# **Standards for Integrating Cadastral Surveys**

# into the Cadastre 2018

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# 1. Title and Commencement

These Standards may be cited as the Standards for Integrating Cadastral Surveys into the Cadastre 2016, and they come into effect on 25 December 2016.

# 2. Definitions

Act	Cadastral Survey Act 2002
adjustment report	an output of prevalidation 'internal consistency', 'network', (Full SDC/Partial SDC), and 'underlying survey' adjustments
adopt	to incorporate into a cadastral survey information from a prior cadastral survey that has already been integrated into the cadastre or, in the absence of suitable cadastral survey information, from an estate record held by the tenure system manager. 'Adoption' and 'adopted' have corresponding meanings.
approved as to survey	the status of a cadastral survey which has been approved as being in terms of cadastral survey rules or regulations
approved parcel	a parcel on a cadastral survey which has been approved as to survey but not approved by the tenure system manager for the assignment of rights (such as a land transfer dataset not yet deposited by the Registrar-General of Land)
aspatial parcel	capture of parcel details where the parcel is not to be captured spatially and has not been depicted spatially in Landonline (ie parcels with no topology)
base land	as defined in s 5 of the Unit Titles Act 2010
boundary point	a uniquely identified point on a parcel boundary, whether marked or unmarked
C-rule	an automatic business rule run in Landonline to test the compliance of a cadastral survey. The rule is prefixed by the letter 'C' in the pre-validation report
cadastral survey dataset (CSD)	as defined in s 4 of the Cadastral Survey Act 2002
cadastral survey network mark	a survey mark of a class specified by the Surveyor-General as suitable for the connection of a cadastral survey to the national survey control network
capture	to populate relevant fields in Landonline
centreline easement	an easement which is spatially represented by one or more lines along its centre
Chief Executive	as defined in s 4 of the Cadastral Survey Act 2002

dataset type	a field used to indicate whether the cadastral survey contains non-boundary marks and related vectors
donut parcel	a parcel inside another parcel that is not connected by boundaries of the same topology
extinguished	for the purpose of this rules means the parcel action assigned in Landonline when an existing parcel is to be replaced by parcels created on the survey or surrendered
Landonline	the designated facility for receiving cadastral surveys
link	to associate captured mark information with the position of the same mark existing in Landonline
LINZ	Land Information New Zealand
live parcel	a parcel in a cadastral survey that has been approved by the tenure system manager (eg deposited) and recorded in the live layer in Landonline
lodged	the process of submitting a cadastral survey for approval as to survey. The terms 'lodge', 'lodgement', and 'lodging' have corresponding meanings
node	the coordinated spatial representation of the location of a survey mark or boundary point
non-primary parcel	<ul> <li>any parcel that is not a primary parcel and includes the following examples</li> <li>(a) an easement, including an esplanade strip or an access strip,</li> <li>(b) a covenant,</li> <li>(c) a lease or an area associated with a lease,</li> <li>(d) a licence or permit area,</li> <li>(e) a unit or common property for the purposes of the Unit Titles Act 2010,</li> <li>(f) a movable marginal strip, and</li> <li>(g) a roadway or a restricted roadway that is an encumbrance over a primary parcel</li> </ul>
non-primary graphic	either 'Lease', 'Easement', or 'Statutory Easement/Right', and which forms part of the Diagram of Survey and Diagram of Parcels
official geodetic datum	a geodetic datum approved by the Surveyor-General for use in a specific area and in force at the time of survey
official vertical datum	a vertical datum approved by the Surveyor-General and in force at the time of survey
parcel	an area or space that is a single contiguous portion of land separately identified in a cadastral survey or in the integrated cadastre

parcel intent	a description of a right or interest intended to be assigned to a parcel
permanent structure	a boundary related to a permanent structure
permanent structure boundary	a type of plan graphic for easements and leases defined by permanent structure boundary where the survey purpose is
plan graphic	a type of supporting document attached to a cadastral survey used to provide graphical information and which forms part of the Diagram of Survey or Diagram of Parcels
pre-validation report	a report containing results of the tests run on a cadastral survey by Landonline prior to lodgement of the cadastral survey
primary parcel	<ul> <li>any parcel that is intended to be:</li> <li>(a) owned by the Crown, with the exception of a movable marginal strip,</li> <li>(b) held in fee simple</li> <li>(c) Māori freehold or customary land</li> <li>(d) part of the common marine and coastal area</li> <li>(e) the bed of a lake or river</li> <li>(f) road or railway, or</li> <li>(g) vested in a local authority</li> </ul>
reinstated	means a new boundary mark that has been placed in the position of a previous boundary mark that has not been found
renewed	means a new survey mark has been placed in the same position as an old survey mark that has been found
Rules	Rules for Cadastral Survey 2016
stratum boundary	a boundary, not being a permanent structure boundary, that defines the upper or lower extent of a parcel
survey mark	as defined in section 4 of the Cadastral Survey Act 2002
survey data graphic	a type of plan graphic containing survey data and which forms part of the Diagram of Survey
survey purpose	a field used to indicate the relevant tenure system and the most appropriate purpose available in the supplied list
tenure system manager	an agency or officer responsible under any enactment for a system that provides for the creation and transfer of interests in land
topology class	class assigned to a parcel in Landonline to indicate what topological rules apply
unit	as defined in s 5 of the Unit Titles Act 2010
vector	the bearing and distance between two survey marks or points

vertical control mark

a survey mark in the national survey control system and being a class of mark specified by the Surveyor-General as suitable for the vertical control of cadastral surveys

# 3. Orientation

- (a) Every bearing in a cadastral survey that defines or marks a new primary parcel boundary point must be oriented in terms of an official geodetic datum applicable to the area unless
  - (1) the survey does not make a new field measurement, or
  - (2) if the survey is a monumentation survey
- (b) Where a new covenant parcel is being defined
  - (1) every bearing, other than an existing magnetic bearing, must be oriented in terms of the official geodetic datum applicable to the area
  - (2) at least one cadastral survey network mark must be connected by vectors to the survey
- (c) Where a new non-primary parcel is being created and the underlying primary parcel is not created by the survey
  - (1) every bearing, other than an existing magnetic bearing, must be oriented in terms of the official geodetic datum applicable to the area
  - (2) at least one cadastral survey network mark must be connected by vectors to the survey

#### 4. Network connection

- (a) At least one cadastral survey network mark must be connected by vectors to the survey when any new boundary point, new boundary mark, or old boundary mark on a primary parcel being created is within
  - (1) 500 m of a cadastral survey network mark for class A
  - (2) 1000 m of a cadastral survey network mark for class B
  - (3) 2000 m of a cadastral survey network mark for class C
- (b) At least one vertical control mark must be connected to the survey when any boundary point is defined by the use of a reduced level within
  - (1) 200 m of any vertical control mark for class A
  - (2) 500 m of any vertical control mark for class B

# 5. Parcels

- (a) A new primary parcel must be
  - (1) at least 0.10 m wide at its maximum width where its boundaries are class A, or
  - (2) at least 0.20 m wide at its maximum width for other boundary classes, unless
  - (3) it is a balance parcel

## 6. Cadastral survey information

#### 6.1. <u>General</u>

(a) All cadastral surveys lodged with the Chief Executive for approval as to survey must be integrated into the cadastre using the Landonline interface, unless the Chief Executive grants an exemption, or specifies alternative requirements

# 6.2 Manage survey

(a)

# 6.3 Territorial authority

(a) The name of the territorial authority in which the cadastral survey is undertaken must be entered in the appropriate field

# 6.4 Capture

6.4.1 Spatial view

#### 6.4.2 Survey reference

(a) The survey reference number must be placed on the spatial window to allow easy identification of the survey location

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## 6.4.3 Header

- (a) The following information must be captured in the header window
  - (1) dataset description, which includes
    - (a) parcel appellations for all new primary parcels
    - (b) the survey purpose for land transfer cadastral surveys, and
    - (c) the legal description of the land under survey for land transfer cadastral surveys ORPORP
  - (2) survey purpose
  - (3) survey type
  - (4) the current estate record references for the land under survey must be captured in the 'Comprised In' field.

#### 6.4.4 Mark

(a) All survey marks and boundary points required by the RCS 2016 to be included in the cadastral survey must be captured, other marks or point must not be captured

## 6.4.5 Vector

- (a) With the exception of a Monumentation, Unit Titles, or Cross-lease survey, the following vector information must be captured
  - (1) all vectors and arcs required by the RCS 2016 to be included in the cadastral survey
  - (2) except for class D, a minimum of two vectors for each boundary point and each new survey mark

- (3) the source cadastral survey number for each adopted vector, distance, bearing, and arc
- (4) information identifying whether every bearing, distance, and arc included in the diagram of survey and diagram of parcels have been calculated, measured, or adopted
- (5) any bearing adjustments applied to each cadastral survey from which bearing was adopted in the cadastral survey
- (6) the accuracy class of each boundary
- (7) the source cadastral survey type and number for each adopted permanent structure boundary, adopted water boundary, and adopted irregular boundary
- (8) for all measured vectors in the cadastral survey, the type of equipment used to measure the vector or components of a vector
- (9) where known, the type of equipment used to measure adopted vectors or components of an adopted vector
- (b) For a Monumentation survey, survey marks required to be captured must be connected by vector
- (c) For a Unit Titles or Cross-lease survey which
  - (1) includes a survey sheet, all non-boundary vectors and associated survey marks must be captured
  - (2) is defining a non-primary parcel over the base land or other land which is not a right under the Unit Titles Act 2010 or a right associated with a company or cross-lease, that right must be captured

#### 6.4.6 Irregular



# 6.4.7 <u>Parcel</u>

- (a) For each new parcel, the parcel reference, intent, topology, and area if applicable must be captured
- (b) When creating a new primary parcel, the existing live primary parcel that is being replaced must be extinguished
- (c) When creating a new unit parcel, the existing live unit parcel that is being replaced must be extinguished
- (d) When a new primary parcel is being created over an approved primary parcel, the approved primary parcel must be extinguished rather than the existing live parcel, unless the cadastral survey showing the approved parcels will not deposit as a land transfer survey
- (e) When recreating existing non-primary parcels and/or centreline easements that are to be retained, the existing live non-primary parcels and/or centreline easements that have been defined spatially must be extinguished, unless a new non-primary parcel is being created over an approved non-primary parcel, when the approved non-primary parcel must be extinguished, rather than the existing live non-primary parcel

- (f) When surrendering non-primary parcels and/or centreline easements, the existing live non-primary parcels and/or centreline easements that have been defined spatially must be extinguished
- (g) Existing parcels for flats or exclusive use areas being redeveloped must be extinguished if they exist in Landonline
- (h) Any existing donut parcels must be extinguished and recreated using their existing appellation and parcel intent
- (i) All new primary parcels required by the RCS 2016 to be depicted on the Diagram of Parcels must be captured
- (j) Balance parcels as defined in the RCS 2016 must be captured
- (k) All new and subject non-primary parcels and centreline easements required by the RCS 2016 to be depicted on the Diagram Parcels, must be captured
- (I) Strata parcels
  - (1) parcels created substantially at ground level must be captured with a topology class of 'primary'
  - (2) a parcel created immediately either above or below the parcel substantially at ground level must be captured with a parcel intent and topology class of 'strata', and
  - (3) all other strata parcels must be captured as aspatial parcels and defined on a plan graphic
- (m) Non-primary strata parcels
  - (1) parcels created substantially at ground level must be captured with a topology class of 'secondary'
  - (2) a parcel created immediately either above or below the parcel substantially at ground level must be captured with a parcel intent and topology class of 'tertiary'
  - (3) all other strata parcels must be captured as aspatial parcels and defined on a plan graphic
- (n) Parcels must be captured as aspatial parcels and defined on a plan graphic where the parcel is defining a right
  - (1) under the Unit Titles Act 2010, or
  - (2) when associated with a company or cross-lease
- (o) parcels must be captured as aspatial parcels and defined on a permanent structure boundary non-primary graphic
  - (1) when a permanent structure boundary is used to define, or partly define, an easement or lease parcel, and
  - (2) the survey purpose is 'Lease' or 'Easement' or 'Statutory Easement/Right'
- (p) Where a non-primary parcel is to be partially surrendered, the part to be surrendered and the part to remain must be captured
- (q) If the non-primary parcel to be partially surrendered is not over a new primary parcel being created, only the portion being surrendered must be captured

#### 6.4.8 <u>Linking</u>

- (a) Captured existing survey marks and boundary points must be linked to the corresponding nodes already recorded in Landonline
- (b) A cadastral survey with the survey purpose of Monumentation survey must have a minimum of two captured marks linked to existing nodes

# 6.4.9 Registers

## 6.5 Diagrams

(a) Unless permitted by the capture standards, the diagram generation functionality of Landonline must be used to prepare the Diagram of Survey and Diagram of Parcels

# 6.6 Supporting information

# 6.7 Prevalidation

(a) The integration report must include an assessment of the actions taken to address

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- (1) C-rule conflicts and warning messages, and
- (2) all adjustment report test failures and warning messages

# 7. Cadastral survey related information

# 7.1 <u>General</u>

## 7.2 Land transfer subdivision

7.2.1 Section 223 RMA 1991

## 7.2.2 Section 224(c) RMA 1991

#### 7.2.3 Request for title

## 7.2.4 Supporting information

#### 7.3 Crown subdivisions

(a) A cadastral survey with survey purpose of 'Crown subdivision' that does not require a s 223 Resource Management Act 1991 certification, must include an explanation as to why that certification is not required

## 7.4 Supporting documents

# 8. Integration report

- (a) An integration report must contain the following:
  - (1) the unique cadastral survey reference to which the integration report relates
  - (2) how the orientation was obtained
  - (3) how the cadastral survey is connected to the cadastral survey network
  - (4) comment on the cadastral survey information provided for integration
  - (5) comment on the cadastral survey related information provided for integration
  - (6) comment on the supporting documents provided for integration purposes
  - (7) comment on the landonline pre-validation report
- (b) Where any of the information required in the integration report is not included in the integration report, the report must state

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- (1) where that information is located, or
- (2) that the requirement for that information does not apply

# 9. Revocation and Savings