



Guidelines on Topographical Surveys 2023_001

Document Control

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Important notice

The Development Control Company (DCC) reserves the right to amend or update any information contained in this document as and when necessary.

Only the “latest version” of this document will be valid to guide owners through the design, construction and maintaining phase. Any previous versions of this document will be invalid and will not be acknowledged for new designs. Houses already built should not be used as a precedent, the revised set of guidelines were created to address architectural inconsistency, inappropriate colour choices and lack of integrated landscape planning.

THE SURVEY:

1. Survey should be controlled and connected to the Tatu City coordinate system which is connected to the National Datum.
2. Survey should include cadastral boundaries where they exist.
3. Survey Control points should be concreted but buried underground to serve as a reference point for future surveys.
4. Picking of buildings should include at least 50% of the corners, but subject to a minimum of 3 corners.
5. Floor levels of buildings should be surveyed and shown on final drawings.
6. Building type (permanent/temporary) and building name or usage should be included in the survey.
7. All sewer manholes should be surveyed and include position, cover level, and invert level (Please Note that invert levels are indicated on the Manhole covers). These details, plus the sewer line should be plotted on the final map.
8. All utility lines (water, electricity, telephone, etc) should be accurately surveyed where they are visible.

9. Embankments, cliffs, kerbs, and ditches should be surveyed giving actual levels at top and bottom. Hachures are preferred on final drawing.
10. Spot heights should be distributed depending on detail density and roughness index of the site.
11. Trees should be picked as spot level (depicting tree position) and the spread should be estimated, booked and plotted to scale.
12. Roads should be surveyed more rigorously to include points at centerline, both edges of carriageway, all tops and bottoms of drains, top and invert of culverts/bridges, lampposts, and road junctions.

DRAWINGS:

13. The scale of plotting should address the survey needs.
14. It is advisable to use only standard paper sizes for final maps (A3, A2, A1, and A0). The survey could be covered on several sheets of size A2 paper and label the series in an orderly manner.
15. Grid line should be plotted either in full or as crosses depending on client needs.
16. Sheets should be aligned North-South.
17. Where a site is covered by more than one sheet, an index should be included on the title box to show the relationship of the sheets.
18. All survey drawings should include a clear title box.
19. Contours should be interpolated between actual spot heights and not sketched.
20. Labeling of contours should follow standard cartographic procedures.

OTHER POINTS:

21. Field verification should be done to ensure that the final map fully conforms to the ground conditions.
22. Presentation of final maps should be neat and with boarder margins.
23. These guidelines are not completely exhaustive of possibilities and therefore each surveyor should carry out all other additional works to ensure that the accuracy and integrity of the final product is maintained.

These guidelines should be read jointly with the following guidelines:

- a) DCC Process.
- b) Building Design Architectural Drawings.
- c) Statutory drawings checklist.
- d) Vehicular and Pedestrian Access.
- e) Siting controls.
- f) Architectural guidelines- vehicular and pedestrian access.
- g) Signage and building names.