



17th June 2025

Far North District Council
Private Bag 752
KAIKOHE 0405

Attention: Planning Team – Resource Consent Applications

Dear Sir or Madam:

RESOURCE MANAGEMENT ACT 1991 – RESOURCE CONSENT APPLICATION BY FORTYSOUTH, FOR THE UPGRADE & CONTINUED OPERATION OF A TELECOMMUNICATIONS FACILITY, MCINTYRE ROAD, KAWAKAWA, NORTHLAND

Enclosed for your further action is a copy of the above application.

The documentation in support of the application is as follows:

1. A description of the activity for which the consent is sought
2. An analysis of the provisions of the Plan, which are relevant to the application
3. An analysis of the National Environmental Standards for Telecommunications which are relevant to the application
5. Plans and elevations; and
6. Associated specialist reports.

The appropriate lodgement fee will be paid on lodgement. If you have any questions or queries, please contact me directly (021 02929905). We look forward to hearing from you in respect of this matter.

Yours faithfully
Fortysouth

Colin Clune
(021) 0292 9905
colin.clune@fortysouth.co.nz

**APPLICATION FOR RESOURCE CONSENT UNDER SECTION 88
OF THE RESOURCE MANAGEMENT ACT 1991**

Fortysouth applies for a resource consent as described below:

1. The names and addresses of the owner (other than the applicant) of any land to which the application relates are as follows:

Connexa (Mathew Loudon)
Level 2, 34 Sale Street
Auckland Central
Auckland, 1010
matthew.loudon@connexa.co.nz

Louise Critchfield (landowner)
lou@blackheart.co.nz
Mobile: + 64 22 0158685

2. The general location and legal description covered by this application is Private Property legally described as **Lot 1 DP 417074 held in Title 465644** at the following location:
 - McIntyres Road, Kawakawa

3. The type of resource consent sought is land use consent for a Discretionary Activity under the Far North District Plan.

4. A description of the activity to which the application relates is:

The upgrade of an established co-locatable telecommunications facility, at McIntyres Road, Kawakawa, Northland.

The activity is more fully described in the attached annexure.

5. There is no additional resource consents required in relation to the proposed activity.
6. The attached annexure forms part of this application and provides a full description of any effects on the environment in accordance with the Fourth Schedule to the Resource Management Act 1991.
7. No other information is required by the District Plan or regulations.

Address for service of applicant:

Colin Clune
Fortysouth
Level 1, AA Building
46 Sale Steet
AUCKLAND 1142
Mobile: 021 0292 9905
colin.clune@fortysouth.co.nz

.....
Colin Clune on behalf of Fortysouth
Date:

Annexure: A description of the proposed activity in accordance with the Fourth Schedule to the Act.



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FORTYSOUTH LTD

Resource Consent Application:

The Upgrade of an Established Co-locatable Telecommunications Facility, McIntyres Road, Kawakawa

REFERENCE:

KAWAKAWA (N1KAW)

Table of Contents

<i>Section</i>	<i>Page</i>
1. Introduction	1
2. Site and Location	2
3. The Proposal	3
4. National Environmental Standards for Telecommunication Facilities 2016	5
5. District Plan Provisions	6
6. Assessment of Effects	8
7. Objectives and Policies	11
8. Resource Management Act 1991	15
9. Conclusion	18

Appendices:

Appendix 1: Certificate of Title

Appendix 2: Drawings

Appendix 3: NESTF Assessment

Appendix 4: Radiofrequency Statement of Compliance

Appendix 5: Cabinet Acoustic Report

Appendix 6: Previous Resource Consent Decisions

1. Introduction

BACKGROUND

- 1.1 Aotearoa Towers Group (ATG) trading as Fortysouth is undertaking a project to modernise their network. This application pertains to the establishment of a new standalone telecommunication facility. Required for network modernisation and resilience.

NATIONAL ENVIRONMENTAL STANDARDS

- 1.2 The National Environmental Standards 2016 (NESTF) for telecommunication facilities came into force on the 1st of January 2017. These regulations substitute the previous NESTF 2008 and existing District Plan rules for telecommunications structures in the road reserve. Activities that do not qualify as regulated activities, under the regulations of the NESTF, are to be assessed through the relevant District Plan under the Resource Management Act 1991.
- 1.3 This report contains the following information:
- i. A description of the proposed activity
 - ii. A description of the site and surrounding locality
 - iii. An analysis of the provisions of the Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016 which are relevant to the application
 - iv. An analysis of the provisions of the District Plan that are relevant to the application.

SALE BY VODAFONE NEW ZEALAND LIMITED OF MOBILE TOWER INFRASTRUCTURE TO AOTEAROA TOWERS GROUP LP

- 1.4 Vodafone (rebranded to One NZ on 1 April 2023) sold its passive mobile tower infrastructure business to Aotearoa Towers Group (ATG), trading as Fortysouth, an entity owned by funds managed by leading global investors InfraRed Capital Partners and Northleaf Capital Partners. The creation of ATG follows the establishment of numerous passive mobile tower infrastructure businesses or tower companies that have been seen around the world. One NZ is upgrading its infrastructure on this ATG asset.

2. Site and Location

- 2.1 The subject site is located within a parcel of land on a Taumatamakuku 2B2B2, which is located 1km along the McIntyre Road from its intersection with Whangae Road and covers 42ha of steep bush clad lad which rises to a ridge between McIntyre Road and State Highway 1 (SH1)
- 2.2 Access to the site is provided for via a four-wheel drive access track off McIntyre Road. The track length is approximately 2km in length, leading to the established facility. The ridgelines within the area, including the site of the telecommunications facility typically sit approximately 200m-240m above sea level. The surrounding area is characterised by farmland and large tracts of bush
- 2.3 The existing telecommunications facility was legally established under Application Number RC 1980230 in 1997. The facility consists of a 20m high monopole with a headframe and various attachment antennas, contained within a fence security fence. Following the establishment of the original facility, there have been multiple resource consents granted for the further upgrade of the facility, providing for the attachment of additional of telecommunications equipment and the introduction of new telecommunications technology.

Figure 1: Kawakawa Site Location



3. The Proposal

- 3.1 The proposed facility will provide an important component of the 2Degrees Network. Providing new resilient mobile coverage and increased coverage for mobile telephone users throughout the surrounding area of Kawakawa.
- 3.2 Details of the upgrade are summarised in the following table and demonstrated in the application drawings within **Appendix 2**.

Table 1 Proposed Works	
Site	Proposal
Kawakawa (N1KAW): McIntyre Road, Kawakawa.	<p>The following upgrade will be undertaken on the existing previously established pole measuring 20m in height (excluding the lightening spike) for the co-location of 2Degrees antennas on a Fortysouth facility. The height of the pole will remain unchanged.</p> <ul style="list-style-type: none"> 3 X 2Degrees Panel Antennas – 21.1m Height: Replacement of three (3) existing antennas with three (3) new panel antennas measuring 206mm depth x 499mm width x 2695mm length at a maximum approximate height of 21.1m. 3 X 2Degrees Panel Antennas – 22.2m Height: Add three (3) new panel antennas measuring 126mm depth x 370mm width x 568mm length at a maximum approximate height of 22.2m. Replace the existing 1 X 2Degrees 1200mmØ dish antenna at a height of 9.8m: with a new 413mmØ dish at a height of 13m. Six (6) X Remote Radio Units (RRU's) - 20m Height: Six RRU's will be attached to the headframe at the top of the pole behind the panel antennas at an approximate height of 20m.

	<ul style="list-style-type: none"> • Ancillary Equipment Cabinet Upgrade: Replacement of two existing ancillary equipment cabinets, with one new cabinet installed on the existing concrete pad. Cabinet 1 measures 0.7m width, 1.45m height, 0.75m depth total footprint 0.53m².
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4. National Environmental Standards for Telecommunication Facilities 2016

- 4.1 An assessment of the proposal against the relevant provisions of the National Environmental Standards for Telecommunication Facilities 2016 (NESTF) is attached as **Appendix 3**.
- 4.2 This NESTF assessment has demonstrated that the proposed upgrades comply with the following Subparts of the NESTF 2016.
- Subpart 5 – Application of District & Regional Rules
 - Subpart 7 – Radiofrequency Regulations
 - Subpart 2 – Antennas
 - Subpart 1 – Cabinets
 - Subpart 6 – Earthworks
- 4.3 The existing facility is located within an Outstanding Natural Landscape Overlays and will not comply with Regulation 50(1) of the NESTF.
- 4.4 In order to determine the activity status of the application, the proposed facility must be assessed against the Far North District Plan, to determine the activity status of the application.

5. District Plan Provisions

- 5.1 The subject site is located on private land. The underlying zoning of the subject site is **rural production** in the District Plan Maps of both the Operative and Proposed Plan.
- 5.2 The subject site includes an Outstanding Natural Landscape overlay in the Proposed and Operative Far North District Plans.
- 5.3 The following table provides a compliance assessment of the proposal, against the relevant provisions of the Proposed Far North District Plan.

Operative District Plan

RULE	STANDARDS	ACTIVITY STATUS
CHAPTER 12 – NATURAL AND PHYSICAL RESOURCES		
12.1.6. Rules	<p>12.1.6.1.6 UTILITY SERVICES IN OUTSTANDING LANDSCAPES <i>The installation of utility services is permitted in Outstanding Landscapes as shown on the Resource Maps, <u>provided that these services are underground.</u></i></p> <p>Comment The proposal involves the upgrade of telecommunication antennas and above ground ancillary cabinets on a previously established 20m tall co-locatable telecommunication mast, located in an outstanding natural landscape overlay. Due to the above ground nature of the proposed upgrade, it will not comply with Rule 12.1.6.1.6.</p>	Discretionary

Proposed District Plan

RULE	STANDARDS	ACTIVITY STATUS
PART 2 – DISTRICT WIDE MATTERS		
Natural Environment Matters	<p>Natural Features and Landscapes Standards</p> <p>NFL-S1</p> <p>Within ONL and ONF</p> <ol style="list-style-type: none"> 1. <u>The maximum height of any new building or structure above ground level is 5m and must not exceed the height of the nearest ridgeline, headland or peninsula; and</u> 2. <u>Any extension to a building or structure must not exceed the height of the existing building above ground level or exceed the height of the nearest ridgeline, headland or peninsula.</u> <p>Comment The proposal involves the upgrade of telecommunication antennas and above ground ancillary cabinets on a previously established 20m tall co-locatable telecommunication mast, located in an outstanding natural landscape overlay. Due to the above ground nature of the proposed upgrade, it will not comply with Rule NFL-S1.</p>	Discretionary

- 5.4 It is considered that the remaining chapters of the District Plan are relevant to the proposal.

6. *Assessment of Effects*

- 6.1 In assessing this application for a **Discretionary Activity**, Council must have consideration to the matters set out in Section 104 of the Resource Management Act. These matters must be considered pursuant to Part 2 of the Act.

Subject to Part 2 of the Act, section 104(1) sets out the range of matters to which Council shall have regard. The specific matters of relevance to this application are as follows:

104(1)(a) Any actual or potential effects on the environment of allowing the activity; and

104(1)(b)(iv) Any relevant provisions of a plan or proposed plan

- 6.2 The effects of the proposal on the environment have been evaluated as required by Section 88 of the Resource Management Act 1991. The proposal is considered an appropriate activity at this site and the following matters have been identified as being relevant to an evaluation of this proposal:

- i. **Visual Effects***
- ii. **Positive Effects***

6.3 **Visual & Landscape Effects**

The existing telecommunications facility consists of a 20m high monopole telecommunication structure, with a 4.5mØ headframe and variety of attachment panel and dish antennas. The existing facility was originally established in 1997 (Application Number RC 1980230) and has now become part of the current visual landscape.

Due to the activity status of telecommunication masts and associated antennas within the Outstanding Natural Landscape, the proposed antenna and cabinet upgrade will add to the level of non-compliance. The proposed additional panel antennas will be attached to the monopole structure at a maximum height of approximately 22.2m from ground level. The proposal will involve the replacement of an existing 1.2mØ, relocated at a height of 13m from ground level. The proposed panel antennas will result in a minor 1.1m height increase. The proposed antennas will appear visually consistent with

the existing facility, being of a similar scale and appearance to the existing telecommunication antennas.

Once attached, the proposed antennas will appear visually appropriate, being located alongside comparable utility equipment. When paralleled against the bulk of the monopole structure, the visual effects associated with the proposed antenna attachment will be less than minor.

The proposed panel antennas will be finished in a non-textured, recessive grey colour, with a low reflective nature. The colour will be consistent with the existing antennas and the remainder of the facility. Furthermore, the recessive grey colouring and low reflectivity ensure the antennas visual acceptance when viewed against the skyline from ground level.

The existing telecommunications facility has been established within a removed area of rural farmland, setback approximately 860m from State Highway 1. Located to the south of the facility. Furthermore, the facility is removed from the nearest dwelling, being 241 State Highway 1, Moerewa. Located approximately 890m to the south of the site. Given the significant separation distances, it is considered that the proposed antenna upgrade and associated 1.1m height infringement will be barely discernible within the existing rural environment.

Due to the above-mentioned mitigating factors, any potential visual effects generated by the proposal will be less than minor, with no persons considered to be adversely affected.

6.4 Positive Effects

At present, there are now more than 3.8 million New Zealanders or about 92% of the population estimated to have mobile handset devices. The introduction of mobile connection has been shown to add to productivity, GDP growth and to enhance lifestyles of people all over the world. The proposal is in preparation of 5G technologies and will assist in the enhanced quality of a valuable district network utility, which may be considered as enhancing economic and community wellbeing.

As mobile devices have become ubiquitous in modern life, people expect to stay connected wherever they are, whether that's sitting in a local café enjoying a coffee or on a train or bus travelling to work, or in a remote rural setting. In remote areas, installing continuous coverage on State Highways can be very difficult. Rugged mountainous terrain and lots of hills and valleys makes mobile coverage difficult to achieve. The proposed facility will provide a significant benefit to neighbouring State Highways. focus of the State Highway coverage is to improve public safety. This will provide everyone with

access to the emergency 111 network no matter what mobile network they are with.

Therefore, it is considered that the positive effects associated with improved mobile network coverage and new technology that the proposed facility will bring to the Kawakawa, will offset any potential adverse effects associated with the proposal.

7. Objectives and Policies

- 7.1 The proposed facility requires assessment against the relevant objectives and policies of the Operative and Proposed District Plan are outlined below:

Operative District Plan

Objectives

17.2.3.1 *To provide for the efficient development, use, maintenance and upgrading of utility services to meet the reasonable needs of residents and businesses throughout the District while ensuring that significant adverse effects are avoided, remedied or mitigated.*

Policies

17.2.4.1 *That the maintenance and upgrading of utility services and radio communication facilities is provided for.*

17.2.4.2 *That any significant adverse effects of proposed utility services and radio communications on amenity values is avoided, remedied or mitigated.*

17.2.4.3 *That provision be made to enable new/upgraded utility services to meet growth demand*

17.2.4.4 *That provision be made for utility services corridors (such as roads) and the co-siting of telecommunication and radio communication equipment where technically and commercially practicable.*

17.2.4.5 *That the safe and efficient development, operation and maintenance of existing utility services is not compromised by incompatible land development.*

Proposed District Plan

7.2 Part 2 District Wide Matters – Infrastructure

Objectives

I-O1 *The district has safe, efficient and resilient **infrastructure** that services the current and future needs of people and communities in the district.*

I-O2 *The economic and community benefits of infrastructure are recognised and provided for, including the benefits of regionally significant*

infrastructure to enhance economic, cultural, environmental and social well-being in the district.

I-04 Adverse effects of infrastructure are managed through the design and location of infrastructure to minimise adverse effects on areas with historical and cultural values, natural values, and coastal values.

I-06 The location of infrastructure does not constrain the ability of tangata whenua to develop land in the Māori Purpose zone or the Treaty Settlement overlay.

Policies

I-P1 Provide for the continued operation, [maintenance](#), upgrading and replacement of existing [infrastructure](#).

I-P4 Provide for [infrastructure](#) where there are benefits such as:

- a. significant social, economic and cultural benefits associated with [regionally significant infrastructure](#)
- b. improved:
 - i. quality of life;
 - ii. standard of living;
 - iii. public health and safety;
 - iv. access to latest technology, such as fibre and high-speed wireless internet;
 - v. functioning of businesses; and
 - vi. transportation of freight, goods, people.
- c. growth and development of the district;
- d. a reduction in the operation and [maintenance](#) costs of [infrastructure](#);
- e. integration of [infrastructure](#) with [urban](#) development; and
- f. facilitating local, regional, national or international connectivity.

I-P6 Where practicable and appropriate for the type of [infrastructure](#), minimise the adverse visual [effects](#) of [infrastructure](#) by:

- a. co-location or multiple use;
- b. removing redundant facilities or [structures](#);
- c. using [landscaping](#) and/or recessive colours and finishes;
- d. encouraging innovative design to maintain the character and amenity of the surrounding area by integrating [infrastructure](#) within the [site](#) and utilising existing built form and landform; and
- e. requiring the undergrounding of services when locating [infrastructure](#) in the [coastal environment](#), a resource overlay, [heritage area](#) or an area with high [amenity value](#).

I-P8 Provide for resilient [infrastructure](#) that will meet the district's needs by considering:

- a. the impact on the network and levels of service if the work is not undertaken;
- b. the need for the *infrastructure* in the context of the wider network; and
- c. whether it is *regionally significant infrastructure*.

I-P12 Recognise the benefits of new technology in *infrastructure* that:

- a. improve access to, and efficient use of, networks and services;
- b. increases resilience or reliability of networks and services;
- c. protects the on-going safety of the community and the integrity of the network; or
- d. results in environmental benefits or enhancements.

I-P13 Manage the adverse *effects* of *infrastructure* on the *environment* by:

- a. avoiding, remedying or mitigating the adverse *effects* of substantial upgrades to, or the development of new *infrastructure*, including *effects* on:
 - i. *natural and physical resources*;
 - ii. *amenity values*;
 - iii. *sensitive activities*;
 - iv. the safe and efficient operation of other *infrastructure*;
 - v. the health, well-being and safety of people and communities.
- b. avoiding radio, electric and magnetic emissions that do not meet the recognised standards or guidelines;
- c. requiring the undergrounding of network utilities in *Urban* zones and the Settlement zone where it:
 - i. is technically feasible;
 - ii. is justified by the extent of adverse visual *effects*; and
 - iii. provides for the safety of the community.

7.3 The proposed upgrade is consistent with the above-mentioned objectives and policies. Potential visual effects associated with the facility have been mitigated as far as possible, through appropriate design, location and colouring. Furthermore, the proposed facility is co-locatable and will involve the attachment of more than one telco operator's antennas. The proposed facility is required to provide resilient mobile coverage levels and to provide for the introduction of future 5G technology. When compared to the positive effects associated with new mobile technologies and reliable wireless data, the effects associated with the proposed facility will be less than minor.

7.4 The proposal is considered consistent with the objectives and policies as follows:

- The proposal facility contributes towards a modern, robust, effective and regionally significant mobile telecommunications network.

- The introduction of new mobile telecommunications technology, improving the efficiency of the mobile network and decreasing the latency of data streaming.
- Adverse visual effects have been mitigated through appropriate site location and design.
- The proposed facility will contribute to significant public benefit including social, economic, cultural, recreational and environmental.
- The facility will contribute to public safety through the provision of a resilient lifeline utility.
- The proposed facility allows for co-location and will have more than one operator antennas attached.
- The proposed upgrade will provide continued resilient coverage to neighbour State Highways.

8. Resource Management Act 1991

PART II ASSESSMENT

8.1 The purpose of the Act as set out in Section 5(1) is:

“to promote the sustainable management of natural and physical resources”

8.2 For Fortysouth and its mobile network operator tenants to continue to provide an effective and efficient nationwide mobile service, the reliability and increased coverage of the network needs to be ensured. As telecommunication is becoming increasingly important to modern society it is essential that this resource is managed appropriately and is consistently provided. The proposed facility will provide new and improved mobile coverage within the surrounding environment without detracting from the qualities of the residential receiving environment.

8.3 SECTION 95

8.4 Section 95A of the Act identifies where public notification is necessary, or if the applicant agrees to public notification.

(1) The consent authority may, in its discretion, decide whether to publicly notify an application for resource consent for an activity.

(2) Despite subsection(1), a consent authority must publicly notify the application if-

(a) it decides under Section 95D that the activity will have or is likely to have adverse effects on the environment that are more than minor; or

(b) the applicant requests public notification of the application; or

(c) a rule or national environmental standard requires public notification of the application.

8.5 The proposal has been assessed as a **Discretionary Activity**. The actual or potential adverse effects are considered appropriate for the receiving environment. Fortysouth does not request that the application be notified nor are there any rules in the Resource Management (National Environmental Standards for Telecommunications Facilities) Regulations 2016 that require the application to be notified.

- 8.6 Section 95D of the Act requires a consent authority to decide if adverse effects may be more than minor and states:

A consent authority that is deciding, for the purpose of Section 95A(2)(a), whether an activity's adverse effect on the environment may be more than minor –

- (a) must disregard any effects on persons who own or occupy –*
 - (i) the land in, on, or over which the activity will occur; or*
 - (ii) any land adjacent to that land; and*
- (e) must disregard any effect on a person who has given written approval to the relevant application.*

- 8.7 The effects on the environment arising from the proposal are less than minor, particularly considering the appropriate design and location. For these reasons, and those contained in Section 6 of this report, there are no potentially affected parties from which written approval is required.

- 8.8 Section 95E of the Act requires a consent authority to decide if any persons are affected by a proposal.

(1) a consent authority must decide that a person is an affected person, in relation to the activity, if the activity's adverse effects on the person are minor or more than minor (but are not less than minor).

(2) the consent authority, in making its decision –

- (a) must disregard any adverse effect of the activity on the person if a rule or national environmental standard permits an activity with that effect; and*

(3) despite anything else in this section, the consent authority must decide that a person is not an affected person if –

- (a) the person has given written approval to the activity and has not withdrawn the approval in a written notice received by the authority before the authority had decided whether there are any affected persons; or*

- (b) it is unreasonable in the circumstances to seek the person's written approval.*

8.9 For the reasons discussed in Section 6 of this report, no one is considered affected.

8.10 Section 104

8.11 Pursuant to section 104 of the Act, when considering an application for resource consent, a consent authority must, subject to Part 2, have regard to:

- (a) Any actual and potential effects on the environment of allowing the activity; and*
- (b) Any relevant provisions of –*
 - (i) A national policy statement*
 - (ii) Other regulations*
 - (iii) A national policy statement*
 - (iv) A New Zealand Coastal Policy Statement*
 - (v) A regional policy statement or proposed regional policy statement*
 - (vi) A plan or proposed plan and*
- (c) Any other matters the consent authority considers relevant and reasonable necessary to determine the application.*

8.12 For the reasons outlined in Section 6 (assessment of effects) of this report, the actual and potential adverse effects of the proposed facility is considered appropriate in the context of the receiving environment, and consistent with the environmental results anticipated by the policy framework of the District Plan. It is considered the proposal satisfies the criteria of section 104, and that Council can proceed to process the application on a non-notified basis.

9. Conclusion

- 9.1 Fortysouth seeks resource consent to upgrade a previously established co-locatable telecommunications facility on private property within a removed rural setting of Kawakawa.
- 9.2 Based on the above assessment we consider that in terms of section 104(1)(a), the adverse effects of the proposal will be appropriate to the receiving environment. The proposal will increase the mobile coverage levels and provide capacity for future telecommunications technology. Thereby contributing significant positive effects to the receiving environment. The proposed telecommunications facility is consistent with the relevant objectives and policies of the District Plan.
- 9.3 In accordance with section 104C of the Act, it is considered appropriate for consent to be granted subject to fair and reasonable conditions.

Appendix 1

Certificate of Title

Appendix 2

Application Drawings

Appendix 3

NESTF Assessment

Appendix 4

Radiofrequency Statement of Compliance

Appendix 5

Cabinet Acoustic Report



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy**




R.W. Muir
Registrar-General
of Land

Identifier 465644
Land Registration District North Auckland
Date Issued 08 July 2009

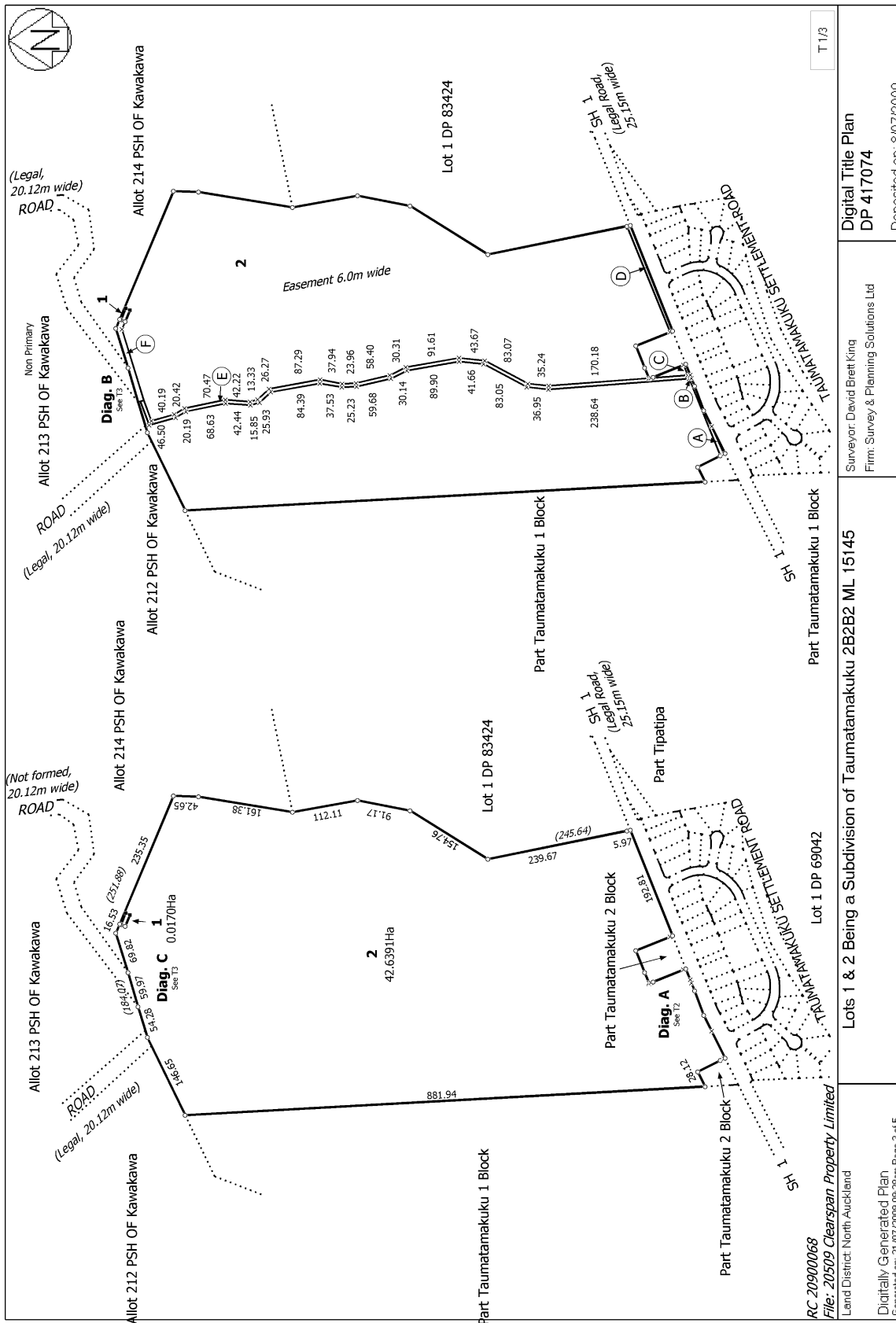
Prior References
NA46C/81

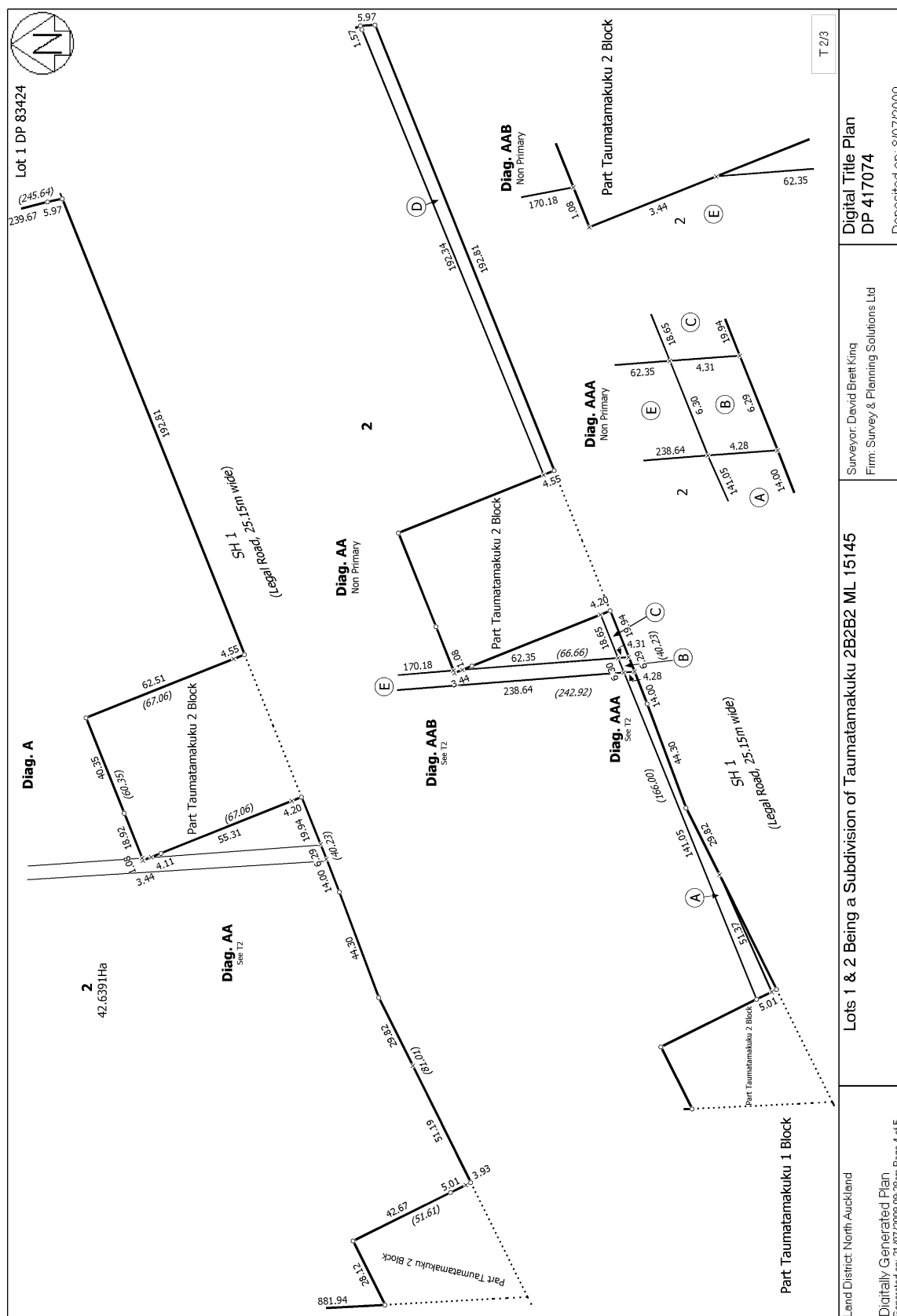
Estate Fee Simple
Area 170 square metres more or less
Legal Description Lot 1 Deposited Plan 417074
Registered Owners
Clearspan Property Assets Limited

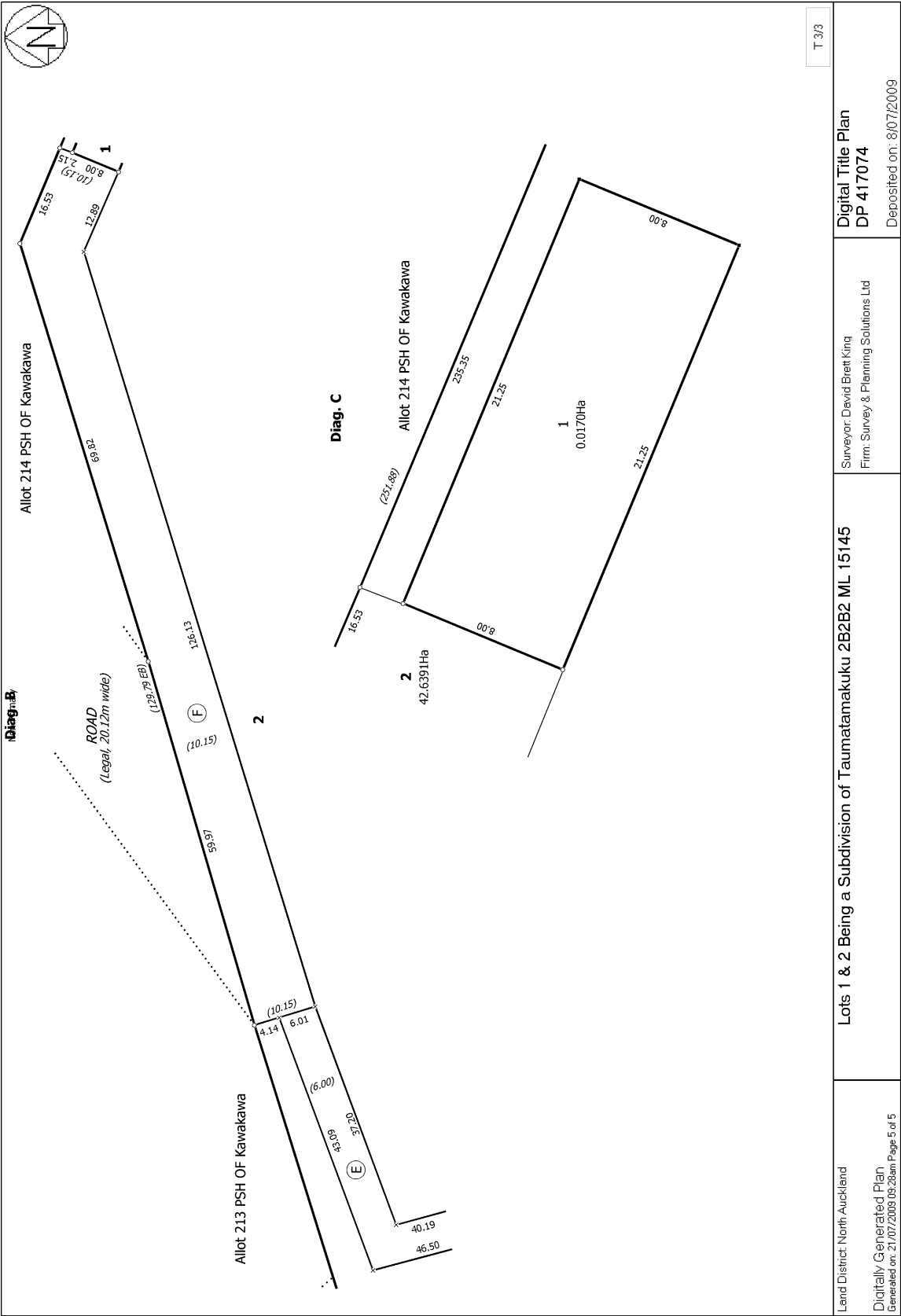
Interests

Appurtenant hereto is a right of way, right to convey electricity, telecommunications and computer media created by Easement Instrument 8162276.2 - 8.7.2009 at 9:16 am

The easements created by Easement Instrument 8162276.2 are subject to Section 243 (a) Resource Management Act 1991
8162276.3 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 8.7.2009 at 9:16 am







1. National Environmental Standards for Telecommunication Facilities 2016

- 1.1 The proposed facility is subject to the provisions of the National Environmental Standards for Telecommunication Facilities 2016 (NESTF). The NESTF regulations provide for the development of different telecommunication facilities, both within and outside the road reserve.

The NESTF regulations applying to this application have been assessed in a sequential order, applicable to the activity, land use, radio frequency and development as follows:

- Subpart 5 – Application of District & Regional Rules
- Subpart 7 – Radiofrequency Regulations
- Subpart 2 – Antennas
- Subpart 1 – Cabinets
- Subpart 6 – Earthworks

Subpart 5 – Application of District & Regional Rules

- 1.2 Subpart 5 of the NESTF requires that all regulated telecommunication facilities comply with specific district wide controls for land use and with Regional Rules of relevance. The following provides an assessment of the proposed telecommunications facility upgrade in context with the applicable District & Regional Plan Rules.

Subpart 5 – Application of District and Regional Rules

Regulation 44: Trees and Vegetation in the Road Reserve

Conditions

(1) This regulation applies to a regulated activity if—

(a) the activity is carried out at a place that is in a road reserve and within the drip line of a tree or other vegetation; and

(b) In the absence of these regulations, the relevant district plan or proposed district plan would require the facility operator to obtain a resource consent for the regulated activity.

(2) This regulation is complied with if the regulated activity is carried out in accordance with the district rules about the protection of trees and other vegetation that apply at that place.

Site Location

McIntyre Road, Kawakawa

Comments

The existing pole is not located in the road reserve.

N/A

Subpart 5 – Application of District and Regional Rules

Regulation 45: Protection of Significant Trees

Conditions

(1) This regulation applies to a regulated activity if the activity is carried out at a place that—

(a) is not in a road reserve; and

(b) is within the dripline of a tree that is, or is in a group of trees that are, identified in the relevant district plan or proposed district plan as being subject to the tree protection rules.

(2) This regulation is complied with if the regulated activity is carried out in accordance with the tree protection rules that apply in relation to that tree.

*In this regulation, **tree protection rules** means the district rules about the protection of trees that are identified in that plan as being of special significance.*

Site Location	Comments
McIntyre Road, Kawakawa	The existing pole is not located within the dripline of any tree.
	N/A

Subpart 5 – Application of District and Regional Rules

Regulation 46: Historic heritage values

Conditions

(1) This regulation applies to a regulated activity if it is carried out at a place identified in a district plan or proposed district plan as being subject to the historic heritage rules.

(2) This regulation is complied with if the regulated activity is carried out in accordance with the historic heritage rules that apply to that place.

(3) In this regulation, historic heritage rules means the district rules about the protection of historic heritage values .

Site Location	Comments
McIntyre Road, Kawakawa	The proposed site location is not located within any listed or identified heritage place, item, site surround or extent of place setting.
	Complies

Subpart 5 – Application of District and Regional Rules

Regulation 47: Visual amenity landscapes

Conditions

(1) This regulation applies to a regulated activity if it is carried out at a place identified in the relevant district plan or proposed district plan as being subject to visual amenity landscape rules.

(2) This regulation is complied with if the regulated activity is carried out in accordance with the visual amenity landscapes rules that apply to that place.

*(3) In this regulation, **visual amenity landscapes rules** means district rules about the protection of landscape features (such as view shafts or ridge lines) identified as having special visual amenity values.*

Site Location	Comments
McIntyre Road, Kawakawa	The subject site is not located within any identified visual amenity landscape overlay or feature.
	Complies

Subpart 5 – Application of District and Regional Rules

Regulation 48: Significant habitats for indigenous vegetation

Conditions	
<p><u>(1) This regulation applies to a regulated activity if it is carried out at a place identified in the relevant district plan or proposed district plan as being subject to the significant vegetation rules.</u></p> <p><i>(2) This regulation is complied with if the regulated activity is carried out in accordance with the significant vegetation rules that apply at that place.</i></p> <p><i>(3) In this regulation, significant vegetation rules means the district rules about the protection of significant habitats for indigenous vegetation (however described).</i></p>	
Site Location	Comments
McIntyre Road, Kawakawa	<p>The proposed facility will not be located within any listed place or overlay. Identified as being subject to any vegetation (significant vegetation or otherwise) overlay or rules in the District Plan.</p> <p>Complies</p>

Subpart 5 – Application of District and Regional Rules	
Regulation 49: Significant habitats for indigenous fauna	
Conditions	
<p><u>(1) This regulation applies to a regulated activity if it is carried out at a place identified in the relevant district plan or proposed district plan as being subject to the significant fauna rules.</u></p> <p><i>(2) This regulation is complied with if the regulated activity is carried out in accordance with the significant fauna rules that apply to that place.</i></p>	

(3) In this regulation, significant fauna rules means district rules about the protection of significant habitats for indigenous fauna (however described).

Site Location	Comments
McIntyre Road, Kawakawa	The proposed site location is not located within any listed place or overlay. Identified as being subject to District Plan rules/overlays for the protection of significant habitats for indigenous fauna.
	Complies

Subpart 5 – Application of District and Regional Rules

Regulation 50: Outstanding natural features or landscapes

Conditions

(1) This regulation applies to a regulated activity if it is carried out at a place identified in the relevant district plan or proposed district plan as being subject to the outstanding natural places rules.

(2) This regulation is complied with if the regulated activity is carried out in accordance with the outstanding natural features or landscape rules that apply to that place.

(3) In this regulation, outstanding natural features or landscapes rules means the district rules about the protection of outstanding natural features or landscapes (however described).

Site Location	Comments
McIntyre Road, Kawakawa	The subject site is in an identified Outstanding Natural Landscape Overlay (ONL) reference# 55 – Bush clad hills west Opuia and Paihia.
	Operative District Plan, Rule 12.1.6.1.6 States that utility services in Outstanding Landscapes must be underground.

	<p>Proposed District Plan, Part 2 District Wide Matters, Natural Environment Values, Natural Features and Landscapes, Standard NFL-S1, states that in any ONL overlay, the max height of any structure is 5m and any extension to any existing structure must not exceed the height of the nearest ridgeline.</p> <p>Comment</p> <p>The proposed antenna upgrade will be undertaken on an existing 20m pole to a max height of 22.2. Furthermore, the existing pole is located on a ridgeline. Therefore, the proposed upgrade will not comply with Standard NFL-S1 of the Proposed Plan and will require discretionary consent under the Proposed District Plan.</p> <p>Therefore, the proposed upgrade will not comply with Regulation 50.</p> <p>Will not comply</p>
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Subpart 5 – Application of District and Regional Rules	
Regulation 51: Places adjoining coastal marine area	
Conditions	
<p><i>(1) This regulation applies to a regulated activity if it is carried out at a place identified in the relevant district plan or proposed district plan as being subject to coastal protection rules.</i></p> <p><i>(2) This regulation is complied with if the regulated activity is carried out in accordance with the coastal protection rules that apply at that place.</i></p> <p><i>(3) In this regulation, coastal protection rules means district rules that regulate the carrying out of activities in places adjoining the coastal marine area for the purpose of protecting the coastal marine area.</i></p>	

Site Location	Comments
McIntyre Road, Kawakawa	The proposed site is not located adjoining the coastal marine area or within any coastal protection setback or margin.
	Complies

Subpart 5 – Application of District and Regional Rules	
Regulation 52: Rivers and lakes	
Conditions	
(1) <i>This regulation applies to a regulated activity if it is carried out over a river or lake (as referred to in regulation 8(2)).</i>	
(2) <i>This regulation is complied with if the regulated activity is carried out in accordance with the applicable regional rules about carrying out that activity over the river or lake.</i>	
Site Location	Comments
McIntyre Road, Kawakawa	The proposed site is not located adjoining any river or lake.
	Complies

- 1.3 An assessment of the NESTF Subpart 5 Regulations above has shown that the proposed upgrade **will not comply with Regulation 50**, due to being previously established within an Outstanding Natural Landscape, where a rule in the District Plan does not provide a permitted activity status for telecommunication facilities.

Subpart 7 - Radiofrequency Fields

1.4 Subpart 7 of the NESTF provides the permitted standards for radiofrequency emissions, where the activity complies with the following conditions.

Subpart 7 - Radiofrequency fields
Conditions
<p>(1) <u>This Regulation applies to an RFG facility.</u></p> <p>(2) <u>This regulation is complied with if—</u></p> <p>(a) <u>The facility must be installed and operated in accordance with NZS 2772.1;and</u></p> <p>(b) Before the facility becomes operational, the facility operator gives the local authority-</p> <p>(i) Written notice of the facility's location; and</p> <p>(ii) A pre-commencement report that complies with subclause (3); and</p> <p>(c) either —</p> <p>(i) The facility operator gives the local authority a post-commencement report that complies with subclause (4) within 3 months after the facility becomes operational; or</p> <p>(ii) Under subclause (5), the facility operator is not required to give a post-commencement report.</p> <p>(3) A pre-commencement report must—</p> <p>(a) be prepared in accordance with AS/NZS 2772.2; and</p> <p>(b) take into account exposures arising from other telecommunication facilities in the vicinity of the facility; and</p> <p>(c) predict whether the radiofrequency field levels at places in the vicinity of the facility that are reasonably accessible to the general public will comply with NZS 2772.1.</p>

(4) A post-commencement report must—
(a) be prepared in accordance with AS/NZS 2772.2; and
(b) provide evidence that the actual radiofrequency field levels at places in the vicinity of the facility that are reasonably accessible to the general public comply with NZS 2772.1.

(5) The facility operator is not required to give a post-commencement report if the prediction referred to in subclause (3)(c) was that the radiofrequency field levels will not reach 25% of the maximum level authorised by NZS 2772.1 for exposure of the general public.

(6) In this regulation,—
AS/NZS 2772.2 means AS/NZS 2772.2:2016 Radiofrequency fields - Part 2:
Principles and methods of measurement and computation - 3 kHz to 300 GHz

NZS 2772.1 means NZS 2772.1:1999 Radiofrequency fields - Maximum exposure levels - 3 kHz to 300 GHz.

Site Location	Comments
McIntyre Road, Kawakawa	<p>The bottom of the proposed antennas (dish) will be approx. 13m above ground level, clear of any area reasonable accessible by the general public. Therefore, NZS 2772.1 will not be exceeded at any point.</p> <p>Radio frequency exposures arising from all other telecommunication facilities in the immediate vicinity, have been taken into consideration in calculating the Radiofrequency statement of compliance reports.</p> <p>The radiofrequency field levels from the proposed antennas are not predicted to reach 25% of the maximum levels authorised by NZS 2772.2 at a point where the public can reasonably gain access.</p>

	<p>Confirmation of compliance with the radiofrequency standards are detailed in the Radiofrequency statement of compliance report, provided by One NZ's Radio Engineer. The statement of compliance report is attached as Appendix 3 of this report.</p> <p>Complies</p>
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Subpart 2 – Antennas

- 1.5 Subpart 2 of the NESTF provides for the replacement of antennas on existing poles outside the road reserve as a permitted activity, where the facility can comply with the following conditions.

SUBPART 2 – ANTENNAS

Subpart 2 Antennas - Antennas on existing poles with antennas not in road reserve and not in a residential zone	
Regulation 32: Regulated activity and standard	
<p><i>(1) The installation and operation of an antenna (antenna D) by a facility operator is a regulated activity if, —</i></p> <p><i>(a) before work to install antenna D begins (date D), there is a pole (pole D) that—</i></p> <p><i>(i) is not in a road reserve; and</i></p> <p><i>(ii) is not in a residential zone; and</i></p> <p><i>(iii) has 1 or more antennas (the existing antennas) attached to it (whether operated by the same or a different facility operator); And</i></p> <p><i>(b) the installation and operation of the existing antennas on pole D complies with the Act; and</i></p> <p><i>(c) antenna D (alone or with 1 or more other antennas) is to be installed—</i></p> <p><i>(i) on pole D in pole D's original location; or</i></p> <p><i>(ii) on pole D after pole D is moved to a new location; or</i></p> <p><i>(iii) on a new pole erected to replace pole D; and</i></p>	

(d) the pole on which antenna D is to be installed (**the final pole**) is—

- (i) not in a road reserve; and
- (ii) not in a residential zone.

(2) The standard for the activity is that—

- (a) regulation 33 must be complied with; and
- (b) each regulation in subpart 5, if it applies, must be complied with; and
- (c) if the activity includes earthworks, regulations 53 and 54 must be complied with; and
- (d) if the antenna is an RFG facility, regulation 55 must be complied with.

Conditions	Comments
McIntyre Road, Kawakawa	<p>The subject site is zoned Rural Production under the Proposed District Plan.</p> <p>The existing pole (pole D) measures 20m in height and has a headframe. The proposed antenna upgrade will result in a 0.6m overall height increase of the facility, due to the length of the new panel antennas.</p> <p>The existing facility includes attachment antennas. The proposal involves the replacement and attachment of additional antennas.</p> <p>The width of the existing pole will remain the same.</p> <p>Complies</p>

Subpart 2 Antennas - Antennas on existing poles with antennas not in road reserve and not in a residential zone

Regulation 33: Antenna on existing pole with antenna not in road reserve and not in residential zone

(1) This regulation applies to the regulated activity described in regulation 32.

(2) *This regulation is complied with if, at the time antenna D is installed, —*

(a) *if pole D is moved or replaced, the location of the final pole—*

- (i) *is not in a road reserve; and*
- (ii) *is not in a residential zone; and*
- (iii) *is not more than 5 m from pole D's location on date D; and*

(b) *if the antenna is a dish or panel antenna, the antenna size rules in subclause (3) are complied with; and*

(c) *the pole width rules in subclause (4) or (5) are complied with; and*

(d) *if the final pole has a headframe, the headframe width rules in subclause (6) are complied with; and*

(e) *the pole height rules in subclause (7) are complied with.*

(3) *The **antenna size rules** are that, —*

(a) *if antenna D is a panel antenna, the width of the panel must not be more than, —*

- (i) *if antenna D is a replacement for an existing panel antenna the width of which was more than 0.7 m, the width of the replaced antenna; or*
- (ii) *otherwise, 0.7 m; or*

(b) *if antenna D is a dish antenna, the diameter of the dish must not be more than, —*

- (i) *if antenna D is a replacement for an existing dish antenna the diameter of which was more than 1.2 m, the diameter of the replaced antenna; or*
- (ii) *otherwise, 1.2 m.*

(4) *If the final pole is in a rural zone, the **pole width rules** are that the width of the final pole must not be more than, —*

(a) *if the width of pole D on date D was more than 6 m, that width; or*

(b) *otherwise, the lesser of—*

- (i) *6 m; and*
- (ii) *the width of pole D on date D multiplied by, —*
 - (A) *if the number of antennas attached to the final pole is more than the number that were attached to pole D on date D, 2; or*
 - (B) *otherwise, 1.3.*

- (5) If the final pole is not in a rural zone, **the pole width rules** are that the width of the final pole must not be more than the width of the baseline pole on the baseline date multiplied by,—
- (a) If the number of antenna attached to the final pole is more than the number that were attached to the baseline pole on the baseline date, 2; or
- (b) otherwise, 1.3.
- (6) The **headframe width rules** are that the width of the headframe on the final pole must not be more than,—
- (a) if pole D had a headframe on date D the width of which was more than 6 m, the width of that headframe; or
- (b) otherwise, 6 m.
- (7) The **pole height rules** are that the height of the final pole and all antennas must not be more than,—
- (a) if the pole was installed without a resource consent in reliance on regulation 34, the lesser of—
- (i) the height of pole D and all antennas on date D plus the permitted height increase; and
- (ii) 25 m; or
- (b) otherwise, the height of the baseline pole and all antennas on the baseline date plus the permitted height increase.
- (8) In this regulation, the **permitted height increase** is,—
- (a) if the facility operator for antenna D is the facility operator for all antennas attached to the final pole, 3.5 m; or
- (b) otherwise, 5 m

Conditions	Comments
McIntyre Road, Kawakawa	<p>The subject site is zoned Rural Production under the District Plan.</p> <p>The antenna upgrade will be undertaken on Pole D, in its existing location.</p> <p>The proposed dish antenna replacement will not exceed 1.2mØ.</p> <p>The panel antennas will not exceed 0.5m width.</p> <p>There will be no change to pole D, the width of the pole will remain the same.</p>

	<p>The existing pole has a headframe. There will be no alteration to the existing headframe.</p> <p>The existing telecommunication pole first was established in 1997 under land use consent RC 1980230 (attached as Appendix 5).</p> <p>The max height of the existing facility (21.1) will have a 0.6m height increase, due to the slightly greater length of the new attachment panel antennas.</p> <p>Summary The proposed upgrade and antenna attachments will be a permitted activity, complying with the max permitted dimensions in Regulation 33.</p> <p>Complies</p>
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Subpart 1 – Cabinets

- 1.6 Subpart 1 of the NESTF provides for telecommunications cabinets as a permitted activity, where the cabinets comply with the following conditions.

Subpart 1 Cabinets
Regulation 21: Cabinet servicing antenna on building
Conditions
<i>(1) This regulation applies to a cabinet that houses equipment the primary purpose of which is to service an antenna that is located on a building.</i>
<i>(2) This regulation is complied with if—</i>

- (a) the height, footprint, and grouping rules in subclause (3) are complied with; and
- (b) for a cabinet that is on the ground, one of the following applies:
- (i) the cabinet's equipment does not require power:
 - (ii) power for the cabinet's equipment is provided by a self-contained power unit:
 - (iii) the power supply for the cabinet's equipment is connected under the ground or inside the cabinet.

(3) The height, footprint, and grouping rules are as follows:

(a) if the cabinet is on the building,—

- (i) the height of the cabinet must not be more than 2 m; and
- (ii) the footprint of the cabinet must not be more than 2 m²:

(b) if the cabinet is not on the building, the requirements set out in regulation 20(3) must be complied with.

Site Location	Comments
McIntyre Road, Kawakawa	Replacement of two existing ancillary equipment cabinets, with one new cabinet installed on the existing concrete pad. The new cabinet measures 0.7m width, 1.45m height, 0.75m depth covering a total footprint 0.53m ² .
	Complies

Subpart 1 Cabinets

Regulation 25: Noise limits for cabinet not in road reserve

Conditions

- (1) This regulation applies to a cabinet not located in a road reserve.
- (2) This regulation is complied with if the cabinet is installed and operated in accordance with the district rules about noise from a facility at the place where the cabinet is located.

Site Location	Comments
McIntyre Road, Kawakawa	<p>The subject site is located outside the road reserve on land zoned rural production.</p> <p>Under Part 2 District Wide Matters, General District Wide Matters, Noise Standard S1, the following noise controls for the Rural Zone, measured at the notional boundary.</p> <p><i>Noise generated by any activity shall not exceed the following limits within the <u>notional boundary</u> of any <u>noise sensitive activity</u> in the Rural Production, Rural Lifestyle or Māori Purpose zones:</i></p> <ul style="list-style-type: none"> <i>a. 7.00am to 10.00pm - 55 dB $L_{Aeq(15min)}$;</i> <i>b. 10.00pm to 7.00am - 40 dB $L_{Aeq(15 min)}$; and</i> <i>c. 10.00pm to 7.00am - 70 dB L_{AFmax}.</i> <p>A noise report for the proposed cabinet model has been attached as Appendix 5 of this application report. The proposed cabinets will be located over 100m from the nearest dwelling, being 241 State Highway 1, Moerewa. Located approximately 890m to the south of the site. Therefore, the proposed cabinet will easily comply with the rural zone noise controls measured at the nearest notional boundary.</p> <p>Complies.</p>

Subpart 6 – Earthworks

- 1.6 Subpart 6 of the NESTF provides for earthworks associated with telecommunication facilities as a permitted activity, where the facility can comply with the following conditions.

Subpart 6 – Earthworks

Regulation 54: Earthworks regional rules apply	
Conditions	
<p>(1) <i>This regulation applies to a regulated activity if it includes earthworks (as referred to in regulation 5(1)(d)).</i></p> <p>(2) <i>This regulation is complied with if the earthworks are carried out in accordance with any applicable regional rules about earthworks.</i></p>	
Site Location	Comments
Deer Park Heights, Frankton	<p>The proposal involves the upgrade of the antennas and cabinets only. The replacement cabinet will be undertaken on the existing concrete pad and will not require any earthworks.</p> <p>Complies</p>

NESTF Regulation Assessment Summary

- 1.7 The NESTF assessment has demonstrated that the proposed upgrade will not comply with Regulation 50(1) of the NESTF Regulations. Given that the existing facility has been established on a Scheduled Outstanding Natural Landscape.



ERICSSON 6140 TELECOMMUNICATIONS CABINET

GENERIC NOISE ASSESSMENT

PREPARED FOR

Two Degrees

DATE

22 November 2021

Generic telecommunications cabinet assessment prepared by Styles Group for Two Degrees.

REVISION HISTORY

Rev:	Date:	Comment:	Version:	Prepared by:
1	22/11/21		Final	Olivier Ghysel, MASNZ Senior Consultant Styles Group
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Table of contents

Executive summary	1
1.0 Introduction	2
2.0 Cabinet noise measurements	2
2.1 Noise measurements- Cabinet operating at 15°C	2
2.2 Testing methodology	3
2.3 Methodology for calculation of fan speed noise levels at 25°C	3
3.0 Cabinet measurement results and predicted noise levels	5
4.0 Noise limits for telecommunications cabinets.....	6
4.1.1 NESTF 2016 noise limits for a cabinet in a road reserve	6
4.1.2 Measurement and assessment of noise levels	7
4.2 Compliance distances for NESTF 2016 noise limits	7
4.3 Vibration	8
5.0 Conclusion	8

Appendices

Appendix A	Cabinet noise level contours
Appendix B	Ericsson Test Report

Executive summary

Two Degrees has engaged Styles Group to undertake noise measurements of the Ericsson 6140 telecommunications cabinet (the **Cabinet**) to inform the site-selection and consenting of future Cabinets.

Styles Group have undertaken a combination of noise measurements and analysis of manufacturer test data to determine the noise emissions of the Cabinet operating under its various fan speeds. The fans speeds vary to maintain an internal cabinet temperature that is generally within 5 degrees Celsius of the ambient outdoor temperature.

Styles Group have assessed the noise emissions of the Cabinet and have prepared noise level predictions and contours to determine the distances at which the noise limits of the Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016 (**NESTF 2016**) or any District Plan standard or condition of resource consent or designation will be complied with.

The noise level contours in Appendix A display the Cabinet noise emissions operating at ambient temperatures of 15 °C, 20°C and 25° on a grid with the Cabinet positioned at the centre. The user of this advice can apply the noise contours and the corresponding grid to estimate the Cabinet noise emissions at the relevant assessment location prescribed by the relevant noise standard.

1.0 Introduction

Two Degrees has engaged Styles Group to undertake noise measurements of the Ericsson 6140 telecommunication cabinet (the **Cabinet**).

This advice is intended to inform the site-selection and consenting of future Cabinets by:

- i. Identifying the noise emissions of the Cabinet when its fans operate at various ambient temperatures.
- ii. Enabling the Cabinet noise emissions to be compared to any telecommunications noise limit prescribed in the Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016 (**NESTF 2016**) or any District Plan standard or condition of resource consent or designation.

2.0 Cabinet noise measurements

Styles Group have undertaken a combination of noise measurements and analysis of manufacturer test data to determine the noise emissions of the Cabinet when operating under its various fan speeds. The fans speeds vary to maintain an internal cabinet temperature that is generally within 5 degrees Celsius of the ambient outdoor temperature.

The cooling fans are the only appreciable noise source from a Cabinet whilst in operation. There are no other sources associated with a Cabinet that would normally be present in a field installation that would otherwise influence the noise levels.

Styles Group undertook noise measurements of the Cabinet operating at an ambient temperature of 15°C. Manufacturer test data was relied on to determine the noise emissions from the Cabinet operating at higher ambient temperatures.

Some telecommunications cabinets are capable of being manipulated to run at fan speeds representative of different ambient temperatures, without the ambient temperature actually changing. This was not possible with this Cabinet. We have conducted a detailed analysis of manufacturer test data to calculate noise levels at ambient temperatures of 20°C and 25°C. The manufacturer has provided detailed test data and fan speed curves for our analysis.

2.1 Noise measurements- Cabinet operating at 15°C

Styles Group undertook noise measurements of the Cabinet with its cooling fans operating at a speed corresponding to an ambient temperature of 15°C on 14 July 2021.

All measurements were conducted using a 2250 Bruel & Kjaer Type 1 sound level meter. The meter and microphone were calibrated in an accredited laboratory and were field-calibrated both before and after the measurements using a Bruel & Kjaer 4231 calibrator.

We performed reverberation time measurements to determine the reverberation time of the test environment (a large atrium in a commercial building). These reverberation measurements have been used to correct the final measured levels to represent an open-air environment. Styles Group used a Norsonic dodecahedron loudspeaker Nor276 with its power amplifier Nor280 and a calibrated Sound Level Meter Nor 140 to determine the reverberation time.

All measurements were conducted in accordance with NZS6801:2008 *Acoustics - Measurement of Environmental Sound* and ISO 3744:2010(E) *Determination of sound power levels of noise sources using sound pressure- Engineering methods for an essentially free field over a reflecting plane*.

2.2 Testing methodology

Styles Group's noise measurements were undertaken in a large indoor environment during the night (when ambient noise levels are sufficiently low) and were conducted according to the provisions of ISO 3744:2010(E).

We applied the provisions of clause Annex C.1 of ISO 3744:2010(E) to determine the microphone measurement positions using the parallelepiped method. The provisions of clauses 8.2.3 and Annex A.3.2 of ISO 3744:2010(E) were used to provide the appropriate adjustments to the raw measured data based on the reverberation time and background noise within the space in which the measurements were made. This required measurement of the reverberation time within the space and background noise measurements of the space with no cabinets running.

Noise measurements were undertaken with the cooling fans in the Cabinet operating at a speed corresponding to an ambient temperature of 15°C. We understand that the fans typically run at this speed during night-time operation in most parts of New Zealand for most of the year.

2.3 Methodology for calculation of fan speed noise levels at 25°C

Styles Group have reviewed the noise test report prepared by Ericsson (the **Ericsson Report**) to understand the Cabinet noise emissions operating under higher ambient temperatures than the test conditions. A copy of the Ericsson Report is provided in Appendix B.

The Ericsson Report provides test results of a Cabinet operating at ambient temperatures of 15°C, 20°C, 35°C and 45°C. The tests were conducted in accordance with ISO 3744:2010(E).

The Ericsson Report does not provide test results for a Cabinet operating at an ambient temperature of 25°C. Styles Group has used Ericsson measurement data and specific fan speed curves to determine the Cabinet noise levels operating at an ambient temperature of 25°C. The same calculation procedure was used to calculate the noise levels at an ambient temperature of 15°C to compare to our measurements. The agreement was good, with the calculated levels within approximately 1 decibel of the measured levels.

Ericsson have provided the graph below demonstrating the relationship between the ambient temperature and fan running speeds.

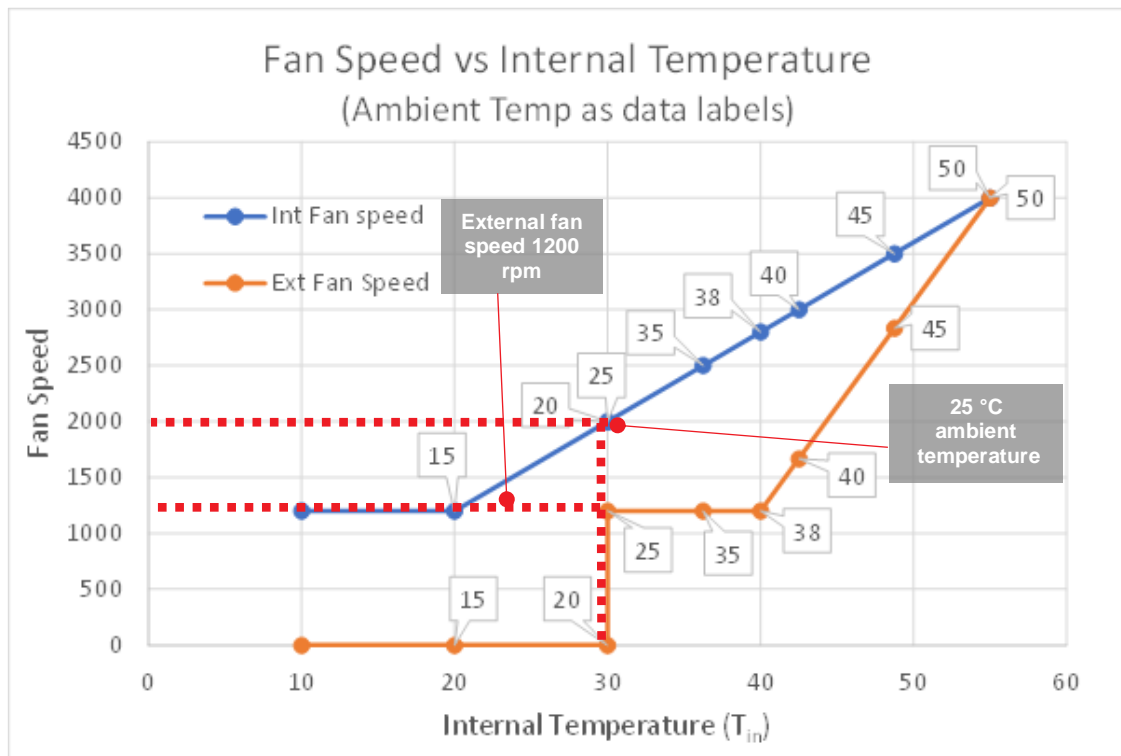


Figure 1 Relationship between internal fan and ambient temperatures and fan speed

Source: Ericsson

Figure 1 shows that the external fans (orange curve) run at the same speed (1200 rpm) whether the ambient temperature is 25°C or 35°C. It also shows that the external fans do not run at up to 20°C of ambient temperature. This means that the measurements taken at ambient temperatures of 20°C or below represent the contribution from the internal fans only.

Based on this information, we determined the daytime noise levels (25°C fan setting) following the methodology detailed below:

1. We identified the noise levels measured at 35°C from Ericsson data (x),
2. We calculate the difference in noise levels generated by the internal fans only between 35°C and 25°C (y) based on fan speed data and measurements at temperatures below 20°C,
3. We subtracted (y) from (x) to get the overall noise level generated by the cabinet at an ambient temperature of 25°C.

3.0 Cabinet measurement results and predicted noise levels

The sound power levels for the Cabinet with its fans operating at a speed corresponding to an ambient temperature of 15°C, 20°C and 25°C are presented in Table 2.

Table 1 Calculated Sound Power Levels (LWA) in accordance with ISO 3744: 2010(E)

Ambient temperature	dBA L_w
15°C	53 dB
20°C	59 dB
25°C	63 dB

The fan noise source is very steady and the levels do not fluctuate with time. The L_{A10} (or L_{10}) noise levels are typically within 1dB of the L_{Aeq} values. This means the L_{Aeq} values can also be used for comparison against any noise limits specified using the L_{A10} descriptor. The L_{AFMax} noise levels are no more than 3dB higher than the L_{Aeq} noise levels.

We note that the minimum signal to noise ratio (SNR) of 6dB, in accordance with clause 8.2.3 of ISO 3744: 2010(E) was not achieved in all frequency bands for measurements of the cabinets off axis from the cooling fans. This was due to the low noise level of the cabinets relative to the background noise levels of the measurement space. However, the fundamental frequencies that control the overall noise output of the cabinets were well above the minimum SNR requirements and are sufficiently robust for the purpose of environmental noise predictions.

Figure 2 displays a typical spectrum of the noise from the Cabinets measured at 1m from the cabinet cooling fan at an ambient temperature of 15°C. We note that both objectively and subjectively, the spectrum does not exhibit any special audible characteristics or have any notable tonal qualities. The objective tonality test for special audible characteristics in accordance with clause B4.3 of NZS 6802: 2008 was performed to confirm the absence of tonality.

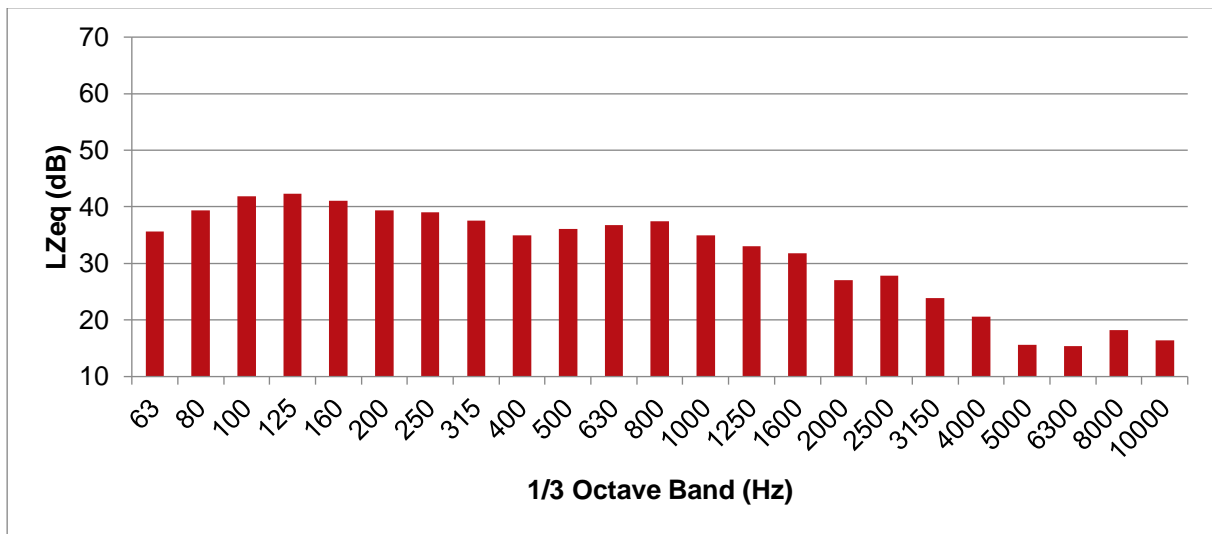


Figure 2 Typical Sound Pressure Level (SPL) spectrum at 1m from Cabinet (cooling fan operating at an ambient temperature of 15°C)

The predicted noise level for any given scenario can be determined by reference to the noise level contour plots presented in Appendix A for the temperature setting(s) that is relevant to the proposed installation. The noise contours presented in Appendix A incorporate two reflecting planes (floor and cabinets themselves).

4.0 Noise limits for telecommunications cabinets

The NESTF 2016 provides nationwide regulations for the installation of telecommunications facilities. The NESTF 2016 controls the noise emissions from a cabinet when installed in locations within and outside of the road reserve.

We have reproduced the NESTF 2016 noise limits for cabinets in road reserves below. We understand the NESTF 2016 enables a local authority to prescribe District Plan noise standards for telecommunications cabinets installed outside the road reserve that are more stringent than the regulations. The relevant noise standards applying to cabinets outside the road reserve, or cabinets subject to a designation condition or condition of resource consent should be confirmed with the relevant local authority.

4.1.1 NESTF 2016 noise limits for a cabinet in a road reserve

Regulation 24 of the NESTF 2016 prescribes noise limits for a cabinet in the road reserve. Regulation 24 requires:

- (3) If the cabinet is located in a residential zone¹ or an adjoining road reserve², the noise limits for the cabinet are, -
 - (a) between 7am and 10pm, 50 dB $L_{Aeq(5min)}$; and
 - (b) between 10pm and 7am,-
 - (i) 40 dB $L_{Aeq(5min)}$; and
 - (ii) 65 dB L_{AFMax} ,
- (4) For any other cabinet, the noise limits for the cabinet are,-
 - (a) at any time, 60 dB $L_{Aeq(5min)}$; and
 - (b) between 10pm and 7am, 65 dB L_{AFMax}

Regulation 24(6) requires the noise levels must be measured and assessed:

- a) 1m from the side of the building (or on the vertical plane of the side of the building) if a building containing a habitable room is within 4m of the road reserve where the cabinet is located
- b) Or, in all other cases, at least 3m from the cabinet and within the boundaries of land adjoining the road reserve where the cabinet is located.

4.1.2 Measurement and assessment of noise levels

Regulation 24(5) of the NESTF 2016 requires the measurement of noise from a cabinet must be:

- a) made in accordance with NZS 6801:2008 Acoustics – Measurement of environmental sound (**NZS 6801**); and
- b) adjusted in accordance with NZS 6801 to a free field incident sound level; and
- c) assessed in accordance with NZS 6802:2008 Acoustics – Environmental noise (**NZS 6802**).

Styles Group has adhered to NZS 6801 and NZS 6802 in the measurement and assessment of noise from the Cabinet.

4.2 Compliance distances for NESTF 2016 noise limits

Styles Group have measured and assessed the Cabinet noise emissions to determine the distances at which the maximum permitted noise levels of the NESTF 2016 will be complied with.

¹ Defined in the NESTF 2016 as "...an area identified in a district plan or proposed district plan as being zoned primarily for residential activities, but not an area zoned for rural/residential or countryside living activities (however described)."

² Defined in the NESTF 2016 as a "formed legal road and any land next to it up to the legal boundary of the adjoining land".

The noise level contours in Appendix A display the Cabinet noise emissions operating at ambient temperatures of 15°C, 20°C and 25° on a grid with the Cabinet positioned at the centre. The user of this advice can apply the noise contours and the corresponding grid to estimate the Cabinet noise emissions at the relevant assessment location prescribed by the relevant noise standard.

4.3 Vibration

We have not encountered any vibration effects from telecommunications cabinets. We did not observe any noticeable or readily measurable vibration effects beyond the Cabinet during the testing. We note that the only moving parts inside telecommunications cabinets are light weight cooling fans. The fans do not have sufficient mass to vibrate the enclosure or the ground around them. The generation of any perceptible vibration effects would require a significantly greater amount of moving mass inside the enclosure.

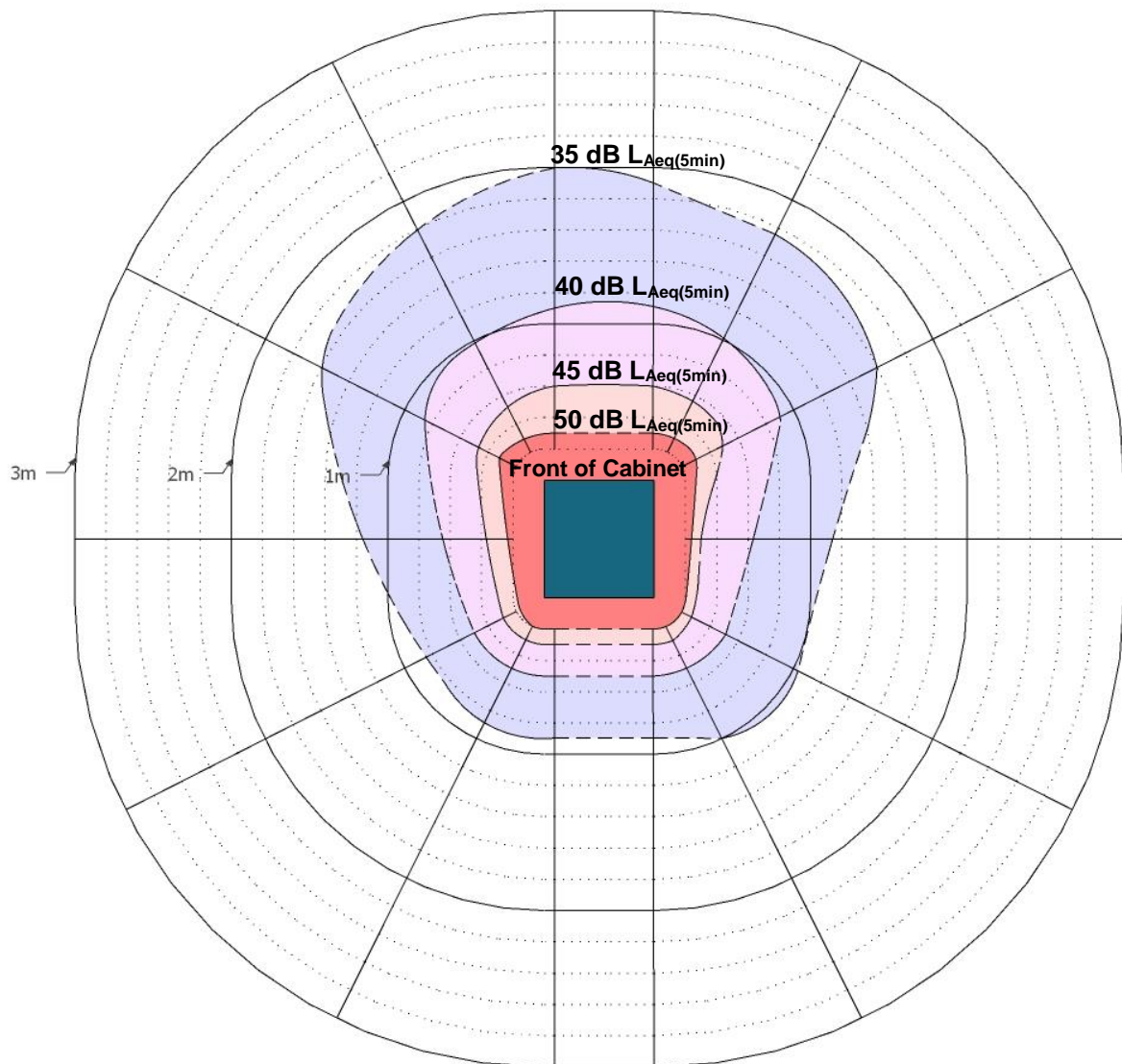
5.0 Conclusion

Styles Group have measured and assessed the noise emissions of a Cabinet and have prepared noise level predictions and contours to determine the distances at which the maximum permitted noise levels of the NESTF 2016 (or noise limit prescribed in a District Plan standard or condition in a designation of resource consent) will be complied with.

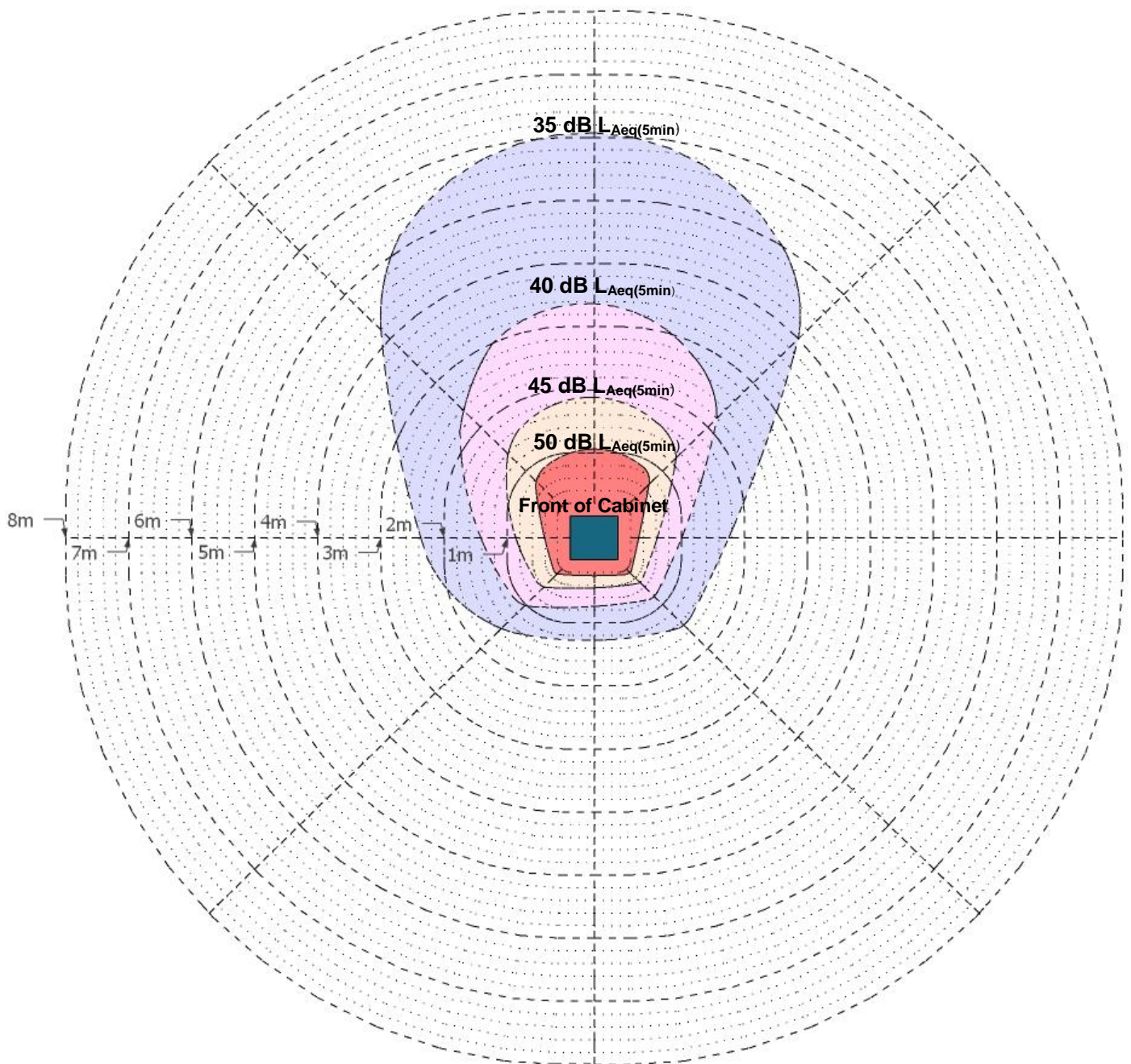
The noise level contours in Appendix A display the Cabinet noise emissions operating at ambient temperatures of 15°C, 20°C and 25° on a grid with the Cabinet positioned at the centre. The user of this advice can apply the noise contours and the corresponding grid to estimate the Cabinet noise emissions at the relevant assessment location prescribed by the relevant noise standard.

Appendix A Cabinet noise level contours

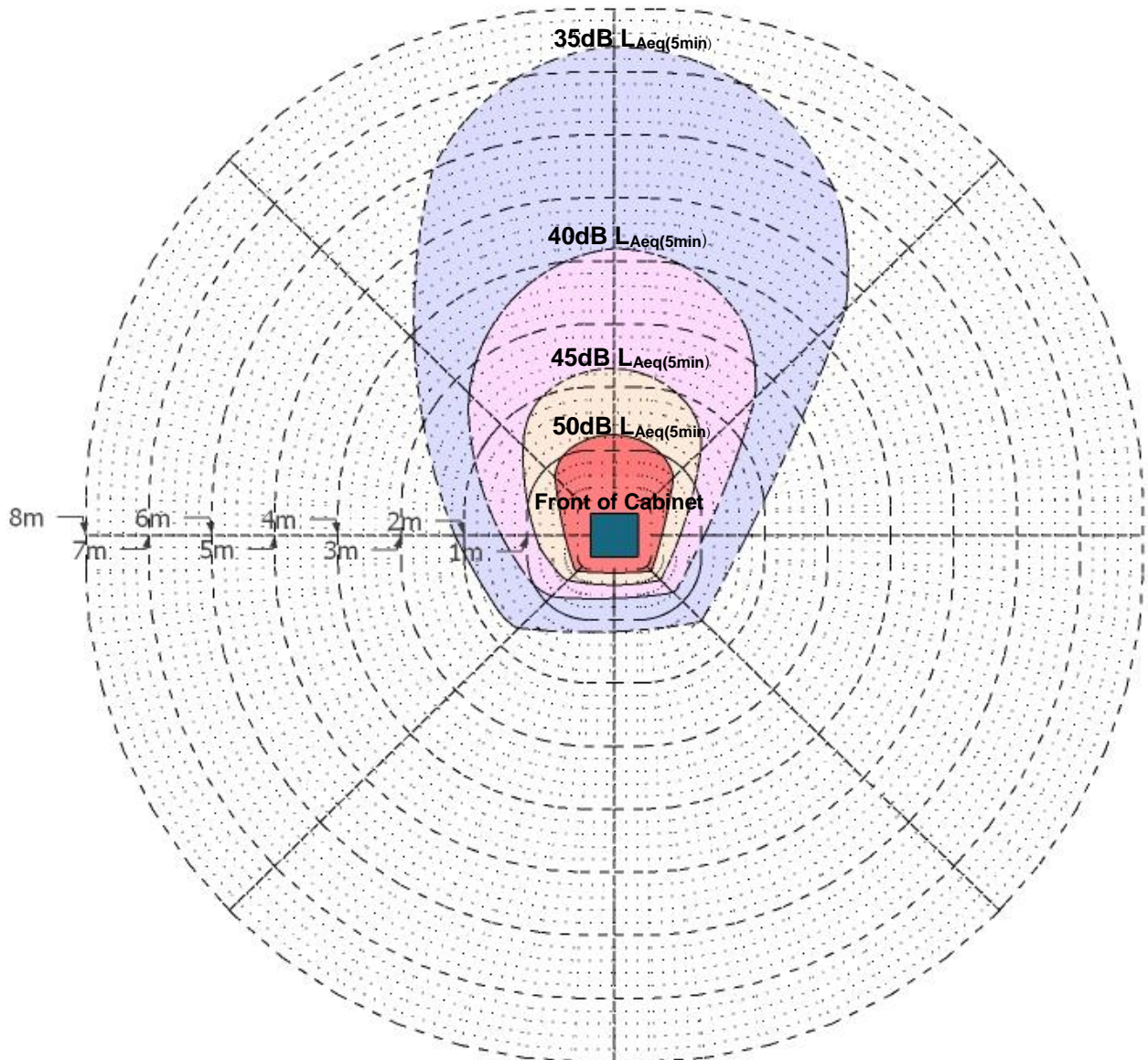
Ambient temperature 15°C



Ambient temperature 20°C



Ambient temperature 25°C



Appendix B Ericsson Test Report

Test summary - Noise test Enclosure 6130/6140

Test Report

NOTE! Enclosure 6130 and Enclosure 6140 utilizes same fan units and fan curve. Noise profile is same. Difference in cooling capacity is dependent on HEX core size. Noise test conducted for characterization only.

1 Test specimen

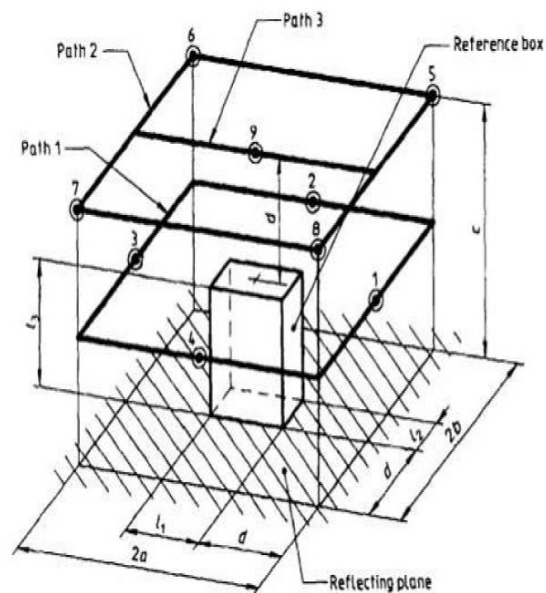
Test unit	Enclosure 6140 AC 21kW	Model	BMK 905 073/1
Product revision	R1A	Purpose	New product verification
Test qty	1 pcs	Test purpose	Noise
		Test location	Shenzhen, China
Start date	2020-10-20	End date	2020-10-20
Room ambient	26degC	Test spec.	ISO 3744:2010 GB/T 3767-1996
Relative hum.	55-56%	Ambient press.	100.5kPa
Background noise	7.1dBA	Test Sound Field	Free field over reflecting plane (semi-anechoic room)
Criteria		Noise characterization	
Conclusion		N/A	
Remarks		N/A	



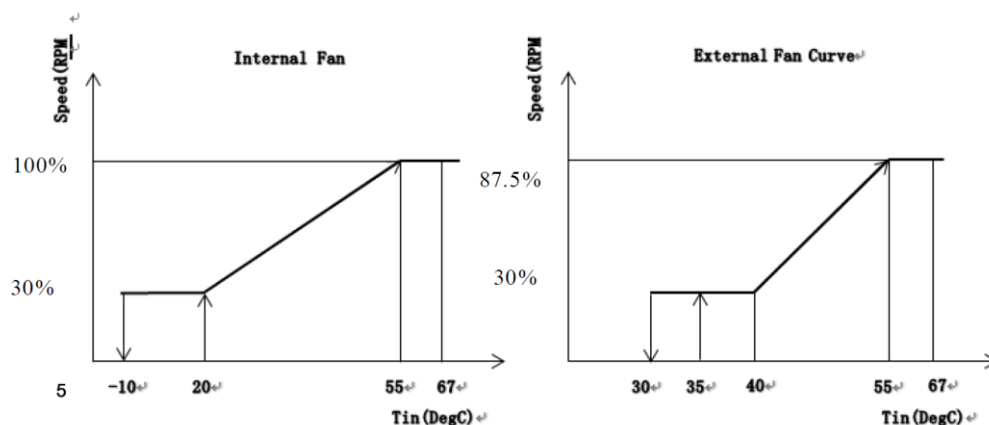
1.1 Test setup



Equipment in noise chamber



Microphone setup (measurement distances = 1m)



Fan curves

1.2 Test cases

	Ambient temp.	Internal fan 1/2 (rpm)	Internal fan 1/2 (rpm)
1	15degC	1200/0	0/0
2	15degC	1200/1200	0/0
3	20degC	2000/2000	0/0
4	35degC	2500/2500	1200/1200
5	45degC	3500/3500	3000/3000

1.3 Results

A-weighted measurements points on each MP, sound pressure level L_{PA} (dB)

MP = Microphone position

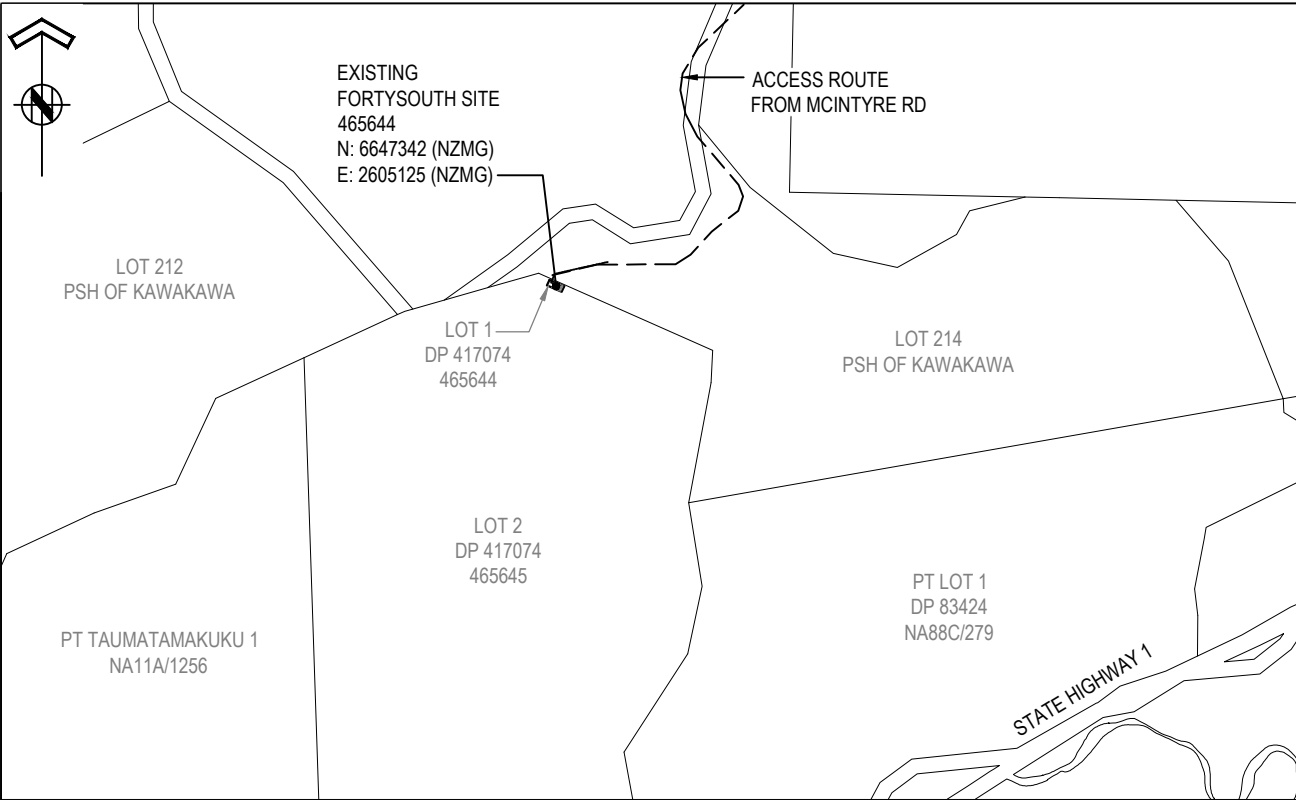
	15degC (1)	15degC (2)	20degC	35degC	45degC
MP1	35.5	37.6	50.7	56.8	66.6
MP2	31.1	31.8	39.9	44.1	54.8
MP3	29.3	29.6	36.8	40.7	48.7
MP4	31.7	32.2	42.5	45.4	54.7



MP5	30.9	31.9	41.4	50.1	58.0
MP6	29.4	29.7	33.2	41.2	46.5
MP7	30.2	30.5	33.9	41.1	47.5
MP8	31.5	32.3	40.8	49.0	57.8
MP9	31.4	31.9	39.9	44.7	52.1

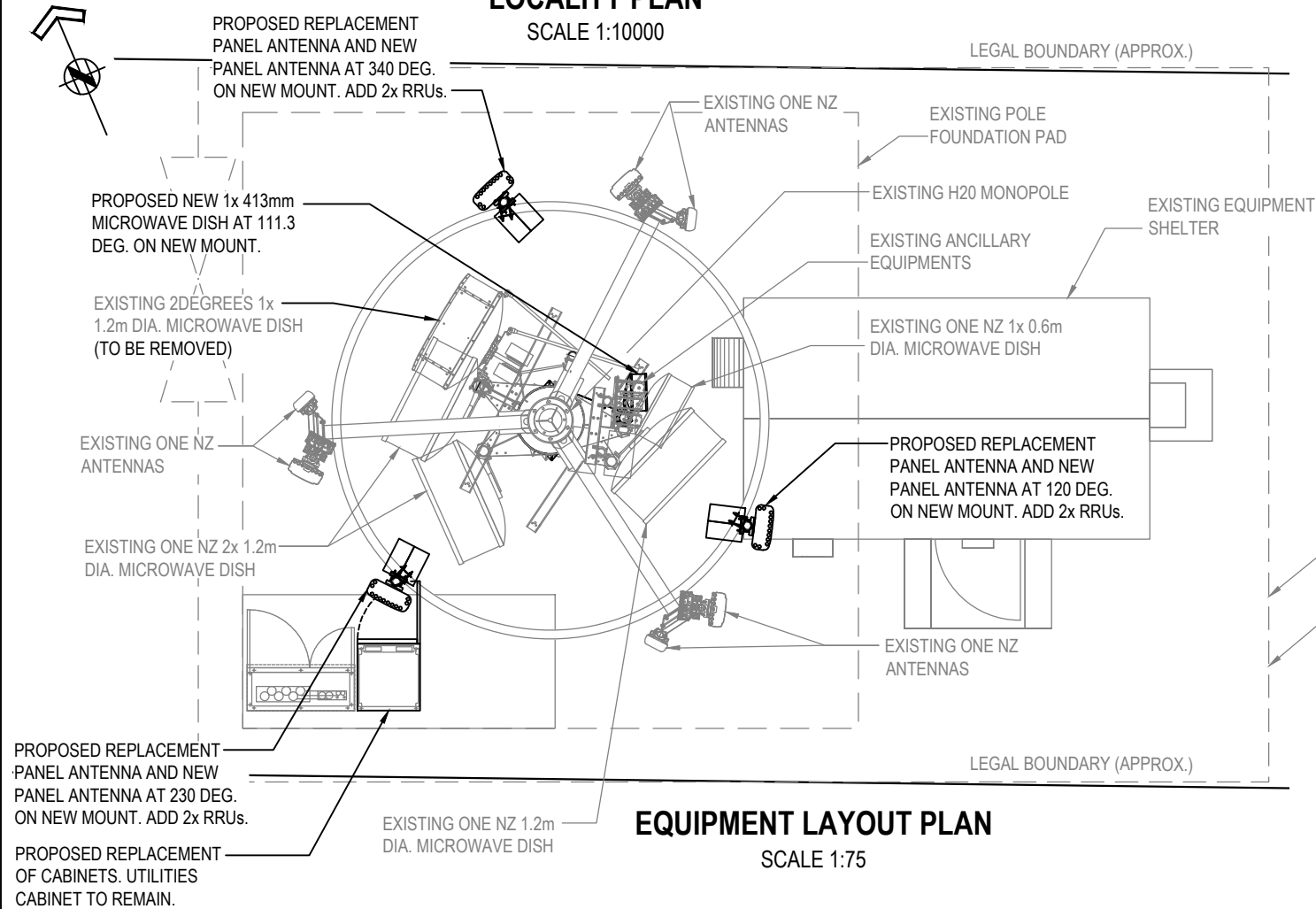
A-weighted sound power level L_{WA} (dB)

	15degC (1)	15degC (2)	20degC	35degC	45degC
A-weighting	47.3	48.4	58.9	65.3	74.4



LOCALITY PLAN

SCALE 1:10000



EQUIPMENT LAYOUT PLAN

SCALE 1:75



SITE LAYOUT PLAN



SCALE 1:1000

NOTES :

1. ACCESS TO SITE FROM MCINTYRE ROAD AS SHOWN.
2. THE NORTH POINT IS INDICATIVE ONLY. BOUNDARIES, BEARINGS AND DISTANCES SHOWN ARE APPROXIMATE AND SUBJECT TO SURVEY. LEVELS GIVEN ARE FROM GROUND LEVEL AND ARE APPROXIMATE ONLY.
3. ALL EXISTING SURFACES AND FEATURES SHALL BE FULLY REINSTATED TO THEIR ORIGINAL CONDITION.
4. ROUTE TO BE CONFIRMED FOR POWER AND TELECOMMUNICATION ROUTE.
5. THE WIDTH OF POWER, TELECOMMUNICATIONS AND ACCESS ROUTE SHOULD BE 3m WIDE.

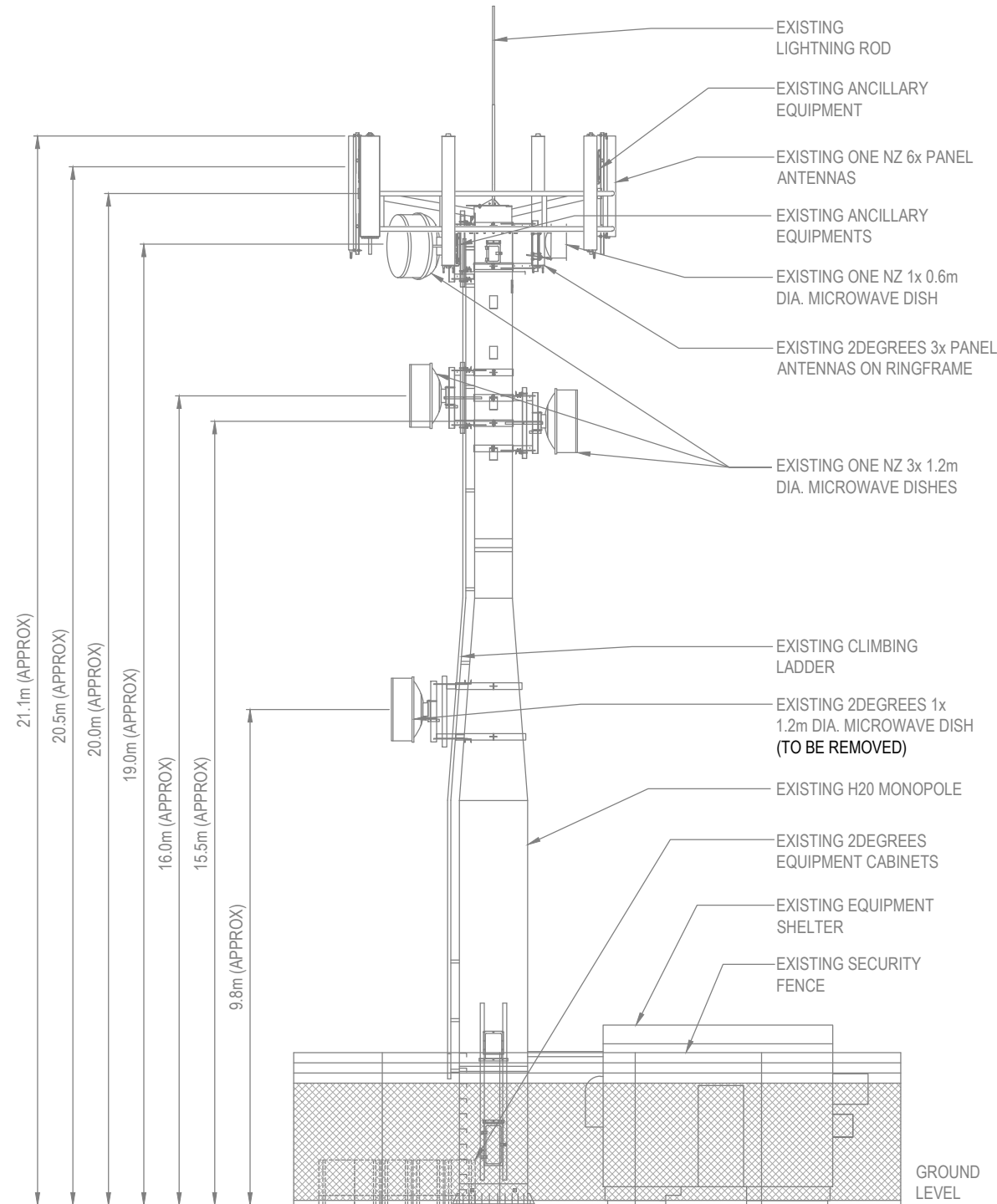
LEGEND

— P —	POWER
— P/T —	POWER AND TELECOMMUNICATIONS
— T —	TELECOMMUNICATIONS
— T —	TELECOMMUNICATION - CHORUS
— G —	GAS
— W —	WATER
— E-UG —	POWER - UNDER GROUND
— Z —	POWER - OVERHEAD
— FO —	FIBRE OPTIC
— SW —	STORMWATER
— S —	SEWER
— — —	DRAINAGE
— — —	FENCE
- - - - -	ACCESS ROUTE
— — —	LEGAL BOUNDARY
⊙	MANHOLE

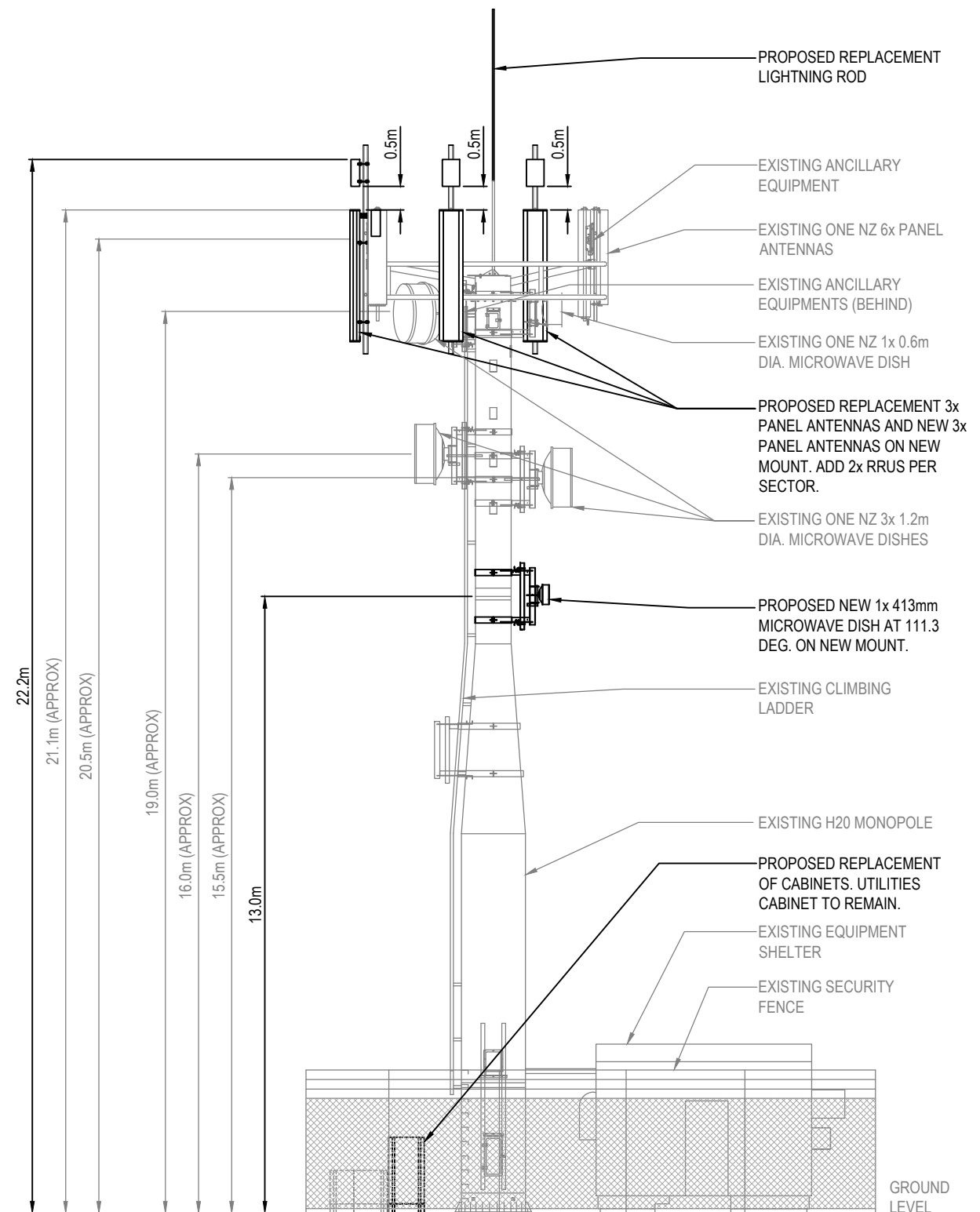
						Fortysouth	Drawn	SP	Date	09.05.25	Project: FORTYSOUTH KAWAKAWA (N1KAW) MCINTYRE ROAD, KAWAKAWA NORTHLAND	Drawing Title: EQUIPMENT LAYOUT	Status PLANNING				
								Designed	SP	Date			09.05.25	Site Code N1KAW	Scale AS SHOWN		
								Checked	JM	Date			09.05.25	Site Type GREENFIELD	Sheet Size A3		
								Approved	JM	Date			09.05.25			Drawing No. S-010-SP	Rev. 1
								Checked	PB	Date			20.05.25				
							Approved	PB	Date	20.05.25			A person using Fortysouth drawings and other data accepts the risk of: 1. Using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions; 2. Using the drawings or other data for any purpose not agreed to in writing by Fortysouth				
		1	ISSUE FOR APPROVAL	SP	27.05.25	Client											
		A	DRAFT FOR APPROVAL	SP	09.05.25												
		REF	REVISION DETAILS	BY	DATE												
													CONFIDENTIAL DO NOT COPY				

CONFIDENTIAL
DO NOT COPY

A person using Fortysouth drawings and other data accepts the risk of:
1. Using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions;
2. Using the drawings or other data for any purpose not agreed to in writing by Fortysouth



EXISTING SOUTH WESTERN ELEVATION
SCALE 1:125



PROPOSED SOUTH WESTERN ELEVATION
SCALE 1:125



1	ISSUE FOR APPROVAL	SP	27.05.25		
A	DRAFT FOR APPROVAL	SP	09.05.25		
REF	REVISION DETAILS	BY	DATE		

Fortysouth	Drawn	SP	Date	09.05.25
	Designed	SP	Date	09.05.25
	Checked	JM	Date	09.05.25
	Approved	JM	Date	09.05.25
Client	Checked	PB	Date	20.05.25
	Approved	PB	Date	20.05.25

Project: **FORTYSOUTH
KAWAKAWA (N1KAW)
MCINTYRE ROAD, KAWAKAWA
NORTHLAND**

Drawing Title:		Status			
ELEVATION		PLANNING			
		Site Code	Scale		
CONFIDENTIAL DO NOT COPY	A person using Fortysouth drawings and other data accepts the risk of: 1. Using the drawings and other data in electronic form without requesting and checking them for accuracy against the original hard copy versions; 2. Using the drawings or other data for any purpose not agreed to in writing by Fortysouth	N1KAW	AS SHOWN		
		Site Type	Sheet Size		
		GREENFIELD	A3		
				Drawing No.	Rev.
				S-011-SE	1

30 May 2025

Far North District Council
Private Bag 752
Kaikohe 0440
New Zealand

RE: Cumulative RF Emissions at Two Degrees Networks Limited Telecommunications facility, McIntyre Road, Kawakawa, Northland. (ref. NTH-001-024)

This report is to address the cumulative effects of radio emissions (at the above-mentioned address) to further the information submitted to Council as required in the NES Regulations (2016), Regulation 55. It is also prepared in accordance with AS/NZS 2772.2:2016 Radiofrequency fields - Part 2: Principles and methods of measurement and computation - 3 kHz to 300 GHz. Please note all Two Degrees Networks Limited site installations are planned and operated in accordance with NZS 2772.1:1999 Radiofrequency fields – Maximum exposure levels - 3kHz to 300 GHz.

2degrees intend to install, operate, and maintain a facility at a total height of 22.2m at the above address.

I have examined the above site in terms of the proposed Two Degrees Networks Limited facility antennas, public access to and uses of the surrounding physical environment, and the predicted RF emission levels of the proposed antennas and those of any existing service providers. I am satisfied that if the proposed antennas were to become operational today the predicted cumulative radiofrequency field levels at places in the vicinity of the facility that are reasonably accessible to the general public will not reach or exceed 25% of the maximum level authorised by NZS 2772: Part 1:1999 Radiofrequency Fields Part 1 – Maximum Exposure Levels – 3 kHz to 300 GHz. Please refer to Appendix A for power outputs, antenna gains and operational frequencies.

RF exposure calculations have considered antennas for each technology that result in the worst-case compliance distances for each site. This allows specific antenna models to be selected at a later stage of the design process whilst ensuring emissions will be retained within the calculated envelopes. Please refer to Appendix B for the RF Lobe diagram and compliance distances.

Yours sincerely,



Verapol Glumglai
Senior RAN Engineer
Two Degrees Networks Limited



Appendix A:

2degrees Power Outputs, Antenna Gains, Operational Frequencies:

Frequency	758	935	1805	2155	3700	MHz
Allowed Power Flux Density (100% Public)	3.79	4.68	9.03	10.00	10.00	W/m ²
Antenna Gain	15.5	16.2	19.1	19.6	0.0	dBi
Peak Power Factor	100%	100%	100%	100%	25%	
TDD Factor	100%	100%	100%	100%	75%	
TRX Power	49.0	49.0	52.0	53.0	45.7	dBm
Total Losses	0.0	0.0	0.0	0.0	0.0	dB
EIRP	64.5	65.2	71.1	72.6	71.5	dBm

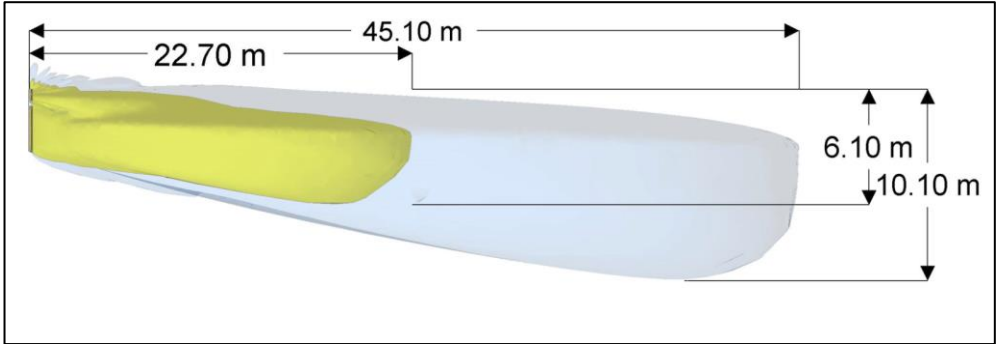


Appendix B:

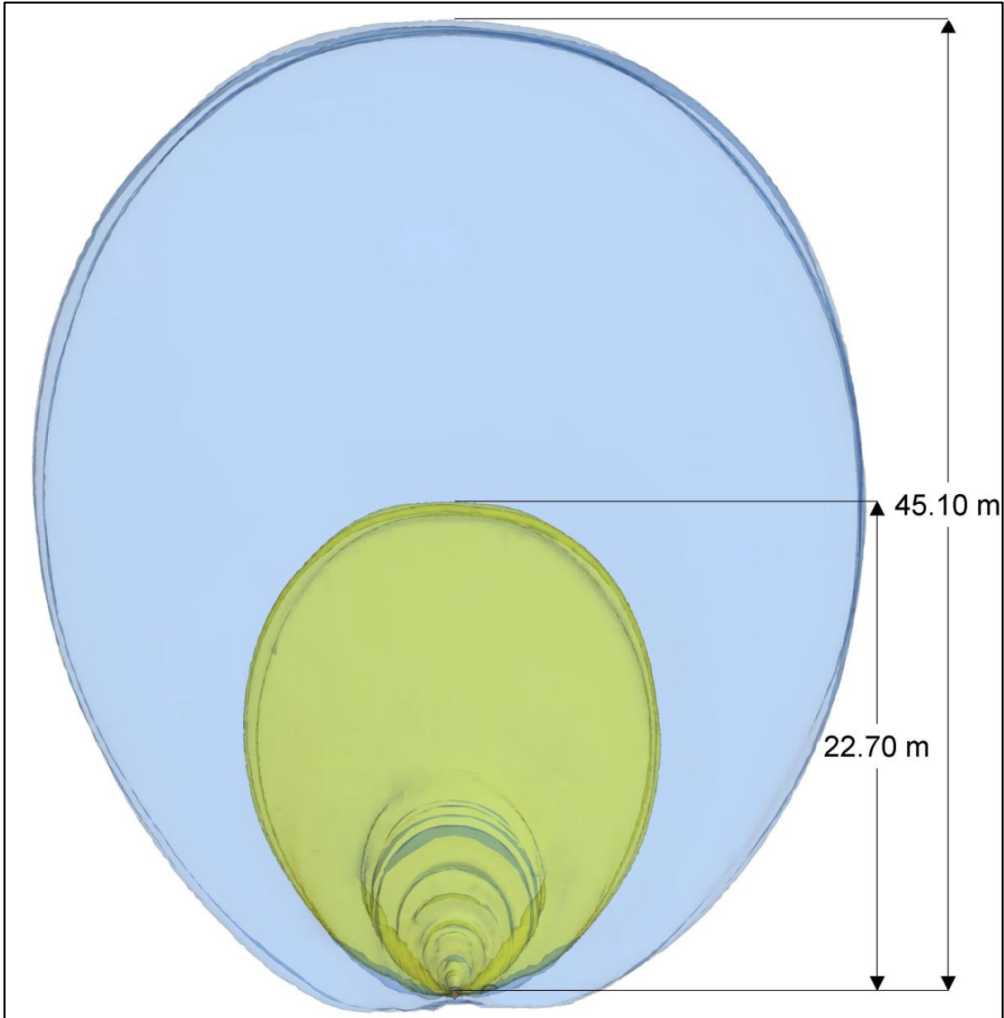
2degrees RF Lobe diagram and compliance distances:



Elevation View:



Plan View:



FAR NORTH DISTRICT COUNCIL



Our reference RC 1990429
M McDonald
All replies should be addressed to the District Secretary

16 December, 1998

Vodafone New Zealand
c/o Connell Wagner Ltd
P O Box 9762
AUCKLAND

PROJ 3059/25			
TO	ACTION	INFO	INIT
CDP		-	CG
SS	✓	-	SS
FILE	✓	REG	-

18 DEC 1998

Dear Sir/Madam,

re: **RC 1990429 APPLICATION BY VODAFONE NZ TO CHANGE
CONDITIONS OF CONSENT**

I enclose a copy of Council's decision on the above application.

The Resource Management Act provides a right of appeal to the Environment Court, in respect of the whole or any part of the Council's decision. This must be lodged within 15 working days of receipt of this decision. An information sheet on appeals is attached.

Also attached is an invoice for \$238.33, being additional costs incurred during the application process.

Yours faithfully,

for RESOURCE PLANNER

FAR NORTH DISTRICT COUNCIL

IN THE MATTER of the Resource
Management Act 1991:

AND

IN THE MATTER of an application
under the aforesaid Act, 1991
by VODAFONE NEW ZEALAND

APPLICATION NUMBER RC 1990429

HEARINGS APPLICATION TO CHANGE CONDITIONS OF CONSENT.

The property in respect of which the application is made, is situated at STATE
HIGHWAY 1, MOEREWAI

HEARING

Before the Hearings Committee of the Far North District Council, on the 7
DECEMBER 1998

DECISION

"THAT PURSUANT TO SECTION 127 OF THE RESOURCE
MANAGEMENT ACT 1991, THE FAR NORTH DISTRICT COUNCIL
APPROVES THE APPLICATION BY VODAFONE NEW ZEALAND TO
CHANGE CONDITIONS OF CONSENT OF RC 1980230, (AN APPROVAL
GRANTED TO BELL SOUTH NEW ZEALAND LTD) TO ESTABLISH A
CELLULAR TELEPHONE TELECOMMUNICATIONS FACILITY ON
TAUMATAMAKUKU 2B2B2, SUCH LAND BEING LOCATED AT STATE
HIGHWAY 1, MOEREWAI.

THE CONSENT IS CHANGED BY:

- THE AMENDMENT OF CONDITION 1 TO:

"1. THAT THE APPLICATIONS PROCEED IN ACCORDANCE WITH
THE APPLICATION AND PLANS SUBMITTED INCLUDING AN
UNDERGROUND POWER SUPPLY REQUIRING VEGETATION
CLEARANCE AND EARTHWORKS".

- THE ADDITIONS OF CONDITIONS 7 AND 8:

"7. THAT PRIOR TO COMMENCEMENT OF ANY EARTHWORKS
OR VEGETATION CLEARANCE IN ASSOCIATION WITH THE
POWER SUPPLY, AN ARCHAEOLOGICAL INSPECTION SHALL
BE UNDERTAKEN AND THE RESULTS FORWARDED TO THE
FAR NORTH DISTRICT COUNCIL AND THE HISTORIC PLACES
TRUST.

8. THE ROUTE OF THE POWER SUPPLY SHALL BE CLEARED AND RE-VEGETATED IN ACCORDANCE WITH THE RECOMMENDATIONS OF LOCKHART FERRICK LANDSCAPE ARCHITECTS IN THEIR REPORT DATED 28 JULY 1997."

Reasons for the Decision:

1. Council is satisfied that environmental effects associated with the change will be minor subject to works being completed in accordance with the details submitted.
2. Concerns were expressed regarding earthworks by iwi earlier in the process. However the written approval of iwi to the change has been obtained.

Advice Clause:

1. The applicant is advised that an invoice for the sum of \$238.33 will follow this decision being additional costs incurred in processing.

INFORMATION AS TO RIGHTS OF APPEAL

THE RESOURCE MANAGEMENT ACT 1991

1. You may appeal against Council's decision by lodging a Notice of Appeal with the **Registrar of the Environment Court** and with **Council** within 15 working days of the receipt of Council's decision by you or the person who filed the application/submission on your behalf. The Notice of Appeal must also be served on the **consent holder**, and on **any person who made a submission** on the application, within 5 working days of it being lodged with the Court. Sections 120 and 121 of the Act explain the right to appeal, and the procedure.
2. The appeal must be in the form prescribed by Form 7 of the Resource Management (Forms) Regulations 1991.
3. The address of the Environment Court is :

P O Box 5027
WELLINGTON

phone : (04) 915-8300
fax : (04) 915-8303

The Notice of Appeal must be accompanied by the appropriate filing fee.

1. If you are in any doubt as to the procedure to be following it is strongly recommended that you obtain professional advice. Incorrect procedure may result in your appeal being struck out.

Vodafone Document Distribution List - Resource Consents

From: Ross Langford

Connell Wagner Limited, Auckland Office

PO Box 9762, Newmarket, phone 09 520 6019, fax 09 524 7815, email langfordR@conwag.com

Date: 11/9/03

The following document is enclosed for your information/review:

Site: KAWA KAWA
(REVISIT)

VNZ Project Code: TTRKAW

π Constraint Map

Gamma Stage #: N070

Copies to: David Stokes
Mark Hepburn
Property
RF Engineer
File Copy

π Final Resource Consent Application

Gamma Stage #: N130

Copies to: David Stokes
Mark Hepburn
Tracy Leadbetter
David Willetts (if notified)
File Copy

π Planning Audit

Gamma Stage #: N210

Copies to: Mark Hepburn
David Stokes
Tracy Leadbetter
Property
RF Engineer
File Copy

π Council Decision

Gamma Stage #: N320

Copies to: David Stokes
Mark Hepburn
Tracy Leadbetter
David Willetts ✓
Property-
Bill Blundell
John Griffin ✓
File Copy ✓
PAUL HALLOWES.

π Draft Resource Consent Application

Gamma Stage #: N290

Copies to: David Stokes
Mark Hepburn
Tracy Leadbetter
File Copy

π Correspondence

Copies to:

Vodafone NZ LTD
Vodafone Auckland Office
Private Bag 92161
Auckland
Fax: 09 379 3451
Tel: 09 357 5100

Dave Townsend
DTZ New Zealand
P O Box 947
Rotorua

Alan Roskrug/Brad Clarke
DTZ New Zealand
P O Box 3490, Shortland Street
Auckland
Fax: 09 309 9020
Tel: 09 309 3040

Bill Blundell
Mainworks
P O Box 3978
Auckland
Fax: 09 375 2106
Tel: 09 375 2100

Andy Wiseman
DTZ New Zealand
P O Box 1444
Whangarei
Fax: 09 438 0330
Tel: 09 438 3400

Wayne Smith
DTZ New Zealand
P O Box 1045
Napier
Fax: 06 835 0036
Tel: 06 834 1106

Greg Munro
DTZ New Zealand
P O Box 1442
Hamilton



FAR NORTH DISTRICT COUNCIL

Private Bag 752, Memorial Ave, KAIKOHE 0400
Freephone: 0800 920 029, Ph: (09) 405 2750, Fax: (09) 401 2137
Email: ask.us@fndc.govt.nz, Website: www.fndc.govt.nz

Application No: RC 2040144

8 September 2003

Connell Wagner Ltd
PO Box 9762
AUCKLAND
Attn: Owen Burn

RECEIVED

11 SEP 2003

Dear Sir

PROJ A405/71			
TO	ACTION	INFO	REG
OB	✓		
FILE	✓	REG	

Re: VODAFONE NEW ZEALAND LTD. RESOURCE CONSENT APPLICATION.
MCINTYRE ROAD, KAWAKAWA

I am pleased to inform you that your application for resource consent has been approved. The decision is enclosed for your information. The application was considered and determined under authority delegated to the Manager, Environmental Services of the Far North District Council, pursuant to Section 34(4) of the Resource Management Act 1991.

It is very important that you understand and comply with any conditions of consent. If you have any questions or concerns about any aspect of your consent or its conditions, please contact the Planner who prepared the decision.

Your consent expires five years from the date that you receive this decision. Please note that under Section 125 of the Resource Management Act 1991, your consent will lapse unless you make significant progress towards giving effect to the consent within the five year period.

If you are dissatisfied with the decision or any part of it, you have the right (under Section 357 of the Act) to object to the decision. The objection must be in writing, stating reasons for the objection, and must be received by Council within 15 working days of your receipt of this decision.

Depending on the costs charged against your consent, you will find enclosed either an invoice or a credit note. Any additional costs shown on an invoice need to be paid as soon as possible. If you receive a credit note, you have the option of requesting a refund by cheque, or transferring the amount to any other Council account.

If you have any further queries regarding this matter, please contact the reporting Planner.

Yours faithfully

Environmental Services Administrator

FAR NORTH DISTRICT COUNCIL

FAR NORTH TRANSITIONAL DISTRICT PLAN [BAY OF ISLANDS SECTION]

AND

FAR NORTH PROPOSED DISTRICT PLAN

IN THE MATTER OF

The Resource Management Act 1991

AND

IN THE MATTER OF

an application for Resource Consent
under the aforesaid Act by
VODAFONE NEW ZEALAND LTD

FILE NUMBER RC 2040144

DECISION

That pursuant to Sections 104B of the Resource Management Act 1991, the Council grants its consent to Vodafone New Zealand Ltd to add two 0.6 metre diameter parabolic dish antennas to the existing cellular telephone mast situated on land adjacent to McIntyre Road, Kawakawa, being legally described as Taumatamakuku 2B2B2, contained within certificate of title NA 46C/81.

The consent is subject to the following conditions:

1. The application shall proceed to accordance with the plans as prepared by Connell Wagner reference A40571-P01 & P02 and attached to this consent with Council's approved stamp affixed.
2. The operation of the facility shall satisfy NZS 2772.1:1999.

In consideration of the application under Section 104 of the Act, the following reasons are given for this decision:

1. The application seeks approval to add two new parabolic dish antennas to an existing telecommunications mast.
2. Environmental effects associated with the additional antenna are considered to be minor and no other parties are affected by the proposal.
3. There are no apparent conflicts with the purpose of the Act, nor with the matters or principles noted in Sections 6, 7 and 8 of the Act, nor with the objectives and policies of the two relevant District Plans.

DECISION PREPARED BY: Murray McDonald, Consultant Resource Planner

CONSENT GRANTED UNDER DELEGATED AUTHORITY:

P.J. Killalea RESOURCE CONSENTS MANAGER
8th September 2003 DATE
RC 2040026

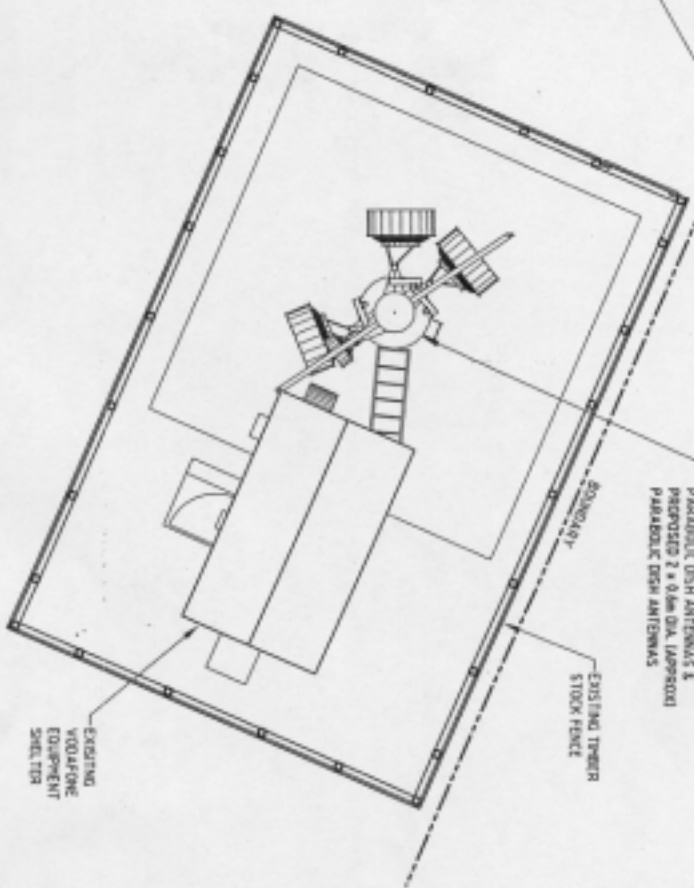
A	Serial	A5 5HOW
	Drawing No.	A40571-1

APPROVED PLAN

PLANNER: *Mtu 9/03*

RC 2040144 Date: 8/9/03

EXISTING TRACK
(VODAFONE ACCESS)



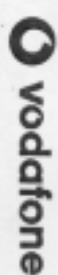
COMPOUND PLAN

(1:100)

OWNERS/OCCUPIER: VODAFONE PROJECT MANAGER
Approval: _____
Approval: _____

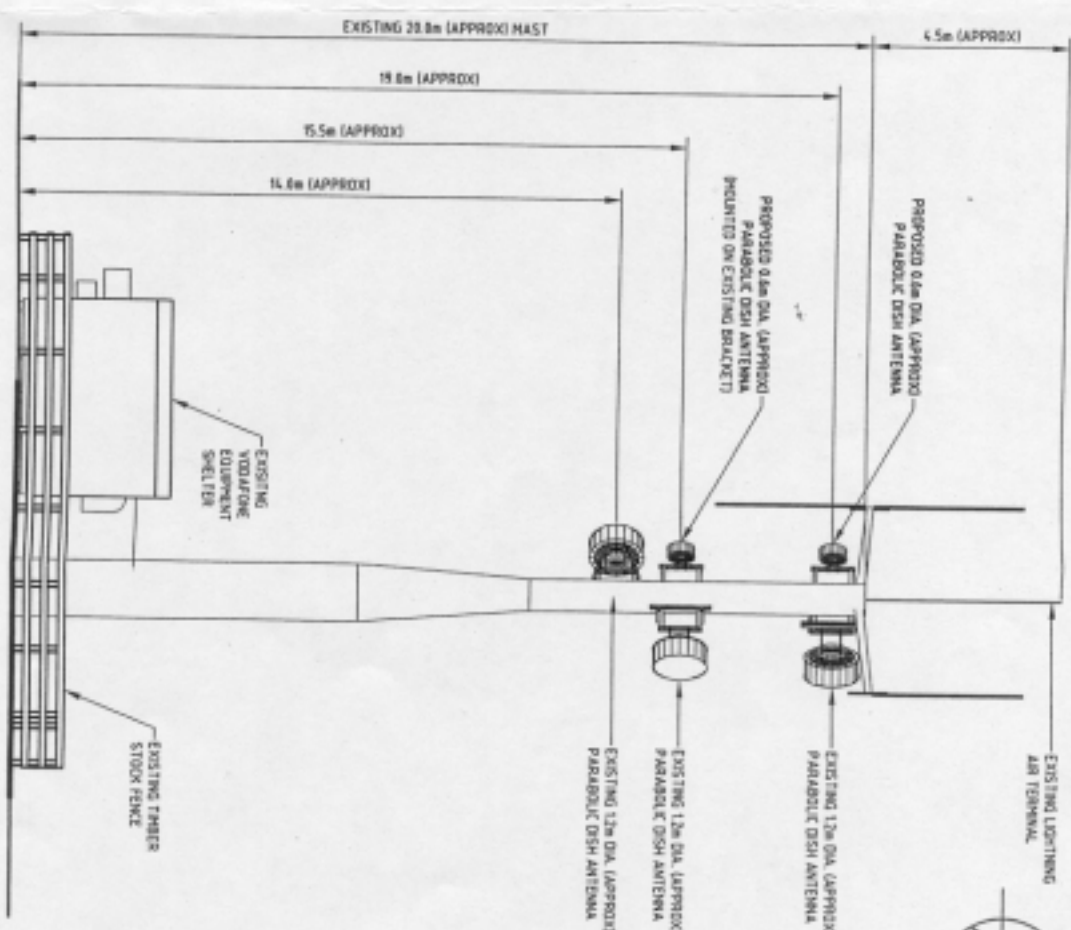
Cornell Wagner

Consulting Engineer - Auckland Office
100-102, The Arcade, Auckland
Phone: 09 308 1100
Fax: 09 308 1101
Email: c.wagner@cw.co.nz



Project Code: TTRCAW Status: Stage 1b NZ90

VODAFONE NEW ZEALAND LIMITED
KAWAKAWA BTS CELL SITE
(REVISIT 07/03) DODS PROPERTY,
MCINTYRE RD, KAWAKAWA



SITE PLAN

(1:100)

Drawn By	Checked By	Approved By	Date
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	15/03/03

COMPOUND PLAN
& ELEVATION



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CONFIDENTIAL
TO THE OWNERS
Date: 20/03/2003

PLAN

Scale: AS SHOWN
Drawing No: AA0571-P02



Far North
District Council

Private Bag 752, Memorial Ave,
KAIKOHE 0400
Freephone: 0800 920 029,
Ph: (09) 405 2750,
Fax: (09) 401 2137
Email: ask.us@fndc.govt.nz,
Website: www.fndc.govt.nz

Company:

Attention:

Rachel

From:

Te Kaunihera o Tai Tokerau Ki Te Raki

Department:

Direct Fax No:

Date:

Page(s) including cover page:

Subject:

as discussed

Doing

FAR NORTH DISTRICT COUNCIL

FAR NORTH PROPOSED DISTRICT PLAN

IN THE MATTER OF

The Resource Management Act 1991

AND

IN THE MATTER OF

an application for Resource Consent
under the aforesaid Act by

Vodafone New Zealand Ltd

FILE NUMBER: RC-2071051-RMALUC

That pursuant to section 37 of the Resource Management Act 1991, the Council hereby extends the time period for processing this resource consent from 20 working days to 40 working days, to account for staff resourcing and increased workloads.

That pursuant to Sections 104B and 108 of the Resource Management Act 1991, the Council grants its consent to Vodafone New Zealand Ltd, to undertake additions to the existing telecommunications facility and to provide for two additional dish antennas within an "envelope" at McIntyre Rd, Kawakawa being more particularly described as TAUMATAMAKUKU 2B2B2 BLKS XI XV KAWAKAWA SD contained in NA-46C/81 (North Auckland Registry) subject to the following conditions:

1. The development shall be carried out in accordance with the approved plans prepared by Harrison Grierson, referenced VODAFONE NZ LTD, dated 19.06.2007, and attached to this consent with the Council's "Approved Plan" stamp affixed to it.
2. A maximum of 7 Parabolic Dish Antenna, at a maximum diameter of 1.8 metres each is allowed within the proposed envelope.
3. The proposed additions, and additions associated with the "envelope" shall be completed in a recessive grey colour similar to the existing facility.

After consideration of the application under Section 104, the following reasons are given for this decision pursuant to Section 113 of the Act:

- A. Consideration was given to the Far North Proposed District Plan (Revised July 2003). Particular consideration was given to Chapters 8.6 Rural Production Zone, 11.1 Landscaping & Natural Features, 16 Designations & Utility Services and the associated appendices of the Proposed District Plan. The proposal was also assessed against the relevant District Wide Provisions outlined in Volume 2 of the Proposed Plan.
- B. The principal issues that were in contention were the proposed building envelope, visual amenity and the location of the facility in Outstanding Landscape. As the telecommunications facility is an existing structure, it is considered that the proposed

additions and building envelope will have a no more than minor effect on visual amenity and the Outstanding Landscape. Additionally, any potential visual amenity effects will be mitigated by the surrounding established vegetation.

- C. Written approval from adjoining owners and interested parties to the proposed activity has not been sought, as the Council is of the opinion that no one will be adversely affected by the granting of consent to the proposal.
- D. The imposed conditions will ensure that the effect of the consent will be compliance with the relevant provisions of the applicable District Plans; and that such conditions will adequately avoid, or mitigate to a minor impact level, the expected adverse effects on the environment.
- E. There are no apparent conflicts with the purpose of the Act, nor with the matters or principles noted in Sections 6, 7 and 8 of the Act, nor with the objectives and policies of the two relevant District Plans.

DECISION PREPARED BY: Jessica Phillips Resource Planner

CONSENT GRANTED UNDER DELEGATED AUTHORITY:



Pat Kihalea

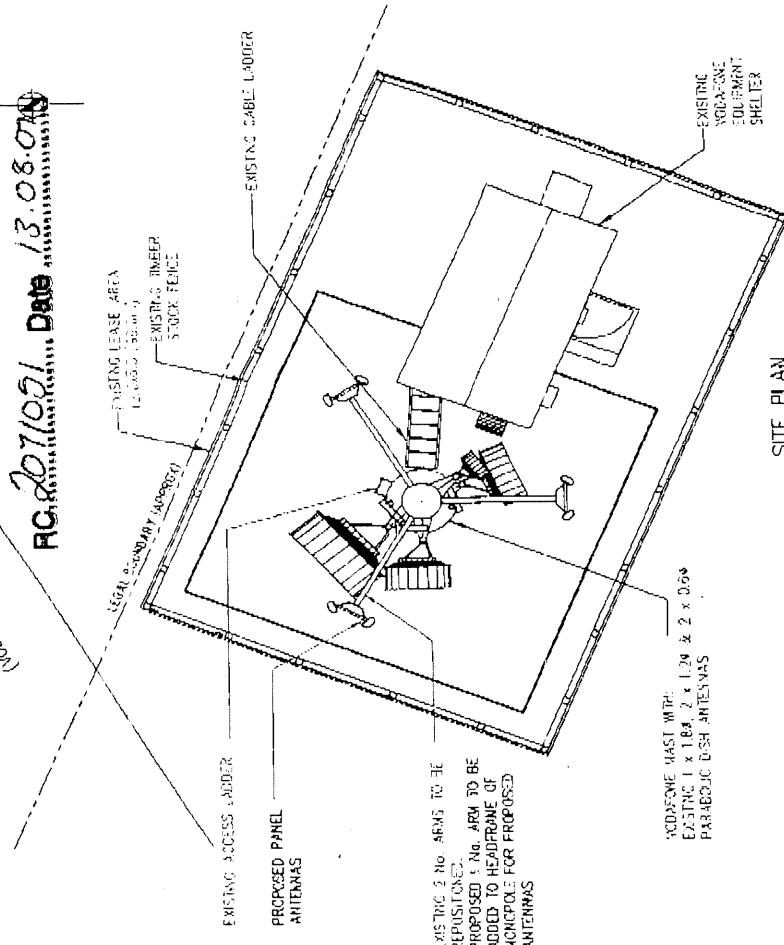
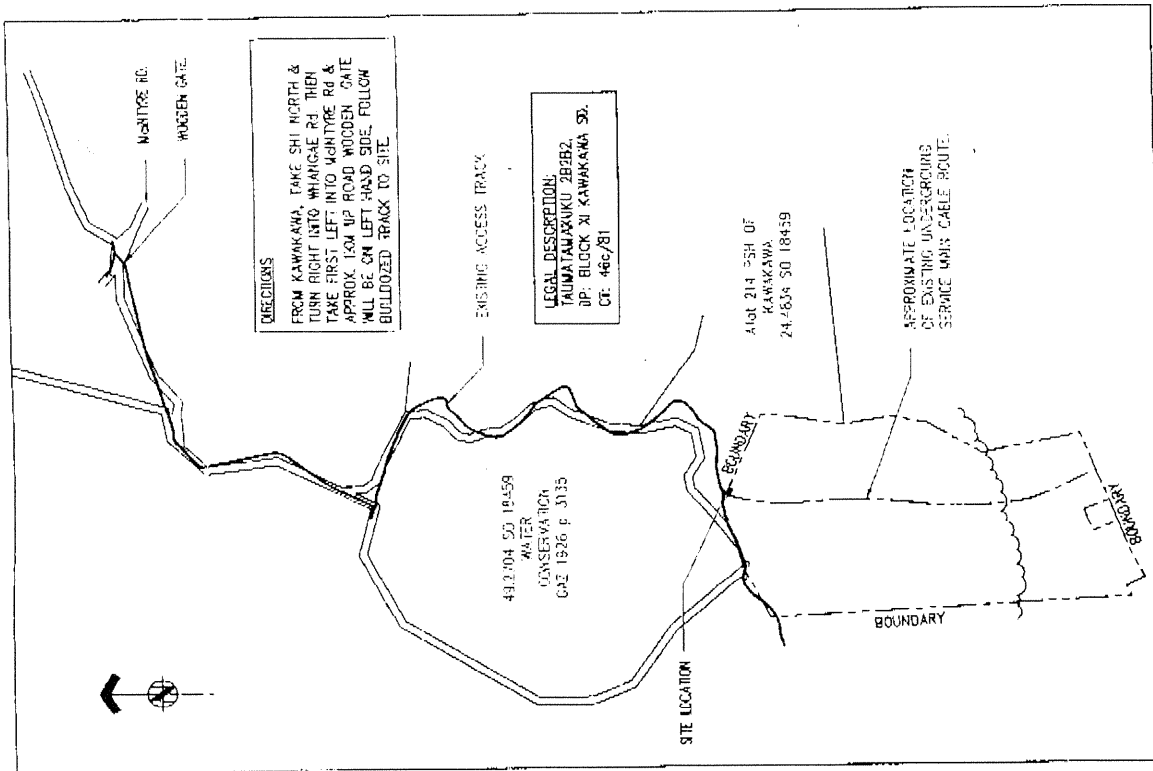
RESOURCE CONSENTS MANAGER

29th August 2007 DATE
RC-2071051-RMALUC

APPROVED PLAN

PLANNER *Paul Lloyd*

RC 2071021 Date 13.08.07



- NOTES**
- EXISTING SERVICES INFORMATION HAS BEEN OBTAINED AND PLOTTED FROM LOCAL AUTHORITY & SERVICE PROVIDERS RECORDS. WHILE EVERY ENDEAVOUR HAD BEEN MADE TO INDICATE ALL KNOWN SERVICES ON THE PLANS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING SERVICES IN THE VICINITY OF THE SITE. PRIOR TO COMMENCEMENT OF ANY WORKS ON SITE, THESE SERVICES HAVE NOT BEEN CONFIRMED ON SITE. ANY DAMAGE TO EXISTING SERVICES SHALL BE MADE GOOD AT THE CONTRACTOR'S EXPENSE.
 - ALL EXISTING SURFACES AND FEATURES SHALL BE FULLY REINSTATED TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER ON COMPLETION OF THE WORKS.
 - THE CONTRACTOR SHALL REFER TO THE ENGINEER SHOULD ANY UNFORESEEN OR ABNORMAL SITE CONDITIONS BE ENCOUNTERED.

CONFIDENTIAL TO THE OWNER
See 27(3) Building Act 1991

DO NOT SCALE FROM THIS DRAWING. USE FIGURED DIMENSIONS.

GRAPHIC SCALE (mm)
0 10 20 30 40 50

OWNERS/OCCUPIER VODAFONE PROJECT MANAGER		Approval		Approval	
PROJECT VODAFONE NZ LTD KAWAKAWA (KAW)		TITLE DODS PROPERTY, MCINTYRE ROAD, KAWAKAWA		RESOURCE CONSENT LOCALITY & SITE PLAN	
DESIGNER HARRISON GRIFFIN		CONSULTANT ENGINEERS & ARCHITECTS HARRISON GRIFFIN		RESOURCE CONSENT RC01	
DRAWN J. HARRISON		CHECKED J. HARRISON		DATE 13.08.07	
SCALE 1:13000		SCALE 1:100		SCALE 1:100	
SHEET 1 OF 1		SHEET 1 OF 1		SHEET 1 OF 1	

