

**Field Planning and Construction****Review of *Surveying* unit standards**

<b>Subfield</b>	<b>Domain</b>	<b>ID</b>
Surveying	Survey - Land Administration and Applied Resource Management	8782, 8784, 8785, 23871
	Survey Practice	8800, 23880
	Geodetic Surveying	23859, 23860
	Geographic Information Systems and Cartography	23863
	Titles and Survey Compliance	23885
	Subdivisional Design	11152, 11153

The Infrastructure ITO has completed the review of the unit standards listed above and developed some new standards for the domains of Survey Practice and Subdivisional Design.

**Date new versions published**

**April 2016**

**Planned review date**

**December 2020**

**Summary**

The surveying unit standards were reviewed as part of the planned targeted review of qualifications process. The Governance Group and the Working Group for surveying conducted this review and it has followed the process of wider industry consultation with industry.

**Main changes**

- Standard 8800 had changes made to content.
- A new maths surveying principles standard has been developed at level 3 to provide progression to 8800, the level 4 maths standard.
- Outcomes have been re-arranged in standard 8782 for flow of assessment and the credit increased from 10 to 12.
- New outcome 7 added to 8784 and credit increased from 6 to 7.
- Evidence requirements and range have been updated in standard 23860 and credit increased from 4 to 5.
- Evidence requirements and range have been updated in standard 23863 and credit reduced from 9 to 6.
- Level of standard 23880 increased from 4 to 5.
- Title of standard 23885 has changed to reflect e-survey for a subdivision and content updated for alignment with new outcomes and credits increased from 12 to 15.
- New ER 2.2 added to 23859 and the credit increased from 4 to 5.
- Thirteen new standards have been written for the domains of Survey Practice and Subdivisional Design for assessment with the New Zealand Diploma in Surveying (Level 6) and the New Zealand Certificate in Surveying (Level 4).

## Category C unit standards will expire at the end of December 2017

### Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

#### Planning and Construction > Surveying > Geodetic Surveying

ID	Title	Level	Credit	Review Category
23859	Demonstrate knowledge of geodetic reference systems and describe the New Zealand geodetic datums	6	4 <b>5</b>	B
23860	Demonstrate knowledge of, and calculate on, map projections	6	4 <b>5</b>	B

#### Planning and Construction > Surveying > Geographic Information Systems and Cartography

ID	Title	Level	Credit	Review Category
23863	Demonstrate knowledge of spatial information systems	5	6	B

#### Planning and Construction > Surveying

ID	Domain	Title	Level	Credit	Review Category
11152	Subdivisional Design	Assess a site for subdivision and prepare the proposed plans and design report	6	15	C
23871	Survey - Land Administration and Applied Resource Management	Prepare and present a resource consent application in a surveying context	6	5	C
<b>29410</b>	<b>Subdivisional Design</b>	<b>Prepare subdivision plans and a resource consent application in a surveying context</b>	<b>6</b>	<b>20</b>	

#### Planning and Construction > Surveying > Subdivisional Design

ID	Title	Level	Credit	Review Category
11153	Design infrastructure and services for subdivisions	6	15	C
<b>29411</b>	<b>Design infrastructure and services for subdivision construction works approvals</b>	<b>6</b>	<b>20</b>	

Planning and Construction > Surveying > Survey – Land Administration and Applied Resource Management

ID	Title	Level	Credit	Review Category
8782	Demonstrate knowledge of land legislation and land development in New Zealand in a surveying context	5	12 <b>10</b>	B
8784	Demonstrate knowledge of the New Zealand surveying system	5	6 <b>7</b>	B
8785	Demonstrate knowledge of legislation as it relates to Maori land and survey practice	4	3	B

Planning and Construction > Surveying > Survey Practice

ID	Title	Level	Credit	Review Category
8800	Apply mathematics to surveying	4	15	B
23880	Explain and use the Global Positioning System (GPS) for survey practice	4 <b>5</b>	10	B
<b>29400</b>	<b>Demonstrate knowledge of the purpose and application of surveying</b>	<b>4</b>	<b>3</b>	<b>New</b>
<b>29401</b>	<b>Demonstrate knowledge of and apply safe work practices when undertaking survey operations</b>	<b>4</b>	<b>5</b>	<b>New</b>
<b>29402</b>	<b>Demonstrate knowledge of measurement in surveying</b>	<b>4</b>	<b>14</b>	<b>New</b>
<b>29403</b>	<b>Prepare for and undertake a topographical survey</b>	<b>5</b>	<b>10</b>	<b>New</b>
<b>29404</b>	<b>Demonstrate knowledge of surveying technology</b>	<b>4</b>	<b>5</b>	<b>New</b>
<b>29405</b>	<b>Prepare for and undertake a cadastral survey</b>	<b>6</b>	<b>20</b>	<b>New</b>
<b>29406</b>	<b>Set up, check calibration and maintain surveying equipment</b>	<b>4</b>	<b>12</b>	<b>New</b>
<b>29407</b>	<b>Prepare for and undertake an engineering survey</b>	<b>6</b>	<b>15</b>	<b>New</b>
<b>29408</b>	<b>Undertake survey measurement tasks and checks</b>	<b>4</b>	<b>30</b>	<b>New</b>
<b>29409</b>	<b>Demonstrate knowledge of height datums and global navigation satellite system for geodetic surveying</b>	<b>6</b>	<b>10</b>	<b>New</b>
<b>29412</b>	<b>Demonstrate knowledge of surveying mathematical principles</b>	<b>3</b>	<b>15</b>	<b>New</b>

## Planning and Construction &gt; Surveying &gt; Titles and Survey Compliance

<b>ID</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Review Category</b>
23885	Create digital cadastral datasets for submission as e-surveys <b>Create an e-survey for a subdivision</b>	5	12 15	B

<b>Key to review category</b>	
<b>A</b>	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
<b>B</b>	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
<b>C</b>	Major changes that necessitate the registration of a replacement standard with a new ID
<b>D</b>	Standard will expire and not be replaced