

September 2014

# 8.2A BUILDINGS, STRUCTURES, SUBDIVISION AND EARTHWORKS WITHIN A HIGH VOLTAGE TRANSMISSION CORRIDOR

## 8.2A.1 SETBACK FROM HIGH VOLTAGE TRANSMISSION LINES

#### 8.2A.1.1 DISCUSSION, PURPOSE AND REASONS

- (1) There are two key transmission lines located within the Hauraki District. The lines are critical for ensuring an efficient and secure supply of electricity throughout (and in respect of one line, beyond) the District. In accordance with the National Policy Statement on Electricity Transmission 2008 and the Waikato Regional Policy Statement, Council is required to manage development to ensure that any third party development in the transmission corridor does not affect the ongoing operation, maintenance, upgrading and development of the line or result in any incompatibility or reverse sensitivity effects.
- (2) It is important that the Council manages third party activities in the vicinity of these lines as there could be significant impact on the reliability of electricity supply for the whole District and beyond if the lines are damaged, or their operation or ability to upgrade to meet demand is inappropriately constrained. Damaged transmission lines will affect supply to the whole District and the Thames-Coromandel District and in turn this has the potential to significantly adversely affect the local economy. There are no back-up supply routes into the Hauraki or Thames-Coromandel Districts. It is therefore critical that these lines be protected from damage and constraint, thus ensuring efficient and secure electricity supply within the Districts.
- (3) Council seeks to manage third party activities such as earthworks, subdivision and new buildings and structures within the transmission corridor by including a 32 metre buffer on either side of the centreline of the supply lines, ensuring that a comprehensive approach can be taken to ensuring security of supply, as well as mitigating risk, whilst enabling reasonable use of affected land.

### 8.2A.1.2 ENVIRONMENTAL RESULTS

(1) Protection of regionally significant (electrical) infrastructure from third party development, and ensuring the integrity of supply and that lines can be maintained, operated and upgraded as required to meet demand.



#### 8.2A.1.3 STANDARDS

Zone	Standard
(1) All Zones – Buildings/ Structures within 12 metres of centreline of High Voltage Transmission Lines	<ul> <li>(a) No new <i>buildings</i>, <i>structures</i> or additions to existing <i>buildings</i> or <i>structures</i>, are permitted within 12m of the centreline of a High Voltage Transmission <i>Line</i>, except for:</li> <li>(i) Fences and stockyards not exceeding 2.5 metres in <i>height</i>;</li> </ul>
	<ul> <li>(ii) crop support poles and artificial crop protection not exceeding 2.5 metres in <i>height</i> (however no crop support poles and artificial crop protection are permitted within 12 metres of the outer edge of a transmission <i>line</i> support structure – refer Rule 8.2A.1.3(1)(c) below);</li> </ul>
	(iii) Buildings, and structures not otherwise provided for in (i) or (ii) above, where less than 10m <sup>2</sup> in area and 2.5 metres in height for purposes other than a dwelling, visitor accommodation or any other activity where people can otherwise reside or congregate;
	<ul> <li>(iv) alterations to existing <i>buildings</i>, not otherwise provided for in (i), (ii) and (iii) above, that do not increase the building envelope or footprint; and</li> </ul>
	(v) Network Utilities.
	(b) Any fences and stockyards exceeding 2.5 metres in <i>height</i> are a <i>Restricted Discretionary Activity</i> .
	(c) Any crop support poles and artificial crop protection where:
	<ul> <li>(i) located within 12 metres of the outer edge of a transmission <i>line</i> support structure; or</li> </ul>
	<ul> <li>(ii) exceeding 2.5 metres in <i>height</i> within 12 metres of the centreline of a High Voltage Transmission <i>Line</i>; are a <i>Restricted Discretionary</i> <i>Activity</i>.</li> </ul>
	<ul> <li>(d) Any additions to existing <i>buildings</i> or <i>structures</i> (existing at 26 September 2014) not otherwise provided for in (a) above are a <i>Restricted Discretionary Activity</i>.</li> </ul>
	<ul> <li>(e) Any <i>buildings,</i> or <i>structures</i> not otherwise provided for in (a),( b), (c) or (d) above, are a <i>Non Complying Activity</i>.</li> </ul>
(2) All Zones - Buildings/ Structures between 12 metres and 32 metres from centreline of High Voltage Transmission Lines	(a) All new <i>buildings</i> , <i>structures</i> or additions to existing <i>buildings</i> or <i>structures</i> are a <i>Permitted Activity</i> provided they comply with the New Zealand Electrical Code of Practice (NZECP) 34:2001.
	(b) Any new <i>buildings</i> , <i>structures</i> or additions to existing <i>buildings</i> or <i>structures</i> that do not comply with NZECP34:2001 are a <i>Non Complying Activity</i> .
(3) All Zones – Earthworks within the High Voltage Transmission Line Corridor (32 metres either side of the	(a) No <i>earthworks</i> shall occur within the High Voltage Transmission <i>Line</i> Corridor (as identified on the Planning Maps) that:
	<ul> <li>(i) are at a depth greater than 300mm within 2.2 metres of a transmission pole support structure or stay wire; and</li> </ul>
	(ii) are at a depth greater than 750mm between 2.2 metres and 5 metres of a transmission pole support structure or stay wire; or
centreline of the	(iii) are at a depth greater than 300mm within 6 metres of the outer



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Zone	Standard
High Voltage Transmission <i>Line</i> )	visible edge of a transmission tower support structure or stay wire; and
	(iv) are at a depth greater than 3 metres between 6 metres and 12 metres of the outer visible edge of a transmission tower support structure or stay wire; or
	(v) create an unstable batter; or
	(vi) result in a reduction of the clearance distance underneath the conductors required by NZECP34:2001.
	Exemptions:
	<ol> <li>Rules 8.2A.1.3(3)(a)(i) – (iv) shall not apply to <i>earthworks</i> undertaken by <i>network utility operators</i>;</li> </ol>
	(2) Rules 8.2A.1.3 (3)(a)(i) & (ii) shall not apply to excavation of vertical holes (irrespective of depth) not exceeding 500mm diameter and which are between 1.5 metres and 5 metres of a transmission pole support structure or stay wire;
	(3) Rules 8.2A.1.3(3)(a)(i) – (iv) shall not apply to <i>earthworks</i> undertaken as part of farming cultivation or domestic cultivation, maintenance of drains, maintenance, repair, sealing, resealing of an existing <i>road</i> , footpath, driveway, and public or private access track where they comply with NZCEP34:2001.
	<ul> <li>(b) Any activity not complying with any one or more of Rules 8.2A.1.3</li> <li>(3)(a)(i) – (vi) is a Restricted Discretionary Activity.</li> </ul>
	<b>Note:</b> <i>Earthworks</i> within the High Voltage Transmission <i>Line</i> Corridors that are not constrained by Rules 8.2A.1.3(3)(a)(i) – (vi), are permitted subject to the provisions of Section 7.8 Excavations and Placement of Fill ( <i>Earthworks</i> ).
(4) All Zones – Subdivision	(a) Subdivision including land within <b>32</b> metres of a high voltage transmission <i>line</i> is a <i>Restricted Discretionary Activity</i> .

#### Notes:

- (a) Works in close proximity to any electricity *line* can be dangerous. Compliance with NZECP34:2001 is mandatory for all *buildings*, *structures*, *earthworks* and mobile plant within close proximity to all electrical *lines*. Compliance with Standard 8.2A.1.3(1) will not necessarily ensure compliance with this Code.
- (b) Vegetation to be planted within close proximity to any electrical *line* should be selected and/or managed to ensure that it will not result in that vegetation breaching the Electricity (Hazards from Trees) Regulations 2003.
- (c) Both the Code of Practice and the Regulations include a number of tables and figures that illustrate minimum safe distances for *buildings* and other works and vegetation in relation to different components of the electricity supply system.



#### 8.2A.1.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) *Council* will restrict the exercise of its discretion to the ability of the activity or development to achieve the particular environmental result in Section 8.2A.1.2 of the Standards in Rule 8.2A.1.3 for which compliance is not met and the following relevant matters:
  - (a) *Buildings* and *Structures* Within A High Voltage Electricity Transmission *Line* Corridor.
    - (i) The risk to the structural integrity of the transmission *line*;
    - (ii) The effects (including cumulative effects) on the ability of the *network utility operator* to operate, maintain and upgrade the transmission network;
    - (iii) The proximity of *buildings* and *structures* to electrical hazards;
    - (iv) The risk of electrical hazards affecting public safety, and risk of property damage;
    - (v) The extent of *earthworks* required, and the use of mobile machinery near transmission *lines* which may put the *line* at risk;
    - (vi) The risk of radio interference;
    - (vii) Extent of compliance with NZECP 34:2001;

(viii)Outcomes of any consultation with the relevant line owner.

#### (b) *Earthworks* Within A High Voltage Electricity Transmission *Line* Corridor.

- (i) Any effects on the integrity of the transmission *line*;
- (ii) Volume, area and location of the works, including temporary activities such as stockpiles;
- (iii) Duration and timing of the works, particularly in relation to planned works on the *line* by the *network utility operator*;
- (iv) Site remediation and rehabilitation;
- (v) The use of mobile machinery near the transmission *line* which may put the *line* at risk;
- (vi) Outcomes of any consultation with the relevant *line* owner.

#### (c) Subdivision Within A High Voltage Electricity Transmission Line Corridor.

- (i) The extent to which the *subdivision* design avoids, remedies or mitigates conflicts with existing *lines*, (eg through the location and design of *roads*, building sites, reserves and *landscaping*;
- (ii) The ability for maintenance and inspection of transmission *lines* including ensuring access;
- (iii) The extent to which the *subdivision* design, through the location of future building sites and development, will minimise the risk or injury and/or property damage from *lines*;



- (iv) The extent to which potential adverse effects from the *line*, including visual impacts, are mitigated (eg through the location and orientation of building platforms;
- (v) The ability to provide for appropriate *buildings* within each *allotment* complying with District Plan standards outside of the High Voltage Electricity Transmission Corridor;
- (vi) Outcomes of any consultation with the relevant *line* owner.
- (2) Where an activity is a *Restricted Discretionary Activity* because it is within the High Voltage Transmission *Line* Corridor, the application need not be publicly notified and need not be served on any affected party other than the relevant *line* owner, where its prior written approval has not been obtained.