ORIGINAL

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE

DEPENDENT RESURVEY OF

A PORTION OF THE SUBDIVISIONAL LINES,

A PORTION OF HOMESTEAD ENTRY SURVEY NO. 401,

A PORTION OF TRACT 37,

THE SUBDIVISION OF SECTION 23,

THE SURVEY OF TRACT 39

AND

A METES-AND-BOUNDS SURVEY IN SECTION 23,

TOWNSHIP 30 NORTH, RANGE 2 EAST,

OF THE GILA AND SALT RIVER MERIDIAN,

IN THE STATE OF ARIZONA.

EXECUTED BY

Geoffrey A. Graham, Cadastral Surveyor

Under Special Instructions dated August 25, 2005, approved August 25, 2005, which provided for the surveys included under Group No. 968, and assignment instructions dated August 25, 2005.

Survey commenced August 29, 2005

Survey completed September 1, 2005

INDEX DIAGRAM

TOWNSHIP 30 NORTH RANGE 2 EAST GILA AND SALT RIVER MERIDIAN, ARIZONA

	T				
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23 6	5 24 4
30	29	28	27	26	4 25
31	32	33	34	35	36

H.E.S. No. 401 Pages 7-8
Tract 37 Page 8
Subdivision of Section 23 Pages 8-9
Tract 39 Pages 10-12
Metes-and-Bounds Survey in Section 23 Page 12

T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the subdivisional lines, a portion of Homestead Entry Survey No. 401, a portion of Tract 37, the subdivision of section 23, the survey of Tract 39 and a metes-and-bounds survey in section 23, T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona.

The history of surveys pertaining to this survey is as follows:

In 1900, Francis B. Jacobs surveyed the subdivisional lines. L. C. Way surveyed Homestead Entry Survey No. 401 in 1915. In 1964, Tract 37 was created on June 22, by supplemental plat and Wallace R. Ott remonumented a portion of the subdivisional corners. Louis D. Gilbert remonumented another portion of the subdivisional corners in 1970. Joe R. Salazar resurveyed a portion of the subdivisional lines, Homestead Entry Survey No. 401, and Tract 37 in 2004.

The survey was executed in accordance with the specifications as set forth in the Manual of Instructions for the Survey of the Public Lands of the United States, 1973, and the Special Instructions dated August 25, 2005, for Group No. 968, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Trimble Navigation 5800 model receivers.

Preliminary to the resurvey, the lines of the prior surveys were retraced and search was made for all corners and other calls of record. Identified corners were remonumented in their original positions. Lost corners were reestablished and remonumented at proportionate positions based on the official record. The retracement data were thoroughly verified and only the true line field notes are given herein.

Geodetic control was derived from Global Positioning System (GPS) static observations post processed by National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS) FREDONIA CORS ARP, FERNO MESA CORS ARP and FLAGSTAFF 1 CORS ARP. The NAD 83 (CORS96) (EPOCH:2002), geographic position of the 1/4 section corner of sections 23 and 24, is as follows:

Latitude: 35°58'12.17" N. Longitude: 112°08'12.72" W.

The mean magnetic declination is 12° E.

Dependent Resurvey of a Portion of the Subdivisional Lines, T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona

CHAINS

Restoring the resurvey executed by Joe R. Salazar, in 2004

Beginning at the 1/4 sec. cor. of secs. 25 and 26, perpetuated by F. Dwan Utley, Arizona Registered Land Surveyor, No. 11369, monumented with an aluminum post, 2 1/2 ins. diam., firmly set, projecting 7 ins. above a mound of stone, 3 ft. base, 1 ft. high, with aluminum cap inscribed KAIBAB NATIONAL FOREST CADSTRAL SURVEY and mkd. 1/4 S26 S25 1980 LS 11369, with an accessory mound of stone, 3 ft. base, 2 ft. high, W. of the cor. This is accepted as a careful and faithful perpetuation of the original cor. position.

from which the original bearing trees

- A gamble oak, 11 ins. diam., bears S. 82 3/4° E., 1.31 chs. dist., with a healed blaze. A standard Forest Service bearing tree tag is nailed to the tree.
- A ponderosa pine, 23 ins. diam., bears N. 68° W., 31 lks. dist., with a mostly healed blaze. A standard Forest Service bearing tree tag is nailed to the tree.
- N. 0°14' E., bet. secs. 25 and 26.

39.97

Point for the cor. of secs. 23, 24, 25 and 26, at proportionate dist.; there is no remaining evidence of the original cor.

Cor. falls in airport, between the runway and taxiway, impracticable to monument.

From the 1/4 sec. cor. of secs. 24 and 25, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 3 ins. above a mound of stone, 3 ft. base, 3/4 ft. high, with brass cap mkd. T30N R2E 1/4 S24 S25 2001 1964, with an accessory mound of stone, 4 ft. base, 2 1/2 ft. high, N. of the cor.

from which the remaining original bearing tree

A ponderosa pine, 28 ins. diam., bears South, 58 lks. dist., with a mostly healed blaze. A standard Forest Service bearing tree tag is nailed to the tree.

and the 1964 bearing tree

A ponderosa pine, 14 ins. diam., bears N. 66 1/2° E., 64 lks. dist., with a healed blaze. A standard Forest Service bearing tree tag is nailed to the tree.

Add the marks 2005 to the brass cap.

17.90 40.03	S. 89°48' W., bet. secs. 24 and 25. Point for AP 3, sec. 24, at intersection with the E. line of the Grand Canyon National Park Airport, not monumented.
	Point for AP 3, sec. 24, at intersection with the E. line of the
	Point for AP 3, sec. 24, at intersection with the E. line of the Grand Canyon National Park Airport, not monumented.
40.03	
	The point for the cor. of secs. 23, 24, 25 and 26.
	N. 0°08' W., bet. secs. 23 and 24.
20.73	Point for AP 4, sec. 24, at intersection with the W. line of the Grand Canyon National Park Airport.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 18 ins. in the ground, in a mound of stone, 3 1/2 ft. base, top, with brass cap mkd.
	T 30 N R 2 E S 23 S 24 AP4
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	From this cor. point, cor. No. 7 of the Grand Canyon National Park Airport, perpetuated by Robert C. Woolery, Arizon Registered Land Surveyor, No. 9753, and recorded in the Coconin County Recorders office in Flagstaff, AZ, in Book 6, Page 9E monumented with an aluminum post, 2 1/2 ins. diam., firmly set projecting 3 ins. above the ground, with an aluminum cap mkd GCAP COR 7 T30N R2E S34 LS 9753 1983, bears S. 40°39' W. 213.27 chs. dist.
	from which the 1983 bearing trees

- A ponderosa pine, 10 ins. diam., bears S. 69° W., 71 lks. dist., with scribe marks X BT visible on a partially healed blaze. (Record: S. 65° W.)
- A ponderosa pine, 16 ins. diam., bears N. 28 1/2° W., 53 lks. dist., with scribe marks X BT visible on a partially healed blaze. (Record: N. 30° W.)

From this same cor. point, AP 5, sec. 24, hereinafter described, bears N. 40°39' E., 28.83 chs. dist.

		Dependent Resurvey of a Portion of the Subdivisional Lines, T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona
	CHAINS	
	39.97	The 1/4 sec. cor. of secs. 23 and 24, identical with AP 1, Tract 39, hereinafter described, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 2 ins. above a supporting mound of stone, 5 ft. base, 1 1/2 ft. high, with brass cap mkd. T30N R2E 1/4 S23 S24 1964 2001.
		from which the remaining original bearing tree
		A ponderosa pine, 19 ins. diam., bears S. 84 1/2° E., 1.21 chs. dist., with a healed blaze. A standard Forest Service bearing tree tag is nailed to the tree.
		and the 1964 bearing tree
		A ponderosa pine, 17 ins. diam., bears N. 18° W., 1.25 chs. dist., with a healed blaze. A standard Forest Service bearing tree tag is nailed to the tree.
		Add the marks 2005 to the brass cap.
		From the cor. of secs. 23, 24, 25 and 26.
		S. 89°40' W., bet. secs. 23 and 26.
	17.93	Point for a witness point at intersection with the W. line of the Grand Canyon National Park Airport.
		Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.
		WP T 30 N R 2 E S 23
		S 26
		2005
		Deposit a magnet in a white plastic case at the base of the stainless steel post.
		From this cor. point, cor. No. 7, of the Grand Canyon National Park Airport, hereinbefore described, bears S. 40°39' W., 185.82 chs. dist.
		From this same cor. point, AP 5, sec. 24, hereinafter described, bears N. 40°39' E., 56.28 chs. dist.
1		

Dependent Resurvey of a Portion of the Subdivisional Lines, T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona

CHAINS

39.74

The 1/4 sec. cor. of secs. 23 and 26, perpetuated by Dennis J. Mouland, Arizona Registered Land Surveyor, No. 12535, and recorded in the Coconino County Recorders office in Flagstaff, AZ, in Book 3, Page 86A, monumented with an aluminum post, 2 1/2 ins. diam., firmly set, projecting 4 ins. above the ground, with an aluminum cap inscribed U.S. DEPARTMENT OF AGRICULTURE and mkd. T30N R2E S23 1/4 S26 LS 12535 19 1. This position is accepted as a careful and faithful perpetuation of the original cor. position.

from which the remains of the original bearing trees

- A ponderosa pine stump, 34 ins. diam., bears N. 66 3/4° E., 1.10 chs. dist., with no marks found.
- A ponderosa pine stump, 14 ins. diam., bears S. 69 1/2° W., 22 lks. dist., with no marks found.

Dependent Resurvey of a Portion of H. E. S. No. 401, T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona

Restoring the resurvey executed by Joe R. Salazar, in 2004

From cor. No. 9, H.E.S. No. 401, identical with AP 1, Tract 37 and AP 6, Tract 39, perpetuated by Charles C. Doak, Arizona Registered Land Surveyor, No. 4476, and recorded in the Coconino County Recorders office in Flagstaff, AZ., in Case 2, Page 97, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 5 ins. above a supporting mound of stone, 4 ft. base, 2 ft. high, with a standard pipe end cap mkd. USDA-FS HES 401 9 S24 T30N R2E LS4476 1965.

from which the original bearing trees

- A ponderosa pine, 41 ins. diam., bears S. 62 1/4° E., 1.42 chs. dist., with scribe marks 401 visible on partially healed blaze. A standard Forest Service bearing tree tag is nailed to the tree.
- A ponderosa pine, 30 ins. diam., bears S. 4 1/2° E., 39 lks. dist., with scribe marks 9 HES 401 visible on partially healed blaze. A standard Forest Service bearing tree tag is nailed to the tree.
- N. 47°55′ W., on line 9 10, H.E.S. No. 401.
- 9.05 Point for AP 7, Tract 39, hereinafter described.
- 18.04 Intersect the line bet. secs. 23 and 24.

Dependent Resurvey of a Portion of H. E. S. No. 401,

T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona CHAINS From this intersection point, the 1/4 sec. cor. of secs. 23 and 24, bears S. 0°07' E., 19.36 chs. dist. 18.18 Cor. No. 10, H.E.S. No. 401, monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 4 ins. above the ground, in a mound of stone, 3 ft. base, to top, with brass cap mkd. T30N R2E HES 401 COR10 S23 2001. Add the marks 2005 to the brass cap. Dependent Resurvey of a Portion of Tract 37, T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona Restoring the resurvey executed by Joe R. Salazar, in 2004 From cor. No. 9, H.E.S. No. 401, identical with AP 1, Tract 37, hereinbefore described. S. 49°46' E., on line 1 - 2, Tract 37. 7.18 AP 5, sec. 24, monumented with a stainless steel post, 2 1/2 ins. diam., firmly set, projecting 1 in. above a mound of stone, 4 ft. base, 1/2 ft. high, with brass cap mkd. T30N R2E TR37 S24 2001. from which a 1983 bearing tree mkd. by Dennis J. Mouland A ponderosa pine, 11 ins. diam., bears N. 56° W., 42 lks. dist., with a healed blaze. A standard Forest Service bearing tree tag is nailed to the tree. Add the marks 2005 to the brass cap. From this cor. point, AP 2, Tract 37, perpetuated by F. Dwan Utley, Arizona Registered Land Surveyor, No. 11369, monumented with an aluminum post, 2 1/2 ins. diam., firmly set, flush with the ground, with aluminum cap mkd. 8 7 TR37 GAP HES401 1991 LS11369, bears S. 49°46' E., 4.55 chs. dist. Subdivision of Section 23, T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona From the 1/4 sec. cor. of secs. 23 and 26. N. 0°06' W., on the N. and S. center line of sec. 23.

Subdivision of Section 23,

	Subdivision of Section 23, T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona
CHAINS	The state of the s
39.95	Point for the center 1/4 sec. cor. of sec. 23, at intersection with the E. and W. center line, not monumented.
79.91	The 1/4 sec. cor. of secs. 14 and 23, monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 4 ins. above the ground, with brass cap mkd. T30NR3E S14 1/4 S23 1970, with an accessory mound of stone, 3 ft. base, 1 ft. high, N. of the cor.
	Add the marks 2005 to the brass cap.
	From the 1/4 sec. cor. of secs. 23 and 24.
	S. 89°38' W., on the E. and W. center line of sec. 23.
24.88	Intersect line 2 - 3, Tract 39. Not monumented.
39.72	Point for the center 1/4 sec. cor. of sec. 23.
79.29	The 1/4 sec. cor. of secs. 22 and 23, perpetuated by Dennis J. Mouland, Arizona Registered Land Surveyor, No. 12535, and recorded in the Coconino County Recorders office in Flagstaff, AZ, in Book 3, Page 86A, monumented with an aluminum post, 2 1/2 ins. diam., firmly set, projecting 5 ins. above a mound of stone, 3 ft. base, 1 ft. high, with an aluminum cap inscribed U.S. DEPARTMENT OF AGRICULTURE and mkd. T30N R2E 1/4 S22 S23 LS 12535 1981. This position is accepted as a careful and faithful perpetuation of the original cor. position.
	from which the remaining original bearing tree
	A trunk, 19 ins. diam., of a juniper, 30 ins. diam., bears S. 77° E., 12 lks. dist., with scribe marks 1/4 S23 BT visible on weathered blaze. On opposite side of this same trunk another weathered blaze with illegible marks. A standard Forest Service bearing tree tag is nailed to the tree. (Orig. Record: S. 45° E.)
	and the 1981 bearing tree
	A ponderosa pine, 21 ins. diam., bears S. 46° W., 52 lks. dist., with small scribe marks 1/4 S22 B visible on partially healed blaze. A standard Forest Service bearing tree tag is nailed to the tree.
	and a bearing tree not of record
	A ponderosa pine, 12 ins. diam., bears N. 65 3/4° E., 37 lks. dist., with a partially healed blaze. A standard Forest Service bearing tree tag is nailed to the tree.

Survey of Tract 39,

***	T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona
CHAINS	
	From AP 1, Tract 39, identical with the 1/4 sec. cor. of secs. 23 and 24, hereinbefore described.
	N. 49°21' W., on line 1 - 2, Tract 39.
18.77	Point for AP 2, Tract 39.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.
	T 30 N R 2 E S 23
	AP2
	2005
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	S. 40°40' W., on line 2 - 3, Tract 39.
16.33	Intersect the E. and W. center line, sec. 23, not monumented.
19.83	Point for AP 3, Tract 39.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 13 ins. in the ground, in a mound of stone, 4 ft. base, to top, with brass cap mkd.
	T 30 N R 2 E
	S23 AP3
	2005
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	S. 49°20' E., on line 3 - 4, Tract 39.
31.34	Point for AP 4, Tract 39, at intersection with the W. line of the Grand Canyon National Park Airport.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.

CHAINC	T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona
CHAINS	
	T 30 N R 2 E
	AP4
	\$23
	525
	2005
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	From this cor. point, cor. No. 7 of the Grand Canyon Nationa Park Airport, hereinbefore described, bears S. 40°39' W. 208.01 chs. dist.
	From this same cor. point, AP 5, sec. 24, hereinbefor described, bears N. 40°39' E., 34.09 chs. dist.
	N. 40°39' E., on line 4 - 5, Tract 39, along the W. line of the Grand Canyon National Park Airport.
5.26	AP 4, sec. 24, at intersection with sec. line bet. secs. 23 ar 24, hereinbefore described.
34.09	AP 5, Tract 39, identical with AP 5, sec. 24, hereinbefor described.
	N. 49°46' W., on line 5 - 6, Tract 39, along a portion of Tract 37.
7.18	AP 6, Tract 39, identical with cor. No. 9, H.E.S. No. 401, an AP 1, Tract 37, hereinbefore described.
	N. 47°55' W., on line 6 - 7, Tract 39, along a portion of H.E.S.
9.05	Point for AP 7, Tract 39.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 23 ins. in the ground, with brass cap mkd.
	T 30 N R 2 E
	S 24
	2005
	Deposit a magnet in a white plastic case at the base of th

Survey of Tract 39,

	T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona
CHAINS	J. Color, M. 2 2., Cita and Bart River Meridian, Arrizona
	From this cor. point, cor. No. 10, H.E.S. No. 401, hereinbefore described, bears N. 47°55' W., 9.13 chs. dist.
	S. 22°02' E., on line 7 - 8, Tract 39.
4.90	Point for AP 8, Tract 39.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with brass cap mkd.
	T 30 N R 2 E
	S24 AP8
	2005
	Deposit a magnet in a white plastic case at the base of the stainless steel post.
	S. 43°57' W., on line 8 - 1, Tract 39.
12.21	AP 1, Tract 39, identical with the 1/4 sec. cor. of secs. 23 and 24, hereinbefore described.
	Metes-and-Bounds Survey in Section 23, T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona
	From AP 4, Tract 39, at intersection with the W. line of the Grand Canyon National Park Airport.
	S. 40°39' W., on the W. line of the Grand Canyon National Park Airport.
22.19	The point for a witness point at intersection with the Grand Canyon National Park Airport and the sec. line bet. secs. 23 and 26, hereinbefore described.

T. 30 N., R. 2 E., Gila and Salt River Meridian, Arizona

CHAINS

GENERAL DESCRIPTION

The purpose of this survey was to identify a tract for disposal according to the Education Land Grant Act, P.L. 106-577, of December 28, 2000. Tract 39, identified by this survey abuts H.E.S. No. 401 and will simplify future managerial tasks of the Forest Service by keeping the boundaries consolidated.

Access to this project is via Arizona State Highway 64, and then utilizing the many smaller roads leading out of the town of Tusayan, which lays wholly within H.E.S. No. 401. The terrain of the area is of gently rolling rocky hills, with elevations averaging around 6500 ft. above sea level. The vegetation is typical of the Kaibab plateau, timbered with ponderosa pine, piñon pine and scrub oaks, with the under story consisting of sage, grasses and diminutive cacti.

The mean magnetic declination of 12° E. was derived from the National Geophysical Data Center's magnetic declination calculator, GEOMAG V4.0, utilizing the International Geomagnetic Reference Field model for years 2000 through 2005, for the dates of survey.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
F. Dwan Utley	Land Surveyor(U.S.F.S.)
Benjamin Garcia	Surveying Technician(U.S.F.S.)
Nelson Kinsel	Surveying Technician

CERTIFICATE OF SURVEY

I, Geoffrey A. Graham, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 25th day of August, 2005, I have dependently resurveyed a portion of the subdivisional lines, a portion of H.E.S. No. 401, a portion of Tract 37, subdivided section 23, surveyed Tract 39, and performed a metes-and-bounds survey in section 23, T. 30 N., R. 2 E., of the Gila and Salt River Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me and under my direction. Said survey has been made in strict conformity with said special instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, 1973, and in specific manner described in the foregoing field notes.

2/1/2006	Marthay A. Sha
/ /Date)	(Cadiastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT Phoenix, Arizona

The foregoing field notes of the dependent resurvey of a portion of the subdivisional lines, a portion of H.E.S. No. 401, a portion of Tract 37, the subdivision of section 23, the survey of Tract 39, and a metes-and-bounds survey in section 23, T. 30 N., R. 2 E., Gila and Salt River Meridian, in the State of Arizona, executed by Geoffrey A. Graham, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

4/06/06	Stephen K. Hunsen
(Date)	(Chief Cadastral Surveyor of Arizona)
CE	RTIFICATE OF TRANSCRIPT
I CERTIFY That the foregoind described surveys in T. 30 Arizona, is a true copy of the	ng transcript of the field notes of the above N., R. 2 E., Gila and Salt River Meridian, ne original field notes.
(Date)	(Chief Cadastral Surveyor of Arizona)