SITE ANALYSIS REPORT
FOR A 7.37 ACRES OF PROPERTY
LOCATED AT THE SOUTHEAST CORNER
OF 1ST AVENUE & INA ROAD

MJM CONSULTING, INC.
Land Planning and Development Services
7002 E. 4th Street Tucson, Arizona 85710 Phone & Fax: 520-885-5021

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July 31, 2015

PREFACE

This report is submitted in connection with a rezoning application proposing a change from CR-1 to TR on property at the southeast corner of 1st Avenue and Ina Road. The report was prepared in accordance with the official Pima County Site Analysis Report Checklist, as it was amended in March, 2010.

This Site Analysis Report was prepared by Michael Marks, AICP of MJM Consulting, Inc. Assistance in the preparation of specific sections of the report was provided by other consultants. CMG Drainage Engineering, Inc performed the hydrologic & drainage analysis. Oracle Engineering Group, Inc. performed preliminary drainage and grading analysis. Novak Environmental, Inc. performed the vegetative inventory and riparian habitat related work. PAST performed the archaeological work.

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BIBLIOGRAPHY

Existing Land Use Information Sources: Boundary Survey by Putt Land Surveying, Inc; Pima County Mapguide, Pima County Assessor's Office, Land Use Survey of Subject Property and Surrounding Properties, Aerial Photography, Pima County Planning Division records

Topography Sources: Topographic information by Putt Land Surveying and by Site Visit

Hydrology Sources: Hydrology Report by CMG Drainage Engineering, Inc.

Vegetation Sources: Survey and assessment by Novak Environmental, Inc

Wildlife Sources: Letter by Arizona Game and Fish Department, Memo by Novak Encironmental, Inc.

Viewshed Sources: Site visit

Traffic Sources: Use of Pima County Street Standards information.

Recreation and Trails Sources: Eastern Pima County Trails Master Plan, Pima County Mapguide

Cultural/Archaeological/Historic Resources Sources: Archaeology Report by PAST

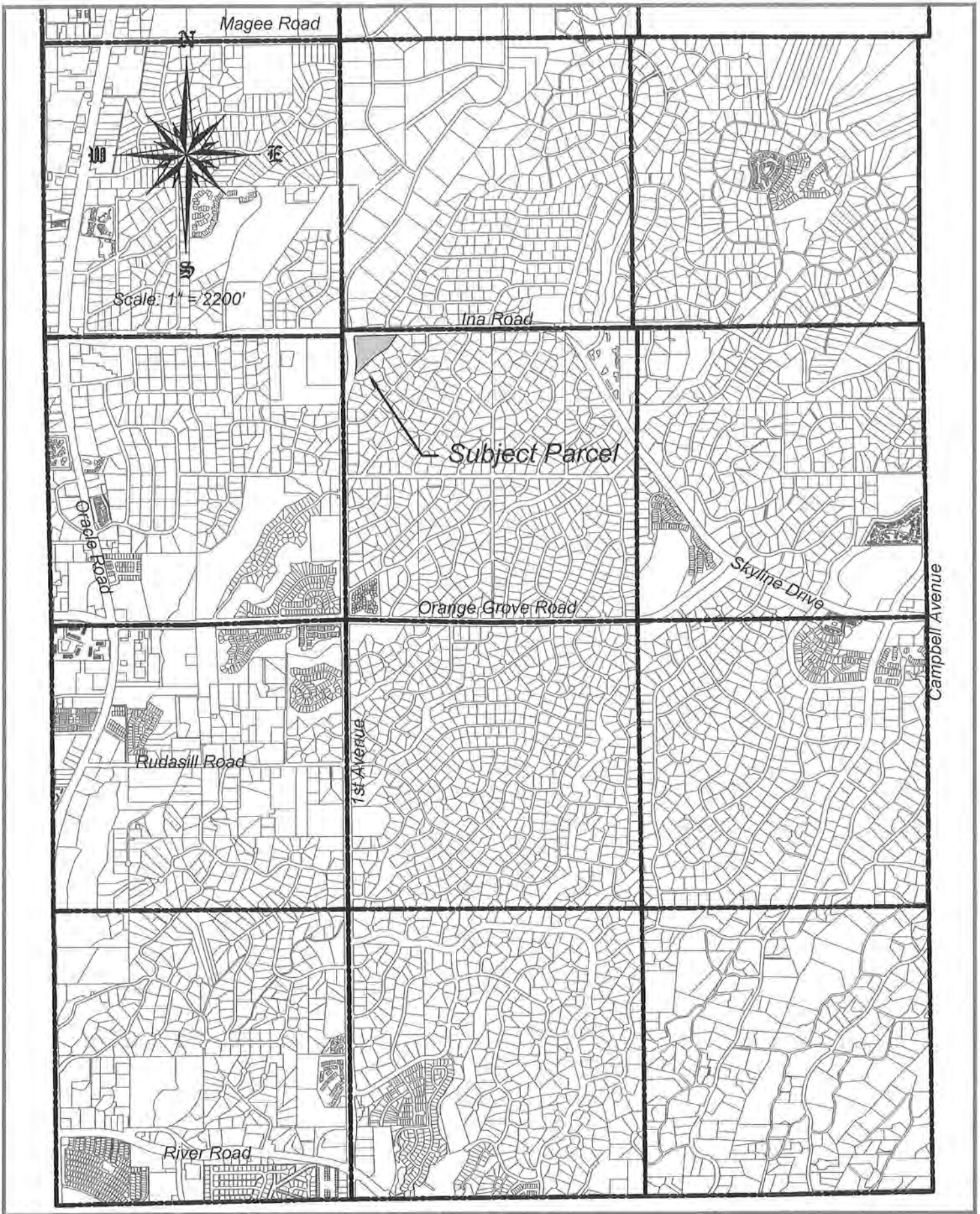
Public Utilities Sources: Records of Pima County Wastewater Management Department, City of Tucson Water, Tucson Electric Company, Southwest Gas, Quest, and site observation.

PART I SITE INVENTORY

I-A. EXISTING LAND USES

1. Exhibit I-A.1, i.e. the Regional Location Map, depicts the site in a regional context. The property is Assessor Parcel 108-05-1380, which is located within Section 6 of Township 13 South, Range 14 East.
2. Exhibits I-A.2a (i.e. the Subject Property Map) and I-A.2b (i.e. the Boundary Map) show the conditions of the property.
    a. The property is vacant.
    b. Exhibit I-A.2b shows three slope easements along Ina Road and a drainage easement along the southeast boundary line.
    c. The Comprehensive Plan designates all of the property as Medium Intensity Urban (MIU). This is depicted on Exhibit I-A.4b. The property is subject to two policies: One is Rezoning Policy RP-12 which reads as follows:
        A. Landscaping buffers are promoted between the higher intensity development area and the existing neighborhoods;
        B. Building height shall be limited to one story, not to exceed 24 feet.
        C. Development will be limited to office uses, and,
        D. Architectural design, materials, signage and colors shall be such that they blend with the natural desert landscape and topography of the area.

        The second is Special Area Policy S-2, which reads "No Construction of building exceeding 24 feet in height shall be permitted without specific authorization from the Board of Supervisors. The Board of Supervisors reserves the right to limit construction to one story." Compliance with both policies will be discussed in Report Section II-A.2.b.
3. Exhibit I-A.3, the Surrounding Properties Map, is an aerial photo of the subject property and the surrounding area within 600 feet in all directions.
4. Exhibits I-A.4a & I-A.4b & I-A.4c show the properties within ¼ mile & address the following:
    a. Exhibit I-A.4a shows the zoning within ¼ mile to all be CR-1 except for a corridor of SR to the north. A small area at the north edge of the ¼ mile radius is within the Buffer Overlay Zone.
    b. Exhibit I-A.4b shows the land uses nearby. There are several vacant properties to the north & east & near the southwest corner. The parcel at the very southwest corner of Ina & 1st is developed at a very low density The majority of the developed properties within one quarter mile are residential at a density of 1 RAC. The only non-residential structure within ¼ mile is the Church that is on the south side of Ina Road and west of 1st Avenue.
    c. Exhibit I-A.4b indicates building height, the 1-story structures without any labeling and the 2-story structures labeled with a '2'. The vast majority of the structures are 1-story. The one story residential structures would typically be about 14 feet tall, and the two story residential home would generally be up to 24 feet tall. The nearby Church is a complex of 1-story buildings, with a height ranging from an estimated 16 to 30 feet tall.
    d. There are no pending or conditionally approved rezonings within one quarter mile.
    e. Ex. I-A.4c shows the Comprehensive Plan designations for all properties within a ¼ mile.



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Schocket - Ina Road
APN: 108-05-1380
Section 6, Township 13 South, Range 14 S,
Pima County, Arizona

Exhibit I-A.1
Regional Location Map

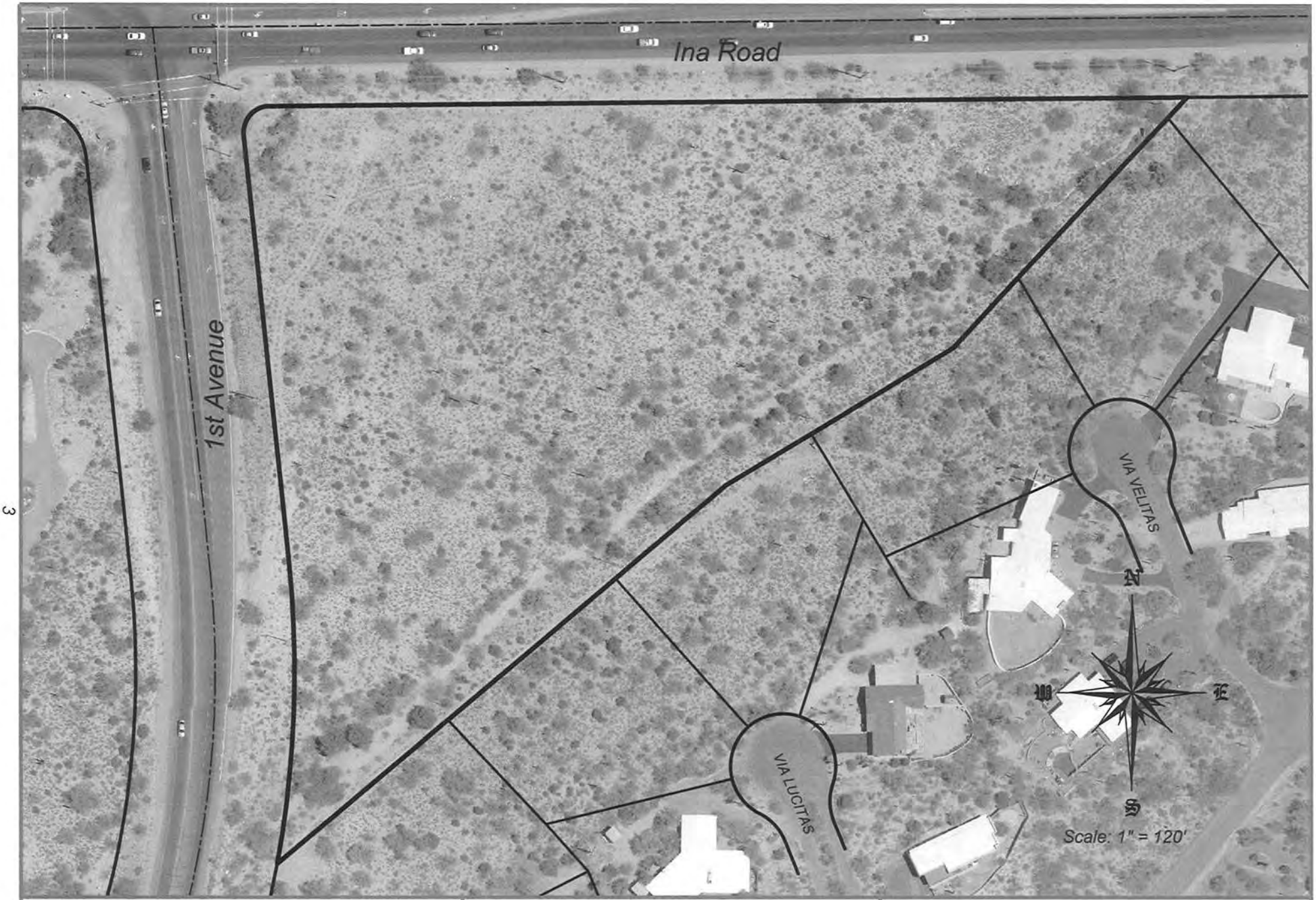

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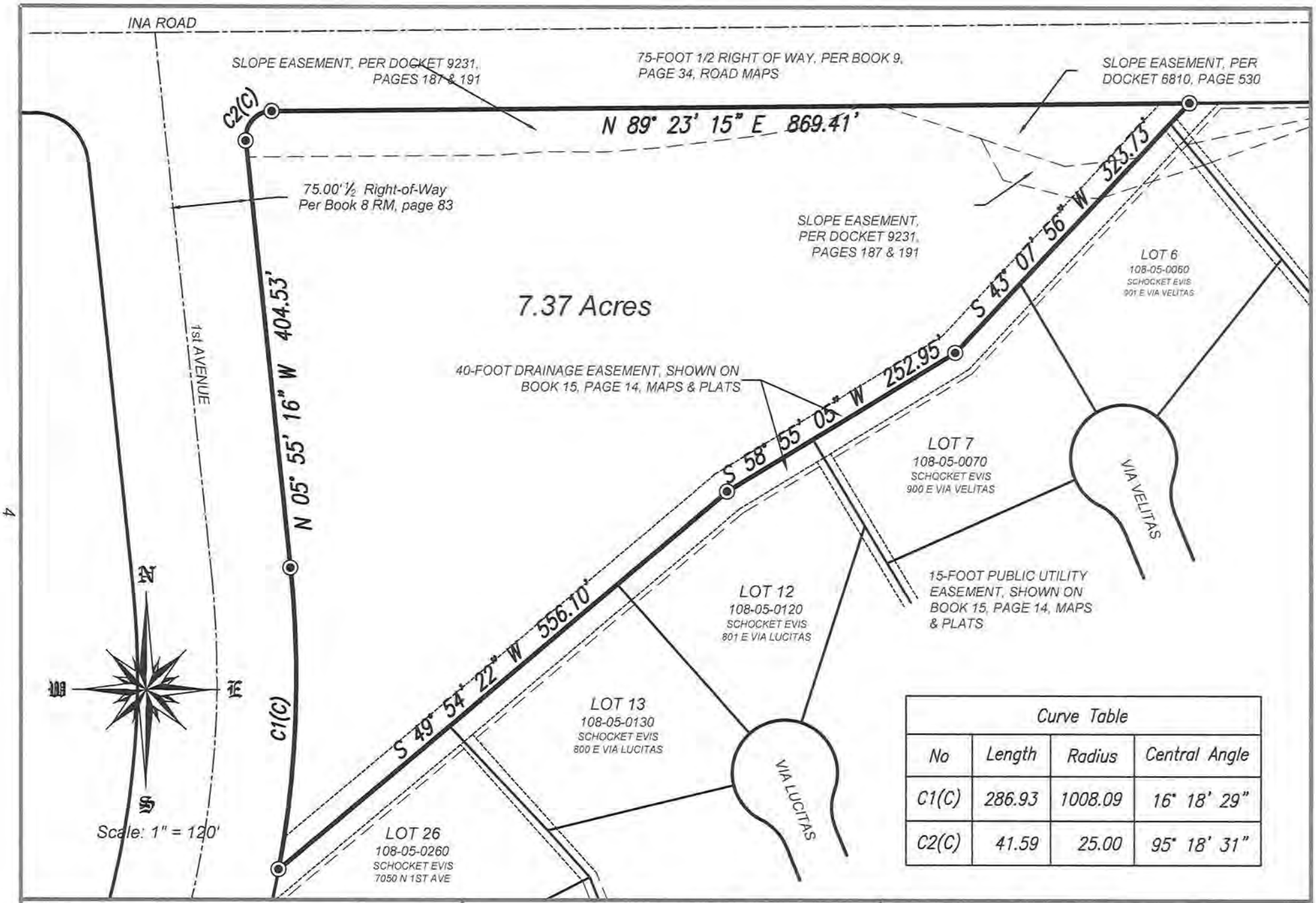
Exhibit I-A.2a
Subject Property Map



Curve Table			
No	Length	Radius	Central Angle
C1(C)	286.93	1008.09	16° 18' 29"
C2(C)	41.59	25.00	95° 18' 31"

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Exhibit I-A.2b
Boundary Map

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Exhibit I-A.3
Surrounding Properties Map

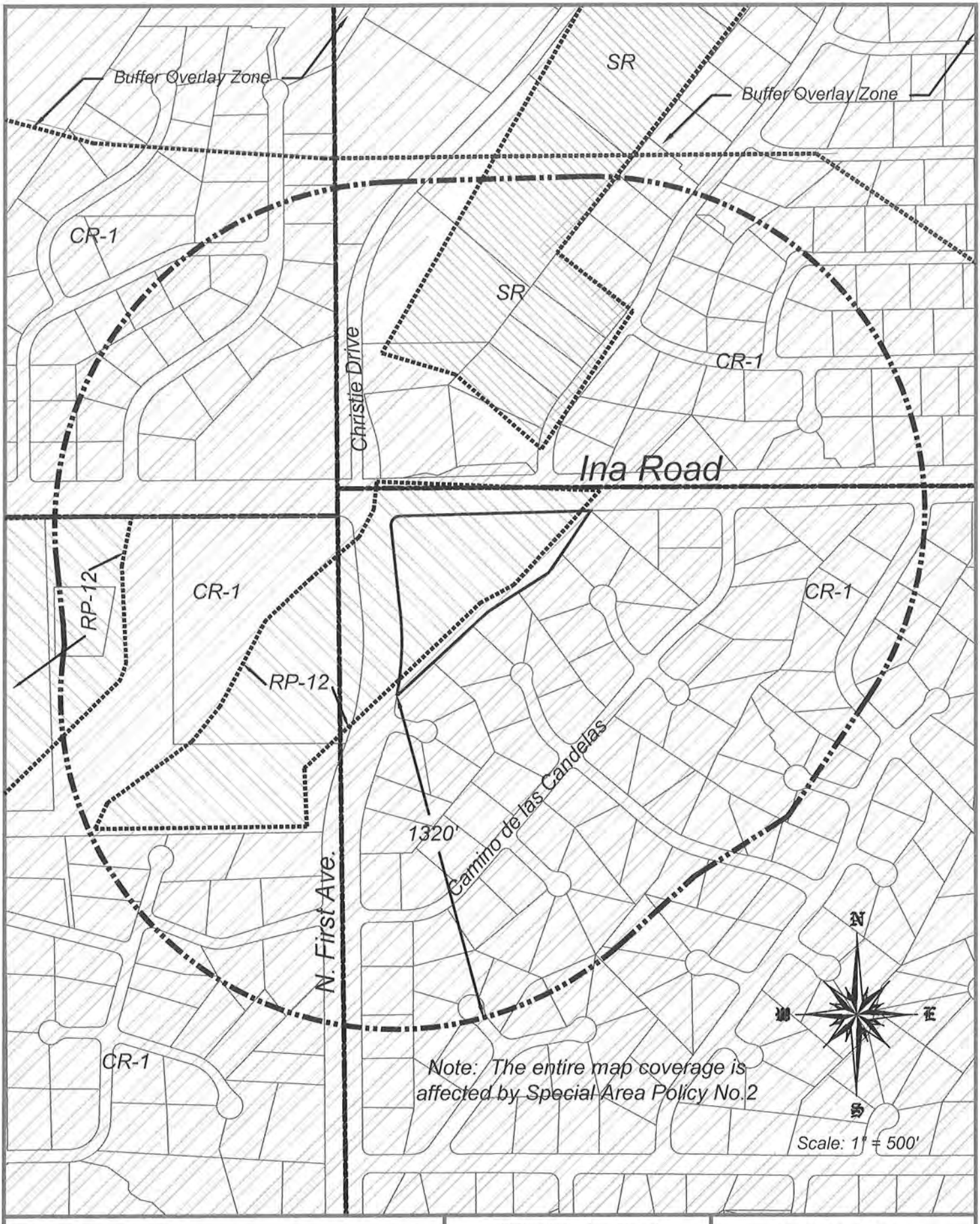

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Exhibit I-A.4a
Vicinity Map with Zoning

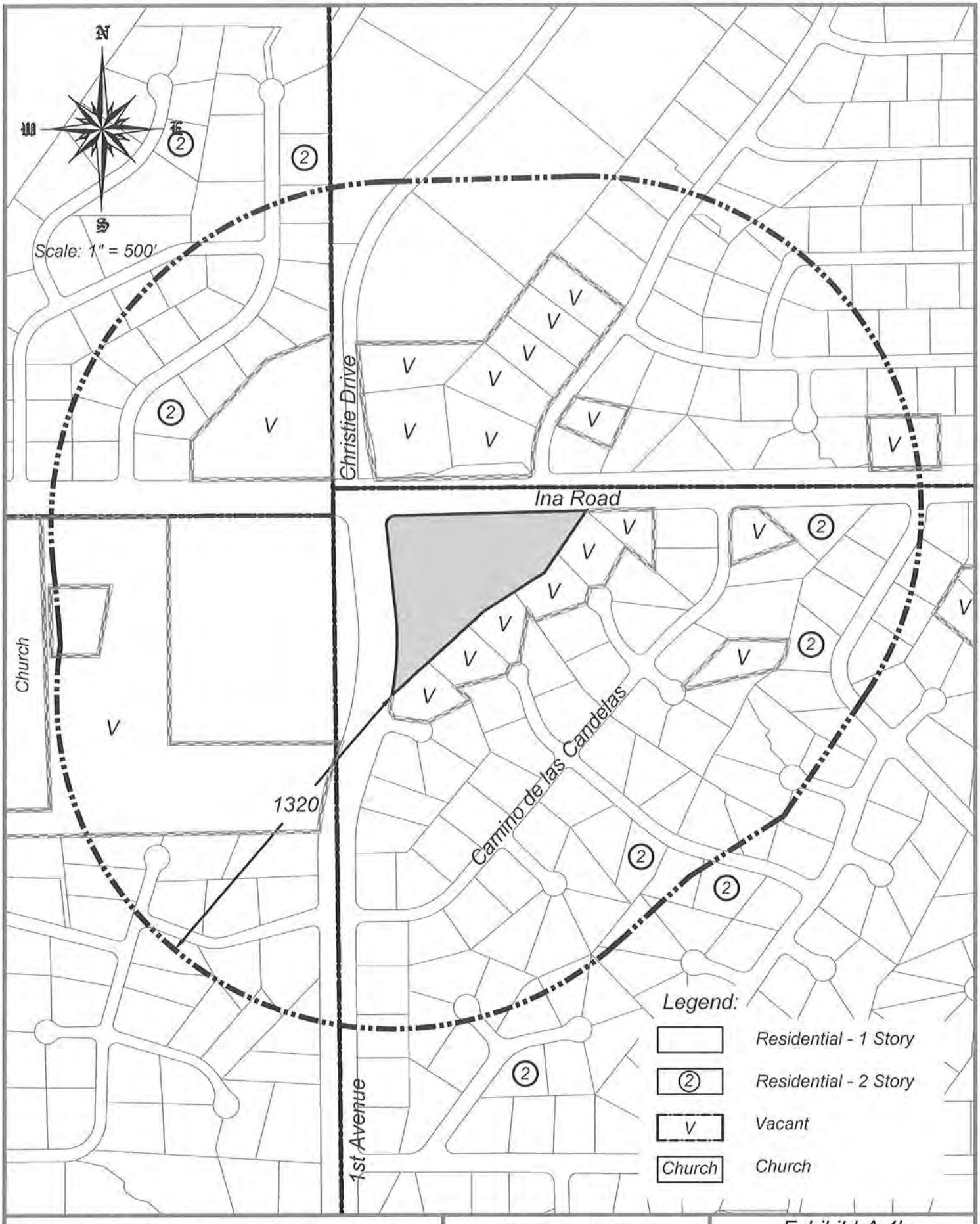

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Exhibit I-A.4b
Vicinity Map
with Land Use

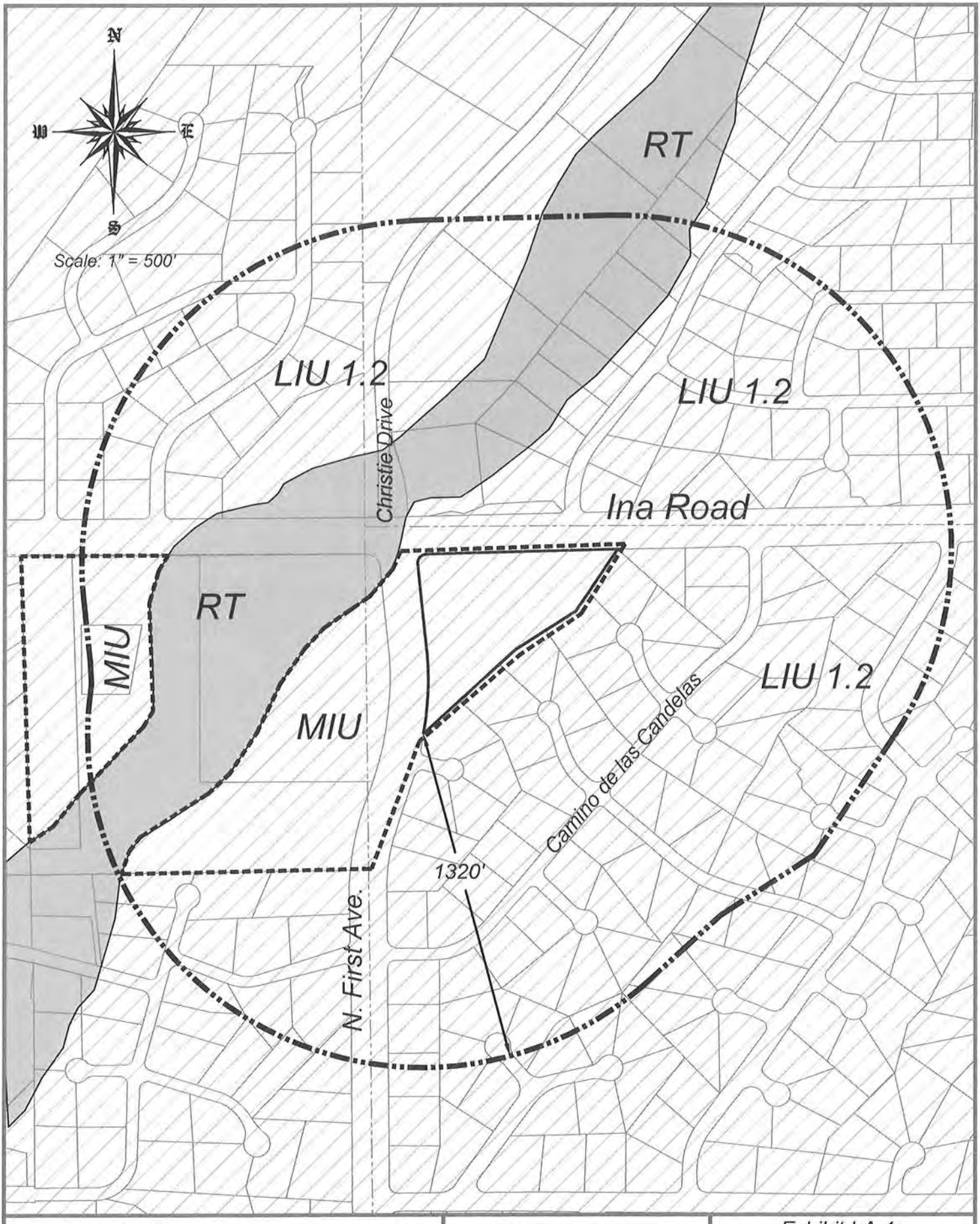

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Exhibit I-A.4c
Vicinity Map
with Comp Plan

I-B. TOPOGRAPHY AND GRADING

1. The topographic characteristics of the property, still in mostly in a natural state, are described below and are depicted on the Exhibit I-B.
    a. There are no restricted peaks or ridges.
    b. There are no rock outcrops or talus slopes.
    c. The property contains steep slopes along the Ina Road & 1st Ave street frontages and along the southeast border. The latter is natural but the former two slopes are the results of grading in connection with road construction for those two adjoining streets. That grading clearly encroached into the site along the Ina Road side but along the 1st Ave side it appears as though the grading occurred up to the right-of-way line and ended at or very close to the property line. The slopes from 15 to 25% and those of 25% or greater, using the definitions in Zoning Code Sections 18.61.020A.18 & 18.61.030A.1, are shaded on the exhibit. The 'previously disturbed' areas are delineated, as best is possible, on the Topography Map. The document between the owner of the subject property and Pima County to allow this grading is enclosed as Appendix 1.
    d. There are no significant topographic features, other than is what is mentioned above, and other than for the fact that the slope at the southeast border leads to an existing wash.
    e. As stated in 'c' above, the Topography Map delineates the area, as best as possible, that was previously graded in connection with roadway projects for Ina Road and 1st Avenue.
2. The 'Agreement' between the owner and Pima County which is enclosed as Appendix 1 contains a record of the average cross slope prior to the grading of the property. This is the analysis that should apply to the property for regulatory purposes, as the Agreement states in Items 10 & 11 under 'Terms'. This analysis finds the property to have an average cross slope of 14.4 percent. This is based on a total length of contours of 23,324 feet, a contour interval of 2 feet, and an area of 7.46 acres. This apparently was the site area prior to r/w dedications.

I-C. HYDROLOGY

1. Exhibit I-C.1 shows the boundaries of the watershed that impacts the subject property. That watershed is a balanced hydrologic basin as defined by the Regional Flood Control District.
2. The upstream watershed identified on Exhibit I-C.1 is all developed, is all residential, and is all typical of 1 RAC development. Surface runoff flows across lot lines and onto streets and ultimately reaches the north side of Ina Road at a low point where it is collected in a 60-inch corrugated metal pipe (CMP) culvert which carries that runoff to the south side of Ina Road. The runoff that is on Ina Road and west of that 60" CMP does not impact the subject property as that runoff is retained on the street until it is collected into a storm sewer inlet where it is directed to a west side of 1st Ave. Ina Road runoff east of the 60" CMP is collected in a storm sewer system inlet and discharged into the 60" CMP where it combines with the upstream watershed runoff. The runoff discharged from the culvert under Ina Road flows southerly in a natural wash and encroaches into the subject property along the southeast boundary.
3. The upstream watershed impacts the subject property at only one point. At that point, that being the northeast corner of the site, the contributing flow is 463 cfs in the 100 year storm event, with a drainage area of 81 acres.

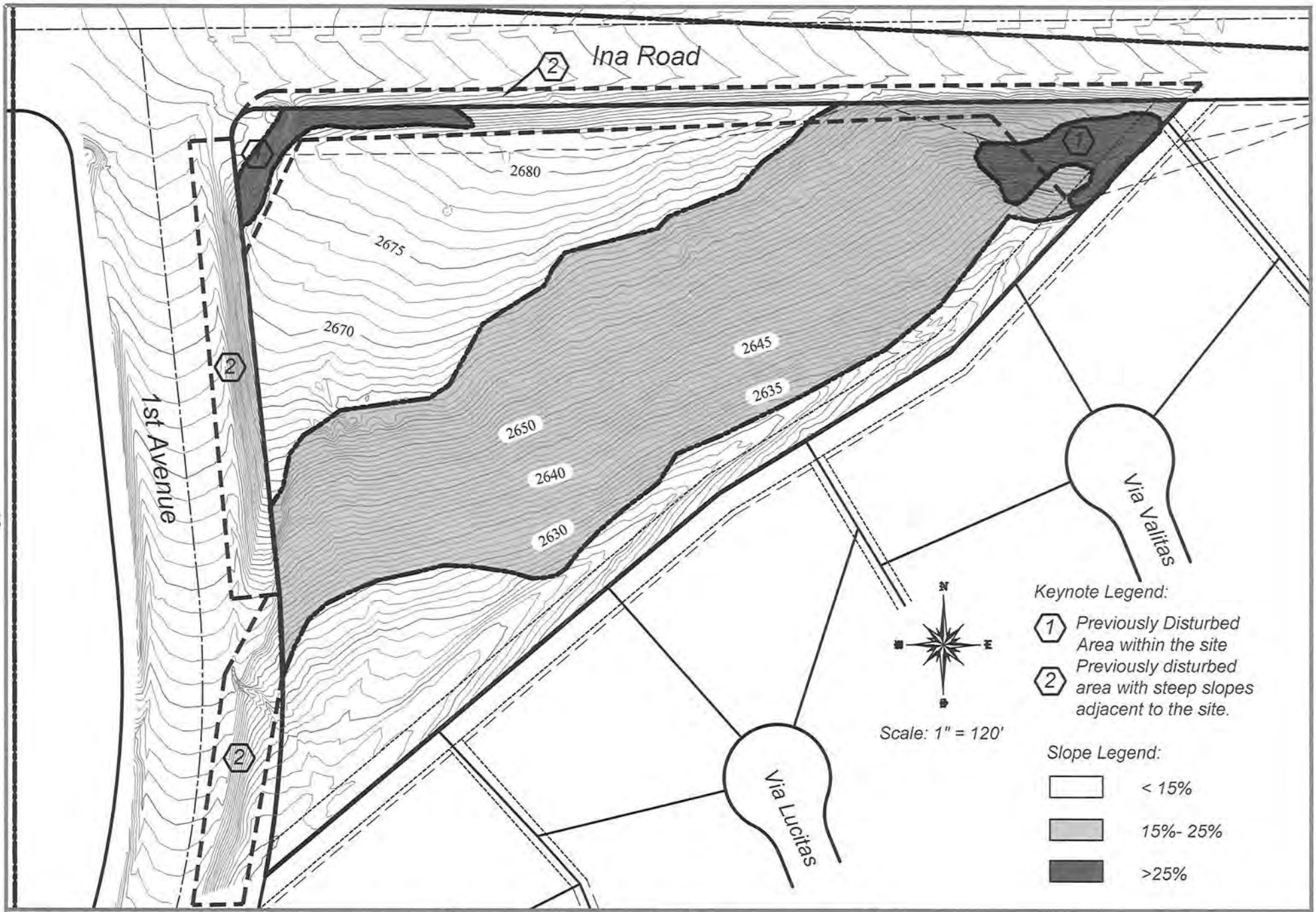

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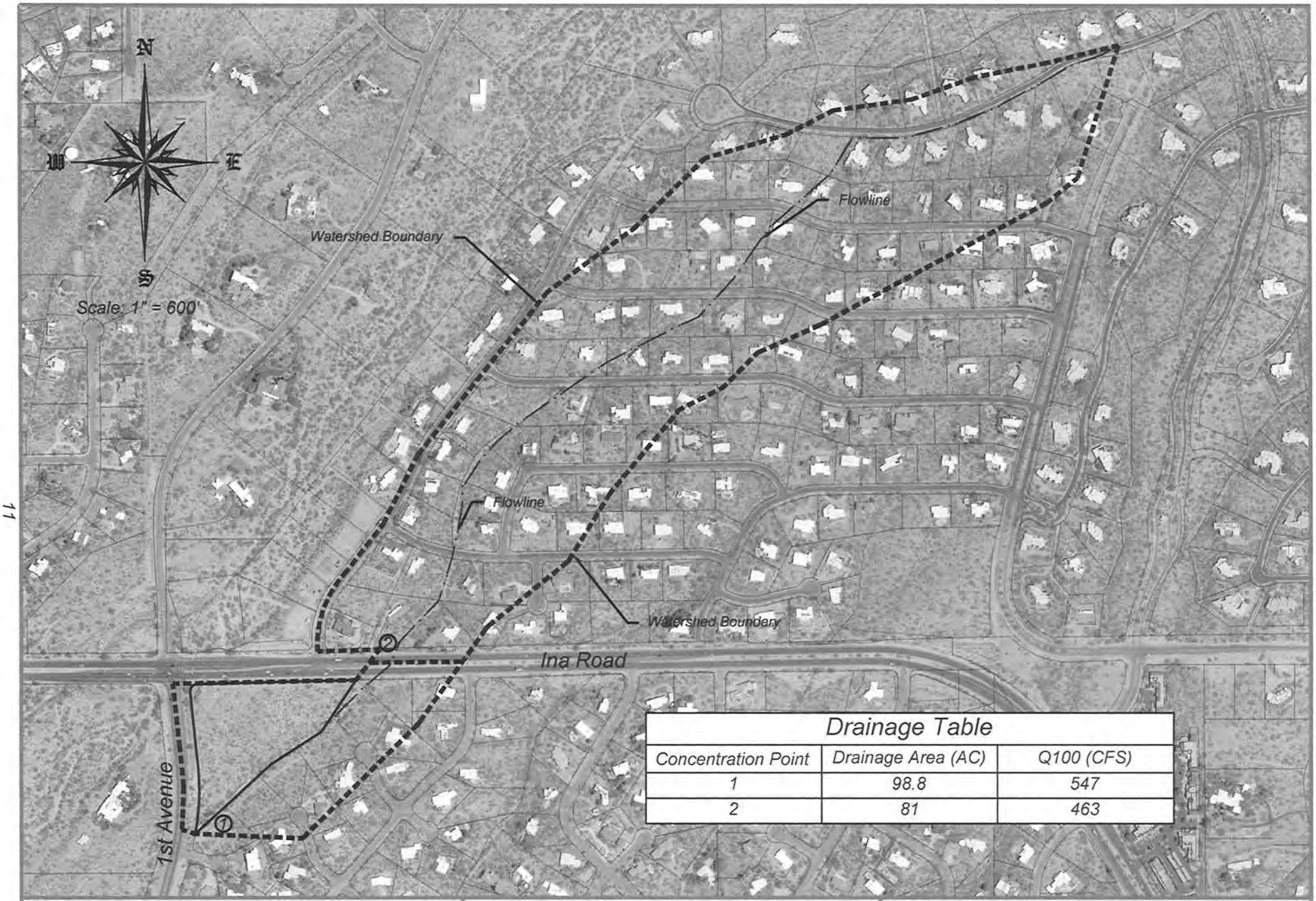
Exhibit-I-B
Topography Map



Drainage Table		
Concentration Point	Drainage Area (AC)	Q100 (CFS)
1	98.8	547
2	81	463

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Exhibit I-C.1
Offsite Watershed Map

4. The Onsite Hydrologic conditions are depicted on Exhibit I-C.4.
   a. The 100 year floodplain lines are shown along the east boundary. These lines were determined by CMG Drainage Engineering and relate to the one wash with a discharge greater than 100 cfs.
   b. No sheet flooding, as defined by the RFCD, occurs on the site.
   c. There are no federally mapped floodways or floodplains. The entire property is classified as Zone X (i.e. 'areas determined to be outside the 0.2% annual chance floodplain' per FEMA Map No. 04019C1680L.
   d. The peak discharge entering and exiting the site along the east boundary is shown.
   e. The property is completely outside of any Riparian Habitat Ordinance designation.
   f. The culvert under Ina Road enters the subject property within a Drainage Easement near the northeast corner of the property. Otherwise the property contains no drainage infrastructure.
   g. No sources of perennial surface water exist on the site.
   h. The erosion hazard setback (EHS) line, adjacent to the one local floodplain, is shown. The 25 & 50 foot dimensions are based on Section 16.28.080 of the Pima County Floodplain Management Ordinance, 2010.
5. Downstream of the property is 1st Ave, low density residential development, and then the Pima Wash. The flows exiting the subject property, at the site's southwest corner, enter a 2 barrel 42-inch CMP culvert that extends beneath 1st Ave to the west. This culvert does not have sufficient capacity to convey all of the 100-year flow reaching it before the headwater rises enough to overtop the short cul-de-sac street to the south. The culvert flows continue to drain on the surface westerly to where they enter the Pima Wash. The flows overtopping the cul-de-sac street to the south will continue to drain south along the 1st Ave right-of-way.

I-D. BIOLOGICAL RESOURCES

1. Exhibit I-D.1 shows that the entire property lies outside of the Conservation Land System (CLS).
2. The property is not within or adjacent to one of the Critical Landscape Connections.
3. The property is not within the Priority Conservation Area for the Pima Pineapple Cactus.
4. The property is not within the Priority Conservation Area for the Needle-spined Pineapple Cactus.
5. The property is entirely within the Priority Conservation Area for the Cactus Ferruginous Pygmy-Owl (Priority 2), as is the surrounding region, but not at all for the Western Burrowing Owl.
6. A copy of the Arizona Game & Fish Department Heritage Data Management System is enclosed as Appendix #2, with an excerpt of the 'Special Status Species and Special Areas Documented within 3 Miles of the Project Vicinity' illustrated on Exhibit I-D.6a. The list includes the Pima Indian Mallow, the Giant Spotted Whiptail, the Mexican Gray Wolf, the Mexican Long-tongued Bat, the Cactus Ferruginous Pygmy-owl, the Lesser Long-nosed Bat, the Lowland Leopard Frog, the California Leaf-nosed Bat, the Stag-horn Cholla, and the Tumamoc Globeberry. The likelihood of each species was then evaluated by Karen Cesare, RLA and the results are presented in Exhibit I-D.6b which speaks to that likelihood.
7. Novak Environmental, Inc. staff, under the direction of Karen Cesare, RLA, performed field work on the site to identify vegetative communities and to inventory Saguaros and Ironwoods. No Ironwoods were found. Regarding Saguaros, 148 were found, of which 141 are viable. Of the 148, 100 are less than or equal to 6 feet tall and 48 are greater than 6 feet tall. Exhibit I-D.7/9 depicts the location of these saguaros.

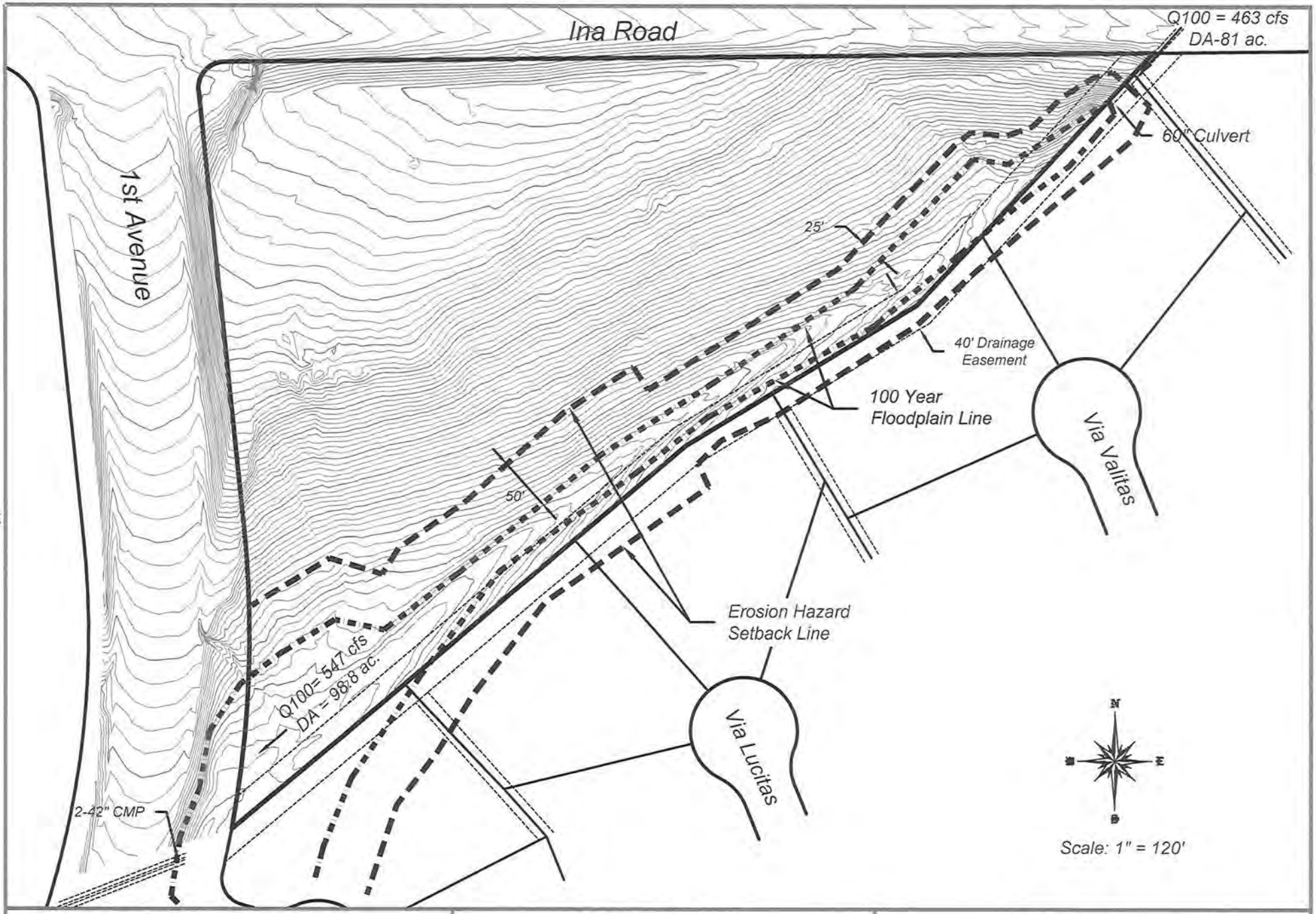

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Exhibit I-C.4
Onsite Hydrology Map

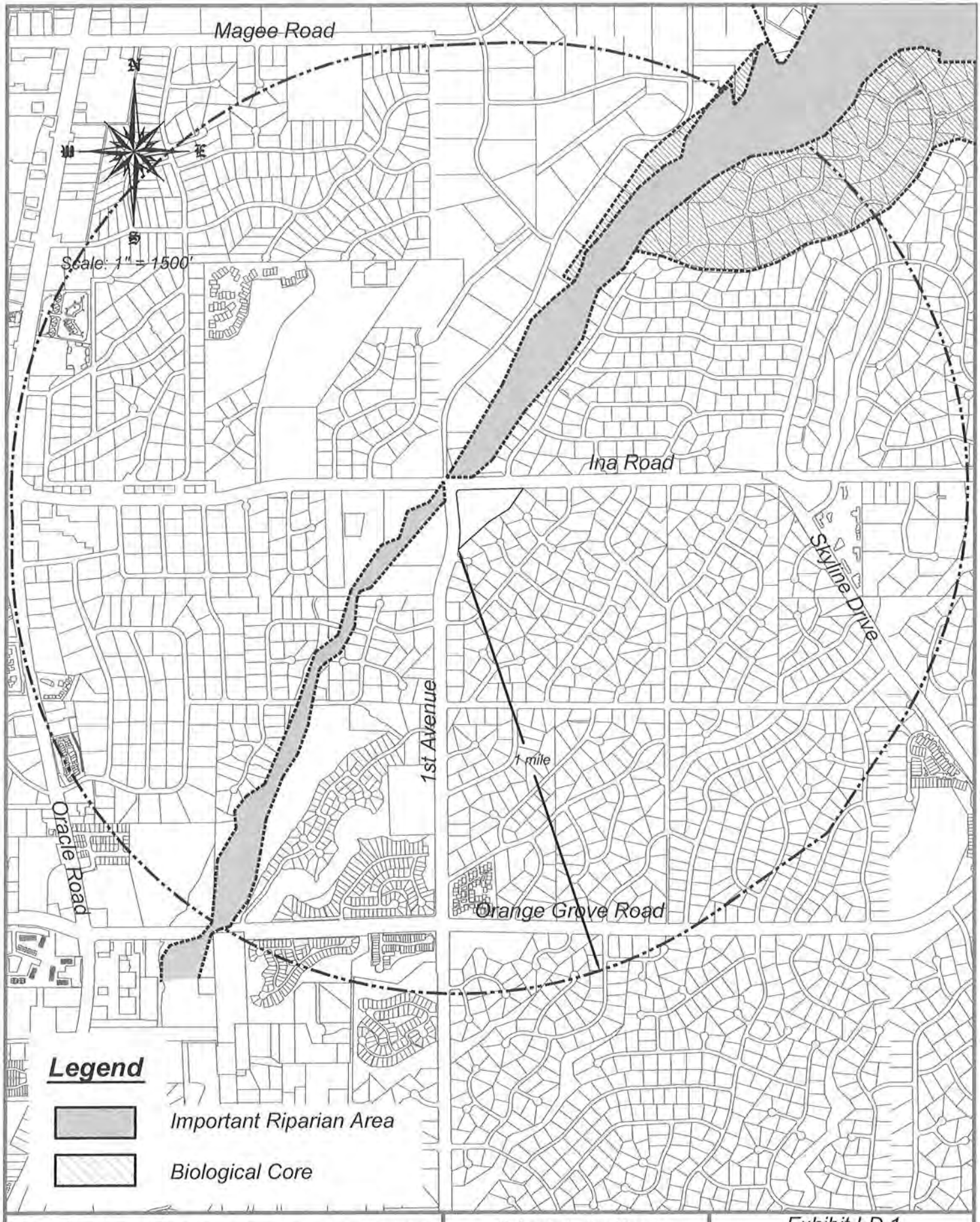

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Exhibit I-D.1
Conservation Land
System Map

AN EXCERPT OF THE ARIZONA GAME & FISH DEPARTMENT
HERITAGE DATA REPORT ON THE SUBJECT PROPERTY

Special Status Species and Special Areas Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Abutilon parishii	Pima Indian Mallow	SC	S	S	SR	
Aspidoscelis stictogramma	Giant Spotted Whiptail	SC	S			1B
Bat Colony						
Canis lupus baileyi	10J area Zone 2 for Mexican gray wolf	LE,XN				
Choeronycteris mexicana	Mexican Long-tongued Bat	SC	S	S		1C
Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	SC	S	S		1B
Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE				1A
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S		1A
Macrotus californicus	California Leaf-nosed Bat	SC		S		1B
Opuntia versicolor	Stag-horn Cholla				SR	
Tumamoca macdougalii	Tumamoc Globeberry		S	S	SR	

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

Exhibit I-D.6a