

ID	Map No.	Designation/Purpose	Requiring Authority	Underlying Zoning
D67	17, 21,56	Electricity Substation and Telecommunications Operations (Mangawhai Central) (refer to attached conditions)	Northpower	Estuary Estates (Mangawhai Central) Subzone 7 Services

Conditions attached to Designation D67 Northpower

- 1) All structures and buildings must not exceed a maximum height of 8 metres and a maximum total building coverage of 60%.
- 2) All structures and buildings must be setback a minimum of 7.5 metres from the front boundary.
- 3) All structures and buildings must not exceed a height of 3.0 metres plus the shortest horizontal distance between the building and the road boundary.
- 4) All activities must be conducted within buildings. Outdoor storage or stockpiles of materials or equipment is prohibited with the exception that short term activities and storage outside buildings is permitted in emergency situations.
- 5) All activities must be conducted so as to ensure the following noise limits are not exceeded outside of the boundary of the designation:
 - a. 55dB LA eq between 0700 and 1900 (Monday to Saturday); 50dB LA eq between 1900 and 2200 (Monday to Saturday) and 0700 to 2200 (Sunday and public holidays); and 45dB LA eq and 75dB LA fmax between 2200 and 0700 (at any other time), except for emergency service vehicles and the operation of emergency service call-out sirens;
 - b. Sound levels shall be measured in accordance with NZS 6801: 2008 "Acoustics – Measurement of Environmental Sound" and assessed in accordance with NZS 6802: 2008 "Acoustics – Environmental Noise".

Note: The use of generators is exempt from the requirement of Condition 5 where the use is required in emergency situation to ensure continuous supply of power, or where urgent maintenance is required ‘
- 6) External lighting is prohibited between the hours of 22:00 and 07:00 with the exception of motion activated security lighting or during emergency works and other maintenance work requiring out of hours activity.
- 7) External lighting must not exceed the following standards:
 - a. The light spill onto any other site measured at the designation boundary does not exceed 10 lux at any receiving property boundary or 15 lux at any road reserve boundary; and
 - b. The artificial lighting complies with AS/NZS 1158:1996; or
 - c. The lighting is required under health and safety regulations.
- 8) The construction of the substation shall be in general accordance with the plan referenced 'Proposed Site Plan' Drawing MWC-40010, Revision 7 dated 12 April 2022.

- 9) An outline plan of works pursuant to section 176A of the Resource Management Act 1991 must be submitted to Council for any new structures and/or equipment, other than the following:
- a. Works referenced in Condition 8, or
 - b. Structures and/or equipment which are to replace the existing structures and/or equipment on the site at the time of consideration or application of an outline plan of works and/or equipment installed inside the proposed substation, or
 - c. Any temporary structures erected for the purposes of allowing maintenance or repair of existing structures and/or equipment for up to a period of one month unless written confirmation is obtained from the Resource Consents Manager (or delegated representative) for an alternative timeframe and will be removed once any maintenance or repair has ceased, or
 - d. Technology, structures and/or equipment permitted by the underlying District Plan Zone rules as they exist at the time of installation.
- 10) The activities on the site must not exceed the reference levels for public exposure to 50 Hz electric and magnetic fields set out in the International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines at all times: electric field strength: 5 kV/m and magnetic flux density: 100 microtesla.
- 11) The Requiring Authority shall, at its expense, engage an electrical engineer to carry out measurement of the electric and magnetic fields emitting from the substation to confirm compliance with the ICNIRP guidelines. An engineer's report with measurement results shall be provided to Council within three months of the substation commencing operation and within three months of the commencement of operation of any additional transformers or capacity upgrades. The report shall be submitted to the Resource Consents Manager (or delegated representative).
- 12) The landscape planting within the 2.5m front yard setback shall be implemented and maintained in perpetuity.

ADVICE NOTES

1. Pursuant to Section 184 of the Resource Management Act 1991, this Designation will lapse on the expiry of five years after the date that it was incorporated into the District Plan if it has not been given effect to.
2. No costs shall be imposed on affected Landowners as a result of the proposal.
3. All archaeological sites are protected under the provisions of the Historic Places Act 1993. It is an offence under that act to modify, damage or destroy any archaeological site, whether the site is recorded or not. Application must be made to the New Zealand Historic Places Trust for an authority to modify, damage or destroy an archaeological site(s) where avoidance of effect cannot be practised.
4. If subsurface archaeological evidence (shell, midden, hangi, storage pits, etc.) should be unearthed during construction, work should cease in the immediate vicinity of the remains and the Historic Places Trust should be contacted.

5. In the event of koiwi (human remains) being uncovered, work should cease immediately and the tangata whenua of the area shall be contacted so that appropriate arrangements can be made.

In the Matter of: *The Resource Management Act 1991*

And

In the Matter of: *A Notice under Section 173 of the
Resource Management Act 1991 made by
Northpower Limited*

File Reference: *RM180468*

DECISION ON NOTICE UNDER SECTION 173 OF THE RESOURCE MANAGEMENT ACT 1991

That pursuant to Section 173 of the Resource Management Act 1991, Council recommends to Northpower Limited that its requirement to construct and operate a substation, and all functions, powers and operations of Northpower Limited in accordance with the Electricity Industry Act 2010 and the Electricity Act 1992, on Part of Lot 301 DP 560726, RT 990199 (The substation will be located on proposed Lot 1 of subdivision RM190283 which is yet to be completed) for the following reasons:

Reasons for the decision:

- 1. The Notice of Requirement (NOR) for the designation has been considered under the relevant sections of Part 8 of the Resource Management Act 1991.*
- 2. There is a demonstrated need for Northpower Limited to construct and operate the proposed substation, in order to better fulfil the authority's responsibilities as the operator of reliable network.*
- 3. The adverse environmental effects of the designation will be no more than minor; and the proposed works will result in positive effects in terms of the network reliability and serviceability and communities who use this portion of the network.*
- 4. The affected landowners agree to the proposed designation, and have entered into agreements to sell or exchange land with the applicant for the purposes of the designation.*
- 5. The proposed designation is consistent with the provisions of the Operative District Plan, with respect to the requirement to service activities permitted by the District Plan or resource consent.*

ADVICE NOTES

- 1. Pursuant to Section 184 of the Resource Management Act 1991, this Designation will lapse on the expiry of five years after the date that it was incorporated into the District Plan if it has not been given effect to.*
- 2. No costs shall be imposed on affected Landowners as a result of the proposal.*

3. *All archaeological sites are protected under the provisions of the Historic Places Act 1993. It is an offence under that act to modify, damage or destroy any archaeological site, whether the site is recorded or not. Application must be made to the New Zealand Historic Places Trust for an authority to modify, damage or destroy an archaeological site(s) where avoidance of effect cannot be practised.*
4. *If subsurface archaeological evidence (shell, midden, hangi, storage pits, etc.) should be unearthed during construction, work should cease in the immediate vicinity of the remains and the Historic Places Trust should be contacted.*
5. *In the event of koiwi (human remains) being uncovered, work should cease immediately and the tangata whenua of the area shall be contacted so that appropriate arrangements can be made.*

Signed:



Date: 31 August 2022

Wendy Robinson

Resource Consents Manager

Kaipara District Council

Signed under delegated authority pursuant to Section 34A of the Resource Management Act 1991.

Recommending Report Pursuant to Section 171 of the Resource Management Act 1991

Description of Application

Applicant	<i>Northpower Limited</i>
Proposal	<i>A Notice of Requirement to construct and operate a new substation.</i>
Location	<i>83 Molesworth Drive, Mangawhai</i>
Legal Description	<i>Part of Lot 301 DP 560726, RT 990199 (The substation will be located on proposed Lot 1 of subdivision RM190283 which is yet to be completed)</i>
KDC References	<i>RM 220050</i>

Processing Details

Date Formally Received	<i>11 March 2022</i>	Date of Report	<i>25 August 2022</i>
Section 92 Request(s)	<i>24 March 2022</i>	Engineer Comments	<i>16 August 2022</i>
Date Further Information Received	<i>29 July 2022</i>	Date of Site Inspection	<i>31 March 2022</i>

Planning Requirements

Kaipara District Plan 2013

Zone	Planning Notation(s)	Category of Application
<i>Estuary Estates</i>	<i>Mangawhai Harbour Overlay</i>	<i>Notice of Requirement</i>

1 Notice of Requirement

1.1 Framework under the Resource Management Act 1991

Northpower Limited is a “Requiring Authority” as defined under s166 of the Resource Management Act 1991 (RMA). Kaipara District Council (Council) is the Territorial Authority responsible for assessing the Notice of Requirement for the designation as it falls within the Kaipara District.

Section 168(2) of the RMA sets out the procedure for when a Requiring Authority decides to issue a Notice of Requirement (NoR) for a designation:

- a) *For a project or work; or*
- b) *In respect of any land, water, subsoil, or airspace where a restriction is reasonably necessary for the safe or efficient functioning or operation of a project or work.*

In March 2022, Northpower Limited lodged the NoR for the construction and operate of a new substation. The purpose of the designation is for “Electricity substation and telecommunications operations (Mangawhai)”. The designation of part of the site for this purpose would provide for the construction and ongoing operation, maintenance, development and potential upgrade of the proposed substation, and would be consistent with the designations for other Northpower substations throughout Northland.

On 25 August 2022, Council decided not to publicly notify the NoR under s169, which applies all necessary consideration of effects.

Section 171 requires that a territorial authority, when considering a NoR, must subject to Part 2 of the RMA, consider the effects on the environment of allowing the requirement, having particular regard to:

- a. *Any relevant provisions of –*
 - i) *A national policy statement*
 - ii) *A New Zealand coastal policy statement*
 - iii) *A regional policy statement or proposed regional policy statement*
 - iv) *A plan or proposed plan; and*
- b. *Whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if –*
 - i) *The requiring authority does not have an interest in the land sufficient for undertaking the work; or*

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

The Territorial Authority (TA) may then decide to:

- a) Confirm the requirement;
- b) Modify the requirement;
- c) Impose conditions; or
- d) Withdraw the requirement.

Pursuant to s172 of the RMA, the Requiring Authority must advise the TA within 30 working days of receiving the TA's s171 recommendation whether it accepts or rejects the recommendation in whole or in part. This is the 'decision on the designation' that is referred to in s173-175 of the RMA.

1.2 Description of Notice of Requirement for Mangawhai Substation

The requirement is for the designation of land for the construction and operation of a new substation in Mangawhai. Based on the information provided in the application for the NoR, and further information received under s92 of the RMA from the applicant, in summary the proposed works include:

- Construction of a new 33/11 kV zone substation within the proposed designation site. The proposed construction *would* involve an approximately 230m² structure which will house infrastructure associated with the operation of the substation activity including (but not limited to):
 - Transformers;
 - Circuit breakers;
 - Substation support structures such poles, gantry and stands;
 - Various cables (including high voltage 11kv and 33kv cables), walls and cabinets;
 - Fibre and Telecommunications equipment;
 - Raingardens and water tanks for stormwater control; and

- Other ancillary facilities (including a toilet for staff).
- Ancillary works including connection to wastewater and stormwater infrastructure that has already been installed as part of the underlying subdivision.

A detailed description of the project works has been provided by the requiring authority in the Notice of Requirement Report, titled "Notice of Requirement, Northpower, 83 Molesworth Drive", dated 9 March 2022 and prepared by Barker & Associates, and drawings provided in Appendix 4 of the application. Further information was requested by Council under s92 of the RMA, and subsequently received. Council is satisfied with the information provided in order to make this recommendation.

1.3 Requirement for designation

The designation of the land will provide for the temporary construction and long-term operation of the substation. The land to be designated includes Part of Lot 301 DP 560726, RT 990199 (The substation will be located on proposed Lot 1 of subdivision RM190283 which is yet to be completed).

'Proposed Site Plan', Drawing MWC-400, Revision 7, Dated 12 April 2022, submitted with the NoR, Scheme Plan 'Lots 1 to 8, 10 to 15, 100, 200 and 300 to 302 Being Proposed Subdivision of Lot 305 Stage 1B and Lot 4 DP154785' dated 15 February 2022 prepared by C&R Surveyors Ltd. and additional information shows the area of designation required for the project.

2 Adequate consideration of alternative sites, routes, or methods for undertaking the work (s171 (1) (b))

Northpower Limited has worked with the property owner of the land over which the designation is proposed to gain written approval for the proposal. The effects of the designation on this directly affected party are therefore disregarded and the effects assessment has confirmed the proposal will have less than minor adverse effects on the environment, subject to recommended conditions.

Chapter 5.4 of the application submitted with the NoR, outlines the processes and outcomes, in which Northpower Limited has considered alternative sites, routes or methods for achieving the project outcomes.

The application document states;

The proposed designation site is located a site that is currently undergoing construction to enable a mix of uses. Access to the proposed subdivision will be from Molesworth drive which is an arterial route between Mangawhai Village and Mangawhai Heads. This area is earmarked to become a large commercial hub which will include a mix of commercial uses, and service/light industrial uses as well as future residential development. When considering the proposed site, consideration was had to a number of alternative sites.

Four main points were considered when choosing the new Mangawhai substation site, being:

- *Historical & Future load growth – the majority of recent growth has been occurring in the southern region. The council 30-year plan for Mangawhai makes it clear that this trend will continue into the future. This means that the southern part of Mangawhai is the preferred area for a substation*
- *Ease of access, 33 & 11kV feeder reticulation - When choosing a site for a substation it is important to take into consideration the feasibility of connecting to existing feeders and incoming lines.*
- *Surrounding buildings and land - It is typically encouraged to build a substation away from residential housing for safety and noise reasons.*
- *Vector ICP transferability - The ability to pick up load from the northern part of Vector's network was a consideration for the position of this substation.*

Other matters, including land conveyance, size, purchase price, assessment of future development, district plan zoning, geotechnical assessment, assessment of hazards, three waters availability, archaeological assessment, cultural assessment, fire risk assessment, land contamination and soil resistivity testing have been a consideration in the site selection process.

From this criterion four main sites were considered with the proposed site being the preferred option due to being well placed for supplying Mangawhai Central and future load growth and as the site is still being developed allows for good feeder reticulation. A good amount of Vector's load could be transferred in the future.

Pursuant to s171(1)(c) Council must have particular regard to whether the designation is reasonably necessary for achieving the objectives of Northpower Limited.

The application details the following objectives relevant to this proposal.

"The principal objective of the Northpower Group is to provide a safe, secure and reliable supply of electricity, while operating as a successful and sustainable business for the benefit of its shareholders, the electricity consumers of Kaipara and Whangārei. In pursuing Northpower's objectives, the business activities are guided by the following principles:

- Demonstrate safety leadership and performance in all areas that we operate;
- Drive sustainable financial performance and improvement over time;
- Ensure that our stakeholders benefit from effective and reliable network infrastructure ownership and operation

The designation is necessary to achieve these objectives and guiding principles as it will:

- To provide new substation in the Mangawhai catchment to serve the current and future needs of this growing community;
- Identify the Site in the KDP (OP) for its purpose as a substation for 'Electricity substation and telecommunications operations' purposes;
- Provide Northpower with greater flexibility and allow for a wider variety and scale of activities associated with the construction, operation, maintenance, development and potential upgrade of the substation equipment at the Site;
- Provide Northpower with certainty to plan for the short, medium and long-term operation, maintenance, development and potential upgrade of the Site, in accordance with the designation;
- Allow Northpower to effectively and efficiently carry out all necessary works at the Substation including any emergency works, to maintain a reliable and secure electricity supply to the local distribution network; and
- Be generally consistent with other designated substations owned and operated by Northpower in the Kaipara and Whangarei Regions."

Without the designation, the Estuary Estates Zone and Mangawahi Harbour Overlay would apply to the project. This would necessitate a number of resource consents and would not necessarily provide Northpower Limited with the long-term certainty needed for the operation of the network that is an essential piece of infrastructure for Northland. The resource consent process would also create less flexibility in terms of conditions, as there would be less opportunity to bring innovation and best practice environmental management into both design and the construction methods to minimise adverse effects on the environment. I agree with Northpower Limited that the designation is considered the most efficient use of resources to provided continued service of the electricity network.

2.1 Existing environment

The site and surrounds are described in section 3 of the application submitted by Northpower Limited. Upon my review of these, and the review by Council's technical experts, Council is in agreement with the description and adopt this.

A summary of the existing environment is also provided in Council's Notification Assessment Report for the NoR and should be referred to in conjunction with this report.

3 Assessment of effects the proposed designation will have on the environment (s171(1A) and s171(1))

There is no trade competition, nor any effects of trade competition.

The designation needs to be assessed according to the provisions of s171 of the RMA. It is important to note that this section of the RMA does not require Council when considering the effects on the environment to determine whether the effects on the environment of the use of the designation are minor. Rather Council should consider whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the works if the requiring authority does not have an interest in the land sufficient for undertaking the works; or if it is likely that the work will have a significant adverse effect on the environment.

Particular regard must be had to whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought, and any other matter the territorial authority considers reasonably necessary in order to make a decision on the requirements. The TA must then decide whether to confirm the requirement, modify the requirement, impose conditions or withdraw the requirement. This is discussed further below.

As the designation has not been publicly notified, no submissions have been received for this project.

The Requiring Authority has provided a detailed AEE, which has been reviewed by Council's processing officer, Development Engineer and consultant Acoustic Specialist.

3.1 Positive Effects

The project would result in a number of positive effects to the region and the local community. This includes achieving the objectives of the designation as described in Section 2 of this report.

More specifically, the project would:

- Provide the certainty required for the construction of the substation and the ongoing use, operation, maintenance, development and potential upgrade of the substation infrastructure to ensure a resilient electricity supply continues to be available for local distribution. This includes the benefits realised from electricity supply for economic, social and cultural wellbeing, and public health and safety;
- Improve security and reliability of electricity supply to the local distribution network;
- Provide secure and efficient connections to existing electricity transmission infrastructure in the short, medium and long term;
- Contribute to the economic and social aspirations of Kaipara by providing safe, reliable and economic electricity transmission services to meet customer and wider community needs.

3.2 Adverse Effects Assessment

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

3.2.1 Noise

The main construction noise generating activities include:

- Construction activities;
- General operating noise.

Construction noise will only be for a temporary period during construction and is indifferent to that which would be anticipated/expected for all infrastructure projects. It is anticipated that any construction noise will comply with the relevant zone rules for noise being Rule 16.8.5 'Temporary Noise'.

An Acoustic Assessment has been completed by Marshall Day Acoustics, dated 2 February 2022 in support of this application. In completing this assessment, a desktop noise model of the proposed substation was completed to predict noise levels experienced at adjacent sites. The assessment concludes that compliance with all relevant zone rules for noise can be easily met while the substation is in operation.

The potential effects of noise and vibration are proposed to be managed by Northpower using proposed conditions that require noise limits to not exceed those limits set out in the District Plan, including all activities within the designation area not exceeding "55dB LA eq between 0700 and 1900 (Monday to Saturday); 50dB LA eq between 1900 and 2200 (Monday to Saturday) and 0700 to 2200 (Sunday and public holidays); and 45dB LA eq and 75dB LA fmax between 2200 and 0700 (at any other time), except for emergency service vehicles and the operation of emergency service call-out sirens".

Overall, it is accepted that in both phases of the project the noise and vibration impacts can be appropriately avoided, remedied and/or mitigated subject to appropriate conditions being implemented. Therefore, the noise effects would be less than minor provided these conditions are met.

3.2.2 Servicing

The proposed substation will be connected to Council's reticulated wastewater and stormwater services. A drainage plan has been provided in support of this application which details infrastructure connections as well as landscaping and rain gardens in relation to water sensitive design.

The plan proposes that the dispersal of stormwater will mainly connect to the existing stormwater drain and outlet, with the rest of the flows going into the rain garden. The proposal has been reviewed by Council's Development Engineer Mr Prasad Sappa who has confirmed the stormwater design is appropriate to manage the level of effects proposed from this development.

Any adverse effects on the stormwater system and any downstream effects are expected to be less than minor.

3.2.3 *Landscape and Visual Effects*

The application site is located within Subzone 7 of the Estuary Estates zone of the District Plan which is a service subzone that provides for 'local service activities' to be established as a permitted activity. It is considered that the proposed substation is compatible with this general intention of the zone.

Landscape and visual effects have been assessed with respect to the proposed built form, bulk and location and site design. All electrical infrastructure associated with the substation will be accommodated within the building and as such has not been the subject of this assessment.

The proposed building has been designed to integrate into the service zone. The appearance is somewhat commercial, however design considerations have resulted in a proposed built form which is not heavily industrial in character. The image below provided in the NoR application provides an example of a similar substation built by Northpower which is similar in design and site layout to that proposed within the designation. Such a design is considered appropriate within the immediate environment of the proposed designation.



Figure 1: Existing Northpower substation.

Despite the planned character of this immediate surrounding area being industrial, Northpower have acknowledged the presence of residential activity beyond the site. As such a number of conditions have been proposed as part of the NoR to ensure that the proposed substation activity undertaken on the site in the future maintains a suitable level of amenity within this

environment. Controls relate to the bulk and location of buildings, noise and lighting. The conditions also outline when an Outline Plan of Works will be required for future development of the site.

Further to the conditions the site constraints provide additional mitigation of effects on surrounding residential activities. The southwestern portion of the site is subject to a land covenant, subject to implementation of RM190283, which will protect and enhance the existing vegetation on site. The area is proposed to be enhanced through weed removal and infill planting as part of the granted subdivision consent. Upon completion this covenant area will provide a suitable buffer between the substation and any surrounding residential activity.

Overall it is considered that the proposal will not result in an over-intensification of the site and subject to compliance with conditions the overall character and amenity values of the area will not be significantly altered.

3.2.4 Traffic Effects

Traffic effects of this proposal relate to both the construction period and the operation of the substation.

The built form proposed on site is of a similar size and scale to that anticipated in the service zone in which the site is located. The traffic associated with construction is therefore anticipated to be similar in volume and character to that produced on any other site within this zone. Construction and operational traffic will use the existing formed entrance ways off Molesworth Drive which are proposed to be vested to Council and provide safe and efficient entry and exit manoeuvres in and out of the site. Further to this, as the wider application site is still under development there are no other occupied sites within the vicinity of this site which would be impacted by construction traffic. As such the effects of construction traffic during the initial construction phase are considered to be less than minor.

Traffic associated with the operation of the substation will be minimal as the substation is largely unmanned. Traffic movements will be limited to the maintenance of grassed areas or routine inspection and maintenance of substation equipment. It is considered that operational traffic movements will be considerably less than those anticipated by the recent service zone subdivision.

The proposal has been reviewed by Mr Sappa who has confirmed the temporary increase associated with the construction period will result in less than minor effects with the operating traffic effects to be significantly less than those of the construction period.

As such the proposed designation is considered to have less than minor traffic effects.

3.2.5 Earthworks

Earthworks for the construction of the substation have been consented under RM220060 as a separate land use consent sought to facilitate enablement works as soon as possible. The proposed earthworks are currently being undertaken on site in accordance with this land use consent. No further assessment of earthworks effects is required as part of this proposal.

3.2.6 Lighting

Lighting of the substation will be in accordance with Northpower's lighting standards, which require a minimum level of lighting within the substation to ensure they provide a safe environment for operating and maintaining a substation. All artificial lighting will be designed to not exceed 10 lux at any receiving property boundary or 15 lux at any road reserve boundary and comply with AS/NZS 1158:1996. A condition to this effect has been proposed by the applicant to accompany this designation.

It is considered that the proposed lighting would not result in significant adverse effects to the surrounding residential environment as a minimum separation distance of 65m exists between the proposed substation site and the nearest residential dwelling. Further to this the nearest dwellings are separated by an existing stream and vegetation, proposed to be enhanced and protected by way of a covenant by the underlying subdivision consent (RM190283).

Overall it is considered any lighting effects would be less than minor.

3.2.7 Electric and Magnetic Fields

The proposed substation will produce an electric and magnetic field as with all systems involving the transmission, transformation, and use of electricity. The application includes a Magnetic Flux Density study, dated December 2021 and prepared by Project Development Professionals Limited. The study confirms that the expected magnetic flux densities at the fence lines within the proposed designation site for the designed electrical load will be low with respect to magnetic and electric field exposures. The level anticipated is well within the NZ Ministry of Health recommended electric and magnetic field public exposure guidelines.

During the processing of this NoR the following conditions were proposed by Council to the applicant;

1. The installation shall at all times not exceed the reference levels for public exposure to 50 Hz electric and magnetic fields set out in the International Commission on Non-Ionising Radiation Protection (ICNIRP) at all times: electric field strength: 5 kV/m and magnetic flux density: 100 microtesla.

2. The Requiring Authority shall, at its expense, engage an electrical engineer to carry out measurement of the electric and magnetic fields emitting from this substation to confirm the compliance with the ICNIRP guidelines. An engineer's report with measurement results shall

be provided to Council within three months of the substation commencing operation and within three months of the commencement of operation of any additional transformers or capacity upgrades. The report shall be submitted to the Manager, Resource Consents and Compliance.

The applicant confirmed they would include the above conditions within the designation to confirm ongoing compliance with magnetic emissions.

The magnetic flux density study confirms that the proposed substation will be designed and operated to limit the electric and magnetic field exposures at or beyond the secure boundary of the site. Subject to compliance with conditions, Council concur with this assessment.

3.2.8 Cultural Effects

The wider application site (Lot 301 DP 560726) is within the Estuary Estates Zone of the Kaipara District Plan. Part of this site is listed as an Area of Significance to Māori, and Archaeological sites R08/167 and R08/168 are recorded on the site. There are also a number of recorded archaeological sites in the vicinity of the wider subject site.

As noted, the proposed designation relates only to a small portion of the wider site and there are no known identified sites of significance to Mana Whenua within the proposed area of designation.

Any accidental discovery made during the earthworks phase of this project will be subject to conditions of RM220060. In particular Northpower have been required to engage Te Uri o Hau to undertake the Cultural Monitoring of all earthworks.

It is considered that all cultural effects have been addressed by RM220060 and the ongoing compliance with conditions of this consent.

3.2.9 Contamination and Hazardous Substances

The application documentation provides an assessment of historic contamination on site and remediation works thereof. It is concluded that the piece of land is covered by the NES, however the activity does not trigger any of the requirements covered by regulations 5(2)–5(6). Accordingly, the activity is a permitted activity under the NES.

Substations are identified on the Ministry for the Environment's hazardous activities and industries list (HAIL). The application notes;

Future earthworks on the Site once the substation is established are therefore subject to the National Environmental Standard for Assessment and Managing Contaminants in Soil to Protect Human Health (NES Soil). The NES Soil regulations apply regardless of the designation and would ensure that any part of the land that may be affected by contaminants in soil in future, is appropriately identified and assessed when soil disturbance and/or land development activities

take place and, if necessary, remediated or the contaminants contained to make the land safe for human use.

Council concur with the assessment that the designation over the Site is not expected to result in adverse effects relating to potential contaminants or hazardous substances.

3.2.10 Conclusion

The project has the potential to give rise to a range of potential adverse effects .in terms of both operation and construction of the project. The project would also result in positive effects relating to increased service capacity of the network, providing social, economic and environmental benefits to the local community and region. The scale of adverse effects on the environment have been assessed and are considered to be less than minor subject to compliance with proposed conditions.

Overall, the likely adverse effects of the project can be managed via appropriate recommended conditions to ensure that any such effects are acceptable.

4 Whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought

The need for the project is provided for in section 5.5 of the application submitted for the project.

In undertaking an assessment of a NoR under s171(1) of the RMA, a project must be considered in terms of whether it is “reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought”.

The application details the following objectives relevant to this proposal.

“In pursuing Northpower’s objectives, the business activities are guided by the following principles:

- Demonstrate safety leadership and performance in all areas that we operate;
- Drive sustainable financial performance and improvement over time;
- Ensure that our stakeholders benefit from effective and reliable network infrastructure ownership and operation

The designation is necessary to achieve these objectives and guiding principles as it will:

- To provide new substation in the Mangawhai catchment to serve the current and future needs of this growing community;
- Identify the Site in the KDP (OP) for its purpose as a substation for ‘Electricity substation and telecommunications operations’ purposes;

- Provide Northpower with greater flexibility and allow for a wider variety and scale of activities associated with the construction, operation, maintenance, development and potential upgrade of the substation equipment at the Site;
- Provide Northpower with certainty to plan for the short, medium and long-term operation, maintenance, development and potential upgrade of the Site, in accordance with the designation;
- Allow Northpower to effectively and efficiently carry out all necessary works at the Substation including any emergency works, to maintain a reliable and secure electricity supply to the local distribution network; and
- Be generally consistent with other designated substations owned and operated by Northpower in the Kaipara and Whangarei Regions.”

Based on the above and having considered the objectives of the Requiring Authority for which the designation is sought, the project is considered necessary to achieve the Project Objectives and broader objectives of Northpower as an electricity network operator within the Northland Region.

5 Any other matter the territorial authority considered reasonably necessary in order to make a decision on the requirement

No other matters have been identified, which have not already been addressed, that are considered reasonably necessary to make a recommendation to the Requiring Authority.

6 Part 2 Matters

In considering this NoR, the relevant matters in Sections 6, 7 and 8 (Part 2) of the RMA need to be taken into account as required by Section 171 of the RMA. Chapter 5.7 of the project application submitted to Council provides an assessment of the proposal against Part 2 of the RMA. Having reviewed this assessment, Council concurs with the details provided and provides the following further assessment.

In relation to Section 6 of the RMA, it is agreed there are no matters of national importance relevant to this project.

In terms of Section 7, the proposal is an efficient use and development of physical resources. Subject to recommended conditions and proposed mitigation, the proposal will not undermine amenity values of the surrounding environment. Designating the proposed substation for the purposes of “Electricity substation and telecommunications operations (Mangawhai)” represents an efficient use of existing resources, and as such satisfies the requirements of Section 7.

Section 8 of the RMA requires the decision-makers to take into account the principles of the Treaty of Waitangi in managing the use and development and protection of natural and physical

resources. As outlined in Section 5.2.9 of the application, the NoR is not considered to be contrary to the principles of the Treaty of Waitangi and meets Section 8 of the RMA.

Overall, the proposal will achieve the principles of the RMA. The proposal will promote the sustainable management of natural resources in a way that minimises the effects of construction on the environment and provides long-term benefits to the community.

Conclusion

Council has considered the NoR in terms of the matters set out in s171 of the RMA and it is concluded that the proposed requirement meets the provisions of both s171 and Part 2 of the RMA.

7 Recommendation

It is recommended that pursuant to s171(2)(c) of the RMA, Council recommends to Northpower Limited that the requirement to designate the following land for the purpose of the substation at 83 Molesworth Drive, be confirmed subject to the recommended conditions provided below. The properties relating to the designation are:

Part of Lot 301 DP 560726, RT 990199 (The substation will be located on proposed Lot 1 of subdivision RM190283 which is yet to be completed) identified in the following plans;

'Proposed Site Plan', Drawing MWC-400, Revision 7, Dated 12 April 2022, prepared by Northpower.

'Lots 1 to 8, 10 to 15, 100, 200 and 300 to 302 Being Proposed Subdivision of Lot 305 Stage 1B and Lot 4 DP154785' dated 15 February 2022 prepared by C&R Surveyors Ltd.

8 Conditions

The conditions have been drafted by Council and Northpower's agent Barker and Associates and minor changes have been recommended by Council. The conditions are required to be approved by the Requiring Authority for inclusion in the Kaipara District Plan 2013, or such subsequent operative District Plan. The conditions are included in a separate document as Attachment 3.

9 Attachments

1. *Draft conditions to be included in the Kaipara District Plan 2013*
2. *Copy of Notification Decision for NoR*
3. *'Proposed Site Plan', Drawing MWC-400, Revision 7, Dated 12 April 2022, prepared by Northpower.*

4. 'Lots 1 to 8, 10 to 15, 100, 200 and 300 to 302 Being Proposed Subdivision of Lot 305 Stage 1B and Lot 4 DP154785' dated 15 February 2022 prepared by C&R Surveyors Ltd.

Reporting Planner



18/08/2022

 Melissa Hallett

 Date

Peer Review



24/08/2022

 Jess Hollis

 Date

Recommendation Confirmed as Decision

Resource Consents Manager



25/08/2022

 Wendy Robinson

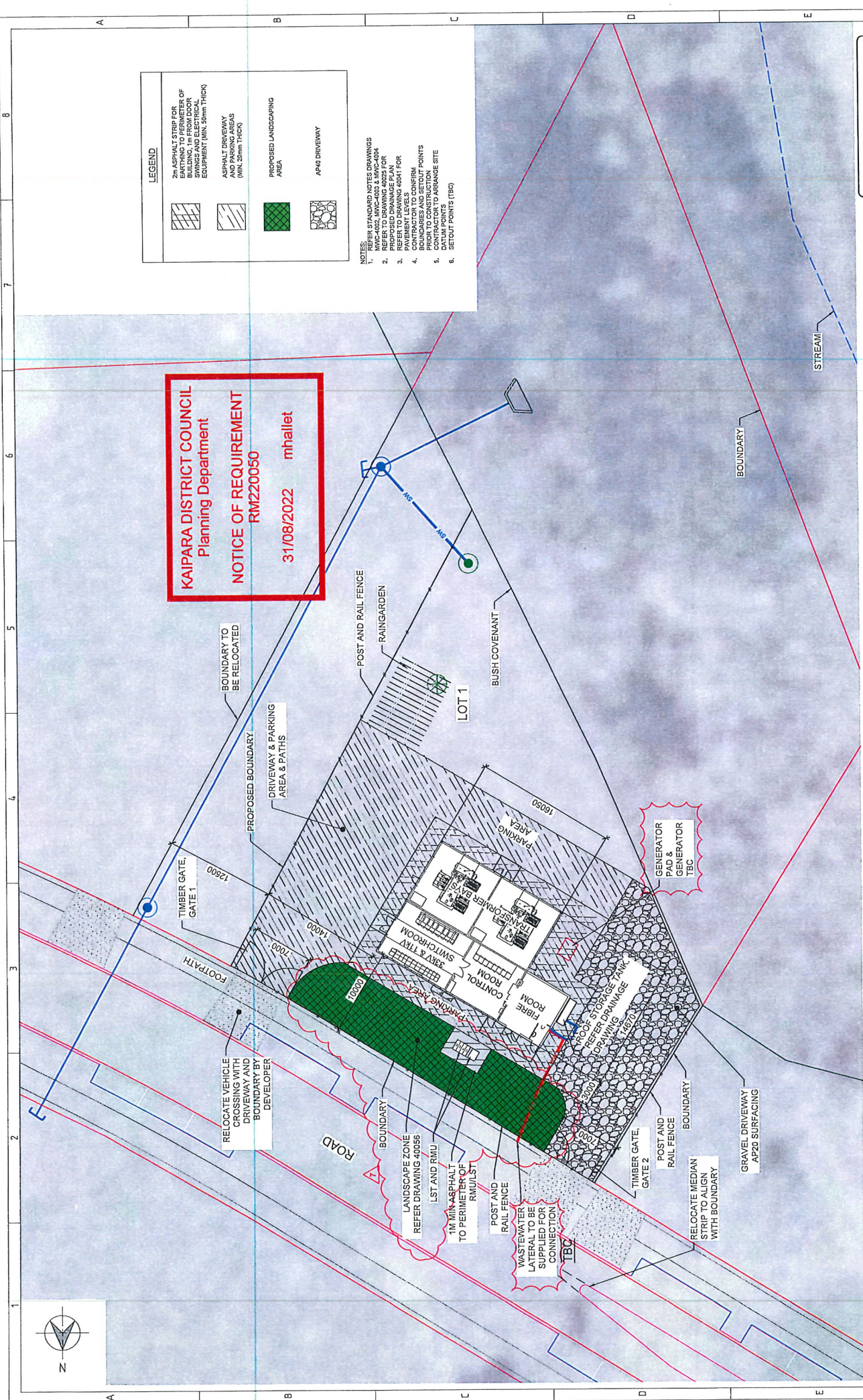
 Date

Appendix 1:

Conditions to be included in the Kaipara District Plan 2013

- 1) *All structures and buildings must not exceed a maximum height of 8 metres and a maximum total building coverage of 60%.*
- 2) *All structures and buildings must be setback a minimum of 7.5 metres from the front boundary.*
- 3) *All structures and buildings must not exceed a height of 3.0 metres plus the shortest horizontal distance between the building and the road boundary.*
- 4) *All activities must be conducted within buildings. Outdoor storage or stockpiles of materials or equipment is prohibited with the exception that short term activities and storage outside buildings is permitted in emergency situations.*
- 5) *All activities must be conducted so as to ensure the following noise limits are not exceeded outside of the boundary of the designation:*
 - a. 55dB LA eq between 0700 and 1900 (Monday to Saturday); 50dB LA eq between 1900 and 2200 (Monday to Saturday) and 0700 to 2200 (Sunday and public holidays); and 45dB LA eq and 75dB LA fmax between 2200 and 0700 (at any other time), except for emergency service vehicles and the operation of emergency service call-out sirens;
 - b. Sound levels shall be measured in accordance with NZS 6801: 2008 "Acoustics – Measurement of Environmental Sound" and assessed in accordance with NZS 6802: 2008 "Acoustics – Environmental Noise".
- 6) *External lighting is prohibited between the hours of 22:00 and 07:00 with the exception of motion activated security lighting or during emergency works and other maintenance work requiring out of hours activity.*
- 7) *External lighting must not exceed the following standards:*
 - a. The light spill onto any other site measured at the designation boundary does not exceed 10 lux at any receiving property boundary or 15 lux at any road reserve boundary; and
 - b. The artificial lighting complies with AS/NZS 1158:1996; or
 - c. The lighting is required under health and safety regulations.
- 8) *The construction of the substation shall be in general accordance with the plan referenced 'Proposed Site Plan' Drawing MWC-40010, Revision 7 Dated 12 April 2022.*

- 9) *An outline plan of works pursuant to section 176A of the Resource Management Act 1991 must be submitted to Council for any new structures and/or equipment, other than the following:*
- a. Works referenced in Condition 8, or
 - b. Structures and/or equipment which are to replace the existing structures and/or equipment on the site at the time of consideration or application of an outline plan of works and/or equipment installed inside the proposed substation, or
 - c. Any temporary structures erected for the purposes of allowing maintenance or repair of existing structures and/or equipment for up to a period of one month unless written confirmation is obtained from the Resource Consents Manager (or delegated representative) for an alternative timeframe and will be removed once any maintenance or repair has ceased, or
 - d. Technology, structures and/or equipment permitted by the underlying District Plan Zone rules as they exist at the time of installation.
- 10) *The activities on the site must not exceed the reference levels for public exposure to 50 Hz electric and magnetic fields set out in the International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines at all times: electric field strength: 5 kV/m and magnetic flux density: 100 microtesla.*
- 11) *The Requiring Authority shall, at its expense, engage an electrical engineer to carry out measurement of the electric and magnetic fields emitting from the substation to confirm compliance with the ICNIRP guidelines. An engineer's report with measurement results shall be provided to Council within three months of the substation commencing operation and within three months of the commencement of operation of any additional transformers or capacity upgrades. The report shall be submitted to the Resource Consents Manager (or delegated representative).*
- 12) *The landscape planting within the 2.5m front yard setback shall be implemented and maintained in perpetuity.*



KAIPARA DISTRICT COUNCIL
 Planning Department
NOTICE OF REQUIREMENT
RM220050
31/08/2022 mhallet

LEGEND

	2m ASPHALT STRIP FOR BUILDING, IN FRONT OF SWINGS AND ELECTRICAL EQUIPMENT (MIN. 50mm THICK)
	ASPHALT DRIVEWAY AND PARKING AREAS (MIN. 50mm THICK)
	PROPOSED LANDSCAPING AREA
	GRAVEL DRIVEWAY

- NOTES:**
1. REFER STANDARD NOTES DRAWINGS MWC-4002, MWC-4003 & MWC-4004 FOR PROPOSED SITE PLAN AND PROPOSED DRAINAGE PLAN
 2. REFER TO DRAWING 40041 FOR CONTRACTOR TO CONFIRM BOUNDARIES AND SETOUT POINTS PRIOR TO CONSTRUCTION
 3. CONTRACTOR TO ARRANGE SITE DATUM POINTS (TBD)
 4. SETOUT POINTS (TBD)

ISSUED FOR CONSENT

REV	DESCRIPTION	DSN	DNM	CHKD	APPD	DATE
1	ISSUED FOR APPROVAL	SP	NS	SC	CS	28.01.22
2	RE-ISSUE FOR APPROVAL	SP	NS	SC	CS	03.02.22
3	ISSUED FOR CLIENT COMMENT	SP	NS	SC	CS	16.02.22
4	DETAILED DESIGN FOR APPROVAL	SP	NS	SC	CS	04.03.22
5	ISSUED FOR TENDER	SP	NS	SC	CS	16.03.22
6	RE-ISSUED FOR TENDER AND CONSENT	SP	NS	SC	CS	12.04.22

Scale at A1: AS SHOWN / CONCEPT	
Reference Designation:	MANGAWHAI CENTRAL SUBSTATION
Drawing Function:	PROPOSED SITE PLAN
Drawing Number:	MWC-40010
Sheet:	1 of 1
Rev:	7

PROPOSED SITE LAYOUT PLAN 1:200 (A1) 1:400 (A0)	
	ORIGINAL DRAWING INFO. Project No. _____ Design Date Feb-22 Approved _____ Prev. DWP# _____ File Name: MWC-40010-1

