



Tooele County Council Agenda Item Summary

Department Making Request:

Meeting Date:

Recorder/Surveyor

05-05-2022

Mark Options That Apply:

Grant
1 time

Contract
1 yr. or less

Purchase

Exp date: _____

Grant
With County Match

Contract
More than 1 yr.

Exp date: _____

Budget Impact:

In Budget

Over Budget

Requested Amount: \$ _____

Item Title:

Please answer the who? what? when? why?

On April 27, 2022, the Tooele County Surveyor office was awarded a Grant in the amount of \$107,868.75 by the Monument Replacement and Restoration Committee (MRRC) and administered by the Utah Geospatial Resource Center (UGRC). We submitted four applications and all were awarded. We have been told we can utilize the money where we see fit over the four applications. The match can be a mix of in-kind and monies. The grant is a reimbursement and is paid after the deliverables are submitted and approved. The funds will come out of a mixture of the Surveyor Professional & Technical account and the Monument Restoration Fund over the course of the 2022 and 2023 budgets with the contract due date being May 15, 2023. There will also be a request for a portion of the matching funds in the 2023 budget to be determined as the projects progress and the amount of funds paid out of the 2022 budget.

List who needs copies when approved: Jerry M. Houghton



Contract # _____

STATE OF UTAH CONTRACT

1. **CONTRACTING PARTIES:** This agreement is between the State of Utah, Division of Technology Services, Utah Geospatial Resource Center (UGRC), Taylorsville State Office Building, 4th Floor, 4315 S. 2700 W, Taylorsville, UT 84129, (Agency Code 110) referred to as STATE, and the following County, which is a Government Agency.

County Name: Tooele County

Address: 47 South Main Street

City, State, Zip: Tooele, UT 84074

Federal ID# _____ Vendor Code _____ Commodity Code _____

2. **GENERAL PURPOSE OF CONTRACT:** The general purpose of this contract is for the County to receive Monument Replacement and Restoration Committee (MRRC) funding as outlined in the 2015 Senate Bill 264 for monument replacement, preservation and restoration of Public Land Survey System section corners.

3. **CONTRACT PERIOD:** Effective date 4/26/2022. Termination date 6/30/2023, unless terminated early or extended in accordance with the terms and conditions of this contract. The MRRC may conduct a mid-term contract review to assure the work is being done or scheduled for completion within the terms of this contract. If progress toward completion of the work cannot be documented, the COUNTY risks the possibility of contract termination. The deliverable for this contract is due May 15, 2023.

4. **GRANT VALUE:** County will be paid a maximum of \$107,868.75 for funds authorized by this contract.

5. **ATTACHMENTS INCLUDED AS PART OF THIS CONTRACT:**

- Attachment A: Standard Terms and Conditions
 - Attachment B: Scope of Work
 - Attachment C: Field Procedures
 - Attachment D: Deliverables
- Any conflicts between Attachment A and other Attachments will be resolved in favor of Attachment A.

6. **DOCUMENTS INCORPORATED INTO THIS CONTRACT BY REFERENCE BUT NOT ATTACHED HERETO:**
A. All other governmental laws, regulations, or actions applicable to goods and/or services authorized by this contract.

IN WITNESS WHEREOF, the parties sign and cause this contract to be executed.

COUNTY

STATE


Signature

5-4-2022
Date

Jerry M. Houghton
Name and Title of Signer (Type or Print)

Tooele County Recorder/Surveyor


James A. Welch
Tooele County Manager

5/4/22

Date: _____
Sean A. Fernandez, Cadastral Manager
Utah Geospatial Resource Center (UGRC)

Date: _____
Division of Technology Services

Date: _____
Division of Finance

APPROVED AS TO FORM:
Blum Mendenhall 05/04/2022
DEPUTY TOOELE COUNTY ATTORNEY

“ATTACHMENT A”
**STATE OF UTAH – DIVISION OF TECHNOLOGY SERVICES,
UGRC STANDARD TERMS AND CONDITIONS**

1. COUNTY: The COUNTY shall have no authorization, express or implied, to bind the State of Utah or the above State Agency to any agreements, settlements, liability, or understanding whatsoever, unless herein expressly set forth. Persons employed by the STATE and acting under direction of the COUNTY shall not be deemed to be employees or agents of the STATE.
2. AUTHORITY: Provisions of this contract are pursuant to the authority set forth in Sections I07 of the State of Utah Accounting Policies and Procedures and any other relevant provisions of the STATE.
3. RENEGOTIATIONS OR MODIFICATIONS: This contract may be amended, modified, or supplemented only by written amendment to the contract, executed by the parties hereto, and attached to the original signed copy of this contract. UGRC has no obligation to perform any services not specified in the contract.
4. TERMINATION: This contract may be terminated, with or without cause, in advance of the specified expiration date by either party, upon 30 days prior written notice being given to the other party. On termination of this contract, COUNTY will make payment for all services rendered and/or costs obligated to date of termination.
5. CONTRACT JURISDICTION: The provisions of this contract shall be governed by the laws of the State of Utah.
6. SEPARABILITY CLAUSE: The declaration by any court or other binding legal source that any provision of this contract is illegal and void shall not affect the legality and enforceability of any other provision of this contract unless said provisions are mutually dependent.
7. INDEMNITY CLAUSE: The COUNTY agrees to indemnify, save harmless, and release the State of Utah and the State officers, agents, and employees from and against any and all loss, damages, injury, liability, suits, and proceedings arising out of the performance of this contract by the COUNTY, its officers, agents, volunteers, or employees. The STATE agrees to indemnify, save harmless, and release the Utah County and the County officers, agents, and employees from and against any and all loss, damages, injury, liability, suits, and proceedings arising out of the performance of this contract by the STATE, its officers, agents, volunteers, or employees.
8. NONAPPROPRIATION OF FUNDS: Contractual service obligations of the STATE to be fulfilled after the current fiscal year are contingent upon funds to maintain the servicing agency being appropriated, budgeted, or otherwise made available. If funds are not appropriated or otherwise available to maintain the servicing agency, this contract may be terminated without penalty by the STATE upon giving thirty (30) days written notice.
9. DATA: All data received or compiled by the STATE under this contract becomes the property of the State of Utah. Access to and confidentiality of said data will be governed by the rules and procedures of the agency with whom the data originated when such rules are specified as an amendment to this contract.
10. DEADLINES: UGRC's agreement to all deadlines and costs in this contract is contingent upon the COUNTY's performance of such actions as are instrumental to the completion of this contract. If the COUNTY fails to act in a timely manner, UGRC may opt to consider the contract terminated under the conditions of Paragraph 4.
11. CONFLICTS: Conflicts, if any, between Attachment A and any other attachments will be resolved in favor of Attachment A.

"ATTACHMENT B"

SCOPE OF WORK COUNTY PLSS MONUMENT PRESERVATION PROTECTION AND REHABILITATION PROJECT

The Monument Replacement and Rehabilitation Committee as created by SB264, enacted 2015, referred to as COMMITTEE, is distributing Legislative authorized grants to Utah counties, referred to as COUNTY, for work to preserve, protect and rehabilitate monuments of the Public Land Survey System.

The work to be performed is surveying of the Public Land Survey System section corners in order to preserve, protect or rehabilitate the monuments of the PLSS.

1. The grants are awarded based on Committee review of grant requests. Grant requests should outline a specific area of interest for the work to occur and the scope of work for each county. County must have an established Public Land Corner Preservation Fund (see Section 17-23-19 Utah Code Annotated) to be eligible for grant funds.
2. Projects having PLSS monuments that are in danger of being disturbed, destroyed or have severe deterioration shall be given the highest priority.
3. The grant request for PLSS work will include a map created by the County outlining areas of the PLSS in which section corner monuments are in need of preservation, protection or rehabilitation.
4. The grant request will include a total cost required for the project. Itemization of expenditures is encouraged.
 - Eligible costs include those associated with the protection, restoration, re monumentation, rehabilitation, preservation and documentation as approved by the Committee.
5. Responsible stewardship of allocated grant monies is mandatory.
6. The survey work will be conducted by the County Surveyor, or a Professional Land Surveyor contractor for the County, qualified by the State of Utah licensing requirements and following the work requirement as outlined in the contract and its attachments.
 - The Committee is available to any County upon request to provide oversight or assistance on contractor selection and/or project performance.
 - The County Surveyor, or the County contract surveyor, will be required to attend at least one of the Utah Association of County Surveyors' summer and fall meetings. (The summer meeting is usually held in August, and the fall meeting is held during November in St. George in connection with the UAC convention.)
 - The costs associated with attendance at the County Surveyors' meetings can be included in the proposed budget request.
7. The purpose of this program is to preserve, protect or rehabilitate monuments of the Public Land Survey System. The quality of the work performed to find, perpetuate and document the true corner location is of paramount importance.
8. The preservation of original evidence including all accessories to the monuments is of paramount importance, and where there is an absence of accessories, accessories will be re established.
9. The County will provide PLSS deliverables to the Committee according to the directions and requirements outlined in "Attachment D"

"ATTACHMENT C"
FIELD PROCEDURES

PURPOSE:

The purpose of this document is to give direction, guidance and an understanding of what is expected in performing field surveys necessary for the maintenance, restoration and re-location of Corners of Cadastral surveys of the Public Land Survey System (PLSS) within the State of Utah.

END RESULT OF THE FIELD SURVEY:

Once the field survey is complete, the surveyor will have gathered, constructed, staked or completed a minimum of the following for each corner:

1. The corner will have been located.
2. The corner will have an acceptable monument.
3. The corner will be referenced.
4. Utah Grid and Geodetic coordinates will have been gathered for the corner.
5. A photo will have been taken of the corner monument (showing markings). A second photo will have been taken of the general corner vicinity.
6. Field notes will have been kept.

Information gathered during the field survey will later be transferred onto the Corner Monument Record (Corner File) and the Record of Survey (ROS) which become the official documents for locating and perpetuating the corner.

1.1 The corner will have been located:

1.1.1 **G.L.O. survey plats and field notes** are a unique resource of important information about original corner monuments and their accessories. They contain such information as:

- The type of monument set, its dimensions, and markings.
- The type of corner (standard, witness, closing, meander, etc.).
- What accessories were established - a mound of stones and its dimensions, blazed bearing trees with their size, species and their course and distance from the corner.
- Relationship with other corners.
- Topography of the area.

The surveyor shall have copies of the G.L.O. plats and field notes while engaged in his survey.

1.1.2 **Research:**

In addition to G.L.O. plats and notes, the surveyor should perform appropriate research into the corner's history. This research could include but not necessarily be limited to:

- a. Records of survey as filed with the County Surveyor's office.
- b. Corner Monument Records (Corner Tie Sheets). These are usually found in the County Surveyor's office but may also be located in the County Recorder's office or with UGRC.
- c. Right-of-way maps for highways, canals, railroads, etc.
- d. Documents filed for record with the County Recorder's office.
- e. Aerial photos.
- f. NGS Data Sheets.
- g. Records and testimony of Professional Land Surveyors and their employees who are familiar with the area.
- h. Testimony of land owners or long-time residents of the area.

1.2 **The corner will have an acceptable monument.**

1.2.1 **Existent Monument, not required to be replaced:**

- a. Unless directed otherwise by the County surveyor or this Committee (if there is not a current county surveyor), an original stone monument in its originally set location does not need to be replaced if it is firmly set, readily identifiable and reasonably durable.
- b. County Surveyor, Private Licensed Surveyor, G.L.O. or B.L.M. brass or aluminum cap monuments on a pipe or minimum 5/8" rebar do not need to be replaced if they are firmly set, readily identifiable and reasonably durable.

1.2.2 Existent Monument, required to be replaced:

The surveyor will be required to replace any monument not meeting criteria set forth in 1.2.1 a. orb.

1.2.3 Identification of Existent and Obliterated Corners:

- a. Existent Corners are defined in 6-11 of the Manual of Surveying Instructions, 2009 edition (hereinafter referred to as Manual).
- b. Obliterated corners are defined in 6-17 of the Manual.
- c. The surveyor shall follow the process for determining the position of an Existent or Obliterated Corner as given in Chapter Six of the Manual.

1.2.4 Lost Corners:

The decision that a corner is lost should not be made until every means has been exercised that might aid in identifying its original position. The courts have admonished surveyors for being too quick to turn to proportionate measurement. They tell us, to find all evidence, every shred of evidence, before we say that the corner point is lost. Determining a corner to be lost and then applying proportionate methods of restoring it is the surveyor's last resort.

U.S. v Doyle 468 F 2nd 633 (1972)

"For corners to be lost, they must be so completely lost that they cannot be replaced by reference to any existing data or other sources of information, and before courses and distances can determine boundary. ALL MEANS/or ascertaining location of the lost monuments must first be exhausted. "

If a corner is declared lost, its position shall be determined by proportionate measurement as outlined in chapter seven of the Manual.

1.2.5 Corner Monuments:

- a. If a Corner Monument is set, it shall be a minimum 2" diameter durable metal disk on a pipe or rebar having a minimum diameter of 5/8" and a length of 24"
- b. If the corner falls in a rock out-cropping, concrete or concrete post, a durable metal disk not less than 2" diameter, on a metallic stem not less than three inches long {drilled into the base) and fixed with epoxy cement, is acceptable as the monument.

- c. If the corner falls in a dirt or gravel road, the monument cap shall be buried 6" below the road surface.
- d. If the corner falls in a paved road, the monument shall be placed in a prefabricated monument well. Alternately, the monument may be driven or drilled into the road base with its disk recessed ¼" to ½" below the pavement surface and any cavities created during the process, filled with epoxy, quikcrete, rockite, cement all, or other similar product.
- e. In the event a corner monument cannot practically be set because of steep terrain, water, marsh, existing structures, busy roads, etc. a minimum of two reference monuments shall be set. These monuments shall be placed as outlined in 4-17 of the Manual.
- f. Corner Monuments shall be marked {stamped) as shown in chapter four of the Manual and shall bear the license number of the surveyor in responsible charge. Reference monuments shall have the distance to the corner point stamped thereon.

1.3 The corner will be referenced: (See example sketch 1.6.5)

- a. Whenever possible, section corners and quarter-section corners {including reference monuments to these corners) shall be witnessed by at least four references of durable quality. If possible these references should also be in different quadrants.
- b. Sixteenth section corners, monumented during original or subsequent cadastral surveys shall also be witnessed, as cited in item a. above.
- c. All references shall be carefully described, and their bearings and distances from the corner noted in the field notes.
- d. Acceptable reference monuments could be a nail in a utility pole or fence post, a scribe in a concrete structure or rock outcropping or a rebar driven into the ground. With exception of items such as concrete or rock scribes, a tag, washer or cap bearing the license number of the surveyor shall be affixed to the reference monument.

1.4 Utah Grid and Geodetic coordinates will have been gathered for the corner:

1.4.I The surveyor shall obtain the following coordinates of the corner.

- a. Utah Coordinate System - Northing and Easting (appropriate zone) 1983.
- b. NAO 83 Geographic Coordinates (North Latitude and West Longitude).
- c. NAVD 88 Elevation.
- d. Reporting Units are to be U.S. Survey Foot or Meter.

1.4.2 The Surveyor shall state the Coordinate Source:

- a. Acceptable sources are the Utah Reference Network Control System (VRS) and Opus Solution Reports.
- b. Sample Surveyor's Statement: ••coordinates are NAO 83 (2011) (EPOCH 2010) derived from the Utah Reference Network Control System.
GEOID 12a, NAVD 88 Elevation = #,###.#."

1.4.3 Acceptable Data Gathering Equipment:

- a. Survey Grade G.P.S. List make and model (such as Trimble R6, TSC3 data collector).
- b. Total Station. List make and model. (A total station instrument may be used to traverse to a corner where a G.P.S. observation is not practicable, such as beneath a tree or structure).

1.4.4 Measuring to the Corner:

- a. G.P.S. receiver or mirrors shall be placed on a tripod or a rod with biped supports and plumbed above the corner.
- b. Three minute observations shall be observed.
- c. Maintain a POOP of 6 or less.
- d. Minimum horizon angle of 15°.
- e. Should be observed with low RMS values.

1.5 A photo will have been taken of the corner monument (showing markings). A second photo will have been taken of the general corner vicinity.

“ATTACHMENT D”

THE DELIVERABLES

IN ACCORDANCE WITH UTAH CODE 17-23-17 AND 17-23-17.5 THERE WILL BE THREE PRIMARY DELIVERABLES. . THE **THREE** PRIMARY DELIVERABLES ARE: (1) A GENERAL VICINITY MAP WITH ENOUGH DETAIL SHOWING THE AREA(S) WHERE CORNER MONUMENTS WILL BE PRESERVED, PROTECTED, OR REHABILITATED, MUST BE PROVIDED WITH THE PROPOSAL; AND (2) A CORNER FILE (SECTION TIE SHEET) FOR EACH CORNER MONUMENT REPLACED OR RESTORED; SAID CORNER FILE SHALL BE FILED IN THE COUNTY SURVEYOR’S OFFICE AND ELECTRONICALLY FILED WITH THE STATE UGRC. (3) A RECORD OF SURVEY (ROS) PLAT SHALL BE FILED IN THE COUNTY SURVEYOR’S OFFICE AND IS A REQUIRED DELIVERABLE FOR THIS GRANT..

IT WILL BE EXTREMELY IMPORTANT TO REVIEW ATTACHMENT “C” LABELED “THE MONUMENT REPLACEMENT AND RESTORATION COMMITTEE FIELD PROCEDURES (Field Procedures)” PRIOR TO ANY WORK BEING PERFORMED. THIS FIELD PROCEDURES ATTACHMENT WILL SERVE AS A GUIDE TO BOTH THE CONTRACTOR IN HIS WORK AND THE COMMITTEE IN THEIR REVIEW.

GENERAL VICINITY MAP (Proposal Requirement)

This can be any type of map (USGS, Aerial Image, GIS map furnished by the County, or anything else that is to such a scale that will clearly depict the corner monuments that will be located, tied, rehabilitated, etc.

THE SECTION TIE SHEET or MONUMENT RECORD SHEET (Final Deliverable Requirement)

During the course of or near the end of the survey project the COMMITTEE may require preliminary versions of corner file reports (section tie sheets) to verify that critical levels of data are made part of said Corner Files. At the end of the project the COMMITTEE may require proof of filing those Corner File Reports with the applicable County Office prior to payment. Please keep in mind that much of the same information found on a section tie sheet will also be found on any required ROS. One of the primary differences will be the capability of putting a great amount of information and detail on a Record of Survey Plat that may not fit on a Corner File Report (tie sheet). The “minimum” amount of information required on the Section Tie Sheet would be the following:

- Monument Description, include a complete description of the corner monument (Field Procedures 1.6.4).

- Corner description specifics (section, township, range, base & meridian)
- Date of field work
- Name(s) of individuals involved in the field work
- A complete description of accessories (original and added) and their relationship to the corner, with bearing/distance ties (Field Procedures 1.3).
- A reference to the ROS filing\recording number
- Horizontal Coordinate Values and units (feet\meters)---State Plane (horizontal datum\projection) as well as Lat\Lon (Field Procedures 1.4.1 and 1.4.2).
- Elevation Values and units (feet\meters)---Vertical Datum (Field Procedures 1.4.1 and 1.4.2).
- Stamp\seal of the surveyor certifying the work
- Photo(s) of the corner monument (showing markings)
- A sketch or graphical representation of the general corner vicinity showing existing features near the corner with accessories found or set (Field Procedures 1.6.5).
- Swing tie distances must be shown from at least 3 existing features, or installed rebar.
- Any additional information that describes the corner monument location that may help a surveyor or property owner locate the monument.

THE RECORD OF SURVEY PLAT (Final Deliverable Requirement)

A ROS plat is a requirement and should include the following:

- 1) A description, per corner, whether it was considered “existent”, “obliterated”, or “lost”.
- 2) In the case of existent or obliterated corners a thorough narrative corner by corner as to what was found, what was not, and what evidence was used in the decisions made. It will also be important to note how those findings relate to the original record. It will be critical to include what accessories were identified as well as what led to the final decisions that were made (Field Procedures 1.6.4).
- 3) Justification to determine a corner is lost as outlined in the Manual of Instructions (Field Procedures 1.2,4). It will be assumed that prior to the classification of a corner being lost, that every shred of evidence has been carefully examined.
- 4) A detailed description of what was set. (Field Procedures 1.6.4).
- 5) The following details for each monument (Field Procedures 1.4.1 and 1.4.2):
 - Horizontal Datum\State Plane Projection
 - Northing and Easting and Units (feet\meters)
 - Latitude\Longitude
 - Vertical Datum
 - Elevation and Units (feet\meters)
 - Height and Geoid Model

- Collection Method (VRS, OPUS, Other Control). If other control is used, what do those control monuments represent and how do they tie back to the HARN
 - A list of the HARN, CORS, or other reference stations used in the survey.
- 6) The stamp\seal and signature of the surveyor certifying the plat as well as any additional information that is required according to U.C. 17-23-17 that may be applicable to this type of survey project.

UPON ACCEPTANCE BY THE COMMITTEE, AND AS REQUIRED BY STATUTE, ANY REQUIRED CORNER FILE AND/OR RECORD OF SURVEY PLAT WILL BECOME PUBLIC RECORD AND THE RESPONSIBILITY OF THAT COUNTY WHERE THE WORK WAS PERFORMED. AN ELECTRONIC VERSION OF THE DATA SHALL BE SENT TO THE STATE OF UTAH UGRC TO COMPLETE THE REQUIREMENTS OF THE CONTRACT.

How to Submit Electronic Corner Information

1. In a Web Browser Go To: <http://mapserv.utah.gov/PLSS/>
2. Select Login. Register if you don't have an account or login with your username and password.
3. Zoom to a section corner by using the TRS tab (Township, Range, Section) or use the + and – buttons to zoom to the corner to be submitted.
4. Once the corner is viewable select the point with your cursor.
 - a. If the point is displayed purple the corner currently has a Monument Record Sheet submitted. The sheet can be viewed by selecting the View tie sheet in the lower left corner.
 - b. Monument Record Sheets can still be submitted for corners that currently have a sheet. The new sheets will be added to the existing record sheet and hopefully improve the accuracy of the point over time.
 - c. If it is displayed orange the corner does not have a Monument Record Sheet available.
5. Once a point is selected, 2 options show up at the bottom of the screen.
 - a. Submit Existing Sheet – will allow you to submit a sheet that is already created and on your computer
 - b. Submit Corner Data – will allow you to create a sheet by filling out an online form with the required field information and photos. The following information is needed to complete a form:
 - i. Collection Date
 - ii. BLM Point Number (provided by web site when the point is selected)
 - iii. County
 - iv. Accuracy

- v. Meridian
- vi. Township
- vii. Range
- viii. Section
- ix. Section Corner
- x. Monument Status
- xi. Geographic Coordinates -
 - 1. Latitude
 - 2. Longitude
 - 3. Ellipsoid Height
 - 4. Vertical Units
- xii. Grid Coordinates -
 - 1. Northing
 - 2. Easting
 - 3. NAVD88 Elevation
 - 4. State Plane Zone
 - 5. Horizontal Units
 - 6. NGS Adjustment
- xiii. Monument Description - (Location information, terrain, general findings, monument condition, etc.)
- xiv. Monument Notes - (Narrative about the monument and field procedures used to determine its location and coordinates)
- xv. Photo 1 - Map view Photo or Sketch
- xvi. Photo 2 - Monument Area Photo (with tripod over monument)
- xvii. Photo 3 - Monument Close-up Photo
- xviii. Extra Pages - pages can be added to the form that will be created when submitted.

USE THIS GOOGLE FORM TO SUBMIT DELIVERABLE

It is important that the County possesses the deliverable, so we ask that a county representative send the deliverable through this form rather than the contractor surveyor. (Monument Record Sheets can be submitted by the contract surveyor through the PLSS corner management website.)

This form will ask you to upload these 4 requirements:

1. Monument Record Sheets (these sheets should be uploaded through the PLSS corner management site <https://plss.utah.gov/>, or can be put into one zip file and uploaded through this form.)
2. Coordinate Spreadsheet (upload through this form)
3. Record of Survey (upload through this form)
4. County Invoice (upload through this form)

<https://docs.google.com/forms/d/e/1FAIpQLSff53uXynl-TQ5tg8KWMuX3kS90-TMP0d74W9PdsCndBm41mg/viewform?vc=0&c=0&w=1>

Please contact Sean Fernandez if there are any questions.
sfernandez@utah.gov 801-209-9359