

State of Utah Monument Replacement and Restoration Committee 4315 South 2700 West Taylorsville, UT 84129

For Committee Use Only						
Application No.						
Date Filed:						

GRANT APPLICATION

Applicant Information	on					
Applicant agency						
Street						
City			S	tate	Zip	
Contact person						
Phone					Fax	
Email						
Presiding official						
Title						
Phone						
Email						
Project surveyor						
Phone						
Email						
Proposed Funding						
Total project cost						
Total MRRC funds requested						
Other project funding (specify)						

Attachment checklist

- Description of the problem or situation to be addressed and how the proposed project will remedy the problem. A superior project description will thoroughly address each category of the Committee's Evaluation Criteria.
- 2. Map of the project area.
- 3. Cost estimate. Itemization of expenditures is encouraged. Include cost sharing if applicable.

(signature)

(date)



PUBLIC WORKS DEPARTMENT

SURVEYING | ENGINEERING | ROADS | WEEDS

CACHE COUNTY SECTION CORNER PROJECT

A GRANT PROPOSAL TO: State of Utah Monument Replacement and Restoration Committee (MRRC)

APPLICANT: Cache County, Utah

DATE: 5/10/2024

CACHE COUNTY SECTION CORNER PROJECT Grant 1 Valley Floor

SUMMARY

Cache County developed a monument preservation program where valley floor monuments are given the highest priority. The valley floor reflects where most of our growth is occurring. While in recent years past the County has worked heavily within Priority 1A (*Image 1*), our valley floor region, the County feels it's still important to pay attention to the valley floor once again due the development and growth we have seen over the last few years. With the help of monies from the Survey Monument Replacement and Restoration County Grant Program, Cache County would be able to accomplish significant monument preservation and locating in our Priority 1A (*Image 1*) area.

THE PROBLEM

Cache County has identified 22 corners where we have no coordinate data however surveyors are tying to these corners. With continued development pressures and current development applications the county needs to preserve and validate these corners to facilitate the growth. Goals we hope to accomplish with this grant is to tie down monuments to facilitate future surveying of county roads and to preserve found original stones.

Our focus with this grant is located on the valley floor. It's in the County's best interest to get these corners established before more growth and larger disputes begin to happen. Researching, verifying and reestablishing these corners will allow us to properly monument and produce tie sheets with measured latitudes and longitudes preserving the corners in the long term.

THE WORKFLOW

Jeff Nielson P.L.S. of Foresight Surveying will turn in corner data, set forth in "Attachment C Field Procedures" of the Public Land Survey System (PLSS) Grant Program to the County's GIS division. The GIS division will be responsible for creating the corner tie sheets See: Image 2: Tie Sheet 574. Corner tie sheets meet and will continue to meet tie sheet standards set forth in "Attachment D" of the Public Land Survey System (PLSS) Grant Program. Corner tie sheets are then published to the public via the County's Section Corner & Survey Web Mapping Application (<u>https://gis.cachecounty.gov/websites/surveyviewer/</u>).

OUR GOALS

Cache County has already made significant improvements on perpetuation and preservation within the valley floor. Cache County has used its own funds to complete perpetuation of

monuments already existing on the valley floor. Once existing corners have been perpetuated, the focus will shift to locating corners with limited to no data and/or tie sheet within our Priority Areas 1B and 2B.

- 1. Complete Priority 1A Existing section corners on the valley floor in need of perpetuation
 - a. Perpetuation Completed = 932
 - b. Needs to be Perpetuated = 183^*
- 2. Priority 1B General area of the valley floor where section corners have not as of yet been located and limited to no data exists. Unknown count of section corners that can be reasonably placed (limitations of data, accessibility and usefulness)
- 3. Priority 2A Existing section corners in the mountainous areas in need of perpetuation
 - a. Perpetuation Completed = 158
 - b. Needs to be Perpetuated = 847*
- 4. Priority 2B General area of the mountainous areas where section corners have not been located and limited to no data exists. Unknown count of section corners that can be reasonably placed (limitations of data, accessibility, and usefulness)

*note: the above "needs to be perpetuated" numbers will fluctuate as more once unknown/missing corners are included.

OUR GOAL FOR THE 2025 GRANT

Priority 2A – Existing section corners near private land holdings adjacent to public lands

 a. Perpetuate with 2025 grant = 22

BUDGET

It is estimated that these 22 section corners within Priority 1A and 2A can be perpetuated. The County estimates this can be accomplished at a cost near \$26,400.00.

Priority 1A/2A: Existing damaged/missing corners requiring additional repairs

Materials

- 1. 4 Rebar Reference Points \$1.67 each (\$6.68)
- 2. 4 plastic caps \$0.26 each (\$1.04)
- 3. Aluminum survey caps \$9.80 each
- 4. Aluminum survey Monument Domed Cap \$62.50 each

Materials total \approx \$80.02 per corner depending what cap is set.

Labor

1. Surveying work, data compilation and record of surveys tied to corners research ≈ 10 hours each = \$1,192.70

Materials and Labor Total = \$1,272.72 per corner.

This project is scalable to the amount of funding made available (more section corners can be added with additional funding and/or less corners with less funding).

County Resources/Match

The County is also putting financial and in kind effort into this project and request. While Cache County is seeking funds to finalize perpetuation of monuments in Priority 1A, the County has allocated funding to 1) pay unique material costs for Priority 1A (concrete, flow able fill, etc.) and 2) in kind staff time for the sheet creation and 3) cash match.

- 1. Tie sheet preparation 22 @ \approx 1 hour each @ \$40.00 per hour = \$1,320.00 (in kind)
- 2. Cash contribution \$4,860 + out of pocket expense for unique materials

Match Total = \$6,000.00

For this round of funding Cache County is hoping to perpetuate 22 section corners (*See Image 3: Section Corner Project Area Map*)

The estimated total cost to complete perpetuation on these 22 section corners is \approx \$26,400.00.

CONCLUSION

Cache County has made significant improvements to existing section corner data and tie sheets among the valley floor. The *Cache County Section Corner & Survey Web Mapping Application* is one of the County's most popular and useful tools to surveyors, realtors, title companies, cities, and the general public. As the County transitions into a more financially burdensome phase of the project the requested financial assistance will greatly improve the project's success. The County hopes to provide the PLSS with better quality section corner data as well as create an environment to receive higher quality land surveys and avoid property disputes.

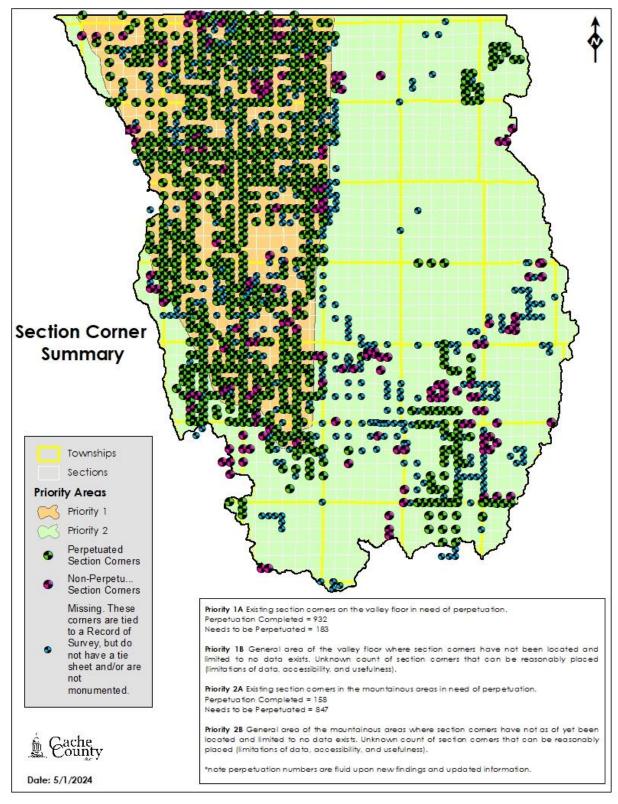
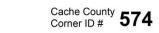


Image 1: Cache County Section Corner Summary Map

Cache County Monument Record Sheet



Contact Name License Number **BLM Point Name** Date UT260140N0010W0 300400 2/27/2015 Jeff C. Nielsen 5152661 Map View Photo or Sketch Corner of Section 300400 874 Township and Range T14N R1W **Base and Meridian** Salt Lake State County 574 UT Cache County 878 **Geographic Coordinates** Latitude (DMS) 41°56'47.4138"N -111°58'23.5956"W Longitude (DMS) Ellipsoid Height **Grid Coordinates** Northing 3868950.9340 Easting 1511674.9840 Horizontal Units feet Ortho Elevation 4558.135 **Coordinate System** Zone 875 NAD83 State UT North Plane Monument Area Photo Monument Close-up Photo Datum WGS84 **Vertical Units** 12A Vertical Datum NAVD89 **Monument Status** Existing Section Corner Location Additional Notes Reference Points 00700 373 3868947.006 1511653.292 CACHE RBR CAP 5 2 6 3 1 4 374 3869007.57 1511680.266 CACHE RBR CAP 515266 00600 3868839.31 1511671.011 CACHE RBR CAP 375 JEFF C. NIELSEN 8 9 10 7 11 12 00500 07 18 17 16 15 14 13 0400 **Monument Description** 19 20 21 22 23 24 Cache County makes no guarantees, representations, or warranties of any kind, expresss or implied, as to the content, accuracy, timeliness, or completeness of any of the data. Cache County reserves the right to make changes to the data at anytime without notice. Found cache county plastic cap on 5/8" rebar, 12" below grade, good condition, reset RPs 1,2&3 with 5/8" x 24" rebar 29 28 27 25 30 26 & cache cap. 00200 31 32 33 34 35 36 010

Image 2: Tie Sheet 574

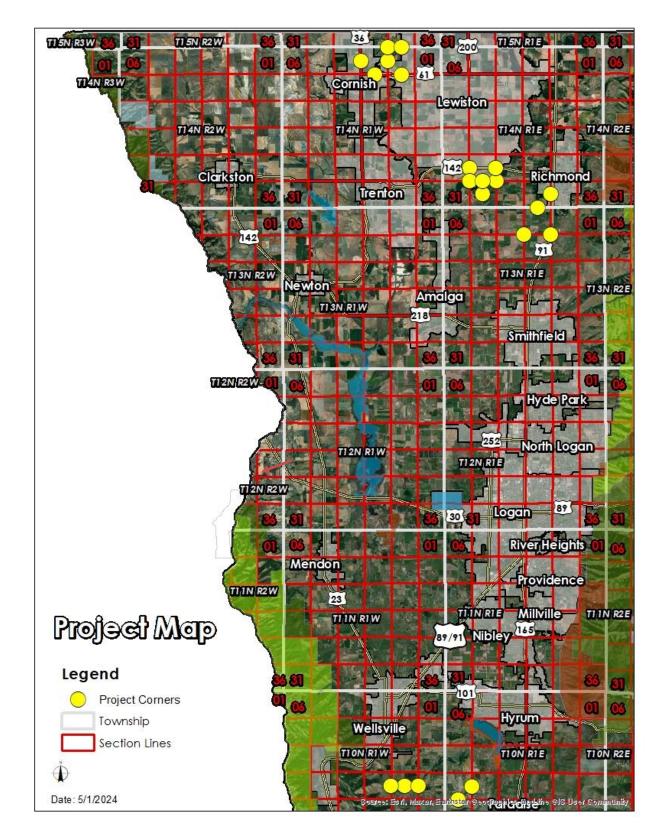


Image 3: Section Corner Project Area Map

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