

Association of British Columbia Land Surveyors

# Survey and Plan Rules

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# INTRODUCTION

The Rules in this document complement requirements contained in the Director of Land Titles Electronic Land Title Plan Requirements, Surveyor General requirements, expressed through CircularLetters and Bulletins, as well as requirements contained in statutes and associated regulations.

# I-1 Definitions

- "absolute accuracy" means the horizontal accuracy of coordinates for a point with respect to the datum required by the Surveyor General at a 95% confidence level and is the degree of conformity of a measured or calculated position to its true (actual) position.
- "active control point" means a *GNSS* base station that forms part of either the B.C. Active Control System or the Canadian Active Control System.
- "Association" means the Association of British Columbia Land Surveyors, as defined in the Land Surveyors Act.
- "average combined factor" means the arithmetic product of the average *elevation scale factor* and the average *UTM* point scale factor for the extent of the area that is being surveyed.
- "British Columbia Geo-Spatial Reference" means the horizontal and vertical datums, specified by the Surveyor General for use in legal surveys.
- "combined factor" means the arithmetic product of the *elevation scale factor* and the *UTM* point scale factor for a given point.
- "control monument" means a coordinate control monument as defined in *Section 11* of the *Land Survey Act.*
- "covenant" means a covenant under Section 219 or a restrictive covenant under section 221 of the Land Title Act.
- "**Director**" means the Director of Land Titles appointed under *Section 9* of the *Land Title Act* and a Registrar instructed under *Section 10* of the *Land Title Act* to perform the duties and exercise the powers of the Director.
- "disturbed" means, with respect to a monument, moved from its original position.
- "electronic plan" means a survey plan, prepared and certified for submission to the Land Title and Survey Authority of BC in the form prescribed by the Director or the Surveyor General, as applicable.
- "elevation scale factor" means the radius of the earth, as defined by the datum specified by the Surveyor General for use in legal surveys, divided by the sum of the radius of the earth and an appropriate ellipsoidal elevation.
- "forest service road" means a forest service road as defined in Section 1 of the Forest Act.
- "geodetic control monument" means a control monument approved by the Surveyor General and officially published on the MASCOT geodetic control database or any other geodetic control monument that has been so approved.
- "to georeference" means the determination of the horizontal coordinates for a point with respect to the adopted *British Columbia Geo-Spatial Reference*.
- "GNSS" means the Global Navigation Satellite System and refers collectively to the worldwide civil positioning, navigation, and timing capabilities available from one or more satellite systems, such as the United States' Global Positioning System (GPS), the Russian Federation's GLONASS and the European Union's Galileo systems.
- "grid bearings" means full circle bearings referred to the central meridian of the UTM zone to which the survey is referenced.
- "hardcopy plan" means a survey plan prepared and certified on mylar for submission to the Land Title and Survey Authority of BC (see Rule I-4).

"highway" means a highway as defined in Section 1 of the Transportation Act.

- "intended plot size" means the intended physical plan dimensions, including margins outside the border, when reproduced in hard copy form without enlargement or reduction.
- "land surveyor" means a practising land surveyor under the Land Surveyors Act.
- "legal survey" means a survey that establishes or re-establishes boundaries to be shown on a plan tendered for deposit into the land title register or filing into the Crown land registry.
- "LTSA" means the Land Title and Survey Authority of BC.
- "lost" means, with respect to a monument, that the position of the monument must be re-established, and can be re-established only by measurements from some other monument or monuments to which the lost monument was previously connected by survey.
- "NAD83(CSRS) [Version]" means North American Datum 1983 (Canadian Spatial Reference System) and is the adopted version of the provincial horizontal datum specific to a particular region of the province [eg. 4.0.0.BC.1.GVRD or 2002.0], as specified by the Surveyor General.
- "obliterated" means, with respect to a monument, that the monument is no longer observable but can be restored with confidence from traces remaining on the ground of the original monument or from other physical evidence of the position of the original monument.
- "original monument" has the same meaning as in Section 11 of the Land Survey Act.
- "parcel" has the same meaning as in Section 1 of the *Land Title Act* and includes an area of land defined under the *Land Act*.
- "partial survey" means a survey that is completed in part by a field survey and in part by using the records from an existing survey plan or field notes.
- "passive control point" means a geodetic control monument not used as an active control point.
- "PDF" means the Adobe Portable Document Format standard.
- "plan image" means an electronic file prepared by a land surveyor containing a graphical representation of the details of a survey.
- "post" means a post described in *Rules 1-2 to 1-7*.
- "primary parcel" means the first parcel created, which generally is a district lot or section.
- "public road" means a public road as defined in Section 1 of the Land Act.
- "re-establish" means, with respect to a monument, to determine the position of a lost or disturbed monument.
- "Real Time Network (RTN)" means a network of active control point stations continuously tracking satellites; the stations relay signals to a central server, which manages and delivers real time correction data to subscribers.
- "reference post" means a reference post described in *Rule 1-9*.
- "Registrar" means a Registrar appointed under Section 9 of the Land Title Act and includes a deputy registrar or acting registrar.
- **"relative accuracy"** means the horizontal accuracy between any two points on the survey where those points define or control the position of a boundary included as part of the survey and is the degree of conformity of a measured or calculated position of a point relative to other points.
- **"restore"** means to refurbish an obliterated monument to its original or near original condition. It includes straightening the monument, and replacing the original monument with a similar monument.

"rule" means a rule contained within this document.

"surveyed boundary" means a boundary, of any parcel or interest area established or defined by a legal survey and whose endpoints have been marked by survey monuments or witness posts, whether the boundary has been physically run or not. For clarity, a quarter section line that is monumented at the quarter points on either side of the section is considered to be a surveyed boundary, even if the center of the section has not been monumented.

"theoretical division" means the division of a primary parcel into quarters, legal subdivisions or other aliquot parts, where the dividing boundaries are unsurveyed boundaries and where no registered titles to the divisions exist.

"unsurveyed boundary" means a boundary, of any parcel or interest area, whose endpoints have not been marked by survey monuments or witness posts.

"UTM" means Universal Transverse Mercator.

# I-2 Duties of a British Columbia land surveyor

A land surveyor must:

- (1) Provide direct supervision for all surveys and the appropriate level of on-site supervision.
- (2) Ensure that the spirit and intent of all acts pertaining to land surveying and any regulations made under those acts are reflected in the survey.
- (3) Approach their work with a judicial mind and be bound by their oath, Association Bylaws and the Code of Ethics to carry out their duties with impartiality.
- (4) Assess all relevant documentary evidence for the land under survey and for adjoining lands.
- (5) Ensure that a legal survey he or she performs, including the plans associated with it that he or she prepares, conforms to these rules.
- (6) Except in the case of an explanatory plan, carry out a thorough field investigation for the best available evidence of all boundaries and corners of the land under survey and give appropriate consideration to that evidence in accordance with common law and statute law.
- (7) Prepare a legal survey plan so that it can stand on its own without the need to obtain evidence from other sources.
- (8) Certify the correctness of the survey and plan by personally affixing his or her signature into the electronic plan.

### I-3 Exemptions to these rules

- (1) The Association may grant an exemption to these rules in the manner prescribed by policy.
- (2) The Surveyor General may issue instructions that differ from these rules, where:
  - a) Land is being surveyed for First Nation treaty related purposes;
  - b) Crown land is being surveyed under the Land Act for land exchange purposes;
  - c) Private land is being surveyed by the Province for the purpose of acquiring the land for park use, wildlife management, or purposes related to environmental conservation and protection; or
  - d) In special circumstances that require the special expertise offered through the Surveyor General's office.

### I-4 Interpretation of plan requirements for hardcopy plans

The General Survey Instruction Rules version 3.11, dated July 15, 2016 shall apply to all hardcopy plans, where either the Surveyor General or the Registrar has granted the land surveyor permission to provide a hardcopy plan.

# PART 1 — PERMANENT SURVEY MONUMENTS, ANCILLARY MONUMENTATION AND BOUNDARY MARKING

# **Division 1: Monuments**

### 1-1 Permanent survey monument

Subject to these rules, a permanent survey monument must consist of a standard post of a type referred to in Rules 1-2 to 1-7, together with a reference post of a type referred to in *Rule 1-9* and, where required, bearing trees and/or a stone mound.

### 1-2 Type 1 post

- (1) A type 1 post, to be known as the standard concrete post, must consist of a type 2 or type 4 post set in the centre of and flush with the top of a concrete base.
- (2) The concrete must be poured directly into a shaped hole, with the base wider than the top, using a form for not less than the top 20 cm. The concrete must be 75 cm deep and the top must not be less than 30 cm along any side. A concrete cylinder that is not less than 75 cm deep and 30 cm in diameter may be used in place of a shaped hole.
- (3) Not more than 15 cm of the standard concrete post may project above ground level.

### 1-3 Type 2 post

- (1) A type 2 post, to be known as the standard rock post, must consist of a bronze post cap that is approximately 7.5 cm in diameter and is cast as a single unit with a shank that is approximately 6.5 cm long.
- (2) A rock post must be securely set into a hole that is drilled in rock or concrete to the full depth of the shank.

# 1-4 Type 3 post

- (1) A type 3 post, to be known as the lead plug, must consist of lead firmly set into and flush with the top of a hole that is drilled in rock or concrete. The hole must have a minimum diameter of 12mm and a minimum depth of 30mm.
- (2) The top of the lead plug must be either round or square and have a minimum diameter or face of 20mm if practicable. A copper or brass tack or screw, must be set in the top of the lead plug to indicate its precise position.
- (3) When a magnet is placed in the hole that is drilled for the lead plug, the plan must include a notation such as "LP with Magnet".

### 1-5 Type 4 post

- A type 4 post, to be known as the standard capped post, must consist of a bronze post cap that is approximately 7.5 cm in diameter fitted on a pointed length of steel reinforcing bar that is not less than 15 mm in diameter and not less than 75 cm in length.
- (2) In loose ground where the land surveyor considers that additional stability is required, a steel anchor plate must be fitted to the post near the bottom of the steel bar and the post must be dug into the ground.

### 1-6 Type 5 post

(1) A type 5 post, to be known as the standard iron post, must consist of a galvanized square iron bar that is not less than 1.2 cm across any face nor less than 75 cm long and that has, before galvanizing, been marked near the top with the initials "BCLS".

(2) A standard iron post must be driven firmly into the ground with not more than 5 cm protruding above ground level.

# 1-7 Alternate type 5 post

- (1) An alternate type 5 post, to be known as the short iron post, must consist of a standard iron post, cut to not less than 10 cm long, set in a hole drilled in concrete or rock and, where required, secured with lead, grout or other equivalent compound.
- (2) The drill hole referred to in Rule 1-7(1) must be at least 7 cm deep and the post must not extend more than 5 cm above ground level.

# Division 2: Orientation and Marking of Types 1, 2 and 4 Posts

# 1-8 Post orientation, centering and marking

- (1) Posts of types 1, 2 or 4 must be set with the crown on the cap facing north, and with the centre of the cap, as nearly as possible, at its precise position.
- (2) The precise position of the corner or witness location must be marked by a small hole that is punched or drilled in the cap.
- (3) The land surveyor must indicate diagrammatically on the cap the directions of the boundary lines, and the designations of the district lots, sections, *Land Act* blocks or quarter sections adjoining the corner, together with the year in which the post was set and the land surveyor's commission number.
- (4) Parcel designations under the *Land Title Act*, other than for roads, railways or rights-of-way, must not be indicated on the cap.
- (5) If a post is set as a witness post, the post cap must be marked in accordance with Rule 1-8(3) and with the letters "WT" and the distance and direction to the corner witnessed.
- (6) Posts of type 1, 2 or 4 must contain the words "BRITISH COLUMBIA LEGAL SURVEY".

# **Division 3: Ancillary Monumentation and Boundary Marking**

### 1-9 Reference marker

- (1) A triangular wood reference marker or a metal reference marker must accompany every post set on a survey and each post found on a survey that forms part of the boundary of that survey. Where it is impractical to set a reference marker, such as in a farm field or when a post is buried, a note should be placed on the plan indicating that no reference marker was set.
- (2) Where a reference marker is set to mark a post that witnesses a true corner, it must be marked with "WT" and the distance from the post to the true corner.
- (3) Triangular wood reference markers must comply with the following:
  - (a) measure not less than 8 cm on one face and 5 cm on each of the other faces;
  - (b) if milled, be chamfered at the top and painted white;
  - (c) if hand hewn, be pointed at the top to shed water;
  - (d) if referencing a post of type 1, 2 or 4, be at least 1 m high where the post marks a district lot corner, *Land Act* block corner, section corner, centre post or a quarter post and, in every other case, be at least 30 cm high, with all markers marked with "MON" on the side facing the post;

- (e) if referencing a post of type 3 or 5, be at least 30 cm high, and be marked with LP or IP, as applicable, on the side facing the post and with adjacent parcel designations carved or painted on appropriate faces.
- (4) A metal reference marker must consist of an aluminum plate approximately 10 cm by 20 cm, marked "Legal Survey Post Do Not Disturb" or similar, bolted to a galvanized angle iron which, if referencing a post of type 1, 2 or 4 at a district lot corner, *Land Act* block corner, section corner, centre post or quarter post, must stand not less than 1 m high and, in every other case, must stand not less than 30 cm high.

# 1-10 Bearing tree

- (1) A bearing tree must be made and recorded in the field as follows:
  - (a) each bearing tree must be blazed and carved with the letters "BT" and the distance to the post, which must be measured from the blaze to a point 1 m vertically above the post;
  - (b) the bearing and distance from the post to the blaze, along with the diameter and species of the tree must be recorded.
- (2) Where bearing trees are found or made, the plan must show the bearing and distance from the post to the blaze, along with the diameter and species of the tree. It must be noted on the plan whether the bearings are magnetic or on the same origin as the survey.

# 1-11 Stone mound

A stone mound is made by surrounding the post with a substantial circle of rocks: where a stone mound is found or built this must be recorded and shown on the plan as a stone mound.

# 1-12 Tripod

A substantial tripod consisting of 3 uprights and 3 cross braces.

# 1-13 Boundary Marker

An aluminum plate bolted to a galvanized angle iron may be set along boundary lines as follows:

- (1) The aluminum plate must be approximately 10 cm by 20 cm and be marked with "Boundary Marker";
- (2) The galvanized angle iron must be a minimum of 1 metre in length driven securely into the ground and be heavily flagged;
- (3) The boundary marker must be placed using methods that will ensure that the marker will be within 20 cm of the true boundary line; and
- (4) The location of each boundary marker is to be shown on the survey plan with its corresponding distance along the boundary to the nearest 20 cm.

# 1-14 Boundary Blazing

- (1) Trees within 2 metres of the boundary must be blazed with 2 readily distinguishable marks, which quarter toward the boundary or if on the boundary line be blazed with 3 notches on each side of the tree in the direction of the boundary;
- (2) The size and type of all boundary line trees and their distance from the last post to the centre of the tree, to the nearest 20cm, must be shown on the plan.

# PART 2 — GENERAL SURVEY REQUIREMENTS

Part 2 of these Rules must be adhered to for all legal surveys. Additional survey requirements are included in

Parts 4 to 10, inclusive and must be adhered to for legal surveys under those Parts.

### 2-1 Relative and Absolute Survey Accuracy Standards

- The minimum relative accuracy for surveys conducted by a land surveyor, including ties to control monuments and points used for bearing derivations, must be ± 0.02 metres plus 80 parts per million (ppm) at a 95% confidence level.
- (2) The absolute accuracy of all georeferenced points within the survey must be 0.20 metres or better at a 95% confidence level. The method of deriving the absolute accuracy for the georeferenced points must be rigorous and verifiable.

# 2-2 Georeferencing

All surveys must have at least two points georeferenced, referred to a framework (datum) required by the Surveyor General.

# 2-3 Integrated Survey Areas

- (1) Surveys within, or partially within, integrated survey areas must be tied to the nearest two accessible, undisturbed control monuments.
- (2) If a coordinate control monument is damaged or destroyed, the land surveyor must promptly report the matter in the manner required by the Surveyor General.

# 2-4 Measuring systems

- (1) Measuring equipment must be kept in proper adjustment and standardized to ensure the equipment is operating to the manufacturer's specifications.
- (2) The land surveyor must keep standardization records for their survey equipment and systems and be prepared to verify the accuracy of the measuring systems used for any survey project.
- (3) If the measuring equipment is unsuited to a standardization process, the land surveyor must employ and document regular quality assurance methodology.

# 2-5 Conduct of surveys

Surveys must be conducted using methods and sufficient redundant measurements that result in the minimum survey accuracy standards identified in Rule 2-1 being achieved or exceeded.

### 2-6 Survey measurements and adjustments

- (1) A land surveyor must directly assess and manage the method in which the survey measurements are conducted, processed and adjusted.
- (2) Survey measurement blunders must be detected and eliminated and all known systematic errors must be identified and corrected before adjustment.
- (3) Survey measurements must be adjusted to distribute random errors.

# 2-7 Bearings

- (1) Bearings shall be grid bearings referred to the central meridian of the UTM zone to which the survey is referenced.
- (2) The bearing derivation must be accurate to 1 minute of arc or better at a 95% confidence level.

- (3) Grid bearings may be derived from an adjacent survey, where that adjacent survey conforms to Rule 2-7(1) and (2).
- (4) Where a linear survey extends more than one kilometre from the bearing derivation vector, additional bearing derivation vectors or other checks are required along the length of the survey to confirm the possible rotation of bearings does not exceed fifteen (15) seconds of arc for every kilometre of the extent of the survey.

### 2-8 Re-establishing boundaries

- (1) The land surveyor must retrace the boundaries of the parcel, within which they are surveying, to determine the actual position of the parcels being created with respect to those boundaries.
- (2) Subject to Rule 2-8(6), where the survey being conducted intersects a surveyed boundary, evidence at both ends of that boundary must be tied. Where evidence at both ends of the boundary cannot be located, sufficient additional evidence must be tied to re-establish that boundary.
- (3) Where the survey being conducted intersects an unsurveyed boundary, sufficient evidence must be tied to re-establish that boundary.
- (4) If evidence of the boundaries has been lost, all evidence adjacent to the survey must be tied and considered in the determination of boundaries.
- (5) The position of all boundaries must be re-established in accordance with common law, the hierarchy of evidence, the Land Survey Act, other appropriate land surveying statutes and the Survey and Plan Rules.
- (6) Where the survey being conducted intersects a district lot, section or quarter section boundary that no longer forms a parcel boundary due to subdivisions, the intersected boundary does not need to be re-established.

### 2-9 Natural boundaries

- (1) The position of natural boundaries may be determined by any survey method that yields an accuracy of 0.5 metres or better.
- (2) All natural boundaries must be tied, in accordance with Rule 2-9(1), where a boundary being surveyed crosses or adjoins that natural boundary.
- (3) Ties to the natural boundary must be made at intervals sufficiently close to permit the accurate representation of the natural boundary on the plan image and the computation of areas to the required standard.

### 2-10 Setting of posts

- (1) Posts of type 1, 2, 3, 4 or 5 must be set at all corners under survey except as noted below where specific posting requirements must be met:
  - (a) Posts of type 1, 2 or 4 must be set at all corners of a district lot, section, centre post or quarter post, where the corner is being set for the first time.
  - (b) Posts of type 1, 2 or 4 must be set at all corners of a district lot, section, centre post or quarter post that is tied to in the course of a survey and is not found to be monumented with a type 1, 2 or 4 post. An old style Dominion iron post does not need to be replaced with a monument of type 1, 2 or 4.
  - (c) If it is impossible to place a post at the true corner, or a post set on the true corner is likely to be destroyed and a more durable definition of the corner would result, one witness post of the type which would be required at the true corner must be planted

at the nearest suitable location, preferably on a boundary of the parcel or production thereof.

- (d) If a witness post cannot be placed within 20 m of the true corner, posts of the type that would be required at the true corner must be set on each boundary radiating from the witnessed corner and, in this case, the posts set are line posts and must not be marked as witness posts.
- (e) Posts set on a boundary a short distance above and referencing the natural boundary are line posts and must not be marked as witness posts.
- (2) If evidence of an original district lot corner, section corner, centre post or quarter post is not found, the position of the original post must be re-established from other evidence in accordance with the *Land Survey Act* and posted with a post of type 1, 2 or 4.
- (3) If an angle or corner of a parcel under survey is marked by a wooden post that was set during an earlier survey, that post must be replaced or witnessed with a post of type 1, 2, 3, 4 or 5.
- (4) If a district lot corner, section corner, centre post or quarter post is situated within a road, it must be witnessed by a post of type 1, 2 or 4 set in a suitable position.
- (5) If a theoretical division is not shown on the official plan, the theoretical division must not be posted. The Surveyor General may be contacted when a land surveyor is working within a theoretical division of a township or district lot to determine if it is necessary to retain the section, quarter section or legal subdivision survey fabric.
- (6) If a new parcel boundary exceeds 1200 m in length, posts, of the same type as set at the corners of the parcel, must be set on the boundary line at intervals not exceeding 800 m and preferably as near as possible to being evenly spaced along the boundary.

### 2-11 Posting Intersections with rights of way, easements and covenants

- (1) If a new parcel under survey, other than an air space parcel intersects a surveyed right of way, easement or covenant area that:
  - (a) exceeds 6.5 m in width; and
  - (b) is registered as a charge on the parcel under survey or if there is a reasonable expectation of a charge being placed on the title of the new parcel under survey,

posting of the points of intersection with the right of way, easement or covenant is required.

(2) The intersections of boundaries of the parcel under survey with boundaries of surveyed rights of way must be posted in the same manner (one boundary or both boundaries) as the intersected right-of-way is posted.

#### 2-12 References to corner posts

At least 3 bearing trees, where available, are required for any new type 1, 2 or 4 posts where that parcel is greater than 4 hectares, except where the land surveyor can demonstrate that the making of bearing trees would be environmentally or aesthetically unacceptable.

# PART 3 — GENERAL PLAN REQUIREMENTS

# Part 3 of these Rules must be adhered to for all legal surveys. Additional plan requirements are included in Parts 4 to 10, inclusive and must be adhered to for legal surveys under those Parts.

# 3-1 Plan image and plot size

- (1) Plan images must be in the form, contain the information and be completed in the manner established by the Director or Surveyor General.
- (2) The intended plot size of all plans must be:

A size – 216 mm by 280 mm B size – 280 mm by 432 mm C size – 432 mm by 560 mm D size – 560 mm by 864 mm E size – 864 mm by 1120 mm

- (3) Where the intended plot size does not fit the standards set in Rule 3-1(2), the intended plot size must not exceed 4 metres in length and 0.75 metres in width.
- (4) Multi sheet plan images shall be subject to Rule 3-1(2) and all sheets shall use the same sheet size and have the same sheet orientation (all landscape or all portrait). Permission for the use of multi sheet plan images for any plans, other than *Strata Property Act* plans, must be obtained from the Registrar, for plans to be filed in the land title register, or the Surveyor General, for plans to be filed in the Crown land registry.

# 3-2 Plan basics

- (1) All information must be depicted in black on a white background and all words and numbers must be in print font (stylized or ornate fonts are not acceptable).
- (2) Lettering on plan images must not be less than 2.0 mm in height at the intended plot size.
- (3) The plan image must have a border of solid straight lines with a margin not to exceed 2 centimetres from the edge of the image at the intended plot size.
- (4) The top of the plan image must, if practical, be north and lettering must be so arranged that it may be easily read from left to right when viewing the plan image.
- (5) The plan image must have a north arrow. Enlargements should be on the same orientation as the main body of the plan, however, where this is not practical that enlargement must have a north arrow.
- (6) The plan image must have the British Columbia Geographic System designation or designations shown immediately below the title using the 6 minute latitude by 12 minute longitude breakdown.
- (7) With the exception of plans prepared under Part 10, plans must have a rectangle that has an area of not less than 70 cm<sup>2</sup> at the intended plot size, in the top right corner of the plan, which will contain the plan number required under *Rule 3-3* with the remaining area left blank for the use of the Registrar or Surveyor General.
- (8) Information not directly related to the survey or required by these Rules or the requirements of the LTSA must not be shown on the plan image, however, the name and address of the land surveyor's firm along with the land surveyor's file number may be appended.
- (9) The plan image must contain no signatures. Any signatures that may be required must be obtained in a form and manner prescribed by the Director for plans filed in the land title register or the Surveyor General for plans filed in the Crown land registry.

# 3-3 Plan number

- (1) The pre-assigned plan number must be prominently displayed in the top right corner of the plan image, immediately below the top margin as follows:
  - (a) For all plans except those specified in (b) and (c) of this rule:

Plan [plan number].

(b) For Strata Property Act plans:

Sheet [pertinent sheet] of [total sheet number] sheets

Strata Plan [plan number] Phase [phase number] (where applicable).

(c) For Air Space plans:

Air Space Plan [plan number].

(2) Rule 3-3(1) does not apply to plans submitted under Section 25 of the *Oil and Gas Activities Act General Regulation*.

### 3-4 Scale

- (1) The scale of the plan image must be 1:[a whole integer] being a multiple of 25.
- (2) The smallest scale and sheet size must be used that will permit all required detail and information to be shown on the plan without congestion at the intended plot size. Enlargements of certain areas may be used to achieve clarity for plan images created at a smaller scale.
- (3) The inserted enlargements referred to in Rule 3-4(2) must conform to a scale required by Rule 3-4(1) except if impractical, in which case the enlargement may be prepared at no specific scale.
- (4) The plan image must contain a bar scale and the following notation:

The intended plot size of this plan is \_\_mm in width by \_\_mm in height (insert sheet size e.g. D size) when plotted at a scale of 1:\_\_.

(a) enlargements shall contain a bar scale and the following notation:

Scale of enlargement is 1 \_\_\_\_\_ at intended plot size of plan

(b) enlargements that are exaggerated for clarity and not plotted to scale shall not require a bar scale and shall include the following notation:

Not to scale

### **3-5** Legend and general statements

The plan image must contain:

- (1) A legend giving details of the following:
  - (a) All monument symbols that are shown on the plan image and any standard abbreviations used that are included in Rules 3-14(1) and (3). Standard abbreviations included in Rule 3-14(2) may be included in the legend for clarity but are not required. Monuments and abbreviations that are not shown on the plan image must not be shown in the legend;
  - (b) All non-standard abbreviations or symbols shown on the plan.
- (2) A statement regarding bearing derivation:
  - (a) For plans based on survey, the following notation, with modification as necessary:

"Grid bearings are derived from [insert bearing derivation method] and are referred to the central meridian of UTM Zone [insert number]."

(b) For Explanatory Plans under the Land Title Act, bearings shall be referenced to the existing land title office records upon which the plan is based and the following notation is required:

"Bearings are [astronomic/grid] derived from Plan [insert plan number]."

(3) The following statement, with respect to georeferencing, with modifications as necessary, for plans based on a survey:

"The UTM coordinates and estimated absolute accuracy achieved are derived from [insert type of survey georeferencing method] to [insert geodetic control monument(s) number(s), and/or insert active control point(s) number(s), RTN name, or previously registered plan]."

- (4) A statement with respect to the computation of ground to grid distances:
  - (a) Where a single average combined factor is used:

"This plan shows horizontal ground level distances, unless otherwise specified. To compute grid distances, multiply ground level distances by the average combined factor of [insert factor]. The average combined factor has been determined based on an ellipsoidal elevation of [insert ellipsoidal elevation] metres or control monument(s) [insert control monument numbers].";

(b) Where a single average combined factor is not appropriate the combined factor and ellipsoidal elevations may be shown at specific points or in a tabular form and then the following statement may be used:

"This plan shows horizontal ground level distances unless otherwise specified. To compute grid distances, multiply ground level distances by the appropriate combined factor as derived from the combined factors ['noted hereon' or 'in the coordinate table' as applicable]."

(5) The following statement:

This plan lies within the (Regional District).

(6) The following statement where the plan lies within or partially within an integrated survey area:

(7) The following statement where a witness post has been found or set:

This plan shows one or more witness posts which are not set on the true corner(s).

(8) The following statement where an application for modified posting is approved by the association:

Modified monumentation has been approved for this survey.

### **3-6** Statements by BC land surveyor

- (1) The plan image must contain one of the following statements:
  - (a) For plans based on field survey:

The field survey represented by this plan was completed on the [dd] day of [month], [yyyy]

[name of BCLS], BCLS [commission number]

(b) For plans based on existing records:

This plan is based on the following Land Title and Survey Authority of BC records:

(list plans and documents used to compile the plan)

[name of BCLS], BCLS [commission number]

[dd] day of [month], [yyyy]

(c) For plans based on a partial survey, when permitted by the Surveyor General:

The field survey represented by this plan was completed on the [dd] day of [month], [yyyy].

The following information shown on this plan was ascertained by field measurement: (insert specifics)\_\_.

All other information shown on this plan was derived from:

(list plans and documents used to compile the portions of the plan not included in the survey)

[name of BCLS], BCLS [commission number]

(2) For multi sheet plans, each sheet following the first sheet must show the field survey date and contain the name of the surveyor preparing the plan.

### 3-7 Line type requirements

The plan image and any enlargements must adhere to the following line types and size requirements:

- (1) Except in the case of a posting plan prepared under Section 68, *Land Title Act*, or a Posting Plan to be filed in the Crown land registry, the exterior boundaries of the land being dealt with by the *plan image* must be shown as solid black lines, between 1 and 1.5 mm in width when the plan image is reproduced at the intended plot size.
- (2) Boundaries of all parcels, highways and public roads shown by solid black lines.
- (3) Boundaries that will be cancelled upon deposit of the plan shown by broken lines.
- (4) Where a parcel or parcels under survey overlap two or more adjacent sections or district lots, the boundaries of those sections or district lots must be shown by broken lines.
- (5) The boundaries of existing rights of way, easements or covenant areas shown by broken lines, if there is a charge on title to the parcel under survey, or if there is a reasonable expectation of a charge being placed on the title to the parcel under survey, or on the titles of newly created parcels.
- (6) All radial lines, traverse lines, GNSS baselines and radial ties shown as fine broken lines.
- (7) Natural boundaries shown as sinuous lines.
- (8) The present natural boundary must be dashed if it is waterward of the titled natural boundary and the plan is not pursuant to Section 94(1) of the *Land Title Act*.
- (9) Hatching may be used if it is necessary to distinguish between parcels or areas of interest being surveyed.

### 3-8 Survey evidence

The plan image must show:

(1) All survey monuments found and set in the course of the survey.

- (2) All other evidence found and used for boundary resolution depicted in a manner that is clear and unambiguous. This includes but is not limited to ancillary evidence, such as evidence of occupation, bearing trees or stone mounds used to support the boundary resolution.
- (3) The following statement where the plan shows evidence of occupation used to determine a boundary location:

"Evidence of occupation shown on this plan was used in the re-establishment of boundaries"

- (4) A note indicating "not found" or "NF" for survey monuments searched for and not found.
- (5) The methods used to reconstruct boundaries and re-establish obliterated, lost or disturbed posts, including brief clarifying notations when necessary to support the boundary resolution. (Note: if an explanation of boundary re-establishment is too complex or lengthy to be placed on the survey plan image the explanation needs to be placed on a survey letter for filing in the land title register concurrently with the submission of the plan for registration. See Rule 4-5(20) as to possible plan notation requirements.)
- (6) If evidence on one side of a road is used to establish the opposite side, sufficient ties by bearing and distance from the posts found to those set on the opposite side, with enough detail to allow for closures on all dimensions.
- (7) Where an alternate type 5 post is found or placed, either a note next to the post reading: *"short iron post....... [description]......."*, or an abbreviation of the note in the legend.
- (8) Any notes required in Part 1 of these Rules for permanent survey monuments or ancillary monumentation.
- (9) Post cap diagrams for all type 1, 2 or 4 posts.
- (10) Where a witness post has been set:
  - (a) The notation "witness" or "Wt" to confirm the post(s) is not set on a true corner;
  - (b) The position of the witness post in relation to the corner by dimensions with no ambiguity.
- (11) All control monuments and geodetic control monuments found with the number or designation of each.

### 3-9 Dimensions

The plan image must show:

- (1) Adjusted bearings and distances for all boundaries of all parcels established and reestablished, and for all boundaries showing survey evidence.
- (2) Adjusted bearings and distances for all traverse lines, GNSS baselines and radial ties, which may be shown in the body of the plan image or in tabular form at a convenient location on the plan image.
- (3) Bearings and distances to intersections of a boundary under survey with unsurveyed boundaries, including unsurveyed mining leases, and with boundaries referred to in Rule 2-11(2).
- (4) Bearings and distances from each control monument to the area under survey within an ISA.
- (5) All bearings in the full circle sexagesimal system clockwise from north.
- (6) All linear measurements must be shown as horizontal ground level distances in metres and decimals thereof, except for distances to bearing trees and ties to geodetic control monuments, active control points or as required under Rule 9-8 (1)(a).

- (7) if a plan image shows both horizontal ground level distances and grid distances or only grid distances, a note is required to clearly identify the type of distance shown.
- (8) The length of arcs, the radius of the curved boundaries and the bearings of radii to the beginning and end of the curve and intersections with points on the curve where curved lines are shown on the plan image.
- (9) The perpendicular width of each road created by the survey, except where the sides of the road are not parallel, in which case measurements across the road must be shown in order to identify the varying widths.
- (10) Where a boundary under survey intersects with an existing statutory right of way, easement or covenant boundary, show either:
  - (a) the dimensions of the intersections with the new boundaries; or
  - (b) the perpendicular width where the statutory right of way, easement or covenant boundaries are parallel to and contiguous with a parcel boundary.
- (11) Except in the case of an Explanatory Plan or where permitted by the Surveyor General, measurements shown on the plan image must be based on the current survey and must not be derived from previously registered plans nor from surveys or plans made by a person other than the land surveyor supervising the current survey or a person under that land surveyor's supervision.
- (12) Theoretical boundaries must not be shown on the plan except for plans prepared under Part 10.

### 3-10 Areas

The plan image must show:

(1) Areas for each parcel created, highway, park or public square dedicated, return to Crown, or other interest in land delineated, except posting plans prepared pursuant to *Section 68* of the *Land Title Act* or for filing in the Crown land registry, to a minimum precision as given in the following table:

Up to 0.1 ha quote to 0.1 m2

From 0.1 ha to 1 ha quote to 0.001 ha

From 1 ha up to 10 ha quote to 0.01 ha

From 10 ha up to 100 ha quote to 0.1 ha

From 100 ha and over quote to 1 ha

- (2) Where a parcel is created, highway, park or public square is dedicated, or other interest in land delineated, is in multiple parts, an area for each part and a total area must be expressed to the precision described in Rule 3-10(1).
- (3) Areas for strata lots and common property on bare land strata plans surveyed under the *Strata Property Act* must comply with the above minimum precision; however the area of a building strata lot must be expressed in square metres.

### 3-11 Georeferenced points

The plan image must show at least two georeferenced points plus, where applicable, additional points to yield an average density of one point every three kilometres along the length of the survey. The following information must be shown on the plan image:

(1) The UTM coordinates based on the datum as approved by the Surveyor General.

- (2) NAD 83 (CSRS) [Version].
- (3) The average combined factor, or the combined factor for each point when a single average combined factor is not used.
- (4) The UTM zone.
- (5) The absolute accuracy achieved.

### 3-12 Parcel descriptions

The plan image must show:

- (1) The District Lot, Group, Block, Section, Township, Range, Meridian, Indian Reserve, or Unsurveyed Crown Land, as appropriate (being the primary parcel information) shown prominently in the body of the plan in solid font.
- (2) The parcel number or letter of parcel(s) created by the survey shown in solid font.
- (3) The parcel number letter and plan number for existing parcels:
  - (a) Where the parcel or parcels created by the legal survey consume all or part of the existing parcel(s) the existing parcel(s) shall be shown in broken font. This does not apply to surveys under the *Land Act*;
  - (b) Remainders of existing parcels shall be shown in solid font;
  - (c) All existing parcels adjacent to each boundary of the parcel(s) created in solid font.
- (4) The names of roads, bodies of water and water courses in solid font. The direction of flow of water courses must also be shown.
- (5) The waterward boundary of filled foreshore must be labelled limit of fill or by using another appropriate notation approved by the Surveyor General.
- (6) The words "Arterial Highway" must be placed upon the appropriate area of a Land Title Act plan when dedicating land for arterial highway as authorized by the Minister of Transportation and Infrastructure.
- (7) Where new highways are being created:
  - (a) With the exception of highways being created over Treaty Lands, the highway must be labelled on the plan as "arterial highway", "highway", "road", "lane" or "walkway", as appropriate;
  - (b) Over Treaty Lands, where the new highway is to vest in the Treaty First Nation, the highway must be labelled on the plan as "highway";
  - (c) Over Treaty Lands, where the new highway is to vest to the province, the highway must be labelled on the plan as "provincial highway" or as "arterial provincial highway" as appropriate.

# 3-13 Natural boundaries

The plan image must show:

- (1) The present natural boundary and the natural boundary as shown on the plan upon which title is based, except:
  - (a) In the case of a plan endorsed under Section 94 (1)(d) of the *Land Title Act*, in which case only the present natural boundary must be shown; or
  - (b) On a posting plan prepared under Section 68(1) of the *Land Title Act*, in which case it is not a requirement to show the present natural boundary.
- (2) For posting plans prepared under Section 68(1) of the Land Title Act:

(a) If the present natural boundary is not shown on the plan, then the following note, with modification as necessary, must be shown on the plan image:

"This plan shows the natural boundary according to (note the plan number) and may not reflect the current extent of title. While the survey defines the location of property corners and boundaries as indicated by the survey evidence the survey does not include an opinion on the true location of the waterward boundary of the lands."

(b) If the present natural boundary is shown on the plan and is not coincident with the natural boundary according to the registered plan, then the following note, with modification as necessary, must be shown on the plan image:

"This plan shows the natural boundary according to (note the plan number) and an opinion of the location of the present natural boundary based on field survey. Dimensions of the lot under survey as shown on (note the plan number) may not reflect the current extent of title."

- (3) The distance along boundaries to the natural boundaries as they exist at the time of the survey, if the present natural boundary is shown.
- (4) Small watercourses of a temporary or seasonal nature that do not have natural boundaries, must not be shown.
- (5) Ties to natural boundaries as either:
  - (a) Offsets from a boundary or traverse line to natural boundaries and the distance along the boundary or traverse line to the point of offset;
  - (b) Radial ties to natural boundaries, which may be shown in tabular format indicating the observation point numbers and their corresponding bearings and distances; or
  - (c) Coordinates shown in tabular format on the same datum as the survey.
- (6) Sufficient ties must be provided so as to allow the natural boundaries to be plotted accurately.
- (7) Where natural boundaries are derived from methods other than a field survey, the method must be noted on the plan, and date of source data if applicable.

#### 3-14 Standard symbols and abbreviations

 The following standard symbols must be used on all survey plans and described in the legend, where applicable. Only where required for clarity, symbol sizes may be increased by 25%.

Symbols		Description	Dimensions
Found	Placed		(mm)
۲	0	Standard Concrete Post (Type 1)	3.5, 1.5
	$\square$	Standard Rock Post (Type 2)	3.5, 2.0
		Lead Plug (Type 3)	2.0
٢	$\otimes$	Standard Capped Post (Type 4)	3.0
۲	0	Standard Iron Post (Type 5)	2.0
	$\bigtriangleup$	Traverse Hub	2.5
Η	Χ	Boundary Marker Post	2.5, 2.5
۲		Control Monument	3.5, 2.5
		Old Style Dominion Land Surveys Iron Post	3.0, 1.5
À		Angle Iron	3.5, 1.0
•		Aluminum Post	2.0, 2.5
۲		Non-Standard Post (describe)	3.0, 2.0
	+	Unmonumented Point	2.0

(2) The following standard abbreviations with or without periods may be used and need not be explained in the legend:

а	arc	
BCGS	British Columbia Geographic System	
BCLS	British Columbia Land Surveyor	
¢	centreline	
CLS	Canada Lands Surveyor	
CLSR	Canada Lands Surveys Records	
cm	centimetre	
DL	District Lot	
E	east	
Fd	found	
Fr	fractional	
FSR	Forest Service Road	
GCM	geodetic control monument	
GNSS	Global Navigation Satellite System	
Gp	group	
ha	hectare	
Hwy	highway	
IP	standard or short iron post	
IR	Indian Reserve	
KDYD	Kamloops Division Yale District	

km	kilometre	
Lat	latitude	
Long	longitude	
LS	Legal Subdivision	
LTO	Land Title Office	
М	meridian (i.e. W6M)	
m	metre	
m <sup>2</sup>	square metre(s)	
m <sup>3</sup>	cubic metre(s)	
MC	Mineral Claim	
Ν	north	
NAD27	North America Datum 1927	
NAD83 (CSRS)	North American Datum 1983 (Canadian Spatial Reference System)	
NF	nothing found	
NWD	New Westminster District	
ODYD	Osoyoos Division Yale District	
P&NG	Petroleum and Natural Gas	
РС	point of curvature	
PCC	point of change of curvature	
PDR	Petroleum Development Road	
PI	point of intersection of tangents	
Pl	placed	
PNB	present natural boundary	
РОТ	point on tangent, subtangent or subtangent produced	
PRD	Peace River District	
QCD	Queen Charlotte District	
Rge	Range	
r	radius	
Rem	remainder	
RP	reference post	
R/W	Right of way	
Ry	railway	

S	south	
Sec	Section	
SDYD	Similkameen Division Yale District	
SRW	statutory right of way	
Sta	station	
Тр	Township	
UTM	universal transverse mercator	
W	west	
WLoc	Well location	
Wt	witness	
YDYD	Yale Division Yale District	

(3) The following standard abbreviations and any non-standard abbreviation used must be explained in the legend.

ACP	active control point
AMD	amended
AP	aluminum post
ASP	Air Space Parcel
ASPI	Air Space Plan

Bk	block	
Bdy	boundary	
Brg	bearing	
BT	bearing tree	
(c)	calculated	
С	standard cairn	
САР	old style capped aluminum post	
CIP	old style capped iron post	
cor	corner	
CofT	Certificate of Title	
СР	standard capped post	
Diam	diameter	
DLSIP	old style Dominion Land Surveys iron post	
elev	elevation	
Ex	explanatory	
illeg	illegible	
L	Lot	
LCP	limited common property	
LP	standard lead plug	
mag	magnetic	
Meas	measured	
Mkd	marked	
NCO	Not cut out	
No or #	number	
oblit	obliterated	
PCon	standard concrete post	
PP	old style pipe post	
PRock	standard rock post	
R	Road under survey (used on post caps)	
Re-est	Re-established	
Ref	Reference	
Res	restored	
RR	Railway under survey (used on post caps)	
SL	strata lot	

SL	strata lot	
SM	stone mound built around a monument	
Т	trench	
temp	temporary	
TH	traverse hub	
THSL	Town of Hastings Suburban Lands	
Tri	Tripod	
UCL	unsurveyed crown land	
Wo	wood post	

# PART 4 — SURVEYS UNDER THE LAND TITLE ACT

# **Division 1: Surveys**

# 4-1 Surveys of titled Crown land

- (1) A land surveyor must contact the Surveyor General, providing all documentation from the Crown authorizing a survey, to obtain specific instructions, prior to beginning a survey. This rule does not apply to statutory rights of way plans.
- (2) A land surveyor must contact the Surveyor General for additional instructions if conditions on the ground are different from those on the information provided by the Crown.

# 4-2 E&N Railway Land Grant Surveys

- (1) A land surveyor must apply to the Surveyor General for approval of the proposed method of survey and preparation of plans that are referred to in Sections 70 (1) and (2) of the Land *Title Act*.
- (2) The land surveyor must obtain a Block designation from the owner of the E&N Lands if no designation exists.
- (3) Before proceeding with a partial survey of a Block, direction must be sought from the Surveyor General as to survey requirements.
- (4) Adjustment of bearings must not be made for Explanatory Plans under section 70(1) of the *Land Title Act* unless the Surveyor General has granted dispensation.
- (5) Bearings of an existing survey must be adjusted to grid based on ties to a minimum of two posts on the original survey for partial surveys under section 70(2) of the *Land Title Act*, unless the Surveyor General has granted dispensation.

# **Division 2: Land Title Act Plan Requirements**

The Rules in this Part complement requirements contained in the Director of Land Titles Electronic Land Title Plan Requirements and Surveyor General requirements expressed throughCircular Letters and Bulletins, as well as requirements contained in statutes and associated regulations.

# 4-3 Title

- (1) The plan image must have a clear and concise plan title that states the type of plan, the legal description of the subject lands and indicate whether all or part of the subject lands are beingdealt with.
- (2) The plan title for Reference or Explanatory Plans under the Land Title Act must include a reference to the pertinent section of the Land Title Act or other relevant statute in the following format:

Pursuant to section ... of the Land Title Act (or other relevant statute)

(3) A plan prepared under Section 70 of the Land Title Act must contain a plan title similar in form to the following:

"Explanatory Plan of Block ......, District"

(4) An Explanatory Plan of lease of part of a building must indicate in the plan title how many stories the building comprises, in a format similar to the following:

"Explanatory Plan of the ... floor of a ... storey building situated upon (legal description)"

(5) Leasehold plans of part of the lands must include in the plan title, where the lease requires the approval of the approving officer and, where applicable, the Provincial Agricultural Land Commission, a reference to the expiry date of the approvals, in the following format:

"Reference Plan to accompany lease of part of (legal description) for leasehold purposes; lease and approval of the approving officer [and (as required) provincial agricultural land commission] to expire (date of expiry)"

# 4-4 Additional Land Title Act plan requirements

A plan tendered for deposit, other than an Explanatory Plan, must comply with the following requirements in addition to the requirements in Part 3 of these Rules:

- (1) If a whole district lot, section or parcel is subdivided, the plan must show the boundaries of the district lot, section or parcel.
- (2) If a portion of a district lot, section or parcel is subdivided, the plan must show the boundaries of that portion and:
  - (a) the location of that portion within the parcel being subdivided and ties to the parcel being subdivided; and
  - (b) the location of any other existing parcels within the parcel being subdivided.
- (3) A terminal curve may be substituted for a transition curve referred to in Sections 116 (1)(e) and (g) of the Land Title Act, so long as the rights of all affected parties are not prejudiced.
- (4) Unless otherwise directed by the Registrar, each new parcel must be assigned a distinct number or letter consecutively starting with "1" or "A". Notwithstanding, it is also permissible to continue assigning new parcels with an existing series, provided the notation in Rule 4-5(17) is shown on the face of the plan.
- (5) If, under Rule 4-4(4), new parcels are grouped into blocks of lots, the blocks may be designated by one series of distinguishing numbers or letters and the lot numbers or letters in a block may comprise an independent series for that block;
- (6) Every highway, park or public square dedicated by the survey must be shown as such, and distinctly delineated with its measurements marked on the plan.
- (7) if a watercourse is shown within a parcel and the watercourse:
  - (a) is owned by the Crown;
  - (b) lies within the boundary of a parcel of one hectare or more in area being created by the plan; and
  - (c) is less than 1/10 of the area of the parcel it passes through;

the natural boundaries of the watercourse may be indicated on the plan, without dimensions, by means that will depict the location of the watercourse.

### 4-5 Notations on plan

The following notes, with modification as necessary, must be shown on the plan image where applicable:

(1) The jurisdiction of the Approving Officer(s) shall be noted with the following statement:

*This plan lies within the jurisdiction of the Approving Officer for [insert jurisdiction].* This notation also applies for a subdivision by way of lease.

(2) If relief from compliance with Sections 75 (1)(c) or (d) of the Land Title Act is obtained:

This plan need not comply with Section 75 (1)( ..... ) of the Land Title Act.

(3) When a covenant in favour of the Crown, a Crown corporation or agency, a municipality or a regional district is a condition of approval and the Approving Officer requires that a notation be placed on the plan, the following statement is then required:

A Covenant [or: (insert number) Covenants] in the name of \_\_\_\_\_{name of covenantee} pursuant to Section 219 of the Land Title Act is a condition of approval for this subdivision.

- (4) If an application to include accreted land has been consented to:
  - (a) Land Title Act, Section 94 (1)(c) The unregistered land included within this plan is accreted land.

or in the case of a statutory right-of-way:

- (5) If an application to adjust a natural boundary has been consented to:
  - (a) Land Title Act, Section 94 (1)(d)
    The water boundary shown hereon is the natural boundary as defined in the Land Act.

or in the case of a statutory right-of-way plan:

(b) Land Title Act, Section 118 (1)(a)

The water boundary of Lot......[complete legal description] shown hereon is the natural boundary as defined in the Land Act.

(6) If an application to include unregistered land within a subdivision plan has been consented to:

Land Act, Section 58

This plan includes unregistered land, which was not included in the grant from the Crown

(7) If a public road allowance is being established over Crown land, as access to a subdivision: Land Act, Section 80

This plan includes public road through Crown land.

(8) If tentative approval has been obtained to access a subdivision by a Forest Service Road:
 *Road established under the Forest Act*

Access to the subdivision is to be by Forest Service Road pursuant to Section 15 (2) of B.C. Reg. 334/79. The Crown in right of the Province shall not be obligated to improve, maintain or repair the forest service road shown on this plan.

(9) If exemption under Section 108 (3) of the Land Title Act has been granted by minister's order:
 Section 108 (3) of the Land Title Act

Subject to an exemption to be granted by minister's order to the action of Section 108 (2) of the Land Title Act, land dealt with hereon, shown covered by water and not designated "Returned to Crown in right of the Province", is not to be transferred to the Crown.

(10) For plans establishing a public road over untitled Crown land under *Section 9* (1) of the *Ministry of Lands, Parks and Housing Act*:

This plan includes public road through Crown land.

(11) For plans establishing a forest service road over untitled Crown land under *Section 9* (1) of the *Ministry of Lands, Parks and Housing Act*:

This plan includes forest service road through Crown land.

(12) For plans dedicating an arterial highway pursuant to Section 44.1 of the Transportation Act:

*This plan dedicates arterial highway as authorized by the Minister of Transportation and Infrastructure.* 

(13) Where an approving officer has required a land surveyor to inspect a survey pursuant to *Section 84* Land Title Act:

Inspected under the Land Title Act on the [dd] day of [month], [yyyy]

(14) Where all or part of a subdivision, reference, explanatory or other plan showing subdivision of land (including *Land Title Act* s. 107(1)(a) dedications) lies within the Agricultural Land Reserve:

This plan lies [partly] within the Agricultural Land Reserve.

(15) Where a dominant tenement is subdivided in whole or in part and the subdivider wishes to designate on the plan that the benefits of an easement do not apply to one or more parcels:

Pursuant to Section 223 of the Land Title Act, Lot [number] of this plan is hereby designated as a parcel to which the benefit of easement [registration number] does not attach.

(16) Where alternate access pursuant to *BC Regulation 334/79* is required for one or more of the lots on the plan, the following applicable notation must be shown on the plan image:

ACCESS BY AIR ONLY

ACCESS BY WATER ONLY

ACCESS TO LOT BY EASEMENT ONLY

ACCESS BY COMMON LOT

(17) Where the parcels into which land is divided are marked with the continuation of an existing series in accordance with Rule 4-4(4)

Lots created on this plan are a continuation of an existing numbering series.

(18) Where a plan is creating a new parcel, air space parcel, or dedication, from a parent parcel that has previously had an air space parcel(s) removed from it, the following notation, amended as applicable, is to be added to the plan:

No portion of the parcels or dedications created on this plan overlap vertically, that is, lie above or below, any portion of the Air Space Parcels on Air Space Plan.

(19) If a plan is prepared of an unsurveyed area designated as a block in an original grant from the Esquimalt and Nanaimo Railway Company under *Sections 70 (1)* or *(2)* of the *Land Title Act*, the following notation must be shown on the plan image:

This plan has been prepared in accordance with Section 70 of the Land Title Act.

(20) Where a letter of explanation regarding a survey inconsistency is attached to the plan application at the time of plan submission, the following notation must be shown on the plan image:

See survey letter signed by (SG or name of land surveyor) filed with the plan application regarding a survey related clarification

(21) Where a letter of explanation regarding a survey inconsistency is provided following the initial plan submission, the letter is to be added to the plan application by submitting a corrective declaration and the following notation must be added to the plan image:

See survey letter signed by (SG or name of land surveyor) filed with Plan Application Number [application filing number – always begins with a "CA"] regarding a survey related clarification

(22) Where a plan of treaty lands is being prepared in accordance with Section 25.1 of Schedule 1 of the *Land Title Act*:

Section 25.1 of Schedule 1 of the Land Title Act applies to this plan

(23) Where a plan of treaty lands is being prepared in accordance with Sections 25(4) or 26(1)(a) of Schedule 1 of the Land Title Act:

This plan complies with the instructions of the Surveyor General for the survey

# **Division 3: Block Outline**

### 4-6 Block outline survey method

Upon approval for a block outline survey from the Surveyor General, the boundaries under survey must be referenced by monuments before construction and then posted after construction has been completed, in accordance with *Section 69* of the *Land Title Act* and any specific requirements of the Surveyor General.

### 4-7 Block outline plans

- (1) Block outline plans must clearly show the mathematical relationship of the lands being surveyed to the controlling monuments.
- (2) If approval has been obtained for a block outline survey under *Sections 69 (3)* and *(4)* of the *Land Title Act*, the following notation must be shown on the plan image:

Block outline monumentation has been approved for this survey.

LTSA File No.: [Add file number assigned by the LTSA]

- (3) The plan title on the subdivision or reference plan must not include a reference to section 69.
- (4) The plan title on the block outline posting plan must conform to the following format:

Posting Plan of [heading on block outline subdivision or reference plan]

Pursuant to section 69 of the Land Title Act

(5) Block outline posting plans, prepared pursuant to Section 69(7) of the *Land Title Act*, must show the following notation on the *plan image*:

*This is the block outline posting plan required under order number*\_\_\_\_\_ [LTSA file number].

(6) Block outline posting plans must conform in all respects to the subdivision or reference plan, including showing the exterior boundaries of the lands dealt with as solid black lines between 1 and 1.5 mm in width when the plan image is reproduced at the intended plot size.

# **Division 4: Air Space**

### 4-8 Air space monumentation

(1) Posts of type 1, 2, 3, 4 or 5 must be set at the horizontal position of all corners of the air space parcel under survey or on a suitable witness subject to:

- (a) Where an air space parcel consists of a large number of boundary corners, posting may be reduced to posts that represent the air space parcel's extents, but in all cases, an air space parcel must be referenced to a minimum of 4 posts of type 1, 2, 3, 4 or 5;
- (b) Where it is impractical to set a post of type 1, 2, 3, 4 or 5 at a corner of the air space parcel, and where a suitable, permanent and clearly identifiable element of a structure is available, the air space parcel corner may be referenced to that element;
- (c) The posts required in Rule 4-8(1)(a) may include posts that define the parent parcel if they are suitably referenced to an air space parcel corner.
- (2) A minimum of 2 bench marks must be found or established within 500 metres of an air space parcel. The bench marks used or established must be located, to the extent possible, to aid in the future re-establishment of the vertical component of the air space parcel and be permanent and vertically stable.

# 4-9 Air space boundary re-establishment

Air space parcel boundaries must be re-established based on the following:

- (1) The vertical component of an air space parcel must be re-established relative to the local benchmarks as shown on the original air space plan and any other information that may be on the original air space plan that assists in determining the location of the boundary. Where there is insufficient information provided on the air space plan to re-establish the vertical component of an air space parcel, such as where the local bench marks referenced on the air space plan are not able to be found or re-established, the land surveyor will determine the elevations based on the best available evidence, giving consideration to the vertical datum used at the time the air space parcels were created.
- (2) Local coordinates shown on an air space plan are intended as a convenient representation of the relationship between air space parcel corners and parent parcel boundaries. These coordinates are to be used to determine the intended relationship between air space parcel corners and shall be given the same weight as bearings and distances when re-establishing air space parcel boundaries. This does not apply to UTM coordinates shown on the plan for georeferencing purposes.

### 4-10 Air space plans

- (1) In Division 4 of this Part, **"paraline drawings"** are abstractions that allow the viewer to see multiple faces of an air space parcel, yet all lines are measurable and none of the faces or elements of the parcel are distorted, unless clearly indicated otherwise.
- (2) Air space plans must be prepared in accordance with the *Land Title Act* and must, where appropriate, contain the following information in addition to the requirements of the Part 3 of the Rules and this part:
  - (a) A plan view showing the relationship of the planimetric extent of each air space parcel(s) to the boundaries of the parent parcel upon which it is based:
    - (i) the plan view shall be located in a prominent location within the air space plan;
    - (ii) if the Registrar permits an air space plan to be prepared on multiple sheets then the plan view shall be on the first sheet.
  - (b) In addition to a plan view of the air space parcel(s), one or more isometric views which are three-dimensional paraline drawings in isometric format, with the following modifications as appropriate:
    - (i) isometric views may be shaded or hatched to further illustrate the three dimensional character;

- (ii) isometric views may be exploded to illustrate shapes or jogs that might be obscured in any particular three dimensional view, and the exploded isometric view must include:
  - (A) construction lines to illustrate break lines and tie points; and
  - (B) point numbers or letters to identify individual points or corners.
- (c) Cross sectional views taken horizontally, vertically, or along other orientations may be provided to better illustrate inflections or corners which may be obscured in any particular three dimensional view; and cross sectional views must include:
  - (i) point numbers or letters to identify individual points or corners; and
  - (ii) geodetic elevations in accordance with the *Land Title Act* clearly noted.
- (d) Where practical, each view shall be referenced to the parent parcel.
- (e) Arrows on the plan view showing the direction of each isometric view and noted "Isometric View". If the plan includes more than one isometric view, additional information must be added to the label to make it clear which isometric view is being referred to.
- (f) Arrows on the plan view showing the location and direction of each vertical cross sectional view and identified with a unique label for the cross section.
- (g) When horizontal cross sectional views are used arrows and/or labels shall be placed on vertical cross sectional views as required to show the location of each horizontal cross sectional view.
- (h) Each view on the plan must be clearly labelled and include a north point, where practical, and a scale statement, including a bar scale unless the view is not to scale.
- (i) The exterior boundaries of the air space parcels being dealt with, whether shown in plan view, cross sectional view or isometric view, are to be identified by a bold outline or other method so that the extent of the air space parcels is clear.
- (j) A unique number or letter, assigned to every corner of the air space parcel(s), which must be shown or referenced on the plan view, cross sectional view(s) or isometric view(s). This unique number or letter shall be repeated as often as practical on the plan view, cross sectional view(s) and isometric view(s) to provide clarity between the various views of the common air space corners.
- (k) Where an existing air space parcel is being shown that has been previously defined on a plan that is filed with the Registrar, the numbers or letters of the air space parcel corners shown on the filed plan shall be repeated at the corresponding air space parcel corners on the new plan.
- (I) Air space parcel corner labels required in Rules 4-10(2)(j) & (k) shall be shown so that there is a distinction between new corner labels and labels derived from a filed plan. Notations in the legend of the plan may be used to clarify the source of the label.
- (m) Dimensions of the boundaries of the air space parcel(s) on the plan view, on the cross sectional views, and on the isometric views in a manner which clearly defines the size, shape, and configuration of the air space parcels, and relates the plan view to the cross sectional and isometric views.
- (n) Where the use of dimensions in Rule 4-10(2)(m) may cause confusion, a local coordinate system may be established, and local coordinates may be provided for air space parcel

corners and parent parcel corners. When coordinates are provided for this purpose, the plan shall contain the following statement:

Coordinates shown [within this table] are based on a local, ground level datum, and are shown to provide a relative location between air space parcel corners and parent parcel corners. These coordinates are not for georeferencing purposes.

- (o) Where an air space parcel boundary or an air space parcel corner has been previously defined on a plan that is filed with the Registrar, and the land surveyor preparing a new air space plan confirms that the information on the previously filed plan is a true representation of an air space parcel boundary or corner, the new plan may make reference to the previous plan by showing the previous plan number and the previous air space parcel corner labels as required in Rule 4-10(2)(k), and need not repeat the bearings, distances, coordinates, or elevations shown on the previous plan for that air space parcel boundary.
- (p) Subject to Rule 4-10(2)(o), an elevation of each air space parcel corner and elevations of at least 2 undisturbed survey posts at the corners of the parent parcel or referencing a corner of the parent parcel must be shown.
- (q) Elevations and coordinates may be shown in tabular form and cross referenced to numbers or letters defined in Rule 4-10(2)(j).
- (r) A notation that the elevations in Rule 4-10(2)(p) are referenced to geodetic datum, and the number, description, elevation, and vertical datum of the *geodetic control monument* used to derive the elevations shall be placed on the plan. In the case where the ties to *geodetic control monuments* are made with GNSS to derive the elevations required by Rule 4-10(2)(p), the geoid model (including epoch) shall be shown on the plan.
- (s) The location of *geodetic control monuments* used to derive the elevations shall be plotted on the plan with sufficient scenery to indicate the location of the monuments.
- (t) If a geodetic control monument is not available within 1000 metres of the parent parcel then approval by the Surveyor General of the geodetic datum referenced is required and the following notation shall be placed on the plan:

*This plan is referred to the vertical datum defined [insert datum details] and approved by the Surveyor General.* 

- (u) The description, elevation, and location of local bench marks used in Rule 4-8(2):
  - where a defined point on a permanent building or structure near an air space parcel corner is adopted as a local bench mark, a clear, unambiguous description of the point shall be placed on the plan and its location plotted.
- (v) The volume of an air space parcel created in cubic metres expressed to four significant figures.
- (w) A book of reference, when the air space plan creates more than one air space parcel, which shows the air space parcel number, the assigned numbers or letters for the corners which define the limits of the air space parcel, and the volume of each air space parcel in cubic metres expressed to four significant figures.

# PART 5 — STATUTORY RIGHT OF WAY, EASEMENT AND COVENANT SURVEYS

Surveys and plans under this Part must also comply with requirements of Part 4 of these Rules.

# **Division 1: Right of Way Surveys**

### 5-1 Commencement and completion of surveys

- (1) Consideration must be given to timing of a survey under this Part to ensure the preservation of survey monumentation during installation of services. Where possible, a survey under this Part should not be posted until clearing has been completed.
- (2) The survey of an oil and gas pipeline right of way must not be posted until construction has been completed.
- (3) The survey of a right of way under the *Oil and Gas Activities* Act must be completed in accordance with *Section 24* of the *Oil and Gas Activities Act General Regulation*.

### 5-2 Titled natural boundaries

If a right of way under survey through a titled parcel begins at, ends at or crosses a natural boundary and it is determined that the location of the present natural boundary differs with the title boundary of the upland parcel, the title boundary must be updated to be coincident with the present natural boundary or direction must be obtained from the Surveyor General.

### 5-3 Crossing of public roads and highways

- (1) Public roads must be excluded from a right of way.
- (2) Highways must be excluded from a right of way. If the highway is unsurveyed, the width to be excluded must be:
  - (a) in the case of a highway established by notice in the Gazette, the width stated in the notice;
  - (b) in the case of a highway established under *Section 42* of the *Transportation Act* by court order, the travelled width or as otherwise specified by the court order.
- (3) If a right of way crosses a forest service road or an *Oil and Gas Activity Act* road, the road must be shown as part of the right of way.
- (4) If a right of way crosses a travelled way, other than a highway or public road, the travelled way must be shown on the plan as part of the right of way without reference to its width.

### **Division 2: Right of Way Monumentation**

### 5-4 Posting requirements

- (1) Except as provided in this Division, posts of type 1, 2, 3, 4 or 5 must be set in the following locations on both sides of the right of way under survey that has a width greater than 6 metres:
  - (a) where the right of way begins;
  - (b) where the right of way ends;
  - (c) at each angle of the right of way;

- (d) Subject to Rule 2-8(6), where the boundary of the survey intersects with an existing surveyed boundary or the boundary of an unsurveyed parcel;
- (e) on both sides of a highway, public road or surveyed forest service road;
- (f) at or near where the boundary of the survey intersects with a natural boundary of a body of water having a width greater than 6 metres;
- (g) at a point witnessing a location referred to in Rules 5-4(1)(a) to (e).
- (2) If a new right of way is coincident with and parallel to an existing right of way and the owner of the rights of way is the same, the land surveyor may post only the outermost boundaries of the new and existing rights of way.
- (3) If a right of way has a width of 6 m or less it may be posted on one boundary only. The posted boundary should remain consistent throughout the survey, except the posted boundary may be changed in order to maximize the potential for monument preservation.

### 5-5 Requirements for type 1, 2 and 4 monuments

- Subject to Rule 2-8(6), posts of type 1, 2 or 4 must be set on one side of a right of way at intersections with district lot, section or quarter section boundaries and at intervals along the right of way not greater than 1 km.
- (2) If the length of a right of way crossing a body of water exceeds 500 m, a type 1, 2 or 4 post must be set on one boundary near the intersection with each natural boundary.
- (3) Posts of types 1, 2 or 4 must be numbered consecutively and the designation of adjoining parcels must be marked on the posts.

### 5-6 Right of way surveyed in accordance with the Oil and Gas Activities Act

- (1) This section shall only apply to right of way surveys that:
  - (a) are located within the Peace River Regional District or the Northern Rockies Regional Municipality; and
  - (b) are linear in nature and are surveyed in accordance with the *Oil and Gas Activities Act* and the *Oil and Gas Activities Act General Regulation*.
- (2) If a right of way has a width of 20 metres or less it may be posted on one boundary only. The posted boundary should remain consistent throughout the survey, except the posted boundary may be changed in order to maximize the potential for monument preservation.
- (3) Relief is granted from the posting requirements of Rules 5-4(1)(c) and (d) only where it refers to surveyed boundaries of rights-of-way, to require no more than 6 monuments per kilometre, including all monuments required by Rule 5-4. Where this provision is used, the land surveyor should give priority to monuments set at right of way crossings rather than deflection points and should attempt to have monuments spaced evenly along the right of way under survey instead of grouping them together excessively and having areas of little or no posting.
- (4) When the right of way under survey crosses multiple adjoining rights of way, which are required to be posted under Rule 5-6(2), the posting requirements may be further reduced such that only the outside boundaries of the adjoining rights-of-way are required to be posted, notwithstanding Rule 5-6(3).

(5) A land surveyor may post both sides of a right of way or set additional posts where they feel it is beneficial to the cadastral fabric.

# **Division 3: Right of way plans**

# 5-7 Additional plan requirements

Right of way plans must contain the following information:

- (1) The width of a linear right of way at frequent intervals.
- (2) The values of convergence from the origin to points on the plan at 8 kilometre intervals or less.
- (3) The serial numbers that have been stamped on type 1, 2 or 4 posts.
- (4) A book of reference, if the plan deals with more than one parcel, near the title, listing in progressive order the legal description of all parcels crossed and the total area of the right of way or easement within each parcel. If there are multiple right of way areas within a parcel, each area must be listed and uniquely identified.
- (5) Surveyed and unsurveyed forest service and *Oil and Gas Activity Act* roads should be included within a right of way and labelled accordingly.
- (6) If a right of way is divided by a highway or public road, the plan must show ties across the highway or public road in fine broken lines and must provide a mathematical link across the road.

# 5-8 Plans crossing both Crown and private land

- (1) If a right of way crosses both Crown land and private land, a separate plan must be prepared and submitted to the Surveyor General in respect of the part of the right of way that crosses Crown land.
- (2) All right of way plans over Crown land must be submitted to the Surveyor General and include the following notation on the plan image.

*This plan is prepared as the Official Plan of the lands shown hereon for the Surveyor General.* 

# **Division 4: Easement and Covenant Surveys and Plans**

### 5-9 Additional posting requirements

Rules 5-4 and 5-5 apply to linear easement or covenant surveys.

# 5-10 Additional plan requirements

Rule 5-7 applies for all linear easement or covenant plans.

# PART 6 — HIGHWAY, PUBLIC ROAD AND RAILWAY SURVEYS

Surveys under this Part must also comply with requirements of Part 4 of these Rules.

# **Division 1: General**

### 6-1 Definitions

- (1) In this Part:
  - (a) **"railway"** means a *railway* within the meaning of Section 1 of the *Railway Act* and includes:
    - (i) a railway established under an enactment of another jurisdiction that provides for a railway in British Columbia; and
    - (ii) a railway right-of-way.

### 6-2 Application of this Part

- This Part applies to highway, public road and railway surveys that are greater than 1 kilometre in length or where the total dedication across parcels is greater than 1 kilometre inlength.
- (2) Highway, public road and railway surveys that are 1 kilometre in length or less shall be surveyed using the requirements for a plan pursuant to Section 107 of the Land Title Act or under the Land Act, as appropriate.
- (3) Before commencing a highway, public road or railway survey over Crown land, the land surveyor must obtain instructions from the Surveyor General.

# **Division 2: Surveys**

### 6-3 Establishing boundaries

- The boundaries of a highway, public road or railway should be surveyed symmetrically, where practical, with the centreline of the constructed highway or railway.
- (2) Construction widths or other conditions that differ from those provided on the plans or described in the instructions must be reported to the appropriate authority, and that authority must provide further instructions. The Surveyor General must also be involved if the survey is over Crown land.
- (3) Widenings of highways, public road or railways on Crown land must, if practical, be bounded by a series of straight lines.
- (4) Widenings of highways, public road or railways on land other than Crown land must be surveyed to conform as closely as practical to the boundaries shown on the design plans or as described in instructions provided by the appropriate authority.
- (5) Where a boundary on an existing highway or railway plan is defined by spiralcircular-spiral curves the curves must be replaced by circular curves of a radius which will reduce the displacement of the physical centreline of the constructed road or railway from the mathematical centreline of the highway or railway under survey to a minimum, or terminalcurves must be used in place of the spiral curves.

### 6-4 Intersecting natural boundaries

The crossing of water bodies must be surveyed in accordance with Rule 5-2.

# 6-5 Intersecting public roads

- (1) Public roads must be excluded from a survey of a railway.
- (2) The land surveyor must involve the Surveyor General with regard to inclusion or exclusion of public road from highway surveys.

### 6-6 Intersecting highways

- (1) Highways must be excluded from a survey of a railway. If unsurveyed the width to beexcluded must be:
  - (a) in the case of a highway established by notice in the Gazette, the width stated in thenotice;
  - (b) in the case of a highway established under *Section 42* of the *Transportation Act* by courtorder, the travelled width or as specified by the court order.
- (2) Existing highway must be excluded from the survey of a new highway.

### 6-7 Intersecting forest service roads

The land surveyor must obtain direction from the Surveyor General with regard to inclusion or exclusion of forest service roads in highway and railway surveys.

### 6-8 Intersecting other travelled ways

If a highway or railway under survey crosses a travelled way, other than a highway, public road or forest service road the travelled way must be included within the highway or railway survey

# **Division 3: Monumentation**

### 6-9 Monumentation systems

- (1) Subject to Rule 6-9(2), the boundary system described in Rule 6-10 must be used for all highway, public road or railway surveys that fall under this part.
- (2) If it is impracticable to use the boundary system, the centre line system described in Rule 6-11 may be used, with the prior approval of the Association.

### 6-10 Boundary system

- (1) Subject to Rule 2-8(6), type 1, 2 or 4 posts must be set on one side of the highway, public road or railway under survey:
  - (a) At the start and end of the survey;
  - (b) Subject to Rule 2-8(6), at points of intersection with boundaries of a district lot other than a mineral title, a section, a Land Act block or a quarter section, unless the boundary is of a theoretical section or quarter section;
  - (c) At points of curve or deflections; and
  - (d) At intermediate points on tangent, so that the distance between the posts is no greater than 1 kilometre.
- (2) Type 5 or better posts must be set:
  - (a) on the side of the highway, public road or railway under survey on the side opposite that referenced in Rule 6-10(1); and
  - (b) on both sides of the highway, public road or railway under survey at intersections with all other surveyed boundaries and unsurveyed parcel boundaries.

# 6-11 Centre line system

- (1) Type 1, 2 or 4 posts must be set:
  - (a) at centre line points of intersection, or at points witnessing centre line points of intersection on subtangents or subtangents produced;
  - (b) at intermediate points on the boundary of the highway, public road or railway under survey, if any tangent exceeds 1 kilometre in length; and
  - (c) at points of intersection with boundaries of a district lot other than a mineral title, a section, a *Land Act* block or a quarter section, unless the boundary is of a theoretical section or quarter section.
- (2) Type 1, 2 or 4 posts required by this section must not be set in any place where they might be disturbed by highway, public road or railway maintenance equipment.
- (3) Type 5 or better posts must be set on the boundary of the highway, public road or railway under survey:
  - (a) at all points of curve and deflection;
  - (b) on the side of the highway, public road or railway under survey on the side opposite that referenced in Rule 6-11(1); and
  - (c) on both sides of the highway, public road or railway under survey at intersections with all other surveyed boundaries and unsurveyed parcel boundaries.

### 6-12 Monument substitutions

In the boundary system and in the centre line system:

- type 1 or 2 posts must be substituted for type 4 posts in locations that support monument preservation at points along the survey so as to give an average density of two type 1 or 2 posts every 5 kilometres.
- (2) type 5 posts may be substituted for type 4 posts so as to reduce the average density of type 4 posts to 2 per kilometre.

### 6-13 Intersection with superseded boundaries

Points of intersection of the highway, public road or railway under survey with district lot, section and block boundaries that are no longer parcel boundaries need not be posted but must be indicated on the plan without dimensions.

### 6-14 Witness monuments

- (1) If, due to interference by fences and other structures, posting under this Division is impracticable, posts must be witnessed toward the centre of the highway, public road or railway wherever possible.
- (2) If practicable, posts that are witnessed must be set:
  - (a) at a point on the production of an intersecting boundary;
  - (b) on the radial line at a point of curve; or
  - (c) on the bisector of an angle at a deflection point.

### 6-15 Monument markings

(1) Type 1, 2 and 4 posts must be marked with the designation of lands adjoining the highway, public road or railway.

- (2) Type 1, 2 or 4 posts that are not sited to mark intersections with the boundaries of a parcel must be serially numbered.
- (3) If posts are set to mark changes in direction of highway, public road or railway boundaries, the following abbreviations must be used on the post caps:
  - (a) "PC" means a point defining the beginning or ending of a curve;
  - (b) "POT" means a point on tangent, subtangent or subtangent produced;
  - (c) "PI" means the point of intersection of two tangents;
  - (d) "R" means the highway or public road under survey;
  - (e) "RR" means the railway under survey.
- (4) If a railway under survey over Crown land has been given a district lot number or a block designation, posts must be marked accordingly.

# **Division 4: Highway, Public Road and Railway Plans**

### 6-16 Additional plan requirements

A plan of a highway, public road or railway must contain the following information:

- (1) The perpendicular width of the highway, public road or railway at frequent intervals.
- (2) The values of convergence from the origin to points on the plan at 8 kilometre intervals or less.
- (3) The serial numbers that have been stamped on the monuments.
- (4) A book of reference, if the plan deals with more than one parcel, near the title, listing in progressive order the legal description of all parcels crossed by the highway, public road or railway and the total area of highway, public road or railway within each parcel.
- (5) The plan title placed at the right side of the plan indicating the location and land district in which the highway, public road or railway is located.
# PART 7 — STRATA PROPERTY ACT

# **Division 1: Building Strata**

### 7-1 Definitions

In this part:

*Fixed improvement* means a structural portion of the strata building that can be unambiguously related to walls, floors and ceilings of the strata.

"parent parcel" means the land that is the subject of the strata plan.

### 7-2 Parent Parcel Requirements

Prior to registration of the strata plan, the parent parcel title must be defined by a plan based on a survey, which fulfills the following:

- (1) The parent parcel has been fully monumented.
- (2) Any boundary discrepancies have been resolved.
- (3) Natural boundaries must be based on their present location.

### 7-3 Field procedures

- (1) Lengths of all exterior building walls must be measured.
- (2) Measurements must be made of all boundaries of each and every strata lot, limited common property and perimeter boundaries of each floor.
- (3) Any parent parcel corners that have been destroyed must be reset in accordance with the parent parcel plan. In the case of a phased strata plan, only corners relevant to the phase under survey need be replaced.

### 7-4 Boundaries

- (1) Strata Lot Boundaries:
  - a) Boundaries of strata lots must be unambiguously defined horizontally and vertically;
  - b) Except as provided under Rule 7-4(1)(c), boundaries of strata lots must be defined with reference to walls, floors or ceilings;
  - Boundaries of strata lots that are not defined with reference to walls, floors or ceilings, must be defined with reference to fixed improvements in a manner approved by the registrar;
  - d) If permitted by the registrar, strata lot boundaries may be defined with reference to survey monuments.
- (2) Limited Common Property Boundaries:
  - a) The extent of limited common property must be defined horizontally and, where the limited common property could impact another strata lot, it must be defined vertically;
  - b) The horizontal extent of limited common property must be defined in relation to strata lot boundaries;
  - c) The vertical extent of limited common property must be defined in relation to strata lot boundaries or fixed improvements that are shown on the strata plan.

### 7-5 General Plan Requirements

- (1) Nothing outside the parent parcel can be designated as a strata lot, limited common property or common property or portion thereof.
- (2) Where portions of a building fall outside the parent parcel:
  - (a) On applicable sheets including cross-sections, the plan must show all building encroachments outside the parent parcel that are relevant to the strata being created along with descriptions of what is encroaching;
  - (b) The related easements or other registered interests that have been or will be created to contain the encroachments shown in Rule 7-5(2)(a) must be shown on the plan;
  - (c) Form U must include clause 2 when completing the Survey Plan Certification form. The related notation must appear on the face of the strata plan in accordance with Rule 7-6(4)(c).
- (3) The plan must identify:
  - (a) The horizontal and vertical boundaries of strata lots using descriptive words and illustrations on floor plans and cross sections, even if the midpoint of a wall, floor or ceiling is used, so that the relative location of boundaries defined under Rule 7-4(1) are clear and unambiguous.
  - (b) The horizontal boundaries of strata lots and limited common property using dimensions on the floor plans.
  - (c) The vertical extents of limited common property using descriptive words (or dimensions, if appropriate) on the floor plans or cross sections so that the relative limits of extents defined under Rule 7-4(2)(c) are clear and unambiguous.
  - (d) The vertical extent of the limited common property by way of a clear plan statement which is reflective of the descriptive words or dimensions shown on the floor plans or cross sections. If there is no vertical extent designated for the limited common property, then this must be noted in a clear statement placed on the plan.
- (4) The plan must delineate a part of the lands or building as common property.

#### 7-6 Sheet one

The first sheet must contain the following additional information.

- (1) The type of monumentation found or reset at every corner of the land that is subject to the strata plan except phased boundaries which do not require posting.
- (2) The external boundaries of all buildings and labelled with:
  - (a) if there is more than one building, each building must be identified by either a building number or by strata lot numbers to enable a cross reference from the first sheet to the floor plans;
  - (b) the dimensions of the exterior walls of all buildings;
  - (c) the shortest distance offsets from each building to the adjacent perimeter strata plan boundaries and, where necessary, additional offsets or bearing and distances to clearly define the relationship of the building(s) to the perimeter plan boundary.
- (3) The statement by BC land surveyor as prescribed by Rule 3-6(1)(a).

- (4) The following notations are required on the plan image:
  - (a) For plans containing either all new or all previously occupied buildings:

The buildings included in this strata plan have not been previously occupied.

or

The buildings included in this strata plan have been previously occupied.

(b) For plans containing both new and previously occupied buildings:

The buildings included in this strata plan have not been previously occupied, as to building(s) containing Strata Lot(s) [list strata lot numbers].

and

The buildings included in this strata plan have been previously occupied, as to building(s) containing Strata Lot(s) [list strata lot numbers].

(c) The buildings shown hereon are within the external boundaries of the land that is the subject of the strata plan.

or

Certain parts of the buildings shown hereon are not within the external boundaries of the land that is the subject of the strata plan and appropriate and necessary easements or other interests are required to provide for these encroachments.

### 7-7 Floor plans

- (1) Strata plans must provide a plan image for each floor of a building that contains a strata lot, limited common property or common property, but it is not necessary to show a plan image of crawl spaces or attic space if they are wholly common property.
- (2) Plan images of floor plans must show the following:
  - (a) A title, which clearly identifies the floor and building number if applicable;
  - (b) Designations for strata lots, common property, limited common property and nonhabitable parts of strata lots if applicable;
  - (c) A notation indicating the particular strata lot or lots to which limited common property is appurtenant;
  - (d) Dimensions to 0.01 metres of all boundaries of each strata lot, part strata lot and limited common property;
  - (e) Dimensions to 0.01 metres of the perimeter boundary of a floor plan and sufficient dimensions to clearly relate the location of all strata lots, part strata lots and limited common property within a floor plan;
  - (f) Boundaries of strata lots, part strata lots, common property and limited common property shown as solid lines;
  - (g) Where boundaries of a strata lot or limited common property change direction other than at forty-five or ninety degrees, sufficient additional distances or angles shown to clearly define the strata lotboundary to the extent that the area can be calculated from the dimensions provided;
  - (h) Floor numbers, to be numbered from the lowest floor to the highest floor;
  - (i) The location and descriptive notation of cross sections.

## 7-8 Cross sections

- (1) Strata plans that show floor plans must also show cross sections.
- (2) Building cross section(s) must indicate the vertical relationships of the strata lots and common property and show the following in a manner which provides clarity of extent of these features in accordance with Rule 7-5:
  - (a) Description of the cross section;
  - (b) The appropriate strata lots, limited common property, decks, patios, garages, and other areas through which the cross section passes;
  - (c) A label for the various floors of the buildings;
  - (d) The outline of the roof of the building through which the section passes;
  - (e) The extent of a strata lot where the floor or ceiling levels change within the strata lot;
  - (f) The extent of a strata lot where a bay window extends outward part way up a wall.

### 7-9 Elevation views

Strata plans that show buildings must also show elevation view(s) when requested by the Registrar or if clarification is needed.

# **Division 2: Bare Land Strata**

### 7-10 Monumentation

All corners of all strata lots, common property and limited common property must be posted with Types 1, 2, 3, 4 or 5 monuments.

### 7-11 Bare land strata plan requirements

Plan images must include the following information:

- (1) The common property area(s) clearly delineated.
- (2) If a land use is to be indicated within the area being dealt with by a strata plan, the use must be stated on the plan image within the indicated area and hatching may be used to illustrate the boundaries of the indicated area.
- (3) If buildings exist on land that is to be divided by a strata plan, then, only buildings that are located on common property must be shown.
- (4) Buildings that exist on land that is to be divided by a strata plan, other than those referred to in Rule 7-11(3), must be shown on a separate sketch which must be submitted to the approving officer.
- (5) The dimensions and bearings of the boundaries of the land included within the strata plan, strata lots, limited common property and common property.
- (6) The following notations are required on sheet 1 of the plan image:
  - (a) This bare land strata plan lies within the jurisdiction of the Approving Officer for [insert jurisdictions].
  - (b) Where relief is granted from all or part of *Section 8* of the Bare Land Strata Regulations 75/78:

This plan need not comply with Section 8 of the Bare Land Strata Regulations 75/78.

(c) Where a re-inspection is required under *Section 19 (3)* of the Bare Land Strata Regulations 75/78:

Inspected under the Strata Property Act on the \_\_\_\_\_ day of \_\_\_\_\_ , \_\_\_\_\_.

# **Division 3: Phased Strata Plans**

## 7-12 Plans

In addition to the requirements of a strata plan, phased strata plan images must show the limits of the phase boundaries with complete bearings and distances and must comply with Rule 3-7(1) by showing the exterior boundaries of the phase being dealt with on the plan image as a solid black line between 1 and 1.5 mm in width.

## 7-13 Notations

Phased strata plan images shall include the following notation on sheet 1:

This Plan is Phase \_\_\_\_\_ [number of phase] of a \_\_\_\_\_ [total number of phases] phase strata plan under section 224 of the Strata Property Act lying within thejurisdiction of the Approving Officer for [insert jurisdictions].

## 7-14 Common Facility

If a common facility is identified in a Phased Strata Plan Declaration (Form P) to be constructed in conjunction with a phase of a strata plan, include the following notation on sheet 1:

The common facility [name the common facility] in this phase is subject to the conditions set out in the Form P filed for this strata plan.

## **Division 4: Strata Plan Amendments**

## 7-15 Notations

(1) When a plan is prepared pursuant to Section 259(3)(b)(ii) or *Section 262 (3)(c)(ii)* under the Strata Property Act, the plan image shall include the following notation:

This plan lies within the jurisdiction of the Approving Officer for [insert jurisdictions].

(2) For strata plan amendments, each amended sheet may contain the following statement:

The area inside the heavy outline is the subject of amendment. Information outside the heavy outline was copied from Sheet \_ of \_ [or where applicable, Amended Sheet \_ of \_].

# PART 8 — SURVEYS UNDER THE LAND ACT

## **Division 1: General**

## 8-1 Definitions

In this Part:

"Act" means the Land Act;

"instructions" means the instructions issued by the Surveyor General under Sections 77 (1) and 77.1 of the Act.

## 8-2 Surveyor General Instructions and Parcel Designations

- (1) A land surveyor must contact the Surveyor General, providing all documentation from the Crown authorizing a survey, to obtain specific instructions and parcel designations, prior to beginning a survey under the Act.
- (2) A land surveyor must contact the Surveyor General for additional instructions if conditions on the ground are different from those on the information provided by the Crown.

# **Division 2: General Survey Principles**

## 8-3 Responsibility of land surveyor

Surveys must be carried out under the personal on-site supervision of the land surveyor signing the plan who must ensure that the spirit and intent of the Act is reflected in the survey.

### 8-4 Running of boundaries

- (1) Boundary lines of district lots or blocks established by the survey must be marked in a manner which will allow the boundary line to be identifiable on the ground by the public, by one of the following methods:
  - (a) Setting boundary marker posts along the boundary line at intervals of approximately 100 metres apart and blazing the boundary line in accordance with Rule 1-14; or
  - (b) Cutting and clearing the boundary line of debris to a width of approximately one metre and blazing the boundary line in accordance with Rule 1-14.
- (2) Notwithstanding Rule 8-4(1), where a boundary or boundaries are offset from the centerline of a road or trail and are generally parallel to the centerline, the boundaries need not be marked if the offset is 30 metres or less.

## 8-5 Natural Boundaries

- (1) Natural boundaries of rivers that are not readily fordable at ordinary stages of water and lakes will normally be adopted as part of the perimeter boundary of a parcel under survey, unless otherwise directed by the Surveyor General.
- (2) Natural boundaries of water bodies that are internal to the parcel under survey must be tied and the area of the water body is to be excluded from the area of the disposition, but form part of the parcel under survey, unless otherwise directed by the Surveyor General.
- (3) Water bodies of a temporary or seasonal nature not having a defined natural boundary need not be tied.

## 8-6 Foreshore lots

- (1) Sidelines of foreshore lots must, if practical, be laid out at right angles to the general trend of the present natural boundary, unless otherwise instructed by the Surveyor General.
- (2) Foreshore lots must be surveyed so as not to encroach on the foreshore fronting adjoining upland parcels or on any land to which a certificate of title exists regardless of the location of the present natural boundary.
- (3) The waterward boundary of a foreshore lot must be a straight line, or a series of straight lines, connecting the outer ends of side boundaries.
- (4) If the foreshore lot is located adjacent to a narrow channel, its waterward boundary must not extend into the navigable part of the channel.
- (5) If all boundaries of a foreshore lot are below the natural boundary, they must be straight line boundaries with appropriate directions and lengths.
- (6) When surveying a parcel covering filled foreshore, the waterward boundary must be surveyed as a series of straight lines along the edge of the fill.

# **Division 3: Monumentation**

## 8-7 Corner & boundary posts

- (1) Despite the requirements in Rule 2-10(1)(a), multiple adjoining parcels under survey, each having an area of less than 2 hectares, may be posted such that each parcel has a minimum of two type 1, 2 or 4 posts with the remaining corners being posted with type 3 or 5 posts.
- (2) If a right of way boundary is adopted as a boundary of the parcel under survey, posts of type 1, 2 or 4 must be used.
- (3) The intersection of a boundary of a parcel under survey with the boundary of a district lot or section must be posted with a type 1, 2 or 4 post.
- (4) If a boundary consists of a series of short lines, corners or deflections may be posted with type 5 posts provided monuments of type 1, 2 or 4 are set at the main parcel corners and at intervals of 500 metres or less.
- (5) The end points of a series of straight lines, establishing the boundary of filled foreshore, must be posted with monuments of type 1, 2 or 4. All intermediate points may be posted with type 5 monuments.

### 8-8 Foreshore lots

- (1) Posts marking the rectilinear boundaries of a foreshore lot must be considered to be witness posts unless set on a true corner and must be type 1, 2 or 4.
- (2) Posts set to range the sideline of a foreshore lot must be set upland of the natural boundary on a production of the sideline and may be of type 3 or 5 unless marking the corner of a foreshore lot.

### 8-9 Marking Post Caps

- (1) If a parcel under survey has jogs in one or more boundaries, the posts must be consecutively numbered from "1" upwards.
- (2) If an existing type 1, 2 or 4 post of an adjacent survey is part of the new survey, the new parcel designation and appropriate lines must be added to the markings on the existing post.

# **Division 4: Land Act Plan Requirements**

Land Act plan images must contain the following additional information.

#### 8-10 Plan title

### 8-11 Additional plan requirements

- (1) Suitable notes or labels providing details of all boundary markings, including where boundaries have not been marked.
- (2) Land Act plans must contain a summary of areas. The following shows typical examples:
  - (a) Survey Plan of District Lot 100, Yale Division of Yale District Area above Present Natural Boundary = X

Area of Water body = Y

Total Area of DL 100 = Z (=X+Y)

Note: District Lot 100 under survey.



(b) Survey Plan of Block A and Road, District Lot 100, Cassiar District

Note: District Lot 100 under Survey



(c) Survey Plan of Block A and Road, District Lot 100, Cassiar District

= A
= B
= C
= Z (=A+B+C)

Notes: District Lot100, Block A and Road under survey. Water body is part of the District Lot, but not part of Block A.



(d) Survey Plan of Blocks A to E and Road, District Lot 100, Cassiar District

Area of Bk A	= A					
Area of Bk B	= B					
Area of Bk C	= C		- 4 -		: :	
Area of Bk D	= D		str	ιсτ	Bk D	Bk E
Area of Bk E	= E	•×			DKD	
Area of Road	= F	reet	F	~		4
Area of Water bo	dy = G		3	5	LO	
Total Area of DL 1	100 = H	Bk A	Bk B	Bk C	X	
(= the sum of A to				Road		100
		6				1

Note: District Lot 100, Blocks A-E and Road under survey. Water body is part of the district lot, but not part of the Blocks. Road includes water body. Area "G" does not include the area of the water body in the Road.

(e) Survey Plan of Block A, District Lot 100, Yale Division of Yale District

Area of Bk A = X

Notes: District Lot 100 already exists and Block A is under survey. Water body is not part of Block A An expression of the area for the creek running through Block A is not required.



 (f) Survey Plan of District Lot 200, and Block A of District Lot 100 and 200, Yale Division of Yale District



Notes: District Lot 100 exists. Block A, Road and District Lot 200 under survey. Water body is part of District Lots but not part of Block A. Road includes water body

# PART 9 — SURVEYS UNDER THE *MINERAL TENURE ACT*

# **Division 1: General**

## 9-1 Definitions

In this Part:

"Act" means the Mineral Tenure Act.

"cell" has the same meaning as in Section 1 of the Mineral Tenure Act.

"cell claim" has the same meaning as in Section 1 of the Mineral Tenure Act.

"claim" has the same meaning as in Section 1 of the Mineral Tenure Act.

"legacy" has the same meaning as in *Section 1* of the *Mineral Tenure Act*.

"mineral title" has the same meaning as in Section 1 of the Mineral Tenure Act.

"mineral title online grid" has the same meaning as set out in the Mineral Title Online Grid Regulation (B.C. Reg. 530/2004).

"mining lease" has the same meaning as in Section 1 of the Mineral Tenure Act.

"records" includes all documents relating to a tenure held under the *Mineral Tenure Act* and available from the Chief Gold Commissioner.

## 9-2 Requirements for survey

A survey of a mineral title or portion thereof must be conducted when:

- (1) required by the Chief Gold Commissioner.
- (2) required by legislation.
- (3) ordered by the court,

and may be conducted when requested by the recorded holder of the mineral title.

# **Division 2: Rules for Survey**

## 9-3 Responsibilities of the land surveyor

Under this Part, a land surveyor in accordance with these rules must prepare a plan showing all or a portion of the ground held by a mineral title.

## 9-4 Extent of Mineral Titles

The extent of a mineral title shall be defined by:

- (1) in the case of cell claims, the mineral title online grid.
- (2) in the case of legacy claims, by the position shown on a map approved by the Chief Gold Commissioner.
- (3) approved surveyed parcel(s) referred to in the Chief Gold Commissioner's records.

## 9-5 Rules for Boundary Determination

- (1) In determining the boundaries of a mineral title, the land surveyor must be governed by: a) the *Mineral Tenure Act*;
  - b) all pertinent regulations under the Act; and
  - c) this Part.

- (2) The land surveyor shall conduct sufficient research and field survey to identify all conflicting interests that affect or may affect the extent of a mineral title, or portion thereof, under survey.
- (3) The land surveyor must procure sufficient evidence in order to reach a conclusion as to the true location of the mineral title boundary being surveyed.
- (4) If a land surveyor is unable to determine the extent of the mineral title pursuant to Rule 9-4, then written direction shall be requested from the Chief Gold Commissioner.

## **Division 3: Monumentation**

### 9-6 Monument placement and types

- (1) Sufficient monumentation must be placed to adequately define the boundary or portion of the boundary being surveyed.
- (2) Additional monumentation may be placed.
- (3) All monumentation placed must be of Type 1, 2, or 4.
- (4) All monumentation must be stamped with the year of survey, commission number of the land surveyor, the letters MT, the electronic plan number, and the monument number in accordance with Rule 9-8(2).

# **Division 4: Mineral Tenure Act Plans**

### 9-7 Title

A plan image under the *Mineral Tenure Act* must contain the appropriate title similar in form to the following:

"Plan of Survey of (Part of)(description of mineral title(s) being surveyed), Land District.".

#### 9-8 Additional plan requirements

A plan image under the *Mineral Tenure Act* must contain the following additional information:

- (1) Notwithstanding Part 3, all information shown on the plan image must be expressed in the UTM projection, specifically:
  - (a) grid distances;
  - (b) grid bearings;
  - (c) areas, based on grid bearings and distances; and
  - (d) co-ordinates.
- (2) Exterior corners and monumentation found or placed must be consecutively numbered.
- (3) A table showing:
  - (a) the number and co-ordinates of all exterior corners on the portion of the mineral title under survey; and
  - (b) the number and co-ordinates of all monumentation found or placed on the portion of the mineral title under survey.
- (4) Boundaries of cells shown as broken lines within the mineral title being surveyed.
- (5) The mineral title designation used by the Chief Gold Commissioner.
- (6) In the case of a survey of all of a mineral title, the total area.

- (7) Highways, public roads, forest service roads, *Oil and Gas Activities Act* roads and other ways shall be shown as follows:
  - (a) if an unsurveyed road, forest service road, *Oil and Gas Activities Act* road, or traveled road that is not a public highway under the *Transportation Act*, is located on the mineral title being surveyed, it must be accurately plotted without dimension;
  - (b) if a road, located within the vicinity of the survey of a mineral title being surveyed, has been previously surveyed and a plan of that survey is on deposit at the land title office or in the Crown land registry, the calculated position of the intersection of each boundary of the road with the mineral title under survey must be dimensioned; and
  - (c) for the purpose of determining the boundary of a road located under Rule 9-8(7)(b), if a road boundary located within the vicinity of the survey of a mineral title being surveyed has been gazetted at a width greater than that on the previous survey, the gazetted width applies.
- (8) The accurately calculated position of conflicting interests determined in Rule 9-5(2) and anyother surveyed tenures or surveyed interests in the vicinity.
- (9) If appropriate, a note providing details of any boundaries cut, cleared and blazed.
- (10) The notation that the plan was prepared under Sections 42, 44, or 45 of the Mineral Tenure Act, as appropriate, or that it was deposited under Section 7 of the Land Act is to be shown on the submission form under electronic submission and is not to be shown on the plan image.

# PART 10 — SURVEYS UNDER THE OIL AND GAS ACTIVITIES ACT

## **Division 1: General**

## **10-1 Definition**

In this Part, "Act" means the Oil and Gas Activities Act.

# **Division 2: Rules for Survey**

### 10-2 Vertical datum

- (1) Geodetic elevations must be derived from the datum and geoid model specified by the Surveyor General.
- (2) Elevations must be determined by any survey method that attains the relative accuracy standard set in Rule 2-1(1).

# **Division 3: Monumentation**

## **10-3** Posting of well sites

If well sites are posted, they must be posted with posts of type 1, 2, 3, 4 or 5.

### **10-4** Referencing of surveys

- (1) Well sites must be referenced by two intervisible monuments, of type 1, 2 or 4, which are a minimum distance apart of 150 metres, or as required by Rule 10-4(2).
- (2) Well sites located within surveyed townships in the Peace River Block must be referenced by ties to at least two existing survey monuments of types 1, 2, 3, 4 or 5 or old style Dominion iron posts, which monuments mark corners of the section, quarter section or legal subdivision in which the well is situated or can be related to such corners through survey plans of record.
- (3) One of the two monuments referred to in Rule 10-4(1) may be a post set on a corner of the well site.
- (4) A tripod and reference post must reference a monument referred to in Rule 10-4(1), where possible.

### 10-5 Markings

Monuments must be marked in accordance with Rule 1-8 except that monuments required by Rule 10-4(1) not set on the true corner of a well site, must be marked with the letters "OGA" followed by the numerical portion of the well name and numbered sequentially.

# Division 4: Oil and Gas Activities Act Plans

### 10-6 Title

A plan prepared under *Section 25* of the *Oil and Gas Activities Act General Regulation* must contain the appropriate title similar in form to the following:

"Survey Plan of Well Site	[insert name of well
site]	District"

### 10-7 Additional plan requirements

A plan prepared under *Section 25* of the *Oil and Gas Activities Act General Regulation* must contain the following information:

- (1) The convergence to be added to or subtracted from plan bearings to obtain bearings to the meridian through the well centre.
- (2) The perpendicular offsets from the well centre to the nearest corner of the spacing area in which the well is situated.
- (3) a table of balanced UTM coordinates for each traverse station, each monument found or set, and the well site.
- (4) The geodetic elevation of the ground at the well position, the corners of the well site and the monuments required by Rule 10-4.
- (5) If the well site lies outside the Peace River Block, the petroleum and natural gas grid in fine broken lines.
- (6) If the well site lies within the Peace River Block, surveyed boundaries of the township system shown as solid lines and theoretical or unsurveyed lines shown as fine broken lines.
- (7) The vertical datum and geoid model (including epoch) used to derive elevations and the horizontal datum.
- (8) In the lower right hand corner of the plan:

Well Authority No. Application Determination No. OGC File No. (if applicable)