



February 6, 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 by 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 runoff. This caused great amounts of silt and debris to be 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 to as is shown on the original plans or to permit all work that was completed. Our firm was retained to evaluate these options and after thorough review of the existing and historic conditions, we believe that certain site drainage improvements, as shown on our plans, would benefit not only the subject properties but the Town as well. In addition our plans show some of disturbed areas to be restored and revegetated to their historic conditions. We presented our plan during a site meeting with Mr. Richard Edwards on October 26<sup>th</sup>, 2016.

## 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 excessive riprap will be removed from the site. Riprap that will remain on site will be set in colored concrete to blend in with the surrounding native desert colors typical for the subject site. Historic drainage patterns and magnitudes are restored and preserved.

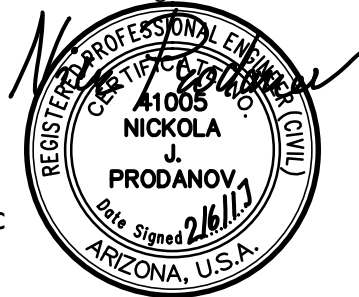
On-site retention with 50% reduction coefficient as directed by the Town Engineer is provided near the site outfall. This retention basin will attenuate the flows that currently leave the site and will keep the silt on site instead of depositing onto the street right-of-way.

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 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

EXPIRES 06/30/2019



1959 AERIAL MAP

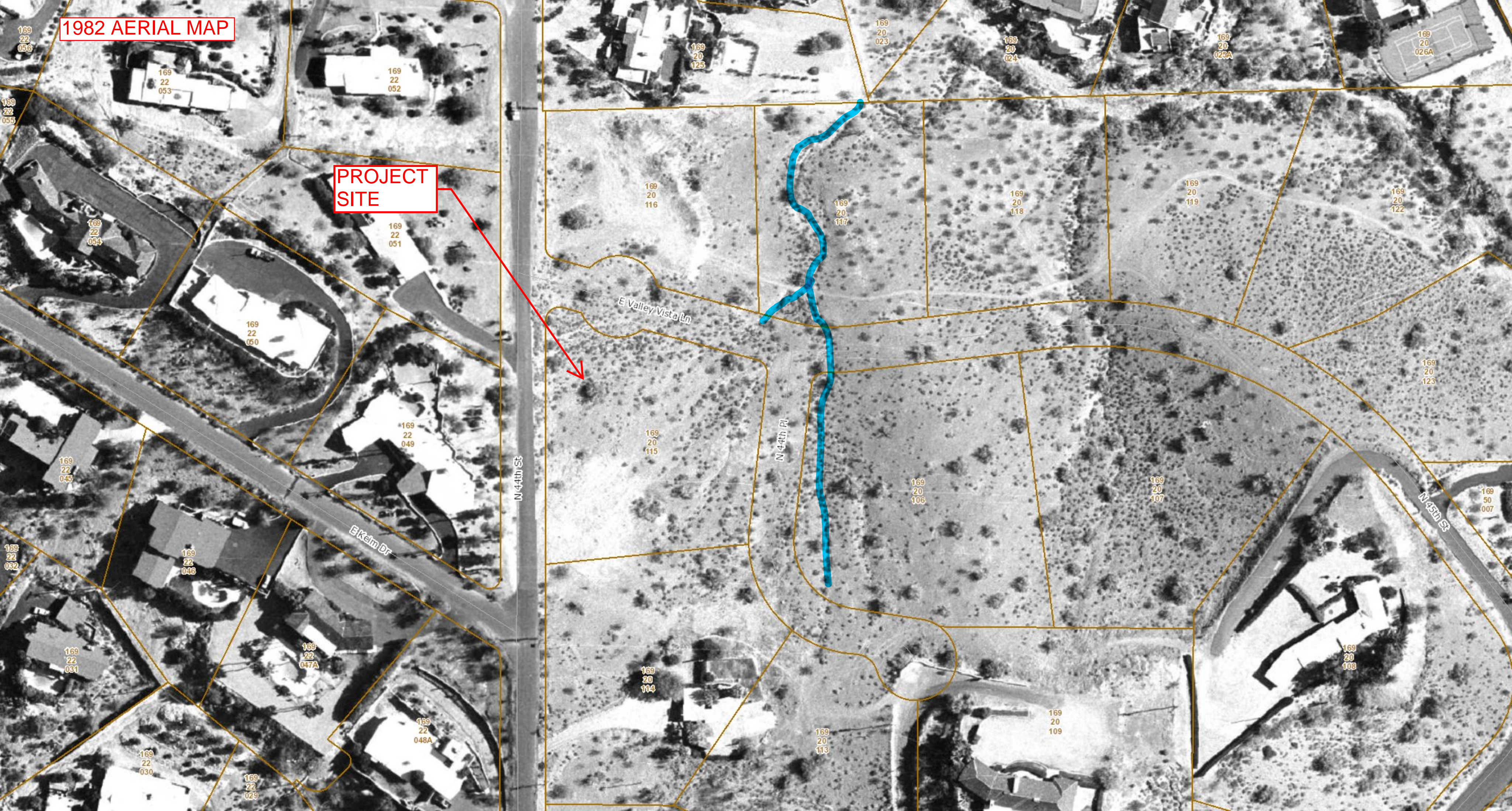
PROJECT  
SITE





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









2011 AERIAL MAP

PROJECT  
SITE





2013 AERIAL AND  
TOPOGRAPHY  
MAP

PROJECT  
SITE





GOOGLE STREET VIEW  
2008

PROJECT  
SITE





GOOGLE STREET VIEW  
2011

PROJECT  
SITE





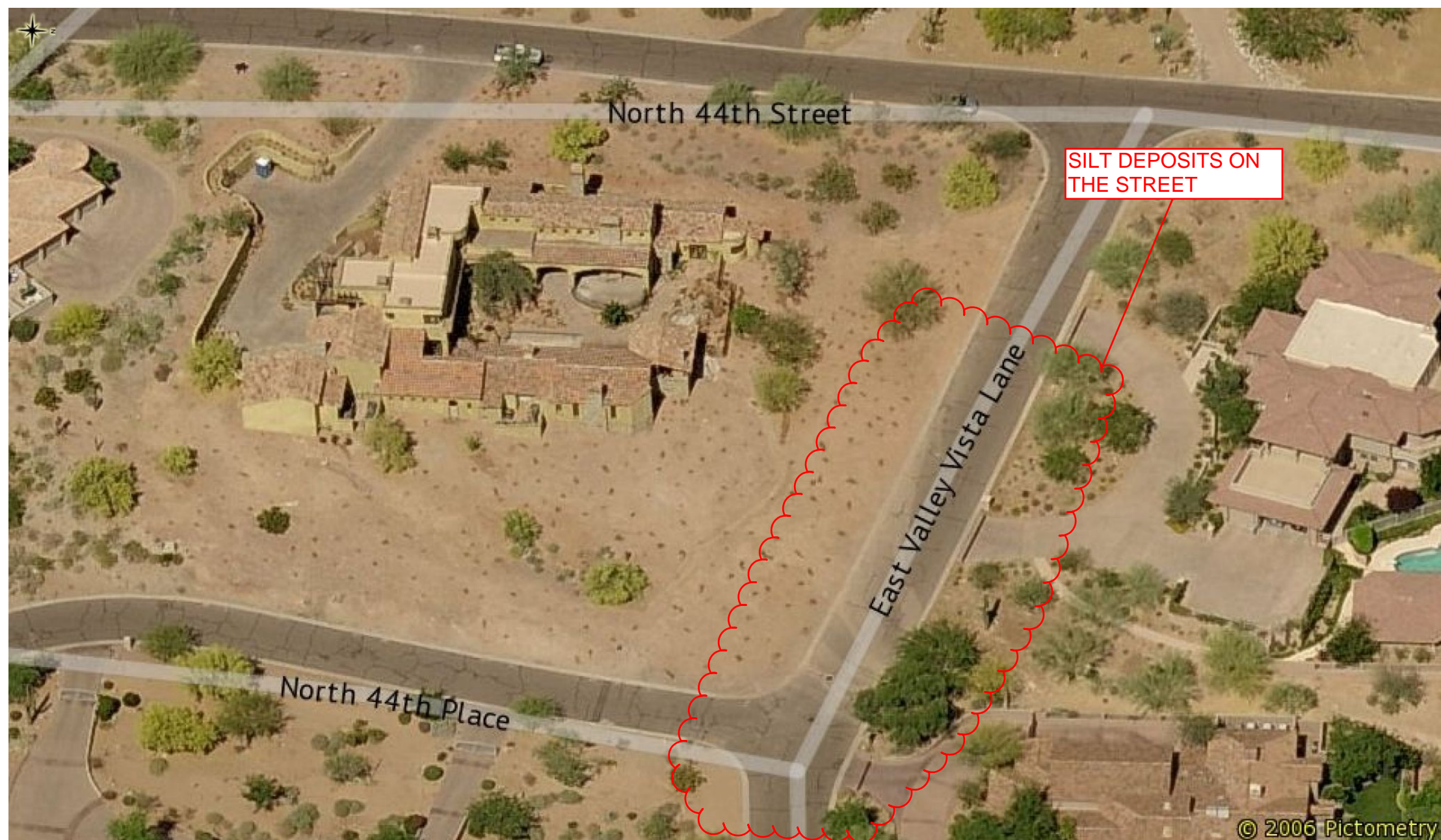
GOOGLE STREET VIEW  
2014

PROJECT  
SITE





# 2006 Aerial NE



© 2006 Pictometry



# 2014 Aerial NE

