City of Phoenix
PLANNING AND DEVELOPMENT DEPARTMENT

Staff Report Z-37-19-2
Desert Foothills PUD
May 13, 2020

Deer Valley Village Planning Committee Meeting Date	May 21, 2020
Planning Commission Hearing Date	June 4, 2020
Request From:	S-1 (156.96 acres)
Request To:	PUD (156.96 acres)
Proposed Use	Planning Unit Development to allow single-family, multifamily, retail, office, and commerce park uses
Location	Northeast corner of Central Avenue and Happy Valley Road
Owner	PAF Central, LLC
Applicant/ Representative	Law Office of David Cisiewski, PLLC
Staff Recommendation	Approval, subject to stipulations

General Plan Conformity			
General Plan Land Use Designation		Current: Preserve / 0 to 1 & 1 to 2 dwelling units per acre, Parks/Open Space – Future 1 dwelling unit per acre, Commerce/Business Park. Proposed: Proposed (GPA-DV-2-19-2): Residential 2 to 3.5 dwelling units per acre, Residential 3.5 to 5 dwelling units per acre, Commerce/Business Park	
Street Map Classification	Central Avenue	Local	0 foot dedicate right-of way
	Happy Valley Road	Major Arterial	0-foot dedicated right-of-way
	Yearling Road	Local	0-foot dedicated right-of-way (County Road)
CONNECT PEOPLE & PLACES CORE VALUE; OPPORTUNITY SITES; LAND USE PRINCIPLE: Promote and encourage compatible development and redevelopment with a mix of housing types in neighborhoods close to employment centers, commercial areas, and where transit or transportation alternatives exist.			

The proposed residential development in Parcel 1 and Parcel 3 (refer to map on page 7) will provide additional housing choices just north and east of the Deer Valley Major Employment Center.

STRENGTHEN OUR LOCAL ECONOMY CORE VALUE; JOB CREATION (EMPLOYERS); LAND USE PRINCIPLE*: *Support General Plan Land Use Map and zoning changes that will facilitate the location of employment generating uses in each of the designated employment centers.

The commercial and commerce park portion of the subject site (Parcel 2) will offer employment opportunities and is located in close proximity to the Deer Valley Major Employment Center.

BUILD THE SUSTAINABLE DESERT CITY CORE VALUE; REDEVELOPED BROWNFIELDS; DIVERSE NEIGHBORHOODS; LAND USE PRINCIPLE: Promote new development located on infill, previously developed, brownfield, and greyfield sites.

The proposal would allow the development of an underutilized parcel that was contaminated by the previous user. Environmental remediation is underway. Parcel 2 has use restrictions due to the contamination. ADEQ has conducted additional soils testing on the site and Parcel 1 and Parcel 3 have been cleared for residential. The addition of the proposed residential land use map designations allows for a mixture of residential uses with lower residential density abutting county properties and higher residential density abutting the Sonoran Preserve and Happy Valley Road to the southeast of the site. A large portion of the site will retain the Commerce/Business Park designation.

BUILD THE SUSTAINABLE DESERT CITY CORE VALUE; RIVERS, WASHES, & WATERWAYS: Establish design and management standards for natural major washes and connected open spaces that will allow preservation of the natural ecological and hydrological systems of major washes while allowing for appropriate public use.

The proposal includes the preservation of major washes that run through the site. The open space proposed in Parcel 1 incorporates large natural wash areas ensuring water flows are preserved. This large wash also serves as a natural buffer between the low density residential proposed in parcel 1 and the commerce park uses proposed in Parcel 2. A robust trail system is proposed that meanders through the natural wash areas.

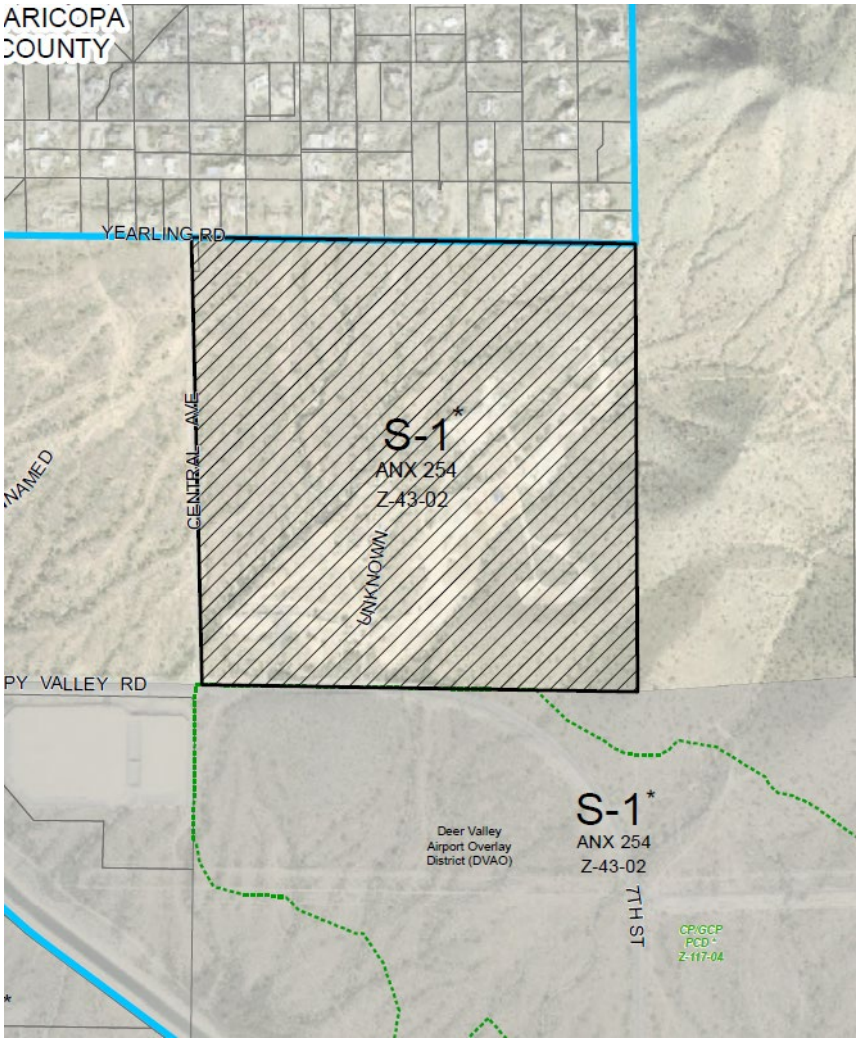
BUILD THE SUSTAINABLE DESERT CITY CORE VALUE; TREES AND SHADE: LAND USE PRINCIPLE: Plant drought tolerant vegetation and preserve existing mature trees in new development and redevelopment.

The proposal includes robust, drought tolerant landscaping throughout the site. Plant salvage will take place in an effort to preserve existing flora on the site.

Applicable Plans, Overlays and Initiatives
Tree and Shade Master Plan– see No. 7 below.
Complete Streets Guiding Principles– see No. 8 below.
Reimagine Phoenix Initiative– see No. 9 below.

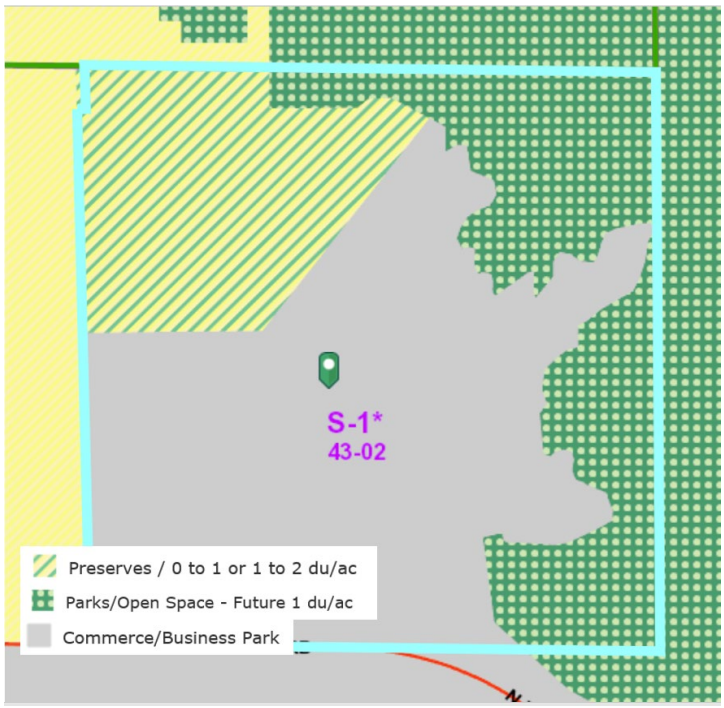
Background/Issues/Analysis

1. This request is to rezone approximately 156.96 acres located at the northeast corner of Central Avenue and Happy Valley Road from S-1 (Farm or Ranch Residence District) to PUD (Planned Unit Development) to allow single-family, multifamily, retail, office, and commerce park uses.



Source: City of Phoenix Planning and Development Department

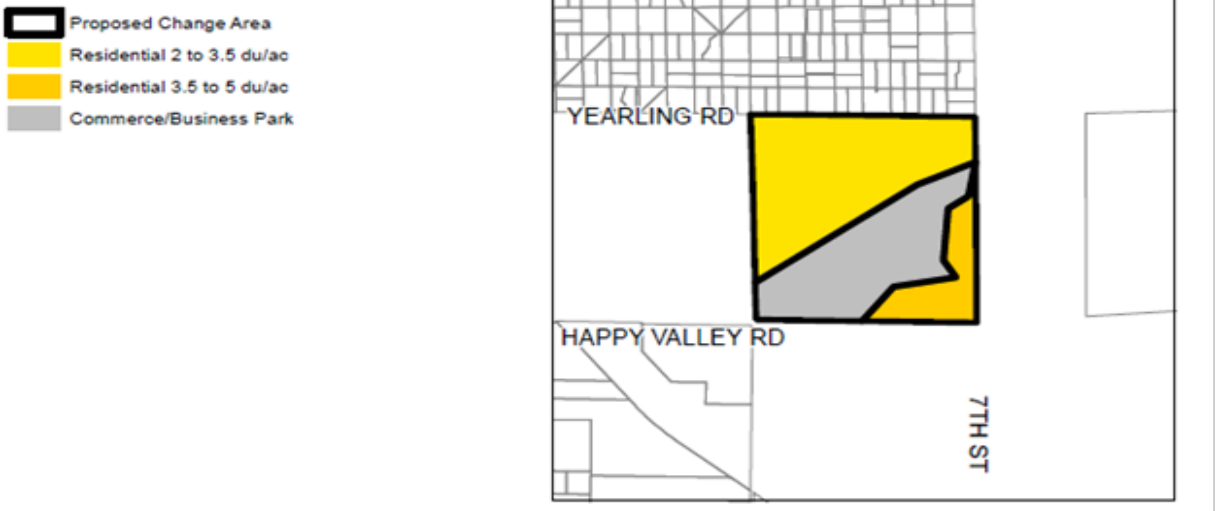
2. The General Plan Land Use Map designations on the subject site include Preserves / 0 to 1 & 1 to 2 dwelling units per acre, Parks / Open Space - Future 1 dwelling unit per acre, and Commerce / Business Park. The proposal is not consistent with portions of the General Plan Land Use Map. A Companion General Plan Amendment application, GPA-2-DV-19-2, is running concurrently with this case. Approval of this request is contingent upon the approval of the General Plan Amendment.



Source: City of Phoenix Planning and Development Department

PROPOSED CHANGE:

Residential 2 to 3.5 du/ac (78.52 +/- Acres)
Residential 3.5 to 5 du/ac (56.74 +/- Acres)
Commerce/Business Park (21.70 +/- Acres)



Source: City of phoenix Planning and Development Department

SITE CONDITIONS AND ANALYSIS

3. The site consists of one parcel that was used as a rocket propulsion testing facility in 1972 and was demolished in 2010. The site was annexed into the City of Phoenix in 2001. At that time, the site was improved with a testing facility campus with multiple buildings. The current S-1 zoning designation on the site was established at the time of annexation through Rezoning Case No. Z-43-02. Maricopa County historical aerials indicate that the site was developed around 1972 and subsequently cleared of all buildings around 2010. A Use Permit was granted in 2017 through Case No. ZA-158-17-2 for an environmental remediation facility, which is currently functioning on the site.

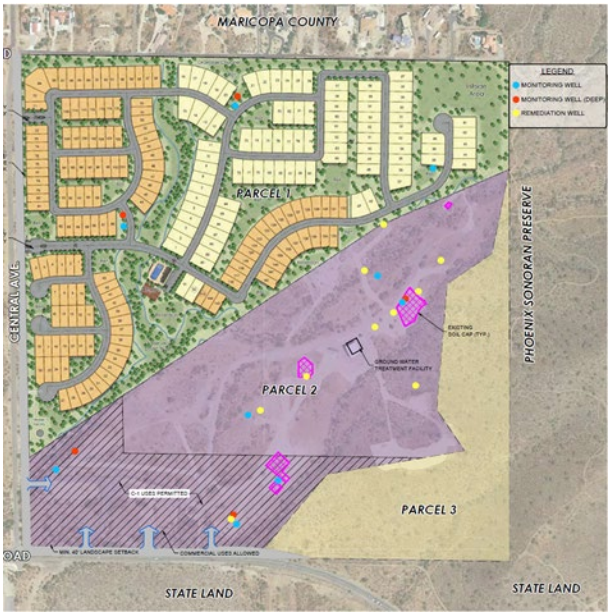


1976 2009 2018

Source: Maricopa County Historic Aerials

The City of Phoenix Office of Environmental Programs (OEP) is requiring the applicant to disclose the existence of contaminants on the site and has requested that the narrative include the environmental remediation reports associated with the site. The reports shall be attachmented to the narrative in the appendix of the document for ease of reference and to be included as part of the City of Phoenix public record. The Arizona Department of Environmental Quality ADEQ) is the regulatory agency overseeing the environmental remediation on the site and the PUD contains the regulatory statement as well as the Declaration of Environmental Use Resrictions (DEUR's) for the site. Additional soils teting was conductd on the site, which cleared Parcel 1 and Parcel 3 for residential uses.

4. The site is currently vacant. There are no structures located on the site other than a ground water treatment facility, twelve monitoring wells and nine remediation wells connected by an underground piping system. Soil remediation has also taken place on the site which has resulted in four soil cap areas that are currently secured by fencing.



Source: RVI

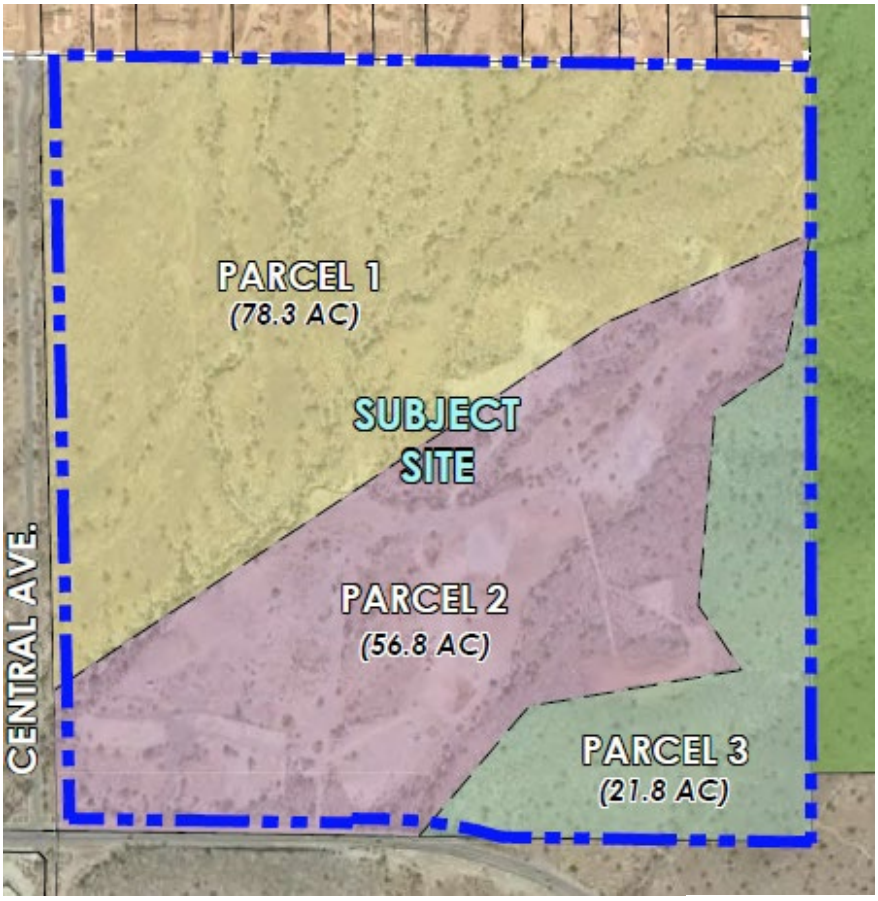
PROPOSAL

5. The proposal was developed utilizing the PUD zoning designation, which allows an applicant to propose uses, development standards, and design guidelines for a site. One of the goals of this process is to allow the applicant to develop standards that respond to the surrounding environment more so than conventional zoning districts allow. The end result is a site rezoned with standards crafted specifically for the site. Where the PUD development Narrative is silent on a requirement, the applicable Zoning Ordinance provisions will be applied.

6. Below is a summary of the proposed standards for the subject site as described in the attached PUD Development Narrative date stamped April 24, 2020. The proposed standards were designed to allow a mix of residential, commerce park and commercial land uses. The proposal reflects the low density residential land uses characteristic of this area on the northwest portion of the site and reflects commerce park uses which are consistent with the underlying General Plan Land Use Map designation on the south and east portions of the site. Multifamily residential is also proposed on the southeast portion of the site, which will fulfill a mixture of housing needs in the area.

   Development standards and design guidelines were designed to meet or exceed standards found in the R1-10 (Single-family Residence District), R-3 (Multifamily Residence District, Commerce Park and C-1 (Neighborhood Retail) zoning districts.

Land Use



Source: RVI

The development is broken into three different districts referred to as Parcel 1, Parcel 2 and Parcel 3, which have unique land use and development standards. Parcel 1 is comprised of low density single-family residential. A special Use Permit may be obtained for 5-10 bed adult daycare home, churches, construction facilities, home occupations, nondaily newspaper delivery service and public assembly. Temporary uses may be obtained upon written request and submission of an application and is contingent upon Section 708 of the City of Phoenix Zoning Ordinance. Parcel 2 is a mix of commercial and commerce park uses. The existing General Plan Land Use Map designation is consistent with commerce park uses. The companion General Plans Amendment, Case No. GPA-DV-2-19-2, reflects this as well. The narrative has provided a list of prohibited uses that are not allowed due to environmental restriction, including residential within Parcel 2. Parcel 3 is multifamily, which will provide additional housing choices in a single-family dominated area.

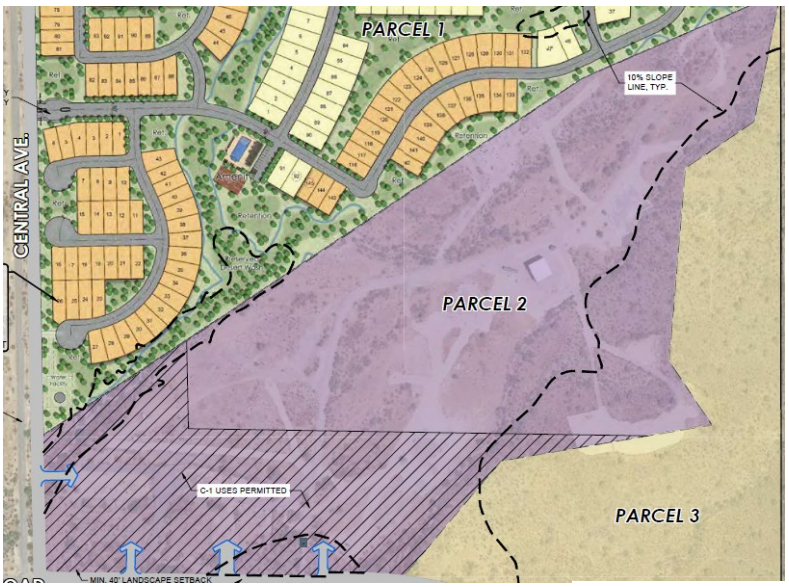
DEVELOPMENT STANDARDS

Parcel 1

Parcel 1 comprises the northern third of the property. It is within this district that low density residential is proposed that provides a transition between Parcel 2 and the residential to the north of the site located within Maricopa County. The Development Narrative proposes to follow R1-10 standards in Parcel 1. Approximately 24 acres of open space are proposed within Parcel 1, which allows for greater density within the district.

Development Standards	**Parcel 1, Proposed Single-Family Residential**
Density (Maximum)	3.2 dwelling units per acre
Height (Maximum)	2 stories/30 feet
Lot area (Minimum)	5,000 square feet
Lot width (Minimum)	45 feet
Perimeter Building Setbacks (Minimum)	**Property Boundary** **Side:** 10 feet 1-story, 15 feet 2-story **Rear:** 15 feet 1-story, 20 feet 2-story **Perimeter Streets:** 15 feet average 10 feet minimum
Development Standards Parcel 1, Proposed Single-Family Residential	
Interior Building Setbacks (Minimum)	**Front:** 10 feet **Garage:** 18 feet from back of sidewalk **Rear:** None **Side (street):** 10 feet, 5 feet with tract **Side (internal):** 5 feet
Street Standards	Private Accessways
Landscape Setbacks (Minimum)	**Perimeter Street:** 15 feet average, 10 feet minimum **North Perimeter:** 40 feet
Lot Coverage (Maximum)	50 percent
Common Open Space (Minimum)	30 percent of net area

Parcel 2



Source: RVI

The Commerce Park District is located on the central portion of the subject site which runs diagonally from northeast to southwest through the site. The majority of the monitoring well sites are located within Parcel 2. The Development Narrative describes this area as an area that will encourage a mixture of commercial and commerce park uses only. This is consistent with the land use restrictions outlined in the Declaration of Environmental Use Restrictions issued by ADEQ for this parcel. The commercial uses are intended to be located in the southern end of Parcel 2 within 500 feet of Central Avenue and Happy Valley Road. The uses permitted within Parcel 2 are consistent with the C-1 and CP zoning districts.

Development Standards	**Parcel 2 (Proposed Commercial and Commerce Park)**
Height (Maximum)	56 feet, subject to step-backs
Lot coverage (Maximum)	50 percent
Perimeter Building Setbacks (Minimum)	**Street Sides:** 30 feet average **Adjacent to R1-10:** 75 feet **Adjacent to R-3:** 50 feet
Internal Building Setbacks (Minimum)	**Adjacent to streets-** 20 feet **Not adjacent to streets-** 10 feet
Landscape Setbacks (Minimum)	**Adjacent to streets:** 20 feet

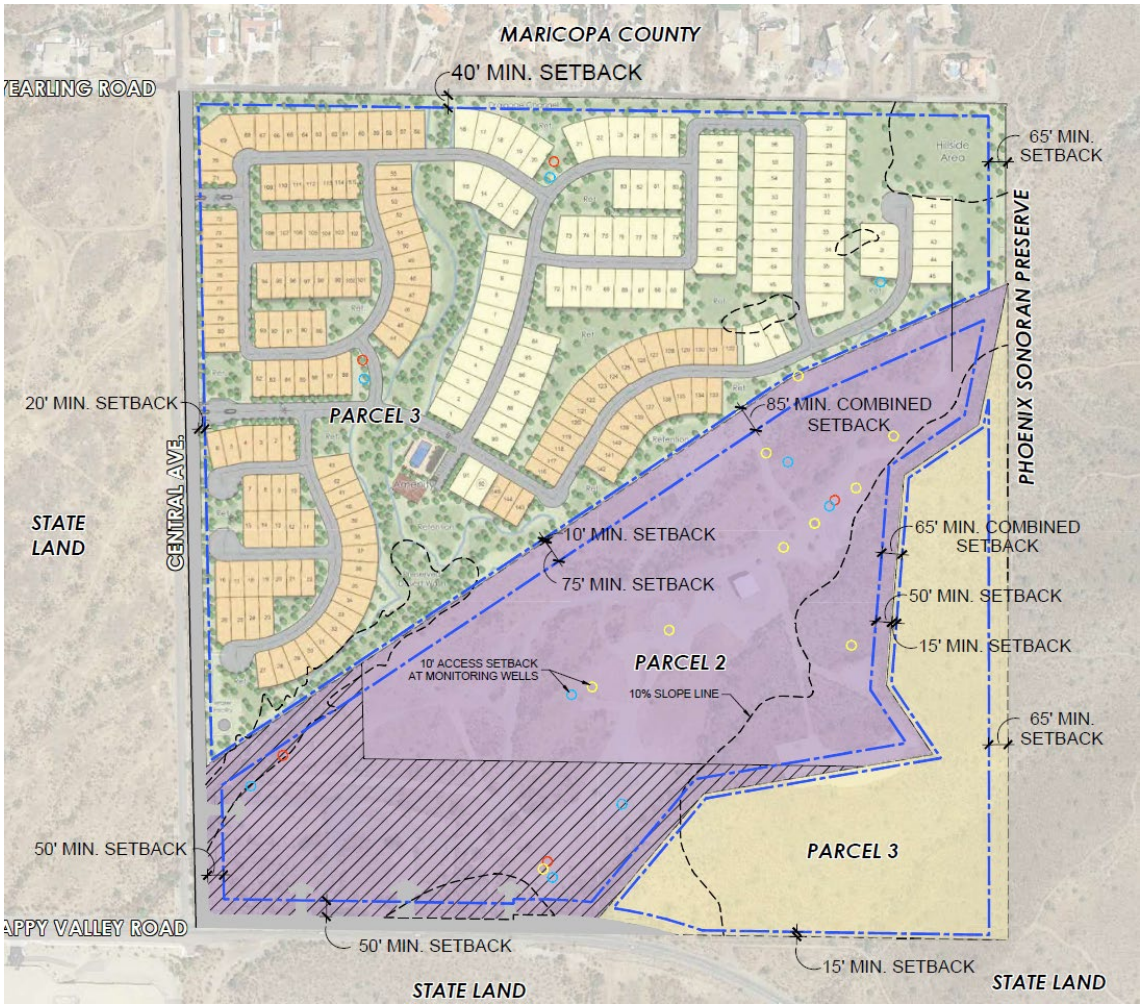
	Adjacent to R1-10: 30 feet **Adjacent to R-3:** 30 feet **Internal adjacent to a street:** 20 feet

Parcel 3

The proposed Multifamily Residential District is in the southeastern quarter of the overall site with direct frontage onto Happy Valley Road through the Parcel 2 portion of the site. The vision for this district is a mixture of multifamily and assisted living. This area is somewhat unique in that it is all in the hillside area with a slope of 10 percent or greater as outlined in the slope analysis. This area is categorized as hillside and shall be subject to the Hillside Development Ordinance. The PUD shall follow hillside density standards for all hillside areas with a slope of 10 percent or greater. The uses permitted in this district are consistent with the R-3 zoning district with a list of permitted uses.

Development Standards	**Parcel 3 R-3 Proposed Multifamily Residential**
Density (Maximum)	5 dwelling units per acre
Height (Maximum)	3 stories or 40 feet
Perimeter Building Setbacks (Minimum)	**Property Boundary:** 15 feet **Public Streets:** 20 feet
Interior Building Setbacks:	**Front:** 10 feet **Garage:** 18 feet from back of curb **Rear:** None **Side, adjacent to street:** 10 feet, 5 feet w/ tract **Side, not adjacent to street:** 5 feet
Landscape Setbacks (Minimum)	**Adjacent to street:** 10 feet
Lot Coverage (Maximum)	45 percent
Common Area (Minimum)	20 percent of gross area

The Development Narrative provides a setback exhibit for boundaries of Parcel 1, Parcel 2 and Parcel 3 as shown in the below graphic.



Source: RVI

Building Setbacks

The Development Narrative proposes a 40-foot minimum building setback adjacent to Yearling Road to the north of the site in an effort to create a buffer to the low density residential to the north. A minimum 90-foot separation is proposed between existing structures on Yearling Road and the proposed new single-family residential. Dependent on the district, the building setback along Central Avenue is either 15-feet or an average of 30-feet. The building setback on the eastern boundary of the PUD along the Phoenix Sonoran Preserve is a minimum of 65 feet as depicted on the setback exhibit above. There is no access proposed to Central Foothills from Yearling Road, further restricting the access to the arterial street. This is required through a streetscape design guideline.

In addition to perimeter building setbacks, interior setbacks have been provided in all of the districts where commercial and residential are adjacent. In those circumstances the Development Narrative proposed a minimum of 85-foot minimum setback between Parcel 1 and Parcel 2 and a minimum 65-foot setback between Parcel 2 and Parcel 3.

Landscape

The Development Narrative proposes landscaping consistent with current code standards. All landscaping shall be supplied with an appropriate watering system. Additionally, where a lot line, not on a street, abuts a residential zoning district, there shall be evergreen trees planted 20 feet on center. Enhanced landscape standards are proposed for Parcel 2 in an effort to buffer the more intense uses form the abutting residential.

Shade

The Development Narrative proposes shade trees along all sidewalks at a minimum density of 75 percent shade cover at maturity. Shade trees are also proposed along pedestrian trails at a minimum density of 50 percent shade cover at maturity. Shade trees and/or shade structures shall be provided at rest areas within common open space areas and where benches and picnic tables are located.

Walls and Fences

The Development Narrative proposes several wall types. Parcel 1 will include primary and secondary theme walls, partial view fencing, full view fencing as well as a builder wall. Parcel 2 shall incorporate a perimeter theme wall and builder wall. Parcel 3 does not currently propose any walls or fencing. The illustration to the right depicts wall types referenced in this section.



Source: RVI

Parking

The Development Narrative proposed parking standards for Parcel 1, 2 and 3. Parcel 1 shall require parking for single-family residential totaling two spaces per one dwelling unit. Parcel 2 shall be based on City of Phoenix Zoning Ordinance standards in Chapter 7 Section 702. Bicycle parking shall be required in Parcel 2. Parcel 3 shall provide 1.3 spaces per efficiency unit and 1.5 spaces per 1 or 2-bedroom units and 2 spaces per three or more bedroom units. For single-family in Parcel 3, the developer shall provide 1.3 spaces per efficiency unit and 1.5 spaces per one and two-bedroom units and three spaces for three or more bedroom units. For community resident centers in Parcel 3, one space shall be provided per two resident beds.

Screening

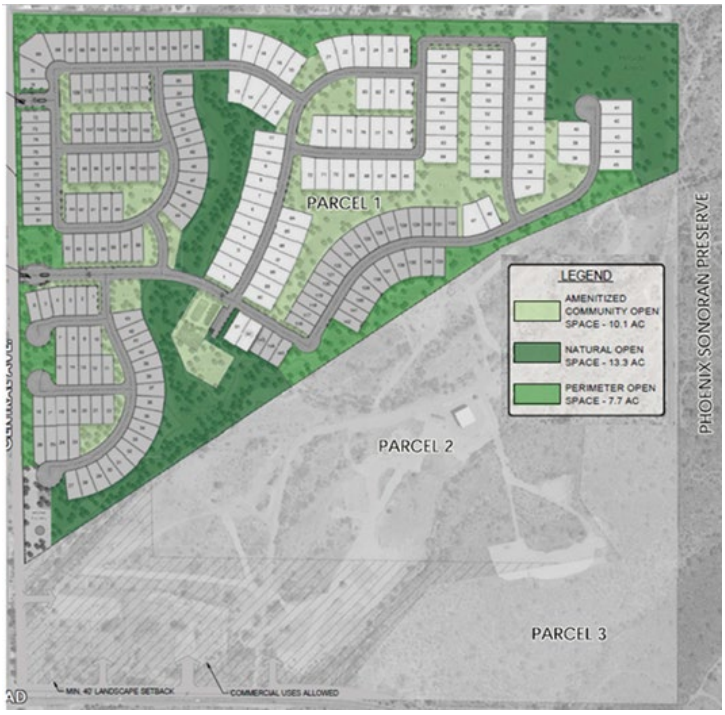
The Development Narrative proposes screening consisting of a solid wall or landscaping in residential districts when the lot serves any use, except single-family units or a multifamily project of less than 16 units. Screening of parking areas is also required in non-residential areas.

Lighting

The Development Narrative proposes all lighting shall conform to Section 23-100 out of the City Code, and Sections 704. A. and 507. Tab A. of the Zoning Ordinance.

Design Guidelines

To ensure high quality development, the Development Narrative includes standards that exceed the Zoning Ordinance. There are standards that address fences/walls, 35 percent open space in Parcel 1 where 5 percent is required by ordinance standards, landscape buffering in Parcel 2 to protect the CP uses from the abutting residential, streetscapes, trails/pathways, and architecture. Architectural design guidelines for Parcel 2 and Parcel 3 shall be reviewed and approved by the Planning Hearing Officer through the public hearing process



Source: RVI

for stipulation modification prior to preliminary site plan approval. This is a legislative review for conceptual purposes only. Specific development standards and requirements may be determined by the Planning Hearing Officer and the Planning and Development Department.

The Development Narrative proposes robust open space areas in Parcel 1 at 30 percent of the gross area. As proposed, this standard exceeds ordinance requirements for R1-10 residential zoning district. R1-10 requires a minimum 5 percent of common area.

SIGNAGE

All signage within Parcel 1 shall be in conformance with Section 705 of the City of Phoenix Zoning Ordinance with exceptions. All signage within Parcel 2 and Parcel 3 shall be in conformance with Section 705 of the City of Phoenix Zoning Ordinance.

SUSTAINABILITY

The Development Narrative proposes six sustainable development principles that may be employed throughout the project.

Proposed sustainable development elements include utilizing industry recognized sustainable construction practices; providing LED and/or low-level lighting, high efficiency air conditioning units, pedestrian amenities, and shade for parking lots and others public spaces.

AREA PLANS, OVERLAY DISTRICTS AND INITIATIVES

7. **Tree and Shade Master Plan**

The Tree and Shade Master Plan has the goal of treating the urban forest as infrastructure to ensure that trees are an integral part of the City's planning and development process. The proposal includes landscape and shade throughout the development.

8. **Complete Streets Guiding Principles**

In 2014, the City of Phoenix City Council adopted the Complete Streets Guiding Principles. The principles are intended to promote improvements that provide an accessible, safe, connected transportation system to include all modes, such as bicycles, pedestrians, transit, and vehicles. The proposal includes safe pedestrian walkways throughout the site.

COMMUNITY INPUT SUMMARY

9. As of the writing of this report, staff has received 18 letters in opposition from concerned property owners in regard to perchlorate contamination on the site, the proposed residential density, the character of the area changing, an increase in crime and traffic, further aqueduct contamination as a result of on-site retention proposed on this site, cancer clusters appearing in existing home

owners to the north and prospective homeowners on the site (specifically thyroid cancer), disruption of existing ground water remediation occurring on the site and trespassing.

INTERDEPARTMENTAL COMMENTS

10. The Street Transportation Department stipulations requires that the developer dedicate right-of-way for Happy Valley Road (70 feet) and Central Avenue (40 feet). Additional stipulations require that the developer make dedications and construct all streets per plans approved by the Planning and Development Department and in compliance with ADA standards and to submit a Developer Project Information Form for the MAG Transportation Improvement Program to the Street Transportation Department

11. The Phoenix Fire Department has noted that they do not anticipate any problems with this case and additional water supply may be required to meet the required fire flow per the Phoenix Fire Code. The site and/or buildings shall comply with the Phoenix Fire Code.

12. The City of Phoenix Floodplain Management division of the Public Works Department has determined that this parcel is not in a Special Flood Hazard Area (SFHA), but is located in a Shaded Zone X, on panel 1280 L of the Flood Insurance Rate Maps (FIRM) dated January 29, 215.

13. The Water Services Department indicated that the subject site is surrounded with existing water and sewer mains that can potentially serve the development.

14. The Parks and Recreation Department stipulations require that the developer dedicate multi-use trail easements and construct multi use trails within the easements and connect to the Phoenix Sonoran Preserve to the east of the site. This is addressed in Stipulation No. 14.

15. The Public Works Department commented that the developers need to follow the City of Phoenix’s current development standards for trash and recycling collection.

16. The Community and Economic Development Department commented that they are supportive of commerce/business park land uses at this location as this is a future extension of a strong employment corridor that will be critical as Phoenix continues to grow to the north. Site planning will also be important so that the residential uses do not limit the business activity due to noise, truck activity, etc.

17. The site has not been identified as being archaeologically sensitive. However, in the event archaeological materials are encountered during construction, all ground disturbing activities must cease within 33-feet of the discovery and the

City of Phoenix Archaeology Office must be notified immediately and allowed time to properly assess the materials.

18. The subject site is located in the Deer Valley Airport traffic pattern airspace. The Aviation Department requires the developer to record a Notice of Prospective Purchasers of Proximity to the Deer Valley Airport and a no hazard determination.

OTHER

24. As part of the Reimagine Phoenix initiative, the City of Phoenix is committed to increasing the waste diversion rate to 40 percent by 2020 and to better manage its solid waste resources. Section 716 of the Phoenix Zoning Ordinances establishes standards to encourage the provision of recycling containers for multifamily, commercial and mixed-use developments meeting certain criteria. Recycling will be provided for single-family development. The PUD Development Narrative does not address recycling provisions.

25. Development and use of the site is subject to all applicable codes and ordinances. Zoning approval does not negate other ordinance requirements and other formal actions may be required.

Findings

1. The proposal is not consistent with the General Land Use Map designations of Preserve / 0 to 1 & 1 to 2 dwelling units per acre and Parks/Open Space – Future 1 dwelling units per acre on a portion of the site and the gross acreage of this portion exceeds 10 acres, however a companion General Plan Amendment request (GPA-DV-2-19-2) is being processed concurrently. If approved the site will be consistent with the General Plan Land Use Map.

2. The proposal includes development and landscaping standards and design guidelines that exceed Zoning Ordinance standards in Parcel 2 in order to buffer the CP/GCP uses from abutting residential.

3. The proposed development will reuse a previously contaminated site that had undergone extensive soils remediation. Groundwater remediation is ongoing. ADEQ has found that Parcel 1 and 3 are cleared for residential development. Parcel 2 restricts residential development.

Stipulations

1. An updated Development Narrative for the Central Foothills PUD reflecting the changes approved through this request shall be submitted to the Planning and Development Department within 30 days of City Council approval of this request. The updated Development Narrative shall be consistent with the

Development Narrative date stamped April 24, 2020 as modified by the following stipulations:

a. Page 18, attach ADEQ final report stating that those portions of the site outside of the defined complex areas have not been environmentally impacted by UPCO's prior operations. Include report in appendix and reference appendix on page 18.

2. Conceptual site plans and elevations for Parcels 2 and 3 shall be reviewed and approved by the Planning Hearing Officer through the public hearing process for stipulation modification prior to preliminary site plan approval. This is a legislative review for conceptual purposes only. Specific development standards and requirements may be determined by the Planning Hearing Officer and the Planning and Development Department.

3. In the event archaeological materials are encountered during construction, the developer shall immediately cease all ground-disturbing activities within a 33- foot radius of the discovery, notify the City Archaeologist, and allow time for the Archaeology Office to properly assess the materials.

4. Right-of-way totaling 70 feet on the north side of Happy Valley Road shall be dedicated for the full limits of the property, or as approved by the Street Transportation Department.

5. Right-of-way totaling 40 feet on the east side of Central Avenue shall be dedicated for a minimum of 300 feet north of Happy Valley Road to accommodate turn lanes, as approved by the Street Transportation Department. Beyond 300 feet, the right-of-way may taper to 30 feet with a 10-foot sidewalk easement, as approved by the Street Transportation Department.

6. Right-of-way triangles shall be dedicated at all intersections at 25 feet by 25 feet, or as approved by the Planning and Development Department.

7. The north half street of Happy Valley Road shall be constructed for the full limits of the property, consistent with cross-section 'A', as approved by the Planning and Development Department.

8. Central Avenue shall be constructed consistent with the E-Section collector street identified on the City of Phoenix Street Classification map, as approved by the Street Transportation Department.

9. The development is required to be in conformance to the City of Phoenix, Storm Water Design Manual for all wash crossings of public and private streets. All associated drainage easements shall be dedicated for operation and maintenance purposes.

10. A Traffic Impact Study (TIS) shall be submitted to the City for this development. No preliminary approval of plans shall be granted until the study has been reviewed and approved by the City upon satisfactory resolutions of review comments by the City staff. The developer must contact Transportation Planning and Programming Division of Street Transportation Department (Attention: Mr. Matthew Wilson, Traffic Engineer III, Phone Number: (602) 262-7580, matthew.wilson@phoenix.gov) to set up a scoping meeting to discuss the requirements for the study, prior to the preparation and submittal of the draft study. No TIS reports will be accepted, unless the developer and/or its traffic engineer consultant has discussed the TIS requirements with the Street Transportation Department staff prior to its preparation.

11. Provide conduit and junction boxes at Central Avenue and Happy Valley Road for future traffic signal equipment on the northeast corner of the intersection. The plan is to be submitted to the Street Transportation Department (Zeke Rios, 602-256-3409 or zeke.rios@phoenix.gov) or review and approval. Submittal will be made as a separate document that shows the entire intersection with existing conduit runs and junction boxes. The Developer will submit the approved plan to the Civil Plans Coordinator as part of the civil engineering plan set. All work related to the construction or reconstruction of the conduit runs and junction box installation shall be the responsibility of the Developer.

12. Driveway access locations to Happy Valley Road shall be in conformance with the Street Transportation Department Planning and Design policies for median access, or as approved by the Street Transportation Department.

13. Development responsibility for off-site traffic improvements will be determined through the Traffic Impact Study, as approved by the Street Transportation. Any applicable escrow funding requirements must be provided prior to final site plan approval, or as approved by the Planning and Development Department.

14. The applicant shall provide a minimum of one access point to the Phoenix Sonoran Preserve regional trail system located in the northeast section of Parcel 1, as approved by the Planning and Development Department.

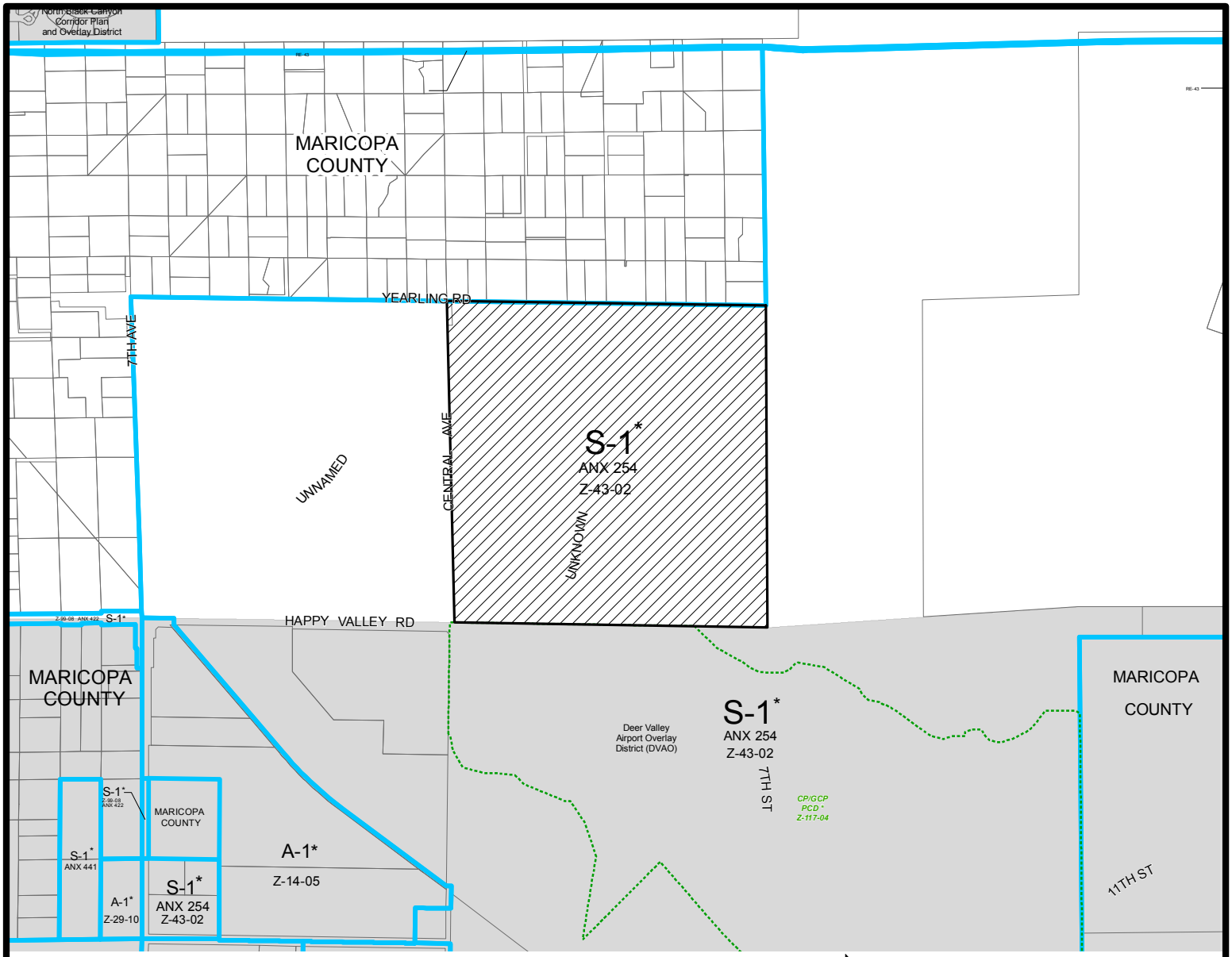
15. The developer shall record a Notice to Prospective Purchasers of Proximity to Airport in order to disclose the existence and operational characteristics of Phoenix Deer Valley Airport (DVT) to future owners or tenants of the property as approved by the Aviation Department.

16. The developer must file FAA Form 7460 and provide City FAA’s no hazard determination prior to construction permit approval.

Writer
David Simmons
May 13, 2020

Team Leader
Samantha Keating

Exhibits
Sketch Map
Aerial
Central Foothills PUD Development Narrative date stamped April 24, 2020

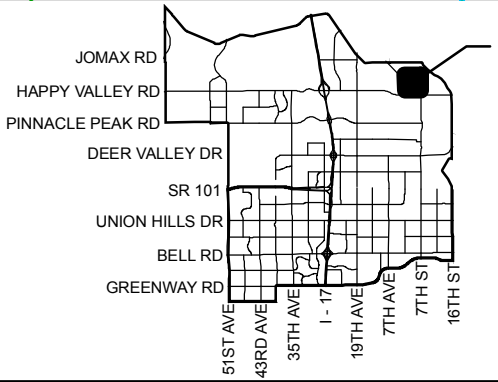


Miles

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DEER VALLEY VILLAGE

CITY COUNCIL DISTRICT: 2



City of Phoenix
PLANNING AND DEVELOPMENT DEPARTMENT

APPLICANT'S NAME:	PAF Central LLC
APPLICATION NO.	Z-37-19
DATE:	6/28/2019
REVISION DATES:	
GROSS AREA INCLUDING 1/2 STREET AND ALLEY DEDICATION IS APPROX.	156.96 Acres
AERIAL PHOTO & QUARTER SEC. NO.	QS 47-28
ZONING MAP	O-8

REQUESTED CHANGE:

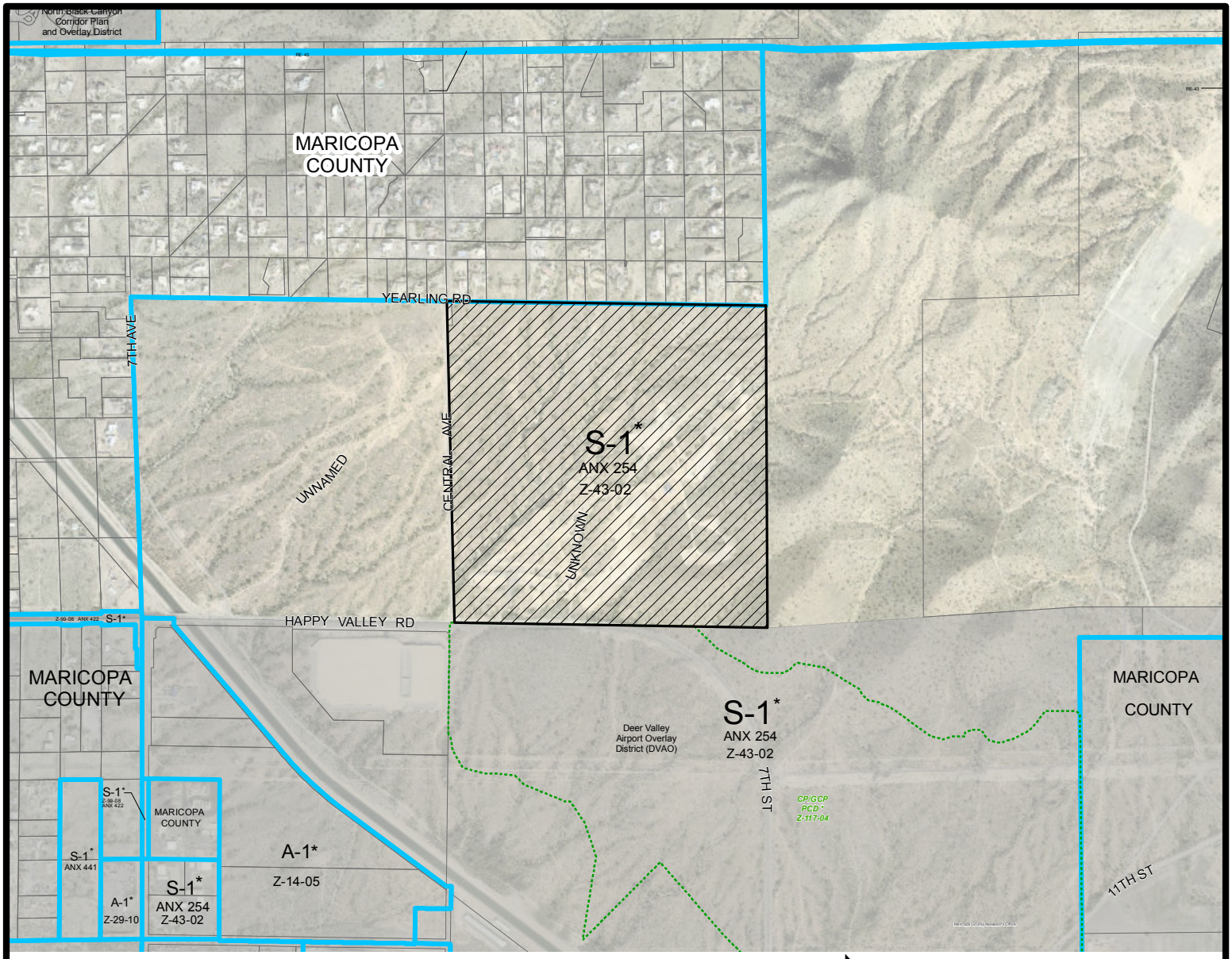
FROM: S-1 (156.96 a.c.)

TO: PUD (156.96 a.c.)

MULTIPLES PERMITTED	CONVENTIONAL OPTION	* UNITS P.R.D. OPTION
S-1	157	N/A
PUD	PER NARRATIVE	PER NARRATIVE

* **Maximum Units Allowed with P.R.D. Bonus**

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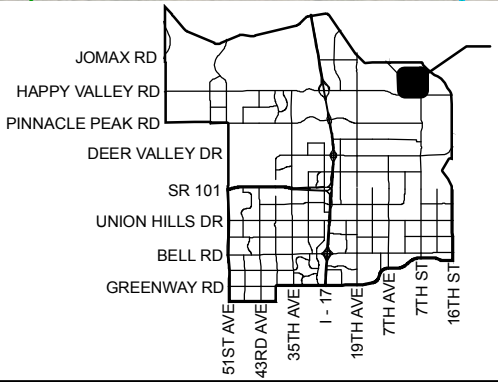


Miles

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DEER VALLEY VILLAGE

CITY COUNCIL DISTRICT: 2



City of Phoenix
PLANNING AND DEVELOPMENT DEPARTMENT

APPLICANT'S NAME:	PAF Central LLC
APPLICATION NO.	Z-37-19
DATE:	6/28/2019
REVISION DATES:	
GROSS AREA INCLUDING 1/2 STREET AND ALLEY DEDICATION IS APPROX.	156.96 Acres
AERIAL PHOTO & QUARTER SEC. NO.	QS 47-28
ZONING MAP	O-8

REQUESTED CHANGE:

FROM: S-1 (156.96 a.c.)

TO: PUD (156.96 a.c.)

MULTIPLES PERMITTED	CONVENTIONAL OPTION	* UNITS P.R.D. OPTION
S-1	157	N/A
PUD	PER NARRATIVE	PER NARRATIVE

* **Maximum Units Allowed with P.R.D. Bonus**

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CENTRAL FOOTHILLS

Planned Unit Development

Happy Valley Road & Central Avenue

Z-37-19/GPA-DV-2-19-2

1st Submittal: June 11, 2019

2nd Submittal: January 10, 2020

3rd Submittal: March 17, 2020

Village Planning Hearing: May 21, 2020

CITY OF PHOENIX
APR 2 4 2020
Planning & Development
Department

A Planned Unit Development (PUD) is intended to be a stand-alone document of zoning regulations for a particular project. Provisions not specifically regulated by the PUD are governed by the Phoenix Zoning Ordinance. A PUD may include background information to help illustrate the intent of the development. The purpose and intent statements are not requirements that will be enforced by the City. The PUD only modifies the Phoenix Zoning Ordinance regulations and does not modify other City Codes or requirements.

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SECTION 1: ENVIRONMENTAL DISCLOSURE

The approximately 156.96 gross acre site located at the northeast corner of Central Avenue and Happy Valley Road (the "Site"), which is the subject of this Planned Unit Development ("PUD"), is encumbered by a Declaration of Environmental Use Restriction for Properties with Institutional Controls, which is recorded in the official records of Maricopa County, Arizona as instrument no. 20180899893, and a separate Declaration of Environmental Use Restriction for Property with Engineering and Institutional Controls, which is recorded in the official records of Maricopa County, Arizona as instrument no. 20200066622 (collectively the "DEUR's"). The DEUR's establish various engineering and institutional controls, use restrictions and financial responsibility related to environmental impact upon limited portions of the Site from past uses of the land. In the event of a conflict between the terms and conditions of this PUD and the terms, conditions, restrictions and requirements of the DEUR's, in all instances, the terms, conditions, restrictions and requirements of the DEUR's shall control. See **Appendix A: 1ST DEUR** & **Appendix B: 2ND DEUR**.



SECTION 2: REGULATORY STATEMENT

The Planned Unit Development zoning district is authorized by Section 6, Section 671 of the Zoning Ordinance of the City of Phoenix ("Zoning Ordinance"). A PUD is intended to be a stand-alone document that sets forth the regulatory framework, including permitted uses, development standards and design guidelines, for a particular project ("PUD Regulations"). The PUD may only modify provisions within the Phoenix Zoning Ordinance and does not modify other City of Phoenix codes, regulations or requirements. A PUD may include substantial background information and narrative discussion, including purpose and intent statements, which are intended to illustrate the overall character and vision for the development. Such statements are not regulatory and are not requirements to be enforced by the City of Phoenix.

The PUD Regulations apply to all property within the PUD project boundary, The PUD Regulations supersede and replace all applicable Phoenix Zoning Ordinance requirements. If there is a conflict between PUD Regulations and the Phoenix Zoning Ordinance, including the design guidelines within the Zoning Ordinance, the terms of this PUD shall apply with the exception of the Hillside Ordinance, Section 710 of the Zoning Ordinance (see **Section 3: Hillside & Sonoran Preserve Regulations** of this document). If a provision is not addressed by the PUD, then the applicable City of Phoenix Zoning Ordinance shall control.

SECTION 3: HILLSIDE & SONORAN PRESERVE REGULATIONS

3.A Slope Analysis

A slope analysis has been prepared for this approximately 156.96 gross acre site located at the northeast corner of Central Avenue and Happy Valley Road (the "Site"), see **Exhibit 10: Slope Analysis Summary**. The complete slope analysis is attached to this narrative as **Appendix C: Slope Analysis**. All areas categorized as Hillside, as shown on the slope analysis for Central Foothills, shall be subject to the Hillside Development Ordinance, Section 710 of the Zoning Ordinance and detailed in this section. The individual density calculations for the residential parcels are included within **Section 6: Land Use Plan**.

3.B Hillside Development Area Density

(See Chapter 7, Section 710 of the Phoenix Zoning Ordinance)

Special density requirements for single family and multifamily residential developments in the hillside development area in any zoning district shall be as follows:

The maximum number of lots, or dwelling units into which may develop in hillside development areas shall be; (i) the sum of the number of lots or dwelling units allowed by the zoning district, or (ii) the sum of the number of lots or dwelling units allowed in each category of land as shown by the following table whichever is less:

Table 1: Hillside Development Area Density

Category Slope of Land	Maximum Number of Lots *
10% to 14.9%	1.80
15% to 19.9%	1.10
20% to 24.9%	0.70
25% to 29.9%	0.50
30% to 34.9%	0.30
35% and over	0.20

* Or dwelling units per gross acre or as allowed by zoning district, whichever is less.

There shall be no more lots or dwelling units created than permitted by the above slope categories, except that lots or dwelling units not placed in a slope category may be placed in a lower slope category so long as the total number of lots or dwelling units in the hillside development area shall not exceed the sum of the lots or dwelling units permitted in each slope category.



1. HILLSIDE DEVELOPMENT AREA STANDARDS

Special yard, height, area, and coverage requirements for developments in the hillside areas in any zoning district shall be as follows:

Table 2: Hillside Development Area Standards

DEVELOPMENT OPTION	Single family Residential (PRD Option, and PAD)	Multifamily Residential	Any Non-Residential Zoning District
MINIMUM LOT DIMENSIONS			
WIDTH/DEPTH	As required by zoning district	As required by zoning district	As required by zoning district
REQUIRED SETBACKS			
FRONT YARD	As required by zoning district	Minimum 30'*	As required by zoning district or minimum 30'*
REAR YARD	As required by zoning district	Minimum 30'*	Minimum 30'*
SIDE YARDS	As required by zoning district or ten (10) feet, whichever is greater	Minimum 15'**Building heights greater than fifteen (15) feet: required yard plus one (1) additional foot for each foot of building height exceeding 15' measured from exterior boundaries	Minimum 15'*, whichever is greater*Building heights greater than fifteen (15) feet: required yard plus one (1) additional foot for each foot of building height exceeding 15' measured from exterior boundaries
MAXIMUM COVERAGE UNDER ROOF	The main building and all accessory buildings shall not occupy more than twenty-five percent (25%) of the hillside portion of the lot or parcel	The main building and all accessory buildings shall not occupy more than twenty-five percent (25%) of the hillside portion of the lot or parcel	The main building and all accessory buildings shall not occupy more than twenty-five percent (25%) of the hillside portion of the lot or parcel or as required by zoning district, whichever is less
MAXIMUM BUILDING HEIGHT	No building shall exceed a height of two (2) stories, not to exceed thirty (30) feet above the natural grade of the lot or parcel at any section through the structure	No building shall exceed a height of two (2) stories, not to exceed thirty (30) feet above the natural grade of the lot or parcel at any section through the structure	No building shall exceed a height of two (2) stories, not to exceed thirty (30) feet above the natural grade of the lot or parcel at any section through the structure

3. GRADABLE AREA

The area occupied and enclosed by fences or walls located within a designated hillside development shall be considered graded area and shall be shown on the grading and drainage plan as required by Section 32-32 of the City Code.

4. DENSITY WAIVERS.

Neither the Zoning Administrator nor the Board of Adjustment shall have jurisdiction over the density requirements of the Hillside Development Ordinance. The Zoning Hearing Officer and Planning Commission may recommend, and City Council may grant in accordance with Section 506.B.4. a., b. and c. of the Zoning Ordinance, density waivers to the provisions where such waivers would be in furtherance of the purposes of the Hillside Development Ordinance and where there exist unusual conditions relating to the Site, such as drainage or flood hazards, peculiarity of the size or shape of the site, or geology, and where approval of the waivers would promote the general welfare of the neighborhood.

5. VARIANCES

Variances affecting the above regulations other than density shall be regulated by Section 307 of the Phoenix Zoning Ordinance.

6. ENFORCEMENT

Maintaining premises in violation of hillside regulations after annexation or the effective date of hillside ordinance (9/12/72) provision shall be grounds to prohibit the issuance of additional building permits until violations are corrected.

3.C Sonoran Preserve Guidelines

(See Chapter 5, Section 507 Tab A of the Phoenix Zoning Ordinance)

Section 507 Tab A of the City of Phoenix Code references specific guideline requirements for properties that directly abut the Sonoran Preserve. The intent of the guidelines is to ensure that uses adjacent to the Preserve blend with the natural desert environment in a manner that supports appropriate access and complimentary adjacency. The Central Foothills property shares its eastern edge with Preserve designated land that is approximately 2,640 feet in length. A majority of the uses provided for within this PUD along this edge have been designated for residential uses and will be subject to Hillside regulations in addition to the Edge Treatment guidelines.

1. GOALS & OBJECTIVES

Where rezoning occurs adjacent to the Sonoran Preserve, encourage development on the lower slopes below the ten percent (10%) slope line, consistent with the general plan, to maintain the Preserve as a visual amenity for all citizens and to maintain connectivity between mountains within the same range.

It is the intent of Central Foothills is to avoid developing within Hillside areas as much a possible not only to protect the topographic features on the Site, but also to plan the site to take advantage of the views created by these features.

Maintain physical access to public preserve lands and a sense of public ownership.

Currently there is no physical public access to the Preserve from the Site. The developer intends to work with the Parks & Recreation Department to plan an access point within Parcel 1 that will connect to a coordinating trail or route. This precaution will avoid allowing unfettered access to the Preserve without ensuring appropriate use-routes for hikers and cyclists to traverse so as to prevent damage or destruction to the land.

Prohibit gated communities adjacent to the Sonoran Preserve that preclude public access to the Preserve, except that gated subdivisions will be allowed after assurance that the sixty percent open edge treatment is provided and connectivity in accordance with the Sonoran Preserve Master Trail Plan is maintained.

While Parcel 1 will have private streets, the proposed community plan currently does not include gates. If gates were incorporated in the future, the shared boundary of Parcel 1 with the Sonoran Preserve is approximately 570 linear feet comprising roughly 21% of the Site's edge condition. Parcels 2 & 3 are not intended to become gated developments.

Development design should take advantage of the proximity of the Sonoran Preserve in subdivision layout and site design.

The Parcel 1 Site Plan has been designed to integrate with, while remaining almost entirely outside of, the Hillside areas 10% slope boundary. The planning and design of Parcels 2 and 3 which will occur at a later time (and will be subject to all required design review processes), will be sensitive to the Preserve edge and Hillside areas while still recognizing and visually complementing these assets.

Minimize damage in the Sonoran Preserve by providing controlled access points including trails, parking areas and recreation amenities.

Central Foothills is committed to providing a trail access to the Preserve through Parcel 1 in addition to the internal trails network. However, until the Parks and Recreation Department is prepared to provide corresponding access routes within the Preserve, such Preserve access from within Central Foothills will be limited to protect the Preserve from uncontrolled pedestrian and bicycle traffic.

Encourage commercial uses that compliment and assist in the active or passive enjoyment of the Sonoran Preserve lands near primary and secondary access points to the preserve.

Uses that correlate with the open space resources of the Preserve and the nearby Cave Buttes Recreation Area will be encouraged where possible as Parcel 2 develops in a later phase.

Use the desert wash system for storm water management, allowing for the natural function of the floodplain and desert washes where feasible, based on engineering parameters and public safety.

In accordance with City stormwater guidelines, Central Foothills will be designed so that onsite runoff from the Property will be routed via street flow and/or storm drainage channels to retention basins located throughout the Site and each separate Parcel. The Site will manage stormwater on-site to comply with the criteria for the 100-year, 2-hour retention requirement. Central Foothills has been and will continue to be designed to minimized conflicts with washes and drainage ways. Where conflicts cannot be avoided, the developer intends to construct bridges and culverts to reduce impact to these features.

The wash system can provide a place for trails, within trail easements above the wash banks, or below the wash banks in approved areas and can provide physical or visual connections to the Sonoran Preserve and wildlife habitat.

Where washes align with logical pedestrian circulation routes, trails will be provided along or down in the wash. An example of this is the wash that runs north-south within Parcel 1. This wash is to be preserved and a meandering internal trail will be installed along it, see **Exhibit 23: Conceptual Trails Plan**.

Use desert vegetation landscaping for low water use, survivability, and to maintain the existing sense of place.

A Salvage Plan for the Site will be performed and as much of the salvageable native material as possible will be harvested and preserved elsewhere on the Site to be reinstalled in the naturalized portions of the Site. All plant materials used throughout the Site shall comply with the Arizona Department of Water Resources("ADWR") Low Water Use Drought Tolerant Plant List for Phoenix.

Minimize the impact of invasive plant species.

See response above. The Low Water Use Drought Tolerant Plant List does not include highly invasive species.

2. DEVELOPMENT STANDARDS

In addition to meeting the goals and objectives shown above, Parcel 1 (single family uses) shares a 570-foot boundary with the Preserve edge. The proposed site plan for this area demonstrates extensive setbacks and open edges with only two single family lots that back to the Preserve. Along the entire eastern boundary of the Site there shall be a minimum of 60-foot buffer setback, although within Parcel 1 the distance from the nearest lot property line to the Preserve boundary is over 150 feet.

Parcel 2 does not include a Preserve edge but comes to a point at the eastern Site boundary and therefore will also maintain the minimum 60-foot setback from the Preserve boundary that will emphasize the

preservation of existing undisturbed open space as a buffer and transition area. Variations in building mass and architectural character within Parcel 2 will be considered in the future design of these buildings.

Parcel 3 is predominantly located within designated hillside area (slopes 10% or greater) and is therefore subject to the development regulations of the Hillside Development Ordinance. Land uses proposed for this parcel will allow for single family and multifamily residential uses with setbacks and development standards that adhere to the Hillside Ordinance Section 507 – Tab A Edge Treatment guidelines including parking and building setback restrictions.

SECTION 4: PURPOSE & INTENT

Central Foothills Planned Unit Development proposes the rezoning of approximately 156.96 gross acres of partially developed property located in north Phoenix, located at the northeast corner of Central Avenue and Happy Valley Road. See **Exhibit 1: Regional Context Map**. The applicant proposes to develop the Site as a planned development in three parcels consisting of single family residential (Parcel 1), commerce/ business park uses (Parcel 2) and a future medium density residential development (Parcel 3).

Central Foothills is located within the City of Phoenix ("City") approximately 2.5 miles east of Interstate-17 and three miles north of State Route Loop 101. The Site is bounded by Central Avenue on the west and Happy Valley Road on the south. Happy Valley Road is designated as a Type 'A' Arterial Roadway but is currently constructed as a two-lane road at the proposed site. The Site is bounded by Arizona State Trust Land to the west and south, Maricopa County residential properties to the north, and Bureau of Land Management (BLM) land to the east that has been designated as a component of the Phoenix Sonoran Preserve. See **Exhibit 2: Parcel Map**.

4.A Project Overview & Goals

The Central Foothills PUD provides a comprehensive planning and regulatory framework designed to facilitate the development of a cohesively planned property that integrates residential and non-residential uses. Central Foothills residents will benefit from the Site's proximity to the Sonoran Preserve and access to significant public lands to the east. The Central Foothills PUD is intended to promote a land use plan, permitted uses, development standards and design guidelines that provide for a sensitively balanced combination of uses.

The goals and objectives of the Central Foothills PUD are as follows:

- Provide a regulatory framework and guidelines that promote a well-designed, unified development plan for the subject property, while maintaining sufficient flexibility to allow detailed planning to occur at the time of development and in response to the market.
- Incorporate design guidelines that improve and reinforce the quality of design in the community and promote sustainable neighborhoods.
- Build a high quality development that is sensitive to the surrounding desert through efficient land use and infrastructure planning, protects the significant wash corridors and effectively re-uses salvaged native materials to the greatest extent possible.
- Design community spaces, such as parks, trails and streetscapes to encourage recreational opportunities and promote social interaction.
- Maintain Hillside preservation, and celebrate the natural desert landscape of the adjacent Sonoran Preserve

The Site will be divided into three parcels consisting of different land uses including low to medium density residential (Parcel 1), commerce/business park (Parcel 2) and medium density residential (Parcel 3). The overall character of each parcel will be cohesive with the entire development, but distinct in support of the unique land uses within each of the parcels. The elements of each parcel visible to the public, such as walls, fences, signage and streetscape, shall use similar forms, materials and colors that flow across the site, harmonize with the surrounding desert character and complement each other. Significant natural landscape features, such as the steep hillside areas on the east side of the Site, will be left intact by avoiding developing lots or pads in those areas, or by clustering building sites to reduce disturbance of these natural features as much as possible.

4.B Request

This application is a rezoning request for an approximately 156.96 gross acre site located at the northeast corner of Central Avenue and Happy Valley Road called Central Foothills. The Assessor Parcel Number (APN) for the Site is 210-14-050A. The Site is proposed to be developed with a mix of uses including approximately 100 acres of residential and approximately 57 acres of Commerce/ Business Park uses. To achieve this, the developer is requesting that the Site be rezoned from Ranch or Farm Residence (S-1) to Planned Unit Development (PUD) for single family residential, Commerce/ Business Park, and medium density residential uses.

The current City of Phoenix General Plan Land Use Map reflects various land use designations on the subject Site. The Site is currently designated as a combination of 0-1 dwelling units per acre/1-2 dwelling units per acre/Parks & Open Space (optional), Commerce/Business Park (CBP), and Future Parks & Open Space on the 2015 General Plan Land Use Map. A minor General Plan amendment has been submitted in conjunction with this zoning application to revise the General Plan Land Use Map to modify the balance of residential and Commerce/Business Park uses already designated on the Site. The proposed Land Uses include approximately 78.3 acres of single family residential at 2 to 3.5 dwelling units per acre (du/ac), ±57.2 acres of Commerce/Business Park and 21.8 acres of medium density residential at 3.5 to 5 du/ac.

4.C Planned Unit Development

The request for PUD zoning is based upon; (i) the challenging and unique topography of the Site, which includes both hillside areas and deep natural washes which traverse the Site in a disorderly manner making development of discrete land uses areas problematic; (ii) various encumbrances upon the Site imposed by the Arizona Department of Environmental Quality (ADEQ) as outlined in the Declaration of Environmental Use Restrictions ("DEUR's"), described in more detail in Section 5 of this Narrative, which DEUR's create peculiarly shaped parcels with regulated uses within each parcel; and (iii) the developers plan to create a well-designed integrated development, featuring both living and working environments with extensive open space and amenities that exceed those of traditional zoning districts to support the unique natural environmental of the Site.

The proposed PUD zoning will allow the developer to tailor the site plans and the development standards of each parcel to the unique constraints and opportunities of this site. Such opportunities on the Site include access to the Sonoran Desert Preserve to the east, a significant drainage pathway that crosses the Site and provides a natural separation and buffering between the proposed land uses, and dramatic topographic forms along the eastern boundary of the site. By adjusting the lot dimensions and setbacks, the proposed residential lots can be better arranged to respond to and utilize the natural features on the site. In addition, while these changes result in less private open space within individual lots, it allows for more common area open space, promoting a more active and socially engaged community. By proposing smaller lots with more common open space areas instead of enclosed, private yards, much more of the natural desert landscape will be preserved. The proposed minimum open space area in Parcel 1 is approximately 27.4 acres or not less than 35% of the gross parcel area.

Additionally, the proposed PUD zoning provides the necessary regulatory flexibility to develop the entire Site with specifically permitted uses from the City's existing residential, commercial and commerce park zoning categories. The coordinated land use scheme will allow for some lower intensity commercial and retail uses, as well as employment and business park uses, to promote more timely development of Parcel 2. Due to the proximity of the proposed residential uses, permitting limited commercial uses along with uses more typical of Commerce/Business Park designation provides uses more compatible with residential development without deviating entirely from the existing General Plan designations on the site. Furthermore, the added flexibility in developing the Site afforded by the PUD zoning will help mitigate the physical constraints of the existing land use restrictions, and the locations of environmentally protected areas within Parcel 2 due to the previous manufacturing uses on the Site, as more fully detailed in see **Section 5.A Historical Uses**.

4.D Surrounding Context

The Site is bounded by undeveloped State Land to the west and low density unincorporated County properties to the north and northwest. The eastern perimeter of the Site shares a boundary with the Phoenix Sonoran Preserve which is part of an 18,000-acre natural park. Currently the Site is vacant, and a portion has been disturbed in association with a prior manufacturing operation on the Site. The current land use and general plan and zoning designations for the surrounding property are detailed in **Table 1** below. See **Exhibit 3: Surrounding Jurisdiction Map**.

Table 3: Surrounding Property

Location	General Plan	Zoning	Land Use
North	0-1 & 1-2 du/acre - Large Lot/ Parks & Open Space	RU-43 (County)	Single family Residential
South	Commerce/Business Park	S-1	State Land (Vacant)
East	Future Parks & Open Space (or 1 du/ac)	S-1	Bureau of Land Management (Phoenix Sonoran Preserve)
West	0-1 & 1-2 du/ac Large Lot	S-1	State Land (Vacant)

4.F Historical Uses

The Site was previously operated as a manufacturing facility from 1972 through 2010 by Universal Propulsion Company, Inc. under a land lease from the State of Arizona. Universal Propulsion Company, Inc. purchased the Site in December of 2015. The Site was then purchased in the December of 2018 by the Patricia Archie Foundation, LLC as a predecessor in interest to the current owner, PAF Central, LLC. Since 2015 Universal Propulsion Company, Inc. has undertaken various remediation activities to remediate the limited areas of soil and groundwater contamination, all of which has been monitored by the Arizona Department of Environmental Quality (ADEQ).

In 2017, the Site underwent a Zoning Adjustment for a Use Permit to allow an environmental remediation facility. The previous use on the Site created a brownfield condition within a limited portion of Parcel 2. Within these defined areas of Parcels 2, remedial actions have been completed to remove and isolate soil contamination and implement an ADEQ approved groundwater remediation system that will continue to operate for the foreseeable future until contamination within the groundwater has reached acceptable levels, as determined by ADEQ. Based on the extensive investigations conducted prior to the remediation efforts, it was determined that the northern 78.3 acres of the Site (being proposed for low to medium density residential) and the eastern 21.8 acres of the Site (being proposed for medium density residential) were not environmentally impacted by the previous use. However, certain isolated and well-defined areas within Parcel 2 contained

contaminants in the soil and groundwater. In response, the previous owner, under the supervision of ADEQ, implemented extensive remediation efforts, which are discussed in detail in Section 5: Site Environmental Conditions. Today, the soil contamination has been fully remediated in accordance with the ADEQ corrective action plans. However, a groundwater treatment facility located within Parcel 2 will continue to treat the groundwater for the foreseeable future. Despite this, the owner of the Site has voluntarily restricted the use of all groundwater, which greatly reduces the risk that any human will ingest or come in contact with the groundwater. Further, the DEURs specifically carve-out the non-impacted areas and provide record notice to all prospective purchasers of the Site. These defined areas within the Site are depicted on **Exhibit 4: Existing Site Conditions**.

4.G Topography & Physical Features

The Site slopes to the southwest away from the Phoenix Sonoran Preserve. The highest point of the Site is in the southeast portion with slopes nearing 20% or steeper. There are several drainage ways that cross the Site including a wash that runs along the boundary of Parcels 1 and 2. See **Appendix I: Context Photographs** (included as a separate document).

The Site is predominantly vacant, undisturbed land with portions towards the south and center of the Site that have historically been used for manufacturing. These historic manufacturing processes resulted in isolated soil and groundwater contamination on the Site (both surface and sub-surface) and the Site is currently undergoing remediation treatment and being monitored by ADEQ. As a result of this prior contamination and ongoing remediation, a portion of the subject property has been restricted to only allow for non-residential uses (Parcel 2). Additionally, numerous monitoring wells have been located across the Site as part of the ongoing remediation and monitoring processes. These wells have been constructed for the purpose of continually monitoring groundwater quality until remediation efforts have been deemed complete. These well sites will be protected and unobstructed during and after the development process for as long as is required. See **Exhibit 5: Monitoring Well Locations** and **Appendix D: Well Piping Plan**.

SECTION 5: SITE ENVIRONMENTAL CONDITIONS

5.A Summary of Site Environmental Conditions.

This section of the Narrative provides a detailed discussion of the past uses at the Site, the environmental impacts resulting from such uses, the extensive investigations that have been completed to define the areas of environmental impact, and the remedial actions that have been implemented to correct prior environmental impacts at the site. The following is a brief synopsis of this detailed information presented in Section 5.B through 5.G of this Narrative:

- Only limited areas of the Site were environmentally impacted by the prior uses at the Site. The environmentally impacted areas are only within Parcel 2.
- These areas have been well characterized under the close supervision of ADEQ, as the regulatory agency charged with oversight of the environmental conditions.
- The areas proposed for residential development have been determined, after lengthy and exhaustive testing, to not have been environmentally impacted above any applicable ADEQ or ADHS action levels.
- Although there is groundwater contamination within a limited portion of Parcel 2, no portion of the Site proposed for residential development contains groundwater with contaminates above any applicable remediation level and a use restriction has been placed upon the entire Site prohibiting the use or consumption of any groundwater.
- The ADEQ approved soil remediation programs have been completed at the Site.

- The ADEQ approved groundwater remediation system has been implemented, is fully operational, and will continue to operate under the supervision of ADEQ until groundwater contamination in Parcel 2 has reached acceptable levels.

- Development of the Site is regulated by ADEQ pursuant to the previously recorded DEUR's implementing both institutional and engineering controls.

5.B Environmental History of the Site

The UPCO facility was located at 25401 North Central Avenue in Phoenix, Maricopa County, Arizona and was initially constructed in 1972. The UPCO facility was operated until 2009 when operations were transferred to another out-of-state facility and demolition of the site buildings was completed in early 2010. During the term of its operation, UPCO operated under a RCRA Part B Permit. The facility conducted various actions as part of the closure of the RCRA Part B Permit which included the issuance of a RCRA Closure Report and Closure Certification, which were approved by ADEQ in 2009.

The Site consisted of approximately 158 acres, isolated portions of which were used for operations, manufacturing, storage, and the placement of administrative buildings. The operational areas of the Site were segregated into seven (7) discrete areas. These areas are shown on **Figure 1** and described below.

- **A-Complex** - This complex included four (4) buildings used for administration and management. Based upon historical uses it was determined that this area would not be impacted by any contaminants of potential concern ("COPC")

- **B-Complex** - This complex included numerous free-standing buildings. This complex was used for the manufacturing and testing of ejection seats, explosive bolts, explosive cutters and other similar items. Additionally, B-Complex housed an x-ray inspection facility which was used to inspect rocket motors.

- **C-Complex** - This complex included numerous free-standing buildings. This complex was used for oxidizer grinding, castable propellants and compound mixing. C-Complex also included several research and development areas devoted to the improvement of products and performance, as well as facilities used for quality assurance and quality control assessment.

- **D-Complex** - This complex had numerous free-standing buildings. This complex was used for the testing and manufacturing of solid propellant and waterbore process. Within the D Complex was the Old Burn Area, the Thermal Treatment Unit (TTU) and Waterbore Area. The Old Burn Area was used for the burn off-specification energetic materials and devices. The Old Burn area was operational from the 1970's to 1983. In 1983 the operations were moved to the Open Burn Unit (OBU) within the New Burn Area. The TTU portion of the complex was used for the burn off-specifications solid propellant materials. Also, since 1983 a high-pressured water spray had been used to remove solid propellant and binders from rocket motor tubes so that the tubes can be reused. This process was known as Waterbore and was completed within the named Waterbore Area of the D-Complex.

- **E-Complex** - This complex contained portable fabricated metal storage containers that were used for the temporary storage of energetic materials and devices awaiting off-site transport. E-Complex is not shown on Figure 1 below, as these storage containers were periodically moved across the various "Complex areas".

- **F-Complex** - This complex had various buildings and structures. This complex was used for the manufacturing of powder-based energetic formulations, assembly operations and quality assurance and quality control.

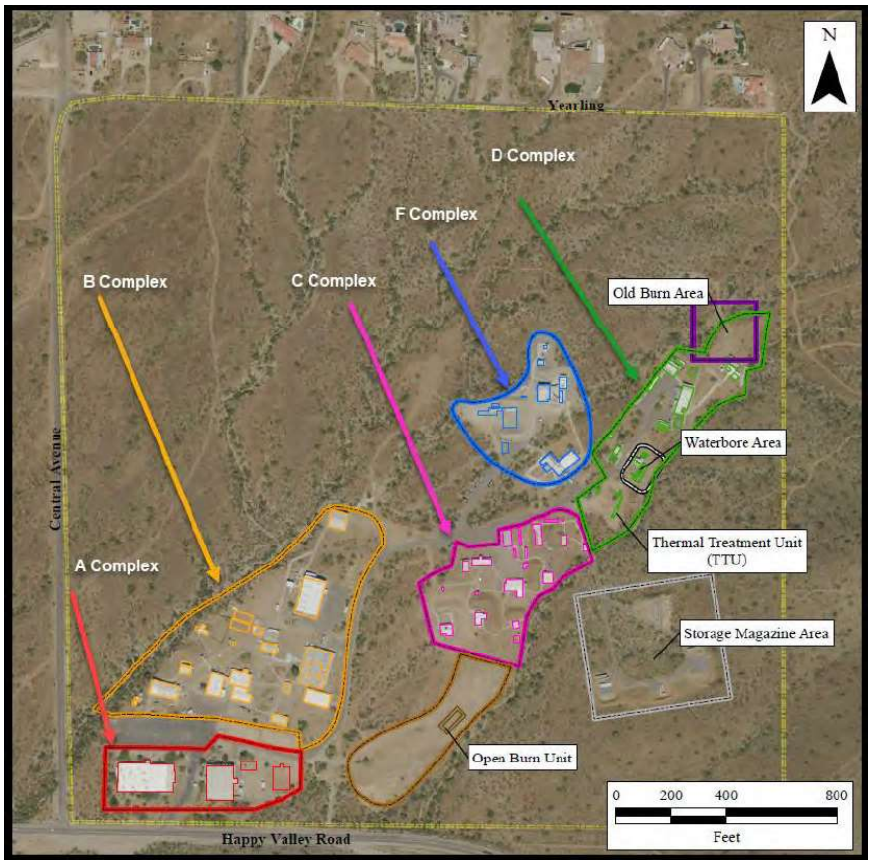


Figure 1: Map of Complex Building Locations

UPCO's operations were limited to these well-defined "Complex areas," which are tightly clustered in the center of the Site. Based upon all the extensive testing and investigation of the Site, including recent tests performed by the Applicant and ADEQ, and the information contained within the ADEQ files, those portions of the Site outside of the defined Complex areas have not been environmentally impacted by UPCO's prior operations.

5.C Past Studies

1. SITE INVESTIGATIONS

The UPCO Facility has been under extensive monitoring and testing since the 1990's. Through the completion of various site assessments under the guidance of regulatory agencies, several potential environmental concerns were found by independent consultants and were brought to the attention of UPCO, as well as the Arizona Department of Environmental Quality (ADEQ). These site assessments included the collection and laboratory analysis of hundreds of soil and groundwater samples, the completion of numerous soil borings and the installation of groundwater monitoring wells to depths in excess of 1300 feet, the completion of soil vapor investigations, as well as geophysical testing to clearly map the subsurface soil and rock layers so as to define geologic conditions at the Site. In addition to the testing and investigation of the Site, periodic water sampling and testing from the private residential water wells located immediately north of the Site was conducted from 2004 until February 2011.

After the completion of this testing by various environmental professionals and the completion of a comprehensive remedial investigation of the entire Site (see Final Remedial Investigation Report, dated June, 2011 prepared by Arcadis-US, Inc) it was determined that elevated concentrations of perchlorate, metals including arsenic and lead, as well as some Volatile Organic Compounds (VOCs) were present in the groundwater and soils within isolated and discrete areas of the Site.

2. SOIL INVESTIGATION AND TESTING

Arcadis provided soil characterization for the Site in July and August 2004 and 2005 as well as February and March of 2008. The soil investigation included the testing for chemicals including Perchlorate, Metals, Nitrate, Cyanide, SVOCs, Acetate, Sodium Azide, Dioxions, High Explosives and pH, as well as various other analytics. The soil testing within the defined Complex areas included the following:

Location	Number of Borings	Samples Obtained
B-Complex	39	117
C-Complex	22	98
Old Burn Area	51	112
TTU Area	30	104
Waterbore Area	15	155
SMA	27	61
F-Complex	22	71
New Burn Area	47	147

In addition to samples obtained during the subsurface soil sampling, surface soil samples were collected from various location across the Site, including along the north boundary line adjoining Yearling Road and the west boundary line along Central Avenue. Laboratory analysis of these soil samples indicated the presence of perchlorate, arsenic, and lead at elevated concentrations limits within the Old Burn Area, New Burn Area and one location within the B-Complex. Soil samples outside of these defined areas, including the surface soil samples obtained along the north and west boundary lines of the Site, did not indicate the presence of arsenic, lead, or any other COPC above the ADEQ established action levels. Specifically, perchlorate was not found to be present above the laboratory detection limit of 0.004 PPM. The laboratory detection limit is 1,375 times lower than the residential Soil Remediation Levels ("SRL") established by ADEQ of 55 PPM to be protective of direct contact with humans in a residential setting and 400 times lower than the site-specific clean-up standard established by ADEQ for the UPCO facility of 16 PPM.

3. GROUNDWATER INVESTIGATION AND TESTING

Arcadis reported hydrological investigations being conducted between December 2003 and April 2011. The hydrological investigations included the installation of monitoring wells, core samples, and geophysical logs. Based these investigations it was determined that the reginal groundwater gradient is from the northeast toward the southwest. The monitoring wells were installed at various depths and locations across the Site based upon former operational areas of known impact, geologic conditions and a defined risk assessment profile. Subsequent to installing the monitoring wells, quarterly groundwater samples were obtained and analyzed by a certified laboratory to determine the impact of any COPC across the site groundwater. The monitoring well samples obtained showed two COPC within the groundwater, including Perchlorate and 1,1DCE, which is a volatile organic compound. During these various phases of groundwater testing, COPC's were identified in monitoring wells MW-1, MW-2, MW-5, MW-6 MW-13 and MW-19, all of which are located within the central former operational areas of the UPCO facility.

ADEQ also required private wells, located immediately north of the Site along Yearling Road, to be tested to ensure private drinking water in the area was not impacted by the previous operational activities performed by UPCO. The private wells were sampled beginning in 2004 and based upon the information contained within the Arcadis reports on file with ADEQ, the highest concentration of perchlorate within any private well was found to be 3.1 PPB, which level is more than 4 times below the action level set by ADHS based upon a Heath Based Guidance Level for perchlorate in

groundwater. This testing data is supported by the determined groundwater gradient being toward the southwest and away from these existing residences along Yearling Road. The locations of all the monitoring wells installed upon the Site, as well as the locations of the private wells along Yearling Road north of the Site, are shown on **Figure 2** below.

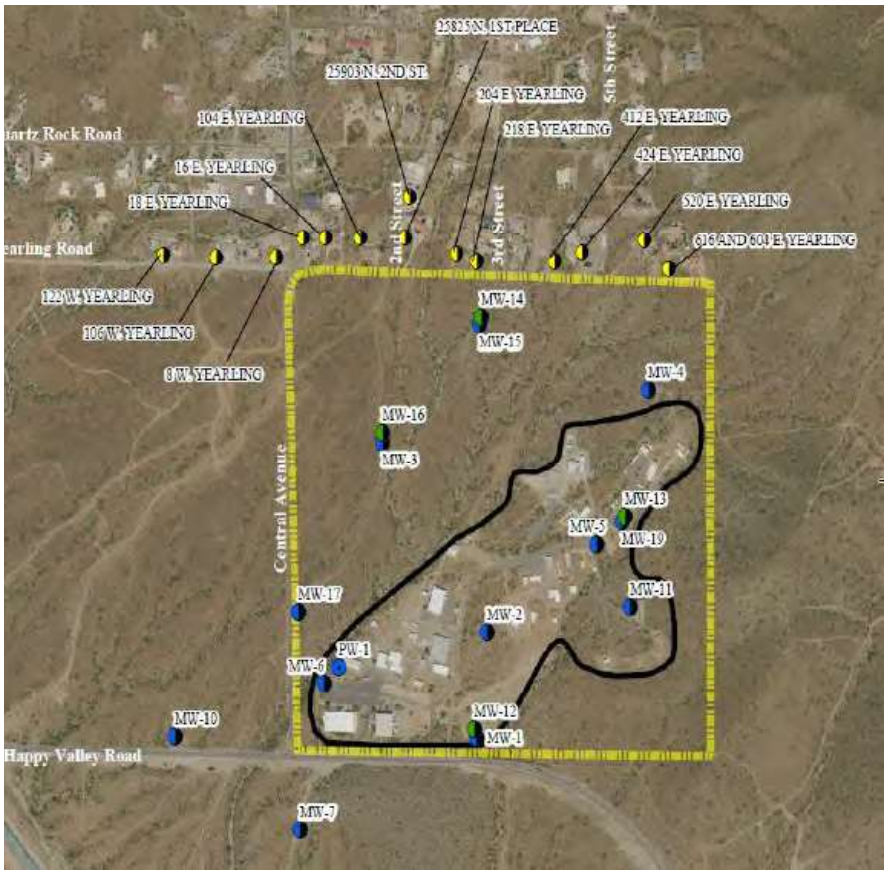


Figure 2: Monitoring Well Locations

4. SUMMARY DETERMINATIONS

As documented in the reports and data on file with ADEQ, the areas of environmental impact at the Site have been defined to be an approximately 57-acre tract located in the south-central portion of the Site. This area is generally depicted in **Figure 2** above as bounded by the black outlined area and labeled "For Non-Residential/Commercial/Industrial Use Only" on **Figure 3**, later in this report. The areas outside these boundaries have been determined not to have been impacted by the COPC's. A detailed summary of the historical environmental investigations and the soil and groundwater sampling and testing that has been completed at the Property is provided in the Environmental Review, dated September 4, 2019 prepared by Geotechnical Testing and Inspections, a copy of which is included as Appendix E: UPCO Environmental Review Summary.



RVi PLANNING + LANDSCAPE ARCHITECTURE

5.D Established Clean-Up Levels

Based upon the extensive soil and groundwater investigations completed at the Site, the identified COPC, the projected future uses of the Site, and the current use of the lands surrounding the Site, ADEQ established the following clean-up levels for the COPC at the Site:

COPC Clean-Up Standard	Concentration
ADEQ established a residential SRL for perchlorate to be protective of direct contact to humans in a residential setting	55 parts per million
Established soil clean-up level at the UPCO facility	***16 parts per million***
Arizona Department of Health Services ("ADHS") established a Heath Based Guidance Level for perchlorate in groundwater to be protective of ingestion by humans in a residential setting	14 parts per billion
Established groundwater clean-up level at the UPCO facility	***14 parts per billion***
ADEQ established SRL for arsenic to be protective of direct contact to humans in a residential setting	10 parts per million
Established soil clean-up level for arsenic at the UPCO facility	***10 parts per million***
ADEQ established SRL for lead to be protective of direct contact to humans in a residential setting	400 parts per million
Established soil clean-up level for lead at the UPCO facility	***290 parts per million***

5.E Remedial Actions

Based on over ten years of detailed monitoring and investigation, ADEQ determined that only discrete areas of the Site contained soil and groundwater contamination above the established clean-up levels. Figure 3 below shows an aerial map of the Site identifying those areas that have been determined not to have been environmentally impacted, or that contain contamination below the established clean-up levels. Such areas are labeled "For Residential Use". Those areas of the Site that have been impacted by the COPC at concentrations above the defined clean-up levels, are labeled "For Non-Residential/Commercial/Industrial Use Only".

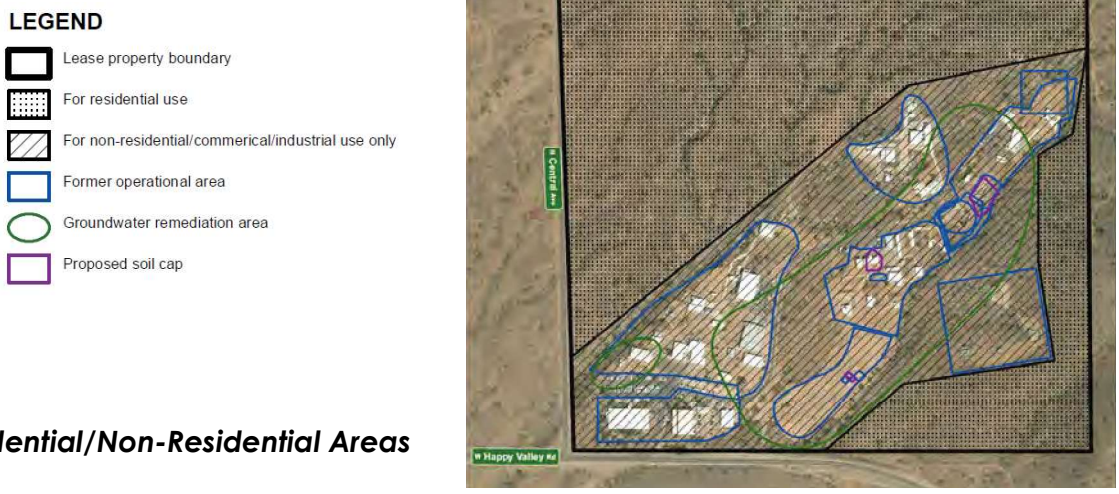


Figure 3: Residential/Non-Residential Areas

In order to ensure future land uses and development of the Site are in compliance with these defined area requirements, ADEQ and UPCO entered into a Declaration of Environmental Use Restriction for Properties with Institutional Controls ("First DEUR"), which was recorded upon the Site in 2018. This First DEUR; (i) requires any owner of the Site to provide prospective purchasers with notice of the prior use of the land and the presence of COPC upon portions of the Site; and (ii) establishes limitations and controls upon the use of groundwater and the installation of wells upon the Site. These restrictions upon the use of groundwater on the Site significantly limit the risk that any human will be affected by contaminated groundwater. Additionally, in January of 2020, a Second Declaration of Environmental Use Restrictions for Property with Institutional and Engineering Controls ("Second DEUR") was recorded against the Property. The Second DEUR accomplishes several things, including; (i) establishing additional engineering and institutional controls related to the approved remedial actions upon that portion of the Property determined to have been environmentally impacted; (ii) assigning long-term financial responsibility for remedial actions; and (iii) conclusively establishing which portions of the Property are acceptable for residential uses, and which portions of the Property are restricted for "Non-Residential/Commercial/Industrial Use Only", as shown in Figure 3 above. Copies of the First DEUR and Second DEUR are attached herein as Appendix A: 1ST DEUR and Appendix B: 2ND DEUR, respectively.

Further, since the completion of the Remedial Investigations in 2011, UPCO and ADEQ have developed and approved remedial action plans for the clean-up of those limited areas of property that have had soil and/or groundwater impact by the COPC's. These remedial actions plans are summarized in a Corrective Measures Study, dated October 30, 2015, prepared by Arcadis. Subsequent to the approval of the Corrective Measures Study and the final design and implementation plans for the approved remedial action processes, UPCO has implemented the Soil Alternative SA-2 remedial action to excavate and transport for off-site disposal much of the impacted soil, as well as construct engineered soil caps in the Waterbore Area, the C-Complex Area and the New Burn Area to reduce the future potential for contact with COPC's in these areas. Additionally, UPCO has installed the ADEQ approved groundwater treatment system which provides for the extraction, treatment and reinjection of groundwater to remove the COPC's from the defined area of groundwater impact. This groundwater treatment system will continue in operation, along with periodic sampling and testing of the groundwater from the existing monitoring wells across the Site, until such time as ADEQ determines that the levels of the COPC on the non-residential portions of the Site have reached the appropriate clean-up levels. Based upon the information obtained from the ADEQ records, as of the writing of this report all of these corrective action measures have been implemented and are fully operational or in the final phases of operational testing.



5.F Additional Verification Testing

To further verify the environmental conditions of the soil located within the northern portion of the Site proposed for use as a single family development, the developer had completed a Limited Phase II Study which included shallow soil exploration and testing, which work was completed in October, 2019. The scope of work for this Limited Phase II Study included drilling ten discrete soil borings across the proposed residential land area and obtaining 20 separate soil samples ranging in depths from 2 to 15 feet below ground surface, with the location of these soils boring shown on the next page in Figure 4. These soil samples were analyzed by a certified laboratory for RCRA metals, using EPA Method 6010C, and for Perchlorate, using EPA Method 314.0.

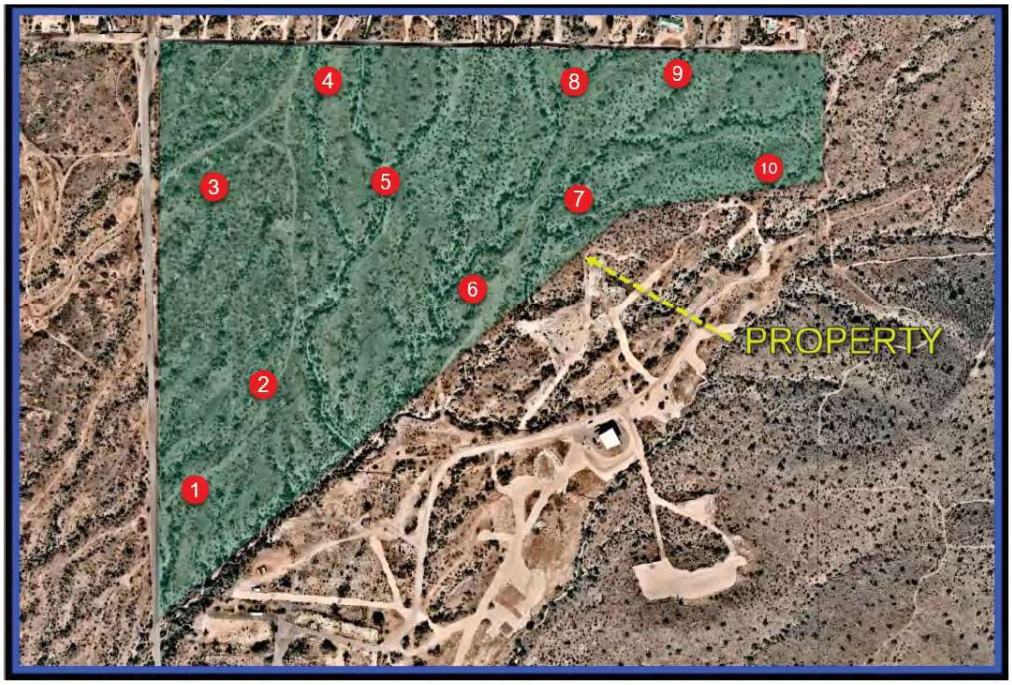


Figure 4: Limited Phase II Study Soil Borings

The results of the soil sampling and testing from the Limited Phase II Study conducted in October 2019 are shown below in Figure 5, all of which indicate concentrations of RCRA metals and/or perchlorate well below the established Arizona Residential Soil Remediation Levels (SRL).

Sample ID -Depth (ft)	Barium* (SRL 15,000)	Chromium* (SRL 120,000)	Lead* (SRL 400)	Perchlorate* (SRL 55)	Concern Yes / NO
B1-2'	140	31	7.7	ND	NO
B1-4'	130	26	7.9	ND	NO
B2-5'	120	17	4.6	0.011	NO
B2-7'	120	16	3.4	ND	NO
B3-2'	130	29	7.1	ND	NO
B3-6'	92	23	4.9	ND	NO
B4-5'	99	30	5.2	ND	NO
B4-10'	78	12	3.1	ND	NO
B5-7'	79	13	3.5	ND	NO
B5-11'	83	18	2.8	ND	NO
B6-7'	150	25	5.8	0.011	NO
B6-10'	120	19	4.7	ND	NO
B7-2'	120	18	5.4	0.041	NO
B7-5'	150	17	2.9	0.021	NO
B8-2'	210	12	4.2	ND	NO
B8-4'	270	13	4	ND	NO
B9-5'	110	7.6	13	ND	NO
B9-7'	93	7.1	11	ND	NO
B10-5'	120	12	3.1	ND	NO
B10-7'	120	3.4	4.7	ND	NO

All results are reported in milligrams per kilogram (mg/kg) which is equal to parts per million (ppm) -ND = Non Detect.

Figure 5: Limited Phase II Study Soil Analytical Results

5.G ADEQ Additional Testing

At the request of concerned neighbors, ADEQ initiated an additional confirmatory sampling program to be conducted by Matrix New World Engineering under the direct guidance of ADEQ. This ADEQ sampling program was initiated in February 2020 and includes a comprehensive soil sampling protocol over all areas of the Site that could be developed for future residential uses. The scope of work for this ADEQ confirmatory sampling program includes establishing a 400 ft x 400 ft grid over the proposed residential use areas and collecting both discrete and composite soil samples from this established grid pattern from the surface and depths of approximately 5 feet below the surface. This additional testing resulted in the collection and testing of 256 samples across the established grid pattern. A map of the proposed sampling grid is shown below in Figure 6. The collected samples will be analyzed for perchlorate using EPA Method 314.0.

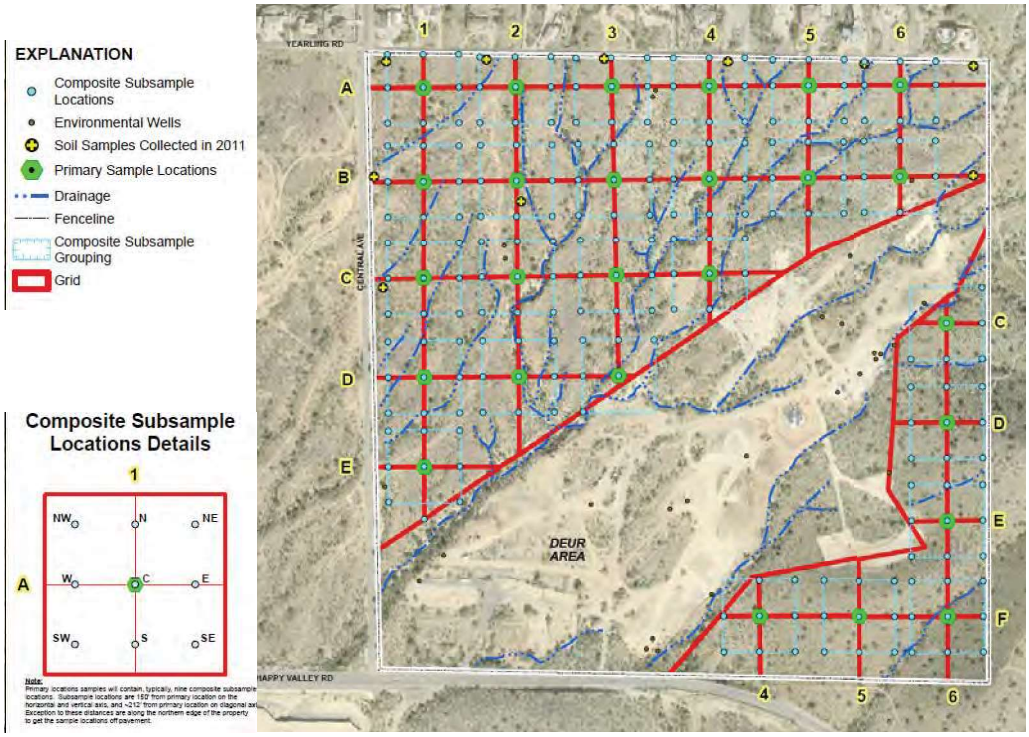


Figure 6: ADEQ Confirmatory Sampling Grid

ADEQ and its contractor completed the field work and sample collection in late February 2020. Based upon this additional soil sampling and analytical testing, no portion of the Property which is proposed for residential development was found to contain Perchlorate or other COPC's above any SRL. The definitive conclusion of this additional ADEQ testing is that "no further investigation is necessary". A copy of the report documenting this ADEQ additional soil testing is attached hereto as **Appendix F: ADEQ Soil Sampling Report**.

5.H Conclusions

Upon review of this information it was determined that operations conducted by UPCO at the Site caused soil and groundwater contamination by three (3) primary COPC in isolated areas of the Site. The responsible parties have been identified and ADEQ is working with them to remediate any existing contamination that is still present today. The contaminated soil from the impacted areas of the Property has been excavated from the site, and concrete caps have been put in place to contain any remaining contaminants. The monitoring wells located on the Site are still active and being monitored by the required parties. Based upon the historical groundwater testing and data collection at the Site the regional groundwater gradient is toward the southwest and away from the existing residences north of the northern boundary line of the Site. DEUR's have been established and recorded on the Site to limit land uses, restrict the drilling of wells and/or the use of any groundwater on the Site, and

provide record notice to all future prospective purchasers of the environmental history of the Site. The prior remedial investigations have established well-defined areas of limited environmental impact and the DEUR's will ensure continuous oversight and completion of the groundwater remediation in accordance with the ADEQ approved corrective action plans.

Based upon the information contained within the ADEQ files, the clean-up levels for the COPC across the entire Site have been established at or well below the ADEQ or ADHS levels mandated to protect human contact. The private wells to north of the Property have been tested for COPCs and the results indicated concentrations far below applicable action levels. All portions of the Property designated for residential development have undergone extensive testing including soil, soil vapor, and groundwater testing. All results have been below ADEQ clean-up levels for the Property, many of which are significantly more stringent than ADEQ's established action levels. As a result, ADEQ has determined that the proposed residential areas do not present a threat to future occupants. Additionally, since the established DEUR upon the Site prevents the use of groundwater for any of the future developments upon the Site, it is unlikely that future residents will come into contact with groundwater contaminants.

The ADEQ records demonstrate that extensive investigation and testing has been conducted at the Site. Based on all this information, laboratory analysis and on-going remedial activities at the Site, there is a clear delineation between the environmentally impacted portions of the Site and those that were not impacted by the prior UPCO operations and are acceptable for residential development. Corrective action has been and continues to be implemented for those limited areas that contain contamination above target clean-up levels. The prior investigations of the Site, and the on-going corrective actions implemented as a result, have been completed in accordance with professional industry practices and under the scrutiny of ADEQ. These investigations have resulted in the establishment of site-specific clean-up levels that are commensurate with – or in many cases, significantly more stringent than – those established by the relevant state regulatory agencies. Currently, all areas of the Site approved for residential development meet or exceed these stringent clean-up levels.

Further based upon all the information and data collected over many years of investigating the environmental conditions of the Site, the following statements can be made:

- ADEQ has established a Residential Soil Remediation Level ("SRL") for perchlorate to be protective of direct contact to humans in a residential setting at 55 parts per million ("PPM"). Based upon all the investigation and testing at the UPCO facility a clean-up level of 16 PPM has been established for the UPCO facility, thus setting a clean-up level at the UPCO facility three times (3X) more stringent than the regulatory clean-up level.

- Based upon the reports and tests within the ADEQ files, on those portions of the Site proposed for residential use, no perchlorate was discovered at concentration levels above the laboratory detection limit of 0.04 PPM. The laboratory detection limit is 1,375 times lower than the Residential SRL established by ADEQ of 55 PPM to be protective of direct contact with humans in a residential setting and 400 times lower than the site-specific clean-up standard established by ADEQ for the UPCO facility of 16 PPM.

- The Arizona Department of Health Services ("ADHS") has established a Heath Based Guidance Level for perchlorate in groundwater to be protective of ingestion by humans in a residential setting at 14 parts per billion ("PPB"). Based upon all the investigation and testing at the UPCO facility a remedial action goal of 14 PPB has been established for the UPCO facility, thus meeting the Health Based Guidance Level established by ADHS.

- Based upon the reports and tests within the ADEQ files, the highest concentration of perchlorate in the groundwater under the portion of the Site proposed for residential use was 2.6 PPB, which is more than 5 times below the ADHS level for perchlorate in groundwater and remedial goal for the UPCO facility.

- The drilling of wells and the use of groundwater for human consumption anywhere on the Site is prohibited by the Declaration of Environmental Use Restriction recorded upon the Site.
- Based upon the historical groundwater testing and data collection at the Site the regional groundwater gradient (direction of flow) is toward the southwest and away from the existing residences north of the northern boundary line of the Site.
- ADEQ has established an SRL for arsenic and lead to be protective of direct contact to humans in a residential setting at 10 PPM and 400 PPM, respectively. Based upon all the investigation and testing at the UPCO facility, a remedial action goal of 10 PPM has been established for arsenic and 290 PPM for lead, thus establishing a clean-up level at the UPCO facility equal to or more stringent than ADEQ's normal clean-up level.
- Based upon the reports and tests within the ADEQ files, all surface soil tested within those portions of the Site proposed for residential development resulted in concentrations of arsenic and lead that was below the established ADEQ residential SRL. It is also noteworthy that arsenic is a common and naturally occurring element in Arizona soils.
- UPCO has designed and implemented soil and groundwater corrective actions for those limited portions of the Site that were determined to have been environmentally impacted, all of which have been reviewed and approved by ADEQ.

SECTION 6: LAND USE PLAN

The Central Foothills development will include a planned single family residential community within Parcel 1 allowing for a maximum density of 3.2 du/ac. Parcel 2, the central portion of the site, will be developed with Commercial and Commerce/Business Park uses, as prescribed by the applicable DEUR's. Parcel 3, the southeastern portion of the Site, is being proposed for medium density uses with a maximum density of 5 du/ac. These three development parcels are defined on **Exhibit 6: Master Development Parcel Map**.

The proposed development plan for the Site provides a conceptual site layout for Parcel 1, including landscape setbacks along the Site's perimeter, and edge treatment conditions along the Sonoran Preserve boundary, as well as the proposed land uses for Parcels 2 and 3. Detailed site plans for Parcels 2 and 3 will be submitted and reviewed through the City's Site Planning Submittal process in the future as these separate parcels are developed. See **Exhibit 7: Conceptual Development Plan**.

6.A Proposed General Plan

Concurrent with this PUD Application, a minor General Plan Amendment application (case number GPA-DV-2-19-2) has been filed with the City of Phoenix. This application seeks to modify the General Plan Land Use designation on the subject Site as follows (see **Exhibit 8: Existing General Plan Map**):

Existing Land Use Designations:

- 0 to 1 du/acre – Large Lot, 1 to 2 du/acre – Large Lot, and Parks/Open Space – Publicly Owned (mixed)
- Future Parks/Open Space or 1 du/acre
- Commerce/Business Park

The applicant is proposing to generally maintain the land use designations on the Site but seeks to reorient the distribution of the land use designations and increase the proposed overall residential density slightly so as to enable the Site to develop successfully in the current market. The proposed General Plan reflects a reduction in the size of the Commerce Park/Business Park designation by approximately 30 acres and proposes to increase the amount of land designated for residential uses and the overall allowed density of the residential area. See **Exhibit 9: Proposed General Plan Map**.

The existing Commerce/Business Park land use designation will be reduced by approximately 20% of the overall site area and will be restricted to the southern portions of the Site away from existing residential uses. The proposed amendment is quantified in **Table 4** as follows:

Table 2: General Plan Land Use Comparison

Existing General Plan			Proposed General Plan		
Land Use	Area	Percent	Land Use	Area	Percent
0 to1 & 1 to 2 du/ac - Large Lot & Parks/ Open Space	33.3 Ac	21%	2.0 to 3.5 du/ac - Traditional Lot	78.3 Ac	50%
Commerce/Business Park	87.2 Ac	55%	Commerce/Business Park	56.8 Ac	36%
Future Parks/Open Space or 1 du/acre	36.4 Ac	23%	3.5 to 5 du/ac -Traditional Lot	21.8 Ac	14%

*For detailed demonstration of General Plan Conformance, see **Appendix G: General Plan Conformance**.*



6.B Development Parcels

1. PARCEL 1 – PLANNED RESIDENTIAL COMMUNITY

The northernmost portion of the Site includes approximately 78.3 acres that is outside of the defined non-residential restriction area and is proposed for low to medium density residential to allow for a maximum density of 3.2 du/ac outside of the Hillside areas. The permitted density has been calculated according to **Exhibit 10: Slope Analysis Summary** and in conformance with the Hillside Development Ordinance, Section 710 of the Zoning Ordinance, see **Table 5** below:

Table 5: Hillside Density - Parcel 1

	Slope	Density	Acreage	Density x Ac.	# Units
1	10-15	1.8	2.0	3.63	3
2	15-20	1.1	0.7	0.78	0
3	20-25	0.7	1.8	1.28	1
4	25-30	0.5	0.04	0.02	0
5	30-35	0.3	0.3	0.09	0
6	35+	0.2	0.0	0.00	0
Total			**4.9**		**4**

- Total Gross Acreage = ±78.3 ac
- Total Hillside Acreage = ±4.9 ac
- Maximum Density (non-hillside area) = 3.2 du/ac

3.2 du/ac x (78.3 ac – 4.9 ac) = 234.88 (234 lots)

234 lots (non-hillside) + 4 lots (hillside) = **238 lots maximum**

Two lot sizes are proposed for the community to provide diversity of design and development. The smaller lots will have typical dimensions of 45' wide by 110' deep, and the larger lots will have typical dimensions of 55' by 120' deep. The planned community will have two vehicular access points off Central Avenue. The primary entry is located approximately 1,600 feet north of the intersection of Central Avenue and Happy Valley Road.

The conceptual site plan for the residential community on Parcel 1 is sensitive to the topography and the major washes that cross the Site. These washes will be preserved as much as possible and any areas that need revegetation will be planted with salvaged plant materials first. Hillside areas in the northeastern corner of the Site are intended to remain undisturbed. A central amenity area is proposed within the community that shall include, but is not limited to, a small community center with play structures, shaded seating areas and a usable turf area. This area will also serve as a hub for a community path and trail network that will link to various open spaces throughout the Site. Smaller community open space areas will provide for additional active and passive recreational opportunities. All homes within the community are located within walking distance of this open space network.

Homesites along the southern edge of the community have been set back from the parcel perimeter, in part utilizing the existing natural washes traversing the Site, to provide an open space buffer to the planned Commerce/Business Park uses within Parcel 2. A significant landscape/hardscape buffer is proposed along the northern boundary of the Site to create a meaningful separation from the existing County residences north of Yearling Road. However, the actual building-to-building separation from these existing residences will be even larger, in some places in excess of 150 feet. Additionally, the number of lots adjacent to this boundary has been reduced from the original proposed development plan in response to requests from the adjoining landowners. The streets within the community will be private and will comply with City of Phoenix standards for private accessways with a minimum 5-foot sidewalk on both sides for an overall tract width of 40 feet. Sidewalks within Parcel 1 will be attached at back-of-curb adjacent to residential lots but will be detached with an 8-foot landscape area where adjacent to common open space greater than 40 feet in length and 10 feet in width, see **Figure 7** below. See **Exhibit 11: Parcel 1 Sidewalk Plan** for specific locations of attached and detached walks.

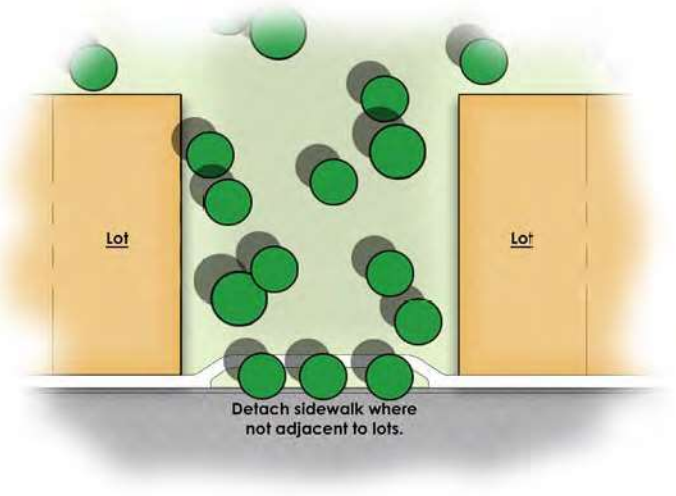


Figure 7: Sidewalk Detachment Example

2. PARCEL 2 – COMMERCE PARK

The central parcel within the overall Site is approximately 56.8 acres and is proposed for non-residential uses. In conformance with the existing General Plan land use designation, this zoning request proposes a Commerce/Business Park designation for this parcel. Primary vehicular access to the Commerce/Business Park parcel is proposed from Happy Valley Road through a site driveway that is approximately 660 feet east of the Central Avenue and Happy Valley Road intersection. Additional secondary driveways are proposed on Happy Valley Road and Central Avenue. Allowed uses include a list of uses selected from the C-1 District and Commerce Park District, and features development standards based on those for both districts. This application does not propose to increase the allowed height or floor area ratio development standards above the City standards for Commerce Park uses.

3. PARCEL 3 – MEDIUM DENSITY RESIDENTIAL COMMUNITY

The parcel in the southeastern portion of the Site is comprised of approximately 21.8 acres and is planned for medium density residential with a maximum of 5 du/ac or senior living uses. The permitted density has been calculated according to Exhibit 10: Slope Analysis Summary and in conformance with the Hillside Development Ordinance, Section 710 of the Zoning Ordinance, see **Table 6** below:

Table 6: Hillside Density - Parcel 3

	Slope	Density	Acreage	Density x Ac.	# Units
1	10-15	1.8	5.1	9.20	9
2	15-20	1.1	5.3	5.79	5
3	20-25	0.7	5.9	4.14	4
4	25-30	0.5	2.5	1.23	1
5	30-35	0.3	1.5	0.45	0
6	35+	0.2	0.5	0.11	0
Total			**20.8**		19

- Total Gross Acreage = ±21.8 ac
- Total Hillside Acreage = ±19.9 ac
- Maximum Density (non-hillside area) = 5 du/ac

5 du/ac x (21.8 ac – 19.9 ac) = 9.5 (9 lots)

9 lots (non-hillside) + 17 lots (hillside) = **26 lots maximum**

Development within Parcel 3 will be clustered within the southwestern portion of the parcel preserving areas with steeper slopes. Access to Parcel 3 will be provided through Parcel 2 or from Happy Valley Road when such road is expanded into a major arterial.

6.C Site Access

Access to the Site will be provided from Central Avenue and Happy Valley Roads. Parcel 1 will be accessed from two community entrances located along Central Avenue. The primary entrance is proposed to be a full access intersection located more than 1,600 feet north of the intersection of Happy Valley Road and Central Ave. The secondary entry is also proposed for a full access intersection located more than 660 feet north of the primary entry. In support of the various requests from the County residents to the north and the request of City staff, the developer has agreed to record a 1-foot Non-Vehicular Access Easement ("NVAE") in favor of the City along the entire northern boundary of Parcel 1 to prevent vehicular access onto and development of Yearling Road.

Parcel 2 will gain primary access from Happy Valley Road via a driveway located approximately 660 feet east of the Happy Valley Road and Central Avenue intersection. Secondary limited access driveways for the Commerce/Business Park will be located on Central Avenue and Happy Valley Road at intervals greater than or equal to 330 feet where possible. Access routes to Parcel 3 will be developed based upon the final design and development plans to be approved by the City at time of Site Plan Review.

6.D Project Phasing

The project phasing for Central Foothills will correlate to the parcel divisions. See **Exhibit 11: Project Phaisng Map**. Parcel 1 is anticipated to be the first phase of the development. As a part of the first phase, the entity tasked with developing Parcel 1 will be responsible for the improvement to Central Avenue north of Happy Valley Road. Parcels 2 and 3 may develop as the second and third phases of the development respectively, but either parcel may be developed independent of the other. The entity developing Parcel 2 will be responsible for the improvements on Happy Valley Road east of Central Avenue.

SECTION 7: LIST OF USES

The existing zoning on the subject Site is S-1 (Ranch or Farm Residence). See **Exhibit 12: Existing Zoning Plan**. This request proposes to rezone the Site to a Planned Unit Development (PUD). See **Exhibit 13: Proposed Zoning Plan**. In coordination with the PUD zoning, each parcel will have customized underlying zoning categories of CF-SFR (Parcel 1), CP PUD (Parcel 2) and R-3 PUD (Parcel 3). Properties adjacent to the Site are vacant or zoned for low density residential within the jurisdiction of Maricopa County.

7.A Proposed Land Uses

The following list of uses defines the Permitted Primary Uses, Permitted Accessory Uses, and Permitted Temporary Uses allowed within each parcel of the Site. The developer(s) of any site within the defined limits of the PUD may request an interpretation of analogous uses to the defined list below from the City of Phoenix Zoning Administrator. The Zoning Administrator may administratively approve a use analogous to those listed below. In addition to the DEUR's, a Special Warranty Deed exists on the Site with additional Covenants, Conditions and Restrictions that prohibit the development of residential uses within the boundaries of Parcel 2, see **Appendix H: Special Warranty Deed**.

1. PARCEL 1 - PLANNED RESIDENTIAL COMMUNITY

a. Legal Description

Being a portion of the southeast quarter of section 5, township 4 north, range 3 east of the Gila and Salt River base and meridian, Maricopa County, Arizona, more particularly described as follows:

Commencing at the brass cap in handhole marking the south quarter corner of said section 5, from which a 1" rebar and illegible cap marking the southeast corner of said section 5 bears, north 89°06'10" west, for a distance of 2564.25 feet;

Thence north 01°09›54» west, along the west line of the southeast quarter of said section 5, for a distance of 477.85 feet to the point of beginning;

Thence continuing north 01°09'54" west, along said west line, for a distance of 2161.03 feet to the northwest corner of the southeast quarter of said section 5, being a brass cap in handhole stamped Maricopa County Department of Transportation;

Thence south 89°07'54" east, along the north line of the southeast quarter, of said section 5 for a distance of 2616.15 feet to the east quarter of section 5, being marked by a 3" metal fence post;

Thence south 00°02'15" east, along the east line of the southeast quarter of said section 5, for a distance of 569.50 feet;

Thence departing from said east line, south 66°31'06" west, for a distance of 747.30' feet;

Thence south 56°23'58" west, for a distance of 2265.39 feet, to the point of beginning.

Said residential parcel 1, contains 78.261 acres, (3,409,038 s.f.) more or less.

b. R1-10 PUD Use List

Permitted Uses

The following uses are permitted in this PUD district in accordance with the regulations and special standards established below.

- Residential Single Family Detached
- Residential Model Home Complex and Sales Office
- Community Clubhouse
- Governmental Uses
- Permitted Uses with Conditions
- Community Residence Home
    a. Such home shall be registered with, and administratively verified by, the Planning and Development Department Director's designee, as to compliance with the standards of this section as provided in Section 701 of the City of Phoenix Zoning Ordinance.
    b. No group home shall be located on a lot with a property line within 1,320 feet, measured in a straight line in any direction, of the lot line of another group home, boarding house, or community residence home or center within a residential zoning district.
    c. A maximum lot coverage of 25 percent.
- Interior Suite with Accessory Cooking Facilities
- Group Home; provided, that not more than ten individuals shall occupy a single dwelling; further, no more than two individuals shall occupy each bedroom; and subject to the following conditions:
    a. Such home shall be registered with, and administratively verified by, the Planning and Development Department Director's designee, as to compliance with the standards of this section as provided in Section 701.
    b. No group home shall be located on a lot with a property line within 1,320 feet, measured in a straight line in any direction, of the lot line of another group home, boarding house, or community residence home or center within a residential zoning district.
- 1—6 Dependent Care Facility

- 1—4 Adult Day Care Home
- Guestrooms
- Public Utility Buildings and Facilities
- Schools, Private

Permitted Accessory Uses

Land in this PUD district may be used as permitted accessory use and structures, incidental to and on the zoning lot as the primary use, for the following uses:

- Community Garden. In accordance with Section 608 of the Zoning Ordinance
- Home Occupations. In accordance with Section 608 of the Zoning Ordinance.

Special Use Permits

A Special Use Permit may be granted by the Council upon recommendation of the Commission to establish the uses listed from Section 608 of the Zoning Ordinance, as follows:

- 5—10 Adult Day Care Home
- Churches/Place of Worship
- Construction Facilities and Storage
- Home Occupations
- Nondaily Newspaper Delivery Service
- Public Assembly—Residential

These uses are subject to the requirements of Section 647 of the Phoenix Zoning Ordinance. All uses herein provided which require the issuance of a Use Permit, shall obtain such required Use Permit in accordance with the standards and procedures of Section 307 of the Zoning Ordinance.

Temporary Use Permits

The Planning and Development Director may issue an administrative Temporary Use Permit upon written request and submission of an application. Any approval is contingent upon Section 708 of the Phoenix Zoning Ordinance, city policy, and written stipulations contained on the permit.

2. PARCEL 2 – COMMERCE PARK (CP PUD)

a. Legal Description

Being a portion of the southeast quarter of section 5, township 4 north, range 3 east of the Gila and Salt River base and meridian, Maricopa County, Arizona, more particularly described as follows:

Beginning at the brass cap in handhole marking the south quarter corner of section 5 from which a 1" rebar and illegible cap marking the southeast corner of said section 5 bears, north 89°06'10" west, for a distance of 2564.25 feet;

Thence north 01°09'54" west, along the west line of the southeast quarter of said section 5, for a distance of 477.84 feet;

Thence departing from said west line, north 56°23'58" east, for a distance of 2265.39 feet;

Thence north 66°31'06" east, for a distance of 747.30 feet to a point on the east line of the southeast quarter of said section 5;

Thence departing from said east line, south 11°36'54" west, for a distance of 452.53 feet;

Thence south 55°50'58" west, for a distance of 284.84 feet;

Thence south 04°47'54" west, for a distance of 665.20 feet;

Thence south 33°45'54" east, for a distance of 262.85 feet;

Thence south 80°18'30" west, for a distance of 734.33 feet;

Thence south 40°12'39" west, for a distance of 576.50 feet to a point on the south line of the southeast quarter of said section 5;

Thence north 89°06'10"" west, along the south line of the southeast quarter of said section 5, for a distance of 1230.28 feet to the point of beginning.

Said non-residential parcel contains 56.778 acres (2,473,228 s.f.) more or less.



b. CP PUD Use List

The list of uses for Parcel 2 includes select uses from the existing permitted uses for the Commercial (C-1) and Commerce Park (CP) zoning categories as shown in Sections 622 and 626 respectively of the City of Phoenix Zoning Ordinance. The uses listed from the C-1 district are restricted and shall only be permitted within 500 feet of the Central Avenue or Happy Valley Road rights of way. All other uses may be located anywhere in Parcel 2 with the exception of Hillside Areas.

Select C-1 Permitted Primary Uses (500' Restriction)

- Adjusters, Insurance
- Adult Day Care Home and Center
- Antique Shop
- Army and Navy Goods, Retail Sales, New
- Art Gallery, Commercial Sales
- Artist Supplies, Retail
- Auctioneer's Office (only)
- Auto Title Loan Establishments, subject to the following limitations:
  a. Shall not be located within 1,320 feet of the same type of use. This distance shall be measured from the exterior walls of the buildings or portions thereof in which the businesses are conducted or proposed to be conducted.
  b. Auto title loan establishments combined with non-chartered financial institutions must meet the spacing requirements of Section 622.D.115.
- Automated Collection Center, subject to the following limitations:
  a. The use shall not be located closer than 75 feet to a residential zoning district.
  b. No processing may occur.
  c. The use shall be incorporated into a closed building.
- Automobile Parts and Supplies, Retail
- Baby Shops
- Bakers and Baked Goods, Retail Sales
- Barbers
- Beauty Shops
  a. Massage therapy, performed by a licensed massage therapist, is permitted as an accessory use subject to obtaining a use permit in accordance with the standards and procedures of Section 307.
- Bicycles, New and Used, Retail Sales and Repairs
- Bingo, subject to a use permit

- Bird Sales, Retail
- Bonding Companies
- Booksellers and Rentals, except adult bookstores
- Braces, Orthopedic, Sales Retail
- Butcher Shops (no slaughtering)
- Camera Shops
- Candy Shops, Retail
- Canvas Goods Sales, Retail
- Caterers
- Charitable Institutions, Offices Only

  a. Bingo may be operated as an accessory use on the premises of the institution for no more than two (2) days a week.

  b. Bingo may be operated on the premises for more than two days a week with a use permit.
- Christian Science Reading Rooms
- Clothing, Retail Sales
- Coin Dealers
- Collection Agencies
- Confectioneries, Retail Sales
- Contractor's Offices
- Costume Rentals
- Crockery Sales, Retail
- Curio Shops
- Dairies, Retail Sales of Products
- Delicatessens
- Delivery Service Office
- Department Stores
- Desks, Sales, Retail
- Detective Agencies
- Draperies, Sales
- Dressmakers, Custom

- Driving Schools, Auto
- Drugs, Retail Sales
- Dry Cleaning Outlet, Not Plants
- Dry Goods
- Electric Light and Power Company Offices
- Electrical Appliances, Retail Sales and Service
- Employment Agencies, not Including Day Labor Hiring and Transportation Centers
- Entertainment Bureaus
- Express Companies, Offices Only
- Family Game Center, subject to a use permit
- Farmers Market, subject to the following conditions:

  a. Obtaining an administrative temporary use permit (ATUP) in accordance with the provisions of Section 708 if no food or beverage is dispensed from a vehicle.

  b. Obtaining a use permit in accordance with the provisions of Section 307 if food or beverage is dispensed from a vehicle.

  c. On-site operational conditions and improvements may be stipulated as a condition of an ATUP or use permit approval.
- Fish Markets, Retail Sales
- Florists, Retail Sales
- Freight Traffic Service Offices
- Furnaces, Display and Sales, Retail
- Furniture, Display and Sales, Retail
- Furs, Retail Sales and Repairing
- Gas Appliances, Retail Sales and Service
- Gas Companies' Offices
- Gift Shops
- Groceries, Retail Sales
- Hardware, Retail Sales (New)
- Hat Cleaners and Renovators
- Health Food Products, Retail Sales
- Heating and Ventilating Sales, Retail

- Hemstitching
- Hobby Goods Stores
- House Furnishings, Retail Sales
- Ice, Package, Sales
- Ice Cream Shops
- Imported Goods, Retail Sales
- Indexing Systems and Supplies, Retail Sales
- Indian Goods, Retail Sales
- Interior Decorators, Display, Retail Sales and Fabrication, Custom
- Jewelers, Retail Sales and Repairs, Gem Stone Repair and Cutting
- Labor Unions, Offices
- Laboratories, Clinical and Dental
- Laundries, Collecting Shops
- Laundries, Self-Help, Hand
- Lawn Furniture, Retail Sales
- Libraries, Private, Rental
- Linens, Retail Sales
- Linoleum Sales, Retail
- Liquor, Package Retail Sales, subject to the following conditions or limitations:

  a. Package liquor sales as a primary use or as an accessory use to a convenience market shall require a use permit in accordance with the standards and procedures of Section 307 if the lot or parcel on which the use is conducted is less than three hundred (300) feet from a residential district, including undeveloped or residentially developed R-5 property. The use permit shall specifically address noise from the use, including parking lot noise, screening of lighting from vehicle headlights and light standards on site, parking access, and access to adjacent neighborhoods but shall not address issues which are the purview of the Arizona Department of Liquor Licenses and Control, such as the number of liquor licenses in the area. Package liquor sales as an accessory use to other uses shall not require a use permit.

  b. Drive-through windows for sale of alcohol shall be located at least three hundred (300) feet from a residential district, including undeveloped or residentially developed R-5 property, and shall have primary access to a major arterial or arterial street.

  c. Retail sales of liquor as an accessory use shall be subject to the following conditions:

     (1) Selling and display space for alcoholic beverages shall be limited to a maximum of twenty percent (20%) of total selling space.

(2) All displays of alcoholic beverages shall be located a minimum of five (5) feet from the entrance to the primary use.

- Lunch Rooms
- Magazines, Retail Sales, except adult bookstores
- Market, Stock and Bond
- Merchandise Brokers Office and Display
- Messenger Service
- Milk Distributing Stations, Retail
- Milliners, Custom and Retail Sales
- Motor Freight Co., Offices Only
- Musical instruments, equipment and related products, including but not limited to sound systems, retail sales, and used sales, rentals and repairs as accessory uses.
- Needlework
- Newspaper Advertising Sales Office
- Non-chartered Financial Institutions, subject to the following limitations:

  a. Shall not be located within 1,320 feet of the same type of use or an auto title loan establishment. This distance shall be measured from the exterior walls of the buildings or portions thereof in which the businesses are conducted or proposed to be conducted.

  b. Shall not be located within 500 feet of a residential use. This distance shall be measured from the exterior walls of the building or portion thereof in which the business is conducted or proposed to be conducted to the parcel boundary of the residential use.

- Newspaper Distribution Center with management offices, subject to the following limitation:

  a. A use permit shall be obtained in accordance with the standards and procedures of Section 307.

- Notions, Retail Sales
- Novelties, Retail Sales
- Nut Shop
- Office Furniture Equipment and Supplies, Retail Sales and Showroom
- Offices
- In conjunction with office complexes with a gross leasable area of fifty thousand

(50,000) square feet or more, a conference and reception center and health/recreation facilities may be established, provided the following requirements are met:

a. Access to the site is to be an arterial or collector street as defined on the street classification map.

b. Sales of alcoholic beverages permitted as an accessory use to a conference and reception center upon compliance with the following conditions:

(1) The securing of a use permit from the Zoning Administrator or Board of Adjustment.

(2) Approval by the Zoning Administrator or the Board of Adjustment of a specific floor plan for the area in which alcohol is to be served.

(3) All alcoholic beverages shall be sold only for consumption on the premises.

c. Outdoor dining permitted as an accessory use to a conference and reception center upon compliance with the following conditions:

(1) The securing of a use permit from the Zoning Administrator or Board of Adjustment.

(2) Approval by the Zoning Administrator Board of Adjustment of a plan indicating the area for outdoor dining.

(3) All alcoholic beverages shall be sold only to patrons seated at tables and only for consumption on the premises. No outdoor bars, patron dancing, or live entertainment shall be permitted.

d. The conference and reception center may not exceed twenty percent (20%) of the total gross leasable area of the office complex.

e. A health/recreation facility, which is limited to employees within the office complex, may not exceed ten percent (10%) of the total gross leasable area of the office complex.

- Outdoor Sales of Food Items:

Outdoor sales of food items shall be permitted as an accessory use to retail grocery sales as follows, with no more than one entity selling such items permitted at a time:

a. Outdoor chili roasting, subject to obtaining a use permit under Section 307 and the following limitations:

(1) All roasted chilies sold must be consumed off site.

(2) Sales must be conducted by employees of the retail grocery store.

(3) Sales area must be located within 20' of the front door and not in the parking lot, or as approved by the Zoning Administrator.

(4) Sales limited to the hours of 12:00 noon to 8:00 p.m. each day.

(5) Payment for product must occur indoors.

(6) Employees preparing the food product shall have a food safety permit.

(7) Equipment used for food preparation shall be immobile during operation. Plans for the use of equipment that is fueled by gasoline, propane or similar form of fuel must be approved by the Fire Department.

b. The preparation of food items outdoors, other than roasted chilies, will be permitted for no more than 3 months per year on any site, subject to the following limitations:

(1) All food products sold must be consumed off site.

(2) Sales must be conducted by employees of the retail grocery store.

(3) Sales area must be located within 20' of the front door and not in the parking lot, or as approved by the Zoning Administrator.

(4) Sales limited to the hours of 12:00 noon to 8:00 p.m. each day.

(5) Payment for product must occur indoors.

(6) Employees preparing the food product shall have a food safety permit.

(7) Equipment used for food preparation shall be immobile during operation. Plans for the use of equipment that is fueled by gasoline, propane or similar form of fuel must be approved by the Fire Department.

c. The sale of packaged food items that are not prepared on site shall be permitted for no more than 3 months on any site, subject to the following limitations:

(1) Sales shall be limited to nonprofit organizations or other recognized community entities raising funds for non-personal purposes. No sales by individuals or for personal gain shall be permitted.

(2) Sales limited to the hours of 8:00 a.m. to 10:00 p.m. each day.

(3) Sales areas shall be limited to the private walkway areas adjacent to the building and not in the parking lot.

(4) Sales must be conducted with written permission of grocery store owner or his duly designated representative. No direct light, sound, smoke or odor caused by any food processed or sold on site shall be broadcast beyond the property boundaries. The outdoor sales operation shall not be visible from any adjacent residential area.

- Paint and Varnish, Retail Sales
- Painting Equipment and Supplies, Retail Sales
- Parking Lots, Customer (Section 702)
- Pet Day Care Facility, Indoor Only, subject to the following limitation:

  a. Operation shall be limited to the hours between 6:00 a.m. and 10:00 p.m.

  b. The average noise level, measured at the property line, shall not exceed fifty-five dBa

- Pet Day Care Facility, With Outdoor Accessory Uses, subject to the following limitations:

a. A use permit shall be obtained in accordance with the standards and procedures of Section 307.

b. Shall be constructed so that direct unaccompanied access by animals to outside areas of the buildings is not allowed.

c. Animals must be accompanied by a facility employee or pet owner at all times when outside the building. All walks and exercise periods must take place on facility grounds.

d. When located adjacent to a residential district, every building and every outdoor animal exercise run shall be set back at least one hundred feet from any lot line abutting such residential district.

e. A solid masonry wall or fence seven feet in height shall be constructed along the perimeter of all outdoor runs unless otherwise restricted in this Ordinance.

f. Solid waste shall be removed from outdoor exercise areas every five hours at a minimum during time periods when these areas are in use.

g. The average noise level, measured at the property line, shall not exceed fifty-five dBa

h. Operation shall be limited to the hours between 6:00 a.m. and 10:00 p.m.

i. Some review period of the use permit may be established should a neighborhood protest occur at the use permit hearing.

- Pet Care Facility, subject to the following limitations:

a. A use permit shall be obtained in accordance with the standards and procedures of Section 307.

b. Shall be constructed so that direct unaccompanied access by animals to outside areas of the buildings is not allowed.

c. Animals must be accompanied by a facility employee or pet owner at all times when outside the building. All walks and exercise periods must take place on facility grounds.

d. When located adjacent to a residential district, every building and every outdoor animal exercise run shall be set back at least one hundred feet from any lot line abutting such residential district.

e. A solid masonry wall or fence seven feet in height shall be constructed along the perimeter of all outdoor runs unless otherwise restricted in this Ordinance.

f. Solid waste shall be removed from outdoor exercise areas every five hours at a minimum during time periods when these areas are in use.

g. The average noise level, measured at the property line, shall not exceed fifty-five dBa

- Pet Grooming

- Pet Shops, Retail Sales Only
- Pharmacy
- Philatelist (Stamps)
- Phonograph Records, Sales, Retail
- Photographers, Commercial Studios
- Photographic Equipment and Supplies, Retail Sales
- Picture Framing, Custom
- Pipe Line Companies, Offices Only
- Plant Nurseries (permitted as an outdoor use subject to a use permit)
- Pottery, Retail Sales
- Private clubs, lodges and community organizations qualifying by law as a nonprofit entity which may conduct activities open to the public and may have their facilities available to the public for functions not involving members, with access from an arterial or collector street as designated on the Street Classification Map, subject to the following conditions or limitations:

  a. Music or entertainment shall be permitted subject to the following regulations:

     (1) The stage or performance area shall be a maximum of 80 square feet unless a use permit is obtained pursuant to Section 307.

     (2) The noise level, measured at any point on the received property, shall not exceed 55 dBa unless a use permit is obtained. An occurrence where the sound level increases up to 60 dBa for five continuous seconds or less shall not be deemed a violation of this section as long as there are no more than five occurrences within an hour-long interval.

     (3) Nothing in this section shall be construed to include an adult use.

  b. Patron dancing shall be permitted only upon securing a use permit pursuant to Section 307.

  c. Outdoor recreation uses, outdoor dining, and outdoor alcoholic beverage consumption shall be permitted as accessory uses only upon securing a use permit, if within 500 feet of a residential district zoning line. This distance shall be measured from the exterior wall of the building or portion thereof in which the business is conducted, or proposed use is to be conducted closest to the residential district zoning line.

  d. Any bar or cocktail lounge which exceeds 5,000 square feet in gross floor area and is located on a lot or parcel within 300 feet of a residential district shall be permitted only upon securing a use permit. This distance shall be measured from the exterior wall of the building or portion thereof in which the business is conducted, or proposed use is to be conducted closest to the residential district zoning line.

e. Outdoor food preparation and cooking shall be permitted as an accessory use subject to the following conditions:

(1) Securing a use permit pursuant to Section 307.

(2) The regularly used cooking area inside the establishment shall be of equal or greater size than the outdoor cooking area.

(3) The outdoor cooking area shall be located within 50 feet of a building entrance from where the restaurant is operated. This distance shall be measured from the appliance in the outdoor cooking area closest to the building entrance from where the restaurant is operated.

(4) The outdoor cooking area shall be set back a minimum of 300 feet from a residential district. This distance shall be measured from the appliance in the outdoor cooking area closest to the residential district zoning line.

- Publicity Service
- Publishers' Offices
- Radio and Television, Retail Sales and Service
- Railroad Agents
- Range and Stoves, Retail Sales and Service
- Refrigerators, Retail Sales and Service
- Rug Sales
- Second Hand or Used Merchandise Sales, subject to the following conditions or limitations:

a. No merchandise shall be received and/or processed for sale at another site; and

b. That no such use is located on a lot with a property line within 1,320 feet, measured in a straight line in any direction, of the lot line of another such use regardless of the zoning district.

c. A use permit shall be obtained in accordance with the standards and procedures of Section 307; and

d. The applicant shall provide the following additional information in conjunction with the use permit application:

(1) A survey of second hand or used merchandise sales uses within one mile of the proposed location shall be provided on a form provided by the Planning and Development Department and approved prior to submittal for a change of use to the second hand or used merchandise facility.

(2) Evidence that notice of the date, time, place and nature of the request has been sent by first class mail to each real property owner, as shown on the last assessment of the property, within 300 feet of the subject property.

(3) Evidence that notice of the date, time, place and nature of the request has been

sent to all homeowners' associations registered with the City located within one mile of the subject property.

(4) It shall be the responsibility of the applicant to comply with the provisions of Section 622.D.154, and to provide the City with evidence of such compliance pursuant to Section 622.D.154.b. Failure to comply with these provisions shall be grounds for revocation of the use permit.

- Self-Service Laundry
- Sewing Machines, Household Sales and Service
- Shoe Repairing
- Sporting Goods, Retail Sales
- Stamp Dealers
- Stationers, Retail Sales
- Surgical Supplies, Retail Sales
- Tailors, Custom
- Tanning Salon

  a. Massage Therapy, performed by a licensed massage therapist, is permitted as an accessory use, subject to obtaining a use permit in accordance with the standards and procedures of Section 307.

- Tapestries
- Tea Room
- Temporary Environmental Remediation Facilities subject to a use permit if within 300 feet of residential zoning districts. Screening will be required and cannot be chain link or chain link with slats.
- Tents and Awnings, Retail Sales
- Theatrical Agencies
- Toys, Retail Sales
- Travel Bureau
- Vacuum Cleaners, Retail Sales
- Variety Stores, Retail
- Veterinary Offices, Indoors, subject to the following stipulations:

  a. They shall be so constructed and operated as to prevent objectionable noise and odor outside the walls of the office.

b. Keeping or boarding of animals shall not occupy more than 25 percent of the gross floor area of the office.

(1) There shall be no outdoor kennels or runs.

(2) There shall be no direct outside exit from any room containing kennels.

- Veterinary Offices, with outdoor accessory uses, subject to the following limitations:

a. A use permit shall be obtained in accordance with the standards and procedures of Section 307.

b. Shall be constructed so that direct unaccompanied access by animals to outside areas of the buildings is not allowed.

c. Animals must be accompanied by a facility employee or pet owner at all times when outside the building. All walks and exercise periods must take place on facility grounds.

d. When located adjacent to a residential district, every building and every outdoor animal exercise run shall be set back at least 100 feet from any lot line abutting such residential district.

e. A solid masonry wall or fence seven feet in height shall be constructed along the perimeter of all outdoor runs unless otherwise restricted in this section.

f. Solid waste shall be removed from outdoor exercise areas every five hours at a minimum during time periods when these areas are in use.

g. The average noise level, measured at the property line, shall not exceed 55 dBa.

h. Operation shall be limited to the hours between 6:00 a.m. and 10:00 p.m.

i. Some review period of the use permit may be established should a neighborhood protest occur at the use permit hearing.

- Wall Paper, Sales and Display
- Watches, Sales and Repairing



- Weaving, Handicraft, Custom

Select CP Permitted Primary Uses

- Churches or similar places of worship.
- Environmental remediation facility, subject to obtaining a use permit in accordance with the provisions of Section 307 of the City of Phoenix Zoning Ordinance.
- Fabrication and assembly of finished products or subassemblies, so long as the primary use of the property is not the basic processing and compounding of raw materials, or food products.
- Facilities and storage incidental to a construction project when located on the project site. If such facilities or storage are located on a lot or lots other than the project site, then such uses shall maintain the yard requirements of the district upon which they are located and shall be subject to the securing of a use permit.
- Financial institutions. Banks, building and loan associations, brokerage houses, savings and loan associations, finance companies, title insurance and trust companies.
- Medical and dental laboratories.
- Office for general or professional use.
- Offices wherein administrative, clerical or sales services only are rendered, provided that other than regular office books, records and papers used in connection with rendering said office service, no commodity or tangible personal property, either by way of inventory or sample, shall be stored, kept or exhibited in any said office or on the premises wherein the said office is located.
- Public utility buildings and facilities when necessary for serving the surrounding territory. Repair and/or storage facilities, including outdoor, subject to a use permit.
- Research laboratories for scientific research, investigation, testing or experimentation which may include prototype product development.
- Restaurants, subject to the following conditions or limitations:

  a. Sales of alcoholic beverages shall only be permitted as an accessory use subject to securing a use permit which shall include a specific floor plan for the restaurant facility detailing areas where alcohol may be served.

  b. Music and entertainment shall be permitted subject to the following regulations:

     (3) The stage or performance area shall be a maximum of 80 square feet unless a use permit is secured.

     (4) The noise level, measured at any point on the received property, shall not exceed 55 dBa unless a use permit is obtained. An occurrence where the sound level increases up to 60 dBa for five continuous seconds or less shall not be deemed a violation of this section as long as there are no more than five occurrences within an hour-long interval.

(5) Nothing in this section shall be construed to include an adult use.

c. Packaged liquor sales shall be permitted as an accessory use only upon securing a use permit.

d. Outdoor dining, outdoor alcoholic beverage consumption, and outdoor recreation uses shall be permitted as accessory uses only upon compliance with the following conditions:

(6) Securing a use permit.

(7) All alcoholic beverages shall be sold only to patrons seated at tables and only for consumption on the premises. No outdoor bars, patron dancing or live entertainment shall be permitted.

e. No restaurant shall be located closer than 100 feet from a residence district. This distance shall be measured from the exterior wall of the building or portion thereof in which the business or proposed use is to be conducted closest to the residential district zoning line.

f. Patron dancing shall be permitted only upon securing a use permit

- Scientific or research laboratories, including incidental pilot plants in connection therewith.
- Wholesaling
- Warehousing: Not including dead vehicle storage, trucking companies, and moving-storage companies.

Special Use Permits

A Special Use Permit may be granted by the Council upon recommendation of the Commission to establish the uses listed in Section 647.A.1 of the Zoning Ordinance in all districts in which such uses are not otherwise allowed. These uses are subject to the requirements. * of Section 647 of the Phoenix Zoning Ordinance. All uses herein provided which require the issuance of a Use Permit, shall obtain such required Use Permit in accordance with the standards and procedures of Section 307 of the Zoning Ordinance.

Temporary Use Permits

The Planning and Development Director may issue an administrative Temporary Use Permit upon written request and submission of an application. Any approval is contingent upon Section 708 of the Phoenix Zoning Ordinance, city policy, and written stipulations contained on the permit.

3. PARCEL 3 – MEDIUM DENSITY RESIDENTIAL COMMUNITY (R-3 PUD)

a. Legal Description

Being a portion of the southeast quarter of section 5, township 4 north, range 3 east of the Gila and Salt River base and meridian, Maricopa County, Arizona, more particularly described as follows:

Commencing at the brass cap in handhole marking the south quarter corner of section 5 from which a 1" rebar and illegible cap marking the southeast corner of said section 5 bears, north 89°06'10" west, for a distance of 2564.25 feet;

Thence north 01°09'54" west, along the south line of the southeast quarter of section 5, for a distance of 1230.29 feet to the point of beginning;

Thence departing from said south line, north s 40°12'39" east, for a distance of 576.50 feet;

Thence north 80°18'30" east, for a distance of 734.33 feet;

Thence north 33°45'54" west, for a distance of 262.85 feet;

Thence north 04°47'54" east, for a distance of 665.20 feet;

Thence north 55°50'58" east, for a distance of 284.84 feet;

Thence north 11°36'54" east, for a distance of 452.53 feet, to a point on the east line of the southeast quarter of said section 5;

Thence along said east line, south 00°02'15" east, for a distance of 2069.34 feet to the southeast corner of said section 5;

Thence north 89°06'10" west, along the south line of the southeast quarter of said section 5, for a distance of 1333.96 feet to the point of beginning.

Said residential parcel 2 contains 21.816 acres, 950,283 s.f. more or less.

b. R-3 PUD Use List

Permitted Uses

- The following uses are permitted in this PUD district in accordance with the regulations and special standards established below.
- Single family Attached Dwellings; including townhouses and duplexes
- Multifamily Dwellings; including duplex, triplex, four-plex, and condominiums
- Residential Single Family Detached
- Residential Model Home Complex and Sales Office
- Community Clubhouse
- Governmental Uses
- A minimum of 100 square feet of usable outdoor open space per bed shall be provided.

- Governmental Uses

Permitted Uses with Conditions

- Community Residence Home

  a. Such home shall be registered with, and administratively verified by, the Planning and Development Department Director's designee, as to compliance with the standards of this section as provided in Section 701 of the City of Phoenix Zoning Ordinance.

  b. No group home shall be located on a lot with a property line within 1,320 feet, measured in a straight line in any direction, of the lot line of another group home, boarding house, or community residence home or center within a residential zoning district.

  c. A maximum lot coverage of 25 percent.

- Interior Suite with Accessory Cooking Facilities

- Group Home; provided, that not more than ten individuals shall occupy a single dwelling; further, no more than two individuals shall occupy each bedroom; and subject to the following conditions:

  a. Such home shall be registered with, and administratively verified by, the Planning and Development Department Director's designee, as to compliance with the standards of this section as provided in Section 701.

  b. No group home shall be located on a lot with a property line within 1,320 feet, measured in a straight line in any direction, of the lot line of another group home, boarding house, or community residence home or center within a residential zoning district.

- 1—6 Dependent Care Facility

- 1—4 Adult Day Care Home

- Guestrooms

- Public Utility Buildings and Facilities

- Schools, Private

Permitted Accessory Uses

- All permitted Accessary Uses as outlined in accordance with Section 608 of the Phoenix Zoning Ordinance

- Leasing, manager's or project office

- Community clubhouse building, exercise and/or amenity room

Special Use Permits

A Special Use Permit may be granted by the Council upon recommendation of the Commission to establish the uses listed from Section 608 of the Zoning Ordinance, as follows:

- 5—10 Adult Day Care Home
- Churches/Place of Worship
- Construction Facilities and Storage
- Home Occupations
- Model Homes and/or Subdivision Sales Office
- Nondaily Newspaper Delivery Service
- Public Assembly—Residential

These uses are subject to the requirements of Section 647 of the Phoenix Zoning Ordinance. All uses herein provided which require the issuance of a Use Permit, shall obtain such required Use Permit in accordance with the standards and procedures of Section 307 of the Zoning Ordinance.

Temporary Use Permits

The Planning and Development Director may issue an administrative Temporary Use Permit upon written request and submission of an application. Any approval is contingent upon Section 708 of the Phoenix Zoning Ordinance, city policy, and written stipulations contained on the permit.

SECTION 8: DEVELOPMENT STANDARDS

8.A Development Standards

The following standards are established for yard, height and area requirements intended to promote sensitivity to adjacent properties and provide an appropriate transition between neighboring land uses. The total number of dwelling units shall not exceed 364 for the overall site area (Parcels 1 and 3). See **Exhibit 15: Comparative Development Standard Tables**.

Table 7: Parcel 1 – R1-10 PUD Development Standards

	Proposed R1-10 PUD
Min. Lot Area	5,000 SF
Min. Lot Width	45'
Min. Lot Depth	None
Max. Dwelling Unit Density	3.2 du/ac
Max. Number of Lots	238 (4 hillside)
Max. Lot Coverage(1)	50% (Calculated w/ PRD method)
Max. Building Height	2-stories/30'
Min. Common Area	30% of net parcel area
Min. Perimeter Building Setbacks	
Property Boundary Side Rear	 10' 1-story/15' 2-story 15' 1-story/20' 2-story
Perimeter Streets	15'
Min. Common Landscape Setback	
Perimeter Street ROW	15' avg./10' min.
Min. Interior Building Setbacks	
Front	10'
Garage(2)	18' from back of sidewalk
Rear	None
Side (street(3))	10'/5' with tract
Side (internal)	5'
Street Standards	**Private Accessways**

(1) As defined by the City of Phoenix Zoning Ordinance (Sec. 202) for "Lot Coverage, Planned Residential Development."

(2) Garage setback may be reduced to 10' for side-loaded garages.

(3) Either public or private streets

Table 9: Parcel 2 – CP PUD Development Standards	
	Proposed CP PUD
Min. Lot Area	None
Max. Lot Coverage(1)	50%
Max. Building Height	18' within 30' of property line, 1' increase per 3' additional setback, max. 56'
Min. Building Separation	20'
Min. Common Landscape Setback	
Perimeter, Arterial/Collector ROW	25' average/15' minimum
Perimeter, Adjacent to R1-10 PUD	30'
Perimeter, Adjacent to R-3 PUD	30'
Internal, Adjacent to a Street(2)	20'
Internal, Not Adjacent to a Street	0'
Min. Building Setback	
Perimeter, Adjacent to a Street(2)	Average 30'
Perimeter, Adjacent to R1-10 PUD	75'
Perimeter, Adjacent to R-3 PUD	50'
Internal, Adjacent to a Street(2)	20'
Internal, Not Adjacent to a Street	10'

(1) As defined by the City of Phoenix Zoning Ordinance (Sec. 202) for "Lot Coverage"

(2) Either public or private streets

Table 10: Parcel 3 – R-3 PUD Development Standards	
	Proposed R-3 PUD
Min. Lot Width	None
Min. Lot Depth	None
Max. Dwelling Unit Density	5 du/ac
Max. Number of Lots	26 (17 hillside)
Max. Lot Coverage[1]	45%, (Calculated w/ PRD method)
Max. Building Height	3 stories or 40'
Min. Common Area	20% of gross parcel area
Min. Perimeter Building Setbacks	
Property Boundary	15'
Street ROW	20'
Min. Common Landscape Setback	
Perimeter Street ROW	15' avg./10' min.
Min. Interior Building Setbacks[5]	
Front	10'
Garage[3]	18' from back of sidewalk
Rear	None
Side (street[4])	10'/5' with tract
Side (internal)	5'

(1) As defined by the City of Phoenix Zoning Ordinance (Sec. 202) for "Lot Coverage, Planned Residential Development."

(2) There shall be a 15-foot maximum height within ten feet of a single-family zoned district, which height may be increased one foot for each additional one foot of building setback to the maximum permitted height.

(3) Garage setback may be reduced to 10' for side-loaded garages.

(4) Either public or private streets

(5) For single family attached, no individual unit lot setbacks shall apply

8.B Setbacks & Buffers

There are a few instances within Central Foothills where enhanced setbacks or landscaped buffers are called for. Along the northern boundary of Parcel 1, a minimum 40-foot landscape setback is planned along the south side of the north property boundary. This area will either remain undisturbed or will be revegetated with salvaged materials at higher concentrations to provide additional buffering for the existing County residences situated north of Yearling Road.

Additionally, there is a prominent drainageway that runs along the shared boundary between Parcel 1 and Parcel 2. This topographical barrier along with widened, landscaped setbacks for the commerce park uses will create a significant buffer of varying widths to separate the residential community and the more intense commercial uses. See **Exhibit 16: Parcel Setback Plan**, **Exhibit 17: Parcel 1 – North Buffer** and **Exhibit 18: Parcel 1 & 2 – Wash Buffer**.

8.C Landscaping, Fences & Walls

(See Chapter 7, Section 703 of the Phoenix Zoning Ordinance for most recent standards)

1. PARCEL 1 – R1-10 PUD
    - Perimeter common: trees spaced a maximum of 20 to 30 feet on center (based on species) or in equivalent groupings, and 5 shrubs per tree.
    - For landscape requirements pertaining to parking areas, see **Section 8.D: Off-Street Parking Standards** of this Narrative.

2. PARCEL 2 – CP PUD

Streetscape Requirements	
Landscape Setback(1)	Average 25', minimum 10' (see **Table 9: Parcel 2 – CP PUD Development Standards**)
Plant Type	Minimum Planting Size/Density
Trees	Min. 2-inch caliper (50% of required trees) Min. 3-inch caliper or multi-trunk tree (25% of required trees) Min. 4-inch caliper or multi-trunk tree (25% of required trees) Trees spaced a maximum of 30 feet on center (based on species) or in equivalent groupings
Shrubs	Min. five (5) 5-gallon shrubs per tree

(1) Other than required access drives, no parking or loading area shall be located within any required setback adjacent to a public street or within any required landscaped area

Landscaping standards.

a. Landscaping, when required, shall consist of both an appropriate ground cover which shall include living ground cover plant material and suitable placement of shrubs and trees so as to create a setting for uses which can enhance the visual attractiveness of the site and to offer a desirable transition to other uses. All landscaped areas shall be supplied with an appropriate watering system. Plant materials shall be maintained in a living condition and shall be selected on the basis of minimizing water consumption, the provision of shade and visual screening where appropriate, and enhancement of the site development. Required setbacks adjacent to a street shall be landscaped. Where a lot line, not on a street, abuts residential zoning, there shall be provided a minimum five-foot-wide landscaped area containing at least fifteen-gallon evergreen trees planted to average a minimum of twenty feet on center.

Walls and screening.

a. A six to eight-foot solid masonry wall shall be provided on or within any lot line which abuts a residential zoning unless that lot line is on any street.

b. Any open use or storage area, where permitted, shall be enclosed by a six-foot-high solid masonry wall.

c. Walls and screening for parking areas adjoining a residence district shall be as provided in Section 8.D: Off-Street Parking Standards of this Narrative.

4. PARCEL 3 – R-3 PUD

- Perimeter common: trees spaced a maximum of 20 to 30 feet on center (based on species) or in equivalent groupings, and 5 shrubs per tree.

5. PARKING LOT LANDSCAPE REQUIREMENTS

Parking Lot Landscape Requirements	
Interior surface area (exclusive of perimeter landscaping and all required setbacks)	Minimum 10%
Landscaped planters	At ends of each row of parking & approximately every 110’
Landscaped planters, single row of parking	Minimum 120 sq. ft.
Landscaped planters, double row of parking	Minimum 240 sq. ft.
Additional parking lot landscaping	As needed to meet 10% minimum requirement, evenly distributed throughout the entire parking lot. Min. interior dimension 5’ (length and width).

7. SHADE

For pedestrian comfort and aesthetic quality shade trees shall be provided along all sidewalks at a minimum density of 75% shade cover. Shade trees shall also be provided along all pedestrian trails at a minimum density of 50% shade cover. Shade trees or other shade structure shall also be provided at any rest area within common open space areas on the Site such as benches or picnic tables.

8. WALLS & FENCES

The fence and wall types for Parcel 1 will include a Primary and Secondary Theme Wall, Partial View Fences, Full View Fence and a Builder Wall. For Parcel 2 there will be a Perimeter Theme Wall and Builder Wall. All walls and related columns, caps, etc. shall have a maximum height of 6’-0”, except between commercial and residential uses where walls or fences and their associated parts shall not exceed 8’-0” in height. Refer to **Exhibit 18: Conceptual Wall Plan**, and **Exhibit 19: Conceptual Wall Details** for the specific design and details of the proposed walls and fences within Central Foothills. These designs are conceptual in nature and subject to change through future site planning and design review processes.

Special fence designs, both permanent and temporary, will be provided for City review and approval, accordance with the terms and conditions of the PUD and other applicable regulations of the City, for those internal portions of Parcel 2 which contain Soil Caps and the groundwater remediation facilities, which fences shall be in accordance with the designs and security criteria prescribed by ADEQ, the RCRA Permit and the DEUR’s.

8.D Off-Street Parking Standards

(See Chapter 7, Section 702 of the Phoenix Zoning Ordinance for most recent standards)

Parking lot layout, dimensions and distribution shall be designed to meet City of Phenix standards, see Section 702 of the City of Phoenix Zoning Ordinance. All design elements for the entire project regarding parking space, design and materials shall meet or exceed ADA requirements. Any details or standards not addressed herein regarding parking shall meet the standards defined in Section 702 of the City of Phoenix Zoning Ordinance.

1. PARCEL 1 – R1-10
   - Required parking for Single Family Detached Residential shall total 2 spaces per 1 dwelling unit.
2. PARCEL 2 – CP PUD
   - Calculations dictating the amount of required parking within Parcel 2, CP PUD (CP and C-1) shall be based on the table shown in Chapter 7 – Section 702. Parking Requirements with requirements listed by land use.
3. BICYCLE PARKING

(See Chapter 13, Section 1307 of Phoenix Zoning Ordinance for most recent standards)

These bicycle parking requirements shall only apply to development within Parcel 2 as development standards for CP-PUD (CP & C-1) uses.

a. Bicycle parking required may be placed in the frontage setback and may be allowed in the right-of-way subject to review by the Planning and Development Department Traffic Engineer.

b. Bicycle parking should comply with ADA requirements and not impede on-site pedestrian access. A clearance of at least four feet in width must be provided for pedestrian access.

c. Bike racks and/or storage areas should be located within 50 feet from building entry points. A bicycle rack should be a minimum of 30 inches from a wall or other obstruction. The minimum length for a bicycle parking should be 72 inches. Bike racks and/or storage areas should be located near high traffic areas and visible to the public but should not impede the function of the pedestrian way.

Bicycle Parking and Amenity Standards

a. All nonresidential uses over 5,000 square feet of floor area shall provide one bicycle space per 25 vehicle parking spaces, with a maximum of 25 spaces.

b. Dining and drinking establishments less than 5,000 square feet should provide a minimum of four bicycle spaces in the frontage setback and/or right-of-way if no vehicle parking is provided.

   (1) When vehicle parking space is provided, additional one bicycle space for every 25 vehicle parking spaces should be provided.

c. Commercial retail and office uses over 100,000 square feet in building area should provide a minimum of two shower stalls and ten lockers that are accessible to the building's occupants.

   (1) Bicycle parking shall be provided at one space per 25 vehicle parking spaces, with a maximum of 50 spaces.

4. PARCEL 3 – R-3 PUD

Multifamily Residential

Total required parking:

- 1.3 spaces per efficiency unit and 1.5 spaces per 1 or 2 bedroom unit and 2 spaces per 3 or more bedroom unit, 1.0 space per unit of less than 600 square feet regardless of number of bedrooms
- When the required parking is reserved for residents, additional unreserved parking is required as follows: 0.3 spaces for each efficiency unit and 0.5 spaces per each 1 or 2 bedroom unit and 1.0 space per each 3 or more bedroom unit.
- Exception for unreserved parking: where minimum 18-foot driveways are provided for individual units, .25 space per each unit.
- Unreserved parking shall be distributed throughout the site.

Note: Any unreserved parking spaces required by this section may be counted toward the total required parking count.

Single Family Residential

1.3 spaces per efficiency unit and 1.5 spaces per 1- or 2-bedroom unit and 2 spaces per 3 or more bedroom unit, 1.0 space per unit of less than 600 square feet regardless of number of bedrooms

Community Residence Center

1 space per 2 resident/patient beds

5. SCREENING

Residential Districts

Screening of parking is required in residential districts when the lot serves any use, except single-family units or a multi-family project of less than sixteen (16) units. A screen consisting of a solid wall or landscaping shall be required, detailed as follows:

1. Along that portion of the perimeter of the parking area bounding or within side or rear yards, the wall shall not be less than four (4) feet nor more than six (6) feet in height. Landscaping, when matured, shall be a minimum of four (4) feet in height and shall be maintained in a living condition.
2. Along that portion of the perimeter of the parking area bounding or within a front yard, the wall shall be three (3) feet in height. Landscaping shall, when matured, be a minimum of three (3) feet in height and shall be maintained in a living condition.
3. All landscaping or wall construction adjacent to driveway entrances is not to exceed three (3) feet in height within a triangle measuring ten (10) feet in depth from the property line tapering to the property line twenty (20) feet on either side of the driveway. All landscaping and wall construction shall comply with the vision obscurement requirement of the Phoenix City Code.
4. All required walls and landscaping shall be maintained in a neat and orderly condition.
5. Landscaping as required in this Section shall provide at least continuous evergreen (broad leaf or conifer) shrubs or hedges in a planting area which shall be a minimum of three (3) feet in width.

Non-Residential Districts

Screening of the parking area is required in nonresidential districts, when the following conditions exist: The lot serves any use, except single-family units or a multi-family project of less than sixteen (16) units, and the lot adjoins a residential zoning district or is separated from a residential district by an alley, locale or collector street. A screen consisting of a solid wall or landscaping shall be required along the portions of the parking lot and drives which adjoin or are across the street or alley from the residential zoning district, detailed as follows:

1. Along that portion of the perimeter of the parking area bounding or within interior, side or rear yards, the wall shall not be less then [than] four (4) feet nor more than six (6) feet in height. Landscaping, when matured, shall be a minimum of four (4) feet in height and shall be maintained in a living condition.

2. Along that portion of the perimeter of the parking area bounding or within a street side or front yard, the wall shall be three (3) feet in height. Landscaping shall, when matured, be a minimum of three (3) feet in height and shall be maintained in a living condition.

3. All landscaping or wall construction adjacent to driveway entrances is not to exceed three (3) feet in height within a triangle measuring ten (10) feet in depth from the property line tapering to the property line twenty (20) feet on either side of the driveway. All landscaping and wall construction shall comply with the vision obscurment requirement of the Phoenix City Code.

4. All required walls and landscaping shall be maintained in a neat and orderly condition.

5. Landscaping as required in this section shall provide at least continuous evergreen (broad leaf or conifer) shrubs or hedges in a planting area which shall be a minimum of three (3) feet in width.

8.E Lighting

All lighting will conform with City Code 23-100 and Section 704 A and 507 – Tab A.II.A.8 of the City of Phoenix Zoning Ordinance.



SECTION 9: DESIGN GUIDELINES

The design guidelines and standards contained in this section reflect the standards intended for this site. The intent of the guidelines and standards is to ensure that development is consistent with the character of the context area and to reflect setbacks and transitions as defined through community outreach and City Staff. All development in this PUD District is subject to Site Plan Review to ensure appropriate applicability of the development and design standards. Architectural Design Guidelines for Parcels 2 and 3 will be submitted to the Phoenix Hearing Officer for approval.

9.A Fences & Walls

The proposed walls and fencing established with the PUD area have been thoughtfully designed to create an attractive Sonoran Desert character that provides visual interest and is complementary to the colors and materials found in the desert environment. The Site does not currently contain any permanent walls or fencing. Landscape setbacks and/or open space areas will be provided along all edges of the Site. Walls and/or fences along the Sonoran Preserve edge will be very limited to maintain an open edge character adjacent to this public open space. Along the Sonoran Preserve edge all proposed fences and walls shall meet the standards set forth in Chapter 5, Section 507 – Tab A of the Zoning Ordinance.

9.B Open Space

1. PARCEL 1 – PLANNED RESIDENTIAL COMMUNITY

Within Parcel 1 there are three categories of open space: Amenitized Community Open Space, Natural Open Space and Perimeter Open Space. These common areas will provide recreational and aesthetic benefits for future residents. The open spaces shown combine to provide 27.4 acres or not less than 35% of the gross parcel area as open space. See **Exhibit 20: Conceptual Open Space Plan**.

Amenitized Community Open Space – These areas within the community are intended to enhance quality of life for future residents by providing both passive and active recreational and aesthetic opportunities. The primary amenity area, located in the center of the community, will include but is not limited to a small community center with play elements, shaded seating areas, and a usable turf area. The central amenity area will serve as the hub of the community with a trail/pathway network that extends from this area to various sections of the community. The minimum area of the central amenity is 5,000 square feet.

Natural Open Space – These areas of the community will be left intact as much as possible through the development process. If disturbed, Natural Open Space areas will be landscaped to complement the natural character of the Sonoran Desert using salvaged plant materials before resorting to commercially grown specimens. Plant species within these areas will adhere to the native plant palette that has been provided with this application. Portions of the Site particularly within significant drainage corridors and along the Sonoran Preserve edge will remain undisturbed to demonstrate a blending with the Preserve areas immediately east of the Site. The applicant recognizes the significance of these natural areas as a component of the Site's desert character and seeks to establish meaningful edges that enhance openness along the project's perimeter and may allow for future access to the Preserve in coordination with the City's Parks and Recreation Department.

Perimeter Open Space – These areas of the Site include the landscape buffers and areas visible to the general public along the adjoining rights-of-way. As such, these areas will not be amenitized but will be landscaped to screen, buffer, and separate residents within the community and neighboring homeowners from one another where necessary. The character of these areas will blend with the desert aesthetic of the surrounding area, similar to the internal open space areas, and will represent the level of quality of the rest of the community.

2. PARCEL 2 – COMMERCE PARK

Common area open space within the Commerce Park/Business Park (Parcel 2) area shall utilize vegetative materials that are common to the Sonoran Desert and will aid to enhance and complement the internal aesthetic of the planned uses, and provide for buffering and screening along the Parcel's perimeter to adjacent residential uses. Common open space areas with landscape and shading will be provided for use by future employees and customers of the development. A minimum of 20% of the gross parcel area shall be planned for natural and re-established open space.

3. PARCEL 3 – MEDIUM DENSITY RESIDENTIAL COMMUNITY

Similar to Parcel 1, open spaces within the medium density community will consist of amenitized common areas and passive recreational and natural areas. These open spaces will combine to provide more than 20% of the gross parcel area.

Amenities for this parcel shall include gathering spaces for residents to socialize and recreational programming appropriate to the intended demographic of the community. Specific amenity programming and design for this space will be determined with future site plan reviews.

The other landscape areas of the community will complement the natural character of the surrounding area. Located directly adjacent to the Sonoran Preserve, Parcel 3 will blend into the dynamic desert terrain. A large portion of the parcel has dramatic elevation changes, landscape features and striking viewsheds. These aspects of the Site will be preserved as much as possible.

9.C Landscape Standards

1. PERMITTED PLANT MATERIALS

The selection of allowable plant materials shall come from the ADWR Low Water Use Drought Tolerant Plant List. The overall character of the landscape material should be generally limited to the use of species found within the Sonoran Desert. Native species will be utilized in areas along the edges of the community within the landscape areas adjacent to the Sonoran Preserve, and adjacent to existing or re-established wash corridors. Internal common open spaces for both residential and non-residential areas may include the limited use of turf for recreational uses. Entry areas may also utilize species that may deviate from commonly found native materials but will be used in limited quantities. For the purpose of this Section, "common open space" shall refer to all landscape setback and open space areas not included on a private lot.

9.D Streetscapes

1. CENTRAL AVENUE

Central Avenue shall be constructed as a Collector Roadway (City of Phoenix Cross-Section "F") to include two (2) lanes of travel, a center turn-lane and a 5-foot detached sidewalk. The area outside of the roadway and sidewalk will include a row of native street trees planted at required City of Phoenix spacing and additional trees will be included within the landscape setback outside of the right-of-way. Tree planting will be complemented by shrubs and groundcover species that are typical of Sonoran Desert species. Along the east edge of the right-of-way there will be a 30-foot Multi-Use Trail Easement ("MUTE") with a 10-foot Multi-Use Trail ("MUT").

2. HAPPY VALLEY ROAD

Happy Valley Road will be developed as a major arterial roadway (City of Phoenix Cross-Section "A") to ultimately include six (6) lanes of vehicular travel, bike lanes, a 24-foot median island and 5-foot detached sidewalks. The edge treatment for the roadway will include extensive landscaping between the curb and the sidewalk, and within the landscape setbacks to the commerce park uses. Trees will be placed at regular intervals adjacent to the sidewalk to ensure shading for pedestrians. Along the frontage of the Site, adjacent to the north edge of the right-of-way, there will be a 30-foot MUTE with a 10-foot MUT.

3. YEARLING ROAD

Yearling Road is currently constructed as a rural roadway that provides access to existing County properties along the north side of the street and terminates approximately one-half mile east of Central Avenue into land designated as part of the Sonoran Preserve. The southern edge of the street is largely undisturbed with concentration of mature native materials that will provide meaningful buffers to the planned Central Foothills residential community. There are no vehicular access points from Central Foothills proposed along Yearling Road. In support of the various requests from the County residents to the north and the request of City staff, the Applicant has agreed to record a 1-foot NVAE in favor of the City along the entire northern boundary of Parcel 1 to prevent vehicular access onto and development of Yearling Road.

4. INTERNAL PRIVATE LOCAL STREETS

All local streets within the Parcel 1 will be designated as private accessways. The accessway width will be 40 feet to allow for typical local street improvements (29.16 feet from back-of-curb to back-of-curb) with five-foot attached/detached sidewalks on both sides. See **Exhibit 22: Street Sections**.

5. PARCEL ACCESS

The various development parcels within the Central Foothills PUD will require access from the project's perimeter roadways. Parcel 1 will gain access from Central Avenue through two access points. The primary entry for this community is located approximately 1,650 feet north of the intersection of Central Avenue and Happy Valley Road, and the secondary entry is approximately 660 feet south of the primary entry. For additional details regarding the design and character of the entry, see **Section F: Signage Standards**. Enhanced landscaping will be installed to provide for a dramatic desert-themed effect upon arrival to the community.

The Commerce/Business Park Parcel will gain access from Happy Valley Road and Central Avenue. The primary entrance driveway to the Commerce park area will be located approximately 660 feet east of the Central/Happy Valley intersection, with secondary access driveways located along the Central Avenue and Happy Valley Road frontages. The primary entry driveway will include signage and landscape that utilizes desert plant materials selected from the ADWR Low Water Use Drought Tolerant Plant List. Additional Commerce Park/Business Park signage may be included at the Central & Happy Valley intersection.

The Medium Density Residential (Parcel 3) currently proposes access from Happy Valley Road through an internal entry driveway connection to Parcel 2. The entry driveway will include signage and landscape that utilizes native desert materials included on the ADWR Low Water Use Drought Tolerant Plant List.

9.E Trails & Pathways

A network of multi-use and internal trails will be established at the perimeter of the Site and within the residential portions of the development to provide recreational opportunities and alternative pedestrian routes for residents. Trails within the development will connect to street sidewalks to create efficient, convenient access for pedestrians. Shade trees shall be arranged along trails to provide a minimum of 50% shade. All concrete pathways will conform to ADA accessibility standards. See **Exhibit 23: Trail Sections**.

Primary Multi-Use Trails:

- 10-foot paved, meandering trail connecting north to south along the east side of Central Avenue to be located within a 30-foot MUTE.
- 10-foot paved meandering trail connecting east to west along the north side of Happy Valley Road to be located within a 30-foot MUTE.

Internal Trails: A series of 6-foot meandering natural-surface trails.

To facilitate an integrated live-work environment with Central Foothills, a gated pedestrian trail connection will be installed from Parcel 1 connecting south to Parcel 2. The portion of this connection located within Parcel 1 shall be built with Parcel 1. However, the portion of such pedestrian trail and related improvements located upon Parcel 2 will only be completed as part the development of Parcel 2 to ensure the safety of the future residents and the protection of the undeveloped portions of Parcel, including any remaining environmental remediation components located on Parcel 2. The location and design of this pedestrian connection will be coordinate with City staff during the applicable design review process for Parcel 1 and Parcel 2.

A trail connection from Parcel 1 to allow future access to the Sonoran Preserve will be designed in coordination with the City's Parks and Recreation Department. This connection will be built at a time when the City is prepared to construct a corresponding trail within the Preserve. See **Exhibit 24: Conceptual Trails Plan**.



9.F Architecture

Although the project is currently in the early stages of design, this application includes preliminary representations of architectural character and quality for the single family product proposed for Parcel 1 included in **Exhibit 24: Conceptual Parcel 1 Architectural Elevations**. To further demonstrate the standard and quality of architectural design intended for the single family residential development on Parcel 1, a general collection of Design Guidelines are listed below:

1. PARCEL 1 – ARCHITECTURAL DESIGN GUIDELINES

Architectural design is important not only for the individual homeowners but for the neighborhood as a whole. The architecture of the homes within a community contributes to the character and perceived design quality of the community and provides visual interest and variety. Diversity and interest are vital to developing a unique and desirable community. Architectural styles and details, when skillfully applied, can give a neighborhood authenticity and a unique character. Within Central Foothills home designs shall abide by the following requirements:

- Each home will have an identifiable architectural style (such as Craftsman, Spanish Mission, Spanish Hacienda, Farmhouse, Mediterranean, Tuscan, etc.)

  Front Elevations shall provide:

  - A variety of traditional roof forms such as sloping roofs with gables, hips and dormers or flat roofs appropriate to architectural style,
  - Varied building faces to break up the building massing.
  - Architectural detailing appropriate to the architectural style of the home (such as

rafter tails, gable vents, columns, shutters, iron work, pop-outs, etc.),

- Accent colors and materials appropriate to architectural style.
- All ground-mounted equipment should be installed outside of the front yard and screened from view from the street.
- Windows with primarily vertical proportions.
- Garage doors that are compatible with the overall architectural design theme.

Rear/Side elevations will provide:

- Trim/popouts required at windows located on side elevations.
- Varied roof forms and planes,
- Covered patios with a roof treatment that is consistent with the main portion of the home.

Architectural Diversity

Parcel 1 will contain a variety of floor plans and building elevations to create a diverse street scene. A mix of different colors, materials and architectural detailing will be employed throughout the community.

- A minimum of three different floorplans with three different architectural styles will be offered for each product line.
- The same floorplan and elevation shall not be platted on adjacent homes or homes directly across the street from one another.
- The same floorplan and elevation shall not be platted on adjacent homes or homes directly across the street from one another.
- A minimum of three distinct color palettes will be offered for each architectural style.
- Building materials and colors will reflect the architectural style of the home and also complement the surrounding desert environment.

Roof Forms

A variety of roof forms and roof materials will be used within each neighborhood block to promote diversity and increase visual interest both within and from outside of the neighborhood. Roof forms should be functional and appropriate to the architectural style of the home.

- A variety of distinctly different roof tile profiles and/or materials is encouraged.
- A variety of roof forms and ridgelines is encouraged.
- Flat roofs are allowed only as appropriate to the architectural style of the home.
- Flat roofs must have a minimum 24-inch parapet wall.
- Roof-top equipment is not allowed except for photovoltaic and solar systems.

Building Height and Massing

Building height and massing must be designed to reinforce a cohesive and diverse streetscene. Techniques for achieving this including but not are not limited to changes in volume, building plane, roof forms and the incorporation of porches.

With the development of Parcels 2 and 3 projected to be farther in the future than Parcel 1, a significant amount of detail for architectural standards is not feasible at this time. Architectural elevations and design guidelines for Parcels 2 and 3 are intended to be compatible with those established for Parcel 1 and will require approval through a Planning Hearing Officer (PHO) review process at a later date.

Similarly to the landscape character and theming, the architecture of the Central Foothills development will be designed with the use of materials and colors that complement the surrounding Sonoran desert. The quality and style of the design elements shown within this document establish a high standard for aesthetic and functional aspects of the community that will be carried through each parcel and phase of the project. Architectural details for Parcels 2 and 3 will be provided for approval through a Planning Hearing Officer (PHO) public hearing review at a later date.

Site Specific Design

- Given the project's desert location, architecture must take environmental conditions into account. The following strategies should be utilized to enhance building performance and respond to site conditions.
- Building materials should be high quality in nature and able to withstand the rigors of the desert environment.
- Architectural shade features including recessed windows, covered patios, window eyebrows, and roof overhangs should be included in building design to mitigate the effects of the sun and solar heat gain.
- Provide shaded outdoor living space to promote engagement with the outdoors.



SECTION 10: SIGNAGE STANDARDS

10.A DEVELOPMENT STANDARDS

All signage within Parcel 1 of Central Foothills shall be in conformance with Section 705 of the Phoenix Zoning Ordinance except for the following:

- The Sign Area shall not exceed 50 square feet and the height of the sign shall not exceed 7'-0" in height. Additionally, the area of the sign lettering shall not exceed 11 square feet, see **Figure 8** below:

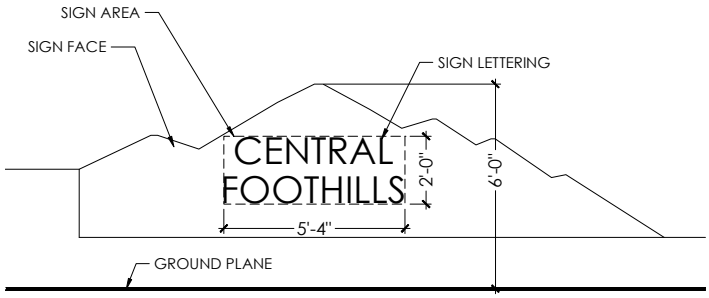


Figure 8: Sign Lettering Diagram

- All signage within the Parcels 2 & 3 of Central Foothills shall be in conformance with Section 705 of the Phoenix Zoning Ordinance unless amended as part of a separate case.

10.B DESIGN GUIDELINES

Monument signage for Parcel 1 will be located at the primary entry and will use materials and colors that complement the Sonoran Desert character of the Site. The entry design will include thematic wall elements with raised planter beds to provide a visual staging and highlighting of the community sign. The monument signage will be backlit or internally lit to conform to the City's Dark Skies guidelines. Landscape lighting will be low voltage and shielded to reduce ambient light spillage onto adjacent properties. See **Exhibit 26: Conceptual Entry Monumentation**.

For signage associated with the residential uses on the Site, all signs shall conform to the single family residential sign standards outlined in Section 705 of the Zoning Ordinance.

For signage associated with the commerce park uses on the Site, all signs shall conform to the Commercial/Industrial sign standards outlined in Section 705 of the Zoning Ordinance. The signage for each parcel will fit with the character of the proposed development while still complementing Central Foothills as a whole, as well as the surrounding desert landscape.

SECTION 11: SUSTAINABILITY

1. Since the Central Foothills development will utilize native plant materials throughout the Site that are typical of species found in arid zones, the landscape program will be representative of a low water use system.

2. Utilize industry recognized sustainable construction practices and maters by providing options for LED and/or low-level lighting, cool roof tops or non-dark tile colors, dual paned windows with high performance Low e-glazing, energy efficient rated insulation, lower flow toilet and showerheads and automatic irrigation systems.

3. Promote energy-efficiency by providing option to high efficiency air conditioning units, Energy

Star appliances, programmable thermostats and who building exchange fans.

4. Provide pedestrian amenities such as sidewalks shaded with landscaping, waste receptacles (recycling and trash), wayfinding signage, benches and pedestrian scaled lighting.

5. Include LED and energy efficient lighting technology into any and all lighting constructed on site, including amenity areas, common open spaces, parking lots, commercial driveways and streets.

6. Shade parking lots, open space areas and public spaces with hardy trees that will withstand the harsh summer climate.



SECTION 12: INFRASTRUCTURE

12.A Stormwater/Grading and Drainage

The region surrounding the Central Foothills property generally drains to the southwest. The Site is affected by a series of intermediate and minor wash corridors that originate to the north and northeast and flow through the Site. In order to accommodate the proposed residential development of Parcel 1, as outlined in this Narrative, and the future development of Parcel 2 and Parcel 3, some of the minor wash corridors will be re-channelized, while the larger wash will be preserved in place. Wherever possible the channelized washes will employ natural bank stabilization materials and contoured slopes to maintain their original aesthetic. These reconfigurations to the natural patterns of these washes will be completed to ensure; (i) that the proposed developments within each separate Parcel are located above and outside of the 100-year water surface elevation; (ii) that there are no adverse impacts to upstream or downstream properties; and (iii) that there will be no adverse impacts to the exist Soil Caps within Parcel 2, as required by the DEUR's.

According to the FEMA Flood Insurance Rate Maps (FIRM) as displayed on the Maricopa County Flood Control District Floodplain Viewer, the Property is not located within an active mapped floodplain (Zone X).

FEMA defines Zone X as:

> *The flood insurance rate zone that corresponds to areas of 0.2 annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% chance flood. No base flood elevations or depths are shown within this zone.*

In accordance with City stormwater guidelines, Central Foothills will be designed so that onsite runoff from the Property will be routed via street flow and/or storm drainage channels to retention basins located throughout the Site and each separate Parcel. The Site will manage stormwater on-site to comply with the criteria for the 100-year, 2-hour retention requirement. All drainage improvements will be designed in accordance with all City and Maricopa County drainage design standards. Additionally, special and detailed design analysis will be conducted when preparing the development plan for Parcel 2 to ensure stormwater drainage and flows are not negatively impacting the Soil Cap areas, any then-existing monitoring or remediation wells or any then-existing groundwater remediation systems.

12.B Water and Wastewater Service

The Central Foothills property does not currently have water and wastewater infrastructure that extends to the Site. The Site is located within the City of Phoenix water and wastewater service area. The applicant will extend public water and sewer services to the Site in alignments and sizing that is in conformance with City requirements. Public lines will be extended from the west to connect to existing infrastructure. The nearest water connection in the area is located at 7th Avenue and Happy Valley. The closest wastewater connection is located at 15th Avenue.

12.C Dry Utilities

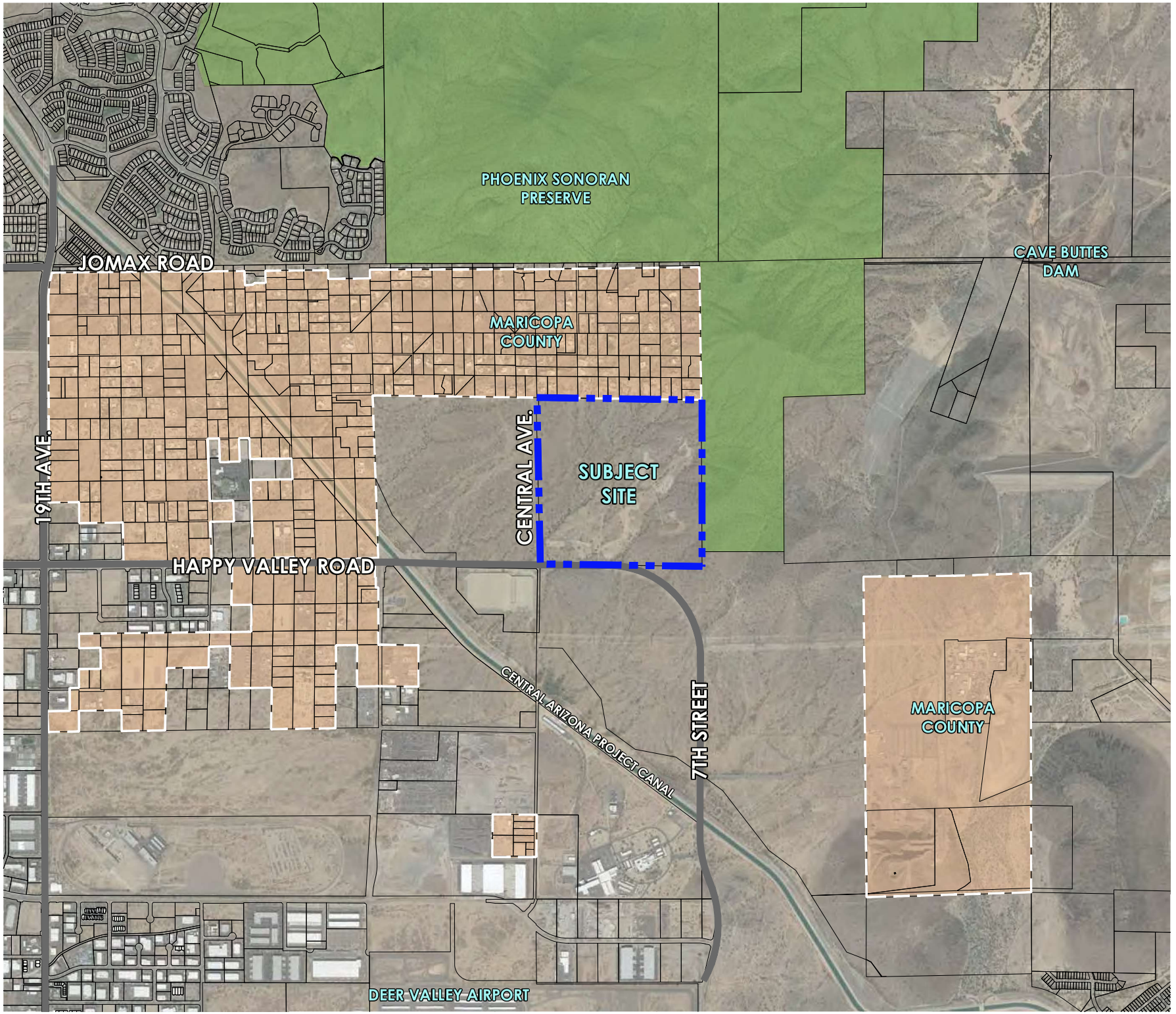
All dry utilities that are extended to the Site will comply will all City and utility provider requirements. The applicant anticipates services for Telecom and Electric will be extended to the Site in conjunction with the off-site improvements. Natural Gas is subject to availability.

SECTION 13: LEGAL DESCRIPTION

13.A Legal Description of the Site

The Southeast quarter of Section 5, Township 4 North, Range 3 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona;

Except all oil, gases and other hydrocarbon substances, helium or other substances of a gaseous nature, geothermal resources, coal, stone, metals, minerals, fossils and fertilizers of every name and description, together with all uranium, thorium, or any other material which is or may be determined to be peculiarly essential to the production of fissionable material, whether or not of commercial value as reserved Patent from the State of Arizona recorded in Document No. 2016-004999.



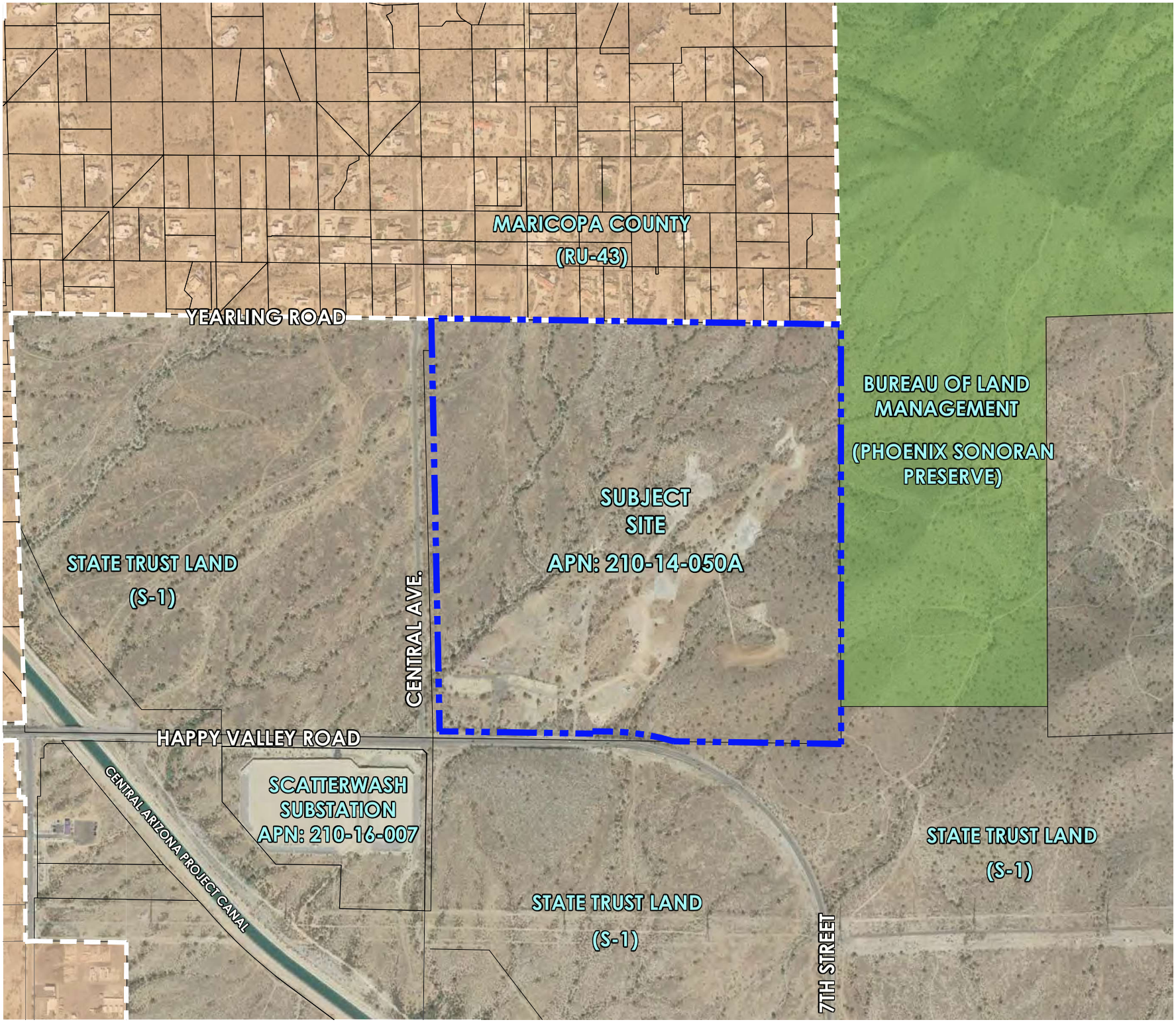
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CENTRAL FOOTHILLS PUD

EXHIBIT 1:
REGIONAL
CONTEXT MAP



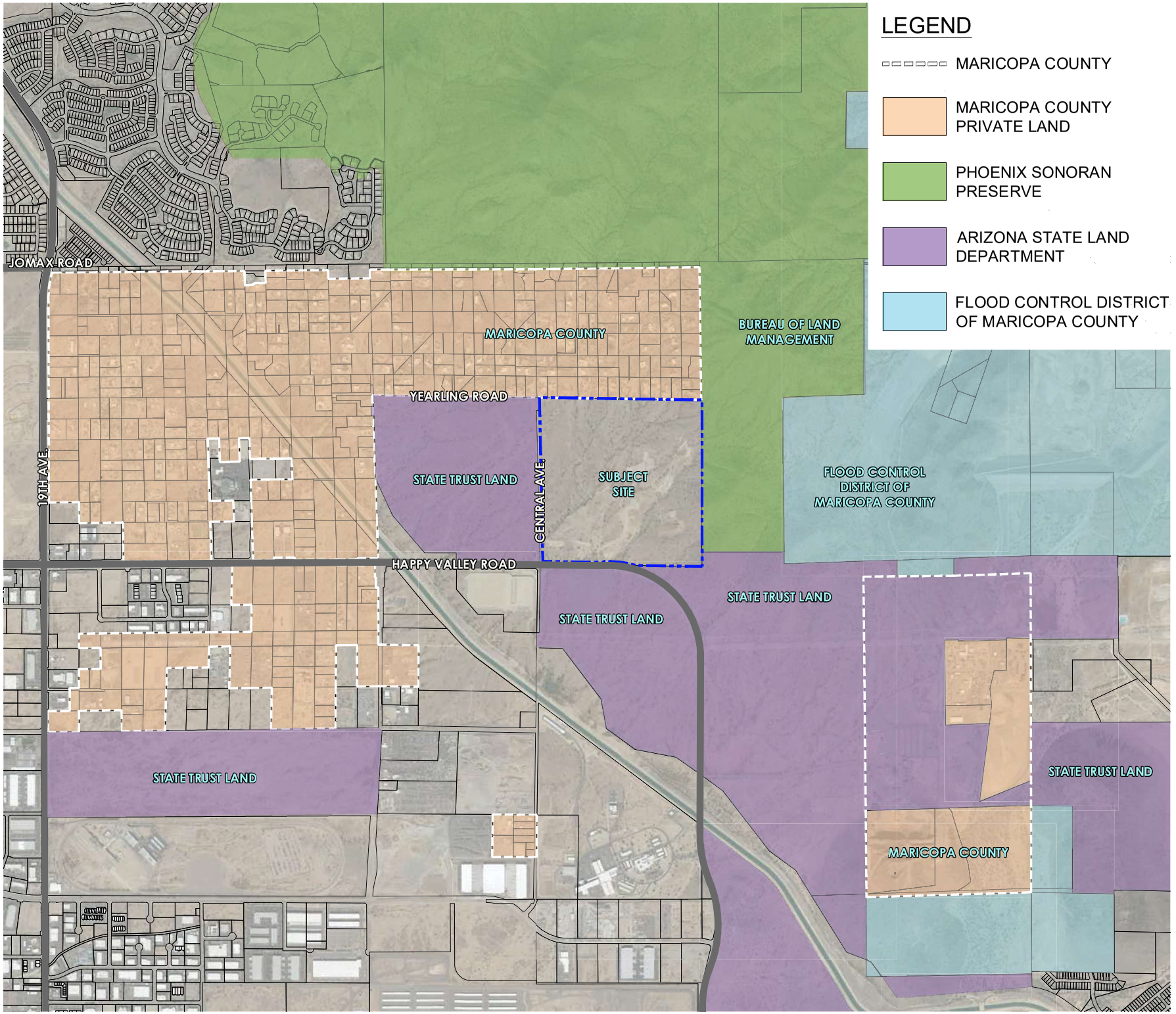
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CENTRAL FOOTHILLS PUD

EXHIBIT 2:
PARCEL MAP

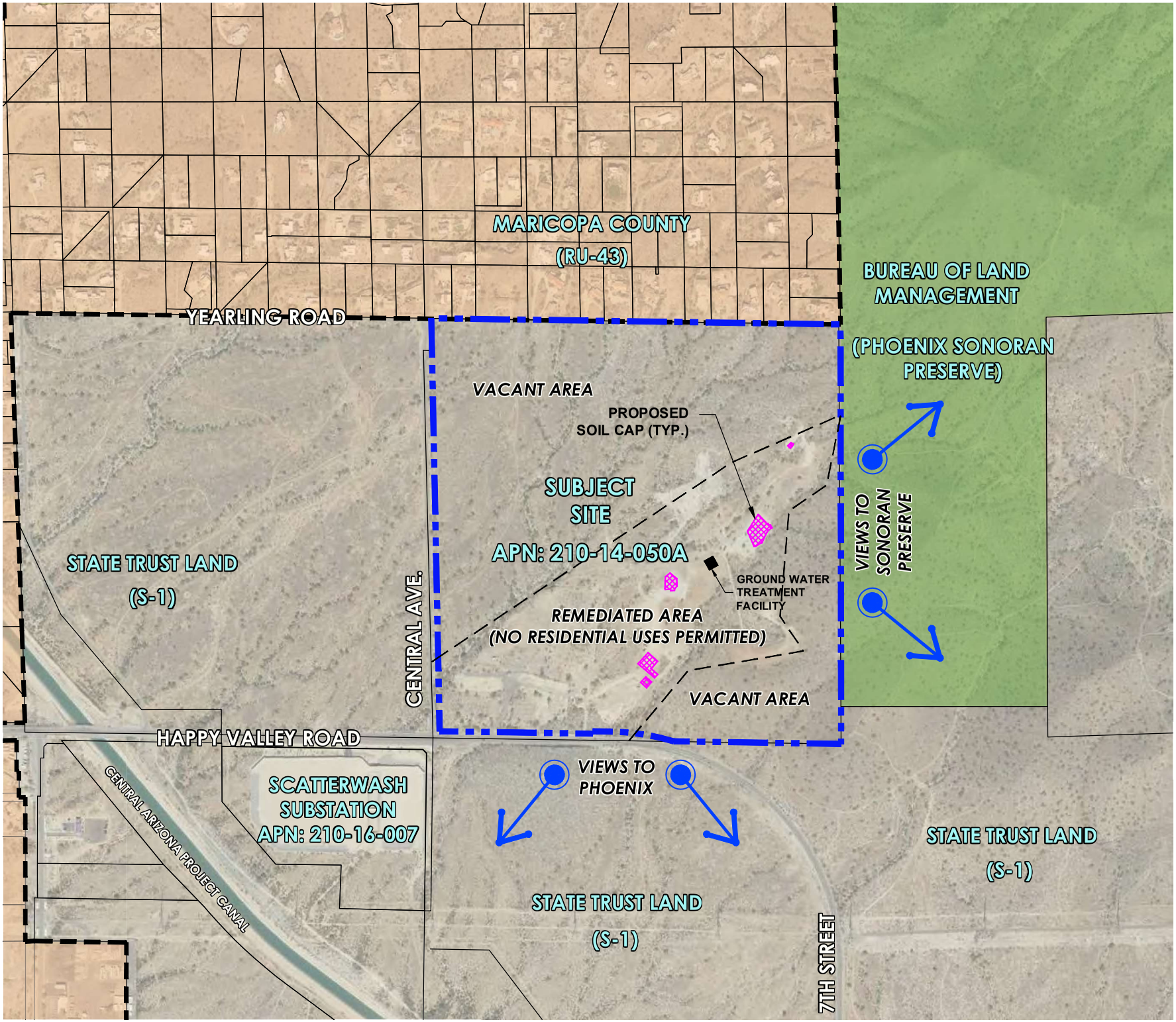


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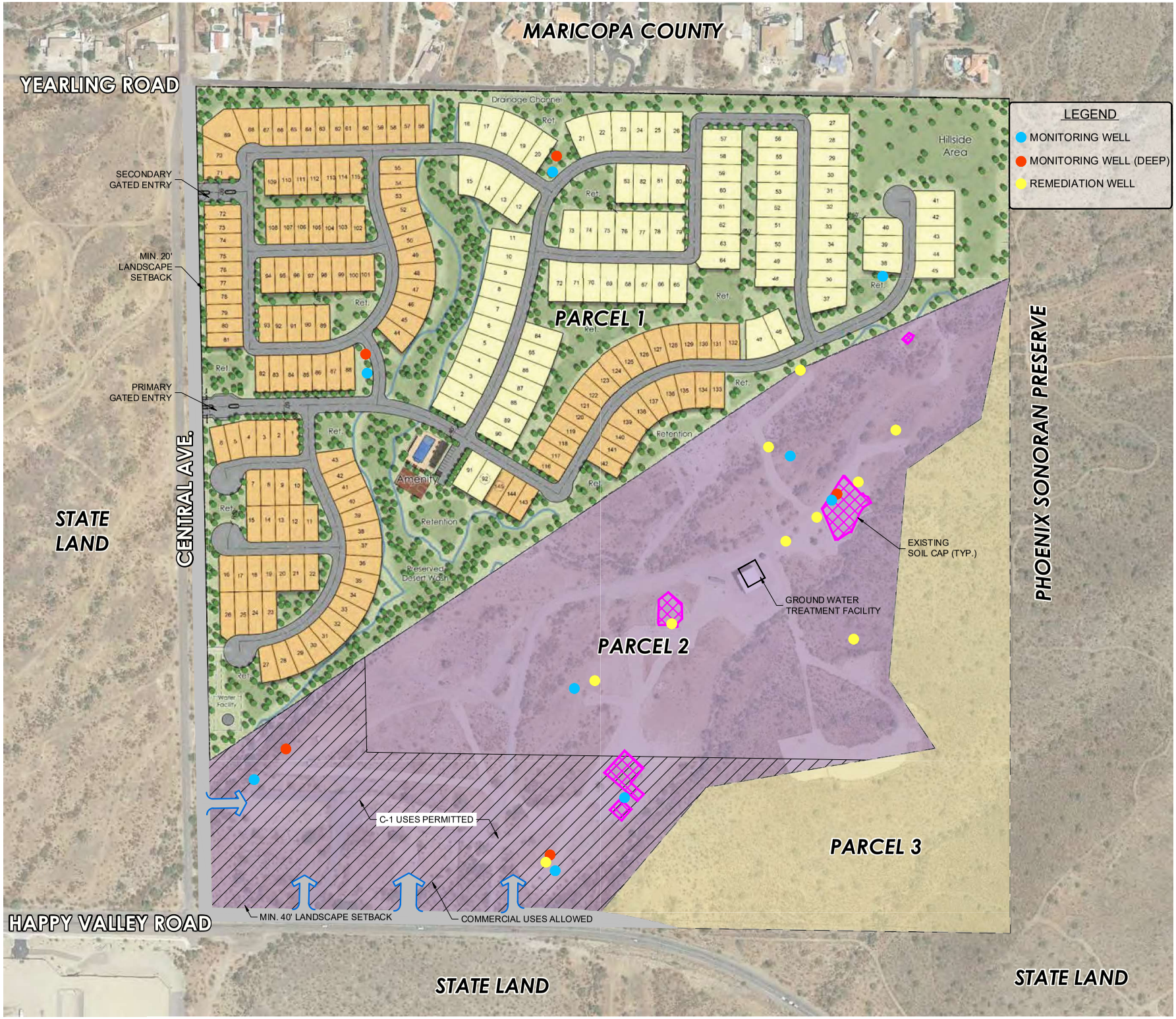
CENTRAL FOOTHILLS PUD

EXHIBIT 3:
SURROUNDING JURISDICTION MAP



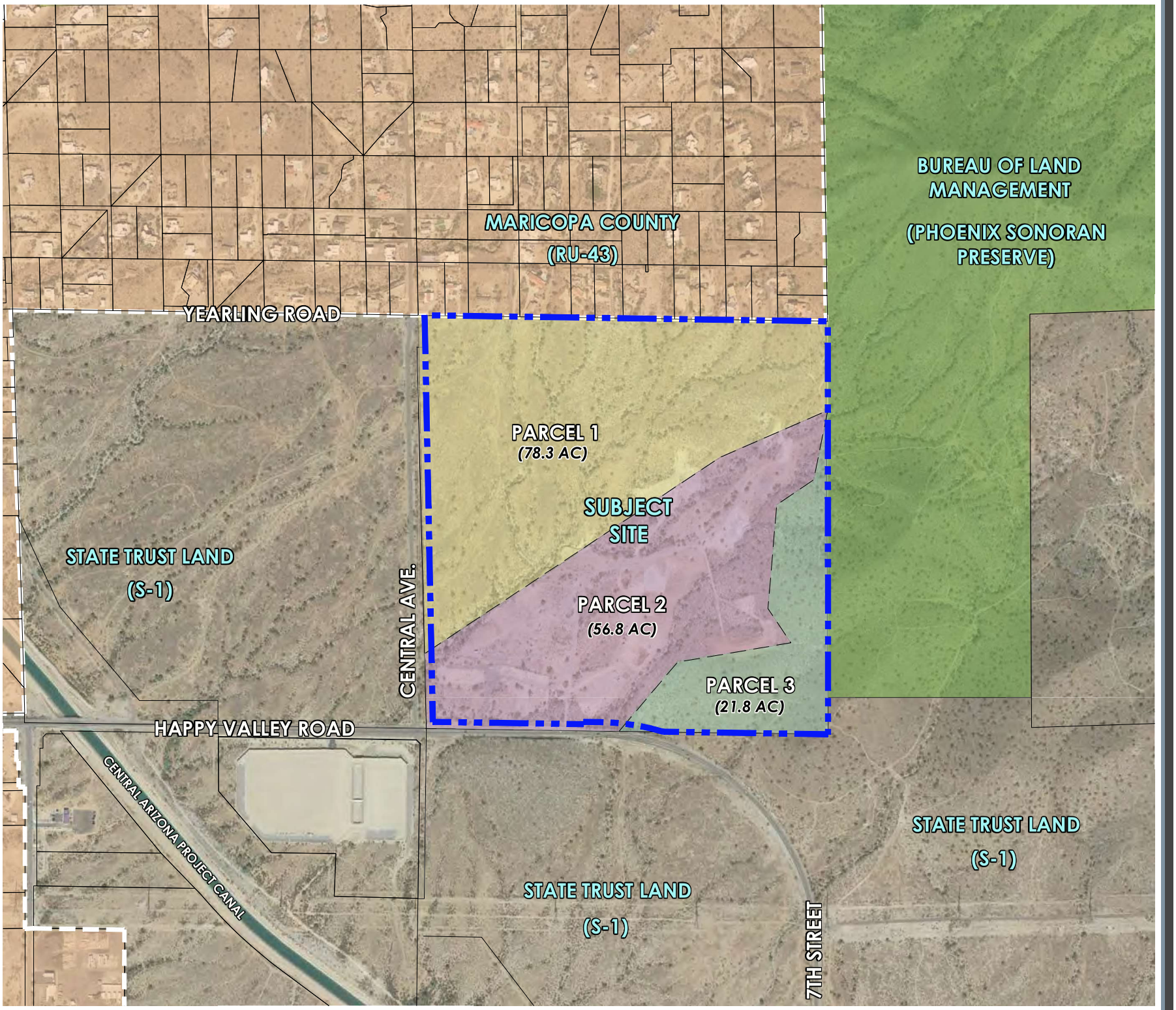
CENTRAL FOOTHILLS PUD

EXHIBIT 4:
EXISTING SITE CONDITIONS



CENTRAL FOOTHILLS PUD

EXHIBIT 5:
MONITORING
WELL LOCATIONS



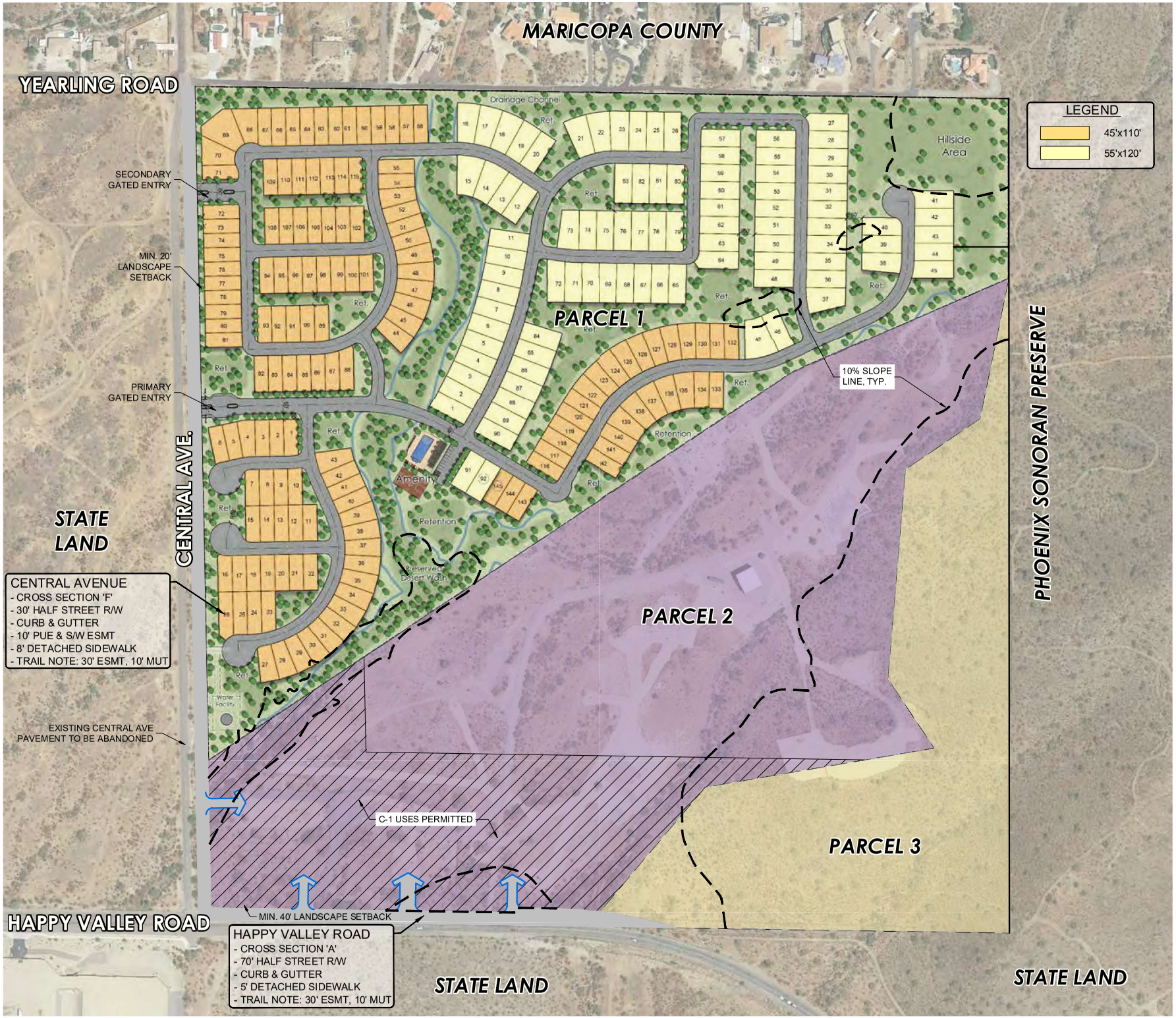
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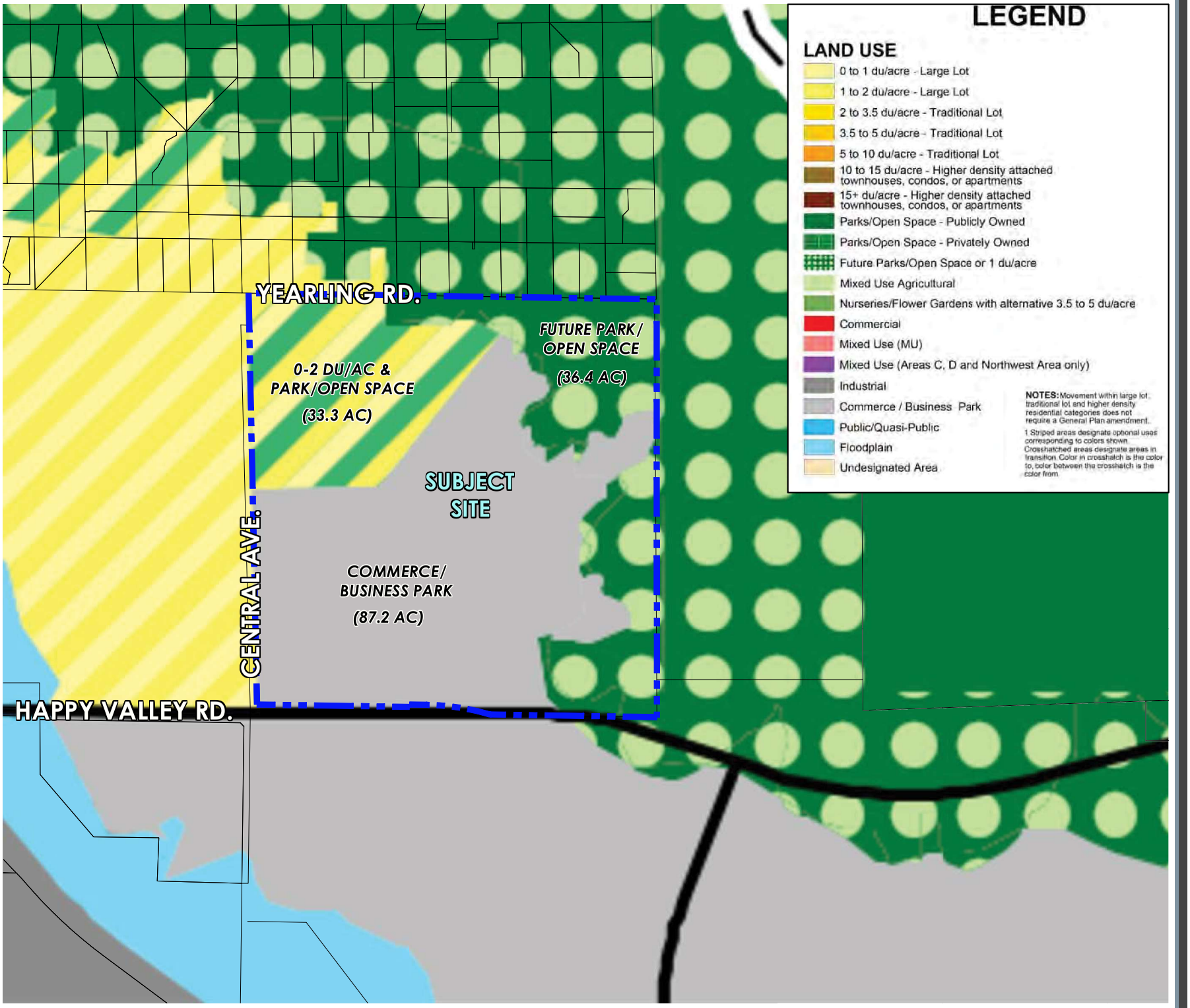
CENTRAL FOOTHILLS PUD

EXHIBIT 6:
MASTER DEVELOPMENT PARCEL MAP



CENTRAL FOOTHILLS PUD

EXHIBIT 7:
CONCEPTUAL DEVELOPMENT PLAN



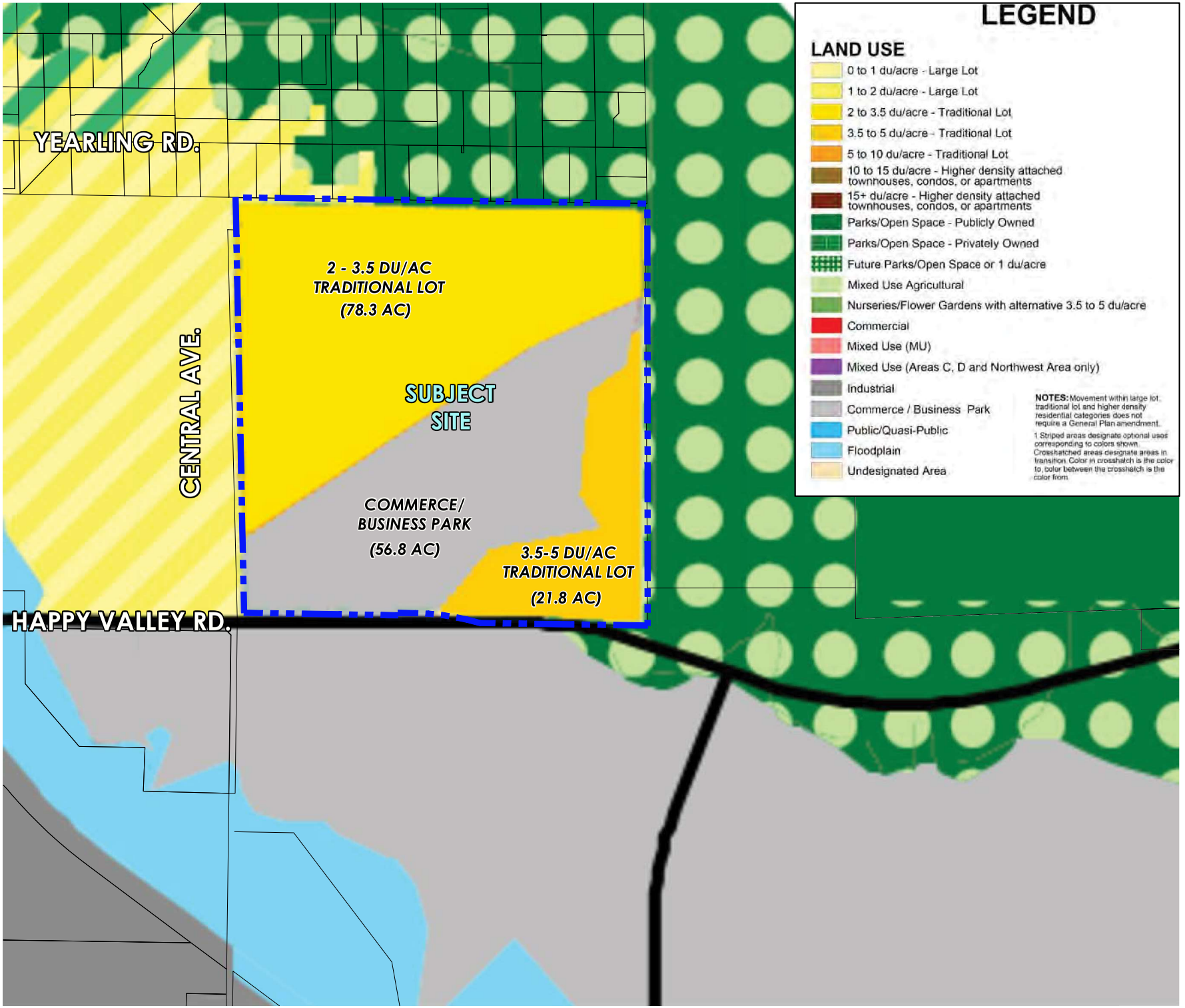
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CENTRAL FOOTHILLS PUD

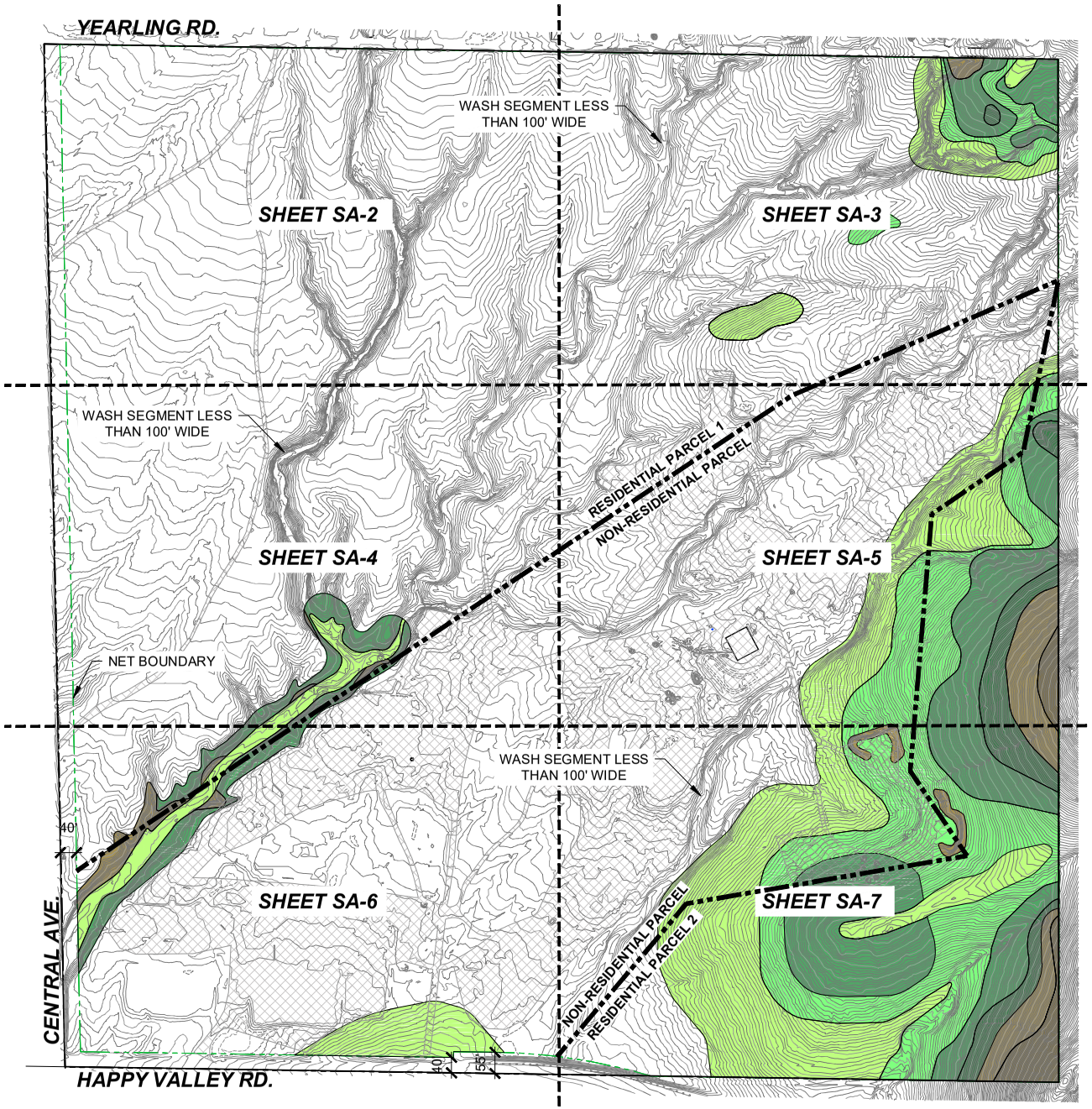
EXHIBIT 8:
EXISTING
GENERAL
PLAN MAP



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CENTRAL FOOTHILLS PUD

EXHIBIT 9:
PROPOSED
GENERAL
PLAN MAP



AREA

PARENT PARCEL	RESIDENTIAL PARCEL 1	RESIDENTIAL PARCEL 2	NON-RESIDENTIAL PARCEL
6,833,257 SQ. FT.	3,409,038 SQ. FT.	950,283 SQ. FT.	2,473,228 SQ. FT.
156.87 ACRES	78.261 ACRES	21.816 ACRES	56.778 ACRES

TOPOGRAPHY

PROVIDED FROM ALTA SURVEY DATED APRIL 2015, PREPARED BY RSTEAM LAND SURVEYORS.

PROJECT TEAM

OWNER/ DEVELOPER
PAF CENTRAL, LLC
11811 N. TATUM BLVD.
SUITE 1051
PHOENIX, ARIZONA 85028
PHONE: (602) 953-8729

LAND PLANNER/ DESIGNER
RVi PLANNING + LANDSCAPE ARCHITECTURE
ALEX STEDMAN
120 SOUTH ASH AVENUE
TEMPE, ARIZONA 85281
PHONE: (480) 994-0994
EMAIL: ASTEDMAN@RVIPLANNING.COM

HILLSIDE RESIDENTIAL DENSITY TABLE

SLOPE OF LAND	ALLOWABLE HILLSIDE DENSITY UNITS/ACRE	ACREAGE IN THE SLOPE CATEGORY	PRODUCT OF DENSITY x ACREAGE	TOTAL # ALLOWABLE HILLSIDE LOTS
10% to 14.9%	1.80	13.0	23.4	23
15% to 19.9%	1.10	8.9	9.8	9
20% to 24.9%	0.70	8.6	6.0	6
25% to 29.9%	0.50	1.6	0.8	0
30% to 34.9%	0.30	2.3	0.7	0
35% and Over	0.20	0.7	0.1	0
TOTAL		34.7	1.53	38

NOTE: ISOLATED TOPOGRAPHIC FEATURES SUCH AS HILLS, PITS, OR WASHES WHERE THE FEATURE IS LESS THAN 100-FEET WIDE SHALL NOT BE INCLUDED IN THE HILLSIDE COMPUTATIONS PER CITY OF PHOENIX ZONING ORDINANCE SECTION 710.

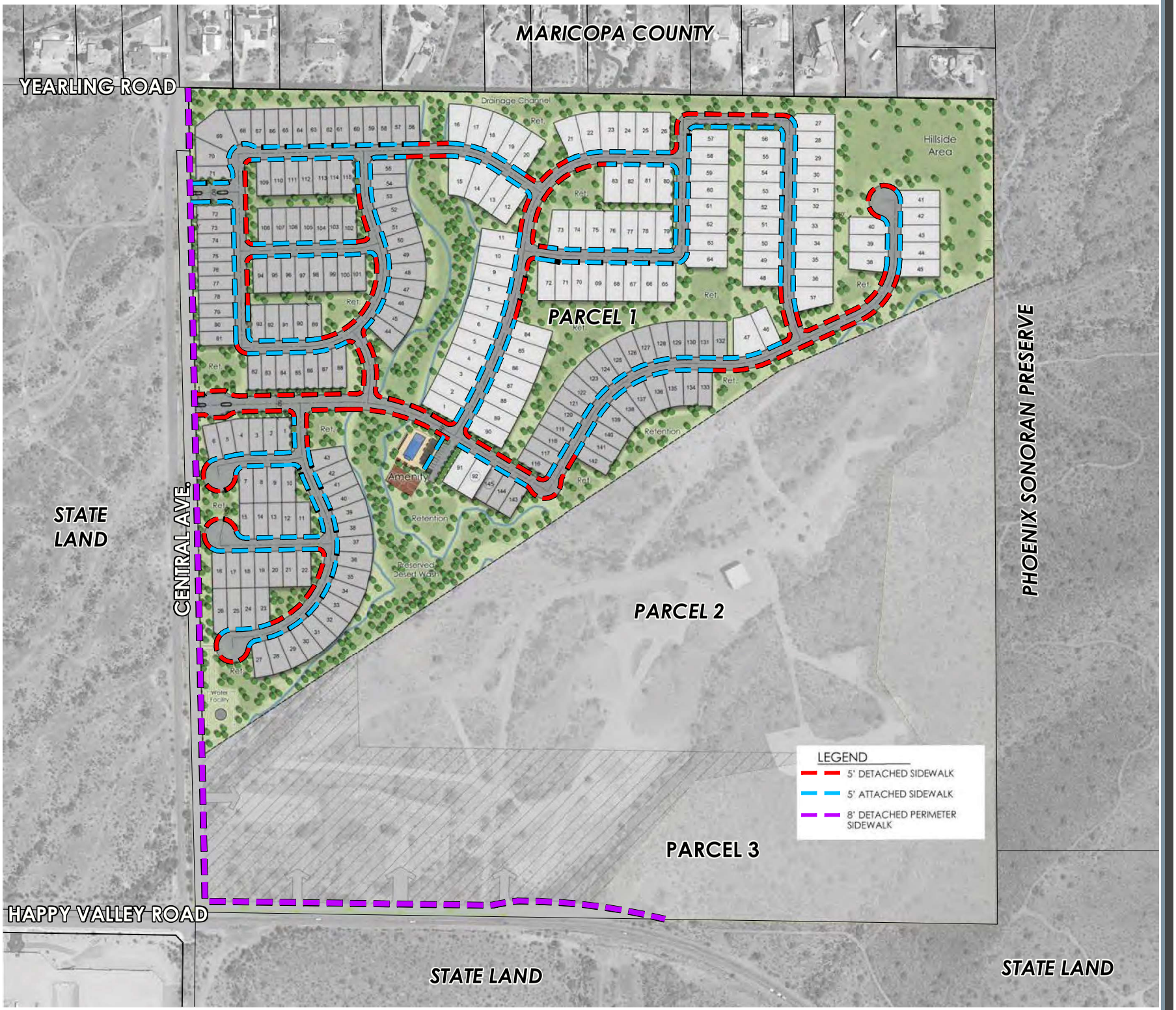
TOTAL HILLSIDE AREA: 34.7 AC.

TOTAL NON-HILLSIDE AREA: 118.3 AC.
TOTAL NET LOT AREA: 153.0 AC.

DISTURBED/DEVELOPED AREA
NOTE: ON-SITE DISTURBANCE WAS EXISTING AS OF THE DATE OF ANNEXATION - 2001

CENTRAL FOOTHILLS PUD

EXHIBIT 10:
SLOPE
ANALYSIS
SUMMARY



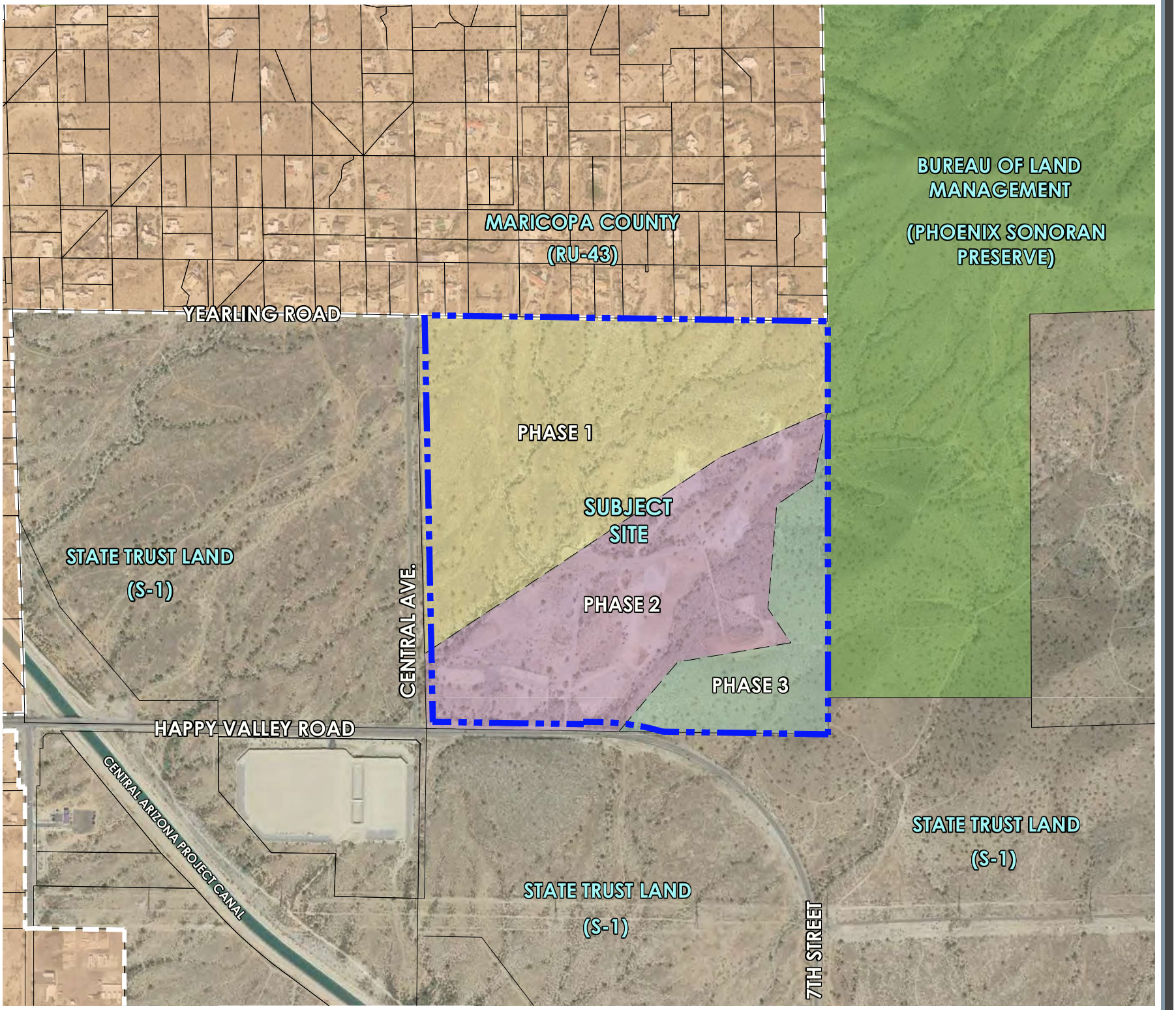
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CENTRAL FOOTHILLS PUD

EXHIBIT 11:
PARCEL 1
SIDEWALK PLAN

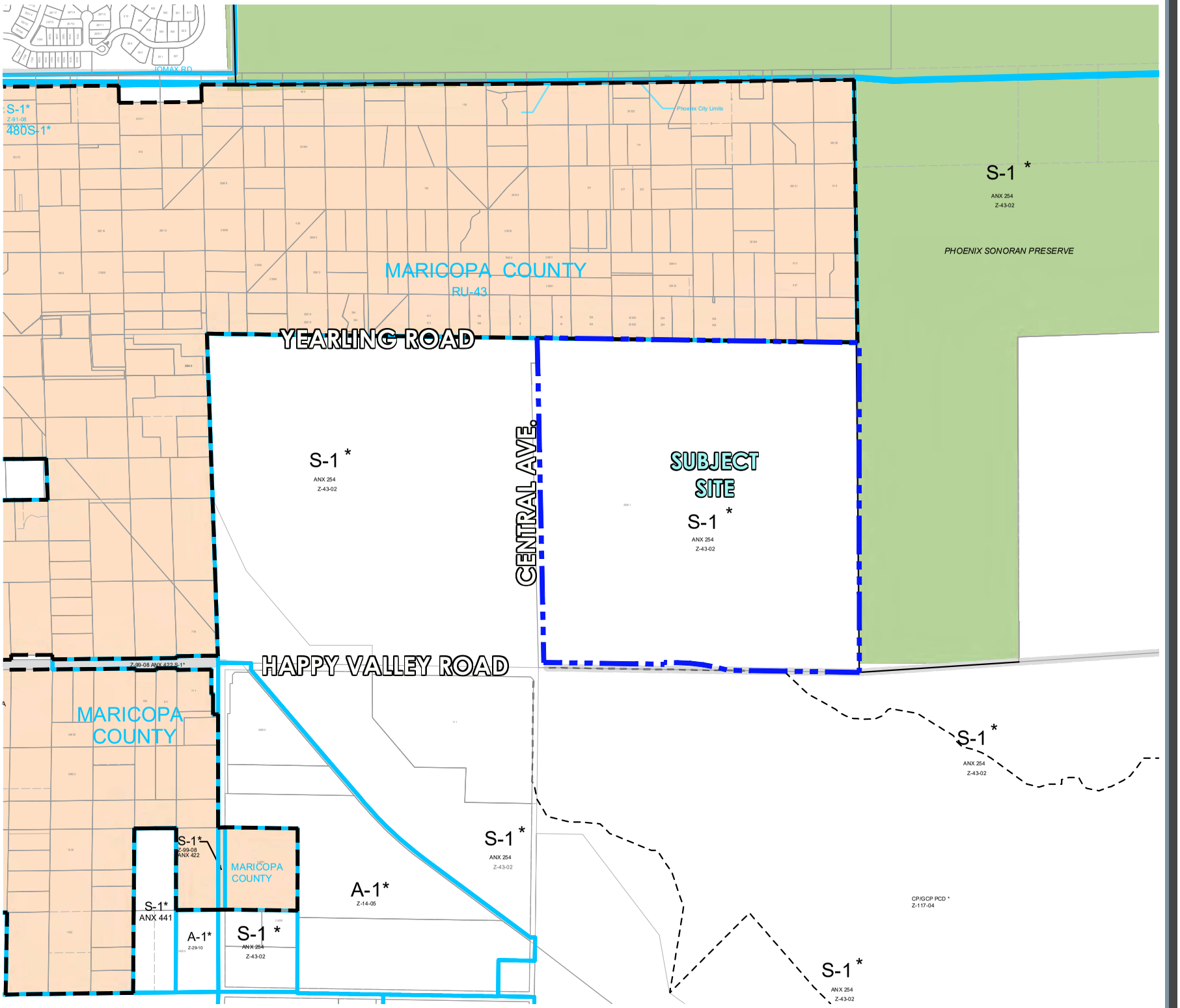


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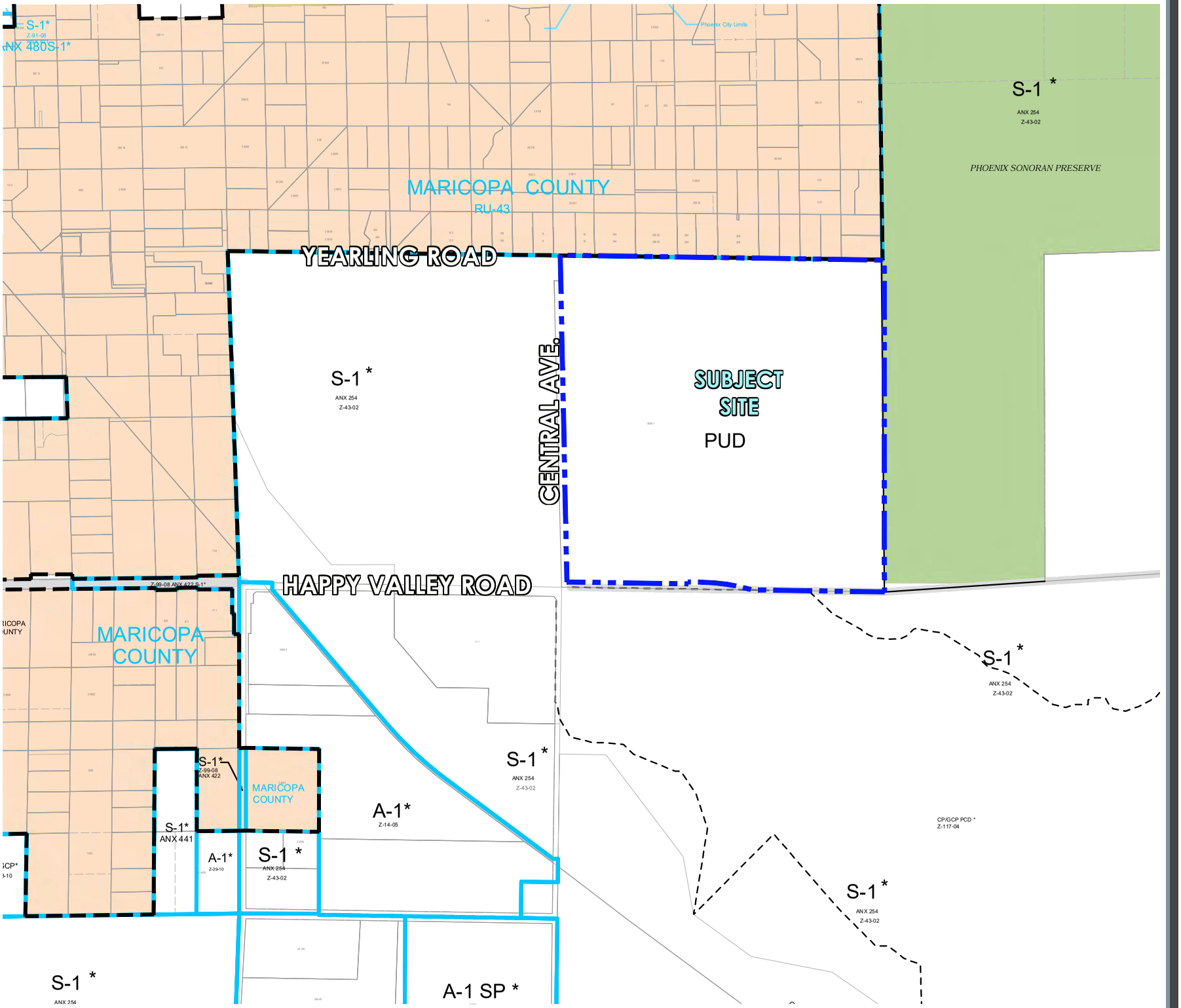
CENTRAL FOOTHILLS PUD

EXHIBIT 12:
PROJECT
PHASNG MAP



CENTRAL FOOTHILLS PUD

EXHIBIT 13:
EXISTING
ZONING PLAN



CENTRAL FOOTHILLS PUD

EXHIBIT 14:
PROPOSED
ZONING PLAN

Parcel 1 – R1-10 PUD Comparative Standards		
	City of Phoenix R1-10 PRD	**Proposed R1-10 PUD**
Min. Lot Area	N/A	5,000 SF
Min. Lot Width	45'	45'
Min. Lot Depth	None, except 110' adjacent to freeway or arterial	None
Max. Dwelling Unit Density	3.5 du/ac, 4.5 w/ bonus	3.2 du/ac
Max. Lot Coverage[(1)]	40% primary structure/ 50% total[(2)]	50% (Calculated with PRD method)
Max. Building Height	2-stories/30'[(3)]	2-stories/30'
Min. Common Area	5% of gross area	35% of gross parcel area
Min. Perimeter Building Setbacks		
Property Boundary	Side: 10' 1-story/15' 2-story Rear: 15' 1-story/20' 2-story	Side: 10' 1-story/15' 2-story Rear: 15' 1-story/20' 2-story
Perimeter Street ROW	15'	15'
Min. Common Landscape Setback		
Perimeter Street ROW	15' avg./10' min.	15' avg./10' min.
Min. Interior Building Setbacks		
Front	10'	10'
Garage[(4)]	18'	18' from back sidewalk
Rear	None	None
Side (street)	10'	10'/5' with tract
Side (internal)	None	5'
Landscape Requirements		
Landscape Standards	Perimeter common: trees spaced a maximum of 20' to 30' on center (depending on species) or in equivalent groupings, and 5 shrubs per tree.	Perimeter common: trees spaced a maximum of 20' to 30' on center (depending on species) or in equivalent groupings, and 5 shrubs per tree.

(1) As defined by the City of Phoenix Zoning Ordinance (Sec. 202) for "Lot Coverage, Planned Residential Development."

(2) "Primary Structure" – Not including attached shade structures or detached structures; "Total" – including all attached and detached structures.

(3) 3 stories not exceeding 30' are permitted if approved by the design advisor for demonstrating enhanced architecture.

(4) Garage setback may be reduced to 10' for side-loaded garages.

EXHIBIT 15: COMPARATIVE DEVELOPMENT STANDARD TABLES

RVi PLANNING + LANDSCAPE ARCHITECTURE

(1)

Parcel 2 – CP PUD Comparative Standards		
	City of Phoenix Commerce Park (Business Park Option)	**Proposed CP PUD (CP)**
Min. Lot Area	None	None
Max. Lot Coverage[1]	40% + 10% for parking canopy structures.	50%
Max. Building Height	18' within 30' of property line, 1' increase per 3' additional setback, max. 56'	18' within 30' of property line, 1' increase per 3' additional setback, max. 56'
Min. Building Separation	N/A	20'
Minimum Landscape Setback		
Perimeter Adjacent to a Public Street	30'	25' average/10' minimum
Adjacent to R1-10 PUD	Min. 5' wide landscape area with min. 2" cal. evergreen trees planted max. 20' on center	30'
Adjacent to R-3 PUD	Min. 5' wide landscape area with min. 2" cal. evergreen trees planted max. 20' on center	30'
Internal (on a Street)	20'	20'
Internal (not on Street)	0'	0'
Minimum Building Setback		
Perimeter Adjacent to a Street	30'	Average 30'
Perimeter Adjacent to R1-10 PUD	20'	75'
Perimeter Adjacent to R-3 PUD	20'	50'
Internal Adjacent to a Street	20'	20'
Internal Not Adjacent to a Street	0'	10'
Landscape Requirements		
Landscape Standards[2]	Perimeter common: trees spaced a maximum of 20 or in equivalent groupings, and 5 shrubs per tree.	Perimeter common: trees spaced a maximum of 20 or in equivalent groupings, and 5 shrubs per tree.

(1) As defined by the City of Phoenix Zoning Ordinance (Sec. 202) for "Lot Coverage"

(2) Other than required access drives, no parking or loading area shall be located within any required setback adjacent to a public street or within any required landscaped area

COMPARATIVE DEVELOPMENT STANDARD TABLES (CONTINUED)

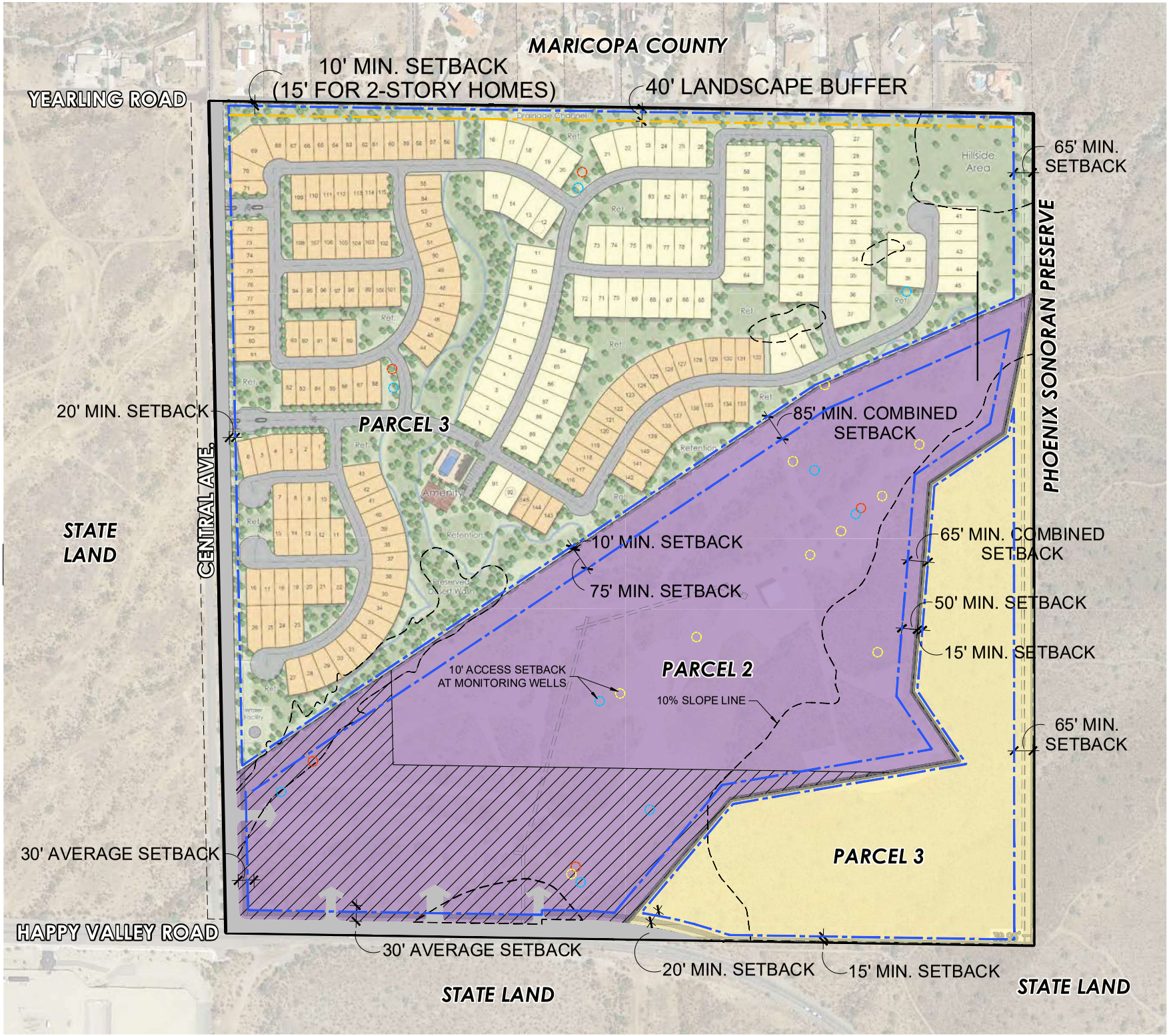
Parcel 3 – R-3 PUD Comparative Standards		
	City of Phoenix R-3 PRD (Table B)	**Proposed R-3 PUD**
Min. Lot Width	None	None
Min. Lot Depth	None	None
Max. Dwelling Unit Density	15.23; 17.40 with bonus	5 du/ac
Max. Lot Coverage(1)	45%	45% (with PRD method)
Max. Building Height	2 stories or 30' for first 150'; 1' in 5' increase to 48', 4-story max	3 stories or 40'
Min. Common Area	5% of gross area	20% of gross parcel area
Minimum Perimeter Building Setbacks		
Property Boundary	15'	15'
Public Streets	20'	20'
Minimum Common Landscape Setback		
Public Streets	15' avg./10' min.	15' avg./10' min.
Minimum Interior Building Setbacks(2)		
Front	10'	10'
Garage(3)	18'	18 from back of sidewalk'
Side (street(4))	0'	10'/5' with tract
Side (internal)	0'	5'
Landscape Requirements		
Landscape Standards	Perimeter common: trees spaced a maximum of 20 to 30 feet on center (based on species) or in equivalent groupings, and 5 shrubs per tree.	Perimeter common: trees spaced a maximum of 20 to 30 feet on center (based on species) or in equivalent groupings, and 5 shrubs per tree.

(1) As defined by the City of Phoenix Zoning Ordinance (Sec. 202) for "Lot Coverage, Planned Residential Development."For single family attached, no individual unit lot setbacks shall apply

(2) Garage setback may be reduced to 10' for side-loaded garages

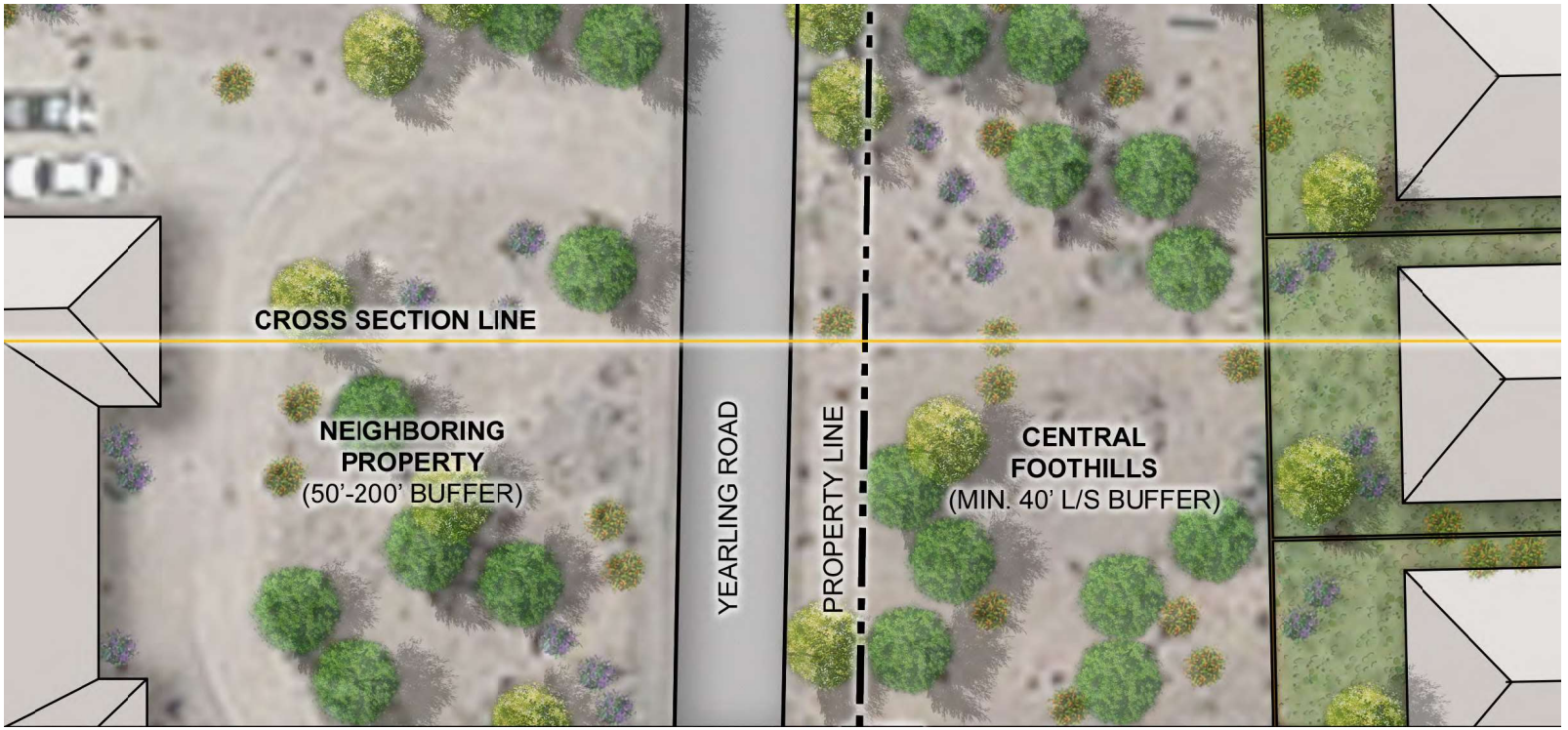
(3) Either public or private streets

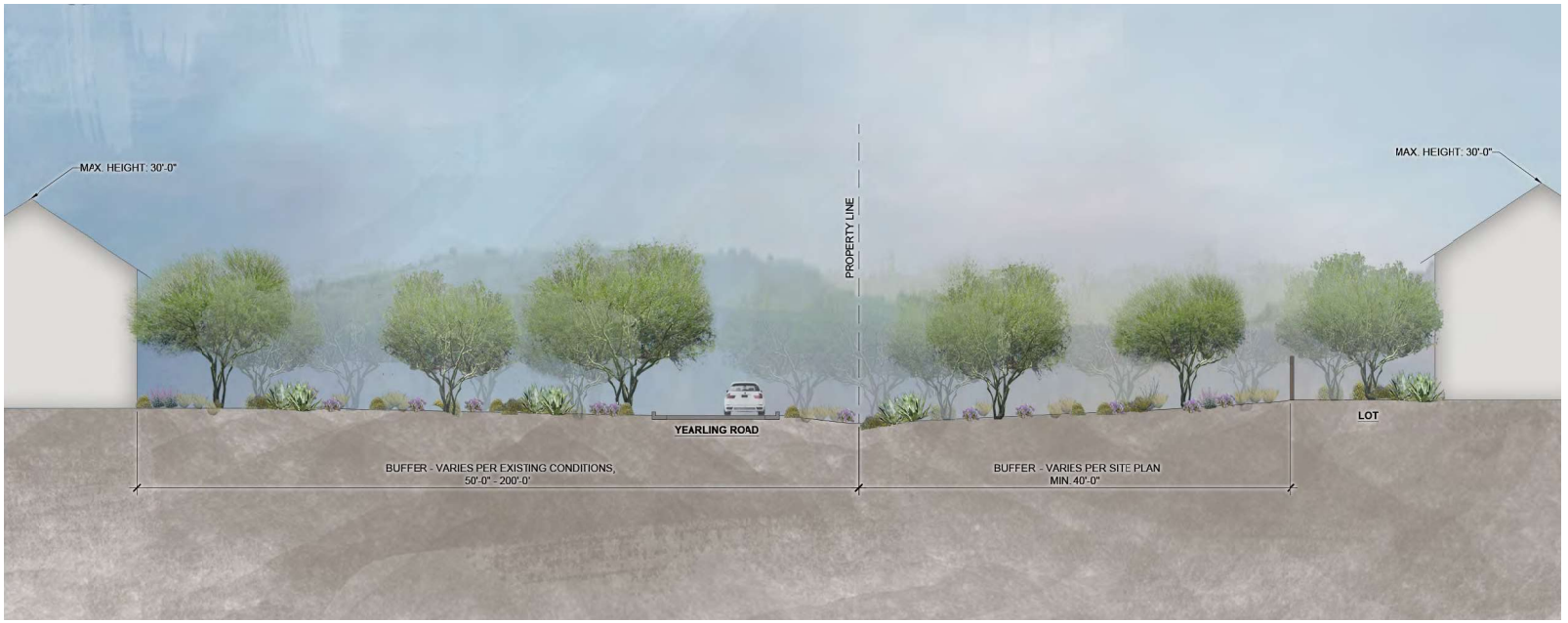
COMPARATIVE DEVELOPMENT STANDARD TABLES (CONTINUED)



CENTRAL FOOTHILLS PUD

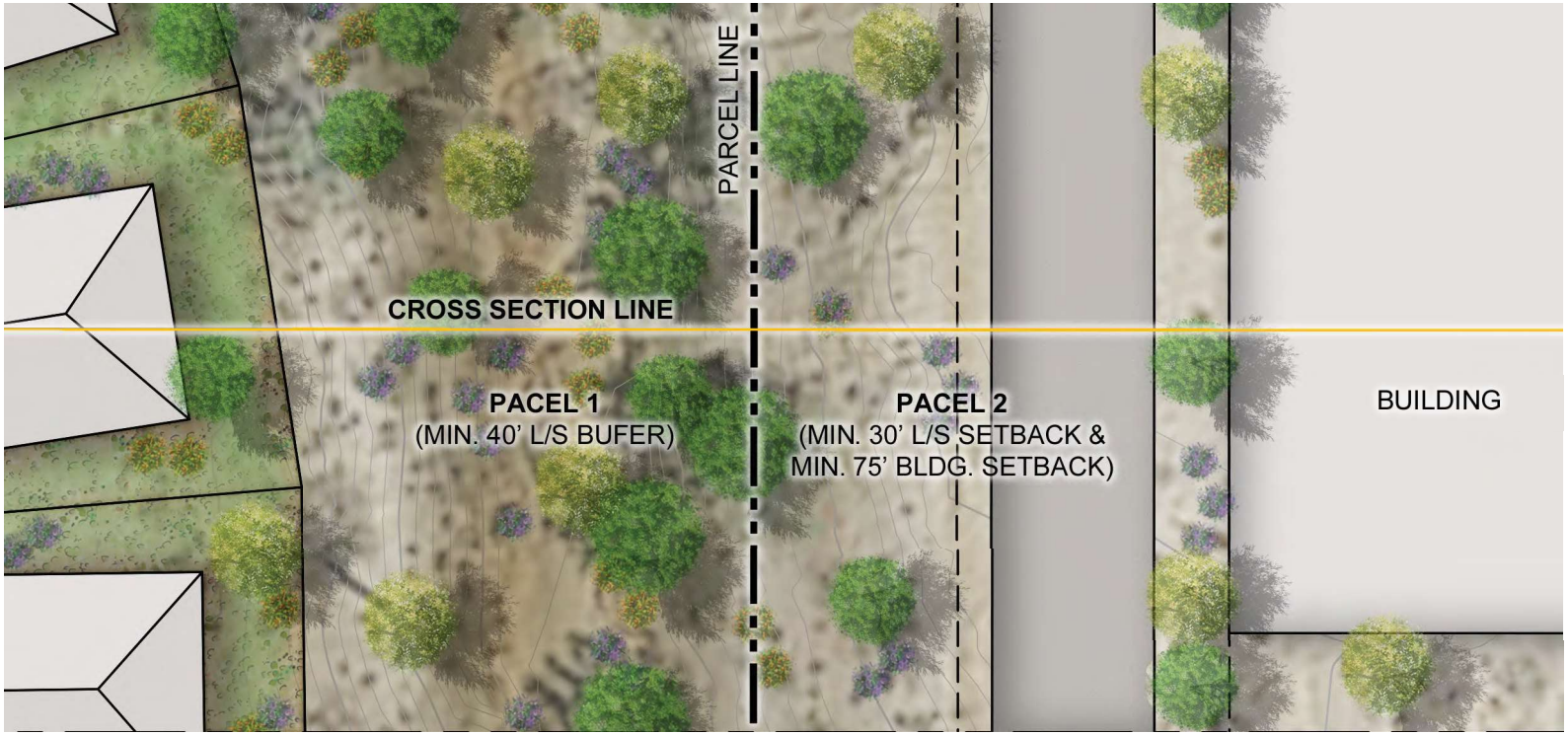
EXHIBIT 16:
PARCEL
SETBACK PLAN

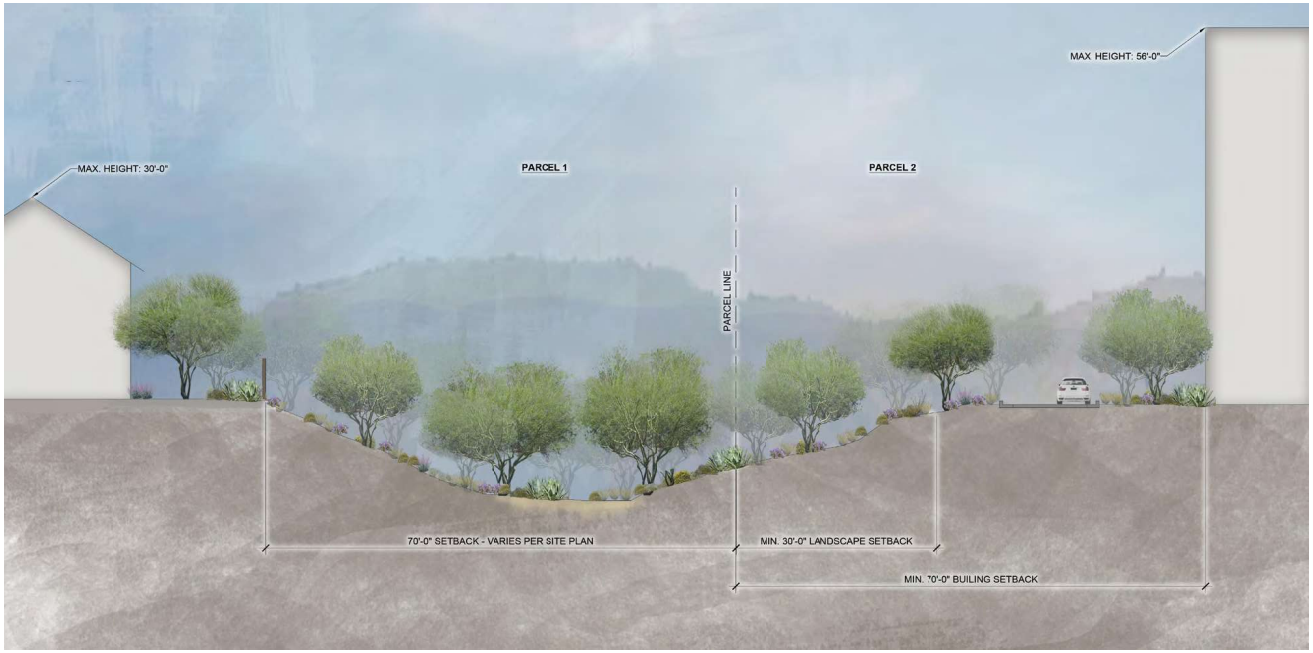




CENTRAL FOOTHILLS PUD

EXHIBIT 17:
PARCEL 1 -
NORTH BUFFER





CENTRAL FOOTHILLS PUD

EXHIBIT 18:
PARCEL 1& 2 -
WASH BUFFER



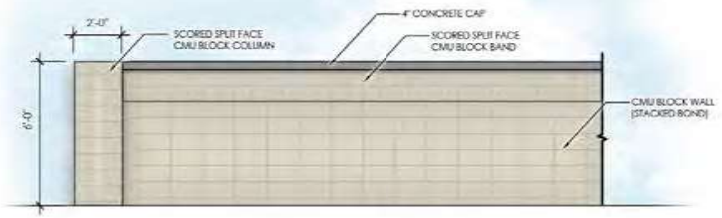
RVi

0 200' 400'

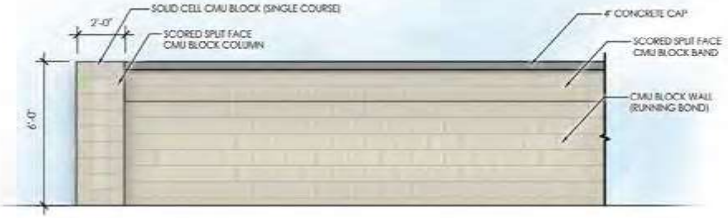
SCALE: 1" = 400'-0"

CENTRAL FOOTHILLS PUD

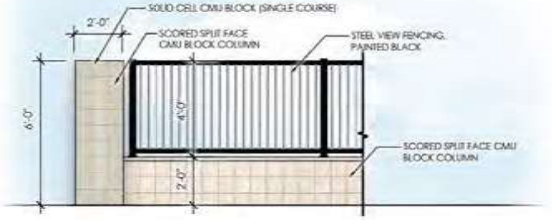
EXHIBIT 19:
CONCEPTUAL
WALL PLAN



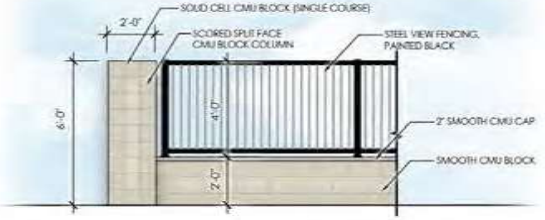
RESIDENTIAL PRIMARY THEME WALL



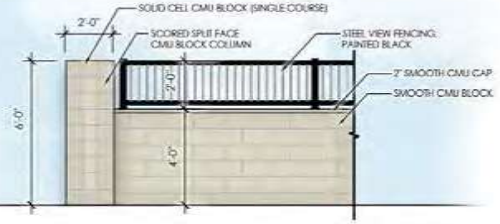
RESIDENTIAL SECONDARY THEME WALL



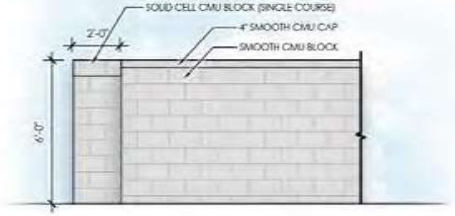
RESIDENTIAL PRIMARY VIEW FENCE



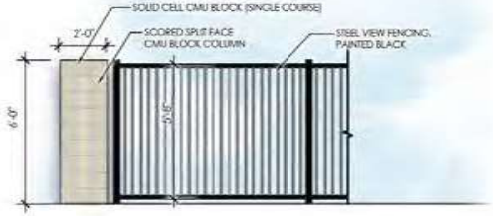
RESIDENTIAL VIEW FENCE (4'-2')



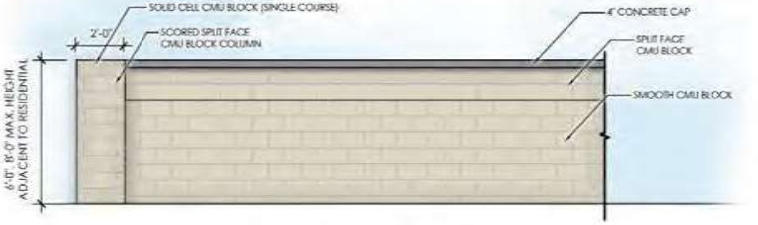
RESIDENTIAL VIEW FENCE (2'-4')



RESIDENTIAL BUILDER WALL



RESIDENTIAL VIEW FENCE



COMMERCE PARK PERIMETER WALL

EXHIBIT 20: CONCEPTUAL WALL DETAILS



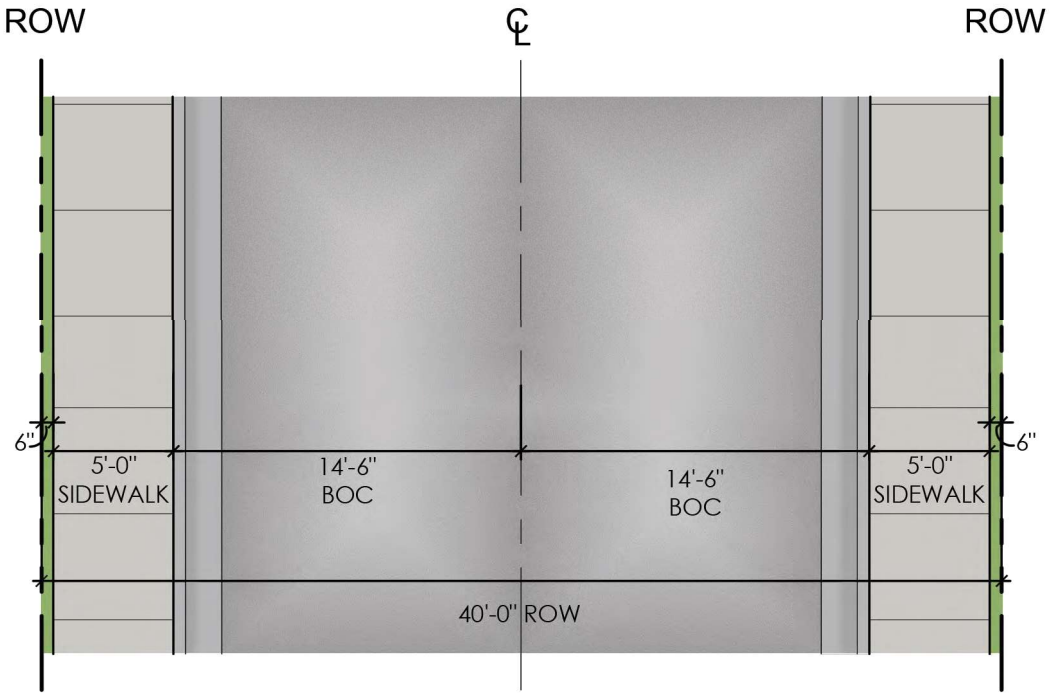
RVi

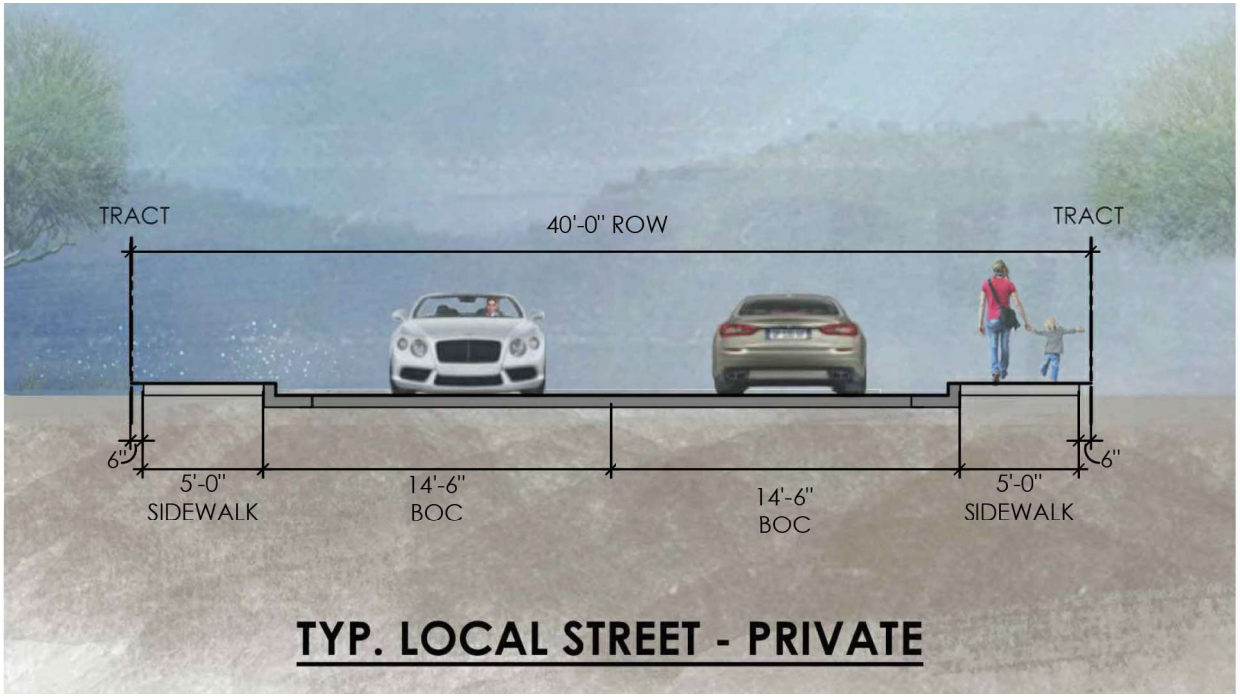
0 200' 400'

SCALE: 1" = 400'-0"

CENTRAL FOOTHILLS PUD

EXHIBIT 21:
CONCEPTUAL
OPEN SPACE
PLAN

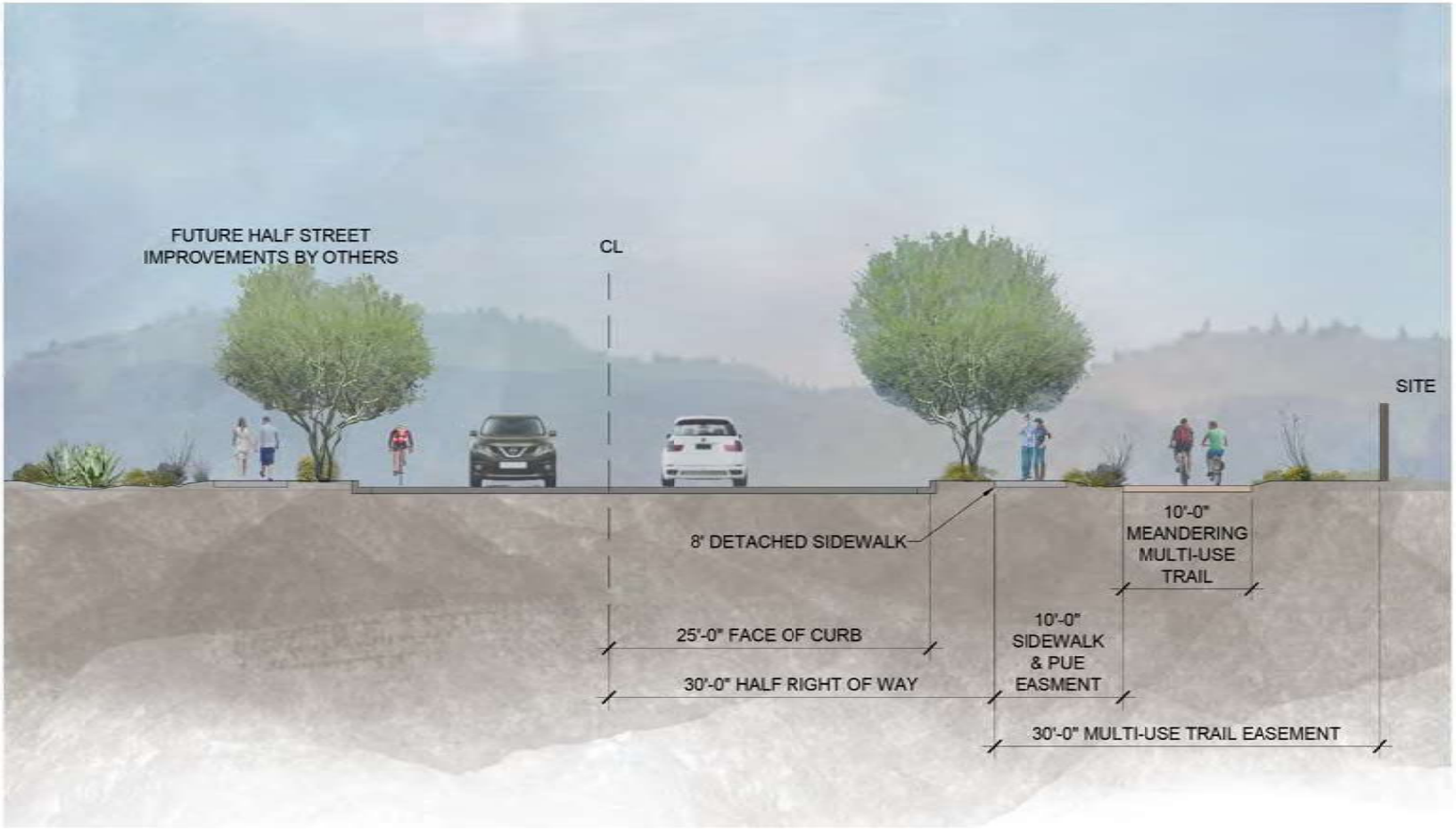




NTS

CENTRAL FOOTHILLS PUD

EXHIBIT 22:
STREET
SECTIONS

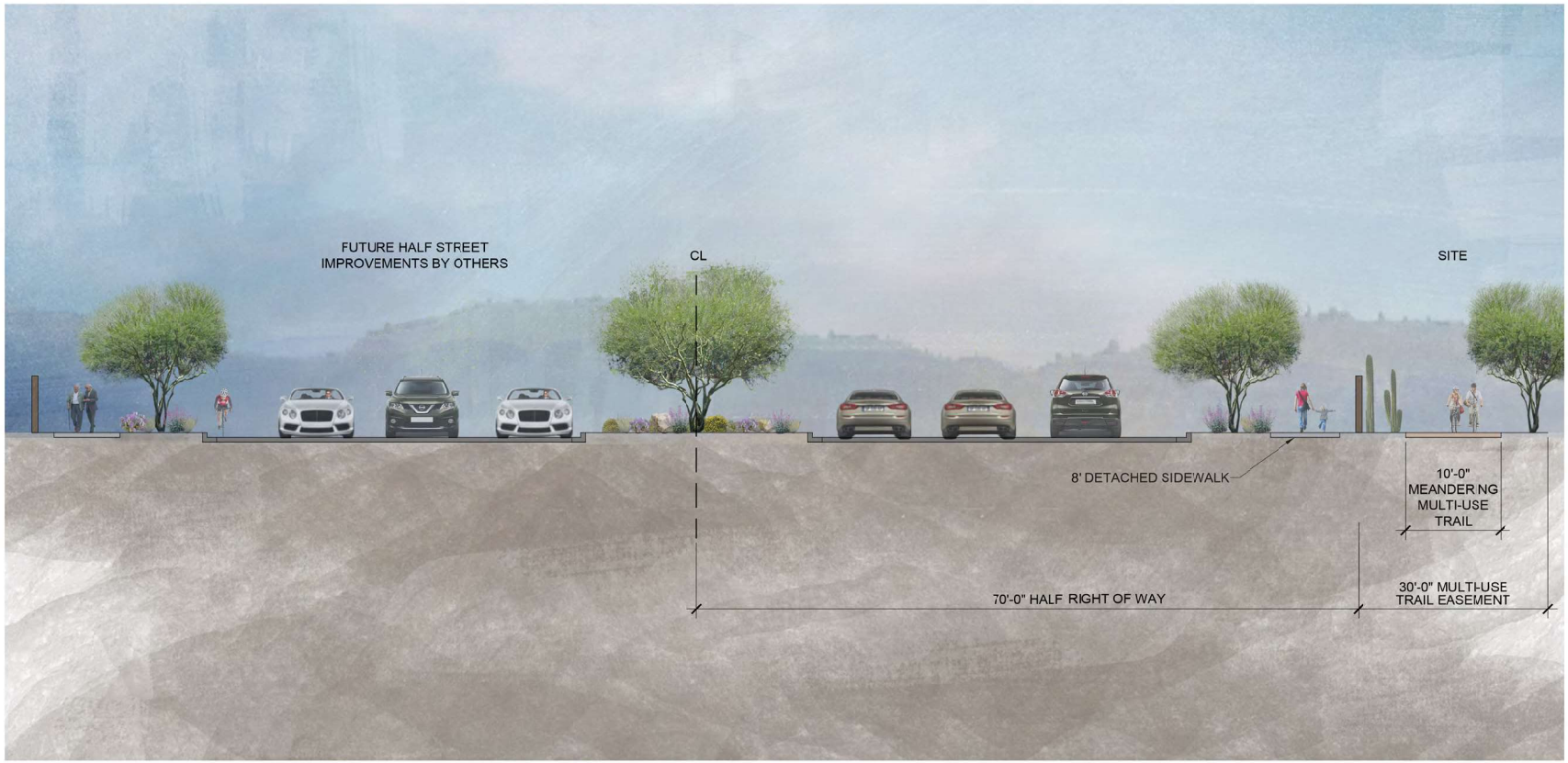


CENTRAL AVENUE
(CROSS SECTION 'F' - 60' ROW)
LOOKING NORTH

NTS

CENTRAL FOOTHILLS PUD

STREET SECTIONS CONTINUED



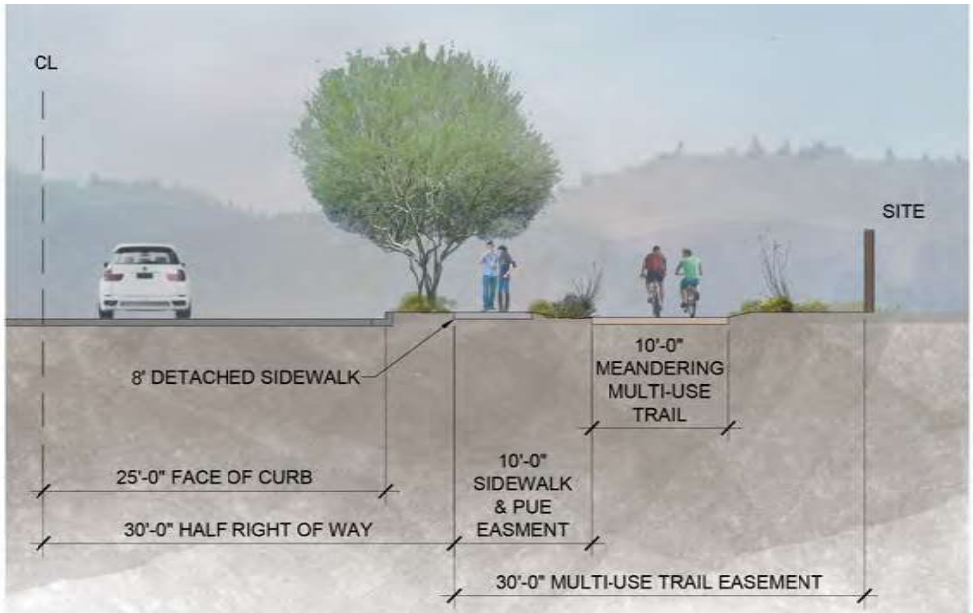
HAPPY VALLEY ROAD
(CROSS SECTION 'A' - 140' ROW)
LOOKING WEST

NTS

CENTRAL FOOTHILLS PUD



INTERNAL TRAIL SECTION



CENTRAL AVENUE TRAIL SECTION



HAPPY VALLEY TRAIL SECTION

NTS

CENTRAL FOOTHILLS PUD

EXHIBIT 23:
TRAIL
SECTIONS



RVi

NTS

CENTRAL FOOTHILLS PUD

EXHIBIT 24:
CONCEPTUAL
TRAILS PLAN



COTTAGE STYLE - PLAN 3510



SPANISH STYLE - PLAN 3517

EXHIBIT 25: CONCEPTUAL PARCEL 1 ARCHITECTURAL ELEVATIONS



Front Elevation

0 4
2 8

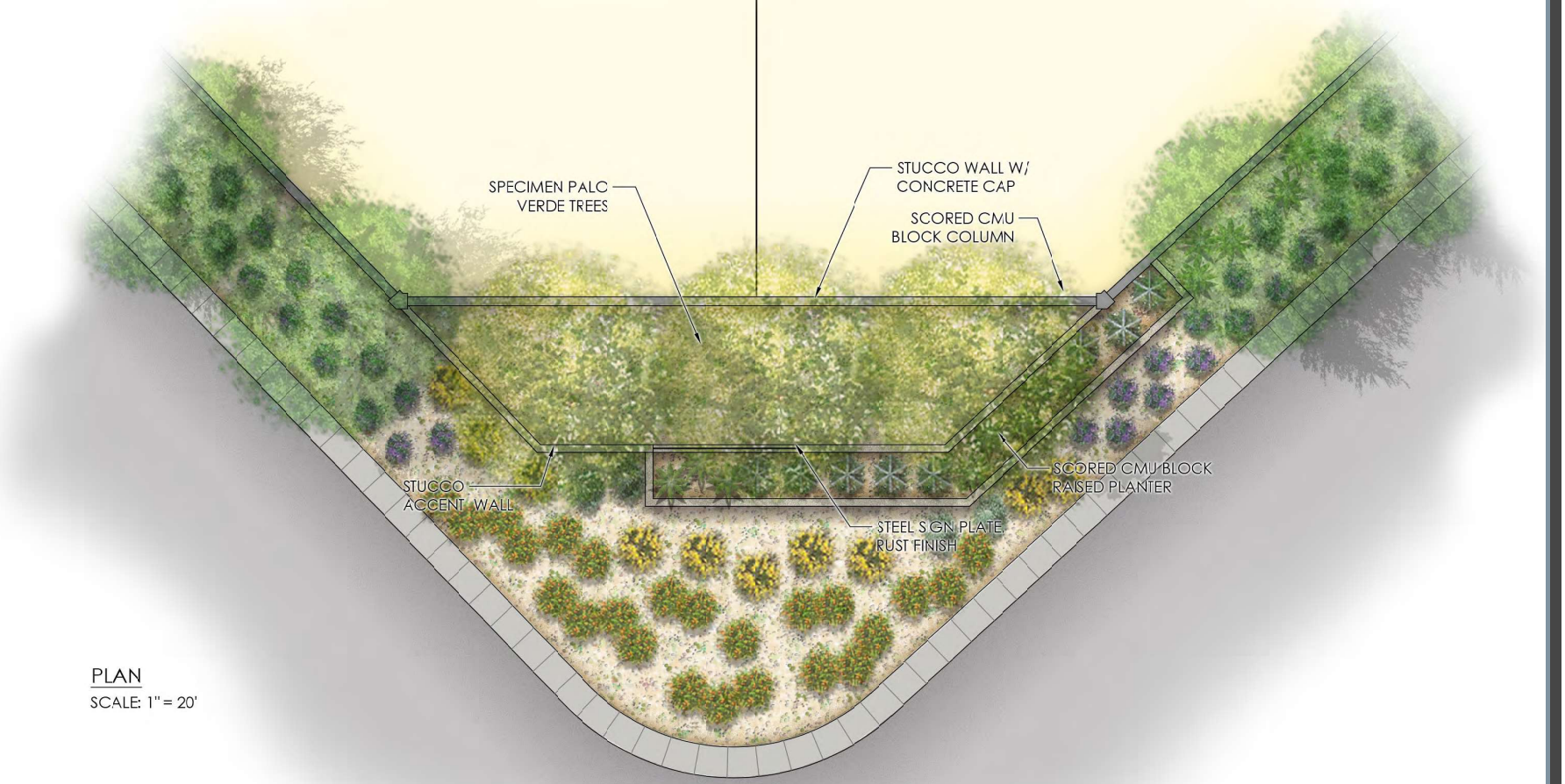
CRAFTSMAN STYLE - PLAN 3513



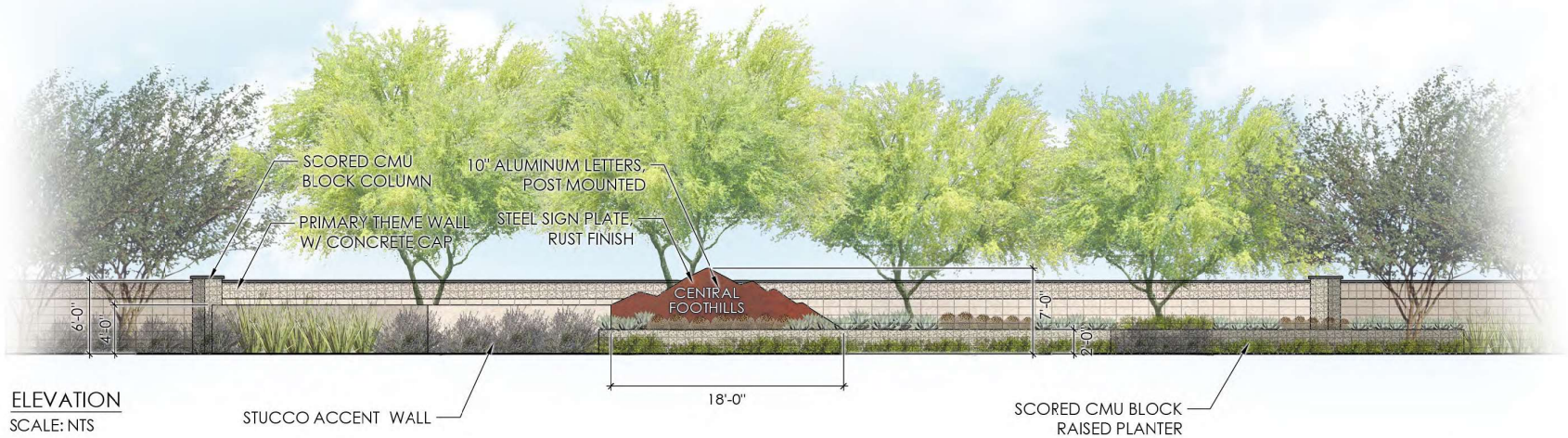
Front Elevation

0 4
2 8

SPANISH STYLE - PLAN 3514



PLAN
SCALE: 1" = 20'



ELEVATION
SCALE: NTS

CENTRAL FOOTHILLS PUD

EXHIBIT 26:
CONCEPTUAL
RESIDENTIAL
ENTRY
MONUMENT

Appendix A

Central Foothills Declaration of Environmental Use Restriction

(1st DEUR)

October 2018

Unofficial
20 Document

When recorded, return to:
Universal Propulsion, Inc.
3530 Branscombe Road
Fairfield, California 94533

DE
sa

DECLARATION OF ENVIRONMENTAL USE RESTRICTION FOR PROPERTIES WITH INSTITUTIONAL CONTROLS

ADEQ Program Name:	Hazardous Waste Program
Program File Number:	RID 32067
Facility Name:	UPCO
Facility Address:	25401 North Central Avenue, Phoenix, AZ 85085

This Declaration of Environmental Use Restriction ("Declaration"), when recorded, is a covenant that runs with and burdens the Property, binds all owners and owners' heirs, successors and assigns (as defined below), and inures to the benefit of the Arizona Department of Environmental Quality ("Department") and the State of Arizona.

This Declaration is executed and recorded by Universal Propulsion Company, Inc., a foreign corporation licensed to do business in Arizona ("Current Owner" either/or "UPCO"), with all successor owners to be known as "Owners".

DECLARATION

Current Owner covenants and agrees as follows:

A. Presence of Contamination. Environmental contaminants are present on a portion of real property located 25401 North Central Avenue, Phoenix, Maricopa County, Arizona ("Property").

B. Warranty of Title. The Current Owner holds all equitable and legal title to, the Property and has authority to execute and record this Declaration.

C. Legal Description. The Current Owner's deed setting forth the legal description of the Property at which the contamination is located is attached and marked **"Exhibit" 1**.

A legal description of the portion of the Property subject to this Declaration is attached and marked **"Exhibit" 2**.

The property tax parcel number is 210-14-050A.

D. Maps. The location of the Property identified in **"Exhibit" 1** is depicted on the map attached and marked as **"Exhibit" 3**. The Property subject to this Declaration is depicted on the map attached and marked as **"Exhibit" 4**.

E. Completion of Remediation.

1. In November 2017, UPCO completed soil excavation on the Engineering Control portion of the Property.

2. Within the portion of the Property covered by the Engineering Control, UPCO will be performing ongoing groundwater monitoring and/or remediation. Pursuant to Arizona Hazardous Waste Management Act Permit LTF 63789, the groundwater remediation process began in 2017.

F. Environmental Contaminant Information. Environmental Contaminant Information, including a description of each environmental contaminant subject to a remediation, remedial action, corrective action or response action, and the remaining contaminant concentrations, is attached and marked as **"Exhibit" 5**.

G. Institutional Control Statements. As part of the Institutional Control, the Current Owner agrees to the following:

1. The Institutional Control consists of the following:

Unofficial Document

a. All Owners shall be restricted from the drilling and/or installation and/or use of wells on the Property. Unless directly related with the approved remedial activities, installation and/or use of wells on the Property will interfere with the ongoing groundwater monitoring and/or remediation taking place on the Engineering Control portions of the Property and are prohibited.

b. If a well is required as a result of Current Owner's remediation plan, Current Owner shall seek approval in writing from ADEQ and any other necessary state agency before installing the well.

c. Restricts Current Owner and all other Owners from access to subsurface water under all portions of the Property for the duration of the Declaration.

2. The Institutional Control shall remain in place to protect the public health and the environment because of ongoing groundwater remediation on a portion of the Property.

3. If any person desires to cancel or modify the Institutional Control in the future, the person shall obtain the Department's and the Current Owner's prior written approval. Any modification of the Institutional Control without the Department's prior written approval is a violation of this Declaration and is voidable.

4. Current Owner hereby grants to the Department and its representatives, authorized agents, attorneys, investigators, consultants, advisors, and contractors the right of access to the Property at all reasonable times to verify the Institutional Control is being maintained.

Attached hereto as **"Exhibit" 6** is the Environmental Access Agreement. The Department's access rights are continual, run with the land, and shall not be restricted. All Owners shall remove any barrier to entry of the Property at the Department's request and at the Owner's expense.

5. All Owners shall incorporate the terms of this Declaration into any lease, easement, license or other agreement that grants any right with respect to the Property. The incorporation may be in full or by reference.

6. If Institutional Controls will affect a right-of-way owned, maintained or controlled by a public entity for public benefit, the Current Owner shall obtain the public entity's written consent before implementing the Institutional Control.

H. Institutional Control Annual Reports. The Current Owner agrees to use an Institutional Control. The Current Owner shall submit to the Department a written Institutional Control Annual Status Report each calendar year regarding the status of each Institutional Control. If the Property or a portion of the Property is sold, all Owners shall notify the Department's DEUR Coordinator within ten (10) days of close of sale. The Current Owner shall continue to be responsible for the submission of the Annual Report for the duration of this Declaration. Any transfer or sale of this Property shall not terminate, modify or affect this Declaration.

I. Notices Required Under This Agreement.

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Notices from ADEQ to Current Owner shall be effective when given, if by telephone, to:

UPCO
(860)728-7624
annette.mcneely@utc.com

And, if in writing, to:

UPCO
Executive Director,
Remediation Programs, UTC,
9 Farm Springs Road,
Farmington, CT 06032

Notices from Owner to ADEQ shall be effective when given, if by telephone, to:

DEUR Program Coordinator
Voluntary Remediation Program
(602) 771-4122

And, if in writing, to:

DEUR Program Coordinator
Arizona Department of Environmental Quality

1110 West Washington Street, 6th Floor
Phoenix, Arizona 85007.

J. Environmental Access Agreement. For the duration of this Declaration, an Environmental Access Agreement, signed by the Current Owner permitting the Department access to the Property is attached and marked as **"Exhibit" 6**. The Environmental Access Agreement shall be binding upon all Owners and the Department.

K. Failure to Comply. If any Owner fails to comply with this Declaration, the Department shall give Owner written notice by certified mail of the failure. If Owner fails to take the action specified in the Department's notice, the Department may issue an order pursuant to A.R.S. §§ 49-152.02 and 49-158(I) and take any other action allowed by law.

L. Release of this Declaration. Request for the release of this Declaration pursuant to A.R.S. §§ 49-152(D) or 49-158(L) may be filed by Owners holding all equitable and legal title to the Property or having legal authority to file the request. The release portion of the fee specified in R18-7-604 was not paid for this declaration. Therefore, a release will not be granted until the Department receives payment of the release portion of the fee specified in R18-7-604 which is in effect at the time of the release request.

This Declaration shall not be released without written confirmation from ADEQ Hazardous Waste Programs that UPCO or its assignee has appropriately performed and satisfactorily completed all groundwater remediation.

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M. Additional Information. More detailed information on the remediation is maintained and available at the Department of Environmental Quality, located at 1110 W. Washington Street, Phoenix, Arizona 85007.

N. Attachments. Attachments to the Declaration are:

Exhibit 1: Current Owner's Deed
Exhibit 2: Legal Description of the Property
Exhibit 3: General Site Location Map
Exhibit 4: Map of the Property
Exhibit 5: Environmental Contaminant Information
Exhibit 6: Environmental Access Agreement

OWNER:

By: _____
Bruce C. Amig, Remedial Programs Manager

State of North Carolina)
)ss. Charlotte
County of Mecklenburg)

This Environmental Access Agreement was acknowledged before me this 31st day of October 2018, by Bruce C. Amig, Remedial Programs Manager, an authorized agent of Universal Propulsion Company, Inc.

_____
Notary Public

ANGELA J. GWINN
NOTARY PUBLIC
Mecklenburg County, NC
My commission expires 8/9/2020

My commission expires: 8/9/2020

Unofficial Document

This Environmental Access Agreement is approved and accepted this 19th day of November, 2018, by the Arizona Department of Environmental Quality.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, an agency of the State of Arizona,

By: Laura L. Malone
Laura L. Malone, Director
Waste Programs Division

State of Arizona)
)ss.
County of Maricopa)

TARA L. OUSLEY
Notary Public - State of Arizona
MARICOPA COUNTY
My Commission Expires
February 28, 2021

This Environmental Access Agreement was acknowledged before me this 19th day of November 2018, by Laura L. Malone, Director, Waste Programs Division, an authorized agent of the Arizona Department of Environmental Quality, an agency of the State of Arizona, on behalf of the agency.

Unofficial Document

Tara L Ousley
Notary Public

My commission expires: 2-28-2021

Exhibit 1

Unofficial Document

Owner's Deed

20180899893

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL
20160004999 01/05/2016 02:26
ELECTRONIC RECORDING

6727000001-5-1-1--
sarabiam

When recorded, return to:

Snell & Wilmer L.L. P.
One Arizona Center
400 E. Van Buren Street
Suite 1900
Phoenix, Arizona 85004-2202
Attention: Mitchell J. Klein

EXEMPT FROM AFFIDAVIT AND FEE PER A.R.S. § 11-1134(A)(3)

PATENT NO. 53-117740-01 FROM STATE OF ARIZONA

Unofficial Document

(Issuance of following Patent recommended by Arizona State Land Commissioner to the Governor of Arizona on the 10th day of December 2015 Lisa D. Atkins, Commissioner)

State of Arizona

PATENT NO. 53-117740-01
(Land Sold at Public Auction)

For 031 Lands
(School, Institutional or University)

In Accordance with the provisions of law, payment in full has been received by the State of Arizona through its State Land Department for the real property described below; and

The State of Arizona in consideration of the premises, and in conformity with law hereby does sell, grant and convey unto

UNIVERSAL PROPULSION COMPANY, INC.

Unofficial Document

of the County of Maricopa, State of Arizona, the following described real property situated in the County of Maricopa, State of Arizona, to-wit:

SEE EXHIBIT "A" LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART OF PATENT NO. 53-117740-01

Total containing 156.87 acres, more or less, subject to existing reservations, easements, or rights-of-way heretofore legally obtained and now in full force and effect, and subject to the following Additional Conditions:

SEE EXHIBIT "B" ADDITIONAL CONDITIONS ATTACHED HERETO AND MADE A PART OF PATENT 53-117740-01

In The Matter Of Patent No. 53-117740-01 (Universal Propulsion Company, Inc. in Maricopa County), pursuant to the provisions of Arizona Revised Statutes § 37-231, of the following substances not heretofore retained and reserved by a predecessor in title to the State of Arizona, all oil, gas, other hydrocarbon substances, helium or other substances of a gaseous nature, geothermal resources, coal, metals, minerals, fossils, fertilizers of every name and description, together with all uranium, thorium or any other material which is or may be determined by the laws of the United States, or of this state, or decisions of court, to be peculiarly essential to the production of fissionable materials, whether or not of commercial value, and the exclusive right thereto, on, in, or under the above described lands, shall be and remain and are hereby reserved in and retained by the State of Arizona, together with the right of the State of Arizona, its lessees or permittees to enter upon those lands for the purpose of exploration, development and removal of the above described substances as provided by the rules of the State Land Department and the laws of Arizona.

To Have And To Hold said property together with all the rights, privileges, immunities and appurtenances of whatsoever nature thereunto belonging unto said Patentee, its successors and assigns forever.

In Testimony Whereof, I, Douglas A. Ducey, Governor of the State of Arizona,

have caused these letters to be made patent, and the Great Seal of

Unofficial Document

the State of Arizona to be hereunto attached.

Given under my hand at the City of Phoenix, Arizona, this 15 day

of December A.D., 2015

Douglas A. Ducey
Governor of the State of Arizona

Attest: Michele Reagan
Secretary of State of the State of Arizona

EXHIBIT "A"
LEGAL DESCRIPTION
53-117740-01

THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, CONTAINING 156.87 ACRES, MORE OR LESS.

Unofficial Document

EXHIBIT "B"
ADDITIONAL CONDITIONS
53-117740-01

1. This Patent includes a reservation for the continuing and unhindered right of access and occupancy by the State of Arizona and for the benefit of UPCO and its successors and assigns, without compensation, for the purposes of implementing, managing and reporting upon the activities required under, and for the satisfaction of Arizona Hazardous Waste Management Act Permit U.S. EPA ID No. AZD 980 814 479 ("Permit"), as may be modified by ADEQ, as well as any physical activities including placement of wells, equipment or structures required by or resulting from the Permit, for an indeterminate period of time.

2. There may be Register Eligible Site or Sites located within the subject Parcel, which could include information significant in this state's history, architecture, archaeology or culture and may meet eligibility criteria, which the Arizona State Parks Board has established for listing on the Arizona Register of Historic Places, or which meet eligibility criteria for listing on the National Register of Historic Places. If ground-disturbing activities will or may impact one or more Register Eligible Site or Sites, patentee shall consult with the State Historic Preservation Office and otherwise take such actions as are necessary to avoid, preserve, protect, or mitigate impacts on the Register Eligible Site or Sites. In the event that avoidance, preservation and protection of the Register Eligible Site or Sites cannot be accomplished, patentee shall ensure a Data Recovery Plan is developed in consultation with and acceptable to, the Arizona State Museum and the State Historic Preservation Office, or their successor agencies, and the Data Recovery is implemented and completed prior to the Register Eligible Site or Sites being affected. The artifacts and records recovered from the property shall be curated according to the Arizona State Museum (ASM) Conservation and Curation Standards as established in rules implementing the Arizona Antiquities Act.

Unofficial Document

Exhibit 2

Unofficial Document

Legal Description of the Property Subject to the Declaration

EXHIBIT "A"
LEGAL DESCRIPTION
53-117740-01

THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, CONTAINING 156.87 ACRES, MORE OR LESS.

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Exhibit 3

Unofficial Document

General Site Location Map

Exhibit 3 – General Site Location Map is available for viewing at the following address:

Arizona Department of Environmental Quality
Records Management Center, 1st Floor
1110 W. Washington St.
Phoenix, Arizona 85007

Unofficial Document

Exhibit 4

Unofficial Document

Map of the Property Subject to the Declaration

Exhibit 4 - Map of Property is available for viewing at the following address:

Maricopa County Recorder
111 S. Third Avenue
Phoenix, AZ 85003

Book 1384 of Maps, Page 10
(https://recorder.maricopa.gov/recdocdata/)

Unofficial Document

Exhibit 5

Unofficial Document

Environmental Contaminant Information

EXHIBIT 5

ENVIRONMENTAL CONTAMINANT INFORMATION

	Contaminant Name	Chemical Abstract No.	Concentration(1)	Exposure Pathway(s) (2)	Non-residential(3)		Residential(4)	
					Carc	Non-carc	Carc	Non-carc
Water	Perchlorate	14797-73-0	71.3	O, D				
	1,1-Dichloroethylene	75-35-4	0.0071	O, D				
	1,4-Dioxane	123-91-1	0.0167	O, D, I				
Soil	Perchlorate	14797-73-0	369	O, I				
	Arsenic	7440-38-2	31	O, I				
				Total				

1) Units are mg/kg. The concentration is the maximum detected at the Property, or the statistically determined value representative of the site-specific contaminant distribution in the area of concern. This value is not the exposure point determined by risk assessment methodology.

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2) Indicate all applicable complete exposure pathways as "O" for oral ingestion, "D" for dermal contact, and "I" for inhalation. One or more pathways may be eliminated by an institutional control, other than a restriction to non-residential uses. All three pathways are considered complete when the only restriction is limiting use of the Property to non-residential use.

3) If a risk assessment has been conducted, list the calculated non-residential risk or hazard quotient for each contaminant. At the bottom of the carcinogen (carc) column, provide the cumulative excess lifetime cancer risk. At the bottom of the non-carcinogen (non-carc) column, provide the hazard index.

4) Optional information, unless one of the following conditions occur:
   a) A risk assessment evaluation for residential uses is required by the program;
   b) A risk assessment evaluation is conducted for residential use which requires implementation of any land use controls; or
   c) The Property use may change from non-residential to residential in the reasonably foreseeable future, and no risk assessment was conducted for residential use. Standard default residential exposure assumptions must be used to determine values for this column.

Exhibit 6

Unofficial Document

Environmental Access Agreement

20180899893

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
ADRIAN FONTES
20180870236 11/26/2018 03:57
ELECTRONIC RECORDING

When recorded, return to:

Arizona Dept. of Environmental Quality
1110 West Washington Street, 6th Floor
Phoenix, Arizona 85007

11262018-15-1-1--
Garciac

ENVIRONMENTAL ACCESS AGREEMENT

ADEQ Program Name:	Hazardous Waste Program
Program File Number:	RID 32067
Facility Name:	Universal Propulsion Company, Inc.
Facility Address:	25401 North Central Avenue Phoenix, Arizona 85085
Parcel Number:	210-14-050A

This Environmental Access Agreement ("Agreement") is entered into by and between the Arizona Department of Environmental Quality ("ADEQ", "Department") and Universal Propulsion Company, Inc., a foreign corporation ("UPCO", "Owner"). Owner and ADEQ are referred to herein as the "Parties."

RECITALS

A. Hazardous substances have been released at real property located at 25401 North Central Avenue, Phoenix, Maricopa County, Arizona ("Property"). The Owner's deed is attached setting forth the legal description of the Property and marked "Exhibit" 1. The Property's tax parcel number is 210-14-050A.

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B. This Agreement is being entered into in connection with the Declaration of Environmental Use Restriction ("Declaration") between the Parties with respect to the hazardous substance contamination at the Property.

C. The Parties desire to state the terms permitting the Department access to and entry on the Property for purposes of inspection and/or necessary repairs to the Engineering Controls and the Institutional Controls in place to protect human health and the environment.

AGREEMENT

For good and valuable consideration, the receipt and adequacy of which is hereby mutually acknowledged, the Parties covenant and agree as follows:

A. Recitals and Warranty of Title. The Recitals and Exhibits are a material part of this Agreement. Owner holds equitable and legal title to and exclusive possession of the Property. Owner has the authority to enter into this Agreement and represents that there is no tenant or other person currently in possession of the Property.

B. Grant of Right of Access. Owner grants an easement to ADEQ and its representatives, authorized agents, attorneys, investigators, consultants, advisers, and contractors to enter on, use, and occupy only as much of the Property as is necessary for the purpose of inspecting, and conducting related activities to ensure that the Engineering Controls constructed on the Property and Institutional Controls are and remain effective remedial action and protect the public health and welfare ("Activities"). This Agreement is a covenant running with the land, binds Owner and Owner's heirs, successors, tenants, and assigns, and will terminate only when ADEQ determines that the Activities are completed or should be discontinued and records a document expressly terminating this Agreement. ADEQ may record this Agreement in the county where the Property is located.

C. Easement and Cooperation with ADEQ. Following the effective date of this Agreement, Owner shall not cause or allow any license, easement, encumbrance or any physical obstacle to be placed on the Property that may interfere with the Activities or ADEQ's rights under this Agreement. If ADEQ has given proper notice under Section "E" below and ADEQ's access is blocked or impaired, ADEQ, without notice to Owner, may remove the barrier or obstacle on the Property, and shall be entitled to immediate injunctive relief.

The Parties hereby acknowledge ADEQ's access to the portion of the Property covered by the Declaration (Engineering Control and Institutional Controls).

If the current or future Owner(s) of the Property:

1. Subdivide the Property; or
2. If the ownership interests in the land are divided; or
3. If any part of the ownership interests are transferred,

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the easement as identified shall remain in full force and effect. Current and future Owner(s) shall not prevent, preclude or hinder ADEQ's access to the Property covered by the Declaration through either subdivision of the Property or any modification of the Property that blocks the access road.

D. Duty of Care. Owner and Owner's agents, employees, contractors, invitees, and guests shall not hinder or interfere with the Activities and shall not damage or tamper with any equipment, wells, or other property used in connection with the Activities.

E. Prior Notice of Activities. ADEQ will use reasonable efforts to give Owner at least ten (10) days prior notice of Activities to be conducted on the Property.

F. Notices Required Under This Agreement.

Notices from ADEQ to Owner shall be effective when given, if by telephone, to:

UPCO
Bruce C. Amig (Manager, Remedial Programs)

At: (704) 423-7071
Bruce.amig@utc.com

And, if in writing, to:

UPCO
c/o Bruce C. Amig
Four Coliseum Centre
Attn: Bruce Amig
2730 W. Tyvola Road
Charlotte, North Carolina 28217

Notices from Owner to ADEQ shall be effective when given, if by telephone, to:

DEUR Program Coordinator
Voluntary Remediation Program
(602) 771-4122

Arizona Office of the Attorney General
Environmental Enforcement Section
(602) 542-5025

And, if in writing, to:

DEUR Program Coordinator
Arizona Department of Environmental Quality
Unofficial Document
1110 West Washington Street, 6th Floor
Phoenix, Arizona 85007.

Arizona Office of the Attorney General
Environmental Enforcement Section
2005 N Central Ave.
Phoenix, Arizona 85007

If Owner changes its telephone number or mailing address for purposes of notice under this Agreement, written notice of the change shall be promptly given to ADEQ.

G. Duration of this Agreement: This Agreement remains in full force and effect and shall not terminate unless or until ADEQ no longer requires use of the easement.

H. No Indemnity. Owner and ADEQ are responsible for only their own negligence in connection with the Activities conducted on the Property.

I. Default. If either Party defaults under this Agreement and the default continues for more than ten (10) days after the effective date of the Party's written notice stating the specific nature of the default, then the Party may treat the default as a breach of this Agreement. Notwithstanding the foregoing, in the event Owner notifies ADEQ of a default, if ADEQ determines that the default cannot be cured within the ten-day notice period, then the default shall be deemed cured if ADEQ commences efforts

to cure the default within the ten-day notice period. ADEQ's inadvertent failure to give notice under Section "E" is not a default under this Agreement. Owner's failure to provide access under this Agreement is not subject to the ten-day notice period and is an immediate breach of this Agreement.

J. Dispute Resolution.

1. This agreement shall be governed by and construed in accordance with the laws of the State of Arizona.

2. In the event any judicial proceeding related to this Agreement, the parties agree that the venue shall be proper in Maricopa County, Arizona.

3. If a dispute that arises out of this environmental access agreement is based upon an Administrative order issued by the Director or ADEQ, any and all appeals from such an Agreement are subject to hearing at the Arizona Office of Administrative Hearing, and any and all such appeals shall be determined pursuant to hearing as prescribed by A.R.S. §41-1092 et. seq.

4. If a dispute arises out of this environmental access agreement, and the amount in controversy does not exceed the statutory amount set forth by statute, the matter shall be, upon filing the matter with Maricopa County Superior Court, submitted to an arbitrator or arbitrators (subject to trial de novo on law and fact) in accordance with the provisions of A.R.S. § 12-133 et. seq., [including A.R.S. § 12-1518], and Az.R.Civ.Pro. 72-76.

5. If a dispute arises out of this environmental access agreement, and the amount in controversy exceeds the statutory amount, the matter shall be filed in Maricopa County Superior Court and litigated pursuant to the appropriate litigation procedures.

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K. Miscellaneous.

(A) This Agreement may be canceled pursuant to A.R.S. § 38-511;
(B) This Agreement expresses the entire agreement of the Parties;
(C) Owner agrees that Owner is not relying on any promise, agreement, or representation made by ADEQ except as stated in this Agreement;
(D) No modification of this Agreement is valid or enforceable unless the terms of the modification are in writing and signed by the Parties;
(E) This Agreement binds and inures to the benefit of the Parties and their agents, heirs, successors, assigns, transferees, executors, and personal representatives;
(F) ADEQ shall retain possession of the fully executed original of this Agreement and Owner shall receive accurate copies;
(G) This Agreement is effective when signed by the Parties;
(H) ADEQ retains all access, investigative, and enforcement authority and all other rights and remedies available to it under any applicable law, statute, rule, and regulation;
(I) This Agreement shall be interpreted and enforced according to the laws of the State of Arizona; and,
(J) This agreement may be signed in counterparts, each of which shall be treated as an original but which, when taken together, shall constitute one and the same Instrument.

Attachments:

Exhibit 1: Owner's Deed
Exhibit 2: General Site Location Map

Unofficial Document

OWNER:

By: _____
Bruce C. Amig, Remedial Programs Manager

State of North Carolina)
)ss. Charlotte
County of Mecklenburg)

This Environmental Access Agreement was acknowledged before me this 31st day of October 2018, by Bruce C. Amig, Remedial Programs Manager, an authorized agent of Universal Propulsion Company, Inc.

_____
Notary Public

ANGELA J. GWINN
NOTARY PUBLIC
Mecklenburg County, NC
My commission expires 8/9/2020

My commission expires: 8/9/2020

Unofficial Document

This Environmental Access Agreement is approved and accepted this 19th day of November, 2018, by the Arizona Department of Environmental Quality.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, an agency of the State of Arizona,

By: Laura L. Malone
Laura L. Malone, Director
Waste Programs Division

State of Arizona)
)ss.
County of Maricopa)

TARA L. OUSLEY
Notary Public - State of Arizona
MARICOPA COUNTY
My Commission Expires
February 28, 2021

This Environmental Access Agreement was acknowledged before me this 19th day of November, 2018, by Laura L. Malone, Director, Waste Programs Division, an authorized agent of the Arizona Department of Environmental Quality, an agency of the State of Arizona, on behalf of the agency.

Unofficial Document

Tara P. Ousley
Notary Public

My commission expires: 2-28-2021

Exhibit 1

Owner's Deed

Unofficial Document

20180899893
20180870236

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL
20160004999 01/05/2016 02:26
ELECTRONIC RECORDING

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sarabiam

When recorded, return to:

Snell & Wilmer L.L. P.
One Arizona Center
400 E. Van Buren Street
Suite 1900
Phoenix, Arizona 85004-2202
Attention: Mitchell J. Klein

EXEMPT FROM AFFIDAVIT AND FEE PER A.R.S. § 11-1134(A)(3)

PATENT NO. 53-117740-01 FROM STATE OF ARIZONA

Unofficial Document

(Issuance of following Patent recommended by Arizona State Land Commissioner to the Governor of Arizona on the 7th day of December 2015 Lan D. Cullen, Commissioner)

State of Arizona

PATENT NO. 53-117740-01
(Land Sold at Public Auction)

For 031 Lands
(School, Institutional or University)

In Accordance with the provisions of law, payment in full has been received by the State of Arizona through its State Land Department for the real property described below; and

The State of Arizona in consideration of the premises, and in conformity with law hereby does sell, grant and convey unto

UNIVERSAL PROPULSION COMPANY, INC.

Unofficial Document

of the County of Maricopa, State of Arizona, the following described real property situated in the County of Maricopa, State of Arizona, to-wit:

SEE EXHIBIT "A" LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART OF PATENT NO. 53-117740-01

Total containing 156.87 acres, more or less, subject to existing reservations, easements, or rights-of-way heretofore legally obtained and now in full force and effect, and subject to the following Additional Conditions:

SEE EXHIBIT "B" ADDITIONAL CONDITIONS ATTACHED HERETO AND MADE A PART OF PATENT 53-117740-01

In The Matter Of Patent No. 53-117740-01 (Universal Propulsion Company, Inc. in Maricopa County), pursuant to the provisions of Arizona Revised Statutes § 37-231, of the following substances not heretofore retained and reserved by a predecessor in title to the State of Arizona, all oil, gas, other hydrocarbon substances, helium or other substances of a gaseous nature, geothermal resources, coal, metals, minerals, fossils, fertilizers of every name and description, together with all uranium, thorium or any other material which is or may be determined by the laws of the United States, or of this state, or decisions of court, to be peculiarly essential to the production of fissionable materials, whether or not of commercial value, and the exclusive right thereto, on, in, or under the above described lands, shall be and remain and are hereby reserved in and retained by the State of Arizona, together with the right of the State of Arizona, its lessees or permittees to enter upon those lands for the purpose of exploration, development and removal of the above described substances as provided by the rules of the State Land Department and the laws of Arizona.

To Have And To Hold said property together with all the rights, privileges, immunities and appurtenances of whatsoever nature thereunto belonging unto said Patentee, its successors and assigns forever.

In Testimony Whereof, I, Douglas A. Ducey, Governor of the State of Arizona, have caused these letters to be made patent, and the Great Seal of the State of Arizona to be hereunto attached.

Unofficial Document

Given under my hand at the City of Phoenix, Arizona, this 15 day of December A.D., 2015

Douglas A. Ducey
Governor of the State of Arizona

Attest: Michele Reagan
Secretary of State of the State of Arizona

EXHIBIT "A"
LEGAL DESCRIPTION
53-117740-01

THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, CONTAINING 156.87 ACRES, MORE OR LESS.

Unofficial Document

EXHIBIT "B"
ADDITIONAL CONDITIONS
53-117740-01

1. This Patent includes a reservation for the continuing and unhindered right of access and occupancy by the State of Arizona and for the benefit of UPCO and its successors and assigns, without compensation, for the purposes of implementing, managing and reporting upon the activities required under, and for the satisfaction of Arizona Hazardous Waste Management Act Permit U.S. EPA ID No. AZD 980 814 479 ("Permit"), as may be modified by ADEQ, as well as any physical activities including placement of wells, equipment or structures required by or resulting from the Permit, for an indeterminate period of time.

2. There may be Register Eligible Site or Sites located within the subject Parcel, which could include information significant in this state's history, architecture, archaeology or culture and may meet eligibility criteria, which the Arizona State Parks Board has established for listing on the Arizona Register of Historic Places, or which meet eligibility criteria for listing on the National Register of Historic Places. If ground-disturbing activities will or may impact one or more Register Eligible Site or Sites, patentee shall consult with the State Historic Preservation Office and otherwise take such actions as are necessary to avoid, preserve, protect or mitigate impacts on the Register Eligible Site or Sites. In the event that avoidance, preservation and protection of the Register Eligible Site or Sites cannot be accomplished, patentee shall ensure a Data Recovery Plan is developed in consultation with and acceptable to, the Arizona State Museum and the State Historic Preservation Office, or their successor agencies, and the Data Recovery is implemented and completed prior to the Register Eligible Site or Sites being affected. The artifacts and records recovered from the property shall be curated according to the Arizona State Museum (ASM) Conservation and Curation Standards as established in rules implementing the Arizona Antiquities Act.

Unofficial Document

Exhibit 2

General Site Location Map

Unofficial Document

Exhibit 2 – General Site Location Map is available for viewing at the following address:

Arizona Department of Environmental Quality
Records Management Center, 1st Floor
1110 W. Washington St.
Phoenix, Arizona 85007

Unofficial Document

Appendix B

Central Foothills Declaration of Environmental Use Restriction

(2nd DEUR)

January 2020

PREMIER TITLE AGENCY-UNINSURED

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
ADRIAN FONTES
20200066622 01/24/2020 04:47
ELECTRONIC RECORDING

When recorded, return to:

PAF Central, LLC
11811 N. Tatum Blvd., Suite 1051
Phoenix, AZ 85028

A-107500

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brodiek

DECLARATION OF ENVIRONMENTAL USE RESTRICTION FOR PROPERTY WITH ENGINEERING CONTROLS & INSTITUTIONAL CONTROLS

ADEQ Program Name:	Hazardous Waste Program
Program File Number:	RID 32248
Facility Name:	Universal Propulsion
Facility Address:	25401 North Central Avenue Phoenix, Arizona 85085

This Declaration of Environmental Use Restriction ("Declaration"), when recorded, is a covenant that runs with and burdens the Property, binds all owners and owners' heirs, successors and assigns, (as defined below) and inures to the benefit of the Arizona Department of Environmental Quality ("Department") and the State of Arizona.

This Declaration is executed and recorded by PAF Central, LLC ("Owner" either/or "Current Owner"), an Arizona Limited Liability Company, and is enforceable against all successive owners. Universal Propulsion Company, Inc. ("UPCO" either/or "Past Owner"), a foreign corporation licensed to do business in Arizona, is included within this Declaration as Past Owner, as it has retained duties and responsibilities under the Declaration. PAF Central, LLC and UPCO are referred to herein as "All Owners".

DECLARATION

Current Owner covenants and agrees as follows:

A. Presence of Contamination. Environmental contaminants are present on a portion of real property located at 25401 North Central Avenue, Phoenix, Maricopa County, Arizona ("Property").

B. Warranty of Title. The Current Owner holds all equitable and legal title to, the Property and has authority to execute and record this Declaration.

C. Legal Description. The Current Owner's deed setting forth the legal description of the Property at which the contamination is located is attached and marked **"Exhibit" 1**.

A legal description of the portion of the property subject to this Declaration is attached and marked as **"Exhibit" 2**.

The property tax parcel number is 210-14-050A.

D. Maps. The location of the Property identified in **"Exhibit" 1** is depicted on the map attached and marked as **"Exhibit" 3**. The Property subject to this Declaration is depicted on the map attached and marked as **"Exhibit" 4**.

E. Completion of Remediation. The date remediation, remedial action, corrective action or response action was completed:

1. UPCO completed soil excavation on the Engineering Control portion of the Property in November 2017.

2. UPCO installed four engineered caps on the Property in February 2018.

3. Within the portion of the Property covered by the Engineering Control, UPCO will be performing ongoing groundwater monitoring and/or remediation. The groundwater remediation process will begin in 2019.

F. Environmental Contaminant Information. Environmental Contaminant Information, including a description of each environmental contaminant subject to a remediation, remedial action, corrective action or response action, and the remaining contaminant concentrations, is attached and marked as **"Exhibit" 5**.

G. Institutional and Engineering Control Statements. The Current Owner is using an Institutional Control and Engineering Controls to satisfy the requirements of A.R.S. §§ 49-152 or 49-158. All Owners agree to the following:

1. The Institutional Control consists of the following:

   a. As defined by A.R.S. § 49-151 *et.seq.*, all Owners shall be restricted from residential use of the portion of the Property as depicted in **"Exhibit" 2**.

   b. The Institutional Control shall remain in place to protect the public health and the environment.

   c. The maintenance requirements of the Institutional Control are that All Owners assure that the restricted area will not be subject to residential use as defined by A.R.S. § 49-151.

   d. All Owners shall prohibit any activity that may harm the engineered caps, including the excavation or disturbance of soil underlying the engineered caps depicted in **"Exhibit" 4**.

   e. As part of this Declaration, Current Owner hereby authorizes UPCO to enforce provisions of the Institutional Control.

2. The Engineering Controls consists of the following:

a. Four engineered caps constructed using a linear low-density polyethylene (LLDPE) MicroSpike® geomembrane liner overlain by a HydroTurf® CS surface layer to minimize erosion of the soil and surface water infiltration. The HydroTurf® CS surface layer is made up of woven geotextile and an engineered synthetic turf which is infilled with Hydrobinder®, resulting in a fiber reinforced high-strength concrete matrix.

   Run-on and run-off controls for the engineered caps and rip-rap cover are designed and constructed to provide erosion protection and eliminate pooling and lateral infiltration of water at and near the ground surface.

b. Waterbore Area

   a. The engineered cap covers an area of approximately 16,765 square feet which includes the HydroTurf® and concrete anchor trench.

   b. Within the footprint of the cap, two groundwater monitoring wells (MS-13 and MW-19), and three (3) moisture monitoring wells (MMW-1, MMW-2, and MMW-3) penetrate the HyrdroTurf®.

   c. The cap is sealed around each well with a LLDPE liner boot.

   d. The concrete anchor trench encompasses the entire HydroTurf® to anchor the liner and the HydroTurf® into the native ground.

   e. Due to potential scouring within the wash from rain events, and to prevent against surface water infiltrating laterally beneath the cap, the anchor trench upgradient of the cap is a minimum of four (4) feet deep, eight (8) feet wide at the surface, and four (4) feet wide at the bottom.

   f. The anchor trench downgradient of the cap is tied into the downgradient rip-rap apron.

c. C-Complex Area

   a. The engineered cap covers an area of approximately 6,839 square feet which includes the HydroTurf® and concrete anchor trench.

   b. The concrete anchor trench encompasses the entire HydroTurf® to anchor the liner and HydroTurf® into the native ground.

   c. The anchor trench extends approximately two (2) feet deep.

d. New Burn Area

   a. There are two (2) engineered caps within the New Burn Area.

b. The larger cap covers an area of approximately 9,664 square feet, while the smaller cap protects an area of approximately 2,486 square feet.

c. The total area covered includes the HydroTurf® and concrete anchor trench.

d. The concrete anchor trench encompasses the entire HydroTurf® to anchor the liner and HydroTurf® into the native ground.

e. The anchor trench extends approximately two (2) feet deep.

f. Within the footprint of the smaller cap, one (1) groundwater monitoring well (MW-21) penetrates the HydroTurf®. The cap is sealed around each well with an LLDPE liner boot.

e. Rip-Rap Cover

a. A rip-rap cover is included in the Old Burn Area.

b. Excavated arsenic areas were backfilled and compacted near ground surface.

c. A nonwoven geotextile fabric was installed on top of the soil and each joint of the geotextile was overlapped at least 12-inches and brought up around the edges of the excavation.

d. A rip-rap layer was then installed within the cap area on top of the geotextile. The top of the rip-rap cover is at the same grade as the surrounding area.

f. UPCO constructed the Engineering Controls in February 2018.

3. The maintenance requirements for the Engineering Control are specified in the Engineering Control Plan ("ECP") document dated December 7, 2018. All Owners agree to maintain the specified maintenance requirement(s) and implement the procedures outlined in the document. The ECP is incorporated herein and is available for review by the Department.

The maintenance requirements specified in the ECP include semiannual inspection of the Engineering Control(s) semi-annually for the first five (5) years during the months of April and October. After five (5) years, inspection frequency will be re-evaluated, and a permit modification request (PMR) may be submitted to request ADEQ approval for a reduction of inspection frequency.

All Owners shall be responsible for maintenance on items identified as unacceptable on the inspection check list. Maintenance will be performed within approximately thirty (30) days following the discovery of an unacceptable item and a summary of maintenance performed during the period covered will be provided in the annual report.

4. To protect the public health and the environment, the Institutional Control and Engineering Controls shall remain in place because contaminant levels exceed residential soil standards, and:

   a. Will prevent direct exposure to the contaminated soil.
   b. Will prevent generation of airborne contaminants from beneath the soil caps.
   c. Will prevent migration of contaminants due to storm water flow or further leaching into the subsurface.
   d. Will prevent exposure to contaminated groundwater underlying the Property.

5. If any person desires to cancel or modify the Institutional Control and/or Engineering Controls in the future, the person shall obtain the Department's, Past, and Current Owner's prior written approval. Any modification of the Engineering Control without the Department's prior written approval is a violation of this Declaration and is voidable.

6. Current Owner hereby grants to the Department and its representatives, authorized agents, attorneys, investigators, consultants, advisors, and contractors the right of access to the Property at all reasonable times to verify the Engineering Controls are being maintained. The Department's access rights are continual, run with the land, and shall not be restricted. Owner shall remove any barrier to entry of the Property at the Department's request and at the Owner's expense. Attached hereto as **"Exhibit" 6** is the Environmental Access Agreement recorded by UPCO on November 26, 2018 in Maricopa County under instrument number 20180870236.

7. All Owners shall incorporate the terms of this Declaration into any lease, license or other agreement that is signed by Owner and that grants a right with respect to the Property. The incorporation may be in full or by reference.

9. All Owners agree to provide a copy of the Engineering Control Plan document dated December 7, 2018 to the subsequent purchaser of the Property. Additional copies can be obtained through the Department's Record's Center by submitting a request and paying any associated fees.

10. If the Engineering Control will affect a right-of-way that is owned, maintained or controlled by a public entity for public benefit, the owner shall obtain the public entity's written consent prior to constructing the Engineering Control.

H. Engineering Control Plans/Financial Assurance. The Engineering Control Plan and financial assurance mechanism prescribed by A.R.S. § 49-152.01 are as follows:

1. The Engineering Control Plan, dated December 7, 2018 provides detailed planning for inspection, maintenance, and repair of the four HydroTurf® caps, rip rap cover, and groundwater remediation system. Inspection and monitoring will be conducted semiannually for the first five (5) years, after which inspection frequency will be reevaluated. Inspection and monitoring will continue throughout the life of the Declaration, which is perpetual, unless formally released by ADEQ. No modifications to the approved maintenance plan will be made without prior approval of ADEQ.

2. The financial assurance is a Surety Bond used to cover the costs of maintenance and/or restoration of the Engineering Controls. The financial assurance under this Declaration shall be incorporated and included in the Arizona Hazardous Waste Management Act Permit. The financial assurance mechanism annual reporting and maintenance costs under this Declaration shall be found within the Arizona Hazardous Waste Management Act Permit. The Current Owner shall continue to be responsible for the financial assurance for the duration of this Declaration, or upon sale, shall comply with A.R.S. § 49-152.01(C).

I. Periodic Inspections and Reports. The Current Owner has elected to use an Institutional Control and Engineering Controls to satisfy the requirements of A.R.S. §§ 49-152 or 49-158. All Owners shall maintain the Controls to ensure that they continue to protect public health and the environment, and shall inspect the Engineering Controls at least once each calendar year or more. In accordance with the Engineering Control Plan Document dated December 7, 2018, the Engineering Controls shall be inspected semi-annually for the first five (5) years during the months of April and October. After five (5) years, inspection frequency will be re-evaluated.

The engineered caps will be inspected following a storm event as follows:

a. Storm events will be established by monitoring the Flood Control District of Maricopa County on-line rain gauge (14200) data monthly.

b. This rain gauge is located at the Deer Valley Airport within two (2) miles of the site. It is assumed that surface water will flow in the wash when 1-inch or greater of rainfall occurs within a 24-hour period.

c. Therefore, if any 1-day rain event equals or exceeds 1-inch of total rain, a visual surface inspection of the run-on and run-off control, and cap integrity will be conducted within approximately seven (7) calendar days.

Within thirty (30) days after each inspection All Owners shall submit to the Department a written report that:

1. Describes the condition of the Engineering Controls and compliance with the non-residential use restriction;
2. States the nature and cost of all restoration made to the Engineering Controls during the calendar year;
3. Includes current photographs of the Engineering Controls; and
4. Describes the status of the financial assurance mechanism prescribed by A.R.S. § 49-152.01, and a certification that the financial assurance mechanism is being maintained.

Within each annual report, a Professional Engineer, licensed in the State of Arizona, will certify the annual report statements are true for each Engineering Control.

The inspection report shall be submitted to the Department as follows:

Arizona Department of Environmental Quality

Attn: DEUR Program Coordinator
1110 W. Washington Street, 6th Floor
Phoenix Arizona 85007

J. Release of this Declaration. Request for the release of this Declaration pursuant to A.R.S. §§ 49-152(D) or 49-158(L) may be filed by Owners holding all equitable and legal title to the Property or having legal authority to file the request. The release portion of the fee specified in R18-7-604 was not paid for this Declaration. Therefore, a release will not be granted until the Department receives payment of the release portion of the fee specified in R18-7-604 which is in effect at the time of the release request.

K. Sale or Transfer of the Property. Pursuant to A.R.S. §49-152.01(C), at least five (5) working days before the sale of the Property or any portion of the Property, the Current Owner shall provide written notice of the sale identifying the buyer. Any transfer or sale of this Property shall not terminate, modify or affect this Declaration or the duties of Past Owner as set forth herein. Any new Owner shall enforce the provisions of this Declaration.

L. Notices Required Under This Agreement.

Notices from ADEQ to Current Owner shall be effective when given, if by telephone or email to, to:

PAF Central, LLC
(602) 953-8729
Dave@dclawaz.com

And, if in writing, to:

PAF Central, LLC
Attn: David Cisiewski, Authorized Agent
11811 N. Tatum Blvd., Suite 1051
Phoenix, AZ 85028

Notices from ADEQ to Past Owner shall be effective when given, if by telephone or email to, to:

UPCO
(860) 728-7624
annette.mcneely@utc.com

And, if in writing, to:

UPCO
c/o Executive Director, Remediation Programs
United Technologies Corporation
9 Farm Springs Road
Farmington, CT 06032

Notices from Owner to ADEQ shall be effective when given, if by telephone, to:

DEUR Program Coordinator
Voluntary Remediation Program
(602) 771-4122

And, if in writing, to:

DEUR Program Coordinator
Arizona Department of Environmental Quality
1110 West Washington Street, 6th Floor
Phoenix, Arizona 85007.

M. Environmental Access Agreement. For the duration of this Declaration, an Environmental Access Agreement signed and recorded by the Past Owner permitting the Department access to the Property is attached and marked as **"Exhibit" 6**. The Environmental Access Agreement shall be binding upon All Owners and the Department.

N. Failure to Comply. If any Owner fails to comply with this Declaration or to implement the Engineering Control Plan document dated December 7, 2018, the Department shall give All Owners written notice by certified mail of the failure. If Owner fails to take the action specified in the Department's notice, the Department may issue an order pursuant to A.R.S. §§ 49-152.02 and 49-158(I) to All Owners and take any other action allowed by law.

O. Additional Information. More detailed information on the remediation is maintained and available at the Department of Environmental Quality, located at 1110 W. Washington Street, Phoenix, Arizona 85007.

P. Attachments. Attachments to the Declaration are:

Exhibit 1: Current Owner's Deed
Exhibit 2: Legal Description of Engineering Control Portion of the Property
Exhibit 3: General Site Location Map
Exhibit 4: Map of Engineering Control Portion of Property
Exhibit 5: Environmental Contaminant Information
Exhibit 6: Environmental Access Agreement

Owner:

By: _____
PAF Central, LLC

State of ARIZONA)
)ss.
County of MARICOPA)

This Declaration of Environmental Use Restriction was acknowledged before me this 19TH day of JULY 2019, by David Cisiewski, an authorized agent of PAF Central, LLC.

_____
Notary Public

DAYLE A. MOSES
Notary Public - State of Arizona
MARICOPA COUNTY
My Commission Expires April 16, 2021

My commission expires: 4/16/2021

By signature above, PAF Central, LLC hereby confirms its authorization provided to UPCO to enforce the provisions of the Institutional and Engineering Controls of this Declaration. By signature herein, UPCO hereby acknowledges and accepts its authorization under this Declaration to enforce provisions of the Institutional and Engineering Controls.

By: _____
Universal Propulsion Company, Inc.

State of North Carolina)
)ss.
County of Mecklenburg)

This Declaration of Environmental Use Restriction was acknowledged before me this 17th day of July 2019, by Bruce C. Amig, an authorized agent of Universal Propulsion Company, Inc.

_____
Notary Public

My commission expires: Sept. 2nd, 22

SELENA M. SWATEK
Notary Public, North Carolina
Mecklenburg County
My Commission Expires
9.2.22

This Declaration of Environmental Use Restriction is approved this 24th day of January, 2020, by the Arizona Department of Environmental Quality.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, an agency of the State of Arizona,

By: Laura L. Malone
Laura L. Malone, Director
Waste Programs Division

State of Arizona)
)ss.
County of Maricopa)

This Declaration of Environmental Use Restriction was acknowledged before me this 24th day of January 2020, by Laura L. Malone, Director, Waste Programs Division, an authorized agent of the Arizona Department of Environmental Quality, an agency of the State of Arizona, on behalf of the agency.

Caitlin Burwell
Notary Public

My commission expires: May 29, 2023

CAITLIN BURWELL
Notary Public - State of Arizona
MARICOPA COUNTY
Commission # 566161
Expires May 29, 2023

Exhibit 1

Owner's Deed

Unofficial Document

WHEN RECORDED, MAIL TO,
AND MAIL TAX STATEMENTS TO:

Law Office of David Cisiewski, PLLC
11811 North Tatum Blvd.
Suite 1051
Phoenix, Arizona 85028

15
Ga

SPECIAL WARRANTY DEED

EXEMPT FROM AFFIDAVIT PURSUANT TO ARS 11-1134 B(7)(c)

THIS SPECIAL WARRANTY DEED (the "**Deed**") is made as of the 8 day of February, 2019, by and between The Patricia Archie Foundation, LLC, a Delaware limited liability company ("**Grantor**") and PAF Central, LLC, an Arizona limited liability company ("**Grantee**").

KNOW ALL MEN BY THESE PRESENTS, that Grantor, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, hereby grants, bargains, sells and releases unto Grantee all of Grantor's right, title and interest in and to the real property more fully described in Exhibit A attached hereto and made a part hereof, together with all improvements thereon and any rights, hereditaments and appurtenances thereunto belonging (collectively, the "**Property**").

EXCEPTING AND EXCLUDING FROM THE PROPERTY, water, water rights, applications for water rights and claims to or interests in water or applications for the same, which are appurtenant or in any way derived from the Property.

THE PROPERTY IS CONVEYED SUBJECT TO: (i) current taxes and assessments, (ii) patent reservations, (iii) all applicable zoning and use ordinances, regulations, zoning codes and the like of any municipality, county, state, or the United States affecting the Property as same now exist and as may hereafter be established or amended, (iv) all covenants, conditions, restrictions, reservations, rights, rights-of-way, easements, obligations and liabilities and other matters of record or to which reference is made in the public record, (v) any and all conditions, shortages in area, overlaps, conflicts in boundary lines, easements, encroachments, rights-of way, rights or claims, or restrictions not shown by the public records which would be disclosed by a physical inspection, or which an accurate survey of the Property would reveal, (vi) unpatented mining claims, and (vii) the additional covenants, conditions and restrictions set forth on Exhibit B attached hereto and incorporated by reference herein, and made a part hereof as if fully rewritten herein (the "**CCR's**").

And Grantor hereby binds itself and its successors to warrant and defend the title, as against all acts of Grantor herein and none other, subject to the matters above set forth.

FURTHERMORE, Grantor hereby quitclaims to Grantee, without covenant or warranty of any kind whatsoever, any rights or claims to title to water, applications for water rights, and claims to or interests in water rights which are appurtenant or in any way applicable to or derived from the Property whether surface, underground, wells, springs, percolating, flood, vested, contingent, recorded, certificated, appropriated or otherwise.

Grantor hereby establishes, declares, grants and reserves the CCR's for the benefit of Grantor and its successors and assigns. The CCR's are and shall be enforceable by Grantor, Goodrich Corporation ("**Goodrich**"), and by United Technologies Corporation, a Delaware corporation ("**UTC**"), and its and their respective successors and assigns (collectively, Grantor, Goodrich and UTC and their respective successors and assigns are referred to as the "**Benefitted Parties,**" and each as a "**Benefitted Party**"), and Grantee acknowledges and agrees that the Benefitted Parties are third-party beneficiaries of all terms and conditions of this Agreement.

By its acceptance of this conveyance, Grantee, on behalf of itself and its successors, accepts title to the Property subject to the CCR's.

It is the intention and agreement of Grantor that the CCR's constitute a real property servitude and shall touch and concern the Property and shall apply to and be binding upon and inure to the benefit of Grantor, the Benefitted Parties and Grantees and to any and all parties hereafter having any right, title or interest in the Property or any part thereof. The CCR's shall continue in perpetuity, unless otherwise modified in writing by Grantor.

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Any person or entity who acquires any rights, title or interest in all or any part of the Property shall be conclusively deemed to have consented and agreed to the provisions of the CCR's, whether or not any reference to the CCR's or its provisions is contained in the deed or other conveyance instruments by which such person or entity acquires an interest in the Property.

[signature on the following page]

IN WITNESS WHEREOF, Grantor has caused this Deed to be duly executed by its duly authorized officer as of the date first set forth above.

GRANTOR:

THE PATRICIA ARCHIE FOUNDATION, LLC,
a Delaware limited liability company

By: _____
David Cisiewski,
Authorized Agent for the Company

State of ARIZONA }
}ss.
County of Maricopa }

The foregoing instrument was acknowledged before me this 8TH day of February, 2019 by David Cisiewski, as the Authorized Agent of The Patricia Archie Foundation, LLC, a Delaware limited liability company, on behalf of said company.

Unofficial Document

_____
Notary Public

My Commission Expires:
4/16/2021

DAYLE A. MOSES
Notary Public - State of Arizona
MARICOPA COUNTY
My Commission Expires April 16, 2021

EXHIBIT A

Description of Property

The Southeast quarter of Section 5, Township 4 North, Range 3 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona;

Except all oil, gases and other hydrocarbon substances, helium or other substances of a gaseous nature, geothermal resources, coal, stone, metals, minerals, fossils and fertilizers of every name and description, together with all uranium, thorium, or any other material which is or may be determined to be peculiarly essential to the production of fissionable material, whether or not of commercial value as reserved Patent from the State of Arizona recorded in Document No. 2016-004999.

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EXHIBIT B

Covenants, Conditions and Restrictions

The Property described in Exhibit A above (or portions thereof, as set forth in this Exhibit B) is conveyed subject to the covenants, conditions and restrictions set forth herein (the "**CCR's**"), which are hereby established, declared, granted and reserved by Grantor.

Recitals

A. The Property has been environmentally impacted requiring remediation and the filing of these CCR's. More detailed information regarding the environmental impacts on the Property is available at the ADEQ (as defined below) at 1110 W. Washington Street, Phoenix, AZ.

B. Grantor is responsible for performing certain Environmental Remedial Action (as defined below) on the Property as required by Environmental Laws, ADEQ or any other Governmental Authority (all as defined below).

C. The nature and extent of Environmental Remedial Action performed on the Property will be subject to the future approval and requirements imposed by ADEQ or any other Governmental Authority, but, as of the date hereof, such Environmental Remedial Action and Remediation Plans (as defined below) have not been finally determined nor completed.

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D. Grantor is imposing these CCR's with the understanding and acknowledgement of Grantee that Grantors may impose additional DEUR(s) (as defined below) in order to implement Remediation Plans in accordance with the terms and conditions of these CCR's.

1. **Definitions. Below are certain definitions of terms as used in these CCR's:**

"**ADEQ**" means the Arizona Department of Environmental Quality.

"**Benefitted Parties**" means Grantor, Goodrich Corporation, a New York corporation, and United Technologies Corporation, a Delaware corporation ("**UTC**"), and each of their respective corporate successors and assigns, which have or assume any liability under the Remediation Plans.

"**Building Materials**" means any materials whatsoever that exist in the Improvements or on its surfaces or in building and construction materials, including its coatings, decorations, and fixtures, and materials meeting the definition of a Regulated Material.

"**DEUR**" means any Declaration of Environmental Use Restriction approved by ADEQ pursuant to applicable Arizona Environmental Law.

"Environment" means soil, land, surface or subsurface strata, surface waters (including navigable waters, ocean waters, streams, ponds, drainage basins, and wetlands), groundwaters, stream sediments, plant and animal life, and any other environmental medium or natural resource.

"Environmental Law" means any applicable law, statute, constitution, code, order, ordinance, decree, judgment, writ, injunction, rule, regulation or other similar directive of any Governmental Authority relating to the protection of the human health or the Environment, and/or governing the handling, use, generation, treatment, storage or disposal of Regulated Materials, but excluding any such law primarily pertaining to employee health and safety.

"Environmental Remedial Action" means any and all actions pursuant to Environmental Laws, the Remediation Plans, these CCR's or any DEUR to (i) investigate, clean up, remediate, remove, treat, contain, impose land use restrictions or in any other way address any Regulated Materials in the Environment, (ii) prevent the Release or threat of Release or minimize the further Release of Regulated Materials so they do not migrate or endanger public health or welfare or the indoor or outdoor Environment, and (iii) perform pre-remedial studies and investigations, remedial activities, and post-remedial monitoring, maintenance and care.

"Governmental Authority" means any nation, state, county, city, town, borough, village, district or other governmental jurisdiction; any court, tribunal or governmental or quasi-governmental authority of any nature; any department, commission, board, bureau, agency or other regulatory, administrative or governmental authority or instrumentality (including foreign, federal, state, local or other political subdivision); or any other authority or entity having jurisdiction over the Property or any conduct of the parties under this Agreement.

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"Non-Residential Property" means that certain portion of the Property designated as "Non-Residential Property" on **Exhibit A**, attached hereto.

"Regulated Material" means any (i) hazardous materials or toxic substances as defined by any Environmental Law; (ii) petroleum or petroleum product, oil or waste oil; (iii) asbestos or polychlorinated biphenyls; (iv) toxic substance, toxic pollutant, solid waste, municipal waste, industrial waste, hazardous waste, flammable material, radioactive material, pollutant or contaminant or words of similar meaning and regulatory effect under any applicable Environmental Law; and (v) any other chemical, material, or substance exposure to which or whose discharge, emission, disposal or Release is prohibited, limited, or regulated under any applicable Environmental Law. "Regulated Material" includes any mixture or solution of the foregoing, and all derivatives or synthetic substitutes of the foregoing, but expressly does not include any Building Materials.

"Release" means any spill, leak, emission, discharge, leaching, dumping or other release of any Regulated Material into the Environment, whether intentional or unintentional.

"Remediation Plans" means any remediation plans submitted by Grantor and approved by ADEQ for the Property, as may be amended or revised from time to time by Grantor and ADEQ, in their sole discretion

"Residential Property" means that portion of the Property not designated as "Non-Residential Property" on **Exhibit A**, attached hereto.

2. **Restrictions on Use and Occupancy of the Property.**

(a) Except to the extent allowed or required under groundwater remediation and monitoring plans that have been approved by a Governmental Authority with jurisdiction over the Property, no surface or subsurface water at, on, or under the Property shall be used for consumption by humans or animals, irrigation or any other purpose that might bring it into contact, directly or indirectly, with humans or animals.

(b) No underground storage tanks or piping for petroleum or other Regulated Material shall be maintained, used or installed in, at on or under the Property.

(c) There shall be no use at or on the Property of any perchlorate, chlorinated solvents or any other chemicals or compounds that have breakdown products similar to breakdown products of chlorinated solvents.

3. **Further Restrictions on Use and Occupancy of the Non-Residential Property.**

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(a) The Non-Residential Property shall not be used for any purpose other than industrial, office, warehouse, commercial, retail and other commercial purposes that, under applicable law, do not require the Property to meet environmental clean-up or remediation standards for residential uses. Without limiting the generality of the foregoing, the Non-Residential Property shall not be used for any of the following uses: single or multi-family residential, school, daycare, group home, nursing home, hospital, meeting hall, church or other place of congregation or worship, hotel, motel or other type of lodging, park, playground or other recreational or residential use.

(b) No person shall dig, excavate, destroy, tamper, or otherwise negatively impact the integrity of any Caps (as defined below) placed on the Non-Residential Property, including, but not limited to those areas indicated to be capped on **Exhibit B**, attached hereto, without Grantor's written approval, which Grantor may withhold in its sole and absolute discretion.

4. **Environmental Remedial Action.**

(a) All use of and activities on the Property and in and about the buildings and structures thereon shall be conducted so that there shall be no material interference with any Environmental Remedial Action then being conducted or reasonably anticipated to be conducted at the Property, nor shall such use or activities result in any exacerbation of any Environmental Condition on the Property.

(b) In particular, and without limiting the generality of the foregoing, no buildings or other structures or improvements or alterations thereof shall be constructed, erected or maintained on the Property and no activities, use, operation or occupancy of the Property shall be conducted in such a way so as to materially interfere with the installation, operation, maintenance, integrity, repair or replacement of any Remediation System. For the purposes of these CCR's, the term **"Remediation System"** means, collectively, all impermeable barriers (**"Caps"**), groundwater extraction wells and related equipment, all purge wells and related equipment, all groundwater wells, monitoring wells, groundwater treatment injection wells or infiltration galleries, or other environmental wells, any groundwater pump and treatment system, and any groundwater and/or soil remediation facilities, including without limitation, any collection trenches, subsurface in-situ treatment trenches or barriers, subsurface pipes, air strippers, groundwater and wastewater ponds and aeration weirs, or other environmental remediation facilities, structures or equipment required for the purpose of conducting or maintaining any Environmental Remedial Action.

(c) If deemed necessary or appropriate by the Benefitted Parties or any Governmental Authority in order to accomplish any Environmental Remedial Action on the Property, the Grantee and its successors in title shall permit Grantor to establish additional Caps within the Non-Residential Property as necessary to complete such Environmental Remedial Action.

5. **Undertakings of Grantee and Successors in Title.**

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(a) Grantee, and its successors in title and any and all occupants of the Property, shall reasonably cooperate with any applicable Governmental Authority, and the Benefitted Parties and its consultants and contractors in connection with any Environmental Remedial Action that the Benefitted Parties, or any of them, or their designees may be required to undertake to implement any Environmental Remedial Action at the Property.

(b) In addition to the CCR's, if deemed appropriate and requested by the Benefitted Parties to implement the Remediation Plans, the Grantee and its successors in title shall grant to the Benefitted Parties and/or any applicable Governmental Authority, DEUR(s) in such form and substance as approved by any applicable Governmental Authority, and shall obtain and deliver to the Benefitted Parties and/or any applicable Governmental Authority such subordinations to, and/or releases to the grant of such DEUR(s) as the Benefitted Parties and/or any applicable Governmental Authority may require; provided, however, that any DEUR entered into under this Section 5.5(b) shall be subject to the following limitations:

(1) As to the Residential Property, such DEUR(s), shall not conflict with or alter the allowed uses of the Residential Property as limited in these CCR's, and shall contain only those restrictions for the Residential Property as set forth in these CCR's;

(2) As to the Non-Residential Property, such DEUR(s) shall not expand the boundaries of the Non-Residential Property, and shall not conflict with or alter the allowed uses of the Non-Residential Property as limited in these CCR's.

(c) In the event that the Benefitted Parties file and/or record DEUR(s) on the Property following Grantee's purchase of the Property that require material alterations, modifications, or repairs to any buildings, structures or other improvements that have been constructed on the Property in compliance with these CCR's and any DEUR(s), the Benefitted Parties, at their sole discretion, shall either make such alterations, modifications, or repairs at the Benefited Parties' cost, or pay Grantee's (or any successor in interest to Grantee of any portion of the Property) reasonable costs for such alterations, modifications, or repairs that are directly required to comply with such additional DEUR(s) requirements and restrictions. In the event that the Benefitted Parties pay for alteration, modification, or repair costs to an individual or entity under this Section 5(c), such payment by the Benefitted Parties shall be made to the individual or entity not later than forty-five (45) days after presentment of reasonable documentation of the actual costs incurred for such alterations, modifications or repairs and the obligations of the Benefitted Parties shall bind and inure to any successor to the Benefitted Parties interest and/or obligations related to the Property.

(d) Subject to Section 4 of these CCR's, Grantee, its, successors in title, and all occupants of the Property, shall at its and their sole cost and expense, employ best management practices with respect to any invasive activity on the Property that could disturb residual contamination. Such best management practices shall include protective measures for fugitive dust and worker exposure and shall ensure that any and all soil, soil cuttings, soil moisture, surface water, groundwater, and/or other potentially contaminated construction debris or materials discovered, identified and/or generated on or after the date hereof as a result of construction or other activities on the Property shall be properly handled, characterized, segregated, stored, managed and disposed of in accordance with all applicable Environmental Laws, and will not pose a danger to public health, safety or the environment.

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(e) Grantee, its successors and assigns, shall reimburse Grantor for any damage, interference or penalties resulting from any action or failure to act by the Grantee which directly results in a violation of the provisions of this Section 5 herein, including but not limited to, the cost of repairing or replacing the Remediation System in compliance with Environmental Laws.

(f) Grantee, its successors and assigns in title and its and their respective successors and assigns, shall not communicate with any Governmental Authority regarding or concerning any Environmental Remedial Action being performed by any of the Benefitted Parties and relating to the Property. All correspondence, discussions and negotiations with, and submissions to, any Governmental Authority concerning, or that may affect, the Benefitted Parties' Environmental Remedial Action shall be controlled by and coordinated with the Benefitted Parties.

(g) Nothing in these CCR's shall preclude the then current owner of the Property from making any filing or other communication necessary to satisfy a legal obligation or prevent, hinder or interfere with any then current owner from pursuing any zoning, entitlement or development approvals related to the Property or any portion thereof; provided, however, that no zoning, entitlement or development approvals shall affect, limit or reduce the terms of these CCR's, all of which shall have priority over such approvals.

(h) Grantee, its successors and assigns in title and its and their respective successors and assigns shall not perform any activities on the Property that reasonably likely to exacerbate any Environmental Conditions on the Property or any related environmental conditions located off-site, or materially interfere with any Environmental Remedial Action.

6. **Reserved Right of Access.**

Grantor hereby reserves to itself, its successors and assigns, and its successors in title, and does hereby grant to the Benefitted Parties and their successors and assigns, an easement and right of entry into and on the Property for themselves and their respective employees, contractors, agents, and consultants, upon reasonable notice and at reasonable times (in light of the purpose of the entry), for the purpose of determining compliance with the terms of these CCR's, to perform any Environmental Remedial Action that the Benefitted Parties may be obligated to perform, including, but not limited to, any action in accordance with the Remedial Plans, any ERUR, Environmental Law, requirement of any Governmental Authority or which Grantor or the Benefited Parties may, in their sole discretion, choose to perform; *provided, however*, that such access shall not unreasonably disrupt or interfere with the lawful use and operation of the Property by the occupants thereof. Such right shall include, but shall not be limited to, a right and easement for (1) the placement, installation, construction, monitoring, operation, repair and maintenance of Remediation Systems and related facilities located or required to be located on the Property pursuant to the Remediation Plans or any other Environmental Remedial Action, (2) temporary material storage and staging, (3) replacement or storage of machinery, equipment and other property on the Property, and (4) and the right to post notices on the Property pursuant to the Benefitted Parties' obligations to perform any Environmental Remedial Action.

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7. **Covenants Run with the Land.**

These CCR's shall run with the land and shall bind Grantee, Grantee's heirs, administrators, executors, successors and assigns, and can only be terminated by a written instrument executed by Grantor or UTC and duly recorded in the local land records in the jurisdiction where the Property is located.

8. **Limitation of Liability.**

These CCR's are made for the benefit of the Benefitted Parties. The reservation by Grantor of the rights and benefits herein to perform one or more activities and the grant of rights and benefits by the Grantor to the other Benefitted Parties does not imply,

and is not to be construed as imposing, any additional liability on the Grantor or the other Benefitted Parties or, except as expressly provided herein, any additional duty on the part of Grantor or the other Benefitted Parties or its or their respective successors and assigns to perform any such activity.

9. **Enforcement.**

(a) The rights herein reserved and/or granted may be enforced jointly or separately by the Benefitted Parties and their respective corporate successors and assigns.

(b) In the event that Grantee or its heirs, successors and assigns shall fail to comply with the requirements of these CCR's, such persons who so fail to comply shall be liable to the Benefitted Parties for any and all costs and reasonably attorney's fees associated with the enforcement of any provision or obligation created herein.

10. **Severability.**

If any court of competent jurisdiction determines that any provision of this instrument is invalid or unenforceable, such provision shall be deemed to have been modified automatically to conform to the requirements for validity and enforceability as determined by such court. In the event that the provision invalidated is of such nature that it cannot be so modified, the provision shall be deemed deleted from this instrument as though it had never been included herein. In either case, the invalidity of such provision shall not affect the validity of any other provisions hereof, and all such other provisions shall continue unimpaired and in full force and effect.

Unofficial Document

11. **Amendment.**

These CCR's may be modified or amended only with the consent of the Grantor or its corporate successors and assigns having at the relevant time the benefits of the rights herein granted.

12. **Notices.**

Except as otherwise required or allowed herein, any required notice from one party to another under these CCR's shall be sufficient if such notice is in writing and shall be deemed to have been duly given or sent (a) when received, if dispatched by registered or certified mail (return receipt requested), (b) when received, if delivered in hand, or (c) on the following business day, if dispatched by a reputable overnight courier which requires a signature of the receiving party, in each case to the party intended at its address as follows:

If to the
Benefitted Parties: Universal Propulsion Company, Inc.
3530 Branscombe Road
Fairfield, California 94533
Attn: Tarah J. Stringfield, Manager, Contracts & Business Management

and

Goodrich Corporation
One Hamilton Road, MS 1-1-BC18
Windsor Locks, Connecticut 06096
Attn: Assistant General Counsel – EH&S and Real Estate

with a copy to: United Technologies Corporation:
Office of the General Counsel
United Technologies Corporation
10 Farms Spring Road
Farmington, Connecticut 06032

If to Grantee: PAF Central, LLC
11811 North Tatum Blvd., Suite 1051
Phoenix, Arizona 85028
Attn: David Cisiewski, Authorized Agent

Any of the parties may change the address to which notices may be sent by written notice to the other parties; *provided, however*, that no such change of address shall be binding unless notice thereof has been recorded in the same land records as these CCR's.

13. **Duration.**

These CCR's shall continue in perpetuity, unless otherwise modified in writing by the Grantor in accordance with Section 11 above.

Unofficial Document

14. **Rights not Abridged by Public Restriction.**

Grantor and Grantees intend that separate agreed upon DEUR(s) approved by ADEQ and/or an applicable Governmental Authority regarding the Property may be recorded, and agree that if the same are recorded, such DEUR(s) shall not diminish any right or obligation described herein of either Grantor or Grantee or their respective heirs, successors or assigns.

EXHIBIT A TO COVENANTS, CONDITIONS AND RESTRICTIONS

Depiction of Residential and Non-Residential Property

(See attached)

Unofficial Document

EXHIBIT 'A'
LEGAL DESCRIPTION
NON-RESIDENTIAL PARCEL

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

BEGINNING AT A BRASS CAP IN HAND HOLE AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH A BRASS CAP IN HAND HOLE AT THE CENTER OF SECTION 5, BEARS N1°10'12"W, A DISTANCE OF 2638.92 FEET;
THENCE N1°10'12"W, ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER OF SECTION 5, A DISTANCE OF 477.87 FEET;
THENCE, DEPARTING SAID WEST LINE, N56°23'41"E, A DISTANCE OF 2265.43 FEET;
THENCE N66°31'14"E, A DISTANCE OF 747.30 FEET TO A POINT ON THE EAST LINE OF SAID SOUTHEAST QUARTER OF SECTION 5;
THENCE, DEPARTING SAID EAST LINE, S11°37'08"W, A DISTANCE OF 452.59 FEET;
THENCE S55°50'47"W, A DISTANCE OF 284.83 FEET;
THENCE S4°47'43"W, A DISTANCE OF 665.23 FEET;
THENCE S33°46'05"E, A DISTANCE OF 262.82 FEET;
THENCE S80°18'19"W, A DISTANCE OF 734.30 FEET;
THENCE S40°12'28"W, A DISTANCE OF 576.52 FEET TO A POINT ON THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF SECTION 5;
THENCE, ALONG SAID SOUTH LINE, N89°06'21"W, A DISTANCE OF 1230.24 FEET TO THE **POINT OF BEGINNING.**

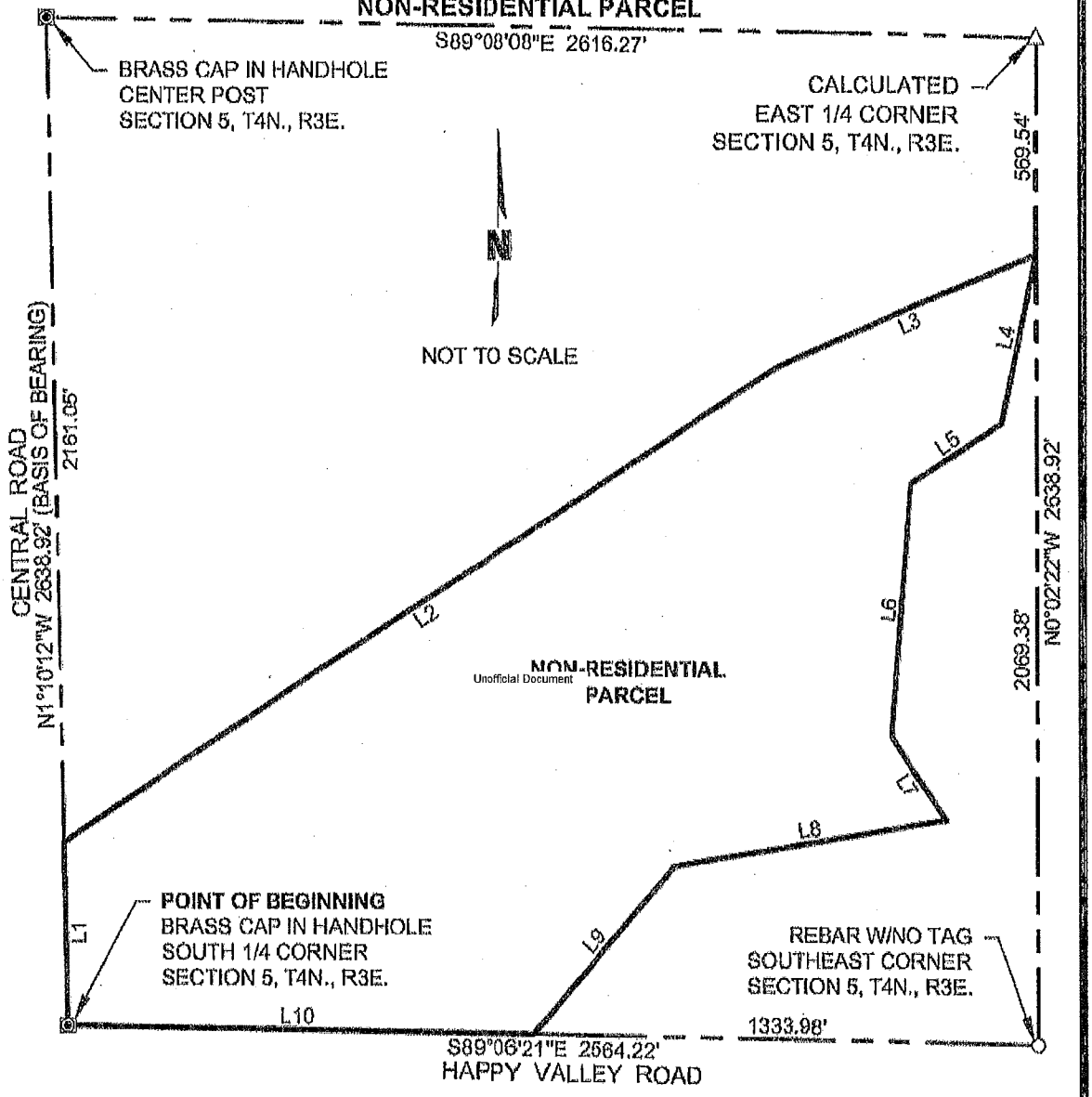
CONTAINING 56.780 ACRES MORE OR LESS.

Unofficial Document

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
49097
R. REECE
HENRY
Date Signed 5-5-16
ARIZONA, U.S.A.
Expires 3/31/2018

OLSSON ASSOCIATES
7250 North 16th Street Suite 210
Phoenix, AZ 85020-5282
TEL: 602.748.1000

EXHIBIT 'A'
LEGAL DESCRIPTION
NON-RESIDENTIAL PARCEL



Unofficial Document

LINE TABLE					
LINE #	DIRECTION	LENGTH	LINE #	DIRECTION	LENGTH
L1	N1°10'12"W	477.87'	L6	S4°47'43"W	665.23'
L2	N56°23'41"E	2265.43'	L7	S33°46'06"E	262.82'
L3	N66°31'14"E	747.30'	L8	S80°18'19"W	734.30'
L4	S11°37'08"W	462.59'	L9	S40°12'28"W	576.52'
L5	S65°50'47"W	284.83'	L10	N89°06'21"W	1230.24'

OLSSON ASSOCIATES
7250 North 16th Street Suite 210
Phoenix, AZ 85020-5282
TEL 602.748.1000

PAGE 2 OF 2

EXHIBIT B TO COVENANTS, CONDITIONS AND RESTRICTIONS

Location of Caps on Non-Residential Property

(See attached)

Unofficial Document

LEGAL DESCRIPTION
APN: 210-14-050A

FIVE PARCELS OF LAND LOCATED IN THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL 1:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 1334.86 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 333.32 FEET TO THE **POINT OF BEGINNING;**

THENCE N46°59'43"W, A DISTANCE OF 27.74 FEET;

THENCE N48°07'14"W, A DISTANCE OF 20.36 FEET;

THENCE N34°34'32"E, A DISTANCE OF 7.32 FEET;

Unofficial Document

THENCE N41°54'45"E, A DISTANCE OF 20.43 FEET;

THENCE N43°05'06"E, A DISTANCE OF 21.32 FEET;

THENCE S48°20'46"E, A DISTANCE OF 10.60 FEET;

THENCE S48°33'55"E, A DISTANCE OF 19.67 FEET;

THENCE S48°19'41"E, A DISTANCE OF 15.55 FEET;

THENCE S50°08'28"E, A DISTANCE OF 4.27 FEET;

THENCE S37°01'50"W, A DISTANCE OF 3.88 FEET;

THENCE S42°17'27"W, A DISTANCE OF 25.91 FEET;

THENCE S44°03'04"W, A DISTANCE OF 18.79 FEET;

THENCE S75°56'06"W, A DISTANCE OF 1.69 FEET TO THE **POINT OF BEGINNING.**

SAID **PARCEL 1** CONTAINS 2,486 SQUARE FEET, MORE OR LESS.

PARCEL 2:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 1383.54 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 396.92 FEET TO THE POINT OF BEGINNING;

THENCE N53°47'31"W, A DISTANCE OF 5.35 FEET;

THENCE N45°25'00"W, A DISTANCE OF 12.22 FEET;

THENCE N49°10'48"W, A DISTANCE OF 16.35 FEET;

THENCE N47°11'14"W, A DISTANCE OF 19.70 FEET;

THENCE N50°38'33"W, A DISTANCE OF 18.51 FEET;

THENCE N47°48'51"W, A DISTANCE OF 20.32 FEET;

THENCE N49°23'40"W, A DISTANCE OF 20.44 FEET;

THENCE N48°43'55"W, A DISTANCE OF 21.14 FEET;

Unofficial Document

THENCE N47°11'14"W, A DISTANCE OF 4.77 FEET;

THENCE N46°23'04"E, A DISTANCE OF 4.63 FEET;

THENCE N44°46'06"E, A DISTANCE OF 24.27 FEET;

THENCE N44°38'42"E, A DISTANCE OF 14.71 FEET;

THENCE N45°28'58"E, A DISTANCE OF 14.99 FEET;

THENCE N46°37'42"E, A DISTANCE OF 14.84 FEET;

THENCE N42°03'52"E, A DISTANCE OF 21.39 FEET;

THENCE S48°56'25"E, A DISTANCE OF 12.53 FEET;

THENCE S47°56'46"E, A DISTANCE OF 24.89 FEET;

THENCE S47°20'44"E, A DISTANCE OF 22.01 FEET;

THENCE S49°02'50"E, A DISTANCE OF 18.93 FEET;

THENCE S41°16'29"E, A DISTANCE OF 3.87 FEET;

THENCE S23°32'41"W, A DISTANCE OF 2.42 FEET;

THENCE S42°10'21"W, A DISTANCE OF 24.15 FEET;

THENCE S40°49'14"W, A DISTANCE OF 15.87 FEET;

THENCE S43°24'23"W, A DISTANCE OF 17.31 FEET;

THENCE S07°10'51"W, A DISTANCE OF 2.25 FEET;

THENCE S47°15'29"E, A DISTANCE OF 10.63 FEET;

THENCE S47°15'34"E, A DISTANCE OF 21.31 FEET;

THENCE S48°42'24"E, A DISTANCE OF 14.95 FEET;

THENCE S42°38'34"E, A DISTANCE OF 2.98 FEET;

THENCE S05°51'36"E, A DISTANCE OF 2.62 FEET;

THENCE S11°15'54"W, A DISTANCE OF 2.48 FEET;

THENCE S45°59'27"W, A DISTANCE OF 13.00 FEET;

THENCE S46°06'19"W, A DISTANCE OF 12.00 FEET;

THENCE S66°04'46"W, A DISTANCE OF 2.39 FEET TO THE POINT OF BEGINNING.

SAID PARCEL 2 CONTAINS 9,664 SQUARE FEET, MORE OR LESS.

Unofficial Document

PARCEL 3:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 1480.68 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 944.95 FEET TO THE POINT OF BEGINNING;

THENCE N11°33'50"W, A DISTANCE OF 7.63 FEET;

THENCE N24°29'24"W, A DISTANCE OF 1.64 FEET;

THENCE N89°54'55"W, A DISTANCE OF 14.47 FEET;

THENCE S87°08'17"W, A DISTANCE OF 17.99 FEET;

THENCE N11°34'49"W, A DISTANCE OF 8.79 FEET;

THENCE N00°06'22"W, A DISTANCE OF 11.01 FEET;

THENCE N02°55'15"E, A DISTANCE OF 15.32 FEET;

THENCE N01°04'26"E, A DISTANCE OF 14.52 FEET;

THENCE N03°49'23"W, A DISTANCE OF 13.29 FEET;

THENCE N02°26'17"E, A DISTANCE OF 17.59 FEET;

THENCE N35°17'16"E, A DISTANCE OF 3.37 FEET;

THENCE N48°36'01"E, A DISTANCE OF 20.69 FEET;

THENCE N52°07'47"E, A DISTANCE OF 13.94 FEET;

THENCE N87°24'46"E, A DISTANCE OF 4.90 FEET;

THENCE S50°03'03"E, A DISTANCE OF 24.48 FEET;

THENCE S51°20'33"E, A DISTANCE OF 12.97 FEET;

THENCE S43°26'28"E, A DISTANCE OF 14.38 FEET;

THENCE S34°31'33"E, A DISTANCE OF 4.06 FEET;

THENCE S03°21'34"E, A DISTANCE OF 10.15 FEET;

Unofficial Document

THENCE S00°01'01"W, A DISTANCE OF 14.66 FEET;

THENCE S01°18'27"W, A DISTANCE OF 15.56 FEET;

THENCE S27°34'26"W, A DISTANCE OF 4.62 FEET;

THENCE S48°37'09"W, A DISTANCE OF 9.38 FEET;

THENCE S39°09'35"W, A DISTANCE OF 8.90 FEET;

THENCE S04°09'21"W, A DISTANCE OF 9.32 FEET;

THENCE S78°37'07"W, A DISTANCE OF 14.03 FEET;

THENCE S87°54'52"W, A DISTANCE OF 10.30 FEET TO THE POINT OF BEGINNING.

SAID PARCEL 3 CONTAINS 6,839 SQUARE FEET, MORE OR LESS.

PARCEL 4:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 2004.29 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 1202.00 FEET TO THE **POINT OF BEGINNING;**

THENCE N12°39'30"E, A DISTANCE OF 13.68 FEET;

THENCE N03°40'04"E, A DISTANCE OF 13.51 FEET;

THENCE N03°19'19"E, A DISTANCE OF 3.84 FEET;

THENCE S61°27'11"W, A DISTANCE OF 5.96 FEET;

THENCE N68°24'17"W, A DISTANCE OF 4.72 FEET;

THENCE N20°43'56"W, A DISTANCE OF 11.42 FEET;

THENCE N24°36'10"W, A DISTANCE OF 20.47 FEET;

THENCE N23°09'08"W, A DISTANCE OF 18.02 FEET;

Unofficial Document

THENCE N24°11'52"W, A DISTANCE OF 26.48 FEET;

THENCE N24°48'32"W, A DISTANCE OF 30.53 FEET;

THENCE N33°30'19"E, A DISTANCE OF 9.32 FEET;

THENCE N35°07'34"E, A DISTANCE OF 14.92 FEET;

THENCE N33°42'47"E, A DISTANCE OF 30.86 FEET;

THENCE N32°50'40"E, A DISTANCE OF 16.53 FEET;

THENCE N32°27'21"E, A DISTANCE OF 28.86 FEET;

THENCE N38°06'18"E, A DISTANCE OF 24.49 FEET;

THENCE N66°54'12"E, A DISTANCE OF 2.93 FEET;

THENCE S69°34'49"E, A DISTANCE OF 2.36 FEET;

THENCE S42°45'15"E, A DISTANCE OF 25.21 FEET;

THENCE S45°43'33"E, A DISTANCE OF 19.63 FEET;

THENCE S45°13'39"E, A DISTANCE OF 9.89 FEET;

THENCE S42°03'28"E, A DISTANCE OF 8.05 FEET;

THENCE S46°20'34"E, A DISTANCE OF 4.30 FEET;

THENCE S22°55'51"W, A DISTANCE OF 3.29 FEET;

THENCE S42°26'21"E, A DISTANCE OF 6.86 FEET;

THENCE N62°44'37"E, A DISTANCE OF 4.10 FEET;

THENCE S53°58'25"E, A DISTANCE OF 3.71 FEET;

THENCE S44°01'54"E, A DISTANCE OF 9.33 FEET;

THENCE N84°09'21"E, A DISTANCE OF 0.44 FEET;

THENCE S56°32'30"E, A DISTANCE OF 4.38 FEET;

THENCE S78°44'41"E, A DISTANCE OF 4.35 FEET;

THENCE S33°39'47"E, A DISTANCE OF 4.72 FEET;

THENCE S10°49'31"W, A DISTANCE OF 2.49 FEET;

THENCE S50°32'50"E, A DISTANCE OF 2.16 FEET;

THENCE S29°45'11"E, A DISTANCE OF [illegible] FEET,

Unofficial Document

THENCE S31°36'23"E, A DISTANCE OF 5.73 FEET;

THENCE S35°24'31"E, A DISTANCE OF 2.23 FEET;

THENCE S38°40'52"E, A DISTANCE OF 0.34 FEET;

THENCE S38°07'09"W, A DISTANCE OF 7.88 FEET;

THENCE S62°49'36"W, A DISTANCE OF 15.90 FEET;

THENCE S52°10'19"W, A DISTANCE OF 9.87 FEET;

THENCE S33°51'36"W, A DISTANCE OF 9.12 FEET;

THENCE S23°43'06"W, A DISTANCE OF 8.79 FEET;

THENCE S27°47'52"W, A DISTANCE OF 21.06 FEET;

THENCE S24°26'46"W, A DISTANCE OF 17.54 FEET;

THENCE S21°48'00"W, A DISTANCE OF 10.19 FEET;

THENCE S23°25'39"W, A DISTANCE OF 9.85 FEET;

THENCE S28°09'22"W, A DISTANCE OF 4.37 FEET;

THENCE S56°48'20"W, A DISTANCE OF 6.05 FEET;

THENCE S11°13'12"E, A DISTANCE OF 1.67 FEET;

THENCE S54°09'55"W, A DISTANCE OF 4.67 FEET;

THENCE S01°20'48"W, A DISTANCE OF 16.59 FEET;

THENCE S11°10'22"E, A DISTANCE OF 8.12 FEET;

THENCE S03°54'54"W, A DISTANCE OF 6.65 FEET;

THENCE S67°25'36"W, A DISTANCE OF 5.34 FEET;

THENCE S58°25'41"W, A DISTANCE OF 5.97 FEET;

THENCE S66°35'05"W, A DISTANCE OF 6.05 FEET;

THENCE S61°52'33"W, A DISTANCE OF 8.29 FEET;

THENCE S57°33'48"W, A DISTANCE OF 9.09 FEET;

THENCE N80°19'32"W, A DISTANCE OF 7.90 FEET TO THE **POINT OF BEGINNING.**

SAID **PARCEL 4** CONTAINS 18,078 SQUARE FEET, MORE OR LESS.

Unofficial Document

PARCEL 5:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 2217.40 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 1854.92 FEET TO THE **POINT OF BEGINNING;**

THENCE N54°06'17"W, A DISTANCE OF 8.74 FEET;

THENCE N45°13'24"W, A DISTANCE OF 13.05 FEET;

THENCE N43°34'29"E, A DISTANCE OF 12.40 FEET;

THENCE N47°12'16"E, A DISTANCE OF 16.67 FEET;

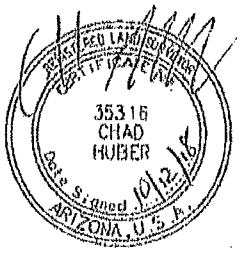
THENCE S58°06'42"E, A DISTANCE OF 16.97 FEET;

THENCE S25°25'51"W, A DISTANCE OF 13.83 FEET;

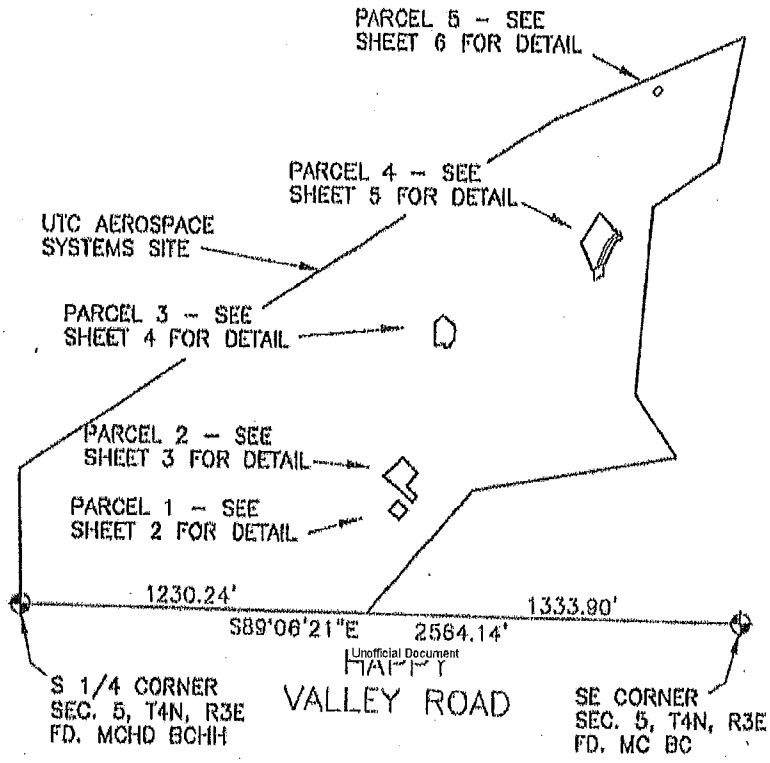
THENCE S44°25'28"W, A DISTANCE OF 18.44 FEET TO THE POINT OF BEGINNING.

SAID PARCEL 5 CONTAINS 641 SQUARE FEET, MORE OR LESS.

TOTAL COMBINED PARCELS CONTAIN 37,708 SQUARE FEET, OR 0.87 ACRES, MORE OR LESS.



Unofficial Document



Unofficial Document

LEGEND

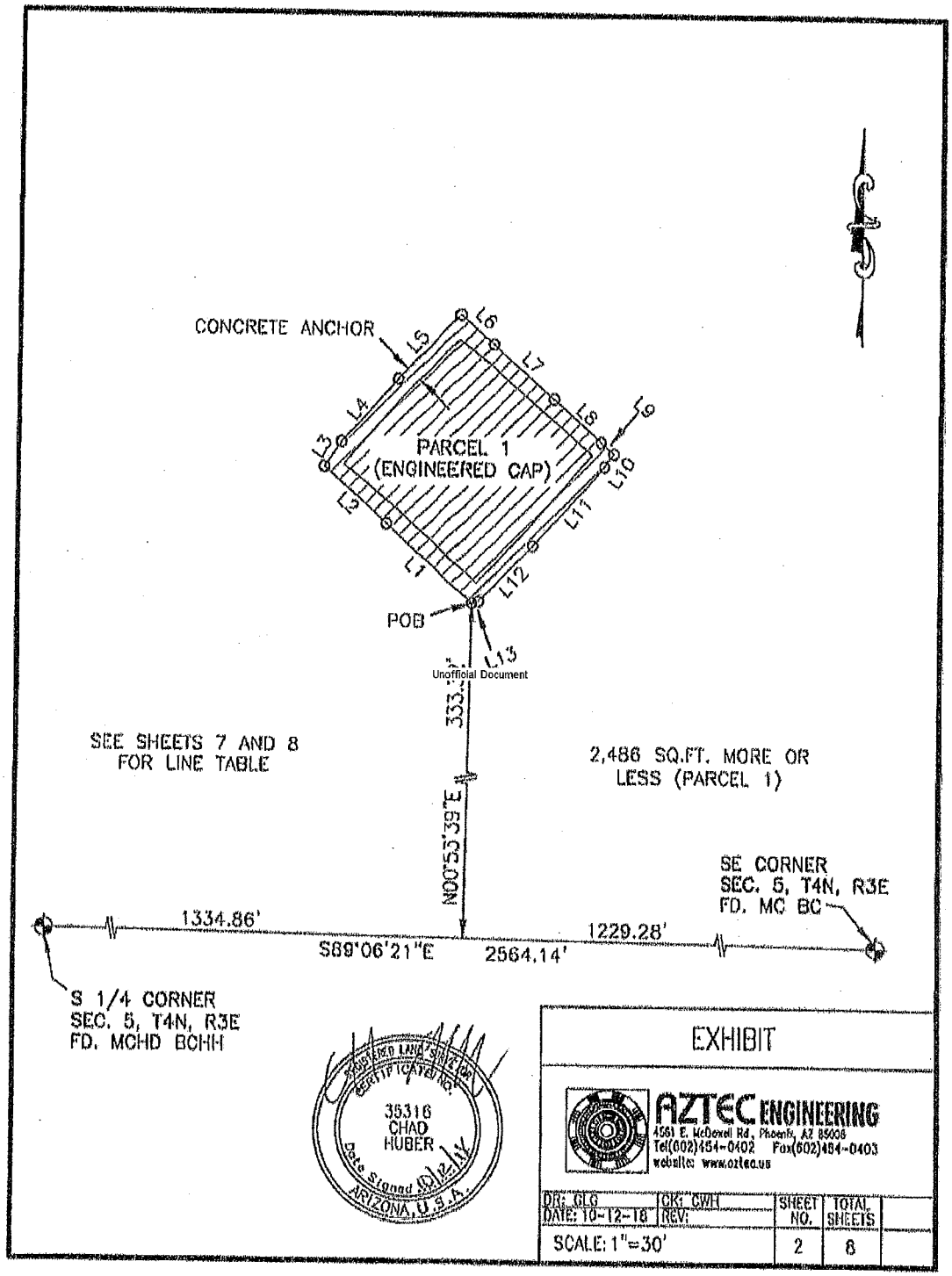
POB = POINT OF BEGINNING
MCHD = MARICOPA COUNTY HIGHWAY DEPARTMENT
BC = BRASS CAP
BCHH = BRASS CAP IN HAND HOLE
○ = CONCRETE CAP ANCHOR
MC = MARICOPA COUNTY
▨ = ENGINEERED CAP

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 10/12/18
ARIZONA, U.S.A.

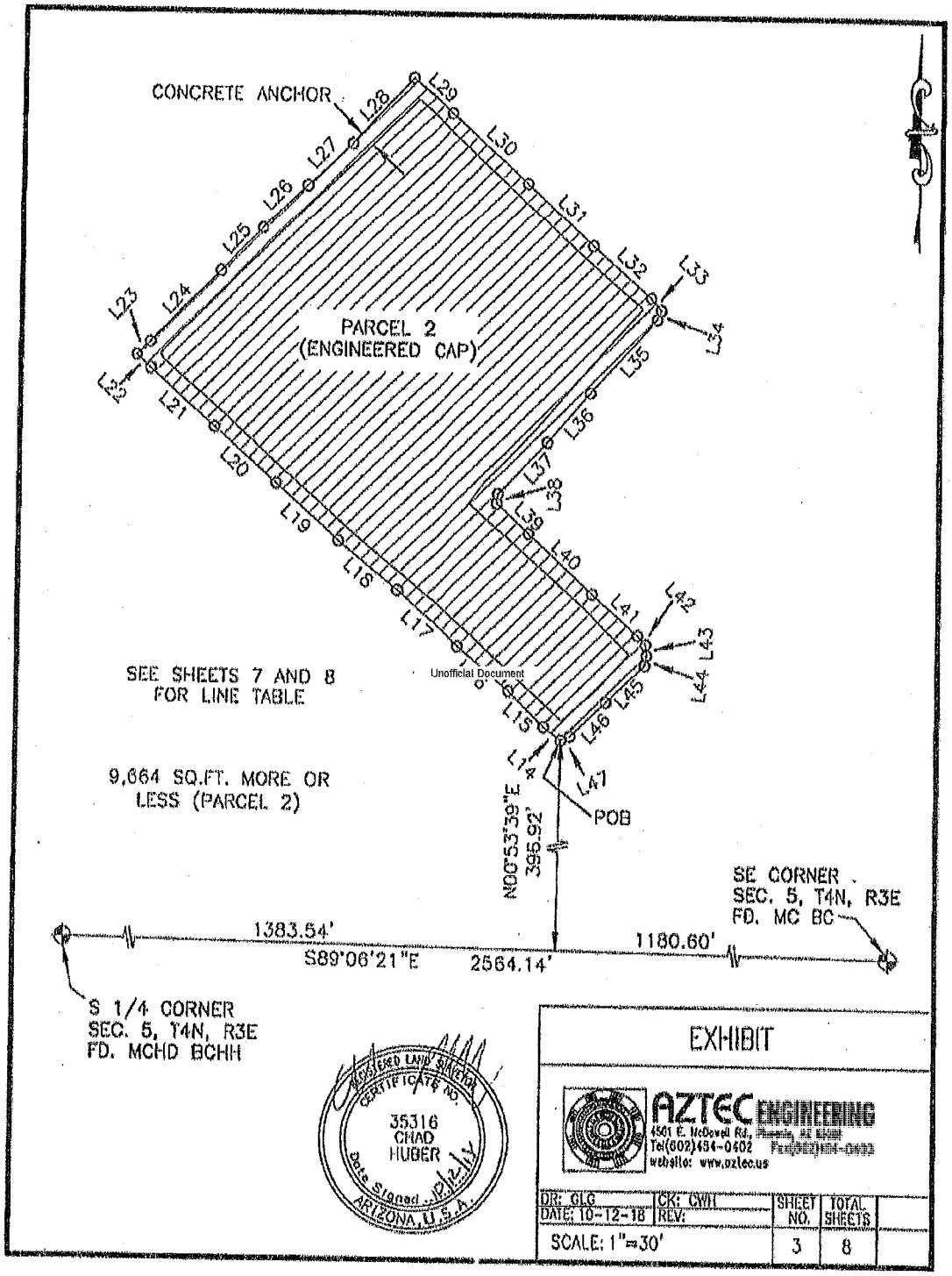
EXHIBIT

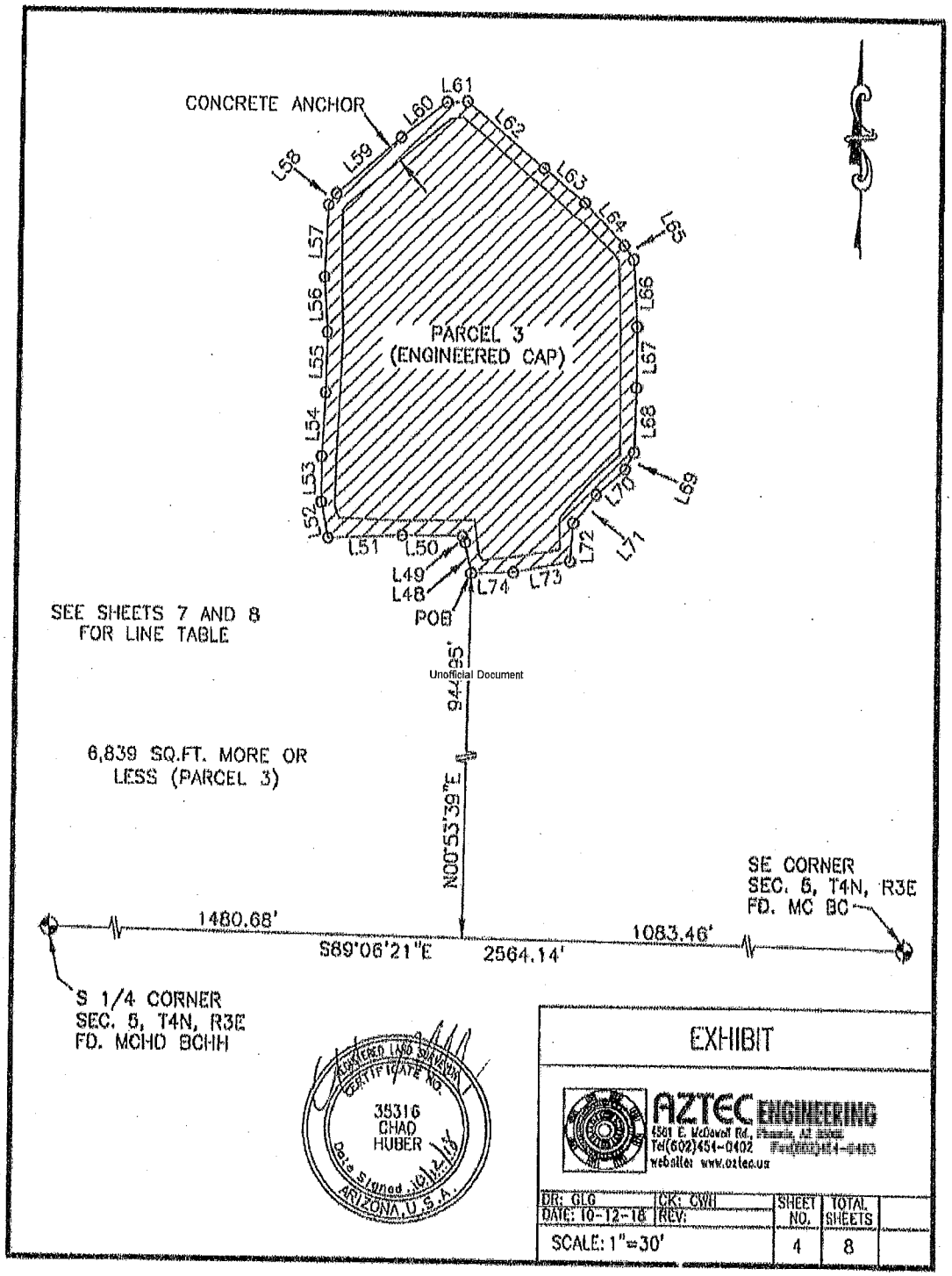
AZTEC ENGINEERING
4561 E. McDowell Rd., Phoenix, AZ 85008
Tel(602)454-0402 Fax(602)454-0403
website: www.aztec.us

DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: 1"=500'		1	8	

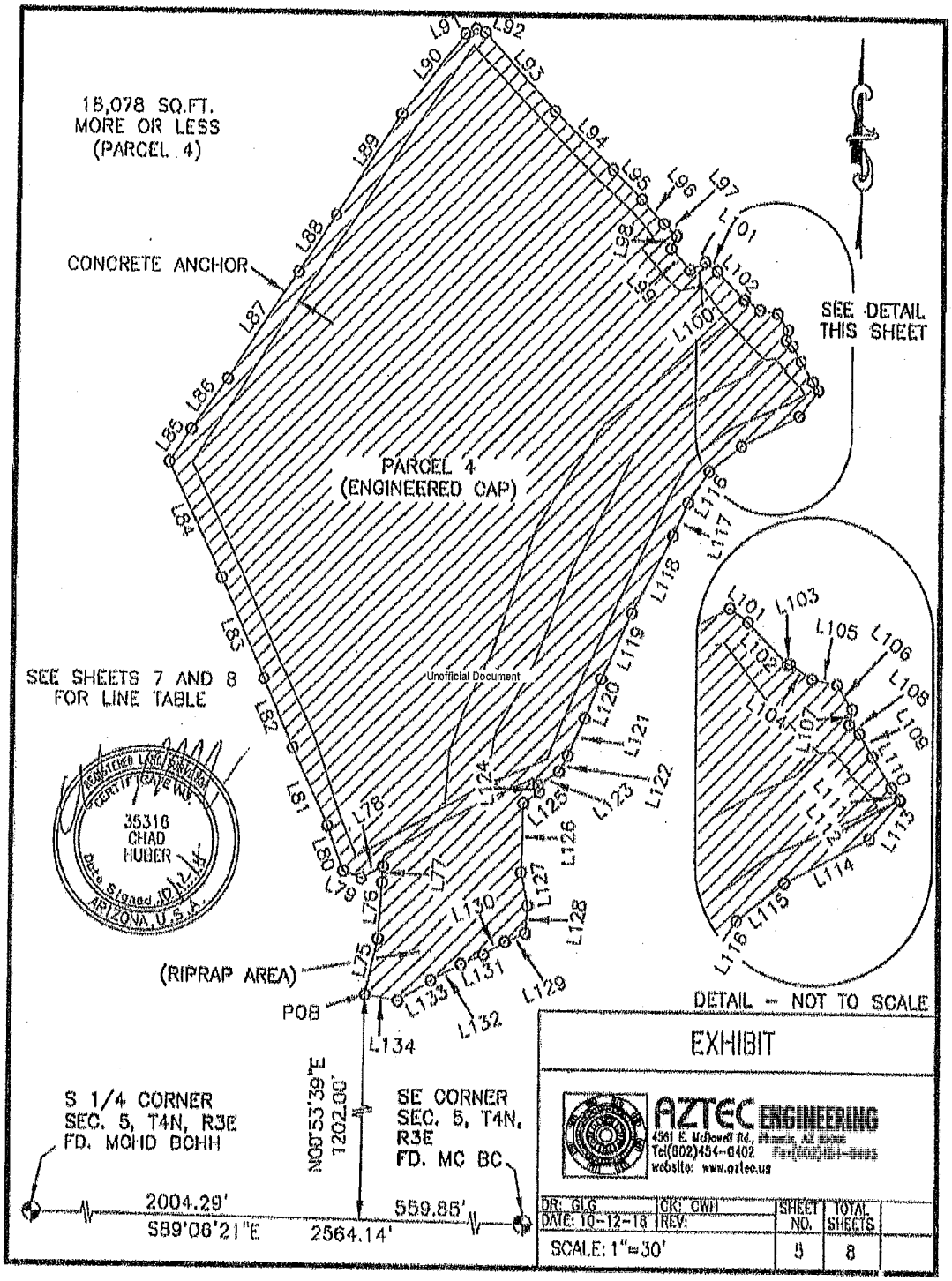


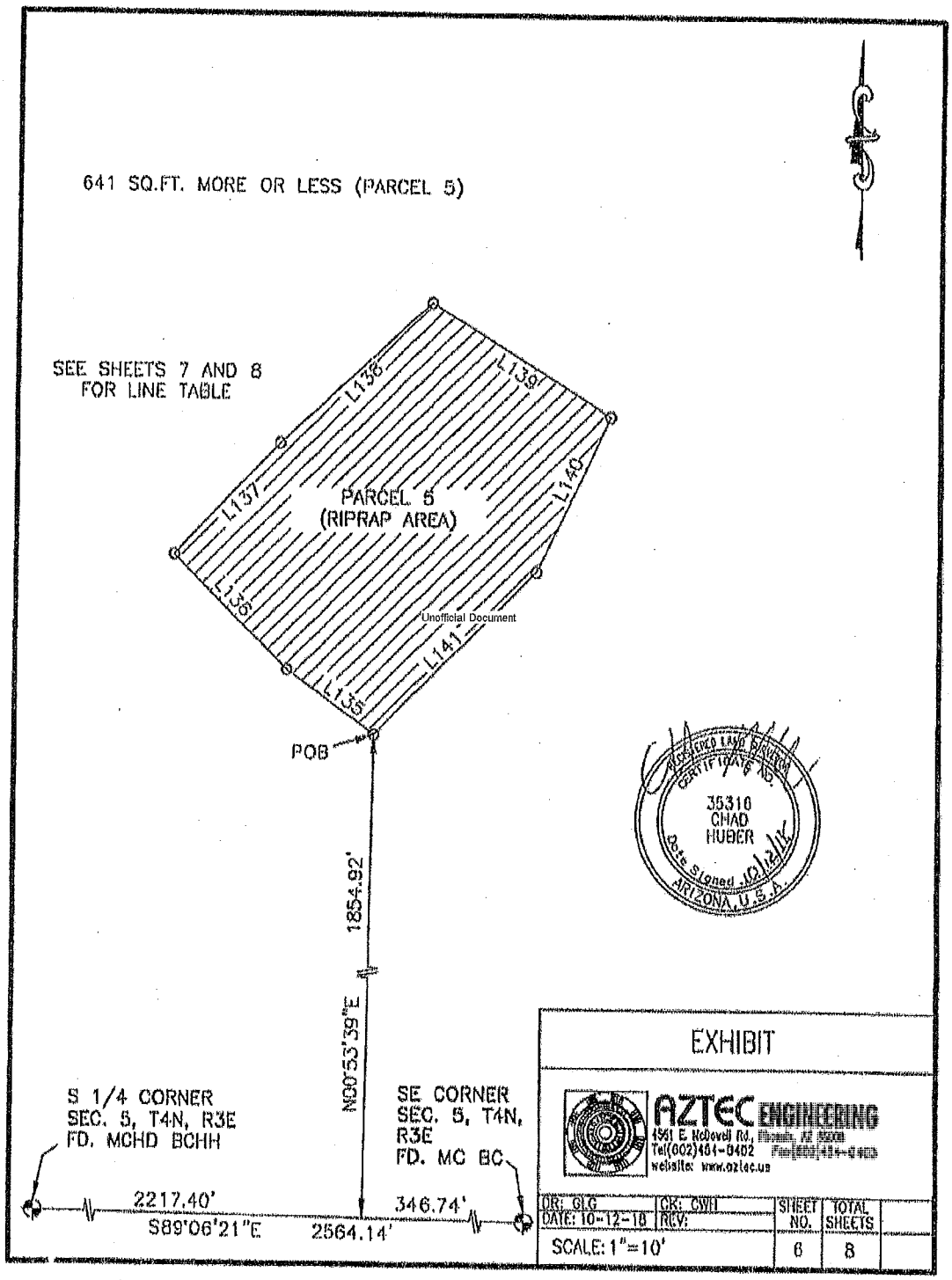
Unofficial Document


CONCRETE ANCHOR
PARCEL 2
(ENGINEERED CAP)
SEE SHEETS 7 AND 8
FOR LINE TABLE
9,664 SQ.FT. MORE OR
LESS (PARCEL 2)
POB
N00°53'39"E
395.92'
1383.54'
S89°06'21"E
2564.14'
1180.60'
S 1/4 CORNER
SEC. 5, T4N, R3E
FD. MCHD BCHH
SE CORNER
SEC. 5, T4N, R3E
FD. MC BC
Unofficial Document
Registered Land Surveyor
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed
ARIZONA, U.S.A.
EXHIBIT
AZTEC ENGINEERING
4501 E. McDowell Rd.,
Tel(602)454-0402
website: www.aztec.us
DR: GLG
DATE: 10-12-18
CK: CWH
REV:
SHEET NO. 3
TOTAL SHEETS 8
SCALE: 1"=30'



Unofficial Document


18,078 SQ.FT.
MORE OR LESS
(PARCEL 4)
CONCRETE ANCHOR
PARCEL 4
(ENGINEERED CAP)
SEE DETAIL
THIS SHEET
SEE SHEETS 7 AND 8
FOR LINE TABLE
(RIPRAP AREA)
POB
DETAIL -- NOT TO SCALE
EXHIBIT
S 1/4 CORNER
SEC. 5, T4N, R3E
FD. MCHD BCHH
SE CORNER
SEC. 5, T4N,
R3E
FD. MC BC
N00°53'39"E
1202.00'
2004.29'
S89°06'21"E
559.85'
2564.14'
AZTEC ENGINEERING
DR: GLG
CK: CWH
DATE: 10-12-18
REV:
SHEET NO. 5
TOTAL SHEETS 8
SCALE: 1"=30'
Unofficial Document


641 SQ.FT. MORE OR LESS (PARCEL 5)
SEE SHEETS 7 AND 8
FOR LINE TABLE
L136
L139
L137
L140
PARCEL 5
(RIPRAP AREA)
L138
L141
L135
POB
1854.92'
N00°53'39"E
S 1/4 CORNER
SEC. 5, T4N, R3E
FD. MCHD BCHH
SE CORNER
SEC. 5, T4N,
R3E
FD. MC BC
2217.40'
S89°06'21"E
2564.14'
346.74'
Unofficial Document
REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 10/12/18
ARIZONA, U.S.A.
EXHIBIT
AZTEC ENGINEERING
1951 E. McDowell Rd.,
Tel(602)484-0402
website: www.aztec.us
DR: G.G
DATE: 10-12-18
CK: CWH
REV:
SHEET NO. 6
TOTAL SHEETS 8
SCALE: 1"=10'

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N46°59'43"W	27.74'
L2	N48°07'14"W	20.36'
L3	N34°34'32"E	7.32'
L4	N41°54'45"E	20.43'
L5	N43°05'06"E	21.32'
L6	S48°20'46"E	10.60'
L7	S48°33'55"E	19.67'
L8	S48°19'41"E	15.55'
L9	S50°08'28"E	4.27'
L10	S37°01'50"W	3.88'
L11	S42°17'27"W	25.91'
L12	S44°03'04"W	18.79'
L13	S75°56'06"W	1.69'
L14	N53°47'31"W	5.35'
L15	N45°25'00"W	12.22'
L16	N49°10'48"W	16.35'
L17	N47°11'14"W	19.70'
L18	N50°38'33"W	18.51'
L19	N47°48'51"W	20.32'
L20	N49°23'40"W	20.44'
L21	N48°43'55"W	21.14'
L22	N47°11'14"W	4.77'
L23	N46°23'04"E	4.63'
L24	N44°46'05"E	24.27'
L25	N44°38'42"E	14.71'
L26	N45°28'58"E	14.99'
L27	N46°37'42"E	14.84'
L28	N42°03'52"E	21.39'
L29	S48°56'25"E	12.53'
L30	S47°56'46"E	24.89'
L31	S47°20'44"E	22.01'
L32	S49°02'50"E	18.93'
L33	S41°16'29"E	3.87'
L34	S23°32'41"W	2.42'
L35	S42°10'21"W	24.15'
L36	S40°49'14"W	15.87'

LINE TABLE		
LINE	BEARING	DISTANCE
L37	S43°24'23"W	17.31'
L38	S07°10'51"W	2.25'
L39	S47°15'29"E	10.63'
L40	S47°15'34"E	21.31'
L41	S48°42'24"E	14.95'
L42	S42°38'34"E	2.98'
L43	S05°51'36"E	2.62'
L44	S11°15'54"W	2.48'
L45	S45°59'27"W	13.00'
L46	S46°06'19"W	12.00'
L47	S66°04'46"W	2.39'
L48	N11°33'50"W	7.63'
L49	N24°29'24"W	1.64'
L50	N89°54'55"W	14.47'
L51	S87°08'17"W	17.99'
L52	N11°34'49"W	8.79'
L53	N00°06'22"W	11.01'
L54	N02°55'15"E	15.32'
L55	N01°04'26"E	14.52'
L56	N03°49'23"W	13.29'
L57	N02°26'17"E	17.59'
L58	N35°17'16"E	3.37'
L59	N48°36'01"E	20.69'
L60	N52°07'47"E	13.94'
L61	N87°24'46"E	4.90'
L62	S50°03'03"E	24.48'
L63	S51°20'33"E	12.97'
L64	S43°26'28"E	14.38'
L65	S34°31'33"E	4.06'
L66	S03°21'34"E	16.15'
L67	S00°01'01"W	14.66'
L68	S01°18'27"W	15.56'
L69	S27°34'26"W	4.62'
L70	S48°37'09"W	9.38'
L71	S39°09'35"W	8.90'

Unofficial Document

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 10/12/18
ARIZONA, U.S.A.

EXHIBIT

AZTEC ENGINEERING
4561 E. McDowell Rd., Phoenix, AZ 85008
Tel(602)454-0402 Fax(602)454-0403
website: www.aztec.us

DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: N.T.S.		7	8	

LINE TABLE		
LINE	BEARING	DISTANCE
L72	S04°09'21"W	9.32'
L73	S78°37'07"W	14.03'
L74	S87°54'52"W	10.30'
L75	N12°39'30"E	13.68'
L76	N03°40'04"E	13.51'
L77	N03°19'19"E	3.84'
L78	S61°27'11"W	5.96'
L79	N68°24'17"W	4.72'
L80	N20°43'56"W	11.42'
L81	N24°36'10"W	20.47'
L82	N23°09'08"W	18.02'
L83	N24°11'52"W	26.48'
L84	N24°48'32"W	30.53'
L85	N33°30'19"E	9.32'
L86	N35°07'34"E	14.92'
L87	N33°42'47"E	30.86'
L88	N32°50'40"E	16.53'
L89	N32°27'21"E	28.86'
L90	N38°06'18"E	24.49'
L91	N66°54'12"E	2.93'
L92	S69°34'49"E	2.36'
L93	S42°45'15"E	25.21'
L94	S45°43'33"E	19.63'
L95	S45°13'39"E	9.89'
L96	S42°03'28"E	8.05'
L97	S46°20'34"E	4.30'
L98	S22°55'51"W	3.29'
L99	S42°26'21"E	6.86'
L100	N62°44'37"E	4.10'
L101	S53°58'25"E	3.71'
L102	S44°01'54"E	9.33'
L103	N84°09'21"E	0.44'
L104	S56°32'30"E	4.38'
L105	S78°44'41"E	4.35'
L106	S33°39'47"E	4.72'

LINE TABLE		
LINE	BEARING	DISTANCE
L107	S10°49'31"W	2.49'
L108	S60°32'50"E	2.16'
L109	S29°45'11"E	4.20'
L110	S31°36'23"E	5.73'
L111	S35°24'31"E	2.23'
L112	S38°40'52"E	0.34'
L113	S38°07'09"W	7.88'
L114	S62°49'36"W	15.90'
L115	S52°10'19"W	9.87'
L116	S33°51'36"W	9.12'
L117	S23°43'06"W	8.79'
L118	S27°47'52"W	21.06'
L119	S24°26'46"W	17.54'
L120	S21°48'00"W	10.19'
L121	S23°25'39"W	9.85'
L122	S28°09'22"W	4.37'
L123	S56°48'20"W	6.05'
L124	S11°13'12"E	1.67'
L125	S54°09'55"W	4.67'
L126	S01°20'48"W	16.59'
L127	S11°10'22"E	8.12'
L128	S03°54'54"W	6.65'
L129	S67°25'36"W	5.34'
L130	S58°25'41"W	5.97'
L131	S66°35'05"W	6.05'
L132	S61°52'33"W	8.29'
L133	S57°33'48"W	9.09'
L134	N80°19'32"W	7.90'
L135	N54°06'17"W	8.74'
L136	N45°13'24"W	13.05'
L137	N43°34'29"E	12.40'
L138	N47°12'16"E	16.67'
L139	S58°06'42"E	16.97'
L140	S25°25'51"W	13.83'
L141	S44°25'28"W	18.44'

Unofficial Document

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
38316
CHAD
HUBER
Date Signed: 10-12-18
ARIZONA, U.S.A.

EXHIBIT

AZTEC ENGINEERING
4561 E. McDowell Rd., Phoenix, AZ 85008
Tel:(602)454-0402 Fax:(602)454-0403
website: www.aztec.us

DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: N.T.S.		8	8	

Premier Title Agency
2910 E Camelback Rd., Suite 100
Phoenix, AZ 85016
Phone: (602) 224-0400
Fax: (480) 718-8395

Date: February 8, 2019

Accommodation #_____

Accommodation Recording Instructions
and
Indemnity, Hold Harmless and Release of Liability Agreement

To: Premier Title Agency:

The undersigned hand(s) you the following documents and request that you deliver said documents to the Office of the County Recorder of Maricopa County, State of Arizona for recording as an accommodation to the undersigned. You are to make no examination of said documents, or of any records, and are not to be concerned with their validity, sufficiency, accuracy or effect on title.

The undersigned agrees to indemnify and hold Company harmless against any and all liabilities, losses, damages, expenses and charges which Company may sustain or incur whether arising from or based on, directly or indirectly, any claim, action, proceeding, judgment, order or process in connection with the recording, failure to record, or other acts undertaken in connection, whether negligent or otherwise.

The undersigned also hereby releases Company of any liability in connection with said documents and acknowledges it is the express purpose and scope of this agreement to relieve Company of any and all liability for any and all acts or failures to act, negligent or otherwise, whether passive or active.

In connection with this indemnity, hold harmless and release of liability agreement, the undersigned understands that 1) protection against acts or failures to act covered by this agreement may be obtained in the form of escrow services and/or title insurance at filed rates, but that undersigned declines these services in connection with said documents; 2) in the absence of such escrow services and/or title insurance Company is unwilling to and would not carry out the requested acts or undertake any action with respect to said documents but for this agreement, and will rely on this agreement in accepting and recording said documents; 3) Company may provide escrow services and/or title insurance whether related or not, and that the acceptance and recording said documents are outside the scope of any such services; 4) the undersigned or others may record documents instead, and that it is not essential that Company accept or record said documents, that Company will derive no benefit from accepting or recording said documents, but that the undersigned will, and that this agreement is freely and voluntarily given in consideration of acceptance and recording, and acceptance and recording is the only consideration for this agreement; 5) this agreement is the sole expression of the intent of the undersigned and Company with respect to said documents; 6) the provisions of this agreement are severable, and in the event any provision is declared unenforceable, the remainder shall remain in full force and effect.

Unofficial Document

Document	First Party	Second Party	Transfer Tax	Recording Fee
1. Deed	The Patricia Archie Foundation, LLC		$0.00	$15.00
2.				
3.				
4.				
5.			$0.00	$15.00

Date: 2/8/19

Signature:

Authorized Agent

Date: 2/11/2019

Premier Title Agency

By: RICH NEWTON

It's: Commercial Escrow Officer

Exhibit 2

Legal Description of the Property Subject to the Declaration

EXHIBIT 2

EXHIBIT 'A'
LEGAL DESCRIPTION
NON-RESIDENTIAL PARCEL

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

BEGINNING AT A BRASS CAP IN HAND HOLE AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH A BRASS CAP IN HAND HOLE AT THE CENTER OF SECTION 5, BEARS N1°10'12"W, A DISTANCE OF 2638.92 FEET;
THENCE N1°10'12"W, ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER OF SECTION 5, A DISTANCE OF 477.87 FEET;
THENCE, DEPARTING SAID WEST LINE, N56°23'41"E, A DISTANCE OF 2265.43 FEET;
THENCE N66°31'14"E, A DISTANCE OF 747.30 FEET TO A POINT ON THE EAST LINE OF SAID SOUTHEAST QUARTER OF SECTION 5;
THENCE, DEPARTING SAID EAST LINE, S11°37'08"W, A DISTANCE OF 452.59 FEET;
THENCE S55°50'47"W, A DISTANCE OF 284.83 FEET;
THENCE S4°47'43"W, A DISTANCE OF 665.23 FEET;
THENCE S33°46'05"E, A DISTANCE OF 262.82 FEET;
THENCE S80°18'19"W, A DISTANCE OF 734.30 FEET;
THENCE S40°12'28"W, A DISTANCE OF 576.52 FEET TO A POINT ON THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF SECTION 5;
THENCE, ALONG SAID SOUTH LINE, N89°06'21"W, A DISTANCE OF 1230.24 FEET TO THE **POINT OF BEGINNING**.

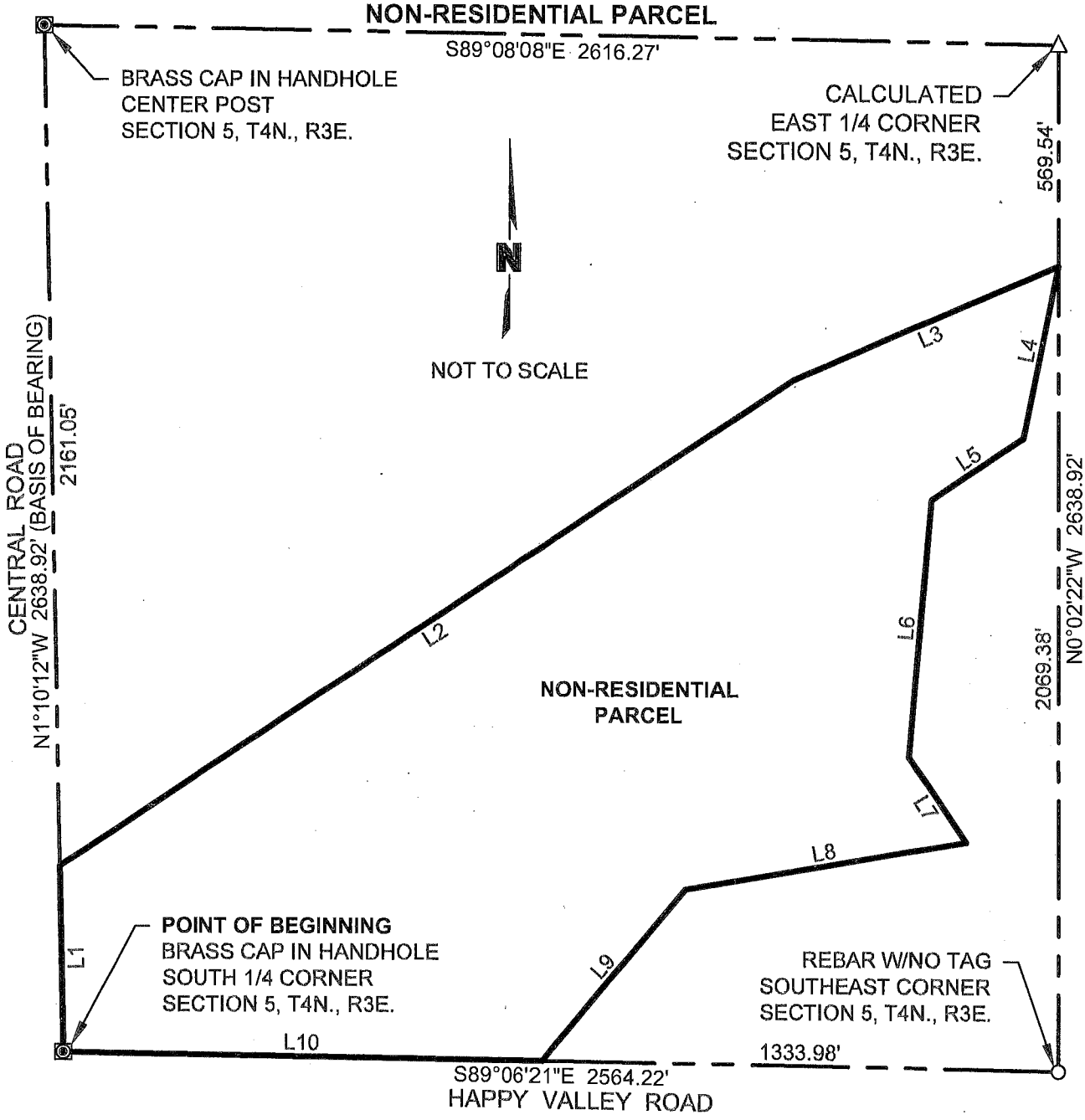
CONTAINING 56.780 ACRES MORE OR LESS.



OLSSON ASSOCIATES
7250 North 16th Street Suite 210
Phoenix, AZ 85020-5282
TEL 602.748.1000

EXHIBIT 'A'

LEGAL DESCRIPTION
NON-RESIDENTIAL PARCEL



LINE TABLE					
LINE #	DIRECTION	LENGTH	LINE #	DIRECTION	LENGTH
L1	N1°10'12"W	477.87'	L6	S4°47'43"W	665.23'
L2	N56°23'41"E	2265.43'	L7	S33°46'05"E	262.82'
L3	N66°31'14"E	747.30'	L8	S80°18'19"W	734.30'
L4	S11°37'08"W	452.59'	L9	S40°12'28"W	576.52'
L5	S55°50'47"W	284.83'	L10	N89°06'21"W	1230.24'

OLSSON ASSOCIATES
7250 North 16th Street Suite 210
Phoenix, AZ 85020-5282
TEL 602.748.1000

LEGAL DESCRIPTION
APN: 210-14-050A

FIVE PARCELS OF LAND LOCATED IN THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL 1:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 1334.86 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 333.32 FEET TO THE **POINT OF BEGINNING;**

THENCE N46°59'43"W, A DISTANCE OF 27.74 FEET;

THENCE N48°07'14"W, A DISTANCE OF 20.36 FEET;

THENCE N34°34'32"E, A DISTANCE OF 7.32 FEET;

THENCE N41°54'45"E, A DISTANCE OF 20.43 FEET;

THENCE N43°05'06"E, A DISTANCE OF 21.32 FEET;

THENCE S48°20'46"E, A DISTANCE OF 10.60 FEET;

THENCE S48°33'55"E, A DISTANCE OF 19.67 FEET;

THENCE S48°19'41"E, A DISTANCE OF 15.55 FEET;

THENCE S50°08'28"E, A DISTANCE OF 4.27 FEET;

THENCE S37°01'50"W, A DISTANCE OF 3.88 FEET;

THENCE S42°17'27"W, A DISTANCE OF 25.91 FEET;

THENCE S44°03'04"W, A DISTANCE OF 18.79 FEET;

THENCE S75°56'06"W, A DISTANCE OF 1.69 FEET TO THE **POINT OF BEGINNING.**

SAID **PARCEL 1** CONTAINS 2,486 SQUARE FEET, MORE OR LESS.

PARCEL 2:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 1383.54 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 396.92 FEET TO THE **POINT OF BEGINNING;**

THENCE N53°47'31"W, A DISTANCE OF 5.35 FEET;

THENCE N45°25'00"W, A DISTANCE OF 12.22 FEET;

THENCE N49°10'48"W, A DISTANCE OF 16.35 FEET;

THENCE N47°11'14"W, A DISTANCE OF 19.70 FEET;

THENCE N50°38'33"W, A DISTANCE OF 18.51 FEET;

THENCE N47°48'51"W, A DISTANCE OF 20.32 FEET;

THENCE N49°23'40"W, A DISTANCE OF 20.44 FEET;

THENCE N48°43'55"W, A DISTANCE OF 21.14 FEET;

THENCE N47°11'14"W, A DISTANCE OF 4.77 FEET;

THENCE N46°23'04"E, A DISTANCE OF 4.63 FEET;

THENCE N44°46'05"E, A DISTANCE OF 24.27 FEET;

THENCE N44°38'42"E, A DISTANCE OF 14.71 FEET;

THENCE N45°28'58"E, A DISTANCE OF 14.99 FEET;

THENCE N46°37'42"E, A DISTANCE OF 14.84 FEET;

THENCE N42°03'52"E, A DISTANCE OF 21.39 FEET;

THENCE S48°56'25"E, A DISTANCE OF 12.53 FEET;

THENCE S47°56'46"E, A DISTANCE OF 24.89 FEET;

THENCE S47°20'44"E, A DISTANCE OF 22.01 FEET;

THENCE S49°02'50"E, A DISTANCE OF 18.93 FEET;

THENCE S41°16'29"E, A DISTANCE OF 3.87 FEET;

THENCE S23°32'41"W, A DISTANCE OF 2.42 FEET;

THENCE S42°10'21"W, A DISTANCE OF 24.15 FEET;

THENCE S40°49'14"W, A DISTANCE OF 15.87 FEET;

THENCE S43°24'23"W, A DISTANCE OF 17.31 FEET;

THENCE S07°10'51"W, A DISTANCE OF 2.25 FEET;

THENCE S47°15'29"E, A DISTANCE OF 10.63 FEET;

THENCE S47°15'34"E, A DISTANCE OF 21.31 FEET;

THENCE S48°42'24"E, A DISTANCE OF 14.95 FEET;

THENCE S42°38'34"E, A DISTANCE OF 2.98 FEET;

THENCE S05°51'36"E, A DISTANCE OF 2.62 FEET;

THENCE S11°15'54"W, A DISTANCE OF 2.48 FEET;

THENCE S45°59'27"W, A DISTANCE OF 13.00 FEET;

THENCE S46°06'19"W, A DISTANCE OF 12.00 FEET;

THENCE S66°04'46"W, A DISTANCE OF 2.39 FEET TO THE **POINT OF BEGINNING.**

SAID **PARCEL 2** CONTAINS 9,664 SQUARE FEET, MORE OR LESS.

PARCEL 3:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 1480.68 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 944.95 FEET TO THE **POINT OF BEGINNING;**

THENCE N11°33'50"W, A DISTANCE OF 7.63 FEET;

THENCE N24°29'24"W, A DISTANCE OF 1.64 FEET;

THENCE N89°54'55"W, A DISTANCE OF 14.47 FEET;

THENCE S87°08'17"W, A DISTANCE OF 17.99 FEET;

THENCE N11°34'49"W, A DISTANCE OF 8.79 FEET;

THENCE N00°06'22"W, A DISTANCE OF 11.01 FEET;

THENCE N02°55'15"E, A DISTANCE OF 15.32 FEET;

THENCE N01°04'26"E, A DISTANCE OF 14.52 FEET;

THENCE N03°49'23"W, A DISTANCE OF 13.29 FEET;

THENCE N02°26'17"E, A DISTANCE OF 17.59 FEET;

THENCE N35°17'16"E, A DISTANCE OF 3.37 FEET;

THENCE N48°36'01"E, A DISTANCE OF 20.69 FEET;

THENCE N52°07'47"E, A DISTANCE OF 13.94 FEET;

THENCE N87°24'46"E, A DISTANCE OF 4.90 FEET;

THENCE S50°03'03"E, A DISTANCE OF 24.48 FEET;

THENCE S51°20'33"E, A DISTANCE OF 12.97 FEET;

THENCE S43°26'28"E, A DISTANCE OF 14.38 FEET;

THENCE S34°31'33"E, A DISTANCE OF 4.06 FEET;

THENCE S03°21'34"E, A DISTANCE OF 16.15 FEET;

THENCE S00°01'01"W, A DISTANCE OF 14.66 FEET;

THENCE S01°18'27"W, A DISTANCE OF 15.56 FEET;

THENCE S27°34'26"W, A DISTANCE OF 4.62 FEET;

THENCE S48°37'09"W, A DISTANCE OF 9.38 FEET;

THENCE S39°09'35"W, A DISTANCE OF 8.90 FEET;

THENCE S04°09'21"W, A DISTANCE OF 9.32 FEET;

THENCE S78°37'07"W, A DISTANCE OF 14.03 FEET;

THENCE S87°54'52"W, A DISTANCE OF 10.30 FEET TO THE **POINT OF BEGINNING.**

SAID **PARCEL 3** CONTAINS 6,839 SQUARE FEET, MORE OR LESS.

PARCEL 4:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 2004.29 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 1202.00 FEET TO THE **POINT OF BEGINNING;**

THENCE N12°39'30"E, A DISTANCE OF 13.68 FEET;

THENCE N03°40'04"E, A DISTANCE OF 13.51 FEET;

THENCE N03°19'19"E, A DISTANCE OF 3.84 FEET;

THENCE S61°27'11"W, A DISTANCE OF 5.96 FEET;

THENCE N68°24'17"W, A DISTANCE OF 4.72 FEET;

THENCE N20°43'56"W, A DISTANCE OF 11.42 FEET;

THENCE N24°36'10"W, A DISTANCE OF 20.47 FEET;

THENCE N23°09'08"W, A DISTANCE OF 18.02 FEET;

THENCE N24°11'52"W, A DISTANCE OF 26.48 FEET;

THENCE N24°48'32"W, A DISTANCE OF 30.53 FEET;

THENCE N33°30'19"E, A DISTANCE OF 9.32 FEET;

THENCE N35°07'34"E, A DISTANCE OF 14.92 FEET;

THENCE N33°42'47"E, A DISTANCE OF 30.86 FEET;

THENCE N32°50'40"E, A DISTANCE OF 16.53 FEET;

THENCE N32°27'21"E, A DISTANCE OF 28.86 FEET;

THENCE N38°06'18"E, A DISTANCE OF 24.49 FEET;

THENCE N66°54'12"E, A DISTANCE OF 2.93 FEET;

THENCE S69°34'49"E, A DISTANCE OF 2.36 FEET;

THENCE S42°45'15"E, A DISTANCE OF 25.21 FEET;

THENCE S45°43'33"E, A DISTANCE OF 19.63 FEET;

THENCE S45°13'39"E, A DISTANCE OF 9.89 FEET;

THENCE S42°03'28"E, A DISTANCE OF 8.05 FEET;

THENCE S46°20'34"E, A DISTANCE OF 4.30 FEET;

THENCE S22°55'51"W, A DISTANCE OF 3.29 FEET;

THENCE S42°26'21"E, A DISTANCE OF 6.86 FEET;

THENCE N62°44'37"E, A DISTANCE OF 4.10 FEET;

THENCE S53°58'25"E, A DISTANCE OF 3.71 FEET;

THENCE S44°01'54"E, A DISTANCE OF 9.33 FEET;

THENCE N84°09'21"E, A DISTANCE OF 0.44 FEET;

THENCE S56°32'30"E, A DISTANCE OF 4.38 FEET;

THENCE S78°44'41"E, A DISTANCE OF 4.35 FEET;

THENCE S33°39'47"E, A DISTANCE OF 4.72 FEET;

THENCE S10°49'31"W, A DISTANCE OF 2.49 FEET;

THENCE S50°32'50"E, A DISTANCE OF 2.16 FEET;

THENCE S29°45'11"E, A DISTANCE OF 4.20 FEET;

THENCE S31°36'23"E, A DISTANCE OF 5.73 FEET;

THENCE S35°24'31"E, A DISTANCE OF 2.23 FEET;

THENCE S38°40'52"E, A DISTANCE OF 0.34 FEET;

THENCE S38°07'09"W, A DISTANCE OF 7.88 FEET;

THENCE S62°49'36"W, A DISTANCE OF 15.90 FEET;

THENCE S52°10'19"W, A DISTANCE OF 9.87 FEET;

THENCE S33°51'36"W, A DISTANCE OF 9.12 FEET;

THENCE S23°43'06"W, A DISTANCE OF 8.79 FEET;

THENCE S27°47'52"W, A DISTANCE OF 21.06 FEET;

THENCE S24°26'46"W, A DISTANCE OF 17.54 FEET;

THENCE S21°48'00"W, A DISTANCE OF 10.19 FEET;

THENCE S23°25'39"W, A DISTANCE OF 9.85 FEET;

THENCE S28°09'22"W, A DISTANCE OF 4.37 FEET;

THENCE S56°48'20"W, A DISTANCE OF 6.05 FEET;

THENCE S11°13'12"E, A DISTANCE OF 1.67 FEET;

THENCE S54°09'55"W, A DISTANCE OF 4.67 FEET;

THENCE S01°20'48"W, A DISTANCE OF 16.59 FEET;

THENCE S11°10'22"E, A DISTANCE OF 8.12 FEET;

THENCE S03°54'54"W, A DISTANCE OF 6.65 FEET;

THENCE S67°25'36"W, A DISTANCE OF 5.34 FEET;

THENCE S58°25'41"W, A DISTANCE OF 5.97 FEET;

THENCE S66°35'05"W, A DISTANCE OF 6.05 FEET;

THENCE S61°52'33"W, A DISTANCE OF 8.29 FEET;

THENCE S57°33'48"W, A DISTANCE OF 9.09 FEET;

THENCE N80°19'32"W, A DISTANCE OF 7.90 FEET TO THE **POINT OF BEGINNING**.

SAID **PARCEL** 4 CONTAINS 18,078 SQUARE FEET, MORE OR LESS.

PARCEL 5:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 2217.40 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 1854.92 FEET TO THE **POINT OF BEGINNING;**

THENCE N54°06'17"W, A DISTANCE OF 8.74 FEET;

THENCE N45°13'24"W, A DISTANCE OF 13.05 FEET;

THENCE N43°34'29"E, A DISTANCE OF 12.40 FEET;

THENCE N47°12'16"E, A DISTANCE OF 16.67 FEET;

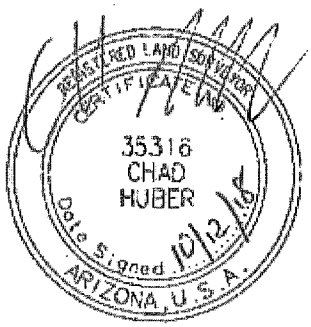
THENCE S58°06'42"E, A DISTANCE OF 16.97 FEET;

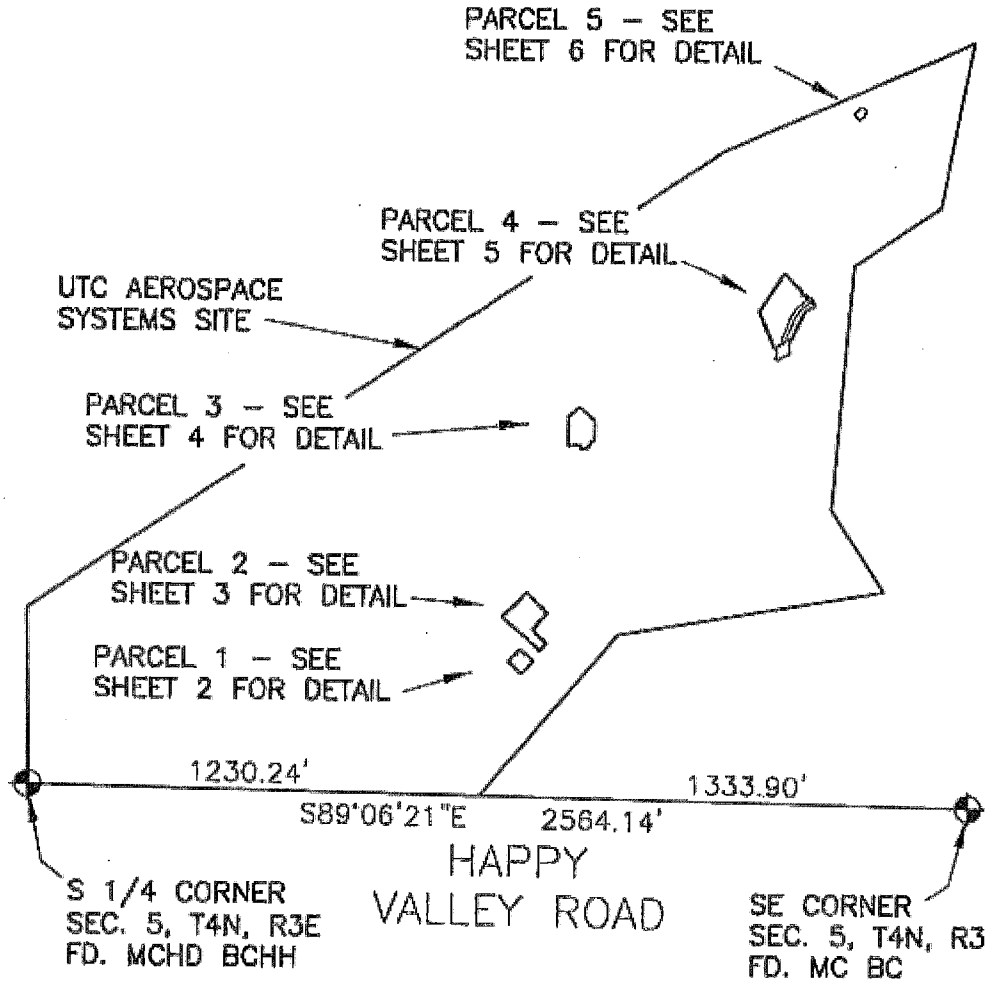
THENCE S25°25'51"W, A DISTANCE OF 13.83 FEET;

THENCE S44°25'28"W, A DISTANCE OF 18.44 FEET TO THE POINT OF BEGINNING.

SAID PARCEL 5 CONTAINS 641 SQUARE FEET, MORE OR LESS.

TOTAL COMBINED PARCELS CONTAIN 37,708 SQUARE FEET, OR 0.87 ACRES, MORE OR LESS.





LEGEND

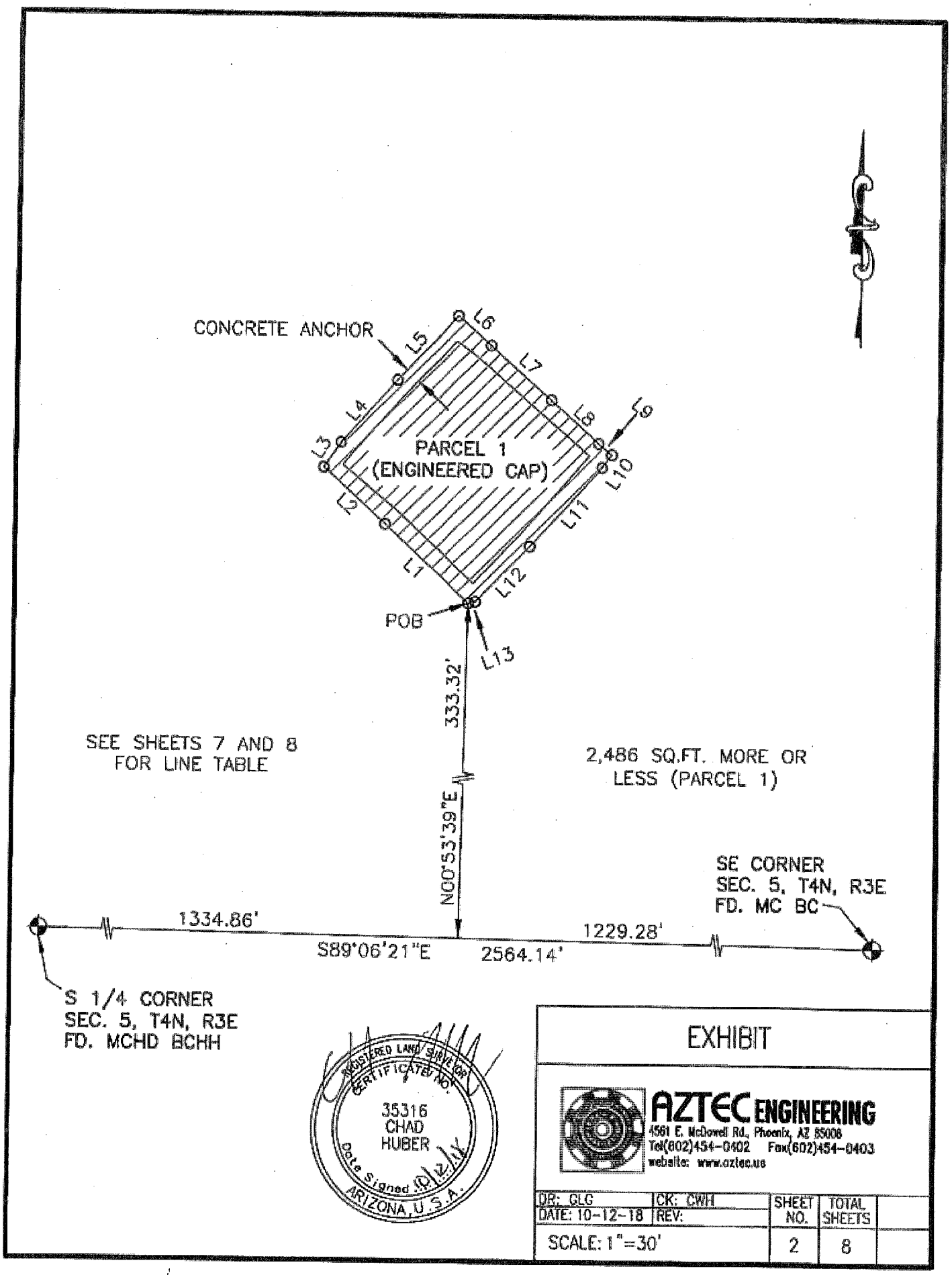
POB = POINT OF BEGINNING
MCHD = MARICOPA COUNTY HIGHWAY DEPARTMENT
BC = BRASS CAP
BCHH = BRASS CAP IN HAND HOLE
O = CONCRETE CAP ANCHOR
MC = MARICOPA COUNTY
▨ = ENGINEERED CAP

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 10/12/18
ARIZONA, U.S.A.

EXHIBIT

AZTEC ENGINEERING
4561 E. McDowell Rd., Phoenix, AZ 85008
Tel(602)454-0402 Fax(602)454-0403
website: www.aztec.us

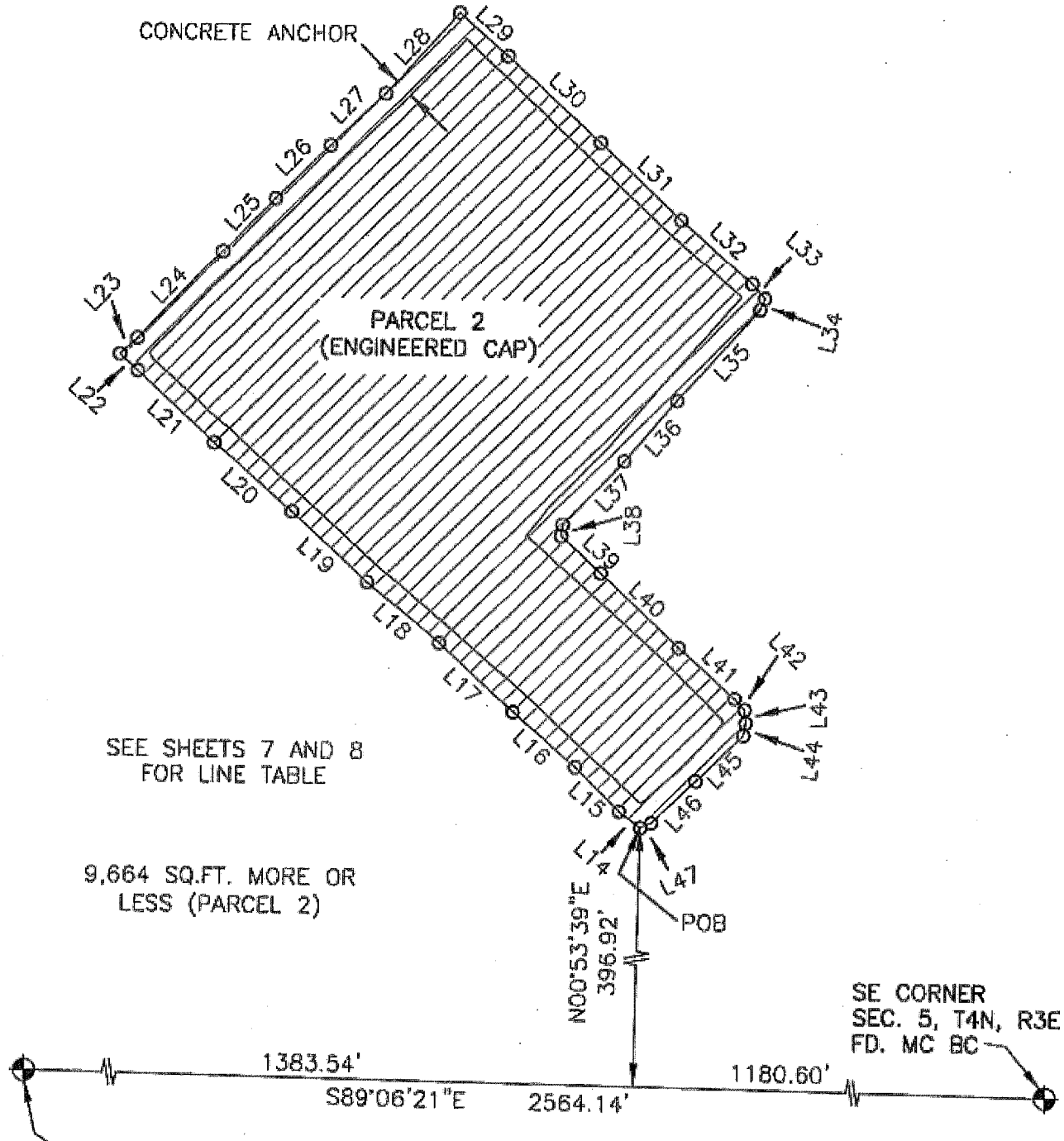
DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: 1"=500'		1	8	



EXHIBIT

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DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: 1"=30'		2	8	

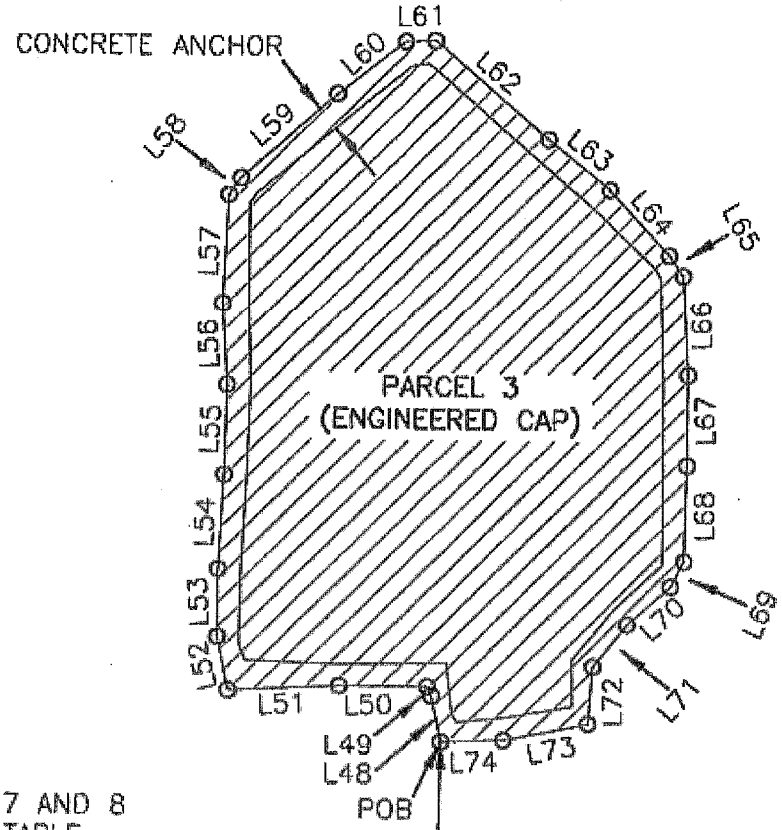


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DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: 1"=30'		3	8	



SEE SHEETS 7 AND 8
FOR LINE TABLE

944.95'

N00°53'39"E

6,839 SQ.FT. MORE OR
LESS (PARCEL 3)

SE CORNER
SEC. 5, T4N, R3E
FD. MC BC

1480.68'

S89°06'21"E

2564.14'

1083.46'

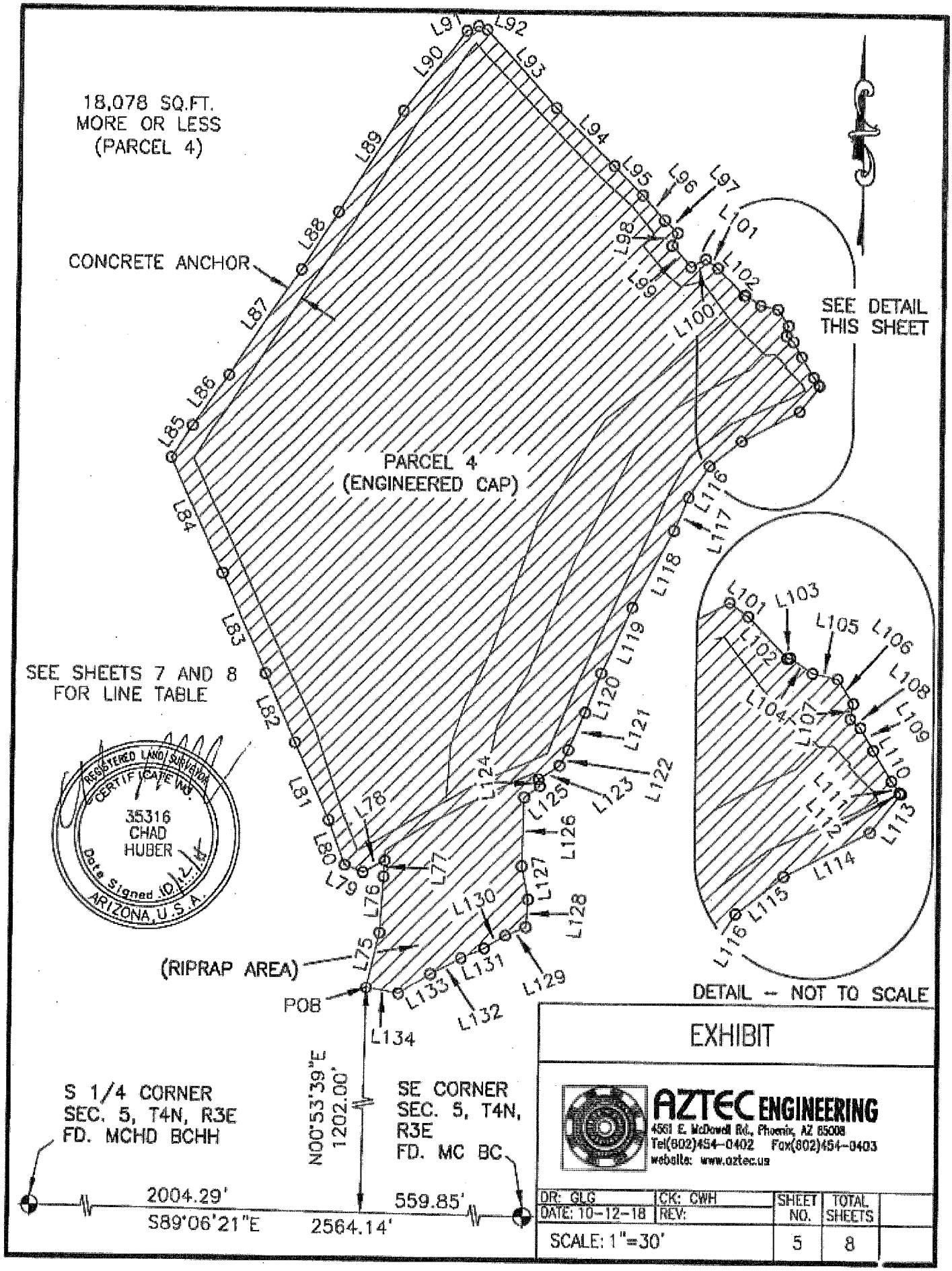
S 1/4 CORNER
SEC. 5, T4N, R3E
FD. MCHD BCHH

REGISTERED LAND SURVEYOR
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DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: 1"=30'		4	8	



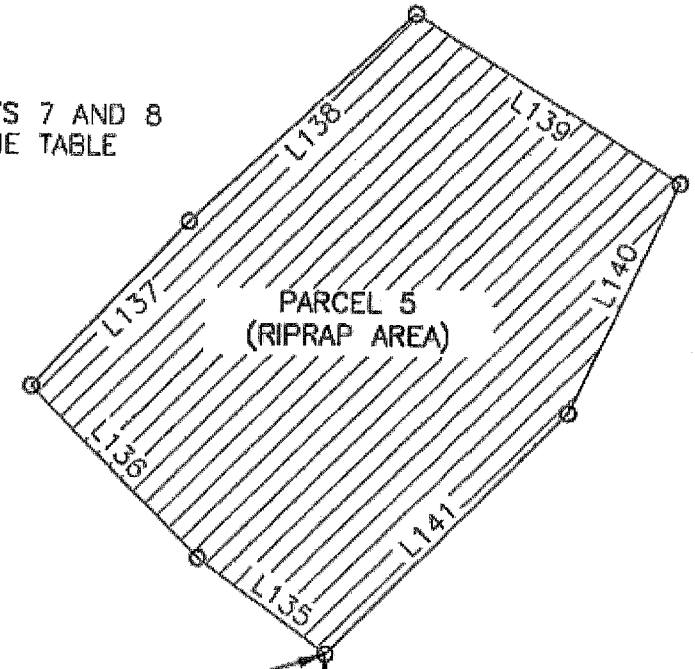
EXHIBIT

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DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS
DATE: 10-12-18	REV:		
SCALE: 1"=30'		5	8

641 SQ.FT: MORE OR LESS (PARCEL 5)

SEE SHEETS 7 AND 8
FOR LINE TABLE



1854.92'

N00°53'39"E

S 1/4 CORNER
SEC. 5, T4N, R3E
FD. MCHD BCHH

SE CORNER
SEC. 5, T4N,
R3E
FD. MC BC

2217.40'
S89°06'21"E
2564.14'
346.74'

REGISTERED LAND SURVEYOR
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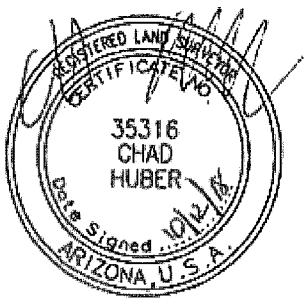
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website: www.aztec.us

DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: 1"=10'		6	8	

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N46°59'43"W	27.74'
L2	N48°07'14"W	20.36'
L3	N34°34'32"E	7.32'
L4	N41°54'45"E	20.43'
L5	N43°05'06"E	21.32'
L6	S48°20'46"E	10.60'
L7	S48°33'55"E	19.67'
L8	S48°19'41"E	15.55'
L9	S50°08'28"E	4.27'
L10	S37°01'50"W	3.88'
L11	S42°17'27"W	25.91'
L12	S44°03'04"W	18.79'
L13	S75°56'06"W	1.69'
L14	N53°47'31"W	5.35'
L15	N45°25'00"W	12.22'
L16	N49°10'48"W	16.35'
L17	N47°11'14"W	19.70'
L18	N50°38'33"W	18.51'
L19	N47°48'51"W	20.32'
L20	N49°23'40"W	20.44'
L21	N48°43'55"W	21.14'
L22	N47°11'14"W	4.77'
L23	N46°23'04"E	4.63'
L24	N44°46'05"E	24.27'
L25	N44°38'42"E	14.71'
L26	N45°28'58"E	14.99'
L27	N46°37'42"E	14.84'
L28	N42°03'52"E	21.39'
L29	S48°56'25"E	12.53'
L30	S47°56'46"E	24.89'
L31	S47°20'44"E	22.01'
L32	S49°02'50"E	18.93'
L33	S41°16'29"E	3.87'
L34	S23°32'41"W	2.42'
L35	S42°10'21"W	24.15'
L36	S40°49'14"W	15.87'

LINE TABLE		
LINE	BEARING	DISTANCE
L37	S43°24'23"W	17.31'
L38	S07°10'51"W	2.25'
L39	S47°15'29"E	10.63'
L40	S47°15'34"E	21.31'
L41	S48°42'24"E	14.95'
L42	S42°38'34"E	2.98'
L43	S05°51'36"E	2.62'
L44	S11°15'54"W	2.48'
L45	S45°59'27"W	13.00'
L46	S46°06'19"W	12.00'
L47	S66°04'46"W	2.39'
L48	N11°33'50"W	7.63'
L49	N24°29'24"W	1.64'
L50	N89°54'55"W	14.47'
L51	S87°08'17"W	17.99'
L52	N11°34'49"W	8.79'
L53	N00°06'22"W	11.01'
L54	N02°55'15"E	15.32'
L55	N01°04'26"E	14.52'
L56	N03°49'23"W	13.29'
L57	N02°26'17"E	17.59'
L58	N35°17'16"E	3.37'
L59	N48°36'01"E	20.69'
L60	N52°07'47"E	13.94'
L61	N87°24'46"E	4.90'
L62	S50°03'03"E	24.48'
L63	S51°20'33"E	12.97'
L64	S43°26'28"E	14.38'
L65	S34°31'33"E	4.06'
L66	S03°21'34"E	16.15'
L67	S00°01'01"W	14.66'
L68	S01°18'27"W	15.56'
L69	S27°34'26"W	4.62'
L70	S48°37'09"W	9.38'
L71	S39°09'35"W	8.90'



EXHIBIT

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DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: N.T.S.		7	8	

LINE TABLE		
LINE	BEARING	DISTANCE
L72	S04°09'21"W	9.32'
L73	S78°37'07"W	14.03'
L74	S87°54'52"W	10.30'
L75	N12°39'30"E	13.68'
L76	N03°40'04"E	13.51'
L77	N03°19'19"E	3.84'
L78	S61°27'11"W	5.96'
L79	N68°24'17"W	4.72'
L80	N20°43'56"W	11.42'
L81	N24°36'10"W	20.47'
L82	N23°09'08"W	18.02'
L83	N24°11'52"W	26.48'
L84	N24°48'32"W	30.53'
L85	N33°30'19"E	9.32'
L86	N35°07'34"E	14.92'
L87	N33°42'47"E	30.86'
L88	N32°50'40"E	16.53'
L89	N32°27'21"E	28.86'
L90	N38°06'18"E	24.49'
L91	N66°54'12"E	2.93'
L92	S69°34'49"E	2.36'
L93	S42°45'15"E	25.21'
L94	S45°43'33"E	19.63'
L95	S45°13'39"E	9.89'
L96	S42°03'28"E	8.05'
L97	S46°20'34"E	4.30'
L98	S22°55'51"W	3.29'
L99	S42°26'21"E	6.86'
L100	N62°44'37"E	4.10'
L101	S53°58'25"E	3.71'
L102	S44°01'54"E	9.33'
L103	N84°09'21"E	0.44'
L104	S56°32'30"E	4.38'
L105	S78°44'41"E	4.35'
L106	S33°39'47"E	4.72'

LINE TABLE		
LINE	BEARING	DISTANCE
L107	S10°49'31"W	2.49'
L108	S50°32'50"E	2.16'
L109	S29°45'11"E	4.20'
L110	S31°36'23"E	5.73'
L111	S35°24'31"E	2.23'
L112	S38°40'52"E	0.34'
L113	S38°07'09"W	7.88'
L114	S62°49'36"W	15.90'
L115	S52°10'19"W	9.87'
L116	S33°51'36"W	9.12'
L117	S23°43'06"W	8.79'
L118	S27°47'52"W	21.06'
L119	S24°26'46"W	17.54'
L120	S21°48'00"W	10.19'
L121	S23°25'39"W	9.85'
L122	S28°09'22"W	4.37'
L123	S56°48'20"W	6.05'
L124	S11°13'12"E	1.67'
L125	S54°09'55"W	4.67'
L126	S01°20'48"W	16.59'
L127	S11°10'22"E	8.12'
L128	S03°54'54"W	6.65'
L129	S67°25'36"W	5.34'
L130	S58°25'41"W	5.97'
L131	S66°35'05"W	6.05'
L132	S61°52'33"W	8.29'
L133	S57°33'48"W	9.09'
L134	N80°19'32"W	7.90'
L135	N54°06'17"W	8.74'
L136	N45°13'24"W	13.05'
L137	N43°34'29"E	12.40'
L138	N47°12'16"E	16.67'
L139	S58°06'42"E	16.97'
L140	S25°25'51"W	13.83'
L141	S44°25'28"W	18.44'

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 10/12/18
ARIZONA, U.S.A.

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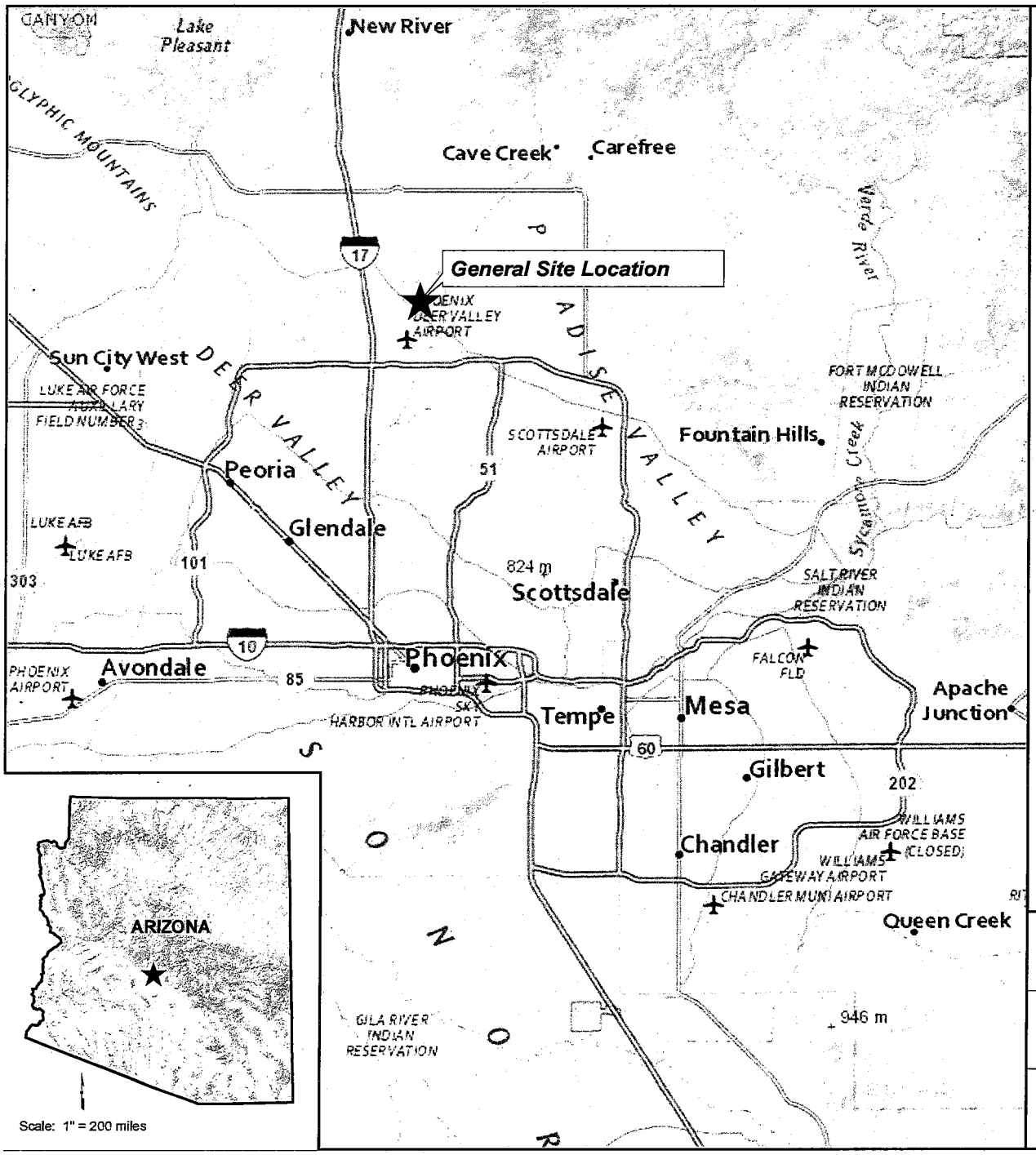
DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: N.T.S.		8	8	

Exhibit 3

General Site Location Map

Exhibit 3 – General Site Location Map is available for viewing at the following address:

Arizona Department of Environmental Quality
Records Management Center, 1st Floor
1110 W. Washington St.
Phoenix, Arizona 85007



LEGEND

★ Approximate site location

NOTES

- Basemap source: ESRI National Geographic World Map.

N

Miles

0 4 8

Scale: 1" = 8 mi

FORMER UNIVERSAL PROPULSION COMPANY, INC. FACILITY
PHOENIX, ARIZONA

GENERAL SITE LOCATION MAP

ARCADIS

EXHIBIT 3

203

20200066622

Exhibit 4

Map of the Property Subject to the Declaration

EXHIBIT 4 - MAP OF THE PROPERTY

RECORD OF SURVEY OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

RECORD OF SURVEY

OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

PHOENIX, ARIZONA 2016

OLSSON ASSOCIATES

2550 N 16TH STREET SUITE 210 PHOENIX, AZ 85020 TEL 602 748 1000 WWW.OLSSONASSOCIATES.COM

SHEET 1 OF 1

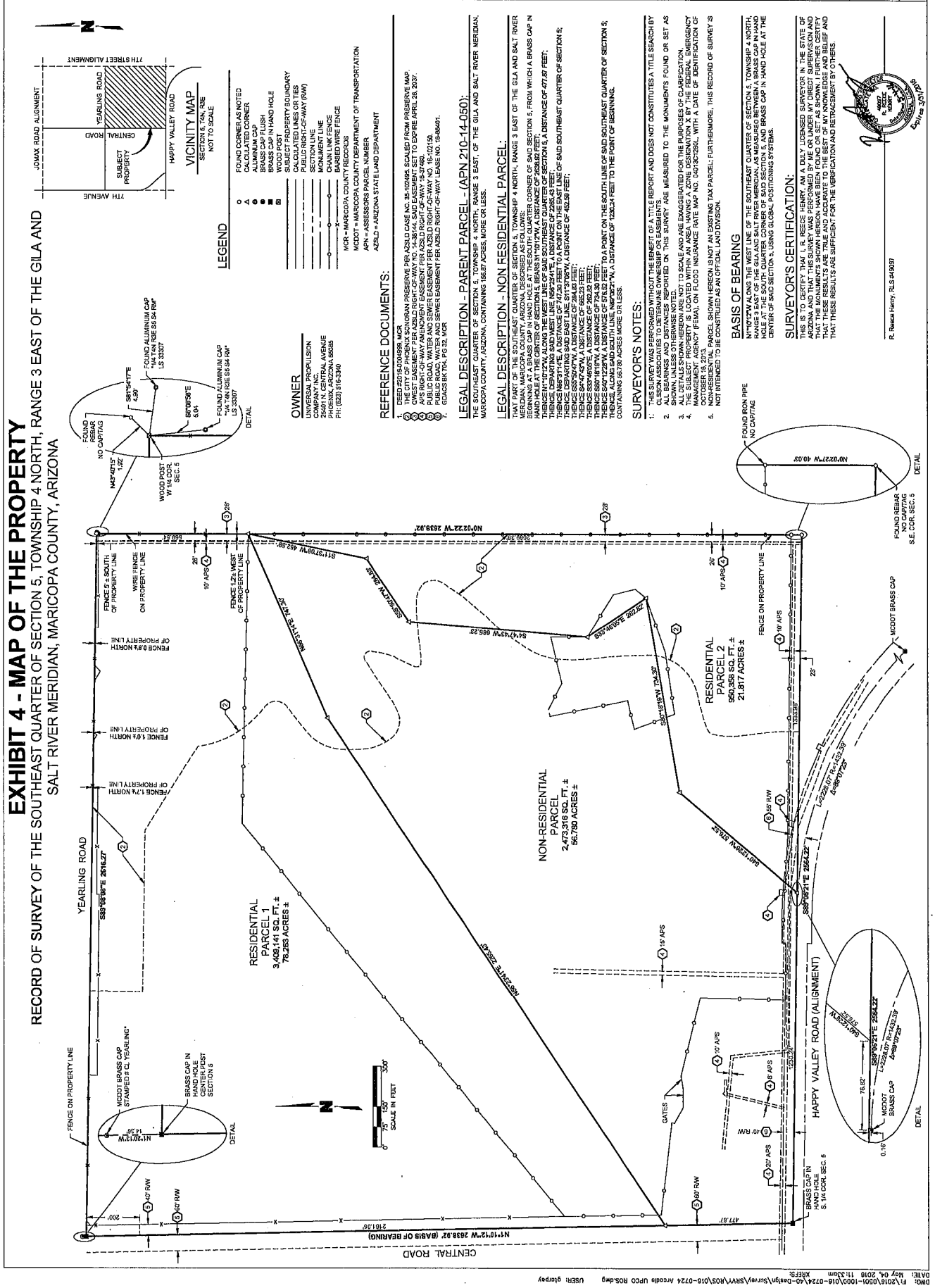

VICINITY MAP
SECTION 5, T4N, R3E
NOT TO SCALE
JOMAX ROAD ALIGNMENT
7TH STREET ALIGNMENT
YEARLING ROAD
CENTRAL ROAD
7TH AVENUE
HAPPY VALLEY ROAD
SUBJECT PROPERTY
LEGEND
FOUND CORNER AS NOTED
CALCULATED CORNER
ALUMINUM CAP
BRASS CAP FLUSH
BRASS CAP IN HAND HOLE
WOOD POST
SUBJECT PROPERTY BOUNDARY
CALCULATED LINES OR TIES
PUBLIC RIGHT-OF-WAY (R/W)
SECTION LINE
MONUMENT LINE
CHAIN LINK FENCE
BARBED WIRE FENCE
MCR = MARICOPA COUNTY RECORDS
MCDOT = MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
APN = ASSESSORS PARCEL NUMBER
AZSLD = ARIZONA STATE LAND DEPARTMENT
REFERENCE DOCUMENTS:
1. DEED #2016-0204668, MCR
2. THE CITY OF PHOENIX SONORAN PRESERVE PER AZSLD CASE NO. 33-102495, SCALED FROM PRESERVE MAP.
3. QWEST EASEMENT PER AZSLD RIGHT-OF-WAY NO. 14-38144, SAID EASEMENT SET TO EXPIRE APRIL 26, 2037.
4. APS RIGHT-OF-WAY AMENDMENT EASEMENT PER AZSLD RIGHT-OF-WAY 15-37480.
5. PUBLIC ROAD, WATER AND SEWER EASEMENT PER AZSLD RIGHT-OF-WAY LEASE NO. 15-10759.
6. PUBLIC ROAD, WATER AND SEWER EASEMENT PER AZSLD RIGHT-OF-WAY LEASE NO. 15-80491.
7. GDACS BK 704, PG 32, MCR
OWNER
UNIVERSAL PROPULSION COMPANY INC.
25401 N. CENTRAL AVENUE PHOENIX, AZ 85004-1856
PH: (623) 376-3340
LEGAL DESCRIPTION - PARENT PARCEL - (APN 210-14-050):
THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, CONTAINING 156.87 ACRES, MORE OR LESS.
LEGAL DESCRIPTION - NON RESIDENTIAL PARCEL:
THAT PART OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:
BEGINNING AT A BRASS CAP IN HAND HOLE AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH A BRASS CAP IN HAND HOLE AT THE SOUTHEAST CORNER OF SAID SECTION 5 BEARS S89°58'21"E, A DISTANCE OF 2,639.43 FEET;
THENCE, DEPARTING SAID WEST LINE, N89°22'41"E, A DISTANCE OF 2285.43 FEET;
THENCE N89°31'14"E, A DISTANCE OF 747.30 FEET TO A POINT ON THE EAST LINE OF SAID SOUTHEAST QUARTER OF SECTION 5;
THENCE S00°22'27"E, ALONG SAID EAST LINE, A DISTANCE OF 1,322.76 FEET;
THENCE S89°49'05"E, A DISTANCE OF 262.80 FEET;
THENCE S84°47'43"W, A DISTANCE OF 866.23 FEET;
THENCE S89°49'05"E, A DISTANCE OF 262.80 FEET;
THENCE S84°47'43"W, A DISTANCE OF 1,230.24 FEET;
THENCE S84°12'28"W, A DISTANCE OF 575.52 FEET TO A POINT ON THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF SECTION 5;
THENCE, ALONG SAID SOUTH LINE, N89°22'27"W, A DISTANCE OF 1,230.24 FEET TO THE POINT OF BEGINNING.
CONTAINING 56.780 ACRES MORE OR LESS.
SURVEYOR'S NOTES:
1. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT CONSTITUTES A TITLE SEARCH BY OLSSON ASSOCIATES TO DETERMINE OWNERSHIP OR EASEMENTS.
2. ALL BEARINGS AND DISTANCES ARE RECORD AND REPORTED ON THIS SURVEY ARE MEASURED TO THE MONUMENTS FOUND OR SET AS SHOWN, UNLESS OTHERWISE NOTED.
3. ALL DETAILS SHOWN HEREON ARE NOT TO SCALE AND ARE EXAGGERATED FOR THE PURPOSES OF CLARIFICATION.
4. THE SUBJECT PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION X BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 04013C2280J, WITH A DATE OF IDENTIFICATION OF OCTOBER 16, 2013.
5. NON-RESIDENTIAL PARCEL SHOWN HEREON IS NOT AN EXISTING TAX PARCEL; FURTHERMORE, THIS RECORD OF SURVEY IS NOT INTENDED TO BE CONSTRUED AS AN OFFICIAL LAND DIVISION.
BASIS OF BEARING
N1°10'12"W ALONG THE WEST LINE OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST OF THE GILA AND SALT RIVER MERIDIAN, AS MEASURED BETWEEN A BRASS CAP IN HAND HOLE AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, AND A BRASS CAP IN HAND HOLE AT THE CENTER OF SAID SECTION 5, USING GLOBAL POSITIONING SYSTEMS.
SURVEYOR'S CERTIFICATION:
THIS IS TO CERTIFY THAT I, R. REECE HENRY, AM A DULY LICENSED SURVEYOR IN THE STATE OF ARIZONA AND THAT THIS SURVEY WAS PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THE MONUMENTS SHOWN HEREON HAVE BEEN FOUND OR SET AS SHOWN. I FURTHER CERTIFY THAT THESE RESULTS ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THESE RESULTS ARE SUFFICIENT FOR THE VERIFICATION AND RETRACEMENT BY OTHERS.
R. Reece Henry, RLS #40087
RESIDENTIAL PARCEL 1
3,409,141 SQ. FT. ±
78.263 ACRES ±
RESIDENTIAL PARCEL 2
950,358 SQ. FT. ±
21.817 ACRES ±
NON-RESIDENTIAL PARCEL
2,473,316 SQ. FT. ±
56.780 ACRES ±
YEARLING ROAD
CENTRAL ROAD
HAPPY VALLEY ROAD (ALIGNMENT)
FENCE ON PROPERTY LINE
FENCE 5' SOUTH OF PROPERTY LINE
WIRE FENCE ON PROPERTY LINE
FENCE 12' WEST OF PROPERTY LINE
FENCE 0.8' NORTH OF PROPERTY LINE
FENCE 1.0' NORTH OF PROPERTY LINE
FENCE 1.7' NORTH OF PROPERTY LINE
GATES
MCDOT BRASS CAP STAMPED P.I. "YEARLING"
BRASS CAP IN HAND HOLE CORNER POST SECTION 5
BRASS CAP IN HAND HOLE S. 1/4 COR. SEC. 5
WOOD POST W 1/4 COR. SEC. 5
FOUND ALUMINUM CAP "14 T4N R3E S5 S4 RM" LS 33507
FOUND ALUMINUM CAP "14 T4N R3E S5 S6 RM" LS 33507
FOUND REBAR NO CAP/TAG
FOUND IRON PIPE NO CAP/TAG
FOUND REBAR NO CAP/TAG S.E. COR. SEC. 5
MCDOT BRASS CAP
DETAIL
SCALE IN FEET
0 75 150 300
N1°10'12"W 2638.92' (BASIS OF BEARING)
S89°58'21"E 2639.43'
S89°58'21"E 2564.22'
N89°22'41"W 2285.43'
S89°31'14"E 747.30'
S89°49'05"E 262.80'
S84°47'43"W 866.23'
S89°49'05"E 262.80'
S84°12'28"W 575.52'
N89°22'27"W 1230.24'
S89°22'27"E 1322.76'
N89°22'27"W 1230.24'
N00°22'27"W 2638.92'
N00°22'27"W 40.03'
S89°58'21"E 2564.22'
S89°58'21"E 2639.43'
N1°10'12"W 2638.92'
N1°10'12"W 2161.05'
200'
660.54'
660.54'
477.67'
1250.00'
1250.00'
1320.38'
1320.38'
1320.38

Exhibit 5

Environmental Contaminant Information

EXHIBIT 5

ENVIRONMENTAL CONTAMINANT INFORMATION

	Contaminant Name	Chemical Abstract No.	Concentration(1)	Exposure Pathway(s) (2)	Non-residential(3)		Residential(4)	
					Carc	Non-carc	Carc	Non-carc
Water	Perchlorate	14797-73-0	71.3	O, D				
	1,1-Dichloroethylene	75-35-4	0.0071	O, D				
	1,4-Dioxane	123-91-1	0.0167	O, D, I				
Soil	Perchlorate	14797-73-0	369	O, I				
	Arsenic	7440-38-2	31	O, I				
				Total				

1) Units are mg/kg. The concentration is the maximum detected at the Property, or the statistically determined value representative of the site-specific contaminant distribution in the area of concern. This value is not the exposure point determined by risk assessment methodology.

2) Indicate all applicable complete exposure pathways as "O" for oral ingestion, "D" for dermal contact, and "I" for inhalation. One or more pathways may be eliminated by an institutional control, other than a restriction to non-residential uses. All three pathways are considered complete when the only restriction is limiting use of the Property to non-residential use.

3) If a risk assessment has been conducted, list the calculated non-residential risk or hazard quotient for each contaminant. At the bottom of the carcinogen (carc) column, provide the cumulative excess lifetime cancer risk. At the bottom of the non-carcinogen (non-carc) column, provide the hazard index.

4) Optional information, unless one of the following conditions occur:
   a) A risk assessment evaluation for residential uses is required by the program;
   b) A risk assessment evaluation is conducted for residential use which requires implementation of any land use controls; or
   c) The Property use may change from non-residential to residential in the reasonably foreseeable future, and no risk assessment was conducted for residential use. Standard default residential exposure assumptions must be used to determine values for this column.

Exhibit 6

Environmental Access Agreement

20200066622

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
ADRIAN FONTES
20180870236 11/26/2018 03:57
ELECTRONIC RECORDING

When recorded, return to:

Arizona Dept. of Environmental Quality
1110 West Washington Street, 6th Floor
Phoenix, Arizona 85007

11262018-15-1-1--
Garciac

ENVIRONMENTAL ACCESS AGREEMENT

ADEQ Program Name:	Hazardous Waste Program
Program File Number:	RID 32067
Facility Name:	Universal Propulsion Company, Inc.
Facility Address:	25401 North Central Avenue Phoenix, Arizona 85085
Parcel Number:	210-14-050A

This Environmental Access Agreement ("Agreement") is entered into by and between the Arizona Department of Environmental Quality ("ADEQ", "Department") and Universal Propulsion Company, Inc., a foreign corporation ("UPCO", "Owner"). Owner and ADEQ are referred to herein as the "Parties."

RECITALS

A. Hazardous substances have been released at real property located at 25401 North Central Avenue, Phoenix, Maricopa County, Arizona ("Property"). The Owner's deed is attached setting forth the legal description of the Property and marked "Exhibit" 1. The Property's tax parcel number is 210-14-050A.

B. This Agreement is being entered into in connection with the Declaration of Environmental Use Restriction ("Declaration") between the Parties with respect to the hazardous substance contamination at the Property.

C. The Parties desire to state the terms permitting the Department access to and entry on the Property for purposes of inspection and/or necessary repairs to the Engineering Controls and the Institutional Controls in place to protect human health and the environment.

AGREEMENT

For good and valuable consideration, the receipt and adequacy of which is hereby mutually acknowledged, the Parties covenant and agree as follows:

A. Recitals and Warranty of Title. The Recitals and Exhibits are a material part of this Agreement. Owner holds equitable and legal title to and exclusive possession of the Property. Owner has the authority to enter into this Agreement and represents that there is no tenant or other person currently in possession of the Property.

B. Grant of Right of Access. Owner grants an easement to ADEQ and its representatives, authorized agents, attorneys, investigators, consultants, advisers, and contractors to enter on, use, and occupy only as much of the Property as is necessary for the purpose of inspecting, and conducting related activities to ensure that the Engineering Controls constructed on the Property and Institutional Controls are and remain effective remedial action and protect the public health and welfare ("Activities"). This Agreement is a covenant running with the land, binds Owner and Owner's heirs, successors, tenants, and assigns, and will terminate only when ADEQ determines that the Activities are completed or should be discontinued and records a document expressly terminating this Agreement. ADEQ may record this Agreement in the county where the Property is located.

C. Easement and Cooperation with ADEQ. Following the effective date of this Agreement, Owner shall not cause or allow any license, easement, encumbrance or any physical obstacle to be placed on the Property that may interfere with the Activities or ADEQ's rights under this Agreement. If ADEQ has given proper notice under Section "E" below and ADEQ's access is blocked or impaired, ADEQ, without notice to Owner, may remove the barrier or obstacle on the Property, and shall be entitled to immediate injunctive relief.

The Parties hereby acknowledge ADEQ's access to the portion of the Property covered by the Declaration (Engineering Control and Institutional Controls).

If the current or future Owner(s) of the Property:

1. Subdivide the Property; or
2. If the ownership interests in the land are divided; or
3. If any part of the ownership interests are transferred,

the easement as identified shall remain in full force and effect. Current and future Owner(s) shall not prevent, preclude or hinder ADEQ's access to the Property covered by the Declaration through either subdivision of the Property or any modification of the Property that blocks the access road.

D. Duty of Care. Owner and Owner's agents, employees, contractors, invitees, and guests shall not hinder or interfere with the Activities and shall not damage or tamper with any equipment, wells, or other property used in connection with the Activities.

E. Prior Notice of Activities. ADEQ will use reasonable efforts to give Owner at least ten (10) days prior notice of Activities to be conducted on the Property.

F. Notices Required Under This Agreement.

Notices from ADEQ to Owner shall be effective when given, if by telephone, to:

UPCO
Bruce C. Amig (Manager, Remedial Programs)

At: (704) 423-7071
Bruce.amig@utc.com

And, if in writing, to:

UPCO
c/o Bruce C. Amig
Four Coliseum Centre
Attn: Bruce Amig
2730 W. Tyvola Road
Charlotte, North Carolina 28217

Notices from Owner to ADEQ shall be effective when given, if by telephone, to:

DEUR Program Coordinator
Voluntary Remediation Program
(602) 771-4122

Arizona Office of the Attorney General
Environmental Enforcement Section
(602) 542-5025

And, if in writing, to:

DEUR Program Coordinator
Arizona Department of Environmental Quality
1110 West Washington Street, 6th Floor
Phoenix, Arizona 85007.

Arizona Office of the Attorney General
Environmental Enforcement Section
2005 N Central Ave.
Phoenix, Arizona 85007

If Owner changes its telephone number or mailing address for purposes of notice under this Agreement, written notice of the change shall be promptly given to ADEQ.

G. Duration of this Agreement: This Agreement remains in full force and effect and shall not terminate unless or until ADEQ no longer requires use of the easement.

H. No Indemnity. Owner and ADEQ are responsible for only their own negligence in connection with the Activities conducted on the Property.

I. Default. If either Party defaults under this Agreement and the default continues for more than ten (10) days after the effective date of the Party's written notice stating the specific nature of the default, then the Party may treat the default as a breach of this Agreement. Notwithstanding the foregoing, in the event Owner notifies ADEQ of a default, if ADEQ determines that the default cannot be cured within the ten-day notice period, then the default shall be deemed cured if ADEQ commences efforts

to cure the default within the ten-day notice period. ADEQ's inadvertent failure to give notice under Section "E" is not a default under this Agreement. Owner's failure to provide access under this Agreement is not subject to the ten-day notice period and is an immediate breach of this Agreement.

J. Dispute Resolution.

1. This agreement shall be governed by and construed in accordance with the laws of the State of Arizona.

2. In the event any judicial proceeding related to this Agreement, the parties agree that the venue shall be proper in Maricopa County, Arizona.

3. If a dispute that arises out of this environmental access agreement is based upon an Administrative order issued by the Director or ADEQ, any and all appeals from such an Agreement are subject to hearing at the Arizona Office of Administrative Hearing, and any and all such appeals shall be determined pursuant to hearing as prescribed by A.R.S. §41-1092 et. seq.

4. If a dispute arises out of this environmental access agreement, and the amount in controversy does not exceed the statutory amount set forth by statute, the matter shall be, upon filing the matter with Maricopa County Superior Court, submitted to an arbitrator or arbitrators (subject to trial de novo on law and fact) in accordance with the provisions of A.R.S. § 12-133 et. seq., [including A.R.S. § 12-1518], and Az.R.Civ.Pro. 72-76.

5. If a dispute arises out of this environmental access agreement, and the amount in controversy exceeds the statutory amount, the matter shall be filed in Maricopa County Superior Court and litigated pursuant to the appropriate litigation procedures.

K. Miscellaneous.

(A) This Agreement may be canceled pursuant to A.R.S. § 38-511;
(B) This Agreement expresses the entire agreement of the Parties;
(C) Owner agrees that Owner is not relying on any promise, agreement, or representation made by ADEQ except as stated in this Agreement;
(D) No modification of this Agreement is valid or enforceable unless the terms of the modification are in writing and signed by the Parties;
(E) This Agreement binds and inures to the benefit of the Parties and their agents, heirs, successors, assigns, transferees, executors, and personal representatives;
(F) ADEQ shall retain possession of the fully executed original of this Agreement and Owner shall receive accurate copies;
(G) This Agreement is effective when signed by the Parties;
(H) ADEQ retains all access, investigative, and enforcement authority and all other rights and remedies available to it under any applicable law, statute, rule, and regulation;
(I) This Agreement shall be interpreted and enforced according to the laws of the State of Arizona; and,
(J) This agreement may be signed in counterparts, each of which shall be treated as an original but which, when taken together, shall constitute one and the same Instrument.

Attachments:

Exhibit 1: Owner's Deed
Exhibit 2: General Site Location Map

OWNER:

By: _____
Bruce C. Amig, Remedial Programs Manager

State of North Carolina)
)ss. Charlotte
County of Mecklenburg)

This Environmental Access Agreement was acknowledged before me this 31st day of October 2018, by Bruce C. Amig, Remedial Programs Manager, an authorized agent of Universal Propulsion Company, Inc.

_____
Notary Public

ANGELA J. GWINN
NOTARY PUBLIC
Mecklenburg County, NC
My commission expires 8/9/2020

My commission expires: 8/9/2020

This Environmental Access Agreement is approved and accepted this 19th day of November, 2018, by the Arizona Department of Environmental Quality.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, an agency of the State of Arizona,

By: Laura L. Malone
Laura L. Malone, Director
Waste Programs Division

State of Arizona)
)ss.
County of Maricopa)

TARA L. OUSLEY
Notary Public - State of Arizona
MARICOPA COUNTY
My Commission Expires
February 28, 2021

This Environmental Access Agreement was acknowledged before me this 19th day of November 2018, by Laura L. Malone, Director, Waste Programs Division, an authorized agent of the Arizona Department of Environmental Quality, an agency of the State of Arizona, on behalf of the agency.

Tara P. Ousley
Notary Public

My commission expires: 2-28-2021

Exhibit 1

Owner's Deed

20200066622
20180870236

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL
20160004999 01/05/2016 02:26
ELECTRONIC RECORDING

When recorded, return to:

Snell & Wilmer L.L. P.
One Arizona Center
400 E. Van Buren Street
Suite 1900
Phoenix, Arizona 85004-2202
Attention: Mitchell J. Klein

6727000001-5-1-1--
sarabiam

EXEMPT FROM AFFIDAVIT AND FEE
PER A.R.S. § 11-1134(A)(3)

PATENT NO. 53-117740-01 FROM STATE OF ARIZONA

(Issuance of following Patent recommended by Arizona State Land Commissioner to the Governor of Arizona on the 7th day of December 2015 Lisa Atkins, Commissioner)

State of Arizona

PATENT NO. 53-117740-01
(Land Sold at Public Auction)

For 031 Lands
(School, Institutional or University)

In Accordance with the provisions of law, payment in full has been received by the State of Arizona through its State Land Department for the real property described below; and

The State of Arizona in consideration of the premises, and in conformity with law hereby does sell, grant and convey unto

UNIVERSAL PROPULSION COMPANY, INC.

of the County of Maricopa, State of Arizona, the following described real property situated in the County of Maricopa, State of Arizona, to-wit:

SEE EXHIBIT "A" LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART OF PATENT NO. 53-117740-01

Total containing 156.87 acres, more or less, subject to existing reservations, easements, or rights-of-way heretofore legally obtained and now in full force and effect, and subject to the following Additional Conditions:

SEE EXHIBIT "B" ADDITIONAL CONDITIONS ATTACHED HERETO AND MADE A PART OF PATENT 53-117740-01

In The Matter Of Patent No. 53-117740-01 (Universal Propulsion Company, Inc. in Maricopa County), pursuant to the provisions of Arizona Revised Statutes § 37-231, of the following substances not heretofore retained and reserved by a predecessor in title to the State of Arizona, all oil, gas, other hydrocarbon substances, helium or other substances of a gaseous nature, geothermal resources, coal, metals, minerals, fossils, fertilizers of every name and description, together with all uranium, thorium or any other material which is or may be determined by the laws of the United States, or of this state, or decisions of court, to be peculiarly essential to the production of fissionable materials, whether or not of commercial value, and the exclusive right thereto, on, in, or under the above described lands, shall be and remain and are hereby reserved in and retained by the State of Arizona, together with the right of the State of Arizona, its lessees or permittees to enter upon those lands for the purpose of exploration, development and removal of the above described substances as provided by the rules of the State Land Department and the laws of Arizona.

To Have And To Hold said property together with all the rights, privileges, immunities and appurtenances of whatsoever nature thereunto belonging unto said Patentee, its successors and assigns forever.

In Testimony Whereof, I, Douglas A. Ducey, Governor of the State of Arizona, have caused these letters to be made patent, and the Great Seal of the State of Arizona to be hereunto attached.

Given under my hand at the City of Phoenix, Arizona, this 15 day of December A.D., 2015

Douglas A. Ducey
Governor of the State of Arizona

Attest: Michele Reagan
Secretary of State of the State of Arizona

EXHIBIT "B"
ADDITIONAL CONDITIONS
53-117740-01

1. This Patent includes a reservation for the continuing and unhindered right of access and occupancy by the State of Arizona and for the benefit of UPCO and its successors and assigns, without compensation, for the purposes of implementing, managing and reporting upon the activities required under, and for the satisfaction of Arizona Hazardous Waste Management Act Permit U.S. EPA ID No. AZD 980 814 479 ("Permit"), as may be modified by ADEQ, as well as any physical activities including placement of wells, equipment or structures required by or resulting from the Permit, for an indeterminate period of time.

2. There may be Register Eligible Site or Sites located within the subject Parcel, which could include information significant in this state's history, architecture, archaeology or culture and may meet eligibility criteria, which the Arizona State Parks Board has established for listing on the Arizona Register of Historic Places, or which meet eligibility criteria for listing on the National Register of Historic Places. If ground-disturbing activities will or may impact one or more Register Eligible Site or Sites, patentee shall consult with the State Historic Preservation Office and otherwise take such actions as are necessary to avoid, preserve, protect, or mitigate impacts on the Register Eligible Site or Sites. In the event that avoidance, preservation and protection of the Register Eligible Site or Sites cannot be accomplished, patentee shall ensure a Data Recovery Plan is developed in consultation with and acceptable to, the Arizona State Museum and the State Historic Preservation Office, or their successor agencies, and the Data Recovery is implemented and completed prior to the Register Eligible Site or Sites being affected. The artifacts and records recovered from the property shall be curated according to the Arizona State Museum (ASM) Conservation and Curation Standards as established in rules implementing the Arizona Antiquities Act.

Exhibit 2

General Site Location Map

Exhibit 2 – General Site Location Map is available for viewing at the following address:

Arizona Department of Environmental Quality
Records Management Center, 1st Floor
1110 W. Washington St.
Phoenix, Arizona 85007

Appendix C

Central Foothills
Full Slope Analysis

March 2020

CENTRAL FOOTHILLS
PHOENIX, AZ
SLOPE CATEGORY ANALYSIS

CITY OF PHOENIX GENERAL SLOPE ANALYSIS NOTES

1. THE CITY OF PHOENIX GENERAL NOTES ARE THE ONLY NOTES APPROVED ON THIS PLAN. ADDITIONAL GENERAL NOTES GENERATED BY THE SEALANT AND PLACED ON THE PLANS ARE NOT APPROVED AS PART OF THIS PLAN AND ARE NOTED AS SUCH ON THE PLANS.
2. LOT LAYOUTS, ROADS, RESIDENCES, DRIVEWAYS, WALLS, POOLS, OR ANY OTHER ACCESSORY STRUCTURES/ AMENITIES ARE NOT APPROVED AS PART OF SLOPE ANALYSIS PLANS.
3. SUBDIVISION DESIGN AND DENSITY REQUIRES PRELIMINARY SITE PLAN APPROVAL.

APN

210-14-050A

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF MARICOPA, STATE OF ARIZONA, AND IS DESCRIBED AS FOLLOWS:

PARENT PARCEL (APN 210-14-050):
THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, CONTAINING 156.87 ACRES, MORE OR LESS.

RESIDENTIAL PARCEL 1:
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE BRASS CAP IN HANDHOLE MARKING THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH A 1" REBAR AND ILLEGIBLE CAP MARKING THE SOUTHEAST CORNER OF SAID SECTION 5 BEARS, NORTH 89°06'10" WEST, FOR A DISTANCE OF 2564.25 FEET;
THENCE NORTH 01°09'54" WEST, ALONG THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 5, FOR A DISTANCE OF 477.85 FEET TO THE POINT OF BEGINNING;
THENCE CONTINUING NORTH 01°09'54" WEST, ALONG SAID WEST LINE, FOR A DISTANCE OF 2161.03 FEET TO THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION 5, BEING A BRASS CAP IN HANDHOLE STAMPED MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION;
THENCE SOUTH 89°07'54" EAST, ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER, OF SAID SECTION 5 FOR A DISTANCE OF 2616.13 FEET TO THE EAST QUARTER OF SECTION 5, BEING MARKED BY A 3" METAL FENCE POST;
THENCE SOUTH 00°02'15" EAST, ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 5, FOR A DISTANCE OF 569.50 FEET;
THENCE DEPARTING FROM SAID EAST LINE, SOUTH 66°31'06" WEST, FOR A DISTANCE OF 747.30' FEET;
THENCE SOUTH 56°23'58" WEST, FOR A DISTANCE OF 2265.39 FEET, TO THE POINT OF BEGINNING.

SAID RESIDENTIAL PARCEL 1, CONTAINS 78.261 ACRES, (3,409,038 S.F.) MORE OR LESS.

NON-RESIDENTIAL PARCEL:
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE BRASS CAP IN HANDHOLE MARKING THE SOUTH QUARTER CORNER OF SECTION 5 FROM WHICH A 1" REBAR AND ILLEGIBLE CAP MARKING THE SOUTHEAST CORNER OF SAID SECTION 5 BEARS, NORTH 89°06'10" WEST, FOR A DISTANCE OF 2564.25 FEET;

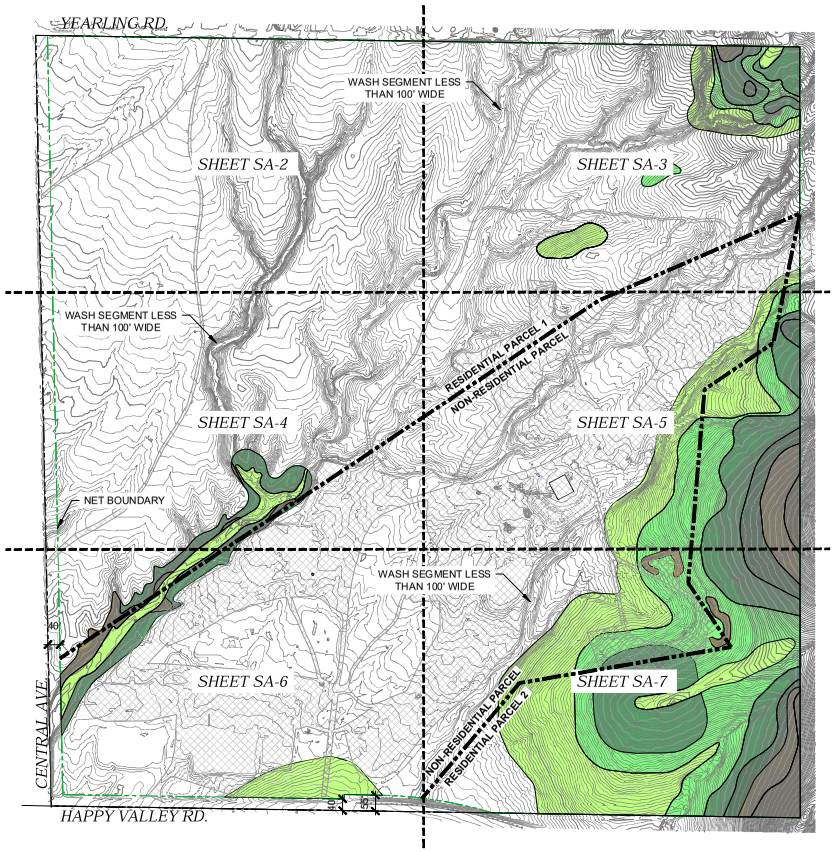
THENCE NORTH 01°09'54" WEST, ALONG THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 5, FOR A DISTANCE OF 477.84 FEET;
THENCE DEPARTING FROM SAID WEST LINE, NORTH 56°23'58" EAST, FOR A DISTANCE OF 2265.39 FEET;
THENCE NORTH 66°31'06" EAST, FOR A DISTANCE OF 747.30 FEET TO A POINT ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 5;
THENCE DEPARTING FROM SAID EAST LINE, SOUTH 11°36'54" WEST, FOR A DISTANCE OF 452.53 FEET;
THENCE SOUTH 55°50'58" WEST, FOR A DISTANCE OF 284.84 FEET;
THENCE SOUTH 04°47'54" WEST, FOR A DISTANCE OF 665.20 FEET;
THENCE SOUTH 33°45'54" EAST, FOR A DISTANCE OF 262.85 FEET;
THENCE SOUTH 80°18'00" WEST, FOR A DISTANCE OF 734.33 FEET;
THENCE SOUTH 40°12'59" WEST, FOR A DISTANCE OF 576.50 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 5;
THENCE NORTH 89°06'10"" WEST, ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 5, FOR A DISTANCE OF 1230.28 FEET TO THE POINT OF BEGINNING.

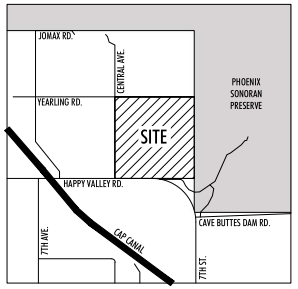
SAID NON-RESIDENTIAL PARCEL CONTAINS 56.778 ACRES (2,473,228 S.F.) MORE OR LESS.

RESIDENTIAL PARCEL 2:
BEING A PORTION OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE BRASS CAP IN HANDHOLE MARKING THE SOUTH QUARTER CORNER OF SECTION 5 FROM WHICH A 1" REBAR AND ILLEGIBLE CAP MARKING THE SOUTHEAST CORNER OF SAID SECTION 5 BEARS, NORTH 89°06'10" WEST, FOR A DISTANCE OF 2564.25 FEET;
THENCE NORTH 01°09'54" WEST, ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 5, FOR A DISTANCE OF 1230.29 FEET TO THE POINT OF BEGINNING;
THENCE DEPARTING FROM SAID SOUTH LINE, NORTH S 40°12'59" EAST, FOR A DISTANCE OF 576.50 FEET;
THENCE NORTH 80°18'00" EAST, FOR A DISTANCE OF 734.33 FEET;
THENCE NORTH 33°45'54" WEST, FOR A DISTANCE OF 262.85 FEET;
THENCE NORTH 04°47'54" EAST, FOR A DISTANCE OF 665.20 FEET;
THENCE NORTH 55°50'58" EAST, FOR A DISTANCE OF 284.84 FEET;
THENCE NORTH 11°36'54" EAST, FOR A DISTANCE OF 452.53 FEET, TO A POINT ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 5;
THENCE ALONG SAID EAST LINE, SOUTH 00°02'15" EAST, FOR A DISTANCE OF 2069.34 FEET TO THE SOUTHEAST CORNER OF SAID SECTION 5;
THENCE NORTH 89°06'10" WEST, ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 5, FOR A DISTANCE OF 1333.96 FEET TO THE POINT OF BEGINNING.

SAID RESIDENTIAL PARCEL 2 CONTAINS 21.816 ACRES, 950,283 S.F. MORE OR LESS.





VICINITY MAP
N.T.S.

AREA

PARENT PARCEL	RESIDENTIAL PARCEL 1	RESIDENTIAL PARCEL 2	NON-RESIDENTIAL PARCEL
6,833,257 SQ. FT.	3,409,038 SQ. FT.	950,283 SQ. FT.	2,473,228 SQ. FT.
156.87 ACRES	78.261 ACRES	21.816 ACRES	56.778 ACRES

TOPOGRAPHY

PROVIDED FROM ALTA SURVEY DATED APRIL 2015, PREPARED BY RSTEAM LAND SURVEYORS.

PROJECT TEAM

OWNER/ DEVELOPER
PAF CENTRAL, LLC
11811 N. TATUM BLVD.
SUITE 1051
PHOENIX, ARIZONA 85028
PHONE: (602) 953-8729

LAND PLANNER/ DESIGNER
RVi PLANNING + LANDSCAPE ARCHITECTURE
ALEX STEDMAN
120 SOUTH ASH AVENUE
TEMPE, ARIZONA 85281
PHONE: (480) 994-0994
EMAIL: ASTEDMAN@RVIPLANNING.COM

HILLSIDE RESIDENTIAL DENSITY TABLE

SLOPE OF LAND	ALLOWABLE HILLSIDE DENSITY UNITS/ACRE	ACREAGE IN THE SLOPE CATEGORY	PRODUCT OF DENSITY x ACREAGE	TOTAL # ALLOWABLE HILLSIDE LOTS
10% to 14.9%	1.80	13.0	23.4	23
15% to 19.9%	1.10	8.9	9.8	9
20% to 24.9%	0.70	8.6	6.0	6
25% to 29.9%	0.50	1.6	0.8	0
30% to 34.9%	0.30	2.3	0.7	0
35% and Over	0.20	0.7	0.1	0
TOTAL		34.7	1.53	38

NOTE: ISOLATED TOPOGRAPHIC FEATURES SUCH AS HILLS, PITS, OR WASHES WHERE THE FEATURE IS LESS THAN 100-FEET WIDE SHALL NOT BE INCLUDED IN THE HILLSIDE COMPUTATIONS PER CITY OF PHOENIX ZONING ORDINANCE SECTION 710.

TOTAL HILLSIDE AREA: 34.7 AC.

TOTAL NON-HILLSIDE AREA: 118.3 AC.
TOTAL NET LOT AREA: 153.0 AC.

DISTURBED/DEVELOPED AREA
NOTE: ON-SITE DISTURBANCE WAS EXISTING AS OF THE DATE OF ANNEXATION - 2001

APPROVAL SIGNATURE BLOCK

SLOPE ANALYSIS APPROVAL, CITY OF PHOENIX
HILLSIDE SLOPE LINES/ CATEGORIES ONLY APPROVED

DATE

H#: 19015
EXISTING ZONING: S-1
KIVA#: 17-1576
SDEV#: 1900492
LSLO#: 1905261
Q.S.#: 47-28

RVi
120 S. Ash Avenue
Tempe, Arizona 85281
Tel: 480.994.0994
www.rviplanning.com

SLOPE ANALYSIS

CENTRAL FOOTHILLS
NEC OF HAPPY VALLEY RD & CENTRAL AVE
PHOENIX, ARIZONA

PROJECT NO :	19001721
DATE :	07/02/19
DRAWN:	AV, JC
REVIEWED:	AS

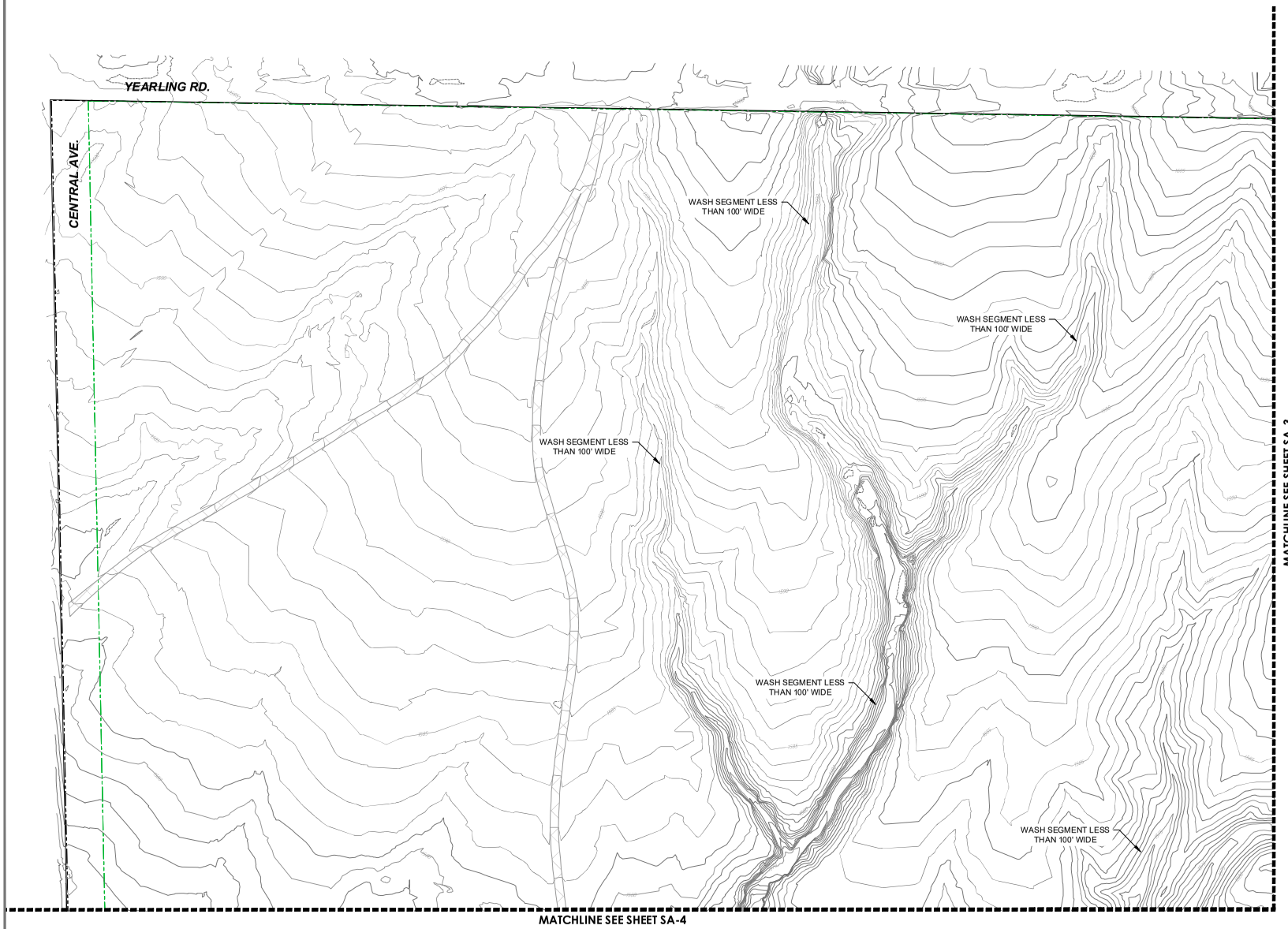
REVISIONS
1 10/14/19
2 03/09/20
3
4
5

0 200' 400'

SA

SHEET 1 OF 7

P:\2019\1721-NEC CENTRAL & HAPPY VALLEY\CAD\PLANNING\1721-SLOPE ANALYSIS 2019-10-14.dwg 3/9/2020 amelia voss



SA-2	SA-3
SA-4	SA-5
SA-6	SA-7

KEY MAP
N.T.S.

SLOPE LEGEND

	0% - 10%
	10% - 15%
	15% - 20%
	20% - 25%
	25% - 30%
	30% - 35%
	35%+

EXISTING DISTURBED/ DEVELOPED AREA

RVi
120 S. Ash Avenue
Tempe, Arizona 85281
Tel: 480.994.0994
www.rviplanning.com

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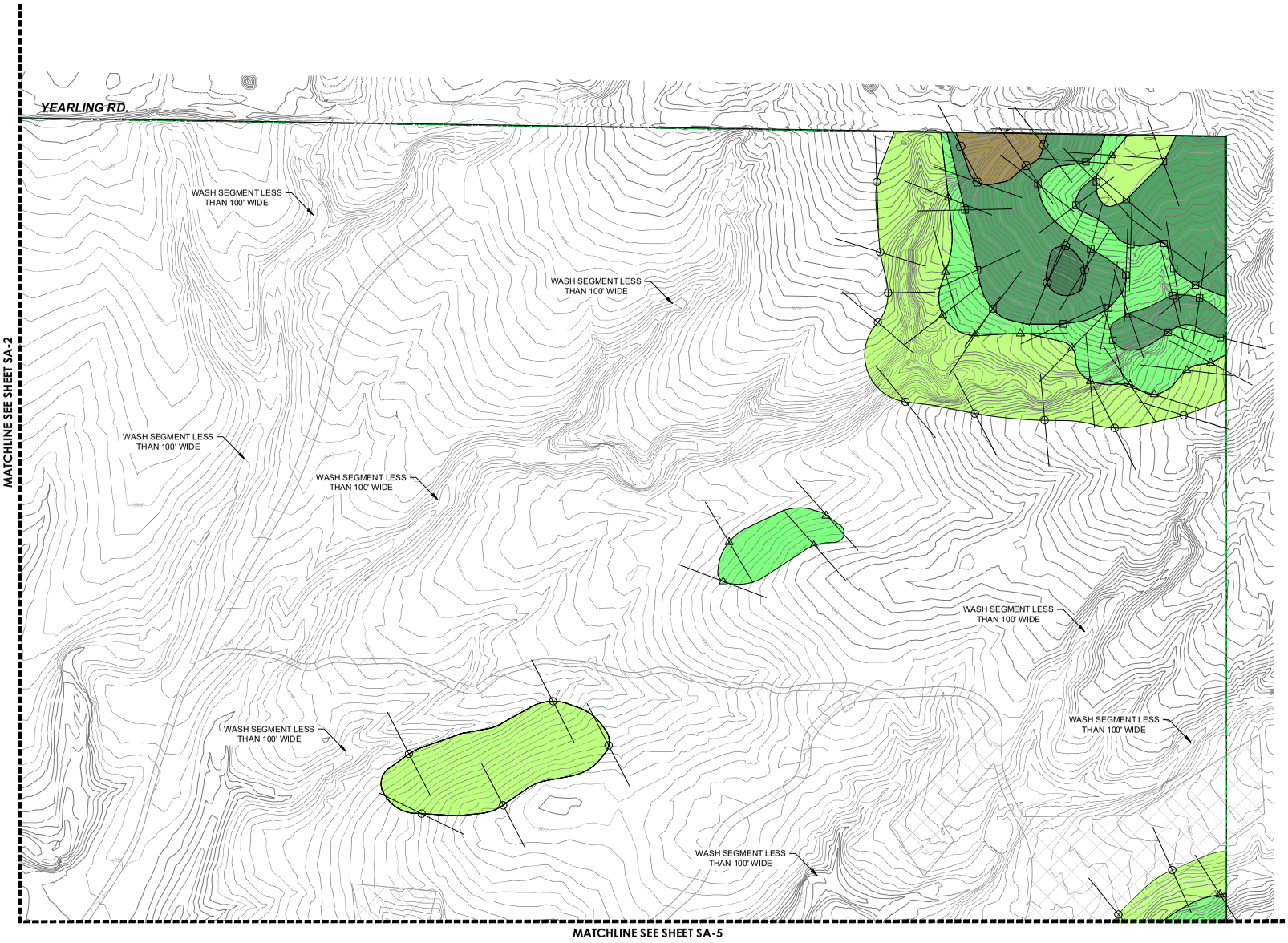
REVISIONS
10/14/19
03/09/20

0 50' 100'

SA

SHEET 2 OF 7

P:\2019\1721-NEC CENTRAL & HAPPY VALLEY\DGN\PLANNING\1721-SLOPE ANALYSIS 2019-10-14.dwg 3/9/2020 amiele.vos



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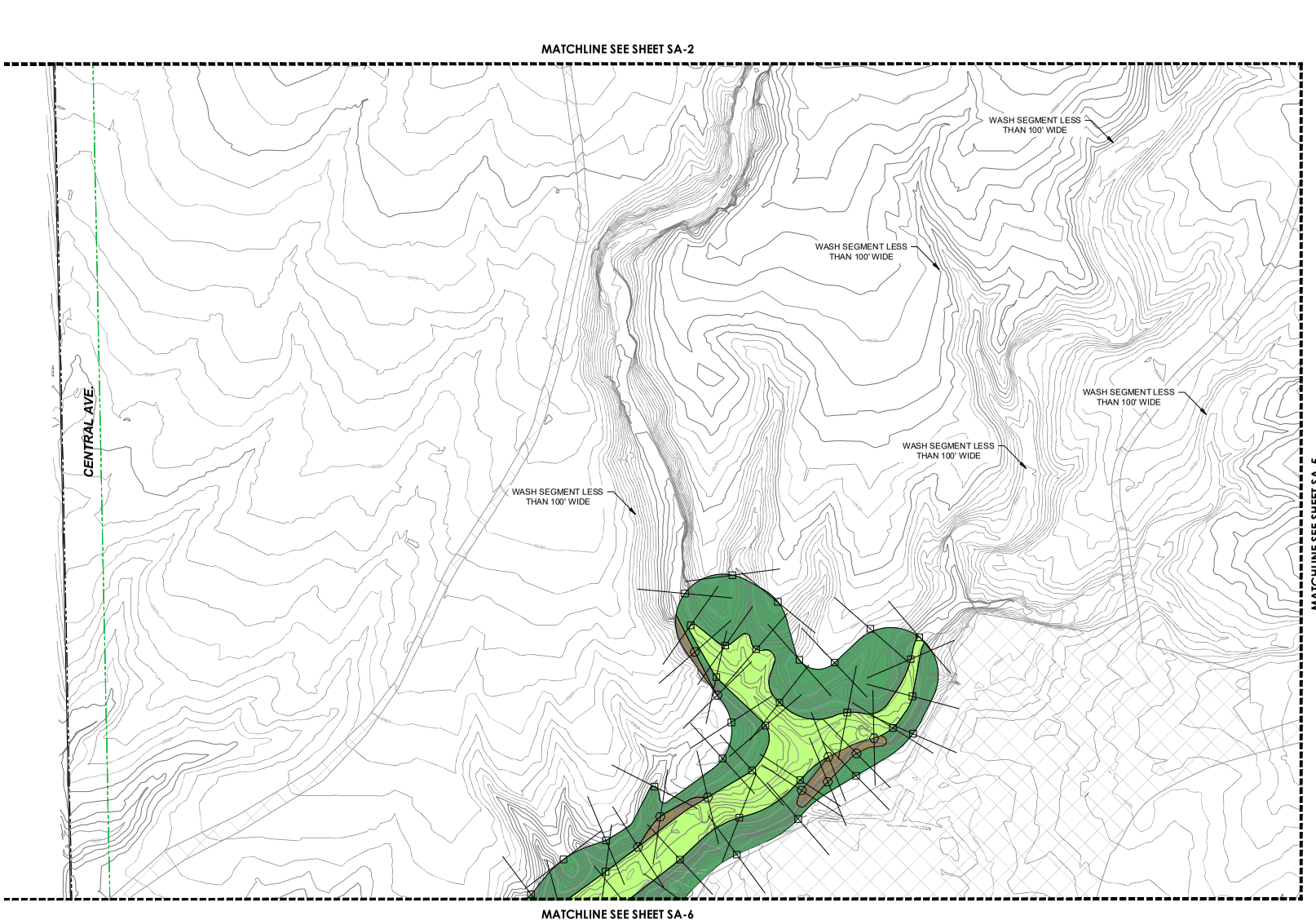
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REVISIONS
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03/09/20

0 50' 100'

SA

SHEET 3 OF 7



SA-2	SA-3
SA-4	SA-5
SA-6	SA-7

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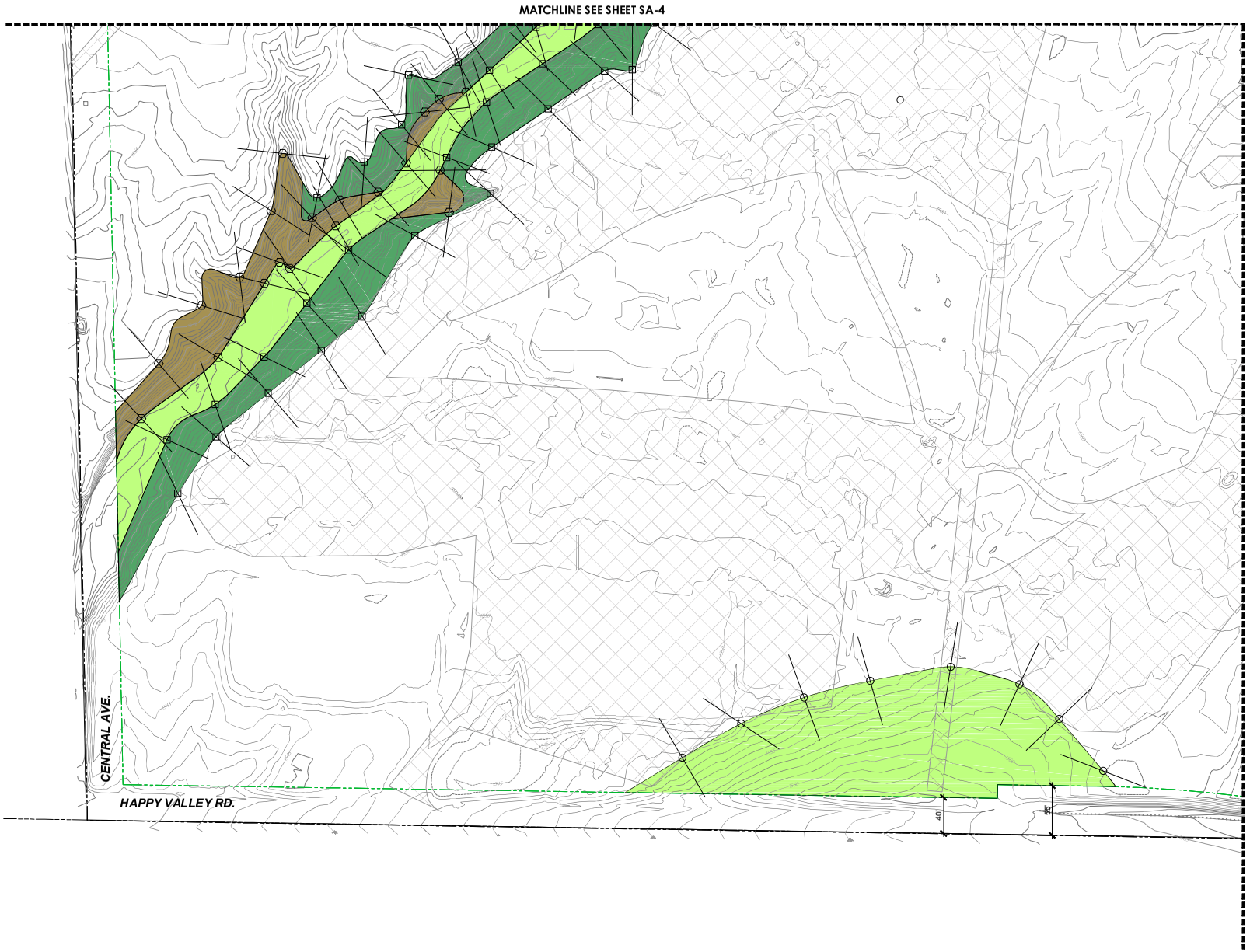
REVISIONS
10/14/19
03/09/20

0 50' 100'

SA

SHEET 4 OF 7

P:\2019\1721-NEC CENTRAL & HAPPY VALLEY\GIS\PLANNING\1721-SLOPE ANALYSIS 2019-10-14.dwg 3/9/2020 amiele rvis



SA-2	SA-3
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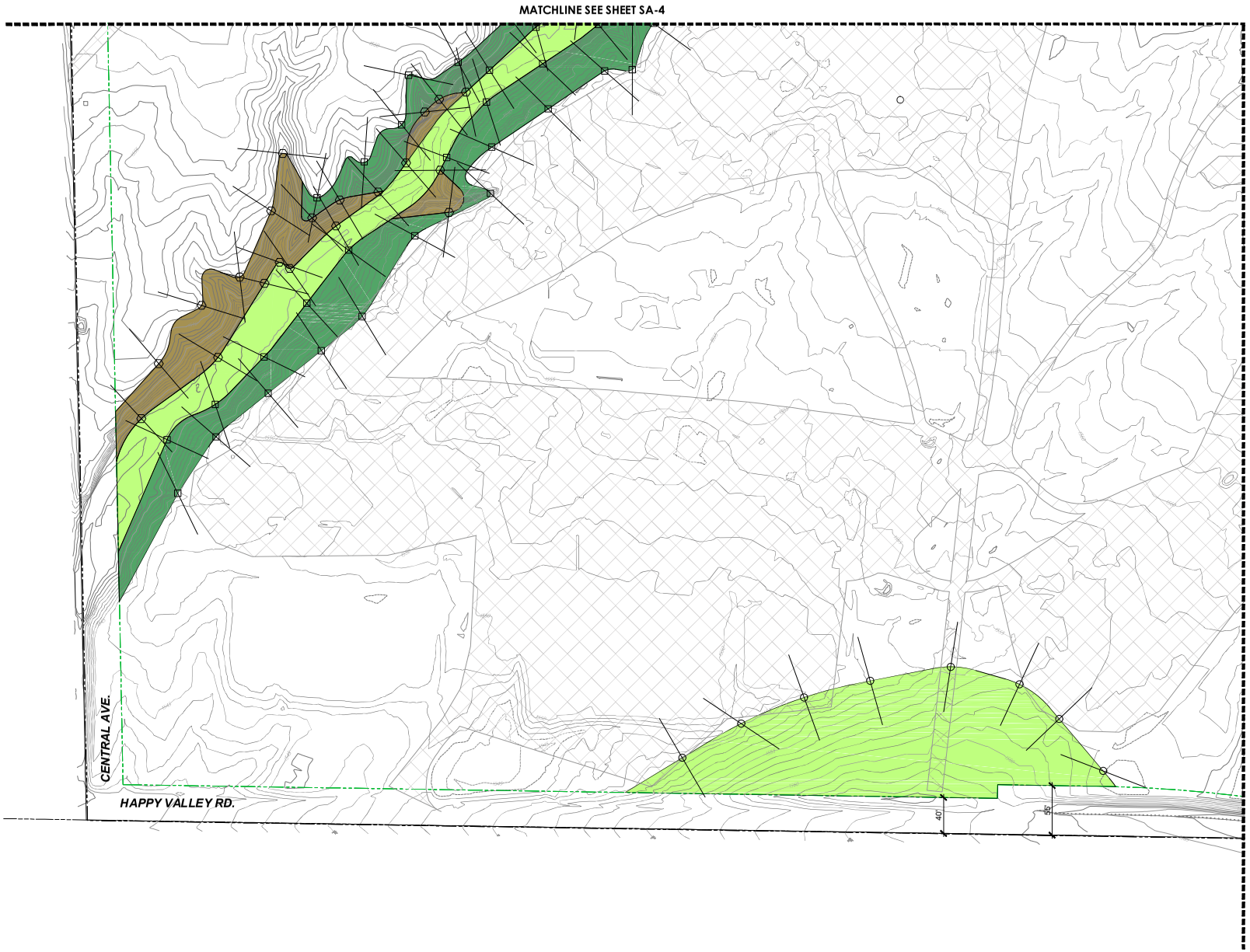
REVISIONS
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SHEET 6 OF 7

P:\2019\1721-NEC CENTRAL & HAPPY VALLEY\GIS\PLANNING\1721-SLOPE ANALYSIS 2019-10-14.dwg 3/9/2020 amiss xxx



SA-2	SA-3
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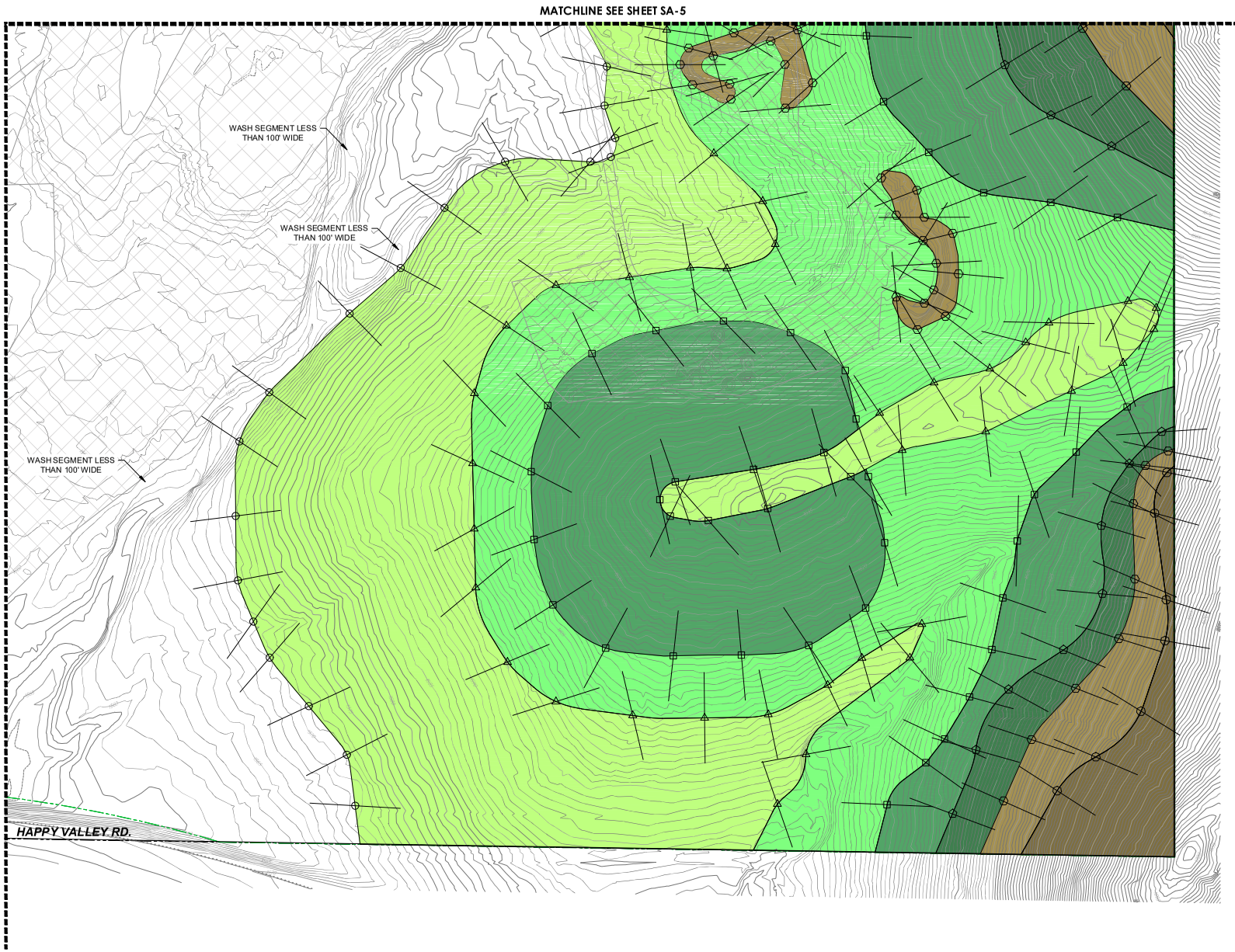
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SHEET 6 OF 7

P:\2019\1721-NEC CENTRAL & HAPPY VALLEY\GIS\PLANNING\1721-SLOPE ANALYSIS 2019-10-14.dwg 3/9/2020 amiss xxx



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SHEET 7 OF 7

P:\2019\1721-NEC CENTRAL & HAPPY VALLEY\GADP\LANNING\1721-SLOPE ANALYSIS 2019-10-14.dwg 3/9/2020 arnaiz.vos

Appendix D

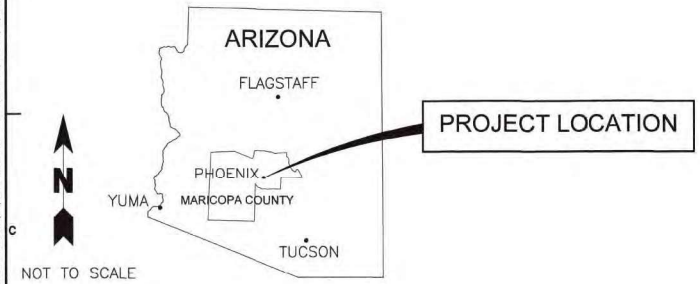
Central Foothills Well Piping Plan

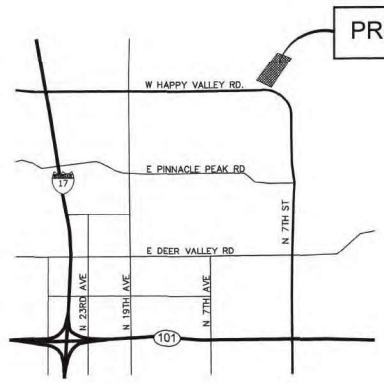
February 2019

FIELD COPY
KEEP AT JOB SITE

CONSTRUCTION DRAWINGS FOR
GRADING AND DRAINAGE PLANS
FORMER UPCO FACILITY
FOR
UTC AEROSPACE SYSTEMS

PHOENIX, ARIZONA
AUGUST 2017





Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

QUANTITIES

EARTHWORKS FOR EXCAVATION AND REPLACEMENT: 1

TOTAL CUT: 4,681 CY
TOTAL FILL: 126 CY
NET CUT: 4,555 CY

CLEAN FILL REQUIRED: 4,087 CY
CLEAN FILL AVAILABLE: 4,528 CY

NOTE: TOTAL CUT AND FILL INCLUDING CLEAN FILL TO REPLACE SOIL REMOVED AND DISPOSED OF PROPERLY OFF-SITE. SEE CALCULATIONS ON INDIVIDUAL SHEETS FOR A MORE COMPREHENSIVE BREAKDOWN

EARTHWORKS FOR GWTF: 1

TOTAL CUT: 867 CY
TOTAL FILL: 589 CY
NET CUT: 278 CY

NOTES:
1. CUT AND FILL NUMBERS ARE NOT ADJUSTED FOR SOIL EXPANSION OR SHRINKAGE.

DRAINAGE STATEMENT

1. THIS SITE IS NOT IN A SPECIAL FLOOD HAZARD AREA.
2. OFF-SITE FLOWS ENTER AND EXIT THIS SITE. OFF-SITE FLOWS DO AFFECT THIS SITE.
3. RETENTION IS NOT PROVIDED ON THIS SITE AS NO DEVELOPMENT OF THE SITE IS OCCURRING.
4. THE ELEVATION STORM OUTFLOWS FOR THE AREA OF THE SITE UNDER CONSIDERATION HAVE NOT BEEN DETERMINED AS NO DEVELOPMENT OF THE SITE IS PROPOSED. 1

GWTF AREA:
5. OFF-SITE FLOWS ENTER THE GTWF AREA AND DO AFFECT THE GWTF AREA.
6. DETENTION IS PROVIDED FOR THE GWTF AREA AND LIMITED CONTRIBUTORY OFF-SITE AREA TO THE GWTF AREA FOR THE 100-YEAR, 2-HOUR EVENT.
7. EXTREME STORM OUTFALLS THE SITE AT THE SOUTHWEST CORNER AT THE ELEVATION OF 1585.

DRAINAGE CALCULATIONS

DRAINAGE CALCULATIONS ARE BASED ON THE RATIONAL METHOD AS PRESENTED IN THE MARICOPA COUNTY FLOOD CONTROL DISTRICT $V=CIP/12A$ WHERE:
C – RATIONAL COEFFICIENT – 0.9 (LIGHT INDUSTRIAL PER CITY OF PHOENIX STORMWATER POLICIES AND STANDARDS TABLE 6.2.2)
P – PRECIPITATION (IN) – 2.70 (MCFCD ISOPLUVIAL 100-YR 2-HR EVENT_
A – AREA (AC) – 1.20 ACRES
VOLUME REQUIRED – 0.243 AC-FT (10,585 CU-FT)
VOLUME PROVIDED – 0.278 AC-FT (12,129 CU-FT)

City of Phoenix
Planning & Development Department

Grading	KAR	Phase	Date	2/12/19
SWPP		Phase	Date	
Paving		Phase	Date	
Concrete		Phase	Date	
Drainage Facilities		Phase	Date	
Water		Phase	Date	
Fire Line		Phase	Date	
Wastewater		Phase	Date	
Miscellaneous		Phase	Date	

City of Phoenix
Planning & Development Department
Preliminary has been approved by the undersigned. SCC Date 2/12/19

CONTACTS

CLIENT CONTACT: BRUCE C. AMIG
MANAGER, REMEDIAL PROGRAMS
UTC AEROSPACE SYSTEMS
2730 W. TYVOLA ROAD
CHARLOTTE, NC 28217
PHONE, 704.423.7071

PROPERTY OWNER AND MANAGER: UNIVERSAL PROPULSION COMPANY, INC. IN MARICOPA COUNTY

PREPARER: ARCADIS INC. (ARCADIS)
MIKE NESKY, PROJECT MANAGER
410 N. 44TH STREET
SUITE 1000
PHOENIX, ARIZONA 85008
PHONE, 602.763.6005
FAX, 602.438.0102

PROPERTY DATA

PROPERTY ADDRESS: 25401 N. CENTRAL AVENUE
PHOENIX, ARIZONA

PARENT PARCEL: APN 210-14-050

LAND USE: VACANT COMMERCIAL LAND

LEGAL DESCRIPTION: THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, CONTAINING 156.87 ACRES, MORE OR LESS

PROPERTY DIMENSIONS: 2616.27' X 2638.92' APPROXIMATE

ACREAGE: 156.87

BENCHMARK: "AZTEC BRASS CAP"
NGVD 29 ELEVATION 1586.50

DATUM: ALL COORDINATES ARE 1983 (2007 EPOCH) STATE PLANE GROUND COORDINATES, ARIZONA CENTRAL ZONE, STANDARD TRANSVERSE MERCATOR PROJECTION, WITH A SCALE OF ORIGIN POINT OF X=0.0000, Y=0.0000, USING A GRID ADJUSTMENT FACTOR OF 1.00016. THESE COORDINATES CAN BE USED AS GROUND DATUM. TO CONVERT TO GRID COORDINATES, DIVEIDE EACH COORDINATE VALUE BY 1.00016.

PROJECT DESCRIPTION

PROJECT CONSISTS OF THE EXCAVATION OF SOILS WITH CONSTITUENTS OF CONCERN (COC), REMOVAL AND PROPER DISPOSAL. EXCAVATIONS WILL BE BACKFILLED WITH CLEAN FILL FROM THE BORROW AREA AT THE E-COMPLEX AREA.

INDEX TO DRAWINGS

C-00	COVER PAGE
C-01	NOTES 1
C-02	OVERALL SITE PLAN 1
C-03	C-COMPLEX PLAN (REFERENCE ONLY)
C-04	C-COMPLEX PLAN CROSS SECTIONS (REFERENCE ONLY)
C-05	E-COMPLEX EXCAVATION AND RESTORATION AND BORROW SOURCE PLAN (REFERENCE ONLY)
C-06	OLD BURN AREA EXCAVATION AND RESTORATION PLAN (REFERENCE ONLY)
C-07	NEW BURN AREA EXCAVATION AND RESTORATION PLAN (REFERENCE ONLY)
C-08	NEW BURN AREA CAP DESIGN CROSS SECTIONS (REFERENCE ONLY)
C-09	WATERBORE AREA EXCAVATION AND RESTORATION PLAN (REFERENCE ONLY)
C-10	WATERBORE AREA CAP DESIGN CROSS SECTIONS (REFERENCE ONLY)
C-11	CAP DESIGN DETAILS (REFERENCE ONLY)
C-12	RIP RAP DESIGN DETAILS (REFERENCE ONLY)
C-13	SECTIONS 1 (REFERENCE ONLY)
C-14	SECTIONS 2 (REFERENCE ONLY)
C-15	SECTIONS 3 (REFERENCE ONLY)
C-16	GWTF SITE PLAN AND HORIZONTAL CONTROL 1
C-17	GWTF AREA GRADING & DRAINAGE PLAN
C-18	GWTF AREA SECTIONS
C-19	GWTF ACCESS ROAD PLAN AND PROFILE 1 (REFERENCE ONLY)
C-20	GWTF ACCESS ROAD PLAN AND PROFILE 2 (REFERENCE ONLY)
C-21	DETAIL SHEET

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

4/19/19
REGISTERED ENGINEER/LAND SURVEYOR — DATE

43127
REGISTRATION NUMBER

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KIVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28 1

ARCADIS Design & Consultancy for natural and built assets

CONSULTANTS

SEALS

CITY OF PHOENIX
UTC AEROSPACE SYSTEMS
25401 N. CENTRAL AVENUE
PHOENIX, ARIZONA

FORMER UPCO FACILITY
SOIL REMEDIATION

3994003

NO.	DATE	ISSUED FOR	BY
1	2/2018	GWTF ADDITION	JLP

COPYRIGHT: ARCADIS U.S., INC. 2017

DATE: MAY 2017
PROJECT NO.: 3994003
FILE NAME: C-00
DESIGNED BY: JLP
DRAWN BY: JP
CHECKED BY: MN

SHEET TITLE

COVER PAGE

SCALE: NONE

C-00
SHEET 1 OF 22 1

FIELD COPY
KEEP AT JOB SITE

CSPR 1703485 QS 47-28 ... 2/12/19 ... SCC ... 2/12/19 ... 2/12/19 ... 2/12/19

CITY NOTES FOR GRADING AND DRAINAGE PLANS

1. A GRADING PERMIT IS REQUIRED UNDER CHAPTER 32A OF THE PHOENIX CITY CODE.
2. WHEN HAUL PERMITS ARE REQUIRED, THEY MUST BE OBTAINED PRIOR TO OR CONCURRENTLY WITH THE GRADING AND DRAINAGE PERMIT.
3. EXCAVATING CONTRACTOR MUST GIVE LOCATION FOR WASTING EXCESS EXCAVATION AND A LETTER FROM OWNER GIVING PERMISSION FOR DUMPING PRIOR TO STARTING ON-SITE CONSTRUCTION. IF EXCESS EXCAVATION EXCEEDS 100 CUBIC YARDS, THE DISPOSAL SITE WILL ALSO REQUIRE A GRADING AND DRAINAGE PERMIT.
4. PLANNING & DEVELOPMENT FIELD INSPECTION GROUP SHALL BE NOTIFIED 48 HOURS BEFORE ANY ON-SITE AND/OR OFF-SITE CONSTRUCTION BEGINS, TELEPHONE (602) 262-7811.
5. STAKING FINISH FLOOR ELEVATIONS IS THE RESPONSIBILITY OF THE OWNER AND HIS ENGINEER. THE OWNER'S ENGINEER SHALL SUBMIT THREE SEALED COPIES OF THIS GRADING AND DRAINAGE PLAN DESIGNATED AS "RECORD DRAWING" (BEARING AN ORIGINAL SIGNATURE) PRIOR TO THE REQUEST FOR FINAL INSPECTION. 1
6. A SEPARATE PERMIT IS NECESSARY FOR ANY OFFSITE CONSTRUCTION.
7. AN APPROVED GRADING AND DRAINAGE PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
8. GRADING AND DRAINAGE PLAN APPROVAL INCLUDES THE CONSTRUCTION OF ALL SURFACE IMPROVEMENTS SHOWN ON THE APPROVED PLAN, INCLUDING, BUT NOT LIMITED TO, RETENTION AREAS, SEDIMENTATION BASINS, AND/OR OTHER DRAINAGE FACILITIES, DRAINAGE PATTERNS, WALLS, CURBS, ASPHALT PAVEMENT, AND BUILDING FLOOR ELEVATION.
9. GRADES SHOWN IN RETENTION BASINS ARE DESIGN FINISHED GRADES. SHOULD THE CONTRACTOR OR ANY SUB-CONTRACTOR PLAN TO PLACE SPOIL DIRT FROM FOOTINGS, UTILITY TRENCHES, LANDSCAPING, SWIMMING POOLS, ETC. IN THE BASINS, THE BASINS SHOULD BE SUFFICIENTLY OVER-EXCAVATED DURING THE ROUGH GRADING OPERATION TO ALLOW FOR THE PLACEMENT OF THE FILL OR LANDSCAPING MATERIALS.
10. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL THE EXISTING UTILITY LINES WITHIN PROPOSED RETENTION BASIN AREAS. IF THE BASIN CANNOT BE CONSTRUCTED PER PLAN BECAUSE OF CONFLICTS, THE CONTRACTOR SHOULD DISCUSS MODIFICATION OF BASIN CONFIGURATION WITH THE CITY INSPECTOR TO DETERMINE IF A PLAN REVISION OR A FIELD CHANGE IS REQUIRED.
11. ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, INTERCEPTOR DITCHES, PIPES, PROTECTIVE BERMS, BARRIER WALLS, CONCRETE CHANNELS, OR OTHER MEASURES DESIGNED TO PROTECT ADJACENT BUILDINGS OR PROPERTY FROM STORM RUNOFF MUST BE COMPLETED PRIOR TO BUILDING CONSTRUCTION.
12. PER SECTION 6.8.7 OF THE CITY OF PHOENIX STORM WATER POLICIES AND STANDARDS, SIDE SLOPES OF STORM WATER STORAGE FACILITIES SHALL BE NO STEEPER THAN 5:1 FOR IRRIGATED GRASS AREAS AND 3:1 FOR LANDSCAPE AREAS. SLOPE STABILIZATION MEASURES ARE REQUIRED FOR ALL SLOPES GREATER THAN 5:1. THE SLOPE STABILIZATION MEASURES MUST BE READILY MAINTAINABLE USING COMMON MAINTENANCE EQUIPMENT AND BE DESIGNED WITH CONSIDERATION TO AESTHETICS. THE SLOPE STABILIZATION MEASURES SHALL BE CONSISTENT WITH COMMONLY USED ENGINEERING PRACTICES. UN-STABILIZED DECOMPOSED GRANITE IS NOT ALLOWED ON SLOPES GREATER THAN 5:1. 1
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14. ALL RETAINING WALLS ARE TO BE REVIEWED, PERMITTED, AND INSPECTED BY THE BUILDING SAFETY BRANCH OF THE PLANNING & DEVELOPMENT DEPARTMENT. ALL RETAINING WALLS ARE TO BE IN ACCORDANCE WITH SECTION 703 OF THE ZONING ORDINANCE AND SECTION 32-32 OF THE SUBDIVISION ORDINANCE FOR SPECIFIC WALL HEIGHT REQUIREMENTS. USE PERMIT IS REQUIRED FOR ALL OVER-HEIGHT RETAINING WALLS.
15. ALL RAMPS MUST MEET 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND CITY OF PHOENIX SUPPLEMENT TO M.A.G. UNIFORM STANDARD SPECIFICATIONS AND DETAILS. 2% MAX CROSS SLOPES AND 12:1 MAX LONGITUDINAL SLOPES.
16. CERTIFICATE OF OCCUPANCY (C OF O) AND/OR FINAL ELECTRICAL CLEARANCE FOR ANY BUILDING IS DENIED UNTIL ALL GRADING AND DRAINAGE IMPROVEMENTS ARE COMPLETED.
17. EXISTING OR NEWLY DAMAGED AND/OR FINAL ELECTRICAL CLEARANCE FOR ANY BUILDING IS DENIED UNTIL ALL GRADING AND DRAINAGE IMPROVEMENTS ARE COMPLETED.
18. THE ENGINEERING DESIGN ON THESE PLANS IS ONLY APPROVED BY THE CITY IN SCOPE AND NOT IN DETAIL. CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY THE CITY. APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF LAW, ORDINANCE, HEALTH, SAFETY OR OTHER DESIGN ISSUES.

GENERAL NOTES

19. THE CITY OF PHOENIX POLICE DEPARTMENT ENFORCES LAWS REGULATING THE OPERATION OF COMMERCIAL VEHICLES. THIS INCLUDES ENFORCEMENT OF FEDERAL, STATE, COUNTY AND LOCAL LAWS AND ORDINANCES. QUESTIONS REGARDING COMMERCIAL VEHICLE ENFORCEMENT MAY BE DIRECTED TO THE COMMERCIAL VEHICLE ENFORCEMENT SUPERVISOR AT (602) 495-7813 (TRAFFIC BUREAU NORTH).
20. PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS SECTION 105.3 FOR BUILDING PERMITS.

1. NO WORK WILL BE PERFORMED WITHIN THE CITY OF PHOENIX RIGHT OF WAY.

FOR REFERENCE ONLY:

PHOTOS ATTACHED ARE FOR REFERENCE ONLY. THEY ARE INTENDED TO SHOW DIFFERENT OPTIONS FOR THE HYDROTURF VISUAL PRESENTATION IN AN AREA. THE INTENT IS TO BLEND IN MORE COMPLETELY WITH THE SURROUNDING ENVIRONMENT.

EXAMPLE OF A HYDROTURF PROJECT INSTALLED IN AN ARID AREA. PROVIDED BY WATERSHED GEOSYNTHETICS.

Western US Roadside Slope



WG WatershedGeo Unearthing Solutions

HydroTurf

ACTUAL SAMPLE OF ONE STYLE OF HYDROTURF PRODUCT PROVIDED BY WATERSHED GEOSYNTHETICS.



LEGEND

- EXISTING CONTOUR (1577)
- PROPOSED CONTOUR (1577)
- PROPOSED LIMITS OF GRADING
- PROPOSED LIMITS OF CAPPED MATERIAL
- EXISTING FENCE
- EXISTING ROAD
- DRAINAGE FLOW DIRECTION
- CC-PV1 PROPOSED SALVAGE VEGETATION PLACEMENT
- EXISTING VEGETATION
- PROPOSED DECOMPOSED GRANITE PLACEMENT
- PROPOSED CONSTRUCTION FENCE
- PROPOSED ROAD
- PROPOSED GRADE BREAK
- 1584.56 PROPOSED GRADE ELEVATION
- 1584.56 EXISTING GRADE ELEVATION
- 1.11% PROPOSED GRADE SLOPE
- 5:1 MAX PROPOSED BASIN SIDE SLOPE

1

AS-BUILT NOTE:

THIS SHEET REFLECTS THE AS-BUILT CONDITION. THERE ARE NO AS-BUILT CHANGES.

REFERENCE ONLY NOT A PART

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KIVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28 1

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CONSULTANTS

SEALS

CITY OF PHOENIX
UTC AEROSPACE SYSTEMS
25401 N. CENTRAL AVENUE
PHOENIX, ARIZONA

FORMER UPCO FACILITY SOIL REMEDIATION

3994003

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DATE: MAY 2017
PROJECT NO.: 3994003
FILE NAME: C-01
DESIGNED BY: JLP
DRAWN BY: JP
CHECKED BY: MN

SHEET TITLE

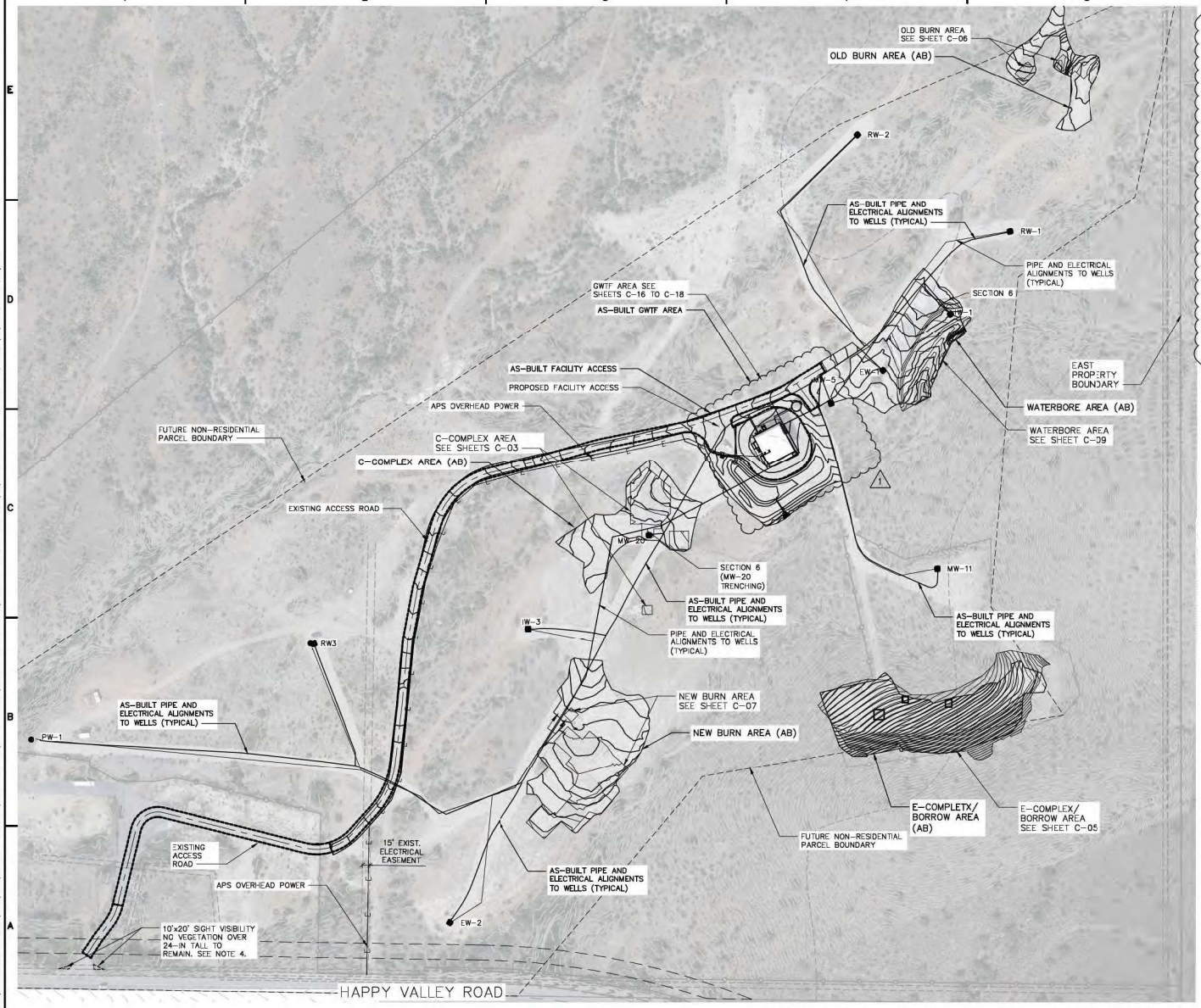
NOTES

SCALE: NONE

C-01

SHEET 2 OF 22 1

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LEGEND

INJECTION WELLS:
RW-1
RW-2
RW-3
MW-5
MW-11
IW-3

EXTRACTION WELLS:
EW-1
EW-2
IW-1
MW-20
PW-1 – POTENTIAL FUTURE EXTRACTION WELL

NOTES:

1. SEE SHEETS C-6 AND C-7 FOR TRENCH DETAILS FOR EACH TRENCH SECTION INDICATED ON THIS SHEET.
2. EACH CONVEYANCE LINE SHALL BE DISTINGUISHED BY UNIQUE COLOR STRIPING OR TAPE FOR IDENTIFICATION DURING CONSTRUCTION OR FUTURE "TIE-IN" ACTIVITIES.
3. ALL PIPE FOR EXTRACTION AND INJECTION WELLS SHALL BE HDPE SDR 11 IN CONFORMANCE WITH ASTM D3035/AWWA C901 AND NSF 61.
4. SIGHT VISIBILITY SHOW IS BASED ON CURRENT EXISTING RIGHT-OF-WAY. NO EASEMENT IS PROPOSED AT THIS TIME. A FULL SIGHT VISIBILITY EASEMENT SHOULD BE DEDICATED AT THE TIME OF FUTURE DEVELOPMENT.

AB NOTE:

AERIAL SHOWN WAS FLOWN POST CONSTRUCTION AND REPRESENTS THE 'AS-BUILT' CONDITION.

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KIVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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DATE: MAY 2017
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FILE NAME: C-02
DESIGNED BY: JLP
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SHEET TITLE

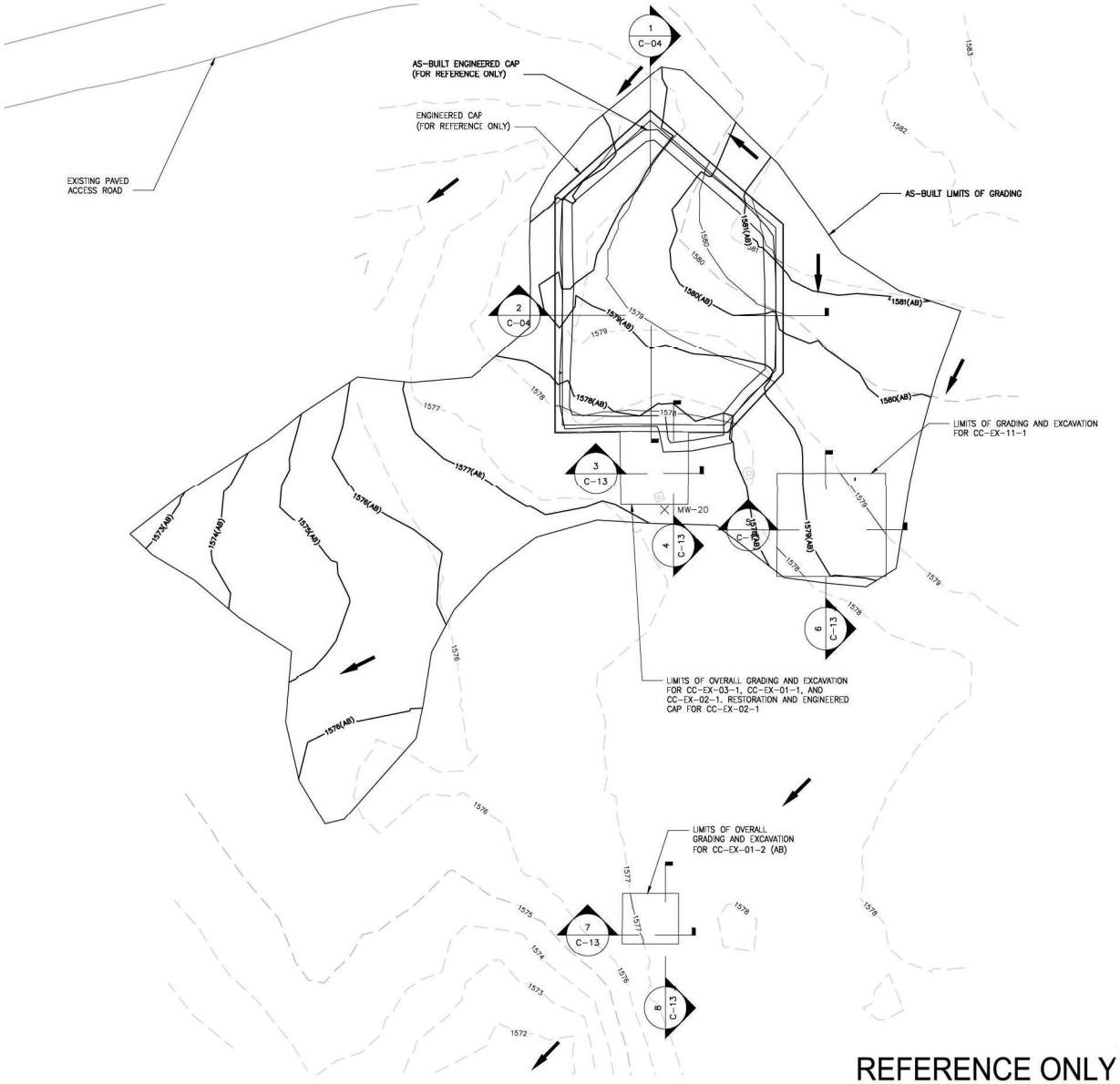
OVERALL SITE PLAN

SCALE: 1"=100'

C-02

SHEET 3 OF 22

User:PRIOR SpecAUS-NCSMOD File2_VCAD_PROJ_3994003 - UPCO DIV\DESIGN DRAWINGS\CITY OF PHOENIX\COMBINED GRADING PLANS\C-02.DWG Scale:1:1 SaveDate:4/19/2019 Time:08:54 Plot Date: Prior, Jenn, 4/24/2019, 08:08 | Layout:3



EARTHWORK VOLUMES

SOIL EXCAVATION AND REMOVAL:

CC_EX_02_1 EXCAVATION VOLUME: 491 CY
CC-EX-01-1 EXCAVATION VOLUME: 7 CY
CC-EX-03-1 EXCAVATION VOLUME: 29 CY
CC-EX-11-1 EXCAVATION VOLUME: 153 CY
CC-EX-01-2 EXCAVATION VOLUME: 13 CY

SOIL REPLACEMENT:

VOLUME ENGINEERED CAP: 491 CY (REFERENCE ONLY)

REQUIRED BORROW MATERIAL: 693 CY

NOTES:

1. A 2-IN LAYER OF DECOMPOSED GRANITE WILL BE PLACED OVER ALL AREAS DISTURBED BY CONSTRUCTION.
2. TOTAL AREA OF DISTURBANCE IS ASSUMED TO EXTEND A MAXIMUM OF 10-FEET BEYOND GRADING LIMITS SHOWN.
3. ENGINEERED CAP SHOWN IN THESE PLANS FOR REFERENCE ONLY. NOT A PART OF THESE PLANS.
4. OVERALL EXCAVATION VOLUMES CALCULATED USING AUTOCAD CIVIL 3D.
5. SPECIFIC IMPACTED AREA VOLUME CALCULATIONS WERE DETERMINED AS AREA X DEPTH.
6. BORROW MATERIAL REQUIRED CALCULATION DETERMINED AS FOLLOWS:

   BORROW = OE − IE − AE − EC

   WHERE:

   BORROW − BORROW MATERIAL REQUIRED
   OE − OVERALL EXCAVATION VOLUME
   IE − IMPACTED MATERIAL REMOVED
   AE − ADDITIONAL EXCAVATION VOLUME (OE-IE)
   EC − VOLUME OF ENGINEERED COVER

REFERENCE ONLY NOT A PART

0 10' 20' 40'
SCALE: 1" = 20'

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 OS #: 47-28

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25401 N. CENTRAL AVENUE
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SOIL REMEDIATION

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DATE: MAY 2017
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DESIGNED BY: JLP
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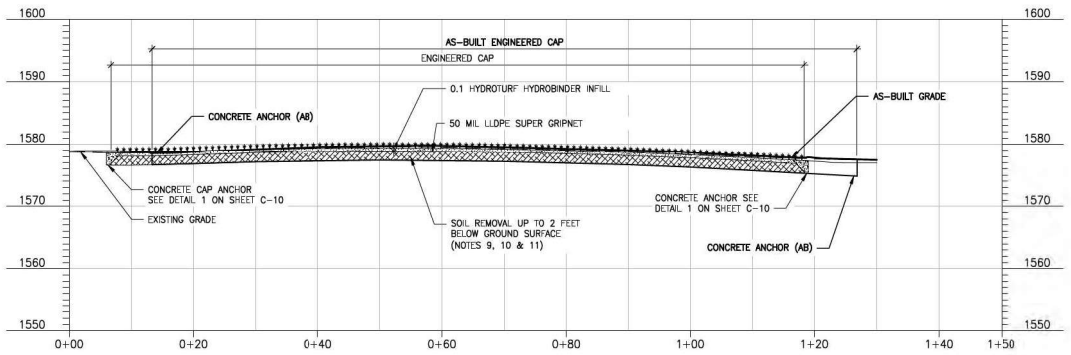
SHEET TITLE

C-COMPLEX PLAN

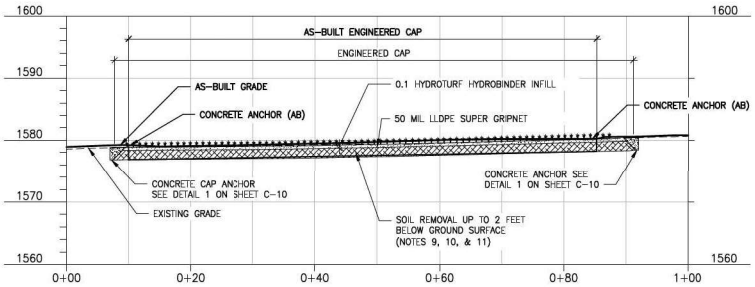
SCALE: 1"=20'

C-03
SHEET 4 OF 22 1

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1 / C-03 SECTION 1
SCALE:1"=10'-0"



2 / C-03 SECTION 2
SCALE:1"=10'-0"

NOTES:

1. REMOVED SOIL SHALL BE REPLACED WITH FREE DRAINING ROCK FILL. REMOVED SOIL SHALL BE DISPOSED OF PROPERLY OFF-SITE.
2. ALL COORDINATED LISTED ARE 1983 (2007 EPOCH) STATE PLANE GROUND COORDINATES ARIZONA CENTRAL ZONE. STANDARD TRANSVERSE MERCATOR PROJECTION, WITH A SCALE OF ORIGIN POINT OF X=0.0000 Y=0.0000. USING A GRID ADJUSTMENT FACTOR BACK TO GRID COORDINATES DIVIDE EACH COORDINATE VALUE BY 1.00016.
3. UNITS =INTERNATIONAL FEET. 1 FOOT = 0.3048 METER EXACTLY.
4. ALL BEARINGS ARE GRID BEARING, DISTANCES ARE GROUND DISTANCES AND COORDINATES ARE GROUND COORDINATES.
5. THE FIELD PORTION OF THIS SURVEY WAS PERFORMED JANUARY 2014.
6. VERTICAL DATUM IN NORTH AMERICAN VERTICAL DATUM OF 1988.
7. HYDROTURF CS = SYSTEM TYPICALLY USED FOR HIGH VELOCITY CONDITIONS AND FOR PROTECTION OF CRITICAL STRUCTURES.
8. POSITIVE DRAINAGE WILL BE MAINTAINED.
9. BACKFILL MATERIAL WILL BE CLEAN FILL FROM AN APPROVED ON-SITE SOURCE AT THE E-COMPLEX AREA.
10. COMPACTED BACKFILL WILL BE PLACED IN LIFT THICKNESS NOT EXCEEDING 12-INCHES AND COMPACTED TO A MINIMUM OF 90% RELATIVE COMPACTION AS DETERMINED BY ASTM D1557 WITHIN +/- 2% OF OPTIMUM MOISTURE CONTENT.
11. COMPACTION TESTS WILL BE PERFORMED AT A RATE OF ONE TEST PER 400 SQUARE FEET OF PLACED BACKFILL PER LIFT.
12. HYDROTURF CS TO BE INSTALLED IN COMPLIANCE WITH THE CONSTRUCTION QUALITY ASSURANCE (CQA) PLAN AND MATERIAL SPECIFICATIONS.

REFERENCE ONLY NOT A PART

SCALE: 1" = 10' HORIZONTAL
SCALE: 1" = 10' VERTICAL

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KIVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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FILE NAME: C-04
DESIGNED BY: JLP
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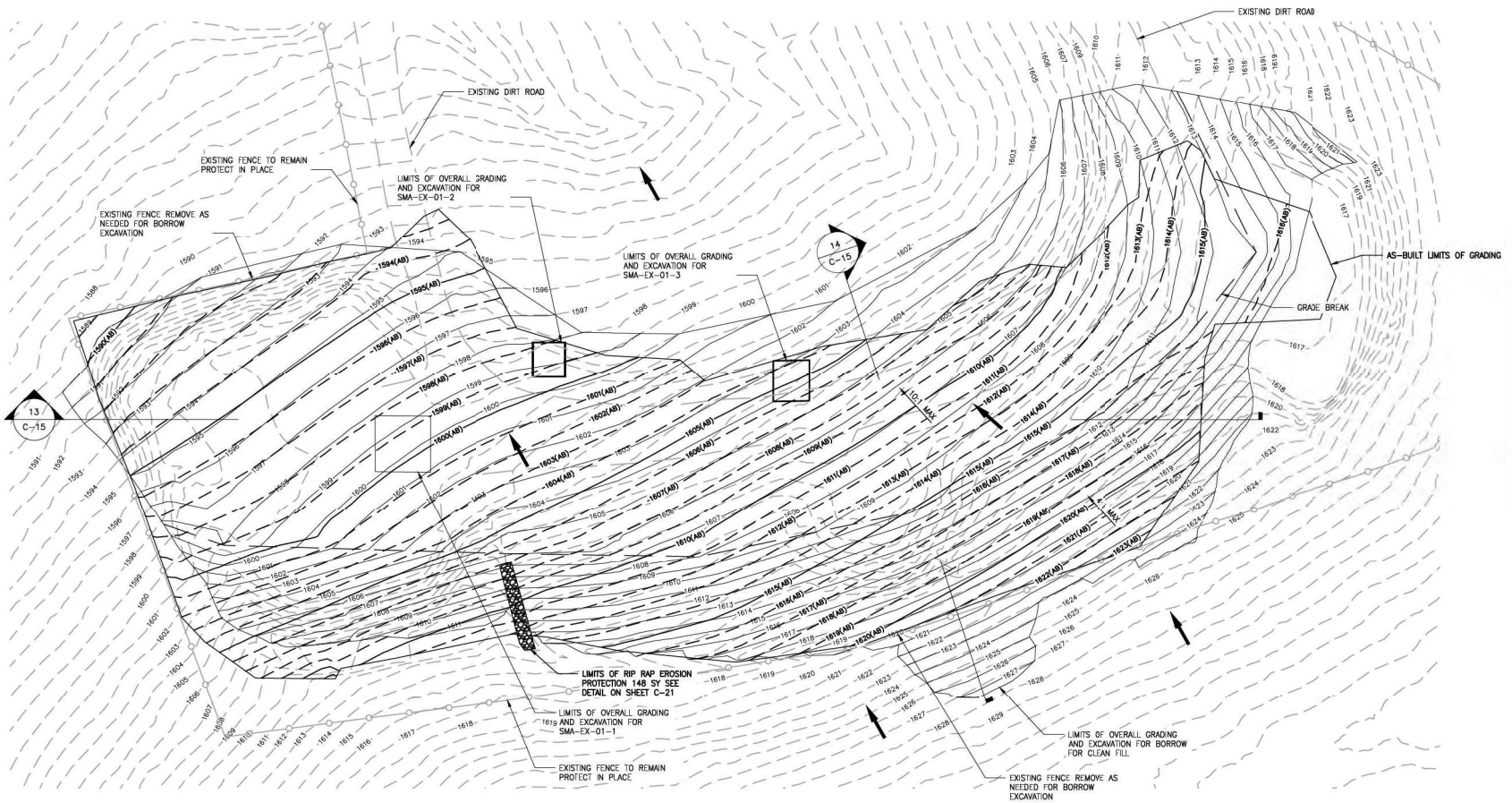
SHEET TITLE

C-COMPLEX PLAN CROSS SECTIONS

SCALE: H: 1"=10' V:1"=10'

C-04
SHEET 5 OF 22 1

User:PRIOR Spec:AUS-NCSMOD File2:\ACAD\PROJ\3994003 - UPCO GW\DESIGN DRAWINGS\CITY OF PHOENIX\COMBINED GRADING PLANS\C-04.DWG Scale:1:1 SavedDate:4/19/2019 Time:09:00 Plot Date: Prior, Jens; 5/3/2019; 06:05 ; Layout5



EARTHWORK VOLUMES

SOIL EXCAVATION AND REMOVAL:

E-COMPLEX

SMA-EX-01-1: 15 CY

SMA-EX-01-2: 5 CY*

SMA-EX-01-3: 7 CY*

SOIL REPLACEMENT:

BORROW MATERIAL EXCAVATION:

CLEAN BORROW AVAILABLE:	4,520 CY
TOTAL CLEAN BORROW REQUIRED:	4,087 CY**

* SMA-EX-01-1, SMA-EX-01-2 AND SMA-EX-03-1 MATERIAL NOT SUITABLE FOR CLEAN BORROW WILL BE REMOVED AND DISPOSED OF PROPERLY.
** TOTAL CLEAN BORROW REQUIRED FOR ALL AREAS OF EXCAVATION.

NOTES:

1. A 2-IN LAYER OF DECOMPOSED GRANITE WILL BE PLACED OVER ALL AREAS DISTURBED BY CONSTRUCTION.
2. TOTAL AREA OF DISTURBANCE IS ASSUMED TO EXTEND A MAXIMUM OF 10-FEET BEYOND GRADING LIMITS SHOWN, EXCEPT ON THE SOUTH AND EAST SIDES.
3. BORROW AREA SHOWN MAY BE REVISED DURING CONSTRUCTION AS EXCAVATIONS ARE MADE AND SOILS ARE TESTED.
4. EXISTING FENCE TO REMAIN PROTECTED IN PLACE.
5. EXISTING TREES SHOWN TO REMAIN PROTECTED IN PLACE. SEE INVENTORY AND SALVAGE PLAN.
6. OVERALL EXCAVATION VOLUMES CALCULATED USING AUTOCAD CIVIL 3D.
7. SPECIFIC IMPACTED AREA VOLUME CALCULATIONS WERE DETERMINED AS AREA X DEPTH.
8. BORROW MATERIAL REQUIRED CALCULATION DETERMINED AS FOLLOWS:

BORROW = OE – IE – AE – EC

WHERE:

BORROW – BORROW MATERIAL REQUIRED
OE – OVERALL EXCAVATION VOLUME
IE – IMPACTED MATERIAL REMOVED
AF – ADDITIONAL EXCAVATION VOLUME (OF-IF)
EC – VOLUME OF ENGINEERED COVER

REFERENCE ONLY NOT A PART

SCALE: 1" = 20'

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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3994003

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DESIGNED BY: JLP
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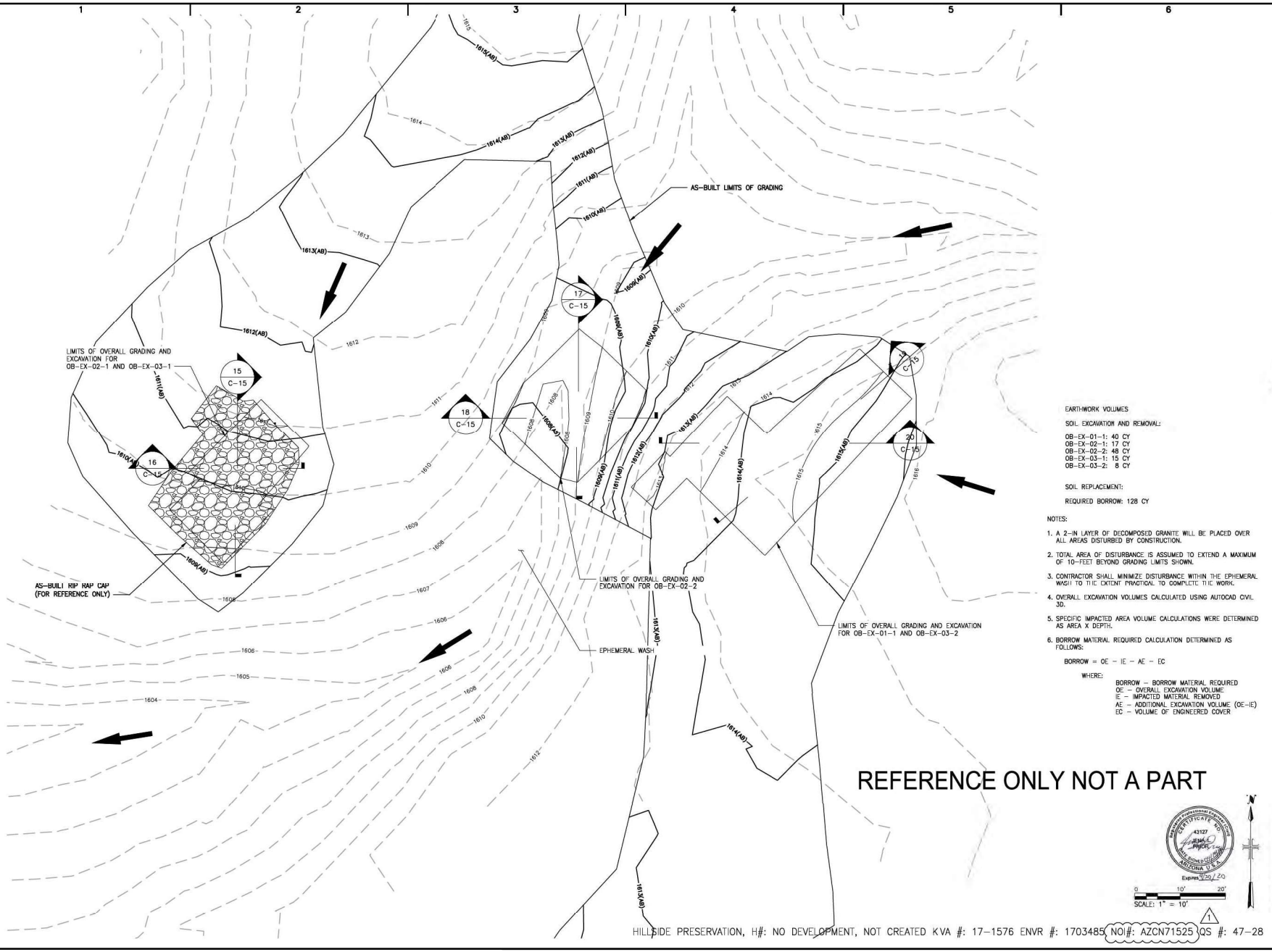
SHEET TITLE

E-COMPLEX EXCAVATION AND RESTORATION AND BORROW SOURCE PLAN

SCALE: 1"=20'

C-05
SHEET 6 OF 22 1

User:PRIOR Spec:AUS-NCSMOD File:D:\ACAD\PROJ\3994003 - UPCO GW\DESIGN DRAWINGS\CITY OF PHOENIX\COMBINED GRADING PLANS\C-05.DWG Scale:1:1 SavedDate:4/24/2019 Time:08:16 Plot Date: Prior, Jenni, 5/3/2019, 08:13 - Layout:6



EARTHWORK VOLUMES

SOIL EXCAVATION AND REMOVAL:

OB-EX-01-1: 40 CY
OB-EX-02-1: 17 CY
OB-EX-02-2: 48 CY
OB-EX-03-1: 15 CY
OB-EX-03-2: 8 CY

SOIL REPLACEMENT:

REQUIRED BORROW: 128 CY

NOTES:

1. A 2-IN LAYER OF DECOMPOSED GRANITE WILL BE PLACED OVER ALL AREAS DISTURBED BY CONSTRUCTION.
2. TOTAL AREA OF DISTURBANCE IS ASSUMED TO EXTEND A MAXIMUM OF 10-FEET BEYOND GRADING LIMITS SHOWN.
3. CONTRACTOR SHALL MINIMIZE DISTURBANCE WITHIN THE EPHEMERAL WASH TO THE EXTENT PRACTICAL TO COMPLETE THE WORK.
4. OVERALL EXCAVATION VOLUMES CALCULATED USING AUTOCAD CIVIL 3D.
5. SPECIFIC IMPACTED AREA VOLUME CALCULATIONS WERE DETERMINED AS AREA X DEPTH.
6. BORROW MATERIAL REQUIRED CALCULATION DETERMINED AS FOLLOWS:

BORROW = OE - IE - AE - EC

WHERE:

BORROW = BORROW MATERIAL REQUIRED
OE = OVERALL EXCAVATION VOLUME
IE = IMPACTED MATERIAL REMOVED
AE = ADDITIONAL EXCAVATION VOLUME (OE-IE)
EC = VOLUME OF ENGINEERED COVER

REFERENCE ONLY NOT A PART

SCALE: 1" = 10'

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KVA #: 17-1576 ENVR #: 1703485 NOI #: AZCN71525 OS #: 47-28

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FILE NAME: C-06
DESIGNED BY: JLP
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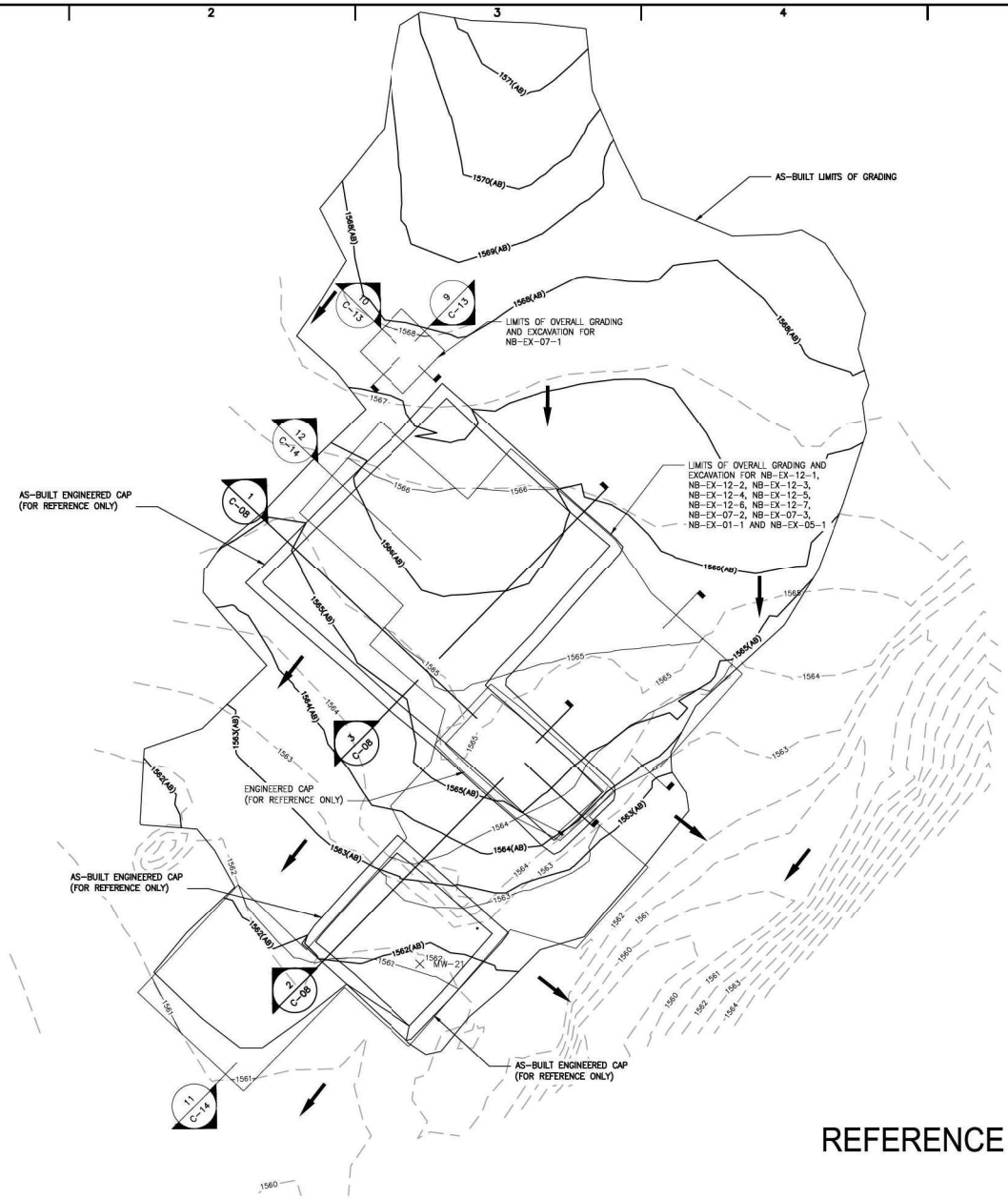
SHEET TITLE

OLD BURN AREA EXCAVATION AND RESTORATION PLAN

SCALE: 1"=10'

C-06
SHEET 7 OF 22 1

User:PRIOR Spec:AUS-NCSMOD File:D:\ACAD\PROJ\3994003 - UPCO GW\DESIGN DRAWINGS\CITY OF PHOENIX\COMBINED GRADING PLANS\C-06.DWG Scale:1:1 SaveDate:4/19/2019 Time:09:06 Plot Date: Prior, Jena, 5/3/2019, 08:25 ; Layout:7



EARTHWORK VOLUMES

SOIL EXCAVATION AND REMOVAL:

NB-EX-01-1:	12 CY
NB-EX-05-1:	222 CY
NB-EX-07-1:	104 CY
NB-EX-07-2:	434 CY
NB-EX-12-1:	222 CY
NB-EX-12-2:	136 CY
NB-EX-12-3:	155 CY
NB-EX-12-4:	136 CY
NB-EX-12-5:	175 CY
NB-EX-12-6:	263 CY
NB-EX-12-7:	245 CY

ADDITIONAL EXCAVATION: 2,104 CY

SOIL REPLACEMENT:

ENGINEERED CAP VOLUME: 89 CY (REFERENCE ONLY)

REQUIRED BORROW: 2,015 CY

NOTES:

1. A 2-IN LAYER OF DECOMPOSED GRANITE WILL BE PLACED OVER ALL AREAS DISTURBED BY CONSTRUCTION.
2. TOTAL AREA OF DISTURBANCE IS ASSUMED TO EXTEND A MAXIMUM OF 10-FEET BEYOND GRADING LIMITS SHOWN.
3. OVERALL EXCAVATION VOLUMES CALCULATED USING AUTOCAD CIVIL 3D.
4. SPECIFIC IMPACTED AREA VOLUME CALCULATIONS WERE DETERMINED AS AREA X DEPTH.
5. BORROW MATERIAL REQUIRED CALCULATION DETERMINED AS FOLLOWS:

BORROW = OE − IE − AE − EC

WHERE:

BORROW = BORROW MATERIAL REQUIRED
OE = OVERALL EXCAVATION VOLUME
IE = IMPACTED MATERIAL REMOVED
AE = ADDITIONAL EXCAVATION VOLUME (OE−IE)
EC = VOLUME OF ENGINEERED COVER

REFERENCE ONLY NOT A PART

SCALE: 1" = 20'

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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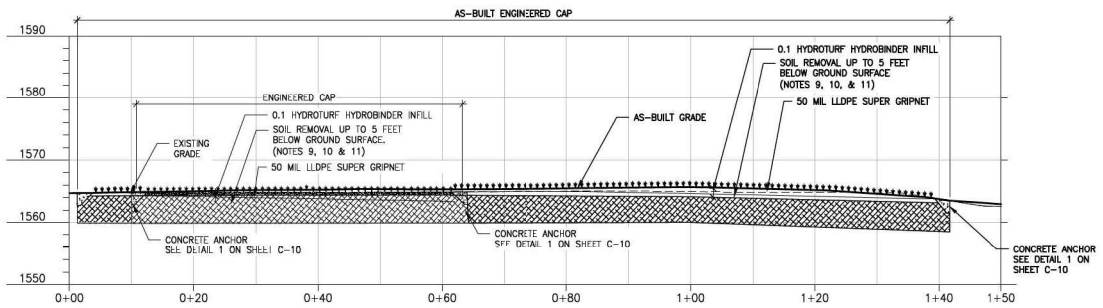
SHEET TITLE

NEW BURN AREA EXCAVATION AND RESTORATION PLAN

SCALE: 1"=10'

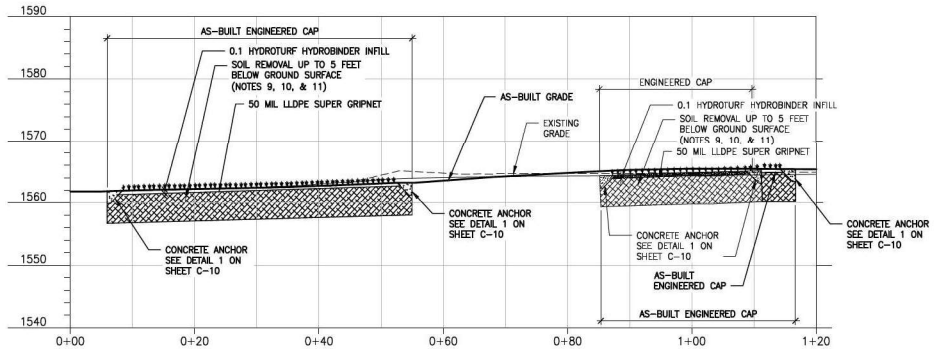
C-07
SHEET 8 OF 22

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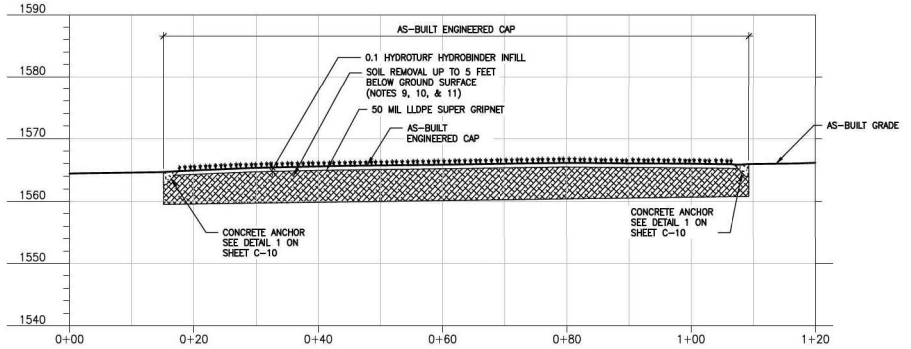
1 / C-07 SECTION 1

SCALE:1"=10'-0"



2 / C-07 SECTION 2

SCALE:1"=10'-0"



3 / C-07 SECTION 3

SCALE:1"=10'-0"

NOTES:

1. REMOVED SOIL SHALL BE REPLACED WITH FREE DRAINING ROCK FILL. REMOVED SOIL SHALL BE DISPOSED OF PROPERLY OFF-SITE.
2. ALL COORDINATED LISTED ARE 1983 (2007 EPOCH) STATE PLANE GROUND COORDINATES ARIZONA CENTRAL ZONE. STANDARD TRANSVERSE MERCATOR PROJECTION, WITH A SCALE OF ORIGIN POINT OF X=0.0000 Y=0.0000. USING A GRID ADJUSTMENT FACTOR BACK TO GRID COORDINATES DIVIDE EACH COORDINATE VALUE BY 1.00016.
3. UNITS =INTERNATIONAL FEET. 1 FOOT = 0.3048 METER EXACTLY.
4. ALL BEARINGS ARE GRID BEARING, DISTANCES ARE GROUND DISTANCES AND COORDINATES ARE GROUND COORDINATES.
5. THE FIELD PORTION OF THIS SURVEY WAS PERFORMED JANUARY 2014.
6. VERTICAL DATUM IN NORTH AMERICAN VERTICAL DATUM OF 1988.
7. HYDROTURF CS = SYSTEM TYPICALLY USED FOR HIGH VELOCITY CONDITIONS AND FOR PROTECTION OF CRITICAL STRUCTURES.
8. POSITIVE DRAINAGE WILL BE MAINTAINED.
9. BACKFILL MATERIAL WILL BE CLEAN FILL FROM AN APPROVED ON-SITE SOURCE AT THE E-COMPLEX AREA.
10. COMPACTED BACKFILL WILL BE PLACED IN LIFT THICKNESS NOT EXCEEDING 12-INCHES AND COMPACTED TO A MINIMUM OF 90% RELATIVE COMPACTION AS DETERMINED BY ASTM D1557 WITHIN +/- 2% OF OPTIMUM MOISTURE CONTENT.
11. COMPACTION TESTS WILL BE PERFORMED AT A RATE OF ONE TEST PER 400 SQUARE FEET OF PLACED BACKFILL PER LIFT.
12. HYDROTURF CS TO BE INSTALLED IN COMPLIANCE WITH THE CONSTRUCTION QUALITY ASSURANCE (CQA) PLAN AND MATERIAL SPECIFICATIONS.

REFERENCE ONLY NOT A PART

SCALE: 1" = 10' HORIZONTAL
SCALE: 1" = 10' VERTICAL

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 OS #: 47-28

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3994003

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FILE NAME: C-08
DESIGNED BY: JLP
DRAWN BY: JP
CHECKED BY: MN

SHEET TITLE

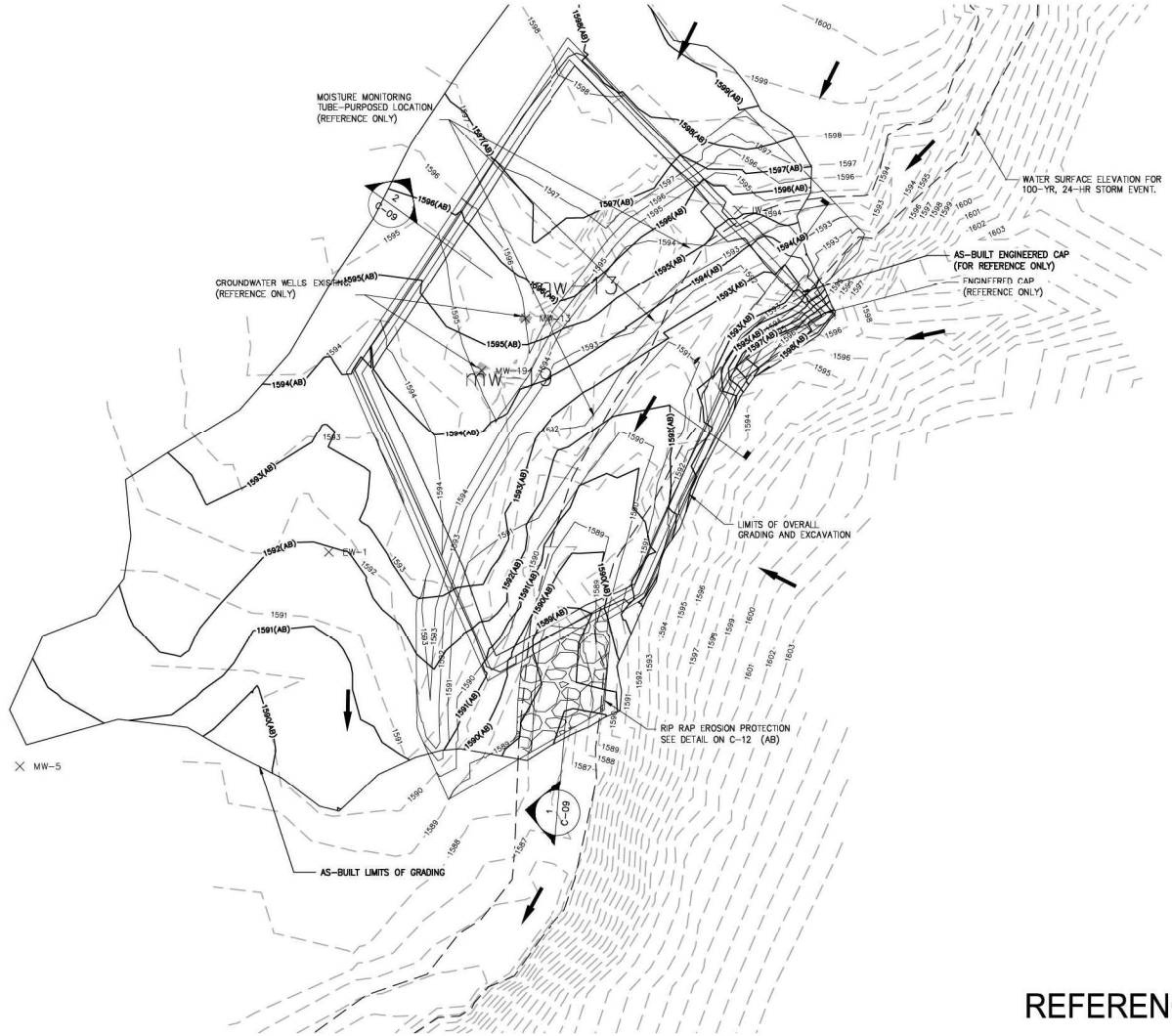
NEW BURN AREA CAP DESIGN CROSS SECTIONS

SCALE: 1"=10'

C-08

SHEET 9 OF 22 1

User=PRIOR Spec=AUS-NCSMOD File=D:\ACAD\PROJ\3994003 - UPCO GW\DESIGN DRAWINGS\CITY OF PHOENIX\COMBINED GRADING PLANS\C-08.DWG Scale=1:1 SavedDate=4/19/2019 Time=09:06 Plot Date: Prior, Jenna, 5/3/2019, 08:32 ; Layout=9



EARTHWORK VOLUMES

SOIL EXCAVATION AND REMOVAL:

WATERBORE: 1,135 CY

SOIL REPLACEMENT:

ENGINEERED CAP: 1,135 CY (REFERENCE ONLY)

FINISH GRADE EARTHWORKS:

CUT: 214 CY
FILL: 183 CY
NET: 34 CY CUT

NOTES:

1. FINISH GRADE EARTHWORKS DO NOT INCLUDE THE EXCAVATION AND REMOVAL OF SOIL WITH COC'S.
2. SOIL EXCAVATED AND REMOVED WITH COC'S WILL BE DISPOSED OF PROPERLY OFF-SITE.
3. AN ENGINEERED CAP WILL BE INSTALLED WHERE SOILS WITH COC'S WERE REMOVED. INSTALLATION OF THE CAP WILL OFFSET THE VOLUME OF SOIL REMOVED. CONSTRUCTION OF THE CAP IS NOT A PART OF THESE PLANS.
4. ALL EARTHWORKS CALCULATED USING AUTOCAD CIVIL 3D.
5. A JURISDICTIONAL DETERMINATION (JD) WAS FILED WITH THE U.S. ARMY CORPS OF ENGINEERS (USACOE), FOR THE EPHEMERAL WASH THROUGH THE WATERBORE AREA, TO DETERMINE IF IT IS REGULATED ACTIVITY UNDER SECTION 10 OF THE RIVERS AND HARBORS ACT OR SECTION 404 OF THE CLEAN WATER ACT. USACOE DETERMINED THAT THE WATER OF THE UNITES STATES DO NOT OCCUR ON THE PROJECT SITE. THEREFORE, THE JD WAS APPROVED AND A 404 PERMIT WAS NOT REQUIRED.

REFERENCE ONLY NOT A PART

SCALE: 1" = 20'

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 OS #: 47-28

ARCADIS

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SEALS

CITY OF PHOENIX
UTC AEROSPACE SYSTEMS
25401 N. CENTRAL AVENUE
PHOENIX, ARIZONA

FORMER UPCO FACILITY SOIL REMEDIATION

3994003

NO.	DATE	ISSUED FOR	BY
1	2/2018	GWTF ADDITION	JLP

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DATE: MAY 2017
PROJECT NO.: 3994003
FILE NAME: C-09
DESIGNED BY: JLP
DRAWN BY: JP
CHECKED BY: MN

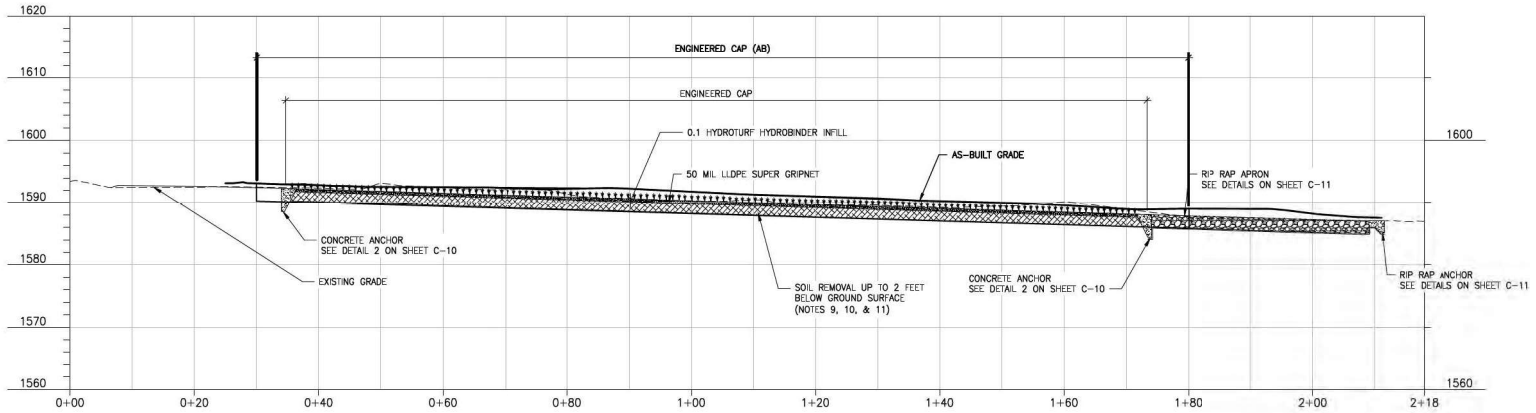
SHEET TITLE

WATERBORE EXCAVATION AND RESTORATION PLAN

SCALE: 1"=10'

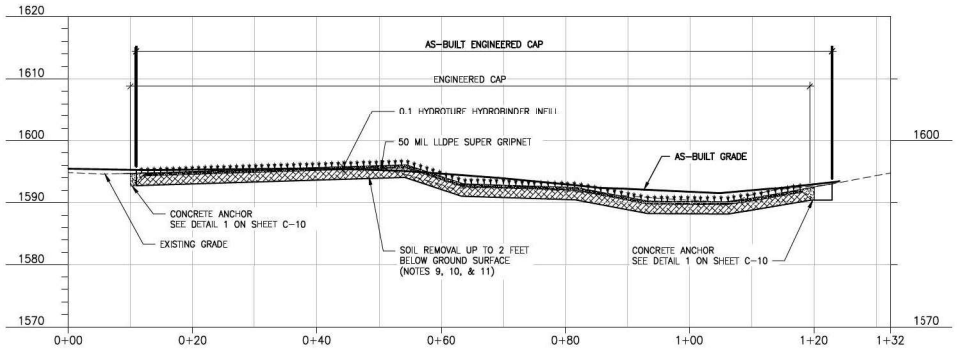
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SHEET 10 OF 22 1

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1 / C-09 SECTION 1

SCALE:1"=10'-0"



1 / C-09 SECTION 2

SCALE:1"=10'-0"

NOTES:

1. REMOVED SOIL SHALL BE REPLACED WITH FREE DRAINING ROCK FILL. REMOVED SOIL SHALL BE DISPOSED OF PROPERLY OFF-SITE.
2. ALL COORDINATED LISTED ARE 1983 (2007 EPOCH) STATE PLANE GROUND COORDINATES ARIZONA CENTRAL ZONE. STANDARD TRANSVERSE MERCATOR PROJECTION, WITH A SCALE OF ORIGIN POINT OF X=0.0000 Y=0.0000. USING A GRID ADJUSTMENT FACTOR BACK TO GRID COORDINATES DIVIDE EACH COORDINATE VALUE BY 1.00016.
3. UNITS =INTERNATIONAL FEET. 1 FOOT = 0.3048 METER EXACTLY.
4. ALL BEARINGS ARE GRID BEARING, DISTANCES ARE GROUND DISTANCES AND COORDINATES ARE GROUND COORDINATES.
5. THE FIELD PORTION OF THIS SURVEY WAS PERFORMED JANUARY 2014.
6. VERTICAL DATUM IN NORTH AMERICAN VERTICAL DATUM OF 1988.
7. HYDROTURF CS – SYSTEM TYPICALLY USED FOR HIGH VELOCITY CONDITIONS AND FOR PROTECTION OF CRITICAL STRUCTURES.
8. POSITIVE DRAINAGE WILL BE MAINTAINED.
9. BACKFILL MATERIAL WILL BE CLEAN FILL FROM AN APPROVED ON-SITE SOURCE AT THE E-COMPLEX AREA.
10. COMPACTED BACKFILL WILL BE PLACED IN LIFT THICKNESS NOT EXCEEDING 12-INCHES AND COMPACTED TO A MINIMUM OF 90% RELATIVE COMPACTION AS DETERMINED BY ASTM D1557 WITHIN +/- 2% OF OPTIMUM MOISTURE CONTENT.
11. COMPACTION TESTS WILL BE PERFORMED AT A RATE OF ONE TEST PER 400 SQUARE FEET OF PLACED BACKFILL PER LIFT.
12. HYDROTURF CS TO BE INSTALLED IN COMPLIANCE WITH THE CONSTRUCTION QUALITY ASSURANCE (CQA) PLAN AND MATERIAL SPECIFICATIONS.

REFERENCE ONLY NOT A PART

SCALE: 1" = 10' HORIZONTAL
SCALE: 1" = 10' VERTICAL

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DESIGNED BY: JLP
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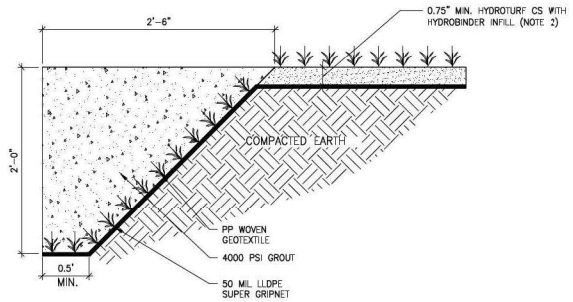
SHEET TITLE

WATERBORE AREA CAP DESIGN CROSS SECTIONS

SCALE: 1"=10'

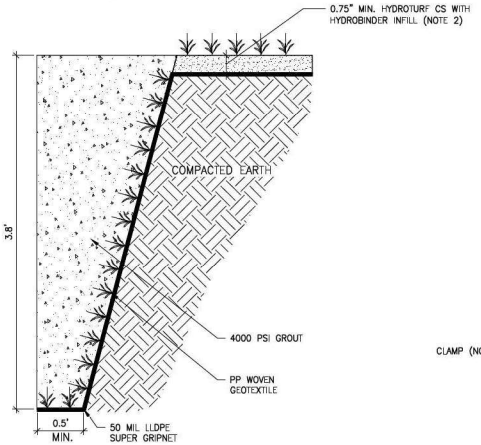
C-10
SHEET 11 OF 22 1

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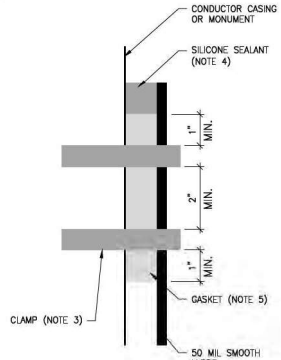
1 C-10 HYDROTURF ANCHOR–OUTSIDE OF CHANNEL

SCALE: NTS



2 C-10 HYDROTURF ANCHOR – ACROSS WASH

SCALE: NTS



5 C-10 CLAMP DETAIL

SCALE: NTS

LEGEND:

SOIL REMOVAL UP TO 2 FEET BGS

CONCRETE CAP ANCHOR

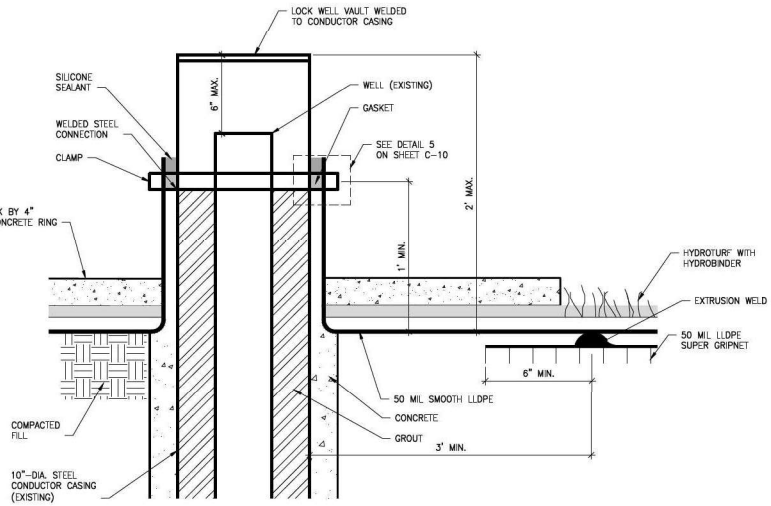
HYDROTURF CS SOIL CAP

BGS	BELOW GROUND SURFACE.
PSI	POUNDS PER SQUARE INCH.
LLDPE	LINEAR LOW DENSITY POLYETHYLENE.

NOTE:

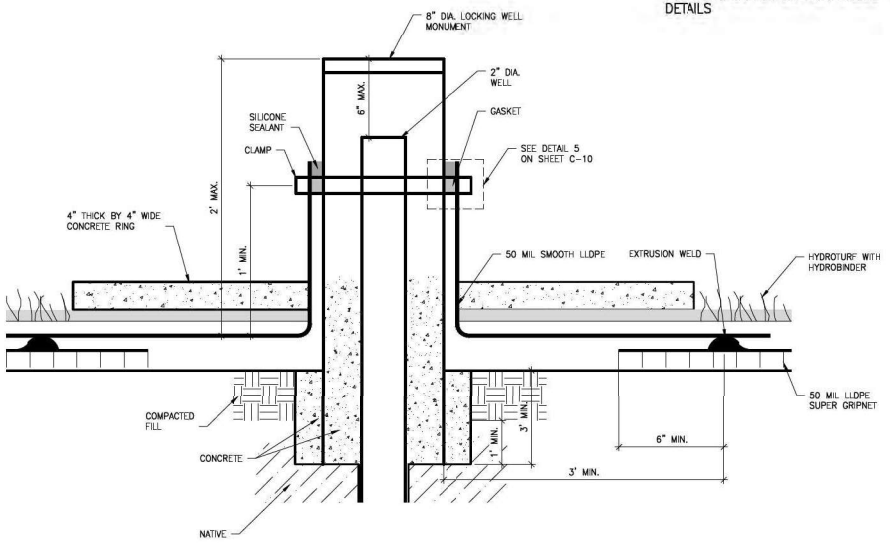
1. HYDROBINDER GOES DOWN INTO TRENCH.
2. HYDROTURF CS INCLUDES: SYNTHETIC TURF; HYDROBINDER INFILL; PP WOVEN GEOTEXTILE; 50 MIL LLDPE DUAL TEXTURED LINER (AGRU AMERICA SUPER GRIPNET)
3. TWO STAINLESS STEEL "BAND-IT" OR "SCREW-TYPE" CLAMPS. CLAMPS TO BE 1/8" THICK BY 1.5" WIDE TO THE EXACT DIAMETER OF THE PIPE (ALLOWING FOR THE THICKNESS OF THE GEOMEMBRANE AND GASKET).
4. SILICONE SEALANT SHALL BE SILICONE, RTV103, OR EQUIVALENT.
5. GASKET MATERIAL SHALL BE NEOPRENE, CLOSED CEL. MEDIUM, 0.25 INCH THICK, WITH ADHESIVE ON ONE SIDE.

THIS PAGE REFLECTS THE AS-BUILT CONDITION FOR THESE DETAILS



3 C-10 GROUNDWATER WELL PENETRATION SEAL

SCALE: NTS



4 C-10 MOISTURE MONITORING WELL PENETRATION SEAL

SCALE: NTS

REFERENCE ONLY NOT A PART

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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FILE NAME: C-11
DESIGNED BY: JLP
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SHEET TITLE

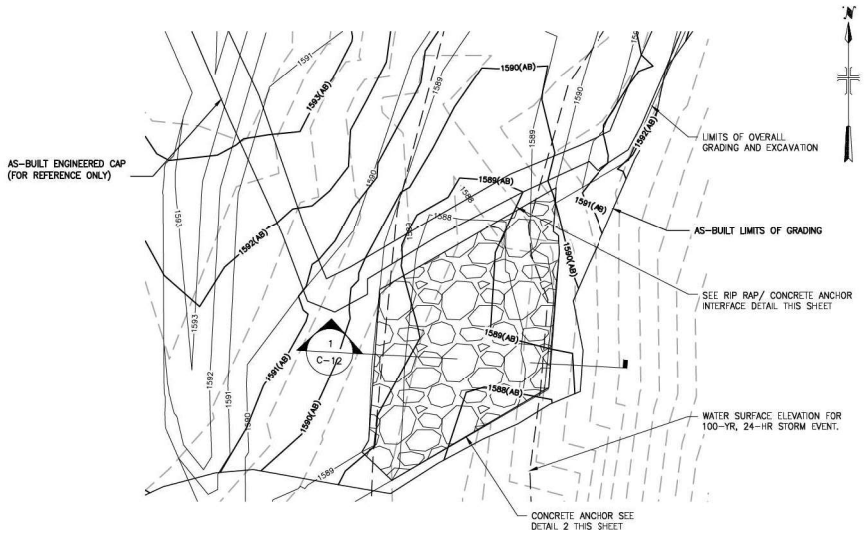
CAP DESIGN DETAILS (REFERENCE ONLY)

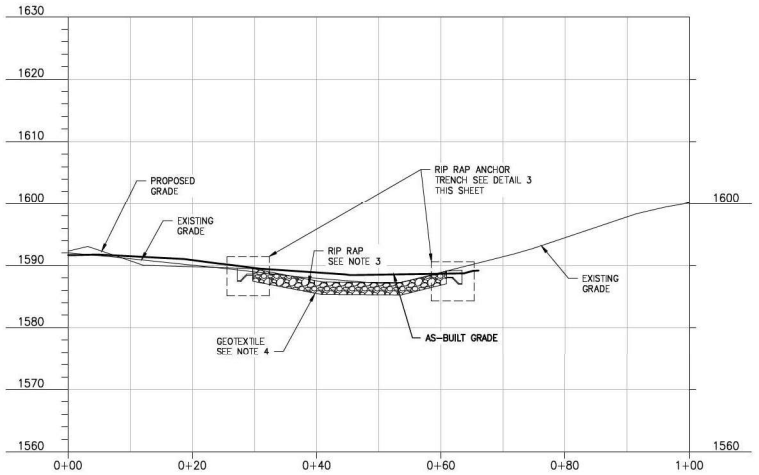
SCALE: N/A

C-11

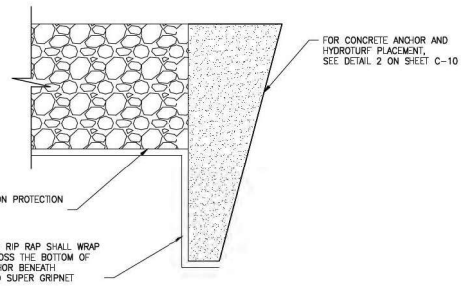
SHEET 12 OF 22

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1 / C-12 SECTION 1
SCALE: 1"=10'

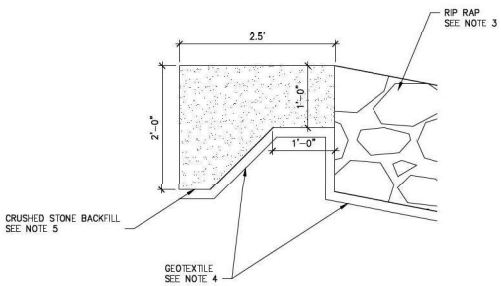


2 / C-11 RIP RAP CONCRETE ANCHOR INTERFACE DETAIL
SCALE:1"=1'-0"

THESE DETAILS REPRESENT
THE AS-BUILT CONDTION

NOTES:

1. RIP RAP SHALL CONFORM TO MAG STANDARD SPECIFICATION 703.
2. RIP RAP SHALL BE PLACED PER MAG STANDARD SPECIFICATION 220.
3. RIP RAP SHALL HAVE A MINIMUM D50 OF 12-INCHES WITH A SIZE NO SMALLER THAN 8-INCHES IN DIAMETER AND SHALL BE PLACED IN A LAYER A MINIMUM OF 24-INCHES THICK.
4. GEOTEXTILE SHALL CONFORM TO CLASS A PER MAG STANDARD SPECIFICATION 796.
5. CRUSHED STONE BACKFILL SHALL HAVE A MINIMUM UNIT WEIGHT OF 100 PCF AND ANCHOR SHALL WEIGH A MINIMUM OF 134 LB/FT REGARDLESS OF EXCAVATED SLOPE.
6. RIP RAP TO BE INSTALLED IN COMPLIANCE WITH THE CONSTRUCTION QUALITY ASSURANCE (CQA) PLAN AND MATERIAL SPECIFICATIONS.
7. RIP RAP CALCULATIONS ARE INCLUDED IN AN APPENDIX TO THE DRAINAGE MEMORANDUM.



3 / C-11 RIP RAP ANCHOR TRENCH
SCALE:1"=1'-0"

REFERENCE ONLY NOT A PART

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KVA #: 17-1576 ENVR #: 1703485 NOI #: AZCN71525 OS #: 47-28

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FILE NAME: C-12
DESIGNED BY: JLP
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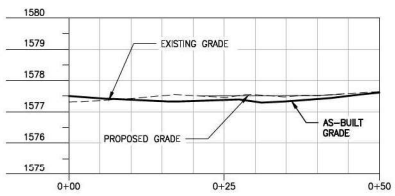
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RIP RAP DESIGN DETAILS (REFERENCE ONLY)

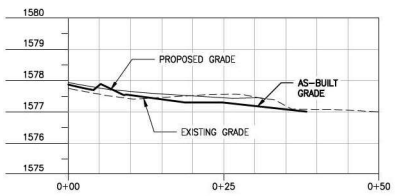
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C-12
SHEET 13 OF 22 1

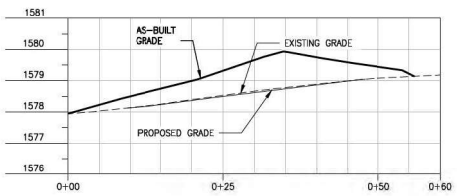
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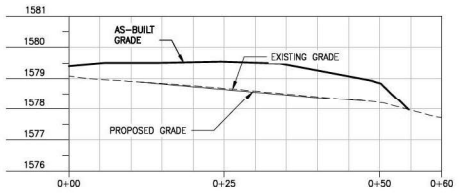
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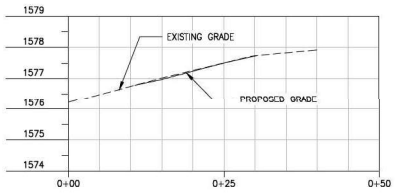
4 / C-03 SECTION 4
SCALE:1"=10'-0"



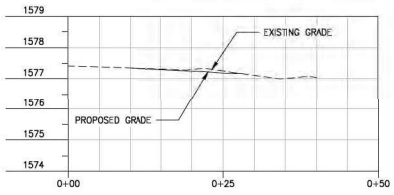
5 / C-03 SECTION 5
SCALE:1"=10'-0"



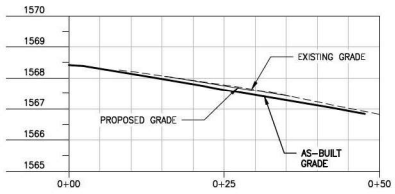
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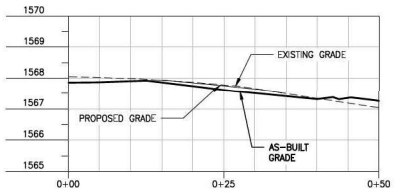
7 / C-03 SECTION 7
SCALE:1"=10'-0"



8 / C-03 SECTION 8
SCALE:1"=10'-0"



9 / C-07 SECTION 9
SCALE:1"=10'-0"



10 / C-07 SECTION 10
SCALE:1"=10'-0"

REFERENCE ONLY NOT A PART

SCALE: 1" = 10' HORIZONTAL
SCALE: 1" = 5' VERTICAL

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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DESIGNED BY: JLP
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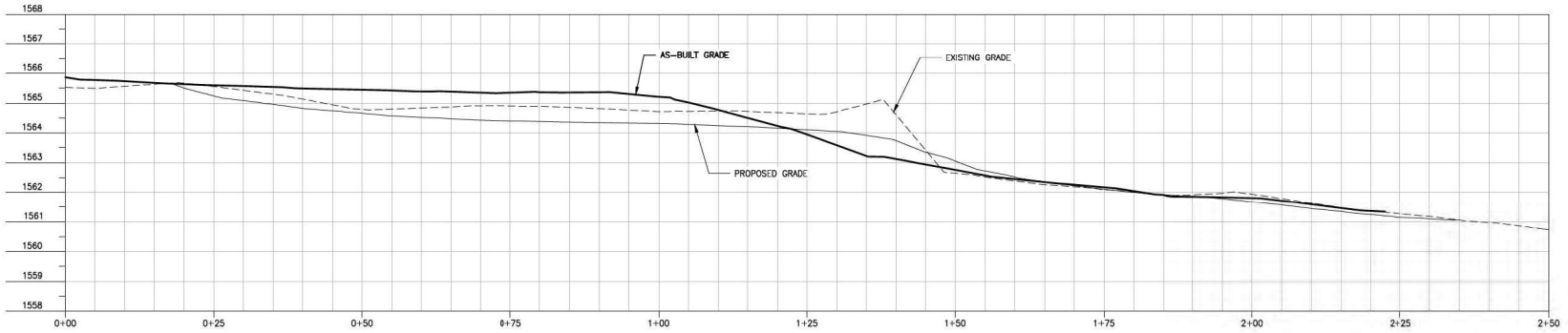
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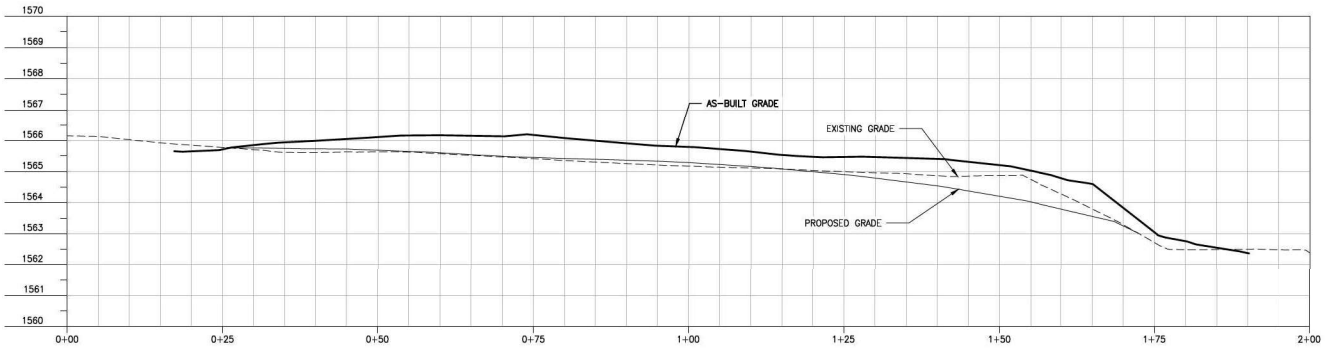
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SHEET 14 OF 22

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11 C-07 SECTION 11
SCALE:1"=10'-0"



12 C-07 SECTION 12
SCALE:1"=10'-0"

REFERENCE ONLY NOT A PART

SCALE: 1" = 10' HORIZONTAL
SCALE: 1" = 5' VERTICAL

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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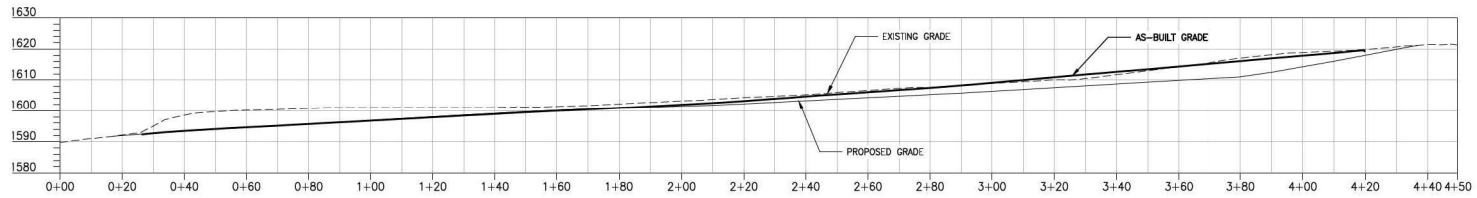
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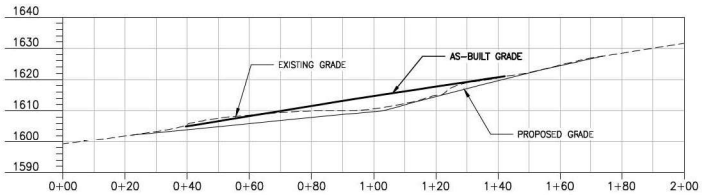
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C-14
SHEET 15 OF 22

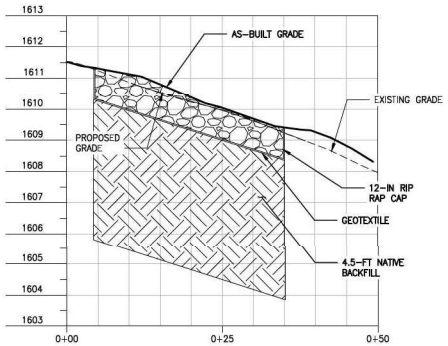
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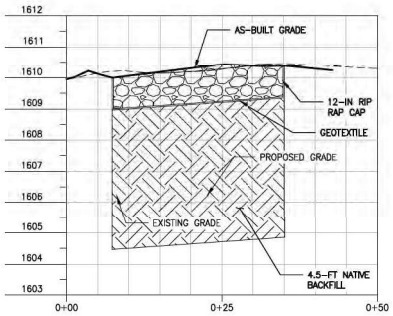
13 C-05 SECTION 13
SCALE:1" = 20' HORIZONTAL
SCALE: 1" = 1' VERTICAL



14 C-05 SECTION 14
SCALE:1" = 20' HORIZONTAL
SCALE: 1" = 1' VERTICAL



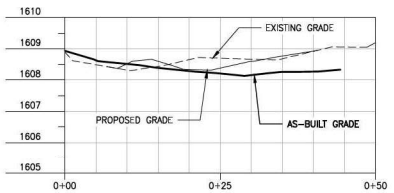
15 C-06 SECTION 15
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SCALE: 1" = 5' VERTICAL



16 C-06 SECTION 16
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SCALE: 1" = 5' VERTICAL

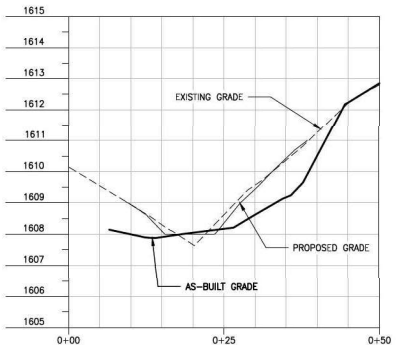
AS-BUILT NOTE:

ACTUAL GRADING DURING CONSTRUCTION EXTENDED BEYOND THE ORIGINAL GRADING LIMITS. THEREFORE THE SECTIONS MAY NOT REFLECT THE FULL EXTENT OF LIMITS OF GRADING AND MAY NOT SHOW THE AS-BUILT GRADE WHERE IT TIES INTO EXISTING GRADE.

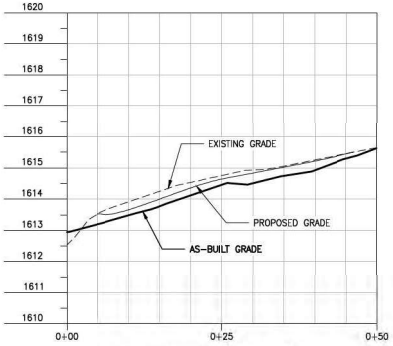


17 C-06 SECTION 17
SCALE:1" = 10' HORIZONTAL
SCALE: 1" = 5' VERTICAL

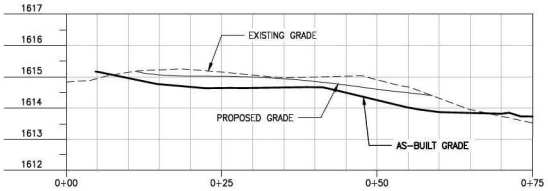
REFERENCE ONLY NOT A PART



18 C-06 SECTION 18
SCALE:1" = 10' HORIZONTAL
SCALE: 1" = 5' VERTICAL



20 C-06 SECTION 20
SCALE:1" = 10' HORIZONTAL
SCALE: 1" = 5' VERTICAL



19 C-06 SECTION 19
SCALE:1" = 10' HORIZONTAL
SCALE: 1" = 5' VERTICAL

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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CITY OF PHOENIX
UTC AEROSPACE SYSTEMS
25401 N. CENTRAL AVENUE
PHOENIX, ARIZONA

FORMER UPCO FACILITY
SOIL REMEDIATION

3994003

NO.	DATE	ISSUED FOR	BY
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DATE: MAY 2017
PROJECT NO.: 3994003
FILE NAME: C-15
DESIGNED BY: JLP
DRAWN BY: JP
CHECKED BY: MN

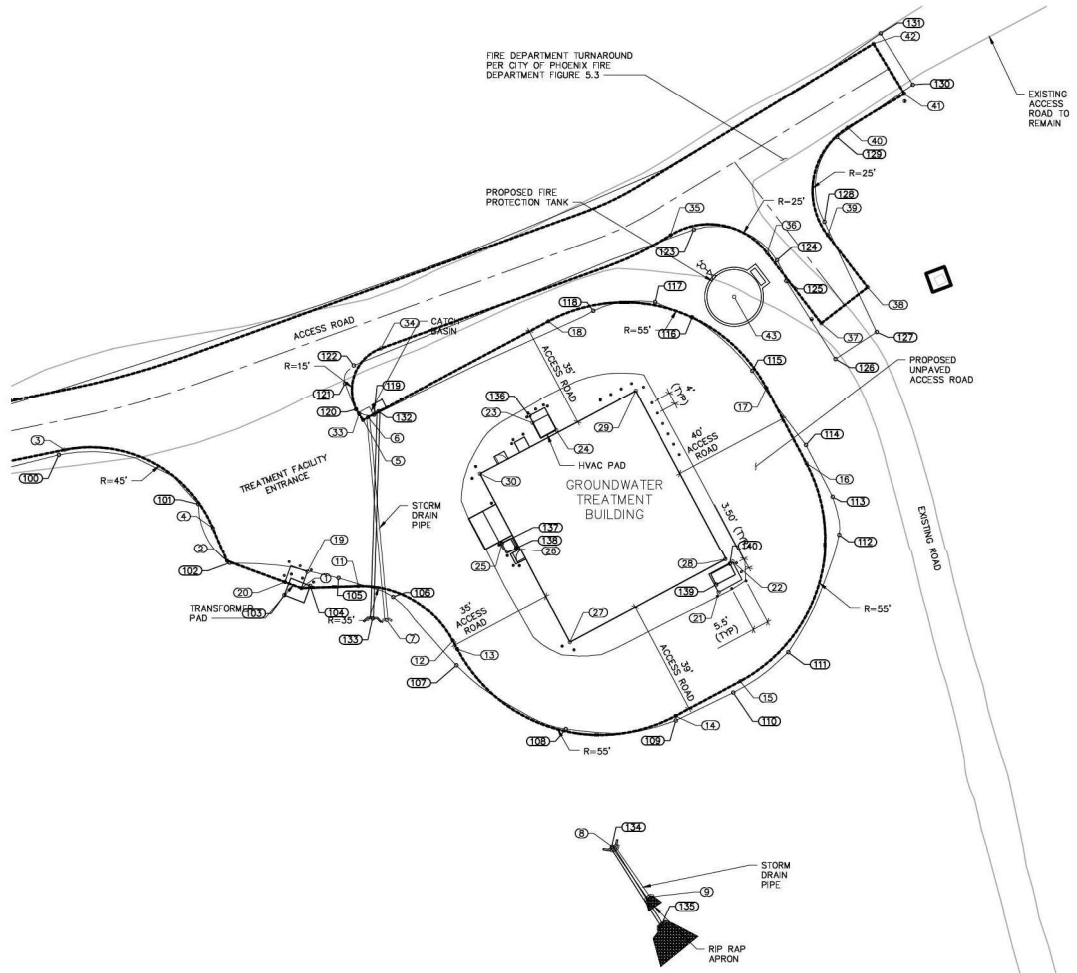
SHEET TITLE

SECTIONS 3

SCALE: N/A

C-15
SHEET 16 OF 22

User:PRIOR Spec:AUS-NCSMOD File:D:\ACAD\PROJ\3994003 - UPCO GW\DESIGN DRAWINGS\CITY OF PHOENIX\COMBINED GRADING PLANS\C-15.DWG Scale:1:1 SavedDate:4/19/2019 Time:09:17 Plot Date: Prior, Jenz, 5/3/2019, 08:43 ; Layout:16



Point Table		
Point #	Northing	Easting
1	988184.7429	653855.4838
2	988194.0313	653830.0888
3	988232.0874	653774.7997
4	988205.4399	653825.2920
5	988242.2401	653876.5140
6	988243.1798	653878.2795
7	988173.9247	653884.5399
8	988095.8684	653962.3520
9	988079.4245	653973.6742
11	988185.4009	653874.9144
12	988166.8664	653906.9948
13	988164.0920	653908.4716
14	988141.3845	653982.8649
15	988153.1312	654004.9333
16	988227.5245	654027.6409
17	988253.1239	654014.0146
18	988275.8314	653939.6213
19	988190.3778	653857.5448
20	988186.8039	653849.8489
21	988183.3334	653997.5502
22	988193.7789	654002.2762
23	988241.2476	653934.2402
24	988238.7704	653942.3559
25	988200.3016	653923.8893
26	988198.6502	653929.2997
27	988166.4137	653946.8853
28	988194.6060	653999.8494
29	988252.1528	653969.3594
30	988223.9606	653916.3953
33	988244.3215	653875.1543
34	988266.6306	653882.6100
35	988305.0926	653981.2557
36	988299.1094	654014.2658
37	988275.1534	654032.7047
38	988287.3523	654048.5536
39	988305.0599	654034.9241
40	988341.6999	654041.7968
41	988353.2646	654060.9169
42	988370.3778	654050.5661
43	988284.1348	654002.9583

As-Built Point Table		
Point #	Northing	Easting
100	988230.3510	653772.8330
101	988213.6090	653820.3030
102	988193.3550	653830.9940
103	988182.3730	653849.6500
104	988185.4540	653858.5090
105	988188.2060	653868.1460
106	988181.7014	653886.7886
107	988158.5264	653908.2082
108	988136.9076	653945.4894
109	988139.8230	653962.9560
110	988149.2900	654002.5570
111	988162.9580	654021.3630
112	988203.1880	654038.8520
113	988216.1420	654036.5810
114	988233.7400	654027.5050
115	988258.9846	654009.1446
116	988277.1900	653988.5850
117	988282.2920	653975.9030
118	988279.3590	653954.9130
119	988244.0150	653880.2640
120	988245.9180	653874.1050
121	988254.6870	653870.3340
122	988260.8304	653873.3270
123	988306.9918	653989.1725
124	988296.6357	654017.6015
125	988289.5350	654020.7336
126	988263.0318	654037.5423
127	988272.1582	654051.6215
128	988309.6780	654033.8105
129	988338.5329	654038.0213
130	988356.3327	654063.8315
131	988373.8915	654053.0147
132	988245.2037	653881.7999
133	988174.4210	653879.7590
134	988096.6430	653961.1890
135	988070.1210	653978.3090
136	988243.7120	653933.1820
137	988200.1540	653923.3850
138	988198.6195	653928.7699
139	988185.9020	653996.7550
140	988193.0030	654001.4050

AS-BUILT NOTES

1. POINTS 1-43 REPRESENT DESIGN PHASE COORDINATES. POINTS 100-140 REPRESENT THE AS-BUILT CONDITION. DESIGN PHASE COORDINATES FOR THE TREATMENT FACILITY THAT DO NOT HAVE ASSOCIATED AS-BUILT COORDINATES SHOULD BE CONSIDERED THE AS-BUILT COORDINATE.
2. THE ACCESS ROAD AND THE STORM DRAIN DESIGN PHASE COORDINATES DO NOT REPRESENT THE AS-BUILT CONDITION AND NEW AS-BUILT COORDINATES ARE PROVIDED FOR THE STORM DRAIN AND THE ACCESS ROAD.

0 10' 20' 40'
SCALE: 1" = 20'

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KIVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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CITY OF PHOENIX
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25401 N. CENTRAL AVENUE
PHOENIX, ARIZONA

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3994003

NO.	DATE	ISSUED FOR	BY
1	2/2018	GWTF ADDITION	JLP

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DATE: FEBRUARY 2018
PROJECT NO.: 3994003
FILE NAME: C-16
DESIGNED BY: JLP
DRAWN BY: JP
CHECKED BY: MN

SHEET TITLE

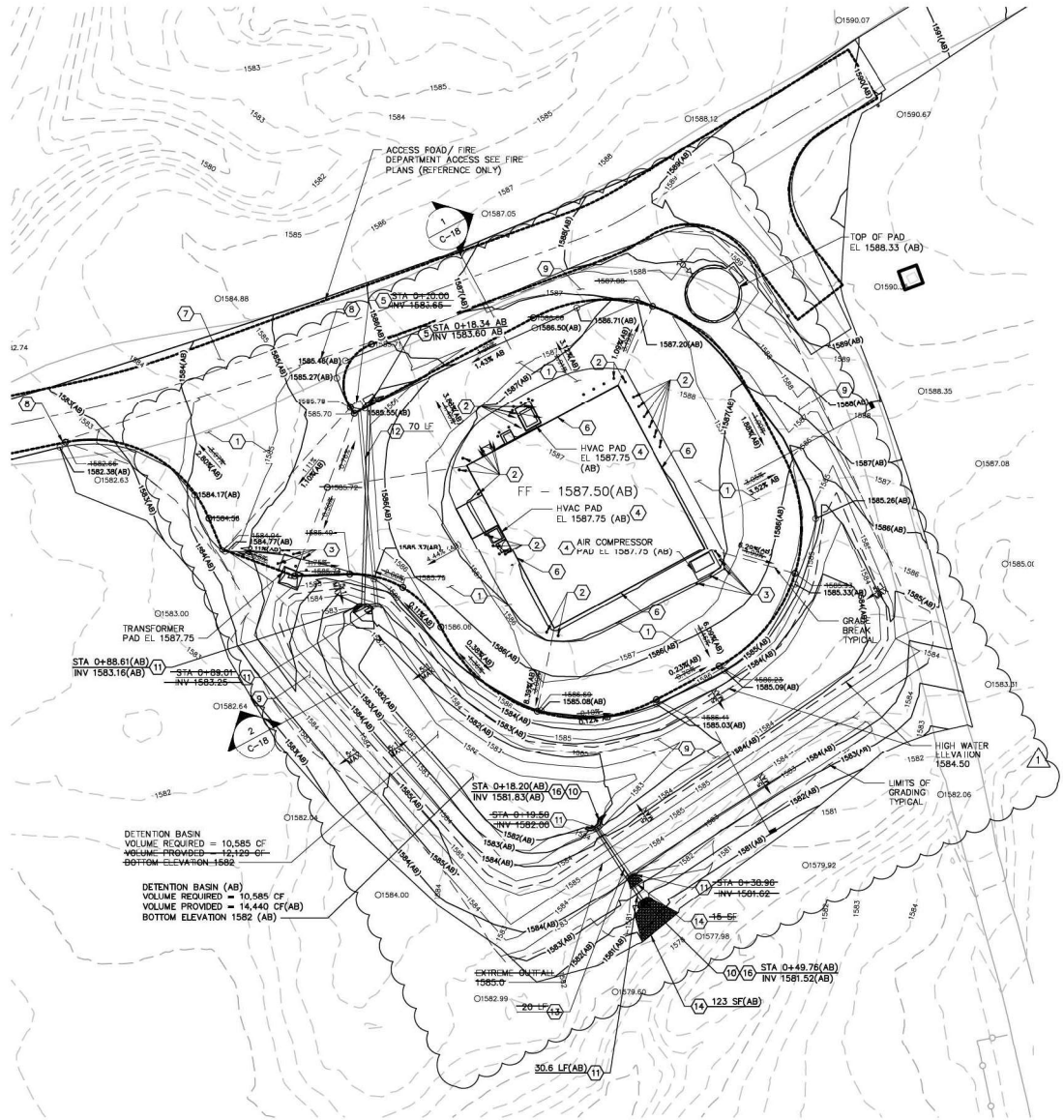
GWTF SITE PLAN AND HORIZONTAL CONTROL

SCALE: 1"=20'

C-16

SHEET 17 OF 22

User:PROR Spec:AUS-NOSMOD File:D:\ACAD\PRO\3994003 - UPCO DW\DESIGN DRAWINGS\CITY OF PHOENIX\COMBINED GRADING PLANS\C-16.DWG Scale:1:1 SaveDate:1/24/2019 Time:08:33 Plot Date: Prior, Jenni, 5/3/2019, 08:43 : Layout:17



CONSTRUCTION NOTES:

1. INSTALL 8-IN THICK LAYER OF TYPE B AGGREGATE BASE PER MAG SPECIFICATION SECTIONS 701 AND 702 AS NON-PAVED ROADWAY ACCESS AND PARKING AS INDICATED. ABC SHALL BE COMPACTED PER MAG STANDARD SPECIFICATION SECTION 310.
2. INSTALL TYPE 1 BOLLARD PER MAG STANDARD DETAIL 140. TYPICAL SPACING UNLESS OTHERWISE NOTED IS 1-FT FROM PROTECTED STRUCTURE.
3. INSTALL TYPE 2 BOLLARD PER MAG STANDARD DETAIL 140.TYPICAL SPACING UNLESS OTHERWISE NOTED IS 1-FT FROM PROTECTED STRUCTURE.
4. PAD ELEVATIONS FOR HVAC, TRANSFORMER, FIRE TANK AND GENERATOR PADS ARE TOP OF CONCRETE AND NOT FINISH GRADE.
5. INSTALL TYPE F CATCH BASIN PER MAG STANDARD DETAIL 535. SEE PROFILE ON SHEET C-21.
6. FINISH GRADE AT THE IMMEDIATE EXTERIOR OF THE BUILDING IS 1587.58.
7. CONSTRUCT 20-FT WIDE ACCESS ROAD SEE SHEETS C-19 AND C-20 (REFERENCE ONLY).
8. MATCH EXISTING GRADE.
9. PLACE A 2-IN LAYER OF DECOMPOSED GRANITE, TO MATCH EXISTING DESERT COBBLE, OVER AREAS DISTURBED BY CONSTRUCTION THAT ARE NOT THE WATER TREATMENT FACILITY OR INDICATED FACILITY ACCESS ROAD. DECOMPOSED GRANITE SHALL MEET THE REQUIREMENTS OF THE CITY OF PHOENIX ZONING ORDNANCE 202 AND THE PHOENIX SUPPLEMENT TO MAG STANDARD SPECIFICATION SECTION 430.
10. INSTALL U-TYPE HEADWALL PER MAG STANDARD DETAIL 501. SEE SHEET C-21 FOR OUTLET PROFILE.
11. INSTALL 12-IN TYPE IV CONCRETE PIPE. INVERTS AND LENGTH AS NOTED. TRENCHING ANC BACKFILL PER CITY OF PHOENIX STANDARD DETAIL P1220, TYPE E, EXCEPT SURFACE REPLACEMENT PER NOTE 1. SEE STORM DRAIN PROFILE ON SHEET C-21.
12. INSTALL 12-IN HDPE PIPE WITH 4-IN HINGED ORIFICE PLATE. INVERTS AND LENGTH AS NOTED. HDPE PIPE SHALL BE DUAL WALL WITH A SMOOTH INTERIOR AND EXTERIOR CORRUGATIONS AND SHALL MEET THE REQUIREMENTS OF ASTM F2648. GASKETS SHALL MEET THE REQUIREMENTS OF ASTM F477 AND BE INSTALLED BY THE MANUFACTURER. TRENCHING PER CITY OF PHOENIX STANDARD DETAIL P1200 TYPE E, EXCEPT DECOMPOSED GRANITE SHALL BE PLACED PER NOTE 11. SEE OUTLET PROFILE ON SHEET C-21.
13. INSTALL RIP RAP EROSION PROTECTION PER DETAIL ON SHEET C-21.
14. BASIN SLOPE SHALL NOT BE STEEPER THAN 5:1.
15. BASIN SHALL NOT BE DEEPER THAN 3-FEET.
16. INSTALL SAFETY RAIL PER MAG STANDARD DETAIL 146.

EARTHWORKS:

CUT	867 CY
FILL	589 CY
NET CUT	278 CY

NOTE: NO ADJUSTMENT HAS BEEN MADE TO CUT AND FILL NUMBERS TO ACCOUNT FOR EITHER EXCAVATION OR FILL SHRINKAGE OR EXPANSION.

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KIVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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PHOENIX, ARIZONA

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DATE: MAY 2017
PROJECT NO.: 3994003
FILE NAME: C-17
DESIGNED BY: JLP
DRAWN BY: JP
CHECKED BY: MN

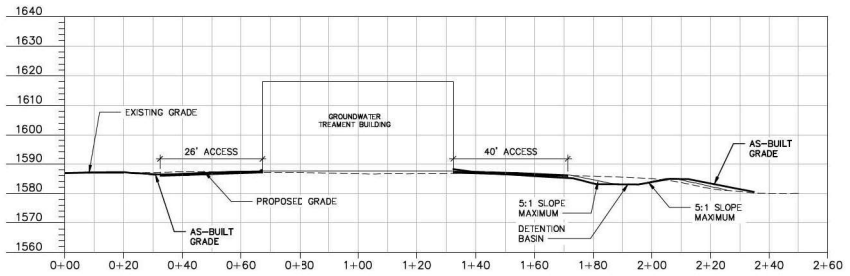
SHEET TITLE

GWTF AREA GRADING & DRAINAGE PLAN

SCALE: 1"=20'

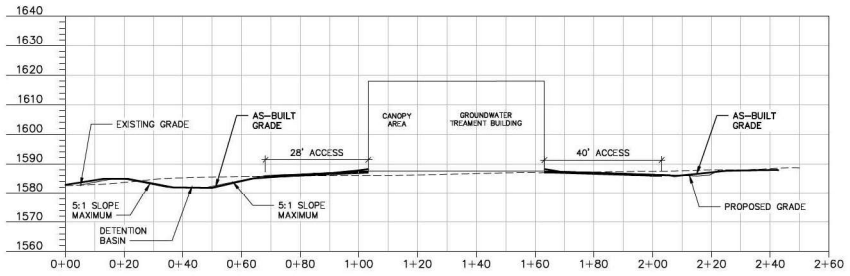
C-17
SHEET 18 OF 22

User:PROR Spec:AUS-NOSMOD File:D:\ACAD\PROJ\3994003 - UPCO DIV\DESIGN DRAWINGS\CITY OF PHOENIX\COMBINED GRADING PLANS\C-17.DWG Scale:1:1 SavedDate:2/6/2019 Time:10:58 Plot Date: Prior, xrns: 5/6/2019, 10:58 ; Layout:18



1 C-17 **SECTION 1**

SCALE: 1" = 20' HORIZONTAL
SCALE: 1" = 1' VERTICAL



2 C-17 **SECTION 2**

SCALE: 1" = 20' HORIZONTAL
SCALE: 1" = 1' VERTICAL

CONSTRUCTION NOTES:

1. BUILDING SHOWN FOR REFERENCE ONLY. SEE STRUCTURAL PLANS FOR BUILDING DETAILS.
2. BUILDING FOUNDATION NOT SHOWN FOR CLARITY.

HORIZONTAL SCALE: 1" = 20'

VERTICAL SCALE: 1" = 4'

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KIVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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DATE: FEBRUARY 2018
PROJECT NO.: 3994003
FILE NAME: C-18
DESIGNED BY: JLP
DRAWN BY: JP
CHECKED BY: MN

SHEET TITLE

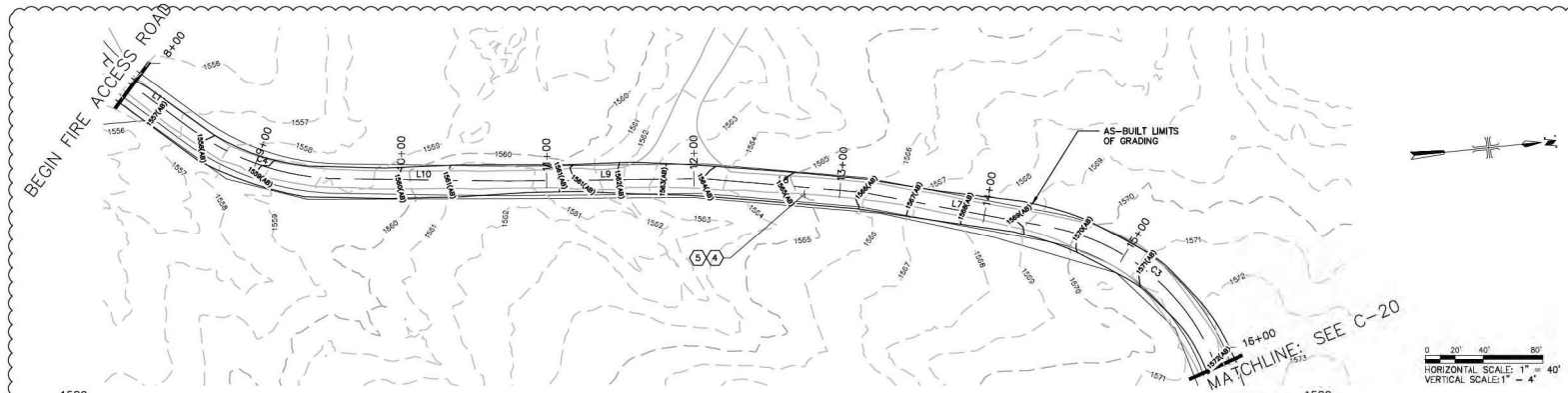
GWTF AREA SECTIONS

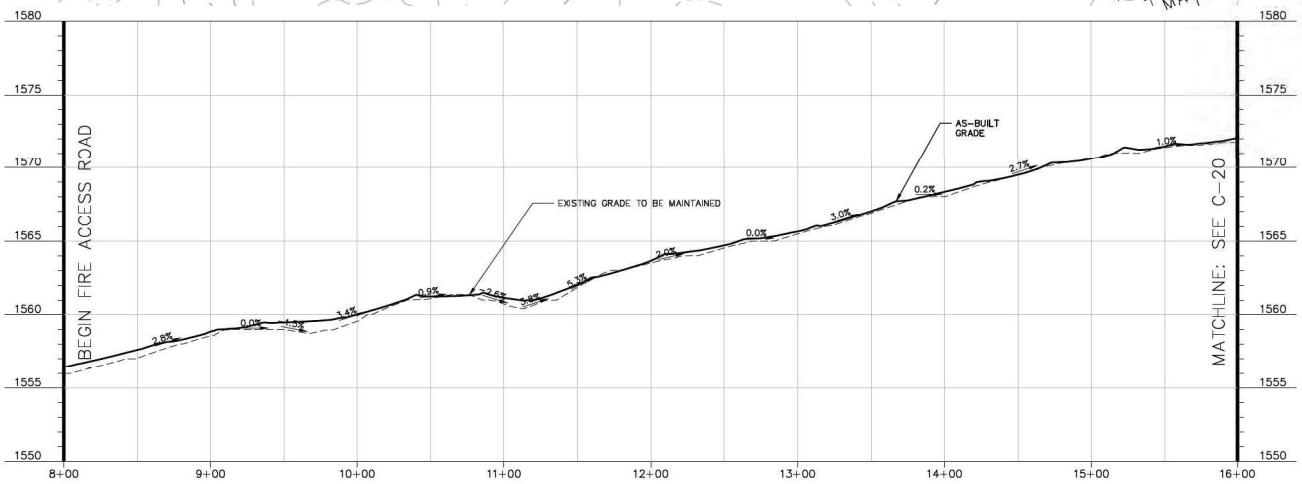
SCALE: 1"=20'

C-18

SHEET 19 OF 22

User:PRIOR Spec:AUS-NCSMOD File:\\ACAD\PRO\3994003 - UPCO DIV\DESIGN DRAWINGS\CITY OF PHOENIX\COMBINED GRADING PLANS\C-18.DWG Scale:1:1 SavedDate:1/19/2019 Time:09:22 Plot Date: Prior, Jenn, 5/3/2019, 07:23 - Layout:19





ACCESS ROAD

STATION: 8+00 TO STATION 16+00

Access Road				
Number	Length	Radius	Line/Chord Direction	A Value
L5	102.210		N74° 04' 41.73"E	
L6	112.372		N76° 04' 51.41"E	
L7	129.636		N16° 19' 22.75"E	
L8	108.847		N10° 41' 57.17"E	
L9	133.042		N05° 07' 46.51"E	
L10	115.730		N06° 37' 39.00"E	
L11	59.955		N42° 10' 02.65"E	
L12	292.159		S76° 00' 48.63"E	
L13	156.840		N13° 37' 54.55"E	
L14	37.435		N37° 19' 57.28"E	
L15	39.692		N33° 31' 13.81"E	

Access Road				
Number	Length	Radius	Line/Chord Direction	A Value
C1	43.648	300.000	N74° 16' 56.04"E	
C2	22.892	300.000	N76° 15' 51.46"E	
C3	156.446	150.000	N46° 12' 07.08"E	
C4	108.550	175.000	N24° 23' 50.83"E	
C5	107.895	100.000	N73° 04' 37.01"E	
C6	70.964	45.000	N58° 48' 32.96"E	
C7	41.366	100.000	N25° 28' 55.91"E	
L1	43.132		N22° 32' 08.78"E	
L2	56.015		N58° 07' 04.31"E	
L3	145.550		N70° 06' 50.88"E	
L4	165.621		N78° 27' 01.19"E	

CONSTRUCTION NOTES:

1. MINIMUM WIDTH OF PROPOSED ACCESS ROAD IS 20-FT.
2. CONSTRUCT NEW SECTION OF ASPHALT ACCESS ROAD 3-IN AC PER CITY OF PHOENIX SUPPLEMENT TO MAG SPECIFICATION 321 ON 7-IN TYPE B AGGREGATE BASE OR RECYCLED ASPHALT PER CITY OF PHOENIX SUPPLEMENT TO MAG SPECIFICATION 701. ASPHALT SHALL BE 1/2-IN MIX DESIGN. PLACEMENT OF BASE COURSES SHALL BE PER CITY OF PHOENIX SUPPLEMENT TO MAG STANDARD SPECIFICATION 310.
3. SAWCUT ASPHALT TO CLEAN EDGE AND REMOVE. APPLY TACK COAT PER MAG SPECIFICATION SECTION 321.4 PRIOR TO NEW ASPHALT PLACEMENT.
4. DEMOLISH AND REMOVE EXISTING ASPHALT ALONG ACCESS ROAD.
5. CONSTRUCT NEW SECTION OF GRAVEL ACCESS ROAD, 8-IN TYPE B AGGREGATE BASE OR RECYCLED ASPHALT PER MAG SPECIFICATION SECTION 701.
6. EXISTING ASPHALT MAY BE CRUSHED AND USED IN GRAVEL ROAD CONSTRUCTION AS ROAD BASE.
7. NO ADJUSTMENTS TO EXISTING GRADE ARE PROPOSED THE NEW ASPHALT AND GRAVEL ACCESS ROAD. NEW ROAD SHALL MATCH EXISTING GRADES. SLOPES SHOW REPRESENT EXISTING ROAD SLOPES. NEW ROAD MAY ADJUST SLIGHTLY WITH PLACEMENT OF GRAVEL VERSUS ASPHALT.

REFERENCE ONLY NOT A PART

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KIVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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25401 N. CENTRAL AVENUE
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3994003

NO.	DATE	ISSUED FOR	BY
1	2/2018	GWTF ADDITION	JLP

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PROJECT NO.: 3994003
FILE NAME: C-19
DESIGNED BY: JLP
DRAWN BY: JP
CHECKED BY: MN

SHEET TITLE

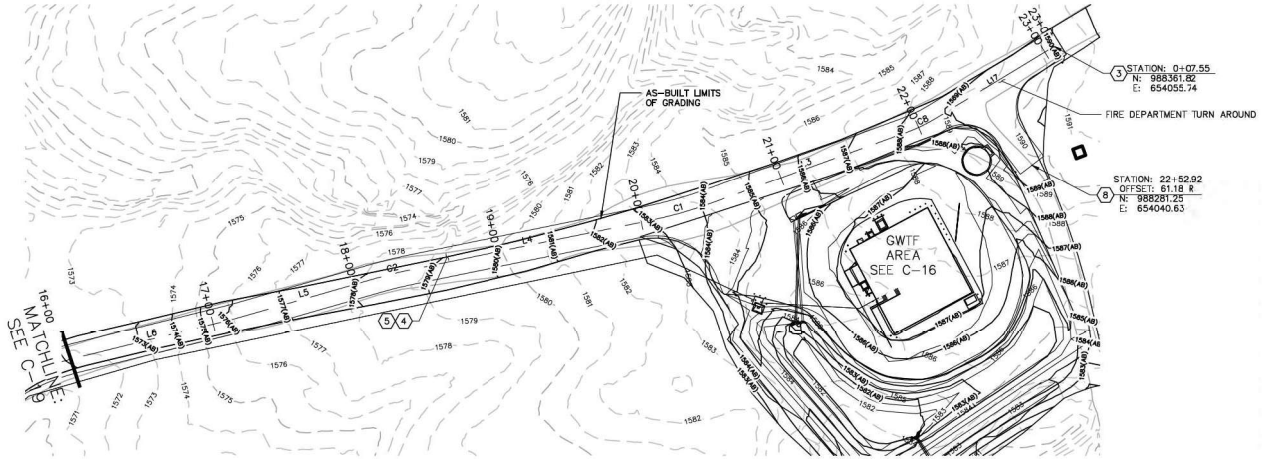
GWTF ACCESS ROAD PLAN AND PROFILE 1

SCALE: 1"=40'

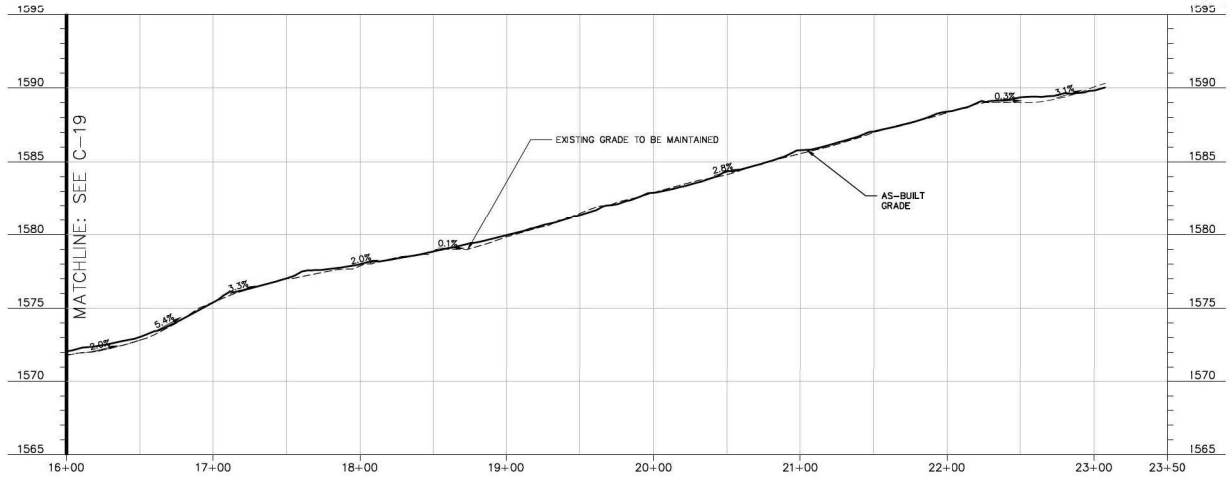
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SHEET 20 OF 22

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Access Road			
Number	Length	Radius	Line/Chord Direction
C1	43.648	300.000	N74° 16' 56.04"E
C2	22.892	300.000	N76° 15' 51.46"E
C3	156.446	150.000	N46° 12' 07.08"E
C4	108.550	175.000	N24° 23' 50.83"E
C5	107.895	100.000	N73° 04' 37.01"E
C6	70.964	45.000	N58° 48' 32.96"E
C7	41.366	100.000	N25° 31' 35.78"E
C8	21.659	100.000	N25° 28' 55.91"E
L1	43.132		N22° 32' 08.78"E
L3	142.893		N70° 06' 50.88"E
L4	165.621		N78° 27' 01.19"E
L5	102.210		N74° 04' 41.73"E
L6	112.372		N76° 04' 51.41"E
L7	129.636		N16° 19' 22.75"E
L8	108.847		N10° 41' 57.17"E
L9	133.042		N05° 07' 46.51"E
L10	115.730		N06° 37' 39.00"E
L11	59.955		N42° 10' 02.65"E
L12	292.159		S76° 00' 48.63"E
L13	156.840		N13° 37' 54.55"E
L14	37.435		N37° 19' 57.28"E
L15	39.692		N33° 31' 13.81"E
L16	94.561		N58° 49' 57.56"E



ACCESS ROAD

STATION: 8+00 TO STATION 16+00

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'

CONSTRUCTION NOTES:

1. MINIMUM WIDTH OF PROPOSED ACCESS ROAD IS 20-FT.
2. CONSTRUCT NEW SECTION OF ASPHALT ACCESS ROAD 3-IN AC PER CITY OF PHOENIX SUPPLEMENT TO MAG SPECIFICATION 321 ON 7-IN TYPE B AGGREGATE BASE OR RECYCLED ASPHALT PER CITY OF PHOENIX SUPPLEMENT TO MAG SPECIFICATION 701. ASPHALT SHALL BE 1/2-IN MIX DESIGN. PLACEMENT OF BASE COURSES SHALL BE PER CITY OF PHOENIX SUPPLEMENT TO MAG STANDARD SPECIFICATION 310.
3. SAWCUT ASPHALT TO CLEAN EDGE AND REMOVE. APPLY TACK COAT PER MAG SPECIFICATION SECTION 321.4 PRIOR TO NEW ASPHALT PLACEMENT.
4. DEMOLISH AND REMOVE EXISTING ASPHALT ALONG ACCESS ROAD.
5. CONSTRUCT NEW SECTION OF GRAVEL ACCESS ROAD, 8-IN TYPE B AGGREGATE BASE OR RECYCLED ASPHALT PER MAG SPECIFICATION SECTION 701.
6. EXISTING ASPHALT MAY BE CRUSHED AND USED IN GRAVEL ROAD CONSTRUCTION AS ROAD BASE.
7. NO ADJUSTMENTS TO EXISTING GRADE ARE PROPOSED THE NEW ASPHALT AND GRAVEL ACCESS ROAD. NEW ROAD SHALL MATCH EXISTING GRADES. SLOPES SHOW REPRESENT EXISTING ROAD SLOPES. NEW ROAD MAY ADJUST SLIGHTLY WITH PLACEMENT OF GRAVEL VERSUS ASPHALT.
8. TERMINATE FIRE DEPARTMENT TURN AROUND WITH THICKENED PAVEMENT EDGE, TYPE A PER MAG STANDARD DETAIL 201.

REFERENCE ONLY NOT A PART

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KIVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28

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FILE NAME: C-20
DESIGNED BY: JLP
DRAWN BY: JP
CHECKED BY: MN

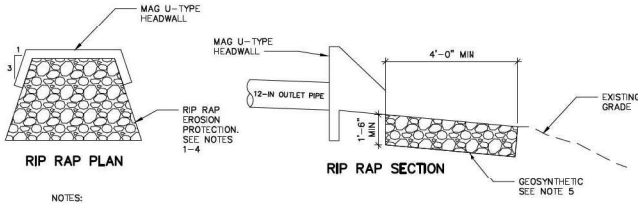
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GWTF ACCESS ROAD PLAN AND PROFILE 2

SCALE: 1"=40'

C-20
SHEET 21 OF 22

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RIP RAP PLAN

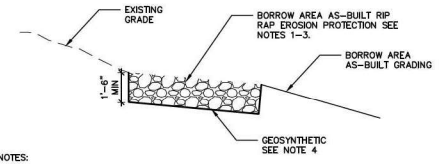
RIP RAP SECTION

NOTES:

1. RIP RAP SHALL CONFORM TO MAG STANDARD SPECIFICATION 703.
2. RIP RAP MINIMUM D50 SHALL BE 5-INCHES.
3. RIP RAP PLACEMENT SHALL BE PER MAG STANDARD SPECIFICATION 220.
4. RIP RAP APRON SHALL SPREAD OUT TO THE SIDE FROM THE TERMINATION OF THE MAG HEADWALL AT A RATE OF 1 TO 3 ACROSS SLOPE TO DOWNSLOPE FOR THE LENGTH OF THE APRON.
5. GEOSYNTHETIC SUITABLE FOR FILTRATION AND DRAINAGE SHALL BE PLACED BETWEEN PREPARED SUBGRADE AND RIP RAP EROSION PROTECTION PER MAG STANDARD SPECIFICATION 796, CLASS B.

RIP RAP PROTECTION

NTS

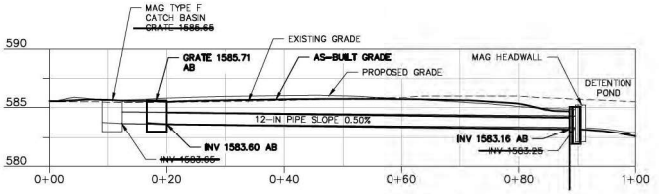


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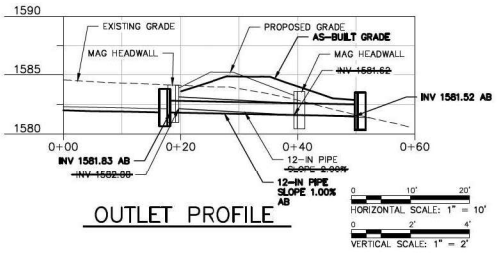
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RIP RAP PROTECTION

NTS



STORM DRAIN PROFILE



OUTLET PROFILE

1

HILLSIDE PRESERVATION, H#: NO DEVELOPMENT, NOT CREATED KIVA #: 17-1576 ENVR #: 1703485 NOI#: AZCN71525 QS #: 47-28 1

ARCADIS

CONSULTANTS

SEALS

CITY OF PHOENIX
UTC AEROSPACE SYSTEMS
25401 N. CENTRAL AVENUE
PHOENIX, ARIZONA

FORMER UPCO FACILITY SOIL REMEDIATION

3994003

NO.	DATE	ISSUED FOR	BY
1	2/2018	GWTF ADDITION	JLP

COPYRIGHT: ARCADIS U.S., INC. 2017

DATE: ~~MARCH~~ 2018
PROJECT NO.: 3994003
FILE NAME: C-21
DESIGNED BY: JLP
DRAWN BY: JP
CHECKED BY: MN

SHEET TITLE

DETAIL SHEET

SCALE: NONE

C-21

SHEET 22 OF 22 1

User:PRIOR SpecAUS-NCSMOD File2\VCAD\PROJ\3994003 - UPCO DWG\DESIGN DRAWINGS\CITY OF PHOENIX\COMBINED GRADING PLANS\C-21.DWG Scale:1:1 SaveDate:4/24/2019 Time:08:42 Plot Date: Prior, Jenn, 5/3/2019, 07:34 - Layout:22

Appendix E

UPCO Environmental Review Summary

September 2019

Geotechnical Testing & Inspections
Geotechnical * Environmental* Materials Engineering
7650 E. Redfield Rd, Suite "D-7" * Scottsdale, Arizona 85260 (480) 659-6630 * Fax (480) 659-7280
Providing Services in the United States and Internationally URL: WWW.GTIAZ.COM

September 4, 2019

GTI Project No. 195505E

To: **Law Office of David Cisiewski**
11811 North Tatum Blvd #1051
Phoenix, AZ 85028

Attention: Mr. David Cisiewski

Subject: Environmental Review for the **Universal Propulsion Company (UPCO)** parcel located at the Northwest Corner of Central Avenue and Happy Valley Road in Phoenix, Maricopa County, Arizona.

Dear Mr. Cisiewski:

In accordance with your request and authorization, Geotechnical Testing and Inspections (GTI) has completed a review of the files and records at the Arizona Department of Environmental Quality ("ADEQ") related to the past use, remedial investigations and remedial action plans for the former **Universal Propulsion Company (UPCO)** property located at the northeast corner of Central Avenue and Happy Valley Road, Phoenix, Arizona ("Property"). It is our understanding that the Property which was previously owned and operated by UPCO will be developed partially for residential use and partly for commercial and commerce park uses. The purposes of this report is to provide a summary of information contained within the ADEQ files such that current and future owners and developers of the Property have a full understanding of the past uses and environmental conditions on various portions of the Property, as well as a present summary of findings and determinations by ADEQ.

EXECUTIVE SUMMARY

The following is a summary of the findings included within this report:

- The UPCO facility was used and operated for the testing and manufacturing of various propellants and related devices from 1972 until its decommissioning in 2009.

- These past uses of the Property created environmental impacts to the soil and groundwater within discrete and isolated areas of the Property.

- For more than ten (10) years, numerous environmental professionals have extensively investigated and tested the Property. ADEQ has closely monitored this process.

- Investigations revealed the presence of certain contaminants of potential concern ("COPC") in the soil and groundwater on certain areas of the Property. Such COPC are located in limited and well-defined areas of the Property.

- The primary contaminants of potential concern include perchlorate, arsenic, lead and a volatile organic compound.

- By and through a Consent Decree, ADEQ and UPCO agreed to complete investigations and remedial actions on those limited areas of the Property which were determined to have been impacted by the COPC and to work with ADEQ to establish clean-up levels for the COPC.

- ADEQ has established a Residential Soil Remediation Level ("SRL") for perchlorate to be protective of direct contact to humans in a residential setting at 55 parts per million ("PPM"). Based upon all the investigation and testing at the UPCO facility a clean-up level of 16 PPM has been established for the UPCO facility, thus setting a clean-up level at the UPCO facility three times more stringent than the regulatory clean-up level.

- Based upon the reports and tests within the ADEQ files, on those portions of the Property proposed for residential use, no perchlorate was discovered at concentration levels above the laboratory detection limit of 0.04 PPM. The laboratory detection limit is 1,375 times lower than the Residential SRL established by ADEQ of 55 PPM to be protective of direct contact with humans in a residential setting and 400 times lower than the site-specific clean-up standard established by ADEQ for the UPCO facility of 16 PPM.

- The Arizona Department of Health Services ("ADHS") has established a Heath Based Guidance Level for perchlorate in groundwater to be protective of ingestion by humans in a residential setting at 14 parts per billion ("PPB"). Based upon all the investigation and testing at the UPCO facility a remedial action goal of 14 PPB has been established for the UPCO facility, thus meeting the Health Based Guidance Level established by ADHS.

- Based upon the reports and tests within the ADEQ files, the highest concentration of perchlorate in the groundwater under the portion of the Property proposed for residential use was 2.6 PPB, which is more than 5 times below the ADHS level for perchlorate in groundwater and remedial goal for the UPCO facility.

- The drilling of wells and the use of groundwater for human consumption anywhere on the Property is prohibited by the Declaration of Environmental Use Restriction recorded upon the Property.

- Additionally, based upon the historical groundwater testing and data collection at the Property the reginal groundwater gradient (direction of flow) is toward the southwest and away from the existing residences north of the northern boundary line of the Property.

- An additional Declaration of Environmental Use Restriction has been finalized and signed by the owner of the Property which will establish additional engineering and institutional controls upon the limited portion of the land impacted by the COPC and ensure final remediation of the environmental impact.

- ADEQ has established an SRL for arsenic and lead to be protective of direct contact to humans in a residential setting at 10 ppm and 400 ppm, respectively. Based upon all the investigation and testing at the UPCO facility, a remedial action goal of 10 ppm has been established for arsenic and 290 ppm for lead, thus establishing a clean-up level at the UPCO facility equal to or more stringent than the regulatory clean-up level.

- Based upon the reports and tests within the ADEQ files, all surface soil tested within those portions of the Property proposed for residential development resulted in concentrations of arsenic and lead that was below the established ADEQ Residential SRL. It is also noteworthy that arsenic is a a common and naturally occurring element in Arizona soils.

- UPCO has designed and implemented soil and groundwater corrective actions for those limited portions of the Property that were determined to have been environmentally impacted, all of which have been reviewed and approved by ADEQ.

- Through the extensive investigations and testing completed at the Property over many years, well defined areas have been established for the future use and development of the Property.

- The future use of these defined areas has been further regulated by the recording of Declarations of Environmental Use Restrictions upon the Property which provide for ADEQ regulation of allowed land uses, as well as the ongoing monitoring and enforcement of the final remediation of all the COPC through the approved corrective action measures.

HISTORY OF THE SITE

The UPCO facility was located at 25401 North Central Avenue in Phoenix, Maricopa County, Arizona and was initially constructed in 1972. The UPCO facility was operated until 2009 when operations were transferred to another out-of-state facility and demolition of the site buildings was completed in early 2010. During the term of its operation, UPCO operated under a RCRA Part B Permit. The facility conducted various actions as part of the closure of the RCRA Part B Permit which included the issuance of a RCRA Closure Report and Closure Certification, which were approved by ADEQ in 2009.

The Property consisted of approximately 160 acres, portions of which were used for operations, manufacturing, storage, and the placement of administrative buildings. The operational areas of the Property were segregated into seven (7) discrete areas. These areas are shown on Figure 1 and described below.

A-Complex - This complex included four (4) buildings used for administration and management. Based upon historical uses it was determined that this area would not be impacted by any contaminants of potential concern ("COPC")

B-Complex - This complex included numerous free-standing buildings. This complex was used for the manufacturing and testing of ejection seats, explosive bolts, explosive cutters and other similar items. Additionally, B-Complex housed an x-ray inspection facility which was used to inspect rocket motors.

C-Complex - This complex included numerous free-standing buildings. This complex was used for oxidizer grinding, castable propellants and compound mixing. C-Complex also included several research and development areas devoted to the improvement of products and performance, as well as facilities used for quality assurance and quality control assessment.

D-Complex - This complex had numerous free-standing buildings. This complex was used for the testing and manufacturing of solid propellant and waterbore process. Within the D Complex was the Old Burn Area, the Thermal Treatment Unit (TTU) and Waterbore Area. The Old Burn Area was used for the burn off-specification energetic materials and devices. The Old Burn area was operational from the 1970's to 1983. In 1983 the operations were moved to the Open Burn Unit (OBU) within the New Burn Area. The TTU portion of the complex was used for the burn off-specifications solid propellant materials. Also, since 1983 a high-pressured water spray had been used to remove solid propellant and binders from rocket motor tubes so that the tubes can be reused. This process was known as Waterbore and was completed within the named Waterbore Area of the D-Complex.

E-Complex - This complex contained portable fabricated metal storage containers that were used for the temporary storage of energetic materials and devices awaiting off-site transport. E-Complex is not shown on Figure 1 below, as these storage containers were periodically moved across the various "Complex areas".

F-Complex - This complex had various buildings and structures. This complex was used for the manufacturing of powder-based energetic formulations, assembly operations and quality assurance and quality control.

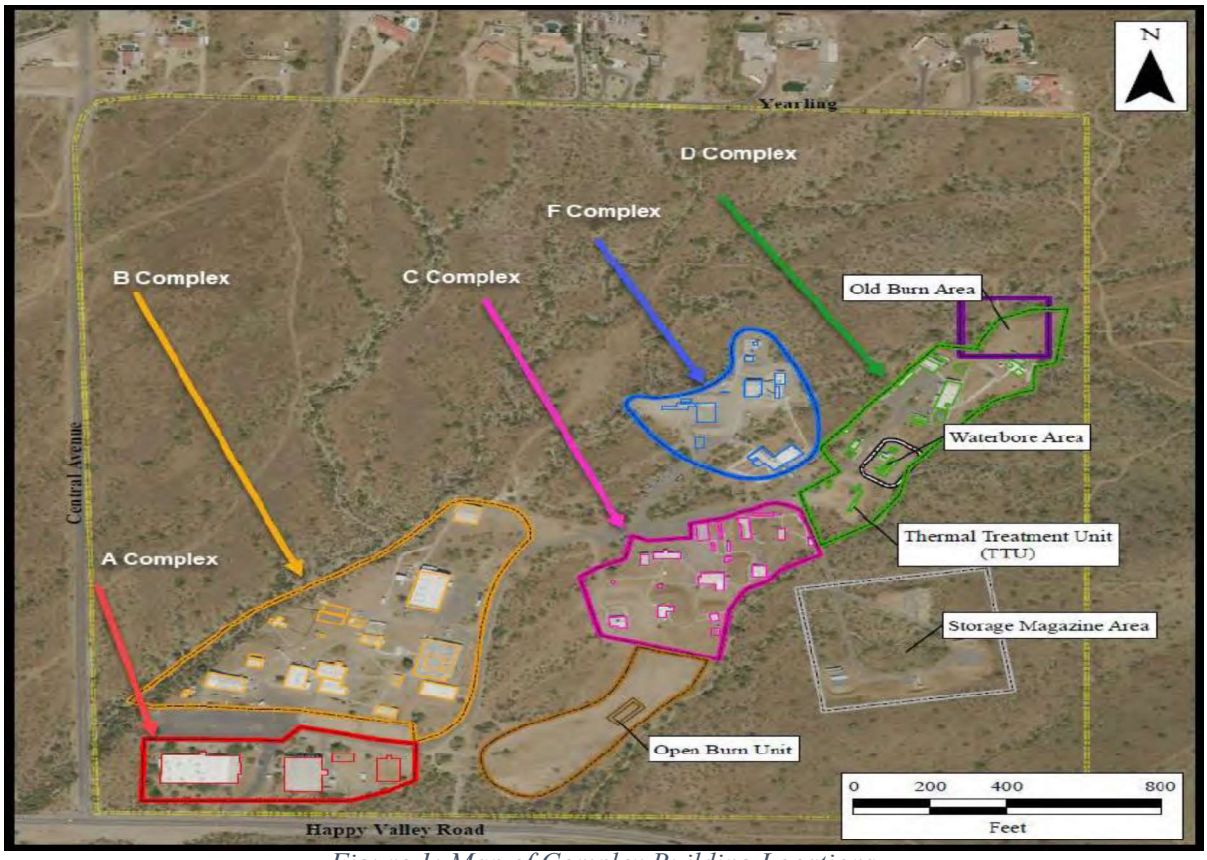


Figure 1: Map of Complex Building Locations

UPCO's operations were limited to these well-defined "Complex areas," which are tightly clustered in the center of the Property. Based upon all the information contained within the ADEQ files, those portions of the Property outside of the defined Complex areas have not been environmentally impacted by UPCO's prior operations.

PAST STUDIES

Site Investigations. The UPCO Facility has been under extensive monitoring and testing since the 1990's. Through the completion of various site assessments under the guidance of regulatory agencies, several potential environmental concerns were found by independent consultants and were brought to the attention of UPCO, as well as the Arizona Department of Environmental Quality (ADEQ). These site assessments included the collection and laboratory analysis of hundreds of soil and groundwater samples, the completion of numerous soil borings and the installation of groundwater monitoring wells to depths in excess of 1300 feet, the completion of soil vapor investigations, as well as geophysical testing to clearly map the subsurface soil and rock layers so as to define geologic conditions at the Property. In addition to the testing and investigation of the Property, periodic water sampling and testing from the private residential water wells located immediately north of the Property was conducted from 2004 until February, 2011.

After the completion of this testing by various environmental professionals and the completion of a comprehensive remedial investigation of the entire Property (see Final Remedial Investigation Report, dated June, 2011 prepared by Arcadis-US, Inc) it was determined that elevated concentrations of perchlorate, metals including arsenic and lead, as well as some Volatile Organic Compounds (VOCs) were present in the groundwater and soils within isolated and discrete areas of the Property.

Soil Investigation and Testing. Arcadis provided soil characterization for the Property in July and August 2004 and 2005 as well as February and March of 2008. The soil investigation included the testing for chemicals including Perchlorate, Metals, Nitrate, Cyanide, SVOCs, Acetate, Sodium Azide, Dioxions, High Explosives and pH, as well as various other analytics. The soil testing within the defined Complex areas included the following:

Location	Number of Borings	Samples Obtained
B-Complex	39	117
C-Complex	22	98
Old Burn Area	51	112
TTU Area	30	104
Waterbore Area	15	155
SMA	27	61
F-Complex	22	71
New Burn Area	47	147

In addition to samples obtained during the subsurface soil sampling, surface soil samples were collected from various location across the Property, including along the north boundary line adjoining Yearling Road and the west boundary line along Central Avenue. Laboratory analysis of these soil samples indicated the presence of perchlorate, arsenic, and lead at elevated concentrations limits within the Old Burn Area, New Burn Area and one location within the B-Complex. Soil samples outside of these defined areas, including the surface soil samples obtained along the north and west boundary lines of the Property, did not indicate the presence of arsenic, lead, or any other COPC above the ADEQ established action levels. Specifically, perchlorate was not found to be present above the laboratory detection limit of 0.04 PPM. The laboratory detection limit is 1,375 times lower than the Residential SRL established by ADEQ of 55 PPM to be protective of direct contact with humans in a residential setting and 400 times lower than the site-specific clean-up standard established by ADEQ for the UPCO facility of(16 PPM.

Groundwater Investigation and Testing. Arcadis reported hydrological investigations being conducted between December 2003 and April 2011. The hydrological investigations included the installation of monitoring wells, core samples, and geophysical logs. Based these investigations it was determined that the reginal groundwater gradient is from the northeast toward the southwest. The monitoring wells were installed at various depths and locations across the Property based upon former operational areas of known impact, geologic conditions and a defined risk assessment profile. Subsequent to installing the monitoring wells, quarterly groundwater samples were obtained and analyzed by a certified laboratory to determine the impact of any COPC across the site groundwater. The monitoring well samples obtained showed two COPC within the groundwater, including Perchlorate and 1,1DCE, which is a volatile

organic compound. During these various phases of groundwater testing, COPC's were identified in monitoring wells MW-1, MW-2, MW-5, MW-6 MW-13 and MW-19, all of which are located within the central former operational areas of the UPCO facility.

ADEQ also required private wells, located immediately north of the Property along Yearling Road, to be tested to ensure private drinking water in the area was not impacted by the previous operational activities performed by UPCO. The private wells were sampled beginning in 2004 and based upon the information contained within the Arcadis reports on file with ADEQ, the highest concentration of perchlorate within any private well was found to be 3.1 PPB, which level is more than 4 times below the action level set by ADHS based upon a Heath Based Guidance Level for perchlorate in groundwater. This testing data is supported by the determined groundwater gradient being toward the southwest and away from these existing residences along Yearling Road. The locations of all the monitoring wells installed upon the Property, as well as the locations of the private wells along Yearling Road north of the Property, are shown on Figure 2 below.



Figure 2: Location of Monitoring Wells

Summary Determinations. As documented in the reports and data on file with ADEQ, the areas of environmental impact at the Property have been defined to be an approximately 57 acre tract located in the south-central portion of the Property. This area is generally depicted in Figure 2 above as bounded by the black outlined area and that labeled "For Non-Residential/Commercial/Industrial Use Only" on Figure 3, later in this report. The areas outside these boundaries have been determined not to have been impacted by the COPC's.

ESTABLISHED CLEAN-UP LEVELS

Based upon the extensive soil and groundwater investigations completed at the Property, the identified COPC, the projected future uses of the Property, and the current use of the lands surrounding the Property, ADEQ established the following clean-up levels for the COPC at the Property:

COPC Clean-Up Standard	Concentration
ADEQ established a Residential Soil Remediation Level ("SRL") for perchlorate to be protective of direct contact to humans in a residential setting	55 parts per million
Established soil clean-up level at the UPCO facility	***16 parts per million***
Arizona Department of Health Services ("ADHS") established a Heath Based Guidance Level for perchlorate in groundwater to be protective of ingestion by humans in a residential setting	14 parts per billion
Established groundwater clean-up level at the UPCO facility	***14 parts per billion***
ADEQ established SRL for arsenic to be protective of direct contact to humans in a residential setting	10 parts per million
Established soil clean-up level for arsenic at the UPCO facility	***10 parts per million***
ADEQ established SRL for lead to be protective of direct contact to humans in a residential setting	400 parts per million
Established soil clean-up level for lead at the UPCO facility	***290 parts per million***

REMEDIAL ACTIONS

Based on over ten years of detailed monitoring and investigation, ADEQ determined that only discrete areas of the Property contained soil and groundwater contamination above the established clean-up levels. Figure 3 below shows an aerial map of the Property identifying those areas that have been determined *not* to have been environmentally impacted, or that contain contamination below the established clean-up levels. Such areas are labeled "For Residential Use". Those areas of the Property that have been

impacted by the COPC at concentrations above the defined clean-up levels, are labeled "For Non-Residential/Commercial/Industrial Use Only".

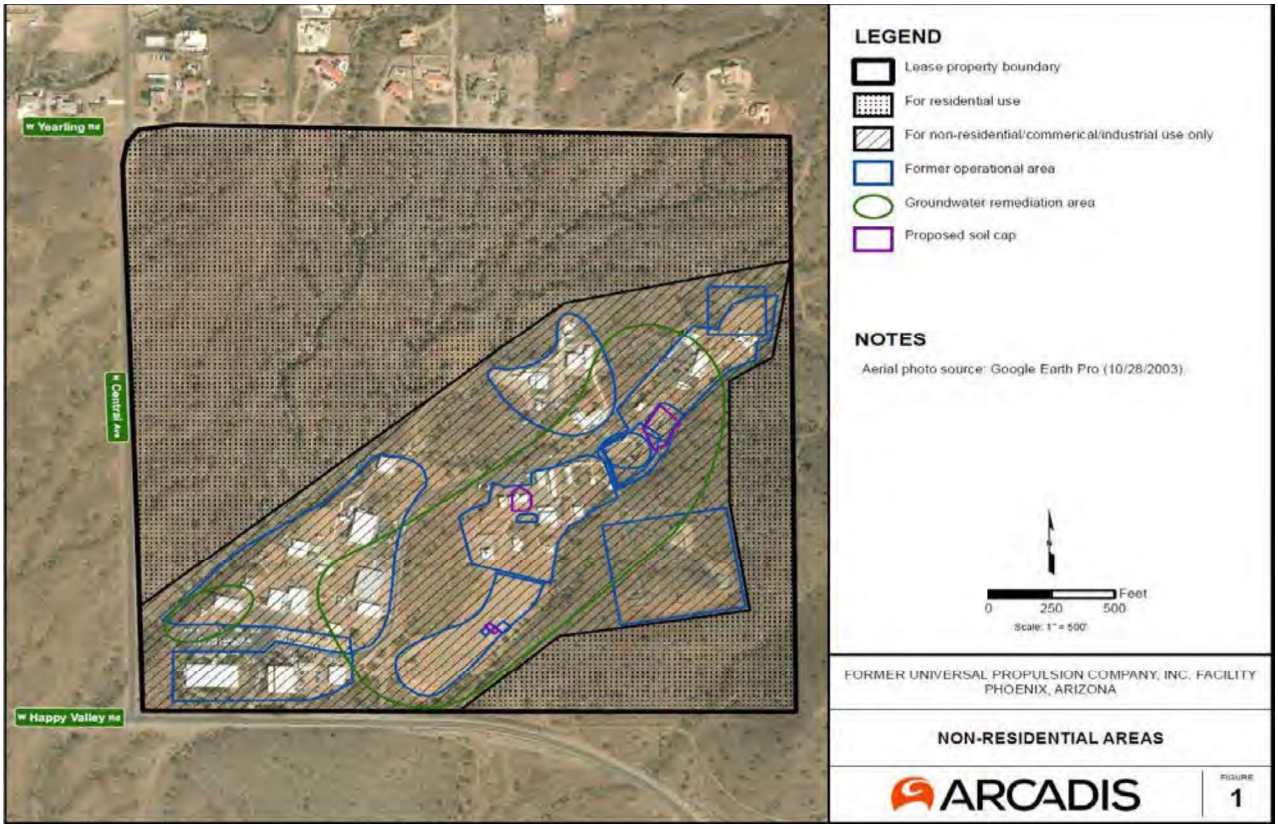


Figure 3: Residential/Non-Residential Areas

In order to ensure future land uses and development of the Property are in compliance with these defined area requirements, ADEQ and UPCO entered into a Declaration of Environmental Use Restriction, with Institution Controls ("First DEUR"), which was recorded upon the Property in 2018. This DEUR (i) requires any owner of the Property to provide prospective purchasers with notice of the prior use of the land and the presence of COPC upon portions of the Property, and (ii) establishes limitations and controls upon the use of groundwater and the installation of wells upon the Property. These restrictions upon the use of groundwater on the Property significantly limit the risk that any human will be affected by contaminated groundwater. Additionally, UPCO and ADEQ have finalized the terms of a second DEUR, which provides further "institutional and engineering controls" ("Second DEUR") upon that portion of the Property determined to have been impacted by the COPC. This Second DEUR is planned to be recorded upon the Property in the near future and will; (i) establish additional engineering and institutional controls related to the approved remedial actions; and (ii) establish long-term financial responsibility for remedial actions, and (iii) finalize the portion of the Property restricted for "Non-Residential/Commercial/Industrial Use Only", as shown in Figure 3 above.

Further, since the completion of the Remedial Investigations in 2011, UPCO and ADEQ have developed and approved remedial action plans for the clean-up of those limited areas of property that have had soil and/or groundwater impact by the COPC's. These remedial actions plans are summarized in a Corrective Measures Study, dated October 30, 2015, prepared by Arcadis. Subsequent to the approval of the Corrective Measures Study and the final design and implementation plans for the approved remedial action processes, UPCO has implemented the Soil Alternative SA-2 remedial action to excavate and transport for off-site disposal much of the impacted soil, as well as construct engineered soil caps in the Waterbore Area, the C-Complex Area and the New Burn Area to reduce the future potential for contact with COPC's in these areas. Additionally, UPCO has installed the ADEQ approved groundwater treatment system which provides for the extraction, treatment and reinjection of groundwater to remove the COPC's from the defined area of groundwater impact. This groundwater treatment system will continue in operation, along with periodic sampling and testing of the groundwater from the existing monitoring wells across the Property, until such time as ADEQ determines that the levels of the COPC on the non-residential portions of the Property have reached the appropriate clean-up levels. Based upon the information obtained from the ADEQ records, as of the writing of this report all of these corrective action measures have been implemented and are fully operational or in the final phases of operational testing.

CONCLUSION

In preparing this report, GTI reviewed numerous reports, documents and data on file with ADEQ dating from 1978 until 2011. Upon review of this information it was determined that operations conducted by UPCO at the Property caused soil and groundwater contamination by three primary COPC in isolated areas of the Property. The responsible parties have been identified and ADEQ is working with them to remediate any existing contamination that is still present today. The monitoring wells located on the Property are still active and being monitored by the required parties. Based upon the historical groundwater testing and data collection at the Property the reginal groundwater gradient is toward the southwest and away from the existing residences north of the northern boundary line of the Property. DEUR's have been established to limit land uses, and restrict the drilling of wells and/or the use of any groundwater on the Property. The prior remedial investigations have established well-defined areas of limited environmental impact and the DEUR's will ensure continuous oversight and completion of the soil and groundwater remediation in accordance with the ADEQ approved corrective action plans.

Based upon the information contained within the ADEQ files reviewed as part of this report, the clean-up levels for the COPC across the entire Property have been established at or well below the ADEQ or ADHS levels mandated to protect human contact. Additionally, since all the private wells that were tested, along with additional and extensive soil, soil vapor, and groundwater testing that was completed for the proposed residential areas resulted in concentrations below the most stringent ADEQ clean-up levels for the Property, the proposed use of these areas for residential purposes has been determined by ADEQ not to present a threat to the future occupants of these area. Additionally, since the established DEUR upon the Property prevents the use of groundwater for any of the future developments upon the Property, there is little likelihood of contact with the groundwater contaminants by future residents or occupants of the Property.

The ADEQ records demonstrate that extensive investigation and testing has been conducted at the Property. Based on this, it is GTI's professional opinion that a clear delineation exists between the environmentally impacted portions of the Property and those that were not impacted by the prior UPCO operations and are acceptable for residential development. Corrective action has been and continues to be implemented for those limited areas that contain contamination above target clean-up levels. The prior investigations of the Property, and the on-going corrective actions implemented as a result, have been completed in accordance with professional industry practices and under the scrutiny of ADEQ. These investigations have resulted in the establishment of site specific clean-up levels that are commensurate with – or in many cases, significantly more stringent than – those established by the relevant state regulatory agencies. Currently, all areas of the Property approved for residential development meet or exceed these stringent clean-up levels.

In support of the findings and statements included in this report, we have attached the following as exhibits for reference purposes, however, as these documents are voluminous, we have included only the narrative portions of these reports, acknowledging that full and complete copies of these documents are on file with ADEQ:

Exhibit A – Final Remedial Investigation Report, dated June 2011
Exhibit B – Corrective Measures Study, dated October 30, 2015
Exhibit C – Soil Alternative SA-2 Completion Summary Report, dated July, 2018

GTI appreciates the opportunity to have provided you with the Environmental Review for the UPCO Property. Please do not hesitate to contact GTI at 480-659-6630 if you have any questions regarding the findings.

Respectfully Submitted,
Geotechnical Testing & Inspections (GTI)

Jennifer M. Jones, M.S.
CEO

Randy Smith, P.E.
Environmental Department Manager



Appendix F

ADEQ Soil Sampling Report

April 2020

SOIL SAMPLING RESULTS REPORT
FORMER UNIVERSAL PROPULSION COMPANY FACILITY
Maricopa County, Arizona

PREPARED FOR:

Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, Arizona 85007

PREPARED BY:

MATRIXNEWORLD

Matrix New World Engineering, Land Surveying and Landscape Architecture, PC
3033 North 44 Street, Ste 120
Phoenix, AZ 85018

DATE:

April 22, 2020

MATRIX PROJECT NO.:

19-967

MATRIXNEWORLD
Engineering Progress

SOIL SAMPLING RESULTS REPORT
FORMER UNIVERSAL PROPULSION COMPANY FACILITY
MARICOPA COUNTY, ARIZONA

PREPARED FOR:

Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, Arizona 85007

DATE:

April 22, 2020

April 22, 2020

Summer Igo
Project Hydrogeologist
Matrix New World Engineering

Date

April 22, 2020

Bridget Hoagland, EIT
Project Engineer
Matrix New World Engineering

Date

April 22, 2020

Harry S. Brenton, RG
Director of Hydrogeological Services
Matrix New World Engineering

Date

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LIST OF ACRONYMS & ABBREVIAITONS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
APS	Arizona Public Service Company
ASTM	American Society for Testing and Materials
BLM	Bureau of Land Management
bls	Below land surface
C.F.R.	Code of Federal Regulations
COC	Constituent of Concern
DEUR	Declaration of Environmental Use Restriction
DQOs	Data Quality Objectives
EPA/USEPA	United States Environmental Protection Agency
ft	Foot
GPL	Groundwater Protection Level
GPS	Global Positioning System
GTI	Geotechnical Testing & Inspections
HASP	Health and Safety Plan
IDW	Investigation-Derived Waste
mg/Kg	Milligram per Kilogram
MS/MSD	Matrix Spike/Matrix Duplicate Spike
nrSRL	Non-Residential Soil Remediation Level
PPE	Personal Protective Equipment
QAPP	Quality Assurance Program Plan
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RFI	Remedial Feasibility Investigation
RI	Remedial Investigation
RPD	Relative Percent Difference
rSRL	Residential Soil Remediation Level
TAT	Turnaround Time
UPCO	Universal Propulsion Company, Inc.
USCS	Unified Soil Classification System
XRF	X-Ray Fluorescence

1.0 INTRODUCTION

This Soil Sampling Results Report, as prepared by Matrix New World Engineering, Land Surveying and Landscape Architecture, PC (Matrix), presents the results from soil sampling activities on associated native land surrounding the former Universal Propulsion Company, Inc. (UPCO) Facility (the Facility) located in Phoenix, Arizona. The location of the UPCO Facility is shown on **Figure 1**.

Sampling activities occurred February 20 through March 3, 2020 in accordance with the *Work Plan for Soil Sampling Activities* as prepared by Matrix, dated February 12, 2020 (Matrix, 2020). The Sampling Plan was prepared in general accordance with Arizona Department of Environmental Quality (ADEQ) *Waste Programs Division Site Investigation Guidance Manual*, dated October 2014 (ADEQ, 2014), ADEQ's *Hazardous Waste Program Quality Assurance Program Plan* (QAPP), dated January 12, 2015 (ADEQ, 2015), and with the *Soil Sampling and Analysis Plan* prepared by Arcadis (Arcadis, 2016).

1.1 Project Objectives

The objectives of the soil sampling effort were to establish a 400 ft x 400 ft grid to collect near surface soil samples to identify potential impacts of perchlorate and selected metals on native land surrounding the UPCO Facility. This work was conducted to address a public concern that concentrations of residual perchlorate and metals may exist between the property fence line and source areas characterized during the Remediation Feasibility Investigation (RFI) (Arcadis, 2011). The native land surrounding the UPCO Facility is planned to be zoned as residential development.

1.2 Site Description and Background Information

The Facility is located at 25401 North Central Avenue in Phoenix, Arizona and occupies approximately 160 acres in the southeast quarter of Section 5, Township 4 North, Range 3 East of the Gila and Salt River Baseline and Meridian (**Figure 2**). The surrounding, adjacent land use consists of residential to the north, vacant Bureau of Land Management (BLM) land to the east, Arizona Public Service Company (APS) land to the southwest, and vacant State Trust land to the south and west. One Declaration of Environmental Use Restriction (DEUR) has been recorded on the deed for institutional controls in December 2018 with an additional DEUR recorded on the deed in January 2020 by ADEQ for engineering controls in the former operational areas.

UPCO manufactured and designed components for various government agencies from 1972 to 2009 in Phoenix, Maricopa County, Arizona. In 1997, Goodrich Corporation acquired UPCO. The former UPCO Facility consisted of various manufacturing, storage, and administrative buildings/structures (Arcadis, 2016). During a Remedial Investigation (RI) conducted by Arcadis in 2011, perchlorate was identified as

a constituent of concern (COC) in soil at concentrations higher than cleanup standards. Additionally, soil samples were collected along the fence line to address a public concern that particulate perchlorate may have been transported off site during historical open burning and testing activities at the UPCO Facility. Based on laboratory results, perchlorate was not detected in the fence line samples above the vertical or horizontal target concentrations, 0.04 milligrams per kilogram (mg/Kg) and 7.8 mg/Kg, respectively (Arcadis, 2011). The results of the fence line sampling event are included as **Table 1**. In 2018, the source areas were fully characterized, and remedial actions were completed, including soil removal and long-term engineered capping of contaminated soil left in place.

A Soil Sampling and Analysis Plan (Arcadis, 2016), approved by ADEQ, addressed samples collected to evaluate and confirm completion of remedial objectives and included an incremental sampling methodology. The procedures outlined in that plan were followed, although full conformance with incremental guidance is not applicable or necessary. Therefore, a less stringent but representative form of composite sampling is outlined in the Work Plan prepared by Matrix (Matrix, 2020).

Additionally, in October 2019, a Phase II limited site investigation was conducted by Geotechnical Testing & Inspections (GTI) to determine if perchlorate contamination existed above ADEQ residential soil remediation levels (rSRLs) on the property. A total of ten (10) soil borings were collected across the site at random locations. A total of 20 soil samples were collected at depths ranging from 2 to 11 feet below ground surface (bgs) and analyzed for perchlorate and metals (Barium, Chromium and Lead). Results of this Phase II investigation indicated 16 samples were below laboratory method detection limits and four samples were above method detection limits but below rSRLs for perchlorate. Detectable metals were found in all samples; Barium concentration ranged from 78 to 140 mg/Kg, Chromium concentrations ranged from 3.4 to 31 mg/kg, and lead concentrations ranged from 3.1 to 7.9 mg/Kg. All detectable metals concentrations were below their respective rSRLs. **Table 1** shows results of perchlorate associated with the Phase II investigation report (GTI, 2019). Based on the results of this investigation, GTI concluded that the proposed residential area has not been negatively impacted by past activities conducted by UPCO.

2.0 SOIL SAMPLING ACTIVITIES AND PROCEDURES

2.1 Grid and Sample Location Layout

In order to collect representative sample sets for this sampling effort, 400-foot (ft) by 400-ft sampling grids were established across the areas of investigation at the locations shown on **Figure 2**. Prior to sample collection, Matrix located each grid cell and pinpointed each sample location and placed either a labeled white flag or stake in the ground to mark the location and determine accessibility to each location. A photo and Global Positioning System (GPS) coordinates were collected at each pinpointed sample location and recorded using the Fulcrum application for preparation of real-time collection and tracking of each discrete sample. Each sample was given a unique name depending on the location in the grid and was identified prior to sampling. Five additional deeper samples were taken using a hand auger. A photo log of the sampling activities is provided in **Appendix A**.

2.2 Field Documentation

Field logbooks were used to record the collection of each sample and associated observations during the field sampling and field screening effort. Generally, the following information was recorded for each sample:

- Sample ID
- Date and time of sample collection
- Depth at which sample was taken
- Composite sample ID/Grid ID
- Sample location; and
- Soil type and color

2.3 Soil Sampling Procedures

This soil sampling effort involved the collection of discrete shallow (collected at a depth of 0.5 ft to 1-foot ft bgs), discrete deep (collected at a depth of 1.5 to 2 ft bgs) soil subsamples and primary composite soil samples to characterize the native land surrounding the former UPCO Facility.

A total of 256 subsamples and primary samples were collected, including duplicate samples. Each soil sample type (discrete subsample and primary composite) was field screened for RCRA 8 metals (arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury) using an X-Ray Fluorescence (XRF) spectrometer. Before and at the end of each day, the XRF spectrometer was field calibrated on two sets of standard reference materials to ensure accuracy of results in accordance with United States

Environmental Protection Agency (EPA) Method 6200 (**Appendix B**). The composition of each soil sample was logged using the Unified Soil Classification System (USCS) in accordance with American Society for Testing and Materials International (ASTM) Standard D-2488, Standard Practice for Description and Identification of Soils (**Appendix C**). Details describing the collection and field screening of shallow, deep, and composite sample collection is described below.

Discrete Shallow Subsamples

Each shallow soil subsample was collected at depths ranging from 0.5 ft to 1 ft bgs from native undisturbed native material using a stainless-steel scoop. The native material was logged as moist, poorly sorted silty to clayey sand intermixed with angular gravels (SM/SC). Once the samples were collected, each discrete sample was placed in a single use Ziplock bag, mixed to homogenize, and then field screened for RCRA Metals using the XRF meter. After field screening, each representative subsample was placed in a laboratory-provided sample jar for potential analysis pending the results of the primary composite sample described below. All field screening results of the discrete subsamples were recorded using the Fulcrum Application and are presented in **Appendix C**.

Discrete Deep Subsamples

Based on XRF field screening results of the shallow samples, five additional deeper samples were collected using a hand auger from native undisturbed material (**Figure 2**). The native material was logged as moist, poorly sorted silty to clayey sand intermixed with angular gravels (SM/SC). Each location was drilled to an auger refusal depth of approximately 1.5-2.5 ft bgs at each identified sample location. Based on field observations, auger refusal occurred on caliche layers present in near-surface soils. Once auger refusal was reached the sample was transferred immediately to a labeled single-use disposable Ziploc® bag, mixed to homogenize, and field screened for RCRA 8 metals using the XRF meter. After field screening, each representative subsample was placed in a laboratory-provided sample jar for potential analysis pending the results of the composite sample described below. All field screening results of the deep samples were recorded using the Fulcrum Application and are presented in **Appendix C**.

Primary Composite Samples

Primary composite samples for each grid were created using soil generated from equal aliquots of each discrete subsample (shallow and deep) collected within a grid. Using a single-use disposable Ziploc® bag equal volumes of each discrete sample were homogenized to create each composite sample. Once the sample was sufficiently mixed, the composite was field screened for RCRA 8 metals using the XRF meter prior transfer to a laboratory provided sample container. All field screening results of the deep

samples were recorded using the Fulcrum Application and are presented in **Appendix C**. All of the primary composite samples were submitted for laboratory analysis.

3.0 LABORATORY ANALYSIS

All of the samples were properly labeled per Section 2.2, logged on a chain-of-custody form and field logbook, and placed in a sample cooler maintained at approximately 4 degrees Celsius prior to laboratory submittal. All samples were submittal to Pace Analytical National Center for Testing and Innovation (Pace Analytical) in Mount Juliet, Tennessee (Arizona Department of Health Services [ADHS] certification number AZ0612. The discrete subsamples were held by the laboratory pending analysis of the corresponding primary composite sample for each grid cell. The 28 primary composite samples, including duplicates, were submitted for immediate analysis for the following:

- Perchlorate in accordance with EPA Method 314.0
- RCRA 8 Metals in accordance with US EPA Method 6010
- Mercury in accordance with EPA method 7471B

Based on the results of the field screening, the laboratory analyzed 28 composite samples, including duplicates, for perchlorate and RCRA 8 Metals. An additional, discrete subsample E6N-0.5 was analyzed in accordance with US EPA method 6010 due to an elevated concentration of arsenic indicated during the XRF field screening effort. This is further discussed in Section 6.0. Analytical laboratory reports are included in **Appendix D** and a summary of the analytical results is presented in **Table 2**.

4.0 DECONTAMINATION PROCEDURES

The sampling equipment (stainless steel scoop and hand auger) were decontaminated prior to each sampling interval and location to avoid cross-contamination and to maintain the integrity of samples. Equipment decontamination was performed using the following procedures.

- Spray rinse and wash using a solution of Liquinox® and potable water.
- Spray rinse with potable water.
- Spray rinse with distilled water.
- Spray rinse with deionized water.
- Allow the equipment to air dry.

4.1 Investigation Derived Wastes

Investigation-derived waste (IDW) which could be generated by the sampling and analysis program includes excavated soil, disposable personal protection equipment (PPE), residual decontamination fluids, and general debris. Any excess soil generated during sampling was returned to the general area where the sample was collected. PPE and other waste generated, including disposable gloves, paper, and Ziploc® bags, were disposed in a commercial solid waste receptacle. Any rinsate water used for decontamination purposes was allowed to evaporate on the site.

5.0 QA/QC PROCEDURES

Quality assurance and quality control (QA/QC) procedures were implemented using methods to ensure the project's data needs for completeness, comparability, representativeness, accuracy, and precision were met. The QA/QC objectives used for this sampling effort were completed in accordance with USEPA methodologies and ADEQ's Hazardous Waste Program QAPP (ADEQ, 2015).

5.1 Quality Control Samples

The QA/QC samples included the collection of blind field duplicates, equipment blanks, and field rinsate blank sample analysis (as appropriate). The QA/QC sample results are presented in the laboratory reports (**Appendix B**). The QC sample frequency and rationale used during this investigation are defined as follows:

- One blind field duplicate sample per twenty (20) analytical primary composite samples were collected to assess laboratory precision.
- One equipment blank sample per day was collected for laboratory analysis to demonstrate adequate decontamination procedures. The equipment blank sample was collected by pouring laboratory-provided deionized water over the sampling device into an appropriate sample container. This was only collected over non-dedicated (i.e., reusable) sampling equipment.
- One trip blank sample was collected to assess demonstrate no cross contamination occurred during transport. The trip blank was prepared with laboratory deionized water and accompanied the sample cooler from the laboratory to the field and back to the laboratory.

5.2 Laboratory Quality Control

The laboratory utilized QC samples to assess the validity of the analytical results of field samples. The laboratory QC sample analyses includes method blank analysis, surrogate spike analysis, matrix spike/matrix spike duplicate (MS/MSD) analysis, internal standards analysis, duplicate sample analysis, and check standard analysis. Each analysis is discussed below. QA/QC results are included in the laboratory reports in **Appendix B**.

Method blank analyses are performed to assess possible laboratory contamination at a frequency of at least one per 20 samples using "clean" deionized water. Surrogate spike analyses are used to evaluate the efficiency of the analytical procedure in recovering the true amount of a known compound. MS/MSD samples are used to evaluate the effect of the sample matrix on the analytical method at a frequency of at least one per 20 samples. Internal standards analyses are performed to confirm the analytical system remains in calibration. This standard is used to assess the laboratory's control of the analytical system. Duplicate sample analyses are conducted to evaluate the reproducibility of the analytical method at a

frequency of at least one per 20 samples. Check standard analyses will be used to verify the standard curve for each group of samples.

The laboratory QC sample analyses program was used to screen the analytical procedures for the purpose of the laboratory maintaining control of the analytical method. Throughout the QC sample analyses, the laboratory performed within the established protocols. A Level II equivalent data package was supplied by the laboratory for this investigation (**Appendix D**).

Data validation was performed on data reported by the laboratory. The laboratory data was screened for inclusion and frequency of laboratory QC data and to ensure appropriate corrective actions will be taken if out-of-control data are discovered. The measurement data will be reduced and validated according to the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (EPA, 2002). Data validation and appurtenance precision and accuracy statements were entered into the database management system and are presented in the laboratory reports (**Appendix D**).

The following Data Quality Objectives (DQOs) were used as a guide for data quality assessment (EPA, 2000). The DQOs are precision, accuracy, representativeness, completeness, and comparability, and represent qualitative and quantitative objectives that ensure the data generated during this investigation meets the needs of the project. The DQOs are defined below:

Precision is a measure of the reproducibility of concentrations reported for duplicate soil samples collected from the same location. Precision is calculated by determining the relative percent difference (RPD) between duplicate samples. The precision objective is an RPD of 20 percent for field duplicates.

Accuracy is the degree to which the measurement data approaches the "true" value for each analyte. Accuracy is assessed by calculating the percent recovery for a sample spiked with the analyte of concern (matrix spike). The accuracy objective will be 75 to 125 percent recovery.

Representativeness refers to the comparability of the sample collection procedures to those delineated in the sampling and analysis plan or work plan and the degree to which the analytical data represent the subsurface contaminant concentrations. Representativeness will be accomplished by consistent field sampling and analytical procedures.

Completeness is defined as the ratio of acceptable validated laboratory measurements to the total number of planned measurements for this investigation. The completeness objective for samples collected during this investigation is at least 90 percent.

Comparability is an evaluation of the relative consistency of the laboratory measurement data. Comparability cannot be measured quantitatively; instead, professional judgment is relied upon. Internal comparability will be achieved by consistent sample collection and analytical methods throughout the investigation.

All samples were received by the laboratories within the required hold time, in good condition, temperature, and with proper preservative. All samples were analyzed within method hold times and no QA/QC issues were identified. Based on the review of the analytical reports provided by the laboratories, the data is determined to be quantitative and usable.

5.3 XRF Quality Assurance/Quality Control

To ensure usability and accuracy of field screening data associated with the discrete subsamples and primary composite samples Matrix closely followed US EPA method 6200, *Field Portable X-Ray Fluorescence Spectrometry for the Determination of Elemental Concentrations in Soil and Sediment* (**Appendix D**). This document includes information about the type of interferences that could occur when screening, including physical characteristics of the sample, moisture content, positioning of XRF with the samples, and chemical properties of the samples. Prior to each day and at the end of every day, calibration checks were conducted with two sets of standard reference materials for accuracy of results.

During each reading, samples were placed on a background-reducing plate to lower the potential background x-ray readings from outside the intended sample bag. The samples were analyzed for a minimum of 60 second count times to account for the limits of detection and standard deviations calculated by the XRF. Detection limits are based on a statistical analysis of the sample readings. More information about how the results are calculated, the methodologies for XRF readings, and sampling procedures are located in **Appendix B**.

6.0 FIELD SCREEN AND LABORATORY RESULTS

6.1 XRF Field Screening Results

The following is a summary of the detectable RCRA 8 Metals field screening results from discrete subsamples and primary composite samples. A summary of the field screening results is presented in **Appendix C**.

- Arsenic concentrations ranged from below detection limits to a high of 50 mg/Kg. Average arsenic concentrations across the sampling grid is 6.4 mg/Kg. The result of 50 mg/Kg is associated with location E6N-0.5 and considered anomalous as a result of matrix interferences associated with the grain size distribution or the moisture content of the sample.
- Barium concentrations ranged from below detection limits to a high of 928 mg/Kg. Average barium concentrations across the sampling grid was 849.2 mg/Kg.
- Chromium concentrations ranged from below detection limits to 75 mg/Kg.
- Only two samples indicated detectable cadmium.
- Lead concentrations ranged from below detection limits to 53 mg/Kg. Average lead concentrations across the sampling grid was 33.3 mg/Kg.
- Silver concentrations ranged from below detection limits to a high of 47 mg/Kg. Average silver concentrations across the sampling grid is 15 mg/Kg.

6.2 Laboratory Results

The following is a summary of the laboratory analytical results from primary composite samples. A summary of the laboratory results is presented in **Table 2**. The spatial distribution of analytical data is presented in **Figure 3**. A copy of the laboratory reports are presented in **Appendix D**.

- Perchlorate was detected in one sample at a concentration of 0.119 mg/Kg below the residential soil remediation level (rSRL) of 55 mg/Kg. All other samples were below the laboratory detection limit.
- Detectable arsenic concentrations were indicated in every sample. Concentrations ranged from 1.61J mg/Kg to 6.13 mg/Kg below the rSRL of 10 mg/Kg.
- Detectable barium concentrations were indicated in every sample. Concentrations ranged from 91.5 mg/Kg to 156 mg/Kg below the rSRL of 15,000 mg/Kg.
- Detectable cadmium concentrations were indicated in every sample at laboratory estimate values. Concentrations ranged from 0.112 J mg/Kg to 0.231 J mg/Kg below the rSRL of 39 mg/Kg
- Detectable chromium concentrations were indicated in every sample. Concentrations ranged from 12.1 mg/Kg to 38.1 mg/Kg below the rSRL of 120,000 mg/Kg. .
- Detectable lead concentrations were indicated in every sample. Concentrations ranged from 4.21 mg/Kg to 12.71 mg/Kg below the rSRL of 400 mg/Kg.

- Selenium was detected in three samples at laboratory estimated values. Concentrations ranged from 1.03 J mg/Kg to 1.32J mg/Kg below the rSRL of 390 mg/Kg. All other samples were below the laboratory detection limit.
- Mercury was detected in every sample at estimated values. Concentrations ranged from 0.000816 J mg/Kg to 0.0256 J mg/Kg below the rSRL of 23 mg/Kg.

Discrete subsample E6N-0.5 which indicated an anomalous XRF field screening result of 50 mg/Kg for arsenic was analyzed in the lab using US EPA method 6010 to determine the validity field screen result. For context, the laboratory result for arsenic from the primary composite sample in grid cell E6 was 2.25 mg/Kg. The result from the lab analysis showed an arsenic concentration of 2.66 mg/Kg commensurate with other arsenic values and the associated primary composite sample result. Based on this comparison, the laboratory result for this sample demonstrate that the field screen result was anomalous. As such, we believe that the anomalous field result is a function of matrix interferences associated with the grain size distribution and/or moisture content of the sample. Multiple interferences are explained in Section 4.0 of EPA Method 6200 included in **Appendix D**.

6.3 Deviations from the Work Plan

The only deviation that occurred during this sampling effort was the use of soil sample bags to collect the samples prior to transferring into sample jars. This method was utilized to facilitate XRF readings at each discrete sample location in accordance with the manufacturer's specifications.

7.0 STATISTICAL ANALYSIS

Although the laboratory data from samples collected indicated all samples were below the rSRLs or below laboratory detection limits, it is important put the soil sample results from this soil sampling effort in the context of the results obtained from the historical investigation in 2011 associated with the RI fence line sampling event conducted by Arcadis (Arcadis, 2011), and the 2019 Phase II site investigation sampling event conducted by GTI (GTI, 2019). As such, a statistical analysis was performed on arsenic, barium, chromium, lead, and mercury sample results. Cadmium and selenium were not included in the statistical analysis since the detectable concentrations during the recent sampling event and the two historical events were below laboratory detectable levels. Perchlorate and silver were not included in the statistical analysis since the sample results during the recent 2020 sampling event were non detect with the exception of one perchlorate sample that indicated a concentration of 0.119 mg/kg (**Table 3**). **Figure 4** shows the sample locations of the 2011 Fence Line investigation and the 2019 Phase II investigation.

To conduct this analysis, ProUCL 5.1 software package developed by the USEPA was used. ProUCL 5.1 is a comprehensive nonparametric Upper Confidence Limit (UCL) tool that is used to address environmental sampling and statistical issues, establish background levels, determine outliers in data sets, and compare background and site sample data sets for site evaluations and risk assessments. To perform this analysis, the contaminants analyzed were separated by each sampling event described above. The results from the Phase II 2019 (GTI, 2019) sampling event were further subdivided into shallow and deep samples. Analytical data from sample SMA-SSBG were not included in the 2011 fence line sample group since the sample location was not along the 2011 fence line.

The results in Chart 1 below indicate that the means of the recent (2020) samples were lower than the means of the 2011 fence line soil samples for the contaminants analyzed. Furthermore, coupled with one standard deviation for each metal, the statistical analysis indicates the results from each sampling event are similar further demonstrating that no adverse impact have occurred as a result of the activities associated with the UPCO facility. Details regarding the statistical analysis are presented in **Appendix E**.

Chart 1 Summary of Statistical Analysis for 2011 Fence Line, 2019 Phase II, and 2020 Soil Sample Results

Sample Analysis	Mean (mg/Kg)	Standard Deviation (mg/Kg)	UTL (mg/Kg)	UPL (t) (mg/Kg)	USL (mg/Kg)	UCL (mg/Kg)
2011 Fence Line Soil Samples						
Arsenic	6.778	1.451	11.17	9.621	9.838	7.677
Barium	112.1	17.32	164.6	146.1	148.7	122.8
Chromium	24.11	9.212	52.03	42.17	43.54	29.82
Lead	8.122	1.974	14.1	11.99	12.29	9.43
Mercury	0.025	0.0128	0.0638	0.0501	0.052	0.0347
2019 Soil Samples - *Combined*						
Barium	126.7	45.29	--	--	--	145.4
Chromium	17.46	7.851	--	--	--	20.49
Lead	5.45	2.716	--	--	--	6.623
2019 Soil Samples - *Shallow*						
Barium	127.8	35.14	--	--	--	148.2
Chromium	19.46	8.614	--	--	--	24.45
Lead	5.96	2.867	--	--	--	7.622
2019 Soil Samples - *Deep*						
Barium	125.6	55.61	310.8	232.4	251.1	166.2
Chromium	15.45	6.855	35.41	28.63	30.37	19.42
Lead	4.94	2.603	14.31	10.2	11.16	6.973
2020 Soil Samples						
Arsenic	4.294	1.195	--	--	--	4.687
Barium	107.6	15.19	--	--	--	112.7
Chromium	20.88	6.641	--	--	--	23.1
Lead	7.31	1.867	--	--	--	7.936
Mercury	0.0171	0.00512	--	--	--	0.0188

8.0 SUMMARY AND CONCLUSIONS

The 2020 soil sampling effort focused on native land surrounding the UPCO Facility as a result of a public concern about potential past activities associated with UPCO operations. A total of 256 discrete subsamples and primary composite samples were collected as part of this investigation. All discrete subsamples within each grid cell were collected from native material consisting of poorly sorted silt to clayey sand intermixed with angular gravels.

Analytical results from the primary composite samples indicated perchlorate concentrations below the rSRL or below the laboratory detection limits in all samples. Detectable metals (arsenic, barium, cadmium, chromium, lead, and mercury) were indicated in all samples at concentrations below their respective rSRLs. Silver was below the laboratory detection limits in all samples and selenium was indicated in three samples at estimates values.

The statistical analyses of the metals results suggest that the 2020 sample results are comparable to the historical sampling events. Additionally, the data indicates that the means overlap based on one standard deviation suggesting metals results from each sampling event are similar except. The comparison evaluation of the 2020 sample results suggests that the data are representative of unimpacted locations and are more than likely part of the background or comparable to background populations established by the Fence line samples collected in 2011 and the Phase II samples collected in 2019.

Based on this sampling effort, the evaluation of results, and the statistical analysis, the detectable concentrations of metals that were observed during the 2020 sampling event are consistent with historical investigations and not associated with past activities conducted at the UPCO Facility. As such, no additional investigation is necessary on these parcels.

9.0 REFERENCES

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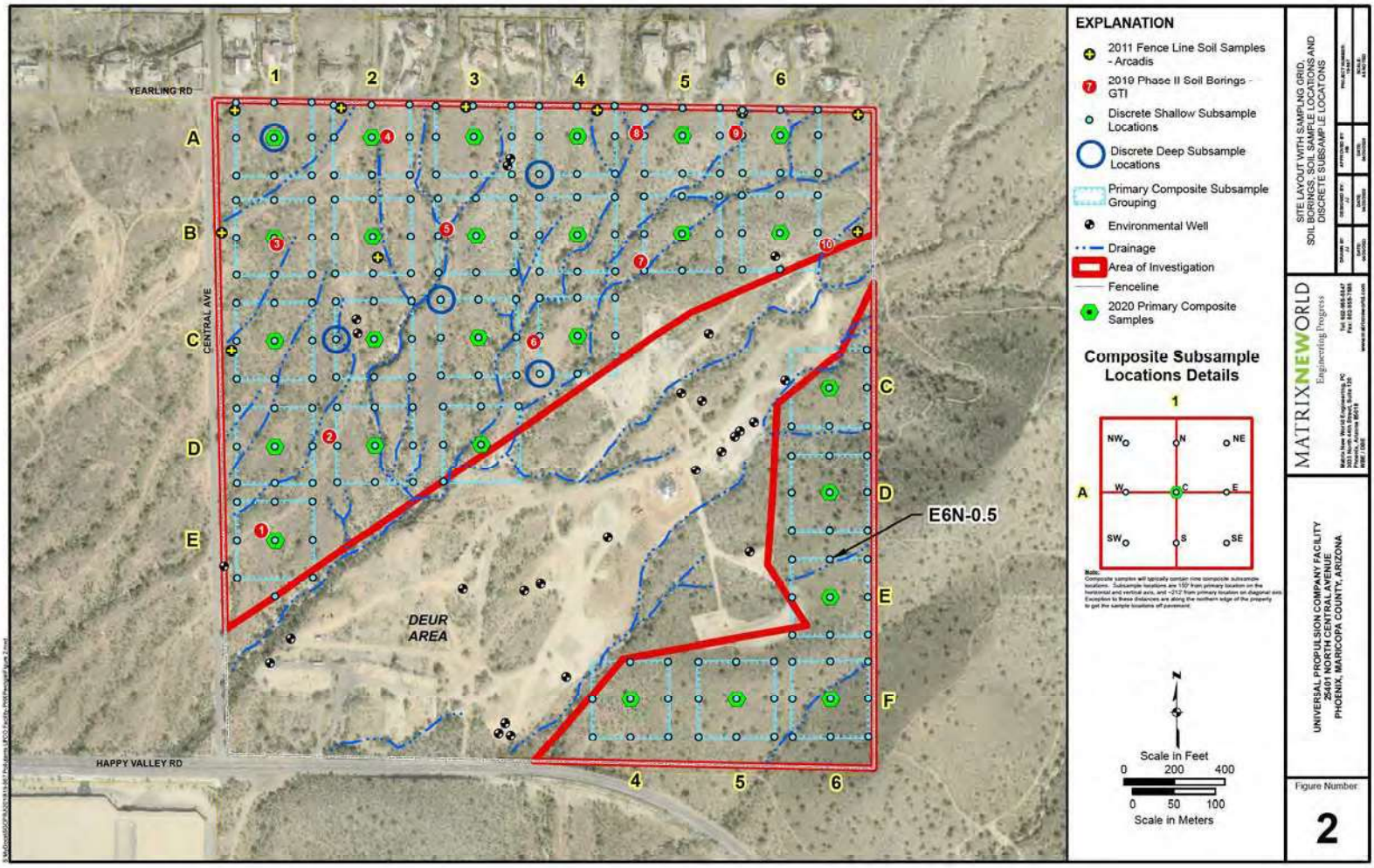
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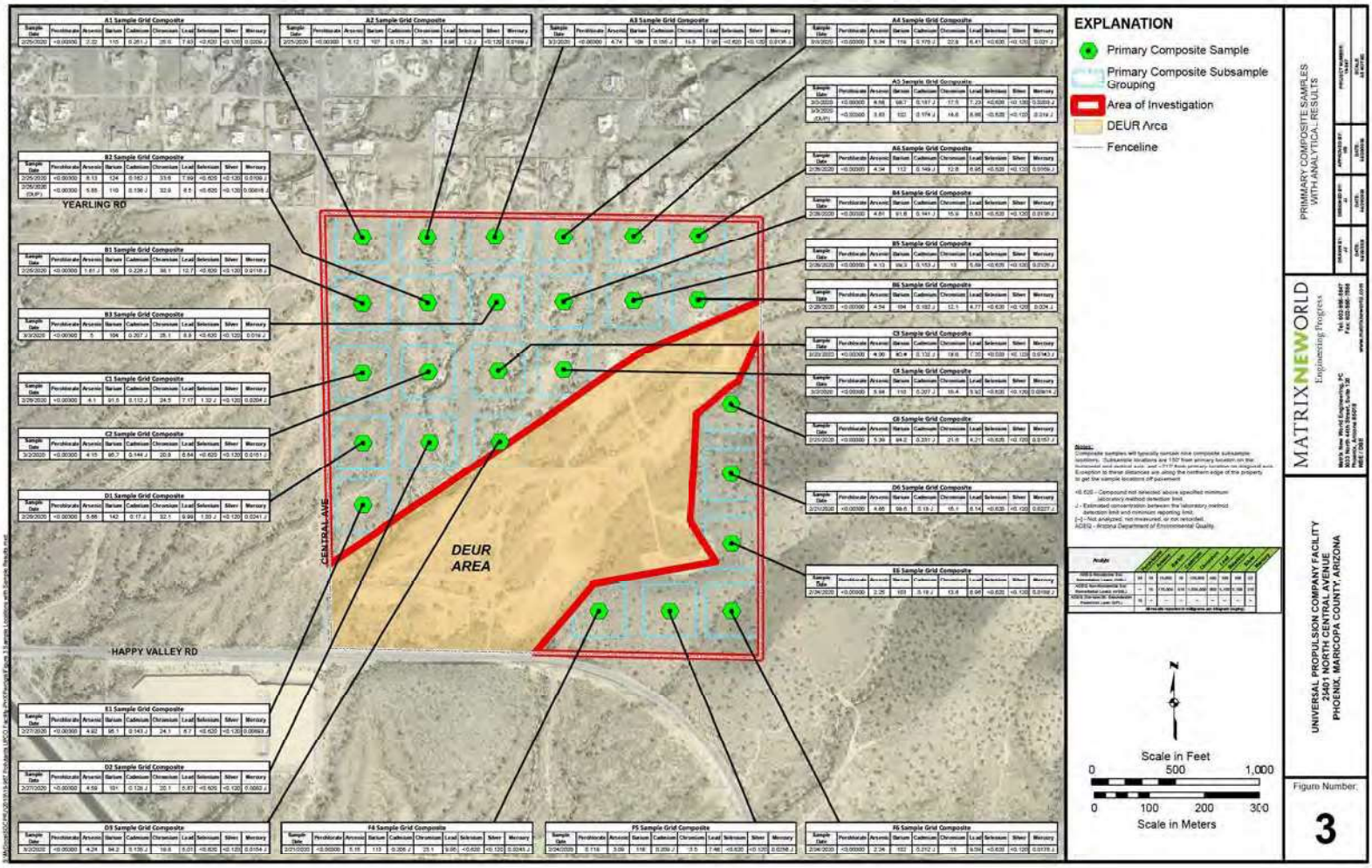
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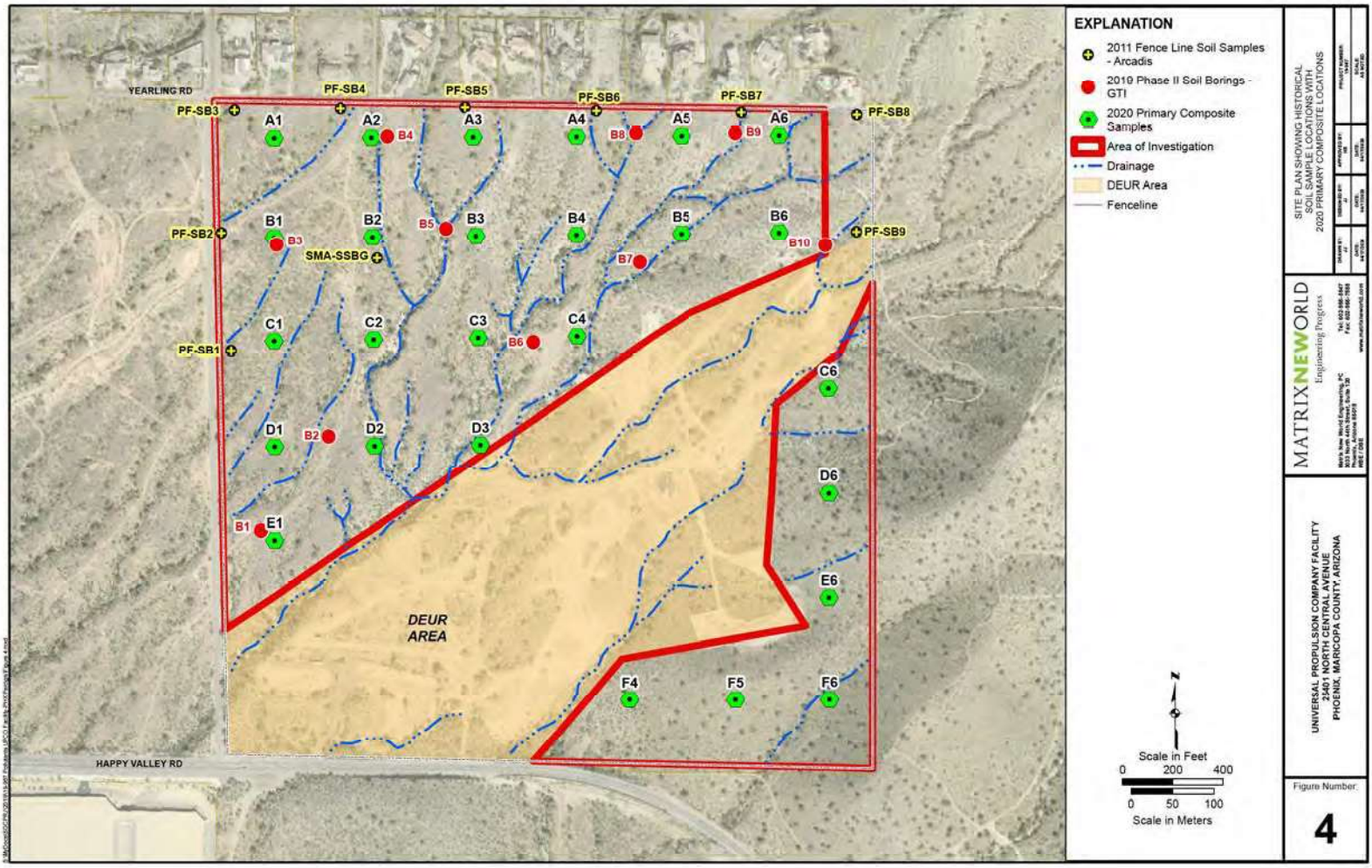
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FIGURES


W YEARLING RD
E YEARLING RD
N CENTRAL AVE
W HAPPY VALLEY RD
W HAPPY VALLEY RD
CAVE BUTTES RECREATION AREA
CAP CANAL
N 7TH ST
Explanation
Property_Boundary
Scale in Feet
0 500 1,000
0 100 200
Scale in Meters
Peoria
Glendale
Scottsdale
Phoenix
SITE LOCATION MAP
MATRIX NEW WORLD
Engineering Progress
UNIVERSAL PROPULSION COMPANY FACILITY
25401 NORTH CENTRAL AVENUE
PHOENIX, MARICOPA COUNTY, ARIZONA
Figure Number
1


YEARLING RD
HAPPY VALLEY RD
CENTRAL AVE
DEUR AREA
E6N-0.5
1
2
3
4
5
6
A
B
C
D
E
F
EXPLANATION
2011 Fence Line Soil Samples - Arcadis
2019 Phase II Soil Borings - GTI
Discrete Shallow Subsample Locations
Discrete Deep Subsample Locations
Primary Composite Subsample Grouping
Environmental Well
Drainage
Area of Investigation
Fenceline
2020 Primary Composite Samples
Composite Subsample Locations Details
NW
N
NE
W
C
E
SW
S
SE
Scale in Feet
0 200 400
0 50 100
Scale in Meters
SITE LAYOUT WITH SAMPLING GRID, SOIL BORINGS, SOIL SAMPLE LOCATIONS AND DISCRETE SUBSAMPLE LOCATIONS
MATRIXNEWORLD
Engineering Progress
UNIVERSAL PROPULSION COMPANY FACILITY
25401 NORTH CENTRAL AVENUE
PHOENIX, MARICOPA COUNTY, ARIZONA
Figure Number
2


EXPLANATION
Primary Composite Sample
Primary Composite Subsample Grouping
Area of Investigation
DEUR Area
Fenceline
YEARLING RD
HAPPY VALLEY RD
CENTRAL AVE
DEUR AREA
Scale in Feet
0
500
1,000
Scale in Meters
0
100
200
300
PRIMARY COMPOSITE SAMPLES WITH ANALYTICAL RESULTS
MATRIXNEWORLD
Engineering Progress
UNIVERSAL PROPULSION COMPANY FACILITY
21401 NORTH CENTRAL AVENUE
PHOENIX, MARICOPA COUNTY, ARIZONA
Figure Number:
3


YEARLING RD
HAPPY VALLEY RD
PF-SB1
PF-SB2
PF-SB3
PF-SB4
PF-SB5
PF-SB6
PF-SB7
PF-SB8
PF-SB9
SMA-SSBG
A1
A2
A3
A4
A5
A6
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
C1
C2
C3
C4
C6
D1
D2
D3
D6
E1
E6
F4
F5
F6
DEUR AREA
EXPLANATION
2011 Fence Line Soil Samples - Arcadis
2019 Phase II Soil Borings - GTI
2020 Primary Composite Samples
Area of Investigation
Drainage
DEUR Area
Fenceline
Scale in Feet
0 200 400
0 50 100
Scale in Meters
SITE PLAN SHOWING HISTORICAL SOIL SAMPLE LOCATIONS WITH 2020 PRIMARY COMPOSITE LOCATIONS
MATRIX NEW WORLD
Engineering Progress
UNIVERSAL PROPULSION COMPANY FACILITY
21401 NORTH CENTRAL AVENUE
PHOENIX, MARICOPA COUNTY, ARIZONA
Figure Number:
4

TABLES

TABLE 1
SUMMARY OF HISTORICAL PERCHLORATE ANALYTICAL DATA
2011 FENCE LINE 2019 PHASE II INVESTIGATIONS
UNIVERSAL PROPULSION COMPANY, INC. FACILITY
25401 North Central Avenue
Phoenix, Arizona
ADEQ Contract No. ADEQ17-151689

Sample Identification	Sample Depth (feet bgs)	Perchlorate
		EPA Method 314.0
All sample results reported as mg/kg		
ADEQ Residential Soil Remediation Levels (rSRL)		55
ADEQ Site-specific Groundwater Protection Level (GPL)		16
Arcadis *Final Remedial Investigation Report*, 2011		
PF-SS01-0	0	<0.04
PF-SS02-0	0	<0.04
PF-SS03-0	0	<0.04
PF-SS04-0	0	<0.04
PF-SS05-0	0	<0.04
PF-SS06-0	0	<0.04
PF-SS07-0	0	<0.04
PF-SS08-0	0	<0.04
PF-SS09-0	0	<0.04
SMA-SSBG-0	0	<0.04
SMA-SSBG-1	1	<0.04
Geotechnical Testing & Inspections *Limited Phase II Stude for the Central Foothills North Development*, 2019		
B1-2	2	<0.0099
B1-4	4	<0.0098
B2-5	5	0.011
B2-7	7	<0.010
B3-2	2	<0.0099
B3-6	6	<0.0098
B4-5	5	<0.0098
B4-10	10	<0.0099
B5-7	7	<0.0099
B5-11	11	<0.0099
B6-7	7	0.011
B6-10	10	<0.010
B7-2	2	0.041
B7-5	5	0.021
B8-2	2	<0.010
B8-4	4	<0.0099
B9-5	5	<0.0098
B9-7	7	<0.010
B10-5	5	<0.0099
B10-7	7	<0.0099

Notes:

mg/kg - Milligrams per kilogram
bgs - Below ground surface
EPA - Environmental Protection Agency
ADEQ - Arizona Department of Environmental Quality
NE - Not established
<0.04 - Compound not detected above specified minimum laboratory method detection limit (MDL).
--- - Not analyzed, not measured, or not recorded

MATRIXNEWORLD
Engineering Progress

TABLE 2
SUMMARY OF PERCHLORATE RCRA 8 METALS ANALYTICAL DATA
Universal Propulsion Company, Inc. Facility
25401 North Central Avenue
Phoenix, Arizona
ADEQ Contract No. ADEQ17-151689

Sample Identification	Sample Date	Sample Location	Perchlorate	Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury
			314.0 Mod	EPA Method 6010C							Method 7471B
			All results reported in milligrams per kilogram (mg/kg).								
ADEQ Residential Soil Remediation Levels (rSRL)			55	10	15,000	39	120,000	400	390	390	23
ADEQ Non-Residential Soil Remediation Levels (nrSRL)			--	10	170,000	510	1,000,000	800	5,100	5,100	310
ADEQ Site-specific Groundwater Protection Level (GPL)			16	--	--	--	--	--	--	--	--
A1 Comp	2/25/2020	A1 Sample Grid	<0.00300	2.22	115	0.251 J	25.0	7.83	<0.620	<0.120	0.0209 J
A2 Comp	2/25/2020	A2 Sample Grid	<0.00300	5.12	107	0.175 J	26.1	8.96	1.2 J	<0.120	0.0189 J
A3 Comp	3/2/2020	A3 Sample Grid	<0.00300	4.74	109	0.155 J	18.5	7.95	<0.620	<0.120	0.0135 J
A4 Comp	3/3/2020	A4 Sample Grid	<0.00300	5.34	119	0.176 J	22.8	6.41	<0.620	<0.120	0.021 J
A5 Comp	3/3/2020	A5 Sample Grid	<0.00300	4.58	98.7	0.187 J	17.5	7.23	<0.620	<0.120	0.0203 J
A5 Comp Dup	3/3/2020	A5 Sample Grid	<0.00300	3.83	102	0.174 J	14.6	6.86	<0.620	<0.120	0.019 J
A6 Comp	2/26/2020	A6 Sample Grid	<0.00300	4.34	112	0.149 J	12.6	6.95	<0.620	<0.120	0.0169 J
B1 Comp	2/25/2020	B1 Sample Grid	<0.00300	1.61 J	156	0.228 J	38.1	12.7	<0.620	<0.120	0.0116 J
B2 Comp	2/25/2020	B2 Sample Grid	<0.00300	6.13	124	0.162 J	33.6	7.89	<0.620	<0.120	0.0109 J
B2 Comp Dup	2/25/2020	B2 Sample Grid	<0.00300	5.85	110	0.136 J	32.9	6.5	<0.620	<0.120	0.00816 J
B3 Comp	3/3/2020	B3 Sample Grid	<0.00300	5	104	0.207 J	25.1	8.8	<0.620	<0.120	0.019 J
B4 Comp	2/28/2020	B4 Sample Grid	<0.00300	4.61	91.6	0.141 J	15.9	5.83	<0.620	<0.120	0.0135 J
B5 Comp	2/28/2020	B5 Sample Grid	<0.00300	4.13	99.3	0.153 J	13	5.59	<0.620	<0.120	0.0125 J
B6 Comp	2/28/2020	B6 Sample Grid	<0.00300	4.54	104	0.182 J	12.1	4.77	<0.620	<0.120	0.024 J
C1 Comp	2/26/2020	C1 Sample Grid	<0.00300	4.1	91.5	0.112 J	24.5	7.17	1.32 J	<0.120	0.0204 J
C2 Comp	3/2/2020	C2 Sample Grid	<0.00300	4.15	95.7	0.144 J	20.8	6.84	<0.620	<0.120	0.0151 J
C3 Comp	2/28/2020	C3 Sample Grid	<0.00300	4.66	95.4	0.152 J	19.8	7.55	<0.620	<0.120	0.0143 J
C4 Comp	3/2/2020	C4 Sample Grid	<0.00300	5.84	110	0.207 J	18.4	5.92	<0.620	<0.120	0.00914 J
C6 Comp	2/21/2020	C6 Sample Grid	<0.00300	5.39	94.2	0.231 J	21.6	4.21	<0.620	<0.120	0.0157 J
D1 Comp	2/26/2020	D1 Sample Grid	<0.00300	5.66	142	0.17 J	32.1	9.99	1.03 J	<0.120	0.0241 J
D2 Comp	2/27/2020	D2 Sample Grid	<0.00300	4.59	101	0.128 J	20.1	5.87	<0.620	<0.120	0.0082 J
D3 Comp	3/2/2020	D3 Sample Grid	<0.00300	4.24	94.2	0.135 J	19.8	5.01	<0.620	<0.120	0.0154 J
D6 Comp	2/21/2020	D6 Sample Grid	<0.00300	4.65	98.6	0.18 J	16.1	6.14	<0.620	<0.120	0.0227 J
E1 Comp	2/27/2020	E1 Sample Grid	<0.00300	4.92	95.1	0.143 J	24.1	6.7	<0.620	<0.120	0.00893 J
E6 Comp	2/24/2020	E6 Sample Grid	<0.00300	2.25	103	0.18 J	13.6	6.96	<0.620	<0.120	0.0188 J
F4 Comp	2/21/2020	F4 Sample Grid	<0.00300	5.15	113	0.205 J	23.1	9.95	<0.620	<0.120	0.0243 J
F5 Comp	2/24/2020	F5 Sample Grid	0.119	3.09	118	0.209 J	13.5	7.46	<0.620	<0.120	0.0256 J
F6 Comp	2/24/2020	F6 Sample Grid	<0.00300	2.24	102	0.212 J	15	9.39	<0.620	<0.120	0.0178 J
E6N-0.5	2/24/2020	E6 North	--	2.66	--	--	--	--	--	--	--

Notes:

RCRA	- Resource Conservation and Recovery Act.		
bgs	- Below ground surface.	<0.620	- Compound not detected above specified minimum laboratory method detection limit.
PID	- Photoionization detector.	J	- Estimated concentration between the laboratory method detection limit and minimum reporting limit.
ppm	- Parts per million.	--	- Not analyzed, not measured, or not recorded.
EPA	- Environmental Protection Agency.	ADEQ	- Arizona Department of Environmental Quality.
NE	- Not established.		
GPL	- Groundwater protection level.		

TABLE 3
SUMMARY OF HISTORICAL RCRA 8 METALS ANALYTICAL DATA
2011 FENCE LINE AND 2019 PHASE II INVESTIGATIONS
UNIVERSAL PROPULSION COMPANY, INC. FACILITY
25401 North Central Avenue
Phoenix, Arizona
ADEQ Contract No. ADEQ17-151689

Location	Depth (ft bgs)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Silver mg/kg)
2011 Fence Line Soil Samples									
PF-SB01	0	5.4	110	<0.5	26	10	<0.02	<5	<0.5
PF-SB02	0	5.5	89	<0.5	30	8	<0.02	<5	<0.5
PF-SB03	0	7.8	120	<0.5	32	10	<0.02	<5	<0.5
PF-SB04	0	7.3	120	<0.5	31	11	0.02	<5	<0.5
PF-SB05	0	5.4	110	<0.5	35	8.1	<0.02	<5	<0.5
PF-SB06	0	6.8	140	<0.5	25	6.7	<0.02	<5	<0.5
PF-SB07	0	5.7	90	<0.5	12	8	0.024	<5	<0.5
PF-SB08	0	7.4	100	<0.5	16	7.3	0.061	<5	<0.5
PF-SB09	0	9.7	130	<0.5	10	<4	<0.02	<5	<0.5
SMA-SSBG	0	NA	110	<0.5	30	12	NA	NA	NA
	1	NA	110	<0.5	48	7.1	NA	NA	NA
2019 Soil Samples									
B1-2'	2	<2.9	140	<0.49	31	7.7	<0.099	<4.9	<2.4
B1-4'	4	<3.0	130	<0.50	26	7.9	<0.096	<5.0	<2.5
B2-5'	5	<3.0	120	<0.50	17	4.6	<0.095	<5.0	<2.5
B2-7'	7	<2.9	120	<0.49	16	3.4	<0.097	<4.9	<2.4
B3-2'	2	<3.0	130	<0.49	29	7.1	<0.099	<4.9	<2.5
B3-6'	6	<3.0	92	<0.49	23	4.9	<0.085	<4.9	<2.5
B4-5'	5	<3.0	99	<0.50	30	5.2	<0.097	<5.0	<2.5
B4-10'	10	<2.9	78	<0.49	12	3.1	<0.089	<4.9	<2.4
B5-7'	7	<3.0	79	<0.50	13	3.5	<0.085	<5.0	<2.5
B5-11'	11	<3.0	83	<0.50	18	2.8	<0.087	<5.0	<2.5
B6-7'	7	<2.9	150	<0.49	25	5.8	<0.095	<4.9	<2.4
B6-10'	10	<3.0	120	<0.49	19	4.7	<0.097	<4.9	<2.5
B7-2'	2	<3.0	120	<0.49	18	5.4	<0.097	<4.9	<2.5
B7-5'	5	<3.0	150	<0.50	17	2.9	<0.097	<5.0	<2.5
B8-2'	2	<3.0	210	<0.50	12	4.2	<0.084	<5.0	<2.5
B8-4'	4	<2.9	270	<0.49	13	4	<0.097	<4.9	<2.4
B9-5'	5	<3.0	110	<0.50	7.6	13	<0.092	<5.0	<2.5
B9-7'	7	<3.0	93	<0.50	7.1	11	<0.098	<5.0	<2.5
B10-5'	5	<3.0	120	<0.50	12	3.1	<0.096	<5.0	<2.5
B10-7'	7	<3.0	120	<0.50	3.4	4.7	<0.098	<5.0	<2.5

Notes: ft bgs - feet below ground surface
mg/kg - milligrams per kilogram

APPENDICES

APPENDIX A

Photo Log

MATRIXNEWORLD
Engineering Progress

3033 North 44th Street, Suite 120
Phoenix, AZ 85018
Phone: 602-955-5547

Photo Log

UPCO Facility
Matrix Project # 19-967

February 20-28 & March 2-3, 2019
Photographed by B. Hoagland & S. Igo

PHOTO 1: UPCO site



PHOTO 2: White flag marking sample location



PHOTO 3: Wooden stake marking sample location in center of sampling grid



PHOTO 4: Recording GPS coordinates of sample location in Fulcrum application



MATRIXNEWORLD
Engineering Progress

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Photo Log

UPCO Facility
Matrix Project # 19-967

February 20-28 & March 2-3, 2019
Photographed by B. Hoagland & S. Igo

PHOTO 5: Sample location dug to depth prior to sample collection



PHOTO 6: Sample location prior to sampling



PHOTO 7: Collecting soil for sample



PHOTO 8: Decontaminating sample collection equipment



MATRIXNEWORLD
Engineering Progress

3033 North 44th Street, Suite 120
Phoenix, AZ 85018
Phone: 602-955-5547

Photo Log

UPCO Facility
Matrix Project # 19-967

February 20-28 & March 2-3, 2019
Photographed by B. Hoagland & S. Igo

PHOTO 9: Hand auguring deeper sample



PHOTO 10: Deeper sample location



APPENDIX B - E HAVE NOT BEEN INCLUDED FOR BREVITY, BUT THESE DOCUMNTS ARE ON FILE WITH THE APPLICANT, ADEQ AND THE PRODUCER OF THIS REPORT

Appendix G

Central Foothills General Plan Conformance

August 2017

Core Values

The Five Core Values of the General Plan are as follows: Connect People and Places, Strengthen our Local Economy, Celebrate our Diverse Communities and Neighborhoods, Build the Sustainability Desert City, Create an Even More Vibrant Downtown.

Connect People and Places

- Complete Streets

  Create a system of streets which encourage and facilitate active transportation, support investment in transit, foster social engagement and community pride, improves safety for all transportation modes, supports the local economy and property values, and improve the livability and long-term sustainability of our region.

  RESPONSE: The layout and proposed street section of the circulation routes throughout Central Foothills encourages and facilitates active and safe transportation through minimizing vehicular and pedestrian interactions. The circulation design for Central Foothills will foster social engagement and community pride through the use of street trees and landscaping along perimeter streets to provide shade and aesthetic character to the community. The expansion of the adjacent public rights-of-way, Central Avenue and Happy Valley Road, will also promote future growth for the neighboring undeveloped properties.

- Bicycles

  Develop the city's bike-way system into an accessible, efficient, connected, safe and functional network which promotes bicycling and quick access to any destination. Establish a network of bicycle amenities at major destinations.

  RESPONSE: The proposed trails and open space within Central Foothills provides cyclists with paths though the community and connections to Central Avenue, and Happy Valley Road. Central Avenue and Happy Valley are both planned to include bicycle lanes at buildout. In addition, the Site's location near the Central Arizona Project (CAP) canal will provide residents with access to the extensive network of canal trails throughout the City and greater Valley. The Property's proximity to the Sonoran Preserve may provide opportunity for recreation cycling on Preserve Trails through approved access points.

- Parks

  Provide a world class park system where every resident has a high level of access to a variety of recreational options that support a healthy lifestyle.

  RESPONSE: The proposed residential community has a network of trails and open spaces with a variety of passive and active amenities to encourage residents to recreate and socialize together. Active amenities may include shade trees or structures, picnic areas, seating, trash receptacles, usable turf, a pool and play equipment to support healthy lifestyles within a diverse community. Proximity of the Central Foothills property to the Phoenix Sonoran Preserve provides for recreational access opportunities through future trails and trailheads that will be designated by the City of Phoenix.

- Canals and Trails

  Design the Phoenix canals and canal-adjacent property throughout the city for pedestrians and businesses to effortlessly interact with the canal, transforming the system into a popular network of trails which are safe, efficient and complete with shade and rest areas. Create a functional network of shared urban trails which are accessible, convenient and connected to parks, centers, and major open spaces such as the Sonoran Preserve, connecting the entire city.

  RESPONSE: While the Central Arizona Project (CAP) canal is not directly adjacent to the property, the intersection of the CAP canal and Happy Valley Road is less than half a mile west of the Site. This connection will provide prospective residents of Central Foothills access to an extensive regional trail network. In order to encourage use of this asset the proposed community will be developed with a network of trails to foster an active community population.

Strengthen Our Local Economy

- Job Creation (Employers)

  Our major employers and established employment centers will continue to grow and provide high quality, wealth generating employment opportunities. Facilitate job creation in targeted high-growth/high-wage industry sectors and targeted trade industry sectors.

  RESPONSE: Apart from the jobs created through the development of the Site, the addition of the commerce park development provides opportunities for smaller businesses in the area. These diverse and flexible spaces for commerce and business park users will provide a necessary companion to the existing office and retail uses in the area.

- Local and Small Business

  Promote the growth and prosperity of Phoenix locally owned and small businesses. Encourage the growth and expansion of locally owned and small businesses as a means of creating jobs.

  RESPONSE: The commerce park development provides ideal commercial facilities for small, locally owned businesses and growing enterprises. With a variety of flexible building types new and expanding businesses will have option to develop building spaces that are flexible to the users' needs and with good access to regional transportation and distribution networks.

- Entrepreneurs Emerging Enterprises

  Establish a robust entrepreneurial and innovative eco-system that supports local/ organic growth as well as having an appeal to attract national/global interests.

  RESPONSE: The commerce park development also provides ideal commercial facilities for burgeoning enterprises. The flexibility and variety of spaces provided will help to fit the needs of the market and boost the local economy.

- Manufacturing/Industrial Development

  Protect and strengthen Phoenix's industrial sector, with a focus on Phoenix's Manufacturing Base.

  RESPONSE: With the ability to incorporate additional flexibility for uses associated with typical commerce and business park uses, the proposed development allows for the expansion of appropriate office and manufacturing businesses.

- Airports

  Ensure the growth, vitality and protection of each of the city's three municipal airports. Develop the Phoenix airport system into a safe, well-planned, and fiscally sound system which meets the needs of the traveling public, its tenants and its various aviation users. A multi-modal transportation system should be developed that will allow the movement of goods and all people safely and efficiently throughout the city, especially into, and between, the urban village cores.

  RESPONSE: As the population expands and industry develops in the surrounding area, these uses will better support the nearby Deer Valley Airport. The addition of residential and commercial uses proposed for Central Foothills achieves this.

Celebrate Our Diverse Communities and Neighborhoods

- Certainty and Character

  Every neighborhood and community should have a level of certainty. Ensure that development, redevelopment and infrastructure support and reinforces the character and identity of each unique community and neighborhood.

  RESPONSE: The proposed residential communities will reflect and enhance the nature and character of the surrounding Sonoran Desert, employing compatible, natural materials such as metal, stone, block and wood and earth-tone colors pulled from the landscape. The area immediately adjacent to the Site is relatively undeveloped, allowing Central Foothills to become a flagship in establishing a strong character an identity for its surroundings.

- Safe Neighborhoods - Police, Fire, Traffic

  Ensure our community is safe for all residents to enjoy. Ensure the community is protected from both human-caused and natural emergencies with an emphasis on public education, fire prevention and the use of automatic systems to control structural fires. The community should be protected by an effective emergency medical response system that includes on-scene emergency care and transportation services. The community should be protected from the negative effects of the volume, speed and cut-through traffic in neighborhoods.

  RESPONSE: Central Foothills has been designed to accommodate all emergency response services including police, fire, and medical. The community is designed to provide a secure and comfortable setting for its residents. Circulation routes within the development have been planned in a manner that will minimize vehicular and pedestrian interaction, and promote safe traffic movements into, out of and through the Site. In addition, the development of this Site will provide added financial support for the emergency service already serving the area.

- Connected Neighborhoods

  Ensure connectivity to resources and services for neighborhoods and communities. Ensure a cohesive, connected community through adequate venues for community interaction, community building activities and events, and the sharing of information about community issues and services.

  RESPONSE: Through pedestrian paths, vehicular circulation routes and visual connectivity through the Central Foothills property residents will be able to connect with one another and their surroundings. The central amenity area provides residents with the ability to gather and socialize. As the community is developed, a Homeowners' Association will eventually control the day-to-day operations of the community including establishing community activities and events and the sharing of information about community issues and services.

- Healthy Neighborhoods

  Ensure all communities and neighborhoods are designed and have the necessary infrastructure to allow residents to enjoy a healthy lifestyle.

  RESPONSE: The infrastructure within Central Foothills has been designed to meet the needs of the proposed community to promote the greater quality of life of its residents in not only the necessary utilities but in access to open space, connectivity to surrounding amenities and provision of recreational amenities.

- Diverse Neighborhoods

  Encourage communities and neighborhoods to be a mix of ages, incomes and ethnicities and provide housing suitable to residents with special needs. A diverse range of housing choices, densities, and prices in each village should be encouraged.

  RESPONSE: The proposed development plan for Central Foothills incorporates employment, open space and differing densities of residential uses. The surrounding area lacks medium density housing, the "middle-housing" that has become scarce in many housing markets. Central Foothill proposes a medium density neighborhood in combination with the commercial and lower density housing more prevalent in this area.

- Clean Neighborhoods

  The preservation, maintenance and improvement of property conditions should be promoted to mitigate or eliminate deterioration or blight conditions and to help encourage new development and reinvestment within our communities.

  RESPONSE: The remediation efforts on the Site have helped to reduce the negative impact of the previous use; however, the redevelopment of the Site for less intense uses like the proposed light industrial and commercial benefit the area while protecting the Site from more damage through the potential for development of more intense industrial uses.

Build the Sustainable Desert City

- Desert Landscape

  Protect and celebrate our unique desert landscape.

  RESPONSE: The proposed landscape character for Central Foothills is intended to serve as an extension of the surrounding Sonoran Desert. The overall identity of the development celebrates the character of its surroundings through the use of complementary, natural materials such as metal, stone, block or wood and the application of earth-tone colors found in the natural landscape.

- Rivers, Washes and Waterways

  Celebrate and protect our Rivers, Washes and Waterways.

  RESPONSE: Major waterways or drainage corridors through the Site will be protected as much as possible. The design of the residential development focuses around an existing central drainage path that provides open space connections and viewsheds through the community.

- Redeveloped Brownfields

  Commit to brownfield cleanup and redevelopment.

  RESPONSE: The redevelopment of this Site includes an extensive remediation process to rehabilitate affected portions of the Site. These impacts have been quantified and the existing contamination has been minimized with voluntary remediation efforts continuing through the development process. These limited areas will be set aside for open space and non-residential uses.

- Trees and Shade

  Create a network of trees and shade that integrate with the built environment to conserve ecosystem functions and provide associated benefits to residents.

  RESPONSE: Central Foothills is designed to use a variety of native and drought-tolerant species to provide shade and aesthetic relief to the Site. According to the landscape standards set forth in this document Central Foothills will meet or exceed those of the City. Trees salvaged during the development process will be re-planted on-site in areas that strategically enhance shading opportunities, supplement existing natural areas and provide aesthetic improvement to the overall Property.

- Create an Even More Vibrant Downtown

  Although the Site is not a part of Downtown Phoenix or its surrounding neighborhoods, the overall purpose of this Core Value is to recognize and enhance the existing culture and character of developing areas in Phoenix. This proposed development achieves the spirit of the Core Value by proposing a vibrant, culturally rich community in place of a vacant, undeveloped property and connecting that community to its surroundings through proposed trails and open space corridors as well as access and infrastructure.

Appendix H

Central Foothills
Special Warranty Deed

February 2019

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
ADRIAN FONTES
20190094648 02/11/2019 03:40
ELECTRONIC RECORDING

WHEN RECORDED, MAIL TO,
AND MAIL TAX STATEMENTS TO:

1549924632053-33-1-1--
Garciac

Law Office of David Cisiewski, PLLC
11811 North Tatum Blvd.
Suite 1051
Phoenix, Arizona 85028

SPECIAL WARRANTY DEED

EXEMPT FROM AFFIDAVIT PURSUANT TO ARS 11-1134 B(7)(c)

THIS SPECIAL WARRANTY DEED (the "**Deed**") is made as of the 8 day of February, 2019, by and between The Patricia Archie Foundation, LLC, a Delaware limited liability company ("**Grantor**") and PAF Central, LLC, an Arizona limited liability company ("**Grantee**").

KNOW ALL MEN BY THESE PRESENTS, that Grantor, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, hereby grants, bargains, sells and releases unto Grantee all of Grantor's right, title and interest in and to the real property more fully described in Exhibit A attached hereto and made a part hereof, together with all improvements thereon and any rights, hereditaments and appurtenances thereunto belonging (collectively, the "**Property**").

EXCEPTING AND EXCLUDING FROM THE PROPERTY, water, water rights, applications for water rights and claims to or interests in water or applications for the same, which are appurtenant or in any way derived from the Property.

THE PROPERTY IS CONVEYED SUBJECT TO: (i) current taxes and assessments, (ii) patent reservations, (iii) all applicable zoning and use ordinances, regulations, zoning codes and the like of any municipality, county, state, or the United States affecting the Property as same now exist and as may hereafter be established or amended, (iv) all covenants, conditions, restrictions, reservations, rights, rights-of-way, easements, obligations and liabilities and other matters of record or to which reference is made in the public record, (v) any and all conditions, shortages in area, overlaps, conflicts in boundary lines, easements, encroachments, rights-of way, rights or claims, or restrictions not shown by the public records which would be disclosed by a physical inspection, or which an accurate survey of the Property would reveal, (vi) unpatented mining claims, and (vii) the additional covenants, conditions and restrictions set forth on Exhibit B attached hereto and incorporated by reference herein, and made a part hereof as if fully rewritten herein (the "**CCR's**").

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
ADRIAN FONTES
20190094648 02/11/2019 03:40
ELECTRONIC RECORDING

WHEN RECORDED, MAIL TO,
AND MAIL TAX STATEMENTS TO:

1549924632053-33-1-1--
Garciac

Law Office of David Cisiewski, PLLC
11811 North Tatum Blvd.
Suite 1051
Phoenix, Arizona 85028

SPECIAL WARRANTY DEED

EXEMPT FROM AFFIDAVIT PURSUANT TO ARS 11-1134 B(7)(c)

THIS SPECIAL WARRANTY DEED (the "**Deed**") is made as of the 8 day of February, 2019, by and between The Patricia Archie Foundation, LLC, a Delaware limited liability company ("**Grantor**") and PAF Central, LLC, an Arizona limited liability company ("**Grantee**").

KNOW ALL MEN BY THESE PRESENTS, that Grantor, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, hereby grants, bargains, sells and releases unto Grantee all of Grantor's right, title and interest in and to the real property more fully described in Exhibit A attached hereto and made a part hereof, together with all improvements thereon and any rights, hereditaments and appurtenances thereunto belonging (collectively, the "**Property**").

EXCEPTING AND EXCLUDING FROM THE PROPERTY, water, water rights, applications for water rights and claims to or interests in water or applications for the same, which are appurtenant or in any way derived from the Property.

THE PROPERTY IS CONVEYED SUBJECT TO: (i) current taxes and assessments, (ii) patent reservations, (iii) all applicable zoning and use ordinances, regulations, zoning codes and the like of any municipality, county, state, or the United States affecting the Property as same now exist and as may hereafter be established or amended, (iv) all covenants, conditions, restrictions, reservations, rights, rights-of-way, easements, obligations and liabilities and other matters of record or to which reference is made in the public record, (v) any and all conditions, shortages in area, overlaps, conflicts in boundary lines, easements, encroachments, rights-of way, rights or claims, or restrictions not shown by the public records which would be disclosed by a physical inspection, or which an accurate survey of the Property would reveal, (vi) unpatented mining claims, and (vii) the additional covenants, conditions and restrictions set forth on Exhibit B attached hereto and incorporated by reference herein, and made a part hereof as if fully rewritten herein (the "**CCR's**").

And Grantor hereby binds itself and its successors to warrant and defend the title, as against all acts of Grantor herein and none other, subject to the matters above set forth.

FURTHERMORE, Grantor hereby quitclaims to Grantee, without covenant or warranty of any kind whatsoever, any rights or claims to title to water, applications for water rights, and claims to or interests in water rights which are appurtenant or in any way applicable to or derived from the Property whether surface, underground, wells, springs, percolating, flood, vested, contingent, recorded, certificated, appropriated or otherwise.

Grantor hereby establishes, declares, grants and reserves the CCR's for the benefit of Grantor and its successors and assigns. The CCR's are and shall be enforceable by Grantor, Goodrich Corporation ("**Goodrich**"), and by United Technologies Corporation, a Delaware corporation ("**UTC**"), and its and their respective successors and assigns (collectively, Grantor, Goodrich and UTC and their respective successors and assigns are referred to as the "**Benefitted Parties,**" and each as a "**Benefitted Party**"), and Grantee acknowledges and agrees that the Benefitted Parties are third-party beneficiaries of all terms and conditions of this Agreement.

By its acceptance of this conveyance, Grantee, on behalf of itself and its successors, accepts title to the Property subject to the CCR's.

It is the intention and agreement of Grantor that the CCR's constitute a real property servitude and shall touch and concern the Property and shall apply to and be binding upon and inure to the benefit of Grantor, the Benefitted Parties and Grantees and to any and all parties hereafter having any right, title or interest in the Property or any part thereof. The CCR's shall continue in perpetuity, unless otherwise modified in writing by Grantor.

Any person or entity who acquires any rights, title or interest in all or any part of the Property shall be conclusively deemed to have consented and agreed to the provisions of the CCR's, whether or not any reference to the CCR's or its provisions is contained in the deed or other conveyance instruments by which such person or entity acquires an interest in the Property.

[signature on the following page]

IN WITNESS WHEREOF, Grantor has caused this Deed to be duly executed by its duly authorized officer as of the date first set forth above.

GRANTOR:

THE PATRICIA ARCHIE FOUNDATION, LLC,
a Delaware limited liability company

By: _____
David Cisiewski,
Authorized Agent for the Company

State of ARIZONA }
}ss.
County of Maricopa }

The foregoing instrument was acknowledged before me this 8th day of February, 2019 by David Cisiewski, as the Authorized Agent of The Patricia Archie Foundation, LLC, a Delaware limited liability company, on behalf of said company.

.

_____
Notary Public

My Commission Expires:
4/16/2021

DAYLE A. MOSES
Notary Public - State of Arizona
MARICOPA COUNTY
My Commission Expires April 16, 2021

EXHIBIT A

Description of Property

The Southeast quarter of Section 5, Township 4 North, Range 3 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona;

Except all oil, gases and other hydrocarbon substances, helium or other substances of a gaseous nature, geothermal resources, coal, stone, metals, minerals, fossils and fertilizers of every name and description, together with all uranium, thorium, or any other material which is or may be determined to be peculiarly essential to the production of fissionable material, whether or not of commercial value as reserved Patent from the State of Arizona recorded in Document No. 2016-004999.

EXHIBIT B

Covenants, Conditions and Restrictions

The Property described in Exhibit A above (or portions thereof, as set forth in this Exhibit B) is conveyed subject to the covenants, conditions and restrictions set forth herein (the "**CCR's**"), which are hereby established, declared, granted and reserved by Grantor.

Recitals

A. The Property has been environmentally impacted requiring remediation and the filing of these CCR's. More detailed information regarding the environmental impacts on the Property is available at the ADEQ (as defined below) at 1110 W. Washington Street, Phoenix, AZ.

B. Grantor is responsible for performing certain Environmental Remedial Action (as defined below) on the Property as required by Environmental Laws, ADEQ or any other Governmental Authority (all as defined below).

C. The nature and extent of Environmental Remedial Action performed on the Property will be subject to the future approval and requirements imposed by ADEQ or any other Governmental Authority, but, as of the date hereof, such Environmental Remedial Action and Remediation Plans (as defined below) have not been finally determined nor completed.

D. Grantor is imposing these CCR's with the understanding and acknowledgement of Grantee that Grantors may impose additional DEUR(s) (as defined below) in order to implement Remediation Plans in accordance with the terms and conditions of these CCR's.

1. **Definitions. Below are certain definitions of terms as used in these CCR's:**

"ADEQ" means the Arizona Department of Environmental Quality.

"Benefitted Parties" means Grantor, Goodrich Corporation, a New York corporation, and United Technologies Corporation, a Delaware corporation ("**UTC**"), and each of their respective corporate successors and assigns, which have or assume any liability under the Remediation Plans.

"Building Materials" means any materials whatsoever that exist in the Improvements or on its surfaces or in building and construction materials, including its coatings, decorations, and fixtures, and materials meeting the definition of a Regulated Material.

"DEUR" means any Declaration of Environmental Use Restriction approved by ADEQ pursuant to applicable Arizona Environmental Law.

"**Environment**" means soil, land, surface or subsurface strata, surface waters (including navigable waters, ocean waters, streams, ponds, drainage basins, and wetlands), groundwaters, stream sediments, plant and animal life, and any other environmental medium or natural resource.

"**Environmental Law**" means any applicable law, statute, constitution, code, order, ordinance, decree, judgment, writ, injunction, rule, regulation or other similar directive of any Governmental Authority relating to the protection of the human health or the Environment, and/or governing the handling, use, generation, treatment, storage or disposal of Regulated Materials, but excluding any such law primarily pertaining to employee health and safety.

"**Environmental Remedial Action**" means any and all actions pursuant to Environmental Laws, the Remediation Plans, these CCR's or any DEUR to (i) investigate, clean up, remediate, remove, treat, contain, impose land use restrictions or in any other way address any Regulated Materials in the Environment, (ii) prevent the Release or threat of Release or minimize the further Release of Regulated Materials so they do not migrate or endanger public health or welfare or the indoor or outdoor Environment, and (iii) perform pre-remedial studies and investigations, remedial activities, and post-remedial monitoring, maintenance and care.

"**Governmental Authority**" means any nation, state, county, city, town, borough, village, district or other governmental jurisdiction; any court, tribunal or governmental or quasi-governmental authority of any nature; any department, commission, board, bureau, agency or other regulatory, administrative or governmental authority or instrumentality (including foreign, federal, state, local or other political subdivision); or any other authority or entity having jurisdiction over the Property or any conduct of the parties under this Agreement.

"**Non-Residential Property**" means that certain portion of the Property designated as "Non-Residential Property" on **Exhibit A**, attached hereto.

"**Regulated Material**" means any (i) hazardous materials or toxic substances as defined by any Environmental Law; (ii) petroleum or petroleum product, oil or waste oil; (iii) asbestos or polychlorinated biphenyls; (iv) toxic substance, toxic pollutant, solid waste, municipal waste, industrial waste, hazardous waste, flammable material, radioactive material, pollutant or contaminant or words of similar meaning and regulatory effect under any applicable Environmental Law; and (v) any other chemical, material, or substance exposure to which or whose discharge, emission, disposal or Release is prohibited, limited, or regulated under any applicable Environmental Law. "Regulated Material" includes any mixture or solution of the foregoing, and all derivatives or synthetic substitutes of the foregoing, but expressly does not include any Building Materials.

"**Release**" means any spill, leak, emission, discharge, leaching, dumping or other release of any Regulated Material into the Environment, whether intentional or unintentional.

"Remediation Plans" means any remediation plans submitted by Grantor and approved by ADEQ for the Property, as may be amended or revised from time to time by Grantor and ADEQ, in their sole discretion

"Residential Property" means that portion of the Property not designated as "Non-Residential Property" on **Exhibit A**, attached hereto.

2. **Restrictions on Use and Occupancy of the Property.**

(a) Except to the extent allowed or required under groundwater remediation and monitoring plans that have been approved by a Governmental Authority with jurisdiction over the Property, no surface or subsurface water at, on, or under the Property shall be used for consumption by humans or animals, irrigation or any other purpose that might bring it into contact, directly or indirectly, with humans or animals.

(b) No underground storage tanks or piping for petroleum or other Regulated Material shall be maintained, used or installed in, at on or under the Property.

(c) There shall be no use at or on the Property of any perchlorate, chlorinated solvents or any other chemicals or compounds that have breakdown products similar to breakdown products of chlorinated solvents.

3. **Further Restrictions on Use and Occupancy of the Non-Residential Property.**

(a) The Non-Residential Property shall not be used for any purpose other than industrial, office, warehouse, commercial, retail and other commercial purposes that, under applicable law, do not require the Property to meet environmental clean-up or remediation standards for residential uses. Without limiting the generality of the foregoing, the Non-Residential Property shall not be used for any of the following uses: single or multi-family residential, school, daycare, group home, nursing home, hospital, meeting hall, church or other place of congregation or worship, hotel, motel or other type of lodging, park, playground or other recreational or residential use.

(b) No person shall dig, excavate, destroy, tamper, or otherwise negatively impact the integrity of any Caps (as defined below) placed on the Non-Residential Property, including, but not limited to those areas indicated to be capped on **Exhibit B**, attached hereto, without Grantor's written approval, which Grantor may withhold in its sole and absolute discretion.

4. **Environmental Remedial Action.**

(a) All use of and activities on the Property and in and about the buildings and structures thereon shall be conducted so that there shall be no material interference with any Environmental Remedial Action then being conducted or reasonably anticipated to be conducted at the Property, nor shall such use or activities result in any exacerbation of any Environmental Condition on the Property.

(b) In particular, and without limiting the generality of the foregoing, no buildings or other structures or improvements or alterations thereof shall be constructed, erected or maintained on the Property and no activities, use, operation or occupancy of the Property shall be conducted in such a way so as to materially interfere with the installation, operation, maintenance, integrity, repair or replacement of any Remediation System. For the purposes of these CCR's, the term "**Remediation System**" means, collectively, all impermeable barriers ("**Caps**"), groundwater extraction wells and related equipment, all purge wells and related equipment, all groundwater wells, monitoring wells, groundwater treatment injection wells or infiltration galleries, or other environmental wells, any groundwater pump and treatment system, and any groundwater and/or soil remediation facilities, including without limitation, any collection trenches, subsurface in-situ treatment trenches or barriers, subsurface pipes, air strippers, groundwater and wastewater ponds and aeration weirs, or other environmental remediation facilities, structures or equipment required for the purpose of conducting or maintaining any Environmental Remedial Action.

(c) If deemed necessary or appropriate by the Benefitted Parties or any Governmental Authority in order to accomplish any Environmental Remedial Action on the Property, the Grantee and its successors in title shall permit Grantor to establish additional Caps within the Non-Residential Property as necessary to complete such Environmental Remedial Action.

5. **Undertakings of Grantee and Successors in Title.**

(a) Grantee, and its successors in title and any and all occupants of the Property, shall reasonably cooperate with any applicable Governmental Authority, and the Benefitted Parties and its consultants and contractors in connection with any Environmental Remedial Action that the Benefitted Parties, or any of them, or their designees may be required to undertake to implement any Environmental Remedial Action at the Property.

(b) In addition to the CCR's, if deemed appropriate and requested by the Benefitted Parties to implement the Remediation Plans, the Grantee and its successors in title shall grant to the Benefitted Parties and/or any applicable Governmental Authority, DEUR(s) in such form and substance as approved by any applicable Governmental Authority, and shall obtain and deliver to the Benefitted Parties and/or any applicable Governmental Authority such subordinations to, and/or releases to the grant of such DEUR(s) as the Benefitted Parties and/or any applicable Governmental Authority may require; provided, however, that any DEUR entered into under this Section 5.5(b) shall be subject to the following limitations:

(1) As to the Residential Property, such DEUR(s), shall not conflict with or alter the allowed uses of the Residential Property as limited in these CCR's, and shall contain only those restrictions for the Residential Property as set forth in these CCR's;

(2) As to the Non-Residential Property, such DEUR(s) shall not expand the boundaries of the Non-Residential Property, and shall not conflict with or alter the allowed uses of the Non-Residential Property as limited in these CCR's.

(c) In the event that the Benefitted Parties file and/or record DEUR(s) on the Property following Grantee's purchase of the Property that require material alterations, modifications, or repairs to any buildings, structures or other improvements that have been constructed on the Property in compliance with these CCR's and any DEUR(s), the Benefitted Parties, at their sole discretion, shall either make such alterations, modifications, or repairs at the Benefited Parties' cost, or pay Grantee's (or any successor in interest to Grantee of any portion of the Property) reasonable costs for such alterations, modifications, or repairs that are directly required to comply with such additional DEUR(s) requirements and restrictions. In the event that the Benefitted Parties pay for alteration, modification, or repair costs to an individual or entity under this Section 5(c), such payment by the Benefitted Parties shall be made to the individual or entity not later than forty-five (45) days after presentment of reasonable documentation of the actual costs incurred for such alterations, modifications or repairs and the obligations of the Benefitted Parties shall bind and inure to any successor to the Benefitted Parties interest and/or obligations related to the Property.

(d) Subject to Section 4 of these CCR's, Grantee, its, successors in title, and all occupants of the Property, shall at its and their sole cost and expense, employ best management practices with respect to any invasive activity on the Property that could disturb residual contamination. Such best management practices shall include protective measures for fugitive dust and worker exposure and shall ensure that any and all soil, soil cuttings, soil moisture, surface water, groundwater, and/or other potentially contaminated construction debris or materials discovered, identified and/or generated on or after the date hereof as a result of construction or other activities on the Property shall be properly handled, characterized, segregated, stored, managed and disposed of in accordance with all applicable Environmental Laws, and will not pose a danger to public health, safety or the environment.

(e) Grantee, its successors and assigns, shall reimburse Grantor for any damage, interference or penalties resulting from any action or failure to act by the Grantee which directly results in a violation of the provisions of this Section 5 herein, including but not limited to, the cost of repairing or replacing the Remediation System in compliance with Environmental Laws.

(f) Grantee, its successors and assigns in title and its and their respective successors and assigns, shall not communicate with any Governmental Authority regarding or concerning any Environmental Remedial Action being performed by any of the Benefitted Parties and relating to the Property. All correspondence, discussions and negotiations with, and submissions to, any Governmental Authority concerning, or that may affect, the Benefitted Parties' Environmental Remedial Action shall be controlled by and coordinated with the Benefitted Parties.

(g) Nothing in these CCR's shall preclude the then current owner of the Property from making any filing or other communication necessary to satisfy a legal obligation or prevent, hinder or interfere with any then current owner from pursuing any zoning, entitlement or development approvals related to the Property or any portion thereof; provided, however, that no zoning, entitlement or development approvals shall affect, limit or reduce the terms of these CCR's, all of which shall have priority over such approvals.

(h) Grantee, its successors and assigns in title and its and their respective successors and assigns shall not perform any activities on the Property that reasonably likely to exacerbate any Environmental Conditions on the Property or any related environmental conditions located off-site, or materially interfere with any Environmental Remedial Action.

6. **Reserved Right of Access.**

Grantor hereby reserves to itself, its successors and assigns, and its successors in title, and does hereby grant to the Benefitted Parties and their successors and assigns, an easement and right of entry into and on the Property for themselves and their respective employees, contractors, agents, and consultants, upon reasonable notice and at reasonable times (in light of the purpose of the entry), for the purpose of determining compliance with the terms of these CCR's, to perform any Environmental Remedial Action that the Benefitted Parties may be obligated to perform, including, but not limited to, any action in accordance with the Remedial Plans, any DEUR, Environmental Law, requirement of any Governmental Authority or which Grantor or the Benefited Parties may, in their sole discretion, choose to perform; *provided, however*, that such access shall not unreasonably disrupt or interfere with the lawful use and operation of the Property by the occupants thereof. Such right shall include, but shall not be limited to, a right and easement for (1) the placement, installation, construction, monitoring, operation, repair and maintenance of Remediation Systems and related facilities located or required to be located on the Property pursuant to the Remediation Plans or any other Environmental Remedial Action, (2) temporary material storage and staging, (3) replacement or storage of machinery, equipment and other property on the Property, and (4) and the right to post notices on the Property pursuant to the Benefitted Parties' obligations to perform any Environmental Remedial Action.

7. **Covenants Run with the Land.**

These CCR's shall run with the land and shall bind Grantee, Grantee's heirs, administrators, executors, successors and assigns, and can only be terminated by a written instrument executed by Grantor or UTC and duly recorded in the local land records in the jurisdiction where the Property is located.

8. **Limitation of Liability.**

These CCR's are made for the benefit of the Benefitted Parties. The reservation by Grantor of the rights and benefits herein to perform one or more activities and the grant of rights and benefits by the Grantor to the other Benefitted Parties does not imply,

and is not to be construed as imposing, any additional liability on the Grantor or the other Benefitted Parties or, except as expressly provided herein, any additional duty on the part of Grantor or the other Benefitted Parties or its or their respective successors and assigns to perform any such activity.

9. **Enforcement.**

(a) The rights herein reserved and/or granted may be enforced jointly or separately by the Benefitted Parties and their respective corporate successors and assigns.

(b) In the event that Grantee or its heirs, successors and assigns shall fail to comply with the requirements of these CCR's, such persons who so fail to comply shall be liable to the Benefitted Parties for any and all costs and reasonably attorney's fees associated with the enforcement of any provision or obligation created herein.

10. **Severability.**

If any court of competent jurisdiction determines that any provision of this instrument is invalid or unenforceable, such provision shall be deemed to have been modified automatically to conform to the requirements for validity and enforceability as determined by such court. In the event that the provision invalidated is of such nature that it cannot be so modified, the provision shall be deemed deleted from this instrument as though it had never been included herein. In either case, the invalidity of such provision shall not affect the validity of any other provisions hereof, and all such other provisions shall continue unimpaired and in full force and effect.

11. **Amendment.**

These CCR's may be modified or amended only with the consent of the Grantor or its corporate successors and assigns having at the relevant time the benefits of the rights herein granted.

12. **Notices.**

Except as otherwise required or allowed herein, any required notice from one party to another under these CCR's shall be sufficient if such notice is in writing and shall be deemed to have been duly given or sent (a) when received, if dispatched by registered or certified mail (return receipt requested), (b) when received, if delivered in hand, or (c) on the following business day, if dispatched by a reputable overnight courier which requires a signature of the receiving party, in each case to the party intended at its address as follows:

If to the
Benefitted Parties: Universal Propulsion Company, Inc.
3530 Branscombe Road
Fairfield, California 94533
Attn: Tarah J. Stringfield, Manager, Contracts & Business Management

and

Goodrich Corporation
One Hamilton Road, MS 1-1-BC18
Windsor Locks, Connecticut 06096
Attn: Assistant General Counsel – EH&S and Real Estate

with a copy to: United Technologies Corporation:
Office of the General Counsel
United Technologies Corporation
10 Farms Spring Road
Farmington, Connecticut 06032

If to Grantee: PAF Central, LLC
11811 North Tatum Blvd., Suite 1051
Phoenix, Arizona 85028
Attn: David Cisiewski, Authorized Agent

Any of the parties may change the address to which notices may be sent by written notice to the other parties; *provided, however*, that no such change of address shall be binding unless notice thereof has been recorded in the same land records as these CCR's.

13. **Duration.**

These CCR's shall continue in perpetuity, unless otherwise modified in writing by the Grantor in accordance with Section 11 above.

14. **Rights not Abridged by Public Restriction.**

Grantor and Grantees intend that separate agreed upon DEUR(s) approved by ADEQ and/or an applicable Governmental Authority regarding the Property may be recorded, and agree that if the same are recorded, such DEUR(s) shall not diminish any right or obligation described herein of either Grantor or Grantee or their respective heirs, successors or assigns.

EXHIBIT A TO COVENANTS, CONDITIONS AND RESTRICTIONS

Depiction of Residential and Non-Residential Property

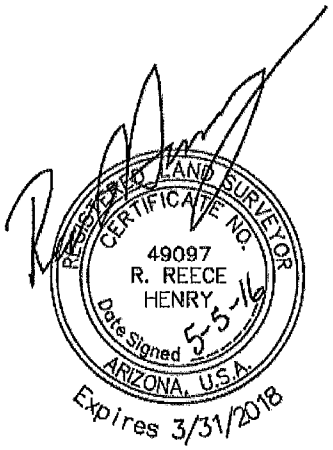
(See attached)

EXHIBIT 'A'
LEGAL DESCRIPTION
NON-RESIDENTIAL PARCEL

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

BEGINNING AT A BRASS CAP IN HAND HOLE AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH A BRASS CAP IN HAND HOLE AT THE CENTER OF SECTION 5, BEARS N1°10'12"W, A DISTANCE OF 2638.92 FEET;
THENCE N1°10'12"W, ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER OF SECTION 5, A DISTANCE OF 477.87 FEET;
THENCE, DEPARTING SAID WEST LINE, N56°23'41"E, A DISTANCE OF 2265.43 FEET;
THENCE N66°31'14"E, A DISTANCE OF 747.30 FEET TO A POINT ON THE EAST LINE OF SAID SOUTHEAST QUARTER OF SECTION 5;
THENCE, DEPARTING SAID EAST LINE, S11°37'08"W, A DISTANCE OF 452.59 FEET;
THENCE S55°50'47"W, A DISTANCE OF 284.83 FEET;
THENCE S4°47'43"W, A DISTANCE OF 665.23 FEET;
THENCE S33°46'05"E, A DISTANCE OF 262.82 FEET;
THENCE S80°18'19"W, A DISTANCE OF 734.30 FEET;
THENCE S40°12'28"W, A DISTANCE OF 576.52 FEET TO A POINT ON THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF SECTION 5;
THENCE, ALONG SAID SOUTH LINE, N89°06'21"W, A DISTANCE OF 1230.24 FEET TO THE **POINT OF BEGINNING.**

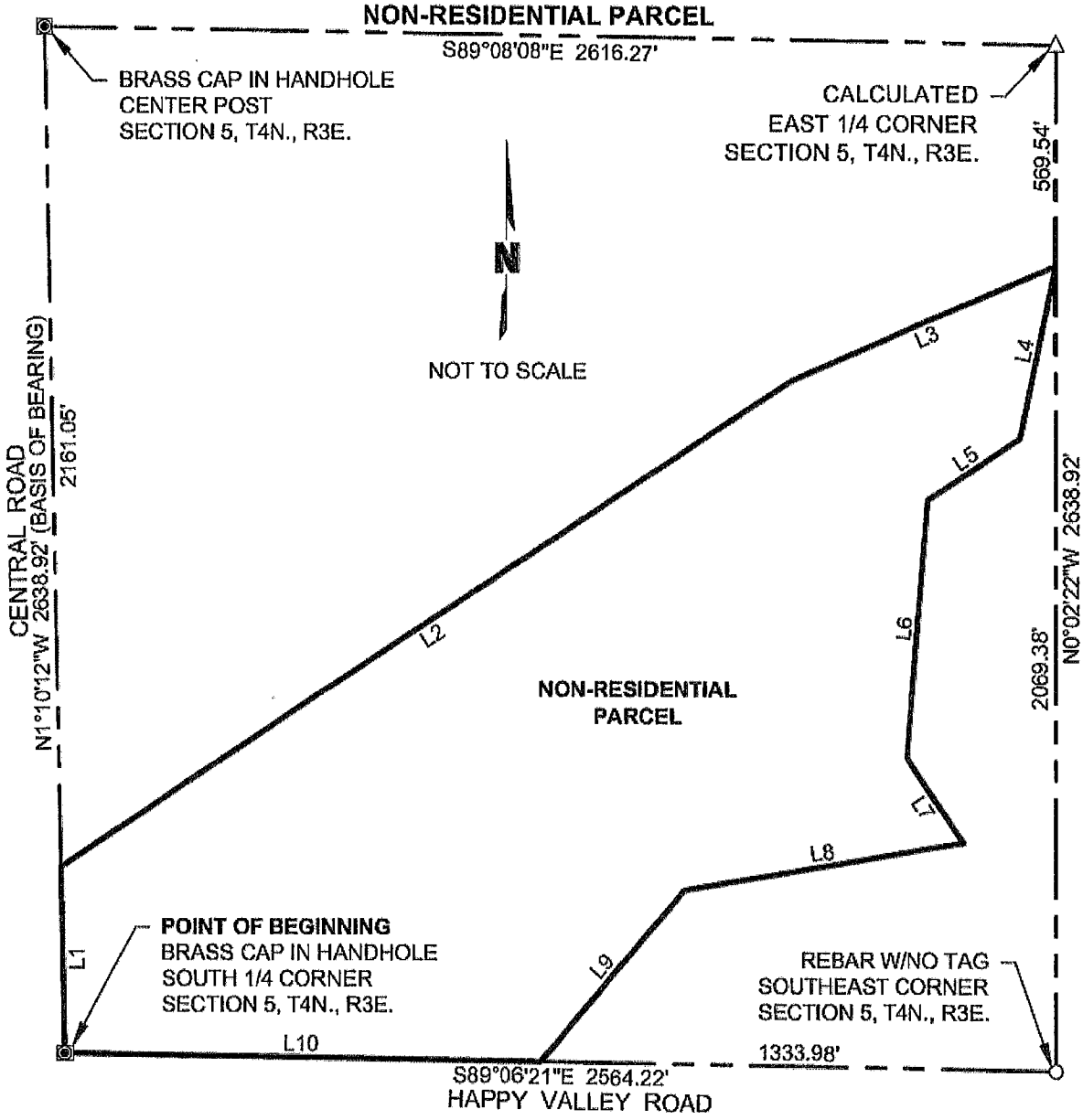
CONTAINING 56.780 ACRES MORE OR LESS.



OLSSON ASSOCIATES
7250 North 16th Street Suite 210
Phoenix, AZ 85020-5282
TEL 602.748.1000

EXHIBIT 'A'

LEGAL DESCRIPTION
NON-RESIDENTIAL PARCEL



LINE TABLE					
LINE #	DIRECTION	LENGTH	LINE #	DIRECTION	LENGTH
L1	N1°10'12"W	477.87'	L6	S4°47'43"W	665.23'
L2	N56°23'41"E	2265.43'	L7	S33°46'05"E	262.82'
L3	N66°31'14"E	747.30'	L8	S80°18'19"W	734.30'
L4	S11°37'08"W	452.59'	L9	S40°12'28"W	576.52'
L5	S55°50'47"W	284.83'	L10	N89°06'21"W	1230.24'

OLSSON ASSOCIATES
7250 North 16th Street Suite 210
Phoenix, AZ 85020-5282
TEL 602.748.1000

PAGE 2 OF 2

EXHIBIT B TO COVENANTS, CONDITIONS AND RESTRICTIONS

Location of Caps on Non-Residential Property

(See attached)

LEGAL DESCRIPTION
APN: 210-14-050A

FIVE PARCELS OF LAND LOCATED IN THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 4 NORTH, RANGE 3 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL 1:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 1334.86 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 333.32 FEET TO THE **POINT OF BEGINNING;**

THENCE N46°59'43"W, A DISTANCE OF 27.74 FEET;

THENCE N48°07'14"W, A DISTANCE OF 20.36 FEET;

THENCE N34°34'32"E, A DISTANCE OF 7.32 FEET;

THENCE N41°54'45"E, A DISTANCE OF 20.43 FEET;

THENCE N43°05'06"E, A DISTANCE OF 21.32 FEET;

THENCE S48°20'46"E, A DISTANCE OF 10.60 FEET;

THENCE S48°33'55"E, A DISTANCE OF 19.67 FEET;

THENCE S48°19'41"E, A DISTANCE OF 15.55 FEET;

THENCE S50°08'28"E, A DISTANCE OF 4.27 FEET;

THENCE S37°01'50"W, A DISTANCE OF 3.88 FEET;

THENCE S42°17'27"W, A DISTANCE OF 25.91 FEET;

THENCE S44°03'04"W, A DISTANCE OF 18.79 FEET;

THENCE S75°56'06"W, A DISTANCE OF 1.69 FEET TO THE **POINT OF BEGINNING.**

SAID **PARCEL** 1 CONTAINS 2,486 SQUARE FEET, MORE OR LESS.

PARCEL 2:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 1383.54 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 396.92 FEET TO THE **POINT OF BEGINNING;**

THENCE N53°47'31"W, A DISTANCE OF 5.35 FEET;

THENCE N45°25'00"W, A DISTANCE OF 12.22 FEET;

THENCE N49°10'48"W, A DISTANCE OF 16.35 FEET;

THENCE N47°11'14"W, A DISTANCE OF 19.70 FEET;

THENCE N50°38'33"W, A DISTANCE OF 18.51 FEET;

THENCE N47°48'51"W, A DISTANCE OF 20.32 FEET;

THENCE N49°23'40"W, A DISTANCE OF 20.44 FEET;

THENCE N48°43'55"W, A DISTANCE OF 21.14 FEET;

THENCE N47°11'14"W, A DISTANCE OF 4.77 FEET;

THENCE N46°23'04"E, A DISTANCE OF 4.63 FEET;

THENCE N44°46'05"E, A DISTANCE OF 24.27 FEET;

THENCE N44°38'42"E, A DISTANCE OF 14.71 FEET;

THENCE N45°28'58"E, A DISTANCE OF 14.99 FEET;

THENCE N46°37'42"E, A DISTANCE OF 14.84 FEET;

THENCE N42°03'52"E, A DISTANCE OF 21.39 FEET;

THENCE S48°56'25"E, A DISTANCE OF 12.53 FEET;

THENCE S47°56'46"E, A DISTANCE OF 24.89 FEET;

THENCE S47°20'44"E, A DISTANCE OF 22.01 FEET;

THENCE S49°02'50"E, A DISTANCE OF 18.93 FEET;

THENCE S41°16'29"E, A DISTANCE OF 3.87 FEET;

THENCE S23°32'41"W, A DISTANCE OF 2.42 FEET;

THENCE S42°10'21"W, A DISTANCE OF 24.15 FEET;

THENCE S40°49'14"W, A DISTANCE OF 15.87 FEET;

THENCE S43°24'23"W, A DISTANCE OF 17.31 FEET;

THENCE S07°10'51"W, A DISTANCE OF 2.25 FEET;

THENCE S47°15'29"E, A DISTANCE OF 10.63 FEET;

THENCE S47°15'34"E, A DISTANCE OF 21.31 FEET;

THENCE S48°42'24"E, A DISTANCE OF 14.95 FEET;

THENCE S42°38'34"E, A DISTANCE OF 2.98 FEET;

THENCE S05°51'36"E, A DISTANCE OF 2.62 FEET;

THENCE S11°15'54"W, A DISTANCE OF 2.48 FEET;

THENCE S45°59'27"W, A DISTANCE OF 13.00 FEET;

THENCE S46°06'19"W, A DISTANCE OF 12.00 FEET;

THENCE S66°04'46"W, A DISTANCE OF 2.39 FEET TO THE **POINT OF BEGINNING.**

SAID **PARCEL 2** CONTAINS 9,664 SQUARE FEET, MORE OR LESS.

PARCEL 3:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 1480.68 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 944.95 FEET TO THE **POINT OF BEGINNING;**

THENCE N11°33'50"W, A DISTANCE OF 7.63 FEET;

THENCE N24°29'24"W, A DISTANCE OF 1.64 FEET;

THENCE N89°54'55"W, A DISTANCE OF 14.47 FEET;

THENCE S87°08'17"W, A DISTANCE OF 17.99 FEET;

THENCE N11°34'49"W, A DISTANCE OF 8.79 FEET;

THENCE N00°06'22"W, A DISTANCE OF 11.01 FEET;

THENCE N02°55'15"E, A DISTANCE OF 15.32 FEET;

THENCE N01°04'26"E, A DISTANCE OF 14.52 FEET;

THENCE N03°49'23"W, A DISTANCE OF 13.29 FEET;

THENCE N02°26'17"E, A DISTANCE OF 17.59 FEET;

THENCE N35°17'16"E, A DISTANCE OF 3.37 FEET;

THENCE N48°36'01"E, A DISTANCE OF 20.69 FEET;

THENCE N52°07'47"E, A DISTANCE OF 13.94 FEET;

THENCE N87°24'46"E, A DISTANCE OF 4.90 FEET;

THENCE S50°03'03"E, A DISTANCE OF 24.48 FEET;

THENCE S51°20'33"E, A DISTANCE OF 12.97 FEET;

THENCE S43°26'28"E, A DISTANCE OF 14.38 FEET;

THENCE S34°31'33"E, A DISTANCE OF 4.06 FEET;

THENCE S03°21'34"E, A DISTANCE OF 16.15 FEET;

THENCE S00°01'01"W, A DISTANCE OF 14.66 FEET;

THENCE S01°18'27"W, A DISTANCE OF 15.56 FEET;

THENCE S27°34'26"W, A DISTANCE OF 4.62 FEET;

THENCE S48°37'09"W, A DISTANCE OF 9.38 FEET;

THENCE S39°09'35"W, A DISTANCE OF 8.90 FEET;

THENCE S04°09'21"W, A DISTANCE OF 9.32 FEET;

THENCE S78°37'07"W, A DISTANCE OF 14.03 FEET;

THENCE S87°54'52"W, A DISTANCE OF 10.30 FEET TO THE **POINT OF BEGINNING.**

SAID **PARCEL 3** CONTAINS 6,839 SQUARE FEET, MORE OR LESS.

PARCEL 4:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 2004.29 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 1202.00 FEET TO THE **POINT OF BEGINNING;**

THENCE N12°39'30"E, A DISTANCE OF 13.68 FEET;

THENCE N03°40'04"E, A DISTANCE OF 13.51 FEET;

THENCE N03°19'19"E, A DISTANCE OF 3.84 FEET;

THENCE S61°27'11"W, A DISTANCE OF 5.96 FEET;

THENCE N68°24'17"W, A DISTANCE OF 4.72 FEET;

THENCE N20°43'56"W, A DISTANCE OF 11.42 FEET;

THENCE N24°36'10"W, A DISTANCE OF 20.47 FEET;

THENCE N23°09'08"W, A DISTANCE OF 18.02 FEET;

THENCE N24°11'52"W, A DISTANCE OF 26.48 FEET;

THENCE N24°48'32"W, A DISTANCE OF 30.53 FEET;

THENCE N33°30'19"E, A DISTANCE OF 9.32 FEET;

THENCE N35°07'34"E, A DISTANCE OF 14.92 FEET;

THENCE N33°42'47"E, A DISTANCE OF 30.86 FEET;

THENCE N32°50'40"E, A DISTANCE OF 16.53 FEET;

THENCE N32°27'21"E, A DISTANCE OF 28.86 FEET;

THENCE N38°06'18"E, A DISTANCE OF 24.49 FEET;

THENCE N66°54'12"E, A DISTANCE OF 2.93 FEET;

THENCE S69°34'49"E, A DISTANCE OF 2.36 FEET;

THENCE S42°45'15"E, A DISTANCE OF 25.21 FEET;

THENCE S45°43'33"E, A DISTANCE OF 19.63 FEET;

THENCE S45°13'39"E, A DISTANCE OF 9.89 FEET;

THENCE S42°03'28"E, A DISTANCE OF 8.05 FEET;

THENCE S46°20'34"E, A DISTANCE OF 4.30 FEET;

THENCE S22°55'51"W, A DISTANCE OF 3.29 FEET;

THENCE S42°26'21"E, A DISTANCE OF 6.86 FEET;

THENCE N62°44'37"E, A DISTANCE OF 4.10 FEET;

THENCE S53°58'25"E, A DISTANCE OF 3.71 FEET;

THENCE S44°01'54"E, A DISTANCE OF 9.33 FEET;

THENCE N84°09'21"E, A DISTANCE OF 0.44 FEET;

THENCE S56°32'30"E, A DISTANCE OF 4.38 FEET;

THENCE S78°44'41"E, A DISTANCE OF 4.35 FEET;

THENCE S33°39'47"E, A DISTANCE OF 4.72 FEET;

THENCE S10°49'31"W, A DISTANCE OF 2.49 FEET;

THENCE S50°32'50"E, A DISTANCE OF 2.16 FEET;

THENCE S29°45'11"E, A DISTANCE OF 4.20 FEET;

THENCE S31°36'23"E, A DISTANCE OF 5.73 FEET;

THENCE S35°24'31"E, A DISTANCE OF 2.23 FEET;

THENCE S38°40'52"E, A DISTANCE OF 0.34 FEET;

THENCE S38°07'09"W, A DISTANCE OF 7.88 FEET;

THENCE S62°49'36"W, A DISTANCE OF 15.90 FEET;

THENCE S52°10'19"W, A DISTANCE OF 9.87 FEET;

THENCE S33°51'36"W, A DISTANCE OF 9.12 FEET;

THENCE S23°43'06"W, A DISTANCE OF 8.79 FEET;

THENCE S27°47'52"W, A DISTANCE OF 21.06 FEET;

THENCE S24°26'46"W, A DISTANCE OF 17.54 FEET;

THENCE S21°48'00"W, A DISTANCE OF 10.19 FEET;

THENCE S23°25'39"W, A DISTANCE OF 9.85 FEET;

THENCE S28°09'22"W, A DISTANCE OF 4.37 FEET;

THENCE S56°48'20"W, A DISTANCE OF 6.05 FEET;

THENCE S11°13'12"E, A DISTANCE OF 1.67 FEET;

THENCE S54°09'55"W, A DISTANCE OF 4.67 FEET;

THENCE S01°20'48"W, A DISTANCE OF 16.59 FEET;

THENCE S11°10'22"E, A DISTANCE OF 8.12 FEET;

THENCE S03°54'54"W, A DISTANCE OF 6.65 FEET;

THENCE S67°25'36"W, A DISTANCE OF 5.34 FEET;

THENCE S58°25'41"W, A DISTANCE OF 5.97 FEET;

THENCE S66°35'05"W, A DISTANCE OF 6.05 FEET;

THENCE S61°52'33"W, A DISTANCE OF 8.29 FEET;

THENCE S57°33'48"W, A DISTANCE OF 9.09 FEET;

THENCE N80°19'32"W, A DISTANCE OF 7.90 FEET TO THE **POINT OF BEGINNING.**

SAID **PARCEL 4** CONTAINS 18,078 SQUARE FEET, MORE OR LESS.

PARCEL 5:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 5, FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 5, BEARS S89°06'21"E, A DISTANCE OF 2564.14 FEET;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 5, S89°06'21"E, A DISTANCE OF 2217.40 FEET;

THENCE DEPARTING SAID SOUTH LINE, N00°53'39"E, A DISTANCE OF 1854.92 FEET TO THE **POINT OF BEGINNING;**

THENCE N54°06'17"W, A DISTANCE OF 8.74 FEET;

THENCE N45°13'24"W, A DISTANCE OF 13.05 FEET;

THENCE N43°34'29"E, A DISTANCE OF 12.40 FEET;

THENCE N47°12'16"E, A DISTANCE OF 16.67 FEET;

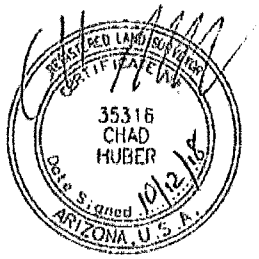
THENCE S58°06'42"E, A DISTANCE OF 16.97 FEET;

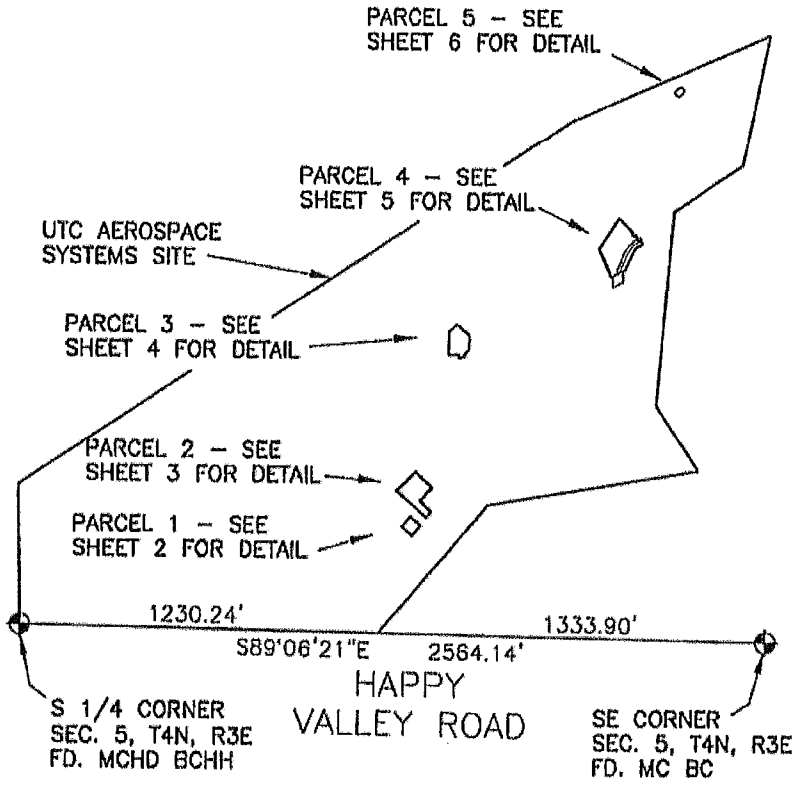
THENCE S25°25'51"W, A DISTANCE OF 13.83 FEET;

THENCE S44°25'28"W, A DISTANCE OF 18.44 FEET TO THE POINT OF BEGINNING.

SAID PARCEL 5 CONTAINS 641 SQUARE FEET, MORE OR LESS.

TOTAL COMBINED PARCELS CONTAIN 37,708 SQUARE FEET, OR 0.87 ACRES, MORE OR LESS.





LEGEND

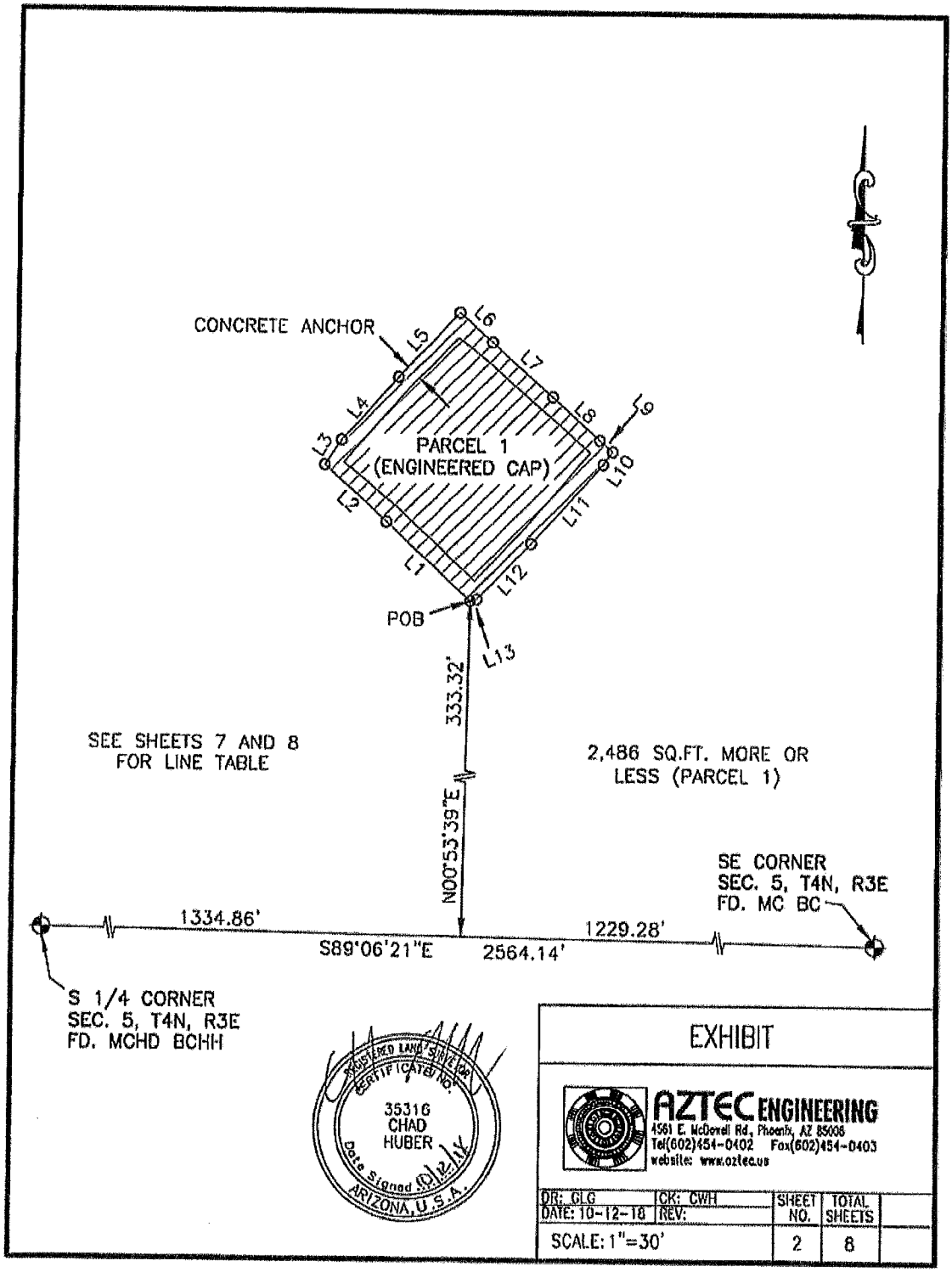
POB = POINT OF BEGINNING
MCHD = MARICOPA COUNTY HIGHWAY DEPARTMENT
BC = BRASS CAP
BCHH = BRASS CAP IN HAND HOLE
O = CONCRETE CAP ANCHOR
MC = MARICOPA COUNTY
▨ = ENGINEERED CAP

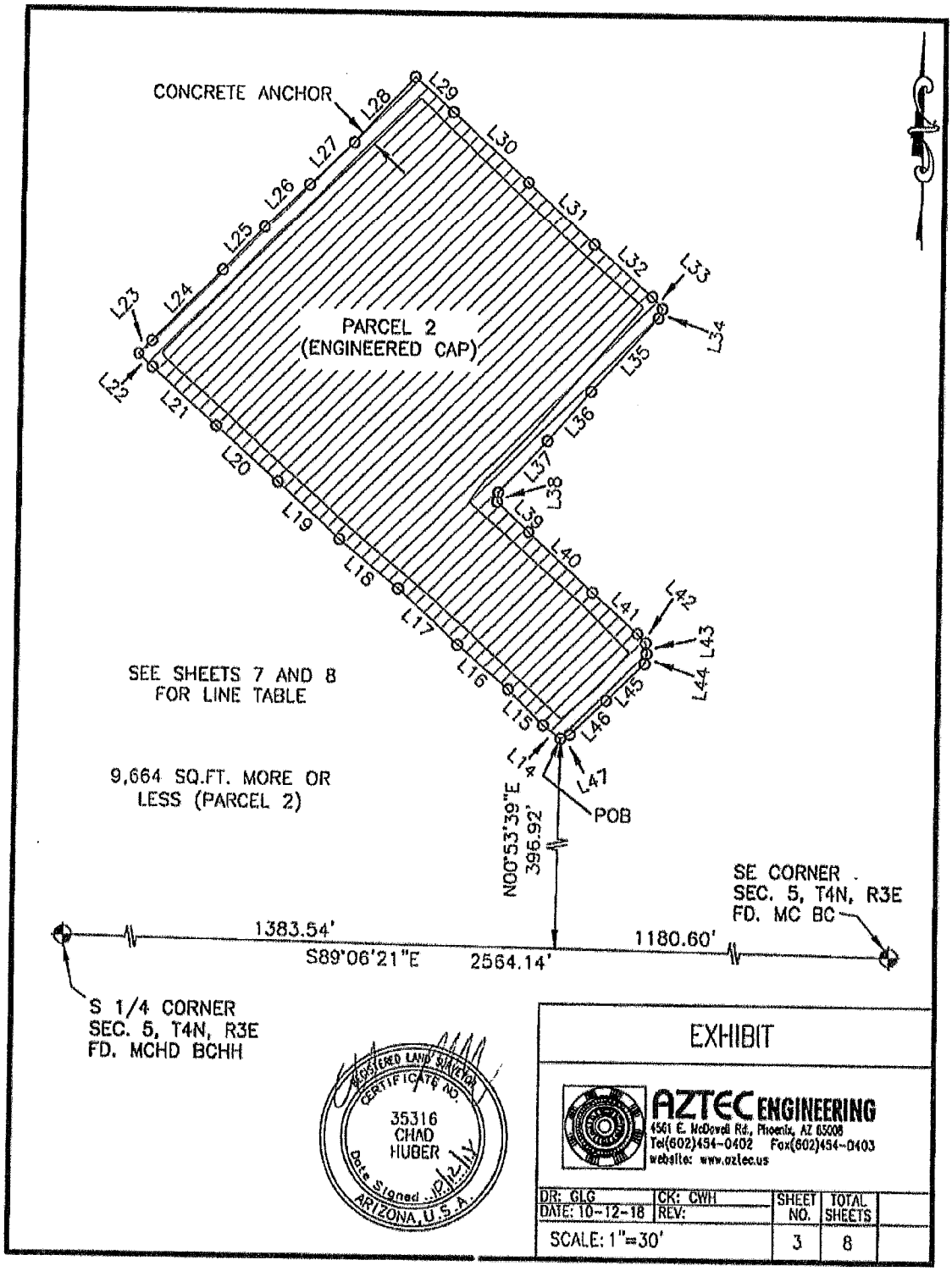
REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 10/12/18
ARIZONA, U.S.A.

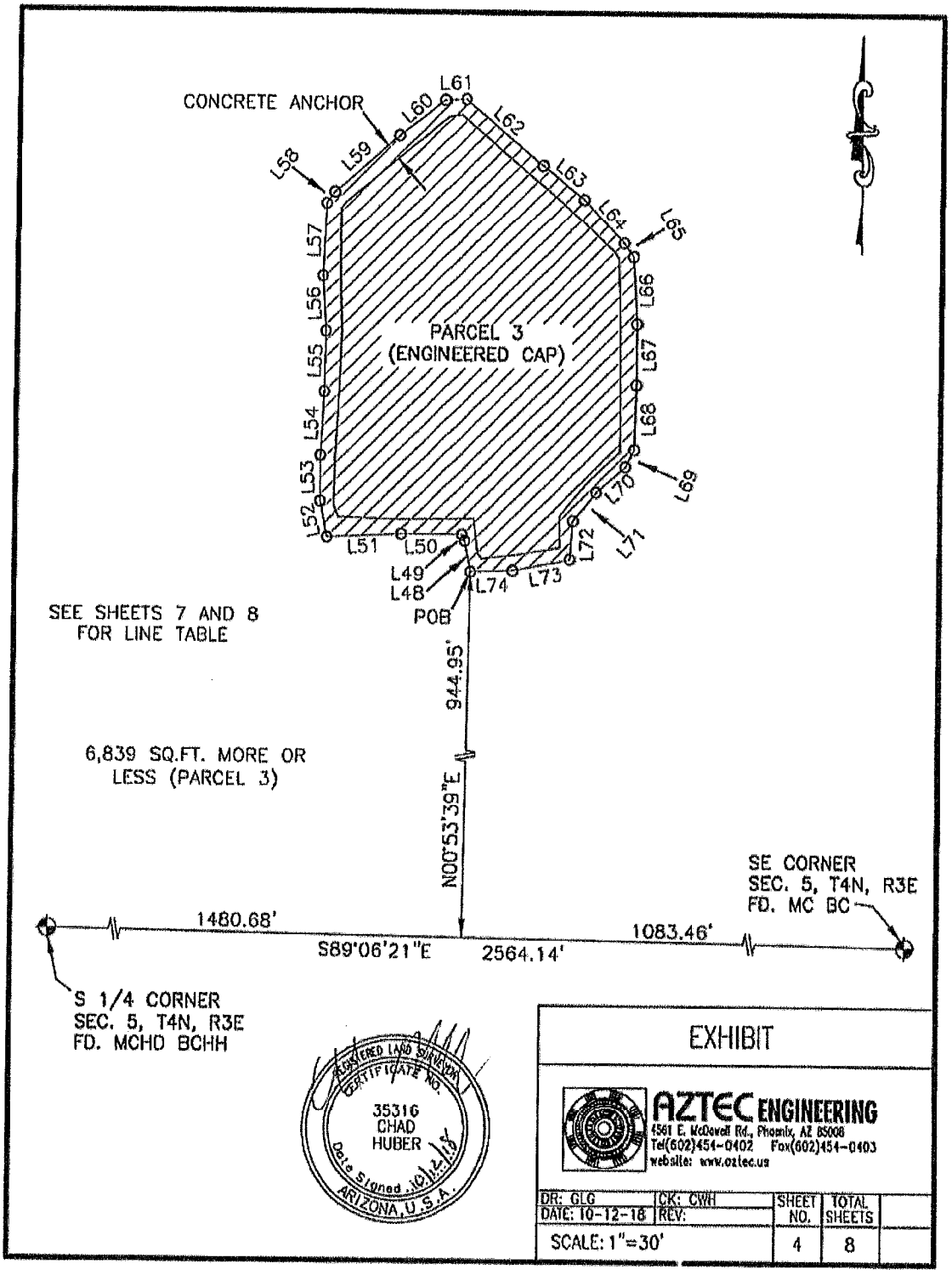
EXHIBIT

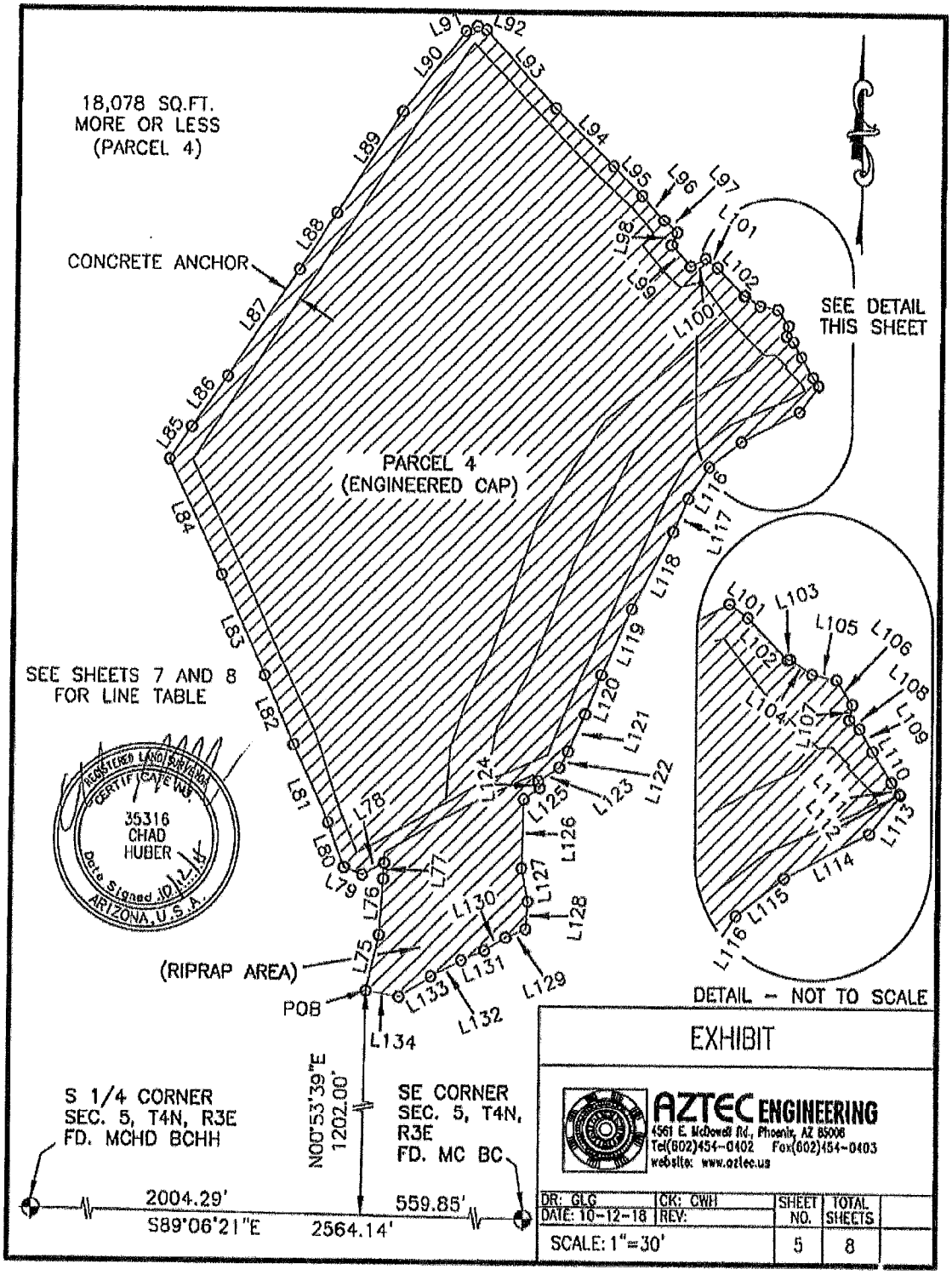
AZTEC ENGINEERING
4561 E. McDowell Rd., Phoenix, AZ 85008
Tel(602)454-0402 Fax(602)454-0403
website: www.aztec.us

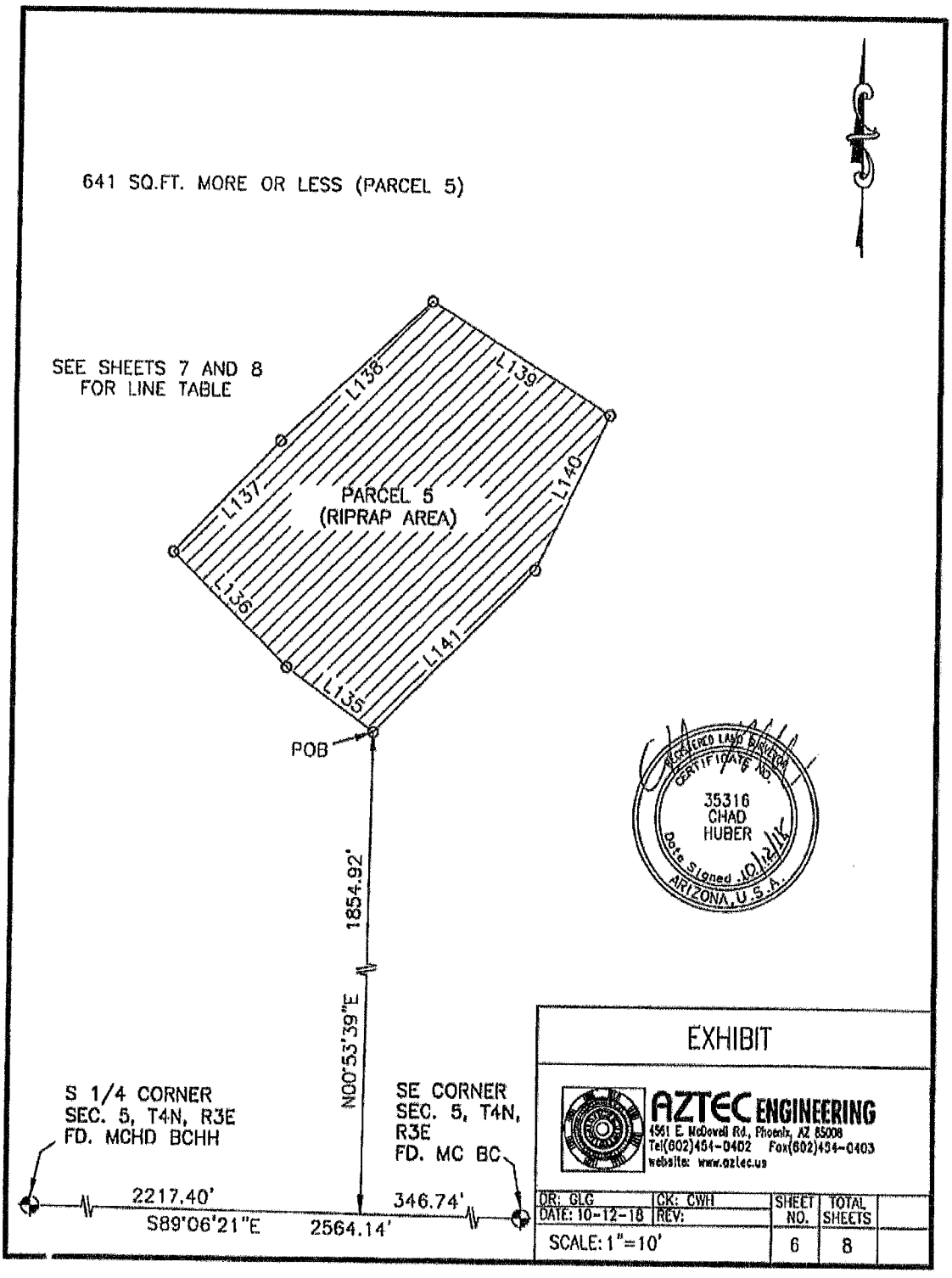
DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: 1"=500'		1	8	


CONCRETE ANCHOR
L5
L6
L7
L4
L8
L9
L3
PARCEL 1
(ENGINEERED CAP)
L10
L2
L11
L1
L12
POB
L13
333.32'
SEE SHEETS 7 AND 8
FOR LINE TABLE
2,486 SQ.FT. MORE OR
LESS (PARCEL 1)
N00°53'39"E
SE CORNER
SEC. 5, T4N, R3E
FD. MC BC
1334.86'
S89°06'21"E
2564.14'
1229.28'
S 1/4 CORNER
SEC. 5, T4N, R3E
FD. MCHD BCHH
REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 10/12/18
ARIZONA, U.S.A.
EXHIBIT
AZTEC ENGINEERING
4561 E. McDowell Rd., Phoenix, AZ 85008
Tel(602)454-0402 Fax(602)454-0403
website: www.aztec.us
DR: CLG
CK: CWH
DATE: 10-12-18
REV:
SHEET NO.
TOTAL SHEETS
SCALE: 1"=30'
2
8


CONCRETE ANCHOR
PARCEL 2
(ENGINEERED CAP)
SEE SHEETS 7 AND 8
FOR LINE TABLE
9,664 SQ.FT. MORE OR
LESS (PARCEL 2)
POB
N00°53'39"E
396.92'
1383.54'
S89°06'21"E
2564.14'
1180.60'
SE CORNER
SEC. 5, T4N, R3E
FD. MC BC
S 1/4 CORNER
SEC. 5, T4N, R3E
FD. MCHD BCHH
REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 12-14
ARIZONA, U.S.A.
EXHIBIT
AZTEC ENGINEERING
4561 E. McDowell Rd., Phoenix, AZ 85008
Tel(602)454-0402 Fax(602)454-0403
website: www.aztec.us
DR: GLG
CK: CWH
DATE: 10-12-18
REV:
SHEET NO. 3
TOTAL SHEETS 8
SCALE: 1"=30'

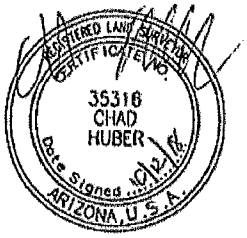

CONCRETE ANCHOR
L61
L60
L62
L58
L59
L63
L64
L65
L57
L66
L56
PARCEL 3
(ENGINEERED CAP)
L55
L67
L54
L68
L53
L69
L52
L70
L51
L50
L72
L71
L49
L48
L74
L73
POB
SEE SHEETS 7 AND 8
FOR LINE TABLE
944.95'
6,839 SQ.FT. MORE OR
LESS (PARCEL 3)
N00°53'39"E
SE CORNER
SEC. 5, T4N, R3E
FD. MC BC
1480.68'
S89°06'21"E
2564.14'
1083.46'
S 1/4 CORNER
SEC. 5, T4N, R3E
FD. MCHD BCHH
REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 10/12/18
ARIZONA, U.S.A.
EXHIBIT
AZTEC ENGINEERING
4561 E. McDowell Rd., Phoenix, AZ 85008
Tel(602)454-0402 Fax(602)454-0403
website: www.aztec.us
DR: GLG
CK: CWH
DATE: 10-12-18
REV:
SHEET NO. 4
TOTAL SHEETS 8
SCALE: 1"=30'


18,078 SQ.FT.
MORE OR LESS
(PARCEL 4)
CONCRETE ANCHOR
PARCEL 4
(ENGINEERED CAP)
SEE DETAIL
THIS SHEET
SEE SHEETS 7 AND 8
FOR LINE TABLE
REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 10-12-18
ARIZONA, U.S.A.
(RIPRAP AREA)
POB
DETAIL - NOT TO SCALE
EXHIBIT
S 1/4 CORNER
SEC. 5, T4N, R3E
FD. MCHD BCHH
N00°53'39"E
1202.00'
SE CORNER
SEC. 5, T4N,
R3E
FD. MC BC
2004.29'
S89°06'21"E
559.85'
2564.14'
AZTEC ENGINEERING
4561 E. McDowell Rd., Phoenix, AZ 85008
Tel(602)454-0402 Fax(602)454-0403
website: www.aztec.us
DR: GLG
CK: CWH
DATE: 10-12-18
REV:
SHEET NO. 5
TOTAL SHEETS 8
SCALE: 1"=30'


641 SQ.FT. MORE OR LESS (PARCEL 5)
SEE SHEETS 7 AND 8
FOR LINE TABLE
L138
L139
L137
L140
PARCEL 5
(RIPRAP AREA)
L136
L141
L135
POB
1854.92'
N00°53'39"E
S 1/4 CORNER
SEC. 5, T4N, R3E
FD. MCHD BCHH
SE CORNER
SEC. 5, T4N,
R3E
FD. MC BC
2217.40'
S89°06'21"E
2564.14'
346.74'
REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 10/12/18
ARIZONA, U.S.A.
EXHIBIT
AZTEC ENGINEERING
4561 E. McDowell Rd., Phoenix, AZ 85008
Tel(602)454-0402 Fax(602)454-0403
website: www.aztec.us
DR: GLG
CK: CWH
DATE: 10-12-18
REV:
SHEET NO.
6
TOTAL SHEETS
8
SCALE: 1"=10'

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N46°59'43"W	27.74'
L2	N48°07'14"W	20.36'
L3	N34°34'32"E	7.32'
L4	N41°54'45"E	20.43'
L5	N43°05'06"E	21.32'
L6	S48°20'46"E	10.60'
L7	S48°33'55"E	19.67'
L8	S48°19'41"E	15.55'
L9	S50°08'28"E	4.27'
L10	S37°01'50"W	3.88'
L11	S42°17'27"W	25.91'
L12	S44°03'04"W	18.79'
L13	S75°56'06"W	1.69'
L14	N53°47'31"W	5.35'
L15	N45°25'00"W	12.22'
L16	N49°10'48"W	16.35'
L17	N47°11'14"W	19.70'
L18	N50°38'33"W	18.51'
L19	N47°48'51"W	20.32'
L20	N49°23'40"W	20.44'
L21	N48°43'55"W	21.14'
L22	N47°11'14"W	4.77'
L23	N46°23'04"E	4.63'
L24	N44°46'05"E	24.27'
L25	N44°38'42"E	14.71'
L26	N45°28'58"E	14.99'
L27	N46°37'42"E	14.84'
L28	N42°03'52"E	21.39'
L29	S48°56'25"E	12.53'
L30	S47°56'46"E	24.89'
L31	S47°20'44"E	22.01'
L32	S49°02'50"E	18.93'
L33	S41°16'29"E	3.87'
L34	S23°32'41"W	2.42'
L35	S42°10'21"W	24.15'
L36	S40°49'14"W	15.87'

LINE TABLE		
LINE	BEARING	DISTANCE
L37	S43°24'23"W	17.31'
L38	S07°10'51"W	2.25'
L39	S47°15'29"E	10.63'
L40	S47°15'34"E	21.31'
L41	S48°42'24"E	14.95'
L42	S42°38'34"E	2.98'
L43	S05°51'36"E	2.62'
L44	S11°15'54"W	2.48'
L45	S45°59'27"W	13.00'
L46	S46°06'19"W	12.00'
L47	S66°04'46"W	2.39'
L48	N11°33'50"W	7.63'
L49	N24°29'24"W	1.64'
L50	N89°54'55"W	14.47'
L51	S87°08'17"W	17.99'
L52	N11°34'49"W	8.79'
L53	N00°06'22"W	11.01'
L54	N02°55'15"E	15.32'
L55	N01°04'26"E	14.52'
L56	N03°49'23"W	13.29'
L57	N02°26'17"E	17.59'
L58	N35°17'16"E	3.37'
L59	N48°36'01"E	20.69'
L60	N52°07'47"E	13.94'
L61	N87°24'46"E	4.90'
L62	S50°03'03"E	24.48'
L63	S51°20'33"E	12.97'
L64	S43°26'28"E	14.38'
L65	S34°31'33"E	4.06'
L66	S03°21'34"E	16.15'
L67	S00°01'01"W	14.66'
L68	S01°18'27"W	15.56'
L69	S27°34'26"W	4.62'
L70	S48°37'09"W	9.38'
L71	S39°09'35"W	8.90'



EXHIBIT

AZTEC ENGINEERING
4561 E. McDowell Rd., Phoenix, AZ 85008
Tel(602)454-0402 Fax(602)454-0403
website: www.aztec.us

DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: N.T.S.		7	8	

LINE TABLE		
LINE	BEARING	DISTANCE
L72	S04°09'21"W	9.32'
L73	S78°37'07"W	14.03'
L74	S87°54'52"W	10.30'
L75	N12°39'30"E	13.68'
L76	N03°40'04"E	13.51'
L77	N03°19'19"E	3.84'
L78	S61°27'11"W	5.96'
L79	N68°24'17"W	4.72'
L80	N20°43'56"W	11.42'
L81	N24°36'10"W	20.47'
L82	N23°09'08"W	18.02'
L83	N24°11'52"W	26.48'
L84	N24°48'32"W	30.53'
L85	N33°30'19"E	9.32'
L86	N35°07'34"E	14.92'
L87	N33°42'47"E	30.86'
L88	N32°50'40"E	16.53'
L89	N32°27'21"E	28.86'
L90	N38°06'18"E	24.49'
L91	N66°54'12"E	2.93'
L92	S69°34'49"E	2.36'
L93	S42°45'15"E	25.21'
L94	S45°43'33"E	19.63'
L95	S45°13'39"E	9.89'
L96	S42°03'28"E	8.05'
L97	S46°20'34"E	4.30'
L98	S22°55'51"W	3.29'
L99	S42°26'21"E	6.86'
L100	N62°44'37"E	4.10'
L101	S53°58'25"E	3.71'
L102	S44°01'54"E	9.33'
L103	N84°09'21"E	0.44'
L104	S56°32'30"E	4.38'
L105	S78°44'41"E	4.35'
L106	S33°39'47"E	4.72'

LINE TABLE		
LINE	BEARING	DISTANCE
L107	S10°49'31"W	2.49'
L108	S50°32'50"E	2.16'
L109	S29°45'11"E	4.20'
L110	S31°36'23"E	5.73'
L111	S35°24'31"E	2.23'
L112	S38°40'52"E	0.34'
L113	S38°07'09"W	7.88'
L114	S62°49'36"W	15.90'
L115	S52°10'19"W	9.87'
L116	S33°51'36"W	9.12'
L117	S23°43'06"W	8.79'
L118	S27°47'52"W	21.06'
L119	S24°26'46"W	17.54'
L120	S21°48'00"W	10.19'
L121	S23°25'39"W	9.85'
L122	S28°09'22"W	4.37'
L123	S56°48'20"W	6.05'
L124	S11°13'12"E	1.67'
L125	S54°09'55"W	4.67'
L126	S01°20'48"W	16.59'
L127	S11°10'22"E	8.12'
L128	S03°54'54"W	6.65'
L129	S67°25'36"W	5.34'
L130	S58°25'41"W	5.97'
L131	S66°35'05"W	6.05'
L132	S61°52'33"W	8.29'
L133	S57°33'48"W	9.09'
L134	N80°19'32"W	7.90'
L135	N54°06'17"W	8.74'
L136	N45°13'24"W	13.05'
L137	N43°34'29"E	12.40'
L138	N47°12'16"E	16.67'
L139	S58°06'42"E	16.97'
L140	S25°25'51"W	13.83'
L141	S44°25'28"W	18.44'

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
35316
CHAD
HUBER
Date Signed 10/12/18
ARIZONA, U.S.A.

EXHIBIT

AZTEC ENGINEERING
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DR: GLG	CK: CWH	SHEET NO.	TOTAL SHEETS	
DATE: 10-12-18	REV:			
SCALE: N.T.S.		8	8	

Premier Title Agency
2910 E Camelback Rd., Suite 100
Phoenix, AZ 85016
Phone: (602) 224-0400
Fax: (480) 718-8395

Date: February 8, 2019

Accommodation #_____

Accommodation Recording Instructions
and
Indemnity, Hold Harmless and Release of Liability Agreement

To: Premier Title Agency:

The undersigned hand(s) you the following documents and request that you deliver said documents to the Office of the County Recorder of Maricopa County, State of Arizona for recording as an accommodation to the undersigned. You are to make no examination of said documents, or of any records, and are not to be concerned with their validity, sufficiency, accuracy or effect on title.

The undersigned agrees to indemnify and hold Company harmless against any and all liabilities, losses, damages, expenses and charges which Company may sustain or incur whether arising from or based on, directly or indirectly, any claim, action, proceeding, judgment, order or process in connection with the recording, failure to record, or other acts undertaken in connection, whether negligent or otherwise.

The undersigned also hereby releases Company of any liability in connection with said documents and acknowledges it is the express purpose and scope of this agreement to relieve Company of any and all liability for any and all acts or failures to act, negligent or otherwise, whether passive or active.

In connection with this indemnity, hold harmless and release of liability agreement, the undersigned understands that 1) protection against acts or failures to act covered by this agreement may be obtained in the form of escrow services and/or title insurance at filed rates, but that undersigned declines these services in connection with said documents; 2) in the absence of such escrow services and/or title insurance Company is unwilling to and would not carry out the requested acts or undertake any action with respect to said documents but for this agreement, and will rely on this agreement in accepting and recording said documents; 3) Company may provide escrow services and/or title insurance whether related or not, and that the acceptance and recording said documents are outside the scope of any such services; 4) the undersigned or others may record documents instead, and that it is not essential that Company accept or record said documents, that Company will derive no benefit from accepting or recording said documents, but that the undersigned will, and that this agreement is freely and voluntarily given in consideration of acceptance and recording, and acceptance and recording is the only consideration for this agreement; 5) this agreement is the sole expression of the intent of the undersigned and Company with respect to said documents; 6) the provisions of this agreement are severable, and in the event any provision is declared unenforceable, the remainder shall remain in full force and effect.

Document	First Party	Second Party	Transfer Tax	Recording Fee
1. Deed	The Patricia Archie Foundation, LLC		$0.00	$15.00
2.				
3.				
4.				
5.			$0.00	$15.00

Date: 2/8/19

Signature: _____

Authorized Agent

Date: 2/11/2019

Premier Title Agency

By: RICH NEWTON

It's: Commercial Escrow Officer