

THIS SECTION HAS RULES THAT HAVE LEGAL EFFECT. PLEASE CHECK THE EPLAN TO SEE WHAT THE LEGAL EFFECT IS OR SUBJECT TO APPEAL.

EW - Ketuketū whenua - Earthworks

Introduction

This chapter provides for and manages earthworks across the District and recognises that earthworks are an integral part of the use and development of land for residential activities, [industrial](#),¹ rural and commercial activities at a variety of scales.

Earthworks also have the potential to generate adverse effects on people, property, infrastructure and the environment, including effects on natural, cultural and amenity values, and from displacement of flood water.

The provisions in this chapter are consistent with the matters in Part 2 - District Wide Matters - Strategic Directions and give effect to matters in Part 2 - District Wide Matters - Urban Form and Development.

Other potentially relevant District Pplan provisions:

As well as the provisions in this chapter, other District Plan chapters that contain provisions that may also be relevant to earthworks include:

- Energy and Infrastructure: this chapter contains provisions relating to energy and infrastructure activities that involve earthworks;
- Contaminated Land: this chapter contains objectives and policies relating to contaminated land that may be relevant to earthworks involving contaminated land;
- Sites and Areas of Significance to Māori: this chapter contains provisions for earthworks that affect culturally important locations.
- Special Purpose Zone (Kāinga Nohoanga): how the Earthworks provisions apply in the Special Purpose Zone (Kāinga Nohoanga) is set out in SPZ(KN)-APP1 to SPZ(KN)-APP5 of that chapter.
- Any other District wide matter that may affect or relate to the site.
- Zones: the zone chapters contain provisions about what activities are anticipated to occur in the zones.
- [Canterbury Land and Water Regional Plan Rule 5.175 which outlines setbacks for earthworks adjacent to waterbodies.](#)²

Objectives	
EW-O1	<p>Earthworks Earthworks are undertaken in a way that minimises adverse effects on amenity values, cultural values, property, infrastructure and the health and safety of people and the environment.</p>
Policies	

¹ Daiken New Zealand Limited [145.23]. Earthworks s42A report.

² Canterbury Regional Council [316.154]. Earthworks initial Reply Report.

<p>EW-P1</p>	<p>Enabling earthworks Enable earthworks where they:</p> <ol style="list-style-type: none"> 1. are compatible with the <u>characteramenity</u> values <u>and qualities</u>³ of the location and surrounding environment; 2. avoid, remedy or mitigate any adverse effects on any sites or areas identified as ONL, ONF, SAL, Coastal Environment Overlay, SNA, <u>mahinga kai</u>⁴ and sites and areas of significance to Māori, Natural Open Space Zone, surface freshwater bodies and their margins, or any notable tree, historic heritage or heritage setting; 3. minimise erosion and avoid adverse effects from stormwater or sediment discharge from the site; 4. avoid increasing the risk to people or property from natural hazards; 5. maintain the stability of land including adjoining land, infrastructure, buildings and structures; 6. minimise the modification or disturbance of land, including any associated retaining structures, on the visual amenity values of the surrounding area⁵; and 7. minimise adverse dust, vibration and visual effects beyond the site.
<p>EW-P2</p>	<p>Earthworks within Flood Assessment Overlays Allow earthworks within the Urban Flood Assessment Overlay and Non-Urban Flood Assessment Overlay where:</p> <ol style="list-style-type: none"> 1. the earthworks do not increase the flooding risk to the site or neighbouring sites through the displacement of flood waters; 2. the earthworks associated with proposed subdivision, development or use do not increase the risk to life or property; and 3. the ability to convey flood waters is not impeded as a result of the earthworks.⁶
<p>EW-P3</p>	<p>Archaeological sites, and sites and areas of significance to Māori Earthworks avoid, remedy or mitigate adverse effects on archaeological sites and sites and areas of significance to Māori, by having regard to:</p> <ol style="list-style-type: none"> 1. the particular cultural or historical values of the site and the extent to which these values may be affected; 2. any consultation with mana whenua, in particular any identified mitigation measures or the incorporation of mātauranga Māori into the scale and extent of the earthworks; and 3. any consultation with HNZPT.
<p>EW-P4</p>	<p>Scale of earthworks within or adjacent to urban environments Minimise adverse effects related to the scale of earthworks on character, and amenity values within or adjacent to urban environments by:</p> <ol style="list-style-type: none"> 1. encouraging the integrated design and management of earthworks associated with subdivision, development and use; 2. minimising any off-site effects of earthworks by controlling the duration and sequencing of earthworks; and 3. avoiding quarry, landfill, cleanfill area, mining, or dam activities within or adjacent to urban environments.⁷
<p>EW-P5</p>	<p>Rehabilitation</p>

³ Summerset [207.16]. Earthworks s42A report.

⁴ ECan [316.156], Summerset [207.16]. Earthworks Reply Report.

⁵ Summerset [207.16]. Earthworks s42a Report.

⁶ Canterbury Regional Council [316.81]. Recommendation from Mr Willis, *Memorandum on Changes to the Council s42A Officer's Right of Reply on the Natural Hazards Chapter on behalf of the Waimakariri District Council* (31/10/2023).

⁷ Fulton Hogan [41.33]. Earthworks final Reply Report.

	<p>Require site rehabilitation during or immediately following the completion of earthworks activity to:</p> <ol style="list-style-type: none"> 1. minimise adverse effects on amenity values, natural values, cultural values, quality of the surrounding environment and the future use of the site, and 2. encourage rehabilitation that incorporates ecological enhancement and habitat for indigenous fauna and the use of locally sourced indigenous vegetation.
EW-P6	<p>Water resources</p> <p>-</p> <p>Avoid, Manage adverse effects of earthworks on ground and surface water bodies that could result in water contamination and adverse effects on mahinga kai.⁸</p>

Activity Rules


EW-R1	Earthworks for the maintenance and repair of roads, footpaths, cycleways, tracks, carparks and accessways⁹	
All Zones	<p>Activity status: PER</p> <p>Where:</p> <ol style="list-style-type: none"> 1. EW-S4 and EW-S7 are met; 2. the earthworks are within the formed area of the road, footpath, cycleway, track, carpark or accessway; and 3. the earthworks are contained within ground previously disturbed through construction of the road, footpath, cycleway, track, carpark or accessway. 	<p>Activity status when compliance not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> EW-MD1 – Activity operation, scale, form and location EW-MD2 – Nuisance and reverse sensitivity EW-MD3 – Land stability EW-MD4 – Natural hazards EW-MD5 – Rehabilitation EW-MD6 – Coastal environment and hazards EW-MD7 – Water bodies, vegetation and fauna EW-MD8 – Outstanding natural features and landscapes¹⁰
EW-R2	Earthworks for interment within a burial ground, cemetery, or urupā	
All Zones	Activity status: PER	Activity status where compliance not achieved: N/A
EW-R3	Earthworks for maintenance of existing <u>community scale irrigation/stockwater networks</u>,¹¹ public water races or drains	
All Zones	<p>Activity status: PER</p> <p>Where:</p> <ol style="list-style-type: none"> 1. EW-S1 to EW-S7 are met; 2. the disposal or stockpiling of any dredged material to land shall meet EW-S1, EW- 	<p>Activity status where compliance not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> EW-MD1 - Activity operation, scale, form and location EW-MD4 - Natural hazards EW-MD5 - Rehabilitation

⁸ ECan [316.156], Summerset [207.16]. Earthworks Reply Report.

⁹ Transpower [195.105]. Energy and Infrastructure Integration Joint Witness Statement.

¹⁰ Chorus NZ, Spark NZ Trading Ltd and Vodafone NZ Ltd [62.6], Transpower [195.23]. Energy and Infrastructure Joint Witness Statement.


¹¹ WIL [210.43, 210.44]. Earthworks s42A report.

	<p>R9 (stockpiling), EW-S2 and EW-R5 (overland flow paths),¹² and</p> <p>3. the activity is undertaken by the Crown, Regional Council, District Council or their nominated agent.</p>	<p>EW-MD6 - Coastal environment and hazards</p> <p>EW-MD7 - Water bodies, vegetation and fauna</p>
<p>EW-R4 Earthworks for community scale natural hazards mitigation works</p>		
<p>Urban Flood Assessment Overlay</p> <p>Non-Urban Flood Assessment Overlay</p>	<p>Activity status: PER</p> <p>Where:</p> <p>1. EW-S1 to EW-S7 are met.¹³</p>	<p>Activity status where compliance not achieved: DIS</p>
<p>EW-R5 Earthworks within an overland flow path</p>		
<p>Urban Flood Assessment Overlay</p> <p>Non-Urban Flood Assessment Overlay</p>	<p>Activity status: PER</p> <p>-</p> <p>Where:</p> <p>1. EW-S1 to EW-S7 are met;  and</p> <p>2. the height of any filling does not exceed 0.25m above the ground level at (18 September 2021); or activity does not exacerbate flooding on any other property by displacing or diverting floodwater on surrounding land in a 0.5% AEP event</p> <p>3. the filling is for a building platform that is located greater than 2m from any site boundary within the Urban Flood Assessment Overlay, or greater than 10m from any site boundary within the Non-Urban Flood Assessment Overlay; or</p> <p>4. the flood depth in a 0.5% AEP event is less than 100mm.¹⁴</p>	<p>Activity status where compliance not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <p>EW-MD4 - Natural hazards</p>
<p>Advisory Notes</p>		

¹² Consequential amendment. Earthworks final Reply Report.

¹³ ECan [316.157] and [316.81]. Consequential amendment to Natural Hazards Chapter recommendations.

¹⁴ Canterbury Regional Council [316.158] and [316.81]. Consequential from Natural Hazards s42A report.

	<ul style="list-style-type: none"> A Flood Assessment Certificate issued in accordance with NH S1(b) will identify whether the site is located within an overland flow path. The District Council holds publicly available information showing flood modelling for the District.¹⁵ 	
EW-R6	Earthworks for wells, test pits or bores	
All Zones	Activity status: PER Where: <ol style="list-style-type: none"> any test pit of 1m³ or greater shall be located a minimum of 5m from the foundation of any habitable building. 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to <ul style="list-style-type: none"> EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD4 - Natural hazards EW-MD5 - Rehabilitation
	Advisory Note <ul style="list-style-type: none"> Test pits or bores should be filled and compacted, or capped to ground level upon completion of testing. 	
EW-R7	Earthworks for firebreaks	
All Zones	Activity status: PER Where: <ol style="list-style-type: none"> the earthworks are located outside of a SNA, and EW-S1 to EW-S7 are met;  or <ol style="list-style-type: none"> the firebreak is required by FENZ for purposes under the Fire and Emergency Act 2017. 	Activity status when compliance not achieved: DIS
	Advisory Note <ul style="list-style-type: none"> The NESPCF¹⁶ regulates earthworks for forestry purposes. 	
EW-R8	Earthworks for underground infrastructure <u>including underground components of above ground infrastructure</u>¹⁷	
	<i>This rule does not apply to any treatment plants, pump stations, canals, infiltration basins, open raw water storage ponds/lakes and treated water reservoirs provided for under EW-R11.</i>	
All Zones	Activity status: PER Where: <ol style="list-style-type: none"> the activity is permitted under <u>EI-R4</u>, EI-R10, <u>EI-R46</u> 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: <ul style="list-style-type: none"> EW-MD1 - Activity operation, scale, form and location EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna


¹⁵ Canterbury Regional Council [316.81]. Consequential amendment that was not shown in Earthworks Reply Report.

¹⁶ s44A(6) RMA. Wrap Up Reply Report.

¹⁷ Chorus New Zealand, Spark New Zealand Trading Limited, Vodafone New Zealand Limited [62.52]; Waimakariri Irrigation Ltd [210.52]; Mainpower [249.30]. Joint Witness Statement – Energy EI - Pūngao me te hanganga hāpori - Energy and Infrastructure (Integration) [28 November 2023] (note the amendment is not shown in the JWS). Cl 16(2), sch 1 consequential change to align with EI chapter.

		TREE-MD1 - Pruning, root protection area, trunk and crown, removal TREE-MD2 - Extent of benefit or need for the activity or works
EW-R9	Earthworks stockpiling	
All Zones	<p>Activity status: PER Where:</p> <ol style="list-style-type: none"> EW-S1 to EW-S7 are met; any stockpile shall not exceed 250m³ and 4m in height; the activity shall not be located within 20m of the bank of any river or lake, 50m from the margin of any wetland; any stockpile is located greater than 100m from any sensitive activity on an adjoining site in different ownership. 	<p>Activity status when compliance not achieved: RDIS Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD4 - Natural hazards EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Outstanding natural features and landscapes
	<p>Advisory Note</p> <ul style="list-style-type: none"> Where the volume specified in EW-S1 is less than 250m³, the maximum volume specified in EW-S1 will apply to R9 (2). 	
EW-R10	Earthworks for farm quarries¹⁸	
General Rural Zone	<p>Activity status: PER Where:</p> <ol style="list-style-type: none"> EW-S1 to EW-S7 are met; the maximum area of any farm quarry shall be 1500m² per site. 	<p>Activity status when compliance not achieved: RDIS Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD4 - Natural hazards EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Outstanding natural features and landscapes
EW-R11	Earthworks not subject to Rules EW-R1 to EW-R10	
All Zones	<p>Activity status: PER Where:</p>	Activity status when compliance not achieved: RDIS

¹⁸ CI 16(2), sch 1, RMA minor error. Earthworks initial Reply Report.

	<p>1. EW-S1 to S7 are met. 2. NH-R4 NH-R6 are met¹⁹</p> 	<p>Matters of discretion are restricted to: EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD4 - Natural Hazards EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Outstanding natural features and landscapes</p>
<p>EW-R13²⁰ Earthworks undertaken in relation to the removal or replacement of a fuel storage system²¹</p>		
<p><u>All zones</u></p>	<p><u>Activity status: PER²²</u></p> <p><u>Where:</u></p> <ol style="list-style-type: none"> <u>The activity complies with the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations 2011 (NESCS); and</u> <u>the activity shall not be located within 20m of the bank of any river or lake, 50m from the margin of any wetland; and</u> <p><u>EW-S4, EW-S6 and EW-S7 are met;</u></p>	<p><u>Activity status when compliance not achieved: RDIS</u></p> <p><u>Matters of discretion are restricted to:</u></p> <ul style="list-style-type: none"> <u>EW-MD1 - Activity operation, scale, form and location</u> <u>EW-MD2 - Nuisance and reverse sensitivity</u> <u>EW-MD3 - Land stability</u> <u>EW-MD4 - Natural hazards</u> <u>EW-MD5 - Rehabilitation</u> <u>EW-MD6 - Coastal environment and hazards</u> <u>EW-MD7 - Water bodies, vegetation and fauna</u> <u>EW-MD8 - Natural features and landscapes²³</u>
<p>EW-R12²⁴</p>	<p>Earthworks to modify, alter or remove sand dunes or vegetation on sand dunes</p>	
<p>Coastal Environment Overlay</p>	<p>Activity Status: DIS</p>	<p>Activity status when compliance not achieved: N/A</p>

¹⁹ Integration with natural hazards chapter

²⁰ Renumbering required

²¹ Fuel Companies [276.39]. Earthworks initial Reply Report.

²² Fuel Companies [276.39]. Earthworks Final Reply Report.


²³ Underlining added.

²⁴ Renumbering required.


Earthworks Standards

EW-S1 General standards for earthworks	
1. Unless otherwise specified in EW-R1 to EW-R11, earthworks shall comply with Table EW-1. Where zone or overlay thresholds differ, the lower threshold shall apply.	<p>Activity status when compliance not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD4 - Natural hazards EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Natural features and landscapes

Table EW-1: General standards for earthworks

Maximum volume or area in any 12 month period (unless otherwise specified) per site:	
Medium Density Residential Zone, General Residential Zone, Settlement Zone, Open Space Zone, Sport and Active Recreation Zone, Special Purpose Zone (Hospital), Special Purpose Zone (Kāinga Nohoanga) - sites within Tuahiwi Precinct	200m ³ or 30m ³ per 100m ² of site area, whichever is greater
Neighbourhood Centre Zone and Mixed Use Zone	250m ³
Special Purpose Zone (Pegasus Resort), Special Purpose Zone (Museum and Conference Centre), Special Purpose Zone (Pines Beach and Kairaki Regeneration Zone), Local Centre Zone, Large Format Zone, Town Centre Zone, Industrial Zones	1000m ² <u>or 50m³ per 100m² of site area, whichever is greater</u> ²⁵
Large Lot Residential Zone, Special Purpose Zone (Kāinga Nohoanga) - sites within Large Lot Residential Precinct	500m ³
General Rural Zone, Rural Lifestyle Zone, Special Purpose Zone (Kāinga Nohoanga) - sites outside of Tuahiwi Precinct	500m ³ or 100m ³ per ha, whichever is greater
ONF - Waimakariri River or SAL Ashley River/Rakahuri	10m ³ except for gravel extraction in the river bed 
ONL – Putekeraki Range and Oxford Foothills	<ol style="list-style-type: none"> 1. For the construction and maintenance of stock water ponds – 500m² per pond. 2. Earthworks to level the ground for the installation of water tanks – 50m² per tank.

²⁵ Ngai Tahu Property [411.30]. Earthworks s42a report.

	<p>3. Earthworks required for the installation or maintenance of water pipes shall comply with EW-S1 for the zone.</p> <p>4. All other activities - 10m² on any one site.</p>
ONF – Ashley River/Rakahuri Saltwater Creek Estuary, SNA, Heritage Setting	None permitted 
Coastal Environment Overlay	25m ³ within any continuous five year period
Natural Open Space Zone	10m ³

Advisory Note

- For ONF - Waimakariri River or SAL Ashley River/Rakahuri, the following may apply:
 - Waimakariri River Regional Plan 2004;
 - Canterbury Land and Water Regional Plan 2018; and
 - Regional Coastal Environment Plan 2005.

EW-S2 General setbacks

<p>1. Earthworks more than 300mm in height or depth shall be set back a minimum of 2m from any boundary of a site in different ownership.</p>	<p>Activity status when compliance not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD4 - Natural hazards EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Outstanding natural features and landscapes
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~~EW-S3 Setback from water bodies²⁶~~

<p>1. Earthworks shall not be undertaken:</p> <ul style="list-style-type: none"> a. within 20m from the bank of any stream, river; or b. within 50m of the edge of any wetland or lake. 	<p>Activity status when compliance not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> EW-MD7 – Water bodies, vegetation and fauna
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EW-S4 Setback from root protection area

<p>1. Earthworks shall not occur within 3m of the root protection area of a notable tree listed in TREE1 – Schedule of Notable Trees, except as provided for by EI-R46.</p>	<p>Activity status when compliance not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> TREE-MD1 - Pruning, root protection area, trunk and crown, removal TREE-MD2 - Extent of benefit or need for the activity or works
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EW-S5 Excavation and filling

²⁶ Federated Farmers [414.171]. Earthworks final Reply Report.

<p>1. Except for the burial of dead animals, and for offal pits, earthworks shall achieve the following:</p> <ol style="list-style-type: none"> a maximum height of 1.5m above ground level, a maximum depth of 2m below ground level; material used for filling of land must be cleanfill material. 	<p>Activity status when compliance not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD4 - Natural hazards EW-MD5 - Rehabilitation EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Outstanding natural features and landscapes
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EW-S6 Earthworks maximum slope

<p>1. Earthworks shall not be undertaken on land that has a slope of more than 1:4 (25%) where the volume of cut exceeds 10m³ or the volume of filling exceeds 30m³ within any 12 month period.</p>	<p>Activity status when compliance not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD3 - Land stability EW-MD5 - Rehabilitation EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Natural features and landscapes
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EW-S7 Earthworks sediment control

<p>1. While earthworks are being undertaken or rehabilitated, sediment from the earthworks shall be prevented from entering any water body, drain or stockwater race.</p>	<p>Activity status when compliance not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <ul style="list-style-type: none"> EW-MD1 - Activity operation, scale, form and location EW-MD2 - Nuisance and reverse sensitivity EW-MD4 - Natural hazards EW-MD6 - Coastal environment and hazards EW-MD7 - Water bodies, vegetation and fauna EW-MD8 - Outstanding natural features and landscapes
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Advisory Note

- The Canterbury Regional Council Erosion and Sediment Control Toolbox for Canterbury provides guidance on sediment control measures for a range of earthworks and different types of sites.

Advice Notes

EW-AN1

Activities and structures may also be subject to controls outside the District Plan. Reference should also be made to any other applicable rules or constraints within other legislation or ownership requirements including the following:

1. Earthworks may require building consent under the Building Act 2004.
2. The Stockwater Race Bylaw 2019, the Waimakariri River Regional Plan 2004, and the Canterbury Land and Water Regional Plan 2018 may apply.
3. Resource consent may be required under regional plans including the Canterbury Land and Water Regional Plan 2018 and the Canterbury Air Regional Plan 2017. Earthworks within the beds and on the margins of lakes and rivers is are regulated under the regional planning framework (Canterbury LWRP) and earthworks in the coastal marine area under the Canterbury Regional Coastal Environment Plan.²⁷
4. The NESPCF²⁸ regulates earthworks for forestry purposes, and the NESCS manages the effects on human health from the disturbance or removal of contaminated soil. Specific activities (i.e. soil sampling and removing or replacing fuel storage systems) are regulated under the NESCS as well as under the rules of this chapter.²⁹ Earthworks managed under the ~~NESCS and NESPCF~~³⁰ are not subject to provisions in this chapter other than where the District Plan deals with terms and conditions not covered in the NES or in the circumstances where the District Plan is allowed to be more stringent. The District Plan can be more stringent than the NESPCF for forestry in outstanding natural features and landscapes, and SNAs, or more stringent or lenient where in relation to afforestation.³¹
5. ~~The NESETA and the NESTF have controls for earthworks in relation to infrastructure. Earthworks managed under the NESETA and the NESTF are not subject to provisions in this chapter other than where they address terms and conditions not covered in the NES, or in the circumstances where the District Plan is allowed to be more stringent than the NESTF, including if the activity is located:~~
 - a. ~~within the root protection area of a notable tree or other vegetation in the road reserve listed in the District Plan;~~
 - b. ~~within the root protection area of a notable tree, group of trees, or other vegetation outside the road reserve identified as being of special significance listed in the District Plan;~~
 - c. ~~in an place identified in the District Plan as having heritage values;~~
 - d. ~~in a landscape feature identified in the District Plan as having special visual amenity values (however described);~~
 - e. ~~in an area identified in the District Plan as a significant habitat for indigenous vegetation (however described);~~
 - f. ~~on an area identified in the District Plan as a significant habitat for indigenous fauna;~~
 - g. ~~in an area identified in the District Plan as an outstanding natural landscape or feature;~~
 - h. ~~in an area where the District Plan has rules to protect the adjoining CMA.~~³²

²⁷ ECan [316.159]. Earthworks s42A report/initial Reply Report.

²⁸ s44A RMA. Wrap Up Reply Report.

²⁹ Z Energy Limited, BP Oil New Zealand Limited, Mobil Oil New Zealand Limited [276.39]. Earthworks s42A report/initial Reply Report.

³⁰ s44A RMA. Wrap Up Reply Report.

³¹ s44A RMA. Wrap Up Reply Report.

³² Transpower [195.106]. Earthworks s42A report/initial Reply Report.

	<p>6. If any activity associated with a project, including earthworks, may modify, damage or destroy an archaeological site(s), an authority from HNZPT must be obtained for the work to proceed lawfully. The Heritage New Zealand Pouhere Taonga Act 2014 contains penalties for unauthorised site damage. The provisions of the Taonga o onamata - Historic Heritage chapter apply.³³</p>
EW-AN2	<p>For guidance refer to the Erosion and Sediment Control Toolbox for Canterbury prepared by the Regional Council.</p>
EW-AN3	<p>If an archaeological site is located during any earthworks, the following Accidental Discovery Protocol applies:</p> <ol style="list-style-type: none"> 1. The earthworks must cease immediately in the vicinity of the site; 2. HNZPT must be notified and application must be made for the appropriate archaeological authority if required; 3. Te Ngāi Tūāhuriri Rūnanga must be notified of the discovery and site access must be provided to enable appropriate cultural procedures and tikanga to be undertaken; 4. If human remains (koiwi) are uncovered then the NZ Police must also be notified; 5. Works affecting the archaeological site shall not resume until HNZPT, the Police (if human remains are involved) and Te Ngāi Tūāhuriri Rūnanga have each given the necessary approval for work to continue; and 6. Evidence of archaeological sites can include oven stones, charcoal, shell middens, ditches, banks, and pits, building foundations, artefacts of Māori and Non-Māori origin or human burials.
EW-AN4	<p>These standards do not apply in the following situations:</p> <ol style="list-style-type: none"> a) during a state of emergency or transition period declared or where direction to undertake specific earthworks has been issued by the controller or recovery manager under the Civil Defence Emergency Management Act 2002³⁴; or during a biosecurity emergency declared by an authorised person under the Biosecurity Act 1993.³⁵

Matters of Discretion

EW-MD1	<p>Activity operation, scale, form and location</p> <ol style="list-style-type: none"> 1. Location, volume and area of earthworks. 2. The operational need or functional need for the earthworks in the location. 3. Any effects on the natural character and amenity values of the site and surrounding area. 4. Any effects on archaeological sites, heritage values or the heritage setting of the site or within the surrounding area. 5. Any disturbance of culturally significant sites and any proposed mitigation measures. 6. Any effects on the health and structural integrity of any notable tree and any effects on the values that have been identified for the notable tree. 7. Public health and safety including contingency provisions for emergency response. 8. Mitigation including fencing, planting and landscaping. 9. Effects on soil quality. 10. Final contour and ground level resulting from excavation or filling.
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³³ Recommendation from Earthworks final Reply Report to integrate with recommendations in Historic Heritage Reply report.

³⁴ Amended in response to Commissioner questions at Hearing Stream 5.

³⁵ Federated Farmers [414.170, 414.173]. Earthworks initial Reply Report.

	<ol style="list-style-type: none"> 11. Vehicle movements associated with earthworks. 12. Any effects on the operation, maintenance, upgrade and development of the National Grid <u>and transmission lines</u>³⁶. 13. Any constraint on the future development potential of the site or surrounding sites. 14. <u>The safe and efficient functioning of infrastructure, including specified infrastructure.</u>³⁷
EW-MD2	<p>Nuisance and reverse sensitivity</p> <ol style="list-style-type: none"> 1. The extent to which dust, sediment and water or wind erosion effects can be avoided or mitigated including through landscape treatment. 2. Reverse sensitivity effects such as the effect of a sensitive activity locating near earthworks activities. 3. Any effects on other sites including noise, vibration, dust, siltation, sedimentation, visual effects on amenity values and traffic generation. 4. The effectiveness of any environmental management plan.
EW-MD3	<p>Land stability</p> <ol style="list-style-type: none"> 1. Any effects on land stability, including stability of adjoining land, and any susceptibility to subsidence, slumping or erosion. 2. Any alteration of natural ground levels and consequently to the height of structures and buildings that may be erected on the site.
EW-MD4	<p>Natural hazards</p> <ol style="list-style-type: none"> 1. Risk to the health and safety of people, property, any building or infrastructure. 2. The location, or identification, of the site within any natural hazard category or overlay, and the ability to manage risk associated with any natural hazard that is identified. 3. Any effect on sites of cultural significance. 4. Any effect on drainage, inundation run-off, flooding risk, overland flow paths or water table level on the site or surrounding land, and any mitigation works proposed. 5. The effect of the earthworks on flow of floodwater through the site, including any effects on the entry and exit points for floodwater. 6. The extent to which the earthworks will displace or divert floodwater from the site onto any other site. 7. Any effects on the character of floodwater, either on-site or off-site, including velocity and depth. 8. Any effect on the operation and function of roads or other infrastructure. 9. The matters addressed or identified in any Flood Assessment Certificate.
EW-MD5	<p>Rehabilitation</p> <ol style="list-style-type: none"> 1. Any proposed site rehabilitation, considering: <ol style="list-style-type: none"> a. the location, gradient and depth of the earthworks; b. availability of clean fill material and time frames for rehabilitation; c. any adverse effects on traffic, dust, groundwater, drainage and landscape; d. any re-vegetation, including the use of indigenous <u>and non indigenous plant varieties from seed sourced from the relevant ecological district within which the planting is to take place</u>³⁸, and any weed and pest control proposed, and e. any mitigation or proposed mitigation. 1. Any quarry site rehabilitation plan, prepared by a person suitably qualified or experienced in site rehabilitation.

³⁶ Mainpower [249.33]. Earthworks initial Reply Report.

³⁷ Waka Kotahi [275.42], WIL [210.60]. Earthworks initial Reply Report.

³⁸ Federated Farmers [414.29]. Earthworks s42a report.

<p>EW-MD6</p>	<p>Coastal environment and hazards</p> <ol style="list-style-type: none"> 1. Any increase in sedimentation in the coastal environment. 2. The extent to which the proposal will maintain, preserve or enhance the natural character attributes of the coastal environment. 3. Any effects from the clearance of vegetation, or disturbance of habitat in the coastal environment. 4. Any effects on the nature, form and resilience of the sandy beach, dunes or rocky shoreline including the protection they provide from coastal inundation. 5. Any effects on the functioning of coastal processes. 6. Any positive or adverse effects on risk to life, property and the environment posed by coastal hazards. 7. The extent to which earthworks would remedy or mitigate coastal hazard or be compatible with existing coastal hazard mitigation works or structures. 8. The extent to which the earthworks will restrict or enable public access and enjoyment of the coastal environment. 9. The extent to which earthworks restrict public access to and along the CMA and water bodies with high values. 10. The extent to which the earthworks will be supervised by either a Chartered Professional Engineer with experience in coastal processes or a professional Engineering Geologist (IPENZ registered). 11. Any effects on culturally significant sites.
<p>EW-MD7</p>	<p>Water bodies, vegetation and fauna</p> <ol style="list-style-type: none"> 1. The extent to which the disturbance of the soil, including disturbance of contaminated land, adversely affects areas of significant indigenous vegetation and significant habitats of indigenous fauna. 2. Any removal of, or disturbance to, indigenous vegetation <u>shall be in accordance with the provisions in the ECO chapter.</u>³⁹ 3. Any effects on the natural character and water quality of any water body⁴⁰. 4. The extent to which the earthworks will restrict public access and enjoyment of the margin of any water body. 5. The extent to which the habitat of trout, salmon, and indigenous aquatic species, may be adversely affected by any disturbance on the <u>riparian margin margin of the water body</u>⁴¹. 6. Fencing, planting and landscaping. 7. The extent to which the land use will adversely affect wahi taonga and mahinga kai. 8. For ngā wai, the matters specified in SASM-MD3 Nga Wai.
<p>EW-MD8</p>	<p>Outstanding natural features and landscapes</p> <ol style="list-style-type: none"> 1. Where earthworks are located in any ONF or ONL: <ol style="list-style-type: none"> a. the timing, duration, area and location of the activity; b. any vegetation that is to be retained; c. any vegetation screening and backdrop; d. the relationship of the activity to landform including prominent ridgelines; e. natural character values, amenity values and landscape values, including revegetation type and density; f. earthworks location and management, including revegetation, of cuts and fills; and g. any effects on the stability and life-supporting capacity of soil.

³⁹ DOC [419.123]. Earthworks s42a report.

⁴⁰ Consequential to deletion of EW-P6 and EW-S3. Earthworks initial Reply Report.

⁴¹ DOC [419.123]. Earthworks s42a report.