exists as currently indicated on GeoMaps.

In any case, stormwater will managed on site to address the effects of potential flooding or pooling effects such that there are no off-site effects. The effects of potential flooding impacts are considered to be less than minor.

#### Comment:

Ms. Paula Vincent, Principal – Planning, from Auckland Council's Healthy Waters Department has undertaken an assessment of the requiring authority's AEE and associated plans. Her comments are below:

Given the scale and location there aren't significant enough effects to trigger notification. It should be adequate to consider the detail on discharge management at the regional consent stage.

I agree with Ms Vincent. I consider the stormwater effects of the alteration to be less than minor. Any future works on the site are likely to trigger the regional provisions in Chapter E Aucklandwide in the AUP(OP) including those for stormwater discharge and diversion.

#### 3.1.2.11 Heritage and archaeological effects

The requiring authority has provided an assessment on heritage and archaeological effects, with a summary in Section 4.13 of its AEE, and associated technical report, CFG Heritage, in Appendix D. The AEE states:

While is considered unlikely that anything of any archaeological value will be identified during the proposed works, it is noted that the wider Bombay area has pre-European, Māori occupation and that it was likely used for occupation and cultivation (this is discussed in detail in the Archaeological Assessment). Therefore, if the accidental discovery of archaeological or culturally significant sites occurs during works, Accidental Discovery Protocols (ADP) will be implemented consistent with those set out the AUP. The ADP requirements in condition 1 of Designation 8511 will also apply and will be complied with in the event of an accidental discovery. On this basis and in the absence of evidence of archaeological deposits, the effects on archaeological and heritage values are considered to be less than minor.

The requiring authority has proposed an amendment to Condition 1 to update the reference of 'New Zealand Historic Places Trust' to 'Heritage New Zealand Pouhere Taonga'.

#### Comment:

Mr Chris Mallows, Team Leader Cultural Heritage Implementation, Heritage Unit, has undertaken a review of the AEE and associated heritage assessment by CFG Heritage. He agrees with the requiring authority's archaeologist that there are no known archaeological effects in relation to the alteration.

However, he has identified a potential technical issue around Condition 1 of the designation:

If regional consents are required at any point in the future there will be conflict between Condition 1 and the AUP ADR as, should any archaeological sites be uncovered, both Condition 1 and the AUP ADR will need to be followed. The AUP ADR is a little bit more prescriptive than Condition 1.

He considers that this could be addressed by an amendment to Condition 1 to ensure full alignment with the AUP(OP) Accidental Discovery Rule (ADR). He has provided the following proposed advice note:

Should the proposed earthworks result in the identification of any previously unknown sensitive materials (i.e. archaeological sites), the requirements of land disturbance –

District Accidental Discovery Rule (E11.6.1 as at 14 May 2021 or any subsequent update to this rule) set in the Auckland Unitary Plan shall be complied with.

Chapters E11: Land Disturbance – Regional and E12: Land disturbance – District of the AUP(OP) relates to the management of the adverse effects of land disturbance, such as the amount of sediment generated through erosion and discharged into water bodies during earthworks. The management of land disturbance during earthworks extends to the impact on historic heritage, special character and Mana Whenua cultural heritage.

Policies 11.2(a) and 12.3(2)(b) require the avoidance, remediation or mitigation of adverse effects on accidently discovered sensitive material. Policies 11.3(3) and 12.3(4) require the management of earthworks on Mana Whenua cultural heritage that is discovered during land disturbance.

The requiring authority has advised that resource consents for the enabling earthworks for Phase 1 of the Bombay ICT Project were granted by Auckland Council on 8 June 2020 (BUN60353821). This work has largely been completed as discussed in Section 2.4 of this report.

The designation, and as altered once confirmed, sits over the district plan provisions of the AUP(OP). Any future works provided for by the purpose and conditions of the designation would be undertaken through the OPW process if not otherwise waived or if the details are incorporated into a future NoR.

I rely on the expertise of Mr Mallows in regard to there being no known archaeological effects as a result of the alteration to the designation. I agree with Mr Mallows that an amendment is required. However, I proposed that the amendment should be a condition not an advice note and reference E12 not E11:

Should any proposed earthworks result in the identification of any previously unknown sensitive materials (i.e. archaeological sites), the requirements of E12.6.1 Land disturbance – District Accidental Discovery Rule (as at 14 May 2021 or any subsequent update to this rule) of the Auckland Unitary Plan (Operative in part) shall be complied with.

A set of amended conditions was forwarded to Transpower on 4 June 2021. Transpower responded on 8 June 2021 and proposed further minor amendments (refer to Attachment E). This included Condition 4 relating to the accidental discovery rule.

The amended condition reverted the reference back to the regional provisions as previously proposed by Mr Mallows. I agree to this amendment but consider that it should now be an advice note given the reference to E12 – Land disturbance – Regional. A regional consent would be required, as a separate process, if the rule was triggered.

The agreed set of conditions is shown in Section 10 of this report.

#### 3.1.2.12 Effects on other infrastructure

The requiring authority has not specifically considered effects on other infrastructure. However, the AEE does address Counties Power's and Watercare's designations, and associated infrastructure, on the adjacent sites on either side.

In regard to Watercare, the authority's AEE, in paragraph 6.2, states the following:

The property immediately to the south of Transpower's site is an Auckland Councilowned Local Purpose (drainage) reserve designated by Watercare for sewage treatment facilities (Designation 9546). As noted in Section 3, a cable connecting Bay 250 to the new transformers traverses under this property. Transpower has therefore consulted with Auckland Council and associated Council Controlled Organisation (Watercare) and is the process of preparing an easement for this cable route requested by Auckland Council. An email from Watercare confirms that the Bombay ICT Project does not appear to impact on Watercare's assets. This email has been included as Appendix H.

In regard to Counties Power's adjacent site to the north, consultation has been undertaken in conjunction as there is some overlap between the two projects. Counties Power has provided its written approval for the NoR to alter the designation as well as for the realignment of the Huntly-Otahuhu A 220kV transmission line. Counties Power has also provided a letter of support stating its intent to implement its designation (refer to Appendix H of the AEE).

#### Comment:

Mr Lindsay Wilson, Policy Planner, Watercare Services Limited (Watercare) has undertaken a review of the requiring authority's NoR, AEE and associated technical reports. His comments are below:

This proposal does not raise any big issues for Watercare in terms of existing or future assets. As with Counties Power application, this location is already dominated by the National Grid Corridor and Transpower Substation.

There are not significant planned upgrades to the existing Watercare water and wastewater in the area reflecting the surrounding rural production/Rural and Coastal Settlement zoning.

Mr Wilson also noted that Watercare operates the Bombay Wastewater Treatment Plant on Barber Road similar to a septic tank. The current resource consent provides for the discharge of treated wastewater from the system to the land. Transpower are not proposing additional connections to this plant. Mr Wilson did not consider that there was a requirement for any conditions relating to water and wastewater.

I adopt the findings of Mr Wilson. I consider that the effects are less than minor. No additional or amended conditions are recommended.

In regard to Counties Power's site, the works provided for by their recently confirmed designation have commenced. I have no further comments.

#### 3.1.2.13 Effects on private property

The requiring authority has not specifically assessed effects on private property. However Section 6 of the requiring authority's AEE addresses stakeholder engagement and consultation. Transpower has consulted with the following parties:

- mana whenua
- Auckland Council and its CCO, Watercare
- surrounding landowners including Counties Power.

In addition, Section 7 of the AEE provides a notification assessment as required under section 169 of the RMA. Section 7.2 Limited notification specifically addresses whether there are any adversely affected persons as required by Section 149ZCF of the RMA. The AEE states:

...there are no adversely affected persons (ie persons who are affected to an extent that is minor or more than minor). In particular, the LVA concludes that the Bombay ICT Project and future development associated with the alteration to the designation will be seen as appropriate elements within the context of the Bombay Substation, and that landscape and character effects are less than minor. The LVA also concludes that visual amenity effects for surrounding properties will be less than minor. This is addressed in Section 4.3 above and in the LVA...

Transpower does not consider that Watercare is an affected party as confirmation has been received from Watercare that the Bombay ICT Project does not impact on Watercare's assets.

#### Comment:

The requiring authority is the landowner of 153 Barber Road, Bombay (Lot 1 DP 162890, Lot 3 439460) and an adjacent site to the north (Lot 4 DP 135265). A portion of Transpower's site is currently designated. The requiring authority is seeking for the remainder of 153 Barber Road to be designated. As Transpower is the landowner and occupier of 153 Barber Road, no written approvals are required.

Ongoing consultation has been undertaken with Counties Power. Counties Power have purchased a portion of the adjacent site to the north. This site has a recently confirmed designation (Designation 3010) and works have begun on its electricity substation. This site also is subject to the provisions of various Infrastructure: National Grid overlays in the AUP(OP). Counties Power, and the landowner of the remaining portion of that site, have both provided written approvals as an affected party.

I agree with the requiring authority that Watercare is not an affected party. While a cable is to traverse Watercare's land, the approvals for this were subject to a separate resource consent process. Transpower is also in process of preparing an easement with Auckland Council.

The requiring authority has advised that the consultation process is ongoing. Transpower's and Counties Power's intention is to host a joint visit site event. This is likely to be with mana whenua, surrounding landowners and occupants, and local board members.

Additional consultation has occurred since the NoR was lodged. An email, dated 2 June 2021, from John Sutherland on behalf of Transpower states:

Two visits to 159 Barber Road and one visit to 163 Barber Road were undertaken by Transpower post-lodgement of the Notice of Requirement. The purpose of the visits to these properties was to inform the landowners of the upcoming construction works at the site, timeframes, etc.

I agree that the effects of the alteration in regard to private property are less than minor. As discussed further below in Section 3.2, I also agree with the requiring authority that there are no affected persons under sections 149ZCF(1) to (3).

#### 3.1.3 Adverse effects conclusion

Based on the information provided by the requiring authority, including the further information provided pursuant to section 92 of the RMA, I consider that overall the adverse effects are less than minor for the following reasons:

- the environmental effects are not considered significantly greater than those effects resulting from the permitted baseline
- the effects on persons who have provided their written approval are disregarded
- the written approvals provided with the NoR have not been withdrawn prior to council's decision on whether there are any affected persons
- the environmental effects are localised, temporary in nature and can be avoided, mitigated or remedied through the proposed conditions.

#### 3.1.4 Special circumstances and general discretion

#### Special circumstances

Special circumstances are those that are:

- exceptional or unusual, but something less than extraordinary;
- outside of the common run of applications (NoR in this case) of this nature;
- or circumstances which makes notification desirable, even where the conclusion is that the adverse effects will be no more than minor.

I consider that there are no special circumstances under s149ZCB(4) surrounding this NoR.

#### 3.1.5 Public notification assessment conclusion

The NoR can be processed without public notification for the following reasons:

- the adverse effects are less than minor
- the requiring authority has not requested public notification
- there are no relevant rules or national environmental standards that require public notification
- the written approvals provided with the NoR have not been withdrawn prior to council's decision on whether there are any affected persons
- there are no special circumstances.

#### 3.2 Limited notification assessment (section 149ZCC)

If the NoR is not publicly notified, the council must decide if there are any affected persons, or customary rights or title groups.

A person is affected if the adverse effects of the activity on them are minor or more than minor (but are not less than minor).

The council must also have regard to any statutory acknowledgement under schedule 11 of the RMA. In regard to the subject site, the statutory acknowledgement relevant is that under the Ngāti Tamaoho Claims Settlement Act 2018.

Appendix 21 Treaty Settlement Legislation – statutory acknowledgements of the AUP(OP) lists the areas over which the statutory acknowledgement applies to. These are largely conservation areas or reserves and coastal strips, rivers, streams and creeks and their tributaries. The subject site is not located within any of the listed areas or sites of significance in Appendix 21.

#### 3.2.1 Adversely affected persons assessment (section 149ZCF)

As noted above in Section 3.1.2.13, the requiring authority has provided a notification assessment in Section 7 of its AEE. The requiring authority considers that there are no adversely affected persons under section 149ZCF.

I agree with this assessment, subject to the amended or additional conditions being accepted by Transpower.

A copy of the amended and additional conditions was forwarded to Transpower on 4 June 2021. Transpower responded on 8 June 2021 and proposed further minor amendments (refer to Attachment E).

Disregarding those persons who have provided their written approval, no other person is considered adversely affected by the NoR because:

- the adverse effects of the proposed works on neighbouring sites will be less than minor. These effects principally relate to construction effects, such as increased traffic for the construction works, which is temporary and localised in nature. The proposed conditions, as amended, will ensure that any potential adverse environmental effects will be suitably avoided, remedied or mitigated.
- the provisions of the AUP(OP) in Chapter E26 provides for substations as a permitted activity in the Rural Rural Production zone.
- the written approvals provided with the NoR have not been withdrawn prior to council's decision on whether there are any affected persons
- no customary rights or marine title groups are considered adversely affected.

#### 3.2.2 Limited notification assessment conclusion

Given the assessment above, it is recommended that the NoR be considered on a non-notified basis.

## 4 Local board views

The site is located within the Franklin Local Board area.

Local board views are sought for NoR's which are either being fully notified or limited notified. In this case, the recommendation is for the NoR to be non-notified for the following reasons:

- the adverse effects on the environment have been assessed to be less than minor
- there are no affected persons/parties

 conditions attached to the designation will ensure that any potential adverse effects will be avoided, remedied or mitigated.

## 5 Notification recommendation

This NoR should proceed on a non-notified basis because:

- under s149ZCB (2)(a) the adverse effects on the environment are likely to be no more than minor. Potential adverse effects predominantly relate to traffic generated by construction works and are likely to be temporary and localised in nature. Such effects can be adequately addressed by way of the conditions proposed.
- there is no rule or national environment standard that requires public notification and the requiring authority has not requested it
- under s149ZCB (4) there are no special circumstances to warrant notification
- there are no protected customary right groups or marine title groups in the region affected by this NoR.
- under Section 149ZCF(1) there are no persons considered to be affected persons and written approvals received with the NoR have not been withdrawn prior to council's affected persons decision (Section 149ZCF(3))
- the requiring authority has provided all further information requested by the required date.

Accordingly, I recommend that the notice of requirement for the alteration of Transpower Designation 8511 be processed on a **NON-NOTIFIED** basis.

**Report Prepared by:** 

Date: 15 June 2021

Jo Hart Senior Policy Planner Regional, North, West, and Islands Planning

## 6 Notification determination

Having read the council planner's report and recommendations on the NoR, I am satisfied that I have adequate information to consider the matters required by the RMA and to make a decision under delegated authority.

Under sections 149ZCB, 149ZCC, and 149ZCD of the RMA, this NoR be non-notified because:

- 1. The requiring authority has provided all further information by the required date.
- 2. The adverse effects on the environment will be less than minor.
- 3. There is no rule or national environment standard that requires public notification and the requiring authority has not requested it.
- 4. There are no special circumstances.
- 5. Persons are not adversely affected by the NoR.
- 6. There are no protected customary rights groups or marine title groups in the region affected by this proposal.

Accordingly, this notice of requirement for the alteration to Transpower Designation 8511 shall proceed on a **NON-NOTIFIED** basis.

Name:

Craig Cairncross

Title:

Team Leader – Central South

Signed:

ŝ

Date:

15 June 2021

## 7 PART B: Section 171 recommendation and determination

## 8. Summary

This section of the combined report is limited to the section 171 recommendation on the section 181 notice of requirement for an alteration to the Transpower Designation 8511.

A determination on notification can be found above in Sections 1 to 6 of the report. The reporting planner's recommendation was to process the notice of requirement on a non-notified basis. The Team Leader Central South has considered the notification report and recommended that the notice of requirement should be processed as non-notified (Part A: Section 169 notification recommendation) for the following reasons:

- the adverse effects on the environment of the proposed works are less than minor
- the applicant has not requested public notification
- there is no rule in the AUP(OP) or National Environmental Standard that requires public notification
- there are no special circumstances that warrant notification
- no persons are considered to be adversely affected by the proposal
- there are no affected protected customary rights groups of affected customary marine title groups.

Note that the details of the proposal, site and locality description, and an assessment of effects have been considered within PART A: Section 169 notification recommendation so is not repeated within Part C.

#### 9.0 Section 171 assessment

When considering a requirement, a territorial authority, must, subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to the following:

- (a) any relevant provisions of-
  - (i) a national policy statement:
  - (ii) a New Zealand coastal policy statement:
  - (iii) a regional policy statement or proposed regional policy statement:
  - (iv) a plan or proposed plan; and
- (b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if—

(i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or

- (ii) it is likely that the work will have a significant adverse effect on the environment; and
- (c) whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and
- (d) any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement.

An assessment of environmental effects was undertaken in Part A in section 3.1.2 of this report. I consider that the effects on the environment are less than minor subject to mitigation through amended conditions, as agreed to by Transpower (refer to Section 10).

#### 9.1 Part 2 Resource Management Act 1991

The purpose of the RMA is set out in section 5(1) which is: to promote the sustainable management of natural and physical resources.

Sustainable management is defined in section 5(2) as: ...managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while –

- (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
- (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Section 6 of the RMA sets out the matters of national importance which must be recognised and provided for.

Section 7 of the RMA sets out other matters which shall be given particular regard to.

Section 8 of the RMA requires the principles of the Treaty of Waitangi to be taken into account.

Section 5.3 of the requiring authority's AEE discusses Part 2 matters. I agree with this assessment in that:

- the enhanced ability to distribute electricity to the wider Auckland area will enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety
- the enhanced distribution of electricity will help to sustain the potential of natural and physical resources to meet the reasonably foreseeable needs of the future generations, in particular the existing distribution network in southern Auckland area
- mitigation measures and the proposed designation conditions will safeguard the life supporting capacity of ecosystems and soils
- restrictions, through the imposition of conditions, will ensure that the works will be conducted in a manner that avoids, remedies and mitigates any adverse effects on the environment
- engagement with mana whenua has sought to ensure that the works and management proposed are appropriately aligned to mana whenua values that recognise and provide for the relationship of Māori and their cultural traditions with their ancestral lands, water, sites, waahi tapu, and other taonga

- the proposed works will not compromise the ability of tangata whenua to practice their role and activities as kaitiaki or the ethic of stewardship
- the proposed works, and amendment to the boundary, expands on existing infrastructure and therefore considered to be an efficient use and development of natural and physical resources
- the works will maintain the quality of the environment and amenity of the area. Taking into account the existing environment and proposed landscaping, the proposal maintains and enhances amenity values
- Transpower has taken into account the principles of Te Tiriti o Waitangi within its engagement with mana whenua. Transpower has sought to respect, recognise and provide for the kaitiaki role that mana whenua has in relation to the environment and to nationally ensure that the principles of Te Tiriti o Waitangi have been taken into account.

## 9.2 Section 171(1)(a) – Any relevant provisions of a national policy statement, a New Zealand coastal policy statement, a regional policy statement or proposed regional policy statement, a regional plan, a district plan or proposed district plan.

The requiring authority has done a thorough assessment in relation to the statutory requirements of section 171(1)(a) in Sections 5.4 to 5.8 of its AEE. This includes an assessment against the following:

- National Policy on Urban Development 2020
- National Policy Statement for Freshwater Management 2020
- National Policy Statement on Electricity Transmission 2008
- Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009
- Auckland Unitary Plan Operative in Part
  - Regional Policy Statement Chapter B3 Ngā pūnaha hanganga, kawekawe me ngā pūngao – Infrastructure, transport and energy
  - o Regional Policy Statement Chapter B6 Mana Whenua
  - Chapter E26 Infrastructure
  - Chapter H19 Rural Rural Production Zone

I have undertaken a review of requiring authority's assessment. I agree with the requiring authority that the works are generally consistent with the objectives and policies of the above statutory statements and plans. I have not repeated that assessment in this report.

#### 9.3 Section 171(1)(b) Alternative sites, routes or methods

Section 171(1)(b)(i) establishes that if a requiring authority has an interest in the land sufficient to undertake the works then it is not required to consider alternative sites, routes or methods.

Section 171(1)(b)(ii) does require an assessment of alternatives if there are going to be significant adverse effects arising from the designation. An assessment of the effects undertaken as part of the notification decision in Part A of this report concludes that the environmental effects are less than minor.

Section 5 of the requiring authority's AEE addresses the consideration of alternative sites, routes and methods.

While not a statutory requirement, Transpower has undertaken an assessment of alternatives for the location of where new infrastructure is to be located at the Bombay Substation. The AEE states:

Relevant engineering information was the primary focus to this assessment, however, noise and visual/landscape effects were also included in the assessment to ensure any effects on nearby sensitive activities and the environment were minimised. The proposed location for the new infrastructure has the least noise and visual/landscape effects on nearby sensitive activities and the environment.

I agree with Transpower that:

- there is sufficient interest in the land for undertaking the works
- the alteration to the designation will not have a significant adverse effect on the environment
- consideration of alternative sites, routes or methods is not required.

#### 9.4 Section 171(1)(c) Necessity of Works and Designation

Section 171(1)(c) requires consideration of whether the work and designation are reasonably necessary for achieving the objectives for which the designation is sought.

Section 1.5 of the requiring authority's AEE sets out its objectives and the reasons for the designation. The requiring authority considers that the alteration to the designation is necessary to achieve its objectives.

In regard to necessity of the works and the designation, the AEE concludes:

The National Grid is enduring infrastructure that requires long-term certainty and protection to ensure safe, efficient and resilient transmission of electricity to the local network in the long-term and for future development. In comparison to a designation, other RMA mechanisms such as resource consents or district plan provisions, would not provide the necessary long-term flexibility and certainty, nor would they enable Transpower to respond and react quickly to upgrade requirements to meet demand, or achieve its objective as efficiently and effectively.

Transpower's substations, such as Bombay Substation, are vital and fundamental links in the National Grid, which also provide connection points between the National Grid and the local electricity network. The operation of the National Grid is essential to the economy of New Zealand and the health and wellbeing of its communities. Transpower is committed to ensuring that the National Grid, including its associated substations, meets the current and future needs of electricity consumers (such as industry, business, farming and citizens).

I agree with the requiring authority, in that the alteration will:

 identify the remainder of the site in the AUP(OP) as being part of the National Grid. The amendment to the designation boundary logically reflects the boundary of the National Grid overlay – National Grid substation corridor.

- enable safe, secure and efficient electricity transmission between the National Grid and the local distribution network
- meet the projected load growth and enable long-term security of supply in the southern Auckland area
- provide Transpower with greater certainty to plan for the short, medium, and long-term operation, maintenance, development and upgrade of the site in accordance with the designation
- enable the land subject to the designation to be used for its intended purpose, while accurately specifying the boundaries of the land within which works, subject to the designation conditions, will be undertaken
- provide the flexibility for the requiring authority to upgrade the site in the future to reflect demand and changing technology
- provide the necessary long-term flexibility and certainty for the requiring authority that other RMA mechanisms, such as resource consents, may not necessarily provide. And may cause greater time delays which could jeopardise the objectives for which the work is being undertaken
- the amendment to the designation purpose will better reflect the new infrastructure associated with Phase 2 of the Bombay ICT Project as well as provide for future development and upgrade requirements within Transpower's designation.

#### 9.5 Section 171(d) Any other matters

Section 171(1)(d) requires the council to have particular regard to any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement. In this case the following non-RMA document is considered relevant.

#### 9.5.1 The Auckland Plan 2050

The Auckland Plan 2050 replaced the Auckland Plan 2012 and was adopted by Auckland Council in June 2018. It is Auckland's long-term spatial plan that provides for how Auckland is expected to grow and change over the next 30 years and is required by the Local Government (Auckland Council) Act 2009 to contribute to Auckland's social, economic, environmental, and cultural well-being.

The Auckland Plan 2050 in its *Development Strategy* acknowledges the importance of Auckland's electricity network. It also includes the outcomes *Opportunity and Prosperity* and *Homes and Places* which relates to productivity and employment and access to housing respectively.

I consider the works enabled by the NoR to be consistent with Auckland Plan 2050 in that it will provide for the needs of new development that is currently occurring in the Bombay area, and the wider Auckland region, both residential and rural.

## **10.0** Recommendation and Conditions

That in accordance with section 171(2) of the Resource Management Act 1991, Auckland Council makes the following recommendation to Transpower New Zealand Limited:

- confirm the notice of requirement for an alteration to a designation, known as the Transpower Bombay Electricity Substation, for the purpose of '*Electricity transmission* -*Bombay electricity substation, line connections and associated infrastructure*' in the Auckland Unitary Plan (Operative in Part)
- 2. impose conditions, as amended by the notice of requirement and additional proposed amendments, and include in Chapter K Designations of the Auckland Unitary Plan (Operative in Part).

#### The reasons for these conclusions are:

- i. the notice of requirement is consistent with Part 2 of the RMA in that it enables people and communities to provide for their social, economic, and cultural wellbeing
- ii. the notice of requirement is consistent with and gives effect to the relevant national policy statements and the AUP
- iii. in terms of section 171(1)(b) of the RMA, adequate consideration has been given to alternative sites, routes or methods for undertaking the work
- iv. in terms of 171(1)(c) of the RMA, the notice of requirement is reasonably necessary to achieve the requiring authority's objectives
- v. restrictions, through the imposition of conditions, have been included to avoid, remedy or mitigate the potential adverse effects of the designation.

## **10.1** Recommended Conditions

The recommended conditions are shown below.

Note: The requiring authority's proposed amendments are shown as either strikethrough or underlined. Agreed amendments (between Auckland Council and Transpower) to the requiring authority's proposed conditions are shown in blue.

## **8511 Bombay Electricity Substation**

Designation Number	8511
Requiring Authority	Transpower New Zealand Limited
Location	153 Barber Road, Bombay
Rollover Designation	Yes
Legacy Reference	Designation 85, Auckland Council District Plan (Franklin Section) 2000
Lapse Date	Given effect to (i.e. no lapse date)

## **Purpose**

Electricity transmission - Bombay electricity substation, line connections and associated infrastructure.

## Conditions

1. <u>The Bombay ICT Project shall be undertaken in general accordance with the plans and information</u> <u>submitted within the Assessment of Environmental Effects for the Notice of Requirement reference 'Bombay</u> <u>Substation alteration to designation - Notice of Requirement and AEE', dated 1 March 2021.</u>

An Outline Plan for the Bombay ICT Project shall not be required and is waived, unless there are more than minor changes to the plans and information referenced above, in which case Transpower New Zealand Ltd (Transpower) shall clearly identify these changes and Auckland Council may then require an Outline Plan be submitted in accordance with Section 176A of the RMA.

2. <u>Any new works other than the works provided for within the Bombay ICT Project in Condition 1 above shall</u> <u>be addressed through an Outline Plan where required in accordance with Section 176A of the Resource</u> <u>Management Act 1991.</u>

#### **Cultural / Spiritual**

3. If any urupā, traditional sites, taonga (significant artefacts), or kōiwi (human remains) are exposed during site works, then the following procedures shall apply:

a. Works in the immediate vicinity of the site that has been exposed shall cease;

b. The site supervisor shall immediately secure the area in a way that ensures that any remains or artefacts are untouched;

c. The site supervisor shall notify representatives of relevant tāngata whenua, the New Zealand Historic Places Trust, <u>Heritage New Zealand – Pouhere Taonga</u>, the Auckland Council and, in the case of human remains, the New Zealand Police; and

d. the notification in (c) above shall allow such persons being given a reasonable time to record and recover archaeological features discovered before work may recommence on the exposed site.

#### **Construction and Maintenance Noise**

- 4. All construction work shall be designed, managed and conducted to ensure that construction and maintenance noise from the site does not exceed the limits in NZS6803:1999 Acoustics–Construction Noise.
- 5. Prior to any significant construction work taking place, including any associated significant earthworks, a noise management plan shall be prepared, with the assistance of a suitably qualified and experienced person, that sets out the management procedures in terms of section 8 and Annex E of NZS6803:1999 and the works shall be undertaken in accordance with that noise management plan.

6. The noise management plan required by the above condition 5 shall be submitted to Council's Consents Manager for approval, at least 20 working days prior to the works commencing. The Council's Consents Manager shall respond within 20 working days indicating whether approval is given or refused. Approval shall not be unreasonably withheld.

#### Vibration

 Vibration from all construction activities shall not exceed the limits of, and shall be measured and assessed in accordance with, German Standard DIN 4150-3 (1999-02) Structural Vibration – Effects of Vibration on Structures.

#### **Hazardous Substances**

8. Any new part of the facility containing oil shall be designed to comply with Transpower's Oil Spill Management Policy (TPG:GS.54.01).

#### **Electric and Magnetic Fields (EMF)**

- 9. Any new equipment, including the Bombay ICT Project, shall be designed and operated to limit the electric and magnetic field exposures at or beyond the secure boundary of the substation site to the International Commission on Non-Ionising Radiation Protection, Guidelines for limiting exposure to time-varying electric and magnetic fields (1Hz 100kHz), (Health Physics 99(6):818-836; 2010) (ICNIRP Guidelines). That is the public exposure reference levels of 5 kV/m for electric fields and 200 µT for magnetic flux density at one metre above ground level under maximum normal operating conditions (ie, when there are no faults in the transmission system).
- 10. Within 3 months of completing the Bombay ICT Project, Transpower shall engage a suitably qualified and experienced person to confirm compliance with the ICNIRP guidelines as evidenced by actual measurements of electric and magnetic fields in relevant locations. The report shall be submitted to Auckland Council. In the event of any non-compliance, the report shall demonstrate how compliance can be achieved and the timeline for completion.

#### **Radio Frequency Interference**

11. Any new works or equipment shall be designed to comply with NZS 6869:2004 Limits and Measurement Methods of Electromagnetic Noise from High-Voltage a.c. Power Systems, 0.15 to 1000 MHz.

#### Earth Potential Rise

12. Any new substation earth grids shall be designed, built, and tested to ensure electrical safety at or beyond the designation boundary in accordance with Transpower Standard TP.DS.52.01, Issue 2, January 2005 Issue 3, May 2016.

#### Light Spill

- 13. Any new exterior lighting shall be designed to comply with:
  - a. AS/NZS 1158.3.1:2020 Lighting for Roads and Public Spaces 2005 Part 3.1; and
  - b. Transpower's guidelines and information for switchyard and grounds lighting TP.DS 40.03 and
  - c. AS/NZ 4282:2019 1997, Control of Obtrusive Effects of Outdoor Lighting.

#### **Operational Noise**

14. A noise management plan shall be submitted for any new equipment (such as transformers, fans and circuit breakers) where the noise from such equipment is likely to generate adverse noise effects for any noise sensitive land uses located in the vicinity.

#### Landscaping and visual amenity

- 15. <u>The requiring authority shall ensure that a planted landscaping strip with a minimum width of 10m is</u> established and maintained along the eastern and southern boundaries, and part of the northern and western boundaries, of Lot 1 DP 162890 in accordance with Figure 6 – Mitigation Principles prepared by Isthmus, June 2021.
- 16. <u>The landscaping shall be implemented as soon as practicable in the planting season following inclusion of the designation in the Auckland Unitary Plan.</u>
- 17. <u>The landscaping shall be maintained regularly and kept in a tidy condition, including replacement if any</u> planting dies or becomes over mature. The replacement of any vegetation shall be no later than the next planting season (i.e. April to September) following discovery of the need for replacement.
- 18. Any landscaping required by Condition 15 above may be trimmed or removed where:
  - a) It is necessary in order to remove or reduce any risk to the maintenance or operational integrity of the substations; or
  - b) Future development of National Grid facilities on the site necessitates the removal of any landscaping.
- 19. <u>If development of National Grid facilities on the site necessitates the removal of any landscaping (such as for</u> <u>new line connections), the Outline Plan submitted for these works shall address how the adverse visual</u> <u>effects of any landscaping removal will be avoided, remedied or mitigated.</u>
- 20. <u>A 15 m wide height restriction zone shall be maintained along the eastern and southern boundaries, and part of the northern and western boundaries, of Lot 1 DP 162890 in accordance with Figure 6 Mitigation Principles prepared by Isthmus, June 2021. The height restriction zone extends 15 m into the site from the edge of the planted landscaping strip as shown on shown on Figure 6.</u>
- 21. Within the height restriction zone, a height limit of 15 m applies to any new substation structures and buildings in accordance with this designation (i.e. any new substation structures and buildings that were not existing as at 31 May 2021). For the avoidance of doubt, this height limit does not apply to transmission lines and transmission line support structures.

## **Construction Traffic Management Plan**

22. <u>At least 20 working days prior to the commencement of any significant construction activities on the site,</u> <u>Transpower shall submit a Construction Traffic Management Plan (CTMP) to the Council for certification.</u> <u>The CTMP shall detail traffic management and mitigation measures for delivery of substation equipment and</u> <u>materials and general construction activities including, but not limited to, restricting over dimension loads and</u> <u>otherwise limiting heavy vehicle movements wherever practicable to outside of Bombay School peak drop off</u> <u>and pick up times (being 8:15 to 9 am and 2:30 to 3:15 pm Monday to Friday, excluding school and public</u> <u>holidays).</u>

In relation to the delivery of over dimension loads including transformers, the CTMP shall detail traffic management and mitigation measures within the vicinity of the Bombay Substation (i.e. Barber and Paparata Roads).

#### Advice Notes

1. Any new works or equipment means those works which were not existing prior to the notification of the Auckland Unitary Plan.

2. The requiring authority will obtain an over dimension/ overweight load permit as required from Waka Kotahi NZ Transport Authority with input from Auckland Transport.

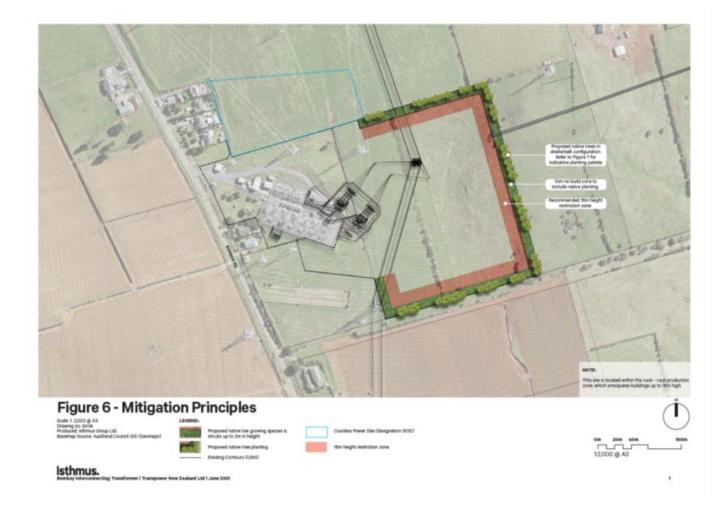
3. Should any proposed earthworks result in the identification of any previously unknown sensitive materials (i.e. archaeological sites), the requirements of E11.6.1 Land disturbance – Regional Accidental Discovery Rule (as at 14 May 2021 or any subsequent update to this rule) of the Auckland Unitary Plan (Operative in part) shall be complied with.

## Attachments

#### **Schedule of Legal Descriptions**

Parcel ID	
Lot 3 DP 439460	
Lot DP 162890	

#### Landscape strip and height restriction area map



**Report prepared by:** Date: 15 June 2021 Jo Hart Senior Policy Planner Regional, North, West and Islands Planning

**Report reviewed by:** 

Name:

Craig Cairncross

Title:

Team Leader Planning Central and South

Signed:

Date:

15 June 2021

# 11. Section 171 Determination

Having read the Council planner's report and recommendations on the NoR, I am satisfied that I have adequate information to consider the matters required by the RMA and to make a decision under delegated authority.

Accordingly, the following recommendations to Transpower New Zealand, under section 171(2) of the Resource Management Act 1991, are:

- 1. to confirm the notice of requirement for an alteration to a designation, known as the Transpower Bombay Electricity Substation, for the purpose of 'Electricity transmission -Bombay electricity substation, line connections and associated infrastructure' in the Auckland Unitary Plan (Operative in Part)
- 2. impose conditions, as amended by the notice of requirement and additional agreed amendments, and include in Chapter K Designations of the Auckland Unitary Plan (Operative in Part).

## The reasons for the recommendation are:

- i. the notice of requirement is consistent with Part 2 of the RMA in that it enables people and communities to provide for their social, economic, and cultural wellbeing
- the notice of requirement is consistent with and gives effect to the relevant national policy ii. statements and the AUP

- iii. in terms of section 171(1)(b) of the RMA, adequate consideration has been given to alternative sites, routes or methods for undertaking the work
- iv. in terms of 171(1)(c) of the RMA, the notice of requirement is reasonably necessary to achieve the requiring authority's objectives
- v. restrictions, through the imposition of conditions, have been included to avoid, remedy or mitigate the potential adverse effects of the designation.

Name:

Craig Cairncross

Title:

Team Leader – Planning Central and South

Signed:

811

Date:

15 June 2021

# 12. PART C: Outline Plan of Works

Transpower considers that an OPW is not required for the works as there is sufficient detail of the Bombay ICT Project incorporated into the NoR in accordance with s176A (2)(b). And that this includes the information required by section 176A(3) of the RMA.

For the requirements of section 176A(2)(b) to be met, the alteration needs to include details on the following:

- the height, shape, and bulk of the public work, project or work
- the location on the site of the public work, project or work
- the likely finished contour of the site
- the vehicular access, circulation, and the provision for parking
- the landscaping proposed
- any other matters to avoid, remedy, or mitigate any adverse effects on the environment.

Section 5.10 of the requiring authority's AEE provides an assessment of the statutory requirements of section 176A(3).

I support the requiring authority's view that an OPW is not required for the proposed works provided for by the alteration to the designation. A review of the AEE and supporting documents has been undertaken by the relevant specialists. Sufficient details have been provided with the NoR and therefore the requirements of section 176(2)(b) of the RMA have been met.

Condition 1 provides for the waiver of the OPW for the Bombay ICT Project. Auckland Council may require an OPW where there are more than minor changes to the works for the Bombay ICT Project or for any other new works.

#### 12.1 Section 176A Outline Plan of Works Recommendation

That pursuant to Section 176A(2)(b), an Outline Plan of Works need not be submitted for the proposed works provided for in Transpower Limited's section 181 Notice of Requirement, 'Bombay Substation alteration to designation, dated 16 April 2021.

Date:

Report prepared by: Jo Hart Senior Policy Planner Regional, North, West and Islands Planning

## 12.2 Section 176A Outline Plan of Works Determination

Having read the Council planner's memo and recommendation on an outline plan of works, I am satisfied that sufficient information has been provided in accordance with section 176A(2)(b) of the Resource Management Act 1991.

Accordingly, an Outline Plan of Works need not be submitted for the proposed works provided for in NZTA's section 181(3) Notice of Requirement, titled "Bombay Substation alteration to designation", dated 16 April 2021.

Name:	Craig Cairncross
Title:	Team Leader – Central and South Planning
Signed:	
Date:	15 June 2021

## SCHEDULE OF ATTACHMENTS

Attachment A:	Section 181 Notice of Requirement	
Attachment B:	Section 92 request	
Attachment C:	Transpower s92 response	
Attachment D:	Landscape and visual assessment	
Attachment E:	Agreed set of conditions	

Attachment B: Changes to text

Note: Amendments to the existing designation conditions are shown as either strikethrough or underlined.

## 8511 Bombay Electricity Substation

Designation Number	8511
Requiring Authority	Transpower New Zealand Limited
Location	153 Barber Road, Bombay
Rollover Designation	Yes
Legacy Reference	Designation 85, Auckland Council District Plan (Franklin Section) 2000
Lapse Date	Given effect to (i.e. no lapse date)

## **Purpose**

Electricity transmission - Bombay electricity substation, line connections and associated infrastructure.

## Conditions

 <u>The Bombay ICT Project shall be undertaken in general accordance with the plans and</u> information submitted within the Assessment of Environmental Effects for the Notice of <u>Requirement reference 'Bombay Substation alteration to designation - Notice of Requirement and</u> <u>AEE', dated 1 March 2021.</u>

An Outline Plan for the Bombay ICT Project shall not be required and is waived, unless there are more than minor changes to the plans and information referenced above, in which case Transpower New Zealand Ltd (Transpower) shall clearly identify these changes and Auckland Council may then require an Outline Plan be submitted in accordance with Section 176A of the RMA.

2. <u>Any new works other than the works provided for within the Bombay ICT Project in Condition 1</u> above shall be addressed through an Outline Plan where required in accordance with Section <u>176A of the Resource Management Act 1991.</u>

#### **Cultural / Spiritual**

3. If any urupā, traditional sites, taonga (significant artefacts), or kōiwi (human remains) are exposed during site works, then the following procedures shall apply:

a. Works in the immediate vicinity of the site that has been exposed shall cease;

b. The site supervisor shall immediately secure the area in a way that ensures that any remains or artefacts are untouched;

c. The site supervisor shall notify representatives of relevant tāngata whenua, the New Zealand Historic Places Trust, Heritage New Zealand – Pouhere Taonga, the Auckland Council and, in the case of human remains, the New Zealand Police; and

d. the notification in (c) above shall allow such persons being given a reasonable time to record and recover archaeological features discovered before work may recommence on the exposed site.

#### **Construction and Maintenance Noise**

 All construction work shall be designed, managed and conducted to ensure that construction and maintenance noise from the site does not exceed the limits in NZS6803:1999 Acoustics– Construction Noise.

- 5. Prior to any significant construction work taking place, including any associated significant earthworks, a noise management plan shall be prepared, with the assistance of a suitably qualified and experienced person, that sets out the management procedures in terms of section 8 and Annex E of NZS6803:1999 and the works shall be undertaken in accordance with that noise management plan.
- 6. The noise management plan required by the above condition 5 shall be submitted to Council's Consents Manager for approval, at least 20 working days prior to the works commencing. The Council's Consents Manager shall respond within 20 working days indicating whether approval is given or refused. Approval shall not be unreasonably withheld.

#### Vibration

 Vibration from all construction activities shall not exceed the limits of, and shall be measured and assessed in accordance with, German Standard DIN 4150-3 (1999-02) Structural Vibration – Effects of Vibration on Structures.

#### **Hazardous Substances**

8. Any new part of the facility containing oil shall be designed to comply with Transpower's Oil Spill Management Policy (TPG:GS.54.01).

#### **Electric and Magnetic Fields (EMF)**

- 9. Any new equipment, <u>including the Bombay ICT Project</u>, shall be designed and operated to limit the electric and magnetic field exposures at or beyond the secure boundary of the substation site to the International Commission on Non-Ionising Radiation Protection, Guidelines for limiting exposure to time-varying electric and magnetic fields (1Hz 100kHz), (Health Physics 99(6):818-836; 2010) (ICNIRP Guidelines). That is the public exposure reference levels of 5 kV/m for electric fields and 200 µT for magnetic flux density at one metre above ground level under maximum normal operating conditions (ie, when there are no faults in the transmission system).
- 10. Within 3 months of completing the Bombay ICT Project, Transpower shall engage a suitably qualified and experienced person to confirm compliance with the ICNIRP guidelines as evidenced by actual measurements of electric and magnetic fields in relevant locations. The report shall be submitted to Auckland Council. In the event of any non-compliance, the report shall demonstrate how compliance can be achieved and the timeline for completion.

#### **Radio Frequency Interference**

 Any new works or equipment shall be designed to comply with NZS 6869:2004 Limits and Measurement Methods of Electromagnetic Noise from High-Voltage a.c. Power Systems, 0.15 to 1000 MHz.

#### **Earth Potential Rise**

12. Any new substation earth grids shall be designed, built, and tested to ensure electrical safety at or beyond the designation boundary in accordance with Transpower Standard TP.DS.52.01, Issue 2, January 2005 Issue 3, May 2016.

#### Light Spill

13. Any new exterior lighting shall be designed to comply with:
 a. AS/NZS 1158<u>.3.1:2020</u> Lighting for Roads and Public Spaces 2005 Part 3.1; and

- b. Transpower's guidelines and information for switchyard and grounds lighting TP.DS 40.03 and
- c. AS/NZ 4282:2019 1997, Control of Obtrusive Effects of Outdoor Lighting.

#### **Operational Noise**

14. A noise management plan shall be submitted for any new equipment (such as transformers, fans and circuit breakers) where the noise from such equipment is likely to generate adverse noise effects for any noise sensitive land uses located in the vicinity.

#### Landscaping and visual amenity

- 15. <u>The requiring authority shall ensure that a planted landscaping strip with a minimum width of 10m is established and maintained along the eastern and southern boundaries, and part of the northern and western boundaries, of Lot 1 DP 162890 in accordance with Figure 6 Mitigation Principles prepared by Isthmus, June 2021.</u>
- 16. <u>The landscaping shall be implemented as soon as practicable in the planting season following</u> inclusion of the designation in the Auckland Unitary Plan.
- 17. <u>The landscaping shall be maintained regularly and kept in a tidy condition, including replacement</u> if any planting dies or becomes over mature. The replacement of any vegetation shall be no later than the next planting season (i.e. April to September) following discovery of the need for replacement.
- 18. Any landscaping required by Condition 15 above may be trimmed or removed where:
  - a) It is necessary in order to remove or reduce any risk to the maintenance or operational integrity of the substations; or
  - b) Future development of National Grid facilities on the site necessitates the removal of any landscaping.
- 19. If development of National Grid facilities on the site necessitates the removal of any landscaping (such as for new line connections), the Outline Plan submitted for these works shall address how the adverse visual effects of any landscaping removal will be avoided, remedied or mitigated.
- 20. <u>A 15 m wide height restriction zone shall be maintained along the eastern and southern</u> boundaries, and part of the northern and western boundaries, of Lot 1 DP 162890 in accordance with Figure 6 – Mitigation Principles prepared by Isthmus, June 2021. The height restriction zone extends 15 m into the site from the edge of the planted landscaping strip as shown on shown on Figure 6.
- 21. Within the height restriction zone, a height limit of 15 m applies to any new substation structures and buildings in accordance with this designation (i.e. any new substation structures and buildings that were not existing as at 31 May 2021). For the avoidance of doubt, this height limit does not apply to transmission lines and transmission line support structures.

#### **Construction Traffic Management Plan**

22. <u>At least 20 working days prior to the commencement of any significant construction activities on</u> <u>the site, Transpower shall submit a Construction Traffic Management Plan (CTMP) to the Council</u> <u>for certification. The CTMP shall detail traffic management and mitigation measures for delivery of</u> substation equipment and materials and general construction activities including, but not limited to, restricting over dimension loads and otherwise limiting heavy vehicle movements wherever practicable to outside of Bombay School peak drop off and pick up times (being 8:15 to 9 am and 2:30 to 3:15 pm Monday to Friday, excluding school and public holidays).

In relation to the delivery of over dimension loads including transformers, the CTMP shall detail traffic management and mitigation measures within the vicinity of the Bombay Substation (i.e. Barber and Paparata Roads).

#### Advice Notes

1. Any new works or equipment means those works which were not existing prior to the notification of the Auckland Unitary Plan.

2. The requiring authority will obtain an over dimension/ overweight load permit as required from Waka Kotahi NZ Transport Authority with input from Auckland Transport.

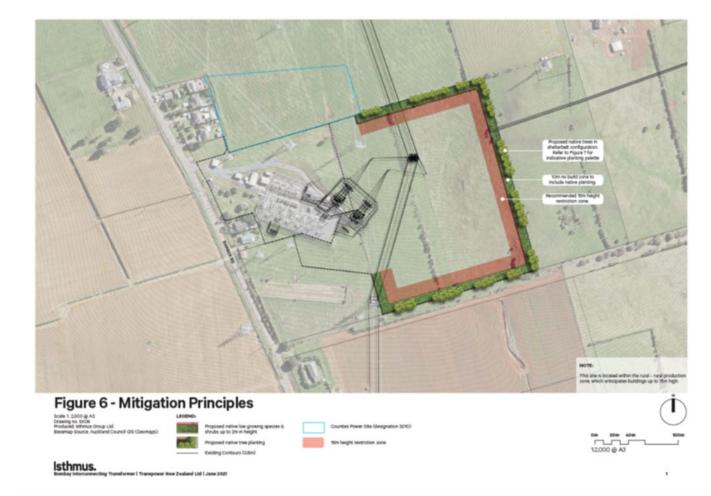
3. Should any proposed earthworks result in the identification of any previously unknown sensitive materials (i.e. archaeological sites), the requirements of E11.6.1 Land disturbance – Regional Accidental Discovery Rule (as at 14 May 2021 or any subsequent update to this rule) of the Auckland Unitary Plan (Operative in part) shall be complied with.

## Attachments

#### **Schedule of Legal Descriptions**

Parcel ID	
Lot 3 DP 439460	
Lot DP 162890	

#### Landscape strip and height restriction area map



Attachment C: Updated Text

## **8511 Bombay Electricity Substation**

Designation Number	8511
Requiring Authority	Transpower New Zealand Ltd
Location	153 Barber Road, Bombay
Rollover Designation	Yes
Legacy Reference	Designation 85, Auckland Council District Plan (Franklin Section) 2000
Lapse Date	Given effect to (i.e. no lapse date)

# **Purpose**

Electricity transmission - Bombay electricity substation, line connections and associated infrastructure.

## Conditions

1. The Bombay ICT Project shall be undertaken in general accordance with the plans and information submitted within the Assessment of Environmental Effects for the Notice of Requirement reference 'Bombay Substation alteration to designation - Notice of Requirement and AEE', dated 1 March 2021.

An Outline Plan for the Bombay ICT Project shall not be required and is waived, unless there are more than minor changes to the plans and information referenced above, in which case Transpower New Zealand Ltd (Transpower) shall clearly identify these changes and Auckland Council may then require an Outline Plan be submitted in accordance with Section 176A of the RMA.

2. Any new works other than the works provided for within the Bombay ICT Project in Condition 1 above shall be addressed through an Outline Plan where required in accordance with Section 176A of the Resource Management Act 1991.

#### Cultural / Spiritual

3. If any urupā, traditional sites, taonga (significant artefacts), or kōiwi (human remains) are exposed during site works, then the following procedures shall apply:

a. Works in the immediate vicinity of the site that has been exposed shall cease;

b. The site supervisor shall immediately secure the area in a way that ensures that any remains or artefacts are untouched;

c. The site supervisor shall notify representatives of relevant tangata whenua, Heritage New Zealand – Pouhere Taonga, the Auckland Council and, in the case of human remains, the New Zealand Police; and

d. the notification in (c) above shall allow such persons being given a reasonable time to record and recover archaeological features discovered before work may recommence on the exposed site.

#### **Construction and Maintenance Noise**

4. All construction work shall be designed, managed and conducted to ensure that construction and maintenance noise from the site does not exceed the limits in NZS6803:1999 Acoustics– Construction Noise.

5. Prior to any significant construction work taking place, including any associated significant earthworks, a noise management plan shall be prepared, with the assistance of a suitably qualified and experienced person, that sets out the management procedures in terms of section 8 and Annex E of NZS6803:1999 and the works shall be undertaken in accordance with that noise management plan.

6. The noise management plan required by the above condition 3 shall be submitted to Council's Consents Manager for approval, at least 20 working days prior to the works commencing. The Council's Consents Manager shall respond within 20 working days indicating whether approval is given or refused. Approval shall not be unreasonably withheld.

#### Vibration

7. Vibration from all construction activities shall not exceed the limits of, and shall be measured and assessed in accordance with, German Standard DIN 4150-3 (1999-02) Structural Vibration – Effects of Vibration on Structures.

#### **Hazardous Substances**

8. Any new part of the facility containing oil shall be designed to comply with Transpower's Oil Spill Management Policy (TPG:GS.54.01).

#### **Electric and Magnetic Fields (EMF)**

9. Any new equipment, including the Bombay ICT Project, shall be designed and operated to limit the electric and magnetic field exposures at or beyond the secure boundary of the substation site to the International Commission on Non-Ionising Radiation Protection, Guidelines for limiting exposure to time-varying electric and magnetic fields (1Hz – 100kHz), (Health Physics 99(6):818-836; 2010) (ICNIRP Guidelines). That is the public exposure reference levels of 5 kV/m for electric fields and 200  $\mu$ T for magnetic flux density at one metre above ground level under maximum normal operating conditions (ie, when there are no faults in the transmission system).

10. Within 3 months of completing the Bombay ICT Project, Transpower shall engage a suitably qualified and experienced person to confirm compliance with the ICNIRP guidelines as evidenced by actual measurements of electric and magnetic fields in relevant locations. The report shall be submitted to Auckland Council. In the event of any non-compliance, the report shall demonstrate how compliance can be achieved and the timeline for completion.

#### **Radio Frequency Interference**

11. Any new works or equipment shall be designed to comply with NZS 6869:2004 Limits and Measurement Methods of Electromagnetic Noise from High-Voltage a.c. Power Systems, 0.15 to 1000 MHz.

#### **Earth Potential Rise**

12. Any new substation earth grids shall be designed, built, and tested to ensure electrical safety at or beyond the designation boundary in accordance with Transpower Standard TP.DS.52.01, Issue 3, May 2016.

#### Light Spill

13. Any new exterior lighting shall be designed to comply with:a. AS/NZS 1158.3.1:2020 Lighting for Roads and Public Spaces Part 3.1; and

b. Transpower's guidelines and information for switchyard and grounds lighting TP.DS 40.03 and

c. AS/NA 4282:2019, Control of Obtrusive Effects of Outdoor Lighting.

#### **Operational Noise**

14. A noise management plan shall be submitted for any new equipment (such as transformers, fans and circuit breakers) where the noise from such equipment is likely to generate adverse noise effects for any noise sensitive land uses located in the vicinity.

#### Landscaping and visual amenity

15. The requiring authority shall ensure that a planted landscaping strip with a minimum width of 10m is established and maintained along the eastern and southern boundaries, and part of the northern and western boundaries, of Lot 1 DP 162890 in accordance with Figure 6 – Mitigation Principles prepared by Isthmus, June 2021.

16. The landscaping shall be implemented as soon as practicable in the planting season following inclusion of the designation in the Auckland Unitary Plan.

17. The landscaping shall be maintained regularly and kept in a tidy condition, including replacement if any planting dies or becomes over mature. The replacement of any vegetation shall be no later than the next planting season (i.e. April to September) following discovery of the need for replacement.

18. Any landscaping required by Condition 15 above may be trimmed or removed where:

a) It is necessary in order to remove or reduce any risk to the maintenance or operational integrity of the substations; or

b) Future development of National Grid facilities on the site necessitates the removal of any landscaping.

19. If development of National Grid facilities on the site necessitates the removal of any landscaping (such as for new line connections), the Outline Plan submitted for these works shall address how the adverse visual effects of any landscaping removal will be avoided, remedied or mitigated.

20. A 15 m wide height restriction zone shall be maintained along the eastern and southern boundaries, and part of the northern and western boundaries, of Lot 1 DP 162890 in accordance with Figure 6 – Mitigation Principles prepared by Isthmus, June 2021. The height restriction zone extends 15 m into the site from the edge of the planted landscaping strip as shown on shown on Figure 6.

21. Within the height restriction zone, a height limit of 15 m applies to any new substation structures and buildings in accordance with this designation (i.e. any new substation structures and buildings that were not existing as at 31 May 2021). For the avoidance of doubt, this height limit does not apply to transmission lines and transmission line support structures.

#### **Construction Traffic Management Plan**

22. At least 20 working days prior to the commencement of any significant construction activities on the site, Transpower shall submit a Construction Traffic Management Plan (CTMP) to the Council for certification. The CTMP shall detail traffic management and mitigation measures for delivery of substation equipment and materials and general construction activities including, but not limited to, restricting over dimension loads and otherwise limiting heavy vehicle movements wherever practicable to outside of Bombay School peak drop off and pick up times (being 8:15 to 9 am and 2:30 to 3:15 pm Monday to Friday, excluding school and public holidays).

In relation to the delivery of over dimension loads including transformers, the CTMP shall detail traffic management and mitigation measures within the vicinity of the Bombay Substation (i.e. Barber and Paparata Roads).

#### Advice Note

1. Any new works or equipment means those works which were not existing prior to the notification of the Auckland Unitary Plan.

2. The requiring authority will obtain an over dimension/ overweight load permit as required from Waka Kotahi NZ Transport Authority with input from Auckland Transport.

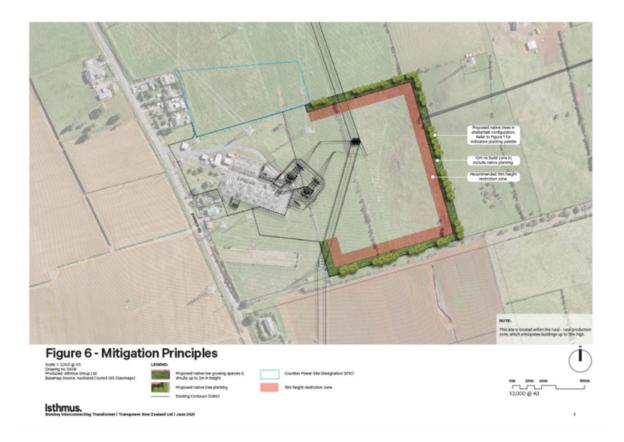
3. Should any proposed earthworks result in the identification of any previously unknown sensitive materials (i.e. archaeological sites), the requirements of E11.6.1 Land disturbance – Regional Accidental Discovery Rule (as at 14 May 2021 or any subsequent update to this rule) of the Auckland Unitary Plan (Operative in part) shall be complied with.

## **Attachments**

#### **Schedule of Legal Descriptions**

Parcel ID	
Lot 3 DP 439460	
Lot DP 162890	

#### Landscape strip and height restriction area map



# Attachment D: Updated GIS Viewer





Whilst due care has been taken, Auckland Council gives no warranty as to the accuracy and completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information. Date: 5/07/2021 Designation 8511 (153 Barber Road) Electricity Transmission Transpower New Zealand Limit



Plans and Places