

FIELD NOTES

OF THE RESURVEY OF

Part of the North Boundary of

Township 2 South, Range 12 East

AND OF THE SURVEY OF

Part of the Boundary of

Addition to Superior Townsite in

Section 3 of

Township 2 South, Range 12 East

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

Benjamin J. Kinsey, U.S. Surveyor

In the capacity of U. S. Surveyor..., under Special Instructions dated June 17, 1930, issued by the District Cadastral Engineer to govern surveys included in Group No. 163 Arizona, which were approved by the Commissioner of the General Land Office, July 25, 1930, and Assignment Instructions dated Sept. 17, 1930

Resurvey and Survey commenced October 2, 1930

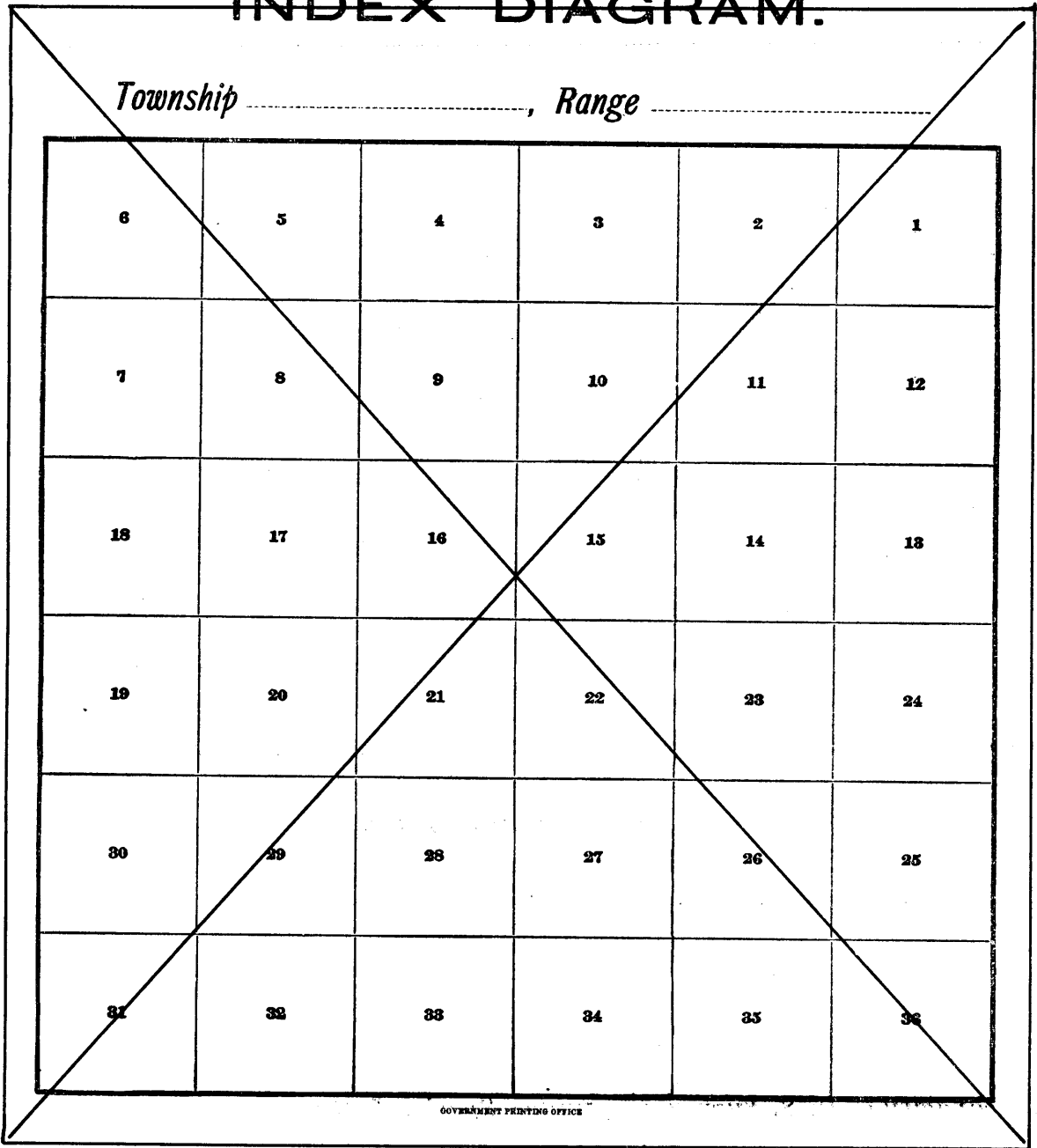
Resurvey and Survey completed October 5, 1930

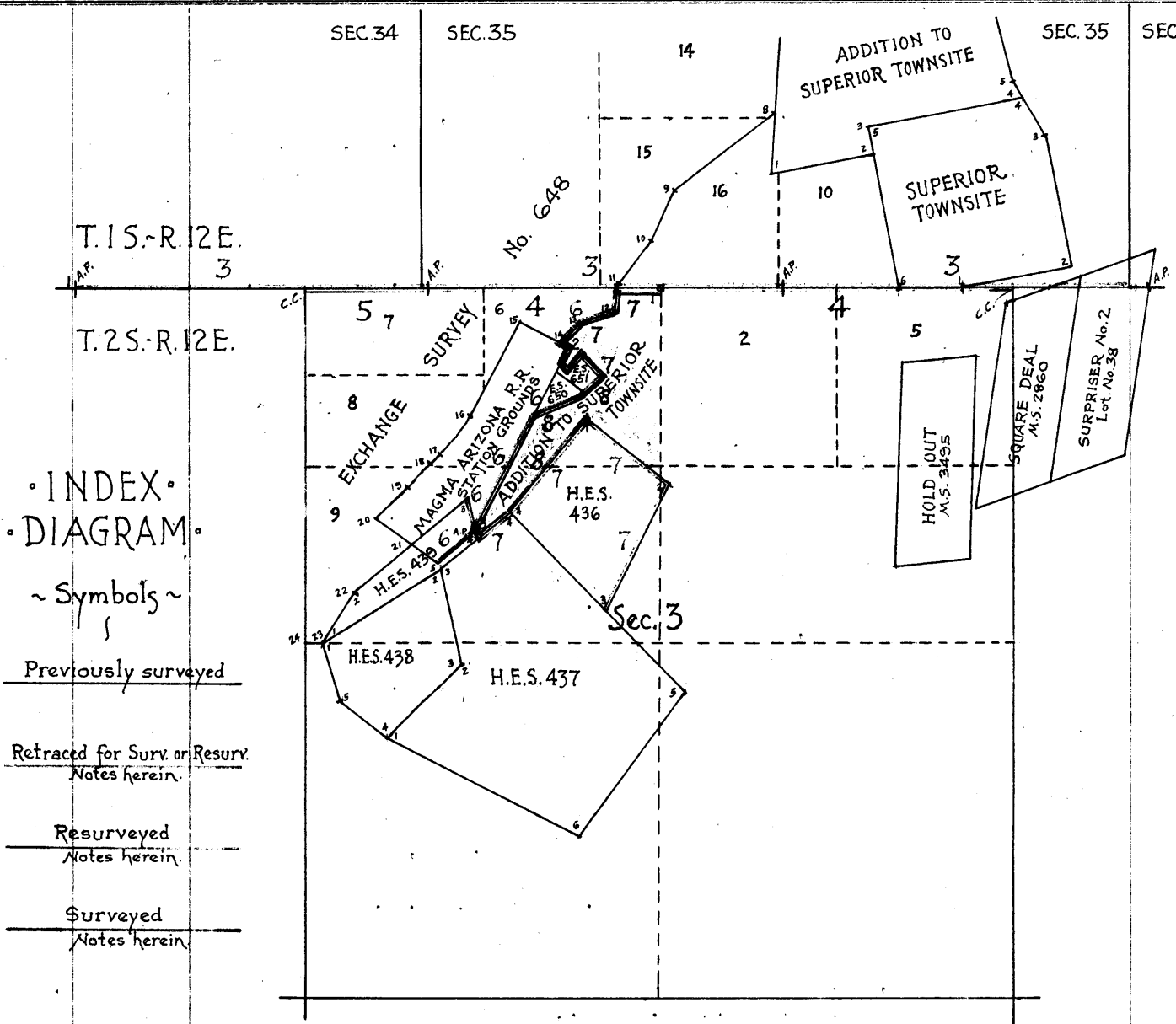
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INDEX DIAGRAM.

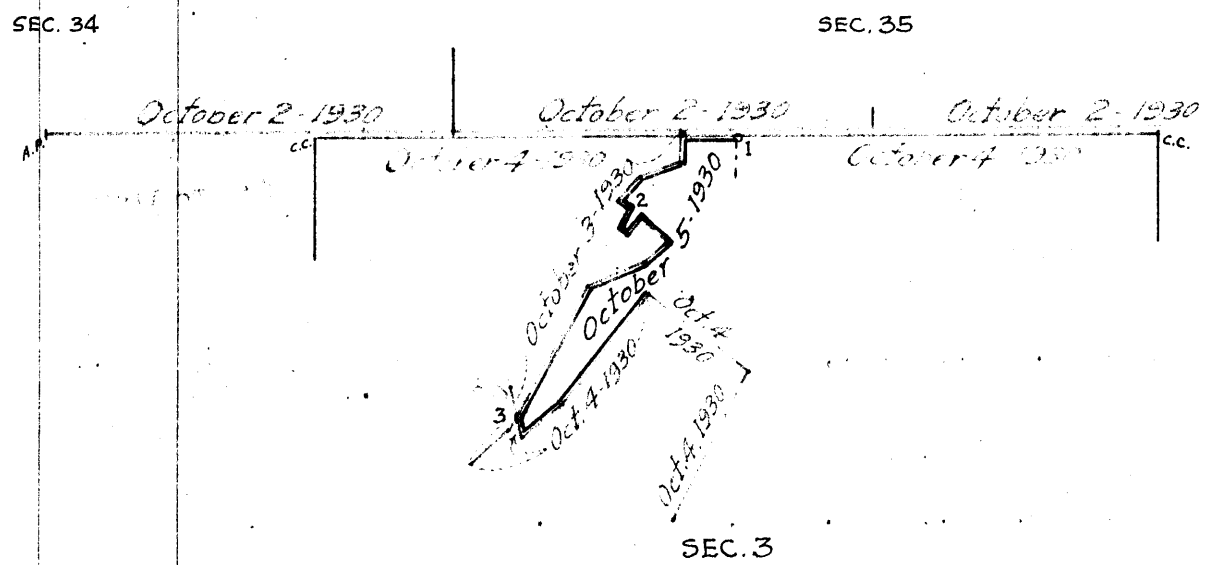
Township , *Range*





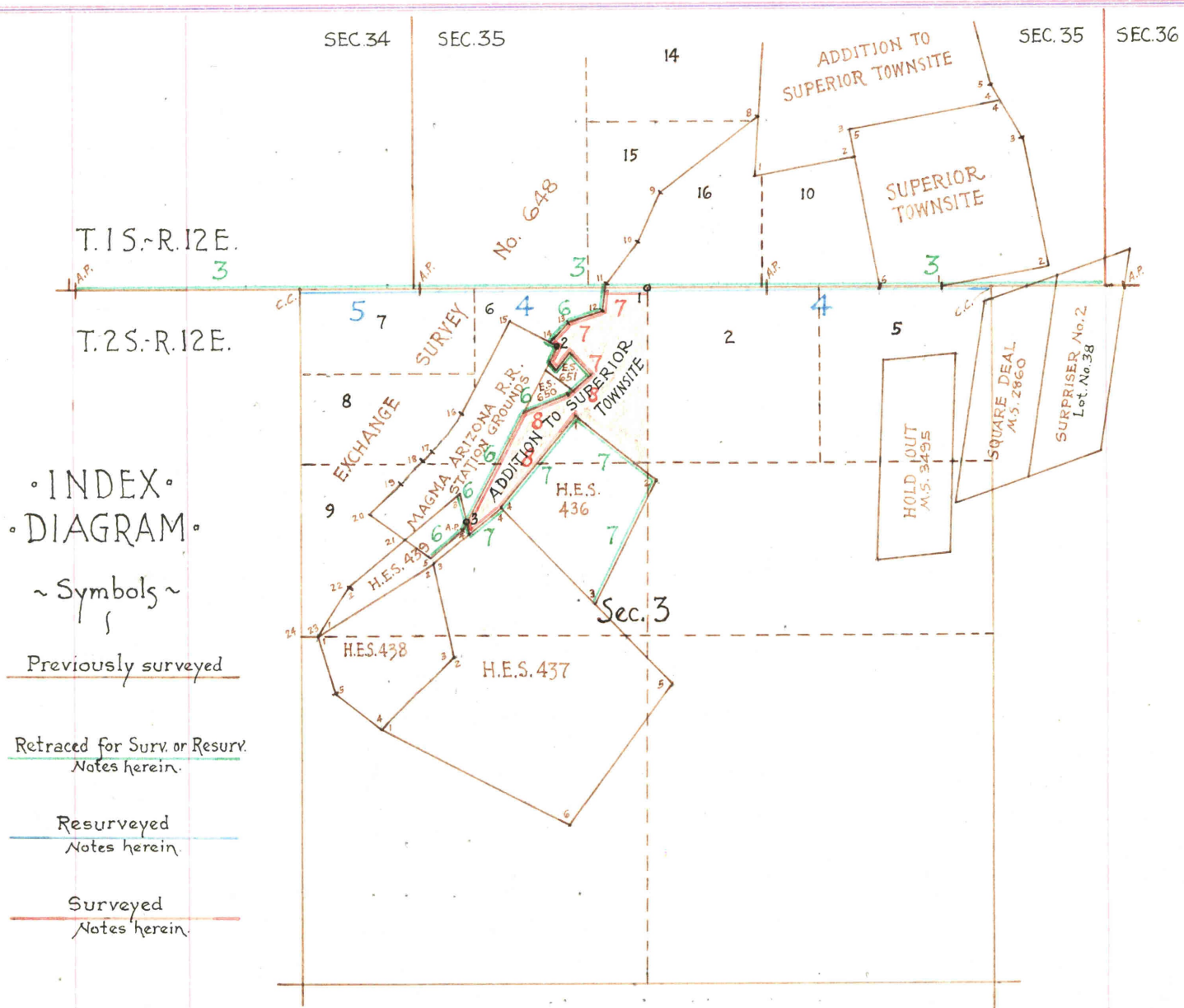
INDEX DIAGRAM

- ~ Symbols ~
- Previously surveyed
- Retraced for Surv. or Resurv.
Notes herein.
- Resurveyed
Notes herein.
- Surveyed
Notes herein.



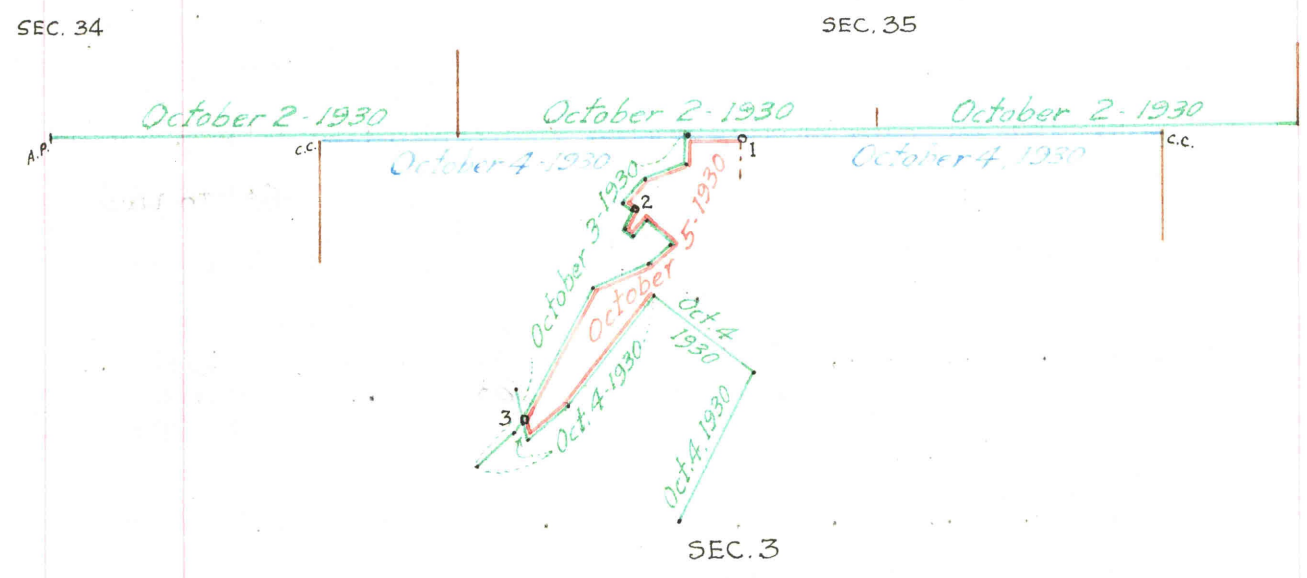
DATE DIAGRAM

- Retracement for Survey or Resurvey by B.J. Kinsey, U.S.S. on dates shown thereon.
- Resurvey by B.J. Kinsey, U.S.S. on dates shown thereon.
- Survey by B.J. Kinsey, U.S.S. on dates shown thereon.



INDEX DIAGRAM

- ~ Symbols ~
- Previously surveyed
- Retraced for Surv. or Resurv. Notes herein.
- Resurveyed Notes herein.
- Surveyed Notes herein.



DATE DIAGRAM

- Retracement for Survey or Resurvey by B.J. Kinsey, U.S.S. on dates shown thereon.
- Resurvey by B.J. Kinsey, U.S.S. on dates shown thereon.
- Survey by B.J. Kinsey, U.S.S. on dates shown thereon.

The resurvey and survey herein described was executed on dates shown on diagram on page 1 hereof, by Benjamin J. Kinsey, U.S. Surveyor, using a Buff "Rocky Mountain Favorite" solar transit No. 18,000, with U-shaped standards, $4\frac{1}{2}$ inch horizontal circle, 4 inch vertical circle and improved Smith solar attachment.

The instrument was examined, tested on the true meridian at the Federal Building in Phoenix, Arizona, found correct and approved by the District Cadastral Engineer for Arizona and California, conditional upon satisfactory field tests.

All azimuth determinations are accomplished with the solar attachment, except the special observations upon Polaris for meridian upon which to test the solar apparatus as stated in the field notes.

All measurements are made with a Lufkin steel tape, 5-chains in length, compared with a Lufkin standard steel tape and found correct. The measurements are made on the slope, the vertical angle determined and the slope measurements properly reduced to true horizontal distances for entry in the field notes.

Preliminary Field Test
of
Buff Transit No. 18,000
by
Benjamin J. Kinsey, U.S. Surveyor.

October, 1, 1930: at station at the closing corner of secs. 3 and 4, T.2 S., R.12 E., in approximate longitude $111^{\circ}06'W.$, and latitude $33^{\circ}17'30"N.$, examine the adjustments of the transit and find no errors.

At 7h.01m., p.m., l.m.t., observe Polaris at eastern elongation, making four observations, two each, with the telescope in direct and reversed positions, and marking the line thus determined by a tack set in top of a peg, driven firmly in the ground about 5 chains North.

Azimuth of Polaris at eastern elongation: $1^{\circ}16'44''$.

October 2: lay off the azimuth of Polaris $1^{\circ}16\frac{1}{2}''$ to the west and mark the true meridian thus determined by a tack set in top of a peg, driven firmly in the ground about 5 chains North.

At 8h.0m. a.m., app.t., with latitude arc set at $33^{\circ}17\frac{1}{2}'N.$ and declination arc set at $3^{\circ}26'S.$, determine a meridian with the solar which agrees with the true meridian.

At 12h.00m., app. noon, with lat. arc unchanged, observe the sun on the meridian; the resultant reading of the decl. arc is $3^{\circ}31\frac{1}{2}'S.$, which agrees with the computed declination of the sun.

At 3h.0m. p.m., app.t., with lat. arc unchanged, set off $3^{\circ}33'S.$, and determine a meridian with the solar which agrees with the true meridian.

As all of the observations taken during the usual hours of solar work, agree within 1' of the true meridian, conclude that the instrument is in a satisfactory state of adjustment.

Resurvey of Part of the North Bdy., of T.2 S., R.12 E.

Chains

Part of the S. bdy. of T.1 S., R.12 E., and the E. and W. bdys. and subdivision lines of T.2 S., R.12 E., were surveyed by Jacobs and Curry, U.S. Deputy Surveyors, in 1911, in which survey the corners on the S. bdy. of T.1 S., R.12 E. and closing cors. for secs. in T.2 S., R.12 E., were established.

In 1914, S.E. Blout, U.S. Surveyor, retraced the Tp. bdy. from the closing corner of secs. 2 and 3, T.2 S., R.12 E. to the $\frac{1}{4}$ sec. cor. of sec. 35, T.1 S., R.12 E., in connection with the survey of the Superior Townsite, establishing Cors. Nos. 1 and 6 thereon.

In 1924, the east five miles of the S. bdy. of T.1 S., R.12 E., were resurveyed and ^{in 1925} the west mile surveyed by Benjamin J. Kinsey, U.S.S. and Theodore VanderMeer, U.S.T.

In 1926, the west half of the S. bdy. of sec. 35, T.1 S., R.12 E., was retraced by the Forest Service Surveyors in connection with Exchange Survey No. 648, and Cor. No. 11 established thereon.

No other retracements or resurveys are of record.

The following notes describe the re-survey of the North Bdy. of sec. 3, T.2 S., R.12 E., establishing the N. $\frac{1}{4}$ sec. cor. thereon.

Retracement for Re-survey.

The reestablished cor. of secs. 35 and 36, T.1 S., R.12 E., is an iron post, 1 in. in diam., firmly set and projecting 12 ins. above ground and mound of stone, with brass cap properly marked. No bearing trees.

- Thence,
- 13.43 N. 89° 57' W., on random line, on S. bdy. of sec. 35. Intersect the closing corner of secs. 2 and 3, T.2 S., R.12 E.; continue line and measurement.
 - 19.17 Intersect Cor. No. 1 of Superior Townsite, which is witnessed by Witness Corner. Continue line and measurement.
 - 26.55 Intersect Cor. No. 6 of Superior Townsite; continue line and measurement.
 - 39.67 Intersect A.P. No. 2 (original $\frac{1}{4}$ sec. cor. sec. 35.) Continue line and measurement.
 - 40.00 Intersect the reestablished $\frac{1}{4}$ sec. cor. of sec. 35, T.1 S., R.12 E. Continue line and measurement.
 - 55.43 Fall $3\frac{1}{2}$ lks. South of cor. (NW) of Addition to Superior Townsite, established by private surveyor. Continue line and measurement.
 - 58.55 Fall 3 lks. S. of Cor. No. 11, Exchange Survey No. 648. Continue line and measurement.
 - 79.61 Intersect A.P. No. 1 (original cor. secs. 34 and 35, T.1 S., R.12 E.) Continue line and measurement.
 - 80.11 Intersect the reestablished cor. secs. 34 and 35, T.1 S., R.12 E.; continue line and measurement.
 - 93.51 Intersect the closing cor. of secs. 3 and 4, T.2 S., R.12 E., continue line and measurement.
 - 119.35 Intersect A.P. No. 1 of sec. 34 (original $\frac{1}{4}$ sec. cor. sec. 34.) True course and dist. for this part of the S. bdy. of T.1 S., R.12 E., are therefore N. 89° 57' W., 119.35 chs.

Re-survey.

The closing corner of secs. 2 and 3, T.2 S., R.12 E., is a stone 10 x 10 x 2 ins. above ground, firmly set, mkd. CC and six grooves on S. face and two and four grooves on E. and W. faces. Reconstruct this cor. monument as follows:

Re-survey of Part of the N. Bdy. of T. 2 S., R. 12 E.

Chains

On the S. side of the original cor. stone, and leaning over same, set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, and surrounded by a cement mix, with brass cap marked

T1S R12E

S 35

S3 | S2

C | C

T2S R12E

1930

No bearing trees available.

From corner:

The North edge of the Magma Smelter brick stack, brs. N.79°42'W.

N. edge of cornice of Belmont Hotel, brs. N.49°45'W.

SE edge of cornice of the Magma Hotel, brs. N.7°07'W.,

Thence,

N.89°57'W., on true line, on N. bdy. of sec. 3 (topography as per record of 1924- re-survey.)

5.74 Intersect the cor. No.1 of Superior Townsite, which is an iron post $\frac{1}{2}$ in. in diam., firmly set in a granite boulder 4 x 3 x 2 ft., witnessed by an iron post, 1 in. in diam., $8\frac{1}{2}$ lks. East, with brass cap properly marked.

Continue line and measurement.

13.12 Intersect Cor. No.6 of Superior Townsite, which is an iron post 1 in. in diam., firmly set and projecting 10 ins. above ground, with brass cap properly marked.

Continue line and measurement.

26.24 Intersect A.P.No.2 (original $\frac{1}{4}$ sec. cor. sec. 35) which is an iron post 1 in. in diam., firmly set and projecting 12 ins. above ground and mound of stone, with brass cap properly marked. Continue line and measurement.

26.57 Intersect the reestablished $\frac{1}{4}$ sec. cor. of secs. 35, which is an iron post 1 in. in diam., firmly set, projecting 12 ins. above ground, with brass cap properly marked.

Continue line and measurement.

39.94 (Midpoint on N. bdy. of sec. 3, T.2 S., R.12 E.) set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, set in cement mix, ~~with brass cap~~ ~~only~~ and Cor.No.1 of Addition to Superior Townsite, with brass cap mkd.

T 2 S R 12 E

1930

from which,

a paloverde, 20 ins. in diam., brs. S.53 $\frac{1}{4}$ °W., 86 lks. dist., marked $\frac{1}{4}$ S 3 BT

No other trees available.

Continue line and measurement.

40.00 From which point, a circular cement slab, set in iron ring about 12 ins. in diam., brs. North, $3\frac{1}{2}$ lks. dist., mkd.

NW COR SP TS

Continue line and measurement.

45.12 Fall 3 lks. S. of Cor.No.11 of Exchange Survey No.648 which is a stone 8 x 10 x 12 ins. above ground, firmly set, mkd. CC ES No.648 No.11 on E. face, (of record as being on Tp. bdy.) continue line and measurement.

66.18 Intersect A.P. No. 2, (original cor. secs. 34 and 35, T. 1 S., R.12 E.) Continue line and measurement.

66.68 Intersect the reestablished cor. secs. 34 and 35, T. 1 S., R.12 E., which is an iron post 2 ins. in diam., firmly set, projecting 12 ins. above ground and mound of stone, with brass cap properly marked. No bearing trees.

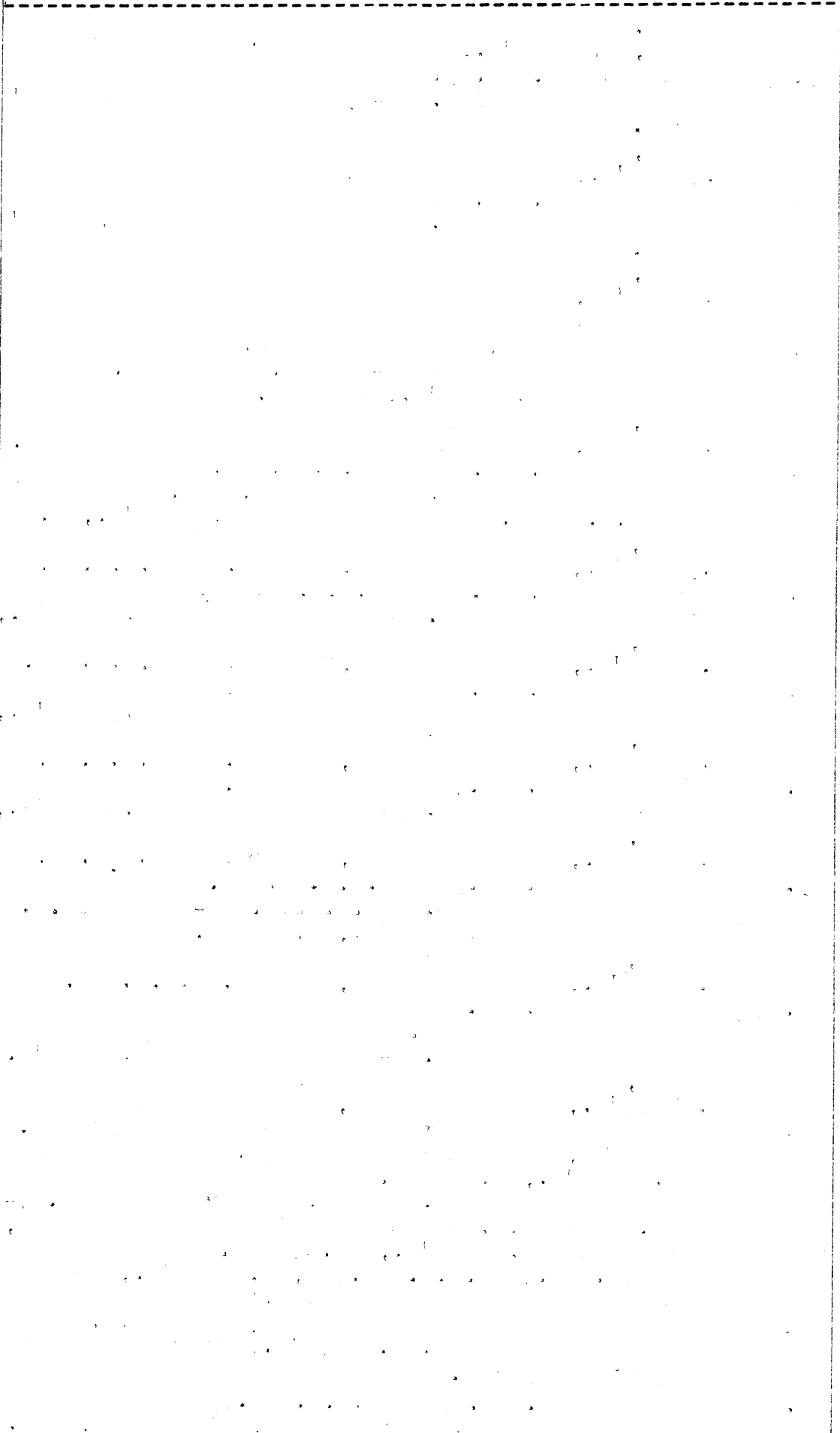
Resurvey of part of the W. Bdy. of T.2 S., R.12 E.

Chains

79.88

Continue line and measurement.

Intersect the closing cor. secs. 3 and 4, T.2 S., R.12 E., which is a stone 8 x 8 x 9 ins. above ground, firmly set in a mound of stone, marked with CC and six grooves on S. and three grooves each on E. and W. faces. No bearing trees.



Survey of Part
-of-

the Boundary of Addition to Superior Townsite in sec. 3.

Chains

Retracement for Survey.

- From Cor. No. 11 of Exchange Sur. No. 648, hereinbefore described.
- 3.03 S. $6^{\circ}47'W.$, on random line along boundary thereof.
Intersect Cor. No. 12.
True course and dist. 11-12 are therefore S. $6^{\circ}47'W.$, 3.03 chs.
- 3.85 Thence, S. $71^{\circ}33'W.$, on random line.
Intersect Cor. No. 13.
True course and dist. 12-13 are therefore S. $71^{\circ}33'W.$, 3.85 chs.
- 2.56 Thence, S. $42^{\circ}21'W.$, on random line.
Intersect Cor. No. 14.
True course and dist. 13-14 are therefore S. $42^{\circ}21'W.$, 2.56 chs.
- 0.78 Thence, S. $62^{\circ}20'E.$, on random line on NE end line of Magma Station grounds.
Intersect NE cor. of said grounds.
True course and dist. 14-NE Cor. Magma Sta. Grounds, are therefore S. $62^{\circ}20'E.$, .78 lks.
- 1.85 Thence, S. $27^{\circ}43'W.$, along SE side line of Station grounds.
Intersect Cor. No. 1 of H.E.S. No. 651.
True course and dist. from NE cor. Sta. grounds to Cor. 1 of H.E.S. No. 651 are therefore S. $27^{\circ}43'W.$, 1.85 chs.
- 1.38 Thence, S. $37^{\circ}07'E.$, on random line, on bdy. of H.E.S. No. 651.
Intersect Cor. No. 2 of H.E.S. No. 651.
True course and dist. 1-2 are therefore S. $37^{\circ}07'E.$, 1.38 chs.
- 2.60 Thence, N. $38^{\circ}13'E.$, on random line, on bdy. of H.E.S. No. 651.
Intersect Cor. No. 3 of said survey.
True course and dist. 2-3 are therefore N. $38^{\circ}13'E.$, 2.60 chs.
- 3.64 Thence, S. $44^{\circ}01'E.$, on random line, on bdy. of H.E.S. No. 651.
Intersect Cor. No. 4 of said survey.
True course and dist. 3-4 are therefore S. $44^{\circ}01'E.$, 3.64 chs.
- 3.26 Thence, S. $49^{\circ}07'W.$, on random line, on bdrs. of E.S. Nos. 651 and 650.
Intersect Cor. No. 3 of H.E.S. No. 650.
True course and dist. 4- H.E.S. No. 651- to 3- H.E.S. No. 650 are therefore S. $49^{\circ}07'W.$, 3.26 chs.
- 6.04 Thence, S. $69^{\circ}08'W.$, on random line, on bdy. H.E.S. 650.
Intersect Cor. No. 4 of said survey on SE side line of Magma Sta. grounds.
True course and dist. 3-4 are therefore S. $69^{\circ}08'W.$, 6.04 chs.
- 15.24 Thence, S. $27^{\circ}43'W.$, on random line, on SE side line of Sta. grounds.
Intersect A.P. of Magma R.R. Station grounds bdy, which is a stone 8 x 12 x 10 ins. above ground, firmly set, and marked MARC on W. face. From this A.P. the SE cor. of said Sta. grounds bears S. $41^{\circ}26'W.$, 4.96 chs. dist.
True course and dist. of Sta. grounds bdy. from Cor. 4- H.E.S. No. 650 to A.P. on SE side line of said grounds, are therefore S. $27^{\circ}43'W.$, 15.24 chs.
- 1.35 From Cor. No. 4 - H.E.S. No. 439, N. $11^{\circ}50'W.$, on random line on NE end line of said claim.
Intersect the SE side line of the Magma R.R. Station grounds at 33 lks. N. $27^{\circ}43'E.$, from the Angle Point thereon.
- 3.99 Continue line and measurement.
Intersect Cor. No. 3 of H.E.S. No. 439 which is a stone 8 x 10 x 14 ins. above ground, firmly set, mkd. 3-HES 439.

Survey of Part of the Boundary of Addition to Superior Townsite in Sec. 3. LOOK 3881

Chains

True course and dist. 3-4 of H.E.S. No. 439 are therefore S. 11° 50' E., 3.99 chs.

From Cor. No. 4 of H.E.S. No. 439, N. 50° 27' E., on random line on NW side line of H.E.S. No. 437.

5.19 Intersect Cors. No. 4 and 4. of H.E.S. Nos. 436-437. True course and dist. bet. Cor. No. 4 H.E.S. 439 and Cor. No. 4 H.E.S. No. 437 are therefore N. 50° 27' E., 5.19 chs. Thence, N. 39° 27' E., on random line, on NW side line of H.E.S. No. 436.

15.00 Intersect the true point for Cor. No. 1 of H.E.S. No. 436 restored from bearing rock of record. True course and dist. 4-1 are therefore N. 39° 27' E., 15.00 chs. Thence, S. 51° 45' E., on random line, on NE end line of H.E.S. No. 436.

11.59 Intersect Cor. No. 2, which is a pine stake 1 x 3 ins. projecting 8 ins. above ground, firmly set and marked S. 2- H.E.S. 436. therefrom S. 51° 45' E., 11.59 chs. True course and dist. of line 1-2 of H.E.S. 436 are therefore S. 51° 45' E., 11.59 chs. From Cor. No. 2 retrace to Cor. No. 3 and determine true course and dist. of line 2-3 to be S. 31° 17' W., 15.98 chs., which agrees with record.

Exchange Survey.

From the 1/4 sec. cor. sec. 3 on N. Bdy. of T. 2 S., R. 12 E., (Cor. No. 1 of Addition to Superior Townsite in Sec. 3) N. 89° 57' W., on true line.

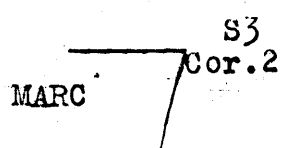
5.18 Intersect Exchange Survey No. 648 at point 3 lks. S. 6° 47' W. of Cor. No. 11 thereof. Thence, S. 6° 47' W., on true line on bdy. of Exchange Survey No. 648.

3.00 Intersect Cor. No. 12. Thence, S. 71° 33' W., on true line.

3.85 Intersect Cor. No. 13. Thence, S. 42° 21' W., on true line.

2.56 Intersect Cor. No. 14. Thence, S. 62° 20' E., on true line, on NE end line of Magma Sta. grounds.

0.78 Intersect the NE Cor. of the Magma Station grounds, which is a wooden post 3 x 3 ins. sq. and projecting 14 ins. above ground, firmly set, with nail in top. Alongside the east edge of this cor. monument, set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground, for Cor. No. 2 of Addition to Superior Townsite, with brass cap marked



1930

No bearing trees available. Raise a mound of stone 2 ft. base, 1 1/2 ft. high E. of cor.

Thence, S. 27° 43' W., on true line along SE side line of Sta. grounds.

1.85 Intersect Cor. No. 1 of H.E.S. No. 651. Thence, S. 37° 07' E., on true line, on bdy. of H.E.S. No. 651.

1.38 Intersect Cor. No. 2 of H.E.S. No. 651. Thence, N. 38° 13' E., on true line,

2.60 Intersect Cor. No. 3. Thence, S. 44° 01' E., on true line.

3.64 Intersect Cor. No. 4. Thence,

Survey of Part
of
the Boundaries of the Addition to Superior Townsite in Sec. 3.

Chains

- Thence,
3.26 S.49°07'W., on true line, on bdrs. of E.S. Nos. 651 and 650.
Intersect Cor. No. 3 of H.E.S. No. 650.
S.69°08'W., on true line, on bdy. of H.E.S. No. 650.
6.04 Intersect Cor. No. 4. on SE side line of Magma Sta. grounds.
Thence,
S.27°43'W., on true line along SE side line of station grounds.
14.91 Intersect NE end line of H.E.S. No. 439, at 2.64 chs.
S.11°50'E. of Cor. No. 3 thereof.
At point of intersection set an iron post 3 ft. long, 1 in. in diam., 20 ins. in the ground to bedrock, deposit a stone mkd. with a cross (x) at base of post, raise a mound of stone about post, for Cor. No. 3 of Addition to Superior Townsite, with brass cap marked.

MARC

S3
Cor. 3

1930

No bearing trees available.

- Thence,
1.35 S.11°50'E., on true line, on NE end line of H.E.S. No. 439.
Intersect Cor. No. 4 of H.E.S. No. 439 which is a stone 12 x 14 x 24 ins. firmly set, properly marked, witness trees of record are now gone.
Thence,
N.50°27'E., on true line, on NW side line of H.E.S. No. 437.
5.19 Intersect cor. No. 4 to H.E.S. No. 437. also Cor. 4 to H.E.S. No. 436 which is an imbedded boulder 2 x 3 x 2 ft. above ground, mkd. properly and witnessed by bearing rocks and trees.
Thence,
N.39°27'E., on true line, on NW side line of H.E.S. No. 436.
15.00 Intersect true point for Cor. No. 1 of H.E.S. No. 436 which is restored from original bearing rock, which is an imbedded stone 72 x 72 x 48 ins., which brs. S.78°05'E., 53 lks. dist. properly marked.
The other SE bearing rock of record is gone.

FINAL TEST

of

Buff Transit No. 18,000

by

Benjamin J. Kinsey, U.S. Surveyor.

- October, 5, 1930, on same meridian as described on page 2, hereof, examine the adjustments of the transit and find no errors.
At 9h.00m., a.m., with lat. arc set at 33°17½' N., and decl. arc set at 4°36½' S., determine a meridian with the solar which agrees with the true meridian.
At 12h.00m., app. noon, with lat. arc unchanged, observe the sun on the meridian; the resultant reading of the decl. arc is 4°40' S., which agrees with the computed declination of the sun.
At 3h.00m., p.m., with lat. arc unchanged, set off 4°42½' S. on the decl. arc and determine a meridian which agrees with the true meridian.
As all of the obsns. taken during the usual hours of solar work agree within 1' of the true meridian, conclude that the adjustments of the instrument have remained in a satisfactory condition during the surveys described in the foregoing field notes.

BOOK 3881

CERTIFICATE OF UNITED STATES SURVEYOR

I, Benjamin J. Kinsey, U. S. Surveyor, hereby certify upon honor that, in pursuance of special instructions received from the District Cadastral Engineer, for Group 163, Arizona bearing date of the 17th day of June, 1930, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, ~~SURVEYED~~ RESURVEYED all those parts or portions of the North Boundary of Township 2 South, Range 12 East and SURVEYED all those parts or portions of the Boundary of the Addition to Superior Townsite in Section 3 of Township 2 South, Range 12 East of the Gila and Salt River Base and Meridian, in the State of Arizona, which are represented in the foregoing field notes ^{and by diagram on page 1 hereof} as having been executed by me, and under my direction; and that all the corners of ~~said resurvey~~ said resurvey and survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the District Cadastral Engineer, for Group 163, Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such ~~resurvey~~ resurvey and survey.

Place: Phoenix, Arizona.
 Date: October 15, 1930.

Benjamin J. Kinsey
 U. S. Surveyor.

APPROVAL

OFFICE OF U. S. SUPERVISOR OF SURVEYS,

Denver, Colo., October 27, 1930

The foregoing field notes of the ~~RESURVEY~~ RESURVEY of Part of the North Boundary of Township 2 South, Range 12 East and of the SURVEY of Part of the Boundary of an Addition to Superior Townsite in Section 3 of Township 2 South, Range 12 East of the Gila and Salt River Base and Meridian, in the State of Arizona executed by Benjamin J. Kinsey, U.S. Surveyor under his special instructions dated June 17, 1930 for Group 163, Arizona, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the ~~resurvey~~ resurvey and ~~survey~~ survey they describe, are hereby approved.

Wm. M. Cannon
 U. S. Supervisor of Surveys.

~~I certify that the foregoing transcript of the field notes of the above described surveys in~~
~~has been correctly copied from the original notes on file in this office.~~

~~U. S. Supervisor of Surveys.~~