
Planning & Zoning Commission Draft

P18RZ00001
Site Inventory & Land Use Proposal

**SEC Thornydale Road @ Overton Road
(Rezoning Application from SR to CB-1 & CR-5)**



Property Owner:

**Wong Family Limited Partnership
5975 E. Speedway Boulevard
Tucson, AZ 85712**

Pima County Case No. P18RZ00001

March, 2018

P18RZ00001

Wong Family Limited Partnership – Thornydale Road Rezoning

**Rezoning Request from SR to CB-1 & CR-5
Pima County, Arizona**

Submitted to:

Pima County Development Services Department
Planning Division
201 N. Stone Avenue – 2nd Floor
Tucson, Arizona 85701

Property Owner:

Wong Family Limited Partnership
5975 E. Speedway Boulevard
Tucson, AZ 85712

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March, 2018

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SECTION I:
Site Inventory

A. EXISTING LAND USES

1. Site Location and Regional Context

The subject rezoning property is located in the SW ¼ of Section 20, T12S, R13E, more particularly located at the immediate southeast corner Thornydale Road and Overton Road. The rezoning site consists of three (3) contiguous parcels (Assessors Parcel Nos. 225-02-027F, 225-02-027G and 225-02-027J), totaling approximately 18.3 acres in gross area.

The property sits within a developed and urbanizing context and clearly constitutes an infill site. Thornydale Road is a major north-south arterial and a designated “Major Street” on the *Pima County Major Streets & Routes Plan*. It is earmarked for a complete repaving, together with the addition of new paved shoulders, slated to begin in the fourth quarter of 2018. The rezoning site is bordered by fully developed residential subdivisions to the south, east, and northeast, respectively, and by developed commercial uses to the immediate north (across Overton Road). To the west, across Thornydale Road, is Arthur Pack Regional Park.

2. Existing On-Site Land Uses

The site is vacant, natural desert. Some minor disturbance has occurred at the northwest corner of the property, as well as along its entire western and southern boundaries, wherein substantial sewer, natural gas, and communications infrastructure is located within established easements.

3. Existing Easements or Encumbrances

The site is encumbered by several recorded easements (see Exhibit I-A for location) along its west, south, and southeast boundaries:

- A ten foot (10') natural gas easement per Docket 7642 @ Page 959 and Docket 7655 @ Page 790.
- A ten foot (10') telephone/communications easement per Docket 7307 @ Page 717.
- A twenty foot (20') public sewer easement per Book 42 of Maps & Plats @ Page 16, and per Docket 8224 @ Page 996.
- A twenty-seven foot (27') public sewer easement per Docket 8219 @ Page 2279 and Docket 8224 @ Page 996.
- A forty-five foot (45') public sewer easement per Docket 7307 @ Page 717. and Docket 7655 @ Page 790.

The above easements all exist in perimeter locations along the property's west, south, and southeast boundaries. All will ultimately be accommodated within planned right-of-way dedications to Pima County along Thornydale Road, or within planned perimeter bufferyards along the southern and southeast project boundaries.

4. Comprehensive Plan Designations On-Site & Surrounding

Pima Prospers designates the subject property as NAC (Neighborhood Activity Center) and MLIU (Medium –Low Intensity Urban) per adopted Board of Supervisors Resolution No. 2017-4. The surrounding properties are a mix of MLIU (Medium Low Intensity Urban), LIU 1.2 (Low Intensity Urban) and RC (Resource Conservation) as follows:

To the North:	NAC & MLIU
To the South:	MLIU
To the East:	MLIU
To the West:	RC (Arthur Pack Regional Park)

No (0) rezoning policies apply to this rezoning site.

5. Surrounding Land Uses

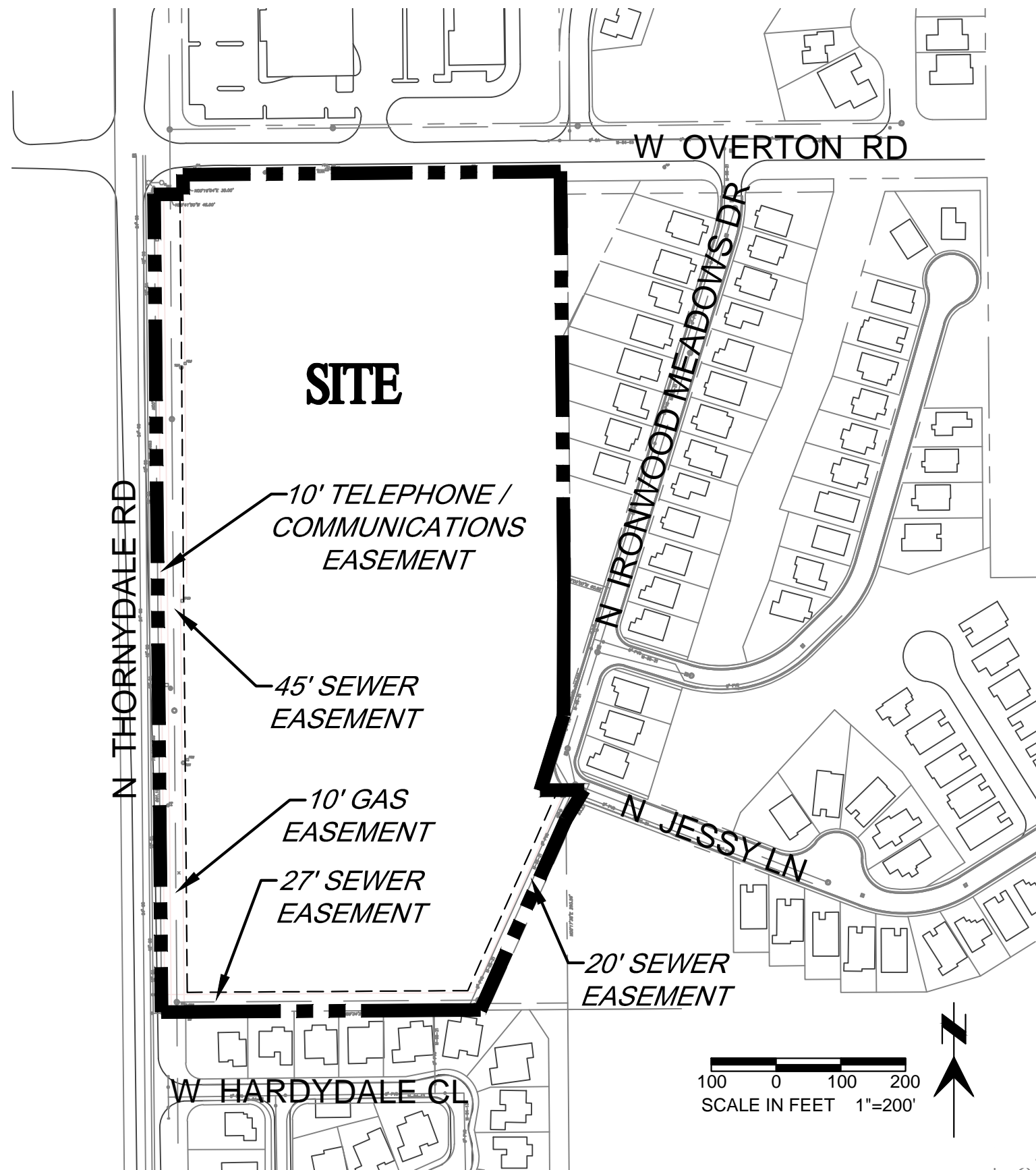
The properties surrounding the subject site are a mixture of developed residential, commercial, and a regional public park:

To the North:	Walgreens Drug Store & Commercial Strip Mall, Developed Residential Subdivisions
To the South:	Developed Residential Subdivisions
To the East:	Developed Residential Subdivisions
To the West:	Arthur Pack Regional Park

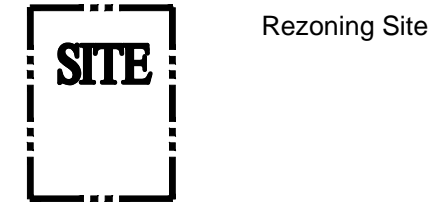
6. Pending Rezoning, Plats & Development Plans

The surrounding area is characterized by significant on-going infill development:

- The 20-acre property to the immediate southeast (fronting on Hardy Road) was rezoned to CR-5 in 2016 under Case No. P16RZ00005; all platting is complete and the subdivision is presently under construction.
- A 30-acre property on Hardy Road (approximately ½ mile to the east) was rezoned to CR-5 in 2015 under Case No. P15RZ00003; subdivision platting for this project has been completed.
- The 18-acre property at the southeast corner of Thornydale Road @ Linda Vista Drive was rezoned to CR-4 & CR-5 in 2015 under Case No. P15RZ00001; subdivision platting has been completed.
- A 78-acre property on Shannon Road was rezoned to CR-2 Cluster in 2016 under Case No. P16RZ00012; subdivision platting is complete and construction is imminent.
- The 78-acre property north of Linda Vista Drive and east of Thornydale Road was rezoned to CR-4 in early 2018 under Case No. P17RZ00006. Subdivision platting is in its initial stages.



LEGEND



RECORDING INFORMATION

10' Gas Easement:
DKT. 7642 @ PG. 959 & DKT. 7655 @ PG. 790

45' Sewer Easement:
DKT. 7307 @ PG. 717

10' Telephone / Communications Easement:
DKT. 9456 @ PG. 1771

27' Sewer Easement:
DKT. 8219 @ PG. 2279 & DKT. 8224 @ PG. 996

20' Sewer Easement:
BK. 42 of M&P @ PG. 16; DKT. 8224 @ PG. 996

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Thornydale/Overton
SEC THORNYDALE ROAD at OVERTON ROAD
(Ownership Entity: Wong Family Limited Partnership)
REZONING: SR to CR-5 & CB-1

EXHIBIT I-A
EXISTING EASEMENTS

B. TOPOGRAPHY & GRADING

1. Topographic Characteristics

The rezoning site is characterized by minor undulations and a gentle downward slope from the northeast to the southwest. It is traversed by one (1) well-defined natural wash that enters the property at its northeast corner and flows to the southwest, eventually exiting the site along its western boundary and crossing Thornydale Road in a dip section. This drainage feature is discussed in more detail in Section I.C (Hydrology) of this Site Analysis. See Exhibit I-B for existing-condition topography.

a. Restricted Peaks & Ridges

There are no restricted peaks or ridges on the property.

b. Rock Outcroppings, etc.

There are no rock outcroppings, etc. on the subject property.

c. Slope of 15% or Greater

The rezoning site contains no (0) slopes of fifteen percent (15%) or greater, nor are there any slopes that are longer than fifty feet (50'), when measured in any horizontal direction, and taller than seven and one half feet (7.5') when measured vertically.

d. Other Significant Topographic Features

Other than the aforementioned wash that traverses the site, there are no significant or remarkable topographic features on the property.

e. Existing Grading and/or Ground Disturbance

The majority of the site is natural desert. Some minor ground disturbance has occurred from the installation and maintenance of sewer, natural gas, and communications sub-surface infrastructure.

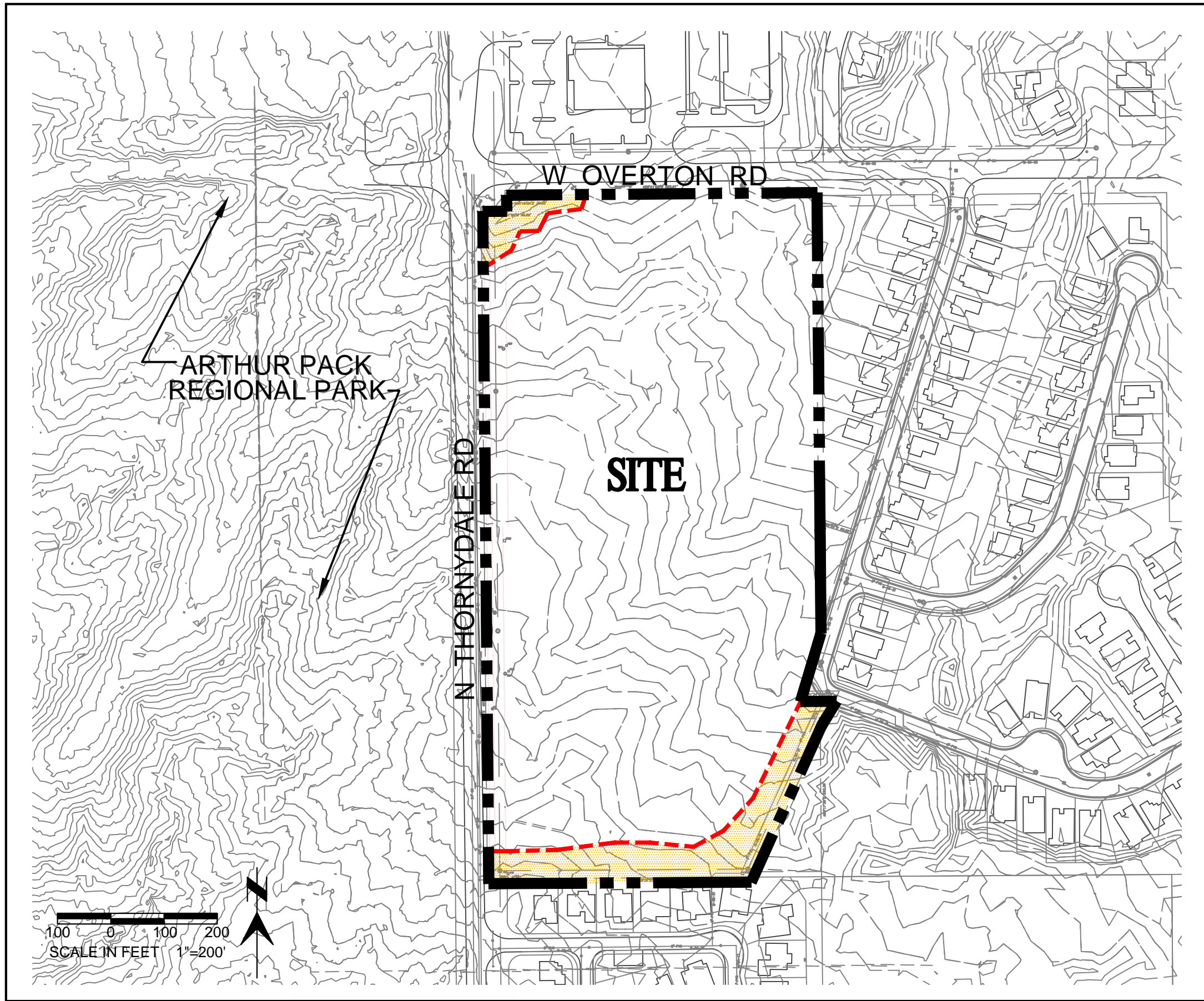
2. Pre-Development Average Cross-Slope

The average cross-slope calculation for the subject property, in accordance with Chapter 18.61 (Hillside Development Zone), is as follows:

$$\frac{(1' \text{ Contour Interval}) \times (21,950' \text{ Total Length of Contours}) \times (0.0023 \text{ Conversion Factor})}{\text{-----}}$$

(18.30 AC Total Site Area)

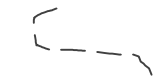
The resultant Average Cross Slope (ACS) = 2.76%.



LEGEND



Rezoning Site



Existing Condition Topographic Contour
(1' Interval)



On-Site Areas of Prior Disturbance

Source of Topography:
PAG 2015

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Thornydale/Overton
SEC THORNYDALE ROAD at OVERTON ROAD
(Ownership Entity: Wong Family Limited Partnership)
REZONING: SR to CR-5 & CB-1

EXHIBIT I-B
TOPOGRAPHIC
CHARACTERISTICS
PAGE 5

C. HYDROLOGY

Alliance Engineering has completed a preliminary drainage assessment for the 18.3-acre subject property (Assessor's Parcel Nos. 225-02-027J and 225-02-027F). The subject site is situated south of Overton Road and east of Thornydale Road. This preliminary assessment is the source work used in this Site Analysis to present specific hydrologic findings and to guide the proposed design of the project.

The findings presented herein are based on the above analysis, together with the results of previous study information, including FEMA/Firm flood insurance mapping by CMG Drainage, as well as more recent hydrologic computations by Alliance Engineering.

1. Off-Site Watersheds & Hydrology

Hardy Wash constitutes the primary off-site impact upon the subject property. Its upstream off-site watershed, together with its pertinent concentration points, is shown on Exhibit I-C.1 (Offsite Hydrology). The Hardy Wash watershed area is 247.7 acres, with a resultant Q100 of 781 cfs (a figure that has been previously accepted by Pima County). The Hardy Wash floodplain is designated as FEMA Zone "A" (no detailed delineation) by FEMA Map Number 04019C1660L, Panel 1660, Revised June 16, 2011.

Two (2) 4' x 8' box culverts pass beneath Overton Road at concentration point CP-OFF1 (see Exhibit I-C.1) and discharge the Hardy Wash flow directly into the subject property at its extreme northeast corner. These culverts are under capacity for the existing Q100. This flow from Hardy Wash then traverses southwesterly across the subject site, exiting into a dip section across Thornydale Road at a point that is approximately 700 feet south of Overton Road.

Hardy Wash crosses the subject property in undisturbed fashion within a natural channel. The existing residential developments to the north and the east have encroached into the original channel with various man-made improvements.

To the east of the subject property is Ironwood Meadows (Lots 1-103), an existing residential subdivision. No concentrated drainage from this adjacent subdivision impacts the subject property. Flow from Ironwood Meadows is primarily directed into an existing detention basin at its extreme southwest corner.

To the south of the subject property is Hardydale II (Lots 1-36), another existing residential subdivision. It contributes no discharge to the subject site.

To the west of the subject property is Thornydale Road, which contributes no flow to the subject site.

2. On-Site Hydrology

Hec-RAS was utilized to delineate the existing preliminary 100-year water surface elevation and regulatory floodplain across the site, together with its resultant 50' erosion hazard setback. NAVD 88 PAG topography was utilized for the site delineation, but will be refined with more detailed aerial topography at the time of future subdivision platting and development plan preparations.

The rezoning site is vacant and undeveloped in the existing condition; minor ground disturbance has occurred in conjunction with the installation and maintenance of sub-surface utilities. The project parcel consists of 100% hydrologic soil Type B. Refer to Exhibit I-C.2 in support of the following:

a. Flood Control Resources Areas.

The northern portion of the subject property includes important riparian area with underlying Xeroriparian C as well as a FEMA Zone A, as well as the aforementioned erosion hazard setback area, related to the 100-year Hardy Wash floodplain. The site is within a designated critical basin.

b. Concentration Points & 100-year Discharges

The subject property is divided into two (2) on-site watersheds (ON1 and ON2).

ON1 is 10.7 acres in area and comprises the north portion of the site discharge within the Hardy Wash watershed. The total Q100 associated with this Wash is 59 cfs and discharges at CPON1.

ON2 is 7.5 acres in area and comprises the remaining southern portion of the site. The total Q100 for this onsite watershed is 42 cfs and discharges at concentration point CPON2. This discharge enters the far northwest corner of the Hardydale I subdivision to the south, then continues flowing due southward within the Thornydale Road right-of-way.

c. FEMA-Designated Floodplains.

FEMA "A" zone is mapped across the northern portion of the subject property. Zone "A" classifies an area of "Special flood hazard areas subject to inundation by the 1% annual chance flood", with "no base flood elevations determined." Given this Zone "A" classification on a portion of the property, this FEMA zone will need to be annotated on any future subdivision plats or development plans, and a CLOMR/LOMR will need to be filed to document the final hydraulic design and the hydrologic/hydraulic characteristics of the resultant regulatory floodway.

- d. Regulatory Floodplain Delineations.
The preliminary floodplain of the Hardy Wash across the subject property has been delineated on Exhibit I-C.2.
- e. Determination of Regulatory Sheet Flood Areas.
There are no sheet flood areas across the site.
- f. Lakes, Ponds, Wetlands, etc.
There are no lakes, ponds, wetlands, springs, or other sources of perennial surface water on this site.
- g. Erosion Hazard Setbacks (EHS)
According to Pima County Ordinance No. 2010 FC-5, 16.28.030, erosion hazard and building setback distances are required for Hardy Wash. The setback is 50 feet.
- h. Pima County Regulated Habitat
Pima County regulated Xeroriparian "C" habitat exists in association with the Hardy Wash across the site. Total on-site regulated habitat is approximately is 3.6 acres.
- i. Flow Arrows for Non-regulatory Flows
Flow direction across the site is generally from northeast to southwest, for both regulatory and non-regulatory flows, and has been indicated on Exhibit I-C.2.
- j. Existing Drainage Easements.
There are no established or recorded drainage easements on this site.
- k. Existing Drainage Infrastructure.
No onsite drainage structures are present on-site. As mentioned previously, two (2) 4' x 8' culverts exist immediately offsite (beneath Overton Road) and discharge Hardy Wash flow into the subject property.

3. Hydrology

The subject property parcel is currently undeveloped (except for some sub-surface utilities), consisting of desert brush and an ephemeral wash that extends through the site from northeast to southwest. Vegetation across the site is composed of desert brush and local cacti, with an approximate overall coverage density of 30%. Refer to Exhibit I-C.2 in conjunction with the following:

a. Features of the Watersheds That May be Affected.

The proposed design for the property (as presented in Section II [Land Use Proposal] of this Site Analysis) includes both commercial development and a single-family residential subdivision and will feature a combination of natural area set-asides and developed areas. Existing conditions that must be addressed with this development include a FEMA Zone "A" floodplain, The Hardy Wash regulatory flood plain, and underlying regulated Xeroriparian "C" habitat.

No proposed offsite improvements will be required to develop the property. All development onsite must comply with Pima County zoning and floodplain County regulations; no offsite properties will be adversely impacted by the proposed development.

b. Acreages and 100-year Peak Discharges of Upstream Watersheds.

The upstream watershed of Hardy Wash is 247.7 acres, with a resultant Q100 discharge into the site of 781 cfs.

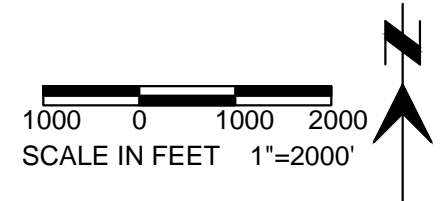
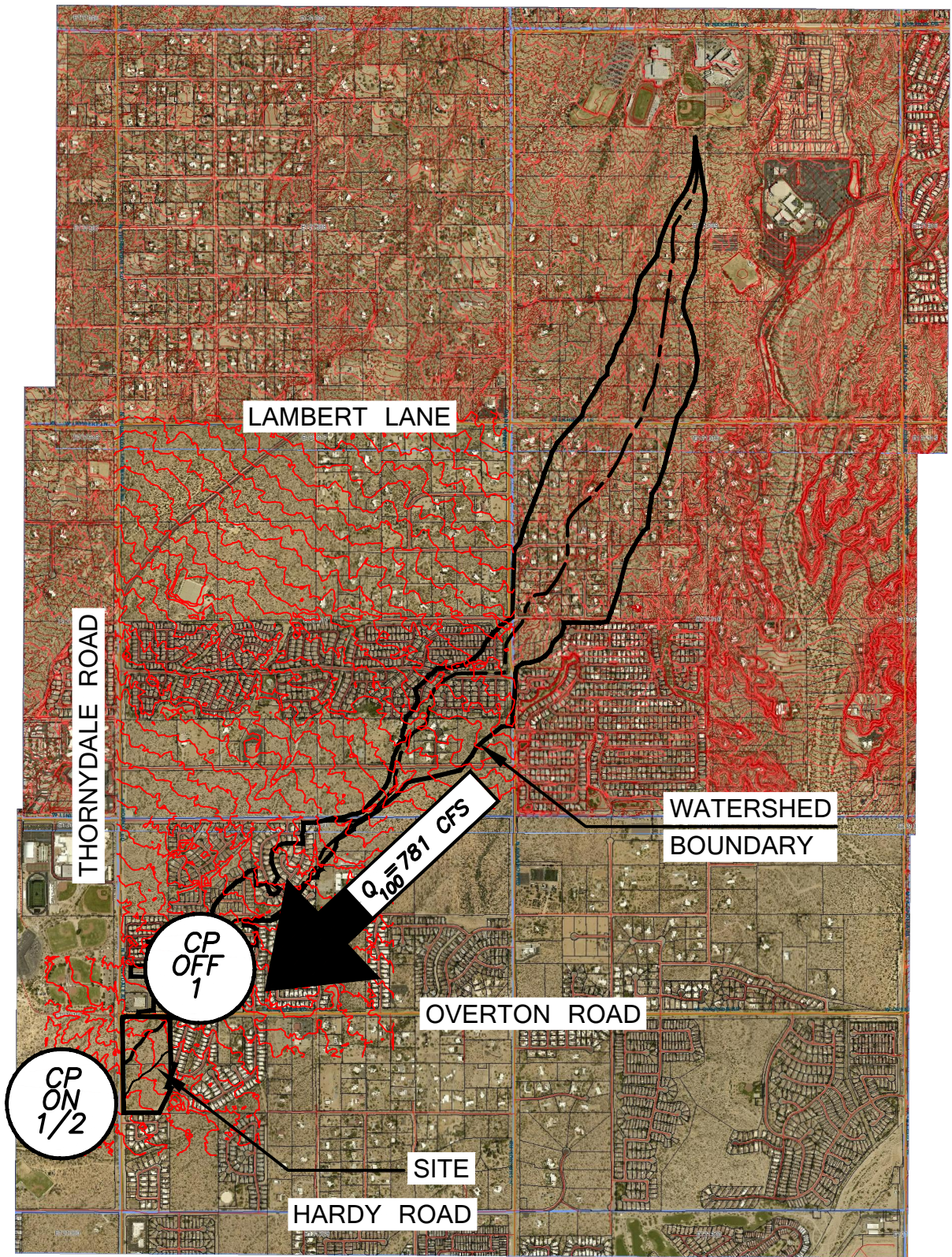
c. Methodology Used to Determine EHS's.

The prescribed erosion hazard setback for a 781 cfs flow volume, per the Pima County Regional Flood Control District (PCRFCD) Floodplain Ordinance, is fifty feet (50') feet.





d. Methodology Used to Determine 100-year Floodplains.

The Pima County Regional Flood Control District has accepted the incoming offsite Q100 for the Hardy Wash as 781 cfs. This Q100 is part of a prior CLOMR/LOMR prepared by CMG Drainage. No other contributing areas producing in excess of 100 cfs (i.e. of a regulatory volume) impact the subject site.

Exhibits to Follow



LEGEND

-  **SITE** REZONING SITE
-  WATERSHED BOUNDARY
-  FLOW CENTERLINE
-  **CP OFF 1** CONCENTRATION POINT

WATERSHED SUMMARY TABLE
(EXISTING)

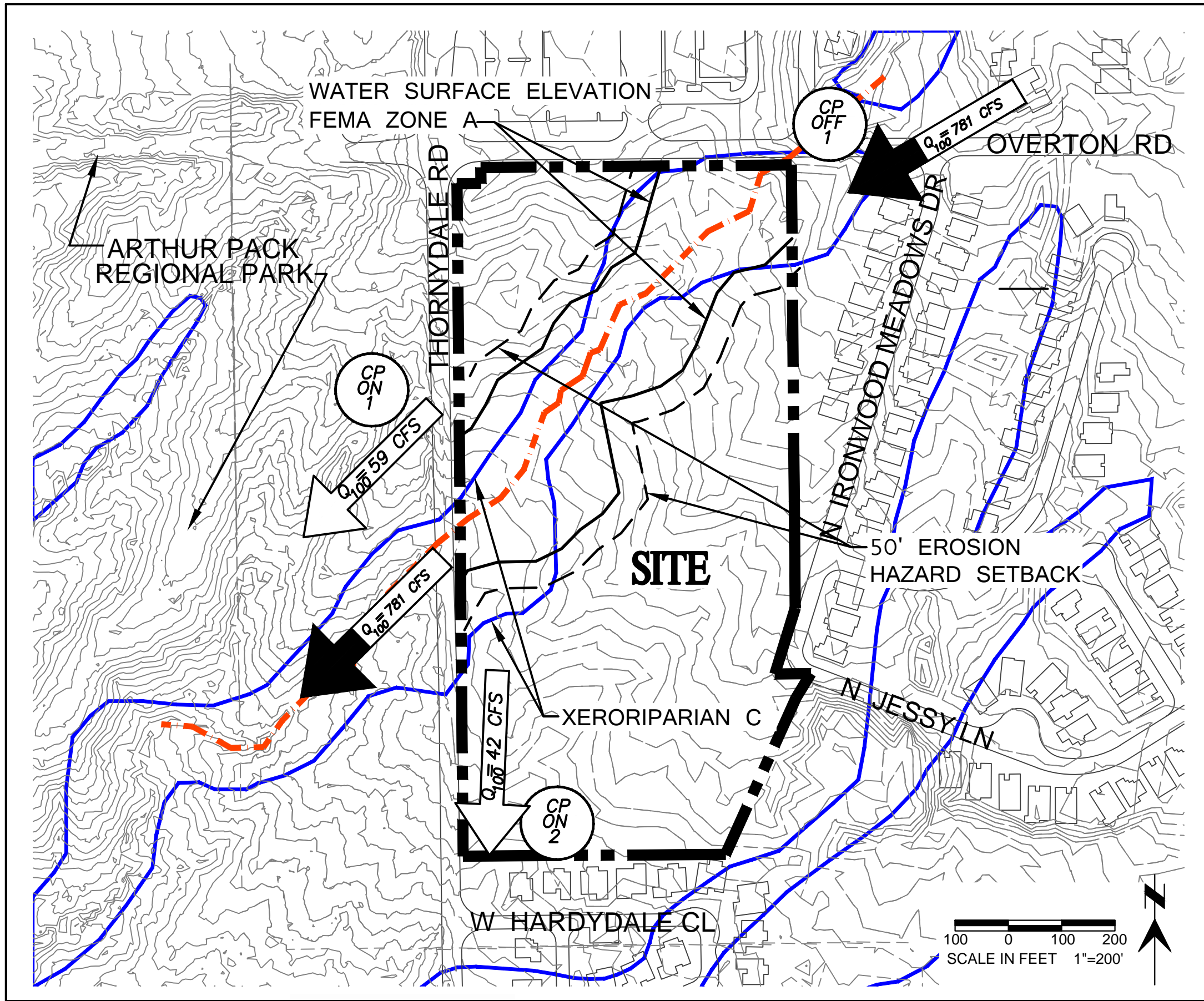
CONCENTRATION POINT ID	DA (AC)	Q100 (CFS)	Q10 (CFS)	Q2 (CFS)
OFF1	247.7	781	NA	NA
ON1	10.7	59	21	6
ON2	7.5	42	15	4

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Thornydale/Overton
 SEC THORNYDALE ROAD at OVERTON ROAD
 (Ownership Entity: Wong Family Limited Partnership)
 REZONING: SR to CR-5 & CB-1

EXHIBIT I-C.1
 OFFSITE HYDROLOGY
 PAGE 10



LEGEND

-  Rezoning Site
-  Existing Condition Topographic Contour (1' Interval)
-  Erosion Hazard Setback Limit (EHSL)
-  Approximate 100-Year Regulatory Floodplain Limit
-  Mapped Riparian Habitat -- Important Riparian Areas (CLS-IRA) with Underlying Xeroriparian "C"
-  Primary Wash Channel
-  Concentration Point, Typ.

NOTE:
Subject Property and several surrounding properties are located within a FEMA designated sheet flow area (0.5' depth).

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Thornydale/Overton
SEC THORNYDALE ROAD at OVERTON ROAD
(Ownership Entity: Wong Family Limited Partnership)
REZONING: SR to CR-5 & CB-1

EXHIBIT I-C.2
ONSITE HYDROLOGY
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D. BIOLOGICAL RESOURCES

1. Conservation Lands System

The entire site falls within the Maeveen Marie Behan Conservation Lands System (MMBCLS) and is classified as CLS *Multiple Use Management Area (MUMA)*; the entire property is also designated as *Special Species Management Area (SSMA)*.

Approximately 3.6 acres is further classified as CLS *Important Riparian Area (IRA)* with underlying Xeroriparian "C" regulated habitat. The remaining 14.7 acres are MUMA/SSMA. Exhibit I-D.1 shows the limits of these areas within the property.

2. Priority Conservation Areas

There are no Critical Landscape Linkages on or near this property.

a. Pima Pineapple Cactus

No portion of the site is designated as Priority Conservation Area (PCA) for the Pima Pineapple cactus.

b. Needle-Spined Pineapple Cactus

No portion of the site is designated as Priority Conservation Area (PCA) for the Needle-Spine Pineapple Cactus.

c. Cactus Ferruginous Pygmy Owl and Burrowing Owl

The entire site is designated as part of Priority Conservation Area (PCA) #1 for the Cactus Ferruginous Pygmy Owl and the Burrowing Owl.

3. Saguaro and Ironwoods Inventory

Saguaro Cactus (*Carnegia gigantea*) have been field surveyed and mapped on the subject rezoning site. A total of one hundred eighty-four (184) viable saguaros were found, sixty-five (65) of which are six feet (6') tall or less and one hundred nineteen (119) of which are greater than six feet (> 6') in height. See Exhibit I-D.2.

The site was also surveyed for Ironwood trees; eighty-two (82) viable specimens were found. Their locations are also shown on Exhibit I-D.2.

4. Habitat Protection/Community Open Space

The property is not designated for habitat protection or community open space acquisition by Pima County