GUIDE FOR PREPARING CORNER RECORDS IN UTAH

This guide supplements the current Corner Perpetuation and Filing Act. 17-23-17.5.

The Utah Association of County Surveyors and The Utah Council of Land Surveyors recognizes the following guidelines as a reasonable expectation of the survey profession conforming to the purpose for which the Corner Perpetuation and Filing Act was created.

Adopted by the Utah Association of County Surveyors on <u>August 16, 2012</u>
Adopted by the Utah Council of Land Surveyors Executive Board on <u>August 4, 2012</u>
Accepted by the UCLS Membership on <u>November 17, 2012</u>

PURPOSE:

The corner record was created to provide a simple and inexpensive method of sharing corner perpetuation information with the public and other surveyors. The corner records provide vital evidence to the surveyor which promotes stability in the land cadastre system.

The paramount purpose of the corner record is to perpetuate the corner position by providing specific information about the location, date of field activities, pedigree, recovery, and or restoration of the existent or obliterated corner monument and accessories.

WHY SHOULD A SURVEYOR FILE A CORNER RECORD?

It is required by state law:

17-23-17.5

- (2) (a) Any land surveyor making a boundary survey of lands within this state and utilizing a corner shall, within 90 days, complete, sign, and file with the county surveyor of the county where the corner is situated, a written record to be known as a corner file for every public land survey corner and accessory to the corner which is used as control in any survey by the surveyor, unless the corner and its accessories are already a matter of record in the county.
- (b) Where reasonably possible, the corner file shall include the geographic coordinates of the corner.
- (c) A surveyor may file a corner record as to any property corner, reference monument, or accessory to a corner.
- (d) Corner records may be filed concerning corners used before the effective date of this section.

17-23-17.

- (7) (a) If, in the performance of a survey, a surveyor finds or makes any changes to the section corner or quarter-section corner, or their accessories, the surveyor shall complete and submit to the county surveyor or designated office a record of the changes made.
- (b) The record shall be submitted within 45 days of the corner visits and shall include the surveyor's seal, business name, and address.
- (8) The Utah State Board of Engineers and Land Surveyors Examiners may revoke the license of any land surveyor who fails to comply with the requirements of this section, according to the procedures set forth in Title 58, Chapter 1, Division of Occupational and Professional Licensing Act.

The surveying profession is charged by society with the responsible maintenance of the land cadastre system. The laws, rules and regulations which govern our profession are designed with the two-fold purpose of perpetuating the positions of existent and obliterated land boundary monuments while also providing a permanent record system which can be relied upon by future

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generations. An accurate and complete corner record system will promote stability in land boundaries, consistency between surveys, and harmony between neighbors.

Surveyors are remembered by the monuments they erect upon the earth. Corner records are a direct reflection on the professionalism of the surveyor perpetuating the corner. The surveyor should set durable monuments and provide a complete record of the evidence they recover and perpetuate. You may be the last surveyor to utilize the corner for several decades; make certain that your footsteps can be retraced.

CLARIFICATIONS TO THE CORNER PERPETUATION AND FILLING ACT:

Corners of the public land survey system are a matter of record within each County, and the Bureau of Land Management in Salt Lake City. Field notes and plats are available online or upon request. Various other sources of record and historical data are available at the state, county, and local levels. Plats, maps, and corner records at the County Recorder and or the County Surveyors office are also available. All of these documents constitute a matter of record.

When the surveyor utilizes a corner monument or its accessories which substantially differs from the record, the surveyor should create a new record. The new record should include any rehabilitation made by the surveyor to perpetuate the corner.

A filed record of survey map that includes the specific information about the location, date of field activities, pedigree, recovery, and or restoration of the existent or obliterated corner monument and accessories in accordance with this guide to preparing corner records, may also meet the filing requirements of 17-23-17.5

If a corner is determined to be "lost", the restoration method, rational and measurements used for reestablishing the corner may be documented on a record of survey map in accordance with 17-23-17.

There is no standard corner record form as many of the counties have been using a standard form of their own for many years. This guide includes a few sample forms that will comply with these guidelines; however the surveyor should contact the county to inquire about any specific forms they may prefer.

There is no limit to the number of pages for a corner record. Meta data or data about the corner is becoming more important as information is becoming more readily available to the public. Therefore, information about the corner, such as location, pedigree, observation files, adjustment reports, digital photos, etc., may be included on additional pages or attachments to the corner record.

Once the corner record is completed in accordance with these guidelines, the surveyor shall file the corner record with the county or counties in which the corner is located. The state's Automated Geographic Reference Center (AGRC) maintains an additional state-wide database for Public Land Survey System (PLSS) corner management. The surveyor is encouraged to submit a copy of the corner record to the AGRC.

Sheet 2 of 9

WHAT INFORMATION WOULD A SURVEYOR INCLUDE IN A CORNER RECORD?

Name or Designation;

Adopted: August 2012

All corners and or monuments should be identified by their proper full name including township, range, meridian, county, and state. Identifiers may include but are not limited to the following list:

- o PLSS Corner Name
- o GCDB/BLM PID
- o National Spatial Grid Address

- NGS Name and PID
- o Cross Index or Local PID
- o AGRC Corner ID

Record and Historical Data (Pedigree);

The corner record should contain a thorough explanation of the historical evidence recovered during an examination of the record documents. References to or excerpts from existing matters of record forming a pedigree of evidence from the original monument record should be included if possible. The record and historical evidence can prove a vital link between the existent monument and the original monument. It may also provide evidence which quantifies the subsequent reliance made by others upon the existent monument, giving credence to its continued acceptance. Pedigree sources may include but are not limited to the following list:

- o Original GLO/BLM Field Notes and Plats
- o NGS Data Sheets
- o County or City tie sheets or Bench Marks
- o State, County, or City Maps of Record
- o Title Conveyance Documents
- o Right of Way Documents

- o Public Utility and Transportation maps
- o Parol Evidence
- Subdivision plats
- o Record of Survey maps
- o Corner Records
- o AGRC PLSS Corner Management

Evidence Found (Recovery);

Write a thorough report of the evidence you found: composition, size, identifying marks, physical condition, etc. If nothing was found, state it in the report along with the extent of search activities performed. The date of the field work, the last time the corner was visited and the date the corner record was prepared are all pertinent information that should be shown on the document. The recovered evidence may include but is not limited to the following list:

- The character and dimensions of the monument should not be widely different from the record
- o Physical condition of the monument and surroundings
- o The markings in evidence should not be inconsistent with the record
- The nature of the accessories in evidence should not be greatly at variance with the record
- Picture/Sketch and/or Rubbing of the monument, markings and accessories
- o Date of initial visit when monument was recovered
- Date and purpose of any subsequent visits

Description of Monuments and Accessories used to rehabilitate the original location

17-23-17.5

of the corner (Perpetuation);

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(6) When a corner record of a public land survey corner is required to be filed under the provisions of this section and the monument needs to be reconstructed or rehabilitated, the land surveyor shall contact the county surveyor in accordance with Section 17-25-14.

The county surveyor has the duty to rehabilitate the public land survey corners, however many of the counties in Utah do not have county surveyors and this duty falls to the private professional land surveyor. Corner perpetuation is a privilege and responsibility granted solely to land surveyors throughout the state. Take the time to rebuild mounds, clear sagebrush or replace a crumbling stone where necessary. You may be the last surveyor to use this corner for several decades. You will be remembered by the monuments you leave in your footsteps. Set durable monuments and provide a complete description of your perpetuation activities. Even with GPS and Google Map, reference ties, bearing trees and reference monuments should not be considered "old-fashioned" or unnecessary.

If the corner monument is determined to be "obliterated," the evidence used to determine the position should be included. If affidavits are used, a copy of the affidavit should be attached to the corner record or a reference to the recorded affidavits should be indicated upon the corner record. Include a picture, a sketch and/or a rubbing of the monument showing its markings and accessories set to perpetuate the corner position.

The perpetuation activities may include but are not limited to the following list:

- o Contact County Surveyor
- o Rehabilitate the monument
- o Rehabilitate and replace any missing accessories
- Picture/Sketch and/or Rubbing of the monument, markings and accessories
- o Date of field perpetuation activities
- o Date and purpose of subsequent visits

Courses and distances shown on corner record (Sketch);

"A Picture is Worth a Thousand Words." Courses and distances to adjacent corners if determined in the survey should be depicted by a sketch or narrative. Distances and bearings should be shown to local objects, if available in sufficient detail to allow rehabilitation of the corner monument if it is destroyed. If the monument is in a vulnerable location, reference monuments should be located and tied. It is suggested that the sketch be done first and the text placed around the sketch. Placement and overall size of the sketch are matters of individual choice. Additional sketches, diagrams, coordinate lists, additional narrative, and photographs may be placed on the reverse side or additional pages. The sketch may include but is not limited to the following list of items:

- o Courses and distances to adjacent corners
- o Tie or accessory distances and bearings
- o Witness or Reference corners with distances and bearings
- Scale and north arrow
- Indicate when additional sketches or diagrams are placed on the reverse side or on additional pages.

Sheet 4 of 9

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Adopted: August 2012

Geographic Coordinates – Published and Non-Published Systems (Location);

When Latitudes and Longitudes of the corner monument location are shown, the surveyor should indicate the methods and equipment used in the observations as well as the datum and control points used to establish the geographic coordinates.

The following should be observed when using state plane coordinates:

57-10-7. Coordinates required to be based on control stations.

- (1) Coordinates based on either the Utah Coordinate System of 1927 or the Utah Coordinate System of 1983 that purport to define the position of a point on a land boundary shall be based on a monumented horizontal control station established in conformity with the standards of accuracy and specifications for first or second order geodetic surveying, as prepared and published by the Federal Geodetic Control Committee (FGCC) of the United States Department of Commerce.
- (a) Standards and specifications of the FGCC or its successor in force on the date of the survey shall apply.
- (b) Publishing existing control stations, or the acceptance with intent to publish the newly established stations, by the National Ocean Service/National Geodetic Survey constitutes evidence of adherence to the FGCC specifications.
- (2) Control stations which have been established by agencies of the state or its political subdivisions may also be used, provided those points are established in conformity with the standards set forth in Section 57-10-6.

57-10-8. Use of terms on maps and documents.

- (1) Any document identifying or using a coordinate system shall, in accordance with Section 57-10-9, clearly and completely identify the system used.
- (a) The use of the term "Utah Coordinate System of 1927 (North, Central, South) Zone" on any map, report of survey, or other document shall be used to reference the system, the coordinates, and the unit of measure as defined in Subsection 57-10-6(1).
- (b) The use of the term "Utah Coordinate System of 1983 (HARN 1994, or the current federal coordinate update used as the basis of the system being used) (North, Central, South) Zone" shall be used to reference the system, the coordinates, and the unit of measure as defined in Subsection 57-10-6(2).

A surveyor should also depict the vertical datum used in addition to the convergence angle, scale factor, and combined factor used in computations for state plane coordinates.

Low Distortion Projections (LDP) should indicate the name of the LDP and the agency that manages and publishes the projection parameters, along with the projection parameters necessary to convert the LDP to a published geographic coordinate system. Additionally a phone number, address and contact person would be good information to include on the corner record.

Local projection parameters used by individual surveyors should include the projection parameters necessary to convert the local projection to a published geographic coordinate system. Any contact information of a person who can answer questions about the local projection should be included also.

The location data may include but are not limited to the following list of systems:

- Horizontal datum
- Vertical datum
- o Latitude Longitude and Height

- o State plane coordinate system used
- Realization used (HARN 1994)

Adopted: August 2012

- Convergence angle, scale factor and combined factors shown for two or more points in the survey
- o LDP name and projection parameters
- o LDP Agency contact info

- Local Projection Parameters
- o Contact information for Local Projection
- Additional meta data such as observation files and adjustment reports may be included with additional pages or links

Location Diagram (Cross-Indexing);

There are many forms of location diagrams (also called cross-index diagrams) providing methods of identifying each corner by an alphabetical-numerical coordinate for each township. These diagrams help to graphically identify the location of each corner relative to other corners in the township or section. However it is important to remember that corners common to adjoining townships or adjoining counties should be indexed in both locations with the appropriate alphabetical-numerical coordinate. See sample corner record forms for sample location or cross index diagrams in Appendix A. The cross indexing forms may include but are not limited to the following list:

- Location diagram of section
- Cross-index diagram of township
- o Alphabetical-numerical corner designation

Surveyors Business Name, address, phone number;

The surveyor's name, business name address and phone number should appear on the first page of the corner record. The surveyor's information may include but is not limited to the following list:

Business name

o Business phone number

Business address

o Surveyor's name

Signature and Seal Required;

Seal and signature are required by law and rules:

17-23-17.5. (7) A corner record may not be filed unless it is signed by a land surveyor.

R156-22-601 Seal Requirements.

- (1) In accordance with Section 58-22-601, all final plans, specifications, reports, maps, sketches, surveys, drawings, documents and plats prepared by the licensee or prepared under the supervision of the licensee, shall be sealed in accordance with the following:
- (a) Each seal shall be a circular seal, 1-1/2 inches minimum diameter.
- (b) Each seal shall include the licensee's name, license number, "State of Utah", and "Professional Engineer", "Professional Structural Engineer", or "Professional Land Surveyor" as appropriate.
- (c) Each seal shall be signed and dated with the signature and date appearing across the face of each seal imprint.

- (d) Each original set of final plans, specifications, reports, maps, sketches, surveys, drawings, documents and plats, as a minimum shall have the original seal imprint, original signature and date placed on the cover or title sheet.
- (e)A seal may be a wet Stamp, embossed, or electronically produced.
- (f)Copies of the original set of plans, specifications, reports, maps, sketches, surveys, drawings, documents and plats which contain the original seal, original signature and date is permitted, if the seal, signature and date is clearly recognizable.

58-22-603 Seal – Authorized use.

- (2) A professional land surveyor may only affix the licensee's seal to a plan, map, sketch, survey, drawing, document, plat, and report when the plan, map, sketch, survey, drawing, document, plat, and report:
- (a) was personally prepared by the licensee; or
- (b) was prepared by an employee, subordinate, associate, or drafter under the supervision of a professional land surveyor, provided the professional land surveyor or principal affixing his seal assumes responsibility.

A simple statement or certificate such as "This corner record was prepared by me or under my direction and supervision" may be included.

The required signature and seal may include but is not limited to the following list:

- Seal shall be a circular seal, 1-1/2 inches minimum diameter
- Seal shall include the licensee's name, license number, "State of Utah", and "Professional Land Surveyor"
- Signed and dated with the signature and date appearing across the face of each seal imprint
- o A simple statement or certificate may be included
- O Digital signatures and attachments may be affixed to electronic submissions

Sheet 7 of 9

Appendix A:

Adopted: August 2012

Sample Corner Record Forms

Sheet 8 of 9

Appendix B:

Adopted: August 2012

Sample Corner Records prepared by Surveyors in the State

Sheet 9 of 9