

INSTRUCTIONS GOVERNING ONTARIO CROWN LAND SURVEYS AND PLANS

SHORT TITLE

"ONTARIO CROWN SURVEY INSTRUCTIONS"

ISSUED BY THE SURVEYOR GENERAL FOR THE PROVINCE OF ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY PETERBOROUGH ONTARIO

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Notes

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1. General Instructions

1.1 Definitions

In these Instructions,

"Crown land" means lands or rights to land administered by the Province under the *Public Lands Act*, the *Provincial Parks and Conservation Reserves Act*, and the *Mining Act*;

"Crown land survey" means a survey of Crown land prepared under the authority of the *Public Lands Act*, the *Provincial Parks and Conservation Reserves Act*, or *Mining Act*, and includes the associated plan;

"Crown Location" is an area of Crown land defined by a Crown land survey which is assigned a unique identifying number in the Crown Survey Records. Crown Location numbers assigned today consist of the letters "CL" followed by one space and a five-digit number. Do **not** put a dash, hyphen or underscore between "CL" and an assigned number;

"Crown subdivision unit" means a lot, block or section on an original township or Crown subdivision plan, mining location, or any unit created by a survey completed under Crown instruction;

"Crown Survey Records" means the plans, field notes and other survey records filed with the Office of the Surveyor General;

"District Office" means the Ministry of Natural Resources and Forestry office for the administrative district in which the surveyed lands are located;

"Instructions" means these Instructions Governing Ontario Crown Land Surveys and Plans;

"Part Schedule" means the reference plan schedule prescribed by O. Reg. 43/96, s. 20.(1)(e), under the *Registry Act*;

"Permanent Onsite Point" means a point:

- 1. located on or in the vicinity of the survey,
- 2. directly connected to the survey, and
- 3. monumented and integrated in accordance with these Instructions.

"Provincial grid" means the digital representation of the province of Ontario prescribed under the *Mining Act*;



"Provincial Recording Office" has the same meaning as in the Mining Act;

"Surveyor" means an Ontario Land Surveyor licensed to practice cadastral surveying as defined under the provisions of the *Surveyors Act* and in good standing with the Association of Ontario Land Surveyors;

"Zone Office" means the Ministry of the Environment, Conservation and Parks office for the administrative zone in which the surveyed lands in a regulated Provincial Park or Conservation Reserve are located.

1.2 Authority and Purpose

- 1.2.1 These Instructions are provided for the guidance and direction of Surveyors retained to perform Crown land surveys.
- 1.2.2 The authority to cause Crown land to be surveyed has been given to the Minister of Natural Resources under the provisions of the *Public Lands Act* and has been assigned to the Minister of Natural Resources and Forestry under the *Executive Council Act*. The Minister has delegated this authority to the Surveyor General under the provisions of the *Ministry of Natural Resources Act*.
- 1.2.3 The management of Crown lands regulated under the *Provincial Parks and Conservation Reserves Act* has been given to the Minister of the Environment, Conservation and Parks. The Office of the Surveyor General provides services related to surveying to the Ministry of the Environment, Conservation and Parks under a Memorandum of Understanding.
- 1.2.4 The *Mining Act* requires surveys prior to the issuance of a lease or licence of occupation of a mining claim. Consent to survey is required under that *Act*. The prescribed methods and procedures to be followed in the surveying of mining claims are as set out in these Instructions pursuant to s. 13.1 of O. Reg. 45/11, under the *Mining Act*.
- 1.2.5 Surveys and plans prepared for the transfer of jurisdiction and control of Crown land for highway purposes under the *Public Transportation and Highway Improvement Act* (Type E Plans) shall adhere to Ministry of Transportation of Ontario procedures and instructions.
- 1.2.6 Subject to paragraph 1.2.5, all Crown land surveys and plans must adhere to these Instructions, Ontario statutes and regulations, and associated guidelines respecting surveys and plans.
- 1.2.7 The Surveyor General may issue additional or special instructions for Crown land surveys on a project specific basis.



1.2.8 Staff of the Office of the Surveyor General are authorized to comment on behalf of the Surveyor General regarding the instruction and review of Crown land surveys, and to permit the deposit of Crown Location reference plans.

1.3 Legal Survey Consultant Services

All Surveyors shall be deemed to be approved vendors for the procurement of professional land surveying services by the Ministry of Natural Resources and Forestry, the Ministry of the Environment, Conservation and Parks, and the Ministry of Energy, Northern Development and Mines.

1.4 Requirement for New Survey

Given the age of many original surveys, a description consisting only of 'all' or an aliquot part of an original Crown subdivision unit is not an acceptable description for the granting of rights to Crown land. A new survey will be required unless the lands are described as a lot or block on a registered Crown plan of subdivision or have been surveyed as a Crown Location reference plan.

1.5 Preliminary Procedures

Before commencing a Crown land survey, consent is required,

- 1. in the case of land being dealt with under the *Public Lands Act*, from the District Office in the form of a **signed** *Requirements for Crown Land Survey* form (refer to Appendix A);
- 2. in the case of land being dealt with under the *Provincial Parks and Conservation*Reserves Act, from the Zone Office in the form of a **signed** Requirements for Crown

 Land Survey form (refer to Appendix A); or
- 3. in the case of land being dealt with under the *Mining Act,* from the Provincial Recording Office in the form of a **signed** *Provincial Requirements and Consent to Survey Mining Claims* form (refer to Appendix B).

A copy of the signed consent form must be included with the survey submission to the respective Ministry.



2. Survey Standards

2.1 Measurements

Measurement standards for Crown land surveys are those adopted by the Association of Ontario Land Surveyors.

2.2 Bench Marks and Elevations

- 2.2.1 Refer elevations to the Canadian Geodetic Vertical Datum 2013 (CGVD2013).
- 2.2.2 Elevations may be established using Global Positioning System methodology or by transferring elevations from a known bench mark. A water transfer to establish a Bench Mark may be used if the specified accuracy in paragraph 2.2.3 can be achieved.
- 2.2.3 Where elevations are transferred from a known bench mark regardless of the methodology, the error of closure will not exceed 5 cm x √ k, where k is the number of kilometres in the loop.

2.3 Monumentation

- 2.3.1 Cut crosses, concrete pins or plastic bars are **not** to be used as survey monuments on Crown land surveys.
- 2.3.2 Restore any deteriorated township lot or section corner, mile post or other original Crown survey point found or used in connection with a Crown land survey with a standard iron bar, rock bar, rock post or rock plug as defined in O. Reg. 525/91, under the *Surveyors Act*. A short standard iron bar may only be used if it is impractical to use a standard iron bar.
- 2.3.3 Monument all cell corners of the provincial grid along the perimeter of a mining claim being surveyed.
- 2.3.4 Refer natural or non-rectilinear boundaries to monumentation positioned at intervals no greater than 1 kilometre, or as directed by the Surveyor General.
- 2.3.5 Where it is impractical to establish permanent and stable monuments on boundary corners due to site conditions, establish at least two additional permanent and stable monuments on or near, and connected to the survey.

2.4 Boundaries of New Units

2.4.1 Prolongation of Side Lines

Where a new boundary is to be the prolongation of an existing boundary, establish and show its location based on the best available evidence of the existing boundary.



2.4.2 Shoreline Boundaries

The District or Zone Office will advise through the *Requirements for Crown Land Survey* form whether a waterside boundary is to be Riparian or Non-Riparian.

2.4.2.1 Riparian Requirement

For riparian limits, the waterside boundary shall be the water's edge.

2.4.2.2 Non-Riparian Requirement

For non-riparian limits, the waterside boundary will be:

- 1. a series of monumented straight lines, or
- 2. a contour of elevation,

as directed by the District or Zone Office.

2.4.3 Natural or Non-Rectilinear Boundaries

The location of a natural or non-rectilinear boundary will be shown by measurements at such intervals as its complexity demands and to such extent as will enable future retracement.

2.4.4 Photogrammetric or Remote Sensing Survey Methods

Contours or natural boundaries established using photogrammetric or other remote sensing techniques will be ground-verified using an alternative technology at monumented points. Vertical accuracy of natural features being verified must be within 30 cm relative to vertical control. Prepare a report showing the comparison between physically measured and digitally derived distance to the feature. Label the governing feature that defines the boundary as "Water's Edge" or "Contour of Elevation xxx.xx m. (CGVD2013)". Include the following note on the plan:

The limit of [official name of water body] (or [Contour of elevation xxx.xx m (CGVD2013)]) as shown on this plan has been derived from [digital survey method used to plot the boundary including date and manufacturer of data] and has been verified on the ground as a true position by [method of ground survey].

2.5 Integrated Surveys

- 2.5.1 Every Crown land survey shall be integrated and,
 - 1. referred to the North American Datum 1983 (Canadian Spatial Reference System) realization; and
 - 2. coordinates shall be expressed as grid coordinates in the Universal Transverse Mercator map projection as defined in O. Reg. 216/10, s. 32, under the *Surveyors Act*.



2.5.2 Where no Specified Control Point exists within 1 km of the site of the survey, establish coordinates on three Permanent Onsite Points to the accuracy set out in O. Reg. 216/10, s. 14(2), under the *Surveyors Act*.

2.6 Digital Photographs/Videos

2.6.1 Digital photographs or digital videos shall be taken along all surveyed boundaries and shorelines. Attention will be given to encroachments, potential third-party interests, filled lands, areas of concern, etc. All photographs or videos taken are to be numbered, indexed and referenced on a diagram or plan showing the camera location and direction. Include a descriptive report, if necessary.

3. Plan Standards

3.1 Dimensions, Areas and Coordinates

- 3.1.1 Linear dimensions shall be ground distances and shown in metres, to a minimum of two decimal places, except that distances to and along non-rectilinear boundaries shall be shown as "±" to a minimum of one decimal place.
- 3.1.2 Areas shall be shown in hectares to a minimum of three decimal places. If necessary, increase the number of decimal places so that the area shown is not 0.000 hectares.
- 3.1.3 Show coordinates of at least three Permanent Onsite Points to a minimum of two decimal places in the table of coordinates required under O. Reg. 216/10, s. 18. (1)(i)(i), under the *Surveyors Act*.

3.2 Road Allowances and Filled Bed

Filled areas such as the bed of lakes and rivers, and any portion of a road allowance or other public road included in the area being surveyed shall each be shown as separate Parts.

3.3 Key Plan

Include a key plan illustrating the geographic location of the survey and its relationship to adjoining cadastral fabric and drawn at a scale sufficient to enable the user to locate the parcel.



- 3.4 Title Block
- 3.4.1 Plans shall be entitled "Plan of Survey of ____".
- 3.4.2 Crown Location plans shall be entitled "Plan of Survey of Location CL ____". The Crown Location number will be provided when permission to deposit is given.
- 3.4.3 Roman numerals are not to be used on plans. Use the Arabic number equivalent.
- 3.4.4 Include the geographic township in the title block even if the land is within a registered plan of subdivision.

3.5 Permission to Deposit Note

Show the following note below or beside the requisition for deposit block:

PERMISSION TO DEPOSIT THIS PLAN OF SURVEY OF CROWN LAND WAS GIVEN BY
THE SURVEYOR GENERAL OF ONTARIO ON THE _____ DAY OF ______, 20___

- 3.6 Part Schedule
- 3.6.1 The Part Schedule shall include additional columns, as needed, to show the following:
 - 1. Underlying surveyed mining claims, indicating all claim(s) partially or wholly contained within each surveyed Part.
 - 2. The rights (i.e. surface rights or mining rights) available where rights have been previously alienated by the Crown.
 - 3. Remarks, including unsurveyed mining claim identifiers, Provincial Park or Conservation Reserve name and previous Crown dispositions.
- 3.6.2 Amend the heading of the Parcel/PIN/Inst. column to "Parcel/PIN/Inst./Crown". The word "Crown" will generally take the place of a PIN in that column opposite each Part describing unpatented Crown land. If the land being surveyed has been assigned a PIN, contact the Office of the Surveyor General for instructions.
- 3.6.3 Show the total area of all Crown Parts.



Sample Schedule:

SCHEDULE													
PART	MINING	LOT/	CON/	AREA	PIN/INST/	RIGHTS	REMARKS ³						
	CLAIM ¹	BLOCK	PLAN	(ha)	CROWN	AVAILABLE ²							
1													
2													
3													
	TOTAL AREA												
(Name of	(Name of Geographic Township or Area Map Sheet)												

¹ Use this column for underlying surveyed mining claims only.

3.7 Bench Mark and Elevation Notes

- 3.7.1 Include a note indicating the location and nature of any benchmark used in support of the survey.
- 3.7.2 Convert local datum, previous geodetic (CGVD28) and benchmark elevations to CGVD2013, and
 - 1. include an Elevation Conversion Note in a conspicuous place on the plan that states:

Elevations on this plan are geodetic and are referred to Canadian Geodetic Vertical Datum 2013 (CGVD2013).

Elevations previously referred to [state previous datum] have been converted to CGVD2013 by [adding or subtracting] [adjustment applied] metres.¹

2. include an Elevation Conversion Table, in a form similar to the example below, immediately below the above Note.

² Use this column for rights available for disposition only if mining or surface rights have previously been alienated by the Crown.

³ Use this column for such things as existing unsurveyed staked mining claims, water power lease agreements, etc.

DESCRIPTION OF	EQUIVALENT ELEVATION ³											
FEATURE ²	LOCAL DATUM	CGVD28	CGVD2013									

¹ Include a separate note for each converted datum, as required.

- 3.7.3 Where an elevation or a contour of elevation is shown on a plan, include the following notes as applicable:
 - 1. Elevations shown hereon are referred to [identify bench mark], having an elevation of [elevation], CGVD2013.
 - 2. [official name of water body] is regulated by a dam at [location of dam].
 - 3. Flooding rights have been granted by [identify appropriate instrument] (see Elevation Conversion Table).

4. Water Boundaries

Show and annotate the water's edge at time of survey on Crown land surveys with non-riparian limits. If the water's edge is coincident with a non-riparian contour of elevation limit at the time of survey, do **not** annotate the water's edge on the plan. Instead, include a note stating:

The water's edge and contour of elevation [state contour] metres CGVD2013 were coincident at the time of this survey.

4.1 Fixed Boundaries Referenced to Water Body Limits

During the survey of the original Crown subdivision unit, or within the original grant by the Crown, the fronts of the subdivision unit or granted parcel were often established along an inland line set some distance back from the edge of a water body (e.g. inner limit of a shore

² Provide a brief description of the feature. (e.g. Benchmark [identify benchmark], Contour of Elevation, Flooding Rights in Licence of Occupation XXXX). Include all features with elevations that are indicated on the plan.

³ Include columns for each datum, as required. **Note:** it is not necessary to convert equivalent elevations between local datum and CGVD28. Insert "n/a" in the associated local datum or CGVD28 column if the equivalent elevation is not available.



road allowance, fronts of summer resort locations, exceptions of strips of land in the original grant).

Re-establish these limits in their original position, having due regard to monuments set and the position of the edge of the water body at the time of the original survey.

In the situation described above, include the following note on the plan:

[Evidence used] as established by survey and shown on this plan has been accepted as being the best available evidence of the limit of [official name of water body] as it existed at the time of the original [survey/grant] of [identify the plan or patent].

4.2 Water Body Limits

4.2.1 Limit to be Coincident with Upland Parcel Limit

The landside limit of Crown land in front of existing riparian parcels will be the limit of the upland parcel. To ensure no gaps or overlaps in title, the limit of the upland parcel will be retraced using the best available evidence.

Annotate the limit as "Limit of PIN xxxxx-xxxx", or clearly identify the extent of the PIN with the use of leaders. Include explanatory notes as required.

4.2.2 Natural Water's Edge Annotation

If a **new** boundary is intended to be the natural water's edge, in order to recognize the boundary's ambulatory nature, annotate the limit as "Water's Edge". Do **not** qualify the annotation with a date or any other qualifiers. The date on which the water boundary was surveyed may be indicated in a note. If no artificial control structure (e.g. dam or weir) exists that affects the water body and the water body is in its natural state, include the following note on the plan:

[Official name of water body] is not regulated by an artificial control structure. The waterside limit of Part [x] is the ambulatory limit of [official name the water body].

4.2.3 Limits Not Affected by Existing Artificial Control Structures

If the Surveyor's opinion is that the construction of an artificial control structure on, or in the vicinity of a water body has not altered the water's edge from its natural state, include the following notes on the plan:



[Official name of water body] is regulated by a [identify structure] at [location of structure], however the [identify structure] does not affect the water level at the location of this survey. The present water's edge has been accepted as the best evidence of [describe limit being retraced or established].

The waterside limit of Part [x] is the ambulatory limit of [official name of water body].

4.2.4 Accretion and Erosion

If the location of the present limit of a water body differs from the location shown on a previous plan and it is the Surveyor's opinion that this difference is the result of natural accretion or erosion, not artificial alteration or sudden movement of the limit, also include the following note on the plan:

The limit of [official name of water body / river / Block/lot, Registered Plan] as shown on this plan has been established by survey and the water's edge has been accepted as the best available evidence of this limit. Any change from the position of this limit as shown on [previous plan / Registered Plan / limits as they existed at the date of the original survey] appears to be the result of normal and gradual fluctuations in the limit.

4.2.5 Artificial Aleration or Sudden Movement of Limits

If the location of the present limit of a water body differs from the location shown on a previous plan and there is evidence of artificial alteration of the limit (e.g. filling, dredging or flooding) or other sudden movement of the limit, establish the position of the upland parcel limit immediately prior to the alteration or sudden movement using the best available evidence.

Include the following note on the plan:

The limit of [official name of water body] has been artificially altered by [cause of alteration]. [Evidence used] is the best available evidence of the position of this limit prior to the alteration.

4.2.6 Annotation of Filled Land

Label filled areas of the bed of a water body as "FILL". The disposition limit will be a contour of elevation in the case of an artificially controlled water body, the water's edge in the case of a natural water body, or as otherwise directed by the District or Zone Office.



5. Specific Instructions

- 5.1 Crown Location Surveys
- 5.1.1 A Crown Location plan is a plan of survey used to define a Crown Location.
- 5.1.2 Unless otherwise instructed, prepare a Crown Location plan as a reference plan for deposit under the *Land Titles Act*.
- 5.1.3 Crown Location plans will consist of surveys of Crown land **only**, unless prior consent for a combined plan has been received from the Surveyor General.
- 5.2 Combined Plans Showing Crown and Other Land
- 5.2.1 Combined plans showing Crown and other land are generally **not** permitted.
- 5.2.2 The Surveyor General may consent to the use of a combined plan of Crown and other land where, in the sole opinion of the Surveyor General, such a combined plan is appropriate.
- 5.2.3 Combined plans will not be accepted for review unless a copy of the consent is included with the submission.
- 5.2.4 The Surveyor General **hereby consents** to the submission of combined plans including portions of a municipal shore road allowance **only** where the municipality has authorized the sale of the flooded portion of the shore road allowance occupied by or adjacent to a two-storey boathouse.

Note: Notwithstanding the above general consent for a combined plan, the Surveyor General reserves the sole discretion to require a separate Crown Location plan.

5.2.5 The title block of a combined plan must consist of two distinct titles joined by the word "and":

Plan of Survey of Location CL [number]

Being Part of etc.

Geographic Township of

and

Plan of Survey of [describe the other lands]

5.2.6 The Crown Location will be the first parts numbered on the survey and the note below shall be added under the Schedule indicating which parts form the Crown Location:

CL xxxxx is comprised of PART[S] [identify part number(s)] only



5.3 Crown Plans of Subdivision

Crown subdivision surveys are carried out under special instructions issued by the Surveyor General.

5.4 Crown Retracement Surveys

Crown retracement and restoration surveys are carried out under special instructions issued by the Surveyor General.

5.5 Surveys for Exercise of Percent Road Reservation

- 5.5.1 Plans for the exercise of a percent road reservation in a previous Crown grant will be prepared as Crown Location reference plans.
- 5.5.2 The Part Schedule will indicate the subject PIN in the Parcel/PIN/Inst./Crown column. "Crown" is not to be indicated.
- 5.5.3 Monumentation standards are those set out under O. Reg. 525/91, s.7, under the *Surveyors Act*.
- 5.5.4 The Surveyor General may issue special instructions for surveys for exercise of percent road reservation.

5.6 Other Surveys

Other Crown land surveys, such as a Surveyor's Real Property Report or topographical survey, may be required for individual projects. All surveys and plans shall be carried out in accordance with these Instructions and any special instructions issued by the Surveyor General.

6. Surveys of Mining Claims

A Crown land survey of a mining claim will be completed in accordance with the *Mining Act*, these Instructions, and any specific direction given by the Minister of Energy, Northern Development and Mines, a Recorder, and/or the Surveyor General.

6.1 Mining Claim Survey Standards

- 6.1.1 The limit of each cell on the provincial grid is deemed to be a rectilinear line joining its corner vertices.
- 6.1.2 The limits of a single cell claim shall be delineated by surveying the limits of the cell on the provincial grid in which the claim is located, subject to any areas of the cell that do not form part of the claim pursuant to the *Mining Act*.



- 6.1.3 The limits of a multi-cell claim shall be delineated by surveying the outer limits of the cells on the provincial grid in which the claim is located, subject to any areas of the cells that do not form part of the claim pursuant to the *Mining Act*.
- 6.1.4 The limits of a boundary claim shall be delineated based on the coordinates provided by the recorder or Minister.
- 6.1.5 All set coordinates used for the establishment of the limits of a cell claim or boundary claim shall be accurate, at the 95 percent confidence level, to 0.05 metres.
- 6.1.6 Any ambiguities encountered during the survey are to be resolved through consultation with the Office of the Surveyor General prior to the submission of the survey. Office of the Surveyor General staff will consult, where necessary, with the Provincial Recording Office. Any specific survey instructions and/or direction from the Office of the Surveyor General on how to proceed will be provided to the Surveyor and shall be included in the survey submission.
- 6.1.7 Survey separate parts for proposed "surface & mining rights" lands, "surface rights only" lands and "mining rights only" lands.
- 6.2 Plan Standards for Mining Claim Surveys
- 6.2.1 Plans of a single mining claim, or multiple individual mining claims, in unsurveyed territory surveyed under sec. 95 (1) of the *Mining Act* shall be entitled:

Plan of Survey of Mining Claim(s) [space] [mining claim number(s)]

6.2.2 Plans of a single mining claim or multiple individual mining claims, in surveyed territory surveyed under sec. 96 of the *Mining Act* shall be entitled:

Plan of Survey of Mining Claim(s) [space] [mining claim number(s)]

6.2.3 Plans of a perimeter survey of multiple contiguous mining claims in unsurveyed territory under sec. 95 (3) of the *Mining Act* shall be entitled:

Plan of Survey of Perimeter Survey CLM [space] [perimeter survey number as issued in the Minister's written instructions]

- 6.2.4 Plans of surveys for the purpose of an exchange of lease under s. 83(1) of the *Mining Act* shall be prepared as Crown Location reference plans.
- 6.2.5 Plans of mining claim surveys shall show, with unique linework and/or annotation for clarity:
 - 1. The relative position of each mining claim within the survey and adjoining the lands under survey.



- 2. The position of the provincial grid annotated as "Limit of Cell".
- 3. The property identifiers, if any, related to the surface rights of lands under survey.
- 4. The property identifiers, if any, related to the surface and mining rights of adjoining lands. Where surface or mining rights of adjoining lands are unpatented, identify such lands or rights as "Crown".
- 5. If the mining rights are unpatented, the registered mining claim numbers affecting the adjoining lands, if any.
- 6. On the plan or within a table all coordinates used to establish the limits of the lands under survey. Include a note stating:
- 7. Coordinates on this plan are accurate at the 95% confidence level to 0.05 metres.
- 8. The position of underlying geographic fabric, if any.

7. Plan Submission, Approval and Deposit

7.1 Where to Make a Submission

- 7.1.1 No submission for review of a Crown plan is to be made directly to the Office of the Surveyor General unless specifically requested.
- 7.1.2 A submission shall include one Crown land survey only.
- 7.1.3 The submission is to be made to the appropriate government ministry:
 - 1. In the case of land under the Public Lands Act, to the District Office,
 - 2. In the case of lands under the *Provincial Parks and Conservation Reserves*Act, to the Zone Office, or
 - 3. In the case of land under the *Mining Act*, to the Provincial Recording Office.

7.2 What to Include in a Submission

- 7.2.1 The submission for review of a Crown plan will consist of two separate packages:
 - 1. A package addressed to the District Office, Zone Office or the Provincial Recording Office as appropriate, and
 - 2. A package addressed to the Office of the Surveyor General.
- 7.2.2 The package to the District Office, Zone Office or the Provincial Recording Office shall include:
 - 1. The package addressed to the Office of the Surveyor General, in a separate sealed package,



- 2. A copy of the signed consent form outlined in paragraph 1.4, together with a copy of any specific written survey instructions,
- 3. Two signed white paper prints of the Crown survey plan, and
- 4. A CD, DVD or other media acceptable to the Surveyor General containing copies of the digital photographs or digital videos of the land for which the survey was made and the photograph or video index sketch and report (refer to paragraph 2.6).
- 7.2.3 The package addressed to the Office of the Surveyor General shall include two signed white paper prints of the Crown land survey plan, and **preferably in digital format** but also acceptable in hard copy (where applicable):
 - 1. A copy of the signed consent form outlined in paragraph 1.4, together with a copy of any specific written survey instructions,
 - 2. A copy of the report required by paragraph 2.4.4, if applicable, and any additional survey report where the survey is complex or contentious, where substantial disagreement with previous surveys occurs, or where there are issues with evidence,
 - 3. A capture of the appropriate portion of the current Mining Lands Administration System (MLAS) map, which may be obtained from the Ministry of Energy, Northern Development and Mines website,
 - 4. Copies of the pertinent instruments, Block maps and parcel registers, for the subject and adjoining lands,
 - 5. A copy of the registered upland Crown grant, together with attached sketches and plans, or a copy of the record of the original Crown grant (if the original grant is not available), when the survey is of a Crown shore reservation, Crown land between a privately-held parcel and a waterbody, or part of the bed of a flooded waterbody,
 - 6. Copies of all survey plans, including Crown plans, relevant to the survey. This includes plans that portray survey evidence that has been used in the survey and shown on the plan being submitted for approval,
 - 7. Proof of areas for all parts and mathematical closure for all traverses shown on the plan,
 - 8. Any other documentary evidence that may be necessary to clarify or substantiate the plan,
 - 9. A USB drive, CD, DVD or other media acceptable to the Surveyor General containing:
 - a. copies of the required information in paragraphs 1 to 8 above (if submitting in digital format),



- b. copies of the digital photographs or digital video of the land for which the survey was made and the photograph or video index sketch and report (refer to paragraph 2.6), and
- c. an integrated (geo-referenced) CAD file in Autodesk DWG format showing:
 - i. the Part boundaries as closed polylines, and
 - ii. for surveys of mining claims, all linework and coordinates used to establish the limits of cell, multi-cell or boundary claims.
- 7.2.4 Supporting documents will **not** be returned unless a self-addressed, postage paid envelope of appropriate size is included in the submission package.
- 7.3 Approval in Principle of a Submission
- 7.3.1 The District Office, Zone Office or Provincial Recording Office, as applicable, approves or rejects the submission as to the extent and nature of the lands included in the survey.
- 7.3.2 If approval in principle is given, the appropriate package is forwarded to the Office of the Surveyor General for submission review, approval and preparation of a legal description.
- 7.4 Survey and Plan Submission Analysis
- 7.4.1 All plans submitted for review are to be in final form, fully checked and **signed** by the Surveyor.
- 7.4.2 The Office of the Surveyor General uses a "submission analysis" approach that emphasizes quality assurance rather than in-depth examination of plan submissions. It concentrates on matters that are of importance to the Crown, including adherence to these Instructions and/or any special instructions issued by the Surveyor General. The Surveyor's certification is generally relied upon with respect to the plan's accuracy and adherence to the statutes and regulations regarding surveys in Ontario.
- 7.4.3 Where a submission is found to have serious deficiencies, it will be returned to the Surveyor unprocessed.
- 7.4.4 The Office of the Surveyor General will assign a project number to each submission. This number, once assigned, must be cited in all related correspondence.
- 7.4.5 Office of the Surveyor General staff will review the submission and complete an Ontario Crown Survey Submission Analysis (see Appendix C for a sample form).
- 7.4.6 Upon completion of the review, a completed copy of the Ontario Crown Survey Submission Analysis form will be sent by email to the Surveyor setting out one of the following:



- 1. If the plan is acceptable and no revisions are required, permitting the deposit of the plan with the assigned Crown Location number. Add the Crown Location number to the plan (refer to paragraph 3.4.2) and complete the permission to deposit note (refer to paragraph 3.5). Show the date of the Ontario Crown Survey Submission Analysis form as the date permission to deposit has been given.
- 2. If the plan requires minor amendments to be acceptable:
 - a. The Surveyor will be asked to make any minor amendments to the plan that may be required.
 - b. Conditional permission to deposit the plan will be given and a Crown Location number assigned. Make the requested amendments, add the Crown Location number to the plan (refer to paragraph 3.4.2) and complete the permission to deposit note (refer to paragraph 3.5). Show the date of the Ontario Crown Survey Submission Analysis form as the date permission to deposit has been given.
- 3. If the plan requires amendments or raises questions that require further consideration by the Surveyor:
 - a. Do **not** deposit the plan.
 - b. Consider the amendments requested and questions raised.
 - c. Submit one paper print or scanned PDF of the amended plan, accompanied by a report if required, directly to the reviewer.
 - d. The resubmission will be reviewed, and a subsequent Ontario Crown Survey Submission Analysis form completed.
- 7.4.7 Other than amendments requested or authorized in writing by the Office of the Surveyor General, **absolutely no changes** are to be made to any plan once the permission to deposit has been issued by the Surveyor General. If changes are requested by land registry office staff at the time of deposit of the plan, **do not deposit the plan** and contact the reviewer.
- 7.4.8 Permission to deposit the plan and issuance of a Crown Location number is not to be considered a waiver of any of the Surveyor's professional responsibilities. The Surveyor is accountable to ensure that the survey and plan are correct and in accordance with all regulations and these Instructions.
- 7.4.9 Should an error or omission be discovered after the plan has been deposited, and the Office of the Surveyor General is of the opinion such error or omission is significant, the Surveyor will be required, at his or her own expense, to deposit a corrected plan, or to make an application to the Examiner of Surveys to correct the plan pursuant to the Regulations under the *Registry Act*.



7.5 Final Deliverables

- 7.5.1 Following deposit of the approved plan, the Surveyor shall forward to the Office of the Surveyor General:
 - On a CD, DVD, other media acceptable to the Ministry, or by e-mail to <u>surveyrecords@ontario.ca</u>, an integrated (geo-referenced) CAD file of the part boundaries shown on the final Crown plan in Autodesk DWG format (refer to Appendix D for sample DWG drawing), and
 - 2. Three good quality white prints of the plan as deposited.
- 7.5.2 The DWG file(s) submitted in accordance with paragraph 7.5.1 shall,
 - 1. Be named using the assigned CL number, i.e. CL_XXXXX.dwg (Note that the use of an underscore is required in the naming convention for the DWG file).
 - 2. Have **only** three layers, other than layer "0".
 - a. "Parcel", being the linework showing the limits/boundaries of the Crown Parts. Each Crown Part on the plan shall consist of a separate, closed, integrated polyline. Polylines shall not be "splined" or have any other smoothing applied. There shall be no annotation on this layer.
 - b. "Metadata", being the text to fully describe the parcel and shall include:
 - i. the Crown Location number
 - ii. the geographic location of the parcel (Lot and Concession)
 - iii. the Geographic Township or Area
 - iv. the Surveyor's name
 - v. the date that the Surveyor signed the Surveyor's Certificate
 - vi. the deposited reference plan number
 - vii. the UTM zone, datum and epoch
 - c. "Points", being the points utilized as Observed Reference points and Permanent Onsite points. Each point shall be represented with:
 - i. the UTM coordinates of the point
 - ii. a node (**not a "block"**) representing the respective point.



Appendix A: Sample Requirements for Crown Land Survey

On	tari	Requirements for Crown Land Survey
Loca	tion De	escription:
as outl	ined in re	d on the attached sketch.
Instr	uctions	:
		is to be surveyed in accordance with the <i>Instructions Governing Ontario Crown d Plans, June 2020,</i> as issued by the Office of the Surveyor General.
In addi	tion to th	e above, the following instructions are also to be adhered to:
Wate	rfront b	oundary
Riparia	n:	
	Wa	ater's Edge
Non-Ri	parian:	
	Contou	r of elevation
		Elevation CGVD28
		Elevation CGVD2013
		Elevation Local Datum
	Monun	nented straight line(s) located
Other	Location S	Specific Instructions:
	Ro	lity right-of-way to be surveyed: metres in width ad right-of-way to be surveyed: metres in width HER
To [n	ame],	Ontario Land Surveyor:
Author	ization is	hereby granted to survey the above noted Crown Land.
Ministr	ry Official:	Date:
Title:	t info	

1. Do not proceed with the survey until this form has been signed by a Ministry official.

Notes:

- 2. A copy of this authorization must accompany the survey submission to the Ministry office.
- If this survey involves a Hydro One Networks Inc. or Bell Canada installation, then prior to the commencement of field work, Hydro One and/or Bell Canada, as the case may be, must be contacted in order to determine their requirements.



Appendix B: Sample Provincial Requirements and Consent to **Survey Mining Claims**

PROVINCIAL REQUIREMENTS AND CONSENT TO

SURVEY MINING CLAIMS Sec. 95(1) [...no survey of a mining claim, except a perimeter survey consented to by the Minister under subsection (3), shall be made without the written consent of the recorder.] winout the written consent of the recorder.] See 96. Where, upon an application for a lease or licence of occupation of a mining claim in surveyed territory, the Minister is of opinion that a survey is necessary, he or she may direct that a survey thereof be made at the expense of the applicant, and the survey, unless otherwise ordered, shall comply with the same requirements as a survey of a mining claim or the perimeter survey of mining claims in A copy of this completed form is to be sent to the Surveyor General for comment prior to granting permission to survey. PRO File #: WGMC, B3-933 Ramsey Lake Rd. Sudbury Mining Division: Land Titles Division: MNR District: Township / Area: G-Plan No. ___ Lot / Concession: Mining Claim No(s): Provincial Recording Office (PRO) Requirements: Office of the Surveyor General's (OSG) Requirements: No. of attachments: The survey must be in accordance with the following: 'Instructions Governing Ontario Crown Land Surveys and Plans', dated June 2020; Special Instructions issued by the Surveyor General for surveying the subject Mining Claim(s), attached Contact the Office of the Surveyor General for any clarifications related to OSG's requirements. **NOTES** The Surveyor shall contact the MNRF District office for any work-related restrictions and to inform them that they will be surveying mining claims in the area. 2. It remains the surveyor's responsibility to ensure that the survey and plan comply with all applicable legislation. CONSENT TO SURVEY To Ontario Land Surveyor: __ Consent is hereby granted to survey the above noted Mining Claim(s). PROVINCIAL MINING RECORDER _, [print name] DATE: CONTACT PERSON: , Lands Technician E-MAIL ADDRESS: 1-888-415-9845, Extension _ TELEPHONE: 1-877-670-1444 (toll free) FAX: 1. Do not proceed with the survey until this form has been signed by the PRO. 2. A copy of this consent must accompany the survey submission to the Provincial Mining

Recorder's Office and also be included in the submission package for the Office of the

Surveyor General, MNRF.

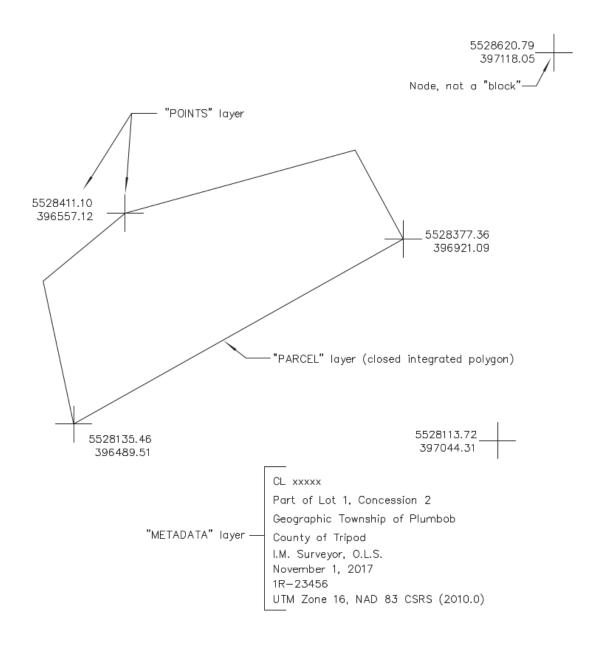


Appendix C: Sample Crown Land Plan Submission Analysis

MINISTRY OF NATURAL	ONTARIO CRO	WN SURVEY SU	JBMISSION ANALYSIS					
RESOURCES AND FORESTRY	FOR ALL INQUIRIES PLEASE QUOTE PROJECT No.							
Office of the Surveyor General, Crown	Land Surveys, 2 nd Floor North, 300 W	ater Street, Peterborough, Ontai	rio, K9J 3C7 • Ph: 705.755.2100 Fax: 705.755.214					
Surveyor	Surveyor's File		Date					
Applicant	Township or Area Map Sheet		Reviewed by					
MNRF District/MECP Zone	Location and/or Description							
deposit the plan to be e The Ministry reserves t Section numbers are re See Section 7.5 for instr This submission analysis emph matters that are of importance to	onsidered a waiver of any requirem the right to require corrections of an ferred to the <i>Instructions Governing</i> ructions regarding deliverables after asizes quality assurance rather the to the Crown, including adherence	nents pertaining to the survey my errors or deficiencies disco g Ontario Crown Land Surveys r deposit of the plan. an an in-depth examination to the Instructions Governin	vered after approval and deposit of the plan.					
•	to the statutes and regulations regulations TO DEPOSIT		MEET OUR REQUIREMENTS					
	the above noted plan of survey of Ci		Office after you have added the PERMISSION TO DEPOSIT note.					
	y this office in writing, absolutely no	changes are to be made to the	plan prior to deposit. Contact the reviewer direct					
CONDITIONAL I	PERMISSION TO DEPOSIT		AT IT WILL MEET OUR REQUIREMENTS EQUESTED BELOW ARE COMPLETED					
You are hereby authorized to deposit	the above noted plan of survey of Cr	own land in the Land Registry	Office after you have made the corrections and					
	S" section below, added Location No.	to the title bloc	k and the key plan, and the date of this					
submission analysis to the PERMISS Other than the amendments requeste Contact the reviewer directly and do	d below or authorized by this office is		es are to be made to the plan prior to deposit. fice staff.					
REVISI	ONS REQUIRED	AMENDMENTS AND RES DO NOT DEPOSIT YOUR						
Make any corrections and additions format directly to the reviewer for re		below and, citing the Project n	umber above, email a copy of your plan in PDF					
COMMENTS								



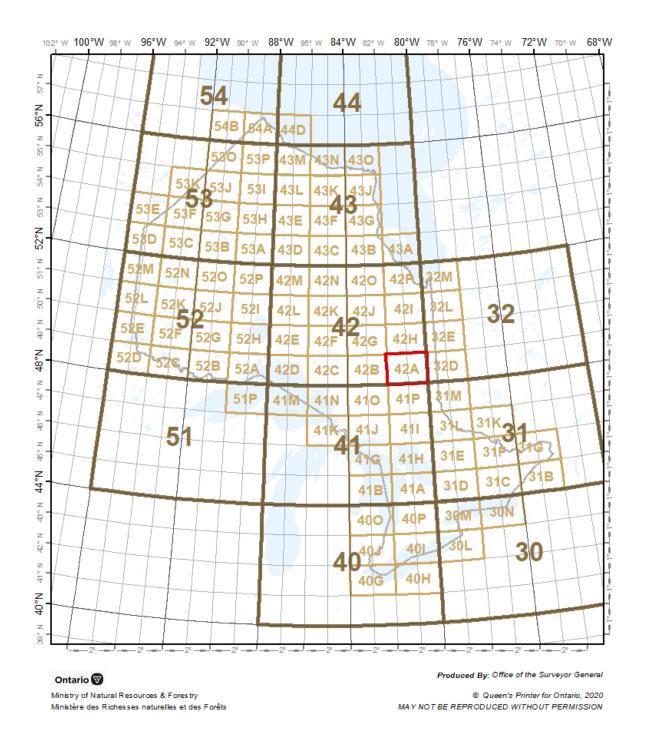
Appendix D: Sample Final Submission CAD Drawing





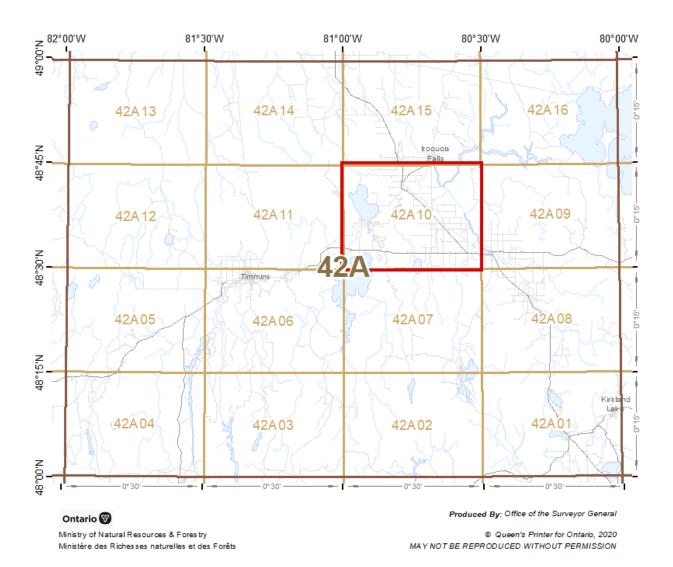
Appendix E: Provincial Grid Specifications

250K Grid



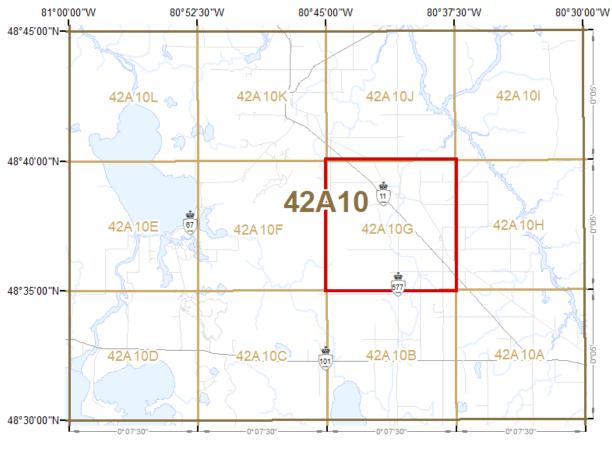


50K Grid (Typical)





Grid Group (Typical)



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Ministry of Natural Resources & Forestry
Ministère des Richesses naturelles et des Forêts

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Provincial Group

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	8 4 5	-80-44.37	5 6	9 6	00.43.30	9 6	24 24 00	9 6	00 44 00	8 8	9 8	9 8	20.40.00	9 8	9 8	22 88 00	00 88 00	5 6	9 8	9 8	}
48°40'00"N-	001	002	003	004	005	006	007	008	009			012			015	016	017	018		020	0°0'15"
48°39'45"N -	021	022		024	025	026		_	029			- 7	033	034	-	036			039	040	0°0'15"
48°39'30"N-	\vdash			044		046		048		050		052	053	054	H	056		058		060	0°0'15"
48°39'15"N-	-	042			-							072	_			-		078	-		0°0'15"
48°39'00"N-		062			\vdash	066		1	069	-		71				-	-	098	-		
48°38'45"N-	+	082	083		-	086		088	_		70	092	093	094		-					0°0'15"
48°38'30"N-	101	102	103		\vdash	106	_	_		110	111	112	113	114	115	116	117	118	119	120	0°0'15"
48°38'15"N-	121		123		125	-		128		130	131	132.	133	134	135	136	137	138	139	140	0°0'15"
48°38'00"N-	141		143	-	145	-		148	149		151	152	153	154	155	156	157		159	160	0°0'15"
48°37'45"N -	161	162	163	164	165	166		168	1	42	471 41	0 E		174	-	176	177	-	179	180	0°0'15"
48°37'30"N-	181	182		184		186	187	188		190	191	192	193	194	195	196	197	198	199	200	0°0'15"
48°37'15"N-	201	202	203	204	205	206	207	208	209	210	211	212	213	214			-	218	219		0°0'15"
48°37'00"N-	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	0°0'15"
48°36'45"N -	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	0°0'15"
48°36'30"N-	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	0°0'15"
48°36'15"N=	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	0°0'15"
48°36'00"N-	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	0°0'15"
48°35'45"N=	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	0°0'15"
48°35'30"N=	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	0°0'15"
48°35'15"N=	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	0°0'15"
48°35'00"N=	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	0°0'15"
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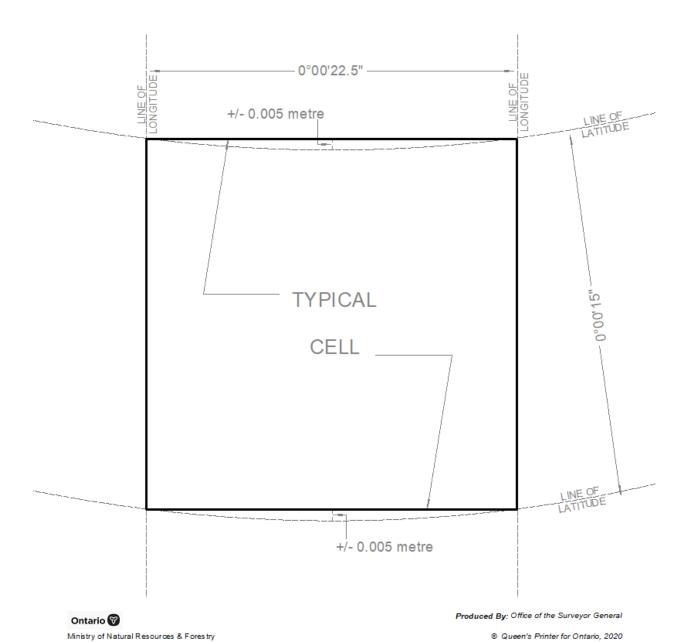
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Typical Cell

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