## Chains

The east boundary of T. 6 N., R. 40 E. was surveyed by Hatch, Barker and Bridges, Deputy Surveyors, in 1873, under Contract No. 57. The east boundary was retraced and the south and west boundaries and the subdivisional lines surveyed by Glover and Perrin, Deputy Surveyors, in 1880, under Contract No. 102. These surveys are shown on the township plat approved February 25, 1881.

The following field notes are those of the dependent resurvey of the east, south, and west boundaries and the subdivision of T. 6 N., R. 40 E.

The survey was executed with a W. and L. E. Gurley solar transit, Serial No. 541328, which conforms to the standard instrumental specifications of the Bureau of Land Management. The instrument was maintained in precise adjustment throughout the progress of the survey.

The measurements were made with a narrow steel tape, 8 chains in length, graduated to tenths of links for the first link, to links for the next 99 links and thereafter at intervals of 10 links. The tape was tested by comparison with a standard steel tape 1 chain in length and found correct. The measurements were made on the slope and the vertical angle of each interval was ascertained by two clinometers in good adjustment. The slope distances were properly reduced to horizontal equivalents which are entered in the field note record.

The adjusted geographic position of the SE corner of the township is in Lat. 38° 19' 42.68" N. and in Long. 117° 25' 26.48" W. as computed from third order N.P.D. "BAST" at the SW corner of the township.

The directions of all lines of this survey were determined by sustained angulation carried forward from the meridian determined by the following direct solar observation: November 16, 1959, at the southeast corner of the township, I made a series of eight altitude observations upon the sun for azimuth, four each with the telescope in direct and reversed positions and observe angle from a flag on the random south boundary, approximately five miles west to the left of the sun.

Time of observation, (120th meridian standard time)

Mean observed vertical angle

Horizontal angle to sun

Declination of sun

True bearing of line

9h 42m

28° 45' 22"

64° 02'

18° 40' 42" S.

\$.89° 57' W.

The magnetic declination was read at a number of station throughout the township and the average of the several readings was found to be 16° 30' E.

Dependent Resurvey of the East Boundary of T. 6 N., R. 40 E.

Reestablishment of the survey executed by Hatch, Barker and Bridges, Deputy Surveyors, in 1873, retraced by Glover and Perrin, Deputy Surveyors, in 1880.

Beginning at the standard cor. of Tps. 6 N., Rs. 40 and 41 E., which is monumented by a wood post, 28 ins. long, 4 ins. diam., mkd. but dim, firmly set in a mound of earth and stone.

At the cor. point

Set an iron post, 30 ins. long,  $2\frac{1}{2}$  ins. diam., 20 ins. in the ground, with brass cap mkd.