

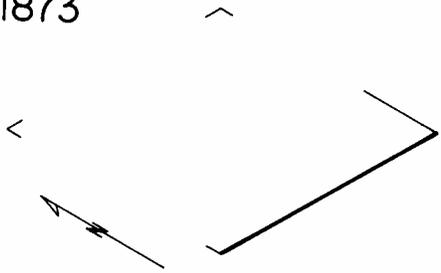
Chapter A

Nearby Topographic Call for Corner Restoration

A11

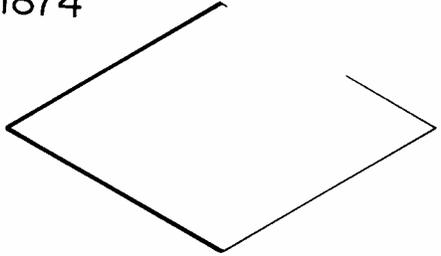
History of Surveys

1873



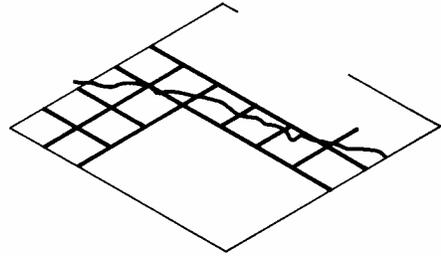
1873 G.W. Garside surveyed the south boundary and the south two miles of the east boundary of T. 43 N., R. 27 E., M.D.M., Nevada

1874



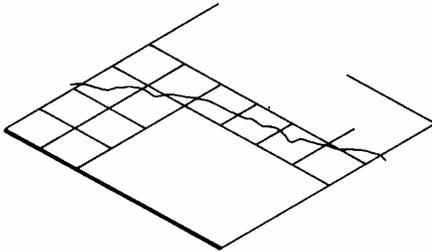
1874 G.W. Garside and C.S. Preble surveyed the north and west boundaries.

1874



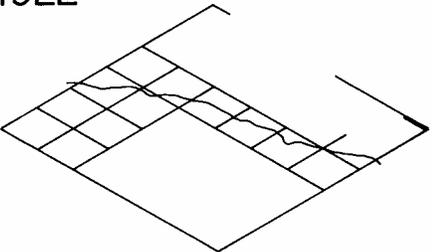
1874 A.J. Hatch, W.W. Skinner and C.S. Preble surveyed selected portions of the subdivisinal lines as shown on the plat approved October 14, 1874.

1917



1917 H.P. Purington resurveyed the west boundary.

1922



1922 Emil Voigt resurveyed the south half mile of the east boundary.

Reasons for Request of this Survey

The introductory paragraphs of field notes state, "The resurvey was requested by the District Manager through the State Director to identify boundaries of the public domain intermingled with private lands to facilitate administration under the appropriate land laws."

29

Thos Ch. & 24 E.

North betsecs 34 and 35
 Var 17044' E.

Descending over rolling ground

40.00 Set sandstone 14x20x6 marked 1/4
 5 in deep and made mound of stone
 for 1/4 sec cor.

68.00 Enter meadow N 1/4 & S E.

80.00 Set sandstone 18x7x6. 10 in in ground
 marked 1 notch Sand S E. for cor
 of sections 26, 27, 34, 35
 Land bet 68 chs rolling sand hills
 balance bet class meadow grass.

Easton true line betsecs 26 & 35
 Var 17045' E.

1.00 Braune Creek 600 ft wide N 10' W.

2.00 Leave meadow N & S. enter hills

38.00 Base of steep mountains N & S. as and

30

M. D. M.

40.00 Set trap stone 18x10x5. marked 1/4.

10 in in ground. for 1/4 sec cor.

Land excepting meadow. rolling hills
 with sage brush. Land to east mts.

North betsecs 26 and 27
 Var 17045' E.

10.00 Braune Creek 600 ft wide N 10' W.

40.00 Set sandstone 16x6x4 marked 1/4.

10 in in ground. made mound of stone
 for 1/4 sec cor.

50.00 Leave meadow N 1/4 & S 10' E. enter
 rolling hills

80.00 Set granite stone 14x9x6. 10 in deep.
 marked 2 notches Sand E. for
 cor of secs 22, 23, 26 & 27
 bet part good grass land. balance
 rolling hills with fair soil.
 Base of mts 30 chs E.

Figure 1 - 1874 Field Notes

Special Instructions

In March 1962 Special Instructions were issued for Group 400, Nevada. They provided for the dependent resurvey of portions of the boundaries and subdivisional lines of several townships. This discussion will be limited to the restoration of the corner of sections 26, 27, 34 and 35. Figure 1 is a copy of the original 1874 field notes for the lines between sections 26, 27, 34 and 35. Figure 2 is a copy of the original plat.

Conditions Found on the Ground

During retracement of the lines, the ¼ section corners to the north, south, east and west of the corner of sections 26, 27, 34 and 35 were recovered. They were monumented with the properly marked original stones.

No evidence of the original monument could be found for the corner of sections 26, 27, 34 and 35 and no collateral evidence or testimony was available.

When the normal procedure of application of proportionate measurement was applied, however, the point fell approximately 50 links east of the natural channel of Craine Creek. Craine Creek had been diverted since the original survey, and now flows in a diversion channel 2.10 chains west of the natural channel.

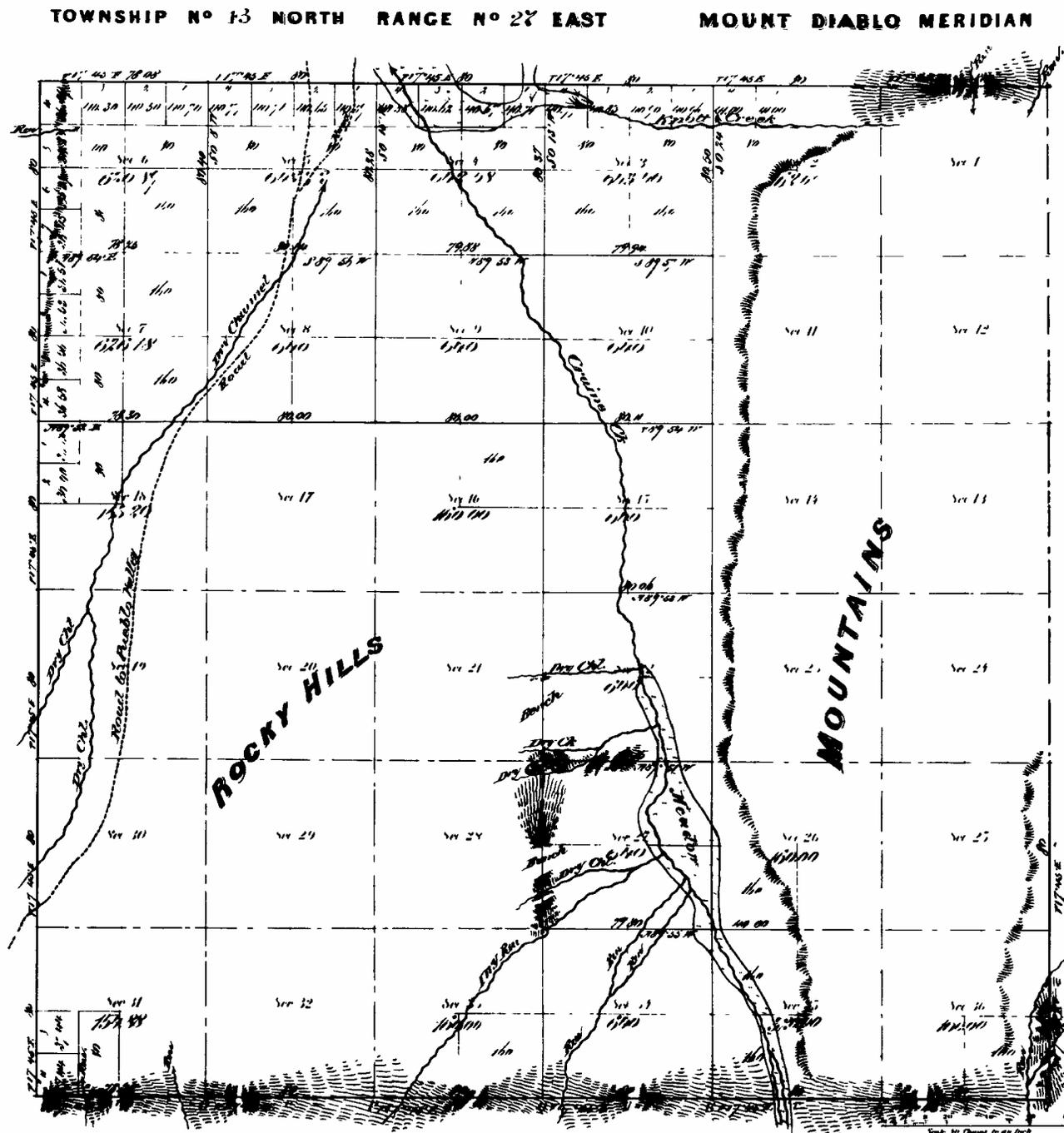


Figure 2 – Original Plat

The original field notes and the plat calls for the corner to be 1.50 chains west of Craine Creek. When the measurements found in the retracement are compared with the topographic calls in the original field notes, differences of up to several chains are revealed; but in no case is a recovered corner in the wrong direction from a topographic call.

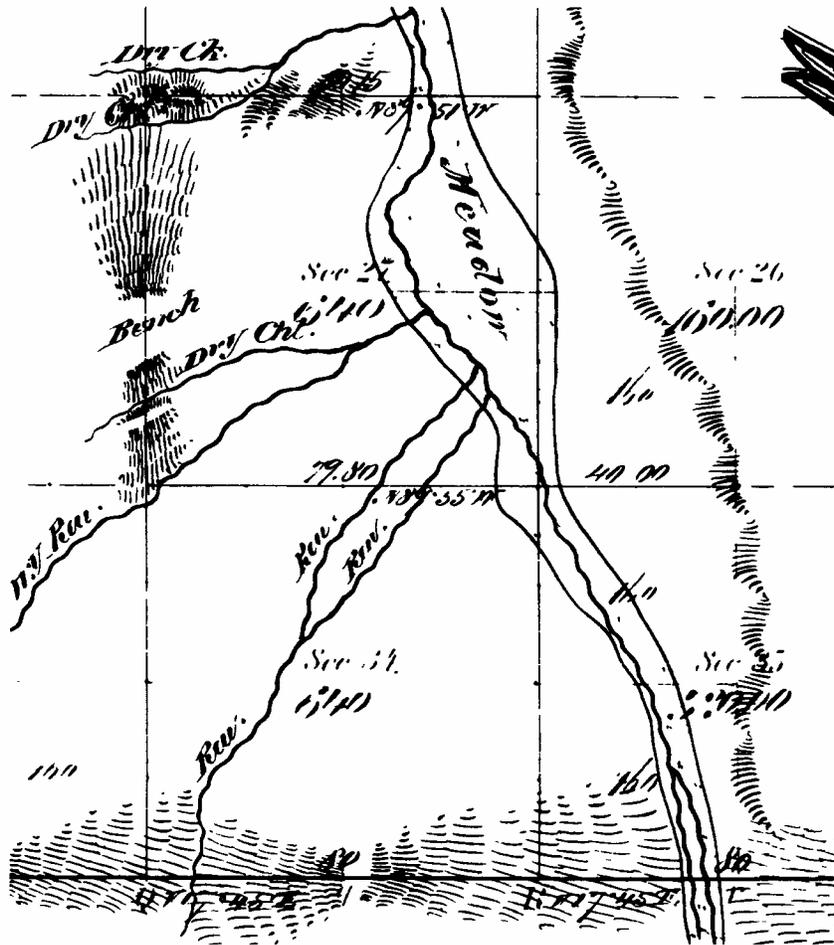


Figure 2 Inset

Preliminary Statement of the Problem

The corner point as determined from proportionate measurement falls on the wrong side of a definite topographic feature called for in the field notes. Using this proportioned point the north half mile between sections 34 and 35 would be N. 30° 15' E., 41.95 chains. The south half mile between sections 26 and 27 would be N. 20° 13' W., 41.91 chains. See figure 3.

Regulations

This survey illustrates the application of sections 5-16 of the Manual of Surveying Instructions, 1973.

Final Statement of the Problem

It must be determined whether or not the topographic call for Craine Creek provides sufficient reliable evidence of the original location to justify its use in restoration of this corner.

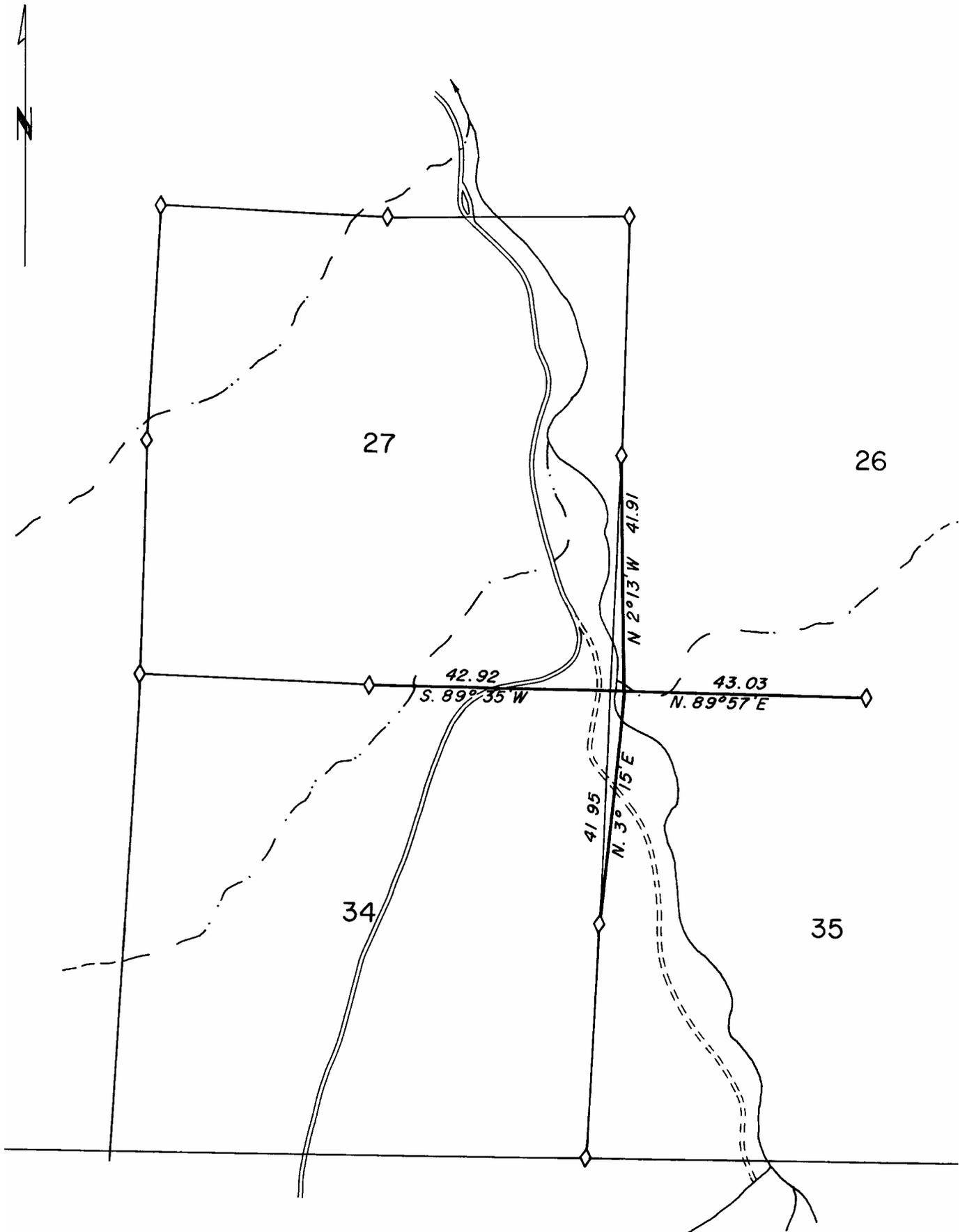


Figure 3 – Preliminary Proportionment

Solution

No other line between recovered corners of the subdivisional lines resulted in a heavy northwest bearing. Nearly all of the lines have northeast bearings, with only a few having not more than one degree of northwest bearing. All of the resurvey measurements are nearly 4 chains of excess and average roughly 2 chains long per half mile. Thus there developed a clear indication that the original surveyor ran to the right and chained long. The original measurements were unreliable over any significant distance.

Section 5-16 of the Manual of Surveying Instructions, 1973, describes the use of topographic calls for restoring an obliterated or lost corner. Only those calls which are nearby and definite may be used, and the reliability of the topographic calls should be proven. The corner of sections 26, 27, 34 and 35, could not be restored solely on the basis of topographic calls. The combination of the nearby call to Craine Creek for the longitudinal position and a proportionment between the nearest found corners to the north and south for the latitudinal position was used. Double proportionment would have placed the corner on the wrong side of Craine Creek.

The procedure which was used placed the section corner at midpoint on line between recovered 1/4 section corners to the north and south. The resurvey field notes reveal that the record distance (1.50 chains) from Craine Creek was actually used for the longitudinal position, even though the result on the final plat appears to be only a single proportionate measurement between recovered corners to the north and south.

Figure 4 is a copy of the plat of the dependent resurvey which was accepted April 14, 1964.

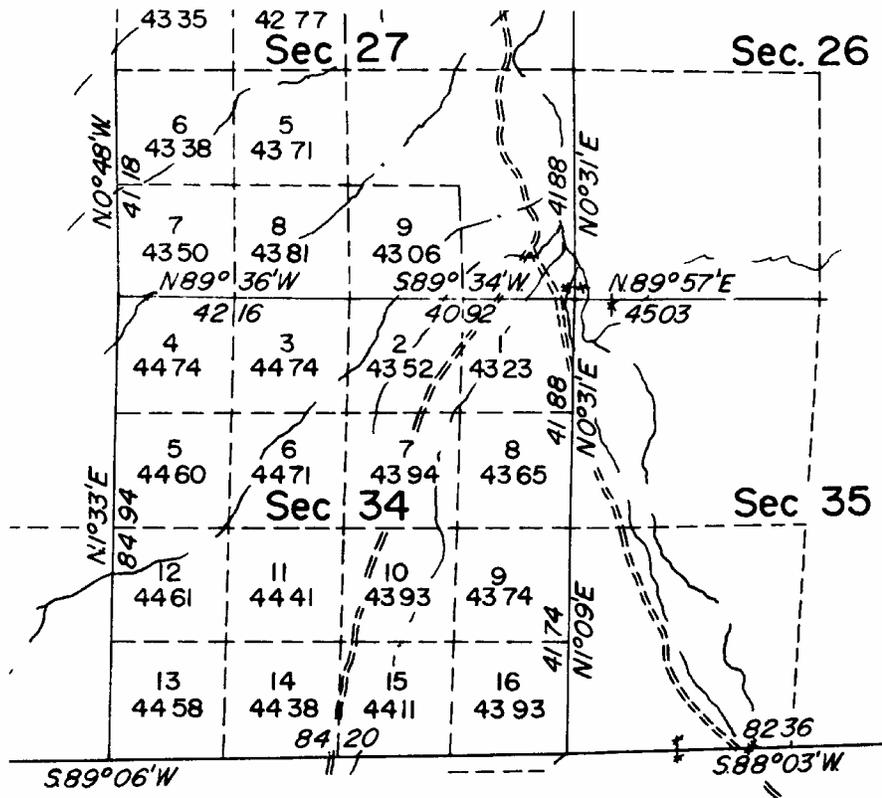


Figure 4 inset