

Decision No. A **113** /01

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of two appeals pursuant to section 174 of the Act

BETWEEN **NORWEST COMMUNITY ACTION GROUP INCORPORATED**

(RMA 838/00)

First Appellant

AND **RODNEY DISTRICT COUNCIL**

(RMA 841/00)

Second Appellant

AND **TRANSPower NEW ZEALAND LIMITED**

Respondent

BEFORE THE ENVIRONMENT COURT

Environment Judge R J Bollard (presiding)

Environment Commissioner P A Catchpole

Environment Commissioner R S Tasker

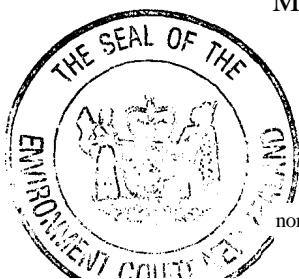
HEARING at **AUCKLAND** on 11, 12, 13, 14, 15, 25, 26, 27, 28 and 29 June; 30 July, 2001

COUNSEL

Mr J M Savage for first appellant

Ms W J Embling and Ms A Bull for second appellant

Mr R B Brabant and Mr A Hazelton for respondent



INTERIM DECISION

Introduction

[1] Transpower New Zealand Limited (“Transpower” or “the company”) is a network utility operator within the meaning of s.166 of the Resource Management Act 1991 (“the Act” or “RMA”). As such, it has applied for and obtained ministerial approval as a requiring authority under s.167 of the Act. Transpower owns and operates electricity transmission lines that serve the greater Auckland area. In the Huapai area the company operates three transmission lines described as:

- The Henderson-Maungatapere 110kV double circuit line constructed in 1959;
- The Henderson-Marsden A 220kV double circuit line (one of which goes to Bream Bay) constructed in 1968;
- The Albany/Huapai 220kV double circuit line (connecting into the Henderson-Marsden A line) constructed in 1977.

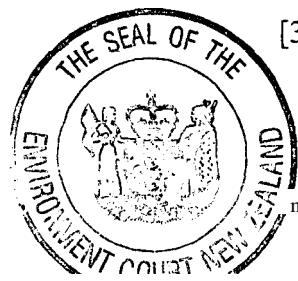
All the lines are supported by pylons of conventional appearance for overhead main-line transmission purposes.

[2] On 7 April 2000, Transpower, through a firm of resource management consultants acting on its behalf, gave notice to the second appellant, the Rodney District Council (“the Council” or “RDC”), of a requirement to designate the property known as 108 Matua Road, Huapai (owned by Transpower), more particularly described as containing 4.31 ha, being Lot 3 DP 148022 and all the land in Certificate of Title 88A/518 (North Auckland Registry). The requirement was for the erection, operation, maintenance and upgrading of a switching station and associated works. Reasons for the designation were stated as follows:

The designation is needed to obtain district council permission to erect, operate and maintain a switching station which will improve the security of electricity supply to the Albany substation.

The designation is also needed to ensure that the site is appropriately identified in the district plan so that the use of the site for electricity works associated with the National Grid is recognised.

[3] After citing the site’s legal description it was noted:



The property is a rear site, with a right of way to Matua Road. Transpower NZ Limited owns the site.

The Kumeu River forms the northern, and part of the western boundaries of the property. The remainder of the western boundary is an ephemeral watercourse. There is also an ephemeral watercourse running through the property. The northern part of the property consists of river flats. The southern part of the property is higher in elevation and forms a terrace.

The site is predominantly open-rural land. Three electricity transmission lines traverse the site. There is an existing house near the southeastern boundary.

[4] Attached to the notice were two annexures and five figures as follows:

Annexure A: Supporting information for Notice of Requirement

Annexure B: Certificate of Title

Figure 1: Location Plan

Figure 2 Existing Site

Figure 3 Site in Relation to Neighbours

Figure 4 Site Layout

Figure 5 Elevations and View (three drawings)

[5] The nature of the work and proposed restrictions were elaborated upon in Annexure A, as were the reasons supporting the designation. The annexure was quite detailed, covering eleven pages. In summarising the nature of the work and proposed restrictions in the body of the notice, the following was stated - (we set forth the details in full so that the jurisdictional question dealt with under a separate head later on can be more easily explained and understood).

<i>Nature of Works</i>	<i>Proposed Restrictions</i>
<p><i>A three circuit breaker switching station is to be erected on the site. This involves various electrical equipment, mostly with a height of 5-7m and gantry structures of approximately 15m in height. A single storey building (approximately 75m² in size) and a telecommunications pole (approximately 30m in height) are also to be erected for control and monitoring purposes.</i></p> <p><i>There will be construction activities for the switching station including earthworks.</i></p>	<p><i>It is proposed to restrict the location of the switching station to an area of less than 4,000m² on the southwestern side of the property generally as shown in Figure 4. Ancillary facilities will also be located on the southwestern side of the property.</i></p> <p><i>It is proposed that information relating to earthworks and sediment control be provided as part of an outline plan. It is expected that earthworks will be required over an area of between 2,000m² and 4,000m² in size. Consent</i></p>



<p><i>The access will be metalled to allow for construction vehicles. A culvert over an ephemeral stream may need to be extended.</i></p>	<p><i>from the Regional Council will be sought if the permitted activity threshold of the Regional Plan: Sediment Control (2,5000m²) is exceeded.</i></p> <p><i>Any works in the ephemeral stream will be undertaken during a dry period. Consent from the Regional Council under s13 RMA will also be sought if the culvert needs to be extended.</i></p>
---	---

[6] Public notification of the requirement for the designation was effected in two local newspapers on 4 May 2000. Notice was also sent to persons in the surrounding area considered likely to be directly affected. Twenty-five submissions were received, all in opposition. A hearing took place on 28 July 2000 before commissioners appointed by RDC. Prior to the hearing, Transpower, through its planning advisors, forwarded amended plans (via letter dated 11 July 2000) with copies to the submitters. The part of the letter relevant for present purposes read as follows:

HUAPAI SWITCHING STATION

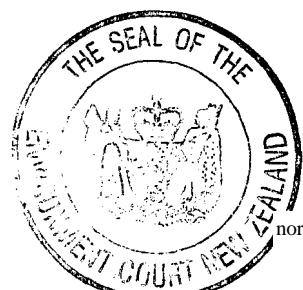
Further to our discussion of 10th July. Please find attached plans of the final design proposals for the proposed Huapai Switching Station which have been forwarded to all submitters.

The site layout plan and elevation drawings included in the designation notice that was lodged with Rodney District, and sent out to affected parties by Transpower, were based on preliminary design information.

Since that time, a detailed design proposal has been produced which has incorporated, as far as practicable, the concerns raised by submitters, and detailed technical requirements.

The most significant changes to the original preliminary design are:

- *The 15m high gantries (which, on the earlier drawing DLID-SW Site Layout, View from Southwest, are the three structures that look like stunted goal posts) are no longer being proposed. Instead they will be replaced with lower post insulators (Just over 5m high) connected by tubular conductors, although some structure will be up to 7m high. (By contrast, the largest existing transmission tower or pylon on the site is approximately 50m high).*
- *The replacement of the gantry structures requires the installation of more post insulators and the area occupied by the switching station will increase from 4000m² to approximately 7250m². However, it is considered that the overall level of effects, particularly visual effects, will be less from this revised proposal.*
- *There will be a standard 20m concrete pole required to hold the conductors (wires) of the 110kV line which passes through the site, so that they do not swing and make contact with the adjacent 220kV conductors and equipment.*



- *The telecommunications pole will be approximately 23m high, rather than the 30m stated originally.*
- *After discussion with some of the submitters on 8th July (meeting in Kumeu Hall), the control building will be shifted further onto the site away from the boundary and this will in turn allow for greater planting of the area.*

[7] By decision dated 22 August 2000, RDC recommended that the requirement be withdrawn for these reasons:

1. *There was insufficient information provided in the Notice of Requirement, and in evidence submitted at the hearing, to demonstrate that the designation of the whole site (4.31 ha) is reasonably necessary for achieving the objectives of the proposed work where this work relates to a significantly smaller area (7,250m²) within the site.*

This has led to considerable uncertainty regarding the designation sought and future development that may occur in accordance with it and importantly the associated effects of it.

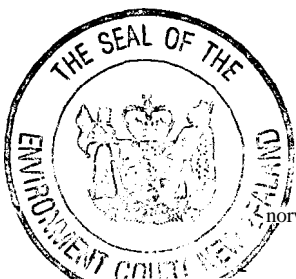
2. *The designation for a proposed switching station is incompatible with the anticipated future use of the surrounding area for urban intensification, as signalled by the Kumeu-Huapai-Waimaku-Structure Plan and the Regional Growth Strategy.*
3. *There was insufficient consideration of alternative sites, particularly in light of the anticipated urbanisation of the surrounding area.*
4. *The requirement is not entirely in accordance with Part II of the Act in that it would not serve to maintain and enhance the amenity values of the area nor the quality of the local environment.*
5. *In terms of the above the requirement as submitted is not considered to be in accordance with sound resource management principles and practice.*

[8] On or about 5 October 2000, Transpower advised the Council and submitters of its decision upon RDC's recommendation as follows (introductory paragraphs and paras. omitted):

Transpower does not accept the recommendation that it should withdraw its requirement for designation of the site at 108 Matua Road, Huapai for the purposes of the erection, operation and maintenance and upgrading of a switching station and associated works.

Transpower accepts in part the first reason for recommending withdrawal of the designation namely that the whole of the site subject to the designation is not reasonably required for achieving the objectives of the proposed work, as the work relates to a significantly smaller area within the subject site.

Transpower's decision amends the designation area so that the part of the site to be designated is the actual area required for the purposes of the switching station and associated works, access and landscaping.



[9] Reasons were advanced in answer to the five matters raised by RDC in its recommendation. In brief, it was claimed that relevant matters under s.271 of the Act had been duly heeded and that environmental concerns would be appropriately addressed and the Act's purpose achieved by the altered footprint for the switching station with a development of lower overall height, coupled with proposed landscape planting.

[10] The requirement was thus confirmed, subject to the designated area being reduced to 2.6752 ha (including an accessway strip, shared in part with other neighbouring landowners, leading to the main body of the site). The decision also specified intended development controls and performance standards in an appendix labelled Appendix 1. An outline plan of works was to be submitted to the Council prior to the commencement of on-site work, dealing with (but not restricted to) landscaping and screen planting, construction management and traffic management.

[11] The portion of the site now intended to be designated lies closest to Matua Road. The balance of 1.6348ha is to remain a non-designated area. A wooden bungalow presently occupies a position close to the eastern boundary. It is proposed to move it onto an adjoining site owned by the appellant more specifically described below (refer paragraph [16]).

[12] Under a head "Development Conditions" in Appendix 1 the following were listed (condition nos. omitted):

Height

The maximum height of equipment within the Switching Station will be as follows:

- *Circuits* 5.7m
- *High level bus conductors* 9m
- *Transmission Pole* 18.5m
- *Control Room* 4.5m
- *Telecommunication Pole* 23.0m

(The height of the two existing towers within the designated area will not be altered as a result of the switching station).

Yards

The switching station equipment (excluding the security fence) is to be cited a minimum of 5m from all boundaries of the designated site.



Site Coverage

The switching station footprint is not to exceed 7250m².

Security Fence

A security fence is to be erected around the switching station. Warning signs are to be placed on this fence and a sign identifying the site as being owned by Transpower New Zealand Limited is to be erected at the site entrance. The sign at the site entrance shall comply with the Council's Signs Bylaw.

Landscaping

The site will be landscaped in locations shown on the outlying landscape plan. A detailed landscape plan will be submitted for approval by Council as part of the outline plan of works required by Section 176A of the Resource Management Act 1991.

[13] Noise level standards, construction controls and the need for compliance with certain internationally recognised guidelines for public exposure to electrical and magnetic fields were stipulated in addition. Reference was also made to the procedure to be adopted in the event of an archaeological site being uncovered in the construction work phase.

[14] Five appeals were lodged following the above decision. Certain appellants decided to pursue their interests through the consortium appeal brought in the name of Norwest Community Action Group Inc ("Norwest"). In the upshot, only two appeals remained outstanding - the first by the Council in support of its stance that the requirement for the switching station should be declined, and the second by Norwest, representing various owners of properties in the immediate vicinity of the site and further afield, all opposed to Transpower's decision.

[15] In opening for Transpower, Mr Brabant indicated that the design layout of the switching station had progressed through a number of options, with the proposed footprint being reduced from 7,250m² (as indicated in the decision) down to 5,634m², or on a "rounded off" basis, 5,650m². He went on to explain:

An earlier design with a site coverage of 4000m² was amended to a larger footprint in order to eliminate 15m high gantry structures and therefore reduce the height of the most visible elements of the development. Now most of the electrical equipment will be five to seven metres in height with high-level bus conductors up to nine metres in height, a standard 18.5 metre high concrete pole to stop the conductors on the Henderson-Mangatapere 110kV line from swinging into the tie down conductors, and a telecommunication pole of some 23 metres to provide essential communication to the control facilities. The control building is 12m x 4.8m in dimension.



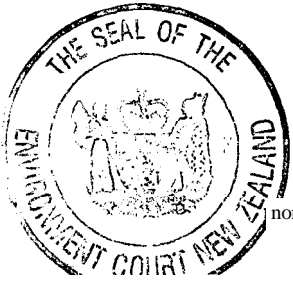
Further Background Concerning Proposal

[16] As noted, Transpower owns the subject site - being a rear site with right-of-way access from Matua Road comprising a largely metalled strip. The accessway runs approximately 400m from Matua Road. The access varies in width from 6m at Matua Road to 12m at a point 62.7m from the road. From that point a separate 6m wide access continues on to the main body of the site. Adjoining the site to the west is a rural property that Transpower likewise owns, with frontage to another local road called Tapu Road.

[17] As the hearing unfolded, it became apparent that the construction phase would create an impact for neighbours whose properties adjoin the right-of-way from Matua Road with the coming and going of heavy vehicles. In deference to concerns over that aspect, Transpower resolved to modify its suggested control governing construction. Heavy vehicle access was to be via the Tapu Road site, subject to any required consent incidental to such access being first sought and obtained.

[18] Around 5,000m³ of earth is calculated to require excavation to form the necessary building platform, with some 2,000m³ comprising topsoil. Earthworks have been designed with the limitation of cutting and filling in mind. It is common ground that those works would require consent of the Auckland Regional Council ("ARC"), in that ARC's Regional Sediment Control Plan requires that consent be obtained for earthworks greater than 0.25ha in area when located within 50m of a river - in this case the Kumeu River. The earthworks consent application would be formulated to embrace earthworks incidental to formation of access to the site through the Tapu Road property. Consent by RDC to access from Tapu Road would also be needed under its proposed district plan labelled "Plan 2000".

[19] Huapai is located about 26km north-west of Auckland via SH 16. Matua Road runs in a northerly direction from the State Highway and turns westwards just before the right-of-way access point to the site. The environment of the general area immediately surrounding the site is rural or rural-residential in character. Properties in the general vicinity range in area from 1,346m² (106 Tapu Road) through to 83.86ha (139 Tapu Road, owned by Mr H Thompson and his wife). A wide valley characterises the area, sloping towards the Kumeu River. The Riverhead State Forest lies to the north-east of steeply rising hills that extend from the valley. Another valley lies beyond to the north-west, known as the Waikoukou Valley.



[20] The site lies above the Kumeu River on the northern boundary. The portion of the site to be designated is at a higher level than the land immediately adjoining the river. The proposed switching station location is at the highest part of the site. Earthworks would be required to construct a level platform to place the development at a suitable level as a safeguard against on-site flooding.

[21] The switching station footprint (demarcated above ground by a perimeter fence for security purposes) is designed and configured so as to lie within and around the area between two existing power pylons or transmission towers described as T401 and T36, respectively 50m and 38.5m in height. We accept the submission and supporting evidence for Transpower, (as confirmed on our inspection of the site and surrounding area at any early stage of the hearing at the parties' invitation), that the existing transmission towers and their associated conductors or transmission lines are visually prominent, both on the site and within the wider valley area. In short, the complex of overhead wires and associated pylons represents a very noticeable and significant man-made feature - the obvious purpose being to serve the urban needs of greater Auckland.

[22] It will be convenient to cite and adopt the following summary of counsel for Transpower in his opening:

... approximately a kilometre to the north-west of the site two transmission lines on towers enter the valley in parallel over the tops of the hills at a point very near to the highest point. They then drop down the valley with the hills forming a backdrop. The lines then traverse the valley in a north-westerly to south-easterly direction through the site then along the valley-floor for a further two kilometres past the site toward Kumeu. At the site itself the circuits from this line separate onto two separate support structures of pylons. There is one circuit on each structure to facilitate the T junction for the Albany-Huapai 220kV line. The Albany-Huapai 220kV line runs towards the Albany sub-station in a generally easterly direction.

[23] We pause to observe that the requirement of Transpower is for a switching station not an electricity sub-station. A facility of the latter kind already exists at Albany and is not intended for repetition as such at Huapai.

[24] Mr A P B Joosten, senior systems engineer for Transpower, discussed how and why the need for the facility arises; further, why it needs to be constructed at, or within 2km of the "T junction" located on the subject site, and either under or close by the electricity transmission corridor. He also explained why, in electrical engineering efficiency terms, the optimum location is at the existing T junction.



[25] We were informed of three transmission supplies into Albany via various lines labelled the “short route”, the “weak route”, and the “long route”. After elaborating on each route and discussing the lack of dependability of the long route at times when the short route is out of service (for example due to a fault), Mr Joosten spoke of a present risk of voltage collapse (total power cut) as regards the “weak route” (33kV load) for about 170hr/year, coupled with a risk of partial power cut as regards the short route (110kV load) for about 850hr/year. He went on to state that-

... the time at risk will increase rapidly as load increases at Albany which is a fast growing area both business and residential. This is because any increase in load simply extends the number of hours per year that the secure capacity of the transmission system is exceeded.

[26] Mr Joosten was cross-examined in detail over the objectives of the project and on issues relating to those matters to which particular regard is required under section 171(1)(a) to (d) of the Act. We found him a steady and convincing witness and accept his assessment that a clear need exists to resolve the security of supply to the Albany sub-station. We also accept that the proposed switching station is a necessary work to address the existing risk of total or partial power cuts in the rapidly-growing Albany area; also that it is needed as part of the development of new infrastructure to provide secure capacity of electricity supply north of the Isthmus generally.

[27] Mr Joosten carefully outlined various options for endeavouring to cope with the “Albany problem”. All in all, his evidence satisfied us that due and adequate consideration has been devoted to alternative methods of achieving the project or work, and that the method proposed of a three circuit-breaker switching station at the location selected is sound and appropriate.

[28] As above noted, there is some flexibility for siting the station a short distance (up to 2km) northwards of the T junction, but that would be less efficient in electrical engineering terms. Put another way, successful establishment of the switching station from a technical feasibility perspective is constrained by the distance factor from the T junction. As Mr Joosten observed:

Every kilometre the switching station is sited north of Huapai represents 2½ years of load growth before the next development is required for security to be maintained.

And later:

Therefore, the best location for the switching station is at Huapai. Although the area up to 5km north of Huapai was studied for potential sites, from a technical view the maximum distance north of Huapai considered prudent is 2km (between towers 41 and 42), otherwise the usefulness of the switching station to provide security to Albany is overly compromised.



[29] While the selected site may be the most efficient in the sense above, the suitability of the site was nevertheless claimed by the appellants to be compromised by reference to other relevant factors bearing on environmental effects and matters of particular regard under section 171(1)(a) to (d). Thus it was contended that the requirement should be cancelled and Transpower's focus of consideration moved to alternative sites within the 2km range of technical feasibility.

Jurisdictional Issue Raised by First Appellant

[30] At the outset of the hearing, counsel for Norwest indicated that he wished to raise a contention that the Court lacked jurisdiction to hear and determine Transpower's proposal in its amended form on account of s.172(2) of the Act that reads:

(2) A requiring authority may modify a requirement if and only if that modification is recommended by the territorial authority or is not inconsistent with the requirement as notified.

[31] It was candidly acknowledged that the point was not cited in Norwest's appeal, although there was an assertion that it had been referred to by Norwest's planning advisor, Mr W H Barker, and at least one submitter at the hearing before RDC. It will be recalled (refer paragraph [6] above) that Transpower proposed in writing to RDC and the submitters prior to the hearing that a larger 7,250m² footprint and lower overall height design be adopted. The modification was proposed in response to concerns raised by submitters in their submissions over the perceived impact as to height (inter alia). The replacement of the relatively high gantry structures necessitated the installation of additional lower-post insulators, thus producing the larger footprint area.

[32] In explanation of the pre-hearing omission to communicate an intention to pursue the jurisdictional issue on appeal, Mr Savage stated that he had been instructed late in the day. Consequently, the issue only became identified in his mind in the course of final preparation in the weekend immediately prior to the hearing.

[33] Counsel for Transpower opposed Mr Savage's contention that the Court should hear and determine the jurisdictional issue as a preliminary matter before proceeding to hear evidence on the case overall. He pointed out that all sides were ready to proceed to hearing on the merits, with witnesses' briefs of evidence having been pre-circulated and arrangements in place for attendance of multiple experts during the Court's sitting time allotted. It was also contended that there was good and sufficient argument to answer Nor-west's assertions on the jurisdictional aspect.



[34] Against this background, it was concluded that the hearing should be allowed to proceed on all aspects, with the Court's view on the jurisdictional question being reserved for resolution in the context of this decision. If Norwest were to succeed on the jurisdictional point, it was acknowledged by Transpower's counsel that consequential costs considerations could very well arise. That acknowledgement was made against the possibility of the Court's consideration on the merits effectively proving a wasted exercise in the event of the requirement having to be re-notified.

[35] By stating in its decision upon RDC's recommendation of withdrawal that the switching station footprint was not to exceed 7,250m², after having stated in the notice of requirement that -

It is proposed to restrict the location of the switching station to an area of less than 4000m² on the South Western side of the property generally as shown in Figure 4.

And by stating in other supporting information supplied under s.168(3) of the Act that -

... a switching station is proposed to cover an area between 2000m² and 4000m² generally in accordance with that shown on Figure 4.

And later:

The switching station requires between 2000m² and 5000m² (sic) of reasonably flat land with well draining soil.

And later again:

Transpower is prepared to accept a condition that the fenced switching station area be located generally as shown on Figure 4 on the southwestern side of the property involving an area of less than 4,000m².

- it is contended for Norwest that Transpower sought to introduce a modification to the requirement of a kind proscribed by s.172(2), so that the company must recommence the designation requirement process by re-notifying what is currently intended - namely, a switching station with a footprint not exceeding 5,650m².

[36] This Court, so it is said, has no authority to uphold a modified footprint area exceeding 4,000m², however worthwhile the modification might appear on evidence presented. That is because that would mean substituting the modified area for that stated at the time Transpower issued the notice of requirement. In other words, with Transpower having given its original indication, the introduction of an enlarged area in the decision following receipt of RDC's withdrawal recommendation, however well-intentioned that modification may have been, produced a breach of s.172(2). That in turn meant that the company was faced with having to re-notify the requirement should



it wish to pursue the aspiration of establishing the switching station at the subject location with a footprint greater than 4,000m²,

[37] The argument for Transpower in response is that an over-narrow approach has been taken on the issue of alleged inconsistency with the requirement as notified. That is asserted on the basis that, in determining whether a breach of s.172(2) has arisen, one cannot decline to examine the comparative visual effects of the height reduction/footprint area modification, viewed in conjunction with proposed landscape planting.

[38] Mr Brabant contended that the present case is distinguishable from *Wellington International Airport Limited v Bridge Street/Coutts Street Subcommittee and Others* (W75/99) where Judge Kenderdine found that -

... any member of the public who examined the present requirement 'as notified' could not have anticipated that at a later stage a significant policy for acquisition of property would be added. It is quite conceivable that there would be members of the public who would have submitted if the original notice of requirement signalled that an acquisition and compensation policy would be a component of the final designation

It was apparent in that case that the subsequent modification sought to be introduced gave rise to a whole new element regarding prospective acquisition of neighbouring land under a compensation policy procedure - that being a matter that should have been contained in the requirement as notified to avoid impermissible inconsistency.

[39] On the other hand, in *Quay Property Management Limited v Transit New Zealand* (W28/00) it was noted by Her Honour's division (pp.42-43) -

A 'modification' is defined as 'an act of making changes to something without altering its essential nature or character'.

- that definition being derived from the New Shorter Oxford Dictionary Vol. 1, p.1804.

[40] Earlier in the decision it was noted (p.26) -

... the content of a notice of requirement resembles that of a check list of factors which are required to be noted or evaluated by a proponent and then put out for public information. Our conclusion on its nature stems in part from s.168(3)(c) which provides for 'the extent to which alternative sites or methods may have been considered and the ways in which effects may be mitigated'. It stems also from s.168(3)(e) which requires a notice of the consultation if any undertaken in the process of putting together the proposal. That provision admits to the possibility that consultation may not have occurred. Section 171 anticipates further modification to the proposal from submissions by including these as matters to have regard to before a final decision is made. From this process we conclude that the notice of requirement per se does not 'ring fence' the proposal in a way which requires it to be undertaken according to the



notice provisions from the outset - or which sets it in stone in a way that the issues it addresses cannot be altered or added to.

[41] We endorse those observations. RDC was, of course, the body vested with jurisdiction under s.171 rather than Transpower. That jurisdiction included the ability either to recommend that the requiring authority confirm the requirement with or without modification on the one hand, or withdraw it on the other. RDC recommended withdrawal and gave its reasons for doing so as required under s.171(3) (see earlier paragraph [7]) No modification by way of an altered height design with a correspondingly enlarged development footprint was recommended as a basis for approving the requirement.

[42] Turning to s.172 (dealing with the requiring authority's decision), having received RDC's recommendation of withdrawal, Transpower was required under subs.(1) to advise RDC within 30 working days whether it accepted or rejected the recommendation in whole or in part. It duly advised RDC of its rejection of the recommendation in whole. By virtue of subs.(2) the only scope that Transpower had for modifying the requirement in the face of RDC's recommendation was to modify the requirement in a way that was not inconsistent with the requirement as notified.

[43] Subsection (3) provides that -

Where a requiring authority rejects the recommendation in whole or in part, or modifies the requirement, the authority shall give reasons for its decision.

The reasons that Transpower gave for reducing the area of the designation and for modifying the switching station footprint were these -

The designation of a reduced area, and the inclusion in the District Plan of a plan and schedule of conditions identifying the area of the designated site and describing the designated purpose together with development conditions and performance standards answers the reason for recommending withdrawal of the requirement, namely that there was considerable uncertainty regarding the designation sought and future development that may occur in accordance with it.

...

In considering whether or not the establishment of the proposed switching station on the designated site would meet the purpose of the Act, all of the provisions of Part II need to be considered in a holistic way. There are district, regional and national matters of importance relating to the development and use of the switching station. The Council was provided with the relevant information and the reports accompanying the Notice of Requirement and the evidence given to the hearing. Transpower amended the requirement prior (to) the hearing by increasing the footprint area on which the switching station and associated works would be established in order to reduce the maximum height of buildings and structures on the designated site. That was to ensure, in conjunction with the landscape planting on the site boundaries, that the visual effects of the development would be no more than minor. This meets the statutory requirements of s.5(2) and pays proper regard to s.7(c) and (f) of Part II.



[44] Plainly enough, Transpower's understanding and purpose was that the decreased height of the switching station, albeit with an increased footprint of 7250m², would improve the visual effect of the proposal, assessed in conjunction with landscape planting at the site boundaries. In our view, in considering whether the height/footprint area modification was "inconsistent with the requirement as notified" it would be wrong to disregard Transpower's reasons for the modification, particularly when subs(3) stipulates that reasons for a modification be given. Those reasons make it plain that it was not just a case of modifying the footprint area, but one of seeking to achieve an enhanced visual outcome with a "flattened" proposal thus mitigating effects.

[45] Instead of incorporating gantry structures 15m in height, components of the switching station are intended to be limited to 9m for high level bus conductors, and 5m to 7m for circuit equipment. Viewed overall, we conclude (as later discussed) that the "lower type" design finally achieved (with a footprint not exceeding 5,650m²) is a positive mitigatory step and a distinct improvement upon the design layout originally proposed; also, that the modification embracing the 7,250m² maximum footprint was a better option in relation to visual effects than the 15m high gantry/smaller footprint design. We also conclude (for reasons later given) that neither modification involves or involved other effects of significance as to render the modification inconsistent with the requirement as notified.

[46] The Act omits to define the term "requirement". However, in the context where the term appears in various sections it appears to mean "order" or "demand". "Designation" is defined in s. 166 as meaning "a provision made in a district plan to give effect to a requirement made by a requiring authority under s.168 or s.168A or cl. 4 of the First Schedule". The straightforward definition of "modification" cited in the *Quay Property Management* case appears to befit the context where the word is used in s.172 and other cognate provisions of the Act. In other words, we see no reason for declining to apply the plain and ordinary meaning of the term as represented by the definition. On this basis, one may enquire whether the changes to the proposed switching station layout in Transpower's decision were such as to alter the essential nature of the project, and render the requirement as modified inconsistent with the requirement as notified.

[47] On the findings on factual aspects that we later reach, we conclude that the modification to the building height associated with the additional footprint area embraced in the decision under appeal was not such as to alter the substance of the requirement. Transpower sought to modify the proposal to assist in reducing the visual impact. In responding as it did to submitters' concerns over the height aspect, the modification included in its decision did not change the material nature of the proposal.



[48] In *Haslam v Selwyn District Council* (1993) 2 NZRMA 628 Judge Sheppard, sitting alone, had to determine whether the relevant district and regional councils as consent authorities had exceeded their jurisdiction by purporting to grant consent for a mushroom composting plant as to a site several hundred metres away from the site that was publicly notified (but still within the applicant's 480 ha farm property). The question was whether the resource consent application proposal had altered to a degree requiring fresh public notification. At p.635 His Honour commented:

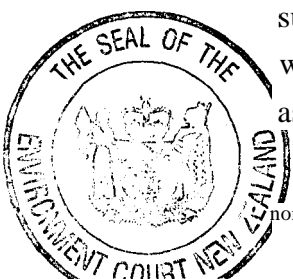
On the one hand there is the desirability of confining consents to the proposals accessible at the time submissions might be lodged. On the other there is the desirability of allowing a practical response to sound points made by submitters or by consent authority's advisers, or even by applicant's advisers, so as to reduce adverse impacts of the proposal or otherwise serve the statutory purpose of sustainable management of natural and physical resources. In my opinion, a better balance between those conflicting values can be achieved by adopting the test of plausibility advanced by Mr Hearn, rather than the test of certainty advanced by Mr Milligan. The application of the test is underlain by the notion of fairness. I therefore ask myself whether it is plausible that any person who did not lodge a submission to either of the subject applications would have done so if the applications had shown the composting site at Site 3 instead of at Site 1.

[49] A little later His Honour went on to say (ibid):

The records of the councils show that 22 submissions were lodged. Nearly all raise objections about odour emission in various ways. I infer that any person who wished to lodge a submission expressing opposition to the proposal because of concern about odour emissions did so without any precise calculation of the extent to which they would in fact be affected if at all. In my judgment, it is not plausible that anyone who did not lodge a submission on the original application would have done so if it had shown the composting site as Site 3 instead of Site 1. I consider that anyone who might have been concerned about the subject proposal being located anywhere on the applicant's property would have lodged a submission, even though the information available for examination at the council offices showed the site as Site 1 (later amended to Site 2).

[50] As in *Haslam*, our view in the present case is that the switching station proposal was modified under Transpower's decision in a way that was understood to mitigate the visual effects of the activity. In substance, however, the proposal remained unaltered. More specifically, it is not plausible that anyone who did not lodge a submission on the original application would have done so had the building height/footprint area modification been notified at the outset. We are satisfied that anyone who wished to lodge a submission would have done so in any event, based on a concern over the switching station in one form or the other being located on the subject site.

[51] A suggestion was advanced that other persons or bodies would have lodged submissions in relation to the modification, having regard to the proposal to establish a walkway more or less along the River alignment. On reviewing the evidence on this aspect and with the precise route still to be determined, we are satisfied that the remarks



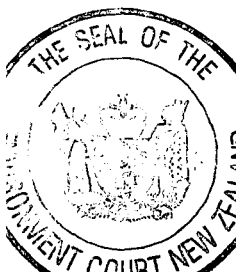
in the previous paragraph remain apt and applicable. We accept Mr Boffa's assessment (refer below at paragraph [107]), and conclude that the modification was not such as to create any material difference to the potential to establish an environmentally appropriate walkway along the river and past the subject site, bearing in mind the screening proposed.

[52] There was also a suggestion that tangata whenua interests would have chosen to lodge submissions on account of the enlarged footprint's relative proximity to the Kumeu River. Evidence was adduced for Norwest from an iwi representative, Mr E Uruamo, who stated that local iwi groups were consulted over the proposal on the understanding that the footprint for the facility was to be 4000m². He went on to voice concern over alleged lack of consultation over the larger footprint proposal. It was apparent from his evidence, however, that the main concern from the tangata whenua perspective was the adequacy of sediment control and avoidance of contaminants in the River through earthworks associated with construction. That position was confirmed by Ms L M Hughes, a qualified planner called for Transpower and involved on the company's behalf in pursuing consultative steps with tangata whenua interests. We accept her evidence that the consultation process was undertaken in a thorough way, as to ensure that those concerned were sufficiently acquainted with the nature of the project and related issues.

[53] The matter of potential effects from earthworks is one falling within ARC's domain, inasmuch as that aspect of construction activity (should the requirement be upheld) is dependent upon Transpower obtaining consent from ARC. (This point is earlier noted at paragraph [18]). Any potential effects from earthworks upon the River come effectively under ARC's consent process, with any related concerns of tangata whenua being able to be addressed accordingly.

[54] All things considered, we do not perceive any material factor of adverse effect upon the environment in relation to the modification that Transpower made that establishes a need for re-notification of the requirement. In short, upon due examination and assessment, we find that the requirement with the modification, is not inconsistent with the requirement as notified for the purposes of s.172(2).

[55] In concluding for reasons stated in the above paragraphs, and in our later consideration of environmental effect issues, that the modification is "not inconsistent", we observe that in *NZ Meat Processors v Alliance Freezing Company (Southland) Ltd* [1990] NZILR 1071, a case involving labour grievances, the Court of Appeal cited the following definition of "inconsistent" from the Oxford English Dictionary (2nd ed): not agreeing in substance, spirit or form; not in keeping; not consonant or in



accordance; at variance, discordant, incompatible, incongruous”. In deciding whether a contractual provision at issue in that case was inconsistent with a relevant labour award provision, the answer was found to lie in a comparison of the two. The basic question postulated was “whether the 2 provisions can live together as terms of the contract of employment.”(p. 1077)

[56] By analogy, we have sought in the present case to compare what was originally proposed with the proposal as modified. In so doing, we have considered whether the modification failed to agree in substance with the notice of requirement as to be incompatible with it.

[57] In our assessment, what Transpower did in its decision was to make changes without altering the essential nature or character of what was proposed - that is, the company made a modification that was not at odds with the substance of what was intended by the notice of requirement all along, namely the construction of a three circuit-breaker switching station on the subject site. The “lower profile” design was conceived purely out of a desire to lessen opposition to the proposal. Had the modification (viewed in its full concept) been included in the requirement as notified, we are satisfied that the material nature of the requirement would have remained constant from the perspective of anyone wishing to lodge a submission. That was effectively reinforced in evidence of various lay witnesses for Norwest, to the effect that their fundamental concern was the presence of a switching station on the subject site by its very nature, irrespective of the design as notified or the “flatter form” as modified.

Matters of Particular Regard under s.171(1)

- (a) **Whether the designation is reasonably necessary for achieving the objectives of the project or work for which the designation is sought.**

[58] Transpower has determined in the light of consultants’ reports and expert advice received that in order to achieve the objectives of the switching station project, namely to achieve appropriate security of electricity supply, particularly in relation to the expanding Albany area, it is reasonably necessary for the company, as a designating authority, to seek that the subject site be designated.

[59] With the area for designation having been reconsidered and reduced, we consider on weighing the evidence that the 2.6ha (approx) now identified, is reasonably necessary for achieving the objectives above-stated. Unlike the recent case of *Bungalo Holdings Limited v North Shore City Council* (Decision A052/01) where the area to be designated was of critical concern, the focus in this instance was more upon the



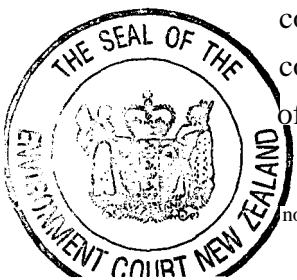
question of alternative sites consideration to which we come shortly. We nonetheless adopt the detailed reasoning advanced in the *Bungalo* decision to the effect that s. 171(1)(a) calls for particular regard to be had to more than just the need to invoke the designation procedure as a planning mechanism. Regard should be directed to the wider issue whether the work or project itself is reasonably necessary as to warrant the designation.

[60] In this instance, the reasonable necessity for the work itself was amply demonstrated by the evidence for Transpower, particularly that of Mr Joosten. The aim of effectively addressing the “electricity supply problem” stands to be materially assisted by the work intended under the designation. That project or work will facilitate provision of a more reliable supply of electricity to different parts of greater Auckland, particularly Albany, through an enhanced ability to accommodate varying power demands at different times or periods. Moreover, on the evidence presented, the three circuit-breaker facility proposed is the most appropriate form or type of switching facility for performing the function necessary to achieve the relevant security of supply objective on a cost effective footing.

[61] Some suggestion was raised for the appellant parties that the designation technique ought not to have been adopted as such. Given the nature of the project or work, we consider that it was open to Transpower as a designating authority to decide that the designation technique should be followed in preference to other possible means such as a resource consent application or proposed plan change. In the circumstances, the procedure was a reasonably necessary means for ensuring that the requirement for the designation (in the wider sense recognised in *Bungalo*) would be considered under due process by RDC as the territorial authority for the district with participation and input from people resident in the Huapai North area.

(b) Whether adequate consideration has been given to alternative sites, routes, or methods of achieving the project or work.

[62] This aspect of the case proved a major source of contention during the hearing, in that it was the position of many of the objecting residents called for Norwest that the company had failed to give adequate consideration to alternative sites. There appeared to be a general acceptance that, for technical reasons explained by Mr Joosten, a switching station, if implemented, would need to be sited within the ambit of technical feasibility earlier mentioned (see paragraph [28] above). But it was Norwest’s contention that, given that ambit, the company had selected the subject site on a pre-conceived footing, and then sought to justify it by belated and inadequate investigation of other possibilities north of Huapai.



[63] Having perused the reports that were obtained, initially from Beca Carter Hollings and Ferner Ltd (Beca Carter) and later from Meritec Ltd (Meritec), and having heard the evidence bearing on alternative sites from witnesses called for the company, we are not persuaded that the company's consideration of the issue was inadequate. We have given particular consideration to all that was stated by Mr D T Almond, a senior consultant from Meritec, by Mr D A Burns, a senior engineering geologist of the same firm, by Mr D Le Marquand, a resource management consultant with the firm Burton Consultants, and by Mr F Boffa, a landscape architect of considerable experience and principal of Boffa Miskell Ltd; also to Mr Joosten's evidence in response to searching cross-examination by Mr Savage at a late point in the hearing when Mr Joosten was recalled in order to formally produce the Beca Carter report (to which various references had earlier been made during the hearing). We have also considered the views expressed by other parties' witnesses, particularly Mr Barker for Norwest and by a planning witness called for RDC, Mr L J Simmons.

[64] On the overall issue of possible location, we were left with the clear impression that alternative sites within the technically feasible range to the north would give rise to argument on environmental grounds, and be likely to encounter opposition from rural-residential landowners within the succeeding valley catchment. On that score it could conceivably be contended that a facility of this kind, being geared to serve urban needs and described by Norwest's planning witness as akin to an industrial facility, ought reasonably to be located peripherally to the Huapai future urban area - that is to say, in the vicinity of the subject site. As non-residential uses go, the switching station would be a relatively "mute" form of urban activity. Hence, so it might be said, the structure planning for the area could be suitably formulated, not only to take account of the transmission line corridors that traverse the area, but also the switching station located at or near the transmission line junction, and in terms of land use efficiency within the main corridor.

[65] It was suggested during the hearing that Transpower had purchased the subject site before an assessment of alternative sites was undertaken. We accept the submission of counsel for Transpower that that assertion was incorrect, inasmuch as the Beca Carter report was completed and forwarded to Transpower on 2 August 1999, the company's purchase having occurred after that date.

[66] We also accept the submission that location of the switching station within the transmission line corridor is a reasonable basis of approach for siting a facility such as this where opportunities for use and development of such land for other future urban purposes would be limited.



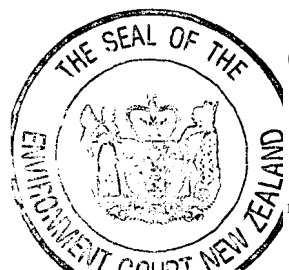
[67] Mr Barker pointed in his evidence to an alternative site possibility within Mr Thompson's land block, considered by him a clearly superior option. Somewhat ironically, Mr Thompson himself, while appearing as a witness for Norwest, declined to endorse the notion that any suitable option was available for Transpower to take up within his property. Be that as it may, evidence called for the company from Mr Boffa served to demonstrate that Mr Barker's assessment was open to argument - to the point that we were unable to conclude with any confidence that the alleged "better alternative" would indeed fit that description, whether in terms of visual impact, logistics of construction from an engineering perspective, or necessary removal of vegetation.

[68] We appreciate that various witnesses for Norwest and others no doubt within the general community of Huapai North sincerely believe that another alternative (whether in terms of the site or method chosen) could have and should have been selected and pursued by the company. Nevertheless, on the evidence adduced, we find that the method for achieving the project or work has been adequately researched and considered, in the context of which the proposed three circuit-breaker switching station has emerged as the preferred option, both in terms of viability and efficiency. As to site or route options, having considered alternatives within the technically feasible range evident on investigation, the consideration applied by or on behalf of the company for the purpose of s.171(1)(b) was in our judgment adequate. The company was not required to identify the best site but to adequately consider alternatives and determine the suitability of the site chosen. Such a process was pursued by seeking expert input and advice from the independent firms of consultants earlier mentioned.

[69] On reviewing all before us, we are satisfied that the company has given adequate consideration to alternative sites, routes, or methods of achieving the project and that the subject site has been reasonably selected as an option for achieving the project or work. That is so against the background of the control framework that Transpower is ready and willing to accept in order to ensure that an appropriate environmental outcome is achieved, consistent with the Act's purpose and having regard to relevant planning instruments.

(c) **Whether the nature of the project or work means that it would be unreasonable to expect Transpower to use an alternative site, route, or method.**

[70] Bearing in mind the conclusions reached in our discussion of paragraphs (a) and (b) above, we consider that it would be unreasonable to expect an alternative to be employed by Transpower, whether in terms of site, route or method. For reasons later



appearing, we consider that the switching station can be suitably constructed and located at the subject site (subject, however, to the obtaining of necessary consents pertaining to earthworks and site access from ARC and RDC). We accept the submission of counsel for Transpower that the limiting factors for the project or work are such that, with the switching station option having been reasonably researched and adopted as the intended method, the practicalities of implementation are such that it would be unreasonable to expect Transpower to use a site beyond the range of feasibility previously noted. Further to that, provided the activity can be satisfactorily accommodated on the subject site by reference to relevant considerations and requirements under the RMA, it would be unreasonable in the light of the investigations and analysis undertaken in relation to the project to expect Transpower to use a site elsewhere within the specified range or area.

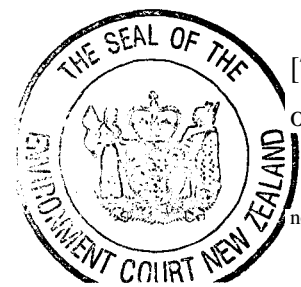
(d) Relevant provisions of planning instruments.

[71] A comprehensive body of evidence was adduced in reference to relevant planning provisions through the planning witnesses. Attention was drawn to the following instruments at district planning level:

Rodney District Plan 1993, operative since 15 March 1993.

- Proposed Plan Change 26 which introduced new provisions for residential development, including future urban zoning provisions. There is no appeal outstanding affecting pertinent provisions of this plan change.
- Proposed Plan Change 55, notified on 12 October 1995, under which new provisions for rural areas were introduced. The change is not far from attaining operative status, with a small number of outstanding appeals awaiting determination by this Court.
- Proposed Plan Change 61 which introduced a new section or chapter dealing specifically with utility services. Submissions and further submissions are before the Council for hearing and determination.
- Proposed Rodney District Plan 2000, notified on 28 November 2000, with the period for receipt of submissions having closed at the end of June this year, and the Council being in the course of organising its hearings process.

[72] On the regional planning front, Mr Simmons noted that the Council has been co-operating with other Auckland councils as part of the Auckland Regional Growth



Forum in attempting to identify a growth strategy for the whole region. The strategy thus far developed, termed the Auckland Regional Growth Strategy 2050, includes Kumeu-Huapai as one of the (few) perceived areas outside the metropolitan urban limits with potential for new residential development.

[73] Emphasis was also placed by Mr Simmons, supported by Mr Barker, on Chapter 2 of the Auckland Regional Policy Statement (RPS). We were referred to paragraphs 2.5.1 which sets out Strategic Objectives, 2.5.2 Strategic Policies and 2.6.1 Policy: Urban Growth Management. Certain provisions of Policy 2.6.1.2 were particularly pointed to. Subclauses (iv) and (v) were noted as referring to existing and new infrastructure on the basis that such infrastructure is to be operated and provided in a way that ensures that adverse effects on the environment are avoided, remedied or mitigated. Other subclauses (vi), (vii) and (viii) bear reciting, together with the policy's introductory statement -

Urban developments shall be contained within the defined limits (including the metropolitan urban limits and the limits of rural and coastal settlements as referred to in Strategic Policy 2.5.2-3) shown in the Regional Policy Statement from time to time, and its form shall be planned and undertaken through an integrated process on a regional basis and in ways that are consistent with Strategic Direction and:

...

- (iv) *Maintain and enhance amenity values within the existing urban area, and achieve high standards of amenity in areas of new developments;*
- (vii) *Do not give rise to conflicts between and compatible land uses;*
- (viii) *Avoids, remedies, or mitigates adverse effects on the environment.*

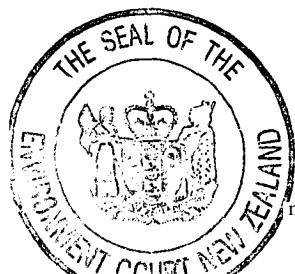
[74] Those provisions were noted by Mr Barker as generally paralleling policies under heading 2.6.7 of the RPS relating to regionally significant infrastructure and services - including within the term "infrastructure" energy transmission:

The safe and efficient operation of existing Regional infrastructure and the provision of necessary new regional infrastructure is to be enabled, planned and undertaken in ways that:

- *give effect to Part II of the Resource Management Act;*
- *are consistent with the Strategic Direction, and with the policies and methods for urban growth management (2.6.1) and for rural areas (2.6.4).*

[75] Mr Simmons pointed to additional provisions 2.6.2.7 and 2.6.2.8 (Methods). While paying due regard to both provisions, we record the latter provision as follows:

8. *Significant new areas proposed for urban development, existing urban areas proposed for significant redevelopment, or significant new areas proposed for countryside living purposes are to be provided for by the Structure Planning Process (or similar mechanism).*



[76] It was Mr Simmons' view, supported by Mr Barker, that the approach adopted by RDC in relation to future growth of Kumeu-Huapai under changes to the operative plan and in Proposed Plan 2000 is consistent with the requirements of the RPS.

[77] Mr Simmons helpfully summarised the district planning background in these words (para nos. omitted):

1993 Plan

The site is zoned Rural 1 under the 1993 Plan and is shown on Map U-15 The planning maps indicate the site was part of a larger 19.4249 hectare title. I understand that this title was subdivided and the 3 new lots sold in the early 1990s.

Under the 1993 Plan adjoining properties were also zoned Rural 1. To the north west is an area zoned Rural Settlement 1 (Rural-Residential). To the east is land zoned Residential 12 (Future Urban). Further to the south and east are the urban zonings of Huapai and Kumeu, the Residential 4 (Township) zone being the dominant zoning.

Change 55

The site is zoned General Rural Activity Area under Change 55 and is shown on Sheet XIV and in more detail on Map 33

Under Change 55 two significant zoning changes occurred. The previous Rural Settlement 1 (Rural-Residential) zone was considerably expanded to include all those properties immediately to the east of the Kumeu River and bound by Oraha Road and Old North Road. The zone was also renamed Countryside Living (Town). The future urban zoning to the north of Huapai was also expanded along Matua and Tapu Roads.

Proposed Plan

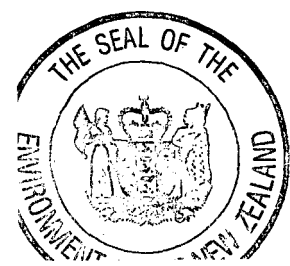
The site has two zonings under the Proposed Plan and is shown on Map 110 (Appendix 9). The majority of the site is zoned General Rural, while a triangular-shaped portion on the southern boundary is zoned Future Urban. The entire site, together with surrounding properties, is also included within the Huapai North Structure Plan Area which is more fully indicated in Figure 4 of Appendix 6 to the Planning Maps

The Proposed Plan has continued the zoning changes in this locality with both the Countryside Living (Town) and the Future Urban land being further expanded.

The rapidly changing zoning pattern in the last ten years or so is an indication of the Council's strategic planning and the future growth and development projected for the Kumeu-Huapai River.

A significant portion of the Thompson property has been identified as a Significant Natural Area (SNA) under the Proposed Plan. The SNA extends onto some of the land identified for more intensive subdivision and also extends across the Kumeu River onto the Transpower land and the two properties immediately to the east.

[78] Mr Simmons spoke of strategic studies undertaken by the Council since 1992 concerning future development options for the Huapai North area. A concern of the Council has been to provide for sustainable growth while seeking to protect and enhance the quality of the district's environment.



[79] As noted, a new Countryside Living (Town) zone was introduced by Change 55 under which the Future Urban zoning of land to the north and east of Huapai in close proximity to the subject site was recognised and extended. Outstanding appeals affecting the proposed change are understood not to relate specifically to Huapai North.

[80] In 1997, RDC undertook a process of community consultation that led to preparation of a strategic analysis, described as the Kumeu-Huapai-Waimauku Structure Plan. That Plan was approved and adopted by RDC in October 1998. The detailed assessment of future growth issues that it embraced was in turn brought forward and integrated in the provisions of Proposed Plan 2000. Mr Simmons summarised the position in these words:

A comprehensive and integrated planning approach was adopted in order to be forward looking, not only creating a vision for future development, but also to provide a plan which will position the area to accommodate future growth pressures before they arise.

Huapai North was identified as the primary area for residential expansion for the next 10 to 15 year period and the Huapai North Structure Plan has been included in the Proposed Plan on that basis.

During 2000 and 2001 more detailed work has continued on the Kumeu-Huapai Central Area Plan and a draft report was produced in February this year. This latest study provides a vision, concept plan and design details for the central part of Kumeu and Huapai.

As can be seen, there has been a continuous effort over nearly a decade by the Council and the community to achieve a comprehensive and integrated management approach to the planning and development of the future growth of Kumeu and Huapai. Through careful evaluation and consultation the Huapai North Area has been identified as the primary residential growth area. The community values the countryside and rural character of the existing settlement and seeks to strengthen or enhance this character for future development. With this background in mind and with community expectations clearly identified, the Transpower proposal must be assessed given its location on the edge of the future urban area set aside for residential purposes.

[81] This summation was echoed by the evidence of other witnesses who confirmed the common expectation of landowners within the Huapai North area that in the next 10 to 15 years the area will undergo transition from the present rural-residential land use pattern to one of relatively intensive residential settlement. Indeed, a suggested form of subdivision layout was proffered in evidence for Norwest as an illustration of the type of subdivision pattern that could conceivably emerge.

[82] The relevant part of Proposed Plan 2000 has been well received, in that no submissions apparently seek to overturn the future residential transformation strategy. Nevertheless, whatever the eventual subdivision and development pattern may be (and much will depend in that regard upon the scope and timing of individual owners'



aspirations for effecting change), the position of the transmission line corridors will remain and influence the form of the future growth structuring.

[83] The main corridor that contains the junction with the secondary corridor running towards Albany, is anticipated to represent in effect a north-west/south-east defining boundary between the future residential area and lands lying generally to the east. In other words, the main corridor, including the junction point within it, is anticipated to lie at the periphery of the future urban area, thus acting as a physical demarcation between more intensive land uses on one side and those of continuing rural or rural-residential character on the other.

[84] Against the background of the long-term presence of the transmission lines and pylons, and the existence of the junction linking the two corridors, we consider that the proposed facility may be suitably accommodated and integrated within the broad future aims for the Huapai North area evidenced in the planning instruments. In short, on the basis of the controlling conditions in the general form offered by Transpower, we consider, on weighing all the evidence and applying the Act's requirements and considerations pertinent to the case, that the switching station can be satisfactorily located where proposed. Were the area not already traversed by the long-standing transmission lines and associated pylons, the circumstances would be rather different. But as matters stand, location of the facility at the relevant transmission junction, with connecting wires, poles and ancillary structures as proposed, may reasonably be viewed as an urban-related adjunct to the electricity supply infrastructure already present (and obvious) in the area, and an indicator or reflection of the wider region's continuing growth and associated service or utility requirements.

[85] We have had regard to the provisions of the RPS on which Mr Simmons and Mr Barker laid emphasis. Like consideration has been paid to the various district planning provisions drawn to our attention, following upon the regional planning theme of integrated and sustainable patterns of change and development, with due attention to standards of amenity and avoiding, remedying, or mitigating adverse effects on the environment. Having done so, we conclude that, on the terms proposed, the switching station can be satisfactorily integrated within the process of change envisaged in the next 10 to 15 years while fitting satisfactorily within the lower density environment currently pertaining.

[86] To recapitulate, as an urban-related facility within a major existing transmission line network running through the area, the switching station in our judgment may appropriately be sited at the edge of the area to be developed in the 10 to 15-year timeframe for residential purposes. On the basis of the controls proposed, and the



continuing provision of careful integrated planning methods to assist the urban transition, we consider that an appropriate environmental outcome (paying due regard to relevant planning provisions raised and in accordance with the Act's purpose) is achievable. We elaborate upon our assessment of effects of the proposed work under the final evaluation heading below.

Evaluation of Effects and Interim Determination

[87] The issue of visual effect emerged as the matter of prime concern to those supportive of Norwest's stance in opposition. Nevertheless, a comprehensive body of evidence was called for Transpower from appropriately qualified experts, covering issues such as noise, geo-technical analysis, flood protection, on-site engineering including traffic management considerations, electric and magnetic field safety and archaeological investigation.

[88] On the question of electric and magnetic fields, it was stated by Dr A C McEwan, Scientific Director at the National Radiation Laboratory of the Ministry of Health, that-

The installation of the proposed switching station will have very little effect on the existing magnetic and electric field strengths outside the Transpower site boundary. At none of the nearest houses nor on any adjoining property will there be any changes in levels attributable to the switching station, except for a very small area adjacent to the western boundary of the Transpower site where it is most closely approached by the switching station.

[89] It will be recalled that Transpower owns an adjacent property fronting Tapu Road west of the subject site (refer paragraph [16]). Whether or not the portion of the western boundary to which Dr McEwan alluded would fall within Transpower's land, Dr McEwan made it plain elsewhere in his evidence that any effect upon the small area concerned, (that is, some 5 to 10 metres beyond the western boundary of the subject site at the point where the switching station would most closely approach the boundary), would be insignificant. As he put it, any increase in the magnetic and electric field strengths would be marginal and not such as to produce an adverse affect of concern at the point in question.

[90] Dr McEwan presented himself as a well-qualified and convincing witness. No counterpart expert was called in rebuttal. While we acknowledge that lay concerns may exist based on incomplete or unreliable information, we have no good reason for declining to accept Dr McEwan's assessment and assurance that the switching station may be suitably located at the subject site from the perspective of adjoining land occupiers' health and safety.



[91] Mr N I Hegley, an acoustic consultant of many years experience, gave a straightforward and convincing assessment of noise issues - not only in relation to the existing noise environment but to noise effect implications stemming from the future urban strategy for the area. On the basis of the company's proposed conditions addressing noise effects (including effects generated from construction activity), reflective of the assessment that Mr Hegley advanced in his evidence, we see no good cause to decline the proposal on the noise aspect, but with the following qualification. Pending a decision by RDC (or this Court on any appeal) on the question of construction work access being derived via the company's Tapu Road property, we reserve our finding on the issue of associated truck noise. We would add that the proposed modification as to the construction phase access arose in the light of comments tentatively made by the Court concerning potential noise effects upon adjacent landowners, were the accessway from Matua Road to be employed during construction.

[92] As observed, the company requires both an earthworks consent from ARC plus a consent from RDC concerning the proposed Tapu Road site access during construction. In its proposed conditions, Transpower has incorporated a condition that "the designated access to the site shall not be used for heavy vehicles during the construction period". We regard that condition as appropriate, subject to the company obtaining the consent it requires to establish and operate access to, the construction site via its Tapu Road property.

[93] Evidence for Transpower on geo-technical considerations, engineering design and associated environmental safety issues including flood protection, and archaeological investigation, was not materially affected, let alone undermined, by other parties' evidence. In reality, the question of actual and potential effects from the proposed facility devolves in substance to the issue of visual effect. A degree of contention arose over the proximity of the switching station footprint to the Kumeu River and alleged effect that the intended siting of the facility would have upon a recreational walkway alignment through the area. After considering the evidence on that branch of the case, including particularly that of the landscape witnesses, we find that the proposal with the footprint modified (both initially in Transpower's decision and with the further refinement before us) can be satisfactorily accommodated, with appropriate avoidance or mitigation of adverse effects being achieved via the controlling provisions proposed by Transpower. However, we reserve our view on the question of any effect upon the Kumeu River from earthworks pending consideration of that aspect by ARC (or this Court on appeal).



[94] In summary, the various effects that were canvassed in evidence for Transpower discussed above, (exclusive of the visual effect aspect and matters on which we have reserved our opinion), whether actual or potential or viewed in a cumulative sense will not militate against the proposal. We so find having borne in mind the present and planned future environment, and having paid regard to the various district and regional planning provisions to which our attention was directed during the hearing. Our appraisal has also been aided by our having inspected the site and viewed it from various vantage points within the surrounding area. We reiterate that, in essence, it is the visual effect factor upon owners and occupiers within the relevant valley catchment, including particularly those with property interests in the vicinity of the subject site, which constitutes the real source of contention. The remainder of this decision is thus devoted largely to that issue.

[95] The landscape architect called in relation to the visual effect aspect for Transpower was Mr F Boffa (to whom earlier reference has been made - refer paragraphs [63] and [67]). He prepared an assessment of visual effects preparatory to presenting evidence at the first instance hearing, and was involved in the review of alternative sites. He also prepared a landscape planting mitigation plan for the site. As part of his evidence at the appeal stage, he presented a series of “before and after” photomontages, prepared in conjunction with Precision Aerial Surveys Ltd. Mr M I Johnson, a director of that firm, was also called to give evidence.

[96] In support of RDC’s position in opposition to the proposal, evidence was adduced from Ms J H Woodhouse, an experienced landscape architect who also holds a diploma in horticulture. She was engaged by RDC in May this year to prepare a landscape assessment and advise on visual effects. In presenting her evidence she produced photographs from various vantage points, but did not produce a set of photomontages in response to those tendered by Mr Boffa. We advance no criticism actual or implied, on that account, but simply record the fact that the only photomontages before us were those prepared by Boffa Miskell Ltd.

[97] For Norwest it was urged that the photomontages should be discounted and greater reliance placed on the landscape evidence called for RDC. To support Norwest’s contention that the photomontage process or procedure was flawed, Mr R G Lindsay was called. He holds a NZCE (Civil) and is an associate member of IPENZ. He described his present position as design manager for Barker & Associates Ltd where his role is to provide and supervise CAD drafting, to provide project management for various clients, and to manage the firm’s information and computer technology. His experience includes preparing photomontage information for local and regional councils and for presentation before this Court.



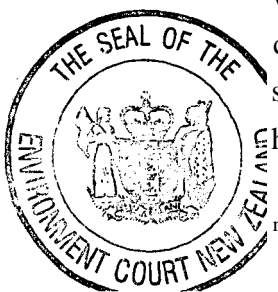
[98] It was Mr Boffa's evidence that the visual simulations were prepared by him in association with Precision Aerial Surveys Ltd, with whose personnel he has collaborated on various occasions. The simulation technique employed was the same as that employed in relation to certain Albany-Silverdale Transmission Line investigations undertaken in 1994. After the eventual completion of that line, Mr Boffa revisited particular viewpoints and re-photographed the views in order to compare what was simulated with what was eventually constructed. He produced illustrations to show the accuracy of the techniques used.

[99] Mr Johnson gave evidence of the equipment and methodology employed by his firm. Ground control was by a GPS Total Station theodolite, with the basic aerial photographs being corrected for scale and height using a Leica stereoplotter. This machine, so he claimed, is unique within New Zealand and regarded as one of the most accurate stereoplotters available. He was confident that the results reflected or achieved a contour accuracy of +/- 40cms. In addition, he used a laser inclinometer to measure the heights of trees. The same equipment is extensively used within the forestry industry and was said to be accurate to 0.5m.

[100] Ms Woodhouse was critical of Boffa Miskell's work, but was not able to support her contentions with technical evidence. In giving rebuttal evidence, she stated that in her earlier evidence-in-chief she had been relying on advice received from Mr Lindsay. For his part, Mr Lindsay itemised nine items which he considered were liable to affect the preparation of photomontages. He then proceeded to relate those factors to what had actually occurred insofar as he could ascertain.

[101] In Mr Lindsay's assessment, the standard of fieldwork undertaken was somehow lacking. Furthermore, the scale of the initial aerial photography was believed to be too small to give accurate results. However, in the course of evidence it became apparent that a wrong scale had been assumed for the photography. Even so, he maintained that, even on the basis of the corrected scale, he would only use derived data to fill in detail, rather than for the purpose of accurately locating structures in a photomontage designed to represent reality.

[102] Mr Lindsay was additionally critical over what he saw as a lack of appropriate importation of accurate topographical survey information in plans produced for Transpower. He said that having regard to particular "on the ground" data, differences were apparent with the information employed by Messrs Johnson and Boffa. He claimed that those differences effectively led to the superimposed structure of the switching station in the photomontages being depicted at a lesser height than it ought to have been. This was said to affect the position of neighbouring landowners opposed to



the designation requirement by giving a false impression of an over-modest building scale and impact.

[103] Having considered all the relevant evidence, we are satisfied about these basic points. The work done on behalf of the respondent has been carried out using accurate and acceptable equipment. In addition, all the co-ordinates are in corresponding terms. The transposition of the three-dimensional model of the proposed switching station has also been carried out in the same terms.

[104] The exact level and position of the components of the switching station may well be subject to some small adjustment or change at the time of construction, but we bear in mind and accept Mr Johnson's evidence that the positioning of the switching station (albeit shown on an indicative footing) was determined in three dimensions in relation to the tops of the existing pylons.

[105] We do not accept that the technique of photomontaging, adopted and presented here to assist in assessing the visual effect aspects of the case, is able to achieve a level of representation equivalent to reality. It cannot be so exact. The outcome is indicative only, and that is how we view it - although we acknowledge that producers of photomontages (such as the experts for Transpower on this occasion) constantly aim to approach as close to reality as they can. In listening to Mr Boffa and Mr Johnson, we gathered that the photomontage work was undertaken with the intent of providing a good indicative impression of how the switching station would appear at different viewing locations. All things considered, we consider that the photomontages (incorporating certain amendments out of points arising during the hearing) achieved that objective.

[106] We perceive little merit in arguing the pros and cons of a few centimetres in position and height, when the extent of actual growth in the screening trees is likely to be variable depending on the vagaries of the weather and other factors. In short, we accept that the photomontages (with final revisions) as presented by the relevant witnesses for Transpower, are reasonable indicative representations of how the switching station would appear from specified viewpoints after projected passages of time.

[107] Mr Boffa explained that residents within the area who were specifically concerned about the visual effect of the switching station agreed to the preparation of the photomontages by allowing access onto their land. He went on to assert that, for his part, he had not perceived a need to call visual simulations in aid for the purpose of satisfactorily assessing the visual effect aspect. However, with the benefit of all the



work involved in preparing plans, undertaking survey investigations, and input into the montaging work, Mr Boffa had this to say:

I conclude that given the nature of the area's topography, the siting of the switching station and the screening that will be provided by additional mitigation planting, the visibility of the switching station will be low. The existing towers and conductors will continue to be visible, but the main elements of the switching station will not generally be seen from the adjacent properties.

As previously noted the regional growth strategy envisages further urban development of the land immediately to the south and west of the site. While this may result in "suburban like" development in what is currently rural land I can consider the visual effects of the switching station will remain minor. This will in part be due to the nature and scale of the switching station and the landscape mitigation proposed. It is also important to acknowledge that future development can be planned to minimise potential visual effects. In fact this is the optimum timing for establishing important infrastructure developments in this locality before the District Plan and Structure planning provisions for the area are assessed subject to public input and approved.

And later he stated:

Adverse visual effects of the proposed switching station from existing residential locations are not, in my opinion, likely to be an issue. While the station may be partially visible from some residential locations, its size, siting and the nature of its form and profile are such that any visual effects will be minor. Again, I mention the existing electrical supply structures and lines as the dominant man-made elements.

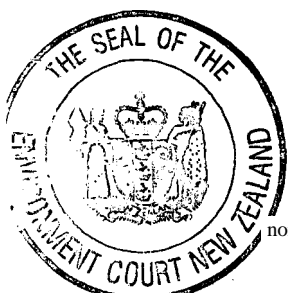
The 23 metre communication pole and the 110kV pole, while visible from locations, will not be readily apparent from most of the surrounding properties. Generally they will be seen as a minor element in the context of the existing towers, particularly when they are painted a dark green colour.

It is likely the most noticeable difference in appearance will be the drop or tie down conductors which will extend down to the switching station from the existing tower to tower conductors. Atmospheric effects will influence the extent of the visibility of these elements of the proposed facility. As outlined in Mr Almond's evidence, the 3 existing insulators in the northern corner of Tower 1 need to be replaced by 3 steel support arms. To leave the existing insulators in place would pose an unacceptable risk for the operation of the lines. However, given the context of the existing situation, the effects of the change are likely to be minor and in most cases not readily apparent to most viewers.

A recreational walkway is planned along the Kumeu River past the Transpower site. I believe the walkway can be sited on an alignment that minimises views of the switching station. In any event the proposed planting will screen views of the installation.

Physical effects of the landscape will not be an issue as there are no landforms, trees or water/wetland areas affected by the proposal. The effect of the earthworks will be minor and there will be no visible cuts or fills that will be apparent.

The switching station building will also be painted a dark green colour and will blend in with its surrounds. In any event it will be fully screened by the existing and proposed mitigation plantings. Landscape design measures in the form of additional planting about the proposed site will further mitigate any visual effects, and will ensure that vegetation screening in the longer term is retained and expanded.



[108] In cross-examination, Mr Boffa acknowledged that gaps in existing on-site planting would produce more obvious views of the switching station from various points of surrounding properties pending the growth of additional planting proposed in general accordance with the planting plan submitted. He estimated the age of existing trees at about 7 years and considered that duly maintained planting of additional specimens could comfortably achieve a height of some 8m after 5 years. As a “worst scenario” he envisaged the lead time for fully effective screening to be around that period. As an interim mitigatory measure, the possibility of dark green fabric fencing was recommended following an enquiry by the Court as to that possibility.

[109] The visual effect assessment of Ms Woodhouse, supported by Mr Simmons and Mr Barker, differed from that of Mr Boffa, in that, in her view:

The structure will be visible from land adjacent to the property, land immediately to the north and land on elevated sites to the north-east and east. The proposed planting will not mitigate the adverse visual effects from these viewpoints.

The proposed future urban development will change the existing character of Northern Huapai dramatically over the next few years. Much of the rural landscape will become urban landscape, and houses and gardens will replace horses and cattle.

Flood prone land on the southern side of the river and the land to the north of the river is proposed to be for recreational use, creating a natural edge to urban expansion. The structure will affect recreational users’ quiet enjoyment of the river bank.

The proposed switching station will be in stark contrast to this future urban/rural interface. Such a large, industrial element is a conflicting and contrasting element in the existing rural landscape and the future urban landscape. It will compound the intrusion of the existing transmission line corridors already seen against the natural, bush clad backdrop. In my opinion the proposal is an intrusive and inappropriate change in landscape character. It will detract from the quality of the landscape and the proposal should not proceed.

[110] We agree that the switching station will introduce an important additional element of power transmission infrastructure at Huapai. But we prefer the evidence of Mr Boffa, supported by Mr Le Marquand, that on the basis of the controls proposed (recorded in the schedule below), the facility can be incorporated satisfactorily within the area, with appropriate attention to landscape planting mitigation and on the basis that a well-planned process of land use change will occur in accordance with the Act’s purpose and relevant planning instruments.

[111] Ultimately, the fundamental issue rests on a value judgment in a situation where strong views exist on each side. In the end we have concluded, after fully considering all that was said on behalf of RDC and Norwest, that Transpower’s position supportive of the requirement to designate the site for the proposed work is made out. We agree that locations will exist on various properties surrounding where parts of the facility will be visible in the short term and to a lesser degree the longer term. But in the context of



the general panoramic landscape, including the presence of existing power transmission infrastructure within that panorama, we concur with the assessments of Transpower's witnesses. Within the wider landscape as it exists, and in the form anticipated in the future with the prospective changes towards comparatively intensive subdivision, development and residential activity, the switching station can be expected to take its place on an environmentally acceptable footing within the area, and be objectively viewed as a necessary adjunct to the electrical supply network.

[112] Aided by our having inspected the site from relatively elevated but distant points overlooking the valley, we accept that the lower height design with correspondingly enlarged footprint (whether at 7250m² or 5650m²) is of no material difference in visual effect to the "higher type" layout with a 4000m² footprint. On the other hand, the comparatively "flat" design within the 5650m² footprint area now intended is a notable mitigatory improvement for those whose properties lie in the more immediate area surrounding the site. That is so when viewed in conjunction with the intended screening (including dark green fabric screening at certain points where planting will need time to come into its own and be effective), plus the dark green colouring to be applied to the 18.5m transmission pole, 23m telecommunications pole, control room, and 7m/9m tubular buswork (excluding couplings).

[113] This decision is given on an interim footing (including the form of the scheduled conditions below) pending resolution of the outstanding consent applications to ARC and RDC. A final decision will be issued in the light of the outcome of those applications.

Costs

[114] Costs at this stage are reserved.

SCHEDULE OF CONTROLLING CONDITIONS

1. The purpose of the designation is to provide for a switching station at Huapai.
2. The nature of the proposed work is to erect, operate, maintain and upgrade a switching station in accordance with the designation and subject to the conditions set out in the concept plan.
3. The designated site comprises 2.6752 hectares and includes the permanent accessway to the site, the proposed switching station facility and landscape buffers to the river (see Figure 1 Dwg TX41442B).



DEVELOPMENT CONDITIONS

Height

4. The maximum height of equipment within the switching station will be as follows:

- Circuits 5 - 7 metres
- High level bus conductors 9 metres
- Transmission Pole 18.5 metres
- Control Room 4.5 metres
- Telecommunication Pole 23 metres

(The height of the two existing towers within the designated area will not be altered as a result of the switching station).

Yards

5. The switching station equipment (including the security fence) is to be sited a minimum of 5 metres from all boundaries of the designated site.

Site Coverage

6. The switching station footprint (demarcated by the security fence) is not to exceed an area of 5650m². This footprint will include all switching station structures except for the earthgrid, which is underground and the 18.5m transmission pole securing conductors on the 110kV line.

Security Fence

7. A security fence is to be erected around the switching station. Warning signs are to be placed on this fence and a sign identifying the site as being owned by Transpower New Zealand Limited (Transpower) is to be erected at the site entrance. The sign at the site entrance shall comply with the Council's signs bylaw.

Landscape Mitigation

8. Planting:

- The site will be planted in locations shown in the outline landscape plan (Figure 2 Dwg W00022/01).
- A detailed landscape plan will be submitted for approval by Council as part of the outline plan of works required by section 176A of the Resource Management Act 1991.



- The planting will be completed within the first planting season after the construction of the switching station and shall be maintained (including the replacement of any diseased specimen or failed plantings) in accordance with the approved Plan.
- Landscaping shall be retained and maintained for the duration of the switching station.

9. Screening:

- The use of fabric fencing (up to 6m in height) is to be incorporated into the mitigation planting area as a temporary visual mitigation measure.
- The fabric is to be a dark green colour and placed on both sides of screening support structures.
- Locations for the fabric screening and timing of removal is to be confirmed by way of the landscape plan to be submitted for approval by Council as part of the outline plan of works.

10. Colours of Structures:

- The 18.5 metre transmission pole and the 23 metre telecommunications pole are to be painted a dark green colour to blend in with the background hills.
- The control room and tubular buswork (7m and 9m components) excluding couplings) will be a similar colour.
- Final colours to be approved by Consents Manager, Rodney District Council.
- The drop wires and other flexible equipment are to be non-reflective with a matt finish.
- The galvanized steel supports are to have a matt or weathered finish.
- The switching yard gravel is to be a dark grey colour.

Resource Consents

- 11 Prior to commencement of construction Transpower will obtain all necessary consents from the Regional and/or District Council.



PERFORMANCE STANDARDS

Lighting

12. The site shall not be illuminated at night except during emergency works or other maintenance work requiring out of hours activity (eg programmed outage). The illuminance of the site lighting installations shall not exceed: 5 lux (lumens per square metre) spill (horizontal or vertical) of light at any window of an adjacent household unit.

Noise

13. The noise level generated by the switching station shall comply at all times with the following noise levels.

All activities on the site shall be conducted so as to ensure the following noise limits are not exceeded at any point within the notional boundary of any dwelling:

(Notional Boundary is defined as a line 20 metres from the facade of any dwelling or the legal boundary where the boundary is closer than 20 metres to the dwelling).

Monday to Saturday	0700 - 1800	50dBA L ₁₀
At all other times including Public Holidays		45dBA L ₁₀
Monday to Sunday	1800 - 0700	70dBA L _{max}

Sound levels shall be measured in accordance with the requirements of NZS 6801: 1991 Measurement of Sound and assessed in accordance with the requirements of NZS 6802: 1991 Assessment of Environmental Sound except that all measurements shall be carried out within the notional boundary of any dwelling as defined above.

14. Noise levels during the construction period shall comply with the requirements NZS 6803: 1999 Acoustics - Construction Noise.

Construction Controls

15. Construction activity shall be undertaken between the hours of 0730 - 1800 hrs Monday to Saturday. If it is essential for construction to be carried out outside these hours, Transpower shall give the occupants of immediately adjoining properties not less than five working days notice of the period during which construction will take



place outside the normal construction period, and when those extended hours will commence.

16. Prior to the commencement of work on the site a Construction Management Plan will be prepared and submitted for approval of the Consents Manager. This Plan is to include details of Earthworks and Silt Control Measures. Specifically the management plan will require the following:

- (i) The stripping of vegetation, overburden and soil shall be kept to a minimum ie. cleared areas will be limited to only those areas where work is about to commence.
- (ii) A dust management plan.

17. A traffic management plan will be prepared for the construction period and incorporated into the Outline Plan.

EMF and EMR

18. The switching station shall comply with the guidelines for public exposure to electric and magnetic fields as published in 1998 by the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

19. The telecommunication facility on the site shall be operated so that it satisfies the requirements of NZS 2772.1: 1999 in respect of all areas to which the public may have access.

A report from a suitably qualified person shall be submitted to the satisfaction of the Consents Manager within three months of the installation commencing operation, confirming that the site is operating in accordance with the guidelines and the requirements of NZS 2772.1: 1999. If these levels do not comply with the guidelines site operations will be amended to ensure compliance.

Archaeological Sites

20. In the event of an archaeological site being uncovered, work is to cease immediately in the vicinity of the discovery and the New Zealand Historic Places Trust Regional Archaeologist and Te Tao U ki Ngati Whatua will be contacted so that appropriate action can be taken before work may recommence.

Access

21. The designated access to the site shall not be used for heavy vehicles during the construction period.



Addendum: Copies of the two plans referred to in the foregoing conditions are appended.

DATED at AUCKLAND this *29th* day of *October*, 2001.

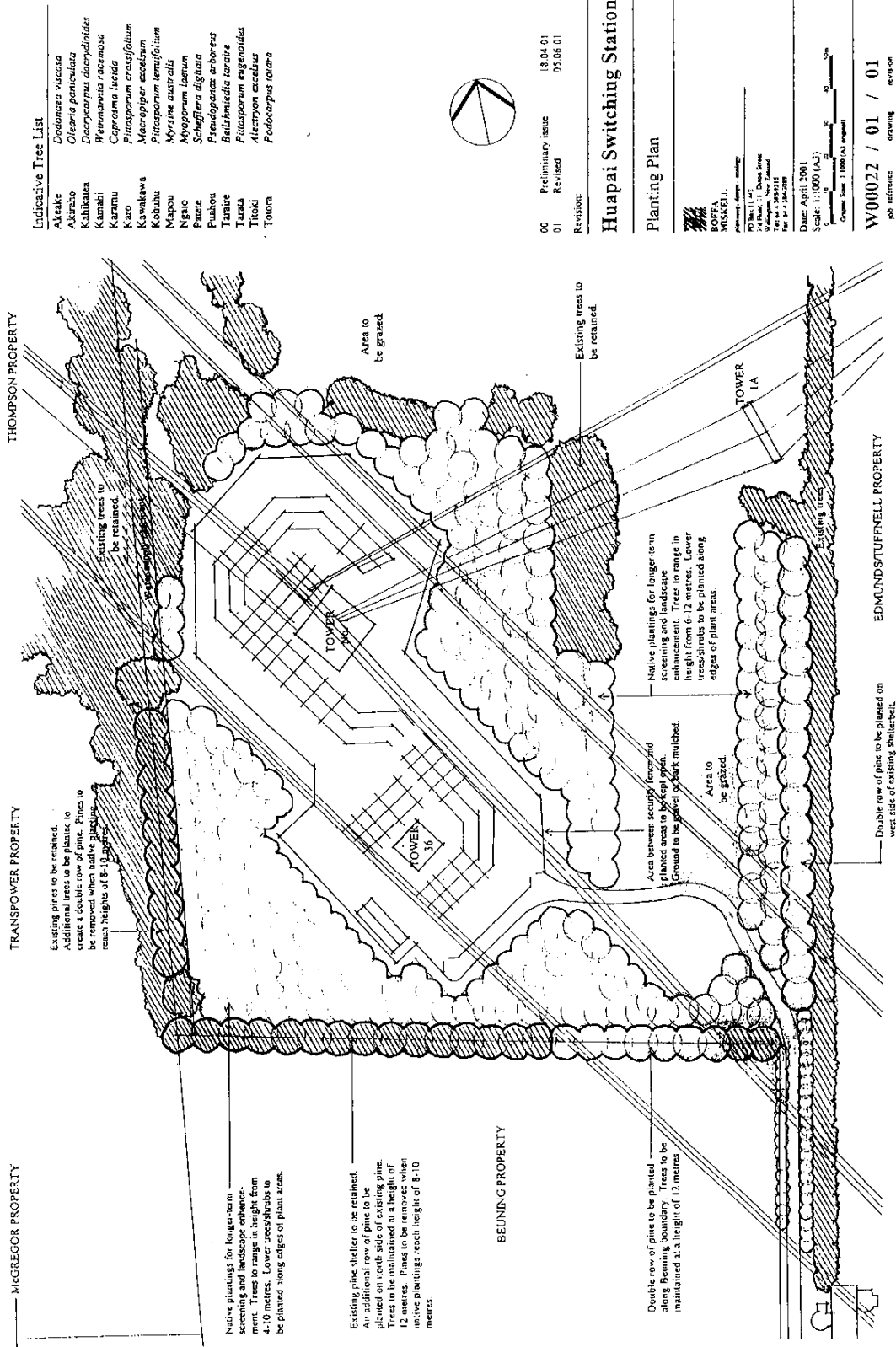
For the Court:



R. J. Bollard

R J Bollard
Environment Judge

FIGURE 2 DWG



Indicative Tree List

Atakite	<i>Dodonaea viscosa</i>
Akaroa	<i>Olea paniculata</i>
Kahikatea	<i>Dacrydium dacrydioides</i>
Kamahi	<i>Waimanama racemosa</i>
Karamu	<i>Coprosma lucida</i>
Karo	<i>Pitopium crassifolium</i>
Kwakaia	<i>Macropiper excelsum</i>
Kobuhu	<i>Pitopium tenuifolium</i>
Mapou	<i>Myrsine australis</i>
Ngaho	<i>Myoporum laetum</i>
Parete	<i>Schefflera digitata</i>
Puahou	<i>Pseudopanax arboreus</i>
Tamire	<i>Beilschmiedia tarairi</i>
Tarua	<i>Pitopium eugenioides</i>
Titoki	<i>Alseodaphne acutata</i>
Toona	<i>Podocarpus totara</i>

00	Preliminary issue	18.04.01
01	Revised	05.06.01

Revisions:

Huapai Switching Station

Planting Plan

BOFFEL
 100 The Terrace
 PO Box 11 447
 Tel: 04 378 1111
 Fax: 04 378 1115
 Email: info@boffel.co.nz
 Date: April 2001
 Scale: 1:1000 (A3)
 Drawing No: 11000 (A3) (planting)

W/00022 / 01 / 01
 job reference drawing revision

