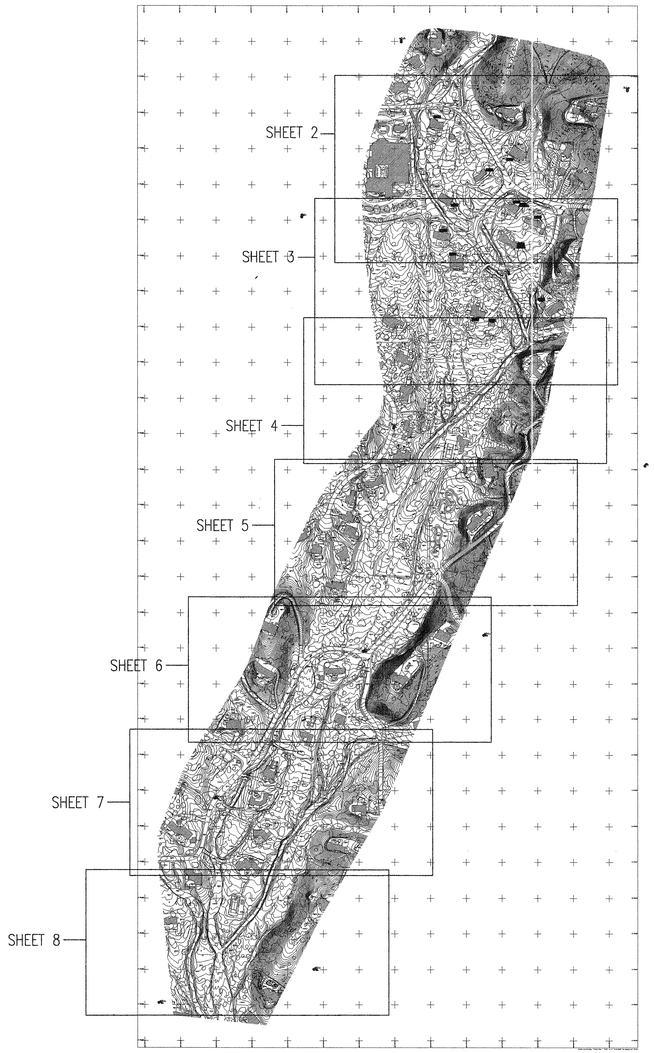


N

FEET
0 400 800 1200 1600

1"=400 FEET
CONTOUR INTERVAL = 1 FOOT

Legend

CPT △ 2631.27	Control point with elevation
○ MON	Survey pin
⊠ SM	Survey monument
(11)	Point number – see Control Table

Notes

1. BASIS OF BEARING – is the Arizona State Plane Grid, Central Zone. State Plane coordinates were derived by a single unconstrained adjustment of Locus L1 static occupations of two existing PAG GIS points and the photogrammetric control. State Plane coordinates do not meet Arizona Statute standards.

   PAG GIS – Pima County Association of Government Geographic Information System
   RTK – Real Time Kinematic (dual frequency) positioning

   Basis of coordinates is Pima County Association of Government Geographic Information System Point NN–23 – 472781.099N, 1016294.820E (NAD83) The Control Table lists GROUND coordinates which were produced by using a single combined Scale Factor of 1.0001067 on surveyed control points.

2. Basis of Elevations is a stainless steel rod in casing at north end of bullnose at the intersection of Calle Barril and Swan Road (NN–23). Elevation = 2643.80 (NAVD88)
   Elevations in the Control Table with "(levels)" are by differential leveling, remaining elevations by static GPS observations.

   Elevations in the Control Table are NAVD88 per Pima County GIS. Three RM benchmarks were recovered as described in adjacent FIRM panels 1643 and 1644. GPS observations of these 3 RM's average 2.00 feet lower to equal NGVD29.

3. The purpose of this survey is to provide topographic mapping for a hydrology study within the mapping limits. The FFE (finish floor elevation) shown at selected homes were surveyed by differential leveling.

4. Photogrammetric control provided by Cardinal Land Surveying. Aerial mapping done by Sun Mapping at 1"=40', 1' CI (Job #071012). Information is available in Autocad R14 .DWG file format. Flight date 11/01/2007.

   This is an electronic copy of final document, original sealed document is with Cardinal Land Surveying, Michael D. Owens – RLS #31030.

Control Table

	N	E	EL	DESCRIPTION
1	474867.264	1016505.224	2689.14	BCSM "PCDOT R/W CONSTR" GIS L17 (levels)
2	472831.545	1016403.259	2643.80	FOUND STAINLESS STEEL ROD IN CASING(NN23)
3	472994.826	1015711.094	2640.30	SET BRIDGE SPIKE RANDOM (levels)
4	471883.568	1015505.901	2610.53	BCSM IN CONCRETE "RLS 4527"(levels)
5	470010.886	1014554.551	2537.83	SET MAG NAIL RANDOM IN AC(levels)
6	469819.386	1013688.345	2521.78	SET BRIDGE SPIKE RANDOM
7	470967.857	1013999.514	2539.88	SET MAG NAIL/SHINER RANDOM
8	473043.074	1014992.306	2602.85	BCSM WITH PUNCH, "PE 1322"
9	474231.029	1014477.484	2635.91	SET BRIDGE SPIKE RANDOM
10	475215.975	1015030.796	2666.99	SET BRIDGE SPIKE RANDOM
11	474941.103	1016310.890	2732.39	SET BRIDGE SPIKE RANDOM
12	473918.361	1015631.613	2624.05	SET MAG NAIL/WASHER "CONTROL POINT RLS31030" (levels)
13	471792.225	1014831.485	2568.78	SET BRIDGE SPIKE RANDOM(levels)

(Divide all coordinates by Scale Factor to equal PAG GIS "State Plane")

FFE Elevations

ELEVATION (NAVD88)	ADDRESS
2651.46	4510 Calle del Pantera
2648.78	4525 Calle del Pantera
2643.30	4520 Calle del Pantera
2635.54	4540 Calle del Pantera
2635.17	" Sunken living room
2632.26	4560 Calle del Pantera
2630.73	4565 Cerco del Corazon
2629.55	" Bedroom addition
2622.98	4580 Cerco del Corazon
2621.78	4560 Cerco del Corazon
2617.9	" Carport
2630.75	4550 Cerco del Corazon
2736.19	4540 Cerco del Corazon
2639.71	4530 Cerco del Corazon

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
31030
MICHAEL D.
OWENS
Date Signed 12/6/07
ARIZONA U.S.A.

TOPOGRAPHIC SURVEY

FLECHA CAIDA #9 AND VICINITY

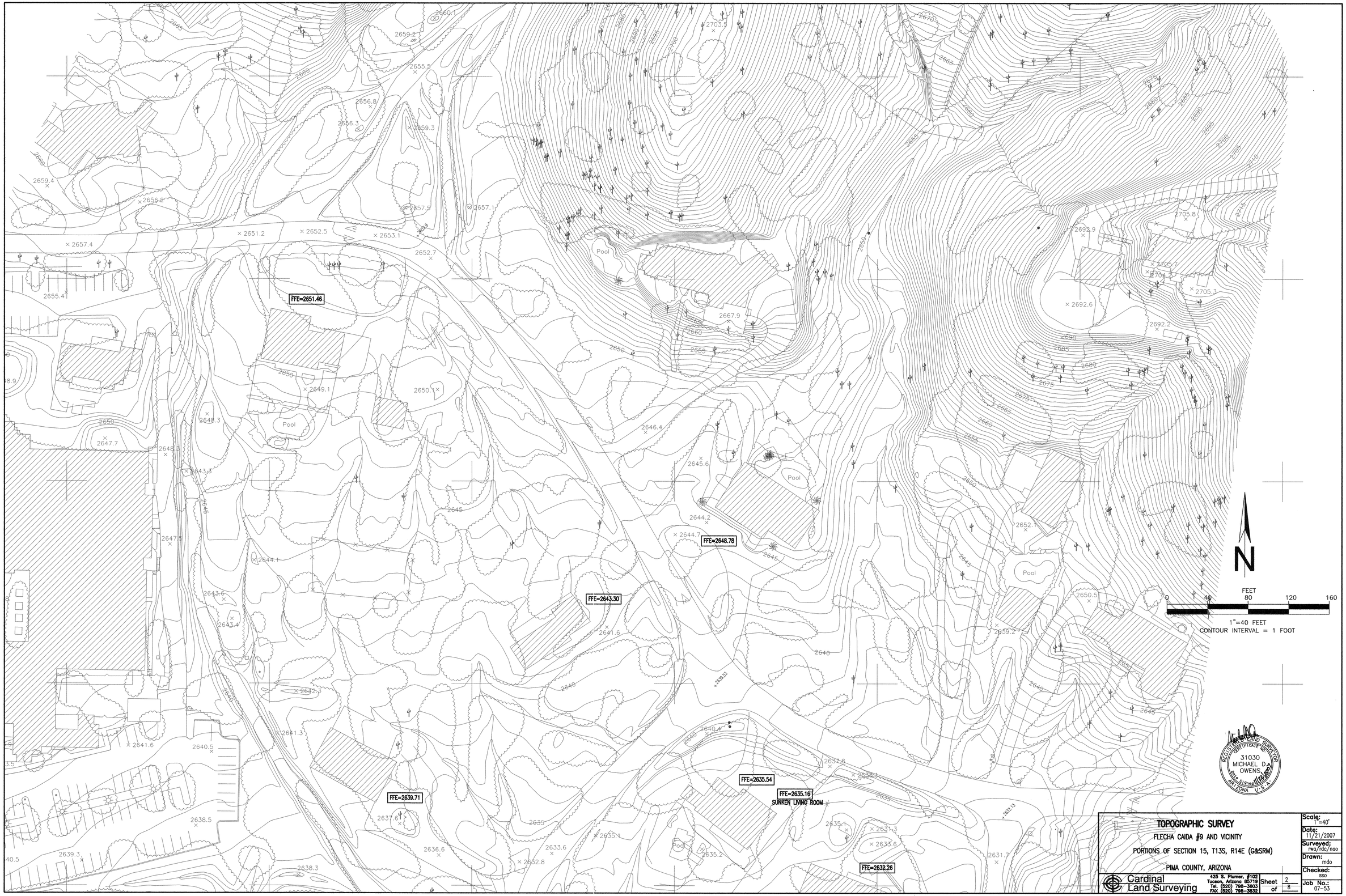
PORTIONS OF SECTION 15, T13S, R14E (G&SRM)

PIMA COUNTY, ARIZONA

Cardinal Land Surveying
425 S. Plumer, #102
Tucson, Arizona 85719
Tel. (520) 798-3603
FAX (520) 798-3832

Sheet 1 of 8

Scale: 1"=400'
Date: 11/21/2007
Surveyed: rwa/rdc/mao
Drawn: mdo
Checked: sso
Job No.: 07-53



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Sheet 2 of 8

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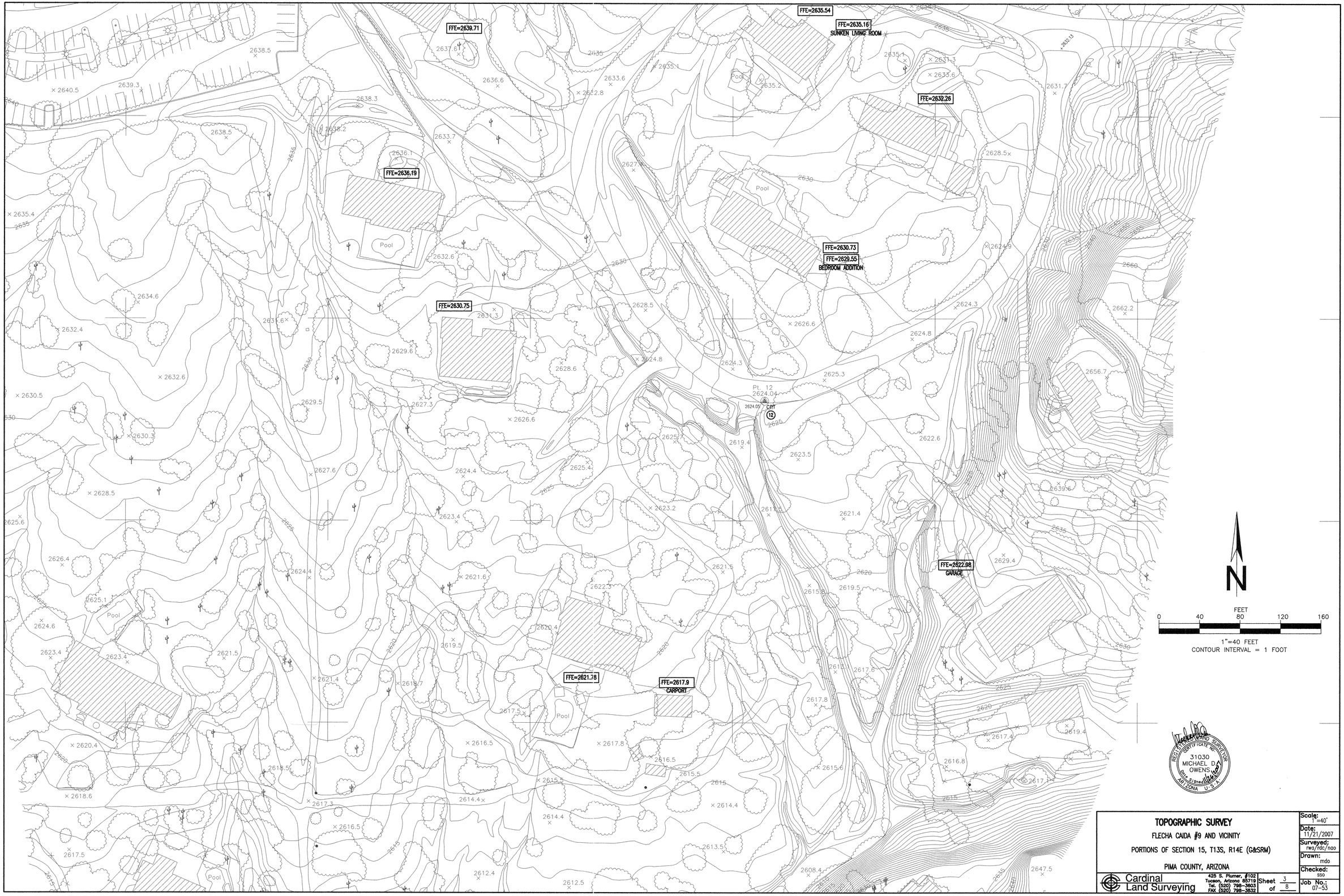

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Sheet 3 of 8

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Sheet 4 of 8

Scale:	1"=40'
Date:	11/21/2007
Surveyed:	rwa/rdc/nao
Drawn:	mdo
Checked:	sso
Job No.:	07-53

N

FEET
0 40 80 120 160

1"=40 FEET
CONTOUR INTERVAL = 1 FOOT

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Sheet 5 of 8

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N

FEET
0 40 80 120 160

1"=40 FEET
CONTOUR INTERVAL = 1 FOOT

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Sheet 6 of 8

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N

FEET
0 40 80 120 160

1"=40 FEET
CONTOUR INTERVAL = 1 FOOT

Pt. 7
2539.88
7 CPT
2539.88

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Checked:	sso
Job No.:	07-53

N

FEET
0 40 80 120 160

1"=40 FEET
CONTOUR INTERVAL = 1 FOOT

N 470,400

N 470,200

N 470,000

N 469,800

2527.6
2535.3
2536.1
2532.6
2526.6
2528.7
2531.4
2530
2529.7
× 2524.8
2529.2
2531.5
2560.3
2568.9
2568.3
2565.2
× 2564.3
2563.5
2527.3
2526.9
2523.6
2523.2
2522.5
2521.3
2520.7
2520
× 2515.7
2553.7
Pt. 5
2537.83
CPT
2537.83
2550
2547.4
2544.5
2545.4
2540.7
× 2541.5
× 2542.2
2535.4
Pool
25 5.6
2511.4
Pt. 6
2521.78
CPT
2521.78
× 2516.5
2520.1
M.H.
2513.5
Pool

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