

Title	Describe risk for the underground utility location industry		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to: <ul style="list-style-type: none"> – describe risk for the underground utility location industry (UUL); – describe the risks when locating underground services.
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Classification	Infrastructure Works > Generic Infrastructure Works
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Available grade	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 industry requirements.
- 2 Legislation and guidelines relevant to this unit standard include:
 - Health and Safety at Work Act 2015;
 - *Excavation Safety Good Practice Guidelines*;
 - *Guide for Safety with Underground Services*: available from www.worksafe.govt.nz and any subsequent amendments and replacements.
- 3 It is recommended people achieve Unit 30265, *Apply health and safety risk assessment to a job role*, or demonstrate equivalent knowledge and skills before being assessed against this unit standard.
- 4 Definitions

Industry requirements may refer to but are not limited 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.

Utility locating refers to any application aimed at position or depth determination of man-made objects embedded within the earth. This includes target location of electrical, water, and gas lines. The principal objectives are target identification and accurate measurement of its position and depth.

Utility locator refers to Ground Penetrating Radar (GPR) or Electro-magnetic location (EML).

Outcomes and performance criteria

Outcome 1

Describe risk for the UUL industry.

Performance criteria

- 1.1 Risk management for UUL is described in terms of how it can improve successful outcomes for the industry.
- Range successful outcomes include – reduce service strikes, eliminate injuries, ensure safe communities, improve professional practice, improve financial, and environmental outcomes.
- 1.2 UUL is described in terms of risks for the utility owner.
- Range up to date records, compliance, addressing risk.
- 1.3 UUL is described in terms of risks for the asset owner.
- Range provision of UUL skills for the contract, up to date documents, reputation, financial cost, public safety.
- 1.4 UUL is described in terms of risks for stakeholders.
- Range client, public, site personnel.
- 1.5 Risks when services are damaged are described in terms of safety and environmental impact.
- Range electrocution, financial, accidents, injury, loss service, gas leak, flooding, contamination, explosions, critical infrastructure loss.
- 1.6 Risk of service strikes for worker safety and construction delays are explained in terms of the cost, damage, and legal action for the employer.

Outcome 2

Describe the risks when locating underground services.

Performance criteria

- 2.1 Risks associated with utility locating are described in terms of the consequences.
- Range utility locating risks include – hidden services, service connections not marked, false positions, age of the map, cables not marked, congestion of multiple services, depth of services, exposed services, services more than three metres underground, latest version of underground service plan.

2.2 Risks associated with provider plans are described in terms of consequences when locating underground services.

Range provider plan risks include – changes not updated, remedial repairs not indicated, changing reference points such as kerbs, regrading of surface alters depths, services moved without authority, twists or turns over time, topographical changes, services more than three metres underground relating to thrusting, using previous version of the plan, redundant services that are still live, abandoned services still onsite.

2.3 Risks are described in terms of locating underground services where a plan is not available.

Range risks include – overhead lighting or cables, illuminated traffic signs, valve pit covers, telecommunications chambers, service pillars, previous trench reinstatement, private assets never recorded.

2.4 Risks associated with not using the correct equipment and not wearing personal protective equipment when locating underground services are described in terms of personal safety.

2.5 Risks associated with health and well-being of utility locator during utility location are explained in terms of ability to carry out the scope of work.

Range health and well-being risks include – dehydration (heat exposure, UV), avoiding distractions, fatigue, complacency, stress, remote and isolated work, time pressure, lack of skills and knowledge, workplace cultural behaviour, managing client expectations, knowledge of job specific health risks, adverse site conditions.

Planned review date	31 December 2027
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	2 March 2023	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 Waihangā Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@WaihangāAraRau.nz if you wish to suggest changes to the content of this unit standard.