

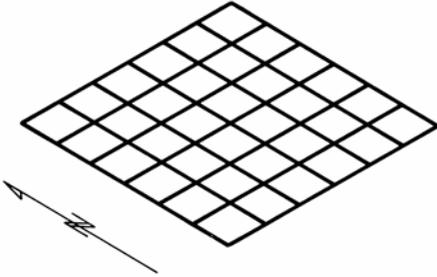
Chapter A

Highway Department Survey Evidence

A13

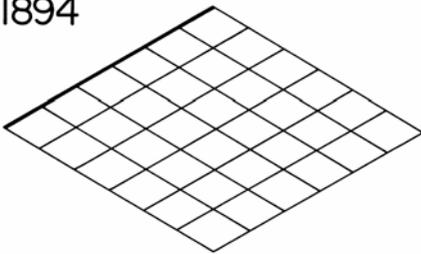
History of Surveys

1868-69



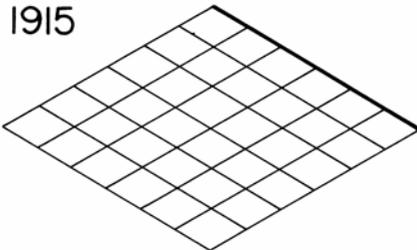
1868 C.C. Tracy surveyed the exterior boundaries and subdivisional lines of T. 34 N., R. 55 E., in 1868 and 1869.

1894



1894 H.S. Maxson resurveyed the north boundary.

1915



1915 Winfred A. Pray resurveyed the east boundary. Pray recovered the corner of sections 7, 12, 13 and 18 and restored the remaining corners by single proportionate measurement.

Reasons for Request of this Survey

The resurvey of section 24 was necessary for the proper management and disposal of the remaining public lands. The necessity was more immediate because section 24 is adjacent to the City of Elko, Nevada.

Special Instructions

On March 21, 1969, Special Instructions were prepared under Group No. 462, Nevada. They provided for the dependent resurvey of section 24.

Conditions Found on the Ground

The surveyor assigned retraced the north, south and west boundaries of the section. All corners were recovered except the 1/4 section corner of sections 24 and 25 and the 1/4 section corner of sections 13 and 24.

The original corner monuments were all stone or charred stakes with pits. No bearing trees were taken, and there are no verifiable calls of topography.

The proportionate position for the 1/4 section corner of sections 13 and 24 was located within the right-of-way of Nevada State Highway No. 46. No remaining original evidence could be found of either 1/4 section corner.

Preliminary Statement of the Problem

The surveyor must restore these missing corners by proportionate measurement or discover collateral evidence or testimony for restoration.

Regulations

This survey illustrates the application of section 5-9 and 5-10 of the Manual of Surveying Instructions, 1973.

Amended Information

In 1941, a Nevada State Highway Department map which showed 6 miles of Route No. 46 was filed in the land Office of the G.L.O., then located in Carson City. The map, which consisted of four sheets, showed the location of the highway across vacant public lands. Portions of sheets 2 and 3 are shown in figures 1 and 2.

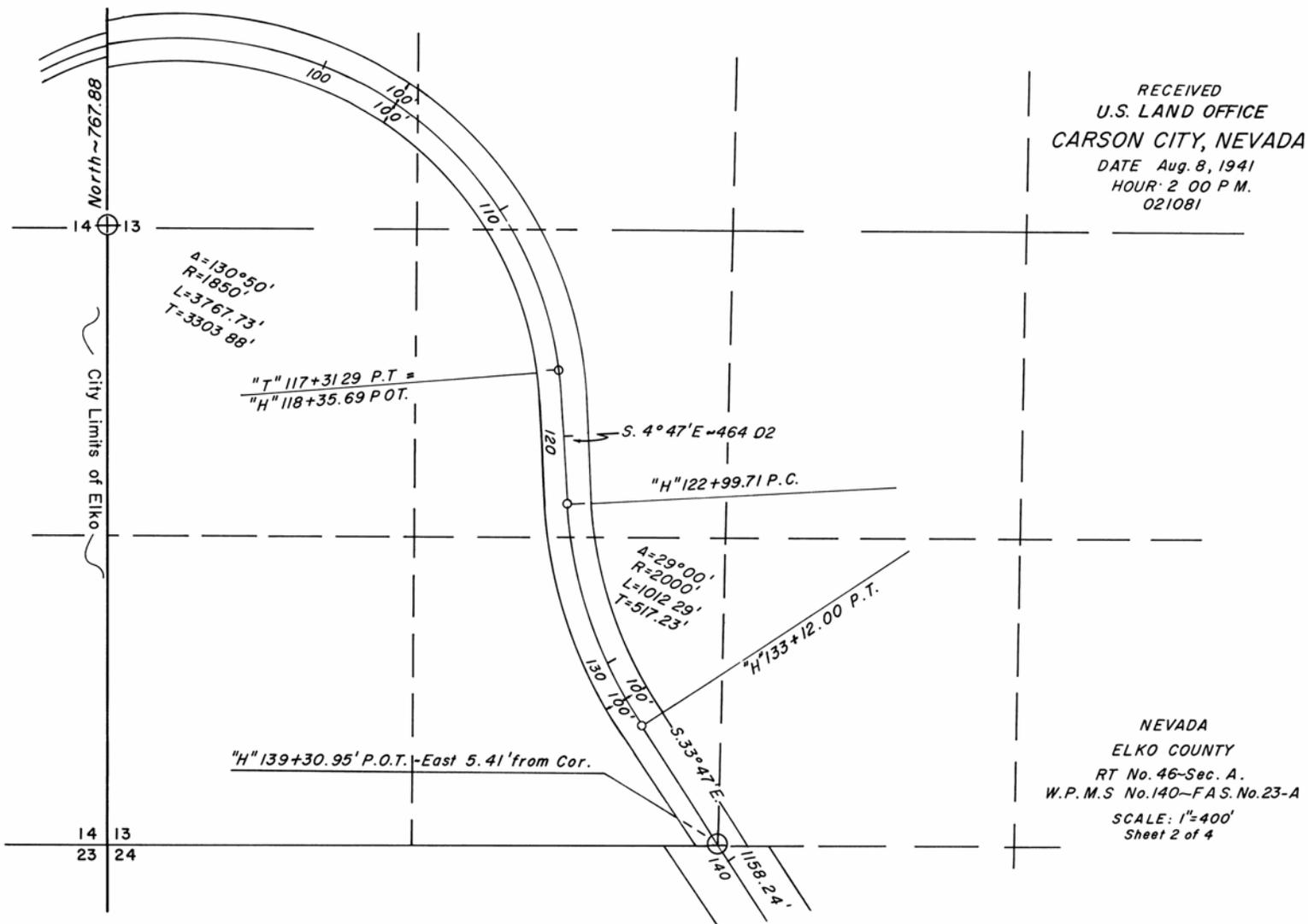


Figure 1 - Portion of Highway Dept. Map

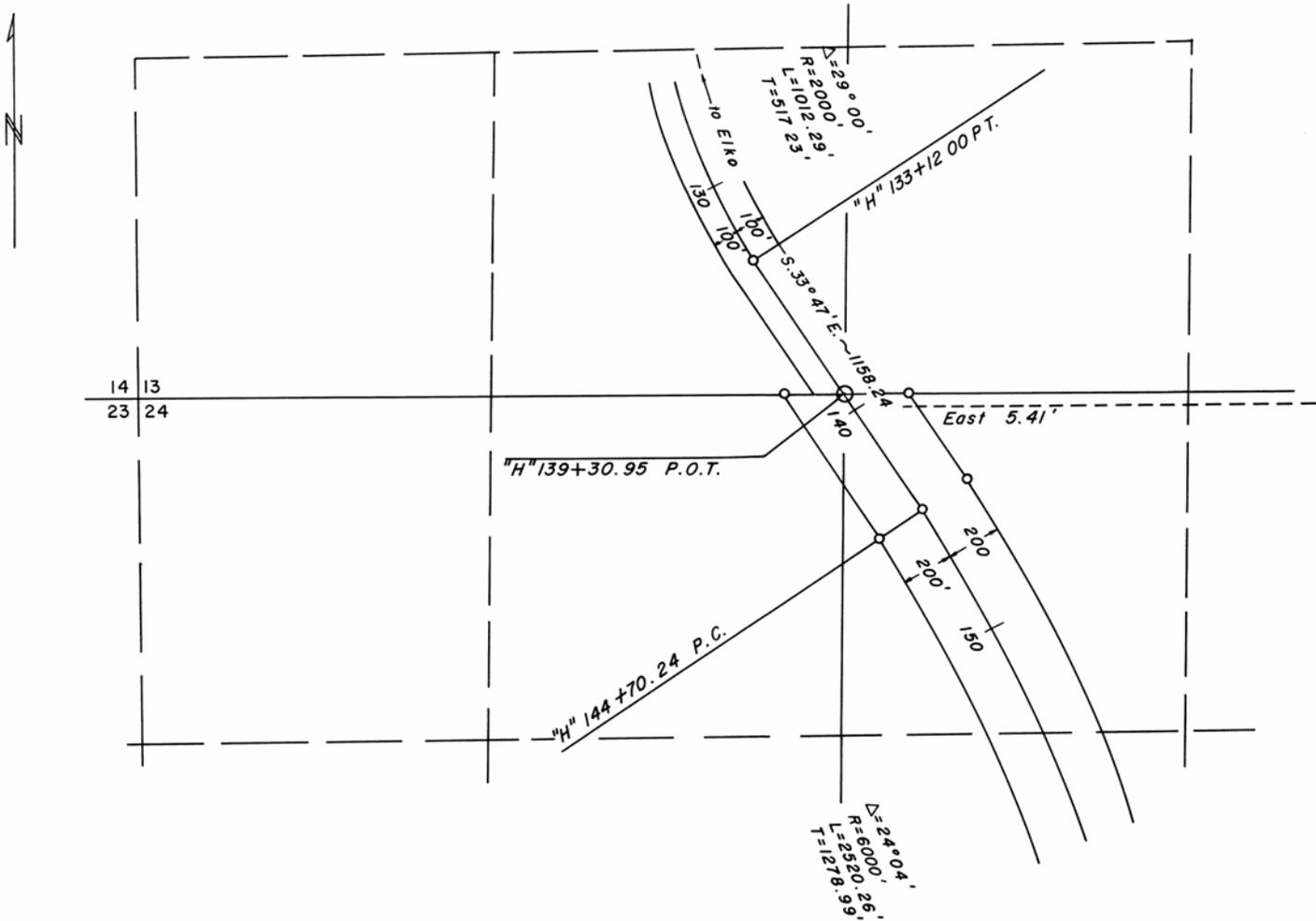


Figure 2 - Portion of Highway Dept. Map

As shown in figures 1 and 2, the $\frac{1}{4}$ section corner of sections 13 and 24 had been recovered by the Highway Department in 1941. The corner was tied in as being 5.41 feet west of highway centerline station "H" 139 + 30.95, a point on a tangent between curves. Figure 2 indicates that right-of-way markers were set left and right of this centerline station, marking a right-of-way which extends 200 feet each side of the centerline, measured 90° to the centerline, which bears S. $33^\circ 47' E$.

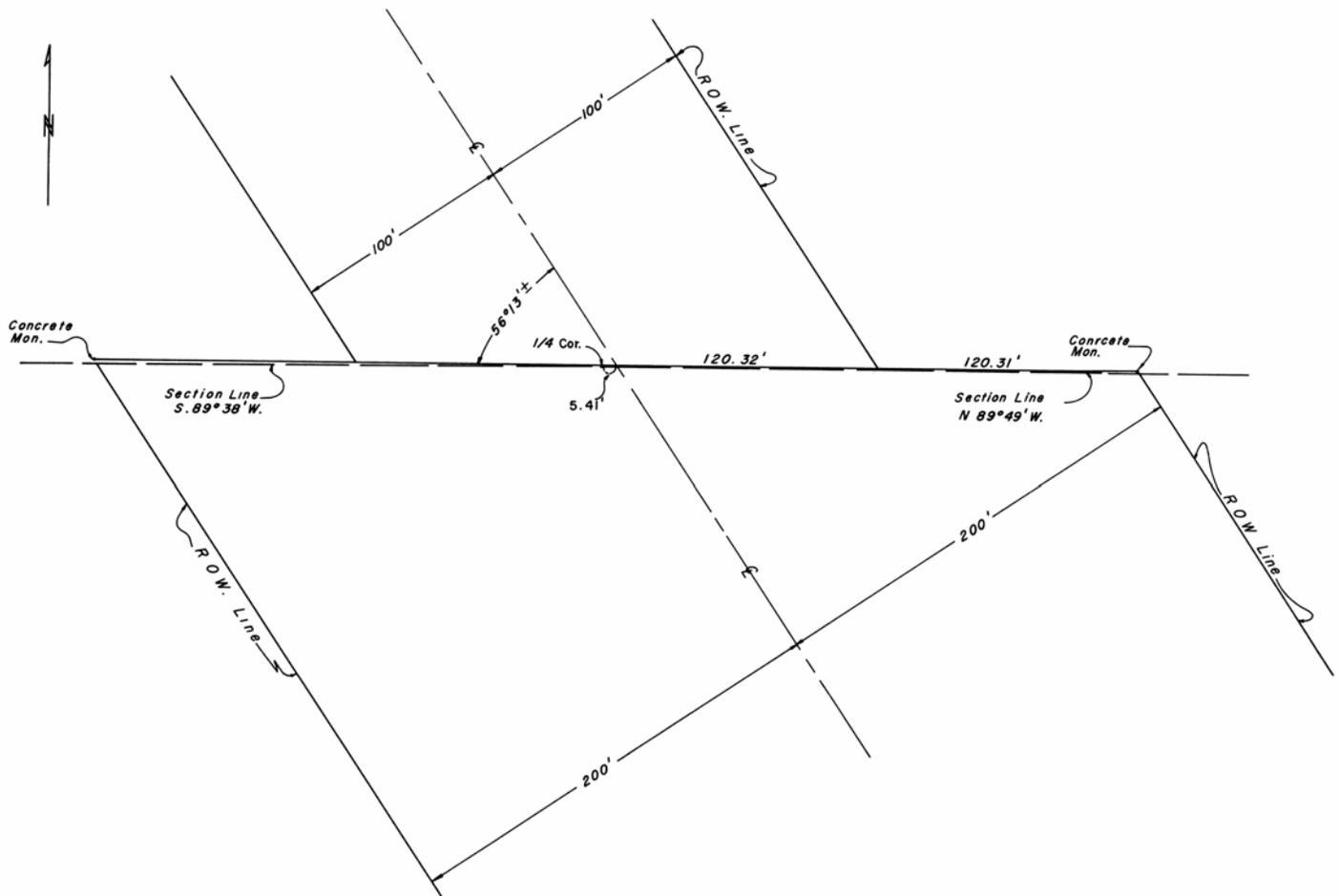


Figure 3 - Solution

Final Statement of the Problem

The highway survey data is adequate to restore the corner, provided the position correlates with other corners of the original survey.

It must be determined whether or not the centerline station can be definitely established and, if so, the corner point must be determined from that. The wording on sheet 3 of 4 (figure 2) is not clear as to whether the corner was east or west of the highway centerline.

Solution

No collateral evidence was found pertaining to the 1/4 section corner of sections 24 and 25, so it was restored by the single proportionate measurement method at midpoint on line between the section corners.

Both right-of-way markers near the 1/4 section corner to sections 13 and 24 were monumented with 4x4 inch concrete posts and were readily recovered. The centerline station "H" 139 + 30.95 was restored at midpoint on line between the markers and the 1/4 section corner was set at a point 5.41 from the centerline. The measurement to the corner was made on a west bearing as determined by using the highway centerline as S. 33° 47' E. according to the Highway Department's reported value.

The corner was remonumented with a patented, copper-coated steel stake and brass cap. Two brass-capped iron posts were set for reference monuments, one N. 70° W. and the other S. 20° W., each 55 feet distant from the corner.

The section line was then resurveyed using the restored 1/4 section corner. This resulted in a bearing of N. 89° 49' W., 39.50 chains for the east 1/2 mile. The west half mile was S. 89° 38' W., 40.34 chains. These bearings and distances are fully compatible with the other section lines, and the original record of N. 89° 56' W., 80.08 chains for the mile. No gross distortion exists. Figure 3 is an enlargement of the situation at the 1/4 section corner. Neither highway right-of-way marker is located on the true section line, as dependently resurveyed.

Figure 4 is a copy of the dependent resurvey plat of section 24 which was accepted January 28, 1971.

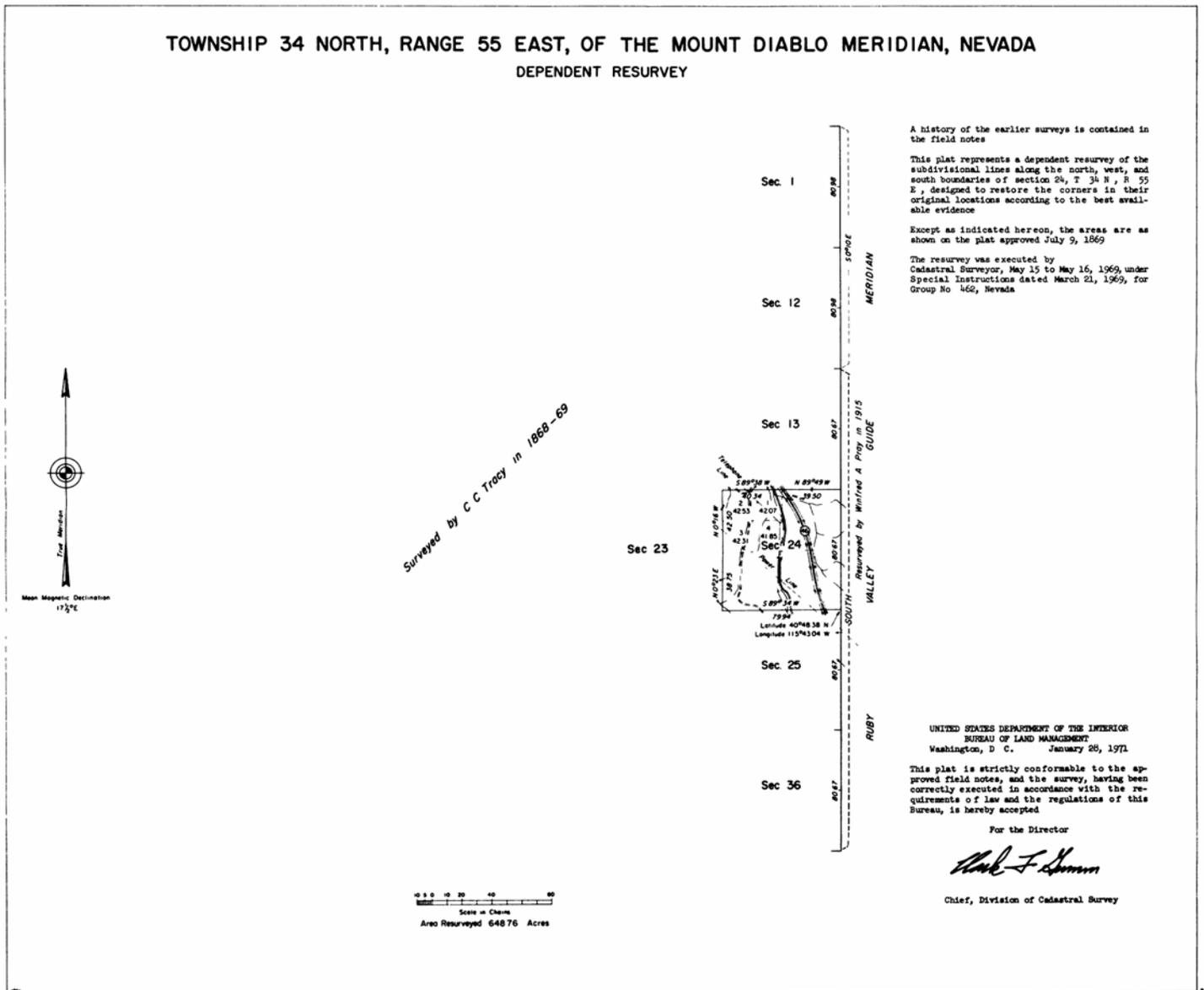
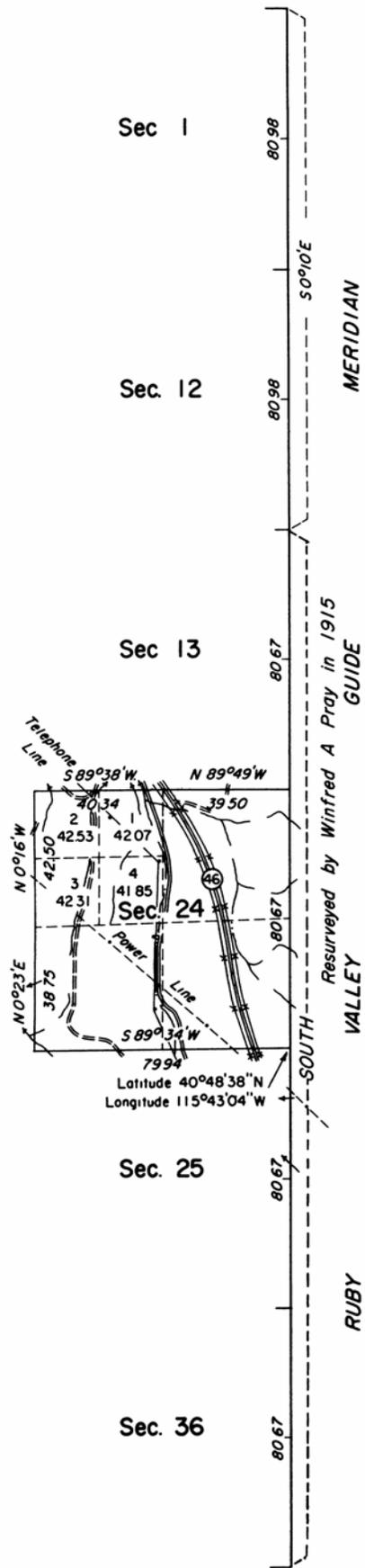


Figure 4 - Accepted Plat



Detail of Figure 4