

# APPENDIX VII – HAZARDOUS SUBSTANCES

| HSNO SUB-CLASS AND HAZARD CLASSIFICATION      | SUBSTANCE   | GROUP 1:<br>RESIDENTIAL 1,<br>RESIDENTIAL 1A,<br>RESIDENTIAL 2,<br>RESIDENTIAL 3,<br>AND OTATARA<br>ZONES AND<br>RESIDENTIAL<br>ACTIVITIES IN ALL<br>OTHER ZONES | GROUP 2:<br>INDUSTRIAL 1,<br>BUSINESS 1,<br>BUSINESS 2,<br>BUSINESS 3,<br>BUSINESS 4,<br>BUSINESS 5 AND<br>BUSINESS 6<br>EXCLUDING<br>RESIDENTIAL<br>ACTIVITIES | GROUP 3 :<br>INDUSTRIAL 2,<br>2AINDUSTRIAL<br>3, INDUSTRIAL<br>4 AND<br>SEAPORT 2<br>ZONES,<br>EXCLUDING<br>RESIDENTIAL<br>ACTIVITIES | GROUP 4<br>HOSPITAL,<br>EXCLUDING<br>RESIDENTIAL<br>ACTIVITIES | GROUP 5: RURAL<br>AND AIRPORT<br>PROTECTIONS<br>ZONES, EXCLUDING<br>RESIDENTIAL<br>ACTIVITIES | GROUP 6: SEAPORT<br>1 ZONE, EXCLUDING<br>RESIDENTIAL<br>ACTIVITIES | GROUP 7: AIRPORT<br>OPERATIONS ZONE,<br>EXCLUDING<br>RESIDENTIAL<br>ACTIVITIES | GROUP 8: SMELTER<br>ZONE, EXCLUDING<br>RESIDENTIAL<br>ACTIVITIES |
|---|---|--|---|---|--|---|--|--|--|
| <b>Explosives</b>                             |   |  |   |   |  |   |  |  |  |
| 1.1A – G, J, L<br>Mass explosion<br>hazard    | Gunpowder and<br>black powder                         | 15kg   | 15kg  | 15kg  | 0  | 15kg  | No threshold   | No threshold   | No threshold   |
|   | Display fireworks                                     | 0  | 0   | 0   | 0  | 0   | 0  | 0  | 0  |
|   | Industrial<br>explosives (eg<br>TNT) and all<br>other | 0  | 0   | 25kg  | 0  | 25kg  | No threshold   | 0  | 25kg   |
| 1.2B – L<br>Projection hazard                 | All   | No threshold   |   |   |  |   |  |  |  |
| 1.3C, F – L Fire<br>and minor blast<br>hazard | Smokeless<br>ammunition<br>reloading<br>powder        | 15kg   | 50kg  | 50kg  | 0  | 15kg  | No threshold   | 15kg   | 50kg   |
| 1.3C, F – L Fire<br>and minor blast<br>hazard | Retail fireworks                                      | No thresholds (refer to Hazardous Substance (Fireworks) Regulations 2001)  |   |   |  |   |  |  |  |
|   | All other 1.3   | No thresholds  |   |   |  |   |  |  |  |
| 1.4B – G, S No<br>significant hazard          | Safety<br>ammunition and<br>marine flares             | 25kg   | 50kg  | 50kg  | 5kg  | 25kg  | 50kg   | 25kg   | 50kg   |
|   | Retail fireworks                                      | No thresholds (refer to Hazardous Substance (Fireworks) Regulations 2001)  |   |   |  |   |  |  |  |

| HSNO SUB-CLASS AND HAZARD CLASSIFICATION             | SUBSTANCE   | GROUP 1   | GROUP 2:  | GROUP 3   | GROUP 4   | GROUP 5   | GROUP 6            | GROUP 7   | GROUP 8  |
|--|---|---|---|---|---|---|--------------------|---|--|
| 1.4B – G, S No significant hazard                    | Sodium Azide  | 0   | 0   | 0   | 0   | 0   | 0                  | 0   | 0  |
|  | All other 1.4   | No thresholds   |   |   |   |   |                    |   |  |
| <b>Gases and Aerosols</b>                            |   |   |   |   |   |   |                    |   |  |
| 1.5 D Very insensitive, with mass explosion hazard   | All   | No thresholds   |   |   |   |   |                    |   |  |
| 1.6N Extremely insensitive, no mass explosion hazard | All   | No thresholds   |   |   |   |   |                    |   |  |
| 2NH (Non-hazardous)                                  | All   | 10m <sup>3</sup>  | 200 m <sup>3</sup>  | 200 m <sup>3</sup>  | 200 m <sup>3</sup>  | 200 m <sup>3</sup>  | 200 m <sup>3</sup> | 200 m <sup>3</sup>  | 7500m <sup>3</sup>   |
| 2.1.1A High hazard gases                             | LPG (inc. propane-based refrigerant) in cylinders<br>For Service Stations refer also to Note 11 | 300kg Total Storage Quantity providing indoor storage is no more than 20kg per dwelling (except for multi-storey attached dwellings of over 3 storeys where no more than 10kg per dwelling) | 300kg Total Storage Quantity providing indoor storage is no more than four 45kg cylinders | 300kg Total Storage Quantity providing indoor storage is no more than four 45kg cylinders | 300kg Total Storage Quantity providing indoor storage is no more than four 45kg cylinders | 300kg Total Storage Quantity providing indoor storage is no more than four 45kg cylinders | No threshold       | 300kg Total Storage Quantity providing indoor storage is no more than four 45kg cylinders | 1500kg Total Storage Quantity providing indoor storage is no more than four 45kg cylinders |

| HSNO SUB-CLASS AND HAZARD CLASSIFICATION | SUBSTANCE   | GROUP 1          | GROUP 2:         | GROUP 3           | GROUP 4          | GROUP 5           | GROUP 6      | GROUP 7          | GROUP 8           |
|--|---|------------------|------------------|-------------------|------------------|-------------------|--------------|------------------|-------------------|
|  | LPG propane-based refrigerant in commercial refrigeration receivers | 0                | 50kg             | 50kg              | 50kg             | 50kg              | 50kg         | 50kg             | 500kg             |
| 2.1.1A High hazard flammable gases       | LPG in single vessel tanks  | 0                | 0                | 0                 | 0                | 0                 | 0            | 0                | 80 tonnes         |
|  | LPG in multi-vessel tanks   | 0                | 0                | 0                 | 0                | 0                 | 0            | 0                | 80 tonnes         |
|  | Acetylene   | 1 m <sup>3</sup> | 30m <sup>3</sup> | 30m <sup>3</sup>  | 30m <sup>3</sup> | 30m <sup>3</sup>  | No threshold | 30m <sup>3</sup> | 400m <sup>3</sup> |
|  | Hydrogen, and all other permanent gases                             | 0                | 30m <sup>3</sup> | 30m <sup>3</sup>  | 30m <sup>3</sup> | 30m <sup>3</sup>  | No threshold | 30m <sup>3</sup> | 30m <sup>3</sup>  |
|  | Methane   | 0                | 30m <sup>3</sup> | 100m <sup>3</sup> | 30m <sup>3</sup> | 100m <sup>3</sup> | No threshold | 30m <sup>3</sup> | 30m <sup>3</sup>  |
| 2.1.1B Medium hazard flammable gases     | Anhydrous ammonia refrigerant                                       | 0                | 0                | 0                 | 0                | 0                 | 0            | 0                | 0                 |
|  | All other 2.1.1B  | No thresholds    |                  |                   |                  |                   |              |                  |                   |
| 2.1.2A Flammable aerosols                | All   | 20 litres        | 450 litres       | 450 litres        | 450 litres       | 450 litres        | 450 litres   | 450 litres       | 450 litres        |

| HSNO SUB-CLASS AND HAZARD CLASSIFICATION  | SUBSTANCE  | GROUP 1   | GROUP 2:  | GROUP 3  | GROUP 4  | GROUP 5  | GROUP 6  | GROUP 7  | GROUP 8   |
|---|--|---|---|--|--|--|--|--|---|
| <b>Flammable liquids (stored above ground in containers with individual capacity ≤450 litres)</b> |  |   |   |  |  |  |  |  |   |
| 3.1A – Liquid: Very high hazard (flash point <23°C, initial boiling point ≤35°C)                  | Petrol   | <ul style="list-style-type: none"> <li>10 litres inside dwelling</li> <li>50 litres outside dwelling (No storage in metal drums)</li> </ul> | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>450 litres in approved HSNO 'Type' stores.</li> </ul>  | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>450 litres in approved HSNO 'Type' stores.</li> </ul> | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>450 litres in approved HSNO 'Type' stores.</li> </ul> | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>450 litres in approved HSNO 'Type' stores.</li> </ul> | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>450 litres in approved HSNO 'Type' stores.</li> </ul> | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>450 litres in approved HSNO 'Type' stores.</li> </ul> | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>450 litres in approved HSNO 'Type' stores.</li> </ul>  |
|   | All other  | 0   | 50 litres   | 50 litres  | 50 litres  | 50 litres  | 50 litres  | 50 litres  | 50 litres   |
| 3.1B Liquid: High hazard (FP <23°C, IBP >35°C)  | All e.g. acetone, paint spray thinners, pure alcohol | 10 litres   | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>450 litres in approved HSNO 'Type' stores.</li> <li>Retail activities only – 1500 litres in containers of up to 5 litres each</li> </ul> |  |  |  |  |  | <ul style="list-style-type: none"> <li><u>50 litres any storage except metal drums</u></li> <li><u>250 litres in Dangerous Goods cabinet approved to AS1940</u></li> <li><u>4000 litres in approved HSNO 'Type' stores in containers up to 20L each.</u></li> </ul> |

| HSNO SUB-CLASS AND HAZARD CLASSIFICATION   | SUBSTANCE   | GROUP 1   | GROUP 2:  | GROUP 3 | GROUP 4 | GROUP 5 | GROUP 6 | GROUP 7 | GROUP 8   |
|--|---|---|---|---------|---------|---------|---------|---------|---|
| 3.1A Petrol plus 3.1B  | Petrol plus any 3.1B substance—cumulative total limit | <ul style="list-style-type: none"> <li>10 litres inside dwelling</li> <li>50 litres outside dwelling (no storage in metal drums)</li> </ul> | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>450 litres in approved HSNO 'Type' stores.</li> <li>Retail activities only – 1500 litres in containers of up to 5 litres each</li> </ul> |         |         |         |         |         | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>4000 litres in approved HSNO 'Type' stores in containers up to 20L each.</li> </ul>  |
| <b>Flammable Liquids (stored above ground in containers with individual capacity ≤450litres)</b> |   |   |   |         |         |         |         |         |   |
| 3.1C Liquid: Medium Hazard (FP≥23°C, but ≤61°C)  | All – e.g. kerosene, aviation kerosene                | <ul style="list-style-type: none"> <li>20litres inside dwelling</li> <li>50 litres outside dwelling</li> </ul>                              | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>450 litres in approved HSNO 'Type' stores.</li> <li>Retail activities only – 1500 litres in containers of up to 5 litres each</li> </ul> |         |         |         |         |         | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>4000 litres in approved HSNO 'Type' stores in containers up to 210L each.</li> </ul> |
| Liquid Low Hazard (FP>60°C but ≤93°C)  | All – e.g. diesel, petroleum fuel oils                | <ul style="list-style-type: none"> <li>20 Litres inside dwelling</li> <li>50 litres outside dwelling</li> </ul>                             | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>450 litres in approved HSNO 'Type' stores.</li> <li>Retail activities only – 1500 litres in containers of up to 5 litres each</li> </ul> |         |         |         |         |         | <ul style="list-style-type: none"> <li>50 litres any storage except metal drums</li> <li>250 litres in Dangerous Goods cabinet approved to AS1940</li> <li>4000 litres in approved HSNO 'Type' stores in containers up to 210L each.</li> </ul> |

| HSNO SUB-CLASS AND HAZARD CLASSIFICATION  | SUBSTANCE  | GROUP 1  | GROUP 2:   | GROUP 3   | GROUP 4  | GROUP 5   | GROUP 6  | GROUP 7  | GROUP 8      |  |
|---|--|--|--|---|--|---|--|--|--------------|--|
| <b>Flammable liquids (stored above ground in containers with individual capacity &gt;450 litres) (Tanks &gt;450 litres)</b> |  |  |  |   |  |   |  |  |              |  |
| 3.1A Liquid: Very high hazard (flash point <23°C initial boiling point ≤35°C)   | Petrol   | 0  | <ul style="list-style-type: none"> <li>• Certified tanks: 600 litres</li> </ul>  |   |  |   |  |  |              |  |
|   | All others   | 0  | 0  | 0   | 0  | 0   | 0  | 0  | 0            |  |
| 3.1B Liquid: High hazard ((flash point <23°C initial boiling point ≤35°C)   | All – e.g. acetone, paint spray thinners, pure alcohol | 0  | <ul style="list-style-type: none"> <li>• Certified tanks: 600 litres</li> </ul>  |   |  |   |  |  |              |  |
| 3.1C Liquid: Medium hazard (flash point <23°C initial boiling point ≤61°C)  | All – e.g. kerosene, aviation kerosene                 | 0  | <ul style="list-style-type: none"> <li>• Certified tanks:2000 litres</li> </ul>  |   |  |   |  |  |              |  |
| <b>Flammable liquids (stored above ground in containers with individual capacity &gt;450 litres) (Tanks &gt;450 litres)</b> |  |  |  |   |  |   |  |  |              |  |
| 3.1D Liquid: Low Hazard ((flash point >60°C initial boiling point ≤93°C)  | All – e.g. diesel, petroleum fuel oils                 | <ul style="list-style-type: none"> <li>• Certified tanks: 600 litres</li> <li>• Certified super vault tanks constructed to South Western Research Institute (SWRI) standards: 10,000 litres</li> </ul> | <ul style="list-style-type: none"> <li>• Certified tanks: 600 litres</li> <li>• Certified super vault tanks constructed to South Western Research Institute (SWRI) standards: 10,000 litres</li> </ul> | <ul style="list-style-type: none"> <li>• Certified tanks: 2000 litres</li> <li>• Certified super vault tanks constructed to South Western Research Institute (SWRI) standards: 10,000 litres</li> </ul> | <ul style="list-style-type: none"> <li>• Certified tanks: 2000 litres</li> <li>• Certified super vault tanks constructed to South Western Research Institute (SWRI) standard s: 10,000 litres</li> </ul> | <ul style="list-style-type: none"> <li>• Certified tanks: 5000 litres</li> <li>• Certified super vault tanks constructed to South Western Research Institute (SWRI) standards: 10,000 litres</li> </ul> | <ul style="list-style-type: none"> <li>• No threshold</li> </ul> | <ul style="list-style-type: none"> <li>• No threshold</li> </ul> | No threshold |  |
| <b>Flammable liquids (stored below-ground)</b>  |  |  |  |   |  |   |  |  |              |  |
| 3.1A, 3.1B, 3.1C, 3.1D  | Petroleum, diesel or alcohol blend fuels               | No threshold   |  |   |  |   |  |  |              |  |

| HSNO SUB-CLASS AND HAZARD CLASSIFICATION  | SUBSTANCE | GROUP 1 | GROUP 2: | GROUP 3 | GROUP 4 | GROUP 5 | GROUP 6      | GROUP 7      | GROUP 8      |
|---|-----------|---------|----------|---------|---------|---------|--------------|--------------|--------------|
| <b>Flammable liquids (any storage)</b>  |           |         |          |         |         |         |              |              |              |
| 3.2A, 3.2B & 3.2C<br>Liquid desensitised explosive: High, medium & low hazard                 | All       | 0       | 0        | 0       | 0       | 0       | 0            | 0            |              |
| <b>Flammable solids</b>   |           |         |          |         |         |         |              |              |              |
| 4.1.1A Readily combustible solids that may cause fire through friction: Medium hazard         | All       | 0       | 50kg     | 50kg    | 50kg    | 50kg    | No threshold | No threshold | No threshold |
| 4.1.1B Readily combustible solids and solids that may cause fire through friction: low hazard | All       | 0       | 500kg    | 500kg   | 500kg   | 500kg   | No threshold | No threshold | 500kg        |
| 4.1.2A&B Self-reactive: Types A & B   | All       | 0       | 50kg     | 50kg    | 50kg    | 50kg    | No threshold | No threshold | 50kg         |
| 4.1.2C-G Self-reactive: Types C-G   | All       | 0       | 500kg    | 500kg   | 500kg   | 500kg   | No threshold | No threshold | 500kg        |
| 4.1.3A-C Solid desensitised explosives  | All       | 0       | 0        | 0       | 0       | 0       | 0            | 0            | 0            |

| HSNO SUB-CLASS AND HAZARD CLASSIFICATION  | SUBSTANCE   | GROUP 1                            | GROUP 2:                             | GROUP 3                              | GROUP 4                              | GROUP 5           | GROUP 6      | GROUP 7      | GROUP 8                              |
|---|---|------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-------------------|--------------|--------------|--------------------------------------|
| <b>Flammable solids</b>   |   |                                    |                                      |                                      |                                      |                   |              |              |                                      |
| 4.2A and B<br>Spontaneously combustible – pyrophoric substances: High hazard and self-heating substances: Medium hazard | All   | 0                                  | 50kg                                 | 50kg                                 | 50kg                                 | 50kg              | 50kg         | 50kg         | 50kg                                 |
| 4.2C<br>Spontaneously combustible – Self-heating substances: Low hazard   | All   | 0                                  | 500kg                                | 500kg                                | 500kg                                | 500kg             | 500kg        | 500kg        | 500kg                                |
| 4.3A&B Solids that emit flammable gas when wet: High and medium hazard  | All   | 0                                  | 50kg                                 | 50kg                                 | 50kg                                 | 50kg              | 50kg         | 50kg         | 50,000 tonnes                        |
| 4.3C Solids that emit flammable gas when wet: Low hazard  | All   | 0                                  | 500kg                                | 500kg                                | 500kg                                | 500kg             | 500kg        | 500kg        | 250,000 tonnes                       |
| <b>Oxidising substances</b>   |   |                                    |                                      |                                      |                                      |                   |              |              |                                      |
| 5.1.1A –C Liquids & Solids  | All   | 10 litres if liquid, 10kg if solid | 200 litres if liquid, 200kg if solid | 200 litres if liquid, 200kg if solid | 200 litres if liquid, 200kg if solid | No threshold      | No threshold | No threshold | 200 litres if liquid, 200kg if solid |
| 5.1.2A Gases  | Oxygen (Except as stored and used in accordance with HSNO requirements within medical facilities) | 5.5m <sup>3</sup>                  | 200m <sup>3</sup>                    | 1000m <sup>3</sup>                   | No threshold                         | 200m <sup>3</sup> | No threshold | No threshold | No threshold                         |



| HSNO SUB-CLASS AND HAZARD CLASSIFICATION       | SUBSTANCE  | GROUP 1   | GROUP 2:                           | GROUP 3                            | GROUP 4                            | GROUP 5                            | GROUP 6      | GROUP 7      | GROUP 8      |
|--|--|-----------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--------------|--------------|--------------|
|  | Nitrous Oxide (except as stored and used in accordance with HSNO requirements within medical facilities) | 0         | 0                                  | 0                                  | No threshold                       | 0                                  | No threshold | No threshold | No threshold |
|  | Chlorine   | 0         | 0                                  | 0                                  | 0                                  | 0                                  | No threshold | No threshold | 2000kg       |
| 5.2A – G Organic Peroxide Types A-G            | All – e.g. MEKP Polyester resin catalyst   | 0.5litres | 0.5 litres                         | 16 Litres                          | 0.5 litres                         | 0.5 litres                         | No threshold | No threshold | 16 litres    |
| <b>Toxic substances</b>                        |  |           |                                    |                                    |                                    |                                    |              |              |              |
| 6.1A – C Acutely toxic                         | Anhydrous ammonia refrigerant  | 0         | 0                                  | 0                                  | 0                                  | 0                                  | No threshold | No threshold | 0            |
|  | Chlorine   | 0         | 0                                  | 0                                  | 0                                  | 0                                  | No threshold | No threshold | No threshold |
|  | All other substances   | 0         | 20 litres if liquid, 20kg if solid | 20 litres if liquid, 20kg if solid | 20 litres if liquid, 20kg if solid | 20 litres if liquid, 20kg if solid | No threshold | No threshold | No threshold |
| 6.1D and E                                     | All  | 1kg       | 100kg                              | 200kg                              | 200kg                              | 200kg                              | No threshold | No threshold | No threshold |
| <b>Toxic Substances</b>                        |  |           |                                    |                                    |                                    |                                    |              |              |              |
| 6.3A and B Skin irritant                       | All  | 1kg       | 1000kg                             | 2000kg                             | 1000kg                             | 2000kg                             | No threshold | No threshold | No threshold |
| 6.4A Eye irritant                              | Cement, Hydrated Lime and Burnt Lime   | 80kg      | 30 tonne                           | 50 tonne                           | 30 tonne                           | 30 tonne                           | No threshold | No threshold | No threshold |
|  | All others   | 1kg       | 1000kg                             | 2000kg                             | 1000kg                             | 2000kg                             | No threshold | No threshold | No threshold |
| 6.5A and B Respiratory and contact sensitisers | Cement, Hydrated Lime and Burnt Lime   | 80kg      | 30 tonne                           | 50 tonne                           | 30 tonne                           | 30 tonne                           | No threshold | No threshold | No threshold |
|  | All others   | 1kg       | 1000kg                             | 2000kg                             | 1000kg                             | 2000kg                             | No threshold | No threshold | No threshold |
| 6.6A and B Human mutagens                      | All  | 1kg       | 1000kg                             | 2000kg                             | 1000kg                             | 2000kg                             | No threshold | No threshold | No threshold |
| 6.7A and B Carcinogens                         | All  | 1kg       | 1000kg                             | 2000kg                             | 1000kg                             | 2000kg                             | No threshold | No threshold | No threshold |

| HSNO SUB-CLASS AND HAZARD CLASSIFICATION   | SUBSTANCE                            | GROUP 1   | GROUP 2:    | GROUP 3     | GROUP 4     | GROUP 5     | GROUP 6      | GROUP 7      | GROUP 8      |
|--|--------------------------------------|---|-------------|-------------|-------------|-------------|--------------|--------------|--------------|
| 6.8A-C Human reproductive or developmental toxicants   | All                                  | 0   | 0           | 0           | 0           | 0           | 0            | 0            | No threshold |
| 6.9A and B Substances affecting human target organs or systems   | All                                  | 0   | 0           | 0           | 0           | 0           | 0            | 0            | No threshold |
| <b>Radioactive materials</b>   |                                      |   |             |             |             |             |              |              |              |
| Class 7 These substances are controlled through the Radiation Protection Act 1965 rather than through HSNO | All                                  | Quantities specified in the 'Type A' transport package limit as identified in the International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Material. Examples: Domestic smoke detectors, demonstration radioactive sources in school laboratories. |             |             |             |             |              |              |              |
| <b>Corrosives</b>  |                                      |   |             |             |             |             |              |              |              |
| 8.1A Substances corrosive to metals  | All                                  | 1 litres  | 1000 litres | 1000 litres | 1000 litres | 1000 litres | 1000 litres  | 1000 litres  | 1000 litres  |
| 8.2A-C Substances corrosive to skin  | Cement, Hydrated Lime and Burnt Lime | 80kg  | 30 tonne    | 50 tonne    | 30 tonne    | 30 tonne    | No threshold | No threshold | No threshold |
|  | All                                  | 1 litres  | 1000 litres | 1000 litres | 1000 litres | 1000 litres | 1000 litres  | 1000 litres  | 3000 litres  |
| 8.3A Substances corrosive to the eye   | Cement, Hydrated Lime and Burnt Lime | 80kg  | 30 tonne    | 50 tonne    | 30 tonne    | 30 tonne    | No threshold | No threshold | No threshold |
|  | All                                  | 1 litres  | 1000 litres | 1000 litres | 1000 litres | 1000 litres | 1000 litres  | 1000 litres  | 3000 litres  |
| <b>Ecotoxics</b>   |                                      |   |             |             |             |             |              |              |              |
| 9.1A-D Aquatic ecotoxics and 9.2A-D Soil ecotoxics   | All                                  | See base Class thresholds<br>NB : Where a substances requires resource consent and also has an ecotoxic class, the ecotoxicity shall be taken into consideration as part of Assessment Matter   |             |             |             |             |              |              |              |
| 9.3A-C Terrestrial vertebrate ecotoxics  | All                                  | See base Class thresholds<br>NB: Where a substances requires resource consent and also has an ecotoxic class, the ecotoxicity shall be taken into consideration as part of Assessment Matter  |             |             |             |             |              |              |              |

| HSNO SUB-CLASS AND HAZARD CLASSIFICATION  | SUBSTANCE | GROUP 1  | GROUP 2: | GROUP 3 | GROUP 4 | GROUP 5 | GROUP 6 | GROUP 7 | GROUP 8 |
|---|-----------|--|----------|---------|---------|---------|---------|---------|---------|
| 9.3A-C Terrestrial invertebrate ecotoxics | All       | See base Class thresholds<br>NB: Where a substances requires resource consent and also has an ecotoxic class, the ecotoxicity shall be taken into consideration as part of Assessment Matter |          |         |         |         |         |         |         |

Notes:

- The above table contains maximum permitted quantity thresholds (plus, in certain cases, storage requirements) for the storage, use and management of different types of hazardous substance, as classified via the Hazardous Substance (Classification) Regulations 2001. To avoid confusion, maximum permitted means up to and equal to the quantity thresholds specified. The quantities vary according to Zone and/or activity type. Where the requirements set out in this table are not met, resource consent will be required under Rule 3.7.2 of the District Plan.
- Unless otherwise stated, if a hazardous substance falls into more than one HSNO sub-class and is therefore controlled by more than one maximum permitted quantity threshold, the base or primary class shall determine the maximum permitted quantity threshold. The base or primary class of a substance is the first classification listed beside any substance within New Zealand Gazette Notice No. 35, as well as in all HSNO required labelling and signage. Where the requirements set out in this table are not met, resource consent will be required under Rule 3.7.2 of the District Plan.
- The permitted quantity thresholds in the above table apply per site, except for in Group 2, 3, 6 and 7 where the permitted quantity thresholds apply per hazardous sub-facility. Where more than one activity is carried out per site or hazardous sub-facility, each hazardous sub-facility shall comply with the above table, otherwise resource consent will be required under Rule 3.7.2 of the District Plan.
- Where the volume or weight of a hazardous substance is affected by the temperature and pressure at which it is stored, the volume or weight shall be considered (for the purposes of this table) to be that present in conditions of 20°C and 101.3kPa otherwise resource consent will be required under Rule 3.7.2 of the District Plan.
- Waste hazardous substances and waste generated by hazardous substances shall be treated as if it were the original hazardous substance. The disposal of hazardous substances is adequately controlled by the Hazardous Substances and New Organisms Act 1996 and by Environment Southland and is not controlled by the District Plan.
- Where any site contains residential activity then the Residential 1, 2 and 3 Zone thresholds detailed in the table shall exclusively apply, regardless of any other activity occurring on the site except for within the Rural 1 Zone, where the Residential 1, 2 and 3 Zone thresholds apply to the residential dwelling and cartilage only.
- Dwelling under HSNO includes the house and any structure attached to the house including a carport, basement garage, etc. It does include a balcony and a veranda but not a deck or patio unless roofed over.
- “Approved” means test certified as compliant with HSNO, or in some cases approved by the EPA.
- “Certified” means tanks that are issues with a Design Verification Test Certificate under HSNO by a Test Certifier if they are of a standard design e.g. service station tanks, farm tanks, etc. The Design Verification Certificate is for the EPA listed Test Certified Approved Tank Fabricator’s production tanks; or; they are site built and subject to Engineer’s Producer Statements – PS1 and PS4’s for design, tanks slab and seismic restraint. Both construction methods are then subject to Stationary Container Systems Certificates on site by another Test Certifier.

10. In addition to these District Plan rules, the provisions of other legislation may also be applicable to activities involving hazardous substances. Separate approvals may be required under the provisions of different legislation.

#### Use of LPG Inside Buildings

| LOCATION  | MAX. QUANTITY OF LPG  | MAX SIZE OF CYLINDER |
|---|---|----------------------|
| A detached house or single storey attached dwelling and multi-storey attached dwelling up to three storeys                      | 20kg per dwelling   | 10kg cylinder        |
| Multi-storey attached dwellings over three storeys  | 10kg per dwelling   | 10kg cylinder        |
| Hotels, bars, restaurants, public buildings, places of worship, shops, offices and laboratories not attached to a dwelling      | 10kg per 10m <sup>2</sup> of the indoor floor area, up to a maximum total quantity of 100kg               | 10kg cylinder        |
| Hotels, bars, restaurants, public buildings, places of worship, shops, offices and laboratories that are attached to a dwelling | 20kg per premises   | 10kg cylinder        |
| Factories and warehouses  | 45kg per 50m <sup>2</sup> of the indoor floor area, up to a maximum total quantity of 180kg per occupancy | 45kg cylinder        |

The table for the use of LPG inside buildings was included in EPA document HRC09001 – the Reassessment of LPG and LPG based refrigerants. The trigger quantities are maximums and cannot be exceeded through the resource consent process (provided for information only) as prohibited under HSNO.

# APPENDIX VIII – TRANSPORT STANDARDS

## 1. CAR PARKING STANDARDS

### NOTES:

- (A) On road parking requirements: On road parking spaces are not detailed in the Invercargill City District Plan and are to be designed, constructed and signposted in accordance with the Invercargill City Council Bylaw Code of Practice for Land Development and Subdivision Infrastructure.
- (B) Accessible car parking spaces: Accessible car parking spaces are not detailed in the Invercargill City District Plan and are to be calculated, designed, constructed and signposted in accordance with the requirement in the New Zealand Building Code.

### Car Parking Areas

- (1) Car parking spaces shall comply with Figure 1 and Table 1.
- (2) Gradient: The gradient of car parking spaces shall be no more than 1 in 20 in any one direction.
- (3) Where the required parking area is outside the building, it shall connect to the building via a pedestrian access route.

Figure 1

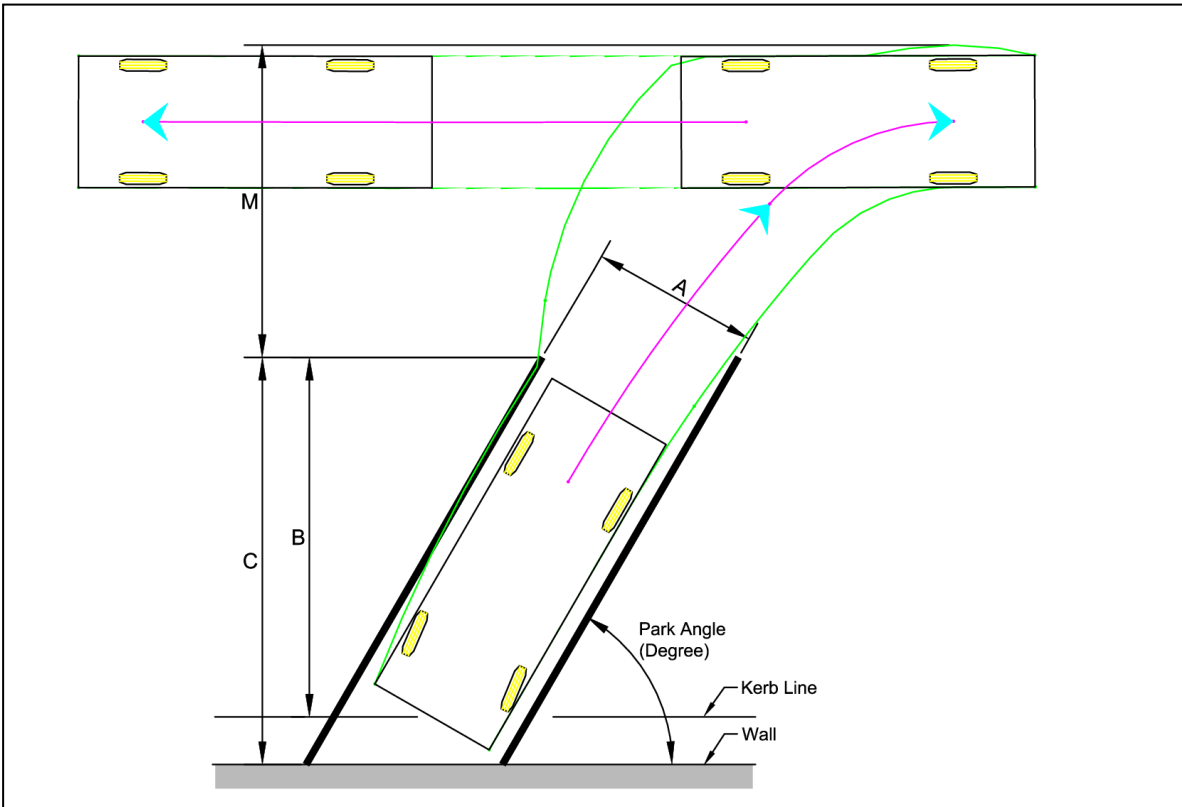


Table 1: Car Park Dimensions

| ANGLE DEGREE | A   | B   | C   | M   | B + M | C + M |
|--------------|-----|-----|-----|-----|-------|-------|
| 0            | 2.3 | 2.3 | 2.3 | 3.0 | 5.3   | 5.3   |
| 30           | 2.5 | 4.5 | 4.9 | 2.9 | 7.4   | 7.8   |
| 45           | 2.5 | 5.1 | 5.6 | 3.7 | 8.8   | 9.3   |
| 60           | 2.5 | 5.3 | 6.0 | 4.6 | 9.9   | 10.6  |
| 90           | 2.5 | 4.8 | 5.4 | 5.8 | 10.6  | 11.2  |

NOTES:

- a. Maximum kerb height = 150mm

**Car parking circulation roadway**

- (4) Vehicle circulation routes shall have:
- (a) A width of no less than 3.5m for one way circulation routes and 6.5m for two way circulation routes. Where pedestrians have to use the circulation roadway to reach a pedestrian access route the widths shall be increased by 800mm.

- (b) A grade of no more than 1 in 8.

**Note:** For ramp grades greater than 1 in 8, a transition is required at changes in grade to avoid scraping the underside of vehicles or stranding them on humps.

- (c) Height clearances of no less than 2.1m.

- (5) Where a circulation route roadway crosses a pedestrian access route, adequate visibility shall be provided. At the crossing, the circulation roadway shall have a gradient no more than 1 in 20 for a distance of 6.0m back from the pedestrian access route and visibility displays shall be provided.

**Queuing spaces**

- (6) Spaces for queuing of vehicles shall be provided between the street and any vehicle control points. To permit a free flow of traffic into the car parking area without adversely affecting traffic flows in surrounding areas, the queuing space shall be no less than given in Table 2.

Table 2: Queuing Spaces

| STORAGE CAPACITY OF CAR PARK<br>(NUMBER OF VEHICLES) | LENGTH OF QUEUING SPACE<br>(M) |
|--|--------------------------------|
| 0-20   | 6.0                            |
| 21-50  | 10.5                           |
| 51-100   | 15.0                           |
| 101-150  | 19.5                           |
| 151-200  | 24.0                           |

NOTES:

- (A) Values based on a length of 6.0m (99%ile) for the first car and 4.5m (50%ile) for subsequent cars.
- (B) For storage capacity greater than 200 vehicles, refer to AS 2890.1

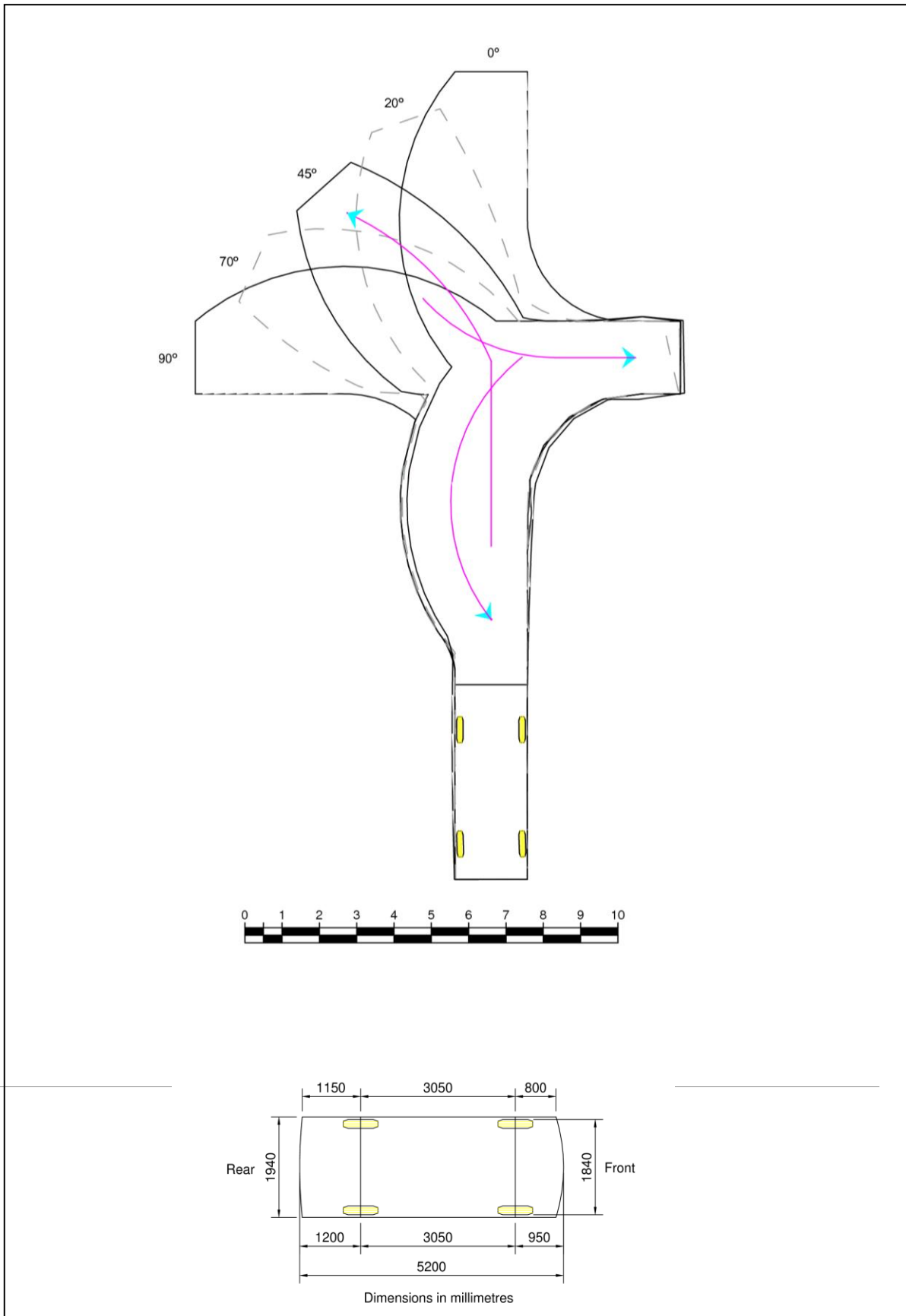
**Spaces and circulation for courier van delivery vehicles**

- (7) Where buildings are required to be serviced only by courier vans, the loading space shall be no less than 6.0m long, 3.0m wide and 3.2m high. Circulation roadways between the street and loading spaces for courier vans shall:
- (a) Provide a height clearance of no less than 3.0m.
  - (b) Have geometrics complying with paragraphs 4 (a) and (b) and 5.

**Note:** Where buildings are required to be serviced by vehicles larger than courier vans, circulation roadways and loading spaces should be specifically designed.

[SEE OVER PAGE FOR APPENDIX VIII.2 MANOEUVRING STANDARD]

## 2. MANOEUVRING STANDARD FOR PRIVATE PASSENGER VEHICLES





### 3. PRIVATE WAYS AND RIGHT OF WAYS

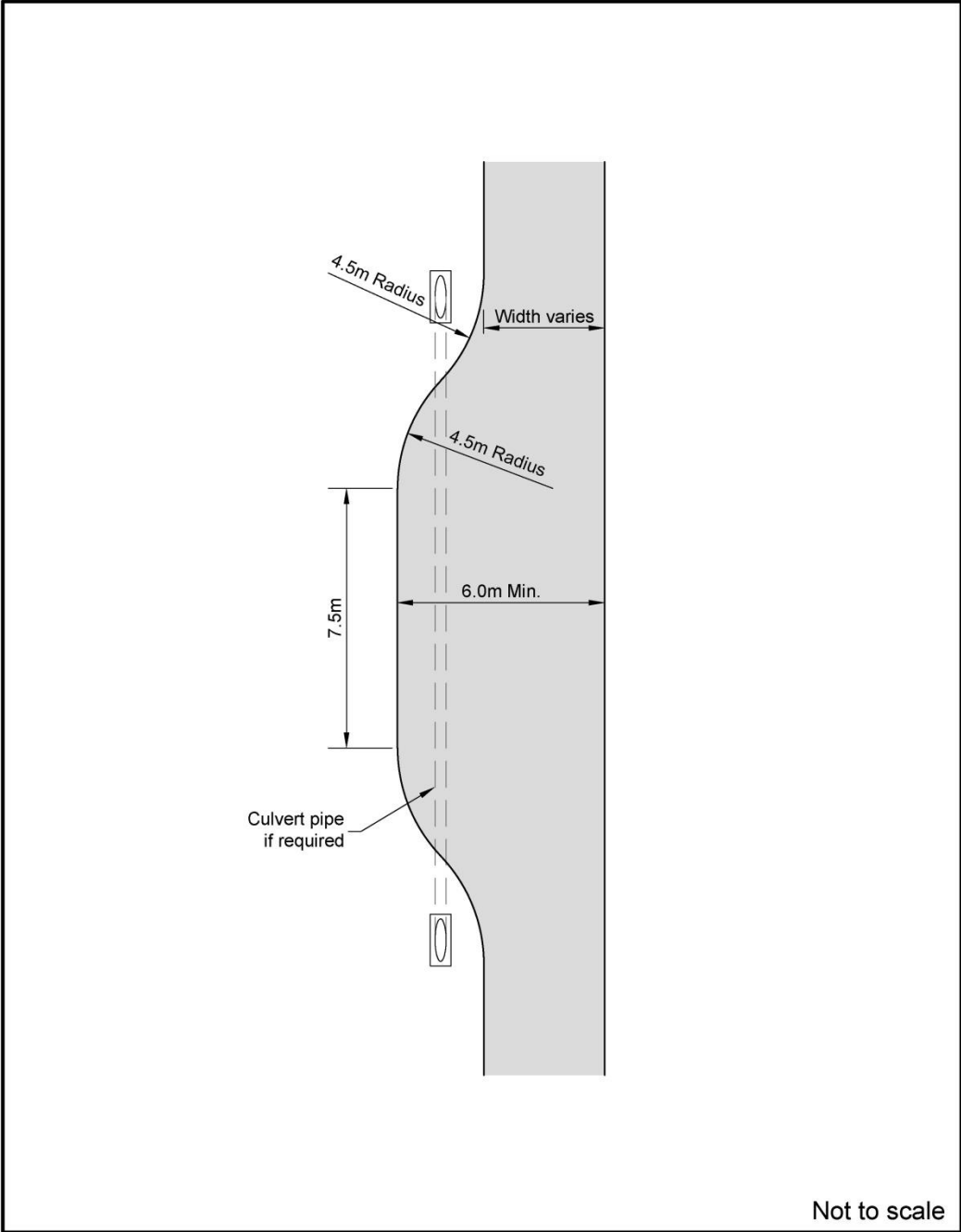
- (1) Private ways and right of ways are to be designed and constructed to comply with the standards set out in Table 1.


Table 1: Private Way and Right of Way Standards.

| <b>Residential 1, 1A, and 2 Zones</b> |  |  |  |
|---------------------------------------|--|--|--|
| <b>Number of Lots</b>                 | 2-3  | 4-6  | 7+   |
| <b>Minimum Width</b>                  | 3.6m   | 4.5m   | 9m   |
| <b>Formed Movement lane</b>           | 3m (sealed 5m in from property boundary)   | 3m (sealed 5m in from property boundary)   | 6m (sealed 5m in from property boundary)   |
| <b>Drainage</b>                       | Interceptor sump required where more than 40m <sup>2</sup> of impermeable area is graded towards the street. | Interceptor sump required where more than 40m <sup>2</sup> of impermeable area is graded towards the street. | Interceptor sump required where more than 40m <sup>2</sup> of impermeable area is graded towards the street. |
| <b>Passing Bays</b>                   | -  | -  | Every 50m, as set out in Figure 1.   |
| <b>Turning Heads</b>                  | -  | -  | As set out in Figure 2.  |
| <b>Footpaths</b>                      | -  | -  | Single sided, 1.5m width for concrete or 1.8m width for asphalt.   |
| <b>Lighting</b>                       | -  | -  | Constructed and designed in accordance with Class P4 of AS/NZS 1158.   |
| <b>Residential 3 Zone</b>             |  |  |  |
| <b>Number of Lots</b>                 | 1-3  | 4-6  | 7+   |
| <b>Minimum Width</b>                  | 4m   | 4.5m   | 9m   |
| <b>Formed Movement lane</b>           | 3m (sealed 5m in from property boundary)   | 3m (sealed 5m in from property boundary)   | 6m (sealed 5m in from property boundary)   |
| <b>Drainage</b>                       | Interceptor sump required where more than 40m <sup>2</sup> of impermeable area is graded towards the street. | Interceptor sump required where more than 40m <sup>2</sup> of impermeable area is graded towards the street. | Interceptor sump required where more than 40m <sup>2</sup> of impermeable area is graded towards the street. |
| <b>Passing Bays</b>                   | -  | -  | Every 50m, as set out in Figure 1.   |
| <b>Turning Heads</b>                  | -  | -  | As set out in Figure 2.  |
| <b>Footpaths</b>                      | -  | -  | Single sided, 1.5m width for concrete or 1.8m width for asphalt.   |
| <b>Lighting</b>                       | -  | -  | Constructed and designed in accordance with Class P4 of AS/NZS 1158.   |
| <b>Rural 1, 2, and Otatarā Zones</b>  |  |  |  |
| <b>Number of Lots</b>                 | 2-6  | 7+   |  |
| <b>Minimum Width</b>                  | 6m   | 9m   |  |
| <b>Formed Movement lane</b>           | In accordance with Figure 3.   | 6m   |  |
| <b>Drainage</b>                       | -  | -  |  |
| <b>Passing Bays</b>                   | Every 200m   | -  |  |
| <b>Turning Heads</b>                  | -  | -  |  |
| <b>Footpaths</b>                      | -  | -  |  |
| <b>Lighting</b>                       | -  | -  |  |

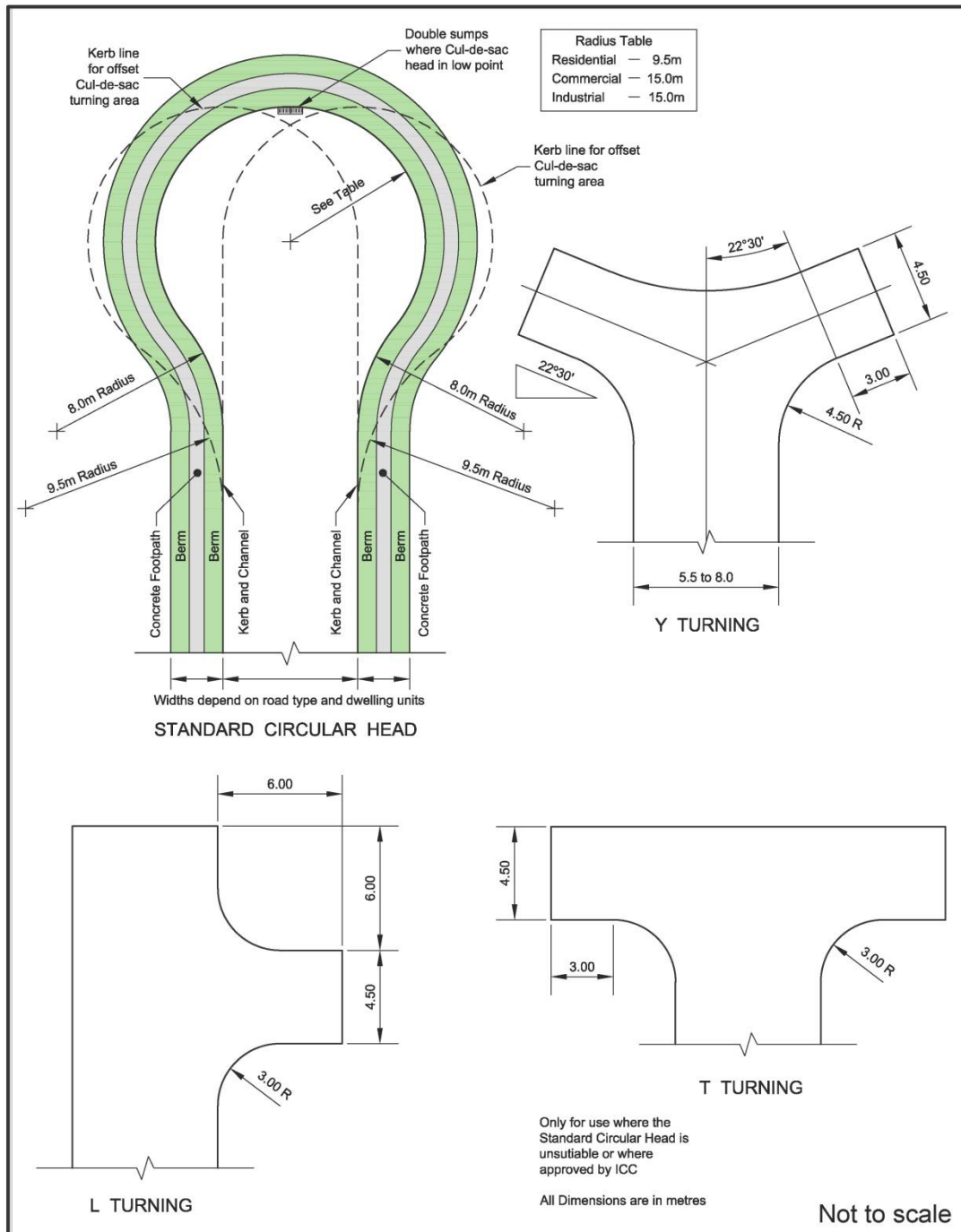
Note: Commercial and Industrial development will be considered on a case by case basis in consultation with the Council's Roading Manager.

Figure 1 – Passing Bay Detail



|  |                           |
|--|---------------------------|
|  <p>Invercargill<br/>CITY COUNCIL</p> | <p>Passing Bay Detail</p> |
|--|---------------------------|

**Figure 2 – No exit turning areas**

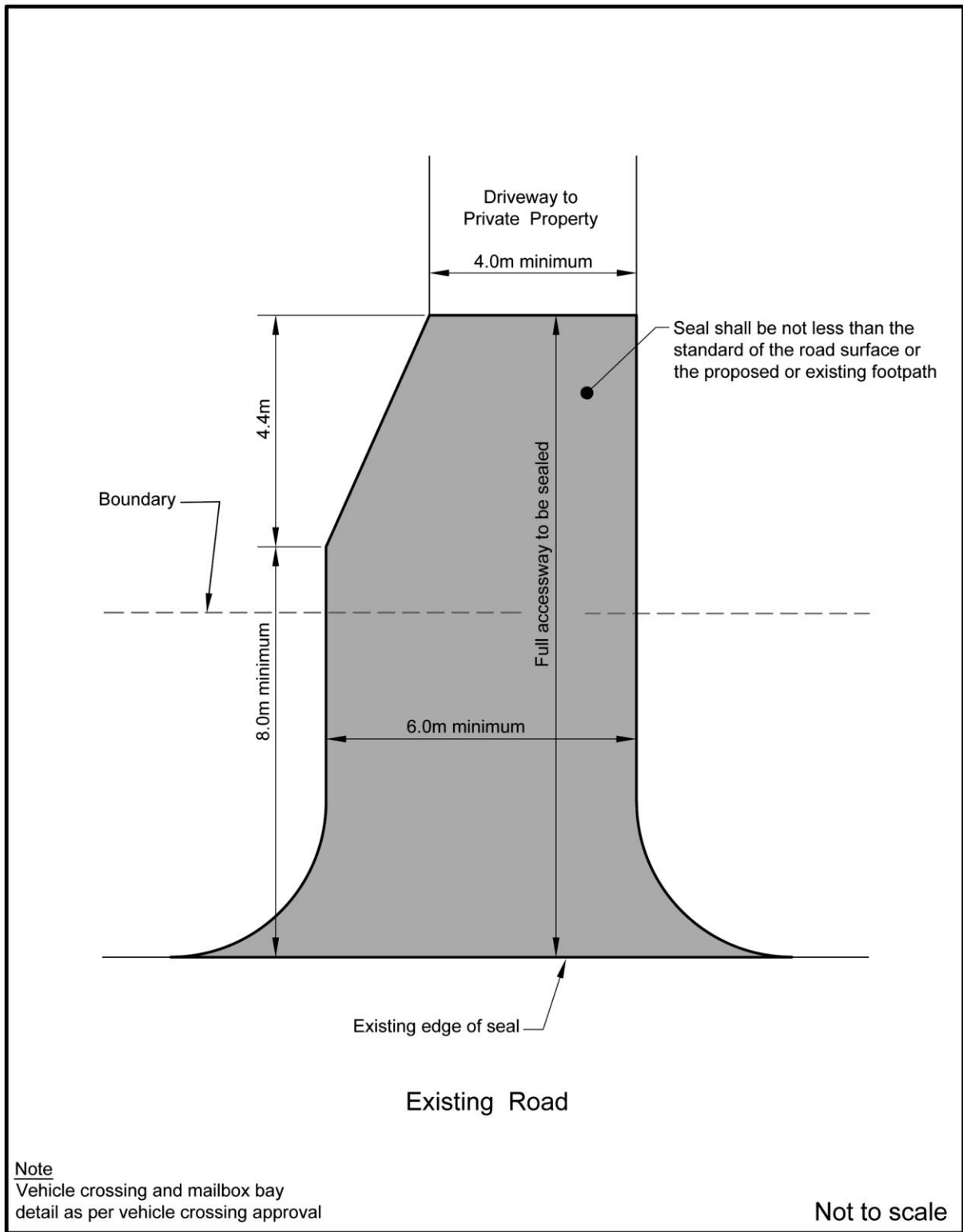





**CUL-DE-SAC STANDARD DETAILS**

**Dimensions of no-exit turning areas**

**Figure 3 – Rural accessway layout**



|   |   |
|---|---|
|  | <p><b>RURAL ACCESSWAY LAYOUT</b><br/> <b>(Two to six dwellings)</b></p> |
|---|---|

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# APPENDIX IX – SCHEDULE OF HEAVY INDUSTRIES

|  |   |
|--|---|
| <p>Acetylene-gas manufacture<br/>         Acids manufacture<br/>         Aerosol packers and manufacture<br/>         Aggregates processing<br/>         Aluminium alloy manufacture<br/>         Alkali-waste works<br/>         Ammonia manufacture<br/>         Ammunition manufacture<br/>         Animal by-products manufacture<br/>         Asbestos manufacture<br/>         Asphalt manufacture<br/>         Battery manufacture and recycling<br/>         Bearing manufacture<br/>         Bisulphide of carbon works<br/>         Boiler makers<br/>         Boiler manufacture<br/>         Boiling down works<br/>         Bone boiling and crushing<br/>         Briquette manufacture<br/>         Bulk storage of asphalt, tallow, industrial chemicals and scrap metal<br/>         Candle manufacture<br/>         Celluloid works<br/>         Cement – packing bag, cleaning works<br/>         Cement manufacture<br/>         Chemicals manufacture<br/>         Chlorine works<br/>         Coke manufacture<br/>         Concrete batching<br/>         Dag crushing<br/>         Dairy Processing<br/>         Detergent manufacture<br/>         Distillation of coal, wood and bones<br/>         Electroplating and galvanising<br/>         Explosive manufacture and storage<br/>         Fat rendering<br/>         Fellmongering<br/>         Fertiliser manufacture, processing, and storage, with the exception of storage included as a permitted activity under Rule 3.7.1<br/>         Fibreglass manufacture<br/>         Fibrous plaster manufacture<br/>         Fireworks manufacture and storage<br/>         Fire clay products manufacture<br/>         Fish processing<br/>         Flax pulping<br/>         Flock manufacturing<br/>         Fluorine works<br/>         Foundry<br/>         Fur curing and tanning</p> | <p>Gelatine manufacture<br/>         Glass manufacture<br/>         Glue manufacture<br/>         Gunpowder manufacture<br/>         Gypsum manufacture<br/>         Hydrochloric acid manufacture<br/>         Incinerator works<br/>         Industrial chemicals manufacture<br/>         Iron works and foundry<br/>         Lacquer manufacture<br/>         Lead works<br/>         Leather tanning<br/>         Lime manufacture<br/>         Linoleum manufacture<br/>         Lucerne dehydration<br/>         Manure (artificial) manufacture<br/>         Meat Processing Facility<br/>         Motor vehicle wrecking and crushing<br/>         Natural gas, oil or petroleum distillation or refining<br/>         Oxygen – gas manufacture<br/>         Paint, varnish, lacquer etc manufacture<br/>         Petroleum based products manufacture<br/>         Plastics manufacture<br/>         Pulp and paper manufacture<br/>         Pyridine works<br/>         Railway workshops<br/>         Rubber goods manufacture<br/>         Sandblasting<br/>         Sale Stock yards (commercial)<br/>         Sewage and septic tank sludge storage and disposal<br/>         Smelting metals (all types)<br/>         Soap manufacture<br/>         Solid waste collection, recycling and disposal facilities<br/>         Steel works<br/>         Stone and mineral crushing<br/>         Sulphur-chloride manufacture<br/>         Sulphur-dioxide manufacture<br/>         Tallow–melting and refining<br/>         Tanning and curing of hides and skins<br/>         Tar manufacture, refining, mixing<br/>         Timber treatment<br/>         Turpentine manufacture<br/>         Varnish manufacture<br/>         White lead manufacture<br/>         Wood chipping, sawmilling and manufacture of timber products<br/>         Wool scouring<br/>         Zinc chloride manufacture<br/>         Zinc works</p> |
|--|---|

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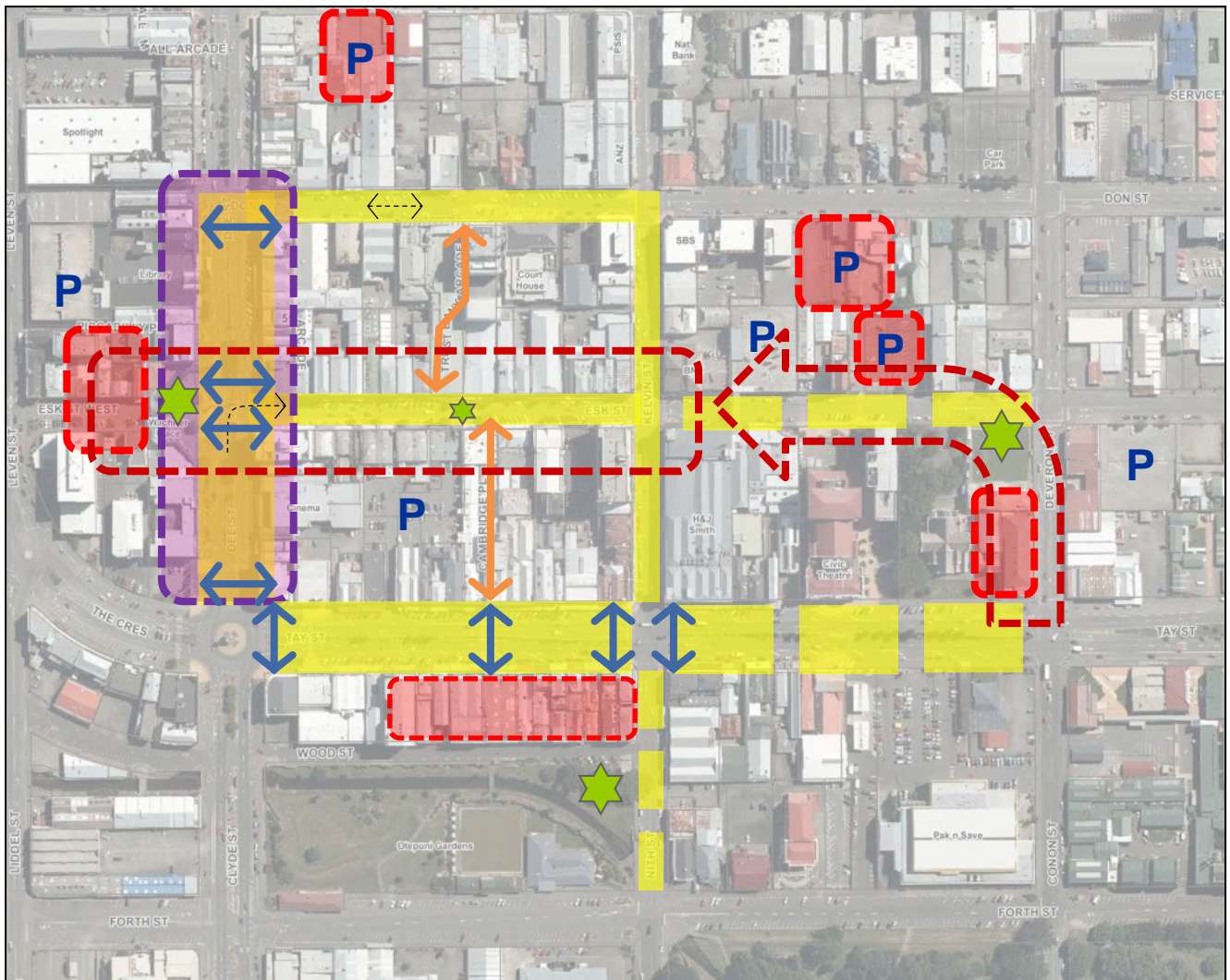


# APPENDIX X – CONCEPT PLANS

1. Concept Plan – CBD – July 2013
2. Concept Plans – Business 5 (Rural Service) Zone
3. Concept Plan – Industrial 3 (Large) Zone
4. Concept Plan – Industrial 4 (Awarua) Zone

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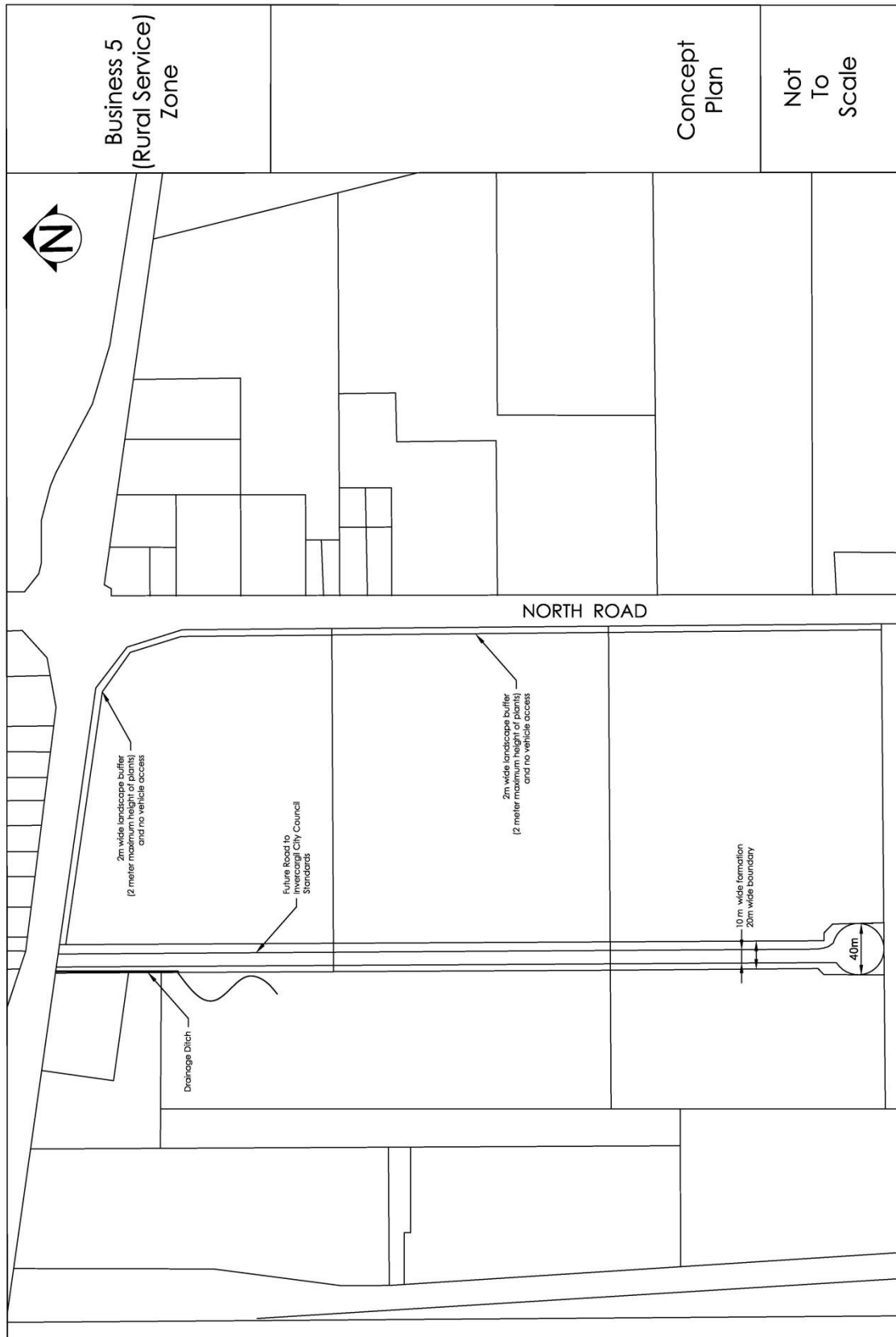
# 1. CONCEPT PLAN – CBD – JULY 2013



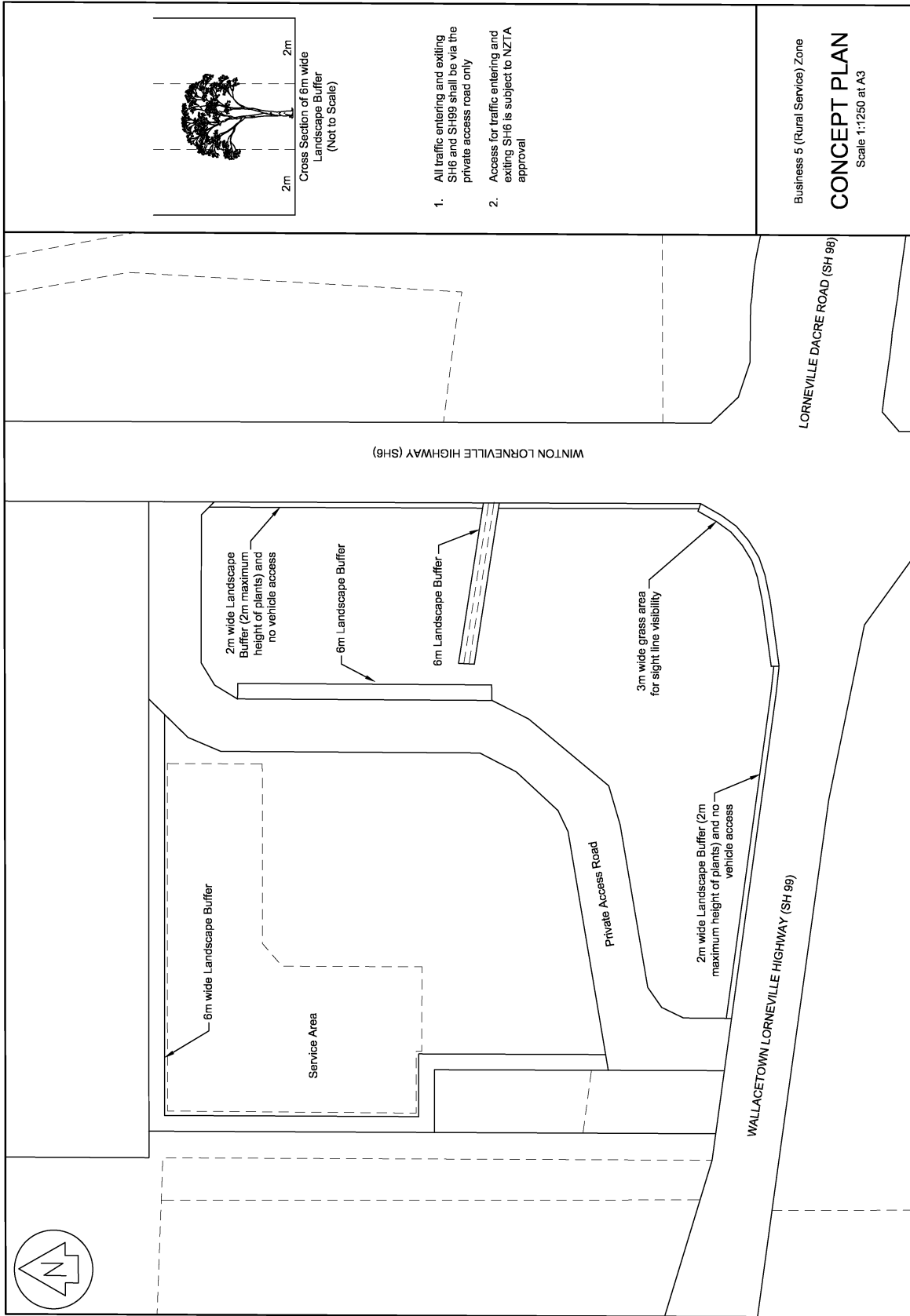
| Legend |   |  |   |
|--------|---|--|---|
|        | Strengthening the heart of the city centre  |  | Public off-street car parking opportunity |
|        | Strengthened pedestrian connection          |  | Development opportunity                   |
|        | Area of streetscape strengthening           |  | Two-way                                   |
|        | Strengthening as informal nightlife cluster |  | Allowing right-turn                       |
|        | Public space upgrade                        |  | Existing arcade                           |
|        | Overcoming State Highway severance          |  |   |

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## 2. CONCEPT PLANS – BUSINESS 5 (RURAL SERVICE) ZONE



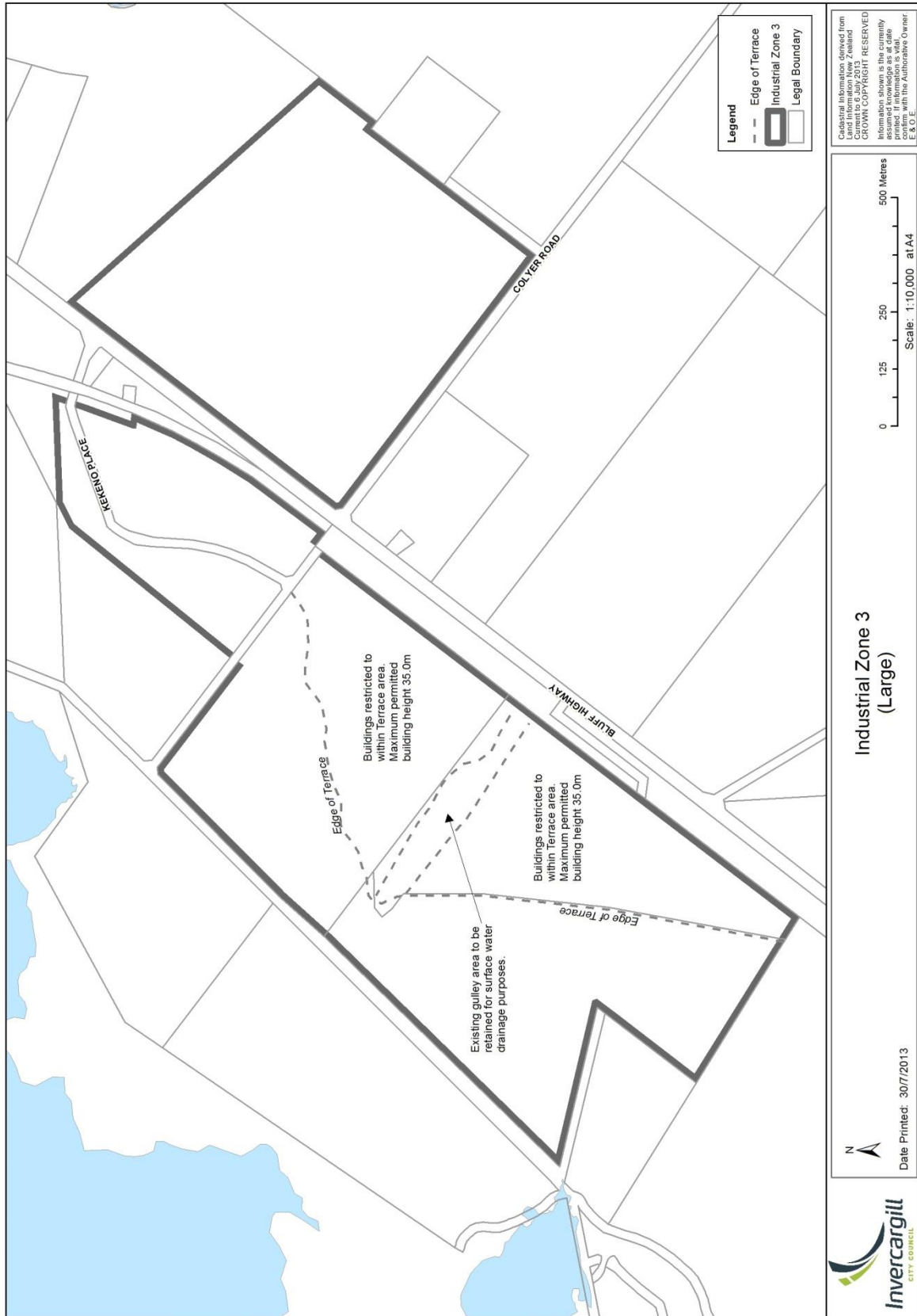
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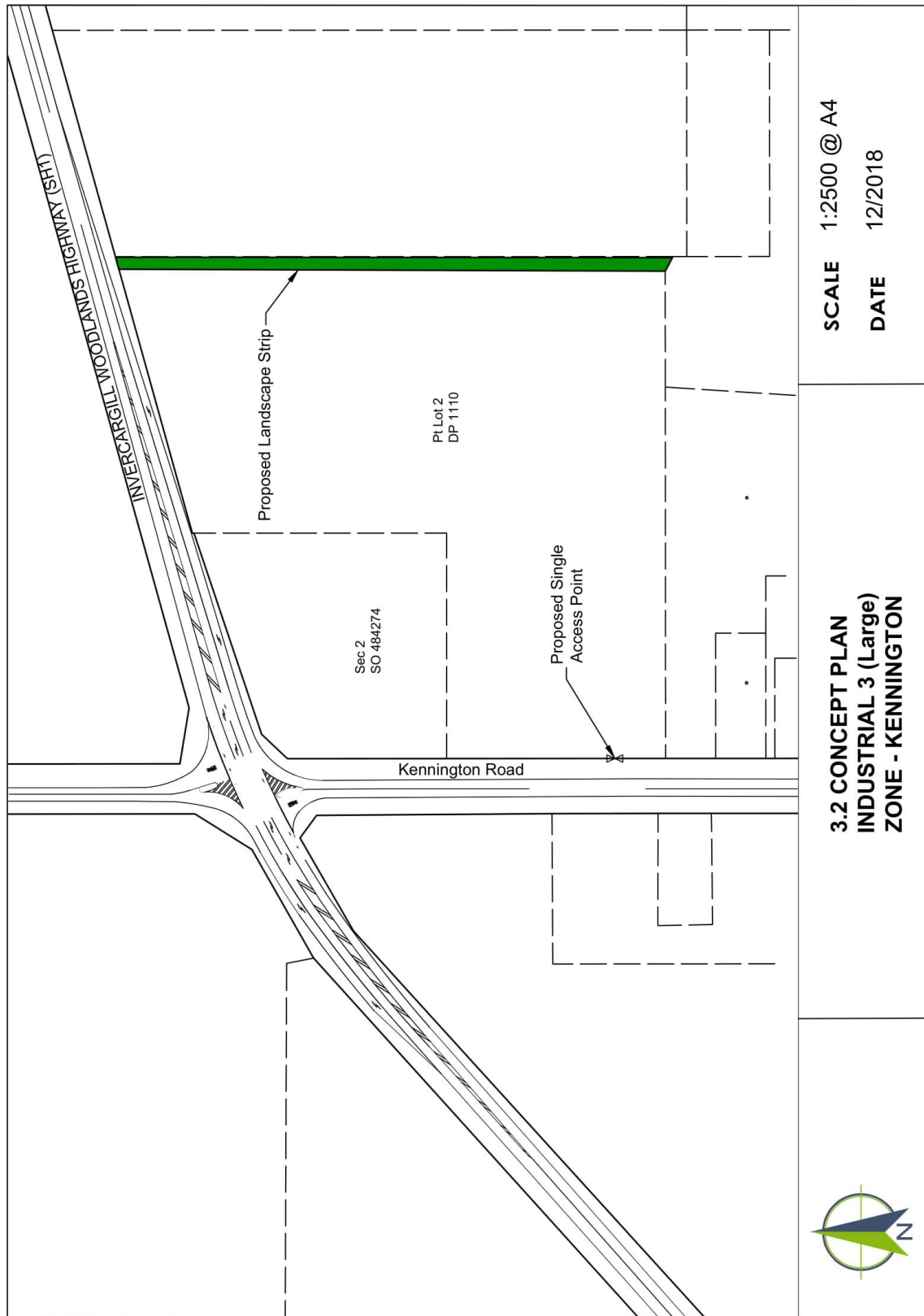


# 3.1 CONCEPT PLAN – INDUSTRIAL 3 (LARGE) ZONE



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### 3.2 CONCEPT PLAN – INDUSTRIAL 3 (LARGE) ZONE – KENNINGTON



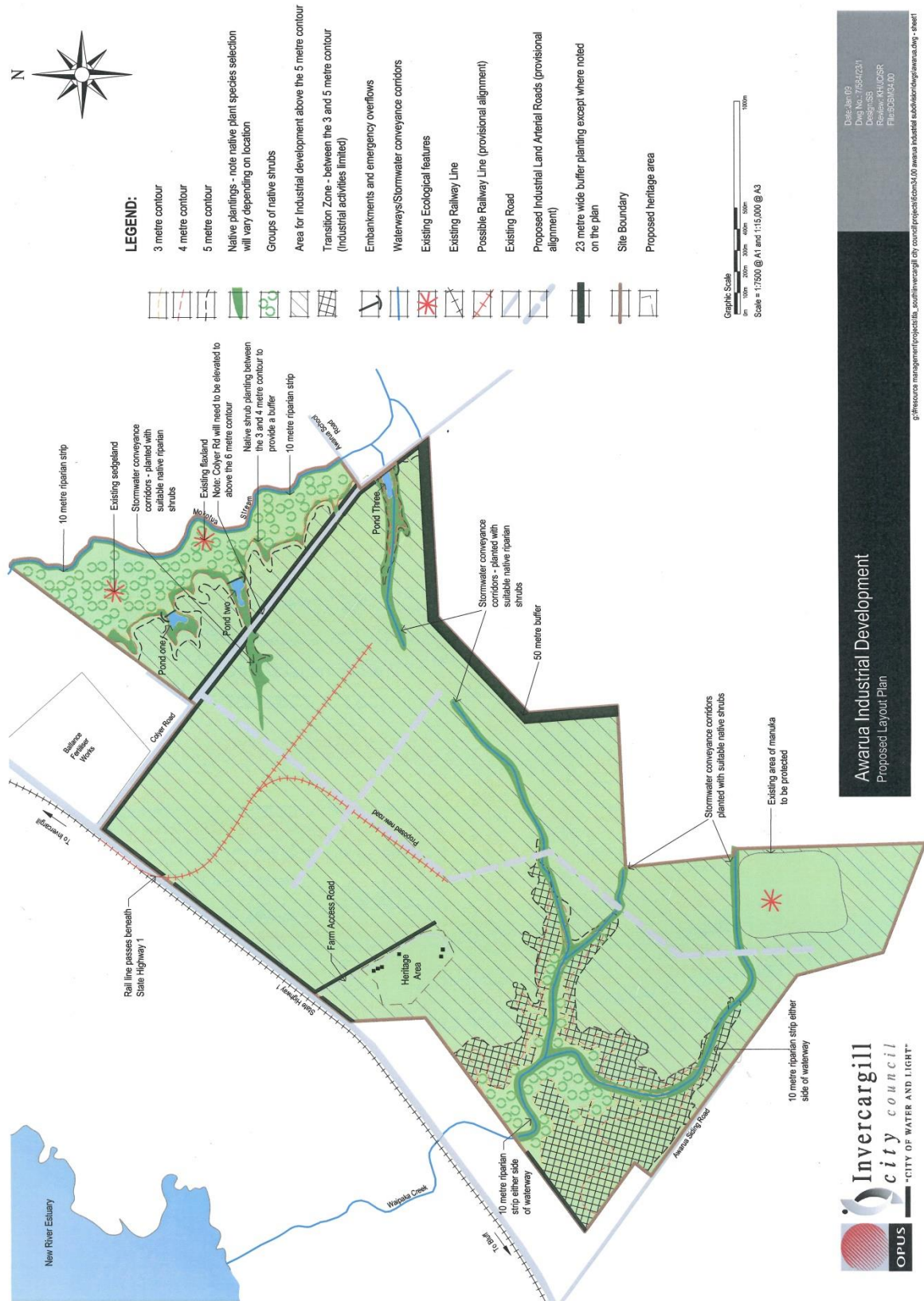
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DATE 12/2018

3.2 CONCEPT PLAN  
INDUSTRIAL 3 (Large)  
ZONE - KENNINGTON



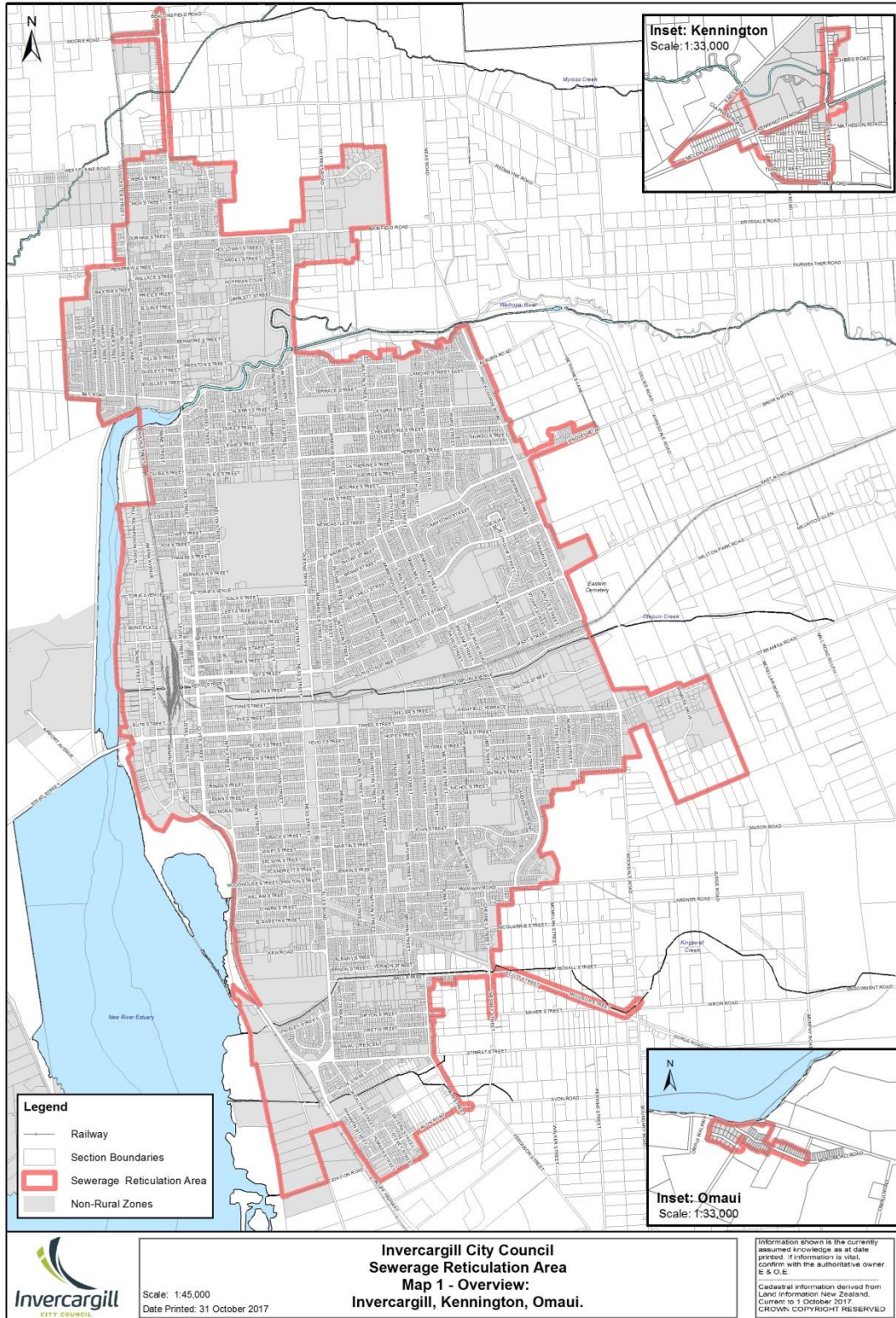
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# 4. CONCEPT PLAN – INDUSTRIAL 4 (AWARUA) ZONE



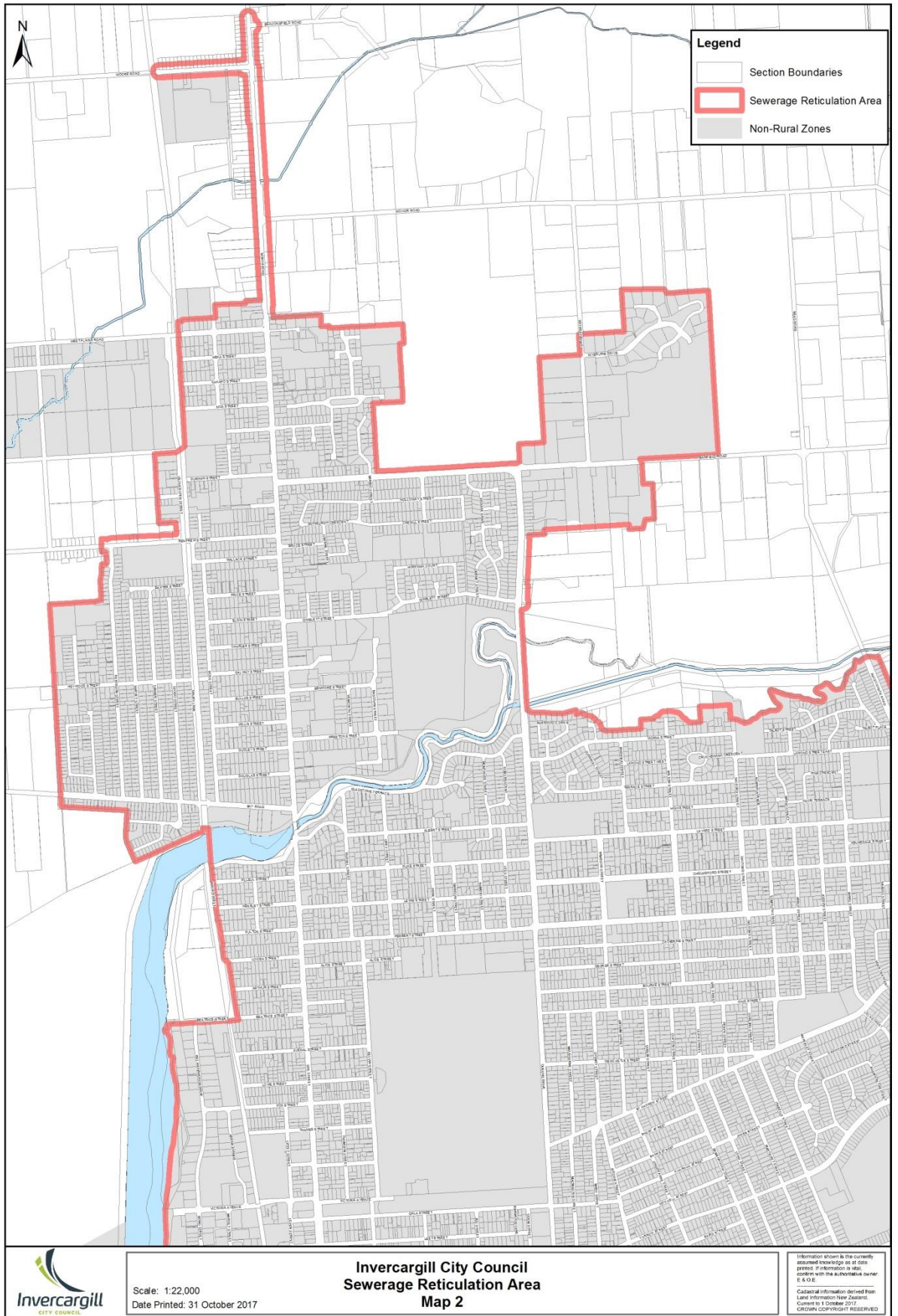
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# APPENDIX XI – COUNCIL’S SEWERAGE AND WATER RETICULATION AREAS

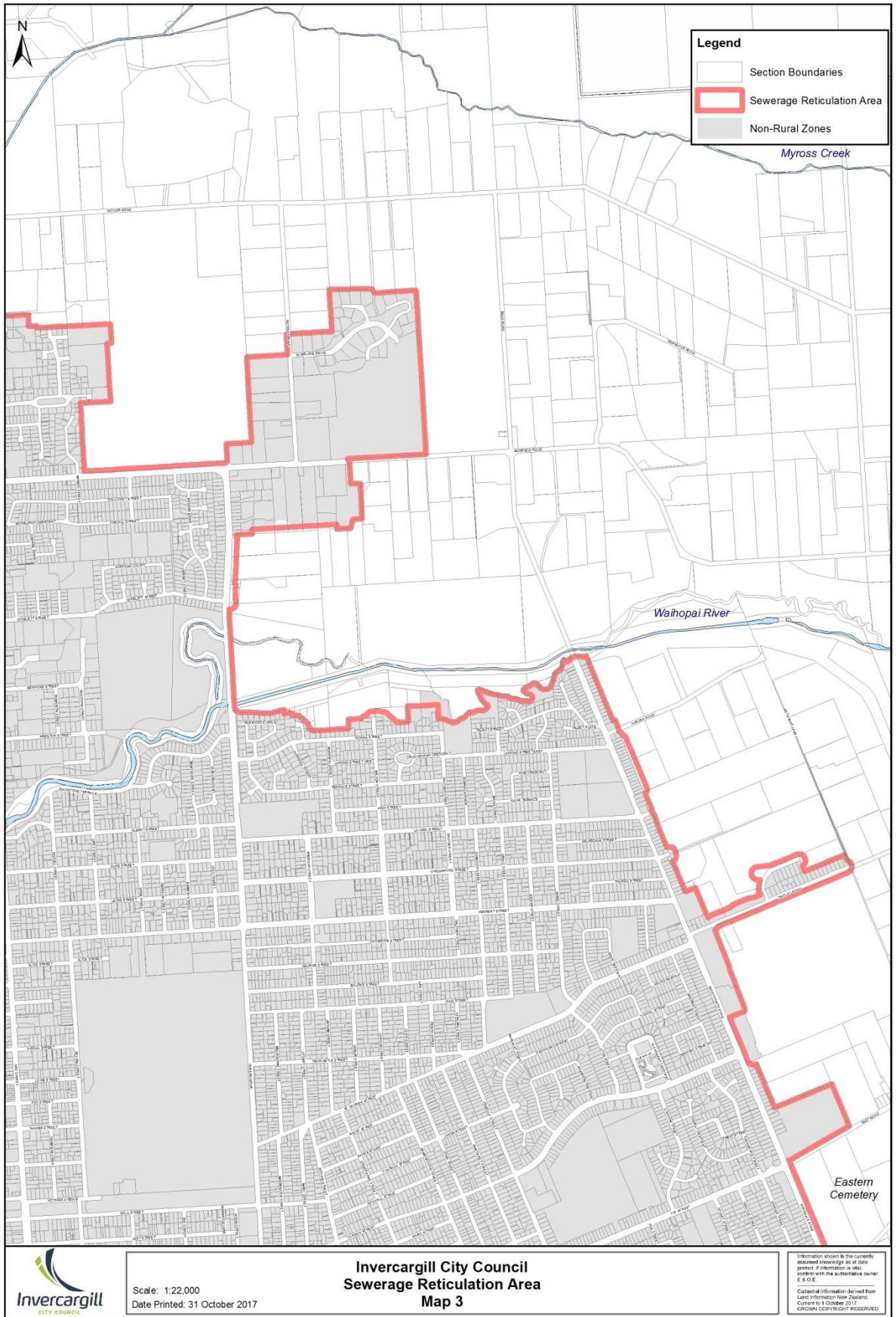


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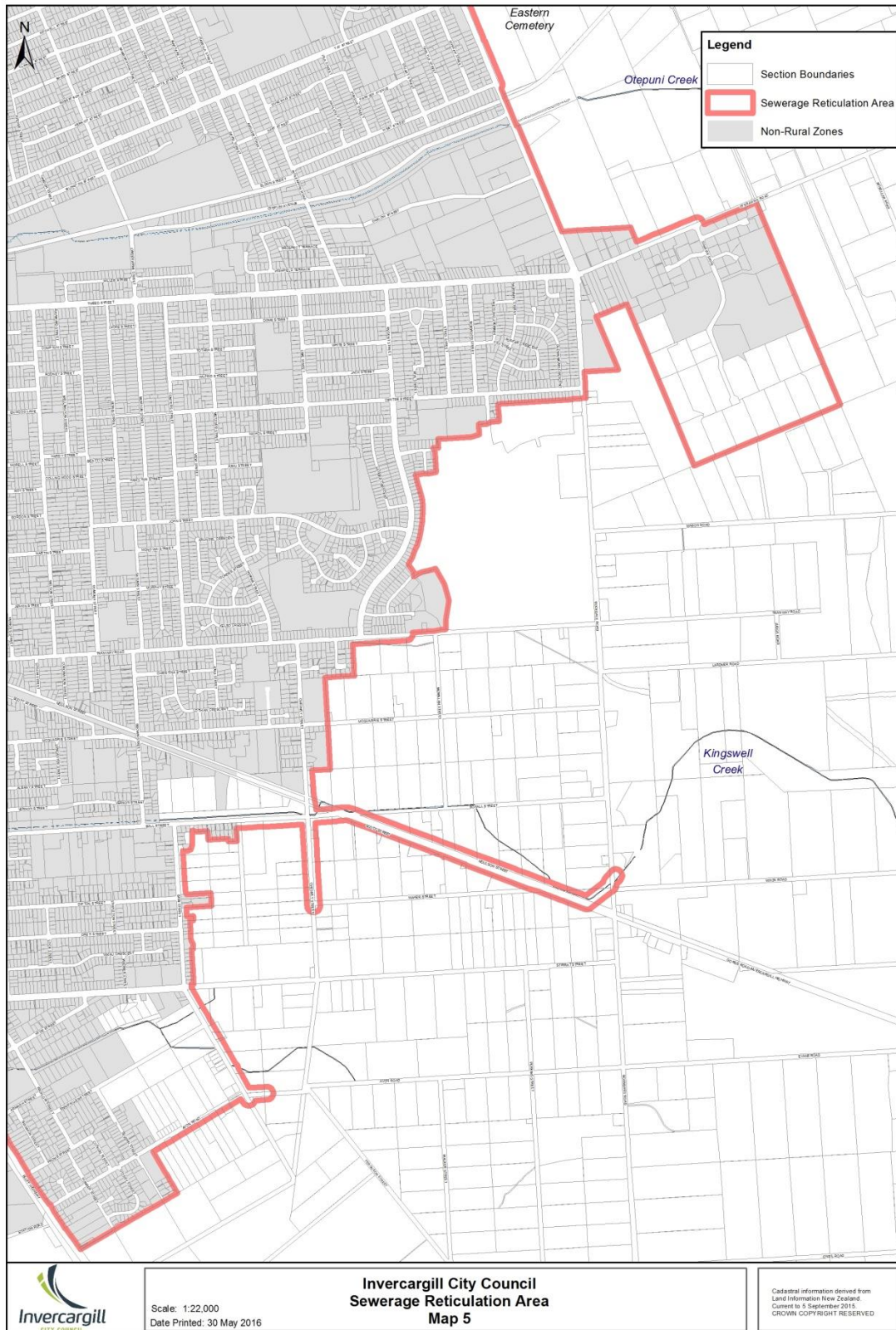
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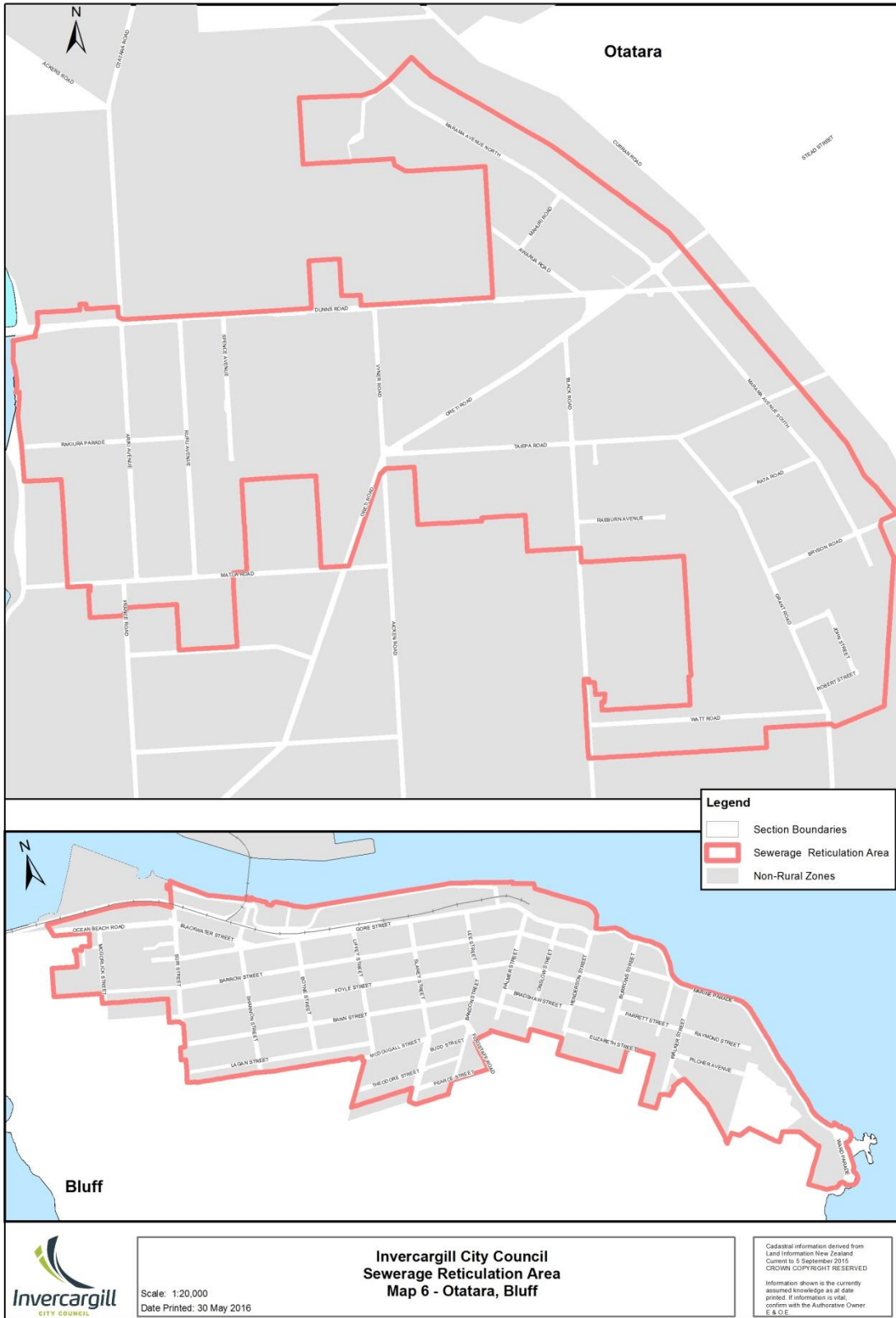


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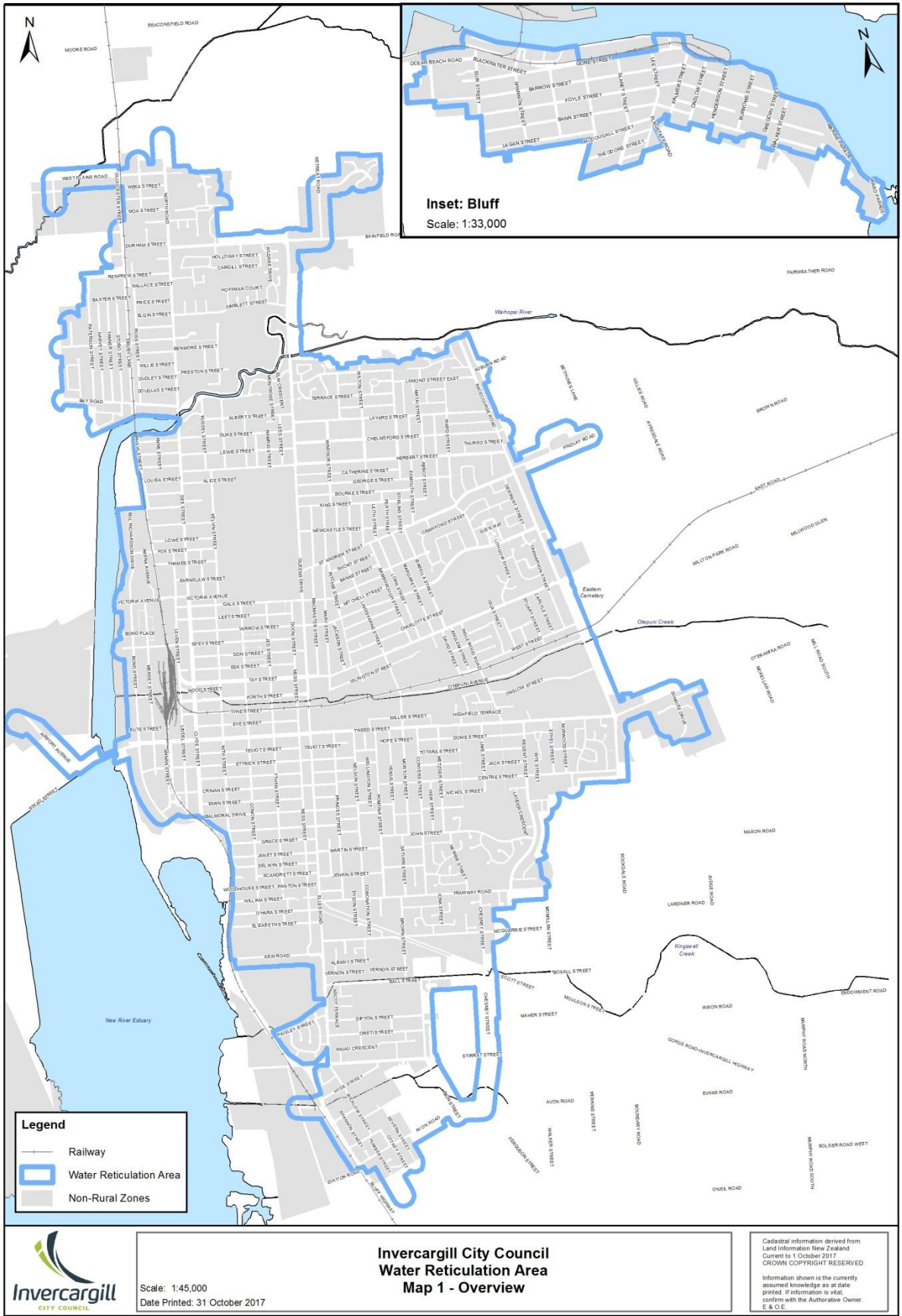


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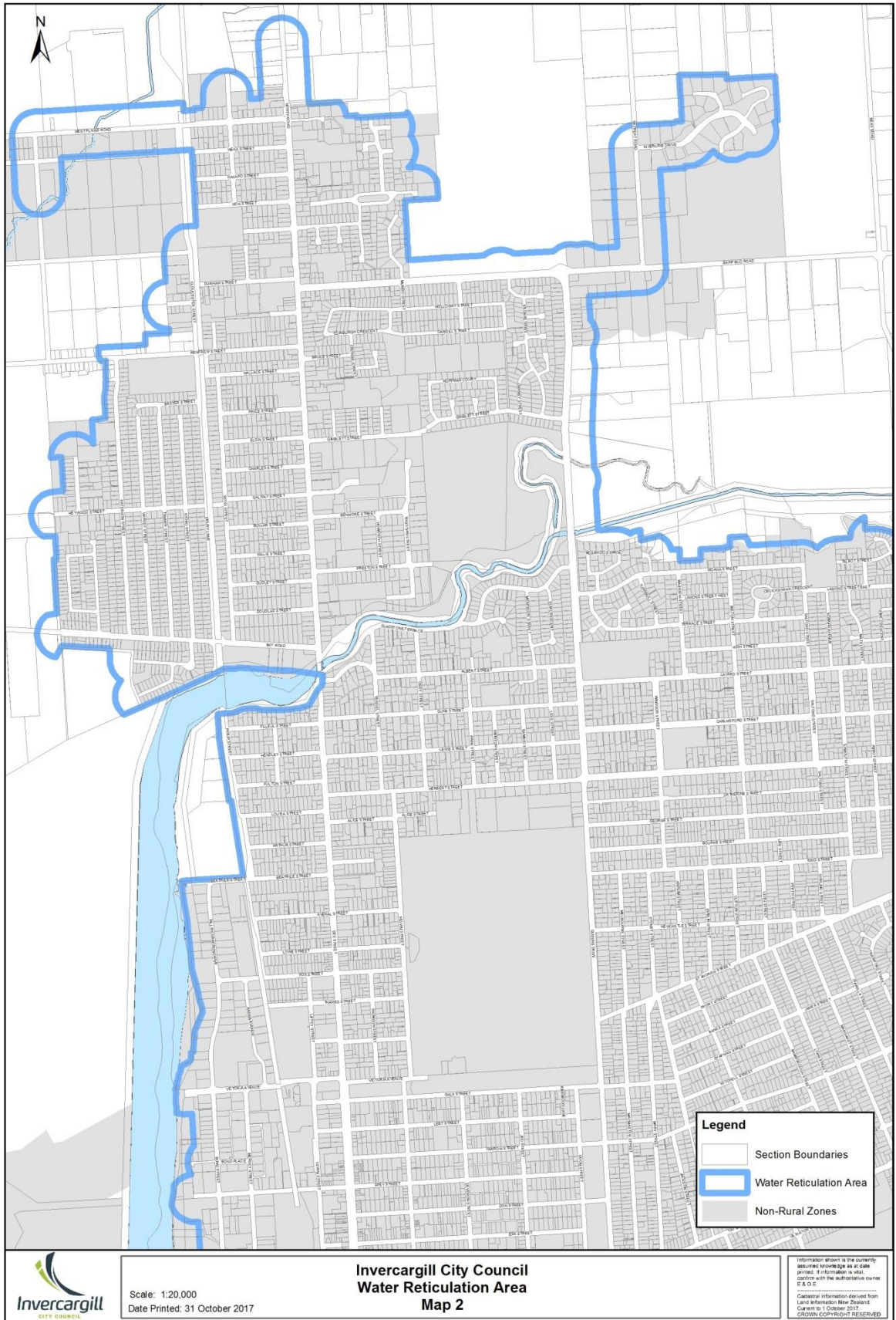




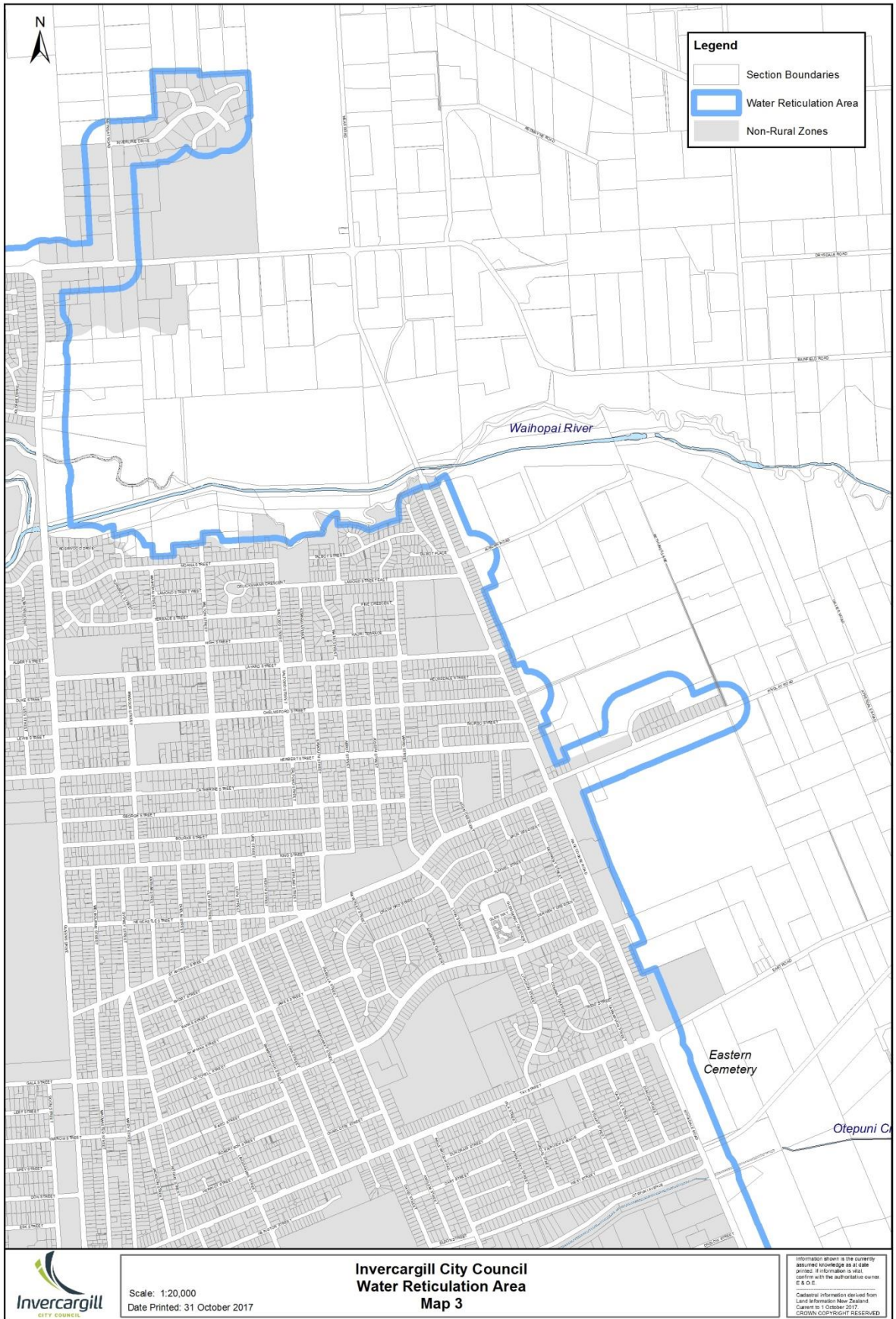
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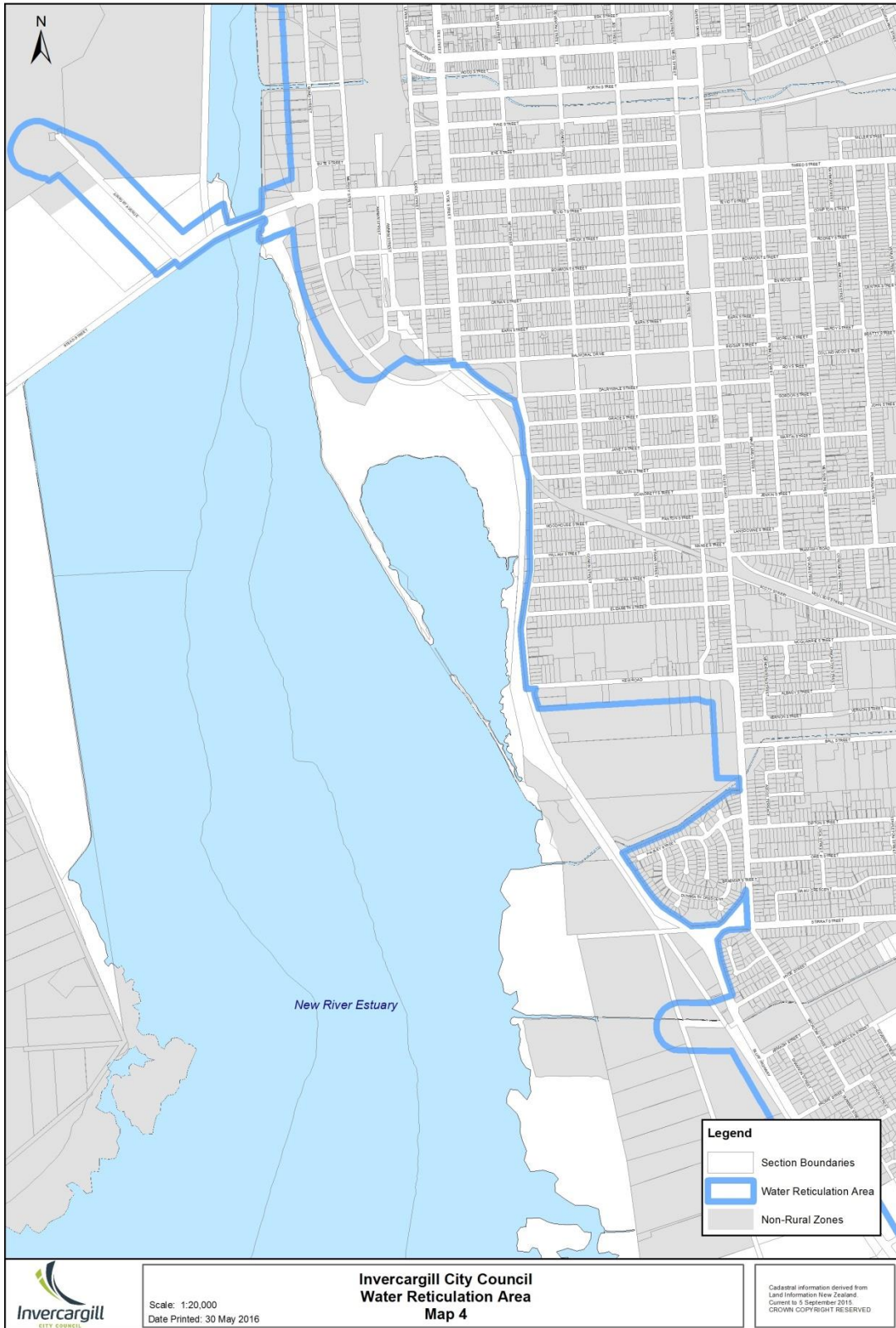


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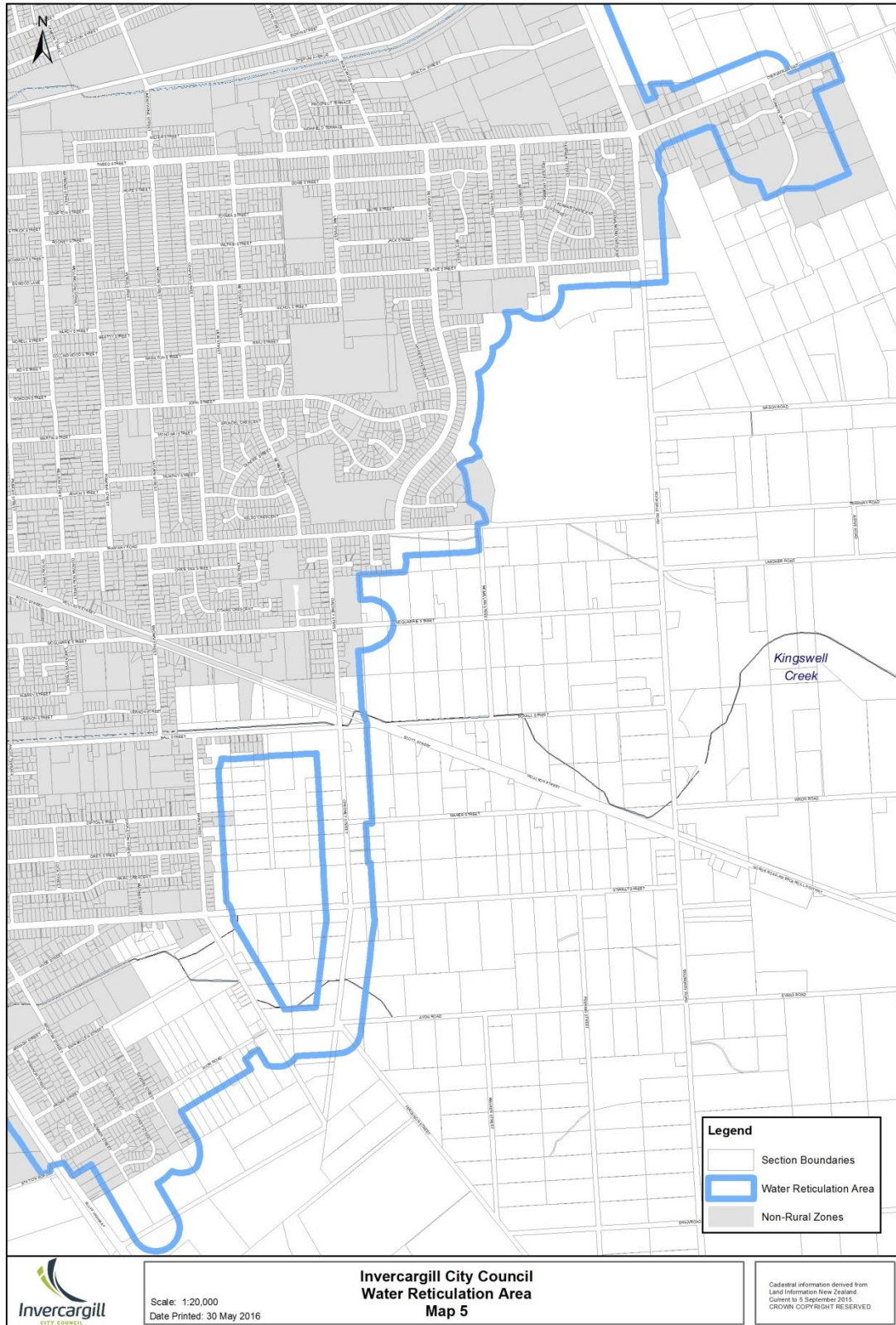


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# APPENDIX XII – NATIONAL ENVIRONMENTAL STANDARD FOR ASSESSING AND MANAGING CONTAMINANTS IN SOIL TO PROTECT HUMAN HEALTH

## Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011

- 1 Title
- 2 Commencement
- 3 Interpretation
- 4 Relationship of regulations with territorial authority and regional council functions
- 5 Application
- 6 Methods
- 7 Standards
- 8 Permitted activities
- 9 Controlled activities
- 10 Restricted discretionary activities
- 11 Discretionary activities

### Regulations

- 1 Title**

These regulations are the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.
- 2 Commencement**

These regulations come into force on 1 January 2012.
- 3 Interpretation**

In these regulations,—

**Act** means the Resource Management Act 1991

**Current edition** means the edition that has legal effect when the edition is being used

**Detailed site investigation** means an investigation that—

  - (a) is done by a suitably qualified and experienced practitioner; and
  - (b) is done in accordance with the current edition of *Contaminated Land Management Guidelines No. 5—Site Investigation and Analysis of Soils*, Wellington, Ministry for the Environment; and
  - (c) is reported on in accordance with the current edition of *Contaminated Land Management Guidelines No. 1—Reporting on Contaminated Sites in New Zealand*, Wellington, Ministry for the Environment; and
  - (d) results in a report that is certified by the practitioner

**Fuel storage system** means a system in which at least 1 of the following is underground:

  - (a) a storage tank for aviation kerosene, diesel, kerosene, lubricating oil, or petroleum;
  - (b) the whole of the tank's ancillary equipment;
  - (c) part of the tank's ancillary equipment

**HAIL** means the current edition of the *Hazardous Activities and Industries List*, Wellington, Ministry for the Environment

**Person** means the person referred to in regulation 5(1)(a)

**Preliminary site investigation** means an investigation that—

- (a) is done by a suitably qualified and experienced practitioner; and
- (b) is reported on in accordance with the current edition of *Contaminated Land Management Guidelines No. 1—Reporting on Contaminated Sites in New Zealand*, Wellington, Ministry for the Environment; and
- (c) results in a report that is certified by the practitioner.

#### **4 Relationship of regulations with territorial authority and regional council functions**

These regulations—

- (a) deal with territorial authority functions under section 31 of the Act;
- (b) do not deal with regional council functions under section 30 of the Act.

#### **5 Application**

(1) These regulations—

- (a) apply when a person wants to do an activity described in any of subclauses (2) to (6) on a piece of land described in subclause (7) or (8):
- (b) do not apply when a person wants to do an activity described in any of subclauses (2) to (6) on a piece of land described in subclause (9).

*Activities*

(2) An activity is removing a fuel storage system from the piece of land or replacing a fuel storage system in or on the piece of land, which means—

- (a) doing any of the following:
  - (i) removing or replacing the whole system:
  - (ii) removing or replacing an underground part of the system:
  - (iii) taking away or putting back soil associated with the removal or replacement of the system or the part:
- (b) doing any of the following for purposes associated with removing or replacing the whole system or part of the system:
  - (i) sampling the soil of the piece of land:
  - (ii) investigating the piece of land:
  - (iii) remediating the piece of land:
  - (iv) validating the piece of land:
  - (v) managing the piece of land.

(3) An activity is sampling the soil of the piece of land, which means sampling it to determine whether or not it is contaminated and, if it is, the amount and kind of contamination.

(4) An activity is disturbing the soil of the piece of land, which—

- (a) means disturbing the soil of the piece of land for a particular purpose:
- (b) does not include disturbing the soil of the piece of land, whatever the purpose, if the land is land to which regulation 33(9) or 36 of the Resource Management (National Environmental Standard for Electricity Transmission Activities) Regulations 2009 applies.

(5) An activity is subdividing land, which means subdividing land—

- (a) that has boundaries that are identical with the boundaries of the piece of land; or
- (b) that has all the piece of land within its boundaries; or
- (c) that has part of the piece of land within its boundaries.



- (6) An activity is changing the use of the piece of land, which means changing it to a use that, because the land is as described in subclause (7), is reasonably likely to harm human health.

*Land covered*

- (7) The piece of land is a piece of land that is described by 1 of the following:
  - (a) an activity or industry described in the *HAIL* is being undertaken on it;
  - (b) an activity or industry described in the *HAIL* has been undertaken on it;
  - (c) it is more likely than not that an activity or industry described in the *HAIL* is being or has been undertaken on it.
- (8) If a piece of land described in subclause (7) is production land, these regulations apply if the person wants to—
  - (a) remove a fuel storage system from the piece of land or replace a fuel storage system in or on the piece of land;
  - (b) sample or disturb—
    - (i) soil under existing residential buildings on the piece of land;
    - (ii) soil used for the farmhouse garden or other residential purposes in the immediate vicinity of existing residential buildings;
    - (iii) soil that would be under proposed residential buildings on the piece of land;
    - (iv) soil that would be used for the farmhouse garden or other residential purposes in the immediate vicinity of proposed residential buildings;
  - (c) subdivide land in a way that causes the piece of land to stop being production land;
  - (d) change the use of the piece of land in a way that causes the piece of land to stop being production land.

*Land not covered*

- (9) These regulations do not apply to a piece of land described in subclause (7) or (8) about which a detailed site investigation exists that demonstrates that any contaminants in or on the piece of land are at, or below, background concentrations.

## **6 Methods**

- (1) Subclauses (2) and (3) prescribe the only 2 methods that the person may use for establishing whether or not a piece of land is as described in regulation 5(7).
- (2) One method is by using information that is the most up-to-date information about the area where the piece of land is located that the territorial authority—
  - (a) holds on its dangerous goods files, property files, or resource consent database or relevant registers; or
  - (b) has available to it from the regional council.
- (3) The other method is by relying on the report of a preliminary site investigation—
  - (a) stating that an activity or industry described in the *HAIL* is, or is not, being undertaken on the piece of land; or
  - (b) stating that an activity or industry described in the *HAIL* has, or has not, been undertaken on the piece of land; or
  - (c) stating the likelihood of an activity or industry described in the *HAIL* being undertaken, or having been undertaken, on the piece of land.

- (4) The person must—
  - (a) choose which of the 2 methods to use; and
  - (b) meet all the costs involved in using the method that the person has chosen.

## 7 Standards

- (1) In this regulation,—
  - Land use** means—
    - (a) the current use, if the activity the person wants to do is—
      - (i) to remove a fuel storage system from the piece of land or replace a fuel storage system in or on the piece of land:
      - (ii) to sample the soil of the piece of land:
      - (iii) to disturb the soil of the piece of land:
    - (b) the intended use, if the activity the person wants to do is—
      - (i) to subdivide land:
      - (ii) to change the use of the piece of land

**Methodology** means the current edition of the *Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health*, Wellington, Ministry for the Environment

**Priority contaminant** means a contaminant for which the *Methodology* derives a soil contaminant standard.

- (2) If the contaminant of concern is a priority contaminant and the land use fits within an exposure scenario adopted in the *Methodology*, the applicable standard is the soil contaminant standard for the priority contaminant.
- (3) If the contaminant of concern is a priority contaminant and the land use does not fit within an exposure scenario adopted in the *Methodology*, the applicable standard is whichever of the following is more appropriate in the circumstances:
  - (a) the guideline value derived in accordance with the methods and guidance on site-specific risk assessment provided in the *Methodology*;
  - (b) the soil contaminant standard for the priority contaminant of the exposure scenario adopted in the *Methodology* with greater assumed exposure than the actual exposure.
- (4) If the contaminant of concern is not a priority contaminant, the applicable standard is whichever of the following is more appropriate in the circumstances:
  - (a) the guideline value derived in accordance with the methods and guidance on site-specific risk assessment provided in the *Methodology*;
  - (b) a guideline value for the protection of human health that is chosen in accordance with the current edition of *Contaminated Land Management Guidelines No. 2—Hierarchy and Application in New Zealand of Environmental Guideline Values*, Wellington, Ministry for the Environment.

## 8 Permitted activities

### *Removing or replacing fuel storage system*

- (1) Removing or replacing a fuel storage system is a permitted activity while the following requirements are met:
- (a) the activity must be done in accordance with the current edition of *Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand*, Wellington, Ministry for the Environment:
  - (b) the territorial authority of the district where the system is located must be notified of—
    - (i) the place where the activity is to be done:
    - (ii) the dates on which it is intended that the activity begin and end:
    - (iii) the facility at which it is intended that soil taken away in the course of the activity be disposed of:
  - (c) notification under paragraph (b) must be done no sooner than 1 month and no later than 1 week before the activity begins:
  - (d) the volume of soil disturbed must be no more than 30 m<sup>3</sup> for each tank in the system:
  - (e) the volume of soil taken away in the course of the activity must be no more than 30 m<sup>3</sup> for each tank in the system:
  - (f) soil taken away in the course of the activity must be disposed of at a facility authorised to receive soil of that kind:
  - (g) the duration of the activity must be no longer than 2 months:
  - (h) the results of the investigation of the piece of land required by the guidelines described in paragraph (a) must be reported to the territorial authority within 3 months after the activity ends.

### *Sampling soil*

- (2) Sampling the soil of the piece of land is a permitted activity while the following requirements are met:
- (a) controls to minimise the exposure of humans to mobilised contaminants must—
    - (i) be in place when the activity begins:
    - (ii) be effective while the activity is done:
    - (iii) be effective until the soil is reinstated to an erosion-resistant state:
  - (b) the soil must be reinstated to an erosion-resistant state within 1 month after the end of the course of sampling for which the activity was done:
  - (c) soil must not be taken away in the course of the activity except as samples taken for the purpose of laboratory analysis:
  - (d) the integrity of a structure designed to contain contaminated soil or other contaminated materials must not be compromised.

### *Disturbing soil*

- (3) Disturbing the soil of the piece of land is a permitted activity while the following requirements are met:
- (a) controls to minimise the exposure of humans to mobilised contaminants must—
    - (i) be in place when the activity begins:
    - (ii) be effective while the activity is done:
    - (iii) be effective until the soil is reinstated to an erosion-resistant state:
  - (b) the soil must be reinstated to an erosion-resistant state within 1 month after the serving of the purpose for which the activity was done:

- (c) the volume of the disturbance of the soil of the piece of land must be no more than 25 m<sup>3</sup> per 500 m<sup>2</sup>:
- (d) soil must not be taken away in the course of the activity, except that,—
  - (i) for the purpose of laboratory analysis, any amount of soil may be taken away as samples:
  - (ii) for all other purposes combined, a maximum of 5 m<sup>3</sup> per 500 m<sup>2</sup> of soil may be taken away per year:
- (e) soil taken away in the course of the activity must be disposed of at a facility authorised to receive soil of that kind:
- (f) the duration of the activity must be no longer than 2 months:
- (g) the integrity of a structure designed to contain contaminated soil or other contaminated materials must not be compromised.

*Subdividing or changing use*

- (4) Subdividing land or changing the use of the piece of land is a permitted activity while the following requirements are met:
  - (a) a preliminary site investigation of the land or piece of land must exist:
  - (b) the report on the preliminary site investigation must state that it is highly unlikely that there will be a risk to human health if the activity is done to the piece of land:
  - (c) the report must be accompanied by a relevant site plan to which the report is referenced:
  - (d) the consent authority must have the report and the plan.

*Consequence if requirement not met*

- (5) If a requirement described in any of subclauses (1) to (3) is not met, the activity is a controlled activity under regulation 9 while it meets the requirements in regulation 9(1).
- (6) If a requirement described in subclause (4) is not met, the activity is a controlled activity under regulation 9 while it meets the requirements in regulation 9(3).

**9 Controlled activities**

*Removing or replacing fuel storage system, sampling soil, or disturbing soil*

- (1) If a requirement described in any of regulation 8(1) to (3) is not met, the activity is a controlled activity while the following requirements are met:
  - (a) a detailed site investigation of the piece of land must exist:
  - (b) the report on the detailed site investigation must state that the soil contamination does not exceed the applicable standard in regulation 7:
  - (c) the consent authority must have the report:
  - (d) conditions arising from the application of subclause (2), if there are any, must be complied with.
- (2) The matters over which control is reserved are as follows:
  - (a) the adequacy of the detailed site investigation, including—
    - (i) site sampling:
    - (ii) laboratory analysis:
    - (iii) risk assessment:
  - (b) how the activity must be—
    - (i) managed, which may include the requirement of a site management plan:
    - (ii) monitored:
    - (iii) reported on:

- (c) the transport, disposal, and tracking of soil and other materials taken away in the course of the activity:
- (d) the timing and nature of the review of the conditions in the resource consent:
- (e) the duration of the resource consent.

*Subdividing or changing use*

- (3) If a requirement described in regulation 8(4) is not met, the activity is a controlled activity while the following requirements are met:
  - (a) a detailed site investigation of the piece of land must exist:
  - (b) the report on the detailed site investigation must state that the soil contamination does not exceed the applicable standard in regulation 7:
  - (c) the consent authority must have the report:
  - (d) conditions arising from the application of subclause (4), if there are any, must be complied with.
- (4) The matter over which control is reserved is the adequacy of the detailed site investigation, including—
  - (a) site sampling:
  - (b) laboratory analysis:
  - (c) risk assessment.

*No public notification of application for resource consent*

- (5) The consent authority must not give public notification of an application for a resource consent to do any of the activities.

*Consequence if requirement not met*

- (6) If a requirement described in this regulation is not met, the activity is a restricted discretionary activity under regulation 10 while it meets the requirements in regulation 10(2).

**10 Restricted discretionary activities**

- (1) This regulation applies to an activity described in any of regulation 5(2) to (6) on a piece of land described in regulation 5(7) or (8) that is not a permitted activity or a controlled activity.
- (2) The activity is a restricted discretionary activity while the following requirements are met:
  - (a) a detailed site investigation of the piece of land must exist:
  - (b) the report on the detailed site investigation must state that the soil contamination exceeds the applicable standard in regulation 7:
  - (c) the consent authority must have the report:
  - (d) conditions arising from the application of subclause (3), if there are any, must be complied with.
- (3) The matters over which discretion is restricted are as follows:
  - (a) the adequacy of the detailed site investigation, including—
    - (i) site sampling:
    - (ii) laboratory analysis:
    - (iii) risk assessment:
  - (b) the suitability of the piece of land for the proposed activity, given the amount and kind of soil contamination:

- (c) the approach to the remediation or ongoing management of the piece of land, including—
  - (i) the remediation or management methods to address the risk posed by the contaminants to human health:
  - (ii) the timing of the remediation:
  - (iii) the standard of the remediation on completion:
  - (iv) the mitigation methods to address the risk posed by the contaminants to human health:
  - (v) the mitigation measures for the piece of land, including the frequency and location of monitoring of specified contaminants:
- (d) the adequacy of the site management plan or the site validation report or both, as applicable:
- (e) the transport, disposal, and tracking of soil and other materials taken away in the course of the activity:
- (f) the requirement for and conditions of a financial bond:
- (g) the timing and nature of the review of the conditions in the resource consent:
- (h) the duration of the resource consent.

*Consequence if requirement not met*

- (4) If a requirement described in this regulation is not met, the activity is a discretionary activity under regulation 11.

**11 Discretionary activities**

- (1) This regulation applies to an activity described in any of regulation 5(2) to (6) on a piece of land described in regulation 5(7) or (8) that is not a permitted activity, controlled activity, or restricted discretionary activity.
- (2) The activity is a discretionary activity.

# APPENDIX XIII – NATIONAL ENVIRONMENTAL STANDARDS FOR TELECOMMUNICATIONS FACILITIES

## Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2008

### Contents

- 1 Title
- 2 Commencement
- 3 Interpretation
- 4 Telecommunication facilities generating radiofrequency fields: activity status
- 5 Telecommunication facilities in road reserves: activity status
- 6 Conditions protecting trees and vegetation, historic heritage values, visual amenity values, and coastal marine area
- 7 Conditions controlling antennas and utility structures
- 8 Conditions controlling cabinets
- 9 Conditions controlling noise

### Regulations

- 1 Title**

These regulations are the Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2008.
- 2 Commencement**

These regulations come into force on the 28th day after the date of their notification in the *Gazette*.
- 3 Interpretation**

In these regulations, unless the context requires another meaning,—

**antenna—**

  - (a) means a device that—
    - (i) receives or transmits radiocommunication or telecommunication signals; and
    - (ii) is operated by a network operator; and
  - (b) includes the mount, if there is one, for the device; and
  - (c) includes the shroud, if there is one, for the device

**cabinet** means a casing around equipment that is necessary to operate a telecommunication network

**mount** means a structure for attaching an antenna to an original utility structure or a replacement utility structure

**network operator** has the meaning given to it by section 5 of the Telecommunications Act 2001

**original utility structure** means a power pole, street light pole, traffic light pole, or structure like those kinds of poles, as it is before any of the following happens to it:

  - (a) an antenna is added to it; or
  - (b) it is modified to enable an antenna to be added to it; or
  - (c) it is replaced to enable an antenna to be added to the replacement

**replacement utility structure** means—

  - (a) an original utility structure that has an antenna added to it; and

- (b) an original utility structure that—
  - (i) is modified to enable an antenna to be added to it; and
  - (ii) has an antenna added to it; and
- (c) a replacement of an original utility structure that—
  - (i) replaces the original utility structure to enable an antenna to be added to the replacement; and
  - (ii) has an antenna added to it

**road reserve** means a formed legal road and the land, if there is any, right next to it up to the legal boundary of the adjacent land

**telecommunication facility** means—

- (a) an antenna;
- (b) a cabinet and, if there is one, the concrete foundation plinth for the cabinet.

#### **4 Telecommunication facilities generating radiofrequency fields: activity status**

- (1) This regulation applies to the planning and operation of a telecommunication facility that generates radiofrequency fields.
- (2) A telecommunication facility is a permitted activity as far as radiofrequency fields are concerned if the network operator that plans and operates the facility complies with—
  - (a) the conditions in subclauses (3) and (4); and
  - (b) the condition in subclause (5), if it applies.
- (3) The first condition is that the network operator plans and operates the telecommunication facility in accordance with *NZS 2772: Part 1:1999 Radiofrequency Fields Part 1 – Maximum Exposure Levels – 3 kHz to 300 GHz*.
- (4) The second condition is that the network operator ensures that the relevant local authority receives, before the telecommunication facility becomes operational, the following:
  - (a) written or electronic notice of where the facility is or where it is proposed to be; and
  - (b) a report that—
    - (i) is prepared in accordance with *NZS 6609.2: 1990 Radiofrequency Radiation: Part 2: Principles and Methods of Measurement 300 kHz to 100 GHz*, and
    - (ii) takes account of exposures arising from other telecommunication facilities in the vicinity of the facility; and
    - (iii) predicts 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: Part 1:1999 Radiofrequency Fields Part 1 – Maximum Exposure Levels – 3 kHz to 300 GHz*.
- (5) The third condition applies if the prediction referred to in subclause (4)(b)(iii) is that the radiofrequency field levels will 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* for exposure of the general public. The network operator must ensure that the relevant local authority receives, within 3 months of the telecommunication facility becoming operational, a report that—
  - (a) is prepared in accordance with *NZS 6609.2: 1990 Radiofrequency Radiation: Part 2: Principles and Methods of Measurement 300 kHz to 100 GHz*, and
  - (b) provides 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: Part 1:1999 Radiofrequency Fields Part 1 – Maximum Exposure Levels – 3 kHz to 300 GHz*.



- (6) A telecommunication facility that is not a permitted activity under this regulation is a non-complying activity as far as radiofrequency fields are concerned.

## **5 Telecommunication facilities in road reserves: activity status**

- (1) The installation and operation of a telecommunication facility in a road reserve is a permitted activity as far as the situations in regulations 6 to 9 are concerned if—
- (a) the facility is a permitted activity as far as radiofrequency fields are concerned under regulation 4; and
  - (b) the facility complies with the applicable conditions in regulations 6 to 9.
- (2) The installation and operation of a telecommunication facility in a road reserve is a noncomplying activity as far as radiofrequency fields are concerned if the facility does not comply with the condition specified in subclause (1)(a).
- (3) The installation and operation of a telecommunication facility in a road reserve is a controlled activity as far as the situations in regulations 6 to 9 are concerned if—
- (a) the facility does not comply with the conditions specified in subclause (1)(b); and
  - (b) the facility would have been a permitted activity or a controlled activity under the relevant district plan or proposed district plan if these regulations did not exist.
- (4) For the purpose of assessing resource consent applications for a telecommunication facility to which subclause (3) applies, control is reserved over the conditions in regulations 6 to 9 with which the facility does not comply.
- (5) The installation and operation of a telecommunication facility in a road reserve is a restricted discretionary activity as far as the situations in regulations 6 to 9 are concerned if—
- (a) the facility does not comply with the conditions specified in subclause (1)(b); and
  - (b) the facility would have been a restricted discretionary activity under the relevant district plan or proposed district plan if these regulations did not exist.
- (6) For the purpose of assessing resource consent applications for a telecommunication facility to which subclause (5) applies, discretion is restricted to the conditions in regulations 6 to 9 with which the facility does not comply.
- (7) The installation and operation of a telecommunication facility in a road reserve is a discretionary activity if—
- (a) the facility does not comply with the conditions specified in subclause (1)(b); and
  - (b) the facility would have been a discretionary activity under the relevant district plan or proposed district plan if these regulations did not exist.
- (8) The installation and operation of a telecommunication facility in a road reserve is a noncomplying activity if—
- (a) the facility does not comply with the conditions specified in subclause (1)(b); and
  - (b) the facility would have been a noncomplying activity under the relevant district plan or proposed district plan if these regulations did not exist.

- (9) The installation and operation of a telecommunication facility in a road reserve is a prohibited activity if—
- (a) the facility does not comply with the conditions specified in subclause (1)(b); and
  - (b) the facility would have been a prohibited activity under the relevant district plan or proposed district plan if these regulations did not exist.

## **6 Conditions protecting trees and vegetation, historic heritage values, visual amenity values, and coastal marine area**

- (1) This condition applies if the telecommunication facility is located in a road reserve within the drip line of a tree or other vegetation and the relevant district plan or proposed district plan would, if these regulations did not exist, require the network operator to obtain a resource consent for the installation and operation of the facility in such a location. The installation and operation of the facility must comply with the plan's rules on tree and vegetation protection. The rules may be more stringent than the conditions in regulations 7 to 9.
- (2) This condition applies if the telecommunication facility is located in a road reserve that is on the same side of the road as and next to land or items that are identified as having historic heritage values in the relevant district plan or proposed district plan. The facility must comply with the plan's rules on historic heritage values. The rules may be more stringent than the conditions in regulations 7 to 9.
- (3) This condition applies if the telecommunication facility is located in a road reserve that is on the same side of the road as and next to land or sites that are identified as having visual amenity values in the relevant district plan or proposed district plan. The facility must comply with the plan's rules on visual amenity values. The rules may be more stringent than the conditions in regulations 7 to 9.
- (4) This condition applies if the telecommunication facility is located in a road reserve that is on the same side of the road as and next to coastal marine area. The facility must comply with the plan's rules that apply to telecommunication facilities. The rules may be more stringent than the conditions in regulations 7 to 9.

## **7 Conditions controlling antennas and utility structures**

- (1) This condition applies if an original utility structure in a road reserve is replaced by a replacement utility structure. The replacement utility structure must not have a diameter that is more than the original utility structure's diameter at its largest point plus 50%.
- (2) This condition applies if the addition of an antenna makes a structure into a replacement utility structure in a road reserve. The height of the replacement utility structure must be no more than the original utility structure's highest point plus the lesser of 3 m or 30%.
- (3) This condition applies if an antenna on a replacement utility structure in a road reserve is replaced. The combined height of the replacement utility structure and the replacement antenna must be no more than the combined height of the replacement utility structure and the original antenna.
- (4) This condition applies if an antenna is added or replaced under subclause (2) or (3). The antenna—excluding the mount, if there is one, and the shroud, if there is one, and ancillary equipment, if there is any—must fit within the dimensions of a cylindrical shape that, when measured along the centre line of the original utility structure or the replacement utility structure, is no more than 2 m high and no more than 0.5 m in diameter.

- (5) This condition applies if a dish antenna either is added to an original utility structure in a road reserve or a replacement utility structure in a road reserve or replaces an antenna on an original utility structure in a road reserve or a replacement utility structure in a road reserve. The dish antenna must have a diameter of no more than 380 mm, must not protrude from the structure's centre line by more than 0.6 m, and must be one of only 2 on the structure.

## **8 Conditions controlling cabinets**

- (1) This condition applies if a cabinet is located by itself in a road reserve next to land that a relevant district plan or proposed district plan classifies as primarily for residential activities. The cabinet's footprint must be no more than 1.4 m<sup>2</sup>. The cabinet must be no higher than the height of the concrete foundation plinth, if there is one, plus 1.8 m.
- (2) This condition applies if 2 or more cabinets are located at the same site in a road reserve next to land that a relevant district plan or proposed district plan classifies as primarily for residential activities. Each cabinet's footprint must be no more than 1.4 m<sup>2</sup>. The total footprint of all the cabinets must be no more than 1.8 m<sup>2</sup>. The distance between each cabinet and the cabinet or cabinets closest to it must be no more than 500 mm. The cabinets must be no higher than the height of the concrete foundation plinths, if there are any, plus 900 mm, with the exception that 1 cabinet may be as high as the height of the concrete foundation plinth, if there is one, plus 1.8 m.
- (3) This condition applies if a cabinet is located by itself in a road reserve, or if 2 or more cabinets are located at the same site in a road reserve, next to land that a relevant district plan or proposed district plan does not classify as primarily for residential activities. The total footprint of all the cabinets must be no more than 2 m<sup>2</sup>. Each cabinet must be no higher than the height of the concrete foundation plinth, if there is one, plus 2 m.
- (4) This condition applies if 2 or more cabinets are located at different sites in the road reserve, on the same side of the road as one another, and next to land that a relevant district plan or proposed district plan either does or does not classify as primarily for residential activities and are higher than the height of the concrete foundation plinths, if there are any, plus 900 mm. Each cabinet must be at least 30 m from each other cabinet that is higher than the height of the concrete foundation plinth, if there is one, plus 900 mm. The 30 m must be measured between the 2 closest points of the cabinets.
- (5) This condition applies if a cabinet is located in a road reserve next to land that a relevant district plan or proposed district plan either does or does not classify as primarily for residential activities and requires a power supply. The power supply must be located either below ground or within the cabinet.

## **9 Conditions controlling noise**

- (1) This condition applies if a cabinet is located in a road reserve in an area in which a relevant district plan or proposed district plan allows residential activities. The noise from the cabinet must not exceed—
- (a) 50 dB LAeq (5 min) between 7.00 am and 10.00 pm:
  - (b) 40 dB LAeq (5 min) between the 10.00 pm referred to in paragraph (a) and the following 7.00 am:
  - (c) 65 dB LAFmax between the 10.00 pm referred to in paragraph (a) and the following 7.00 am.

- (2) This condition applies if a cabinet is located in a road reserve in an area in which a relevant district plan or proposed district plan does not allow residential activities. The noise from the cabinet must not exceed—
  - (a) 60 dB LAeq (5 min) at any time;
  - (b) 65 dB LAFmax between 10 pm and the following 7 am.
  
- (3) The noise from the cabinet must be measured and assessed at 1 of the following points:
  - (a) if the side of a building containing a habitable room is within 4 m of the closest boundary of the road reserve, the noise must be measured—
    - (i) at a point 1 m from the side of the building; or
    - (ii) at a point in the plane of the side of the building;
  - (b) in any other case, the noise must be measured at a point that is—
    - (i) at least 3 m from the cabinet; and
    - (ii) within the legal boundary of land next to the part of the road reserve where the cabinet is located.
  
- (4) The noise from the cabinet must be measured in accordance with *NZS 6801: 2008 Acoustics – Measurement of environmental sound*, the measurement must be adjusted in accordance with *NZS 6801: 2008 Acoustics – Measurement of environmental sound* to a free field incident sound level, and the adjusted measurement must be assessed in accordance with *NZS 6802: 2008 Acoustics – Environmental noise*.

# APPENDIX XIV – NATIONAL ENVIRONMENTAL STANDARDS FOR ELECTRICITY TRANSMISSION ACTIVITIES

## Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009

### Contents

- 1 Title
- 2 Commencement
- 3 Interpretation
- 4 Regulations apply only to certain activities relating to existing transmission lines  
*Operation of transmission line or use of access track*
- 5 Permitted activities  
*Overhead conductors, earth-wires, overhead telecommunication cables, and adding overhead circuits*
- 6 Permitted activities: overhead conductors
- 7 Permitted activities: earth-wires and overhead telecommunication cables
- 8 Permitted activities: adding overhead circuits
- 9 Restricted discretionary activities  
*Increasing voltage or current rating, underground conductors, and undergrounding transmission lines*
- 10 Permitted activities: increasing voltage or current rating
- 11 Permitted activities: underground conductors
- 12 Controlled activities: undergrounding transmission lines
- 13 Non-complying activities  
*Transmission line support structures: Alteration, relocation, and replacement*
- 14 Permitted activities
- 15 Controlled activities
- 16 Restricted discretionary activities  
*Temporary structures and temporary line deviation*
- 17 Permitted activities
- 18 Controlled activities  
*Transmission lines: Removal*
- 19 Permitted activities
- 20 Controlled activities  
*Telecommunication devices*
- 21 Permitted activities
- 22 Restricted discretionary activities  
*Signs*

- 23 Permitted activities
- 24 Restricted discretionary activities  
*Transmission line support structures: Discharges from blasting and applying protective coatings*
- 25 Permitted activities
- 26 Controlled activities
- 27 Restricted discretionary activities  
*Discharges to water*
- 28 Permitted activities
- 29 Controlled activities  
*Trimming, felling, and removing trees and vegetation*
- 30 Permitted activities
- 31 Controlled activities
- 32 Restricted discretionary activities  
*Earthworks*
- 33 Permitted activities
- 34 Controlled activities
- 35 Restricted discretionary activities: historic heritage areas
- 36 Restricted discretionary activities: potentially contaminated land  
*Noise and vibration from construction activity*
- 37 Permitted activities
- 38 Controlled activities  
*Other transmission activities*
- 39 Discretionary activities

**Schedule Envelopes for activities relating to towers**

**1 Title**

These regulations are the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.

**2 Commencement**

These regulations come into force on 14 January 2010.

**3 Interpretation**

(1) In these regulations, unless the context requires another meaning,—

**abrasive blasting** means wet abrasive blasting and dry abrasive blasting

**Act** means the Resource Management Act 1991

**base footprint** means the footprint of a tower at the commencement of these regulations

**base height** means the height of a transmission line support structure at the commencement of these regulations

**base position** means the position of a pole at the commencement of these regulations

**base width** means the length of the longest side of a tower’s base footprint

**blasting** means water blasting and abrasive blasting

**circuit** means conductors on a transmission line that together form a single electrical connection between 2 or more system nodes

**conductor—**

- (a) means wire or cable used for carrying electric current along a transmission line; and
- (b) includes any hardware and insulation associated with the wire or cable

**dry abrasive blasting** means using abrasive material in air and directing it at pressure to wear down or remove the coatings or corrosion on a structure's surface

**earth-wire—**

- (a) means a protective wire that provides a path to ground for electrical current from a fault or lightning strike; and
- (b) includes an earth-wire that contains optic fibres; and
- (c) includes any hardware associated with the wire

**earthworks** means the disturbance of the surface of land by activities including blading, tracking, boring, contouring, ripping, moving, removing, stockpiling, placing, replacing, re-compacting, excavating, cutting, and filling earth (or any other matter constituting the land, such as soil, clay, sand, or rock)

**envelope for controlled activities** means the quadrangle formed by moving each side of a tower's base footprint outwards by 150% of the tower's base width and joining the sides (as shown in the second diagram in the Schedule)

**envelope for permitted activities** means the quadrangle formed by moving each side of a tower's base footprint outwards by 60% of the tower's base width and joining the sides (as shown in the first diagram in the Schedule)

**existing transmission line—**

- (a) means a transmission line that was operational, or was able to be operated, at the commencement of these regulations; and
- (b) includes a transmission line described in paragraph (a) that is altered or relocated in accordance with these regulations; and
- (c) includes a transmission line that, in accordance with these regulations, replaces a transmission line described in paragraph (a)

**footprint** means the outline of the land occupied by a tower, formed by drawing straight lines between the outermost edges of the outermost parts of the tower at ground level

**height**, in relation to a transmission line support structure, means the height of the structure measured vertically from the ground level at the centre of the structure to the highest point of the structure (including conductors, but excluding telecommunication devices, earth peaks, and lightning rods)

**historic heritage area—**

- (a) means an area that is protected by a rule because of its historic heritage; and
- (b) to avoid doubt, includes an area that is protected by a rule because it is a site of significance to Māori

**land includes—**

- (a) land covered by water and the air space above land; and
- (b) the bed of a lake or river; and
- (c) the surface of water in a lake or river

**national grid** means the network that transmits high-voltage electricity in New Zealand and that, at the commencement of these regulations, is owned and operated by Transpower New Zealand Limited, including—

- (a) transmission lines; and
- (b) electricity substations

**natural area** means an area that is protected by a rule because it has outstanding natural features or landscapes, significant indigenous vegetation, or significant habitats of indigenous fauna

**normal operating conditions** has the meaning given by regulation 10(9)

**occupied building** means a building that is, or is intended to be, regularly occupied by 1 or more people

**operation** means the use of a transmission line to convey electricity

**overland flow path** means the path that water takes over land if there is flooding

**pole—**

- (a) means a structure that supports conductors as part of a transmission line and that—
  - (i) has no more than 3 vertical supports; and
  - (ii) is not a steel-lattice structure; and
- (b) includes the hardware associated with the structure (such as insulators, cross-arms, and guy-wires) and the structure's foundations

**sensitive land use** includes the use of land for a childcare facility, school, residential building, or hospital

**telecommunication cable—**

- (a) means a wire or cable used for telecommunication; and
- (b) includes any hardware associated with the wire or cable

**telecommunication device—**

- (a) means a device (for example, an antenna) that—
  - (i) facilitates the operation of a transmission line; and
  - (ii) receives or transmits telecommunication signals; and
- (b) includes any hardware associated with the device; but
- (c) does not include a telecommunication cable

**temporary line deviation** means the construction and use of a temporary section of transmission line to divert electricity transmission during the maintenance or upgrading of an existing section of transmission line

**temporary structure—**

- (a) means a non-permanent structure, and any associated lighting, erected only for a specific maintenance or upgrading task; but
- (b) does not include a transmission line that is part of a temporary line deviation.

**termination structure** means a tower or pole used for the transition between an overhead and an underground transmission line

**tower—**

- (a) means a steel-lattice structure that supports conductors as part of a transmission line; and
- (b) includes the hardware associated with the structure (such as insulators, cross-arms, and guy-wires) and the structure's foundations



**transmission line—**

- (a) means the facilities and structures used for, or associated with, the overhead or underground transmission of electricity in the national grid; and
- (b) includes transmission line support structures, telecommunication cables, and telecommunication devices to which paragraph (a) applies; but
- (c) does not include an electricity substation

**transmission line support structure** means a tower or pole

**undergrounding—**

- (a) means replacing overhead transmission lines with underground transmission lines; and
- (b) includes altering, relocating, or replacing a tower or pole at 1 or both ends of the underground transmission lines so that the tower or pole becomes a termination structure

**upgrading** means increasing the carrying capacity, efficiency, security, or safety of a transmission line

**water blasting** means directing water at pressure to clean or wash a structure's surface

**wet abrasive blasting** means using abrasive material in water and directing it at pressure to wear down or remove the coatings or corrosion on a structure's surface.

- (2) If a transmission line support structure is altered, relocated, or replaced after the commencement of these regulations, the altered, relocated, or replacement structure retains the base footprint, base height, base position, base width, envelope for controlled activities, and envelope for permitted activities of the first structure.
- (3) Unless the context requires another meaning, a term or expression that is defined in the Act and used, but not defined, in these regulations has the meaning given by the Act.

**4 Regulations apply only to certain activities relating to existing transmission lines**

- (1) These regulations apply only to an activity that relates to the operation, maintenance, upgrading, relocation, or removal of an existing transmission line, including any of the following activities that relate to those things:
  - (a) a construction activity
  - (b) a use of land or occupation of the coastal marine area (within the meanings of use and occupy given by section 2(1) of the Act):
  - (c) an activity relating to an access track to an existing transmission line:
  - (d) undergrounding an existing transmission line.
- (2) However, these regulations do not apply to—
  - (a) the construction or use of a bridge or culvert to access an existing transmission line; or
  - (b) the control of the use of land for the purpose of the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances; or
  - (c) the refuelling of a vehicle or equipment; or
  - (d) the use of land as a landing area for helicopters; or

- (e) an activity carried out in relation to an electricity substation; or
- (f) earthworks to the extent that they are subject to a regional rule.

*Operation of transmission line or use of access track*

**5 Permitted activities**

- (1) The operation of an existing transmission line is a permitted activity.
- (2) The use of an access track to an existing transmission line is a permitted activity.

*Overhead conductors, earth-wires, overhead telecommunication cables, and adding overhead circuits*

**6 Permitted activities: overhead conductors**

- (1) Adding an overhead conductor, or part of an overhead conductor, to an existing transmission line (except as part of adding an overhead circuit) is a permitted activity if—
  - (a) both of the conditions in subclauses (4) and (5) are complied with; and
  - (b) all of the applicable conditions in regulation 10(2) to (8) are complied with.
- (2) Replacing an overhead conductor, or part of an overhead conductor, on an existing transmission line is a permitted activity if the condition in subclause (6) is complied with.
- (3) Maintaining an overhead conductor on an existing transmission line is a permitted activity.

*Conditions*

- (4) The conductors must be configured so that there are no more than 2 conductors in the same phase (duplex configuration).
- (5) The diameter of a new conductor, or a new part of a conductor, must not exceed 50 mm.
- (6) The diameter of a replacement conductor, or a replacement part of a conductor, must not exceed—
  - (a) the diameter of the existing conductor or part; or
  - (b) 50mm, if the diameter of the existing conductor or part is less than 50 mm.

**7 Permitted activities: earth-wires and overhead telecommunication cables**

- (1) Adding an earth-wire or overhead telecommunication cable, or part of an earth-wire or overhead telecommunication cable, to an existing transmission line is a permitted activity if both of the conditions in subclauses (4) and (5) are complied with.
- (2) Replacing an earth-wire or overhead telecommunication cable, or part of an earth-wire or overhead telecommunication cable, on an existing transmission line is a permitted activity if the condition in subclause (6) is complied with.

- (3) Maintaining an earth-wire or overhead telecommunication cable on an existing transmission line is a permitted activity.

#### *Conditions*

- (4) The number of wires and cables must not exceed—
  - (a) 3 earth-wires, or 2 earth-wires and 1 telecommunication cable, per transmission line support structure; or
  - (b) the existing number of wires and cables, if that number is more than is permitted by paragraph (a).
- (5) The diameter of a new wire or cable, or a new part of a wire or cable, must not exceed 25 mm.
- (6) The diameter of a replacement wire or cable, or a replacement part of a wire or cable, must not exceed—
  - (a) the diameter of the existing wire, cable, or part (as the case may be); or
  - (b) 25 mm, if the diameter of the existing wire, cable, or part (as the case may be) is less than 25 mm.

### **8 Permitted activities: adding overhead circuits**

- (1) Adding an overhead circuit to an existing transmission line is a permitted activity if—
  - (a) the condition in subclause (2) is complied with; and
  - (b) both of the conditions in regulation 6(4) and (5) are complied with; and
  - (c) all of the applicable conditions in regulation 10(2) to (8) are complied with.
- (2) The transmission line support structures of the transmission line must have been designed and built, at the commencement of these regulations, to carry the additional circuit.

### **9 Restricted discretionary activities**

- (1) Adding an overhead conductor, or part of an overhead conductor, to an existing transmission line (except as part of adding an overhead circuit) is a restricted discretionary activity if
  - (a) 1 or both of the conditions in regulation 6(4) and (5) are breached; but
  - (b) all of the applicable conditions in regulation 10(2) to (8) are complied with.
- (2) Replacing an overhead conductor, or part of an overhead conductor, on an existing transmission line is a restricted discretionary activity if the condition in regulation 6(6) is breached.
- (3) Adding an earth-wire or overhead telecommunication cable, or part of an earth-wire or overhead telecommunication cable, to an existing transmission line is a restricted discretionary activity if 1 or both of the conditions in regulation 7(4) and (5) are breached.

- (4) Replacing an earth-wire or overhead telecommunication cable, or part of an earth-wire or overhead telecommunication cable, on an existing transmission line is a restricted discretionary activity if the condition in regulation 7(6) is breached.
- (5) Adding an overhead circuit to an existing transmission line is a restricted discretionary activity if—
  - (a) first,—
    - (i) the condition in regulation 8(2) is breached; or
    - (ii) 1 or both of the conditions in regulation 6(4) and (5) are breached; and
  - (b) second, all of the applicable conditions in regulation 10(2) to (8) are complied with.

*Matters to which discretion restricted*

- (6) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:
  - (a) visual effects; and
  - (b) the effects and timing of construction works; and
  - (c) the effects on services and infrastructure.

*Increasing voltage or current rating, underground conductors, and undergrounding transmission lines*

**10 Permitted activities: increasing voltage or current rating**

- (1) Increasing the voltage or current rating of an existing transmission line is a permitted activity if all of the applicable conditions in subclauses (2) to (9) are complied with.
- (2) The electric and magnetic fields produced by the transmission of electricity at 50 Hz through overhead or underground alternating current transmission lines must, after being modelled in accordance with subclauses (4) to (7), be demonstrated to either—
  - (a) not exceed the following reference levels for public exposure:
    - (i) electric field strength of 5 kV/m; and
    - (ii) magnetic flux density of 100 microteslas; or
  - (b) not exceed the basic restriction level of 2 mA/m<sup>2</sup> for the density of electric current induced in the body.
- (3) The static electric field strength produced by the transmission of electricity through overhead direct current transmission lines must be demonstrated to have no likely adverse human health effects after—
  - (a) modelling the field strength in accordance with subclauses (4) to (6) as if references to electric field strength were references to static electric field strength; and
  - (b) including the likely contribution to the field strength from the space charge around the transmission line caused by corona discharge.
- (4) The electric field strength and magnetic flux density of a transmission line must be modelled at whichever of the following locations is closest to the line:

- (a) 1 metre above the ground in an area above, below, or next to the line that is reasonably accessible to the public; or
  - (b) 1 metre above the highest floor level of an occupied building.
- (5) The electric field strength and magnetic flux density of a transmission line may be modelled to take account of any shielding effect from buildings.
- (6) The electric field strength and magnetic flux density of an overhead transmission line must be modelled to result in the highest electric and magnetic fields likely under normal operating conditions using the following climatic conditions to determine conductor position:
- (a) ambient temperature of 20°C in winter and 30°C in summer:
  - (b) maximum solar radiation of 1 000 W/m<sup>2</sup>:
  - (c) dry conditions:
  - (d) wind speed of 0.6 m/s.
- (7) The magnetic flux density of an underground transmission line must be modelled to result in the highest magnetic field likely under normal operating conditions.
- (8) The results of modelling the electric field strength, magnetic flux density, density of electric current induced in the body, or static electric field strength under this regulation must be provided to the relevant territorial authority if requested by the territorial authority.
- (9) In subclauses (6) and (7), normal operating conditions—
- (a) means the conditions associated with the highest load current; but
  - (b) does not include conditions in which a short-term increase in voltage or current is caused by a fault such as switching, a lightning strike, a short circuit, or an abnormal operating state of a direct current transmission line.

## **11 Permitted activities: underground conductors**

- (1) Adding an underground conductor, or part of an underground conductor, to an existing transmission line is a permitted activity if all of the applicable conditions in regulation 10(2) to (8) are complied with.
- (2) Replacing an underground conductor, or part of an underground conductor, on an existing transmission line is a permitted activity.
- (3) Maintaining an underground conductor on an existing transmission line is a permitted activity.

## **12 Controlled activities: undergrounding transmission lines**

- (1) Undergrounding an existing transmission line is a controlled activity if all of the applicable conditions in regulation 10(2) to (8) are complied with.

*Matters over which control reserved*

- (2) Control is reserved over the following matters in relation to a controlled activity under this regulation:
- (a) the location of termination structures, and the route of underground cables, in relation to—
    - (i) visual, landscape, and ecological effects; and
    - (ii) the effects on historic heritage; and
  - (b) the extent and nature of earthworks and control of sediment; and
  - (c) the effects and timing of construction works; and
  - (d) the effects on services and infrastructure.

**13 Non-complying activities**

- (1) Each of the following activities is a non-complying activity if 1 or more of the applicable conditions in regulation 10(2) to (8) are breached:
- (a) adding an overhead conductor, or part of an overhead conductor, to an existing transmission line:
  - (b) adding an overhead circuit to an existing transmission line:
  - (c) increasing the voltage or current rating of an existing transmission line:
  - (d) adding an underground conductor, or part of an underground conductor, to an existing transmission line:
  - (e) undergrounding an existing transmission line.
- (2) Altering, relocating, or replacing a transmission line support structure of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a non-complying activity if—
- (a) the requirement described in regulation 15(1)(c) or (2)(c) is breached; and
  - (b) 1 or more of the applicable conditions in regulation 10(2) to (8) are breached.

*Transmission line support structures: Alteration, relocation, and replacement*

**14 Permitted activities**

- (1) Altering, relocating, or replacing a tower of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a permitted activity if all of the applicable conditions in subclauses (3) to (6) are complied with.
- (2) Altering, relocating, or replacing a pole of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a permitted activity if all of the applicable conditions in subclauses (3), (4), (7), and (8) are complied with.

*Conditions*

- (3) If a transmission line support structure is increased in height (including by being replaced with another structure),—
- (a) the structure may be made no more than 15% higher than its base height; and
  - (b) the additional height must comply with any height restrictions for airport purposes, or any public view shafts, specified in a rule.

- (4) A transmission line support structure must not be relocated, or replaced with another transmission line support structure, so that any part of the structure at ground level is—
  - (a) within 12 metres of an occupied building (measured horizontally); or
  - (b) any closer to an occupied building, if the existing structure is within 12 metres of the building (measured horizontally).
- (5) If a tower is widened (including by being replaced with another tower), each side of the tower's footprint may be made no longer than the total of—
  - (a) the length of that side of the tower's base footprint; and
  - (b) 25% of the tower's base width.
- (6) A tower must not be relocated, or replaced with another tower, so that any part of the tower at ground level falls outside the tower's envelope for permitted activities.
- (7) A pole must not be replaced with a tower.
- (8) A pole must not be relocated, or replaced with another pole, more than 5 metres from the pole's base position (measured horizontally).

## **15 Controlled activities**

- (1) Altering, relocating, or replacing a tower of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a controlled activity if—
  - (a) all of the applicable conditions in regulation 14(3) to (5) are complied with; and
  - (b) the condition in regulation 14(6) is breached; but
  - (c) the tower is not relocated, or replaced with another tower, so that any part of the tower at ground level falls outside the tower's envelope for controlled activities.
- (2) Altering, relocating, or replacing a pole of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a controlled activity if—
  - (a) all of the applicable conditions in regulation 14(3), (4), and (7) are complied with; and
  - (b) the condition in regulation 14(8) is breached; but
  - (c) the pole is not relocated, or replaced with another pole, more than 10 metres from the pole's base position (measured horizontally).
- (3) Altering, relocating, or replacing a tower or pole of an existing transmission line as part of undergrounding, so that the tower or pole becomes a termination structure, is a controlled activity if all of the applicable conditions in regulation 14(3), (4), and (7) are complied with.

*Matters over which control reserved*

- (4) Control is reserved over the following matters in relation to a controlled activity under this regulation:
  - (a) visual, landscape, and ecological effects; and
  - (c) the effects and timing of construction works; and
  - (d) the effects on services and infrastructure.

**16 Restricted discretionary activities**

- (1) Altering, relocating, or replacing a tower of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a restricted discretionary activity if—
  - (a) 1 or more of the conditions in regulation 14(3) to (5) are breached; or
  - (b) both of the following apply:
    - (i) the requirement described in regulation 15(1)(c) is breached; but
    - (ii) all of the applicable conditions in regulation 10(2) to (8) are complied with.
- (2) Altering, relocating, or replacing a pole of an existing transmission line (other than as part of a temporary line deviation or undergrounding) is a restricted discretionary activity if—
  - (a) 1 or more of the conditions in regulation 14(3), (4), and (7) are breached; or
  - (b) both of the following apply:
    - (i) the requirement described in regulation 15(2)(c) is breached; but
    - (ii) all of the applicable conditions in regulation 10(2) to (8) are complied with.
- (3) Altering, relocating, or replacing a tower or pole of an existing transmission line as part of undergrounding, so that the tower or pole becomes a termination structure, is a restricted discretionary activity if 1 or more of the conditions in regulation 14(3), (4), and (7) are breached.

*Matters to which discretion restricted*

- (4) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:
  - (a) the location and height of the transmission line support structures in relation to—
    - (i) visual, landscape, and ecological effects; and
    - (ii) the effects on historic heritage; and
    - (iii) the effects on sensitive land uses; and
  - (b) earthworks, clearance of trees and vegetation, and restoration of the land; and
  - (c) the effects and timing of construction works.



*Temporary structures and temporary line deviation*

**17 Permitted activities**

- (1) Erecting or using a temporary structure in relation to an existing transmission line (other than as part of a temporary line deviation) is a permitted activity if the condition in subclause (3) is complied with.
- (2) Carrying out a temporary line deviation of an existing transmission line is a permitted activity if the condition in subclause (4) is complied with.

*Conditions*

- (3) Any temporary structures must be—
  - (a) erected no earlier than 20 working days before the start of the relevant maintenance or upgrading; and
  - (b) removed no later than 20 working days after the end of the maintenance or upgrading.
- (4) Any structures involved in a temporary line deviation must be—
  - (a) erected no earlier than 60 working days before the start of the relevant maintenance or upgrading; and
  - (b) removed no later than 60 working days after the end of the maintenance or upgrading.

**18 Controlled activities**

- (1) Erecting or using a temporary structure in relation to an existing transmission line (other than as part of a temporary line deviation) is a controlled activity if the condition in regulation 17(3) is breached.
- (2) Carrying out a temporary line deviation of an existing transmission line is a controlled activity if the condition in regulation 17(4) is breached.

*Matters over which control reserved*

- (3) Control is reserved over the following matters in relation to a controlled activity under this regulation:
  - (a) the duration of any works; and
  - (b) the effects and timing of construction works.

*Transmission lines: Removal*

**19 Permitted activities**

- (1) Removing an existing transmission line, or part of an existing transmission line, is a permitted activity if both of the conditions in subclauses (2) and (3) are complied with.

*Conditions*

- (2) The transmission line, or the part of the transmission line, and any associated construction or demolition material must be removed from the land.

- (3) Any ground that is disturbed from the removal must be restored in a way that minimises the risk of soil erosion, sediment run-off, and weed invasion.

## **20 Controlled activities**

- (1) Removing an existing transmission line, or part of an existing transmission line, is a controlled activity if 1 or both of the conditions in regulation 19(2) and (3) are breached.

### *Matters over which control reserved*

- (2) Control is reserved over the following matters in relation to a controlled activity under this regulation:
- (a) earthworks, clearance of trees and vegetation, and restoration of the land; and
  - (b) the effects and timing of construction works.

### *Telecommunication devices*

## **21 Permitted activities**

- (1) Installing or modifying a telecommunication device on a transmission line support structure of an existing transmission line is a permitted activity if both of the conditions in subclauses (3) and (4) are complied with.
- (2) Maintaining a telecommunication device on a transmission line support structure of an existing transmission line is a permitted activity.

### *Conditions*

- (3) The width of the telecommunication device must not exceed 1.8 metres.
- (4) The telecommunication device must extend no more than 2.5 metres above the height of the structure.

## **22 Restricted discretionary activities**

- (1) Installing or modifying a telecommunication device on a transmission line support structure of an existing transmission line is a restricted discretionary activity if 1 or both of the conditions in regulation 21(3) and (4) are breached.

### *Matters to which discretion restricted*

- (2) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:
- (a) the size, height, and number of telecommunication devices and associated telecommunication cables; and
  - (b) visual and landscape effects.

### *Signs*

## **23 Permitted activities**

- (1) Installing or modifying a sign on a transmission line support structure of an existing transmission line that is intended to identify the structure or its owner, or is intended

to help with safety or navigation, is a permitted activity if the applicable condition in subclause (2) or (3) is complied with.

*Conditions*

- (2) The signs on a transmission line support structure that are intended to identify the structure or its owner must together cover an area of no more than 1 m<sup>2</sup>.
- (3) The signs on a transmission line support structure that are intended to help with safety or navigation must together cover an area of no more than 6 m<sup>2</sup>.

**24 Restricted discretionary activities**

- (1) Installing or modifying a sign on a transmission line support structure of an existing transmission line that is intended to identify the structure or its owner, or is intended to help with safety or navigation, is a restricted discretionary activity if the applicable condition in regulation 23(2) or (3) is breached.
- (2) Installing or modifying a sign next to a transmission line support structure of an existing transmission line that is intended to identify the structure or its owner, or is intended to help with safety or navigation, is a restricted discretionary activity.

*Matters to which discretion restricted*

- (3) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:
  - (a) visual effects; and
  - (b) the effects on services and infrastructure.

*Transmission line support structures:*

*Discharges from blasting and applying protective coatings*

**25 Permitted activities**

- (1) Blasting a transmission line support structure of an existing transmission line, or preparing the structure to receive protective coatings, is a permitted activity if all of the applicable conditions in subclauses (3) to (9) are complied with.
- (2) Applying protective coatings to a transmission line support structure of an existing transmission line is a permitted activity if the condition in subclause (10) is complied with.

*Conditions*

- (3) Blasting must not be done within 50 metres of a water body or the coastal marine area.
- (4) Blasting must not be done—
  - (a) within 50 metres of a public road; or
  - (b) within 100 metres of an occupied building.

- (5) Abrasive material used in abrasive blasting must contain no more than 5% free silica by dry weight.
- (6) Waste and debris resulting from abrasive blasting must be removed from the site of the blasting to the extent practicable.
- (7) Dry abrasive blasting—
  - (a) must be done no more than 1 metre above ground level; and
  - (b) may be done only if covers or screens are used to mitigate the effects of any contaminants discharged by the blasting.
- (8) If abrasive blasting is done on a tower coated with lead-based paint, the waste and debris (including abrasive material) resulting from the blasting must be captured and removed by using geotextile material of a filter quality or by any equivalent method.
- (9) The following substances must not be used for surface preparation: paint strippers (unless used on a solvent rag to degrease a surface), fungicides, acids, alkalis, sodium hypochlorite, or any other oxidising agent.
- (10) Protective coatings must be applied—
  - (a) by hand; or
  - (b) by pressurised spray used no more than 1 metre above ground level.

## **26 Controlled activities**

- (1) Blasting a transmission line support structure of an existing transmission line, or preparing the structure to receive protective coatings, is a controlled activity if—
  - (a) it is not done over a water body or the coastal marine area; and
  - (b) the applicable conditions in regulation 25(4) and (7) are complied with; and
  - (c) 1 or both of the following apply:
    - (i) it is done within 50 metres of a water body or the coastal marine area;
    - (ii) 1 or more of the conditions in regulation 25(5), (6), (8), and (9) are breached.
- (2) Applying protective coatings to a transmission line support structure of an existing transmission line is a controlled activity if the condition in regulation 25(10) is breached.

### *Matters over which control reserved*

- (3) Control is reserved over the following matters in relation to a controlled activity under this regulation:
  - (a) the effects on water quality and ecologically-sensitive receiving environments; and
  - (b) the effects on occupied buildings; and
  - (c) the risk of contamination of soil; and
  - (d) the effects on health.

## **27 Restricted discretionary activities**

- (1) Blasting a transmission line support structure of an existing transmission line, or preparing the structure to receive protective coatings, is a restricted discretionary activity if—
  - (a) it is done over a water body or the coastal marine area; or
  - (b) 1 or both of the conditions in regulation 25(4) and (7) are breached.

### *Matters to which discretion restricted*

- (2) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:
  - (a) the effects on water quality and ecologically-sensitive receiving environments; and
  - (b) the effects on occupied buildings and use of public roads; and
  - (c) the risk of contamination of soil; and
  - (d) the effects on health.

### *Discharges to water*

## **28 Permitted activities**

- (1) Discharging contaminants into water, in relation to an existing transmission line, is a permitted activity if, after the water and contaminants are reasonably mixed together, all of the conditions in subclauses (2) to (6) are complied with.

### *Conditions*

- (2) The discharge must not produce conspicuous—
  - (a) films of oil or grease; or
  - (b) scums or foams; or
  - (c) floatable or suspended materials.
- (3) The discharge must not create a conspicuous change in colour or visual clarity.
- (4) The discharge must not emit an objectionable odour.
- (5) The discharge must not make fresh water unsuitable for farm animals to drink.
- (6) The discharge must not have adverse effects on aquatic life that are more than minor.

## **29 Controlled activities**

- (1) Discharging contaminants into water, in relation to an existing transmission line, is a controlled activity if, after the water and contaminants are reasonably mixed together, 1 or more of the conditions in regulation 28(2) to (6) are breached.

*Matters over which control reserved*

- (2) Control is reserved over the following matters in relation to a controlled activity under this regulation:
  - (a) the effects on water quality; and
  - (b) the effects on aquatic life.

*Trimming, felling, and removing trees and vegetation*

**30 Permitted activities**

- (1) Trimming, felling, or removing any tree or vegetation, in relation to an existing transmission line, is a permitted activity if all of the applicable conditions in subclauses (2) to (6) are complied with.

*Conditions*

- (2) Any tree or vegetation must not be trimmed, felled, or removed if—
  - (a) a rule prohibits or restricts its trimming, felling, or removal (as the case may be); or
  - (b) it is in a natural area.
- (3) Any tree or vegetation located on any land must not be felled or removed if a regional plan controls the use of the land for the purpose of—
  - (a) soil conservation; or
  - (b) avoiding or mitigating flooding.
- (4) Any tree or vegetation must not be trimmed, felled, or removed if it is on land administered by the Department of Conservation under the Conservation Act 1987 or an Act specified in Schedule 1 of that Act.
- (5) The felling or removal of any tree or vegetation must not create or contribute to—
  - (a) instability of a slope or another land surface; or
  - (b) erosion of the bed or bank of a water body or the coastal marine area.
- (6) Debris resulting from the trimming, felling, or removal must not enter a water body or the coastal marine area.

**31 Controlled activities**

- (1) Trimming, felling, or removing any tree or vegetation, in relation to an existing transmission line, is a controlled activity if—
  - (a) first,—
    - (i) the condition in regulation 30(2) is breached because the tree or vegetation is in a natural area; but
    - (ii) the trimming, felling, or removal is done to reduce the risk to a transmission line; and
  - (b) second, all of the applicable conditions in regulation 30(3) to (6) are complied with.

*Matters over which control reserved*

- (2) Control is reserved over the following matters in relation to a controlled activity under this regulation:
  - (a) replanting; and
  - (b) disposal of trees and vegetation; and
  - (c) visual, landscape, and ecological effects.

**32 Restricted discretionary activities**

- (1) Trimming, felling, or removing any tree or vegetation, in relation to an existing transmission line, is a restricted discretionary activity if 1 or both of the following paragraphs apply:
  - (a) first,—
    - (i) the condition in regulation 30(2) is breached; and
    - (ii) it does not satisfy the exception in regulation 31(1)(a)(ii):
  - (b) second, 1 or more of the conditions in regulation 30(3) to (6) are breached.

*Matters to which discretion restricted*

- (2) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:
  - (a) replanting; and
  - (b) disposal of trees and vegetation; and
  - (c) control of erosion and sediment; and
  - (d) visual, landscape, and ecological effects; and
  - (e) the effects on drainage, flooding, and overland flow paths.

*Earthworks*

**33 Permitted activities**

- (1) Earthworks relating to an existing transmission line are a permitted activity if all of the conditions in subclauses (2) to (9) are complied with.

*Conditions*

- (2) Earthworks in a natural area must not, in a calendar year, exceed—
  - (a) 50 m<sup>3</sup> per transmission line support structure; or
  - (b) 100 m<sup>3</sup> per access track.
- (3) Erosion sediment control must be applied and maintained at the site of earthworks, during and after the earthworks, to avoid the adverse effects of sediment on water bodies and the coastal marine area.
- (4) All areas of soil exposed by the earthworks must be stabilised against erosion as soon as practicable after the earthworks end to avoid the adverse effects of sediment on water bodies and the coastal marine area.
- (5) The earthworks must not create or contribute to—
  - (a) instability or subsidence of a slope or another land surface; or

- (b) erosion of the bed or bank of a water body or the coastal marine area; or
  - (c) drainage problems or flooding of overland flow paths.
- (6) Soil or debris from the earthworks must not be placed where it can enter a water body or the coastal marine area.
  - (7) Earthworks must not be carried out on the bed of a lake or river or in the coastal marine area.
  - (8) Earthworks must not be carried out in a historic heritage area unless they are carried out on an archaeological site in accordance with the Heritage New Zealand Pouhere Taonga Act 2014.
  - (9) Earthworks must not be carried out on land that a local authority has identified as containing, or possibly containing, contaminants that pose a risk to the environment.

### **34 Controlled activities**

- (1) Earthworks relating to an existing transmission line are a controlled activity if—
  - (a) 1 or more of the conditions in regulation 33(2) to (7) are breached; but
  - (b) both of the conditions in regulation 33(8) and (9) are complied with.

#### *Matters over which control reserved*

- (2) Control is reserved over the following matters in relation to a controlled activity under this regulation:
  - (a) the extent and nature of any disturbance; and
  - (b) management of the earthworks and the methods used to carry out the earthworks; and
  - (c) control of erosion and sediment and restoration of the land; and
  - (d) visual, landscape, and ecological effects; and
  - (e) the effects on historic heritage; and
  - (f) the effects on drainage, flooding, and overland flow paths.

### **35 Restricted discretionary activities: historic heritage areas**

- (1) Earthworks relating to an existing transmission line are a restricted discretionary activity if the condition in regulation 33(8) is breached.

#### *Matters to which discretion restricted*

- (2) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:
  - (a) the extent and nature of any disturbance; and
  - (b) management of the earthworks and the methods used to carry out the earthworks; and
  - (c) control of erosion and sediment and restoration of the land; and
  - (d) visual, landscape, and ecological effects; and



- (e) the effects on historic heritage; and
- (f) the effects on drainage, flooding, and overland flow paths.

### **36 Restricted discretionary activities: potentially contaminated land**

- (1) Earthworks relating to an existing transmission line are a restricted discretionary activity if the condition in regulation 33(9) is breached.

#### *Matters to which discretion restricted*

- (2) Discretion is restricted to the following matters in relation to a restricted discretionary activity under this regulation:
  - (a) restoration of the land; and
  - (b) management of the earthworks and the methods used to carry out the earthworks; and
  - (c) the extent and nature of any disturbance in relation to ecological and health effects.

#### *Noise and vibration from construction activity*

### **37 Permitted activities**

- (1) A construction activity relating to an existing transmission line is a permitted activity if both of the conditions in subclauses (2) and (3) are complied with.

#### *Conditions*

- (2) The noise from the construction activity must comply with New Zealand Standard NZS 6803:1999 Acoustics—Construction Noise.
- (3) The vibrations from the construction activity must comply with the peak particle velocity limits in table 1 of German Standard DIN 4150–3:1999 Structural Vibration—Effects of Vibration on Structures.

### **38 Controlled activities**

- (1) A construction activity relating to an existing transmission line is a controlled activity if 1 or both of the conditions in regulation 37(2) and (3) are breached.

#### *Matters over which control reserved*

- (2) Control is reserved over the following matters in relation to a controlled activity under this regulation:
  - (a) the timing of the works; and
  - (b) the effects on sensitive land uses; and
  - (c) the giving of notice of the works to parties who may be affected.

#### *Other transmission activities*

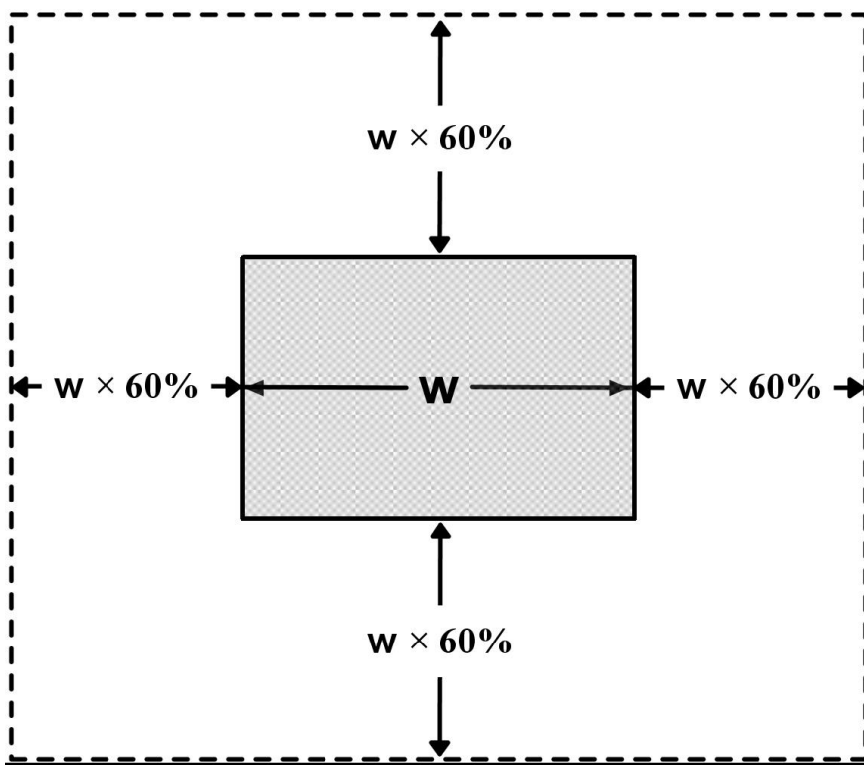
### **39 Discretionary activities**

An activity to which these regulations apply (under regulation 4) is a discretionary activity if it is not described in these regulations as a permitted activity, controlled activity, restricted discretionary activity, or non-complying activity.

**Schedule**

**Envelopes for activities relating to towers**

**Envelope for permitted activities**



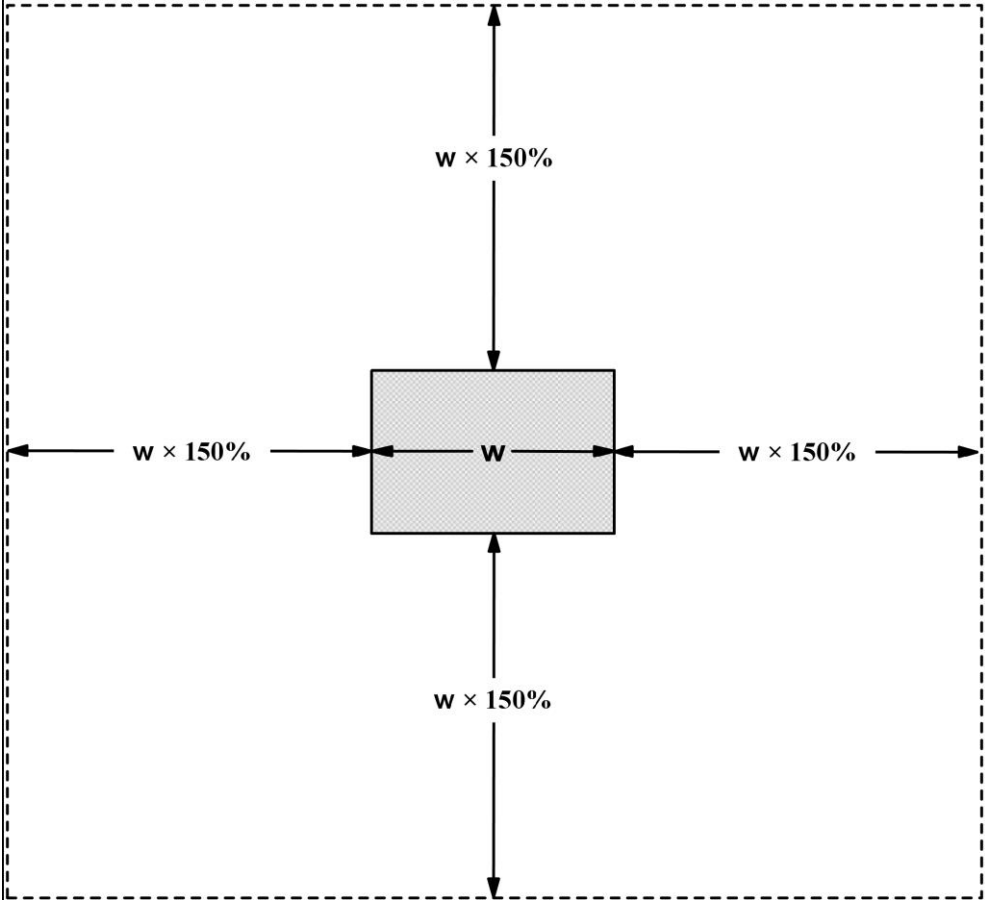
where—

w is the base width

the inner rectangle is the base footprint

the outer rectangle (dashed) is the envelope for permitted activities.

**Envelope for controlled activities**



where—  
w is the base width  
the inner rectangle is the base footprint  
the outer rectangle (dashed) is the envelope for controlled activities.

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# APPENDIX XV – OUTLINE DEVELOPMENT PLAN AREAS



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# APPENDIX XVI - CRITERIA FOR SIGNIFICANT INDIGENOUS BIODIVERSITY ASSESSMENT UNDERTAKEN IN 1999

Areas of significant indigenous biodiversity identified in the report entitled '*Significant Natural Areas – Invercargill City District 1999*' were assessed having regard to the following criteria:

- (A) **Representativeness** – reflecting importance based on ecological Districts (Southland Plains, Waituna and Foveaux) enabling a comparison between historic (typically prehuman) and present distributions.
- (B) **Rarity/Distinctiveness** – with rarity being the presence of species that are uncommon to a particular area, and distinctiveness relating to unusual features or species found on the site.
- (C) **Landscape Context** – incorporating a general assessment of:
  - (a) *Diversity/pattern* – whether or not an ecological sequence is represented within any one site.
  - (b) *Shape* – for example, discontinuous, irregular or compact.
  - (c) *Size* – for example, large, medium or small compared to other such remaining areas.
  - (d) *Connectivity* – for example, very isolated, semi-continuous, or part of a continuous landscape.
- (D) **Sustainability** – if the ecological role of the site, for example, providing a corridor for movement of birds, will remain intact under the current management regime then it is sustainable.
- (E) **Viability** – refers to the continued integrity of the ecosystem itself, as distinct from the role it provides.
- (F) **Threat/Fragility** – with potential threats being grouped as:
  - (a) *Biotic* – for example, troublesome plants and introduced animals.
  - (b) *Physical climatic* – for example, accelerated erosion.
  - (c) *Human* – for example, logging, burning, people damage.

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