1XXXXX Manage irrigation installation contracts

| Kaupae Level | 5 |
|----------------------|---|
| Whiwhinga Credit | 15 |
| Whāinga Purpose | This skill standard is for people working in, or intending to gain skills in, managing the planning and contractual processes required to deliver an irrigation system installation. |
| | People credited with this skill standard will be able to prepare an engineer's estimate, gather technical and legislative requirements, confirm project costs, and produce contract documentation. |
| | This standard provides a foundation for further training in irrigation project management, contract administration, and pre-construction coordination to ensure projects are compliant, financially scoped, and contract ready. |
| | This skill standard has been developed to align with the New Zealand Certificate in Irrigation System Design (Level 5). |

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

| Hua o te ako Learning outcomes | Paearu aromatawai Assessment criteria | | |
|--|--|--|--|
| Prepare an initial project estimate | Identify the main components and scope of the irrigation installation from the design brief. | | |
| | b. Develop a preliminary cost and timeline estimate based on project requirements. | | |
| | c. Justify estimate assumptions using historical data, supplier pricing, or construction knowledge. | | |
| Collate technical and compliance requirements as used in the design. | a. Gather and review all design documents, including specifications for pumps, pipes, controllers, and layout. | | |
| | b. Identify relevant legislation, codes of practice, consent conditions, and regulatory requirements. | | |
| | c. Confirm that all information is complete and suitable to support pricing and contract documentation. | | |

| Hua o te ako Learning outcomes | | Paearu aromatawai Assessment criteria | | |
|----------------------------------|--|--|---|--|
| 3. | Confirm supply and installation costs | Source and compar installation services | re quotes for materials and | |
| | | • • | ted costs for labour, , and risk contingencies. | |
| | | Validate cost break pricing and budgeting | downs to support contract ng decisions. | |
| 4. | Construct contract documentation for irrigation installation | | omplete scope of work for ng critical risks during the | |
| | | • | rms covering responsibilities, nes, pricing, and payment | |
| | | | , performance standards, and health and safety clauses | |

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria Assessment specifications:

Akōnga/learners must be collected from commercial irrigation systems, using naturally occurring evidence.

Activities can be assessed against existing, new or modified irrigation system – applicability.

The irrigation system is for an agricultural or horticultural property, sports turf surface, landscape, golf course, amenities and irrigated wastewater but are not limited to.

All activities and evidence must meet the requirements of worksite procedures, accepted industry practice and any subsequent amendments to legislation.

Evidence for all outcomes must be presented in accordance with; New Zealand Piped Irrigation Systems Design Code of Practice; and Irrigation; available from the Irrigation New Zealand website, http://irrigationnz.co.nz/ and any subsequent amendments.

Providers must give due consideration to embedding ngā kaupapa (principles) o Te Tiriti o Waitangi when designing delivery activities relevant to this standard. These principles are outlined in <u>Guidelines</u> for <u>Providers</u>: <u>Embedding Tirohanga Māori</u>.

Providers must give due consideration to the needs and values of Pacific peoples and other cultural groups when designing delivery activities relevant to this standard, ensuring practices are inclusive and equitable. This may include treating the Awa as a living entity, engaging with local iwi to understand cultural narratives relevant to the river's behaviour, and arranging a blessing before work commences.

Definitions:

Worksite procedures refer to documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

Initial Estimate

- Interpret design brief to calculate initial cost estimates
- Interpret design information to define installation scope.
- Use supplier data or historical pricing to estimate cost and duration.
- Document pricing assumptions, unit rates, and allowances.

Design and Compliance Requirements

- Review technical documents: pump curves, pipe sizes, controller specs, layout drawings.
- Identify relevant legislation: Resource Management Act, Building Act, Health and Safety at Work Act.
- Confirm consents, codes of practice (e.g. IrrigationNZ Design and Installation), and site-specific compliance needs.
- Check completeness and consistency of all pre-contract information.

Cost Confirmation

- Obtain supplier and contractor quotes for materials and labour.
- Compare costs across suppliers and validate against market rates.
- Identify delivery, installation, contingency, and subcontracting costs.
- Cross-check with the initial estimate and update as needed.

Contract Construction

- Develop clear scope of work including risks, responsibilities, tasks, and deliverables (e.g.; unforeseen site digging conditions).
- Draft contract terms covering payment structure, timeline, performance requirements, and health & safety.
- Include legal clauses: liability, dispute resolution, compliance references, and retentions.
- Prepare contract package ready for tender or signing.

Rauemi | Resources

Legislation relevant to this skill standard includes but is not limited to:

- Irrigation New Zealand website (codes of practice), http://irrigationnz.co.nz/
- Health and Safety at Work Act 2015 <u>Health and Safety at Work Act 2015 No 70 (as at 05 April 2025)</u>, Public Act Contents New Zealand Legislation
- Resource Management Act 1991 Resource Management Act 1991 No 69 (as at 05 April 2025),
 Public Act Contents New Zealand Legislation

- National Policy Statement for Freshwater Management 2014 <u>National Policy Statement for</u> Freshwater Management | Ministry for the Environment
- Public Works Act 1981 Public Works Act 1981 No 35 (as at 05 April 2025), Public Act Contents New Zealand Legislation
- Resource Management (National Environmental Standards for Freshwater) Regulations 2020
 <u>Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (LI 2020/174) (as at 01 January 2025) Contents New Zealand Legislation</u>
- National Environmental Monitoring Standards (NEMS) <u>National Environmental Monitoring</u> Standards » National Environmental Monitoring Standards (NEMS)
- Site specific water resource consent or water supply agreement, weather data Home | NIWA
- Descriptions and soil profile data sheets <u>S-Map Online | Manaaki Whenua Landcare Research</u> and any subsequent amendments or replacements.

Pārongo Whakaū Kounga | Quality assurance information

| Ngā rōpū whakatau-paerewa Standard Setting Body | Muka Tangata – People Food and Fibre Workforce Development Council | |
|--|---|--|
| Whakaritenga Rārangi Paetae Aromatawai DASS classification | Agriculture, Forestry and Fisheries > Water Industry > Irrigation | |
| Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR | 0052 | |

| Hātepe Process | Putanga Version | Rā whakaputa Review Date | Rā whakamutunga mō te aromatawai Last date for assessment |
|--|---|-------------------------------|--|
| Rēhitatanga Registration | <type here=""></type> | [dd mm yyyy] | [dd mm yyyy] |
| Kōrero whakakapinga Replacement information | This skill standard replaced Unit standard 28933. | | |
| Rā arotake Planned review date | 31 December 203 | 0 | |

Please contact Muka Tangata – People Food and Fibre Workforce Development Council at qualifications@mukatangata.nz to suggest changes to the content of this skill standard.