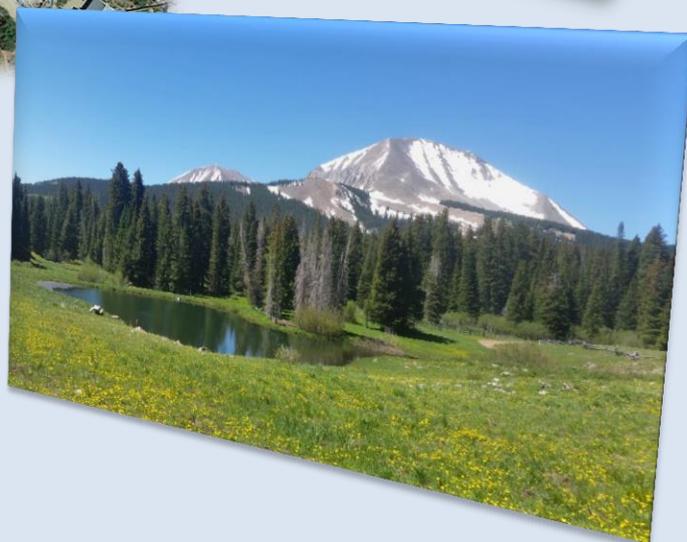
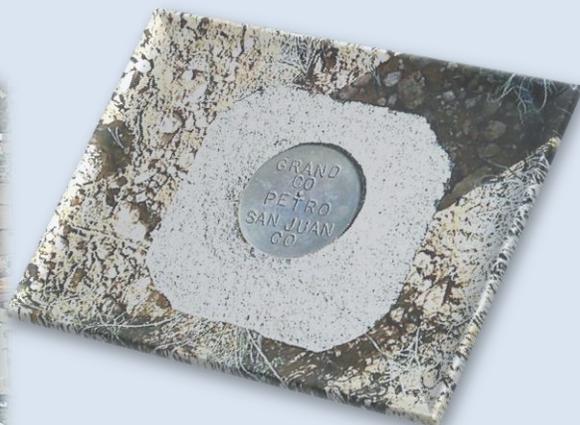




**FINAL REPORT AND  
RECOMMENDATIONS FOR  
THE  
RE-MONUMENTATION OF  
THE SAN JUAN-GRAND  
COUNTY BOUNDARY**

*Kent B. (Sam) Cantrell P.L.S., San Juan County Surveyor  
Sean Fernandez P.L.S., State Cadastral Surveyor, AGRC/DTS*

**August 2018**



# REPORT AND RECOMMENDATIONS FOR THE RE-MONUMENTATION OF THE SAN JUAN–GRAND COUNTY BOUNDARY

*Kent B. (Sam) Cantrell P.L.S., San Juan County Surveyor  
Sean Fernandez P.L.S., State Cadastral Surveyor, AGRC/DTS*

**August 2018**

The recommendations presented in this report are based on meetings and discussions between the San Juan County Surveyor, the State Cadastral Surveyor of the Utah Automated Geographic Reference Center (AGRC), the Office of the Lieutenant Governor of the State of Utah, and the Utah Association of County Surveyors. These discussions took place between August 2017 and August 2018 and detailed the issues involved with the re-monumentation of the San Juan–Grand County boundary. Because Grand County does not have a County Surveyor, the services of the State Cadastral Surveyor were engaged per *Utah Code 17-50-105* and *63F-1-506*. Continual questions and confusion about the location of the boundary, as well as expanding growth on both sides of, and adjacent to, the boundary, necessitated the actions detailed in this report.

## The History

---

Between December 1958 and June 1962, a series of court proceedings took place regarding the location of the county boundary between San Juan County and Grand County. The proceedings ended with a Utah Supreme Court ruling.

The case involved a boundary dispute between the two counties whereby San Juan County commenced action seeking to enjoin Grand County from exercising jurisdiction over a disputed area and to recover taxes admittedly collected in that area by Grand County. Grand County, by way of a counterclaim, sought a determination by the court that the common boundary is a line that coincides with the South line of Township 26 South of the Salt Lake Meridian as it extends from the Eastern boundary of Utah to the middle of the Green River.

The supreme court ruling (Case Number 9563, Supreme Court of Utah, May 28, 1962) dismissed both counties' complaints and declared that *"as a matter of law, the common boundary of the two counties is Parallel 38 degrees, 30 minutes North Latitude and that it remains for the counties to follow statutory procedure in locating this boundary upon the face of the earth."* No costs were awarded to either county. The ruling continued, elaborating on the boundary's location and also commenting on the difficulty in placing it in actuality:

*The common boundary of the two counties runs from the Colorado border on the East to the middle of the Green River on the West. Ever since the establishment of San Juan County in 1880 and Grand County in 1890, the South boundary of Grand and the North boundary of San Juan have been legislatively placed at Parallel 38 degrees, 30 minutes North Latitude. The difficulty has been placing this boundary on the surface of the earth. (Case Number 9563)*

## History of Previous Surveys

The San Juan–Grand County boundary transects Township 26 South, Ranges 17 through 26 East, of the Salt Lake Meridian for approximately 53 miles. The original public land surveys were conducted first by the Government Land Office through 1946 and subsequently, after a merger with the United States Grazing Service, by the Bureau of Land Management. These surveys were performed in Township 26 South during the years 1880, 1911, 1912, 1915, 1926, 1934, 1955, and 1956.

From 1962 through 1965, based on the supreme court ruling, the county surveyors of San Juan and Grand, in cooperation with the Utah state engineer, undertook a field survey to monument on the ground, the boundary of the two counties at Parallel 38 degrees, 30 minutes North Latitude. During this same time frame the US Coast and Geodetic Survey, now known as the National Geodetic Survey (NGS), was conducting surveys, mainly on the western portion of the county boundary, in order to establish triangulation stations for geodetic control.

During the boundary survey conducted by the two county surveyors, Donald (Chap) Blake for San Juan and George (Hub) Newell for Grand, some monuments were either set or found to be set in the wrong locations. Direct evidence of these monuments can still be found today as well as correspondence between the Utah State Engineer and the Deputy Director of the US Coast and Geodetic Survey discussing this issue and what should be done with the monuments. Said monuments were located in 2017 and all were stamped with the date “1962.” The stamped lettering inscribed “County Boundary” was also found to be eradicated with X marks as recommended by the Coast and Geodetic Survey.



The August 3, 1961, Memorandum Decision of the Fourth Judicial District Court from the original lower court civil action states, *“The record shows that the parties engaged the State Engineer to survey and mark the boundary on the ground. After a preliminary survey was conducted, no further steps were taken and the project was abandoned.”* Also, the September 12, 1961, Findings of Facts and Conclusions of Law of the Fourth Judicial District Court, Fact Number Five from the original lower court civil action, reads *“Sometime in 1958, the two counties engaged the State Engineer to survey and mark the common boundary line between the two counties. The State Engineer never conducted any survey or placed any monuments on Parallel 38 degrees, 30 minutes North Latitude, or any other place pursuant to said employment but requested the Coast and Geodetic Department of the Federal Government to do a reconnaissance survey, which was conducted by said Coast and Geodetic Department of the Federal Government. No further steps were taken and the project was abandoned.”* And, again, Fact Number Six reads, *“There is evidence in the record that in the year 1912, the County Surveyors of the Plaintiff and Defendant counties surveyed the common boundary line between the two Counties and there is evidence of monuments and other markings being made, but the exact location thereof cannot now be determined.”*



There is still a great deal of uncertainty as to who actually set the erroneous monuments, but it is quite clear that the monuments are not at Parallel 38 degrees, 30 minutes North Latitude.

### **Current Survey Activity**

During the summer of 2017, the San Juan County Survey Department, under the direction and control of the county surveyor, conducted a retracement survey of the 1962 Blake/Newell county boundary survey. A total of thirty-three monuments were located and found to be set from 1962 to 1965. Of those thirty-three monuments, twenty were found to have markings designating them as county boundary monuments, and of the twenty, six were found to be those that were erroneously set as previously mentioned and one was found to be completely obliterated with some evidence of

having been set by “Skipper Resources.” No additional evidence on the pedigree of this monument has been discovered by the San Juan County Survey Office. The remaining thirteen monuments were United States Coast and Geodetic Survey triangulation station monuments and reference monuments to those triangulation stations that were never meant to be county boundary monuments.

The San Juan County Survey Office found no evidence of any survey monuments or markings from the 1912 county surveyors’ boundary survey, nor did the office investigate the survey any further as to the county boundary’s possible location at the South line of Township 26 South of the Salt Lake Meridian. The 1912 survey was determined to be irrelevant as to the position of Parallel 38 degrees, 30 minutes North Latitude, on the surface of the earth. Further, the district and supreme courts gave it no merit since the township line is not where the county boundary was legislatively placed in 1880 and 1890 when the counties were established.

Some additional survey work has been performed in 2018 by the San Juan County Survey Office, mainly to verify some monument locations and to try to further investigate the pedigree of the obliterated monument in the Spanish Valley area.

As recent as May of 2018, a survey of a new subdivision development near the county boundary was submitted for approval to both San Juan and Grand counties. However, San Juan County informed the



developer, engineer, and surveyor, as well as the Grand County officials, that the subdivision was not in San Juan County and, therefore, did not require San Juan County approval. Even though the surveyor had clearly denoted on the subdivision plat the location of the county boundary at Parallel 38 degrees, 30 minutes North Latitude, showing the location of the subdivision to be entirely in Grand County,

parties relevant to the approval process still seemed to be confused as to the county boundary location! This confusion led to delays in the approval process and unnecessary review by officials in San Juan County.

In summary, it is clear and evident that in order to prevent further confusion and problems associated with a “disputed boundary,” a “boundary action” is needed in order to clarify and confirm the physical location of the San Juan–Grand County Boundary.

## The Problem

---

The locations of the erroneously placed monuments in the Blake/Newell survey, particularly one in the Spanish Valley area; a lack of any public record documenting the survey and its findings; and years of “local and regional assumptions” have, in our opinion, led to some of the confusion as to the physical location of the San Juan–Grand County boundary.

Further, in addition to the surveys conducted by the aforementioned governmental entities, a number of private land surveyors have conducted work in the area over the years. Countless private parcels, a major connector road (i.e., Sunny Acres Lane), and five subdivisions have been surveyed and developed since the Blake/Newell Survey in the early 1960s. It is our opinion that these surveys have also added to the confusion as to the physical location of the San Juan–Grand County boundary.

This uncertainty regarding the location of the county boundary has led to procedural errors in the creation of the subdivisions in the area, which have, in turn, fueled the controversy.

These procedural errors in the establishment of the subdivisions transected by the county boundary have also led to problems with other county-related jurisdictional responsibilities, such as taxation, voting, emergency and medical services, addressing, school districting, and road ownership and maintenance. For at least the recent past, the two counties have worked together to deal with the taxation and road issues. Other jurisdictional agreements may also be in place and may very well be acceptable to both counties. However, it is our recommendation that unless there are existing memorandums of understanding, intergovernmental agreements, or county policies, these other jurisdictional responsibilities should be specifically addressed in order to deal with all property that is transected by the San Juan–Grand County boundary.

## **The Survey Solution and Recommendations**

---

In order to remedy the problems that have been discovered throughout the research and investigation of this county boundary issue, there are three areas of concern that we would like to address and that we would like to offer recommendations and solutions on.

*The first item* of main concern is insufficient correct monument placement on the surface of the earth along the county boundary line.

*The second item* of concern is the lack of any public record documenting the location and findings of the county boundary.



*The third item* of concern has to do with the affected property owners' knowledge and awareness as to the location of the county boundary as it transects their property, and the potential lack of a mechanism in place to deal with the related jurisdictional issues.

### ***Insufficient Correct Monumentation***

As stated previously, during the retracement survey of 2017 there were twenty monuments found that were associated with the county boundary survey of the early 1960s. Six of these twenty monuments were found to be erroneously set, and the markings were subsequently eradicated, and one was set and discovered obliterated with little evidence of pedigree. This leaves thirteen monuments marking an approximate fifty-three mile boundary.

Evidence shows that Blake and Newell set these thirteen monuments in 1962 by: determining the parallel of latitude by solar observation, sighting fixed reference points, and using trigonometric functions to calculate the desired angles and bearings. In contrast, the 2017 survey conducted by the San Juan County Survey Office used global navigation satellite system observations to track and record the monument locations.

Comparing the measurements of the thirteen monuments set in the Blake/Newell survey to the survey conducted by the San Juan County Survey Office in 2017, the largest deviation from Parallel 38 degrees, 30 minutes North Latitude, was 5.76 feet, and the smallest deviation was 1.60 feet. Given the surveying equipment used and the survey techniques employed, the results of the earlier survey are within acceptable tolerances.

Blake and Newell set monuments along the boundary to the best of their abilities, and this good faith effort must be honored to conform with all the accepted methods and procedures of land surveying, including long-standing common and case law and the "Priority or Hierarchy of Calls" used when processing evidence for the reestablishment of a boundary.

### ***Lack of Any Public Record Documenting the Location and Findings of the County Boundary***

While researching this issue, very little information was found in the public record, making it extremely difficult, as well as time consuming, to determine the facts and findings of any previous efforts to locate the county boundary on the surface of the earth.

This is in part because until April 1987, surveyors were not legally required to record a survey plat of a boundary survey in the respective county(s) offices where it was performed. Additionally, oversight, poor record keeping, and the passing of over fifty years of time led to insufficient documentation in the public record.

### ***Affected Property Owners' Knowledge and Awareness as to the Location of the County Boundary as It Transects Their Property, and the Potential Lack of a Mechanism in Place to Deal with the Related Jurisdictional Issues***

At present, according to the record, there are twenty-seven property owners, including county, state and federal entities, affected by the county boundary transecting their parcels. These property owners need to be made aware of the location of the county boundary on their parcels and the existing or potential issues this may cause now or in the future, or both.

The two counties have some agreements in place to deal with jurisdictional issues, such as some taxation, some road maintenance, and some emergency and medical services, but *all* jurisdictional issues need to be dealt with at the appropriate level of state and county government.



## Recommendations

---

### **Recommendation #1**

Due to the previously mentioned standards of surveying practice, the thirteen recovered Blake/Newell monuments will be held in their present locations to represent the two county surveyors' best effort to monument the location for the San Juan–Grand County boundary at its legislatively intended

position of Parallel 38 degrees, 30 minutes North Latitude.

### **Recommendation #2**

Because there are so few monuments marking the extensive boundary, additional monumentation needs to be physically set at the legislatively intended position of Parallel 38 degrees, 30 minutes North Latitude.

Modern-day surveying techniques using global navigation satellite systems should be employed to accomplish this task. New monuments should be placed at approximate one-mile intervals along the boundary where it transects a Public Land Survey System section line. When an original Blake/Newell monument is encountered, a new monument should be set at the nearest section line east and west of that original monument. This will allow for more extensive monumentation along the boundary, as well as honoring the original survey monuments and the legislative intent of the boundary location. It will also tie the boundary to the Public Land Survey System and satisfy *Utah Code 17-50-105(4)*

There will be some deviation from Parallel 38 degrees, 30 minutes North Latitude, at the original monument locations, but these monuments must hold true as boundary markers.

### **Recommendation #3**

A record of survey plat should be produced and provided to the Office of the Lieutenant Governor of the State of Utah, per *Utah Code 17-50-105(1)* and *Utah Code 17-50-105(3)(e)*. The survey plat should also be recorded in the Office of the County Surveyor and Recorder of each county.

The plat should detail all the facts and findings of the survey and subsequent monumentation of the boundary and should be accompanied by all other relevant documents relating to the original survey and the retracement survey.



## **Recommendation #4**

The counties should provide public notice as to the time and location of any public meetings to discuss the proposed boundary action. Notice should also be provided as to the location of the recorded survey plat and accompanying documents.

The governing bodies of each county should, with the assistance, if necessary, of the Office of the Lieutenant Governor of the State of Utah, create policies or intergovernmental agreements. These policies or agreements should deal with all pertinent jurisdictional issues previously mentioned in this report for properties transected by the San Juan–Grand County boundary.

## **Conclusion**

---

In this report we have documented what we believe is the best possible remedy to the problems associated with the San Juan–Grand County boundary as described herein.

Professionals from the surveying community and government have been consulted, and their opinions and advice have helped develop the recommendations detailed in this report. These professionals, and others, have put a great deal of time, research, and fieldwork into this project to date.

The decision as to whether the boundary is further monumented to better delineate it on the surface of the earth ultimately lies with the governing bodies of both San Juan and Grand counties.

We, as professional land surveyors, strongly urge the San Juan County Commission and the Grand County Council to jointly endorse and fund the recommendations contained in this report in order to prevent any further questions and confusion as to the location of the county boundary.

Whether or not these recommendations are accepted and implemented, the only remaining conclusion is that the San Juan–Grand County boundary is located at Parallel 38 degrees, 30 minutes North Latitude, regardless of the extent of the monumentation.

