

Title	Operate an excavator for a bulk dig		
Level	4	Credits	20

Purpose	<p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – prepare for bulk dig operations; – manoeuvre and control an excavator during a bulk dig; – excavate, strip, and trim materials for a bulk dig; – operate an excavator for cut and fill formations for a bulk dig; and – complete operational requirements for an excavator.
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Classification	Infrastructure Works > Civil Plant Operation
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Available grade	Achieved
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Prerequisites	Class of driver licence and any driver licence endorsement appropriate for the vehicle being driven.
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Guidance Information

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with relevant legislative and industry requirements.
- 2 Legislation and references relevant to this unit standard include: Health and Safety at Work Act 2015; *Excavation Safety – Good practice guidelines 2016*, available from <https://worksafe.govt.nz/>; and any subsequent amendments.
- 3 Definition
Industry requirements refer to relevant policies, processes, methodologies, industry codes of practice, site specific health and safety plans, standard operating procedures, site safety plans, quality plans, work plans, traffic management plans, contract work programmes, job safety analysis, safe work method statements, job instructions, manufacturer's requirements, contract specifications, manuals, procedural documents and Waka Kotahi New Zealand Transport Agency specifications and guidelines.

Outcomes and performance criteria

Outcome 1

Prepare for bulk dig operations.

Performance criteria

- 1.1 Job instructions are confirmed.
- 1.2 Pre-start check of machine and 360 walkaround check is carried out prior to starting work and any required action is taken.

Range machine operation, damage, wear and tear, track adjustment.
- 1.3 A risk assessment of the site and machine is carried out, and any identified hazards are eliminated or minimised.
- 1.4 A suitable work platform is created prior to starting work.

Outcome 2

Manoeuvre and control an excavator during a bulk dig.

Performance criteria

- 2.1 Excavator is manoeuvred on site with adequate clearances in accordance with job instructions.
- 2.2 Machine control levers are used to produce smooth movement of bucket through all positions.
- 2.3 Excavator is controlled on slopes.
- 2.4 Machine production is maintained at maximum usage relative to the task and the safety of the operator.

Range lead times, placement of vehicle being loaded.
- 2.5 Site communication protocols are used.

Outcome 3

Excavate, strip, and trim materials for a bulk dig.

Performance criteria

- 3.1 Topsoil is stripped to contour and depth in accordance with job instructions.
- 3.2 Area for specified job is excavated to depth and level in accordance with job instructions.

Outcome 4

Operate an excavator for cut and fill formations for a bulk dig.

Performance criteria

- 4.1 Excavator is used to prepare access roads, haul roads and loading and unloading areas in accordance with contract specifications.
- 4.2 Excavator is used to remove material from cut face in accordance with contract specifications.
- 4.3 Excavator is used to load, haul, and unload material at the fill site in accordance with contract specifications.
- 4.4 Excavator is used to carry out cut and fill formation and to achieve required level in accordance with contract specifications.
- 4.5 Compaction of fill is carried out to achieve the specified density in accordance with contract specifications, including any required testing.

Outcome 5

Complete post-operational procedures for an excavator.

Performance criteria

- 5.1 Excavator is parked, shut down safely and secured, and daily maintenance is carried out.
- 5.2 Excavator is inspected, and any faults are reported.

Planned review date	31 December 2026
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	28 October 2021	N/A

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

Comments on this unit standard

Please contact Connexis - Infrastructure Industry Training Organisation qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.