**ORIGINAL** 

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE

DEPENDENT RESURVEY OF PORTIONS OF THE SOUTH AND EAST BOUNDARIES,

A PORTION OF THE SUBDIVISIONAL LINES,

THE SUBDIVISION OF SECTIONS 33 AND 34,

THE SURVEY OF THE BOUNDARY OF THE GLEN CANYON NATIONAL RECREATION AREA,

THE ESTABLISHMENT OF THE DIVIDING LINE WHICH CROSSES THE COLORADO RIVER

BETWEEN GRAND CANYON NATIONAL PARK AND GLEN CANYON NATIONAL RECREATION AREA

AND THE METES-AND-BOUNDS SURVEY

OF A PORTION OF THE RIGHT-OF-WAY OF U.S. HIGHWAY NO. 89A

TOWNSHIP 40 NORTH, RANGE 7 EAST

OF THE GILA AND SALT RIVER MERIDIAN,

IN THE STATE OF ARIZONA.

#### **EXECUTED BY**

#### Rosendo Ramos Serrano, Cadastral Surveyor

Under Special Instructions dated June 1, 2020, approved June 1, 2020, which provided for the surveys included under Group No. 1205, and assignment instructions dated June 1, 2020.

Survey commenced June 3, 2020

Survey completed July 9, 2020

### INDEX DIAGRAM

## TOWNSHIP 40 NORTH RANGE 7 East GILA AND SALT RIVER MERIDIAN, ARIZONA

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

Subdivision of Sec. 33	11-12
Subdivision of Sec. 34	12-16
Boundary Glen Canyon National Resource Area	16-19
Metes-and-Bounds right-of-way U.S. Highway No. 89APages	19-21

#### T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the south and east boundary, portions of the subdivisional lines, the subdivision of sections 33 and 34, the survey of the boundary of the Glen Canyon National Recreation Area, the establishment of the dividing line between Grand Canyon National Park and Glen Canyon National Recreation Area, across the Colorado River and the metes-and-bounds survey of a portion of the right-of-way of U.S. Highway No. 89A, in Township 40 North, Range 7 East, of the Gila and Salt River Meridian, Arizona.

The history of surveys pertaining to this survey is as follows: In 1926, the survey of the south boundary, the east boundary, subdivisional lines and the meanders of the right and left bank of the Colorado River, was surveyed by U.S. Surveyor Williams E. Hiester, and U.S. Transitman Otis O. Gould, under group number 139, Arizona,

In 1937, the resurvey of The north 3 miles of the east boundary. As originally surveyed the corners on the east boundary were common to ranges 7 and 8 east. The resurvey established new section and 1/4 section corners for the north 3 miles of range 8 east only. The original corners on the north 3 miles of the east boundary were altered to refer to range 7 east only. Executed by U.S. Surveyor Benjamin J Kinsey and U.S. Transitman Bert E. Wakeman, under group number 181, Arizona.

In 1997, the dependent resurvey of a portion of the south boundary, was resurveyed by Cadastral Surveyor, William P. Carpenter, under group number 815, Arizona.

The boundary of the Glen Canyon National Recreation Area, has been determined by photogrammetrically interpreted and digitized 0.5 meter resolution true color satellite imagery, collected in (May) 2020. Source DigitalGlobe(G-EGD)

The survey was executed in accordance with the specifications as set forth in the  $\underline{\text{Manual of Instructions for the Survey of the}}$  Public Lands of the United States, 2009, and the Special Instructions dated June 1, 2020, for Group Number 1205, Arizona.

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Trimble Navigation R10-2 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,

#### T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

#### CHAINS

Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS) AI8820 FERN FERNO MESA CORS ARP, DP9946 P008 TUBA CITY AZ 2007 CORS ARP, AI8805 FRED FREDONIA CORS ARP.

The NAD 83 (CORS2011) (EPOCH: 2010), geographic position of the corner of sections 2, 3, 34 and 35, is as follows:

Latitude: 36°48'58.891" N. Longitude: 111°37'23.420" W.

The NAD 83 (CORS2011) (EPOCH: 2010), geographic position of the corner of sections 13, 14, 23 and 24, is as follows:

Latitude: 36°51'35.387" N. Longitude: 111°36'18.510" W

The mean magnetic declination is 10  $1/4^{\circ}$  E.

Dependent Resurvey of a portion of the South Boundary, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

Restoring the survey executed by Williams E. Hiester and Otis O. Gould, in 1926-27 and William P. Carpender in 1997.

Beginning at the witness cor. to the 1/4 sec. cor. of secs. 5 and 32 on the S. bdy. of the Tp., monumented with a 1 in. iron post, firmly set, projecting 4 ins. above ground, with a supporting mound of stone 4 ft. base, 22 ins. high, with a 2 1/2 ins. brass cap mkd. S32 WC 1/4 S5 1927.

Add the marks T40N R7E T39N and 2020 to the brass cap.

S. 89°59' E., bet. secs. 5 and 32, on the S. bdy of the Tp.

38.90 True point for the cor. of secs. 4, 5, 32 and 33, on the S. bdy. of the Tp., at proportionate dist., corner falls on a southerly facing steep slope, where is impracticable to establish a permanent monument.

The 1927 witness cor., of secs. 4, 5, 32 and 33, on the S. bdy. of the Tp., monumented with a 2 ins. diam. iron post, firmly set, projecting 5 ins. above ground, with a 2 1/2 ins diam. brass cap mkd. T40NR7E WC S32 S33 S5 S4 1927.

Add the marks 2020 to the brass cap.

Found mound of stone 4 ft. base, 16 ins. high to the W. of the cor.

40.42

### Dependent Resurvey of a portion of the South Boundary, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

CHAINS	
	S. 89°59' E., continuing on line bet. secs. 4 and 33, on the S. bdy of the Tp.
39.46	The 1/4 sec. cor. of secs. 4 and 33 on the S. bdy. of the Tp., monumented with a 1 in. diam. iron post, firmly set, projecting 1 in. above ground, with a 2 1/2 ins. diam., with brass cap mkd. T40NR7E 1/4 S33 S4 T39N 1997 1927.
	Add the marks 2020 to the brass cap.
	Found a fence post, alongside, projecting 3 1/2 ft. above ground.
	S. 89°58' E., beginning new measurement.
	Between Bureau of Land Management lands to the N. and patented lands to the S.
20.00	The E. 1/16 sec. cor. of secs. 4 and 33 on the S. bdy. of the Tp., monumented with a stainless steel post, firmly set, projecting 2 ins. above ground, with a 2 1/2 ins. diam., with brass cap mkd. T40N R7E 1/16 S33 S4 T39N 1997.
	Cor. is located at a fence cor., fences extending E. and. S.
	S. 89°58' E., beginning new measurement.
20.00	The cor. of secs. 3, 4, 33 and 34 on the S. bdy. of the Tp., monumented with a 1 in. iron post, firmly set, projecting 1 in. above ground, with a 2 ins. diam., with brass cap mkd. T40NR7E S33 S34 S4 S3 T39N 1997 1927.
	Add the marks 2020 to the brass cap.
	Cor. is located at a fence cor., fences extending N. and. W.
	From the cor. of secs. 3, 4, 33 and 34, hereinbefore described.
	S. 89°59' E., bet. secs. 3 and 34, on the S. bdy. of the Tp.
13.43	Intersect the northerly right-of-way line, of U.S. Highway No. 89A.
16.45	Intersect the center line of U.S. Highway No. 89A, paved, 83 lks. wide, bears N. 75° E., and S. 75° W., from this point a right-of-way monument, bears S. 6°40' W., 81 lks dist., monumented with a 3 ins. diam. brass cap, set flush in concrete, cap mkd. P.O.T. 3767+95.13 ROB GREVE PLATEAU ENGINEERING 1995, an angle iron alongside 4 ins., 4 ins., projecting 2 1/2 ft. above ground, as per Arizona Department of Transportation Highway Division, right of Way Plan of the Bitter Spring-Fredonia Highway, Drawing
<u></u>	

### Dependent Resurvey of a portion of the South Boundary, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

CHAINS	
	No. D-3-T-658, Project No. F-037-3-810, Route "U.S. 89A", dated 1/27/92.
20.00	The W. 1/16 sec. cor. of secs. 3 and 34 on the S. bdy. of the Tp., identical with the right-of-way monument, monumented with a 3 ins. diam. brass cap, set flush in a 10 ins. concrete base, cap mkd. P.O.C. 3765+57.28 ROB GREVE 1995, as per Arizona Department of Transportation Highway Division, right of Way Plan of the Bitter Spring-Fredonia Highway, Drawing No. D-3-T-658, Project No. F-037-3-810, Route "U.S. 89A", dated 1/27/92.
	From this cor. a cor. of fence's extending E. and S., bears., N., 1.62 lks. dist.
	Cor. is located underneath a barbed wire fence, 4 strand, bears N. and S.
	N. 89°58' E, beginning new measurement.
3.13	Point for angle point on the south boundary bet. secs. 3 and 34, intersect the southerly right-of-way line, of U.S. Highway No. 89A,
	Set a rebar 24 ins. long, 5/8 in. diam., in a drill hole, cemented, projecting 10 ins. above ground, in a mound of stone 2 ft. base to top, with a 2 ins. diam. brass cap mkd.
	T 40 N R 7 E
	S 34
	T 39 N S 3
	2020
	Set a 4 ft. long 'U' post, alongside of the cor.
12.16	Westerly rim of the Colorado River Canyon.
16.62	The true point for the meander cor. bet. secs. 3 and 34, on right bank of the Colorado River, on the S. bdy. of the Tp., monumented with a 2 ins. diam. iron post, firmly set, projecting 4 ins. above a supporting mound of stone 4 ft. base, 3 ft. high, with a 2 1/2 ins. with brass cap mkd. T40N R7E S34 MC S3 T39N 1927.
	Add the marks 2020 to the brass cap.
	Cor. is located on a ledge above the Colorado River.

## Dependent Resurvey of a portion of the South Boundary, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

	T. 40 N., R. / E., Gila and Salt River Meridian, Arizona
CHAINS	
	S. 89°58' E., beginning new measurement.
3.43	The true point for the 1/4 sec. cor. of secs. 3 and 34 on the S. bdy. of the Tp., at proportionated dist., cor. falls in water of the Colorado River, where is impracticable to establish a permanent monument.
8.78	The true point for the meander cor. of secs. 3 and 34, on the left bank of the Colorado River, on the S. bdy. of the Tp., at proportionate dist., no permanent monument established.
9.59	Easterly rim of the Colorado River Canyon.
9.78	The true point for the witness cor. to the meander cor. of secs. 3 and 34, on the left bank of the Colorado River, on the S. bdy. of the Tp., at proportionate dist., there is no remaining evidence of the original corner, no permanent monument established.
10.60	Intersect the southerly right-of-way line, of U.S. Highway No. 89A.
	From this point a right-of-way monument, bears S. 60°04' E., 4.10 chs. dist., monumented with a 3 ins. diam. aluminum cap, set flush in concrete, with cap mkd. P.O.T. 3741+00 ROB GREVE, as per Arizona Department of Transportation Highway Division, right of Way Plan of the Bitter Spring-Fredonia Highway, Drawing No. D-3-T-658, Project No. F-037-3-810, Route "U.S. 89A", dated 1/27/92. Cor. is located SE of fence cors. extending N. 31° E. and N. 60° W.
	From this same point a right-of-way monument, bears N. 60°04' W., 44 lks. dist., monumented with a 3 ins. diam. aluminum cap, set flush in rock outcrop, with cap mkd. P.O.T. 3744+00 ROB GREVE 1995, as per Arizona Department of Transportation Highway Division, right of Way Plan of the Bitter Spring-Fredonia Highway, Drawing No. D-3-T-658, Project No. F-037-3-810, Route "U.S. 89A", dated 1/27/92. Cor. is located SW of a fence cors. extending N. 31° E. and S. 60° E.
14.25	Intersect the center line of U.S. Highway No. 89A, paved, 83 lks. wide, bears S. 60° E., and N. 60° W.
43.38	The cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Tp., monumented with a 2 ins. diam. iron post, firmly set, projecting 15 ins. above ground, with a 2 1/2 ins. diam. brass cap mkd. T40NR7E S34 S35 S3 S2 T39N 1927.
	Add the marks 2020 to the brass cap.

	Dependent Resurvey of a portion of the East Boundary, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona
CHAINS	
	Restoring the survey executed by
	Williams E. Hiester and Otis O. Gould, in 1926-27
	From the cor. of secs. 13, 19 and 24 on the E. bdy. of the Tp., monumented with a 2 ins. iron post, firmly set, projecting 16 ins.
	above ground, with a 2 1/2 ins diam. brass cap mkd. T40N R7E R8E S13 S19 S24 1927.
	Add the marks 2020 to the bras cap.
	Found a mound of stone 4 ft. base, 2 ft. high, W. of the cor.
	Cor. is located on a moderate east facing slope.
	N. 0°07' W., bet. secs. 13 and 19, on the E. bdy. of the Tp.
0.65	The cor. of secs. 13, 18 and 19, on the E. bdy. of the Tp., monumented with a 2 ins. iron post, firmly set, projecting 12 ins. above ground, with a 2 1/2 ins. brass cap mkd. T40N T40N R7E R8E S18 S13 S19 1937.
	Add the marks 2020 to the brass cap.
	Found a mound of stone 3 ft. base, 18 ins. high, E. of the cor.
	N. 0°06' W., beginning new measurement.
22.72	The true point for the 1927 left bank meander cor. bet. sec 13 and 18, at proportionate dist., there is no remaining evidence of the meander corner; no permanent monument established.
23.77	Point for the witness point on line bet. secs. 13 and 18, at the line of the ordinary high water mark; not monumented due to inevitable destruction by water action.
	From this point a U.S.G.S. gauging station, monumented with a 3 ins. brass cap, cemented in a 6 ft. diam. boulder, surrounded by water, bears N. 78°32' W., 3.27 chs. dist.
	From this same point a 1/2 in. rebar, firmly set, projecting 3 ins. above ground, with a yellow faded plastic cap with illegible marking, bears S. 62°15' W., 2.40 chs.
31.75	The true point for the 1927 right bank meander cor. bet. sec 13 and 18, at proportionate dist., there is no remaining evidence of the meander corner; no permanent monument established.

## Dependent Resurvey of a Portion of the East Boundary, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

	T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona
CHAINS 39.36	The 1/4 sec. cor. of sec. 13 only, on the E. bdy. of the Tp., monumented with a 1 in. diam. iron post, flush in a supporting mound of stone 4 ft. base, 28 ins. high, with a 2 1/2 ins. brass cap mkd. 1/4 S13 1927. Add the marks T40N R7E and 2020 to the brass cap.
	Dependent Resurvey of a Portion of the Subdivisional Lines, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona
	Restoring the survey executed by Williams E. Hiester and Otis O. Gould, in 1926-27
	From the cor. of secs. 2, 3, 34 and 35, on the S. bdy of the Tp., hereinbefore described.
	N. 0°02' W., bet. secs. 34 and 35.
39.98	The 1/4 sec. cor. of secs. 34 and 35, monumented with a 1 in. diam. iron post, firmly set, projecting 7 ins. above a supporting mound of stone 4 ft. base, 17 ins. high, with a 2 1/2 ins. diam. brass cap mkd. 1/4 S34 S35 1927.
	Add the marks T40N R7E and 2020 to the brass cap.
	Rebuild mound of stone to top of iron post.
i	From the cor. of secs. 3, 4, 33 and 34, on the S. bdy of the Tp., hereinbefore described.
	N. 0°01' E., bet. secs. 33 and 34.
	Between Bureau of Land Management lands to the W. and patented lands to the E.
13.11	Found a 1/2 in. rebar, firmly set, projecting 2 in. above ground, with a 1 in. plastic yellow cap mkd. LS 27232, stablished by Carl Elleard, Arizona R.L.S. No. 27232, in 1999, found and accepted by Stanley L. Nienhuser, Arizona R.L.S. No. 29884, in 2018, according to survey maps, instrument No. 3829761 on file at Coconino County Recorder's Office.
20.00	The S. 1/16 sec. cor. of secs. 33 and 34, monumented with a 1 in. diam iron pipe, firmly set, projecting 3 ins. above ground with 3/4 in. brass washer wired to pipe mkd. RLS 29884. found and accepted by Stanley L. Nienhuser, Arizona R.L.S. No. 29884, in 2018, according to survey maps, instrument No. 3829761 on file at Coconino County Recorder's Office. This is accepted as a careful and faithful determination of the position of the cor.
	At the cor. point

### Dependent Resurvey of a Portion of the Subdivisional Lines, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

	T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona		
CHAINS			
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.		
	T 40 N R 7 E		
	S 1/16 S 33   S 34		
	2020		
	Deposit a magnet, in a white plastic case, at the base of the stainless steel post.		
	Bury the 1 in. diam. iron pipe 14 ins. long, alongside the stainless steel post. Set a steel fence post, W. of the cor.		
į	Cor. is located on a moderate, south facing slope of loose rock.		
	N. 0°02' W., beginning new measurement.		
20.03	The 1/4 sec. cor. of secs. 33 and 34, monumented with a 1 in. diam. iron post, firmly set, projecting 9 ins. above ground with, brass cap mkd. 1/4 S33 S34 1927.		
	Add the marks T40N R7E and 2020 to the brass cap.		
	Found mound of stone 4 ft. base, 2 1/2 ft. high, W. of the cor.		
	From the cor. of secs. 4, 5, 32 and 33, on the S. bdy of the Tp., hereinbefore described.		
	N. 0°03' W., bet. secs. 32 and 33.		
19.99	Point for the S. 1/16 sec. cor. of secs. 33 and 34.		
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.		
	T 40 N R 7 E		
	S 1/16 S 32   S 33		
	2020		
	Deposit a magnet, in a white plastic case, at the base of the stainless steel post.		
	Build a mound of stone, 3 ft. base, 2 ft. high, W. of the cor.		
1			

## Dependent Resurvey of a Portion of the Subdivisional Lines, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

	T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona
CHAINS 39.98	The 1/4 sec. cor. of secs. 32 and 33, monumented with a 1 in. diam. iron post, firmly set, projecting 7 ins. above a supporting mound of stone 4 ft. base, 2 ft. high, with a 2 1/2 ins. diam. brass cap mkd. 1/4 S32 S33 1927.
	Add the marks T40N R7E and 2020 to the brass cap.
	Subdivision of Section 33, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona
	From the 1/4 sec. cor. of secs. 4 and 33, on the S. bdy. of the Tp.
	N. 0°04' E., on the N. and S. center line of sec. 33.
20.00	Point for the center S. 1/16 sec. cor. of sec. 33.
	Set a rebar 24 ins. long, 5/8 in. diam., in a drill hole, projecting 4 ins. above ground, with a 2 ins. diam. brass cap mkd.
	T 40 N R 7 E
	C .
	S 1/16   S 33 C
	2020
	Set a "T" steel fence post, in a drill hole, W. of the cor.
40.00	Point for the center $1/4$ sec. cor. of sec. 33, at intersection with the E. and W. center line.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, in a collar of stone, with brass cap mkd.
	T 40 N R 7 E
	C 1/4 S 33
	2020
	Build a mound of stone, 4 ft. base, 3 ft. high, W. of the cor.
79.89	The 1/4 sec. cor. of secs. 28 and 33, monumented with a 1 in. diam. iron post, firmly set, projecting 1 ft. above ground, with a 2 1/2 ins. diam. brass cap mkd. 1/4 S28 S33 1927.

Subdivision of Section 33, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

	T. 40 N., R. / E., Gila and Salt River Meridian, Arizona
CHAINS	Add the marks T40N R7E and 2020 to the brass cap.
	Found mound of stone 3 ft. base, 3 ft. high, N. of the cor.
	From the $1/4$ sec. cor. of secs. 33 and 34,on the south boundary of the Tp.
	S. 89°59'W., on the E. and W. center line of sec. 33.
39.94	The center 1/4 sec. cor. of sec. 33.
79.99	The 1/4 sec. cor. of secs. 32 and 33.
s	E 1/4
	From the S. 1/16 sec. cor. of secs. 33 and 34.
	N. 89°58' W., on the E. and W. center line of the SE1/4 of sec. 33.
39.98	The center S. 1/16 sec. cor. of sec. 33.
	SW 1/4
	From the center S. 1/16 sec. cor. of sec. 33.
	West, on the E. and W. center line of the SW1/4 of sec. 33.
40.01	The S. 1/16 sec. cor. of secs. 32 and 33.
	Subdivision of Section 34, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona
	From the 1/4 sec. cor. of secs. 3 and 34, on the S. bdy. of the Tp.
4.48	N. 0°02' W., on the N. and S. center line of sec. 34. Intersect the southerly right-of-way line, of U.S. Highway No. 89A.
	From this point a right-of-way monument, bears S. 60°04' E., 8.02 chs. dist., monumented with a 3 ins. diam. aluminum cap, set flush in outcrop, with cap mkd. P.O.T. 3744+00 ROB GREVE 1995, as per Arizona Department of Transportation Highway Division, right of Way Plan of the Bitter Spring-Fredonia Highway, Drawing No. D-3-T-658, Project No. F-037-3-810, Route "U.S. 89A", dated
1	

Subdivision of Section 34,
T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

	T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona
CHAINS	
	1/27/92. Cor. is located SE of a cor. of fence's extending S. 31° W. and N. 62° W.
	From this same point a right-of-way monument, bears N. 60°04' W., 4.09 chs. dist., monumented with a 3 ins. diam. aluminum cap, set flush in sandstone outcrop, with cap mkd. PC 3751+98.82 ROB GREVE 1995, as per Arizona Department of Transportation Highway Division, right of Way Plan of the Bitter Spring-Fredonia Highway, Drawing No. D-3-T-658, Project No. F-037-3-810, Route "U.S. 89A", dated 1/27/92.
6.23	Intersect a construction center line of U.S. Highway No. 89A, concrete, 83 lks. wide, bears S. 60° E., and N. 60° W.
10.45	Westerly rim of the Colorado River Canyon. 12.93 Intersect the northerly right-of-way line, of U.S. Highway No. 89A.
19.995	Point for the center S. 1/16 sec. cor. of sec. 34, not monumented.
39.99	Point for the center 1/4 sec. cor. of sec. 34, at intersection with the E. and W. center line.
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 16 ins. in the ground, in a mound of stone, 2 1/2 ft. base, to top, with brass cap mkd.
	T 40 N R 7 E
	C 1/4 S 34
	2020
	Set a "T" steel fence post, alongside.
79.99	The 1/4 sec. cor. of secs. 27 and 34, monumented with a 1 in. diam. iron post, firmly set, projecting 7 ins. with a 2 1/2 ins. diam. brass cap mkd. 1/4 S27 S34 1927.
	Add the marks T40N R7E and 2020 to the brass cap.
	Found a mound of stone 2 ft. base, 1 ft. high.
	From the 1/4 sec. cor. of secs. 34 and 35.
	N. 89°57' W., on the E. and W. center line of sec. 34.
16.44	E. rim of the Colorado River Canyon.
29.49	W. rim of the Colorado River Canyon.
39.95	Point for the center 1/4 sec. cor. of sec. 34.

### Subdivision of Section 34, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

	T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona
CHAINS	
52.58	Center of Lees Ferry road, paved, 43 lks. wide, bears S. 8° W. and N. 11° W.
59.965	Point for the center W. 1/16 sec. cor. of sec. 34, not monumented.
79.98	The 1/4 sec. cor. of secs. 33 and 34.
	SW 1/4
	From the W. 1/16 sec. cor. of secs. 3 and 34 on the S. bdy. of the Tp., identical with the right-of-way monument, station 3765+57.28 P.O.C.
	N. 0°01' E., on the N. and S. center line of the SW1/4 of sec. 34.
	Between National Park Service lands to the E. and patented lands to the W.
1.07	Intersect the center line of U.S. Highway No. 89A, paved, 83 lks. wide, bears N. 45° E., and S. 73° W.
2.16	Intersect the southerly edge of Marble Canyon Lodge, parking lot.
	From this point the following courses encompass a portion of the N.P.S. land, being utilized by Marble Canyon Lodge as a parking lot.
ļ	Thence, N. 54°16' E., 1.54 chs. dist. along the southerly edge parking lot.
	Thence N. 32°01' W., 2.35 chs. dist., along the most easterly edge parking lot, to the N. and S. center line of the SW1/4 of sec. 34.
	The area contains approximately 0.18 acres more or less.
2.43	Angle point, intersect the northerly right-of-way line, of U.S. Highway No. 89A, monumented with a cotton picker spindle, with a galvanized washer mkd, LS29884, according to survey maps, instrument No. 3829761, on file at Coconino County Recorder's Office, a 1/2 in. diam. rebar was stablished by Stanley L. Nienhuser, Arizona RLS No. 29884, there is no remaining evidence of the 1/2 in. rebar, other than cotton picker.
	At the cor. point
n g	Set a rebar 24 ins. long, 5/8 in. diam., projecting 1 in. above ground, with a 2 ins. diam. brass cap mkd.

Subdivision of Section 34,
T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

	T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona
CHAINS	
	T 40 N R 7 E
	S34 I
	AP
	2020
	Set a "T" steel fence post, alongside S. of the cor.
5.05	Intersect the northerly edge of Marble Canyon Lodge, parking lot.
5.26	Angle point, intersect the most northerly right-of-way line, of U.S. Highway No. 89A.
	Set a rebar 24 ins. long, 5/8 in. diam., projecting 2 in. above ground, with a 2 ins. diam. brass cap mkd.
	T 40 N R 7 E
	S34
	AP
	'
	2020
	Set a 4 ft. long 'U' post, alongside S. of the cor.
10.00	Found a 1/2 in. rebar, firmly set, projecting 1 in. above ground, with a brass washer mkd. RLS 29884. Cor. is located SE, 3 ins. dist. of a chain link fence, found and accepted by Stanley L. Nienhuser, Arizona R.L.S. No. 29884, in 2018, according to survey maps, instrument No. 3829761, on file at Coconino County Recorder's Office.
10.91	Found a 1/2 in. rebar, firmly set, projecting 2 ins. above ground, with a brass washer mkd. RLS 29884. Cor. is located easterly, 10 ins. dist. of a chain link fence, found and accepted by Stanley L. Nienhuser, Arizona R.L.S. No. 29884, in 2018, according to survey maps, instrument No. 3829761 on file at Coconino County Recorder's Office.
13.11	Found a 1/2 in. rebar, firmly set, projecting 1 in. above ground, with a 1 in. plastic yellow cap mkd. ALS 29884, stablished by Stanley L. Nienhuser, Arizona R.L.S. No. 29884, in 2018, according to survey maps, instrument No. 3829761, on file at Coconino County Recorder's Office.
20.00	The SW 1/16 sec. cor. of sec. 34, found a 1 in. diam. iron pipe rust, 4 ins. long, with deteriorated remains of iron pipe underground as evidence by rust ring in soil, with a collar stone, with 3/4 in. brass washer wired to pipe mkd. RLS 29884, found and

### Subdivision of Section 34, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

	T. 40 N., R. / E., Gila and Salt River Meridian, Arizona
CHAINS	
	accepted by Stanley L. Nienhuser, Arizona R.L.S. No. 29884, in 2018, according to survey maps, instrument No. 3829761 on file at Coconino County Recorder's Office. This is accepted as a careful and faithful determination of the position of the cor.
	At the cor. point
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with brass cap mkd.
	T 40 N R 7 E
	SW 1/16 S 34
	2020
	Bury the 1 in. diam. iron pipe 4 ins. long and remaining, alongside the stainless steel post.
	Set a steel fence post, alongside, W. of the cor.
	N. 0°01' W., beginning new measurement.
20.01	Point for the center W. 1/16 sec. cor. of sec. 34.
	From the center S. 1/16 sec. cor. of sec. 34.
	West , on the E. and W. center line of the SW1/4 of sec. 34.
18.48	Center of Lees Ferry road, paved, 39 lks. wide, bears N. 16° E. and S.
20.02	Point for the SW 1/16 sec. cor. of sec. 34.
	West, beginning new measurement.
	Between National Park Service lands to the N. and patented lands to the S.
20.00	The S. 1/16 sec. cor. of secs. 33 and 34
	Boundary of the Glen Canyon National Resource Area, on the left bank of the Colorado River, at the ordinary high water mark, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona
	From the witness point on line bet. cor. of secs. 13 and 18, on the E. bdy. of the Tp., hereinbefore described.

Boundary of the Glen Canyon National Resource Area, on the left bank of the Colorado River, at the ordinary high water

mark, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona CHAINS Thence downstream with the boundary of the G.C.N.R.A., on the left bank of the Colorado River, at the ordinary high water mark. S. 83°57' W., 0.84 chs. N. 73°33' W., 1.65 chs. N. 76°48' W., 1.17 chs. S. 84°03' W., 0.58 chs. S. 60°26' W., 1.12 chs. S. 41°32' W., 0.87 chs. S. 46°01' W., 1.36 chs. S. 37°23' W., 1.75 chs. S. 39°06' W., 2.82 chs. S. 27°20' W., 0.78 chs. S. 40°00' W., 0.44 chs. S. 41°21' W., 0.94 chs. S. 31°12' W., 2.15 chs. S. 42°48' W., 2.66 chs. S. 47°01' W., 5.36 chs. S. 76°39' W., 0.64 chs. S. 58°43' W., 1.47 chs. S. 50°06' W., 2.64 chs. S. 54°18' W., 2.53 chs. S. 54°07' W., 2.12 chs. S. 60°33' W., 2.56 chs. 1.75 chs. S. 65°08' W., S. 65°14' W., 2.34 chs. S. 59°15' W., 0.96 chs. S. 43°41' W., 1.82 chs. At end of this course, the point for the 1927 meander cor. of secs. 13 and 24, on the left bank of the Colorado River, at the line of the ordinary high water mark, monumented with a 2 ins. iron post, projecting 6 ins. in a supporting mound of stone 4 ft. base, 3 ft. high, with a 2 1/2 ins. diam. brass cap mkd. MC S13 S24 T40N R7E. Add the marks 2020 to the brass cap; thence downstream with the bdy. of G.C.N.R.A., on the left bank of the Colorado River, at the line of the ordinary high water mark. S. 60°19' W., 1.26 chs. S. 57°30' W., 1.38 chs. N. 63°05' W., 0.48 chs. S. 55°06' W., 1.04 chs. S. 72°06' W., 0.94 chs. S. 54°54' W., 0.39 chs. S. 42°19' W., 0.58 chs. S. 40°24' W., 0.32 chs. N. 77°22' W., 0.79 chs. N. 35°06' W., 0.86 chs. N. 81°51' W., 0.54 chs. S. 65°23' W., 0.58 chs. S. 64°49' W., 2.17 chs. S. 49°35' W., 1.22 chs.

S. 88°55' W.,

S. 58°44' W.,

0.83 chs.

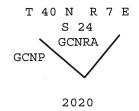
0.45 chs.

Boundary of the Glen Canyon National Resource Area, on the left bank of the Colorado River, at the ordinary high water mark, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

CHAINS	
	S. 79°00' W., 1.09 chs.
	S. 60°14' W., 0.73 chs.
	S. 46°15' W., 0.91 chs.
	S. 51°44' W., 1.10 chs.
ļ.	S. 85°29' W., 0.49 chs.
	S. 60°29' W., 2.11 chs.
	N. 82°47' W., 0.30 chs.
	S. 53°45' W., 0.68 chs.
	N. 71°05' W., 0.41 chs.
	S. 71°41' W., 0.56 chs.
	S. 40°10' W., 0.17 chs.
	N. 82°41' W., 0.46 chs.
	S. 51°40' W., 0.61 chs.
	S. 6°52' W., 0.28 chs.
	S. 64°36' W., 1.02 chs.
	S. 73°12' W., 1.08 chs.
	S. 3°16' E., 0.42 chs.
	S. 63°38' W., 0.88 chs.
	N. 23°47' W., 0.25 chs.
	S. 38°59' W., 0.28 chs.
	S. 2°45' E., 0.34 chs.
	S. 76°34' W., 0.98 chs.
	S. 54°37' W., 1.74 chs.
	S. 74°01' W., 0.43 chs.
	S. 55°24' W., 0.52 chs.
	S. 39°07' W., 0.27 chs.
	S. 56°47' W., 0.60 chs.
	At end of this course intersect the dividing line between the Glen
1	L Canyon National Recreation Area and the Grand Canyon National

At end of this course intersect the dividing line between the Glen Canyon National Recreation Area. and the Grand Canyon National Park, in sec. 24, on the left bank of the Colorado River; at the line of the ordinary high water mark;

Set a brass tablet, 3 1/4 ins. diam., 3 1/2 ins. stem, cemented in a drill hole, with top mkd.



Set a steel fence post in a drill hole, S. 24° E., 0.95 ft. dist.

Cor. is located on a sandstone shelf at base of cliff, 3 ft. above water level, on the left bank of the Colorado River.

Access to this corner is by boat.

Thence across Colorado River.

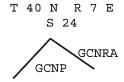
Boundary of the Glen Canyon National Resource Area, on the left bank of the Colorado River, at the ordinary high water mark, T. 40 N., R. 7 E., Gila and Salt River Meridian, Arizona

#### CHAINS

N. 29°52' W., 7.08 chs.

At end of course, the point for the mouth of the Paria River, on the right bank of the Colorado River, at the line of the ordinary high water mark.

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 25 ins. in the ground, with brass cap mkd.



2020

Set a "T" steel fence post alongside.

From this point the center of the Paria River, bears N. 58°38' E., 178 lks. dist., 315 lks. wide, course S. 12° W, at this point set a steel fence post.

From this same point, the cor. of secs. 13, 14, 23 and 24, bears N. 69°00' W., 17.26 chs. dist., monumented with a 2 ins. diam. iron post, firmly set, projecting 13 ins. above ground, with a  $2\ 1/2$  ins. diam. brass cap mkd. T40NR7E S14 S13 S23 S24 1927.

Add the marks 2020 to the brass cap.

Metes-and-Bounds Survey of a portion of the southerly right-ofway of U.S. Highway No. 89A, T. 40 N., R. 8 E., Gila and Salt River Meridian, Arizona

From angle point, bet. secs. 3 and 34 on the S. bdy. of the Tp., identical with the W. 1/16 sec. cor. of secs. 3 and 34 and the right-of-way monument of U.S. Highway No. 89A, at station point on curve 3765+57.28, hereinbefore described.

N. 89°58' E., along the south boundary of sec. 34.

3.13 Angle point, on the south boundary bet. secs. 3 and 34, hereinbefore described.

N. 51°19' E., along the southerly right-of-way of U.S. Highway No. 89A.

Angle point, in sec. 34, identical with the right-of-way monument of U.S. Highway No. 89A, at station point on curve 3755+25.59, monumented with a 3 ins. diam. brass cap, in a 9 ins. diam. concrete base, with cap mkd. P.O.C. 3755+25.59 ROB GREVE 1995, as per Arizona Department of Transportation Highway Division, right

### Metes-and-Bounds Survey of a portion of the southerly right-ofway of U.S. Highway No. 89A, T. 40 N., R. 8 E., Gila and Salt River Meridian, Arizona

	·
CHAINS	of Way Plan of the Bitter Spring-Fredonia Highway, Drawing No. D-3-T-658, Project No. F-037-3-810, Route "U.S. 89A", dated 1/27/92.
	Thence, along a non-tangent curve to the right, having a central angle of 31°01'27", a radius of 503.11 ft., the chord of said arc bears S. 75°35'14" E., 269.11 ft. dist.
	On the southerly right-of-way of U.S. Highway No. 89A
4.09	Intersection with the N. and S. center line of sec. 34.
4.13	Angle point, in sec. 34, identical with right-of-way monument of U.S. Highway No. 89A, at station point of curve 3751+98.82, hereinbefore described.
	S. 60°04' E. on the southerly right-of-way of U.S. Highway No. 89A
12.10	Angle point, in sec. 34, identical with right-of-way monument of U.S. Highway No. 89A, at station point on tangent 3744+00, hereinbefore described.
3	S. 29°47' W., on the southerly right-of-way of U.S. Highway No. 89A
.31	Angle point No. 6, sec. 34, identical with right-of-way monument of U.S. Highway No. 89A, at station point on tangent 3744+00, hereinbefore described.
	Metes-and-Bounds Survey of a portion of the northerly right-of- way of U.S. Highway No. 89A, T. 40 N., R. 8 E., Gila and Salt River Meridian, Arizona
	From angle point, on the most northerly right-of-way line, of U.S. Highway No. 89A., on the N. and S. centerline of the SW1/4, of sec. 34, hereinbefore described.
	N. 51°18' E., along the northerly right-of-way of U.S. Highway No. 89A.
12.52	Angle point, in sec. 34, on the northerly right-of-way of U.S. Highway No. 89A.
Į.	Set a brass tablet, 3 1/4 ins. diam., 3 1/2 ins. stem, cemented in a drill hole in solid rock, with top mkd.

Metes-and-Bounds Survey of a portion of the northerly right-ofway of U.S. Highway No. 89A, T. 40 N., R. 8 E., Gila and Salt River Meridian, Arizona

	River Meridian, Arizona
CHAINS	T 40 N R 7 E
i	S 34
	AP
	2020
	Set a 1/4 in. diam. rebar post, cemented in a drill hole, bears  N. 68°23' E., 4.38 lks. dist.
	Thence, along a curve to the right, having a central angle of 68°38'26", a radius of 518.30 ft., the chord of said arc bears N. 85°37'19" E., 584.47 ft. dist.
	On the northerly right-of-way of U.S. Highway No. 89A.
9.41	Angle point in sec, 34, on the northerly right-of-way of U.S. Highway No. 89A.
	Set a rebar 24 ins. long, 5/8 in. diam., in a drill hole in solid rock, projecting 6 ins. above ground, built a collar stone to top, with a 2 ins. diam. brass cap mkd.
	T 40 N R 7 E S34
	AP
	2020
	Set a 4 ft. long 'U' post, bears N. 57°31' E., 4.43 lks. dist.
	S. 60°04' E., along the northerly right-of-way of U.S. Highway No. 89A.
1.65	Intersection with the N. and S. center line of sec. 34.
11.73	Angle point, in sec. 34, at station, point on tangent 3745+70.69 P.O.T. right 200', not monumented.
	From this point, set a "T" steel fence post, bears S. 60°04' E., 2 chs. dist.

# GENERAL DESCRIPTION CHAINS This survey is situated approximately 11 miles southwesterly from Page, Arizona. The land is generally vast and open, with very little timber, with elevation ranging from approximately 3,000 ft. to 4,015 ft. above sea level in the vicinity of this survey. No mineral deposit or activity was noted during the course of the survey. The mean magnetic declination of 10 1/4° E. was derived from the United States Geological Survey computer program GEOMAG, utilizing the World Magnetic Model for Epoch 2020 for the dates of survey. Note: In the SE1/4SW1/4 of sec. 34, a portion of the N.P.S. land, approximately $\pm$ 0.18 acres, is being utilized by Marble Canyon Lodge as a parking lot.

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

### FIELD ASSISTANTS

NAMES	CAPA	CITY
Mark R. Searles	Survey	Technician
Charles E. Besancon III	Survey	Technician
	:	

#### CERTIFICATE OF SURVEY

I, Rosendo Ramos Serrano, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the day of 1st day of June, 2020, I have dependently resurveyed a portion of the east boundary, south boundary, portions of the subdivisional lines, the subdivision of sections 33 and 34, the survey of the boundary of the Glen Canyon National Recreation Area, the establishment of the dividing line between Grand Canyon National Park and Glen Canyon National Recreation Area, across the Colorado River and the metesand-bounds survey of a portion of the right-of-way, of U.S. Highway No. 89A of Township 40 North, Range 7 East, 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, 2009, and in specific manner described in the foregoing field notes.

8-16-2021	
(Date)	(Cadastral Surveyor)

#### CERTIFICATE OF APPROVAL

**A** 

BUREAU OF LAND MANAGEMENT Phoenix, Arizona

The foregoing field notes of the dependent resurvey of a portion of the east boundary, south boundary, portions of the subdivisional lines, the subdivision of sections 33 and 34, the survey of the boundary of the Glen Canyon National Recreation Area, the establishment of the dividing line between Grand Canyon National Park and Glen Canyon National Recreation Area, across the Colorado River and the metes-and-bounds survey of a portion of the right-of-way, of U.S. Highway No. 89A of Township 40 North, Range 7 East, Gila and Salt River, Arizona., executed by Rosendo Ramos Serrano, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

8/17/2021	Mak Male
(Date)	(Chief Cadastral Surveyor of Arizona)
	CERTIFICATE OF TRANSCRIPT
	<u></u>
<del>-</del>	ng transcript of the field notes of the above described North, Range 7 East, Gila and Salt River Meridian,
_	f the original field notes.
(Date)	(Chief Cadastral Surveyor of Arizona)