REVISED REZONING
Preliminary Development Plan
C9- C9-19-13 Date 09/20/2019
Planning & Development Services

# ESCALERA PLANNED AREA DEVELOPMENT

City of Tucson

September 2019

# Escalera
# Planned Area Development
Houghton Road and Valencia Road
Tucson, Arizona

*Submitted to:*

**City of Tucson**
**Planning & Development Services Department**
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**September 2019**

# TABLE OF CONTENTS

## LIST OF EXHIBITS



## LIST OF TABLES

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# PART I: INTRODUCTION

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## A. PROJECT OVERVIEW

The Escalera Planned Area Development (PAD), herein referred to as the "Property, or PAD" encompasses approximately 344.3 acres located on the southwest corner of East Valencia Road and South Houghton Road in the City of Tucson (refer to *Exhibit I: Location Map*). The Property was annexed into the City of Tucson in 1985 and was given a translational zoning of RX-1. A change in zoning from RX-1 to PAD is requested as part of this proposal. The Escalera PAD will establish a framework that effectively blends a variety of housing types and employment-generating commercial uses in an area that is flourishing with new residential and commercial development, improved infrastructure and connectivity to the greater Tucson metro area, and a top-performing school district.

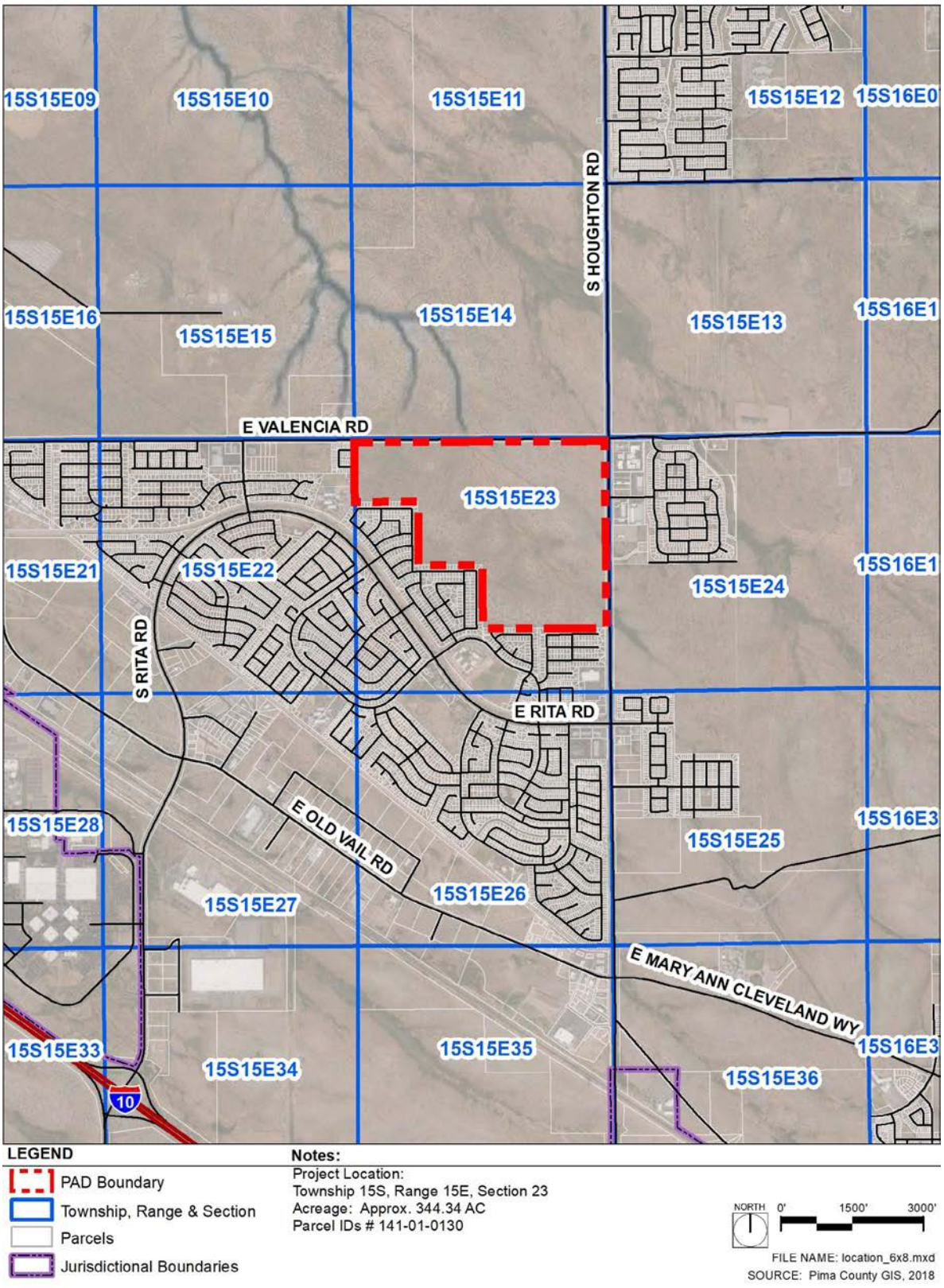
The Property is located within the planning boundaries of the Houghton Area Master Plan (HAMP), which was adopted in 2005 to provide land use guidance for an approximately 10,800-acre area. The HAMP designates the Property as: Neighborhood/Low Density Residential, 100-Year Floodplain and Riparian Area, Village Center Periphery/ Medium to High Density Residential, and Village Center. The Escalera PAD will provide development standards and design guidelines that consider best practices with the intention of furthering the goals of the HAMP, as well as the synergistic growth between the new development, a top-performing school district, and the current economic vitality of the surrounding community.

## B. RATIONALE AND BENEFITS FOR USE OF A PAD

The City of Tucson's Planned Area Development Zone (PAD) designation provides property owners the flexibility to develop land utilizing site-specific development standards that would otherwise not be possible through the traditional zoning classifications within the City of Tucson Unified Development Code (UDC). Utilizing the basic parameters of the R-2 and C-2 zones, this PAD will provide development regulations and design guidelines that facilitate an effective mix of housing and commercial opportunities and ensure a quality design that can protect the integrity of existing neighborhoods.

This PAD shall serve as the primary mechanism for regulating the development of the 344.3-acre property. In accordance with Section 3.5.5 of the Unified Development Code (UDC), the PAD standards herein supersede the standards of the UDC. Where specific references to UDC standards are provided, those reference the UDC standards in existence on the date this PAD is approved by the Mayor and Council.

# EXHIBIT I: LOCATION MAP



## C. BENEFITS TO THE COMMUNITY

The Escalera PAD will foster significant benefits to the community, including:

- Providing a complementary mix of uses that create a livable community in proximity to services and recreational amenities.
- Promoting connectivity to The Loop and other critical multi-modal corridors adjacent to the site.
- Promoting long-term stabilization of home values while supplementing the current housing supply.
- Promoting the preservation of wildlife corridors and significant riparian areas adjacent to the Atterbury Wash Tributary.
- Utilizing existing infrastructure in proximity to the development of the subject property.
- Advancing the economic sustainability of the area through the generation of additional tax revenue and creation of quality employment opportunities.

## D. CONFORMANCE WITH ADOPTED PLANS

The PAD District is consistent with policy recommendations in the City's *Plan Tucson* and the *Houghton Area Master Plan* (HAMP). Both stress the compatibility between uses, the promotion of commercial development along arterial corridors, and the protection of established neighborhoods.

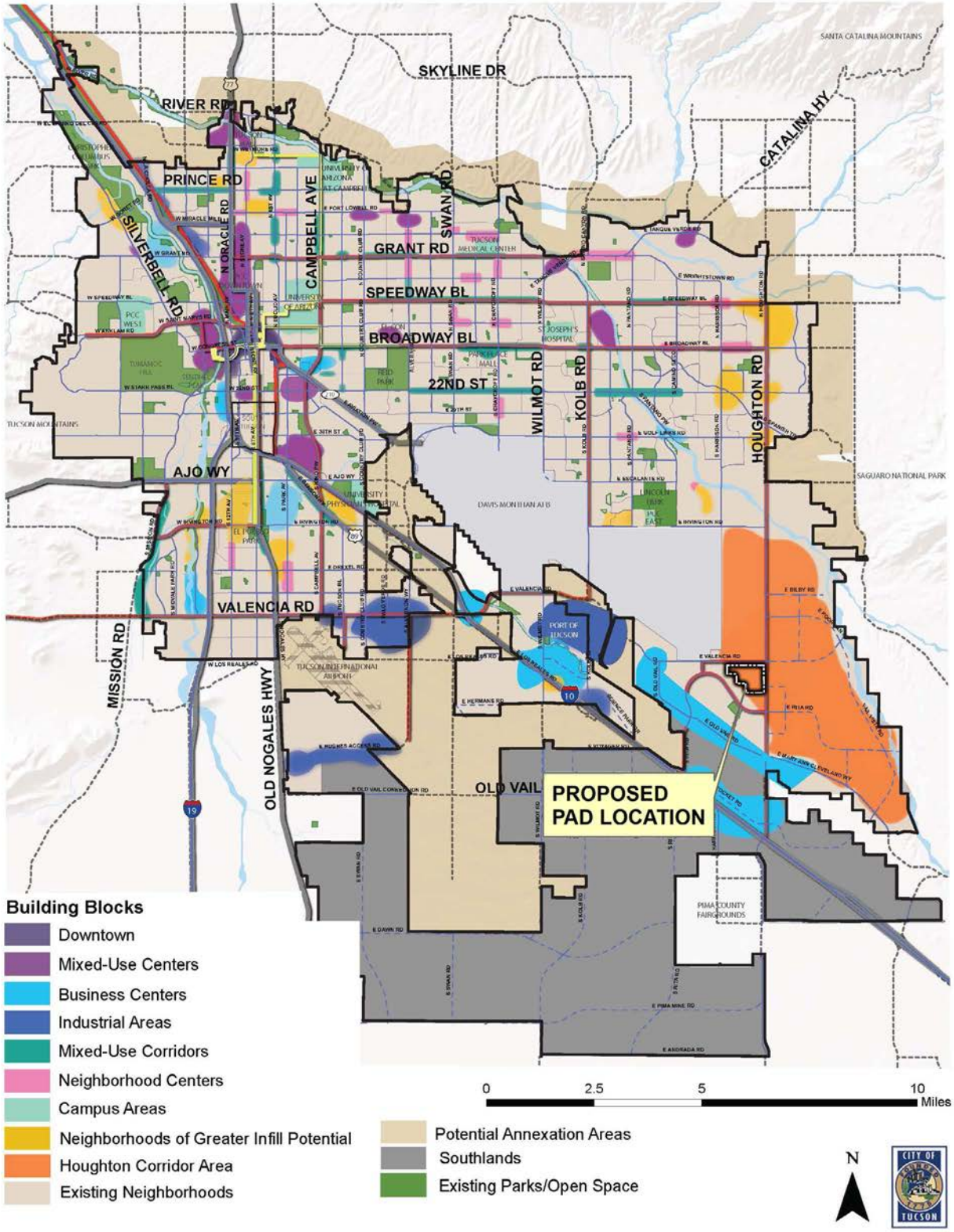
### 1. PLAN TUCSON

As shown on *Exhibit I.D.1: Plan Tucson Future Growth Scenario Map*, the PAD is located within an area designated as Houghton Corridor Area. Properties within the Houghton Corridor Area are intended to be master planned, mixed-use communities that are sensitive to the existing, established neighborhoods and provide a variety of housing types, commercial services and recreational amenities along the Houghton Corridor.

The goal of the PAD is to promote the major intersection of Valencia Road and Houghton Road as a logical site for mixed-use development. The PAD development regulations and design standards are envisioned to protect the existing residential neighborhoods adjacent to the site by establishing a logical transition of uses and promoting synergistic growth that facilitates a livable community within close proximity to open space and commercial services. Other related policies include:

- LT 1: Integrate land use, transportation, and urban design to achieve an urban form that supports more effective use of resources, mobility options, more aesthetically-pleasing and active public spaces, and sensitivity to historic and natural resources and neighborhood character.
- LT 7a: Use the Future Growth Scenario Map as a general guide for determining the general location of development opportunities, development patterns, and land use and transportation concepts, while also considering area and site-specific issues.
- LT 9: Plan Tucson supports locating housing, employment, retail, and services in proximity to each other to allow easy access between uses and reduce dependence on the car.
- BC 8: The Business Climate element of Plan Tucson promotes continued economic viability of existing neighborhoods and commercial districts by supporting a safe, distinctive, well-maintained, and attractive community with neighborhoods made up of residences and businesses that contribute to Tucson's quality of life and economic success.

## EXHIBIT I.D.1: PLAN TUCSON FUTURE GROWTH SCENARIO MAP



## 2. HOUGHTON AREA MASTER PLAN

The intent of the *Houghton Area Master Plan* (HAMP) is to guide future growth and development that intertwines land use, circulation and mobility, environmental and cultural resources, public services, utilities and facilities, and cost of service to establish livable communities and protect the natural features of the desert environment. The HAMP covers a 10,800-acre area largely bounded by Irvington Road to the north, Davis Monthan Air Force Base and Houghton Road to the west, Mary Ann Cleveland Road and Union Pacific Railroad (UPRR) to the south and the Pantano Wash to the east.

According to the Conceptual Land Use and Circulation Map in the HAMP, the Property is designated as: Neighborhood/ Low Density Residential, 100-year Floodplain and Riparian Habitat, Village Center Periphery/ Medium to High Density Residential, and Village Center (refer to *Exhibit I.D.2: HAMP Conceptual Land Use and Circulation Map*).

The Escalera PAD has been designed to further the HAMP's fundamental values of providing:

a) A variety of housing types and densities, which offer both affordability and livability.

The Escalera PAD will provide a variety of housing types and densities, including a variety of attached and detached single family residences as well as a range of multi-family residential, including both rental and owner-occupied units.

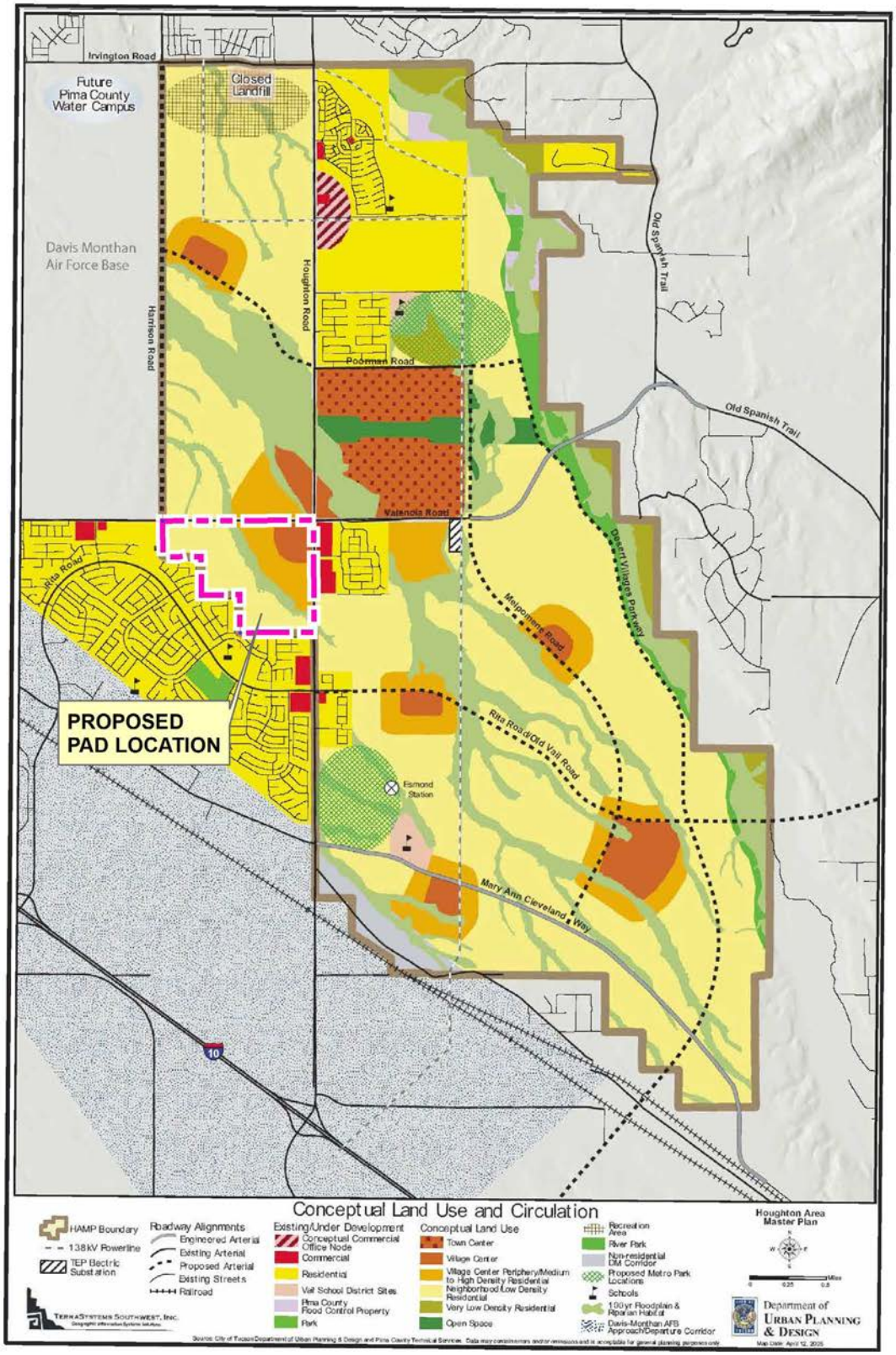
b) A mix of uses within a compact development pattern, which integrates places for people to live, work, shop, and play within a cohesive system of Neighborhoods and Village and Town Centers.

Using the concentric ring pattern set forth in the HAMP, the lowest density uses will be on the west side of the Atterbury Wash Tributary, providing a transition from the existing neighborhoods to the west and south of the site. To the east of the Atterbury Wash Tributary, densities increase, with more dense single and multi-family residential transitioning into mixed use, with the highest intensity commercial uses near the intersection of Houghton and Valencia. A neighborhood park/community center is proposed within close proximity to the Atterbury Wash Tributary, providing recreational opportunities and a community gathering place.

c) A transportation and circulation system that offers residents alternatives for mobility, giving high priority to pedestrian, bicycle, and transit modes.

The Property's location at the intersection of two major arterial streets provides high capacity automobile and transit connections to the metro area, and easy access to Interstate 10 to the south. Within the PAD, a collector/ spine road is proposed to provide circulation within the development, while minimizing the number of crossings of the Atterbury Wash Tributary. Ample sidewalks and bike lanes throughout the community and trails along both banks of the Atterbury Wash Tributary will provide pedestrian and bicycle linkages between uses and connections

## EXHIBIT I.D.2: HAMP CONCEPTUAL LAND USE AND CIRCULATION MAP




to activity areas. The Harrison Road Greenway path runs along a portion of western boundary of the Property, and is part of the Chuck Huckleberry Loop, a system of over 120 miles of paved, shared-use paths and short segments of buffered bike lanes connecting the Rillito, Santa Cruz, and Pantano River Parks and the Julian Wash Greenway. The Greenway's intersection with Valencia Road is an existing access point for the trail. The Houghton Road Greenway provides an additional multi-use connection to the north and south of the Property.

d) A regional open space system that preserves washes and environmentally sensitive areas as passive open space amenities and offers active recreational opportunities such as trails and developed parks.

The Atterbury Wash Tributary is proposed to remain as open space to preserve the environmentally sensitive areas of the site while facilitating wildlife habitat and movement, and passive recreation. While the final location is unknown at this time, a neighborhood park will be provided adjacent to the wash within MLDR Planning Area.

e) A long-term, phased approach to development, to provide for increased efficiency of infrastructure and services for residents.

This site is a logical next step in the development of the HAMP area, in that it is adjacent to other developed portions of the HAMP, at the intersection of two existing major arterial streets, and has easy access to utilities and infrastructure. Development of additional housing in this area will help support not only the development of additional retail and services on the Property but will also support the existing and proposed businesses in the vicinity, including the Houghton Town Center and other commercial uses along the Houghton Road Corridor.

## E. COMPATIBILITY TO ADJOINING LAND USES

The Property is entirely suitable for the development of residential and commercial uses given its proximity to the major intersection of Valencia Road and Houghton Road, The Loop, and the surrounding residential and commercially-zoned properties. Recently, Houghton Road, north of the Property, was improved and widened to include six (6) vehicular travel lanes and bicycle infrastructure to facilitate a cohesive and integrated approach of developing the corridor.

- To the north, across Valencia Road, is vacant land owned by the Arizona State Land Department (ASLD). Given the proximity to the major intersection of Valencia Road and Houghton Road, Plan Tucson and the land use designation prescribed by the HAMP, it can be speculated that this property will be developed in the future as commercial and medium to high density residential.

- To the south and west of the Property lies Rita Ranch residential community. Rita Ranch includes a range of low to medium density single-family neighborhoods with a density range comparable to the low density residential as proposed in this PAD. Appropriate buffering and screening will be provided accordingly.

- To the east, across Houghton Road, lies a variety of commercial and industrial uses as well as vacant Trust Land owned by ASLD.

## F.SUITABILITY WITH EXISTING INFRASTRUCTURE

The Property is suitable for development as it is situated at the intersection of two major arterial roads, Valencia Road and Houghton Road, which contain sewer, water and electrical infrastructure. Furthermore, Valencia Road and Houghton Road have sufficient roadway capacity to accommodate the proposed development. The Property is within the Tucson Water's obligated service area. Per *Exhibit II.I.4*, Tucson Water has indicated that water service will be provided to the property upon completion of a water meter application and water master plan. Additionally, Pima County Regional Wastewater Reclamation Department has indicated that capacity is available in the current sewer network to accommodate the potential flows generated by proposed development (refer to *Exhibit II.I.3.b*).

# PART II:
# SITE ANALYSIS

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## A. SIGNIFICANT NATURAL AND BUILT CONSTRAINTS

The Property is a vacant ± 344.3-acre parcel located on the southwest corner of two arterial streets: Valencia Road and Houghton Road, and is surrounded by existing development to the south, west and east. The Property is largely undisturbed with the exception of disturbance associated with an informal trail that traverses the site along the western property boundary from the northwest corner of the site to the southeast corner. Additionally, there is some disturbance along the eastern property boundary largely associated with the Tucson Electric Power electrical transmission lines and along the northern property boundary from a rip-rapped drainage channel.

A tributary of the Atterbury Wash traverses through the central portion of the Property from the southeast to the northwest. The existing vegetation on the Property consists largely of upland desert scrub predominately including Creosote, Foothills Palo Verde, Mesquite, Brittle Bush, and Prickly Pear. Plant density across much of the Property can be classified as medium to low density upland scrub vegetation, typical to the region. The areas generally around the Atterbury Wash Tributary can be classified as medium with similar plant types as the remaining site.

# B. TRANSPORTATION AND CIRCULATION

## 1. EXISTING ROADWAY CONDITIONS

Near the proposed development site, Valencia Road is currently a two-lane roadway with paved shoulders that is designated as an "Urban Principal Arterial" Federal Highway Administration (FHWA) roadway classification code. This roadway designation likely reflects the planned improvements to the corridor and not its current condition. Valencia Road has the following characteristics near the proposed Escalera PAD development. Valencia Road currently has a typical cross section of approximately 34 feet in width consisting of:

- One 12-foot travel lane in each direction.
- 5-foot paved shoulders in each direction.
- Fair pavement condition in the vicinity of the project site.

Near the proposed development site, Houghton Road (north of Valencia Road) has recently been improved to a six-lane roadway with paved shoulders and multi-use paths on both sides of the roadway. The lanes are 11 feet wide and the paved shoulders are 6 feet wide. This improvement project included the widening and capacity improvements at the Valencia Road / Houghton Road intersection which include dual left-turn lanes and single right-turn lanes for each approach as well as three through lanes for the northbound and southbound approaches and two through lanes for both the eastbound and westbound approaches. The proposed posted speed for this section of the Houghton Road corridor is 45 MPH and is designated as an "Urban Principal Arterial" Federal Highway Administration (FHWA) roadway classification code. The pavement is in good condition.

South of Valencia Road, Houghton Road currently reduces down to a two-lane roadway approximately 2,600' south of Valencia Road. This roadway designation likely reflects the planned improvements to the corridor and not its current condition. Similar to Valencia Road, this segment of Houghton Road currently contains the same cross section elements as previously described.

## 2. CITY OF TUCSON ORDINANCES

Valencia Road is designated as a Gateway Route and is subject to the Gateway Corridor Zone (GCZ). Houghton Road is designated as a Scenic Route and is subject to both the GCZ and Scenic Corridor Zone (SCZ).

***Gateway Corridor Zone***

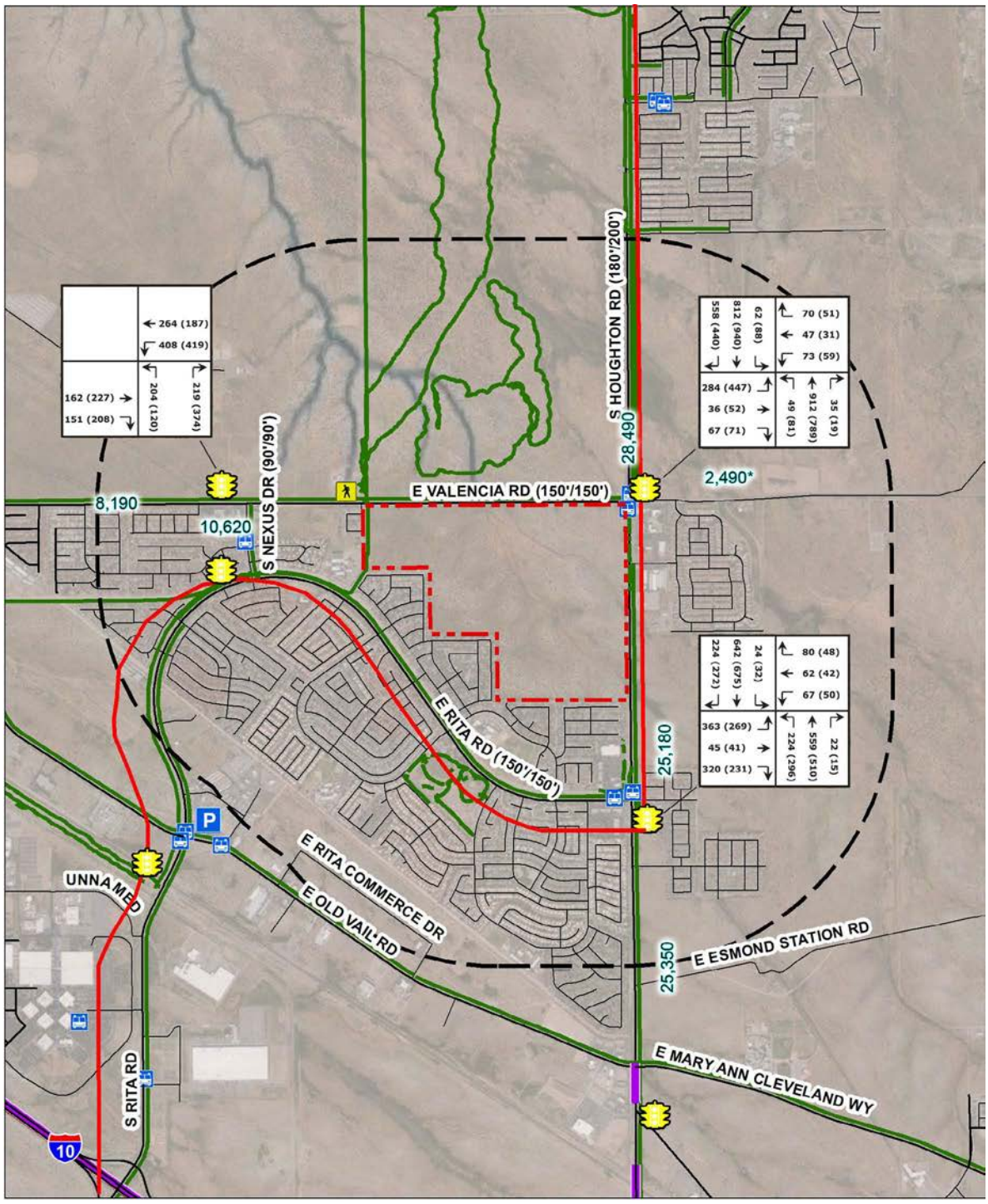
According to the City of Tucson Unified Development Code (UDC) *Section 5.5 Gateway Corridor Zone*, on-street intersections where a Scenic Route and Gateway Route intersect, development review and criteria provisions of the Gateway Route apply for seven hundred (700) feet along the Scenic Route from each side of the intersection. The seven hundred (700) feet is measured from the MS&R right-of-way line of the Gateway Route. Since Valencia is a Gateway Route, the regulations of the Gateway Corridor Zone shall apply to Valencia Road and 700 linear feet along Houghton Road, and shall supersede the requirements of the SCZ for the applicable duration of Houghton Road that is subject to the GCZ.

***Scenic Corridor Zone***

Subject to provision above, the provisions of the Scenic Corridor Zone (SCZ) apply to any portion of all real properties or parcels which are within four hundred (400) feet of the future right-of-way line of any Scenic Route designated on the Major Streets and Routes (MS&R) Plan. The SCZ provisions outlined in *Section IV.B.1.b* of this document apply along Houghton Road for the remaining portion of the scenic route that is not subject to the GCZ, and shall supersede the provisions identified in *Article 5, Section 5.3* Scenic Corridor Zone of the UDC.

## 3. EXISTING TRAFFIC VOLUMES

Existing traffic volumes were collected for Valencia Road and Houghton Road with the project area in September of 2018. 24-hour counts were collected for these roadways and peak-hour turning movement counts were collected at the existing intersections of Valencia Road / Nexus Road, Valencia Road / Houghton Road, and Houghton Road / Rita Road. The existing traffic volumes are shown in *Exhibit II.B.1: Traffic*.




**LEGEND**

PAD Boundary
One-Mile Radius
Traffic Signals
(90'/90') Existing ROW/Planned ROW
Scenic Routes
Bike Routes
HAWK Crossing
Bus Route
Bus Stops
Park & Ride Lot
xx,xxx 2018 ADT
xx,xxx* 2016 ADT
xx (xx) 2018 AM (PM) Turn Movements
NORTH
0' 1500' 3000'
FILE NAME: traffic_6x8.mxd
SOURCE: Pima County GIS, 2018

## C. ZONING

The Property is currently zoned RX-1 (Residence Zone). Zones for the surrounding properties within 150 feet can be found in *Table II.C: Surrounding Zones*.

### TABLE II.C: SURROUNDING ZONES

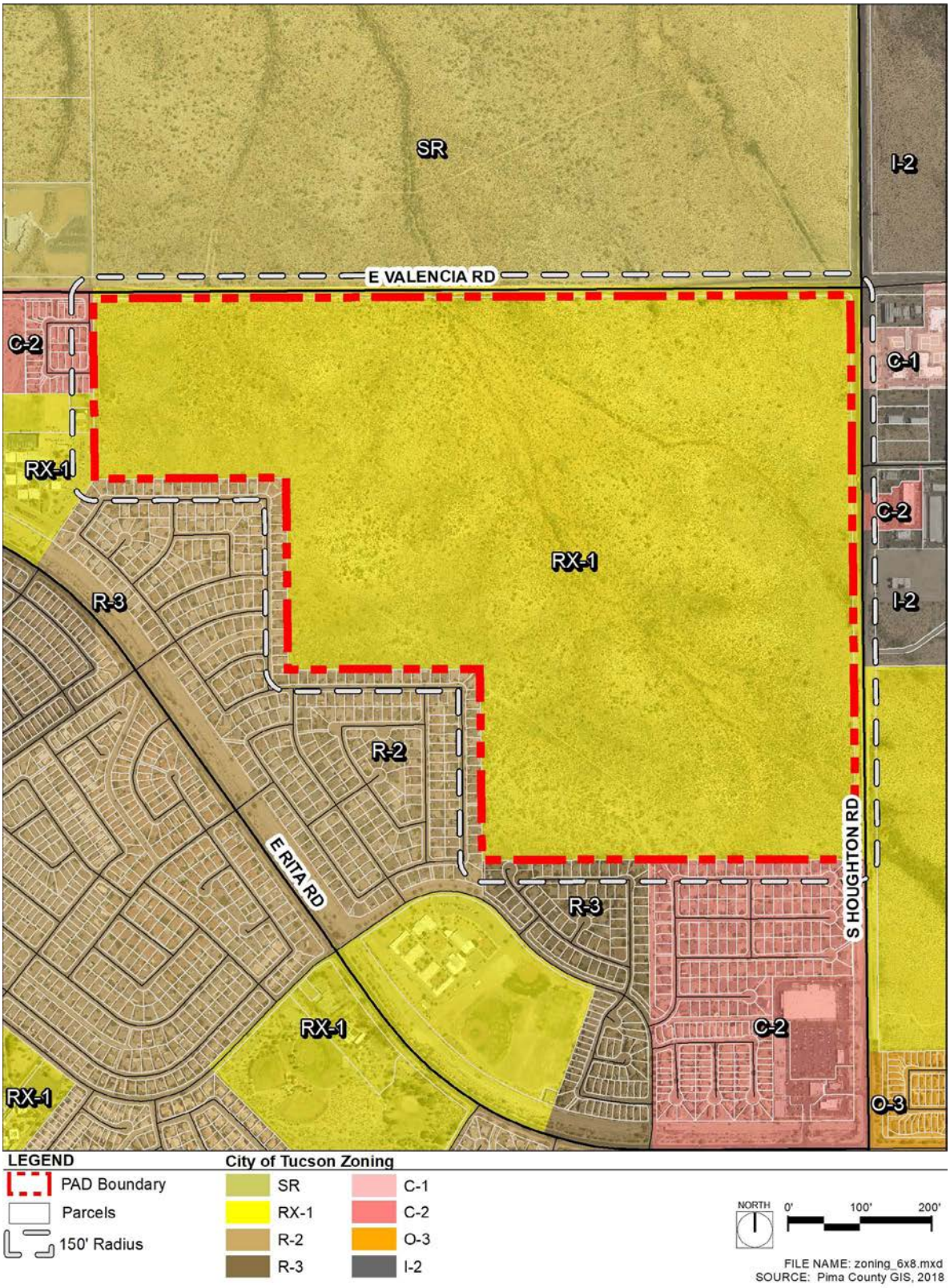
| Direction | Zone |
|---|---|
| North | SR (Suburban Ranch) |
| South | C-2 (Commercial), R-3 (Residence) |
| East | RX-1 (Residence), I-2 (Industrial), C-1 (Commercial), C-2 (Commercial) |
| West | C-2 (Commercial), RX-1 (Residence), R-2 (Residence) |

## D. ADJACENT PARCELS AND STRUCTURES

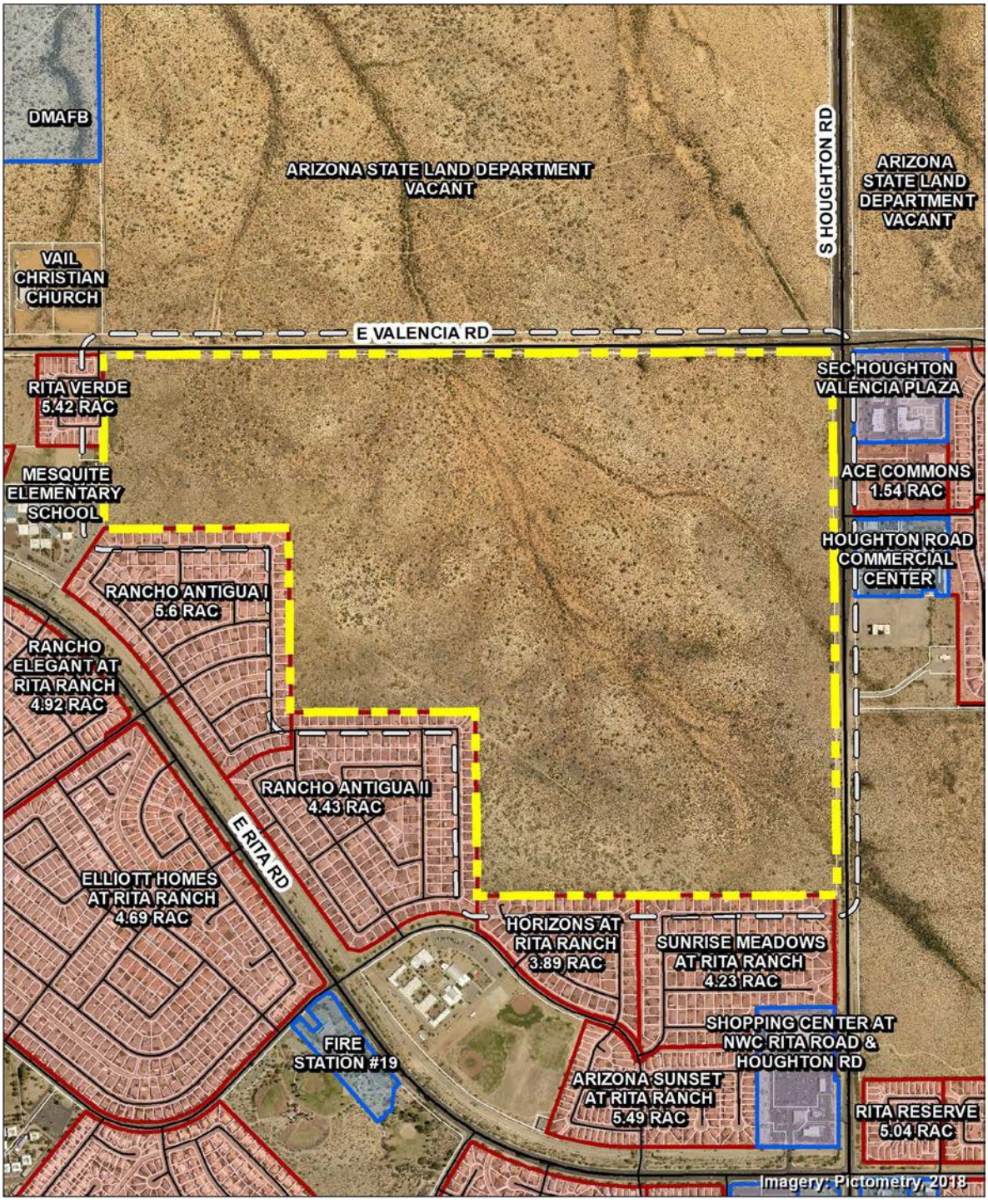
Existing land uses on adjacent parcels within 150 feet of the Property can be seen in *Table II.D: Existing Land Uses and on Exhibit II.D: Existing Land Uses*.

### TABLE II.D: EXISTING LAND USES

| Direction | Property Use |
|---|---|
| North | Vacant |
| South | One-and Two Story Single-Family Residential, One-Story Commercial |
| East | Vacant, One-Story Commercial |
| West | Elementary School, One- and Two-Story Single-Family Residential |


SR
I-2
E VALENCIA RD
C-2
C-1
RX-1
C-2
RX-1
R-3
I-2
R-2
E RITA RD
S HOUGHTON RD
R-3
RX-1
C-2
RX-1
O-3
LEGEND
PAD Boundary
Parcels
150' Radius
City of Tucson Zoning
SR
RX-1
R-2
R-3
C-1
C-2
O-3
I-2
NORTH
0'
100'
200'
FILE NAME: zoning_6x8.mxd
SOURCE: Pima County GIS, 2018

# EXHIBIT II.D: EXISTING LAND USES



## E. PARK, RECREATION AND OPEN SPACE

According to the Pima Regional Trail System Master Plan (PRTSMP), there are several recreational amenities within a one-mile radius of the Property. The following greenways are located within one-mile of the subject property: Harrison Road Greenway (provides connection to The Loop), Valencia Road Greenway, Atterbury Wash Greenway, Rita Ranch Greenway, Houghton Road Greenway, Esmond Station Greenway and Atterbury Wash North Greenway. It should be noted that the final design and alignment of the Atterbury Wash Greenway or any future trail that bisects the Property will be determined during the final platting and/or development plan process. The following trails are located within one-mile of the subject property: Atterbury Connection Trail, Rita Ranch Trail, and Rita Ranch Two Trail. Additionally, the Civano Wash Path is located within one-mile of the site.

The Houghton Road Greenway lies adjacent to the PAD and features a 10-foot regional multi-path corridor on the eastern side of the road, an 8-foot multi-use on the western side of the road (for a portion of the eastern property boundary) and contains native plants and landscaping that maintains the scenic corridor. The Houghton Road Greenway utilizes water harvesting and incorporates wildlife-sensitive design.

Purple Heart Park is located within one mile of the Property. The 30-acre park features a parking lot, playground, shaded and unshaded picnic tables, barbecue grills, ramadas, walking paths, community pool, dog park and a variety of sports fields.

See *Exhibit II.E: Recreation*.

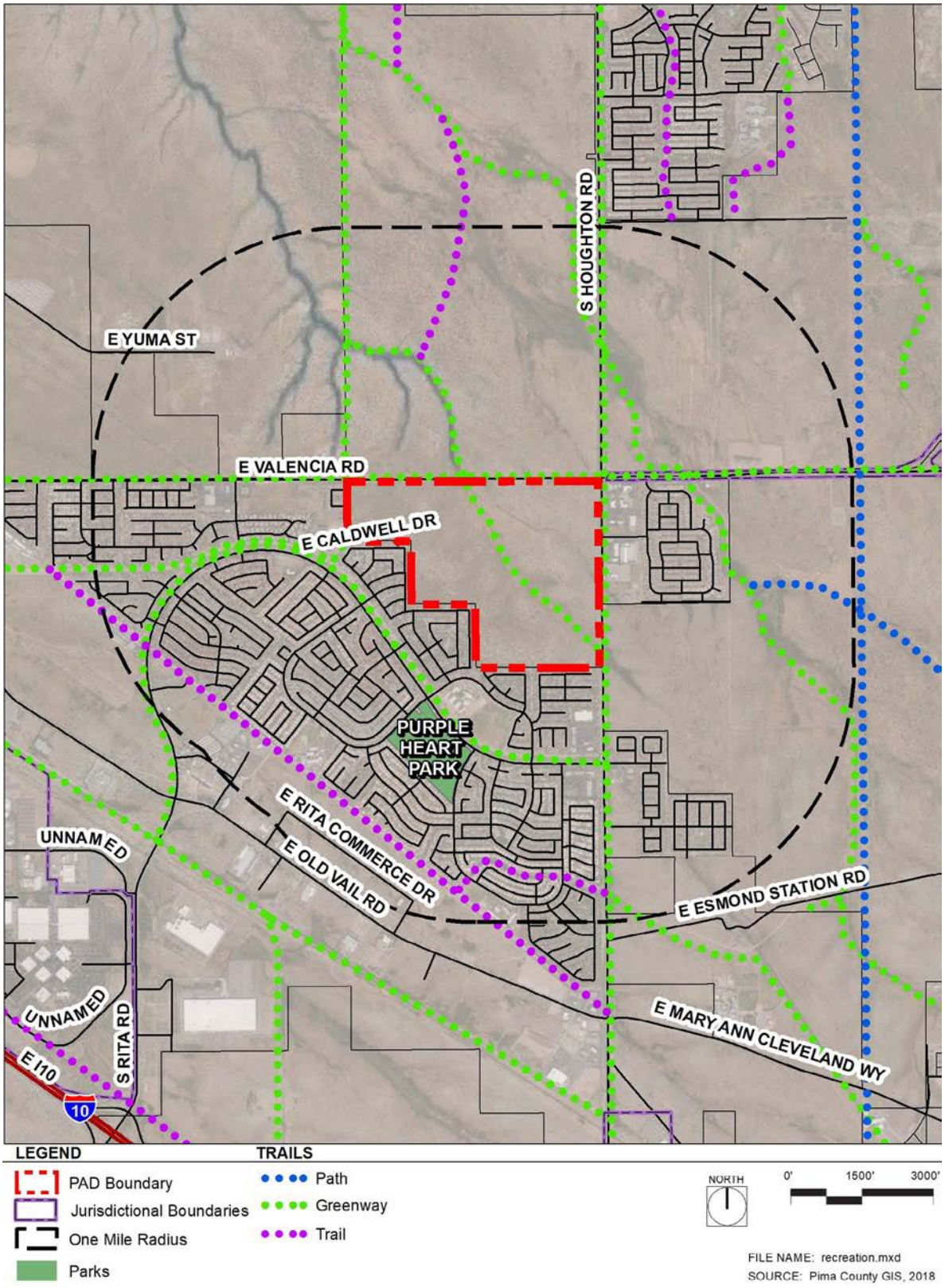
## F.PUBLIC, EDUCATIONAL, COMMUNITY AND CULTURAL FACILITIES

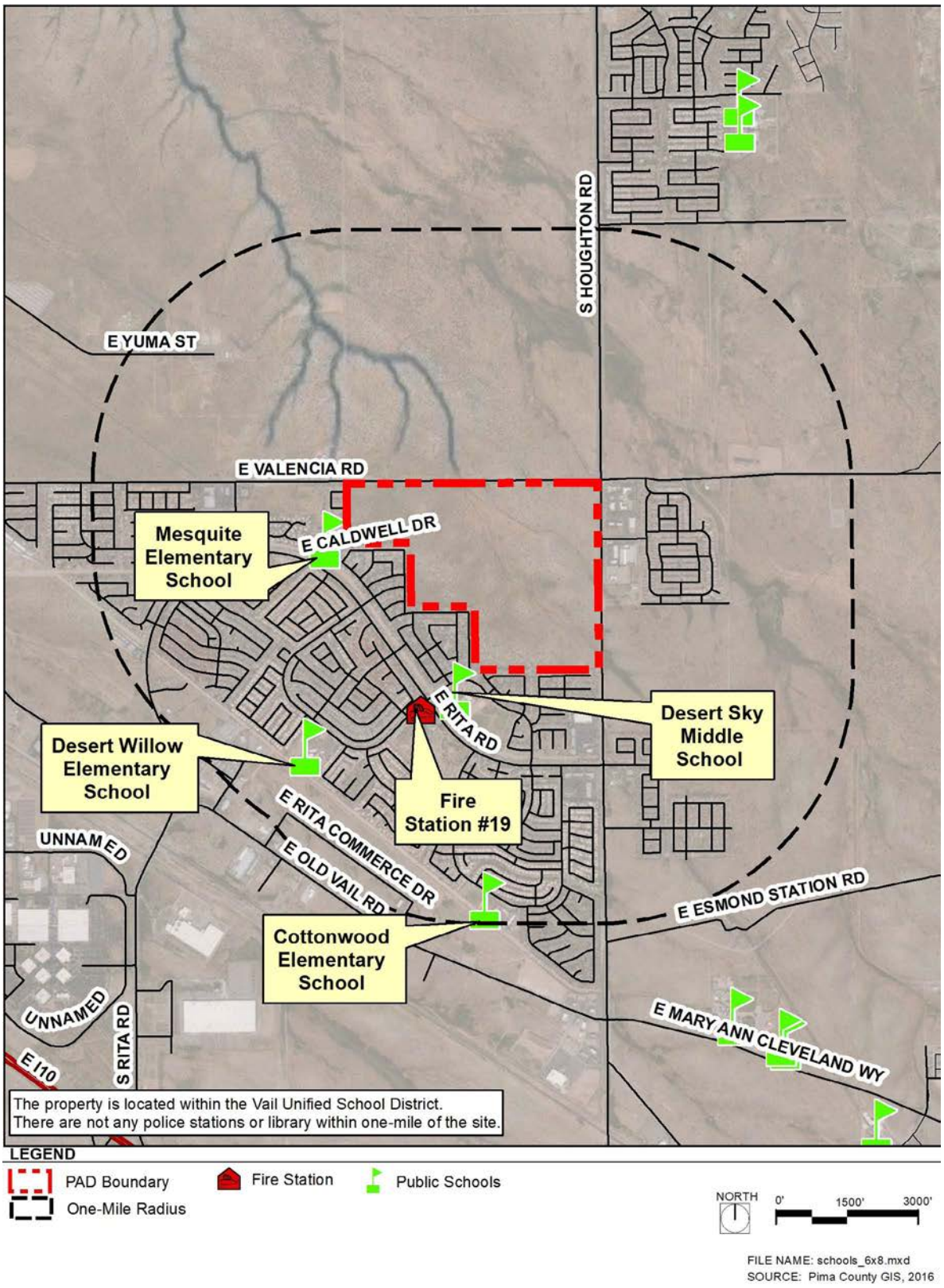
The Property is located within the Vail Unified School District (VUSD). As indicated on *Exhibit II.F: Community Facilities*, four public schools are located within one-mile of the Property: Mesquite Elementary School, Desert Willow Elementary School, Cottonwood Elementary School and Desert Sky Middle School. There are no charter schools or public schools within one-mile of the Property. VUSD was contacted in August 2018 inquiring about current enrollment and capacity numbers for the public schools that will serve the site. VUSD indicated that based on the predicted 1,312 residential units, the PAD at full build-out will generate approximately 328 elementary school students, 223 middle school students, and 275 high school students. Currently, there is capacity at Mesquite Elementary and Desert Sky Middle School. Within the three high schools in VUSD there is currently no capacity, but a new high school is in the planning stages, and is projected to open prior to the development of this project.

The nearest fire station is Tucson Fire Department Fire Station #19 located at 9700 East Esmond Loop less than one-half mile southwest of the Property.

There are no libraries or police stations within one-mile of the site. The closest public library to the site is the George Miller-Golf Links Library located off Harrison Road and Golf Links Road, just over 6 miles northwest of the subject property. The closest police station to the Property is the Tucson Police Department – Rincon Substation located off Harrison Road and Golf Links Road, just over 6 miles northwest of the Property.

# EXHIBIT II.E: RECREATION




S HOUGHTON RD
E YUMA ST
E VALENCIA RD
E CALDWELL DR
Mesquite Elementary School
E RITA RD
Desert Sky Middle School
Desert Willow Elementary School
Fire Station #19
E RITA COMMERCE DR
E OLD VAIL RD
UNNAMED
E ESMOND STATION RD
Cottonwood Elementary School
UNNAMED
S RITA RD
E I10
E MARY ANN CLEVELAND WY
The property is located within the Vail Unified School District.
There are not any police stations or library within one-mile of the site.
LEGEND
PAD Boundary
One-Mile Radius
Fire Station
Public Schools
NORTH
0'
1500'
3000'
FILE NAME: schools_6x8.mxd
SOURCE: Pima County GIS, 2016

# G. EXISTING DRAINAGE

This section of the PAD submittal includes pre-development onsite and offsite hydrologic and hydraulic characteristics. CMG Drainage Engineering, Inc. (CMG) conducted a preliminary drainage assessment for the Property based on existing Tucson Stormwater Management Study (TSMS) hydrologic data and the results of supplemental hydrologic computations using the City of Tucson method.

A tributary of the Atterbury Wash bisects the Property (Wash 1, CP-3 to CP-B). The Atterbury Wash watershed is considered a balanced watershed by the City of Tucson, which requires that post-developed onsite peak flows to be at or below pre-developed conditions. The wash is currently natural both onsite and offsite, and the watershed is mostly undeveloped. Other existing conditions flows on site are conveyed through natural washes. Wash 1 has a regulatory tributary (Wash 2, CP-2 to CP-C), which has a drainage area of 75 acres. At Valencia Road on Wash 1 (CP-B), there is a TSMS node with a 100-year discharge of 895 cfs and 7-10'x4' box culverts to convey flow beneath the roadway. Preliminary models show that the existing culvert can pass the 895 cfs. Offsite flows that impact the property are from the east side of Houghton Road (CP-1, CP-2 and CP-3). The offsite washes cross Houghton Road through at-grade low water crossings prior to entering the site. Vegetation growth upstream of Houghton Road indicates temporary ponding of stormwater at the roadway. A summary of peak flows entering and exiting the site can be seen on *Exhibit II.G: Existing Hydrology and Drainage.*

## 1. ON-SITE AND OFF-SITE WATERSHEDS

*Exhibit II.G: Existing Hydrology and Drainage* shows the boundaries of the onsite and offsite watersheds impacting the Property. Runoff from three offsite watersheds enters the Property from east (at Houghton Road). These flow Concentration Points, identified as CP-1, CP-2, and CP-3 are labeled numerically on *Exhibit II.G: Existing Hydrology and Drainage*, and their respective 100-year discharges and watershed acreages are listed in tabular form on the exhibit. Five on-site watersheds generate 100-year discharges greater than 100 cfs. The 100-year floodplain limits for the five washes associated with these watersheds have been shown on *Exhibit II.G.*

## 2. 100-YEAR FLOODPLAINS

Wash 1 is mapped as a FEMA Zone A floodplain as shown on FIRM Panel No. 04019C2925L (effective date 6/16/2011). Preliminary 100-year floodplain limits for the other four onsite regulatory washes have been determined by CMG. The floodplain limits are shown on *Exhibit II.G: Existing Hydrology and Drainage.*

## 3. ORDINANCES

The washes on the Property are not subject to the Environmental Resource Zone (ERZ) or Watercourse Amenities, Safety, and Habitat (WASH) ordinances.

## 4. EROSION HAZARD AREAS

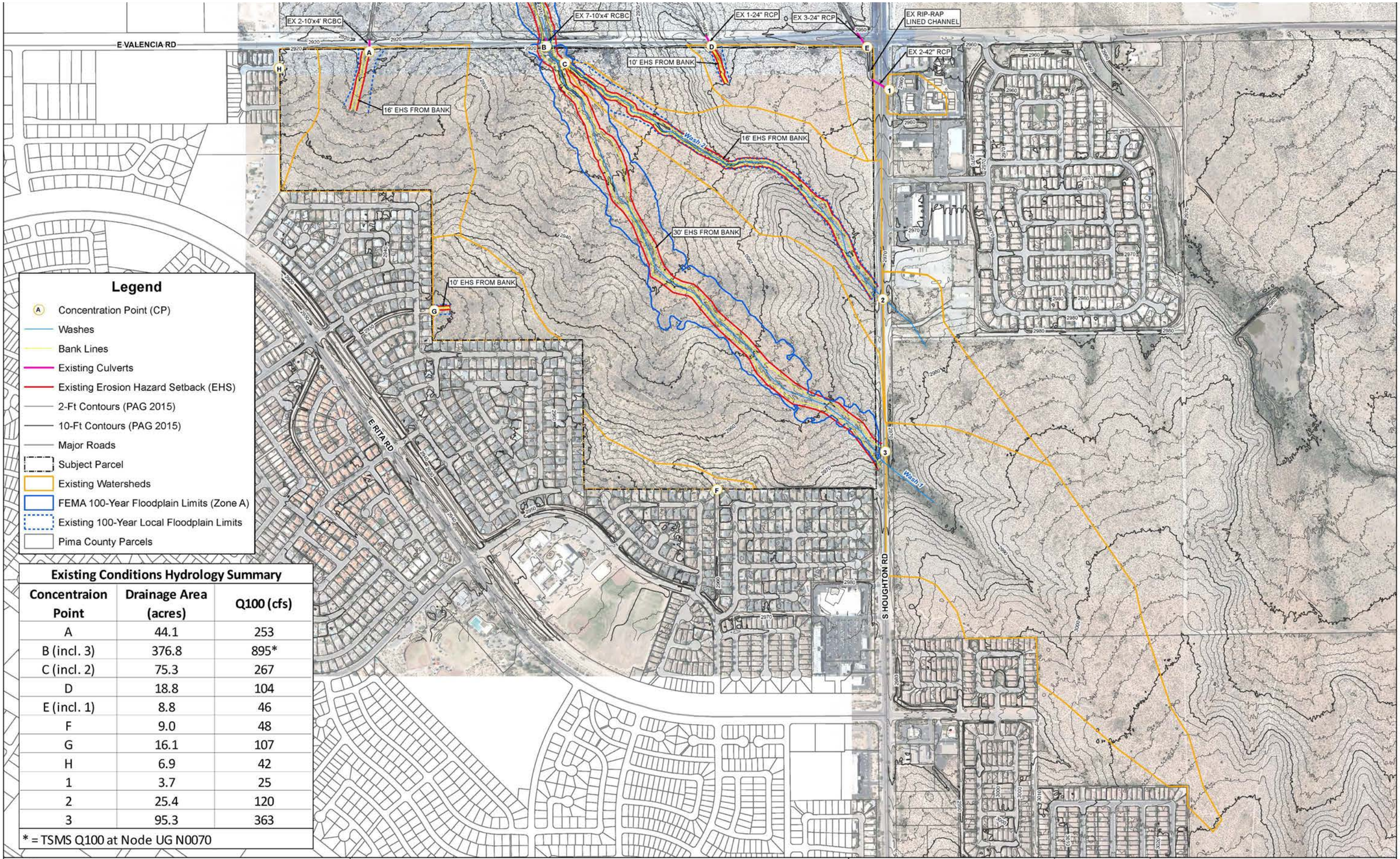
Erosion hazard setback (EHS) limits have been determined for the regulatory washes and are shown on *Exhibit II.G*. The EHS limits are measured from the bank of the wash per Chapter 7 of the City of Tucson Standards Manual for Drainage Design and Floodplain Management (SMDD). The setback for Wash 1 is 30 feet, 16 feet for Wash 2, 16 feet for CP-A, 10 feet for CP-D, and 10 feet for CP-G. The setback distances were determined by Equation 7.8a from the SMDD.

The following information has been provided on *Exhibit II.G: Existing Hydrology and Drainage*, or in the text below.

a. *100-Year Discharges*
The 100-year discharge at designated concentration points can be seen on *Exhibit II.G*. At Valencia Road on Wash 1 (CP-B), there is a TSMS node with a 100-year discharge of 895 cfs and 7-10'x4' box culverts to convey flow beneath the roadway. All other discharges were calculated using the City of Tucson Method.

b. *Existing Condition Drainage Patterns*
The wash is currently natural both onsite and offsite, and the watershed is mostly undeveloped. Other existing conditions flows on the Property are conveyed through natural washes.

c. *Ordinances*
The Property is within the City of Tucson and will need to comply with the City Floodplain Ordinance. The




## Legend

- Concentration Point (CP)
- Washes
- Bank Lines
- Existing Culverts
- Existing Erosion Hazard Setback (EHS)
- 2-Ft Contours (PAG 2015)
- 10-Ft Contours (PAG 2015)
- Major Roads
- Subject Parcel
- Existing Watersheds
- FEMA 100-Year Floodplain Limits (Zone A)
- Existing 100-Year Local Floodplain Limits
- Pima County Parcels

**Existing Conditions Hydrology Summary**

| Concentraion Point | Drainage Area (acres) | Q100 (cfs) |
|---|---|---|
| A | 44.1 | 253 |
| B (incl. 3) | 376.8 | 895* |
| C (incl. 2) | 75.3 | 267 |
| D | 18.8 | 104 |
| E (incl. 1) | 8.8 | 46 |
| F | 9.0 | 48 |
| G | 16.1 | 107 |
| H | 6.9 | 42 |
| 1 | 3.7 | 25 |
| 2 | 25.4 | 120 |
| 3 | 95.3 | 363 |

* = TSMS Q100 at Node UG N0070

N

0 350 700 1,400 2,100 Feet

1 inch = 350 feet

NOTES:

1. FEMA FLOODPLAIN LIMITS WERE OBTAINED FROM FIRM PANEL 04019C2925L WITH AN EFFECTIVE DATE OF JUNE 16, 2011.
2. VERTICAL DATUM = NADV88. HORIZONTAL DATUM = ARIZONA STATE PLANE CENTRAL NAD83 HARN.
3. AERIAL PHOTO BY PIMA ASSOCIATION OF GOVERNMENTS (PAG), 2015.
4. TOPOGRAPHY BY PIMA ASSOCIATION OF GOVERNMENTS (PAG), 2015. 2-FT CONTOUR INTERVAL.

CMG DRAINAGE ENGINEERING, INC.

3555 N MOUNTAIN AVE., TUCSON, ARIZONA 85719
PHONE: (520) 882-4244, FAX: (520) 888-1421

| | |
|---|---|
| PROJECT NO.: | 18-046 |
| DESIGN: | RWN |
| CHECKED: | JC |
| DRAWN: | RWN |
| DATE: | 12/10/2018 |

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Atterbury Wash watershed is considered a balanced watershed by the City of Tucson, which requires that post-developed onsite peak flows to be at or below pre-developed conditions. The washes on the Property are not subject to the Environmental Resource Zone (ERZ) or Watercourse Amenities, Safety, and Habitat (WASH) ordinances.

## H. EXISTING INFRASTRUCTURE

The Property is largely surrounded by existing infrastructure that has sufficient capacity for the proposed PAD development.

### 1. ELECTRIC

Tucson Electric Power services the general vicinity surrounding the Property. There are existing electrical transmission lines located along the eastern property boundary in the Houghton Road right-of-way.

### 2. SEWER

The existing sewer network can be seen on *Exhibit II.I.3.a: Sewer Network*. The Property is tributary to the Agua Nueva Wastewater Reclamation Facility via the Southeast Interceptor. Capacity is currently available for the proposed project in the public sewer G-2001-001, downstream from manhole 4216-06. Refer to *Exhibit II.I.3.b: Pima County Wastewater Reclamation Wastewater Capacity Letter.*

### 3. WATER

Per the Tucson Water Service Area Map, the Property is located within the Tucson Water obligated service area. Tucson Water has indicated that there is an assured water supply (AWS) from the State of Arizona Department of Water Resources (ADWR) and water service will be provided to the subject property upon completion and approval of a water service application (See *Exhibit II.I.4: Tucson Water Letter*).

## I. TOPOGRAPHY

The topography on the Property ranges from 2,918 feet at the northwest corner to 2,972 feet at the southeastern corner of the Property. The Property generally slopes from the southeastern corner to the northwest corner of the property, with the southern portion of the property lying higher than the northern property lie. The site generally slopes towards the Atterbury Wash Tributary resulting in a “bowl” on the east-west plane. There are minimal slopes greater than 15% within the wash areas, however, given the disbursement of slopes exceeding 15%, their significance is negligible (See *Exhibit II.J: Topography*).

The average cross slope of the parcel is 2.75%, as calculated by performing the following calculation:

$$ACS = \frac{I \times L \times 0.0023}{A}$$

Where:

Interval (I) = 2’
Total length of contours (L) = 205,903’
Area (A) = 344.3 AC

$$ACS = \frac{2 \times 205{,}903 \times 0.0023}{344.3}$$

$$ACS = 2.75\%$$

# EXHIBIT II.I.3.A: SEWER NETWORK

PIMA COUNTY
WASTEWATER RECLAMATION
201 NORTH STONE AVENUE
TUCSON, ARIZONA 85701-1207

JACKSON JENKINS
DIRECTOR

PH: (520) 724-6500
FAX: (520) 724-9635

August 15, 2018

Lexy Wellott
The Planning Center
2 E Congress St #600
Tucson AZ 85701

**Sewerage Capacity Investigation No. 2018-212 Type I**

RE: **Valencia and Houghton PAD (PUL-30), Parcel 141010130**
**Estimated Flow 343,392 gpd (ADWF).**
**P18WC00212**

Greetings:

The above referenced project is tributary to the Agua Nueva Wastewater Reclamation Facility via the Southeast Interceptor.

Capacity is currently available for a project this size in the public sewer G-2001-001, downstream from manhole 4216-06.

This letter is not a reservation or commitment of treatment or conveyance capacity for this project. It is not an approval of point and method of connection. It is an analysis of the system as of this date. Allocation of capacity is made by the Type III Capacity Response.

If further information is needed, please feel free to contact us at (520) 724-6369.

Reviewed by: Denice Elie, CEA

CITY OF TUCSON

TUCSON WATER DEPARTMENT

August 14, 2018

The Planning Center
2 E. Congress St.
Tucson, AZ 85701

Attn: Lexy Wellott

SUBJECT: **Water Availability for Project: SWC Valencia Rd & Houghton Rd , APN: 141010130,Case #: WA2570, T-15 R-15 S-23, Lots: 9999, Location Code: TUC, Total Area: 344.35 , Zoning: RX-1**

**WATER SUPPLY**

*Tucson Water will provide water service to this project based on the subject zoning of the above parcels.* Tucson Water has an assured water supply (AWS) designated from the State of Arizona Department of Water Resources (ADWR). An AWS designation means Tucson Water has met the criteria established by ADWR for demonstration of a 100-year water supply - it does not mean that water service is currently available to the subject project.

**WATER SERVICE**

The approval of water meter applications is subject to the current availability of water service at the time an application is received. The developer shall be required to submit a water master plan identifying, but not limited to: 1) Water Use; 2) Fire Flow Requirements; 3) Offsite/Onsite Water Facilities; 4) Loops and Proposed Connection Points to Existing Water System; and 5) Easements/Common Areas.

Any specific area plan fees, protected main/facility fees and/or other needed facilities' cost, are to be paid by the developer. *If the existing water system is not capable of meeting the requirements of the proposed development, the developer shall be financially responsible for modifying or enhancing the existing water system to meet those needs.*

***This letter shall be null and void two years from the date of issuance.***

**Issuance of this letter is not to be construed as agency approval of a water plan or as containing construction review comments relative to conflicts with existing water lines and the proposed development.**

If you have any questions, please call New Development at 791-4718.

Sincerely,

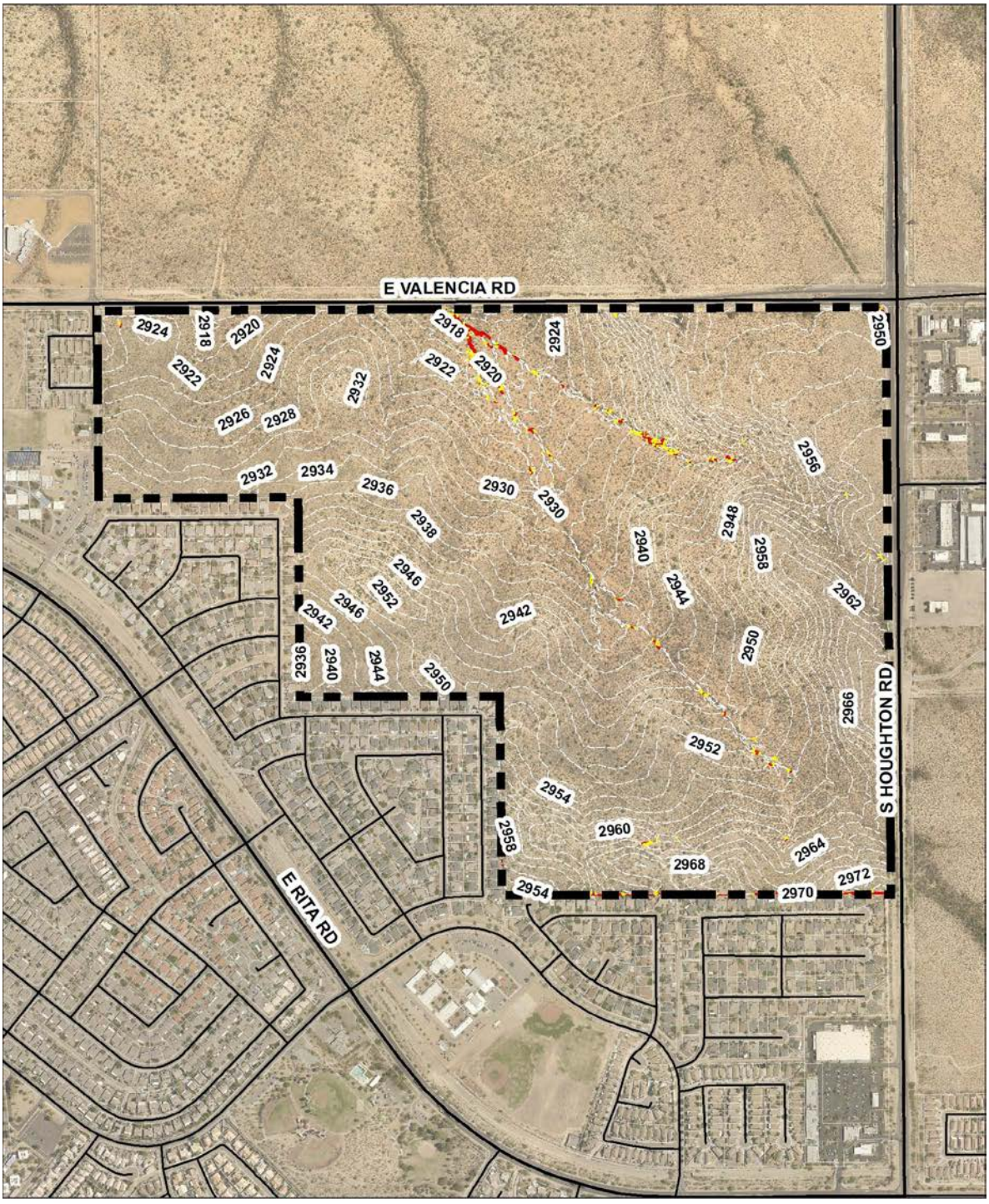
Richard A. Sarti

Richard A. Sarti, P.E.
Engineering Manager
Tucson Water Department

RS:ka
CC:141010130.docx

TUCSON WATER

NEW DEVELOPMENT • P.O. BOX 27210 • TUCSON, AZ 85726-7210
(520) 791-4718 • FAX (520) 791-2501 • TDD (520) 791-2639 • www.tucsonaz.gov/water




**LEGEND**

- PAD Boundary
- Parcels
- 2' Elevation Contours
- Slopes 15% - 25%
- Slopes >25%

NORTH 0' 1000' 2000'

FILE NAME: topo_6x8.mxd
SOURCE: Pima County GIS, 2018

## J. VEGETATION AND WILDLIFE

The natural vegetation on the Property is largely undisturbed, with exception of the disturbance associated with an informal trail that traverses the Property along the western boundary from the northwest to the southeast corners of the property. Vegetation density and composition vary across the site, dependent upon relative proximity to the tributaries of the Atterbury Wash. As shown on *Exhibit II.K: Vegetative Communities*, there are two vegetative communities and/or plant associations located on the Property: Sonoran Desertscrub and Xeroriparian Class C. In December 2018, WestLand Resources, Inc. conducted a survey for tobosagrass (*Pleuraphis [=Hiaria] mutica*) on the Property. The results of the survey performed by WestLand Resources indicated that there is no tobosagrass present on the Property and that majority of the grass found onsite was buffelgrass. The complete finding of the survey can be found in the *Appendix* of this document.

### 1. SONORAN DESERTSCRUB

The Sonoran Desert Scrub community occupies approximately 310 acres of the property. The plant species predominately consist of Creosote Bush (Larrea tridentate), Foothills Palo Verde (Parkinsonia microphylla), Velvet Mesquite (Prosopis velutina), Brittlebush (Encelia farinose), and Prickly Pear Cacti (Opuntia engelmanii). Plant density throughout much of the Property can be classified as medium to low density typical of upland scrub vegetation in the region.

### 2. XERORIPARIAN CLASS C

Pima County has mapped Xeroriparian C habitat delineated onsite (See Exhibit II.K: Vegetative Communities). The xeroriparian habitat consists of a mix of Whitethorn Acacia Trees (Acacia constricta), Foothills Palo Verde Trees (Cercidium microphyllum), Desert Hackberry Shrubs (Celtis pallida), and Velvet Mesquite Trees (Prosopis velutina). A number of Fish Hook Barrel Cacti (Ferocactus wizlizennii) also occur in the Xeroriparian area.

### 3. ARIZONA GAME AND FISH DEPARTMENT

The Arizona Game and Fish Department's (AGFD) Heritage Data Management and Project Evaluation Program was consulted utilizing the Online Environmental Review Tool to determine occurrences of special species on the Property. As shown on *Exhibit II.K.3: Arizona Game and Fish Letter*, the Arizona Game and Fish Department's Online Environmental Review Tool indicates there are twelve (12) special status species that have been documented within a three-mile radius of the Property including: Western Burrowing Owl, Mexican Wolf, Sonoran Desert Tortoise, Reticulate Gila Monster, Western Yellow Bat, Ocelot (possible occurrence), Cave Myotis, Stag-horn Cholla, Jaguar (possible occurrence), Brazilian Free-tailed Bat and the Desert Box Turtle (See *Appendix* for full report).

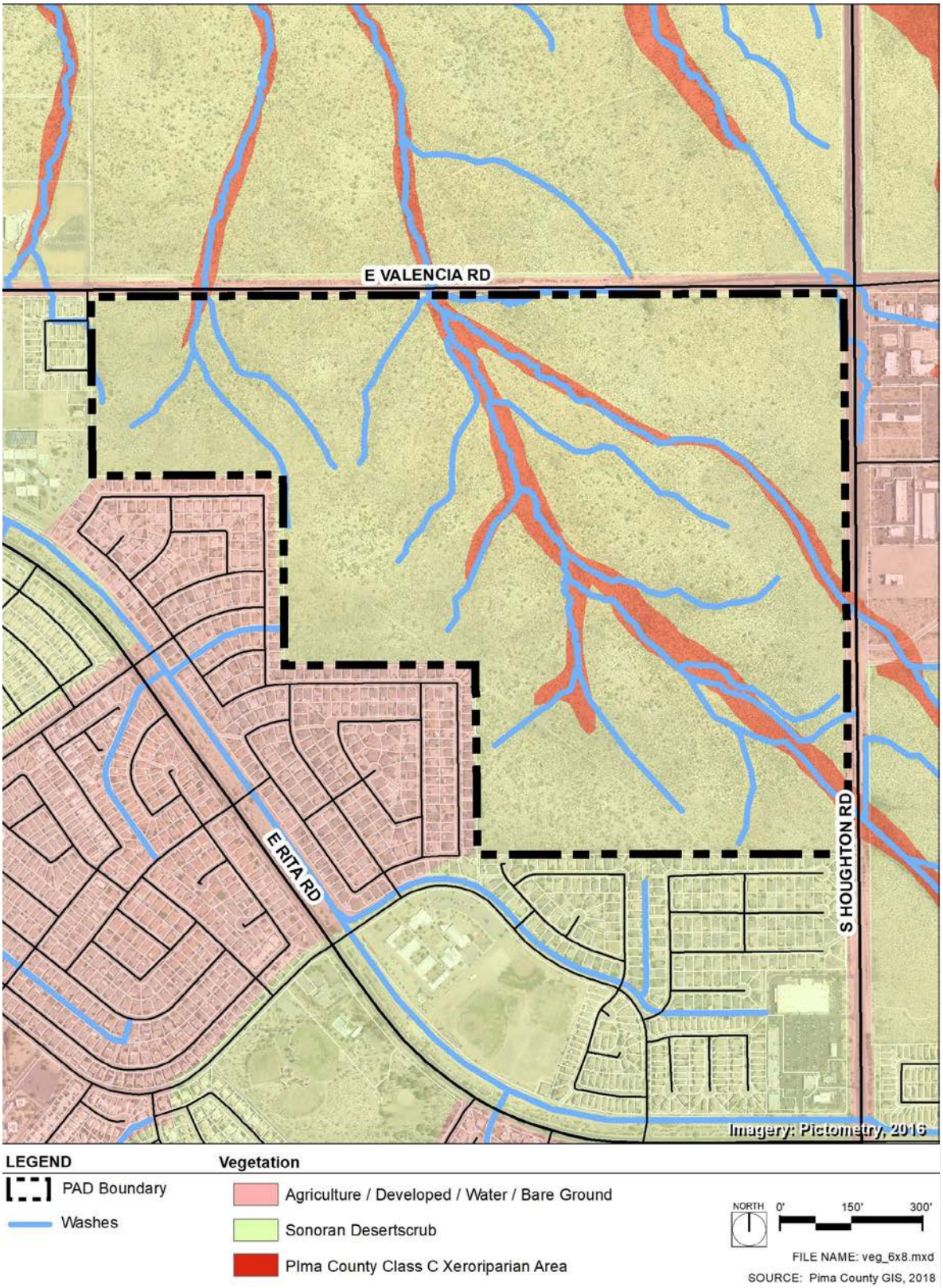
## K. SOILS

Per data obtained during a soil survey of eastern Pima County performed in 2003 by the National Resource Conservation Service (NRCS), there are a variety of soil classifications found on the Property. As shown on *Exhibit II.L: Soil Classifications*, the following soils are present on the Property: Continental – Tubac, Mohave – Sahuarita – Cave, Pinaleno – Nickel - Palos Verdes, and Tanque – Riverroad – Arizo – Riggs. The NRCS indicates that soils of this type are typically used for home sites and other urban development, as well as for recreation purposes.

## L. VIEWSHEDS AND VISUAL ANALYSIS

The perimeter of the PAD is visible from Houghton Road looking southwesterly, from Valencia Road looking south and from The Loop looking east. However, due to the topography and onsite vegetation density, views into the property from these vantage points are minimal. Based on the topography, views across the site from the southern property boundary looking north are notable simply due to the elevation differences and the natural topography of the site. The existing homes in Rita Ranch, immediately adjacent to the southern property boundary, generally sit at a higher elevation with the exceptions of the areas near the Atterbury Wash Tributary where the grades converge and a "bowl" is formed. Viewshed of the Catalinas and Rincon Mountains are visible throughout most portions of the property. The inner portions of the property vary from medium to low visibility largely due to topographical differences of the site and vegetation density.

Refer to *Exhibit II.M.1: Photo Key Map* and *Exhibit II.M.2: Site Photos*.


E VALENCIA RD
E RITA RD
S HOUGHTON RD
Imagery: Pictometry, 2016
LEGEND
PAD Boundary
Washes
Vegetation
Agriculture / Developed / Water / Bare Ground
Sonoran Desertscrub
Pima County Class C Xeroriparian Area
NORTH
0'
150'
300'
FILE NAME: veg_6x8.mxd
SOURCE: Pima County GIS, 2018

# M. CULTURAL SITES

## 1. ARIZONA STATE MUSEUM LETTER

According to a record search performed by the Arizona State Museum (ASM), 38 archaeological survey projects were conducted within a one-mile radius of the project area between 1938 and 2012; each of which were conducted in support of road construction and improvements, residential and commercial development, construction of community parks and sport facilities, land sales, installation of cell towers, well construction and the installation/maintenance of utilities. The entire project area was surveyed in 1987 as part of the Houghton Hills Survey (Douglas 1987), which identified 51 archaeological sites within their nearly 4,000-acre project area.

Thirty-seven archaeological sites have been identified within a one-mile radius of the project area. Ten of those sites are located within the project area. All are prehistoric sites for which National Register eligibility has not been determined.

Due to the age of the previously performed survey, the ASM advises that a qualified archaeological contractor be consulted prior to any ground disturbance beginning. Refer to *Exhibit II.N: Arizona State Museum Archaeological Records Search*.

Arizona Game and Fish Department
Project ID: HGIS-07879

project_report_valencia_houghton_pad_28457_29301.pdf
Review Date: 8/14/2018 04:00:57 PM

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

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|---|---|---|---|---|---|---|
| Athene cunicularia hypugaea | Western Burrowing Owl | SC | S | S | | 1B |
| Bat Colony | | | | | | |
| Canis lupus baileyi | 10J area Zone 2 for Mexican Wolf | LE,XN | | | | |
| Gopherus morafkai | Sonoran Desert Tortoise | CCA | S | S | | 1A |
| Heloderma suspectum suspectum | Reticulate Gila Monster | | | | | 1A |
| Heloderma suspectum | Gila Monster | | | | | 1A |
| Lasiurus xanthinus | Western Yellow Bat | | S | | | 1B |
| Leopardus pardalis | Ocelot Area of Possible Occurrence | LE | | | | 1A |
| Myotis velifer | Cave Myotis | SC | | S | | 1B |
| Opuntia versicolor | Stag-horn Cholla | | | | SR | |
| Panthera onca | Jaguar Area of Possible Occurrence | LE | | | | 1A |
| Tadarida brasiliensis | Brazilian Free-tailed Bat | | | | | 1B |
| Terrapene ornata luteola | Desert Box Turtle | | | S | | 1A |

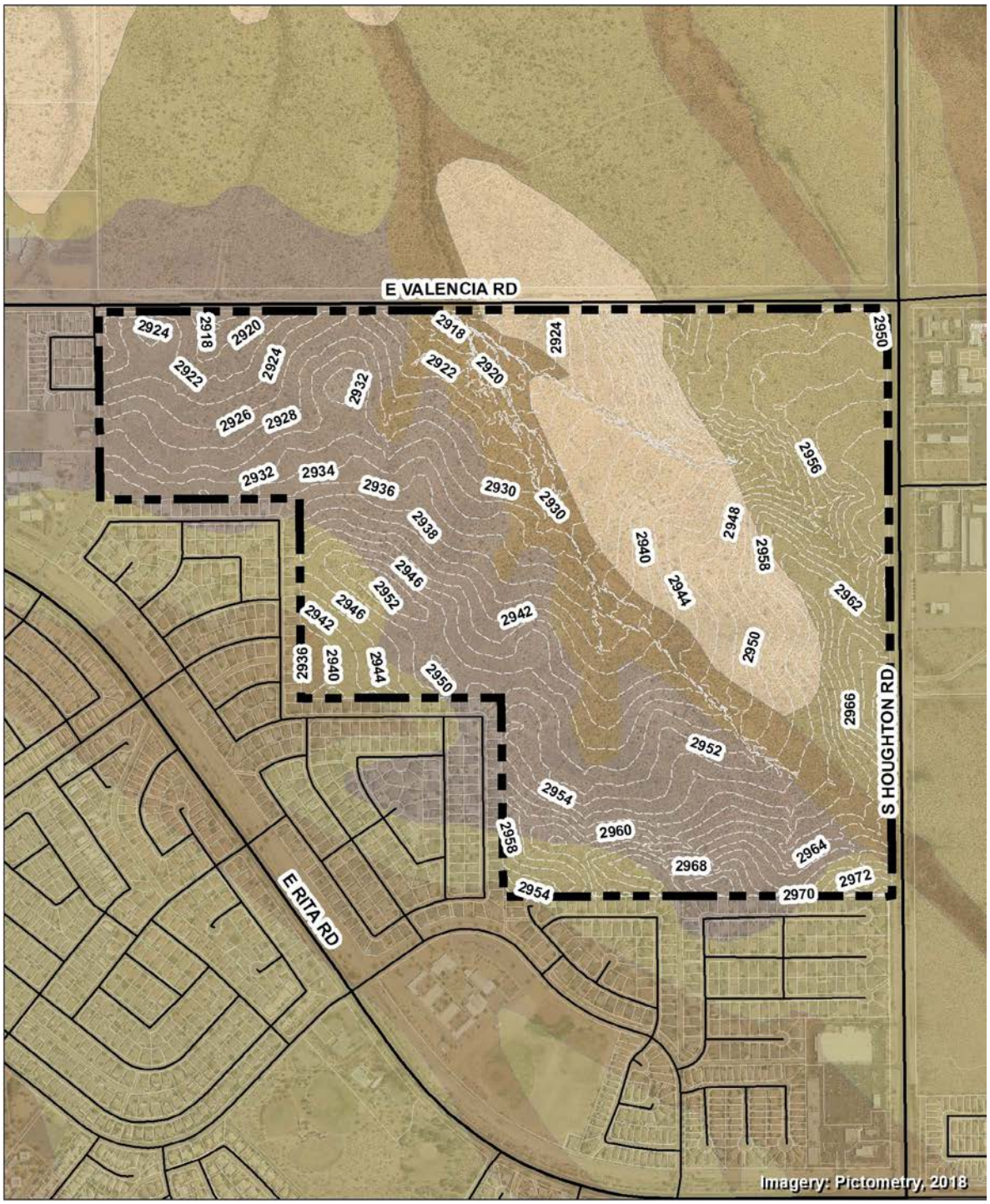
*Note: Status code definitions can be found at* https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/

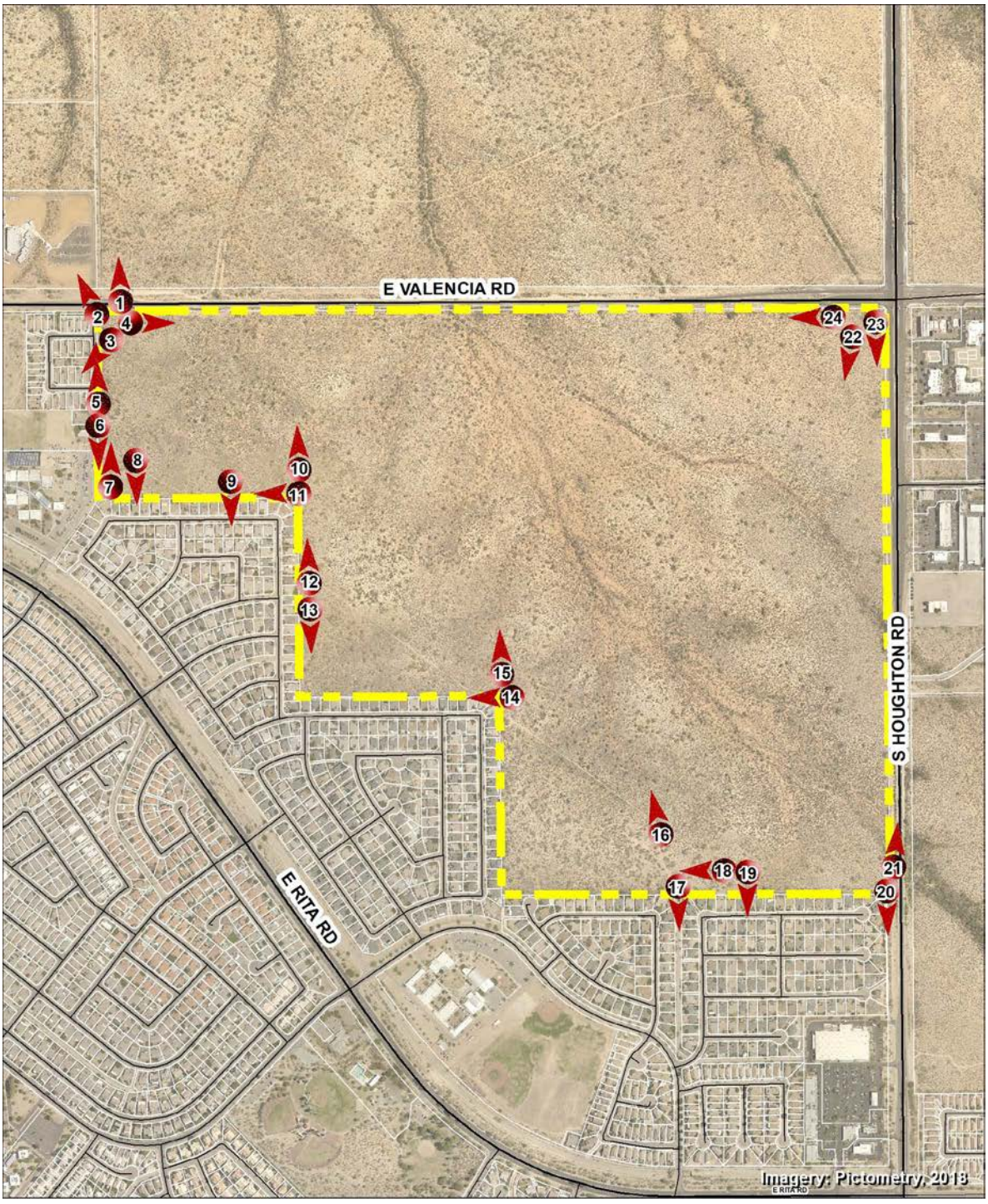
.

Species of Greatest Conservation Need
Predicted within 3 Miles of Project Vicinity based on Predicted Range Models

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|---|---|---|---|---|---|---|
| Aix sponsa | Wood Duck | | | | | 1B |
| Amazilia violiceps | Violet-crowned Hummingbird | | S | | | 1B |
| Ammospermophilus harrisii | Harris' Antelope Squirrel | | | | | 1B |
| Anthus spragueii | Sprague's Pipit | SC | | | | 1A |
| Antrostomus ridgwayi | Buff-collared Nightjar | | S | | | 1B |
| Aquila chrysaetos | Golden Eagle | BGA | | S | | 1B |
| Aspidoscelis stictogramma | Giant Spotted Whiptail | SC | S | | | 1B |
| Aspidoscelis xanthonota | Red-backed Whiptail | SC | S | | | 1B |
| Athene cunicularia hypugaea | Western Burrowing Owl | SC | S | S | | 1B |
| Botaurus lentiginosus | American Bittern | | | | | 1B |
| Buteo swainsoni | Swainson's Hawk | | | | | 1C |
| Calypte costae | Costa's Hummingbird | | | | | 1C |
| Chilomeniscus stramineus | Variable Sandsnake | | | | | 1B |
| Cistothorus palustris | Marsh Wren | | | | | 1C |
| Colaptes chrysoides | Gilded Flicker | | | S | | 1B |
| Coluber bilineatus | Sonoran Whipsnake | | | | | 1B |
| Corynorhinus townsendii pallescens | Pale Townsend's Big-eared Bat | SC | S | S | | 1B |
| Crotalus tigris | Tiger Rattlesnake | | | | | 1B |
| Cynanthus latirostris | Broad-billed Hummingbird | | S | | | 1B |
| Dipodomys spectabilis | Banner-tailed Kangaroo Rat | | | S | | 1B |

# EXHIBIT II.L: SOIL CLASSIFICATIONS






**LEGEND**

- PAD Boundary
- Parcels
- 2 Photo Point Location and Direction

NORTH

0' 1000' 2000'

FILE NAME: Photo_key_6x8
SOURCE: Pima County GIS, 2018

## EXHIBIT II.M.2: SITE PHOTOS

Photo 1: View looking north from the northwest property corner.


Photo 2: View from the northwest toward the Vail Christian Church from the northwest property corner.

Photo 3: View from the southwest from the northwest property corner.

Photo 4: View looking east along Valencia Road from the northwest property corner.

Photo 5: View from western property boundary looking north.

Photo 6: View looking north from the midpoint on the western property boundary.

Photo 7: View looking north from the southwest property corner.

Photo 8: View looking south from the informal trail on the southwestern portion of the property.

Photo 9: View looking south from the southern property boundary.

Photo 10: View looking north from the southern property boundary.

Photo 11: View looking west along the southern property boundary.

Photo 12: View along the western property boundary looking north.

## EXHIBIT II.M.2: SITE PHOTOS (CONT.)

Photo 13: View looking north from the western boundary.

Photo 14: View looking west along southern property boundary.

Photo 15: View looking south from the southern property boundary.

Photo 16: View looking north from the southeastern portion of the property.

Photo 17: View looking down the drainage channel located along the southern property boundary.

Photo 18: View along west along the southern property boundary.

THE UNIVERSITY OF ARIZONA
ARIZONA STATE MUSEUM

3Arizona State Museum
PO Box 210026
Tucson AZ 85721-0026
(520) 621-6281
www.statemuseum.arizona.edu

13 September 2018

Lexy Wellott
The Planning Center
2 E. Congress, Ste. 600
Tucson, AZ 85701

**RE: Archaeological Summary Letter in support of rezoning at Valencia and Houghton (PUL-30)**

Dear Lexy:

Arizona State Museum (ASM) has reviewed archaeological project and site records in support of The Planning Center's "PUL-30" project (Figure 1). Correspondence indicates this project will involve rezoning from RX-1 to PAD for residential and commercial development on a privately-owned property located on the southwest corner of Valencia and Houghton Roads in Tucson, Arizona. The project area encompasses all of parcel 141-01-0130 within T15N R15E S23. Below are the results of ASM's research.

**Search Results:**

According to a search of the archaeological site files and records retained at ASM, 38 archaeological survey projects were conducted within a one-mile radius of the project area between 1983 and 2012. Previous survey work was conducted in support of road construction and improvements; residential and commercial development; construction of community parks and sports facilities; land sales; the installation of cell towers; well construction; and the installation and maintenance of transmission, natural gas, and fiber optic lines. The entire project area was surveyed in 1987 as part of the Houghton Hills Survey (Douglas 1987), which identified 51 archaeological sites within their nearly 4,000-acre project area.

Thirty-seven archaeological sites have been identified within a one-mile radius of the project area. Ten of those sites are located within the current project area: AZ BB:13:350-359(ASM). All are prehistoric sites for which National Register eligibility has not been determined (Douglas 1987).

**Recommendations and Responsibilities:**

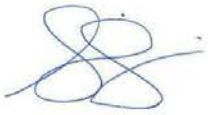
**1.** Although the entire project area has been previously surveyed, it is archaeological protocol to re-survey any areas that were surveyed more than 10 years ago to evaluate the condition of previously-identified sites and investigate whether any previously-unidentified sites have been exposed. ASM recommends, but it is not required by ASM, that a qualified archaeological contractor be consulted before any ground-disturbance begins.. A list of archaeological contractors is available on the ASM website at: http://www.statemuseum.arizona.edu/services/cultural -resources-services.

**2.** Pursuant to Arizona *Revised Statutes* §41-865, if any human remains or funerary objects are discovered during project work, all work will stop within the area of the remains and Dr. Claire Barker, ASM repatriation coordinator, will be contacted at 520-626-0320.

**3.** City, county, or municipal governments may have requirements, therefore ASM recommends that the relevant jurisdiction(s) be consulted.

If you have any questions about the results of this records search, please contact me at twilling@email.arizona.edu or 520-621-2096.

Sincerely,



Shannon Twilling, M.A.
Research Specialist
Arizona Antiquities Act Permits Office

**References:**

Douglas, John E.
1987 *An Assessment of Cultural Resources in the Houghton Hills Project Area, Eastern Tucson Basin: Survey Results*. Pima Community College Archaeology Center, Tucson.

# PART III:
# PAD DISTRICT PROPOSAL

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## A. PLAN OVERVIEW

The Escalera Planned Area Development (PAD) presents a comprehensive vision for the development of an approximately 344.3-acre property located at the southwest corner of Valencia Road and Houghton Road. The Property has been divided into three (3) land use designations primarily consisting of medium to low density residential, open space, and medium to high density residential/village center uses; refer to *Exhibit III.B: Illustrative Land Use Plan*. The acreages of each land use designation includes all public rights-of-way (i.e. internal roadways), infrastructure (drainage, utilities, etc.) and all open space, common areas, and recreational amenities. All land uses are integrated with regard to circulation, infrastructure, aesthetics and visual character through a unique set of development standards and design guidelines that incorporate best practices and innovative design techniques.

Utilizing the basic parameters of the R-2 and C-2 zones, this PAD will provide development regulations and design guidelines that facilitate an effective mix of housing and commercial opportunities and ensures a quality design that can protect the integrity of the existing neighborhoods. Where the PAD varies from the UDC or other relevant City standards, the PAD shall control. In instances where the PAD is silent in providing development standards or regulations, the provisions of the UDC for the R-2 and C-2 zones, the Administrative and Technical Standards Manuals and other relevant City standards shall apply.

## B. LAND USE PLAN

As demonstrated on *Exhibit III.B: Illustrative Land Use Plan*, the PAD consists of three (3) land use designations, herein referred to as "Planning Areas," that allow for a cohesive mixed-use development with an assortment of residential uses within close proximity to a variety of commercial uses and services. The overall design of the Property articulates connectivity between uses by providing an internal pedestrian system, as prescribed by the HAMP, along the collector/spine road linking Valencia Road and The Loop to Houghton Road, as well as providing meaningful open space that further facilities wildlife movement and passive recreation. Each Planning Area has been thoughtfully crafted to reflect the overall intent of the PAD and the HAMP while providing considerable residential and non-residential uses.

The residential uses within the PAD will afford numerous market-rate housing options including traditional detached single-family homes and attached single-family homes on varying lot sizes, as well as multi-family residential options. Densities of the residential uses will vary, as will the size and character of the housing products offered. The overall density of the residential uses will be reflective of the densities suggested by the HAMP.

The proposed non-residential uses as part of this PAD will complement the proposed residential development by providing residents with localized services and retail opportunities that satisfy daily needs and reduce the overall vehicle miles traveled to obtain such services. The Property's locale at the intersection of two major arterial streets and along the Houghton Road Corridor enable the nonresidential uses to serve beyond the immediate area due to proximity and convenience to regional roads and bicycle paths.

The PAD and each Planning Area will provide flexibility that is responsive to an ever-changing economic market so that the developer can adapt to specific market conditions within a timely manner while still preserving the overall intent and guiding vision of the PAD. The following provides a brief description of each Planning Area and further provides regulation relating to uses, physical character and intensity of development on the property. See *Table III.B: Land Use Specifications*.

### 1. MEDIUM TO LOW DENSITY RESIDENTIAL (MLDR)

As identified on *Exhibit III.B: Illustrative Land Use Plan*, the portion of the Property designated as MLDR is approximately 197.6 acres, generally bounded by Valencia Road to the north, the Atterbury Wash Tributary to the east, single-family residences in Rita Ranch to the south, and the Harrison Greenway (portion of The Loop) to the west. This Planning Area will provide low to medium density single-family residences with an overall density of four (4) residences per acre (minimum) as prescribed by HAMP. Density calculations for this area shall be calculated based on the net area of the Planning Area upon subtraction of the gross square footage of all public rights-of-way including internal roadways (i.e. collector/spine road), infrastructure (drainage, utilities, etc.) and all open space, common areas and recreational amenities. Additionally, the MLDR Planning Area provides opportunities for non-residential uses that further the goals of the HAMP by providing uses that satisfy daily service needs. Non-residential uses should be located within close proximity to Houghton Road

or the proposed collector/spine road and should be screened and landscaped according to the parameters outlined in the UDC to ensure compatibility with the adjacent residential uses. Since connectivity is of emphasis in this PAD, the Planning Area designated as MLDR will also feature a collector/spine road to facilitate pedestrian linkages from Houghton Road Corridor to The Loop and a neighborhood center/community park. Additional pedestrian linkages may be provided along the property boundary to facilitate pedestrian connectivity to the schools and Rita Ranch south of the property. The final location, size and amenities provided for the neighborhood center/ community park and the location of pedestrian access points will be determined during the tentative / final platting processes. Uses proposed within this Planning Area are subject to and shall follow the standards outlined within *Section IV: Development Regulations* of this PAD document. The standards and guidelines applicable to MLDR Planning Area were developed utilizing the basic parameters of the R-2 Zone.

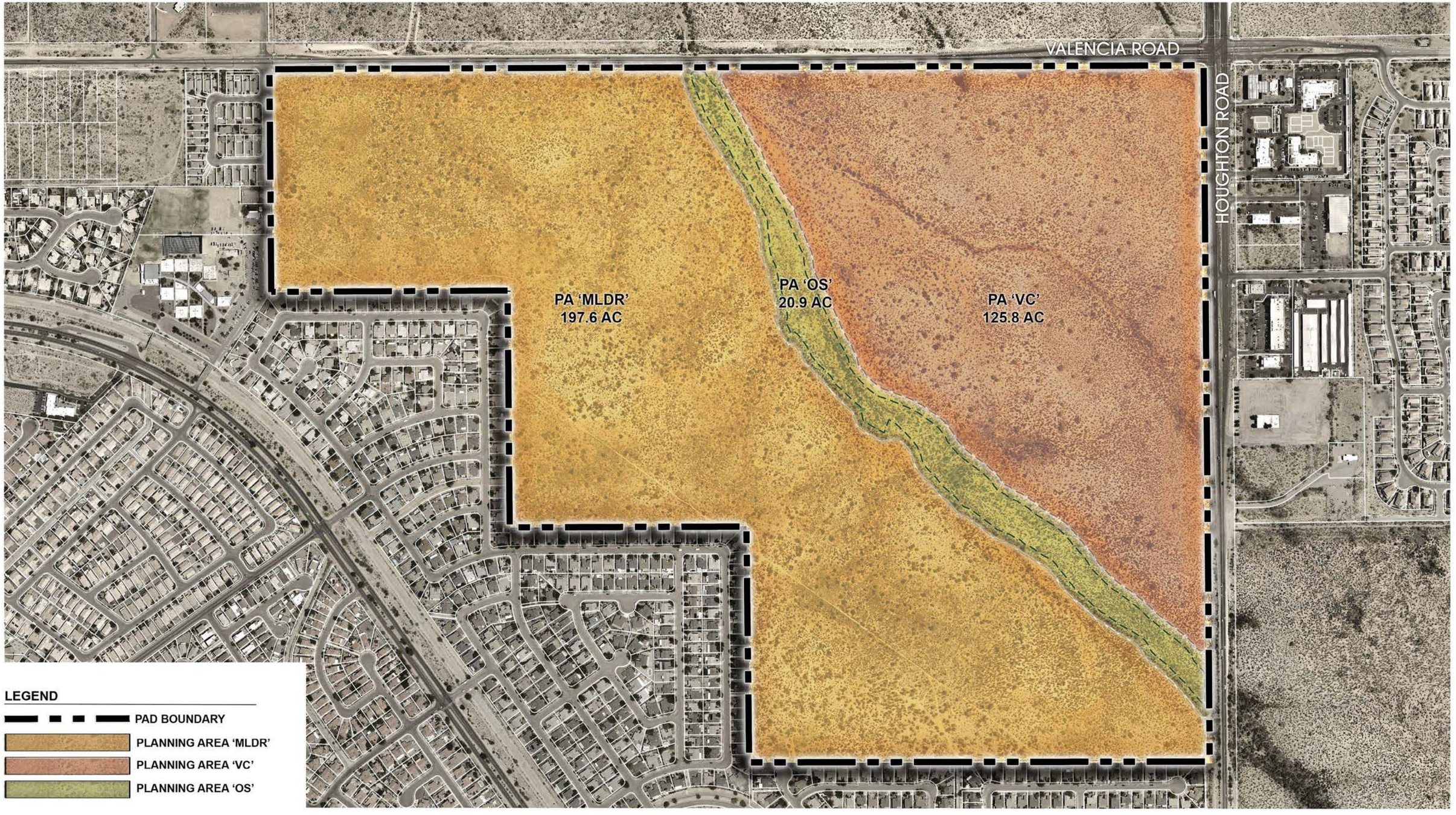
## 2. VILLAGE CENTER (VC)

As identified on *Exhibit III.B: Illustrative Land Use Plan*, the area designated as VC contains approximately 125.8 acres, generally bounded by Valencia Road to the north, Houghton Road to the east, and the Atterbury Wash Tributary to the west and south. This Planning Area features medium to high density residential units with an overall density of 8 units per acre, as prescribed by the HAMP, as well as village commercial uses near the corner of Valencia Road and Houghton Road. The intent of the Village Center is to act as a transition area from the more intensive commercial uses anticipated at the corner of Valencia Road and Houghton Road to the less intensive residential uses and environmentally sensitive corridors. Furthermore, the VC Planning Area intends to provide at least 25 acres of commercial uses, professional and medical offices, high-density residential, and other similar uses that satisfy daily service needs and provide cohesive commercial activity while preserving the overall safety of residents and maintaining convenient access. After a period of 10 years from the adoption of this PAD, should market conditions for commercial property prevent users from developing the area as intended, all other uses identified in the Village Center designation shall be allowed, subject to Section V.C.2 as a non-substantial amendment. Residential density calculations for this area shall be calculated based on the net area of the site upon subtraction of the gross square footage of all public rights-of-way including internal roadways, infrastructure (drainage, utilities, etc.), and all open space, common areas, and recreational amenities. Primary access to the area designated as VC will be provided via Valencia Road and Houghton Road. Uses proposed within the VC Planning Area are subject to and shall follow the standards as outlined within Section IV: Development Regulations of this PAD document. The standards and guidelines that apply to residential and non-residential uses in the VC land use designation were developed utilizing the basic parameters of the C-2 Zone.

## 3. OPEN SPACE (OS)

As demonstrated on *Exhibit III.B: Illustrative Land Use Plan*, the OS Planning Area occupies approximately 20.9 acres located in the central portion of the site, generally within the confines of the existing 100-year floodplain and riparian areas of the HAMP. The intent of this Planning Area is to provide visual screen between the lower intensity residential uses proposed in the MLDR Planning Area from the higher intensity residential and commercial uses proposed in the VC Planning Area. Trails will be provided on both side of the Atterbury Wash Tributary corridor providing circulation and access to the Houghton Greenway and Valencia Greenway. The trails are intended to consist of a 12-foot multi-use path and 8-foot soft path that meander through the existing vegetation to the greatest extent feasible. Additionally, the OS

EXHIBIT III.B: ILLUSTRATIVE LAND USE PLAN



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Planning Area allows for the creation of a continuous area of natural vegetation that ultimately facilitates wildlife movement and the preservation of riparian habitat as well as preserves the site's natural drainage corridors. Open Space areas shall not be disturbed except where necessary for road crossings, utilities, active and passive recreation and drainage facilities, screening and wall installation, riparian habitat mitigation, soil stabilization, etc. In areas where disturbance is necessary, the disturbed areas shall be revegetated using native and low water use, regionally adapted plants.

TABLE III.B: LAND USE SPECIFICATIONS

| Planning Area | Description | Approximate Gross Acreage* | Approximate Net Developable Acreage** | Anticipated Net Density Range (RAC)*** | Target Unit Range |
|---|---|---|---|---|---|
| MLDR | Low to Medium Density Residential | 197.6 AC | 158 | 4-8 | 632-1264 |
| VC | Medium to High Density Residential, Village Center | 125.8 AC | 100 | 8-15 | 800-1500 |
| OS | Open Space | 20.9 AC | 0 | 0 | 0 |

** Gross Acreage includes all public rights-of-way (i.e. internal roadways), infrastructure (drainage, utilities, etc.) and all open space, common areas, and recreational amenities.*

*** Net Developable Acreage was calculated using an infrastructure factor of 20% which assumes that approximately 20% of the gross acreage is utilized for infrastructure needs, buffers and open space.*

**** The overall density for the MLDR Planning Area shall be a minimum of 4 RAC based on net developable acres. The overall density of the VC Planning Area shall be a minimum of 8 RAC based on net developable acres.*

## C. CIRCULATION PLAN

The Escalera Circulation Plan establishes the general configuration capacity and design standards for roadways within the planned are development boundaries (refer to *Exhibit III.C.1 Illustrative Circulation Plan*). The Circulation Plan was developed based on an analysis of future traffic needs of the land uses proposed with the PAD boundaries. All roads will be managed and maintained by the City of Tucson unless designated as a private roadway through the subdivision platting processes. The access points and road alignments shown on *Exhibit III.C.1* are placed in generally appropriate locations based on preliminary analysis and are shown primarily for conceptual purposes. Actual access point locations and roadway alignments will be determined during the final platting and/or development plan process utilizing more detailed analyses, and in conjunction with the City of Tucson Department of Transportation (TDOT). Traffic Impact Analyses for future developments shall examine appropriate access locations and roadway improvements, such as: deceleration lanes, traffic signals, etc. as the Property develops. Roadway improvements shall be installed based on the results of subsequent TIA submitted during the development plan and/or platting process, available right-of-way and applicable traffic warrants. The entire Traffic Impact Analysis has been submitted under separate cover. The following conditions as outlined in the submitted TIA are required by TDOT:

1. If the land is developed prior to completion of full improvements on Houghton Road and Valencia Road, the interim improvements (right-of-way facilities) should be built by the Developers.

2. Impact fees will be required for Roadway projects along Valencia and Houghton Road.

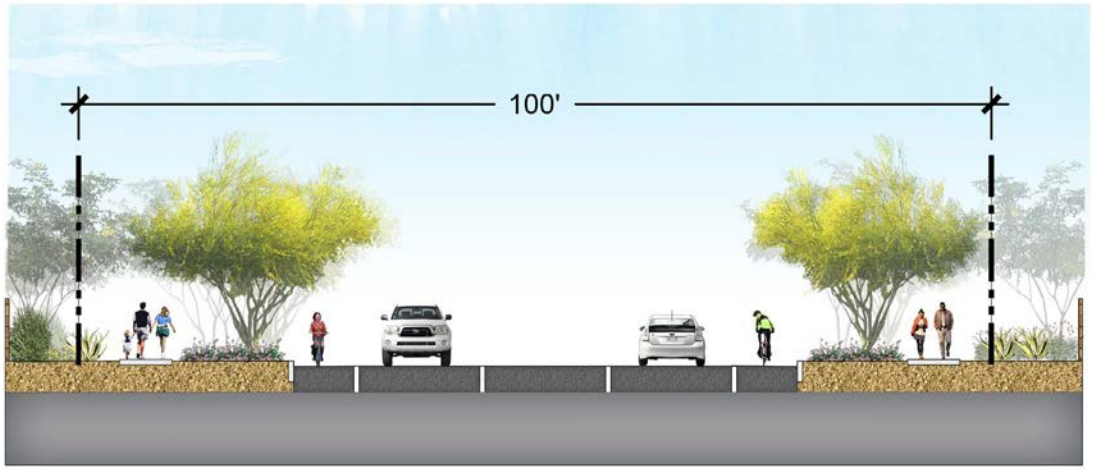
3. Developer should work with TDOT to incorporate roadway access, and infrastructure into the capital improvement design of the new roadway along Houghton Road and Valencia Road.

## 1. SITE ACCESS

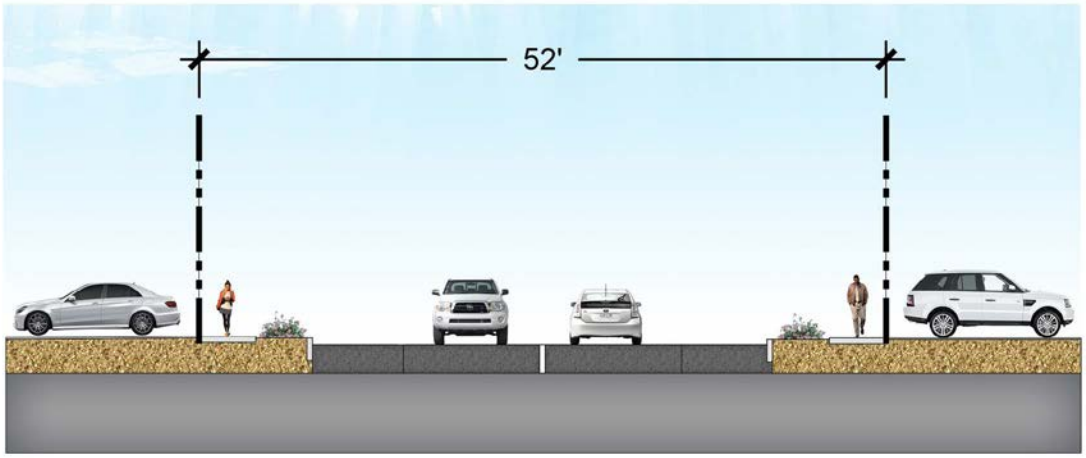
Primary access to the MLDR Planning Area will be provided via a collector/spine road internal to the site. The collector/spine road is intended to be accessed along Valencia Road, west of the Atterbury Wash Tributary, and along Houghton Road, aligned with the East Coyote Willow Trail right-of-way. While the final location of the collector/spine road is undetermined at this time, deceleration lanes shall be provided along Houghton Road and Valencia Road to serve the MLDR Planning Area. The collector/spine road will facilitate connectivity within each Planning Area and provide access to neighborhood center amenities by way of future local streets. Circulation through the VC Planning Area will be primarily provided via future local streets that offshoot from Valencia Road and Houghton Road. Direct access from Houghton Road and Valencia Road may be provided in accordance with the City of Tucson ingress/egress standards.

For the purpose of developing a scenario to gauge the overall traffic implications of the proposed development, site access points were estimated based on several assumptions related to minimum median spacing requirements per the City of Tucson Transportation Access Management Guidelines as well as using logical placements of access points. The City of Tucson requires a minimum of 670' between median openings on an arterial with a posted speed limit of 45 MPH. In addition, both Valencia Road and Houghton Road have been planned to be high mobility, controlled-access corridors as part of the Pima Association of Governments (PAG) Regional Transportation Plan. These were the primary factors which guided the assumptions for the access points. Each of the access points were assumed to either be full access points without any turn restrictions or have restricted access where one or more left-turn movements were assumed to be prohibited.

For planning purposes, the Escalera PAD is proposed to have twelve (12) new access points, including six (6) full access

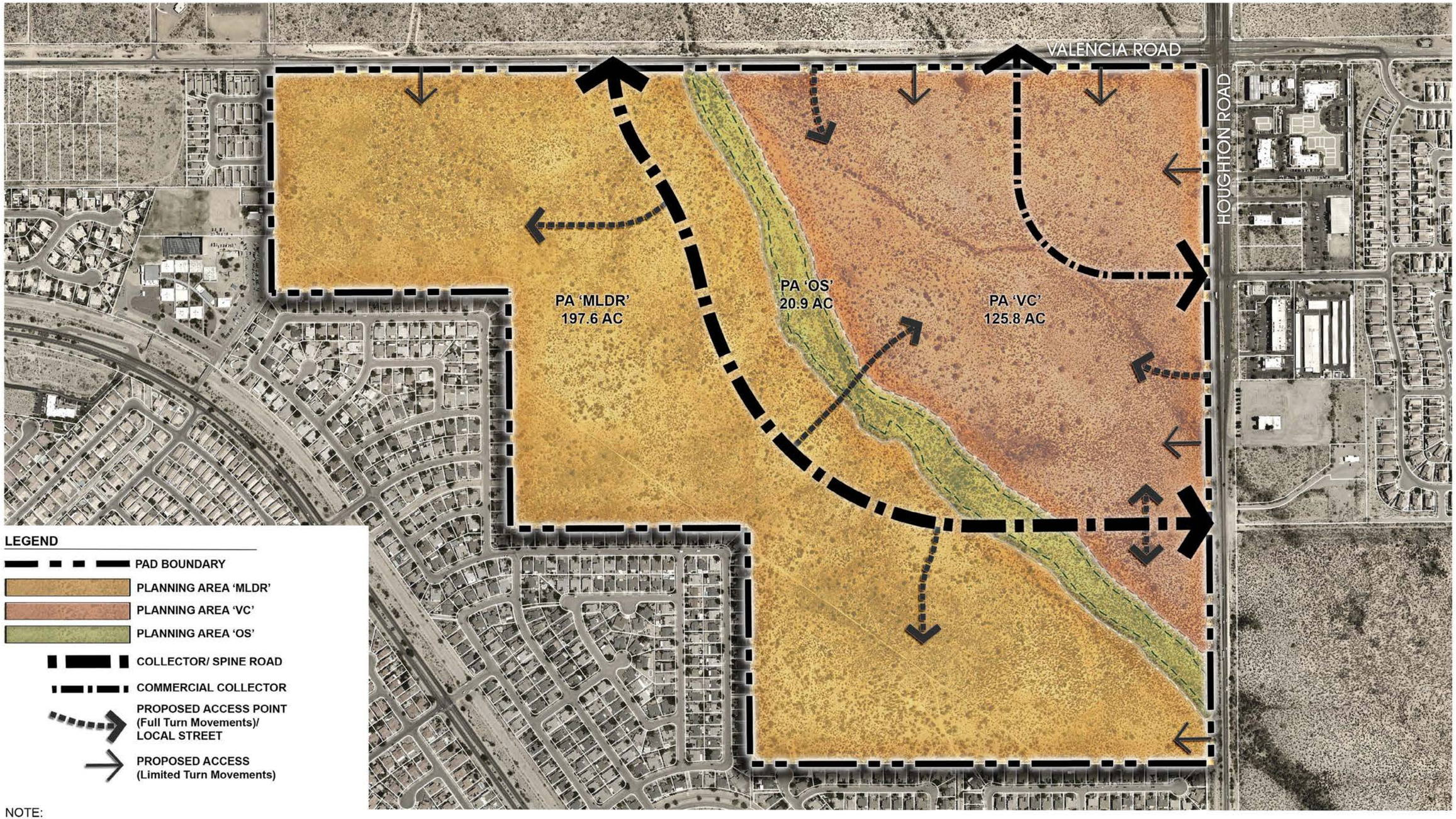



COLLECTOR / SPINE ROAD
*(ILLUSTRATIVE PURPOSES ONLY)*




RESIDENTIAL LOCAL STREET
*(ILLUSTRATIVE PURPOSES ONLY)*

EXHIBIT III.C.1: ILLUSTRATIVE CIRCULATION PLAN




NOTE:
ALL ACCESS POINTS AND ROADS ARE CONCEPTUALLY LOCATED AND SUBJECT TO CHANGE. FINAL LOCATION SHALL BE DETERMINED DURING THE PLATTING AND/OR DEVELOPMENT PLAN PROCESS

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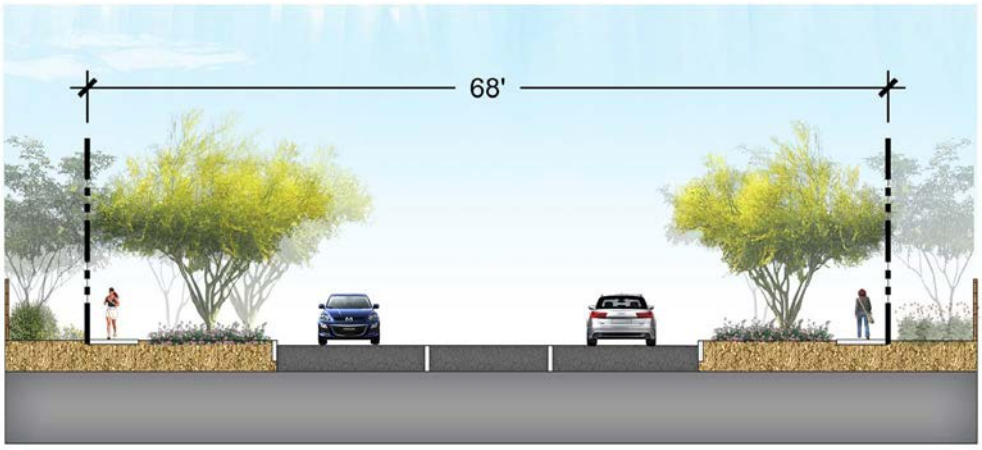
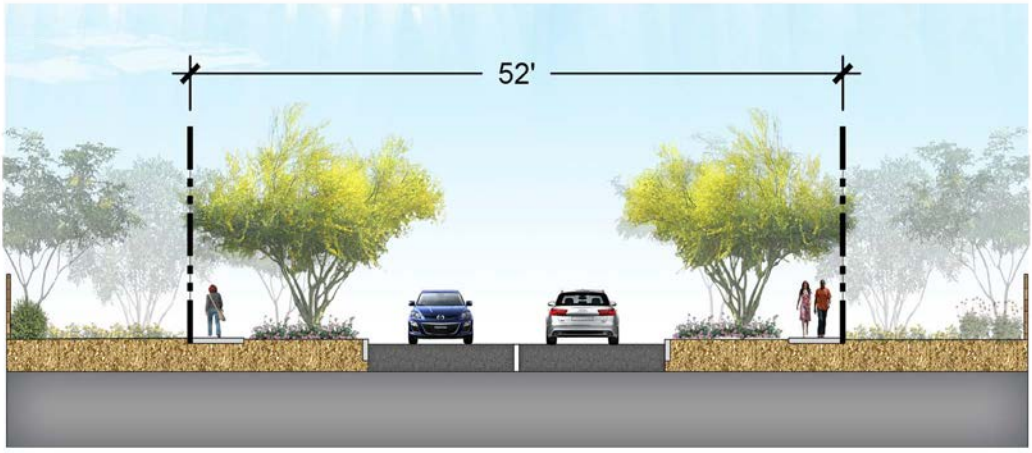



VILLAGE CENTER COLLECTOR
*(ILLUSTRATIVELY PURPOSES ONLY)*




VILLAGE CENTER LOCAL STREET
*(ILLUSTRATIVE PURPOSES ONLY)*

points and six (6) access points that are either right-in, right-out only or restrict the left-turn out of the development. The access points assumed for this analysis are shown in *Exhibit III.C.1*. It is important to note that the exact location of these access points has not been determined and may change as the design of the site progresses and coordinates with the design of the adjacent sections of Valencia and Houghton Roads.

## 2. ONSITE VEHICULAR CIRCULATION

While onsite vehicular circulation is largely indeterminable at this point in time due to the unknown end-users of the site, the purpose of this section is to provide road classifications that inform the overall circulatory design within each Planning Area. The proposed PAD offers the following road classifications as a means of guiding the circulation of the site as a whole, but also, within each of the Planning Areas accordingly.

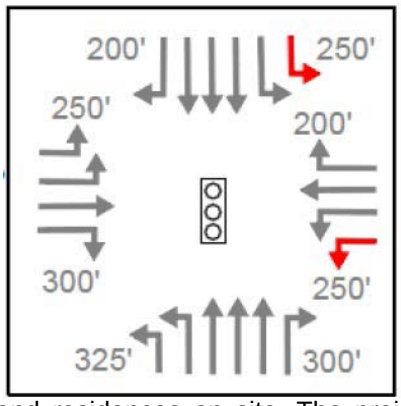
- Collector Street / Spine Road: facilitate central access and circulation between residential local streets and arterials (Houghton Road and Valencia). These roads utilize a 100-foot right-of-way and consist of a 2 vehicular travel lanes, a continuous turn lane, bicycle lanes and sidewalk. The proposed collector street/spine road will also feature a wash crossing that consists of 2 vehicular travel lanes, bicycle lanes and sidewalk. Final wash crossing design will be determined during the development plan/ platting process at the time of development.

- Residential Local Streets: are lightly trafficked, pedestrian-scaled streets that connect residential neighborhoods and communities to the greater transportation network of the city. These streets utilize a 52-foot right-of-way with 2 vehicular travel lanes, on-street parking and sidewalks.

- Village Center Collector Streets: act as central corridors that facilitate circulation between proposed land use within the VC land use designation and adjacent arterials. These streets utilize a 68-foot right-of-way with 2 vehicular travel lanes, a continuous turn lane, and sidewalks.

- Village Center Local Street: are transitionary streets that typically connect commercial uses to residential uses within the VC Planning Area. These streets utilize a 52-foot right-of-way and consist of 2 vehicular travel lanes and sidewalks.

EXHIBIT III.C.2: PLANNED LANES AND STORAGE AT HOUGHTON RD AND RITA RD




## 3. ONSITE PEDESTRIAN CIRCULATION

The proposed onsite pedestrian connections will provide an amenity for residents and users of the project. The Houghton Greenway, Valencia Greenway, Harrison Greenway, trails, public sidewalks, bike routes and pedestrian walkways will create an interconnected system to the various uses and residences on site. The project will provide pedestrians with accessibility, safety, and convenience to reduce traffic impacts and create a more livable development.

Residents within the MLDR Planning Area will have sidewalks connecting their residences with Mini Parks and the trails adjacent to the Atterbury Wash Tributary. The trails adjacent to the Atterbury Wash Tributary will provide pedestrian connectivity with Valencia Road, Houghton Road and the Houghton Greenway, the Neighborhood Park, as well as uses within the VC Planning Area. Residents will also be able to access the Harrison Greenway via a pedestrian connection on the west side of the MLDR Planning Area.

Within the VC Planning Area, pedestrians will utilize sidewalks along collector and local streets to access residential and commercial uses. Pedestrian connections will be made with the trails adjacent to the Atterbury Wash Tributary. Sidewalks will connect with sidewalks and trails along Valencia Road and Houghton Road.

Houghton Road: a paved path/sidewalk has been included in the right-of-way along the west side of Houghton Road as part of the Houghton Corridor improvement plans prepared by the City of Tucson and will be constructed in conjunction with the future roadway improvements. The Houghton Greenway exists along the east side of Houghton Road.

Valencia Road: a paved path/sidewalk has been included in the right-of-way along the south side of Valencia Road as part of the future roadway improvement plans to be prepared by the City of Tucson and will be constructed in conjunction with future roadway improvements.

Collector/Spine Road: Sidewalks will be installed on both sides of the Collector/Spine Road.

Harrison Greenway: the Harrison Greenway exists along the western boundary of the Property. A pedestrian connection will be provided from the project site to the Harrison Greenway.

Sidewalks: sidewalks will be provided along all streets, except where trails or paths provide pedestrian circulation along a street.

TABLE III.C.6: ANTICIPATED TRIP GENERATION

| | | | TOTAL SITE TRAFFIC | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Day Totals | | | AM Peak Hour | | | PM Peak Hour | | |
| Parcel Name | Sq Ft / DU | ITE Code | Entering | Exiting | Total | Entering | Exiting | Total | Entering | Exiting | Total |
| Major Commercial Retail | 261,360 | 820 | 6,341 | 6,340 | 12,681 | 170 | 109 | 279 | 566 | 614 | 1,180 |
| Single Family Residential | 830 | 210 | 3,918 | 3,917 | 7,835 | 154 | 460 | 614 | 518 | 304 | 822 |
| Multi-Family Housing (Apartments) | 718 | 220 | 2,694 | 2,693 | 5,387 | 76 | 254 | 330 | 253 | 149 | 402 |
| Multi-Family Housing (Townhouse-Condos) | 718 | 220 | 2,694 | 2,693 | 5,387 | 76 | 254 | 330 | 253 | 149 | 402 |
| | | | | | | | | | | | |
| Total | | | 15,647 | 15,643 | 31,290 | 476 | 1,077 | 1,553 | 1,590 | 1,216 | 2,806 |

## 4. FUTURE ROADWAY NETWORK

The roadway network adjacent to the Escalera PAD is programmed to have several roadway improvements in the near future. Valencia Road, from Kolb Road to Houghton Road, is programmed to be widened to six lanes with design beginning in 2019 and construction estimated to be completed in 2022. During the design process the intersection of Valencia Road and Nexus Road will be modified to accommodate the future design volumes at this intersection. Houghton Road, from Valencia Road to Mary Ann Cleveland Way, is programmed to be widened to six lanes with design concluding in 2019 and construction estimated to be completed in 2022. The current design is at the 90% level and proposes modifications to the Houghton Road and Rita Road intersection which are shown in *Exhibit III.C.2: Planned Lanes and Storage at Houghton and Rita Road*. Valencia Road east of Houghton Road is in the early stages of construction to extend Valencia Road to Old Spanish Trail. These improvements are developer driven as part of the Rocking K Ranch development. This segment of Valencia is planned to be built as two lanes initially and then widened to four lanes as the Rocking K development is closer to completion.

## 5. ANTICIPATED TRIP GENERATION AND DISTRIBUTION

The site traffic estimates were developed for the AM and PM peak-hours of the adjacent street traffic. The number of trips generated is the mathematical product of land use intensity (estimated number of dwelling units and commercial square footage) and the trip generation rate or the value calculated based on the fitted curve equation. The result is the total number of oneway trips (not round trips) expected to be generated by the project. These trips represent the number of vehicles estimated to enter and leave the project. The trip generation estimates for the site are provided in *Table III.C.6: Anticipated Trip Generation*.

## 6. ANTICIPATED LEVEL OF SERVICE

The results of the Traffic Impact Analysis indicate that the existing signalized intersections within the project vicinity are anticipated to operate under capacity for the traffic conditions analyzed as part of this study. With and without site traffic, all intersections and movement operate at LOS D or better, except for two movements at Valencia Road and Houghton Road intersection during the PM Total Traffic scenario, which operate at LOS E.

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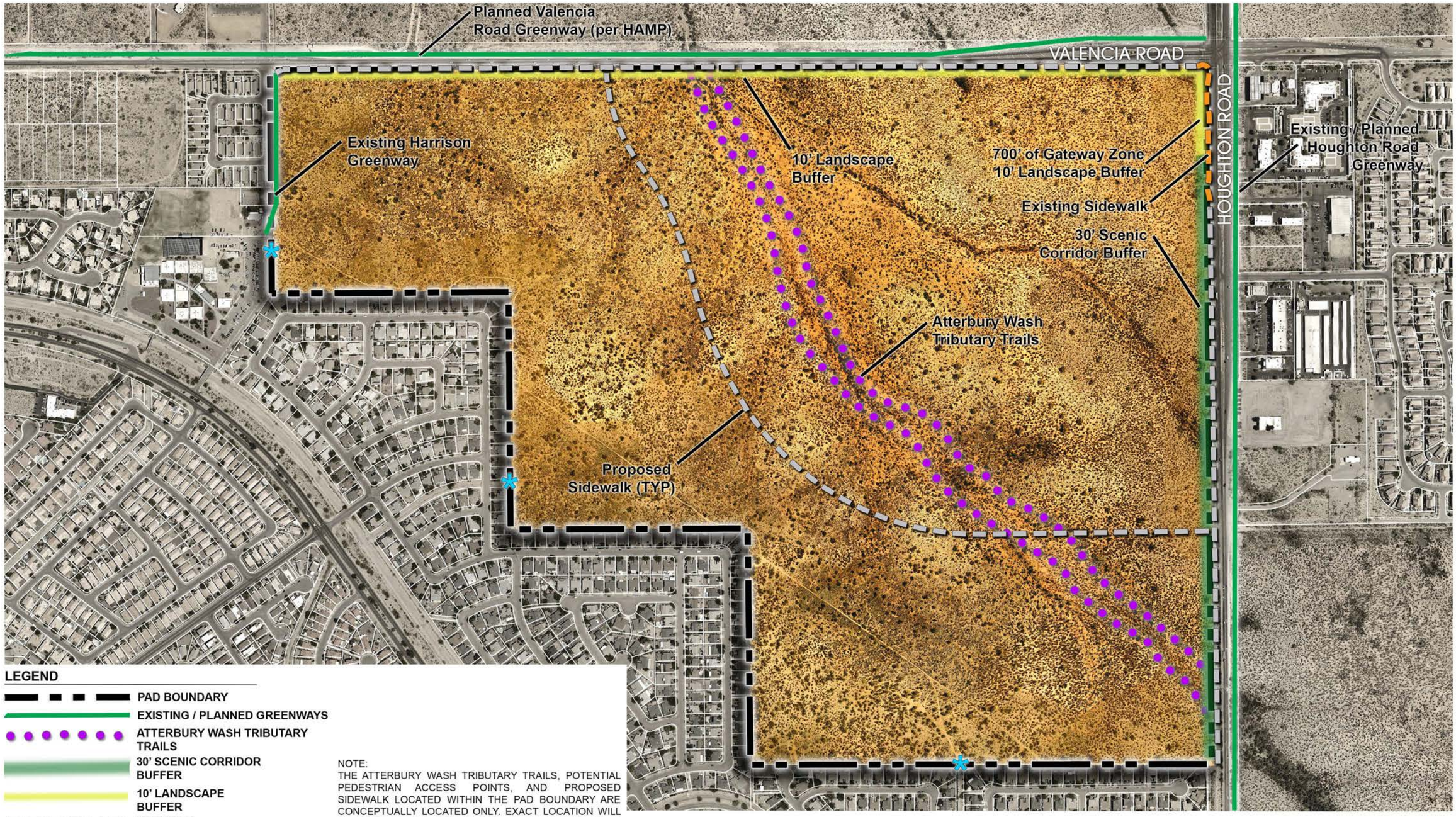


**LEGEND**

- PAD BOUNDARY
- EXISTING / PLANNED GREENWAYS
- ATTERBURY WASH TRIBUTARY TRAILS
- 30' SCENIC CORRIDOR BUFFER
- 10' LANDSCAPE BUFFER
- SIDEWALK
- EXISTING SIDEWALK
- POTENTIAL PEDESTRIAN ACCESS POINTS

NOTE:
THE ATTERBURY WASH TRIBUTARY TRAILS, POTENTIAL PEDESTRIAN ACCESS POINTS, AND PROPOSED SIDEWALK LOCATED WITHIN THE PAD BOUNDARY ARE CONCEPTUALLY LOCATED ONLY. EXACT LOCATION WILL BE DETERMINED DURING THE DEVELOPMENT PLAN AND/OR PLATTING PROCESS. SIDEWALKS ADJACENT TO VALENCIA AND HOUGHTON ROAD SHALL BE LOCATED WITHIN THE RIGHT-OF-WAY AND CONSTRUCTED IN CONJUNCTION WITH FUTURE ROADWAY PLANS.

0' 250' 500' NORTH

SCALE: 1"- 500'-0"
PROJECT: PUL-30 DATE:09.19.19
FILE NAME: PUL-30_SP_08.16.18.DWG

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# D. LANDSCAPE PLAN

The Landscape Plan for the Escalera PAD, refer to *Exhibit III.D: Illustrative Landscape Plan*, contains the following objectives:

- Unify and enhance the overall character of each Planning Area
- Create visual interest and appeal
- Provide buffers between conflicting uses or activities
- Provide shade for people and activities within each Planning Area
- Screen structures or selected uses within each Planning Area
- Reduce water use through plant selection and irrigation techniques

The principal design elements used to convey the landscape character of the PAD include:

## 1. LANDSCAPE BORDERS & PARKING AREAS

- Street Landscape Border – Houghton Road: provides a natural landscape border utilizing native and drought tolerant plant species and will comply with *Section III.B.1.b*: Scenic Routes. The street border will provide a buffer between Houghton Road (Scenic Arterial Street) and the VC Planning Area. The landscape border will utilize an informal plant layout and additional plant material to create a natural appearance, indicative of the desert environment.

- Street Landscape Border – Valencia Road: provides a landscape border utilizing native plant and drought tolerant species. This street border will provide a buffer between Valencia Road and the VC and MLDR Planning Areas. The landscape border will utilize an informal plant layout and additional plant material to create a natural appearance, indicative of the desert environment.

- Interior Landscape Borders: provide a buffer between this project site and existing adjacent residential development. The landscape border will create a visually attractive space through the use of native and low water use plant materials.

- Parking Areas: landscape will enhance the overall visual appearance of parking areas within the VC Planning Area. Canopy trees will provide shade and mitigation of the urban heat island effect.

## 2. PARKS & OPEN SPACE

The following provides brief descriptions of the park and open space amenities to be provided within the PAD. Applicable Parks and Open Space standards can be found under Section IV.B.3: Park Standards. Exhibit III.D.2: HAMP Exhibit for Park Sizes suggests parameters for determining park sizes and may be used to determine appropriate park sizes and amenities. All amenities to be provided will ultimately be determined at the platting and/or development plan process. Prior to submittal of the first plat and/or development package, a discussion regarding ownership and maintenance of the required neighborhood park should be had with the Developer and the City of Tucson Parks and Recreation Department.

- Neighborhood Park: provide recreation amenities for residents of the Planning Areas. The Neighborhood Park will provide a playground with play features for children. A shade structure, ramadas, and trees will provide shade for residents utilizing the park. A large turf area will provide space for passive recreation and activities. Covered picnic areas will provide space for group gatherings.

- Mini Parks: provide recreation space within the MLDR Planning Area for nearby residents. All Mini Parks will include a turf area for passive recreation, canopy shade trees, and seating. Mini Parks may also include playgrounds, free standing play features, and covered picnic areas.

- Open Space: provide natural riparian habitat along the existing wash. Open Space along the wash will preserved in a natural state wherever feasible. Trails will be included adjacent to each bank of the Atterbury Wash Tributary to facilitate pedestrian and non-motorized circulation. Any disturbed areas will be revegetated to restore the area's natural appearance. Open Space will provide a buffer between the MLDR and VC Planning Areas. The area will provide an attractive natural area that provides visual relief from the surrounding developed areas. The natural area will provide wildlife habitat and may function as a corridor for wildlife movement.

III.D.2:HAMP EXHIBIT 9 FOR PARK SIZES

| Facility Type | Standard Park Size (acres) | Service Radius of Park (miles) | Facility/Total Population Ratio, unless otherwise noted |
|---|---|---|---|
| **All Parks** | | | |
| Mini | 1 max. | .25 | 1 acres / 1,000 people |
| Neighborhood | 1-15 | .5 | 2.5 acres / 1,000 people |
| Community | 15-40 | 1 | 3 acres / 1,000 people |
| Metro | 40-200 | 2.5 | 3.5 acres / 1,000 people |
| Regional | >200 | 7 | 2 acres / 1,000 people |
| **Field Sports** | | | |
| Adult Baseball | | | 1 field / 12,000 people |
| Youth Baseball | | | 1 field / 10,000 people |
| Soccer/ Football | | | 1 field / 12,000 people (total and youth population) |
| Softball Fields | | | 1 field / 10,000 people (total and youth population) |
| **Active Recreation** | | | |
| Multi-Use Paths within parks | | | 1 mile / 15,000 people (total and senior population) |
| Playgrounds | | | 1 playground / 2,500 people |
| Centers | | | 1 sq ft / person (total and senior population |
| Swimming Pools | | | Neighborhood: 1 pool / 5,000 people<br>Community: 1 pool / 15,000 people<br>Family Aquatic Center: 1 pool / 30,000 people<br>Heated year round: 1 pool / 50,000 people |

*Note: the Escalera PAD only contemplates providing mini parks and a neighborhood park.*

## 3. STREETSCAPES & ENTRIES

- Collector/Spine Road Streetscape: define overall landscape character of the Planning Area while allowing for the safe passage of automobiles, bicycles, service and emergency vehicles. Provide a comfortable, safe environment for pedestrian circulation.

- Local Residential Streetscape: continues the character of the Planning Area along minor streets on a smaller scale than the Collector/Spine Road Streetscape. Most landscape will be located within common area at the side or rear of residential lots.

- Village Center Collector Streetscape: define overall landscape character of the Planning Area while allowing for the safe passage of automobiles, bicycles, service and emergency vehicles. Provide a comfortable, safe environment for pedestrian circulation.

- Village Center Local Streetscape: continues character of the Planning Area along minor streets on a smaller scale than the VC Collector Streetscape.

- Primary Entry Statements: create a sense of arrival and introduce characteristic materials used within the Planning Area. Provide a backdrop for signage or monumentation. The Primary Entry Statements serve as a gateway into the Planning Area.

- Secondary Entry Statements: similar to Primary Entry Statements, but smaller in scale.

## E. DRAINAGE PLAN

The Drainage Plan represents a conceptual approach for addressing the major offsite and onsite flows which traverse the Property. Planning-level analysis indicates that the overall drainage scheme should function in a manner which will provide for the adequate collection, conveyance and discharge of major flows within or across the Property. The following provides a discussion on the impacts of the proposed development and offers a solution to mitigate adverse impacts. Refer to *Exhibit III.E: Illustrative Drainage Plan.*

### 1. PROPOSED DRAINAGE SOLUTION

The Illustrative Land Use Plan (refer to *Exhibit III.A*) maintains historical drainage patterns draining into and out of the Property. The use of detention basin and water harvesting areas allows the drainage leaving the Property to be like those in existing conditions. The washes on the Property are not subject to the Environmental Resource Zone (ERZ) or Watercourse Amenities, Safety, and Habitat (WASH) ordinances.

It is intended that Planning Area MLDR will utilize on-site drainage systems such as street drainage, constructed channels or storm drains to convey flows to detention basins. Street drainage will consist of curbed streets, curb cuts, and scuppers. The future development will continue to receive flows from upstream at CPs 1, 2 and 3, and convey them through the Property. It's presumed that Wash 1 will largely be preserved as a natural channel.

Planning Area VC may utilize a drainage channel to route flows from CP-2 (120 cfs) west along the proposed spine road to discharge into Wash 1. Due to expected velocities, the conceptual channel will need to have erosion control lining. The channel may have flatter 3:1 side slopes with dumped riprap, or steeper 1:1 side slopes and be shotcrete lined. The channel bottom will either be earthen or dumped riprap. Refer to *Exhibit III.E: Illustrative Drainage Plan* for typical sections. Downstream of Houghton Road, flows from Wash 2 will be conveyed through various means such as storm sewers or collector channels to Wash 1. The location of these storm sewers or collector channels will be identified and determined during the development plan approval process. The proposed layout will also utilize detention basins to mitigate post development discharges.

### 2. POST-DEVELOPMENT IMPACTS

Downstream flows will not be negatively impacted due to the proposed development. The development will provide on-site detention/retention in accordance with City of Tucson requirements. The detention basin(s) will allow the proposed discharge to be the same or less than the existing conditions discharge. The total detention/retention volume for Planning Area MLDR has been estimated to be 4.5 acre-feet. However, in existing conditions, portions of the Property drain to the Rita Ranch Regional Detention Basin. Because the Rita Ranch Regional Detention Basin was designed using future urbanization estimates, portions of the proposed development in Planning Area MLDR could continue to discharge into that basin and reduce the amount of on-site detention requirement. The total detention/retention volume for Planning Area VC has been estimated to be 2.9 acre-feet.

If either proposed development layout encroaches into the effective FEMA 100-year floodplain, a Conditional Letter of Map Revision (CLOMR) will be needed as part of the site development package. Bank protection may be used to contain the floodplain and reduced erosion hazards on adjacent lots. Therefore, the new structural improvements would redefine the limits of the FEMA floodplain and erosion hazard areas of Wash 1. After construction, a Letter of Map Revision (LOMR) would be submitted to the City of Tucson and FEMA for approval to revise the effective FEMA floodplain limits. The floodplain encroachments are planned such that regulatory increases to water surface elevations in the watercourses will not exceed allowed thresholds, or adversely impact adjacent properties. Alternatively, if the proposed development stays outside the effective FEMA 100-year floodplain a CLOMR/LOMR would not be needed.

Any building pads adjacent to regulatory washes and detention basins will be designed to be a minimum of 1 foot above adjacent 100-year base flood elevations. Where improvements encroach into regulatory floodplains, bank protection with adequate scour protection measures will be provided to protect from erosion and scour. This will effectively reduce the erosion hazard setback (EHS) along those improvements to be coincident with the new bank line. A typical section for bank protection erosion control is shown on *Exhibit III.E: Illustrative Drainage Plan*.

## F. WASTEWATER PLAN

The Property is tributary to the Agua Nueva Wastewater Reclamation Facility via the Southeast Interceptor. Capacity is currently available for the proposed project in the public sewer G-2001-001, downstream from manhole 4216-06. Refer to *Exhibit II.I.3.b: Pima County Wastewater Reclamation Wastewater Capacity Letter.* Pima County Regional Wastewater Reclamation Department recommends the following conditions:

1. The owner(s) shall not construe any action by Pima County as a commitment to provide sewer service to any new development within the rezoning area until Pima County executes an agreement with the owner(s) to that effect.

2. The owner(s) shall obtain written documentation from the PCRWRD that treatment and conveyance capacity is available for any new development within the rezoning area, no more than 90 days before submitting any tentative plat, development plan, preliminary sewer layout, sewer improvement plan, or request for building permit for review. Should treatment and / or conveyance capacity not be available at that time, the owner(s) shall enter into a written agreement addressing the option of funding, designing and constructing the necessary improvements to Pima County's public sewerage system at his or her sole expense or cooperatively with other affected parties. All such improvements shall be designed and constructed as directed by the PCRWRD.

3. The owner(s) shall time all new development within the rezoning area to coincide with the availability of treatment and conveyance capacity in the downstream public sewerage system.

4. The owner(s) shall connect all development within the rezoning area to Pima County's public sewer system at the location and in the manner specified by the PCRWRD in its capacity response letter and as specified by PCRWRD at the time of review of the tentative plat, development plan, preliminary sewer layout, sewer construction plan, or request for building permit.

5. The owner(s) shall fund, design and construct all off-site and on-site sewers necessary to serve the rezoning area, in the manner specified at the time of review of the tentative plat, development plan, preliminary sewer layout, sewer construction plan or request for building permit.

6. The owner(s) shall complete the construction of all necessary public and/or private sewerage facilities as required by all applicable agreements with Pima County, and all applicable regulations including the Clean Water Act and those promulgated by ADEQ, before treatment and conveyance capacity in the downstream public sewerage system will be permanently committed for any new development within the rezoning area.

## G. PHASING PLAN

As demonstrated in *Exhibit III.F: Illustrative Phasing Plan,* development phasing for the PAD will generally proceed as follows:

- It is anticipated that development will generally proceed west to east, commencing with the MLDR Planning Area. It should be noted that this generalized phasing is entirely dependent upon market demand and absorptions rates and may differ at the time of development.

- Construction of a Neighborhood Park, as required by the HAMP, shall commence in Phase 1 of the MLDR Planning Area and upon the issuance of 70% of the allowable building permits and shall be completed prior to the issuance on the 800th building permit of MLDR Phase 1.

- Construction of the Atterbury Wash Tributary trails will be dependent on residential building permits issued within each Planning Area. Upon issuance of the 800th residential building permit within the MLDR Planning Area construction of the trail section adjacent to the west bank of the Atterbury Wash Tributary will begin. Construction for the trail adjacent to east bank of the Atterbury Wash Tributary will begin upon issuance of the 800th residential building permit in the VC Planning Area. Construction for each trail shall be completed before issuance of 950th residential building permit for each bank respectively.

- Infrastructure and utilities needed to serve the future development(s) shall be constructed per approved development plans during the appropriate phases and will be determined at the time of development.

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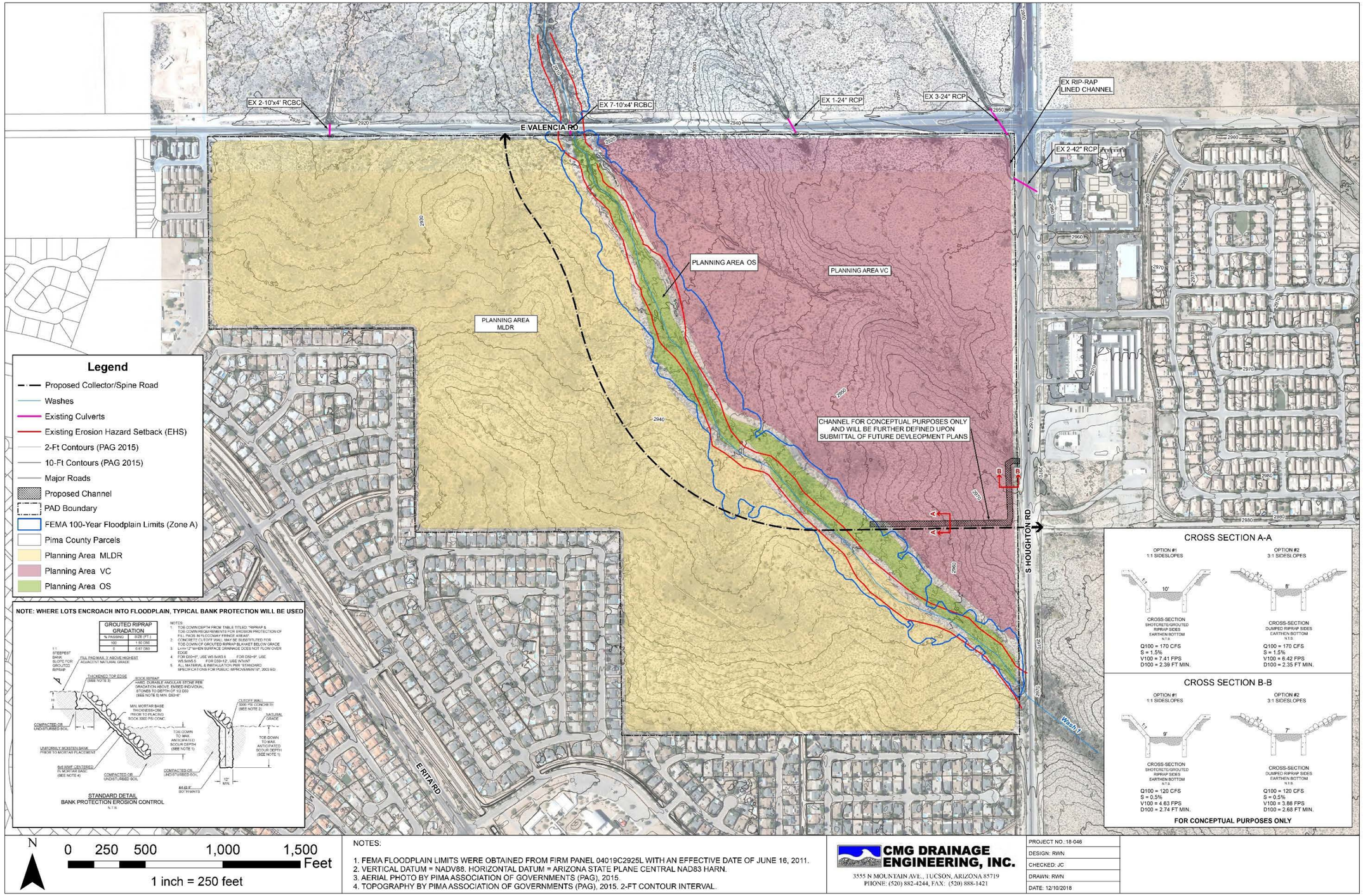
# EXHIBIT III.E: ILLUSTRATIVE DRAINAGE PLAN

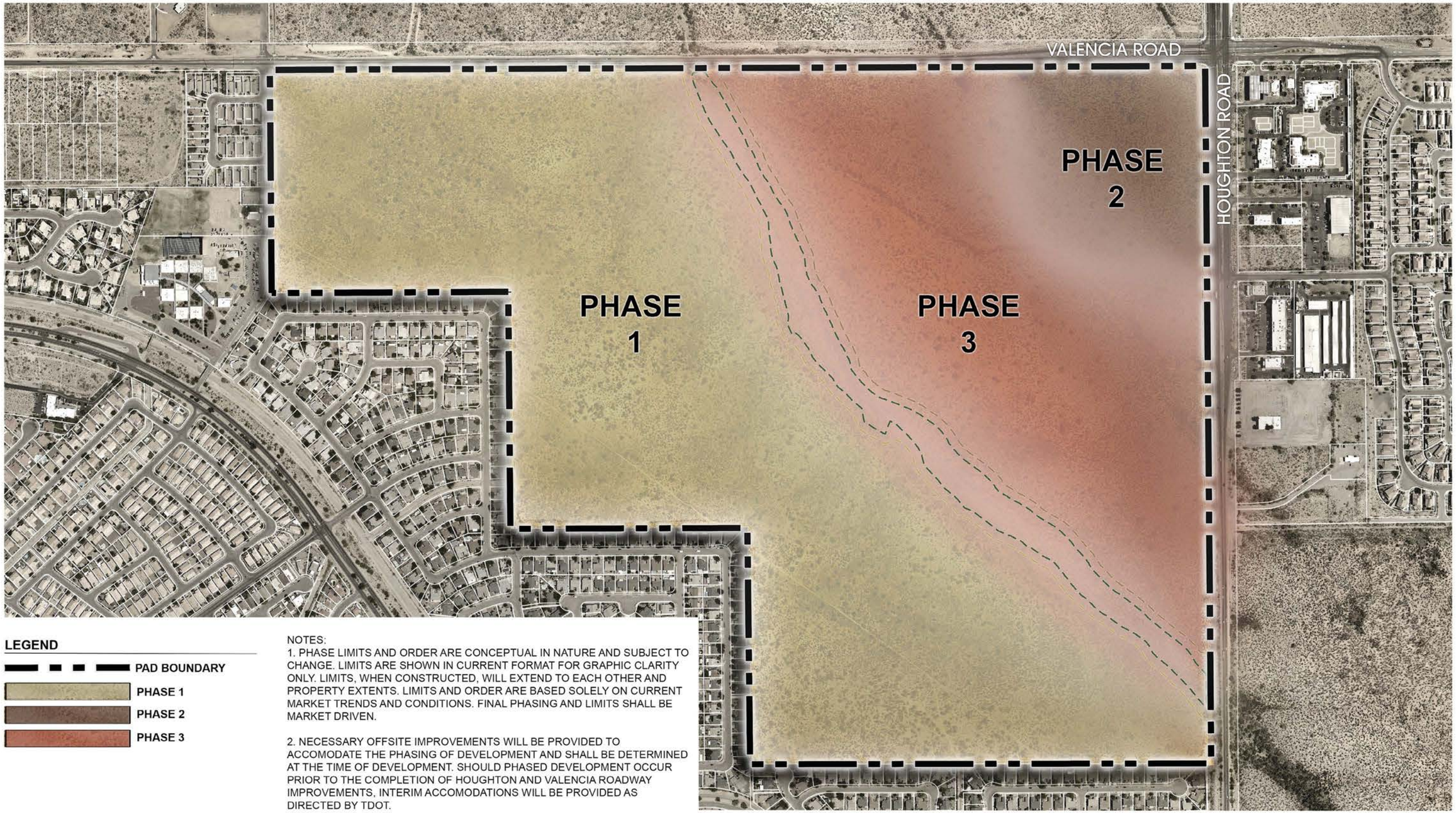



NOTES:

1. FEMA FLOODPLAIN LIMITS WERE OBTAINED FROM FIRM PANEL 04019C2925L WITH AN EFFECTIVE DATE OF JUNE 16, 2011.
2. VERTICAL DATUM = NADV88. HORIZONTAL DATUM = ARIZONA STATE PLANE CENTRAL NAD83 HARN.
3. AERIAL PHOTO BY PIMA ASSOCIATION OF GOVERNMENTS (PAG), 2015.
4. TOPOGRAPHY BY PIMA ASSOCIATION OF GOVERNMENTS (PAG), 2015. 2-FT CONTOUR INTERVAL.

CMG DRAINAGE ENGINEERING, INC.
3555 N MOUNTAIN AVE., TUCSON, ARIZONA 85719
PHONE: (520) 882-4244, FAX: (520) 888-1421

| | |
|---|---|
| PROJECT NO.:18-046 | |
| DESIGN: RWN | |
| CHECKED: JC | |
| DRAWN: RWN | |
| DATE: 12/10/2018 | |




**LEGEND**

- PAD BOUNDARY
- PHASE 1
- PHASE 2
- PHASE 3

NOTES:

1. PHASE LIMITS AND ORDER ARE CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE. LIMITS ARE SHOWN IN CURRENT FORMAT FOR GRAPHIC CLARITY ONLY. LIMITS, WHEN CONSTRUCTED, WILL EXTEND TO EACH OTHER AND PROPERTY EXTENTS. LIMITS AND ORDER ARE BASED SOLELY ON CURRENT MARKET TRENDS AND CONDITIONS. FINAL PHASING AND LIMITS SHALL BE MARKET DRIVEN.

2. NECESSARY OFFSITE IMPROVEMENTS WILL BE PROVIDED TO ACCOMODATE THE PHASING OF DEVELOPMENT AND SHALL BE DETERMINED AT THE TIME OF DEVELOPMENT. SHOULD PHASED DEVELOPMENT OCCUR PRIOR TO THE COMPLETION OF HOUGHTON AND VALENCIA ROADWAY IMPROVEMENTS, INTERIM ACCOMODATIONS WILL BE PROVIDED AS DIRECTED BY TDOT.

3. ROADWAY STUB OUTS FOR A CONNECTION BETWEEN PHASE 1 AND 2 WILL BE PROVIDED IN EACH PHASE DURING THE DEVELOPMENT PROCESS FOR EACH PHASE. AN INTERIM ROADWAY WILL NOT BE PROVIDED THROUGH PHASE 3

0' 250' 500'

NORTH

SCALE: 1"= 500'-0"
PROJECT: PUL-30 DATE: 12.11.18
FILE NAME: PUL-30_SP_08.16.18.DWG

# PART IV:
# PAD DEVELOPMENT REGULATIONS

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# A. DEVELOPMENT REGULATIONS

The following provides development regulations for each Planning Area. All new development within the PAD shall conform to applicable building, fire and other applicable safety standards.

## 1. MEDIUM TO LOW DENSITY RESIDENTIAL (MLDR) (R-2)

**A. Permitted Uses:**

1) *Agricultural Land Use Group*
   a. Community Garden, subject to: *UDC Section 4.9.2.B*
   b. Urban Farm, subject to: *UDC Section 4.9.2.E.*

2) *Civic Use Group*
   a. Civic Assembly
   b. Cultural Use (Government Owned and Operated Only)
   c. Educational Use: Elementary and Secondary Schools, subject to: *UDC Section 4.9.3.D.1 – 7 and 4.9.13.O*
   d. Educational Use: Postsecondary Institution, subject to: *UDC Section 4.9.3.E and 4.9.13.O*
   e. Educational Use: Instructional School, subject to: *UDC Section 4.9.13.O*
   f. Membership Organization: Postal Service (government owned and operated only)
   g. Protective Service (government owned and operated only)
   h. Religious Use, subject to: *UDC Section 4.9.13.O.*

3) *Commercial Services Use Group*
   a. Administrative and Professional Office, subject to: *UDC Section 4.9.13.O*
   b. Day Care, subject to: *UDC Section 4.9.13.O.*

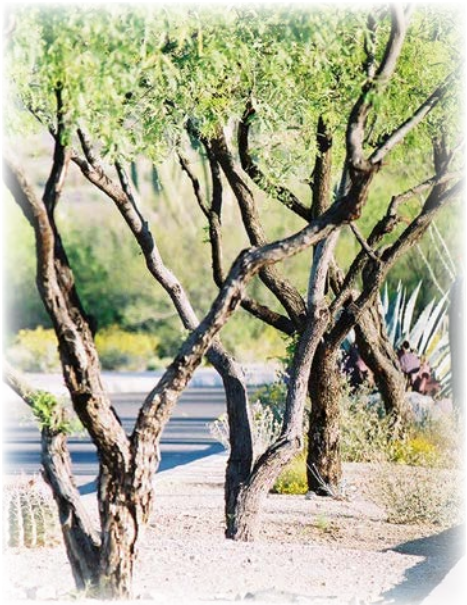
4) *Recreation Use Group*
   a. Parks and Recreation, subject to: *UDC Section 4.9.13.B and C.*

5) *Residential Use Group*
   a. Duplex, subject to: *UDC Section 4.9.7.B.6, .9, and .10*
   b. Manufactured Housing, subject to: *UDC Section 4.9.7.B.6, .9 and .10*
   c. Multifamily Development, subject to: *UDC Section 4.9.7.B.6, .9, and .10*
   d. Single Family, Detached
   e. Home Occupation as an accessory use to any permitted Family Dwelling, subject to: *UDC Section 4.9.7.D*
   f. Flexible Lot Development, subject to: *UDC Section 8.7.3*

**B. Prohibited Uses:**

The following primary land uses shall be prohibited within the MLDR land use designation.

1) Adult Rehabilitation
2) Shelter Care
3) Cemetery
4) Golf Course
5) Stand-alone Wireless Communication Towers



## 2. MEDIUM TO LOW DENSITY RESIDENTIAL (MLDR) (R-2) DEVELOPMENT STANDARDS

The following provides the residential development standards applicable to the MLDR Planning Area. These standards were developed utilizing the basic parameters of the R-2 zone.

**A. Residential Development Standards**

1). Single Family - Detached

a. Maximum Density: 8 units per acre
b. Maximum Lot Coverage: 75%
c. Maximum Building Height: 36 feet
d. Maximum Building Height Along Southern / Western Project Boundary: All structures shall be limited to a single-story unless the rear boundary of proposed lot abuts common area or drainage infrastructure and is a minimum of 50 feet from project boundary.
e. Setbacks:
   i. Front Yard:
      - Main Structures: 5 feet
      - Front Entry Garage: 18 feet from back of sidewalk
      - Side Entry Garage: 10 feet
      - Off-Alley Entry/ Private Accessway to Garage: 2 feet
   ii. Side Yard: 0 feet
      - Minimum distance between buildings: 6 feet
      - Adjacent to a Street: 5 feet
   iii. Rear Yard:
      - Main structure: 5 feet to primary structure
      - Rear Entry Garages: 3 feet
      - Accessory Structures:0 feet

2) Single Family - Attached

a. Maximum Density: 8 units per acre
b. Maximum Lot Coverage: 85%
c. Maximum Building Height: 36 feet
d. Maximum Building Height Along Southern / Western Project Boundary: All structures shall be limited to a single-story unless the rear boundary of proposed lot abuts common area or drainage infrastructure and is a minimum of 50 feet from project boundary.
e. Setbacks:
   i. Front Yard:
      - Main Structures: 5 feet
      - Front Entry Garage: 18 feet from back of sidewalk
      - Side Entry Garage: 5 feet
      - Off-Alley Entry/ Private Accessway to Garage: 2 feet
   ii. Side Yard: 0 feet
      - Minimum distance between buildings: 6 feet
      - Adjacent to a Street (or Alley): 5 feet
   iii. Rear Yard
      - Main structure: 5 feet to primary structure
      - Rear Entry Garages: 3 feet
      - Accessory Structures: 0 feet

3) Multi-Family

a. Maximum Density: 8 units per acre

b. Maximum Lot Coverage: 85%
c. Maximum Building Height: 36 feet
d. Maximum Building Height Along Southern / Western Project Boundary: All structures shall be limited to a single-story unless the rear boundary of proposed lot abuts common area or drainage infrastructure and is a minimum of 50 feet from project boundary.
e. Minimum Building Setback:
    i. To Street: 20 feet
    ii. Adjacent Single Family Detached Units: 20 feet
f. Minimum Distance between Buildings: 8 feet

**A. Non-Residential Development Standards**

1) Nonresidential Use

a. Minimum Lot Area: None
b. Minimum Lot Width: None
c. Separation Between Buildings: Governed by Applicable Building Code
d. Maximum Floor Area Ratio*: 0.5
e. Maximum Building Height: 24 feet
f. Minimum Building Setbacks:
    a. To Street: 20 feet
g. Maximum Lot Coverage: None

** Floor Area Ratio (FAR) shall be defined as a ratio expressing the amount of square feet of floor area permitted for every square foot of land area within the site and the permitted maximum Floor Area (FA) shall be calculated as follows: Site Area X FAR = FA. The FAR designated above shall apply to each separate site, as that term is defined as the land area consisting of a lot or contiguous lot.*

## 3. VILLAGE CENTER (VC) (C-2)

**A. Permitted Uses**

*1) Agricultural Land Use Group*
a. Community Garden, subject to: *UDC Section 4.9.2.B*
b. Urban Farm, subject to: *UDC Section 4.9.2.E.*

2). *Civic Use Group*
a. Civic Assembly
b. Cultural Use (Government Owned and Operated Only)
c. Educational Use:
- Elementary and Secondary Schools, subject to: *UDC Section 4.9.3.D.1 – 7*
- Postsecondary Institution, subject to: *UDC Section 4.9.3.E*
- Instructional School

d. Membership Organization
e. Postal Service (government owned and operated only)
f. Protective Service (government owned and operated only)
g. Religious Uses

*3) Commercial Services Use Group*
a. Administrative and Professional Office, subject to: *UDC Section 4.9*.
b. Alcoholic Beverage Service:
- Excluding a Large Bar; subject to: *UDC Section 4.9.13.P*
- Large Bar (permitted as Special Exception Use), subject to *UDC Section 4.9.4.C.2 and 4.9.13.O*
- With a Microbrewery as an accessory use to permitted Alcoholic Beverage Service Use, subject to: *UDC Section 4.9.5.E.6, .7 and .8*

c. Animal Service, subject to: *UDC Section 4.9.4.D.1, .2, .3, & .4 and 4.9.13.P*

d. Artisan Residence, subject to: *UDC Section 4.9.4.E.1, .2, .3, .4, & .5 and 4.9.13.P*
e. Automotive:
- Minor Service and Repair, subject to *UDC Section 4.9.13.E*

f. Buildings and Ground Maintenance
g. Commercial Recreation, subject to: *UDC Section 4.9.13.P*
h. Communications
- Wireless Communication, subject to: *UDC Section 4.9.13.P*
- Wireless Communication, limited to communication towers and antennas, subject to: *UDC Section 4.9.13.P*

i. Construction Service, subject to: *UDC Section 4.9.13.P*
j. Day Care
k. Entertainment
- Excluding Large Dance Hall, subject to: *UDC Section 4.9.4.K.1, .2, .3, .4, 4.9.4.C.3, and 4.9.13.E and 4.9.13.P*

l. Financial Services
- Excluding non-chartered Institution, subject to: *UDC Section 4.9.4.L3., 4.9.13.E and 4.9.13.P*

m. Food Service
- Excluding Soup Kitchens, subject to: *UDC Section 4.9.4.M.1*
- Soup Kitchens, subject to: *UDC Section 4.9.4.M.4*
- With a Microbrewery as an accessory use to Food Service

n. Funeral Service, subject to: *UDC Section 4.9.13.P*
o. Medical Service
- Extended Healthcare
- Major
- Outpatient, excluding blood donor centers, subject to: *UDC Section 4.9.4.O.2 and 4.9.13.P*
- Outpatient, limited to blood donor centers (permitted as Special Exception Use), subject to *UDC Section 4.9.4.O.3 & 4.9.13.P*

p. Parking
q. Personal Service, subject to: *UDC Section 4.9.13.P*
r. Research and Product Development
s. Technical Service, subject to: *UDC Section 4.9.4.W.2 and 4.9.13.P*
t. Trade Service and Repair:
- Minor Repair, subject to: *UDC Section 4.9.13.P*

u. Transportation Services Land Carrier, subject to: *UDC Section 4.9.13.E*
v. Travelers Accommodations, Lodging

*4) Industrial Use Group*
a. Craftwork, subject to: *UDC Section 4.9.13.P*
b. Household Goods Donation Center Only (permitted as Special Exception Use), subject to: *UDC Section 4.9.5.G.2, and .6-.12, 4.9.13.A.2, 4.9.13.B-D, and 4.9.13.P*
c. Processing and Cleaning, subject to: *UDC Section 4.9.13.P*

*5) Recreation Use Group*

a. Parks and Recreation, subject to: *UDC Section 4.9.13.B and C.*

*6) Residential Use Group*

a. Duplex, subject to: *UDC Section 4.9.7.B.6, .9, and .10*
b. Manufactured Housing, subject to: *UDC Section 4.9.7.B.6, .9 and .10*
c. Multifamily Development, subject to: *UDC Section 4.9.7.B.6, .9, and .10*
d. Single Family, Detached
e. Home Occupation as an accessory use to any permitted Family Dwelling, subject to: *UDC Section 4.9.7.D*
f. General Farming as an accessory use to any permitted Family Dwelling, subject to: *UDC Section 4.9.2.A.1.a, .3.a, and 4.9.2.B.1*
g. Flexible Lot Development, subject to: *UDC Section 8.7.3*
h. Group Dwelling
i. Residential Care Services, Adult Care or Physical and Behavioral Health Services
    - Unlimited # of Residents, subject to: *UDC Section 4.9.7.J.3.d, .4 and .8*
j. Residential Care Services, Adult Rehabilitation or Shelter Care
    - Unlimited # of Residents, subject to: *UDC Section 4.9.7.J.1, 3.d, .4, and .8*
k. Residential Care Services, Rehabilitation Service – Children's Facility (maximum 10 residents), subject to: *UDC Section 4.9.7.J.1, .3.a, and .4*
l. Residential Care Services, Shelter for Victims of Domestic Violence, subject to: *UDC Section 4.9.7.J.1, .3.c, and .4.*

*7) Retail Trade Use Group*

a. Food and Beverages Sales Farmers' Market only, subject to: *UDC Section 4.9.9.A.12.a-d*
    - Excluding Large Retail Establishment
    - Large Retail Establishment (permitted as Special Exception Use), subject to: *UDC Section 4.9.9.D*
b. General Merchandise Sales
    - Excluding Large Retail Establishment, subject to: *UDC Section 4.9.9.B.1*
    - Large Retail Establishment (permitted as Special Exception Use), subject to: *UDC Section 4.9.9.D*
c. Medical Marijuana
    - Designated Caregiver Cultivation Location, subject to: *UDC Section 4.9.9.E.2 and .3*
    - Dispensary, subject to: *UDC Section 4.9.9.E.1*
    - Dispensary Off-site Cultivation Location, subject to: *UDC Section 4.9.9.E.2*
    - Qualifying Patient Cultivation Location, subject to: *UDC Section 4.9.9.E.4*
d. Vehicle Rental Sales, subject to: *UDC Section 4.9.9.G.1 and .2*
e. Farmers' Market as an accessory use to any permitted principal use in every land use group, subject to: *UDC Section 4.9.9.A.12.a-.e.*

*8) Storage Use Group*

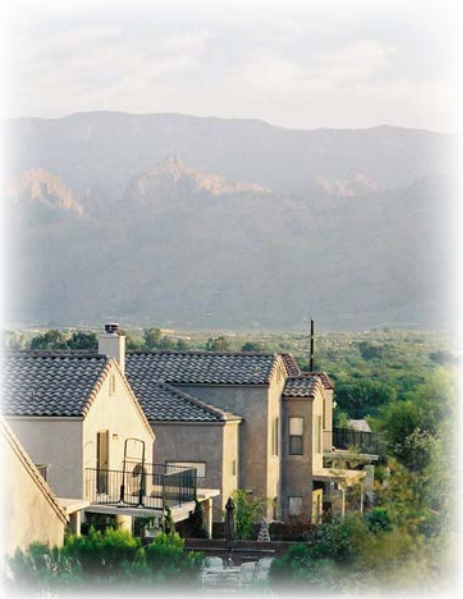
a. Commercial Storage, subject to: *UDC Section 4.9.10.A*
b. Hazardous Material Storage as an accessory use to any permitted principal use in every land use group, subject to: *UDC Section 4.9.10.B.1, .2.a or .2.e*
c. Personal Storage, subject to: *UDC Section 4.9.10.C.3 and .6*
d. Distribution System, subject to: *UDC Section 4.9.11.A.1, .5, and .9*
e. Renewable Energy Generation, subject to: *UDC Section 4.9.1.B.1, .2, .3, and .5.*

B. Permitted Uses After 10 Years Subject to Section V.C.2

*1) All VC Permitted Uses*

*2) Commerical Service Use Group*

a. Automotive:
    - Major Service and Repair (excluding bodywork and paint booths), subject to: UDC Section 4.9.13.E



*3) Retail Trade Group*

a. Constuction Material Sales
b. Heavy Equipment Sales

*4) Wholesaling Use Group*

a. Business Equipment Supply and Wholesaling, subject to: UDC Section 4.9.13.P
b. Construction/ Heavy Equipment Wholesaling, subject to: UDC Section 4.9.13.P
c. Food and Beverage Wholesaling, subject to: UDC Section 4.9.13.P.

**C. Prohibited Uses**

The following primary land uses shall be prohibited within the VC land use designation.

1. Billboards
2. Correctional Uses
3. Golf Course
4. Restricted Adult Activities
5. Salvaging and Recyling
6. Swap Meets and Auctions

## 4. VILLAGE CENTER (VC) (C-2) DEVELOPMENT STANDARDS

The following provides the residential and nonresidential development standards applicable to the VC Planning Area. These standards were developed utilizing the basic parameters of the C-2 zone.

**A. Residential Development Standards**

1) Single Family - Detached

a. Maximum Density: 8 RAC
b. Maximum Lot Coverage: 75%
c. Maximum Building Height: 36 feet
d. Setbacks:
    i. Front Yard:
        - Main Structures: 5 feet
        - Front Entry Garage: 18 feet from back of sidewalk
        - Side Entry Garage: 10 feet
        - Off-Alley Entry/ Private Accessway to Garage: 2 feet
    ii. Side Yard: 0 feet
        - Minimum distance between buildings: 6 feet
        - Adjacent to a Street: 5 feet
    iii. Rear Yard :
        - Main structure: 5 feet to primary structure
        - Rear Entry Garages: 3 feet
        - Accessory Structures: 0 feet

2. Single Family - Attached

a. Maximum Density: 15 RAC
b. Maximum Lot Coverage: 85%
c. Maximum Building Height: 45 feet
d. Setbacks:
    i. Front Yard:
        - Main Structures: 5 feet

- Front Entry Garage: 18 feet from back of sidewalk
- Side Entry Garage: 5 feet
- Off-Alley Entry/ Private Accessway to Garage: 2 feet

ii. Side Yard: 0 feet

- Minimum distance between buildings: 6 feet
- Adjacent to a Street (or Alley): 5 feet

iii. Rear Yard:

- Main structure: 5 feet to primary structure
- Rear Entry Garages: 3 feet
- Accessory Structures:0 feet

3. Multi-Family

a. Maximum Density: 44 RAC
b. Maximum Lot Coverage: 85%
c. Maximum Building Height: 52 feet
d. Minimum Building Setback:
    i. To Street: 20 feet
    ii. To Adjacent Single Family Detached Units: 20 feet
e. Minimum Distance between Buildings: 6 feet

**B. Nonresidential Development Standards**

1. Nonresidential Use

a. Minimum Lot Area: None
b. Minimum Lot Width: None
c. Separation Between Buildings: Governed by Applicable Building Code
d. Maximum Floor Area Ratio*: 0.5
e. Maximum Building Height: 40 feet
f. Minimum Building Setbacks:
    i. To Street: 20 feet
g. Maximum Lot Coverage: None

* Floor Area Ratio (FAR) shall be defined as a ratio expressing the amount of square feet of floor area permitted for every square foot of land area within the site and the permitted maximum Floor Area (FA) shall be calculated as follows: Site Area X FAR = FA. The FAR designated above shall apply to each separate site, as that term is defined as the land area consisting of a lot or contiguous lot.

## 5. OPEN SPACE (OS)

**A. Permitted Uses**

Typical uses include, but not limited to, unimproved land, that is set aside, dedicated, or reserved in perpetuity for public or private enjoyment. The permitted uses may also include but not limited to the following uses. All disturbance associated with these uses must be revegetated.

1) Retaining Walls
2) Drainage Structures and Bank Protection
3) Screening Walls
4) Revegetation
5) Road or utility crossings
6) Riparian Mitigation
7) Recreation Use Group
    a. Parks and Recreation
    b. Trails
    c. Open Space

# B. DEVELOPMENT STANDARDS

## 1. CIRCULATION STANDARDS

a. *Street Cross Sections:* All roads within the PAD will be public roads that are owned and maintained by the City of Tucson. If it is desired by a future homebuilder or developer to provide a gated entry into their development, the roads will be designated as private during the platting and/or development plan process and shall be maintained by an established homeowner association or property manager. The proposed cross sections contain vehicular travel lanes, pedestrian sidewalks, utility easements and landscape areas.

1. *Collector/Spine Road Cross Section*: utilize a 100-foot right-of-way, which includes a 10-foot urban trail, 2 vehicular travel lanes, a continuous turn lane, bicycle lanes and sidewalk. Refer to *Section III.C.2: OnSite Vehicular Circulation* for an illustrative Collector/Spine Road cross section.

2. *Local Residential Street Cross Section*: utilize a 52-foot right-of-way, which includes 2 vehicular travel lanes, on-street parking and sidewalks. Refer to *Section III.C.2: OnSite Vehicular Circulation* for an illustrative Local Residential Street cross-section.

3. *Village Center Collector Cross Section*: utilize a 68-foot right-of-way, which includes 2 vehicular travel lanes, a continuous turn lane, and sidewalks. Refer to *Section III.C.2: OnSite Vehicular Circulation* for an illustrative Village Center Collector cross section.

4. *Village Center Local Street Cross Section:* utilize a 52-foot right-of-way and consist of 2 vehicular travel lanes and sidewalks. Refer to *Section III.C.2: OnSite Vehicular Circulation* for an illustrative Village Center Local Street cross section.

b. *Scenic Routes:* Houghton Road is designated as a Scenic Arterial Street. The following provisions of the Scenic Corridor Zone (SCZ) apply to real properties or parcels that are within four hundred (400) feet of the future right-of-way line of Houghton Road except for where the Gateway Corridor Zone applies on Houghton Road. These provisions supersede the provisions identified in Article 5, Section 5.3 Scenic Corridor Zone of the UDC.

1. Addition of Vegetation and Mitigation

- A 30-foot wide buffer adjacent to the MS&R right-of-way line of Houghton Road is proposed for the purposes of the SCZ. The buffer can comprise of natural and/or graded and revegetated/landscaped areas.

Additional plant material may be added to the buffer area to increase the plant density and visual appearance of the buffer. Additional plant material shall consist of native or drought tolerant plant species. Additional plant material for purposes of native plant preservation, revegetation or riparian mitigation may be added to the buffer.

- Modifications to the existing drainageway within the SCZ may occur in accordance with the City of Tucson Floodplain Ordinance.

2. Structure Heights and Setbacks

- Structure heights will be limited to the prescribed building heights for each Planning Area and shall be setback at a one-to-one (1:1) ratio based on the proposed building height.

c. Atterbury Wash Tributary Trails: A 12-foot paved multi-use path and an 8-foot soft path will be provided on both sides of the Atterbury Wash Tributary within the Open Space (OS) Planning Area. The 8-foot path may be located within the Erosion Hazard Setback. The trails will connect the Houghton Greenway to the existing Valencia Greenway and provide additional circulation opportunities for pedestrians and non-motorized forms of transportation.

## 2. LANDSCAPE AND SCREENING

a. *Street Landscape Border: Houghton Road*: the street landscape border along Houghton Road shall be 30-feet in width, except where the Gateway Corridor Zone applies, and shall comply with *Section IV.B.1.b: Scenic Routes*.

b. *Street Landscape Border: Valencia Road*: the street landscape border along Valencia Road shall comply with *UDC Section 7.6 Landscaping and Screening* requirements.

c. *Interior Landscape Border: Residential Border*: the interior landscape border between the VC Planning Area and existing residential development shall comply with *UDC Section 7.6 Landscaping and Screening* requirements.

d. *Parking Areas*: canopy trees shall comply with *UDC Section 7.6 Landscaping and Screening* requirements and shall aid in the mitigation of urban heat island effect. Screens of 30-inch height shall be allowed for parking adjacent to non-MS&R streets or multifamily housing.

## 3. PARK STANDARDS

*a.* *Neighborhood Center Park*: The neighborhood park shall have a minimum area of 5.0 acres. The neighborhood park shall feature a large turf area, picnic tables, ramadas, benches, a drinking fountain, bicycle parking, and a playground with a shade structure. The Neighborhood Park will be located near the collector/spine road and provide pedestrian connections to the Atterbury Wash Tributary trails. Riparian habitat mitigation and drainage structures shall be permitted within the park limits.

b. *Mini Parks*: the mini parks shall vary in size. Mini Parks may range from approximately 0.2 acres to approximately 1.0 acres in size. A minimum of 100 square feet per residential unit shall be provide for mini parks for areas developed not within close proximity to the Neighborhood Center Park. All Mini Parks shall include a turf area and seating. Additional amenities may be included in Mini Parks based on their size and location. Additional amenities and may include playgrounds, free standing play features, ramadas, and picnic tables.

c. *Planting*: all parks will include canopy shade trees and drought tolerant understory accents and shrubs.

## 1. RIPARIAN MITIGATION STANDARDS

This section shall modify Technical Standards 4.02.0.0, Floodplain, Wash and Environmental Resource Zone (ERZ) Standard to achieve the intent expressed within the PAD. The specific sections include, but are not limited to the following:

- *4-02.2.5.A - Development Restrictions*. Impacts as shown in the PAD are allowed. The main wash (located within the Open Space Planning Area) and associated Regulated Areas may be impacted by uses listed in Section IV.A.3: Open Space. Other washes and associated Regulated Areas on the Property may be impacted by additional uses, including residential and commercial development.

- *4-02.3.0 - Review (No SAC or STAC Review)*. The PAD Review process shall serve as the review for the riparian mitigations plans.

- The Property shall be permitted to impact existing Regulated Areas and Protected Riparian Area (PRA) as needed and be allowed to provide mitigation for impacts to the Regulated Area and PRA on-site. On-site mitigation areas may be located within the Open Space.

## 2. WATER CONSERVATION STANDARDS

Conservation standards will be accomplished via low water use plants, efficient irrigation and rainwater harvesting.

a. *Low Water Use Plants*: The plant palette will consist of predominately low water use, native and regionally adapted plants. The plants will be located relative to their functionality and the uses associated with the zones within which they are planted. The use of low water use plants in locations appropriate with their species characteristics provides for the conservation of potable water while assuring the survivability and long term health of such plant material.

b. *Irrigation*: Plants requiring irrigation shall be irrigated by means of an efficient underground drip irrigation system. Underground drip systems reduce water evaporation and waste, thereby conserving water. The irrigation system


will be controlled by a programmable controller which can be used to adjust irrigation schedules. The use of different seasonal irrigation schedules reduces the amount of water applied during cooler and wetter periods. Irrigation systems shall be fitted with irrigation controllers and shall be capable of monitoring and responding to plant water needs through the use of weather stations and/or evapotranspiration data. The technology chosen should be capable of preventing the irrigation system from running if sufficient moisture is present to support the vegetation.

c. *Rainwater Harvesting:* A water harvesting plan will be prepared for commercial uses within the Village Center Planning Area at the time of development plan submittal in compliance with Development Standards 10-03, illustrating 50 percent of estimated landscape water budget is met by water harvesting techniques. The water harvesting plan will utilize passive water harvesting techniques to collect rainwater and direct it to planting areas, thereby reducing the consumption of potable water for irrigation purposes. A number of passive rainwater harvesting techniques may be employed to direct surface water and capture rainfall for the benefit of the landscape: curb cuts, flush curbs, recessed planting areas, minimized compaction of planting areas and semi-pervious pavers.

## 3. PARKING AND LOADING STANDARDS

Each Planning Areas in this PAD will comply with the Motor Vehicle and Bicycle Parking Requirements of Section 7.4 of the UDC. In instances where loading is required, it will be provided in accordance with Section 7.5 of the UDC.

Vehicle use areas shall be constructed utilizing materials and construction techniques in accordance with recommendations of the geotechnical engineer and concurrence from City of Tucson. Per Figure 7.4.6-A of the UDC, the minimum two-way PAAL shall be 24 feet wide.

Accessible parking will be provided in accordance with the requirements noted in the 2012 IBC Chapter 11 and the ICC A117.1-2009. Accessible spaces and “Van Accessible” spaces will connect to the accessible route as required by ICC A117.1-2009 Edition. Newly constructed and modified sidewalks, detectable warnings and curb ramps will comply with accessibility requirements as required.

## 4. SIGNAGE AND MONUMENTATION

Signage and monumentation within the PAD shall comply with the applicable City of Tucson Sign Code and sign regulations.

## 5. SOLID WASTE STANDARDS

All required solid waste and recycle materials collection and storage shall be designed in accordance with the City of Tucson Technical Standards Manual, Section 8: Solid Waste and Recycling Disposal, Collection, and Storage Standards. Solid waste and recycling collection and storage containers associated with nonresidential uses shall be setback a minimum of 50 feet from any residential use.

## 6. LIGHTING

All outdoor light shall comply with the City of Tucson Outdoor Lighting Code. Street lighting is not required for public or private street, including collector roads and local streets. Lighting may be integrated at the discretion of the future developer(s). In addition, lighting may be provided to illuminate common areas, residential lots, multifamily and commercial sites using full cut off lights and landscape accent lighting in accordance with the Outdoor Lighting Code.

## 7. CULTURAL RESOURCES

A review of Arizona State Museum records revealed that the Property was surveyed in 1987 as part of the Houghton Hills Survey (Douglas 1987) which identified 51 archaeological sites in their 4000-acre project area. 37 of the 51 site were recorded to be within one-mile of the site; 10 of which were located on the Property. Due to the age of the survey, the Arizona State Museum recommends an on-the-ground cultural resource study be conducted prior to any ground disturbing activities to evaluate the condition of previously-identified sites and investigate whether any previous-unidentified site have been exposed. Historic or prehistoric features or artifacts discovered during future ground disturbing activities should be reported to the City of Tucson Historic Preservation Officer. Pursuant to A.R.S. 41-865 the discovery of human remains, and associated objects found on private lands in Arizona must be reported to the Director of Arizona State Museum.

# PART V: IMPLEMENTATION AND ADMINISTRATION

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## A. DESIGN REVIEW COMMITTEE

The Design Review Committee shall consist of one (1) member of the development team, one (1) representative from Arizona State Land Department (ASLD), one (1) member of the project consultant team, and one (1) volunteer representative from the surrounding neighborhood associations and/or homeowner association. The surrounding neighborhoods and/or homeowner association representative may include but not be limited to, Horton at Rita Ranch, Sunrise Meadows at Rita Ranch, Hacienda Del Oro, or surrounding Registered Neighborhood Associations (Rita Ranch). The Design Review Committee will review and approve all details of project design. A copy of the self-certification will be provided to the City of Tucson at the time of plan submittal advising whether the architectural and landscape design conforms to the Escalera PAD Design Guidelines

The DRC shall remain in place through 100% of the initial build-out of the Property. Beyond this point, the Committee's function will survive through the Homeowners Associations of the residential subdivision or through the property owner's association of the commercial center, at their respective discretion.

## B. DESIGN STANDARDS AND GUIDELINES

Prior to development of any area within Escalera PAD, development and design standards will be submitted as an extension of this document and shall be reviewed by the DRC and City of Tucson Planning and Development Services Department to ensure compatibility with the HAMP and approved by the DRC. A copy of the DRC approved Design Standards and Guidelines will be provided to the City of Tucson Planning and Development Services Department prior to the first Development Package submittal. These guidelines and standards will be representative of the overall intent of the HAMP and will strive to develop a cohesive mixed-use development. Additionally, the standards and guidelines will provide the framework for the design and character of the Escalera Planned Area Development and address the following goals:

- A common theme and design elements will be established that will be used throughout the Property. They will cover unifying site design elements, including streetscape design, signage, materials, colors and architectural styles and will be reviewed and approved by the design review committee established by the Master Developer. Guidelines should be clear, concise and enforceable. Address adjacent neighborhoods and provide for transitions at the edges of the property.

- Ensure new development does not adversely impact existing neighborhood character by complying with the goals and policies of the Houghton Area Master Plan (HAMP).

- Ensuring compatibility with existing Southwestern architectural styles and building materials of adjacent land uses.

- Provide consistency with the PAD and the intentions of the document.
- Village Center core is to be a consolidated node, single cohesive area for commercial activity, rather than a strip commercial center found at arterial intersections. Village Centers should be oriented around a public space or feature and reinforce a sense of place and identity; early consideration should be given to the village center's configuration so that components developed at the beginning do not jeopardize the viability of components developed later in the process.
- Neighborhood Area should be developed as cohesive units with a range of densities. Care given to ensure components, such as parks and trails, are integrated with the surrounding neighborhood and function effectively.

## C. INTERPRETATIONS AND AMENDMENTS

### 1. INTERPRETATION

The regulations and guidelines provided within this PAD supersede existing regulations within the City of Tucson Unified Development Code. If an issue arises regarding definitions, conditions, standards and/or situations not addressed in this PAD, those in the UDC shall prevail, as interpreted by the COT Zoning Administrator.

### 2. AMENDMENTS

Amendments to this PAD may be necessary over time to respond to the changing market demands, or financial conditions, or to respond to the unanticipated needs of new users. Non-substantial changes to the PAD shall be approved pursuant to UDC Section 3.5.5.I and include the following:

- Modifications to the permitted and secondary uses that do not change the overall intent of the PAD.
- Modifications to tax code parcel boundaries, including changes to interior boundaries or combining parcels. (Except that changes to the PAD perimeter boundary may not be considered a minor amendment or non-substantial changes to the PAD).
- Any other items not expressly defined as substantial based on UDC Section 3.5.5.I
- After a period of 10 year from the adoption of this PAD, the minimum 25 acres of commerical uses required in the VC planning area may be reduced and all other uses identified in the Village Center designation may be allowed subject to documentation demonstrating that market conditions support the change.
- With approval from the City of Tucson Parks and Recreation Department, the 12-foot multi-use path proposed as part of the Atterbury Wash Trails may be located adjacant to a collector street/spine road as long as the overall intent of the HAMP and PAD are acheived.
- In coordination with ASLD and approval from the Directors of Planning and Development Services and Parks and Recreation Departments, the neighborhood park required in the PAD may be consolidated with a larger park in the overall HAMP area to create a regional park.

Substantial changes (as defined in UDC Section 3.5.5.I), are subject to the amendment application process outlined in UDC Section 3.5.5.I.2.

## D. FEE REQUIREMENTS

Upon sale of the Property for private development, the fees that otherwise would be due at the time of rezoning submittal will be paid to the City of Tucson by the private purchaser in accordance with the following:

1. The deferred fees will be pro-rated at $289 per acre (PAD fee of $99,416 divided by 344 acres). The deferred fees will be based on the acreage being developed at the time of Development Package Submittal and at the rate of $289 per acre. The fee will be collected and applied to the PAD rezoning case at the time of Development Package submittal as a separate check.

# PART VI: APPENDIX

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Douglas A. Ducey
Governor

Lisa A. Atkins
Commissioner

Arizona State Land Department

1616 West Adams, Phoenix, Arizona 85007
(602) 542-4631

April 15, 2019

Mr. Michael Ortega
City Manager's Office
City Hall, 10th Floor
255 W. Alameda
Tucson, AZ 85701

Re: PAD Rezoning of Parcel 141010130, RZ18-002

Dear Mr. Ortega,

The Arizona State Land Department ("ASLD" or the "Department") formally requests the deferral of imposition of fees associated with RZ18-002 until the State Trust land at T15S R15E Section 23 has auctioned to a private entity. Per our previous discussions, the Department believes deferral of these fees until an end user has acquired legal ownership of the property is appropriate. Should you have any questions or concerns, please do not hesitate to contact me at 602-542-6331 or ASLD's Project Manager, Micah Horowitz, at mhorowitz@azland.gov or at 620-542-2643.

Sincerely,

Mark Edelman, AICP
Director, Planning and Engineering Division

## 1. METHODS

On December 3, 2018, a WestLand Resources, Inc. crew of two, including a botanist and a biologist, conducted survey for tobosagrass (*Pleuraphis* [=*Hilaria*] *mutica*) on 353 acres of State Trust lands managed by the Arizona State Land Department, located at the southwest corner of Valencia Road and Houghton Road in the City of Tucson (the Parcel). Prior to the field visit, the crew reviewed publicly available aerial photographs of the Parcel taken in different seasons to look for signatures of dense growth of grasses indicative of the growth habitat of tobosagrass. Topography of the Parcel was also reviewed to locate flat areas potentially prone to formation of swales or stormwater pooling areas that may be conducive to growth of tobosagrass.

In review of the aerial photographs, numerous areas across the Parcel were identified for field investigation. This included the margins of the tributary of Atterbury Wash, the small feeder channel east of the tributary, and numerous isolated locations throughout the Parcel where it appeared on aerial photography that dense patches of grass were supported. All of these areas and the areas on the path between were investigated for tobosagrass.

## 2. RESULTS

No tobosagrass was found within the Parcel during the survey. The areas that appeared on aerial photographs to be dense patches of grass were mainly buffelgrass (*Cenchrus ciliaris* [= *Pennisetum ciliare*]), which was found to be widespread on the Parcel and growing in large patches. A complete list of grasses identified during the survey is found in **Table 1**.

**Table 1. Grass species observed within the Parcel**

| Scientific Name | Common Name | Visual Assessment of Abundance[a] |
|---|---|---|
| *Aristida purpurea* | Purple threeawn | occasional |
| *Aristida ternipes* | Spider threeawn | abundant |
| *Bothriochloa barbinodis* | Cane beardgrass | uncommon |
| *Bouteloua aristidoides* | Needle grama | occasional |
| *Bouteloua barbata* | Sixweeks grama | occasional |
| *Cenchrus ciliaris** | Buffelgrass | abundant |
| *Dasyochloa pulchella* | Fluffgrass | occasional |
| *Digitaria californica* | Arizona cottontop | common |
| *Enneapogon cenchroides** | Soft feather pappusgrass | uncommon |
| *Enneapogon desvauxii* | Nineawn pappusgrass | uncommon |
| *Eragrostis echinochloidea** | African lovegrass | occasional |
| *Eragrostis lehmanniana** | Lehmann's lovegrass | occasional |
| *Eragrostis mexicana* | Mexican lovegrass | uncommon |
| *Leptochloa panicea* | Muronate sprangletop | occasional |
| *Muhlenbergia porteri* | Bush muhly | uncommon |
| *Panicum* cf. *hirticaule* | Panicgrass | uncommon |
| *Pappophorum vaginatum* | Pima pappusgrass | occasional |
| *Setaria* sp. | Bristlegrass | uncommon |

a: Abundance scores were estimated visually as abundant, common, occasional, or uncommon

# Arizona Environmental Online Review Tool Report

***Arizona Game and Fish Department Mission***
***To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.***

**Project Name:**
Valencia and Houghton PAD

**User Project Number:**
PUL-30

**Project Description:**
This is a rezoning project from RX-1 to PAD for a 345-acre property located at the SWC of Valencia Road and Houghton Road.

**Project Type:**
Development Within Municipalities (Urban Growth), Residential subdivision and associated infrastructure, New construction

**Contact Person:**
Lexy Wellott

**Organization:**
The Planning Center

**On Behalf Of:**
AZGFD

**Project ID:**
HGIS-07879

***Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.***

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

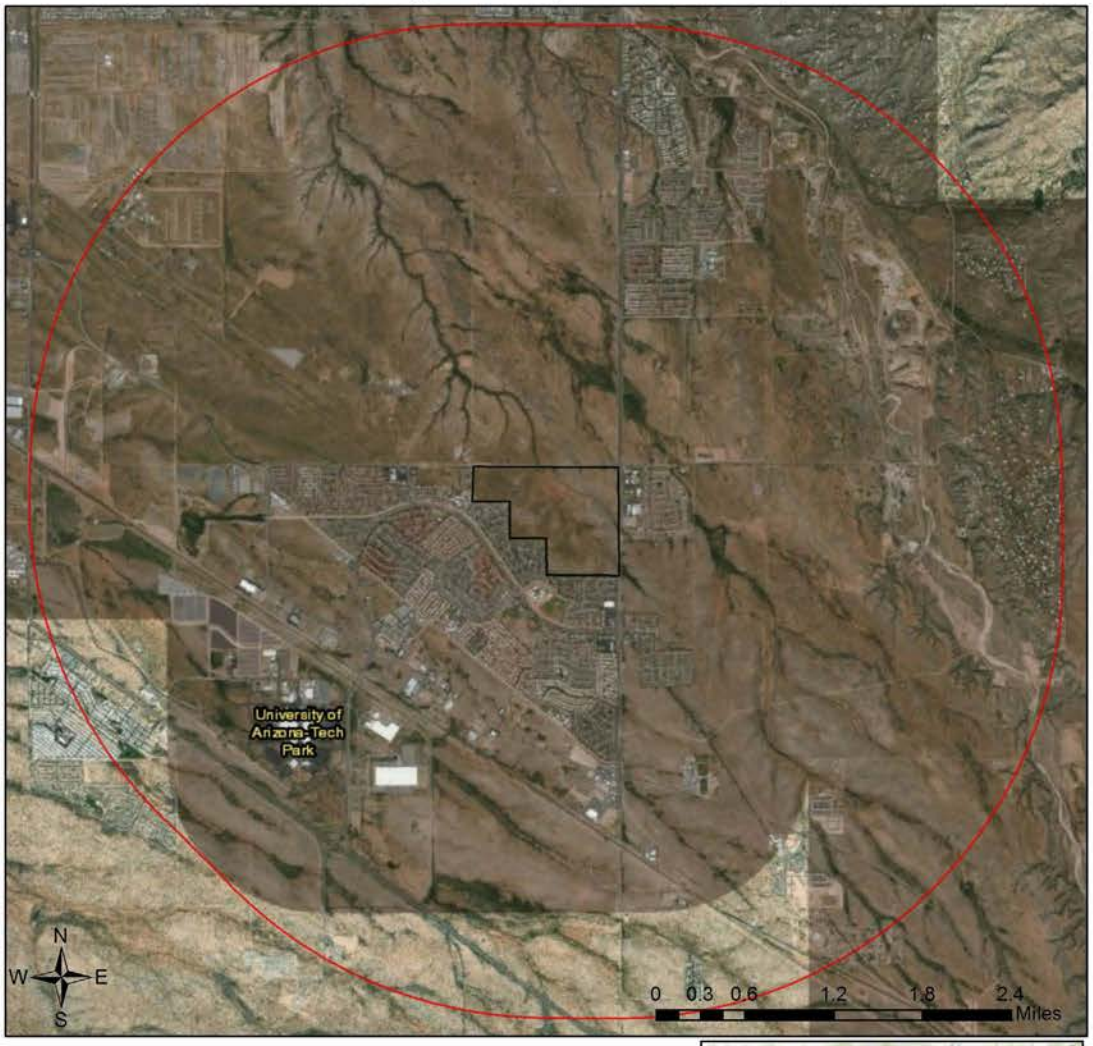
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies

# Valencia and Houghton PAD

## Aerial Image Basemap With Locator Map




Project Boundary

Buffered Project Boundary

Project Size (acres): 344.04

Lat/Long (DD): 32.1143 / -110.7796

County(s): Pima

AGFD Region(s): Tucson

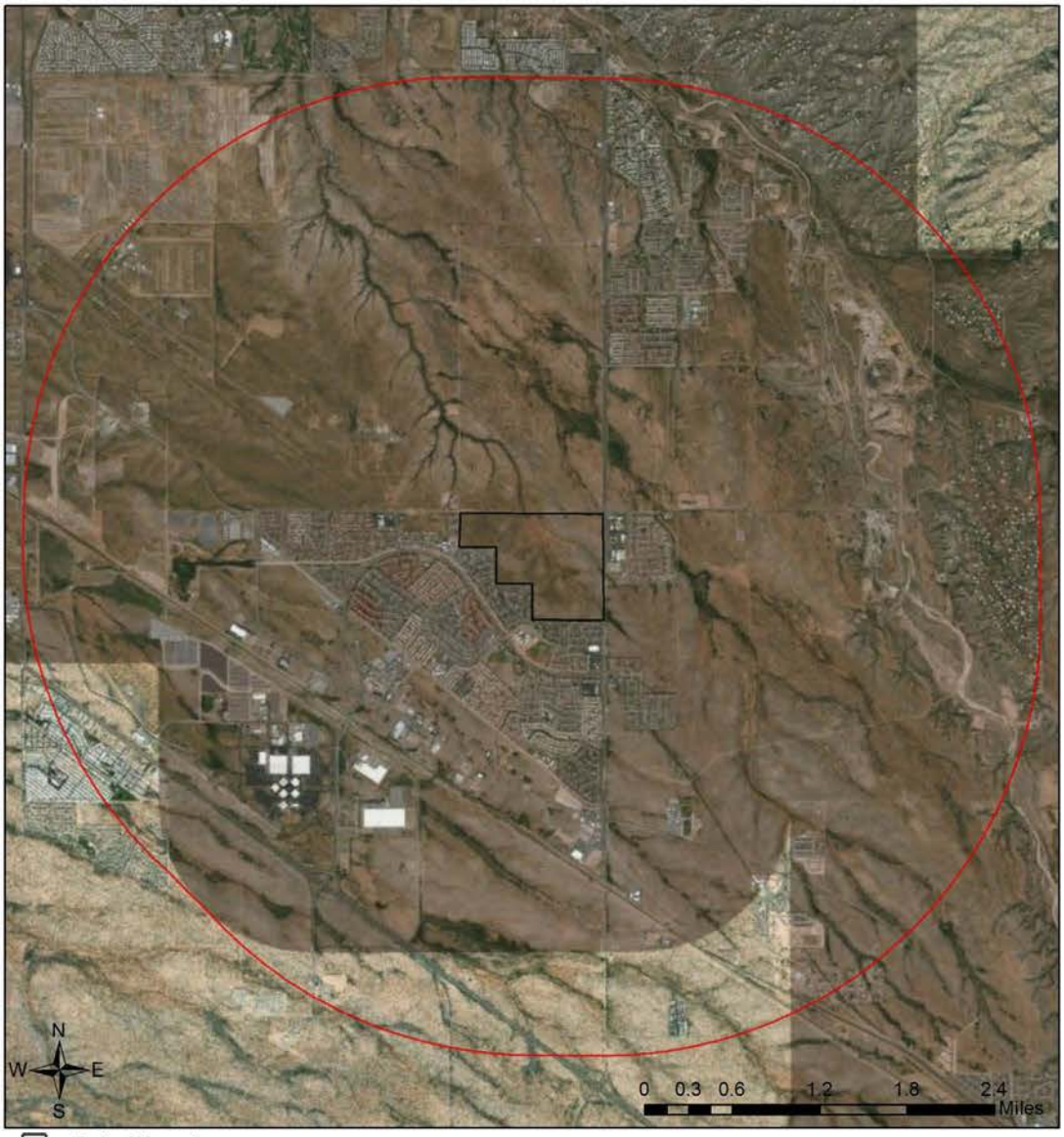
Township/Range(s): T15S, R15E

USGS Quad(s): TUCSON SE


Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, ©

# Valencia and Houghton PAD

## Web Map As Submitted By User




Project Boundary

Buffered Project Boundary

Project Size (acres): 344.04

Lat/Long (DD): 32.1143 / -110.7796

County(s): Pima

AGFD Region(s): Tucson

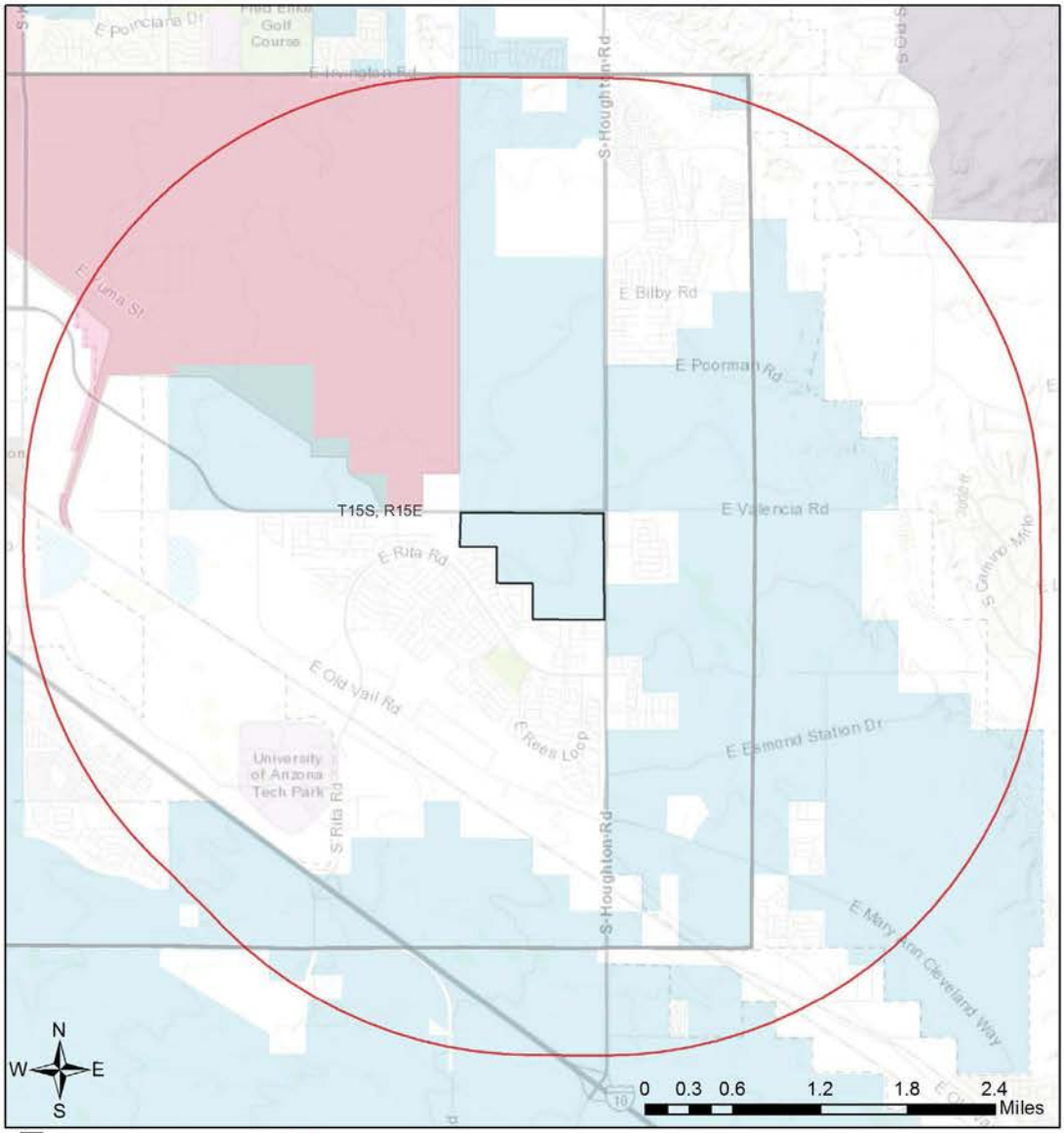
Township/Range(s): T15S, R15E

USGS Quad(s): TUCSON SE

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

# Valencia and Houghton PAD

## Topo Basemap With Township/Ranges and Land Ownership




- Project Boundary
- Buffered Project Boundary
- Township/Ranges

**Land Ownership**

- AZ Game and Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State and Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge

Project Size (acres): 344.04
Lat/Long (DD): 32.1143 / -110.7796
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T15S, R15E
USGS Quad(s): TUCSON SE

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

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|---|---|---|---|---|---|---|
| Athene cunicularia hypugaea | Western Burrowing Owl | SC | S | S | | 1B |
| Bat Colony | | | | | | |
| Canis lupus baileyi | 10J area Zone 2 for Mexican Wolf | LE,XN | | | | |
| Gopherus morafkai | Sonoran Desert Tortoise | CCA | S | S | | 1A |
| Heloderma suspectum suspectum | Reticulate Gila Monster | | | | | 1A |
| Heloderma suspectum | Gila Monster | | | | | 1A |
| Lasiurus xanthinus | Western Yellow Bat | | S | | | 1B |
| Leopardus pardalis | Ocelot Area of Possible Occurrence | LE | | | | 1A |
| Myotis velifer | Cave Myotis | SC | | S | | 1B |
| Opuntia versicolor | Stag-horn Cholla | | | | SR | |
| Panthera onca | Jaguar Area of Possible Occurrence | LE | | | | 1A |
| Tadarida brasiliensis | Brazilian Free-tailed Bat | | | | | 1B |
| Terrapene ornata luteola | Desert Box Turtle | | | S | | 1A |

*Note: Status code definitions can be found at* https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

Species of Greatest Conservation Need
Predicted within 3 Miles of Project Vicinity based on Predicted Range Models

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|---|---|---|---|---|---|---|
| Aix sponsa | Wood Duck | | | | | 1B |
| Amazilia violiceps | Violet-crowned Hummingbird | | S | | | 1B |
| Ammospermophilus harrisii | Harris' Antelope Squirrel | | | | | 1B |
| Anthus spragueii | Sprague's Pipit | SC | | | | 1A |
| Antrostomus ridgwayi | Buff-collared Nightjar | | S | | | 1B |
| Aquila chrysaetos | Golden Eagle | BGA | | S | | 1B |
| Aspidoscelis stictogramma | Giant Spotted Whiptail | SC | S | | | 1B |
| Aspidoscelis xanthonota | Red-backed Whiptail | SC | S | | | 1B |
| Athene cunicularia hypugaea | Western Burrowing Owl | SC | S | S | | 1B |
| Botaurus lentiginosus | American Bittern | | | | | 1B |
| Buteo swainsoni | Swainson's Hawk | | | | | 1C |
| Calypte costae | Costa's Hummingbird | | | | | 1C |
| Chilomeniscus stramineus | Variable Sandsnake | | | | | 1B |
| Cistothorus palustris | Marsh Wren | | | | | 1C |
| Colaptes chrysoides | Gilded Flicker | | | S | | 1B |
| Coluber bilineatus | Sonoran Whipsnake | | | | | 1B |
| Corynorhinus townsendii pallescens | Pale Townsend's Big-eared Bat | SC | S | S | | 1B |
| Crotalus tigris | Tiger Rattlesnake | | | | | 1B |
| Cynanthus latirostris | Broad-billed Hummingbird | | S | | | 1B |
| Dipodomys spectabilis | Banner-tailed Kangaroo Rat | | | S | | 1B |

Species of Greatest Conservation Need
Predicted within 3 Miles of Project Vicinity based on Predicted Range Models

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|---|---|---|---|---|---|---|
| Empidonax wrightii | Gray Flycatcher | | | | | 1C |
| Euderma maculatum | Spotted Bat | SC | S | S | | 1B |
| Eumops perotis californicus | Greater Western Bonneted Bat | SC | | S | | 1B |
| Falco peregrinus anatum | American Peregrine Falcon | SC | S | S | | 1A |
| Glaucidium brasilianum cactorum | Cactus Ferruginous Pygmy-owl | SC | S | S | | 1B |
| Gopherus morafkai | Sonoran Desert Tortoise | CCA | S | S | | 1A |
| Haliaeetus leucocephalus | Bald Eagle | SC, BGA | S | S | | 1A |
| Heloderma suspectum | Gila Monster | | | | | 1A |
| Hypsiglena sp. nov. | Hooded Nightsnake | | | | | 1B |
| Incilius alvarius | Sonoran Desert Toad | | | | | 1B |
| Kinosternon sonoriense sonoriense | Desert Mud Turtle | | | S | | 1B |
| Lasiurus blossevillii | Western Red Bat | | S | | | 1B |
| Lasiurus xanthinus | Western Yellow Bat | | S | | | 1B |
| Leopardus pardalis | Ocelot | LE | | | | 1A |
| Leptonycteris yerbabuenae | Lesser Long-nosed Bat | SC | | | | 1A |
| Lepus alleni | Antelope Jackrabbit | | | | | 1B |
| Lithobates yavapaiensis | Lowland Leopard Frog | SC | S | S | | 1A |
| Macrotus californicus | California Leaf-nosed Bat | SC | | S | | 1B |
| Melanerpes uropygialis | Gila Woodpecker | | | | | 1B |
| Melospiza lincolnii | Lincoln's Sparrow | | | | | 1B |
| Melozone aberti | Abert's Towhee | | S | | | 1B |
| Micrathene whitneyi | Elf Owl | | | | | 1C |
| Micruroides euryxanthus | Sonoran Coralsnake | | | | | 1B |
| Myiarchus tyrannulus | Brown-crested Flycatcher | | | | | 1C |
| Myotis occultus | Arizona Myotis | SC | | S | | 1B |
| Myotis velifer | Cave Myotis | SC | | S | | 1B |
| Myotis yumanensis | Yuma Myotis | SC | | | | 1B |
| Nyctinomops femorosaccus | Pocketed Free-tailed Bat | | | | | 1B |
| Oreoscoptes montanus | Sage Thrasher | | | | | 1C |
| Oreothlypis luciae | Lucy's Warbler | | | | | 1C |
| Panthera onca | Jaguar | LE | | | | 1A |
| Peucaea carpalis | Rufous-winged Sparrow | | | | | 1B |
| Phrynosoma solare | Regal Horned Lizard | | | | | 1B |
| Phyllorhynchus browni | Saddled Leaf-nosed Snake | | | | | 1B |
| Progne subis hesperia | Desert Purple Martin | | | S | | 1B |
| Setophaga petechia | Yellow Warbler | | | | | 1B |
| Sphyrapicus nuchalis | Red-naped Sapsucker | | | | | 1C |
| Spizella breweri | Brewer's Sparrow | | | | | 1C |

Species of Greatest Conservation Need
Predicted within 3 Miles of Project Vicinity based on Predicted Range Models

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|---|---|---|---|---|---|---|
| Tadarida brasiliensis | Brazilian Free-tailed Bat | | | | | 1B |
| Thomomys umbrinus intermedius | Southern Pocket Gopher | | | | | 1B |
| Toxostoma lecontei | LeConte's Thrasher | | | S | | 1B |
| Troglodytes pacificus | Pacific Wren | | | | | 1B |
| Vireo bellii arizonae | Arizona Bell's Vireo | | | | | 1B |
| Vulpes macrotis | Kit Fox | No Status | | | | 1B |

Species of Economic and Recreation Importance Predicted within 3 Miles of Project Vicinity

| Scientific Name | Common Name | FWS | USFS | BLM | NPL | SGCN |
|---|---|---|---|---|---|---|
| Callipepla gambelii | Gambel's Quail | | | | | |
| Odocoileus hemionus | Mule Deer | | | | | |
| Odocoileus virginianus | White-tailed Deer | | | | | 1B |
| Pecari tajacu | Javelina | | | | | |
| Puma concolor | Mountain Lion | | | | | |
| Zenaida asiatica | White-winged Dove | | | | | |
| Zenaida macroura | Mourning Dove | | | | | |

Project Type: Development Within Municipalities (Urban Growth), Residential subdivision and associated infrastructure, Newconstruction

Project Type Recommendations:
Fence recommendations will be dependant upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the Wildlife Planning button at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

Minimize potential introduction or spread of exotic invasive species. Invasive species can be plants, animals (exotic snails), and other organisms (e.g., microbes), which may cause alteration to ecological functions or compete with or prey upon native species and can cause social impacts (e.g., livestock forage reduction, increase wildfire risk). The terms noxious weed or invasive plants are often used interchangeably. Precautions should be taken to wash all equipment utilized in the project activities before leaving the site. Arizona has noxious weed regulations (Arizona Revised Statutes, Rules R3-4-244 and R3-4-245). See Arizona Department of Agriculture website for restricted plants, https://agriculture.az.gov/. Additionally, the U.S. Department of Agriculture has information regarding pest and invasive plant control methods including: pesticide, herbicide, biological control agents, and mechanical control, http://www.usda.gov/wps/portal/usdahome. The Department regulates the importation, purchasing, and transportation of wildlife and fish (Restricted Live Wildlife), please refer to the hunting regulations for further information https://www.azgfd.com/hunting/regulations.

The construction or maintenance of water developments should include: incorporation of aspects of the natural environment and the visual resources, maintaining the water for a variety of species, water surface area (e.g., bats require a greater area due to in-flight drinking), accessibility, year-round availability, minimizing potential for water quality problems, frequency of flushing, shading of natural features, regular clean-up of debris, escape ramps, minimizing obstacles, and minimizing accumulation of silt and mud.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Based on the project type entered, coordination with State Historic Preservation Office may be required (http://azstateparks.com/SHPO/index.html).

Trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herptefauna (snakes, lizards, tortoise) from entering ditches.

Communities can actively support the sustainability and mobility of wildlife by incorporating wildlife planning into their regional/comprehensive plans, their regional transportation plans, and their open space/conservation land system programs. An effective approach to wildlife planning begins with the identification of the wildlife resources in need of protection, an assessment of important habitat blocks and connective corridors, and the incorporation of these critical wildlife components into the community plans and programs. Community planners should identify open spaces and habitat blocks that can be maintained in their area, and the necessary connections between those blocks to be preserved or protected. Community planners should also work with State and local transportation planning entities, and planners from other communities, to foster coordination and cooperation in developing compatible development plans to ensure wildlife habitat connectivity. The Department's guidelines for incorporating wildlife considerations into community planning and developments can be found on the Wildlife Friendly Guidelines portion of the Wildlife Planning page at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Reduce/minimize barriers to allow movement of amphibians or fish (e.g., eliminate falls). Also for terrestrial wildlife, washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found on the home page of this application at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Based on the project type entered, coordination with Arizona Department of Environmental Quality may be required (http://www.azdeq.gov/).

Based on the project type entered, coordination with Arizona Department of Water Resources may be required (http://www.azwater.gov/azdwr/default.aspx).

Based on the project type entered, coordination with U.S. Army Corps of Engineers may be required (http://www.usace.army.mil/)

Based on the project type entered, coordination with County Flood Control district(s) may be required.

Development plans should provide for open natural space for wildlife movement, while also minimizing the potential for wildlife-human interactions through design features. Please contact Project Evaluation Program for more information on living with urban wildlife at PEP@azgfd.gov or at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/ and https://www.azgfd.com/Wildlife/LivingWith.

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

*The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly.* PEP@azgfd.gov

Project Location and/or Species Recommendations:
Your project site is within one or more defined Areas of Capture Concern. Please follow Department protocols while working within an Area of Capture Concern at U:\Agency Directives\JaguarOcelot Directives 17AUG10.pdf.

HDMS records indicate that one or more native plants listed on the Arizona Native Plant Law and Antiquities Act have been documented within the vicinity of your project area. Please contact
Arizona Department of Agriculture
1688 W Adams St.
Phoenix, AZ 85007
Phone: 602.542.4373
https://agriculture.az.gov/environmental-services/np1

HDMS records indicate that Western Burrowing Owls have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at:
https://www.azgfd.com/wildlife/speciesofgreatestconservneed/burrowingowlmanagement/.