

<b>Title</b>	<b>Describe and complete aggregate sampling in civil engineering</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 describe and complete aggregate sampling in civil engineering.
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<b>Classification</b>	Infrastructure Civil Engineering > Infrastructure Laboratory
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<b>Available grade</b>	Achieved
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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 applicable organisational and legislative requirements.
- 2 Applicable legislation, regulations, rules, standards and codes include but are not limited to the: Health and Safety at Work Act 2015, Hazardous Substances and New Organisms Act 1996, and their associated regulations and subsequent amendments; ISO/IEC 17025:2018 *General requirements for the competence of testing and calibration laboratories*, available from <https://www.iso.org/store.html>; NZS 4407:2015 *Methods of sampling and testing road aggregates*, available from <https://www.standards.govt.nz/>.
- 3 Definitions  
*Describe* refers to stating the individual components of the test sequentially in terms of the relevant test method and organisational requirements. Components will vary between the tests and include but are not limited to – the sample specifications, equipment requirements, environmental requirements, units of measurement, purpose and scope of the test. *Describe* does not include the explanation of results, the interaction between tests or their scientific basis.  
*Organisational requirements* refer to instructions to staff on policy and procedures which are formally documented or generally accepted at the worksite. This may include legislation; industry standards and methods; national and international standards and methods; standard operating procedures; specifications; manuals; and manufacturer's information.  
*Samples* may include but are not limited to – prepared materials and test materials such as standards and reagents.

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## Outcomes and performance criteria

### Outcome 1

Describe aggregate sampling in civil engineering.

Range evidence is required for five sampling methods including a minimum of one machine and one hand sampling method.

### Performance criteria

- 1.1 The selection of sites is described in terms of material integrity.
- 1.2 The selection of samples is described in terms of homogeneous and representative sampling.
- 1.3 The methods of sampling are described in terms of their use and limits.
- 1.4 The documentation requirements are described.

### Outcome 2

Complete aggregate sampling in civil engineering.

Range evidence is required for three sample methods.

### Performance criteria

- 2.1 Sampling is planned.
  - Range may include but is not limited to – transport, access to sample site, customer communication.
- 2.2 Samples are taken.
- 2.3 Samples are labelled, and observations are documented.
- 2.4 Samples are transported to testing location.

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<b>Planned review date</b>	31 December 2025
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### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	21 January 2011	31 December 2021
Review	2	23 January 2020	N/A
Rollover and Revision	3	24 October 2024	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 Waihangā Ara Rau Construction and Infrastructure Workforce Development Council at [qualifications@WaihangāAraRau.nz](mailto:qualifications@WaihangāAraRau.nz) if you wish to suggest changes to the content of this unit standard.