

Earthworks

Introduction

Earthworks are the physical works that modify land so that it can be used for residential, commercial, rural, or recreational activities and for the construction of building foundations and other infrastructure. Earthworks and land disturbance are an essential part of the use and development of land. However, if not appropriately managed, earthworks can adversely affect amenity values (due to their visual, dust, nuisance, noise, and traffic effects) and result in changes to natural landforms. They can also result in land instability increasing risk to people and property and affect important natural values and affect mana whenua values, particularly in and around Sites and Areas of Significance to Māori.

The earthworks provisions manage the scale of earthworks to address these effects by setting permitted thresholds, and requiring resource consent above these, where more specific assessment is required to ensure effects are adequately addressed and managed.

This earthworks chapter covers general earthworks provisions in all rural, residential, commercial and mixed use and industrial zones. Additional earthworks provisions may apply within overlays such as Outstanding Natural Landscapes and Sites and Areas of Significance to Māori. These earthworks provisions have been included in the respective Overlay chapters because they address the overlay related effects of earthworks on the identified values, characteristics, risks, or features. The earthworks provisions within overlays apply in addition to the provisions of this chapter unless specified otherwise.

Advice Note: *The rules in this chapter do not apply to the Open Space and Recreation and Special Purpose Zones.*

Objectives and Policies

Objective	
EW-O1	Earthworks
Earthworks to facilitate subdivision, land use and development are undertaken in a way that minimises adverse effects on landscape values, <u>natural values</u> , ¹ visual amenity and mana whenua values and protects the safety of people, <u>and</u> property and <u>the safe and efficient operation of</u> infrastructure. ²	
Policies	
EW-P1	Enable Earthworks

¹ DOC (7.08)

² NZTA (14.57)

Enable ~~small-scale~~ earthworks that are small in scale, or limited to the maintenance and repair of existing activities.³

EW-P2	Manage Earthworks
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Manage the adverse effects of earthworks, including their scale and nature, to:

1. minimise adverse effects on the character, values and qualities of the surrounding environment, relative to the sensitivity of the surrounding environment;
2. ~~avoid unreasonable effects on~~ ensure the stability of adjoining land, infrastructure, buildings, and structures is not compromised;⁴
3. minimise silt and sediment loss from the site; and
4. ensure that sites are appropriately rehabilitated following completion of earthworks.

Rules

Notes for Plan Users:

1. Activities must also comply with the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.⁵
2. Notwithstanding the rules in the District Plan:
 - a. the Resource Management (National Environmental Standards for Commercial Forestry) Amendment Regulations 2023 apply to earthworks associated with commercial forestry as defined in the regulations.⁶

EW-R1	Earthworks for Maintenance or Repair of Existing Activities	
All Zones	Activity Status: PER Where: <ol style="list-style-type: none"> 1. The earthworks are for the purpose of maintenance or repair of existing: <ol style="list-style-type: none"> a. fence lines b. vehicle tracks c. roads and associated infrastructure d. stock tracks and crossings e. firebreaks f. drains 	Activity status when compliance is not achieved with R1.1: Refer to EW-R4 Activity status when compliance with standard(s) is not achieved: Refer to relevant standard(s).

³ NZTA (14.58)

⁴ Transpower (11.16)

⁵ Clause 10(2)(b), PB (23.01)

⁶ PB (23.01)

	<p>g. ponds</p> <p>h. dams</p> <p>i. stockyards</p> <p>j. farm buildings</p> <p>k. water troughs and associated reticulation piping</p> <p>l. airstrips</p> <p>m. walking and cycling tracks</p> <p>n. fuel storage systems (including removal or replacement) in accordance with Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.</p> <p>And the activity complies with the following standards:</p> <p>EW-S4 – Accidental Discovery Protocol</p> <p><u>EW-S6 – Proximity to the National Grid⁷</u></p>	
EW-R2	Earthworks for Specific Activities General⁸	
All Zones	<p>Activity Status: PER</p> <p>Where:</p> <p>1. The earthworks are:</p> <p>a. subject to a building consent;</p> <p>b. for gardening <u>and/or</u> landscaping;⁹</p> <p>c. for cultivation;</p> <p>d. holes for trees or other plants;</p> <p>e. for the installation of fence posts; or</p> <p>f. for an offal or farm rubbish pit.</p> <p>And the activity complies with the following standards:</p>	<p>Activity status when compliance is not achieved with R2.1: Refer to EW-R4</p> <p>Activity status when compliance with standard(s) is not achieved: Refer to relevant standard(s).</p>

⁷ Transpower (11.21)

⁸ Clause 10(2)(b), Transpower (11.17)

⁹ TLGL (9.02)

	EW-S4 – Accidental Discovery Protocol EW-S6 – Proximity to the National Grid ¹⁰	
EW-R3	Earthworks for Subdivision	
All Zones	<p>1. Earthworks directly associated with the development of land for subdivision shall not exceed 500m³ by volume, and 2,500m² by area in any 5-year period.</p> <p>And the activity complies with the following standards:</p> <p>EW-S1 – Maximum slope Gradient EW-S2 – Excavation and Filling EW-S3 – Rehabilitation and Reinstatement EW-S4 – Accidental Discovery Protocol EW-S5 – Specific Locations EW-S6 – Proximity to the National Grid</p>	<p>Activity status when compliance is not achieved with R3.1: RDIS</p> <p>Matters of discretion are restricted to:</p> <p>a. The extent of amenity effects on neighbouring properties, and on the road network, of heavy vehicle and other vehicular traffic generated as a result of the activity. b. The extent of any potential dust nuisance, sedimentation, and water or wind erosion effects associated with the activity. c. The extent of land instability effects. d. The extent of any adverse effects from vibration associated with the activity. e. Where any earthworks are within a SASM, those matters in SASM MD1 Activities in a SASM.¹¹</p>
EW-R4	Earthworks not Specified in EW-R1, <u>or</u> EW-R2 or EW-R3¹²	
GRUZ	<p>Activity Status: PER</p> <p>Where:</p> <p>1. Earthworks on any site shall not exceed <u>1500m³</u>1000m³ by volume and <u>2500m²</u> 1000m² by</p>	<p>Activity status when compliance is not achieved with R4.1: CON</p> <p>Where:</p> <p>2. Earthworks on any site is more than 1000m³ but less than</p>

¹⁰ Transpower (11.17)¹¹ TLGL (9.03)¹² Clause 10(2)(b), TLGL (9.03)

	<p>area per site in any <u>12 month</u> 5-year period.¹³</p> <p>And the activity complies with the following standards:</p> <p>EW-S1 – Maximum slope Gradient</p> <p>EW-S2 – Excavation and Filling</p> <p>EW-S3 – Rehabilitation and Reinstatement</p> <p>EW-S4 – Accidental Discovery Protocol</p> <p>EW-S5 – Specific Locations</p> <p>EW-S6 – Proximity to the National Grid</p>	<p>1500m² by volume, and is more than 1000m² and less than 2500m² by area per site in any 5-year period.</p> <p>And the activity complies with the following standards:</p> <p>EW-S1 – Maximum Slope Gradient</p> <p>EW-S2 – Excavation and Filling</p> <p>EW-S3 – Rehabilitation and Reinstatement</p> <p>EW-S4 – Accidental Discovery</p> <p>EW-S5 – Specific Locations</p> <p>EW-S6 – Proximity to the National Grid</p> <p>Matters of control are limited to:</p> <p>a. The effects of stockpiling.</p> <p>b. The visual effects on landscape values.</p> <p>c. Where any earthworks are within a SASM, those matters in SASM-MD1 Activities in a SASM.</p> <p>Activity status when compliance is not achieved with R4.21: RDIS</p> <p><u>Matters of discretion are restricted to:</u></p> <p>a. <u>The potential for adverse effects from the earthworks in terms of visual amenity, landscape context and character.</u></p> <p>b. <u>The extent of amenity effects on neighbouring properties, and on the road network, of heavy vehicle and other vehicular traffic generated as a result of the activity.</u></p> <p>c. <u>The extent of any potential dust nuisance, sedimentation, and water or wind erosion effects associated with the activity.</u></p> <p>d. <u>The extent of land instability effects.</u></p>
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¹³ Fed Farmers (21.03)

		<p>e. <u>The extent of any adverse effects from vibration associated with the activity.</u></p> <p>f. <u>Where any earthworks are within a SASM, those matters in SASM-MD1 Activities in a SASM.</u>¹⁴</p> <p>Activity status when compliance with standard(s) is not achieved: Refer to relevant standard(s).</p>
RESZ RLZ CMUZ GIZ	<p>Activity Status: PER</p> <p>Where:</p> <p>2. Earthworks on any site shall not exceed <u>1000m³</u>300m³ by volume and <u>2500m²</u>1000m² by area per site in any <u>12 month</u> 5-year period.¹⁵</p> <p>And the activity complies with the following standards:</p> <p>EW-S1 – Maximum Slope Gradient EW-S2 – Excavation and Filling EW-S3 – Rehabilitation and Reinstatement EW-S4 – Accidental Discovery Protocol EW-S5 – Specific Locations EW-S6 – Proximity to the National Grid</p>	<p>Activity status when compliance is not achieved with R3.4.3 CON</p> <p>Where:</p> <p>3. Earthworks on any site is more than 300m³ but less than 1000m³ by volume, and is more than 1000m² and less than 2500m² by area per site in any 5-year period.</p> <p>And the activity complies with the following standards:</p> <p>EW-S1 – Maximum Slope Gradient EW-S2 – Excavation and Filling EW-S3 – Rehabilitation and Reinstatement EW-S4 – Accidental Discovery Protocol EW-S5 – Specific Locations EW-S6 – Proximity to the National Grid</p> <p>Matters of control are limited to:</p> <p>a. The effects of stockpiling. b. The visual effects on landscape values. c. Where any earthworks are within a SASM, those matters in SASM-MD1 Activities in a SASM.</p> <p>Activity status when compliance is not achieved with <u>R4.2</u>R4.4: <u>RDIS</u></p>

¹⁴ NZ Pork (20.04)¹⁵ Fed Farmers 21.03)

		<p><u>Matters of discretion are reserved to:</u></p> <ul style="list-style-type: none"> a. <u>The potential for adverse effects from the earthworks in terms of visual amenity, landscape context and character.</u> b. <u>The extent of amenity effects on neighbouring properties, and on the road network, of heavy vehicle and other vehicular traffic generated as a result of the activity.</u> c. <u>The extent of any potential dust nuisance, sedimentation, and water or wind erosion effects associated with the activity.</u> d. <u>The extent of land instability effects.</u> e. <u>The extent of any adverse effects from vibration associated with the activity.</u> f. <u>Where any earthworks are within a SASM, those matters in SASM-MD1 Activities in a SASM.</u>¹⁶ <p>Activity status when compliance with standard(s) is not achieved: Refer to relevant standard(s).</p>
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Standards

EW-S1	Slope	Activity status when compliance not achieved:
All Zones	<ol style="list-style-type: none"> Earthworks must not be undertaken on an existing slope with a gradient greater than 1 in 4. 	<p>RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> a. Whether the earthworks affect the stability of adjoining land and its susceptibility to subsidence or erosion upon excavation taking place.

¹⁶ Clause 10(2)(b), NZ Pork (20.04)

		b. Whether any changes to the patterns of surface drainage would result in a higher risk of drainage problems, inundation runoff, sedimentation, flooding, or change the water table. c. <u>The impacts on visual amenity, landscape character and outlook.</u> ¹⁷ d. <u>Where any earthworks are within a SASM, those matters in SASM-MD1 Activities in a SASM.</u> ¹⁸
EW-S2	Excavation and Filing	Activity status when compliance not achieved:
All Zones	1. Earthworks shall not exceed a maximum depth below or height above natural ground level of: <ol style="list-style-type: none"> 1.5m, when 1.5m or more from the boundary of a site in separate ownership: or 0.5m, when within 1.5m of the boundary of a site in separate ownership. 2. All fill shall consist of cleanfill material only.	RDIS Matters of discretion are restricted to: <ol style="list-style-type: none"> The potential for adverse effects from the earthworks in terms of visual amenity, landscape context and character, views, outlook, overlooking and privacy. Whether the earthworks affect the stability of adjoining land and its susceptibility to subsidence or erosion upon excavation taking place. The extent of any alteration to natural ground levels in the vicinity and, consequently, to the height and bulk of buildings that may be erected on the site. Potential for land contamination. Whether any changes to the patterns of surface drainage or subsoil drains would result in a higher risk of drainage

¹⁷ Clause 10(2)(b), TRoNT (19.32)

¹⁸ TRoNT (19.32)

		problems, inundation run-off, sedimentation, flooding, or change the water table.
EW-S3	Rehabilitation and Reinstatement	Activity status when compliance not achieved:
All Zones	<p>1. No more than 12 months after the earthworks commenced and on completion of the earthworks, the area of land disturbed as a result of the earthworks must be:</p> <ul style="list-style-type: none"> a. built upon; b. sealed with hardstand material; c. landscaped; or d. recontoured and replanted. 	<p>RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> a. The impact on visual amenity, landscape character and outlook. b. Potential dust nuisance, sedimentation, land instability, erosion, flood, and drainage effects. c. <u>Where any earthworks are within a SASM, those matters in SASM-MD1 Activities in a SASM.</u>¹⁹
EW- S4	Accidental Discovery Protocol	Activity status when compliance not achieved:
All Zones	<p>1. In the event of discovery of sensitive material (which is not authorised to be disturbed by any resource consent or other statutory authority), the owner of the site or the consent holder must take the following steps.</p> <p>Cease works and secure the area</p> <ul style="list-style-type: none"> a. Immediately cease all works within 20m of any part of the discovery, including shutting down all earth disturbing machinery and stopping all earthmoving activities. b. Secure the area of the discovery, including a sufficient buffer area to ensure that all sensitive material remains undisturbed. 	<p>RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> a. The effects of earthworks on historic heritage, or mana whenua values. b. Where any earthworks are within a SASM, those matters in SASM-MD1 Activities in a SASM.

¹⁹ TRoNT (19.32)

	<p>Inform relevant authorities and parties immediately of the discovery</p> <ul style="list-style-type: none"> c. The New Zealand Police if the discovery of human remains or koiwi. d. The Council in all cases. e. Heritage New Zealand Pouhere Taonga if the discovery is an archaeological site, Māori cultural artefact, human remains or koiwi. f. Mana Whenua if the discovery is an archaeological site, Māori cultural artefact, or koiwi. <p>Wait for and enable an inspection of the site</p> <ul style="list-style-type: none"> g. Wait for and enable an inspection of the site by the relevant authority or agency. h. Following site inspection and consultation with all relevant parties (including owner and consent holder), the Council will determine the area within which work must cease and any changes to controls on discharges of contaminants. <p>Recommendation of work</p> <ul style="list-style-type: none"> i. Work within the area determined by the Council in h. above must not recommence until all of the following requirements, so far as relevant to the discovery, have been met: <ul style="list-style-type: none"> i. Heritage New Zealand Pouhere Taonga has confirmed that an archaeological authority has been approved for the work or that none is required. ii. Any required notification under the Protected Objects Act 1975 	
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	<p>has been made to the Ministry for Culture and Heritage.</p> <p>iii. Any material of scientific or educational importance must be recorded and if appropriate, recovered and preserved.</p> <p>iv. Where the site is of Māori origin and an authority from Heritage New Zealand Pouhere Taonga is not required, the Council will confirm, in consultation with Mana Whenua, that:</p> <ul style="list-style-type: none"> any koiwi have either been retained where discovered or removed in accordance with the appropriate tikanga; and any agreed revisions to the planned works to be/have been made in order to address adverse effects on mana whenua values. <p>v. Resource consent has been granted for any alteration or amendment to the earthworks or land disturbance that may be necessary to avoid the sensitive materials and that is not otherwise permitted under the plan or allowed by any existing resource consent.</p>							
EW – S5	Specific Locations	Activity status when compliance not achieved:						
All Zones	<p>2. No earthworks shall exceed the threshold outlined in Table EW-Table 1: Earthworks Volumes – Specific Locations.</p> <p>EW-Table 1: Earthworks Volumes – Specific Locations</p> <table border="1"> <thead> <tr> <th>Location</th><th>Volume (m³ per site in</th><th>Area (m² per site in</th></tr> </thead> <tbody> <tr> <td></td><td></td><td></td></tr> </tbody> </table>	Location	Volume (m ³ per site in	Area (m ² per site in				DIS
Location	Volume (m ³ per site in	Area (m ² per site in						

	<table> <tr> <td></td><td>any <u>12 month</u> 5-year period)²⁰</td><td>any <u>12 month</u> 5-year period)²¹</td></tr> <tr> <td>Sites of Natural Significance</td><td>20</td><td>50</td></tr> <tr> <td>Geopreservation sites</td><td>20</td><td>50</td></tr> <tr> <td>Scenic Viewing Areas</td><td>0</td><td>0</td></tr> <tr> <td>Scenic Grasslands</td><td>0</td><td>0</td></tr> </table> <p>Advice Note: For earthworks in Outstanding Natural Landscapes or Features, see the Natural Features and Landscape Chapter. For earthworks in riparian areas, see the Natural Character Chapter.</p>		any <u>12 month</u> 5-year period) ²⁰	any <u>12 month</u> 5-year period) ²¹	Sites of Natural Significance	20	50	Geopreservation sites	20	50	Scenic Viewing Areas	0	0	Scenic Grasslands	0	0	
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Scenic Viewing Areas	0	0															
Scenic Grasslands	0	0															
EW – S6	Proximity to the National Grid	Activity status when compliance not achieved:															
All Zones	<ol style="list-style-type: none"> The earthworks shall be no deeper than 300mm within 6m of the outer visible edge of a foundation of a anNational gGrid²² transmission line tower or pole. The earthworks shall be no deeper than 3m between 6m and 12m of the outer visible edge of a foundation of a anNational gGrid²³ transmission line tower or pole. The <u>earthworks</u> land disturbance²⁴ does not compromise the stability of a anNational gGrid²⁵ transmission line tower or pole. 	NC															

²⁰ Clause 10(2)(b), Fed Farmers (21.03)²¹ Clause 10(2)(b), Fed Farmers (21.03)²² Clause 10(2)(b), Transpower (PC26.7.01)²³ Clause 10(2)(b), Transpower (PC26.7.01)²⁴ Transpower (11.20)²⁵ Clause 10(2)(b), Transpower (PC26.7.01)

	<p>4. The earthworks and disturbance²⁶ does not result in a reduction in the ground to conductor clearance distances as required in Table 4 of the New Zealand Electrical Code of Practice for Safe Electrical Distances (NZECP 34:2001).</p> <p>5. The earthworks do not permanently physically impede access to a National gGrid²⁷ support structure.</p> <p>Standards EW-R6.1-5 do not apply to the following:</p> <ul style="list-style-type: none"> a. Land disturbance undertaken as part of agricultural, horticultural, or domestic cultivation, or repair or resealing of a road, footpath, driveway, or farm track. b. Excavation of a vertical hole, not exceeding 500mm in diameter, that is more than 1.5 metres from outer visible edge of foundation of a National gGrid²⁸ transmission line pole or stay wire. c. Earthworks that otherwise comply with Clause 2.4.1 of NZECP 34:2001. 	
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²⁶ Transpower (11.20)

²⁷ Clause 10(2)(b), Transpower (PC26.7.01)

²⁸ Clause 10(2)(b), Transpower (PC26.7.01)