



TOOELE COUNTY CORPORATION
CONTRACT # 11-09-09

Contract #

#

120545

STATE OF UTAH CONTRACT

1. **CONTRACTING PARTIES:** This agreement is between the State of Utah, Department of Technology Services, Automated Geographic Reference Center (AGRC), 1 State Office Building Fl 6, Salt Lake City, Utah 84114-1201, (Agency Code 110) referred to as STATE, and the following County, which is a Government Agency.

County Name: Tooele

Address: 47 South Main

City, State, Zip: Tooele City, Utah 84074

Federal ID# 876000317

Vendor Code 69883GJ

Commodity Code 99999

- 2. **GENERAL PURPOSE OF CONTRACT:** The general purpose of this agreement is an AGRC grant for: Funding reimbursement for collection and delivery of Public Land Survey System section corner data as outlined in the Technical Direction for Acceptance and Analysis of Local Control Digital Data into BLM Cadastral Framework and/or enhancing the digital GIS Parcel Data Layer.
- 3. **CONTRACT PERIOD:** Effective date 5-30-2010. Termination date 10-30-2011, unless terminated early or extended in accordance with the terms and conditions of this contract. The STATE will conduct a mid-term contract review (July 30, 2011) 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.
- 4. **GRANT VALUE:** \$10,600 County will be paid a maximum of \$10,600 for funds authorized by this contract. County must contribute an additional 20% match (\$2,120)
- 5. **PREREQUISITE:** A prerequisite to executing this contract as determined by the Cadastral Grant Committee, which is authorized to manage the distribution of the grant funds, requires all COUNTIES applying for these funds to provide the STATE with the county PARCEL and PLSS section corner data that has been collected through this grant program in past years, before this agreement can be signed.
- 6. **ATTACHMENTS INCLUDED AS PART OF THIS CONTRACT:**
 Attachment A: Standard Terms and Conditions
 Attachment B: Scope of Work – Outline of Deliverables
 Attachment C: Technical Direction for Acceptance and Analysis of Local Control Digital Data in BLM Cadastral
 Attachment D: Attributes needed for submitting points
 Attachment E: Instructions – How to Submit Corner Information Online
 Any conflicts between Attachment A and other Attachments will be resolved in favor of Attachment A.
- 7. **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.

CONTRACTOR

Colleen Johnson
Signature

8 June 2011
Date

COLLEEN JOHNSON - COMMISSIONER
Name and Title of Signer (Type or Print)

STATE

Sean Fernandez Date: 7-27-2011
Sean Fernandez, Cadastral Manager
Automated Geographic Reference Center (AGRC)

JADA Date: 8/31/11
Department of Technology Services
CONTRACT RECEIVED AND
PROCESSED BY
DIVISION OF FINANCE
Date: _____
Division of Finance

SEP 01 2011

ATTACHMENT A
STATE OF UTAH - DEPARTMENT OF TECHNOLOGY SERVICES,
AGRC 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 I-07 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. AGRC 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:** AGRC'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, AGRC 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 AND GIS PARCEL PROJECT

The State of Utah, Department of Technology Services, Automated Geographic Reference Center, referred to as STATE, is distributing Legislative authorized grants to several counties, referred to as COUNTY, for furthering GIS work and the Public Land Survey System.

The work to be performed is Cadastral Surveying and Mapping of Public Land Survey System section corners and/or enhancing the digital GIS Parcel Data Layer.

1. The grants are awarded based on bid proposals, outlining a specific area of interest for the work to occur, and the scope of work for each county will be defined in the bid.
2. The bid proposal for PLSS work will include a map created by the COUNTY outlining general areas the PLSS section corner data will be collected.
3. The bid proposal for GIS Parcel work will include a map created by the COUNTY outlining general areas the GIS Parcel data will be created.
4. The COUNTY agrees the survey work will be conducted by the COUNTY, or a contractor of the COUNTY, qualified by the State of Utah licensing requirements and following the work requirement as outlined in this contract and its attachments.
5. The COUNTY agrees the GIS Parcel work will be conducted by the COUNTY, or a contractor of the COUNTY and the work will be done in accordance to this contract.
6. The STATE agrees the purpose of this program is to improve the quality of the Public Land Survey System, not necessarily focusing on the quantity of the section corners collected, but the quality of the work performed to find the true corner location.
7. The STATE agrees the purpose of this program is to improve the quality of the County GIS Parcel Layer and enhance the Statewide GIS Parcel Layer.
8. The STATE will work with the COUNTIES to determine an acceptable deliverable based on the difficulty of the area being worked in and other possible obstacles.
9. The COUNTY agrees to provide the following **PLSS deliverables** to the STATE according to the directions and requirements outlined in the contract and its attachments:
 - A **map** or sketch outlining a general area the corner data will be collected

ATTACHMENT B

- **A Monument Record Sheet** for each point, submitted through the AGRC PLSS Corner Management web app. including all the required fields. The **Surveyor Narrative of Evidence** and the **Surveyor Narrative of GPS Procedures** as outlined in “Attachment C,” will be included in the online form under **Monument Description** and **Monument Notes**. as outlined in “Attachment C”
10. The COUNTY agrees to provide the following **GIS Parcel deliverables** to the STATE according to the directions and requirements outlined in the contract and its attachments:
- **Metadata** - The metadata will be FGDC compliant for parcel data and include the process used to create the digital parcel dataset.
 - **Parcel Outline (Polygon)** – The polygon is the geographic extent of the parcel, the parcel boundaries forming a closed polygon.
 - **Parcel ID** - A unique identifier for the parcel that is also used to tie other attributes of the parcel from additional database tables.
 - **Owner Type** - The type of ownership is the classification of owner. In some local governments tax parcels are tagged as either taxable or exempt and the owner classification is not known. In these cases an owner types of taxable and exempt may be added to this list (tribal, federal, state, private).
 - **Parcel Street (Site) Address** – This is the street address (site address) for the parcel. If there is more than one, select the first or primary site address.
 - **Structure** – Yes or No. This can be taken from the tax roll table from the building field, square footage field or any other field with a reference to a structure.
 - **County Recorder Contact Information** – This is the Phone Number to the Office of the County Recorder.

Technical Direction for Acceptance and Analysis of Local Control Digital Data into BLM Cadastral Framework

Introduction

A critical element with creation of a standard statewide cadastral framework is integrating data/positions which are essential to the stakeholders of the data. This technical direction specifically addresses the integration of local control supplied by the counties of Utah. Recent experiences with ground truthing by BLM, County Surveyors and Private Surveyors has brought to light questions regarding the reliability of the efforts to rehabilitate Public Land Survey System (PLSS) infrastructure. This work included not only remonumentation and GPS positioning observations of existent PLSS corners, but restoration of PLSS corners. Field returns in many cases have not distinguished whether rehabilitated PLSS corners are existent, obliterated, or restored by proportionate methods. The BLM and the State of Utah, Automated Geographic Reference Center (AGRC) engaged in extensive training throughout the state to provide technical direction for county efforts with rehabilitating the PLSS infrastructure. The training identified BLM PLSS Corner Collection requirements along with BLM GPS collection methodology. In spite of the periodic training, the BLM has received local control deliverables which do not meet BLM PLSS Corner Collection requirements. This technical direction provides not only updated BLM PLSS Corner Collection requirements, but will also provide direction for integration of the local control position into the standard statewide cadastral framework.

BLM PLSS Corner Collection Requirements

BLM Cadastral Survey maintains the authority to conduct original surveys of the PLSS and continues to maintain authority to conduct resurveys of federal interest lands and PLSS corners which control the location of federal interest lands. In Utah, state licensed Professional Land Surveyors hold authority to conduct dependent resurveys of the PLSS. When conducting resurveys the evaluation of local control as identified in the Manual of Survey Instructions, found in chapter 6 guides both the BLM and local surveyor acceptance of local control. Critical to such acceptance is the ability to trace the local control to the original PLSS survey. Similarly, submission of digital data representing local control must meet the same standards for acceptance. BLM PLSS corner collection requirements are a compilation of three deliverables; Surveyor Narrative of Evidence, Digital Data for Inclusion into PLSS Control Database and Surveyor Narrative of GPS Procedures.

Surveyor Narrative of Evidence

Corner recovery notes are required to be filed by private surveyors as per Utah Code; 17-23-17(7) (a). Clearly, corner recovery sheets differ from county to county, but their intent is the same; a requirement of the surveyor to provide evidence which traces local control to the original PLSS survey. The BLM PLSS Corner collection requirements regarding the surveyor's evidentiary narrative are:

- **Description of what was found** should include:
 - Physical description of the monument and its accessories.
 - If monument is of record provide:
 - Name and PLS # of surveyor responsible for setting monument.
 - Identify tracking # of the document of record.
 - If monument is not of record provide evidence supporting the decision to accept.
- **In the event that re-establishment of the monument is required:**
 - Identify in narrative that remonumentation occurred to replace deteriorating existent monument.
 - Obliterated corners which are re-established require the narrative to include evidence to support decision that corner was in fact obliterated, as per Chapter 5, Section 9 through Chapter 5, Section 14 in the Manual of Survey Instructions.
 - Restoration of lost corners requires narrative to include the method used to restore the lost corner, as per Chapter 5, Section 20 through Chapter 5, and Section 46 in the Manual of Survey Instructions.

Digital Data for Inclusion within PLSS Control Database

Most preferred deliverable of local control would be; a digital GCDB Measurement Management (GMM) Software control file, which is an anticipated output format from the AGRC Surveyors Office application. Acceptable file formats for submission of local control data along with aforementioned include; excel spreadsheet, access database, or delimited, field specified ASCII text file. Required data fields follow:

- Township Number & Direction and Range Number & Direction
- Meridian
- GCDB Point Identifier → refer to Existing GCDB dataset for correct Point Identifier
- Status of PLSS corner monument → populate field with one of the following
 - Existent
 - Obliterated
 - Lost
 - Original → meaning previously unmonumented Section Subdivision

"Attachment C"

- Monument description → identifies Surveyor Narrative of Evidence document
- Network Accuracy → As per IM No. 2001-186, include units
- Agency/PLS # of PLSS monument
- Datum
- State Plane Projection
- Northing
- Easting
- Horizontal Units
- Latitude → Preferred Format: DDMMSS.SSSS
- Longitude → Preferred Format: DDDMMSS.SSSS
- Vertical Datum
- Elevation
- Vertical Units
- Height
- Geoid Model
- Collection Method → identifies Surveyor Narrative of GPS Procedures document
- Contact Name
- Contact Phone Number
- Collection Date

Surveyor Narrative of GPS Procedures

The surveyor narrative of GPS procedures is fully described in the BLM, Instruction Memorandum No. 2001-186: Standards and Guidelines for Cadastral Surveys Using Global Positioning System Methods. This narrative shall be prepared and submitted to the project by the Professional Land Surveyor in responsible charge of the land survey project. Required elements of the narrative are summarized below:

- Make and Model of the GPS receiver, Antenna, and related equipment.
- A data collector report of all RTK field operations, including calibrations, duplicate point measurements.
- A processing generated report regarding the baseline processing results and the software and version number used.
- A processing generated report regarding the Network adjustment results including a summary of covariance's, standard deviation or RMS values and the software and version number used. *OPUS data sheet can satisfy this element*
- A network diagram, true line diagram or map showing the network configuration as designed. *OPUS data sheet can satisfy this element*

"Attachment C"

- A list of the HARN, CORS or reference stations used in the survey. *OPUS data sheet can satisfy this element*
- A list of coordinates by Pt Id including the datum, geoid model, epoch, and measurement units which are within same control network.
- Local and Network Accuracies.

Data Analysis and Acceptance of Local Control using GCDB Measurement Management (GMM) Software

GMM control file with all appended local control should have the comment field populated with the Agency Code found in Appendix A; GCDB Data Collection Attribute Definitions Version 2.0. Rejected control will remain in .con file, but will require an * in front of control entry.

Local control positions of PLSS corner which do not control the location of federal interests will follow existing guidance found in Utah P&G, 2006. The following guidance will only apply to local control positions of PLSS corners which control Federal interests:

- Township.txt file requires listing all rejected control with accompanying comment as to reason for rejection.
- Import of control using appended .con file should occur as an inraw.exe operation, and should occur before deleting any existing control for same PLSS corner.
 - The *import of control* function found in the control maintenance subroutine of inraw.exe will list coordinate mismatch measurements. Coordinate mismatch of greater than 20 feet requires flagging local position for possible rejection.
 - If documentation that accompanies local control deliverable can substantiate that local PLSS corner position can be traced to the original PLSS survey. Remove flag and continue to use local position.
 - If documentation accompanies local control deliverable which cannot substantiate that local PLSS corner position can be traced to the original PLSS survey. Reject local position.
- If GCDB point identifier (Pt Id) does not match PLSS Pt Id within existing GCDB dataset, then flag local position for possible rejection.
 - If documentation that accompanies local control deliverable can substantiate that local PLSS corner position can be traced to the original PLSS survey, then edit Pt Id to match existing GCDB dataset. Remove flag and continue to use local position.

"Attachment C"

- If documentation accompanies local control deliverable which cannot substantiate that local PLSS corner position can be traced to the original PLSS survey. Reject local position.
- Initial Least Squares Adjustment (LSA) of standalone townships will occur with local control allowed to float using the following assigned error estimates:
 - 1 ft - Local control positions which do not meet IM # 2001-186 standards
 - .656 ft – Local control positions using RTK method positioning which meet IM # 2001-186 standards
 - .328 ft - Local control positions which meet IM # 2001-186 standards for Control Network Accuracy
- Results of LSA shows the local control position > 2X error estimate requires flagging the local position.
 - If documentation that accompanies local control deliverable can substantiate that local PLSS corner position can be traced to the original PLSS survey. Remove flag and continue to use local position.
 - If documentation accompanies local control deliverable which cannot substantiate that local PLSS corner position can be traced to the original PLSS survey. Reject local position.
- Proceed as per existing Utah GCDB Collection Guidance.

ATTACHMENT D

ATTRIBUTES NEEDED FOR WEB APP.

SURVEYOR NAME
SURVEYOR LICENSE NUMBER
COLLECTION DATE
BLM POINT ID NUMBER
COUNTY
MERIDIAN
TOWNSHIP
RANGE
SECTION
CORNER OF SECTION
ACCURACY
COORDINATES
STATE PLANE PROJECTION
NORTHING (meters)
EASTING (meters)
ELEVATION (meters)
LATITUDE
LONGITUDE
ELLIPSOID HEIGHT (meters)
VERTICAL DATUM
NGS ADJUSTMENT
MONUMENT STATUS
MONUMENT DESCRIPTION
MONUMENT NOTES
Photo (Map view of point in imagery or sketch like a tie sheet)
Photo (Monument area, photo taken of tripod over the point)
Photo (Close-up of the monument)

How to Submit Corner Information

1. Go To: <http://mapserv.utah.gov/PLSS/>
2. Select **"CANCEL"** on the Zoom to County box in the center of the page.
3. Select **"How to Submit Corner Information"** in the lower right hand corner of the page.
4. Select **"Register"**
5. Create an account with all required information including your Surveyor License Number.
(This information will be used to create the monument record sheets, please use a valid email address and enter your name as you would like to see it on the record sheets beginning with caps.)
6. Select **"Register,"** it will complete your registration and take you back to the home page.
(Notice: the upper right hand corner says, "Welcome back: with your email address." This confirms you are logged in.)
7. In the Zoom to County box in the middle of the page "select a county" where you are submitting data then select **"ZOOM"**
(Notice: if you select a county that has a web viewer for PLSS Tie sheets, a box appears stating this county has its own Cadastral Data web page along with a hyperlink to the county site.)
8. If the County Data box comes up select **"Close,"** the County you selected is now outlined in yellow.
9. Use any of the Zoom to Location options to find the point you are looking for, or the zoom slide bar in the upper left side of the map with the up arrow to zoom in and the down arrow to zoom out.
10. Notice: the PLSS points are color coated according to the Legend.
11. Select with your curser the point you want to submit data on.
(Notice: the point you selected is marked with a yellow push pin.)
12. Select **"Submit Corner Data"** on the right hand side under corner information that takes you to the "Submit Section Corner Data" form.
(Notice: The Submitted by, Surveyor License # and BLM Point Number are already filled out.)
13. Fill out all required fields. More information is better than less.
14. Once filled out select **"Submit"**. If successful a notification saying "Thanks you, Your information has been submitted to the cadastral Section."
15. Select "Download Form" to view the new Monument Record Sheet created from the information you have submitted. (Notice: you can print or save to your local computer for your won records.)
16. Close the Monument Record Sheet pdf. Select **"Return to Home"** and repeat steps 9-15 to submit another point.