

<b>Title</b>	<b>Carry out cut and fill formation for infrastructure earthworks</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>12</b>

<b>Purpose</b>	People credited with this unit standard are able to prepare to carry out, and carry out, cut and fill formation for infrastructure earthworks.
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<b>Classification</b>	Infrastructure Works > Infrastructure Civil Works
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation and references relevant to this unit standard include:  
Health and Safety at Work Act 2015;  
Resource Management Act 1991;  
Health and Safety in Employment Regulations 1995;  
BS 6031:2009 *Code of practice for earthworks* and NZS 4404:2010 *Land development and subdivision*, available from <https://www.standards.govt.nz/>;  
TNZ F/01 *Specification for Earthworks Construction*, available from <http://www.nzta.govt.nz/resources/>;  
Territorial Authority guidelines for earthworks.
- 2 Assessment against this unit standard must take place in a workplace environment. Assessment parameters depend on company and site-specific equipment, procedures, and practices. Practices must reflect industry best practice and comply with legislative requirements.
- 3 Definitions  
*Company requirements* include the policy, procedures, and methodologies of the company. They include legislative and regulatory requirements which may apply across the company or to a specific site. Requirements are documented in the company's health and safety plans, traffic management plans, contract work programmes, quality assurance programmes, policies, and procedural documents. *Contract specifications* include plans, diagrams, and special technical conditions. They do not include special administrative conditions.

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### Outcomes and performance criteria

#### Outcome 1

Prepare to carry out cut and fill formation for infrastructure earthworks.

**Performance criteria**

- 1.1 Required fill level and method of excavation are determined and confirmed in accordance with contract specifications and company requirements.
- 1.2 Location of stockpiles and/or dumps and size of hauls are confirmed in accordance with contract specifications and company requirements.
- 1.3 Plant and equipment are selected in accordance with excavation method and company requirements.
- 1.4 Site management and communication requirements are identified and confirmed as in place before commencement of work.

Range site safety plan, environmental plan, traffic management plan.

**Outcome 2**

Carry out cut and fill formation for infrastructure earthworks.

**Performance criteria**

- 2.1 Access roads, haul roads and loading and unloading areas are prepared in accordance with contract specifications and company requirements.
- 2.2 Material is removed from cut face and slope is secured in accordance with contract specifications and company requirements.
- 2.3 Material is loaded, hauled, and unloaded at the fill site in accordance with contract specifications and company requirements.
- 2.4 Cut and fill formation is carried out to achieve required level in accordance with contract specifications and company requirements.
- 2.5 Compaction of fill is carried out to achieve the specified density in accordance with contract specifications and company requirements, including any required testing.

<b>Planned review date</b>	31 December 2023
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	27 September 2018	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0101
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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**Comments on this unit standard**

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at [qualifications@waihangaararau.nz](mailto:qualifications@waihangaararau.nz) if you wish to suggest changes to the content of this unit standard.