

# K R C M T R

## Surveyor's Checklist <sup>TM</sup>

### Condominium Development & Registration Process

#### Condominium Development and Registration

- \* Condo Development/ Registration Process: **PART 1 - Marketing and Sales Process**
- \* Condo Development/ Registration Process: **PART 2 - Planning Process**
- \* Condo Development/ Registration Process: **PART 3 - Registration Process**

#### Construction

- \* Low-Rise Construction Process
- \* High-Rise Construction Process

#### Legal and Engineering

- \* Boundary and Detailed Topographic Survey for Site Planning and Design
- \* First Application to Land Titles Absolute - Conversion Process
- \* Three – Dimensional/Stratified Description Reference Plan for Site Severance and Easements

Revised: Sept 9, 2005

## Condo Development/Registration Process: PART 1 - Marketing and Sales Process

- Land titles office search of subject land and adjoining properties for property boundaries, existing easements, right of ways, etc.
- Condominium production meeting to discuss and coordinate project particulars.
- Current consultant's drawings for condominium disclosure sketches and schedules preparation (as available):
  - architectural site plan, site grading and servicing drawings, landscape drawings.
- Office computations/drafting of condominium disclosure sketches of different floor plates from ground to penthouse levels. (ground floor for low-rise condo; parking levels not required for disclosure purposes)
- Prepare condominium disclosure schedules for solicitors' declaration:
  - **Schedule 'A'** (legal description of condominium lands including existing and future easements);
  - **Schedule 'C'** (description of condominium unit boundaries);
  - **Schedule 'D'** (percentage common expense/common interest);
  - **Schedule 'F'** (schedule of allocation of exclusive use common element areas).
  - **Schedule 'I'** (common element condo only – certificate of owner for each owner of a POT'L - parcel of tied land)
  - **Schedule 'J'** (common element condo only – notice of attachment of a common interest in a common element condominium)
  - **Schedule Budget** (monthly/yearly common expense contributions)
- Unit/suite area verification from digital architectural plans for schedule D calculations and bulletin-18 requirements.
- Review of agreement of purchase and sale, disclosure statement and declaration prepared by the solicitor, to the extent where it impacts on future description plans project understanding.
- Submit complete set of the sketches and schedules to solicitor and client.

## Condo Development/Registration Process: PART 2 - Planning Process

- Obtain hard copy and digital versions of current consultant's drawings:
  - architectural site plan, architectural and structural working drawings, site grading and servicing drawings, landscape drawings, mechanical/electrical drawings.
  
- Office computations/drafting of condominium draft plan based on available consultant's data, client objectives and regulatory criteria.
  
- Prepare the draft plan of condominium showing the following:
  - Residential/parking/locker/industrial/commercial units, common elements and exclusive use common elements;
  - Update and review land titles office search material.
  - Pertinent information as required under section 51 of the planning act.
    - (a) the boundaries of the land proposed to be subdivided, certified by an Ontario land surveyor;
    - (b) the locations, widths and names of the proposed highways within the proposed subdivision and of existing highways on which the proposed subdivision abuts;
    - (c) on a small key plan, on a scale of not less than one centimetre to 100 metres, all of the land adjacent to the proposed subdivision that is owned by the applicant or in which the applicant has an interest, every subdivision adjacent to the proposed subdivision and the relationship of the boundaries of the land to be subdivided to the boundaries of the township lot or other original grant of which the land forms the whole or part;
    - (d) the purpose for which the proposed lots are to be used;
    - (e) the existing uses of all adjoining lands;
    - (f) the approximate dimensions and layout of the proposed lots;
    - (g) natural and artificial features such as buildings or other structures or installations, railways, highways, watercourses, drainage ditches, wetlands and wooded areas within or adjacent to the land proposed to be subdivided;
    - (h) the availability and nature of domestic water supplies;
    - (i) the nature and porosity of the soil;
    - (j) existing contours or elevations as may be required to determine the grade of the highways and the drainage of the land proposed to be subdivided;
    - (k) the municipal services available or to be available to the land proposed to be subdivided; and
    - (l) the nature and extent of any restrictions affecting the land proposed to be subdivided, including restrictive covenants or easements.
  
- Assist preparation/submission of draft plan/application forms to planning authority.

### Condo Development/Registration Process: PART 3 – Registration Process

- Update and review the land titles office search and confirm absolute title designation.
- Field inspect and measure as required, all units and exclusive use portions of the common element.
- Prepare final condominium plans showing units, exclusive use areas, and common elements as required under the Condominium Act.
- Re-check suite/unit numbering correlation and possible changes between architect's drawings, property management schedules, survey plans and sales documents.
- Re-monument all property boundary corners.
- Monumentation with iron bars, limits of certain types of units and exclusive use areas.
- Field inspections and as-built measurement verification for condominium units, and exclusive use parking and lockers (lockers must be constructed for condominium pre-approval submission).
- Declarant/consultant meeting(s) for condominium plans/document review and finalizing.
- Review and finalize the condominium declaration schedules, as needed (A, C, D, F) for solicitor's condominium declaration.
- Surveyor and/or engineer to provide clearance of condominium draft plan condition of mutual servicing easements and right-of-way easements creation (on multi-phase projects)
- Instructions to architect and structural engineer on labelling and numbering of "record" architectural and structural drawings as per land titles office.
- Building inspection for completion status and verification that final condominium plans reflect true ground conditions
- Confirm anticipated easements are transferred to utilities (typically "blanket" easements) and municipal authorities, prior to condominium pre-approval submission (if not, must wait till after registration)
- Condominium pre-approval submission to local land titles office (current title information, surveyors final condominium plans, condominium declaration)

**Condo Development/Registration Process: PART 3 – Registration Process (cont'd)**

- Condominium pre-approval requisitions from plan examiner issued to solicitor, property management and declarant.
- Surveyor to assist solicitor gathering condominium registration documentation from other professionals (architectural record drawings and structural engineering record drawings).
- Confirm draft plan of condominium conditions cleared by municipality.
- Submission of architectural and structural(indexed) record drawings to land titles office.
- Delivery of final submission package (final condominium plan mylars and white prints) to City planning department for final endorsement (rubber-stamping), upon receiving pre-approval from land titles office,
- Submission of final condominium mylars by planning authority to land titles office for registration.
- Registered condominium plan copies to declarant for turnover meeting
- Digital registered condominium plans to solicitor for website posting and closings.

## Low-Rise Construction Process

- Current consultant's drawings for construction layout:
  - architectural site plan, architectural foundation and working drawings; site grading and servicing drawings; landscape drawings.
- Review applicable zoning by-law and OMB decisions.
- Detailed computer calculations for townhouse blocks location and layout from foundation drawings, according to set-back dimensions as shown on the approved architectural site plan, for layout of all townhouse blocks, roads and parking areas. Ensure consultant's drawings in reasonably final state.
- Field survey to establish or confirm local geodetic benchmarks on-site.
- Field survey to stakeout centreline of road and four (4) main corners of each townhouse block for underground servicing purposes (lateral connections).
- Field survey for excavation stakeout of individual townhouse units, stake out offset reference points for main corners of townhouse blocks with intermittent points at change of underside of footing elevations. Provide cuts for every change in footing elevation.
- Field survey to check excavated grades - report discrepancies to the site superintendent.
- Field survey to stake out all unit corners in footings.
- Field survey and office computations/drafting of "as-built" foundation (surveyor's real property report), top of foundation wall and ground finished floor elevations.
- Field survey to confirm/reset disturbed or removed property boundary bars.
- Evaluate field measurements for townhouse block setbacks and confirm compliance with minimum zoning requirements, as per site plan.
- Update land titles office search.
- Finalize surveyor's real property report showing 'as-built' location of townhouse blocks. Provision of copies of plan and report to client and/or municipality.
- Office computations/drafting and field survey layout for site landscape work including curbs, parking areas, retaining walls, fences and proposed grades.

## High-Rise Construction Process

- Current consultant's drawings for construction layout:
  - shoring drawings, architectural site plan, architectural and structural working drawings, site grading and servicing drawings, landscape drawings, mechanical/electrical drawings.
- Review applicable zoning by-law and OMB decisions.
- Detailed computer calculations and detailed, dimensioned computation layout sketch of all grid lines location for underground garage and building construction, according to set-back dimensions as shown on the approved architectural site plan.
- Field survey to establish or confirm local geodetic benchmarks on-site.
- Field survey to re-establish property lines and stakeout for building placement; layout main or all grid lines; layout for shoring, caissons, piles, crane pad(s), elevator shaft(s), ramp layout; and shoring monitoring.
- Field survey to establish main grid lines in the hole and set benchmark elevation in bottom of excavation.
- Field survey and office computations/drafting of foundation survey (stage 1 – “as-built” surveyor's real property report) and ground finished floor elevation.
- Field survey and office computations/drafting of superstructure survey when outer surface of building is constructed (stage 2 – “as-built” surveyor's real property report of building under construction).
- Field survey to confirm/reset property boundary iron bars.
- Evaluate field measurements of “as-built” structures by computation and confirm compliance with minimum zoning setback requirements, as per site plan.
- Update land titles office search.
- Finalize “surveyor's real property report” showing final underground garage and building locations. Provision of copies of plan and report to client and/or municipality.
- Three-dimensional slab edge monitoring for precise pre-cast high-rise façade finishes.
- Office computations/drafting and field survey layout for site landscape work including curbs, parking areas, retaining walls, fences and proposed grades.

## Boundary and Detailed Topographic Survey for Site Planning and Design

- Site inspection to assess site conditions and unique requirements.
- Land titles office search of subject land and adjoining properties for property boundaries, existing easements, right of ways, etc.
- Field survey to transfer geodetic benchmark elevation from source to subject site, and establish local geodetic benchmarks for future construction.
- Field survey to geo-reference site boundaries into Ontario control network (UTM).
- Field survey site in accordance with client's/consultant's request and Krcmar specifications:
  - Description of legal parcel i.e. lot, concession, range;
  - Boundary dimensions and bearings;
  - Ontario control network monuments (UTM);
  - Area of site as surveyed;
  - Location of all existing right-of-ways and easements as revealed by legal search;
  - Geodetic bench marks;
  - Levels/elevations over the entire site with overlap onto adjoining properties. Intermediate levels will be taken where grade changes rapidly;
  - Spot elevations and street furniture up to the centre lines of adjoining roads;
  - Locations of all visible ditches, swales, creeks, rivers and other relevant drainage features;
  - Location of existing visible storm and sanitary sewers, gas and water mains, hydrants, and gas markers;
  - Location of all sidewalks, curbs, gutters, driveways, and fences;
  - Location of any buildings, and paved areas;
  - Other pertinent information that will influence site design and construction;
  - Location of intersecting street for possible street or entrance alignment;
  - Finished floors and setbacks of adjoining houses;
  - Height of buildings.
- Office computations/drafting to finalize boundary and topographical survey.
- Mathematical closure of property boundary for area confirmation and quality control.
- Provision of hard copy and digital (DWG and PDF) to client and consultants.



## First Application to Land Titles Absolute Conversion Process under Land Titles Act

- Title search in the land titles/registry office to determine the extent of ownership and existence of any easements or right of ways.
- Confirm that subject lands held under one(1) owner, or multiple reference plans required.
- Field survey property to:
  - locate all property corner iron bars;
  - locate all possessory evidence;
  - determine boundary position in office;
  - reset missing or disturbed iron bars;
  - identify encroachments or unregistered right-of-ways or easements.
- Office computations/drafting of first application reference plan.
- Mathematical closure of property boundary and interior "parts" for area confirmation and quality control.
- Preparation of submission package for solicitor's application to land titles office.
- Preparation of surveyors certificate under land titles act.
- Provide solicitor with necessary copies of reference plan for solicitor's notification of adjoining owners.
- Resolve boundary objections by adjoining owners (if any).
- Preparation of final submission package to land titles office upon receiving final approval to deposit reference plan.

### **Three – Dimensional/Stratified Description Reference Plan for Site Severance and Easements**

- Update and review land titles office search.
- Field survey to establish or confirm local geodetic benchmarks on-site.
- Field survey to geo-reference site boundaries into Ontario control network (UTM).
- Field survey to locate property corner iron bars and necessary structural building features (defining PART limits).
- Obtain current consultant's drawings for office computations/drafting of severance and easement limit calculations:
  - architectural site plan, architectural and structural working drawings, site grading and servicing drawings, landscape drawings, mechanical/electrical drawings.
- Review/analyze project drawings to determine necessary severances, size of easements and right-of-ways, in consultation with client, solicitor, architect and engineers.
- Perform necessary office calculations and prepare multi-sheet survey plans based on consultant's construction working drawings, field measurements and instructions received.
- Prepare PART listing schedule defining purpose of "parts" for use by client and solicitor.
- Mathematical closure of property boundary and interior "parts" for area confirmation and quality control.
- Field survey to reset/establish PART limits for reference plan.
- Update and review land titles office search.
- Pre-approval submission of stratified reference plan to land titles office.
- Resolution of pre-approval requisitions from land titles office.
- Final reference plan to land titles office for deposit. Hard copy and digital copies of final deposited reference plan to client and solicitor.