



May 19, 2017

To: Mr. George Burton  
Planner  
**Town of Paradise Valley**  
6401 E Lincoln Drive  
Paradise Valley, AZ 85253

Re: **6199 N 44<sup>th</sup> Street – Hillside Application – Site Drainage Improvements**  
**Marsoner Residence**  
**LDG Project #1608081**

## **PROJECT NARRATIVE**

Dear Mr. Burton:

In accordance with the Town of Paradise Valley Hillside Ordinance, we have prepared this submittal package that covers proposed site drainage improvements on the subject property, located at 6199 N 44<sup>th</sup> Street, Paradise Valley, AZ 85253, parcel 169-20-115, being a portion of the SW  $\frac{1}{4}$  of Section 7, Township 2 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona.

The property is surrounded by streets on its north, east and west sides and large residential lot on the south side. There is an existing 10,153 s.f. single family residence constructed in 2004-2005. Original survey and civil plans prepared in 2003 by Land Survey Services, PLLC and Gannet Fleming, Inc are enclosed in this submittal. Based on our review of these plans and the historic aerial topography maps, there are no washes that existed on this property. The lot is covered with native vegetation. The existing terrain slopes northeasterly with an average slope of 15%, which is similar to the slopes, prior to the construction of the house. No offsite flows enter the subject property. Ultimate outfall of the site is located at the northeasterly property corner at an elevation of 1348.25. The original Grading and Drainage plan that was approved by the Town of Paradise Valley proposed the sheet flows to be routed around the house perimeter via swales and piping. Riprap at each point of pipe discharge and in a portion of the swales was specified as well. As seen on the historic aerial photos, the amount of erosion control that was installed on site was not sufficient to address the site generated runoff. During storms, great amounts of silt and debris washed out from the site onto the public streets, near the intersection of Valley Vista Lane and 44<sup>th</sup> Place.

The owner of the property hired a licensed landscape contractor to address the existing erosion issues on site and to mitigate the drainage impact to the Town's right-of-way and neighboring properties downstream by placing riprap rock and creating artificial swales. Unfortunately, the work that was done in 2015 was with no engineering or permitting through the Town.

As of now the Owner was presented with two choices - to either put back everything as it is shown on the original plans or to permit all work that was completed. Based on a feedback from the Hillside Committee members and requests from the property owner of 4424 E Valley Vista Ln, we were left with the only option to prepare grading, drainage and restoration plan and bring the grades back to their pre-disturbed condition.

A surface water test conducted on March 15<sup>th</sup>, 2017 by the Town of Paradise Valley Public Works crew. Water was sprayed on the pavement of 44<sup>th</sup> Street, Valley Vista Lane, and 44<sup>th</sup> Place. Water test cannot create conditions similar to 100-year design storm event, however it could clearly identify existing diversions, flow splits and confirm location of the ultimate outfall.

Water test was witnessed by the Town's officials, homeowners of 6199 N 44<sup>th</sup> Street and 4424 E Valley Vista Ln, LDG and Gookin engineers. There were no evident diversions of the historic flows observed. Improvements of 6199 N 44<sup>th</sup> Street property do not have an adverse impact to downstream properties. The runoff ultimately reaches a point west of the driveway entrance of 4424 E Valley Vista Ln. The entire test was video recorded and a disc was provided to Mr. Richard Edwards.

## Drainage Narrative

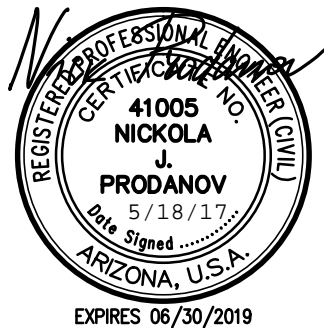
Site is located in FEMA Flood Zone "X" according to Flood Insurance Rate Map (FIRM) #: 04013C, Panel 1765 of 4425, Suffix L, dated October 16th, 2013, as published by FEMA. The FIRM Panel defines Zone "X" as follows: "Areas determined to be outside the 0.2% annual chance floodplain".

At each point of discharge, rock outlet structures are proposed as energy dissipaters. Rock outlet structures will be installed with harvested from the site large boulders for erosion protection and to minimize the visual impact of the pipe opening. Existing riprap will be removed from the site. Historic drainage patterns and magnitudes will be restored and preserved.

On-site retention with 50% reduction coefficient as directed by the Town Engineer is provided near the site outfall. This retention basin will attenuate the flows and will mitigate the amount of silt that currently leaves the property.

In conclusion, the project site has the potential to collect, convey and discharge runoff safely and effectively. The proposed improvements reduce the drainage impact to the neighboring lots downstream and will not result in changes to the existing and historic drainage patterns or magnitudes.

Respectfully Submitted,



Nick Prodanov, PE, PMP  
Principal

**Land Development Group, LLC**

### Enclosures:

- Maps and Photos Exhibits
- Topographic Survey
- Grading and Drainage Plan
- Previously Approved Civil Plans
- Aerial Map with Proposed Improvements



1959 AERIAL MAP

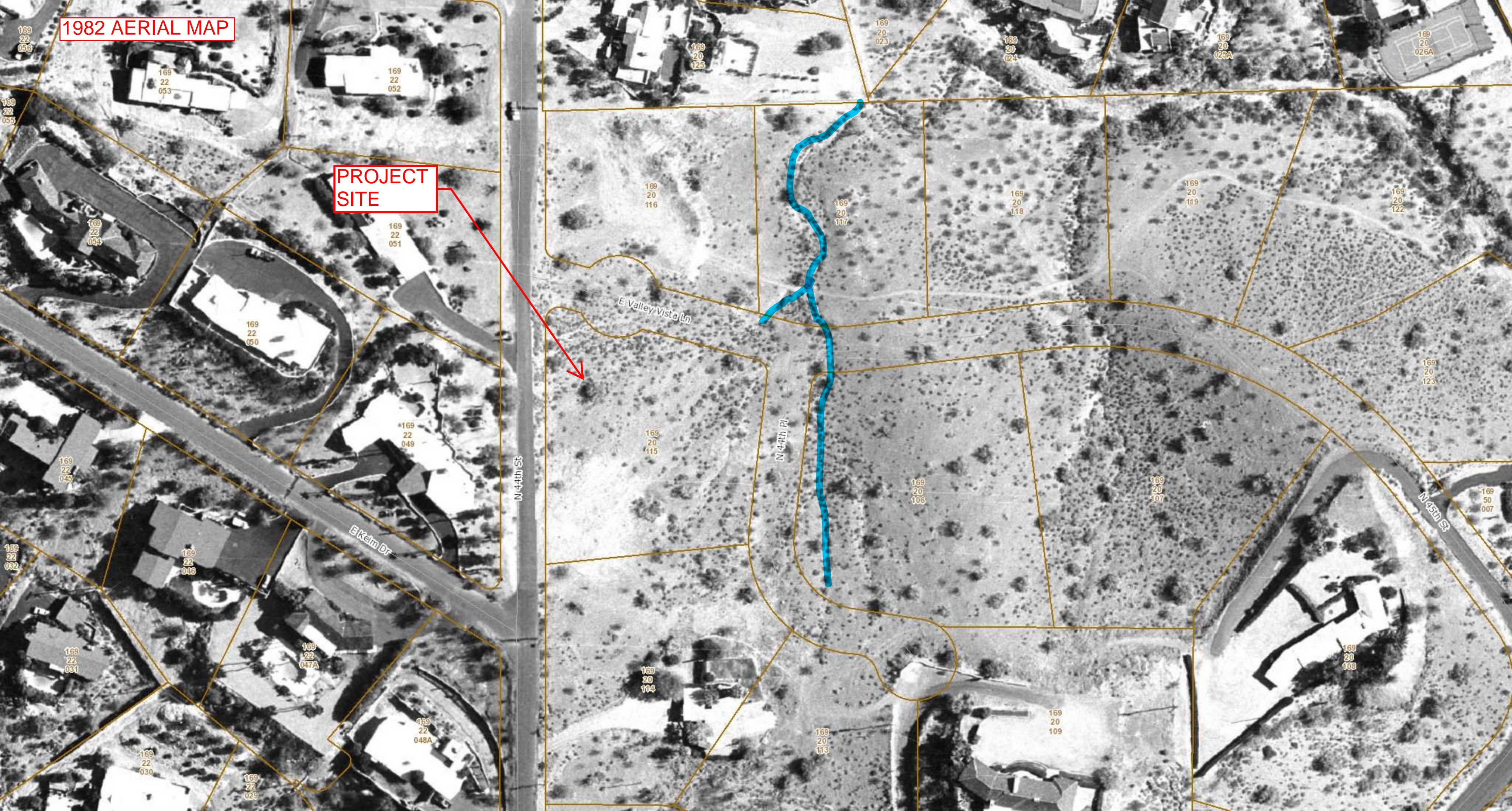
PROJECT  
SITE





1982 AERIAL MAP

PROJECT  
SITE





1999 AERIAL MAP

PROJECT  
SITE





2002 AERIAL MAP

PROJECT  
SITE





## 2004 AERIAL MAP

PROJECT  
SITE



2006 AERIAL MAP

PROJECT  
SITE





2010 AERIAL MAP

PROJECT  
SITE





2011 AERIAL MAP

PROJECT  
SITE





**2013 AERIAL AND TOPOGRAPHY MAP**

**PROJECT SITE**

The map displays a residential neighborhood with various properties and streets. Key features include:

- Streets:** E Valley Vista Ln, N 44th St, E Kalm Dr, and N 45th St.
- Topography:** Elevation contours are shown in green, with values ranging from 1320 to 1410 feet.
- Property Lines:** Yellow lines delineate individual lots and parcels.
- Project Site:** A red arrow points to a specific lot located at the intersection of E Valley Vista Ln and N 44th St.
- Surrounding Properties:** Numerous other residential lots are visible, many with swimming pools and tennis courts.

[illegible]



GOOGLE STREET VIEW  
2008

PROJECT  
SITE





GOOGLE STREET VIEW  
2011

PROJECT  
SITE





GOOGLE STREET VIEW  
2014

PROJECT  
SITE



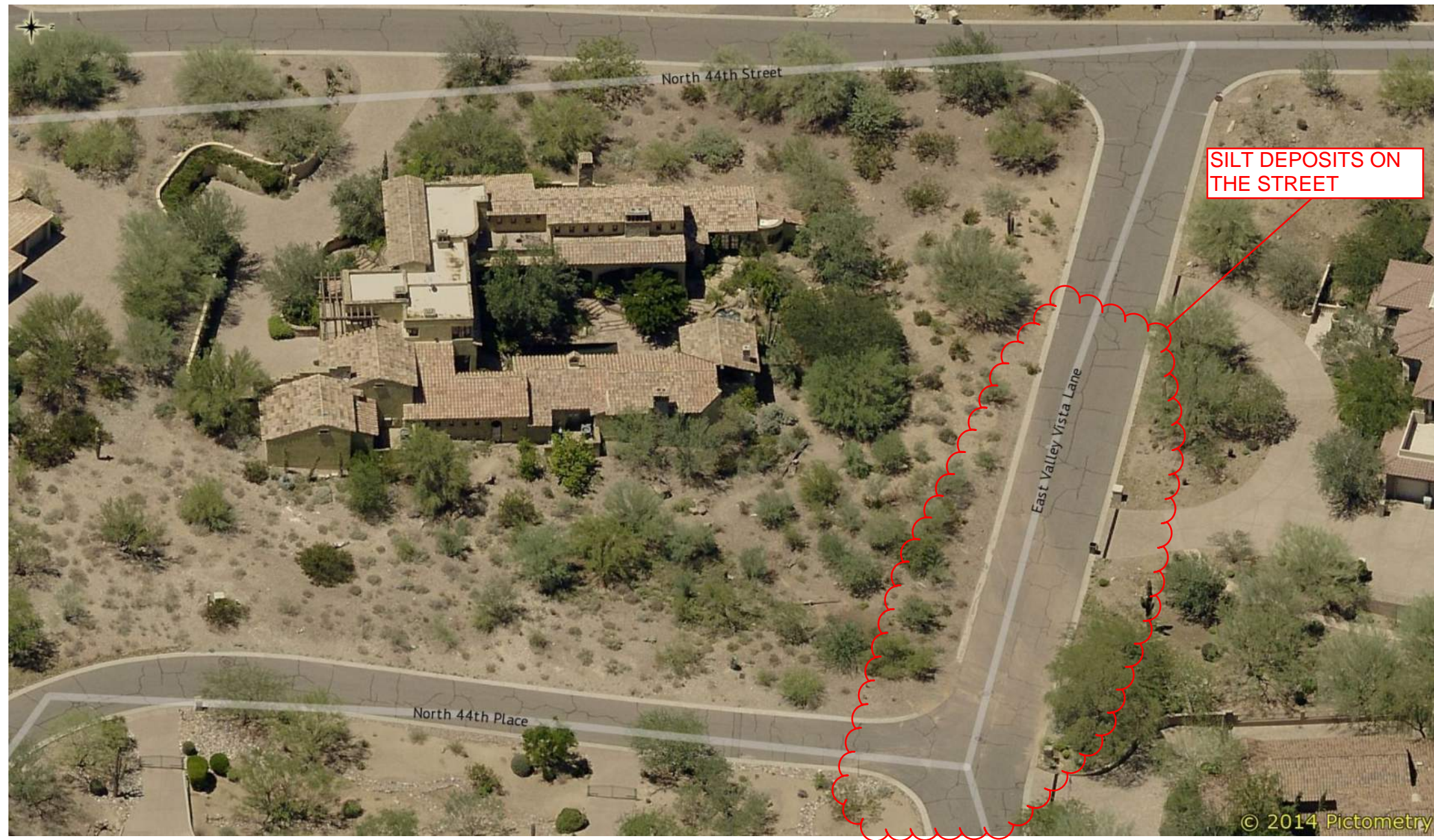


# 2006 Aerial NE





# 2014 Aerial NE



08/20/2014



FOUND BRASS CAP IN HANDHOLE

PRAYING MONK VIEW ESTATES  
BOOK 158 - PAGE 49

VILLA MADEROS del CUENTA  
BOOK 127 - PAGE 2

# FINAL PLAT 375-04

## THE SANCTUARY

### A HILLSIDE SUBDIVISION

A SUBDIVISION OF A PORTION OF LOT 11, SECTION 1, T.2 N., R.4 E.,  
G. & S.R.B. & M., MARICOPA COUNTY, ARIZONA.

#### DEDICATION:

State of Arizona ss.  
County of Maricopa ss.

KNOW ALL MEN BY THESE PRESENTS: THAT ROSALEE ARIZONA CACTUS, INC., A DELAWARE CORPORATION, AS LEGAL OWNER OF SAID REAL PROPERTY, HAS SUBDIVIDED UNDER THE NAME OF 'THE SANCTUARY', A PORTION OF LOT 11, SECTION 1, T.2 N., R.4 E., G. & S.R.B. & M., MARICOPA COUNTY, ARIZONA, AS SHOWN AND PLATTED HEREON, AND HEREBY PUBLISHES THIS PLAT AND HEREBY DECLARES THAT THIS PLAT SETS FORTH THE LOCATION AND GIVES THE DIMENSIONS OF THE LOTS AND STREETS CONSTITUTING SAME AND THAT EACH LOT AND STREET SHALL BE KNOWN BY THE NUMBER OR NAME GIVEN TO EACH RESPECTIVELY ON THIS PLAT, AND HEREBY DEDICATES AND GRANTS TO THE TOWN OF PARADISE VALLEY THE STREETS AND RIGHTS OF WAY SHOWN ON THIS PLAT AND INCLUDED IN THE ABOVE DESCRIBED PREMISES. EASEMENTS ARE HEREBY DEDICATED FOR THE PURPOSES SHOWN.

SCALE: 1"=80'

STATE OF ARIZONA ss.  
County of Maricopa ss.  
I hereby certify that the within instrument was filed and recorded at request of  
Town of Paradise Valley  
4-21-94 4:42  
in Book 375  
on page 4  
Witness my hand and official seal the day and year aforesaid.  
Helen Dorell County Recorder  
By John P. Miller Deputy Recorder  
94-352460 RECORDING NUMBER

IN WITNESS WHEREOF: ROSALEE ARIZONA CACTUS, INC., AS OWNER, HAS HEREUNTO CAUSED ITS CORPORATE NAME TO BE AFFIXED BY THE UNDERSIGNED OFFICER, THEREUNTO DULY AUTHORIZED THIS 15<sup>th</sup> DAY OF MARCH, 1994.

BY: [Signature] ATTEST: [Signature]

#### ACKNOWLEDGEMENTS:

State of Arizona ss.  
County of Maricopa ss.

THIS 15<sup>th</sup> DAY OF MARCH, 1994, THE FOLLOWING PERSONS PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC: DAVID J. KLEIN AND JOHN P. MILLER WHO ACKNOWLEDGED (S) THEMSELVES TO BE OFFICERS OF THE TOWN OF PARADISE VALLEY AND ACKNOWLEDGED (S) THEMSELVES TO BE THE LEGAL OWNERS OF THE PROPERTY PLATTED HEREON, AND ACKNOWLEDGED (S) THAT THEY AS LEGAL OWNER, EXECUTED THIS INSTRUMENT FOR THE PURPOSES HEREIN CONTAINED.

IN WITNESS WHEREOF: I HERETO SET MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: 9/30/97 FRED E. FLEET NOTARY PUBLIC

#### RATIFICATION:

State Savings Bank, FSB  
AS MORTGAGEE(S) OF THE SANCTUARY, HEREBY RATIFIES, APPROVES AND ACQUIRES IN THE DEDICATIONS AS STATED IN THIS DEDICATION.

BY: John P. Miller A.P.

#### ACKNOWLEDGEMENT:

State of Arizona ss.  
County of Maricopa ss.

THIS 23<sup>rd</sup> DAY OF MARCH, 1994, THE FOLLOWING PERSONS PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC: John P. Miller AND Julie M. Griffin WHO ACKNOWLEDGED (S) THEMSELVES TO BE OFFICERS OF THE TOWN OF PARADISE VALLEY AND ACKNOWLEDGED (S) THAT THEY AS LEGAL OWNER, EXECUTED THIS INSTRUMENT FOR THE PURPOSES HEREIN CONTAINED BY SIGNING THE NAME OF AS.

IN WITNESS WHEREOF: I HERETO SET MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: 9-9-97 Julie M. Griffin NOTARY PUBLIC

#### CERTIFICATION:

THIS IS TO CERTIFY THAT (1) THE SURVEY OF THE PREMISES DESCRIBED AND PLATTED HEREIN WAS MADE UNDER MY DIRECTION DURING THE MONTH OF SEPTEMBER, 1993, AND (2) THIS PLAT IS CORRECT AND ACCURATE, AND (3) THE MONUMENT OR MONUMENTS SHOWN HEREIN HAVE BEEN LOCATED AS DESCRIBED.

BY: [Signature] REGISTERED LAND SURVEYOR

#### APPROVAL:

APPROVED BY THE TOWN COUNCIL OF THE TOWN OF PARADISE VALLEY, ARIZONA, THIS 10<sup>th</sup> DAY OF MARCH, 1994.

BY: Joan Horne MAYOR ATTEST: Anne Hancock TOWN CLERK  
John C. Miller 4/15/94 [Signature] 4/15/94  
TOWN ENGINEER PLANNING DIRECTOR

GROSS AREA  
26.30 ACRES

CASTRO • FLEET ENGINEERING, INC.  
1702 EAST HIGHLAND AVENUE, #200 - PHOENIX, ARIZONA 85016 - PHONE (602) 264-3335

Sheet  
1/3

FOOTHILLS UNIT 2  
BOOK 12 - PAGE 14

14

— INDICATES FOUND 1/2" REBAR (UNLESS NOTED OTHERWISE).  
— INDICATES FOUND 3/4" IRON PIPE (UNLESS NOTED OTHERWISE).

CURVE DATA TABLE					
C 1	R: 12.00'	L: 15.11'	T: 9.21'	Δ: 15°00'00"	
C 2	R: 12.00'	L: 21.39'	T: 15.64'	Δ: 105°00'00"	
C 3	R: 45.00'	L: 89.36'	T: 67.35'	Δ: 112°30'21"	
C 4	R: 45.00'	L: 89.36'	T: 67.35'	Δ: 112°30'21"	
C 5	R: 200.00'	L: 77.37'	T: 39.17'	Δ: 22°09'51"	
C 6	R: 120.00'	L: 17.11'	T: 10.38'	Δ: 81°42'57"	
C 7	R: 12.00'	L: 18.18'	T: 11.35'	Δ: 86°41'53"	
C 8	R: 120.00'	L: 154.83'	T: 91.18'	Δ: 88°42'39"	
C 9	R: 20.00'	L: 23.52'	T: 13.33'	Δ: 61°22'48"	
C 10	R: 45.00'	L: 89.36'	T: 67.35'	Δ: 247°22'48"	
C 11	R: 45.00'	L: 89.36'	T: 67.35'	Δ: 112°30'26"	

#### DRAINAGE EASEMENT RESTRICTIONS:

PURSUANT TO A.R.S. 9-463.01(C), AND ARTICLE 6-4 (E) (J) AND SECTION 6-3-8 OF THE CODE OF ORDINANCES OF THE TOWN OF PARADISE VALLEY, DRAINAGE EASEMENTS ARE FOR THE PURPOSES OF ALLOWING STORM, FLOOD AND OTHER WATERS TO PASS OVER, UNDER OR THROUGH THE LAND SET ASIDE FOR THE EASEMENT AND NOTHING WHICH MAY, TO ANY DEGREE, IMPEDE THE FLOW OF SUCH WATERS SHALL BE CONSTRUCTED, PLACED, PLANTED, OR ALLOWED TO GROW ON OR IN SUCH EASEMENTS. THE MAINTENANCE AND CLEARING OF THESE DRAINAGE EASEMENTS SHALL BE THE SOLE RESPONSIBILITY AND DUTY OF THE OWNER OF THE PROPERTY ON WHICH SAID EASEMENTS ARE PLATTED. HOWEVER, THE TOWN OF PARADISE VALLEY, A MUNICIPAL CORPORATION, MAY, IF THE TOWN DEEMS IT TO BE IN THE BEST INTERESTS OF THE HEALTH, SAFETY, OR WELFARE OF THE TOWN OF PARADISE VALLEY, CONSTRUCT AND/OR MAINTAIN DRAINAGE FACILITIES ON OR UNDER SUCH EASEMENTS. AGENTS AND EMPLOYEES OF THE TOWN OF PARADISE VALLEY SHALL HAVE FREE ACCESS TO AND FROM ALL PORTIONS OF SUCH EASEMENTS AT ALL TIMES.

#### NOTICE REGARDING WATER SUPPLY:

ON JUNE 9TH, 1993, THE ARIZONA DEPARTMENT OF WATER RESOURCES DESIGNATED PARADISE VALLEY WATER COMPANY AS A DESIGNATED WATER SERVICE AREA WHERE AN ASSURED WATER SUPPLY EXISTS.

#### BENCH MARK:

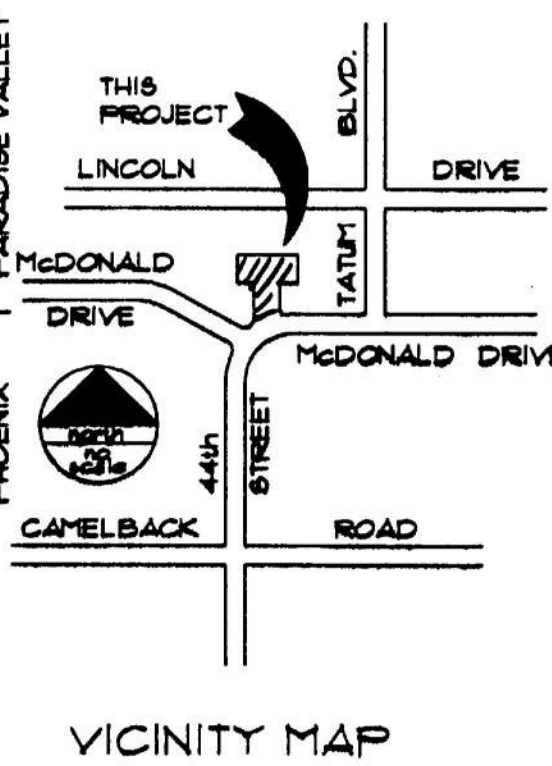
BRASS CAP AT THE INTERSECTION OF 44th STREET & McDONALD DRIVE  
ELEVATION = 1310.29

#### NOTE:

ALL FINISHED FLOORS ARE TO BE A MINIMUM OF 12" ABOVE SURROUNDING TERRAIN PER SECTION 1024 OF THE TOWN OF PARADISE VALLEY ZONING ORDANCE

FOUND 1/2" REBAR  
SE CORNER CAMELHEAD VISTA  
AND SE CORNER LOT 11, SECTION 1, T.2 N., R.4 E.

FOUND BRASS CAP  
0.07' N, 14.95' E  
SE CORNER LOT 11,  
SECTION 1, T.2 N., R.4 E.

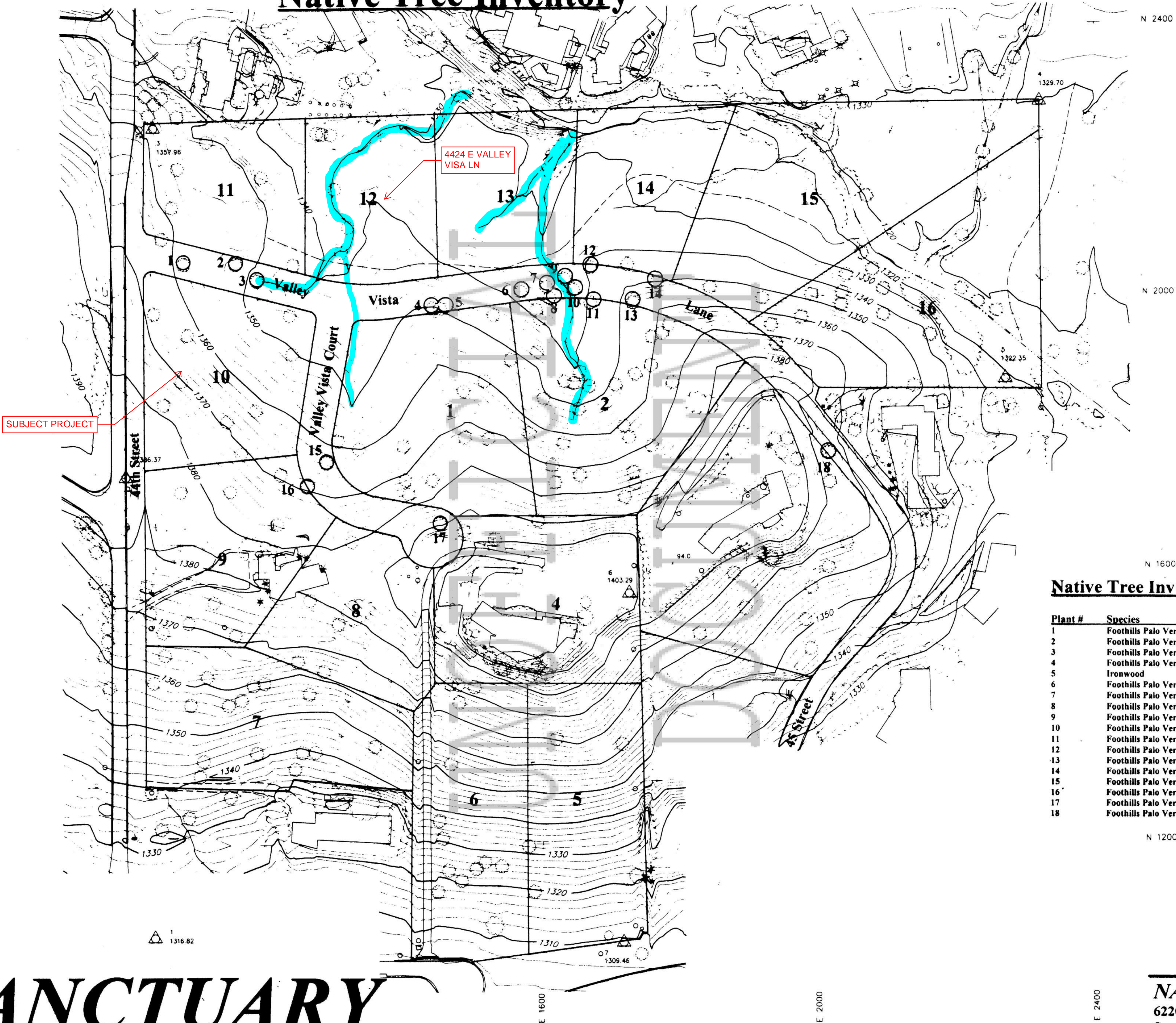




STATE OF ARIZONA | SS  
County of Maricopa  
I hereby certify that the within  
instrument was filed and recorded  
at request of  
*County of Paradise Valley*  
4-21-94 4:42  
in Book 375  
on page 4  
Witness my hand and official  
seal the day and year aforesaid.  
Helen Powell County Recorder  
By *L. Mary Ward* Deputy Recorder  
94-323460  
RECORDING NUMBER

RECORDER ORIGINAL

Native Tree Inventory



Native Tree Inventory Plant List

Plant #	Species	Diameter	Salvagable
1	Foothills Palo Verde	8"	No(unhealthy)
2	Foothills Palo Verde	12"	Yes
3	Foothills Palo Verde	12"	No(unstable)
4	Foothills Palo Verde	3"	Yes
5	Ironwood	8"	Yes
6	Foothills Palo Verde	8"	Yes
7	Foothills Palo Verde	8"	No(unhealthy)
8	Foothills Palo Verde	8"	Yes
9	Foothills Palo Verde	6"	No(unstable)
10	Foothills Palo Verde	8"	No(unstable)
11	Foothills Palo Verde	8"	No(unstable)
12	Foothills Palo Verde	12"	No(unstable)
13	Foothills Palo Verde	12"	Yes
14	Foothills Palo Verde	8"	Yes
15	Foothills Palo Verde	12"	No(unhealthy)
16	Foothills Palo Verde	8"	No(too steep)
17	Foothills Palo Verde	8"	No(too steep)
18	Foothills Palo Verde	6"	No(unstable)

THE  
SANCTUARY

APPROXIMATELY  
30 ACRES

NASH & ASSOCIATES, INC.  
6220 East Thomas Road, Suite 301  
Scottsdale, Arizona 85251  
(602) 949-0344 Fax (602) 949-9823  
Date: 6/27/93 Drawn By: JC Checked By: JN  
Revisions: 10/20/93 11/17/93 11/21/93 Job No. FDC-375

0 40' 80' 160'  
JOB NO. 930436

KENNEY AERIAL

Sheet  
3/3