Field Records Retention - Best Practices

All field measurements should be recorded at the time of observation. Records may be kept in digital or paper format, or a combination of both. Raw data collected during the survey constitutes field observations and must be retained as part of the field records. Entries in field records should never be erased, altered, or obscured. If an error is made, it should be crossed out in a way that still allows the original entry to be legible.

Field records serve two purposes:

- 1. To provide field data to facilitate the preparation of the plan of survey, boundary retracement, reporting to client or other project deliverables.
- 2. To provide an archivable record of:
 - the work that was done,
 - the evidence that was relied upon, and
 - clear proof that the data meets the accuracy standards required by the National Standards (see Field Work Supervision – Best Practices)

The field records should provide a clear and detailed account of everything found, observed, measured, and carried out during the course of the survey, including:

- Date of observations, location, and purpose of the survey.
- Type and identification of survey equipment used.
- Environmental conditions, including weather.
- Name and duties of the person(s) making and recording the observations.
- Complete description of the markings and condition of every monument found, restored, and placed.
- Record of all physical, documentary, and/or verbal searches made for monuments or other physical evidence, and identification of all lost monuments.
- Each quantitative observation or measurement, including independent and redundant checks.
- Diagram representing the survey, oriented to north, showing streets, parcels, and north arrow.
- Clear description of each point observed, such that a points code library is not required to identify or interpret what has been observed.

For surveys done partially or completely using remote positioning or satellite positioning techniques, the field records should also include:

- Raw data, including setup information with position validation checks if utilizing existing control data.
- A record of the control points, including location, identification and observation method.
- Record the antenna height in both metric and imperial (or use a fixed height pole) to ensure an accurate height. It is also recommended to manually record these

- antenna height measurements for future verification, and to verify these measurements in the field.
- Record the Antenna Reference Point (ARP) used, and the antenna type manually.
- Methods of post processing and/or adjustments used to integrate the survey with existing control or survey information.

Retention of field records

Field records are relied upon for future surveys, court cases, insurance claims, professional review purposes and collaboration with other surveyors. The field records are to be preserved and filed and indexed for easy retrieval in the future, regardless of format (paper or digital).

Digital field records must be accessible for review by others in the future; accessibility to the records must not be restricted by access to specific software. Consideration must be given to protect this accessibility against the possibility of computer crashes, or software becoming obsolete.

Field records of retired or deceased members should be placed with another surveyor. The registrar should be made aware of the placement of these records.

Archiving Files

When archiving digital files, consideration must be given to the hardware and software necessary for its retrieval. Archived digital files may have to be reformatted to be compatible with new office systems.