

## Township 7 North, Range 40 East

## Chains

The boundaries and subdivisional lines of T. 7 N., R. 40 E. were 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 boundaries and subdivision of T. 7 N., R. 40 E.

The survey was executed with a W. and L. E. Gurley solar transit, serial number 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 southeast corner of the township is in latitude  $38^{\circ} 24' 58.24''$  N., and in longitude  $117^{\circ} 25' 19.92''$  W. as computed from third order N.P.D. "Bast" at the southwest corner of T. 6 N., R. 40 E.

The direction of all lines of this survey was determined by sustained angulation carried forward from the meridian determined by the following direct solar observation: November 16, 1959, at the southeast corner of T. 6 N., R. 40 E., I made a series of 8 altitude observations upon the sun for azimuth, 4 each with the telescope in direct and reversed positions and observed the angle from a flag on the random south boundary approximately 5 miles west to the left of the sun.

Time of observation, 120th meridian standard time	$9^{\text{h}} 42^{\text{m}}$ a.m.
Mean observed vertical angle	$28^{\circ} 45' 22''$
Horizontal angle to sun	$64^{\circ} 02'$
Declination of sun	$18^{\circ} 40' 42''$ S.
True bearing of line	S. $89^{\circ} 57'$ W.

The magnetic declination was read at a number of stations throughout the township and the average of the several readings was found to be  $16^{\circ} 30'$  E.

Dependent Resurvey of the South Boundary of T. 7 N., R. 40 E.

Reestablishment of the survey executed by Glover and Perrin, Deputy Surveyors, in 1880.

Beginning at the cor. of Tps. 6 and 7 N., Rs. 40 and 41 E., which is monumented by an iron post,  $2\frac{1}{2}$  ins. diam., 6 ins. above ground, firmly set, mkd. and witnessed as described in the resurvey of T. 6 N., R. 40 E., of this group.

N.  $89^{\circ} 40'$  W., bet. secs. 1 and 36.

Over nearly level land, through desert vegetation.

40.78

Point for the  $\frac{1}{4}$  sec. cor. of secs. 1 and 36, at proportionate dist.; there is no remaining evidence of the original cor.