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
Peterborough
Ontario

November 1, 2010

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1. **General Instructions**

1.1 **Introduction**

- 1.1.1 For the purposes of these *Instructions Governing Ontario Crown Land Surveys and Plans* (short title: *Ontario Crown Survey Instructions*), "Crown land" refers to unpatented Crown land in accordance with the *Public Lands Act* and the *Mining Act*.
- 1.1.2 The authority to survey Crown land for the purpose of disposition is given to the Minister of Natural Resources under the provisions of the *Public Lands Act*. The Minister has delegated this authority to the Surveyor General under the provisions of the *Ministry of Natural Resources Act*.
- 1.1.3 The authority to survey mining lands is given to the Minister of Northern Development, Mines and Forestry under the provisions of the *Mining Act*.
- 1.1.4 The *Ontario Crown Survey Instructions* are provided for the guidance and direction of Ontario Land Surveyors retained to survey Crown lands.
 - a) Exception 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 (MTO) instructions.
- 1.1.5 All Crown surveys and plans must adhere to Ontario Statutes, Regulations and associated guidelines respecting surveys and plans. These instructions are in addition to the aforementioned requirements and are not intended to duplicate them.
- 1.1.6 The Surveyor General may issue additional or special instructions for the survey of Crown land on a project specific basis.

1.2 MNR Legal Survey Consultant Services

All Ontario Land Surveyors, 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, shall be deemed to be approved vendors for the procurement of professional land surveying services by the Ministry of Natural Resources.

1.3 **Preliminary Procedures**

Before commencing a survey of Crown land,

- a) in the case of land dealt with under the *Public Lands Act*, contact the Ministry of Natural Resources District/Area Office to obtain a <u>signed</u> "*Requirements for Crown Land Survey*" form (see Appendix A), or
- b) in the case of land being dealt with under the *Mining Act*, contact the Provincial Mining Recorder to obtain a <u>signed Provincial Requirements and Consent to Survey Mining Claims</u> form (see Appendix B).

A copy of the signed authorization must be included with the survey submission to the 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 Elevations will be referred to the Canadian Geodetic Vertical Datum 1928 (CGVD28).
- 2.2.2 Where a permanent bench mark has not been established or is not shown on a Plan of Survey of record in a Land Registry Office or in the Office of the Surveyor General, establish a permanent bench mark, such as a clearly identifiable point on the sill or wing wall of a concrete dam, or other permanent structure or monument, and indicate the elevation of the bench mark on the plan.
- 2.2.3 Elevations may be established using Global Positioning System methodology or by transferring elevations from a known bench mark.
- 2.2.4 Where elevations are transferred from a known bench mark regardless of the methodology, the error of closure shall not exceed 5 cm x \sqrt{k} , where k is the number of kilometres in the loop. A water transfer may be used if the specified accuracy can be achieved.
- 2.2.5 Refer to subsection 3.6 for required notes to be shown on the plan.

2.3 Monumentation

- 2.3.1 Notwithstanding the requirements of O. Reg 525/91, cut crosses, concrete pins or plastic bars are not to be used as survey monuments on Crown land surveys.
- 2.3.2 Each township lot or section corner, mile post or other original Crown survey point found or used in connection with a Crown Location survey must, if in a deteriorated condition, be restored with a Standard Iron Bar, Rock Bar, Rock Post or Rock Plug.
- 2.3.3 When it is impractical to use a Standard Iron Bar, a Short Standard Iron Bar may be used.
- 2.3.4 The fronts of lots, parcel, etc. along natural or non-rectilinear boundaries must be monumented with sufficient ties shown to the non-rectilinear boundary to permit future retracement of the limit.
- 2.3.5 Where site conditions are such that the monumentation planted may not be permanent and stable, every Crown survey shall include at least two additional monuments established on or near the survey in locations which are stable and permanent.
- 2.3.6 On every Crown survey,
 - a) Rectilinear boundaries shall be monumented at intervals no greater than 400 metres.
 - b) Non-rectilinear boundaries, such as water's edge, contours of elevation or the inner limit of a shore road allowance, shall be monumented at intervals no greater than 1 kilometre and contain sufficient ties to permit future retracement.

2.4 Connections to Underlying Survey Fabric

- 2.4.1 A connection must be shown to a corner of the original Crown subdivision unit (township lot, section, mining location, etc.) in which it is situated. Where the surveyed lands comprise part of the bed of a water body lying in front of an original Crown subdivision unit the survey must be connected to a corner of the upland, original Crown subdivision unit.
- 2.4.2 This connection may be derived from existing surveys, and it does not have to be remeasured. However, if the connection has been derived from earlier surveys, include a note indicating that the connection has been derived from an earlier plan, or plans, and has not been verified
- 2.4.3 A survey connection to an adjacent nearby Crown plan of subdivision may be considered an acceptable alternative to a "lot corner tie".
- 2.4.4 A survey connection to a private plan of subdivision (i.e. not Crown) is <u>not</u> an acceptable alternative to a "lot corner tie" as private plans of subdivisions are not

retained in Crown Survey Records.

2.4.5 Where a surveyed unit is part of an un-subdivided or annulled portion of a township or part of un-surveyed territory, it must be connected by survey to a previously surveyed line (township boundary, Crown Location boundary, base line, meridian line, etc.), if such a previously surveyed line exists and is situated within 150 metres of the surveyed unit.

2.5 **Boundaries of New Units**

2.5.1 Prolongation of Side Lines

Where a new boundary is intended to be the prolongation of an existing boundary, the location of the existing boundary must be determined based on the best available evidence of the boundary and shown on the face of the plan.

2.5.2 Shoreline Boundaries

Before commencing the survey of a Crown Location fronting on a water body, consult with the Ministry of Natural Resources District/Area Office to determine if the Crown Location is to be Riparian or Non-Riparian.

2.5.2.1 Riparian Requirement

Where it is the intention of the Ministry of Natural Resources District/Area Office to establish the Crown Location as riparian lands, the limit of the location shall be the water's edge. The water's edge must be determined by sufficient measurements at such intervals as its complexity demands and to such extent as will enable its relocation.

2.5.2.2 Non-Riparian Requirement

Where it is the intention of the Ministry of Natural Resources District/Area Office to make the new Crown Location a non-riparian property, the boundary closest to the water's edge will be;

- a) a series of monumented straight lines situated approximately one metre inland from the water's edge, or
- b) a series of monumented straight lines approximating some other physical feature, (i.e. top of bank), or
- c) a contour of elevation, such as the maximum regulated water level or a flooding contour determined by sufficient measurements at such intervals as its complexity demands and to such extent as will enable its relocation,

and where the contour has been established by photogrammetric or other remote sensing techniques the contour will be ground truthed at monumented points, at intervals no greater than 1 kilometre, to ensure a vertical accuracy of 30 cm, relative to vertical control

and be in accordance with the requirements as in Section 1.3.

2.6 **Integrated Surveys**

2.6.1 Every Crown survey must be projected in the Universal Transverse Mercator Grid System.

Note: Crown Surveys and Plans prepared for the Ministry of Transportation of Ontario (MTO) shall follow MTO instructions and requirements with respect to the projection and datum to be used.

2.6.2 There are various points required to integrate a survey. These points are not mutually exclusive and may be used in conjunction with each other.

(1) Observed Reference Point

- a) Means an occupied station from which observations were made to establish the coordinates for the integration of the survey.
- b) The Observed Reference points need not be monumented where conditions exist that do not allow for permanent and stable monuments.

(2) Specified Control Point

a) Means a monument with coordinate values that are of record and are stored and made available by a control survey authority.

(3) Permanent Onsite Point

- a) Means an established point located on or in the vicinity of the survey
- b) The Permanent Onsite point must be established using permanent and stable monuments to the same standards as Section 2.3.1., with a direct connection to Part limits.
- c) One or more of the Permanent Onsite points can be an Observed Reference point but must be monumented as in 2.3.1.
- 2.6.3 Where there are no existing horizontal control survey monuments within 1 km of the site of the survey, the surveyor must establish coordinates on three Permanent Onsite points to the accuracy set out in Section 14(2) of O. Reg. 216/10.
- 2.6.4 All coordinates used to integrate the survey are to be shown in the North American Datum 1983 (Canadian Spatial Reference System), also known as NAD83 (CSRS). A note indicating the source of the CSRS values is to be shown on the plan. Should CSRS values be unattainable, contact the Office of the Surveyor General (surveyrecords@ontario.ca).

2.7 **Digital Photographs/Videos**

- 2.7.1 Ministry of Natural Resources staff may or may not conduct a field inspection of a site proposed for disposition or survey. As such, the surveyor is expected to act as the Crown's "eyes" and report what is on the ground that may be of importance to the Crown.
- 2.7.2 Digital photographs or digital videos are to be taken along all surveyed boundaries and shorelines giving particular attention to encroachments, potential third party interests, areas of concern, filled lands, etc. with a descriptive report. All photographs or videos taken are to be numbered, indexed and referenced on a diagram or plan showing the camera location and direction.
- 2.7.3 Photographs provided are to be at a minimum resolution of 2.0 mega pixels, clearly portraying the particulars being photographed.

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.
- 3.1.2 Areas shall be shown in hectares to a minimum of three decimal places in the Schedule as per 3.5.2. When Parts are smaller than 5 square metres, increase the number of decimal places so that the area shown is not 0.000 hectares. The total area of all the Crown Parts must be shown.
- 3.1.3 Lettering shall be in solid black font and shall be no smaller than 2.0 mm in height.
- 3.1.4 Sec. 18.(1)(i)(i) of O.Reg. 216/10, requires "a table containing the coordinates of at least two monumented points related to the survey". All Crown survey plans shall show the table with the coordinates of at least three monumented points, which will be Permanent Onsite Points (see Section 2.6.2). These coordinates will be shown to a minimum of two decimal places:

SAMPLE INTEGRATION COORDINATE TABLE

COORDINATES BELOW ARE DERIVED FROM [state methodology] AND ARE REFERRED TO UTM ZONE 17, NAD83 (CSRS) (1997.0).

COORDINATES COMPLY WITH THE [urban/rural/remote] ABSOLUTE ACCURACY PER SEC. 14(2) OF O.REG. 216/10

POINT ID	NORTHING	EASTING
A B C	5528411.10 5528135.46 5528377.36	396557.12 396489.51 396921.09

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

Absolute accuracy (network) is the accuracy of the position of the survey within a given reference system. Relative accuracy (local) is the accuracy of the position of a point in a survey relative to other points in the same survey.

For example, in a remote area, your Absolute accuracy is 1 metre, while your Relative accuracy is still 1:5000.

3.2 Road Allowances

Surveyed land, which is part of a road allowance or other public road, must be shown as a separate Part.

3.3 **Key Plan**

Include a key plan illustrating the geographic location of the survey, drawn at a scale sufficient to enable the user to locate the parcel and which clearly indicates the parcel's relationship to adjoining cadastral fabric.

3.4 **Title Block**

- 3.4.1 Crown plans shall be entitled "Plan of Survey of".
- 3.4.2 Crown Location Plans shall be entitled "Plan of Survey of Location CL ____". The Ministry will assign a location number. The location number consists of the letters "CL" followed by one space and a five-digit number. Do not put a dash, hyphen or underscore between "CL" and the assigned number.

- 3.4.3 Avoid the use of Roman numerals on Crown plans. Although many original township plans have concessions labeled with Roman numerals, the Arabic number equivalent is to be used whenever possible.
- 3.4.4 In addition to the requirements of the Regulations under the Surveyors Act, the title block shall contain the name of the geographic township in which the surveyed land is situate, regardless of whether or not the land is within a registered plan of subdivision.

3.5 Forms and Certificates

3.5.1 Permission to Deposit

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

PERMISSION TO	DEPOSIT THIS	S PLAN OF	<i>SURVEY</i>	OF C	ROWN	LAND
WAS GIVEN BY T	THE SURVEYOR	GENERAL	OF ONTA	RIO O	N THE	
DAYOF	, 20					

3.5.2 Schedule

The schedule as prescribed by Form 2, Regulation 43/96 under the *Registry Act* shall include additional columns, as needed to show the following:

- (1) Surveyed Mining Claims lying within each Part.
- (2) Where surface or mining rights have been previously alienated, the available rights to be transferred (i.e. surface rights or mining rights).
- (3) Remarks including such things as unsurveyed mining claims.

The word "Crown", and PIN where applicable, will generally take the place of a parcel number in the parcel column opposite each Part describing unpatented Crown land.

NOTE: SAMPLE for all survey plans. The appropriate Schedule is to be placed adjacent to form 6, O.Reg. 43/96 (Registry Act).

				SCHEDU		.,	
PART	MINING CLAIM *	LOT OR BLOCK	CON./ PLAN	AREA (ha.)	PIN/PARCEL/ INST./CROWN	RIGHTS AVAILABLE **	REMARKS ***
1							
2							
3							
			TOTAL AREA				
			(Name	of Geographic Towns	hip or Area Map sheet)		

^{*} use this column for underlying surveyed mining claims only

^{**} use this column for rights available for disposition only if Mining or Surface rights have previously been alienated by the Crown

^{***} use this column for such things as existing unsurveyed staked mining claims, water power lease agreements, etc.

3.6 Bench Mark and Elevation Notes

- 3.6.1 Where a local datum has been established by previous survey and is referenced by a permanent bench mark which is shown on a Plan of Survey of record in a Land Registry Office or in the Office of the Surveyor General, include a note to indicate the location and nature of the benchmark and indicating the conversion of the local datum to CGVD28.
- 3.6.2 Where a permanent bench mark has been established in accordance with Section 2.2.2, a note shall be included to indicate the location and nature of the bench mark and the elevation of the bench mark on the plan referred to CGVD28.
- 3.6.3 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], CGVD28.
 - (2) Lake [official name of water body] is regulated to elevation [elevation], CGVD28.
 - (3) Flooding rights have been granted to elevation [elevation], CGVD28, under Crown Lease No. [number]. (or under License of Occupation No. [number], or under [identify appropriate instrument].)

4. <u>Notes for Natural Boundaries</u>

4.1 Fixed Boundaries Referenced to Water Body Limits

- 4.1.1 When Crown lands were surveyed into townships or other Crown subdivisions, the fronts of the lots, blocks, mining locations, etc., were often established along an inland line set some distance back from the edge of a lake or river. Since monuments were not always set at the fronts of these lots, etc., at the time of the original survey or patent, it may be necessary to re-establish the position of these limits from the edge of the lake or river. In order to relocate these fronts in their original position, the distance must be set from the position of the edge of the lake or river as it existed at the time of the original survey or patent.
- 4.1.2 In the situation described in paragraph 4.1.1, 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 [name of water body] as it existed at the time of the original survey (patent) of [identify the plan or patent, as the case may be.]

4.2 Natural Water Body Limits

4.2.1 Accretion and Erosion

The location of the present limit of a water body may differ from the location shown on a previous plan. Where it is the surveyor's professional opinion that this difference is the result of natural accretion or erosion, and not from artificial alterations, or the sudden movement of the limit, include the following note on the plan:

The limit of [name of water body / river / Block/lot, Registered Plan] as shown on this plan has been established by survey and by identifying [evidence used] as being the best available evidence of this limit. Any change in 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 this limit

4.2.2 Limits Not Affected by Existing Dams

In situations where it is the surveyor's professional opinion that the construction of a dam on, or in the vicinity of a lake or river has not altered the water's edge from its natural state, (i.e. the upland property is far removed from the dam outlet or the dam only holds the water to its original elevation), include the following notes on the plan:

[Name of water body] is regulated by a dam at [location of dam]. However the dam does not affect the water level at the location of this survey. The present water's edge is considered to be the best evidence of [describe limit being retraced or established]

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

4.2.3 Unaltered Water Bodies

If there are no artificial structures which affect the water body and the water body is in its natural state, include the following note on the plan:

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

4.2.4 Water Lot Boundaries

When a boundary is identified as being the water's edge, the Ministry, in order to recognize the boundary's ambulatory nature, requires that it **not be qualified by a date or any other qualifiers on the face of the plan**. The date on which the water boundary was surveyed may be indicated in the notes of the plan.

4.3 Artificially Altered Water Body Limits

4.3.1 Flooded Water Bodies

- 4.3.1.1 Where the Crown intends to patent or lease a portion of the bed of a water body (for example, in the case of: a two-storey boathouse), to ensure that no gaps or overlaps in title will exist, it is necessary to retrace the limit of the upland, privately-held parcel. If the upland parcel was riparian and the level of the water body has been artificially altered, the upland parcel limit may be under water.
- 4.3.1.2 To avoid ambiguity, the parcel limit should be annotated as: "Limit of PIN xxxxx-xxxx(LT or R)".
- 4.3.1.3 In the situation described in paragraph 4.3.1.1, include the following note on the plan:

[Evidence used] as established by survey and shown on this plan has been accepted as the best available evidence of the limit of the parcel now known as PIN xxxxx-xxxx(LT or R) which became a fixed limit at the time of [cause of alteration]

4.3.2 Filling, Dredging or Sudden Movement of Limits

4.3.2.1 Where the position of the water's edge differs substantially from its position shown on a previous plan and it is the surveyor's professional opinion that the difference is a result of filling, dredging or sudden movement of the limit, include the following note on the plan:

The limit of [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.

4.3.2.2 Where part of the surveyed land is a filled area of the bed of a water body, label the area "FILL". If the limits of the filled area are within the limits of the surveyed area, show sufficient survey ties to permit the future retracement of the limits of the filled area shown on the plan. Annotate the limit of the filled area as "Limit of Fill (date of survey)"

5. **Specific Instructions**

5.1 **Crown Location Surveys**

- 5.1.1 A Crown Location plan is a plan of survey of Crown land, prepared in accordance with the *Ontario Crown Survey Instructions* and the Regulations regarding surveys in Ontario, for use in the disposition of interests in Crown land.
- 5.1.2 A Crown Location plan will ordinarily be deposited as a reference plan in the appropriate land registry office under the *Land Titles Act*.

5.2 Combined Crown Location and Private Land Plans

- 5.2.1 Combined Crown Location and private land plans are generally not acceptable.
- 5.2.2 The Surveyor General may consent to the use of a combined plan where, in the opinion of the Surveyor General, such a combined plan would be of benefit to the Crown or other government body. (An example could be where the Crown and municipal lands share a common boundary that is a sinuous line, such as when a municipally owned shore road allowance abuts a Crown owned shore reservation.) Combined plans are the exception and are not intended to do away with the general requirement for a separate Crown Location plan when both private and Crown lands happen to be surveyed together at the same time.
- 5.2.3 Combined plans will not be accepted for review unless the surveyor has obtained prior written consent from the Surveyor General to use a combined plan. A copy of the consent must be included with the submission.

5.2.3.1 EXCEPTION

Where a municipality has authorized the sale of the flooded portion of the shore road allowance adjacent to a two storey boathouse Crown parcel, the Office of the Surveyor General will accept a combined plan, showing both the Crown parcel and the municipal shore road allowance parcel, without previous consent.

Note: Notwithstanding the above general consent for a combined plan, the Office of the Surveyor General reserves the right to require a separate Crown Reference Plan if, after reviewing the combined plan, the Surveyor General is of the opinion that a Crown Reference plan is warranted.

5.2.4 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 private lands*)

5.2.5 A note shall be added under the Parts Schedule indicating which Parts form part of the Crown Location, such as;

CL xxxxx is comprised of PARTS 1, 2 and 3 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 Crown Retracement Supporting Plan

- 5.5.1 Where an extensive retracement survey, made to re-establish one or more township lot or section corners, is complicated by adjoining surveys and the particulars of the resurvey cannot be properly shown on the retracement survey returns, a separate supporting plan of survey may be submitted.
- 5.5.2 A supporting plan of survey is retained in the Crown Survey Records. It is not filed in a land registry office.
- 5.5.3 Include the following approval block at the upper right corner of the plan:

APPROVED	
Date	
S. F. MacGregor Surveyor General	-

5.6 **Mining Claim Surveys**

Mining claim surveys must be performed in accordance with the instructions of the Mining Recorder and the *Procedural Guide Governing Mining Claim Surveys in the Province of Ontario*. The guide may be obtained from the Office of the Surveyor General.

5.7 Percent Road Reservation Surveys

- 5.7.1 Where the Crown wishes to exercise a percent road reservation reserved in a Patent, a Crown Location plan shall be required.
- 5.7.2 Plans of road reservation surveys shall be prepared as Crown Location Plans. The plan is to be titled:

Plan of Survey of Location CL number

- 5.7.3 The Parcel/PIN/Instrument column of the schedule shall not show the Parts as "Crown", but show the Parts according to the appropriate Land Titles Parcel number or PIN or Land Registry Instrument numbers, as the case may be.
- 5.7.4 Monumentation standards are set out under the Route Survey provisions of Regulation 525/91 under the *Surveyors Act*.
- 5.7.5 Area Notes for areas of Parts, broken down <u>for each</u> Crown patent within the survey, shall be shown in the following manner:

Crown Patent No. number

Area in Patent decimal number ha. Area of Road Reserved in Patent ([x] %) decimal number ha. Area of Parts 1, 2 and 4 decimal number ha. Area previously exercised decimal number ha. Unused Balance of ([x] %) Reservation decimal number ha.

5.7.6 In addition to these instructions, the Surveyor General may issue special instructions for road reservation surveys and plans.

5.8 Surveys For Correcting Letters Patent

- 5.8.1 Further to these instructions, the Surveyor General may issue special instructions for surveys for Correcting Letters Patent.
- 5.8.2 Plans for Correcting Letters Patent shall be prepared as Crown Location Plans.
- 5.8.3 Generally, there shall be one Part for each original patent.

5.8.4 The following note shall be shown immediately below the schedule:

"This Plan of Survey is prepared for the purpose of supporting Correcting Letters Patent to correct the descriptions contained in Patent Number(s) *number*."

5.8.5 The boundaries and designations of the current parcels comprising each Part shall be shown underlying the Part by light lines, which may be broken.

5.9 Other Surveys

The Ministry may require other Crown surveys such as Surveyor's Real Property Report or Topographical Surveys for particular projects. All surveys and plans shall be carried out in accordance with these *Ontario Crown Survey Instructions* and the special instructions issued by the Surveyor General.

6. Plan Submission, Approval and Deposit

6.1 Where to Make a Submission

- 6.1.1 No submission for review of a Crown plan is to be made directly to the Office of the Surveyor General unless specifically requested.
- 6.1.2 A submission shall include one Crown survey only.
- 6.1.3 The submission is to be made to the appropriate government jurisdiction:
 - (1) In the case of land being dealt with under the *Public Lands Act*, the Area Supervisor for the Ministry Area in which the land is situate, or
 - (2) In the case of land being dealt with under the *Mining Act*, to the Provincial Recording Office.

6.2 What to Include in a Submission

- 6.2.1 The submission for review of a Crown plan will consist of two separate packages;
 - (1) A package addressed to the Office of the Surveyor General, and
 - (2) A package submitted to the Ministry District/Area Office or the Provincial Recording Office as appropriate.
- 6.2.2 The package to the Ministry District/Area 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 "Crown Land Survey Requirements" form, issued by the Ministry District/Area Office under Section 1.3, authorizing the survey of Crown land or a copy of the "Provincial Requirements and Consent" of the Provincial Mining Recorder to survey the mining claim or mining claims as appropriate,
- (3) Two signed white prints of the Crown Location plan,
- (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 (see subsection 2.7).
- 6.2.3 The package addressed to the Office of the Surveyor General shall include:
 - (1) a copy of the signed "Crown Land Survey Requirements" form, issued by the Ministry District/Area Office under Section 1.3, authorizing the survey of Crown land or a copy of the "provincial Requirements and Consent" of the Provincial Mining Recorder to survey the mining claim or mining claims.
 - (2) Two signed white prints of the Crown Location plan,
 - (3) A print of the appropriate portion of the current CLAIMaps, which may be obtained from the Ministry of Northern Development, Mines and Forestry website,
 - (4) Copies of the current parcel registers and/or registered instruments or Block maps and PIN sheets, for the subject lands and adjoining lands,
 - (5) Copies of the registered patent together with attached sketches and plans when surveying Crown shore reservations/exceptions or strips of land in front of Crown locations,
 - (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 survey report, where the survey is complex or contentious, where substantial disagreement with previous surveys occurs, or where there are problems with evidence,

- (10) A CD, DVD or other media acceptable to the Surveyor General containing 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 (see subsection 2.7).
- 6.2.4 If the supporting documents are to be returned, include a self-addressed envelope of appropriate size. If a self-addressed envelope is not included, this will indicate to the Office of the Surveyor General that the return of the supporting documents is not required and the documents will be disposed of.

6.3 Field Office Approval of a Submission

- 6.3.1 The Ministry of Natural Resources Area Supervisor or Provincial Mining Recorder, as applicable, will approve or reject the submission as to extent and nature of the lands included in the survey.
- 6.3.2 If approval is given, the Ministry of Natural Resources Area Supervisor or Provincial Mining Recorder, as applicable, will forward the package to the Office of the Surveyor General for submission analysis and preparation of a legal description.

6.4 Survey and Plan Submission Analysis

- 6.4.1 All plans submitted for review are to be in final form, fully checked and <u>signed</u> by the surveyor.
- 6.4.2 The Office of the Surveyor General uses a submission analysis approach that emphasizes quality assurance rather than an in-depth examination of plan submissions. It concentrates mainly on matters that are of importance to the Crown. For technical matters, including adherence to the *Ontario Crown Survey Instructions* or any special instructions issued by the Surveyor General, the Crown will generally rely on the professional surveyor's certification that the plan is correct and in accordance with the statutes and regulations regarding surveys in Ontario.
- 6.4.3 Where a submission is found to have obvious serious deficiencies, it will be returned to the surveyor unprocessed.
- 6.4.4 The Office of the Surveyor General will assign a project number to each submission that is reviewed. This number, once assigned, must be cited in all related correspondence with the Ministry.
- 6.4.5 The staff of the Office of the Surveyor General will review the submission and complete an Ontario Crown Survey Submission Analysis (see Appendix C for a sample form).
- 6.4.6 Upon completion of the review, a completed copy of the Ontario Crown Survey Submission Analysis form will be sent to the surveyor setting out the following:
 - (1) If the plan is acceptable, and no revisions are required, the Office of the Surveyor

General will issue permission to deposit the plan, assigning a Crown Location number, and the surveyor will add the Crown Location number to the plan (see subsection 3.4.2) and complete the permission to deposit note (see paragraph 3.5.1). The date shown on the Ontario Crown Survey Submission Analysis is the date that is to be shown in the permission to deposit note.

- (2) If the plan requires only minor amendments to be acceptable:
 - (i) The surveyor will be asked to make any minor amendments to the plan that may be required.
 - (ii) The Office of the Surveyor General will issue permission to deposit the plan, assigning a Crown Location number, and the surveyor will add the Crown Location number to the plan (see subsection 3.4.2) and complete the permission to deposit note (see paragraph 3.5.1). The date shown on the Ontario Crown Survey Submission Analysis is the date that is to be shown in the permission to deposit note.
- (3) If the plan appears to require major amendments or raises questions that appear to require further consideration by the surveyor:
 - (i) The surveyor shall <u>not</u> deposit the plan until permission to deposit has been issued by the Office of the Surveyor General and Crown Location number has been assigned.
 - (ii) The surveyor will be asked to consider the amendments and questions.
 - (iii) The surveyor shall submit one paper print or scanned PDF of the amended plan, accompanied by a report if required, directly to the Office of the Surveyor General.
 - (iv) Staff of the Office of the Surveyor General will review the resubmission and complete a subsequent Ontario Crown Survey Submission Analysis form.
- 6.4.7 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.
- 6.4.8 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.
- 6.4.9 In the event that a significant error or omission is discovered after the plan has been deposited, the surveyor will be required, at his or her own expense, to deposit a

corrected plan, or to make an application to the land registrar to correct the plan pursuant to the Regulations under the *Registry Act* or the *Land Titles Act* as applicable.

6.5 Final Deliverables

- 6.5.1 After depositing the original plan, the surveyor shall forward to the Office of the Surveyor General:
 - (1) On a CD, DVD, other media acceptable to the Ministry, or by e-mail to surveyrecords@ontario.ca, include an integrated (geo-referenced) closed polygon vector file of the Part boundaries shown on the Crown plan in Autodesk DWG format (See Appendix D for sample DWG drawing).
 - (2) Three good quality white prints of the **deposited plan**, signed by the Land Registrar.
- 6.5.2 The DWG file submitted in accordance with 6.5.1. shall,
 - (1) Be named using the assigned CL number. ie. CL_54321.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".
 - (i) "Parcel", being the linework showing the limits/boundaries of the Crown parcel(s). Each Crown PART on the plan shall consist of a separate, closed, integrated polygon. There shall be no annotation on this layer.
 - (ii) "Metadata", being the text to fully describe the parcel and shall include:
 - 1. the Crown Location number
 - 2. the geographic location of the parcel (Lot and Concession)
 - 3. the Geographic Township or Area
 - 4. Surveyor's name
 - 5. the date that the surveyor signed the Surveyors Certificate
 - 6. the deposited reference plan number
 - 7. the UTM Zone and datum
 - (iii) "Points", being the points utilized as Observed Reference points and Permanent Onsite points. Each point shall include:
 - 1. the UTM Coordinates of the point
 - 2. an indicator, (i.e. node) of the respective point

7. <u>Exceptions and Reservations</u>

7.1 Exceptions/Reservations Along Shores of Lakes and Rivers

Ministry of Natural Resources Lands Policy PL.4.03.01 deals with the release and voidance of reservations and conditions in land grants. Subsection 4.5.1 of Lands Policy PL.4.03.01 provides direction on the treatment of one-chain-wide strips of shore land reserved in Crown Patents. Should a survey and Crown land plan be required to describe the area to be dealt with, the surveyor is to be guided by the Ministry positions set out in the policy.

Lands Policy PL 4.03.01 is available online at;

 $\underline{http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@crownland/documents/document/mnr_e000101.pdf}$

7.2 Reservations Abutting Registered Plans of Subdivision

The Ministry is reluctant to upset the position of the waterside boundaries on the lots and parcels shown on registered plans of subdivision. In most cases, provided that a registered plan of subdivision was surveyed in accordance with generally accepted surveying practices, the Ministry will accept the waterside limit of the subdivision lots shown on the registered plan as being the first running of the inland limit of the one chain strip reserved in the Crown patent. Surveyors are advised to show any Crown owned portions of these reserved strips commencing at the waterside limit of the subdivision lots as they are shown on the registered plans.

8. APPENDICES

A. Requirements for Crown Land Survey

Sample "Requirements for Crown Land Survey" form issued by MNR, which sets out the Crown's requirements for a land survey and grants the surveyor authorization to proceed with a Crown survey. A copy of this form must be included with the plan submission (see Section 1.3)

B. Provincial Requirements and Consent to Survey Mining Claims (MNDMF)

C. Crown Land Plan Submission Analysis

Sample "Crown Land Plan Submission Analysis" form used in the submission analysis of Crown land survey returns.

D. Sample CAD.DWG drawing

Sample drawing showing the parcel layer and the metadata layer.

Appendix A



Requirements for Crown Land Survey

Gov as i	s Crown land is to be surveyed in accordance with the "Instructions verning Ontario Crown Land Surveys and Plans, November 1, 2010" ssued by the Office of the Surveyor General. dition to the above, the following instructions are also to be adhered to:
	erfront boundary parian:
1	Water's edge
f Noi	n-Riparian:
]	Contour of maximum regulated elevation if body of water is regulated (Surveyor to verify elevation with MNR District).
	Monumented straight Line/s approximately one metre inland from water's edge at it's highest level or from the contour of maximum regulated elevation.
]	Monumented straight line/s approximating the top of bank, a flooding contour of CGVD28 (GSC), or some other physical feature:
	Utility right-of-way to be surveyed metres in width
	Road right-of-way to be surveyed metres in width
	Other Location Specific Instructions:
Го О	ntario Land Surveyor:
	orization is hereby granted to survey the above noted Crown Land.

Note:

- Do not proceed with survey until this form has been signed by an MNR official.
 A copy of this authorization must accompany the survey submission to the Ministry of Natural Resources district office.



FORM B - Provincial Requirements & Consent to Survey Mining Claim Surveys

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.]
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, 933 Ramsey Lake Rd. Sudbury Mining Division: Land Titles Division: MNR District: Township / Area: G-Plan No. ___ Lot / Concession: Mining Claim No(s) Provincial Mining Recorder's Office (PRO) Requirements: No. of attachments: 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 November 1, 2010, with supplementary 'Procedural Guide Governing the Survey Of Mining Claims in The Province of Ontario'; 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 MNR District/Area 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 _ DATE: _____, Deputy Mining Recorder CONTACT PERSON: E-MAIL ADDRESS: _ 1-888-415-9845, Extension __ TELEPHONE: FAX: 1-877-670-1444 (toll free) 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 support package for the Office of the

Surveyor General, MNR.

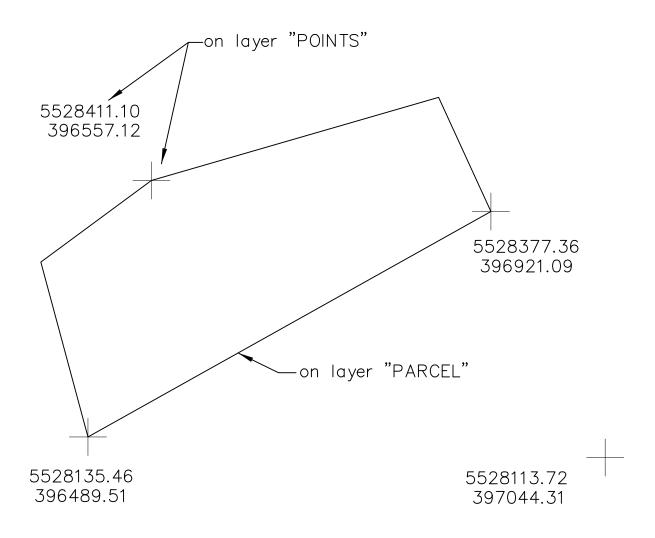
Appendix C

MINISTRY OF ONTARIO CROWN SURVEY SUBMISSION ANALYSIS

Office of the Surveyor General, Crown Land Surveys, 2 nd Floor North, 300 Water Street, P.O. Box 7000, Peterborough, Ontario, K93 8M5 Ph: 705.755.2100 Fax: 705.755.2 SURVEYOR Applicant Township/Area Map Sheet Location/Description All plans are to be in final form, fully checked and signed by the surveyor before being submitted to MNR or MNDMF. It is the signing surveyor's responsibility to ensure that he plan is correct. The submission analysis reflected on this form is not to be taken as an acceptance by the Ministry of the surveyor's responsibility for the correctness of the work, nor is the permission to deposit the plan to be considered a waiver of any requirements pertaining to the survey and plan. The Ministry reserves the right to require corrections of any errors or deficiencies discovered after approval and deposit of the plan. Section numbers are referred to the Instructions Governing Ontario Crown Land Surveys and Plans, dated November 1, 2010. See Section 6.5 for instructions regarding deliverables after deposit of the plan. This submission analysis emphasizes quality assurance rather than an in-depth examination of the plan submission. It concentrates mainly on matters that are of importance to the Crown. The Crown generally relies on the professional surveyor's certification that the plan is correct and in accordance with the statutes and regulations regarding surveys in Ontario, and the Instructions Governing Ontario Crown Land Surveys and Plans.
Applicant Township/Area Map Sheet Reviewed by All plans are to be in final form, fully checked and signed by the surveyor before being submitted to MNR or MNDMF. It is the signing surveyor's responsibility to ensure that the plan is correct. The submission analysis reflected on this form is not to be taken as an acceptance by the Ministry of the surveyor's responsibility for the correctness of the work, nor is the permission to deposit the plan to be considered a waiver of any requirements pertaining to the survey and plan. The Ministry reserves the right to require corrections of any errors or deficiencies discovered after approval and deposit of the plan. Section numbers are referred to the Instructions Governing Ontario Crown Land Surveys and Plans, dated November 1, 2010. See Section 6.5 for instructions regarding deliverables after deposit of the plan. This submission analysis emphasizes quality assurance rather than an in-depth examination of the plan submission. It concentrates mainly on matters that are of importance to the Crown. The Crown generally relies on the professional surveyor's certification that the plan is correct and in accordance with the statutes and regulations regarding surveys in Ontario, and the Instructions Governing
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PERMISSION TO DEPOSIT THE PLAN APPEARS TO MEET OUR REQUIREMENTS You are hereby authorized to deposit the above noted plan of survey of Crown land in the Land Registry Office after you have added Location No. to the title block and the key plan, and the date of this submission analysis to the PERMISSION TO DEPOSIT note. Other than amendments authorized by this office in writing, absolutely no changes are to be made to the plan prior to deposit.
THE PLAN APPEARS THAT IT WILL MEET OUR REQUIREMENTS WHEN THE REVISIONS REQUESTED BELOW ARE COMPLETED You are hereby authorized to deposit the above noted plan of survey of Crown land in the Land Registry Office after you have made the corrections and additions noted in the "COMMENTS" section below, added Location No. to the title block and the key plan, and the date of this submission analysis to the PERMISSION TO DEPOSIT note. Other than the amendments requested below or authorized by this office in writing, absolutely no changes are to be made to the plan prior to deposit.
REVISIONS REQUIRED AMENDMENTS AND RESUBMISSION REQUIRED DO NOT DEPOSIT YOUR PLAN AT THIS TIME Make any corrections and additions noted in the "COMMENTS" sections below and, citing the Project number above, send one print of your revised pladirectly to this office for re-analysis. Alternatively, a copy of your plan in PDF format emailed directly to the reviewer may be acceptable. COMMENTS

Appendix D

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CL 00000

PART OF LOT 2, CONCESSION 3

TOWNSHIP OF BLANK

I. M. Surveyor, OLS
October 1, 2010

99R-12345

UTM ZONE 16, NAD 83 CSRS (2002.0)