Planning & Zoning Commission Draft

P19RZ00012 Site Inventory & Land Use Proposal

NWC La Cholla Boulevard @ Overton Road (Rezoning Application from SR to CR-5)



Property Owners:

Northwest Bible Church & Quest Land Group, LLC together with the Robert & Michelle Harbour Family Living Trust, et. al.

Pima County Case No. P19RZ00012

March, 2020

P19RZ00012

Northwest Bible Church, Quest Land Group, Harbour Trust – La Cholla Boulevard Rezoning

Rezoning Request from SR to CR-5 Pima County, Arizona

Submitted to:

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

Property Owners:

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> > March, 2020

Table of Contents

PART I – SITE INVENTORY

A.	Exis	sting Land Uses	1
	1.	Site Location and Regional Context	
	2.	Existing On-Site Land Uses	
	3.	Existing Easements	
	4.	Comprehensive Plan Designations On-Site & Surrounding	
	5.	Surrounding Land Uses	
	6.	Pending Rezonings, Plats & Development Plans	
В.	Тор	ography & Grading	5
	1.	Topographic Characteristics	5
		a. Restricted Peaks & Ridges	
		b. Rock Outcroppings, etc	
		c. Slopes of 15% or Greater	
		d. Other Significant Topographic Features	
		e. Existing Grading and/or Ground Disturbance	
	2.	Pre-Development Average Cross-Slope	
C.	Hvd	rology	Ω
•	1.	Off-Site Watersheds & Hydrology	
	2.	On-Site Hydrology	
		a. Flood Control Resources Areas	
		b. Concentration Points & Discharges	
		c. FEMA Designated Floodplains	
		d. Regulatory Floodplain Delineations	
		e. Determination of Regulatory Sheet-flood Areas	
		f. Lakes, Ponds, Wetlands, etc.	
		g. Erosion Hazard Setbacks	
		h. Pima County Regulated Habitat	
		i. Flow Direction for Non-regulatory Flows	
		j. Existing Drainage Easements	
		k. Existing Drainage Infrastructure	
	3.	Hydrology	
		a. Features of the Watershed That May Be Affected	
		b. Acreages and 100-year Peak Discharges	
		c. Methodology for Determining Erosion Hazard Setbacks	
		d. Methodology for Determining Regulatory Floodplains	

D.	Biol	logical Resources	17
	1.	Conservation Lands System	17
	2.	Priority Conservation Areas	17
		a. Pima Pineapple Cactus	17
		b. Needle-Spined Cactus	17
		c. Cactus Ferruginous Pygmy Owl & Burrowing Owl	17
	3.	Saguaro and Ironwoods Inventory	17
	4.	Habitat Protection/Community Open Space	17
Е.	Tra	nsportation	19
	1.	Existing & Proposed Off-Site Streets	
		a. Existing Rights-of-Way	
		b. Travel Lanes, Capacity, etc	
		c. Present Average Daily Trips (ADT)	1 9
		d. Existing Bicycle and Pedestrian Ways	
		e. Planned Roadway Improvement Schedules	
	2.	Distances from Site to Existing Nearby Driveways & Intersections	
	3.	Existing & Planned Transit Routes	21
F.	Sew	vers	24
-•	1.	Size & Location of Existing Sewers	24
	2.	Any Constraints to Gravity Service	
G.	Rec	reation & Trails	26
. .	1.	Public Parks, Recreation Areas & Trails within One (1) Mile	
	2.	Eastern Pima County Trails System Master Plan (EPCTSMP)	
Н.	Cult	tural Resources, Archaeological and Historic Sites	28
11.	1.	Records Check and Letter Report	
	٨.	a. Prior Field Surveys	
		b. Previously Recorded Archaeological or Historic Resources .	
		c. Probability of Buried Resources	
		d. Recommendation as to Future Surveys	
	2.	Survey Title	
I.	Con	nposite Map	
	1.	Description of Major Characteristics	29

PART II - LAND USE PROPOSAL

A.	Pro	ject Overview	31
	1.	Proposed Zoning Boundaries	31
	2.	Project Descriptions	32
		a. Proposed Development Use & Type	32
		b. Development Response to Opportunities & Constraints	32
		c. Conformance with Comprehensive Plan, etc	32
		d. Interactions with Surrounding Property Owners	34
		e. Impact on Existing Land Uses and Surrounding ¼ Mile	35
		f. Contribution to Smart Growth Principles	35
	3.	Compliance with the Pima County Zoning Code	37
В.	Pre	liminary Development Plan (PDP)	37
	1.	PDP Map and Overlay	
	2.	Support Data	
		a. Estimated Floor Area of Structures	
		b. Building Heights	
		c. Number of Dwelling Units	
		d. Maximum & Minimum Residential Densities	
		e. Type of Landscaping	
		f. Size & Description of Rec Areas, Natural/Functional Open Space	
		g. Other Supplemental Information – Safe Streets	
C.	Top 1.	ography & Grading Development Features on Slopes of 15% or Greater	
	2.	Natural Areas Used for HDZ Allowances	41
	3.	Disturbed, Revegetated and Natural Areas	41
		a. Natural Open Space	41
		b. Revegetated Areas	41
		c. Graded/Disturbed	41
	4.	Maximum Grade Change; Areas By More than 5' of Cut/Fill	41
D.	Hyd	rology	43
	1.	Post-Development On-Site Hydrology	
		a. Preserved Natural Washes	
		b. Regulatory Floodplains	
		c. Erosion Hazard Setbacks	
		d. Pima County Regulated Habitat	
		e. Proposed Drainage Structures	
		f. Drainage Crossing & Attendant Structures	
		g. Floodplain Encroachments & Associated Erosion Protection	
		h. Proposed Storm Drain Alignments	
		i. Drainage Easements	
		j. Street, Lots, Building Pads	

	2.	Preli	minary Integrated Water Management PlanPlan	50
	3.	Prop	osed Hydrology	50
		a.	PDP Response to Constraints	50
		b.	Encroachment Justification	51
		c.	Table of Concentration Points	
		d.	Potential Engineering & Design Features	52
		e.	Summary of Overall Development Impacts	
Е.	Biol	ogical	Resources	56
	1.		ected Impacts	
		a.	Conservation Lands System (CLS) Compliance	
		b.	Saguaros	
		c.	Ironwood Trees	
		d.	Pima Pineapple Cactus	
		e.	Needle-Spined Pineapple Cactus	
F.	Lan	dscape	& Buffer Plan	59
••	1.	Ruffe	eryards In Accordance with Chapter 18.73	59
	2.	Conf	licts with Bufferyards Due to Easements, Rights-of-Way, etc.	59
	3.	Imna	acts of Transplanted/Salvage Vegetation in Bufferyards	59
	4.		gation of Visual Impacts	
	5.		ificant Vegetation	
G.	Tno	n an ant	ation	62
G.			iguration of Proposed Ingress/Egress and Its Rationale	
	1.		ances to Adjacent Access Points	
	2.		ociated Off-Site Roadway Improvements, Completion Schedule	
	3.		nge in ADT and Level of Service (LOS) for Public Streets	
	4.		formance with Pima County Concurrency Requirements	
	5. 6.		ormance with Filma County Concurrency Requirementsoosed Bicycle & Pedestrian Pathways	
	7.		Site Street System	
	7. 8.		licability & Timing of Traffic Impact Study (TIS)	
Н.	On-		astewater Treatment & Disposal (Not Applicable)	
	1.		onale for Non-Connection to Public System (Not Applicable)	
	2.		Evaluations (Not Applicable)	
	3.	Rese	erve Disposal Areas (Not Applicable)	67
I.	Sewers			
	1.	Capa	acity Response Letter	67
	2.	Meth	nod of Sewer Service and Point of Connection to Public System	67
	3.	Sew	er Easements	67
	4		gation of Constraints to Providing Gravity Service	

J.	Wate	er (refer to Section II-D.2)	70
K.	Scho	ols	7(
	1.	Access to Internal or Abutting Schools	
	2.	Capacity Analysis by Tucson Unified School District	
	3.	Communication with TUSD Regarding Mitigation of Impacts	
L.	Docr	eation & Trails	74
L			
	1.	On-Site Recreation Elements	
	2.	Ownership & Maintenance of Recreation Elements & Natural Areas	
	3.	Proposed Public Trails In or Adjacent to the Development	74
М.	Cultu	ral Resources: Archaeological & Historic Sites	76
4-44	1.	Mitigation Measures for Already Identified/Known Resources	
	2.	Measures Employed If Archaeological Survey is Recommended	
	3.	Submittal Timing, etc. of Mitigation Plan	
	Э.	a. Outline of Resource Assessment Program	
		y	
		c. Schedule of Mitigation Plan Implementation	/ t
N.	Envir	onmental Quality	76
	1.	Dust Control During Construction	76
0.	Agree	ements	77
	1.	Specific Agreements (If Any) with Neighboring Property Owners	
	Biblio	ography	78
APP	ENDIC	ES	
Appe Appe Appe	ndix A: ndix B: ndix C: ndix D: ndix E:	Preliminary Hydrology Report Establishing La Cholla Wash 100-year F Technical Analysis Memorandum Addressing La Cholla Breakout Flow Cultural Resources Survey by MCA Consulting Drainage Memorandum Addressing On-Site Routing of Break-Out Flow Through the Proposed Residential Development Executed Roof-Top Agreement with Amphitheatre Public School District	, etc.
whhe	nuix E:	Executed Root-Top Agreement with Ampuniteatre rubite 20000 Distric	"L

List of Exhibits

Exhibit I-A	Existing Easements	4
Exhibit I-B	Topographic Characteristics	
Exhibit I-C.1	Offsite Hydrology	
Exhibit I-C.2	Onsite Hydrology - Sheetflow Depths	15
Exhibit I-C.3	Onsite Hydrology	
Exhibit I-D	Saguaro/Ironwoods Inventory	
Exhibit I-E.1	Transportation-Access (Adjacent Driveways & Intersections)	22
Exhibit I-E.2	Public Transit	23
Exhibit I-F	Sewers	25
Exhibit I-G	Recreation & Trails	27
Exhibit I-I	Composite Map	30
Exhibit II-B	Preliminary Development Plan (PDP)	4{
Exhibit II-C	Topography & Grading	42
Exhibit II-D.1	Proposed Hydrology	54
Exhibit II-D.2	Metropolitan Water District Will-Serve Letter	55
Exhibit II-E	Biological Resources	58
Exhibit II-F.1	Landscape & Buffer Plan	61
Exhibit II-F.2	Cross-Sections of Perimeter Buffers	62
Exhibit II-G	Transportation	
Exhibit II-I.1	RWRD Capacity Response Letter	
Exhibit II-I.2	Proposed Sewer Concept	69
Exhibit II-K.1	Nearby Public Schools	
Exhibit II-K.2	Amphitheater Public School District Capacity Letter72	2. & 73
Exhibit II-L	Recreation	75
	List of Tables	
Table 1: ADT	Volumes for Streets Within One (1) Mile	20
Table 2: 100-	Year Pre-Development Peak Discharges	52
Table 3: 100-	Year Post-Development Discharges	52
Table 4: Cons	ervation Lands System (CLS) Areas – Pre- & Post-Development	56

SECTION I:

Site Inventory

A. EXISTING LAND USES

1. Site Location and Regional Context

The subject rezoning property is a portion of the NE ¼ of Section 21, T12S, R13E, and is more particularly located at the immediate northwest corner La Cholla Boulevard and Overton Road. The rezoning site consists of four (4) contiguous parcels (Assessors Parcel Nos. 225-04-002A, 225-04-002C, 225-04-003P, and 225-04-008B), totaling approximately 50.7 acres in gross area.

The property sits on the northern edge of an established, urbanized residential district and would constitute an expansion of this existing residential density. La Cholla Boulevard is a major north-south arterial and a designated "Major Street" on the *Pima County Major Streets & Routes Plan*. South of Overton Road, it is a full fourlane divided arterial. Construction on the segment of La Cholla north of Overton Road is well underway and will result in a full four-lane divided cross-section with curbs, bike lanes, multi-use paths, and landscaping to mirror the same roadway prism already in place to the south. These street improvements are proceeding through the Regional Transportation Authority (RTA) and the Town of Oro Valley. When completed in 2020, they will provide a continuous four-lane arterial from River Road northward to Tangerine Road.

In addition to this major street corridor improvement and the established residential core mentioned above, the rezoning site's context also features a handful of unsubdivided, residentially-zoned properties (some occupied, some vacant) to the immediate west. Enhanced setbacks and buffer elements are incorporated into the project's *Preliminary Development Plan (PDP)*, presented in Section II.B of this Site Analysis, so as to appropriately protect these lower-density properties.

2. Existing On-Site Land Uses

The rezoning site is vacant, natural desert, with the following exceptions: 1) some minor disturbance has occurred in the northwest portion of the property from a public waterline that was installed years ago to serve a planned church campus (the church was never built but the waterline remains; and 2) in the northeast corner of the property, a significant area has been graded and cleared to provide for drainage improvements associated with the aforementioned La Cholla Boulevard four-lane roadway construction.

3. Existing Easements or Encumbrances

The site is encumbered by the following recorded easements (see Exhibit I-A for location):

- ☐ A public drainage easement, per Sequence No. 20182480395, for drainage improvements attendant to the 4-lane construction of La Cholla Boulevard.
- ☐ A ten foot (10') utility easement (for an existing public waterline) per Docket 12815 @ Page 2666

- ☐ A twenty foot (20') ingress/egress & utility easement per Dkt. 12815 @ Pages 2667 and 2668.
- ☐ A sixteen foot (16') right-of-way easement, for the installation and maintenance of electric utility facilities, per Dkt. 8483 @ Pg. 1029.

None of the above easements poses an impediment to the residential subdivision proposed by this rezoning request. The easements will either be incorporated into and accommodated within the proposed lotting layout, when possible, or will be relocated or abandoned/released at the time of future subdivision platting in coordination with the appropriate grantee or utility company.

4. Comprehensive Plan (Pima Prospers) Designations

The rezoning site was recently designated as a combination of MLIU and LIU 1.2 by the Pima County Board of Supervisors when they voted to approve comprehensive plan amendment Case Nos. P18CA00003 & P18CA00004, respectively, on October 16, 2018. The surrounding properties are designated as follows by Pima Prospers:

To the North:

LIU 0.3

To the **South**:

MIU

To the East:

LIU 0,3

To the West:

LIU 0.3, LIU 1.2 and MIU

No (0) rezoning or special-area policies apply to this rezoning site.

5. Surrounding Land Uses

The properties surrounding the subject site are a mixture of developed residential and vacant land:

To the North:

Unsubdivided property (some existing residences,

some vacant)

To the South:

Developed/platted Residential Subdivisions

To the East:

Unsubdivided property (some existing residences,

some vacant)

To the West:

Unsubdivided property (some existing residences,

some vacant), a developed/platted residential

subdivision

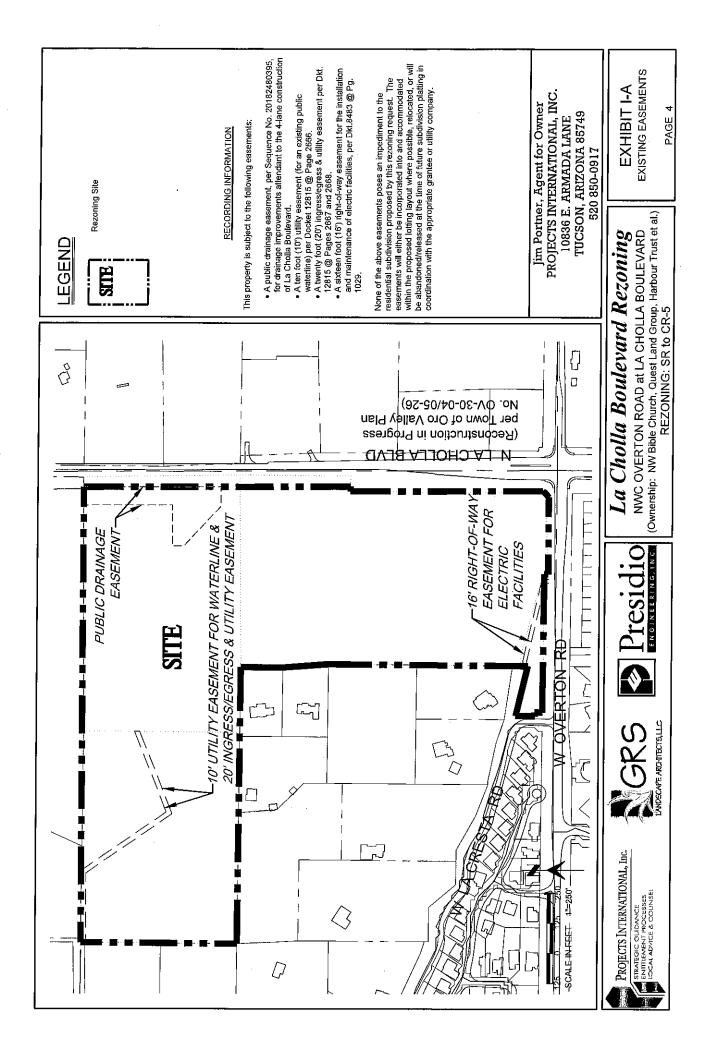
6. Pending Rezonings, Plats & Development Plans

There are no other pending rezonings, nor any pending plats or development plans, in the immediately surrounding area. The following are nonetheless noteworthy to further describe the site's developed/urbanized context:

☐ The existing platted residential subdivisions to the south and to the west total nearly 700 occupied residences and have been in place for decades. The proposed rezoning is simply an extension of this established density.

- ☐ The Pima County Regional Flood Control District (RFCD) has been actively acquiring properties east of La Cholla Boulevard and now owns a substantial portion of this acreage. These acquisitions are furthering the District's flood-control measures pertaining to the Canada del Oro Wash, which lies approximately ¼ mile east of La Cholla Boulevard.
- ☐ As mentioned earlier, the four-lane reconstruction of La Cholla Boulevard is well underway and will result in a full, four-lane divided arterial from Overton Road to Tangerine Road.
- While not in the immediate context of the subject rezoning site, there has been substantial recent infill and rezoning activity throughout the northwest metropolitan area, including recent Case No. P18RZ00001 at the southeast corner of Overton Road and Thornydale Road. That project proposed 51 new residences, which are currently under construction, together with a stand-alone commercial corner. It was one of six (6) recently approved residential rezonings within the Thornydale Road corridor.

Exhibit To Follow



B. TOPOGRAPHY & GRADING

1. Topographic Characteristics

The topography of the rezoning site is characterized by low foothills and ridges that transition to a uniformly sloping plain across the balance of the property. The site exists in a predominantly undeveloped, natural state.

The low foothills and ridges are located within the site's extreme northwest corner, with the remainder of the site uniformly sloping downward to the southeast and extending parallel along La Cholla Boulevard to Overton Road at a generally uniform slope of approximately 3%.

The low foothills drain to the east into the sloping plain, with these flows then proceeding southward towards Overton Road. Additionally, the site's extreme northeast corner is traversed by a segment of the La Cholla Wash, which drains in a southeasterly direction across this corner toward La Cholla Boulevard. This area of the subject property has been graded to provide for drainage improvements that will direct a portion of the La Cholla Wash flow into a new culvert beneath the roadway. More detail on all drainage particulars is provided in Section I-C of this Site Analysis.

See Exhibit I-B for existing conditions contours and topographic features.

a. Restricted Peaks & Ridges

There are no restricted peaks or ridges on the property.

b. Rock Outcroppings, etc.

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

c. Slope of 15% or Greater

The project site does contain some slopes of fifteen percent (15%) or greater which are both longer than fifty feet (50'), when measured in any horizontal direction, and higher than seven and one half feet (7.5') when measured vertically.

Additionally, the site contains select slope areas of 25% or greater via the same definition referenced above.

All of the above are confined to the site's extreme northwest corner.

d. Other Significant Topographic Features

Other than the aforementioned low foothills, the La Cholla Wash, and the public drainage improvements in the northeast corner of the property associated with the roadway reconstruction, there are no other significant topographic features pertaining to the site.

e. Existing Grading and/or Ground Disturbance

Although the majority of the site exists in its natural site, a minor amount of ground disturbance was created via the previous installation of an 8" Metro Water main per Plan No. M-07-07. This waterline was construction to serve a then-planned church on the property; the church was never constructed and the waterline remains. This ground disturbance is confined to the extreme northwestern corner of the site.

According to Metropolitan Water District base maps, this water main lies within an existing 20' public utility easement. This easement is shown on Exhibit I-A.

In addition, the northeast corner of the property has been wholly graded and cleared to provide for drainage improvements associated with the aforementioned La Cholla Boulevard roadway project and the major box culvert that will convey the La Cholla Wash beneath the new roadway.

2. Pre-Development Average Cross-Slope

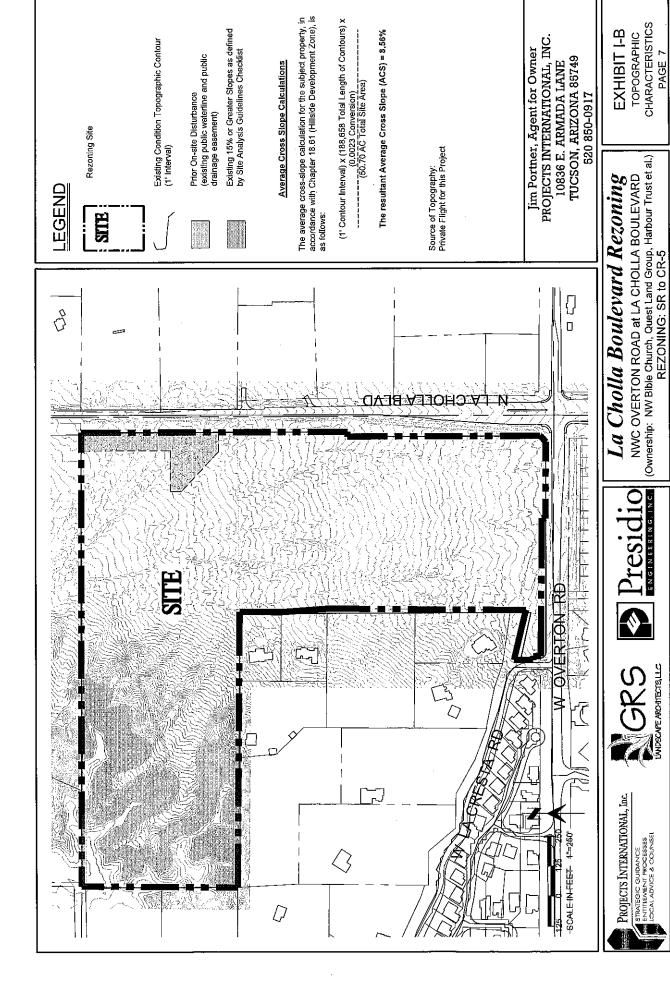
The average cross-slope calculation for the subject property, in accordance with Chapter 18.61 (Hillside Development Zone), is as follows:

(1' Contour Interval) x (188,658 Total Length of Contours) x (0.0023 Conversion)

(50.70 AC Total Site Area)

The resultant Average Cross Slope (ACS) = 8.56%.

Exhibit to Follow



C. HYDROLOGY

1. Off-Site Watersheds & Hydrology

This rezoning site is located within the La Cholla Wash regional watershed. The regional off-site watershed and its pertinent concentration points are shown on Exhibit I-C.1 (Off-Site Hydrology).

Additionally, a Preliminary Hydrology Report was requested by and submitted to the Pima County Regional Flood Control District (RFCD) to establish the 100-year peak discharge for La Cholla Wash upstream of the La Cholla Road crossing, as well as its breakout flow to the south. A copy of the *Preliminary Hydrology Report, La Cholla Wash at La Cholla Boulevard*" dated September 2019 can be found in Appendix "A".

The watershed for The La Cholla Wash has a contributing area of approximately 3.95 square miles upstream of its crossing of La Cholla Boulevard. The 100-year peak discharge at this location was estimated to be 2904 cfs. It is also estimated that 1722 cfs of the 2904 cfs crosses the roadway with approximately 1182 cfs breaking out southward onto the subject property and partly finding its way into an existing channel within the La Cholla Boulevard right-of-way. This existing channel does not contain all of the diverted flow, so a significant portion of the break-out flow directly impacts the rezoning site in the existing condition.

In addition to the above regional watershed impacts, there is also a localized watershed impacting the subject site. This offsite watershed lies adjacent to and west of this project. The local watershed has a drainage area of approximately 65.3 acres, and generates a 100-year peak discharge of approximately 258 cfs.

2. On-Site Hydrology

Refer to Exhibits I-C.2 & I-C.3 for Items 2.a thru 2.k below.

a. Flood Control Resources Areas.

Flood control resource areas are mapped areas of floodplain or riparian habitat of which FEMA is typically not aware. These areas are based upon superior site-specific information relative to the conditions of risk involved. The rezoning property has FEMA designated floodplains as a resource area, which will be discussed in section 2.c below. The majority of the site is located within a FEMA Zone "A".

The only Pima County designated riparian habitat on the rezoning site occurs within the extreme northeast corner of the property; this habitat area comprises approximately 3.70 acres in area and generally correlates with the La Cholla Wash channel.

Pima Prospers states three primary goals for Resource Areas:

- Goal 1: Minimize flood and erosion damages for all County residents, property and infrastructure
- Goal 2: Manage storm water to protect lives and property, to reduce flood risk and to assure no adverse impact to adjacent or downstream properties
- Goal 3: Integrate watercourses, riparian and upland habitat, land use, recreation and drainage to achieve healthy development patterns.

With each goal there are policies and suggested implementation measures. Policies, as they relate to the drainage, address design policies, standards and technical policies. Goal 1 Implementation Measures require, when appropriate, avoidance of development in Resource Areas. Most policies mentioned are standard procedures; we explain below the pertinent ones will be implemented and why avoidance is not practical nor the most appropriate option.

Goal 1-Policy 3: Preserve washes with a base flood peak discharge equal to or greater than 100 cfs ...

This is not appropriate nor practical for the following reasons:

- The resource areas on the west side of the site are located within the outer edge of sheet flow hydraulic depths ranging from 0.13 to 0.76 feet, while the more central areas of the property have been modeled as being outside the sheet flow area altogether.
 The floodplain consists of braided sheet flow resulting from the breakout of the main La Cholla Wash channel.
- ☐ Improvements as proposed in this rezoning will efficiently manage and consolidate the break-out flow to control its location, erosion and sediment transport characteristics.
- ☐ With the above in mind, encroachment into this sheet flow area can be achieved with negligible impact on the overall floodplain, and without negative impacts to downstream properties.

Goal 1- Policy 5: Require that drainage improvements are consistent with the overall character of the area and do not create nor worsen existing drainage problems.

The improvements proposed with this project will be consistent with this Goal as detailed below:

☐ The proposed improvements within this site will integrate with the drainage improvements pertaining to the La Cholla Boulevard reconstruction, which include a large collector channel, multicelled box culvert, and training berm.

☐ The proposed site drainage improvements will control and confine erosion through the use of grade control structures and armored sides.

Goal 1- Policy 6: Design road crossings of washes to cross the floodplain with minor encroachment.

The on-site road crossings associated with the proposed project will be designed as follows:

- □ A significant portion of the La Cholla Wash breakout flow will be conveyed through the site within a new bank-protected channel and grade-control structures. This flow will be conveyed beneath the project's entry drive in a multi-celled culvert, and then into a set of basins along our south boundary. The outflow from same will then be conveyed beneath Overton Road via a new culvert.
- ☐ Given the above, the existing flow and sediment currently crossing the Overton Road pavement will be eliminated, thus mitigating one of the more troublesome aspects of the existing drainage situation that has heretofore characterized this area.

The remaining policies for Goal 1, Goals 2 and 3 will comply with FEMA, Pima County RFCD standards, and Pima County Building and Zoning Codes.

b. Concentration Points & 100-year Discharges

This site is bound on the north and west by vacant land or low-density residences zoned SR and CR-1. To the east is La Cholla Boulevard and to the south is Overton Road. The existing topography yields stormwater run-off entering the site along its north and west boundaries and exiting the site on the south across Overton Road.

The La Cholla Wash conveys approximately 2904 cfs as it diagonally traverses the extreme northeast corner of the site, intersecting La Cholla Boulevard as described above. The existing topography directs most of the flow (approximately 1722 cfs) across the roadway; the remaining 1182 cfs breaks out to the south. This breakout flow is conveyed through the southern portions of the subject property and partly into an existing channel within the La Cholla Boulevard right-of-way. There currently are two dip crossing on Overton Road along the project's south frontage. It is estimated that the east crossing conveys approximately 619 cfs of the La Cholla Wash breakout flow, while the west crossing conveys approximately 563 cfs of it.

The localized on-site watershed encompasses an upstream drainage area of approximately 65.3 acres and contributes a 100-year peak discharge of approximately 258 cfs to the site. The west Overton Road crossing

conveys this 258 cfs flow, while the east crossing conveys approximately 173 cfs of localized on-site flow (both are less than the regional breakout flows described above). This local floodplain was analyzed in concert with the above-mentioned break-out flow from the La Cholla Wash in developing the *Preliminary Development Plan (PDP)* for this project as presented in Section II-B of this Site Analysis. The breakout flows associated with the La Cholla Wash and the local on-site generated flows are not additive, as it is estimated that the local flow has been completely conveyed across Overton Road before the regional breakout flow makes it to the same roadway crossings. The details of the preliminary analysis on this point are found in the "Offsite Breakout Flow Progress Memo", dated October 1, and provided in Appendix "B".

c. FEMA-Designated Floodplains.

This project is located within FEMA Zones "A" and "X" (unshaded), pursuant to FIRM Panel 04019C1070L and FIRM Panel 04019C1660L, both with an effective date June 16, 2011. Approximately 70% of the subject site is located within a FEMA Zone "A", with the remaining 30% designated as FEMA Zone "X".

A FEMA Zone "A" is a floodplain where no base flood elevations have been determined by FEMA. FEMA Zones "X" (unshaded) are areas with: 1) a 0.2% annual chance of flood; 2) areas of 1% annual chance of flood with average depths of less than 1 foot; 3) drainage areas of less than 1 square mile; or 4) areas protected by levees from a 1% annual chance of flood.

d. Regulatory Floodplain Delineations.

The existing FEMA Zone "A" floodplain encompasses approximately 70% of the rezoning site. The remainder of the property (30% of the site) lies within FEMA Zone "X" and is located at the base of a natural bluff that has a finite watershed of less than 14 acres in area and which generates a non-regulatory existing discharge of less than 100 cfs.

e. Determination of Regulatory Sheet Flood Areas.

The dominant discharge impacting this project results from the 1182 cfs that breaks out from the La Cholla Wash and flows southward across the property toward Overton Road. The pertinent regulatory sheet-flow areas were determined via-a HEC-RAS 1D model that delineated the floodplain limits and are presented within the "Offsite Breakout Flow Progress Memo", dated October 1, 2019 (See Appendix "B"). These limits, while more precise than FEMA's Zone "A" delineation, are similar in their general location and depth.

f. Lakes, Ponds, Wetlands, etc.

There are no lakes, ponds, wetlands or standing bodies of water located on-site.

g. Erosion Hazard Setbacks (EHS)

Pima County RFCD has already designated the erosion hazard setback areas that impact the rezoning site; these predominate over the eastern portions of the property (pertaining to the La Cholla Wash) and have been delineated on Exhibit I-C.3.

h. Pima County Regulated Habitat

Pima County designated/regulated riparian habitat occurs within the extreme northeast corner of the property and comprises an area of approximately 3.70 acres and generally correlates with the 100-year floodplain area. A large portion of this habitat has been significantly impacted and cleared of vegetation to implement the aforementioned drainage improvements associated with the roadway reconstruction of La Cholla Boulevard.

i. Flow Arrows for Non-regulatory Flows

The non-regulatory flow arrows have been shown on Exhibit I-C.3.

j. Existing Drainage Easements.

A pubic drainage easement (per Sequence No. 20182480395) exists over a portion of the extreme northeast corner of the rezoning site. This easement is for drainage improvements attendant to the reconstruction of La Cholla Boulevard to a four-land divided arterial.

k. Existing Drainage Infrastructure.

The subject property is vacant desert, currently without any development or on-site drainage structures, with the exception of those public drainage improvements (attendant to La Cholla Boulevard's four-lane reconstruction) referenced in Section 2.j immediately above.

3. Hydrology

a. Features of the Watersheds That May be Affected.

As discussed above, the existing regional flow of the La Cholla Wash currently breaks out, with a portion of it (1182 cfs) flowing southward and impacting the rezoning site. This volume exits the property at Overton Road and is currently conveyed over the top of the roadway surface.

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

The La Cholla Wash Watershed has a gross contributing upstream area of approximately 3.95 square miles and generates a 100-year peak discharge 2904 cfs, pursuant to the "Preliminary Hydrology Report, La Cholla Wash at La Cholla Boulevard" dated September, 2019 (provided in Appendix "A").

c. Methodology Used to Determine EHS's.

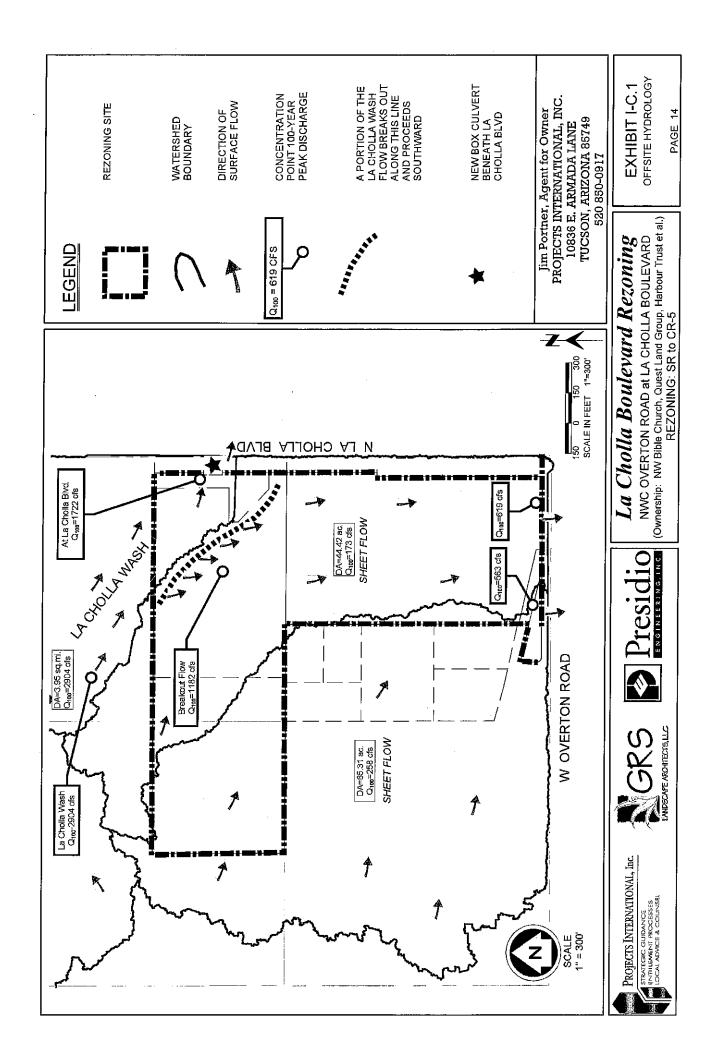
Per established Pima County RFCD methodology, erosion hazard setbacks are measured from the top of bank or edge of the floodplain, whichever is located closer to the centerline of the wash. The previously mentioned "Offsite Breakout Flow Progress Memo", dated October 1 (Appendix "B") has estimated the 100-year peak discharge at Overton Road to be approximately 1182 cfs. This would require a 35-foot EHS. A 250' EHS extends from the La Cholla Wash floodplain limit.

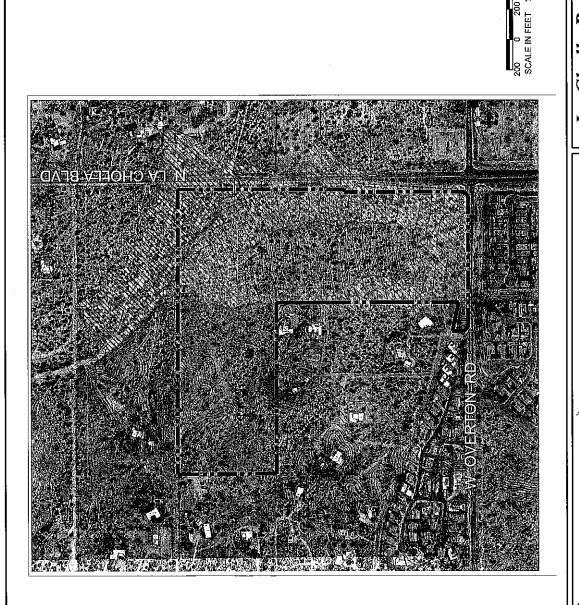
d. Methodology Used to Determine 100-year Floodplains.

A preliminary floodplain analysis was also prepared to determine the magnitude of the breakout flow impacting this site and the depth of flow. The summary of the results and the technical procedures used were outlined in a memo dated October 1, 2019 that was presented to Pima County Regional Flood Control District. A copy of this "Offsite Breakout Flow Progress Memo" is included in Appendix "B". The depths of the sheetflow impacting the subject rezoning site are approximately 0.72' (3/4 foot) or less.

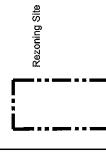
The above "Offsite Breakout Flow Progress Memo" delineated the regulatory floodplains using one-foot contour interval topography created from 2015 NAVD88 information and available from the Pima Association of Governments (PAD) Regional Data Center. The 100-year peak discharge used was evaluated utilizing HEC-HMS (with the SCS Unit Hydrograph method) for the cumulative discharge (see Appendix "A", "Preliminary Hydrology Report, La Cholla Wash at La Cholla Boulevard" dated September 2019).

Exhibits to Follow





ON-SITE FLOODPLAIN LIMITS FROM LA CHOLLA WASH BREAKOUT



Floodplain Area

5' Contour Interval

PROJECTS INTERNATIONAL, INC. 10836 E. ARMADA LANE TUCSON, ARIZONA 85749 Jim Portner, Agent for Owner

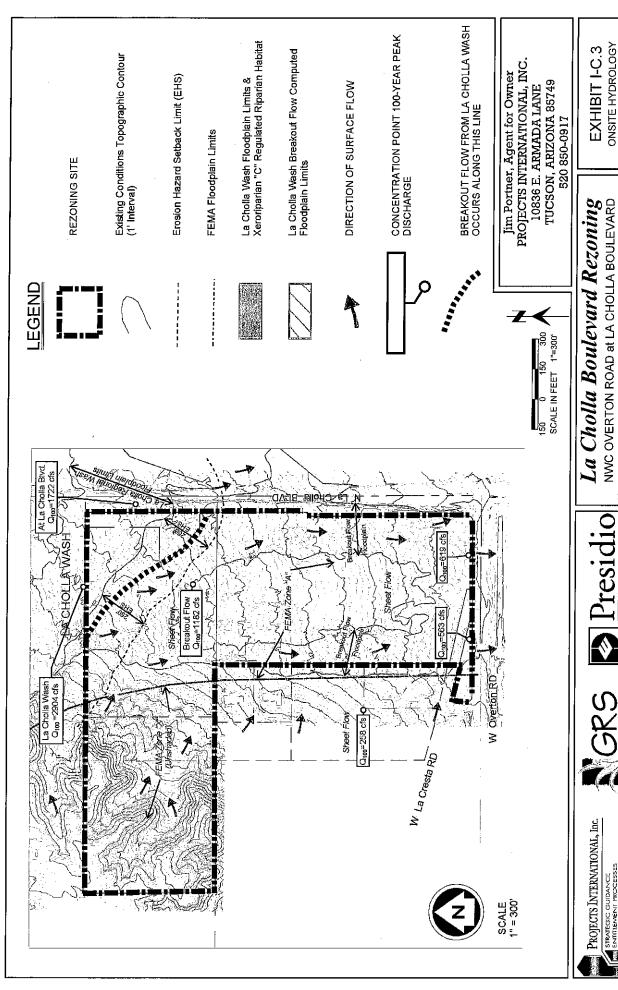
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PROJECTS INTERNATIONAL, Inc.



La Cholla Boulevard Rezoning
NWC OVERTON ROAD at LA CHOLLA BOULEVARD
(Ownership: NW Bible Church, Quest Land Group, Harbour Trust et al.)
REZONING: SR to CR-5

LA CHOLLA WASH BREAK-OUT FLOW **EXHIBIT I-C.2** PAGE 15



La Cholla Boulevard Rezoning

NWC OVERTON ROAD at LA CHOLLA BOULEVARD (Ownership: NW Bible Church, Quest Land Group, Harbour Trust et al.) REZONING: SR to CR-5

L'TESIGIO

L'ANDSCAPE ARCHITECTS, LLC

STRATEGIC GUIDANCE
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EXHIBIT I-C.3
ONSITE HYDROLOGY

PAGE 16

D. BIOLOGICAL RESOURCES

1. Conservation Lands System

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

A Public Drainage Easement covers 1.5 AC of the subject property and has been graded as part of the La Cholla Boulevard roadway project. As such, for CLS purposes, the Project Area for this rezoning is 49.2 AC (50.7 AC minus 1.5 AC).

2. Priority Conservation Areas

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

a. Pima Pineapple Cactus

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

b. Needle-Spined Pineapple Cactus

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

c. Cactus Ferruginous Pygmy Owl and Burrowing Owl

The entire site is designated as part of Priority Conservation Area (PCA) #1 for the Cactus Ferruginous Pygmy Owl. It is not a PCA for the Burrowing Owl.

3. Saguaro and Ironwoods Inventory

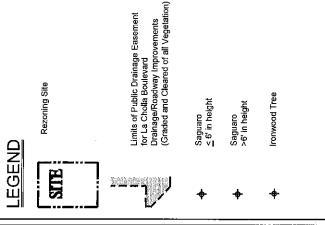
Saguaro Cactus (Carnegia gigantea) has been field surveyed and mapped on the subject rezoning site. A total of two hundred forty-nine (249) viable saguaros were found, fifty-nine (59) of which are six feet (6') tall or less and one hundred ninety (190) of which are greater than six feet (> 6') in height. See Exhibit I-D.

The site was also surveyed for Ironwood trees; five hundred eighty-three (583) viable specimens were found. Their locations are also shown on Exhibit I-D.

4. Habitat Protection/Community Open Space

Pima County had, in the past, expressed interest in acquiring the northern portion of the rezoning site for habitat protection and community open space due to the upland foothills topography therein and the major La Cholla Wash corridor that traverses the extreme northeast corner of the property. No purchase by Pima County was ever consummated. The above-mentioned resources, however, will be set aside as natural open space by this rezoning's proposed *Preliminary Development Plan (PDP)*, presented in Section II.B (Land Use Proposal) of this Site Analysis.





See Section I.D.3 & I.D.4 in Site Analysis text for totals of the above specimens.

Jim Portner, Agent for Owner
PROJECTS INTERNATIONAL, INC.
10836 E. ARMADA LANE
TUCSON, ARIZONA 85749

520 850-0917

PROJECTS INTERNATIONAL, Inc.

FIRATOR GUIDANCE
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La Cholla Boulevard Rezoning NWC OVERTON ROAD AT LA CHOLLA BOULEVARD

NWC OVERTON ROAD at LA CHOLLA BOULEVARD (Ownership: NW Bible Church, Quest Land Group, Harbour Trust et al.)
REZONING: SR to CR-5

EXHIBIT I-D

SAGUARO / IRONWOOD INVENTORY PAGE 18

E. TRANSPORTATION

The subject property is located at the immediate northwest corner of La Cholla Boulevard and Overton Road, which is a signalized intersection. Both roadways are designated "major streets" on the *Pima County Major Streets & Scenic Routes Plan (MSRP)*. Neither are designated "scenic routes".

Please refer to Exhibit I-E.1 and Table 1 below for streets within one (1) mile of the subject property. La Cholla Boulevard is classified as a "medium volume arterial" with an MSRP right-of-way width of 150'; Overton Road is classified as a "low volume arterial" with a 90' ultimate right-of-way. La Canada Drive is classified as a "medium volume arterial" with an MSRP right-of-way width of 150'; Shannon Road is classified as a "low volume arterial" with a 90' ultimate right-of-way.

1. Existing & Proposed Off-Site Streets

a. Existing Rights-of-Way

As the result of recent right-of-way dedications from the rezoning site, the existing right-of-way width of La Cholla Boulevard along the project frontage is now in conformance with the MSRP and will facilitate the planned construction of a four-lane divided roadway. The existing right-of-way is a minimum of one hundred fifty feet (150'), with slightly wider right-of-way tapers in the vicinity of the Overton Road intersection.

The existing right-of-way in place for Overton Road along the project frontage is ninety feet (90') near the La Cholla Boulevard intersection, increasing to one hundred twenty feet (120') further to the west.

b. Number of Travel Lanes, Capacity & Posted Speed Limits

La Cholla Boulevard is currently functioning as a two-lane roadway north of Overton Road while it is being reconstructed to a full four-lane facility. South of Overton Road, the full four-lane divided arterial cross-section is already in place. Overton Road is two-lane low-volume arterial. There are no curbs, bike lanes, or sidewalks in place (on either side of the roadway prism) on Overton Road nor on La Cholla Boulevard north of the Overton Road intersection. To the south of Overton Road, La Cholla Boulevard features concrete curbs, multi-use lanes, bike/pedestrian paths, and landscaping within its four-lane cross-section.

La Cholla Boulevard had a posted speed limit of 35 MPH, although on-going road construction activity is currently requiring reduced speeds throughout the corridor. Overton Road has a posted speed limit of 45 MPH. The two-lane sections of these streets each have an estimated capacity of 16,500 VPD. The four-lane section of La Cholla Boulevard (south of Overton Road) has a capacity of 31,500 VPD; this figure will similarly characterize La Cholla Boulevard north of Overton Road once construction is complete.

c. Present Average Daily Trips (ADT)

Per the Preliminary Development Plan (PDP) presented in Section II.B of this Site Analysis, the proposed residential subdivision will generate less than 10,000 new vehicle trips. As such, Table 1 below provides the existing ADT volumes for those major streets within one (1) mile of the property.

TABLE 1: ADT VOLUMES FOR MAJOR STREETS WITHIN ONE (1) MILE		
Street Name	Average Daily Trip (ADT) Volume	
La Cholla Boulevard	14,938 (Magee Road to Overton Road) 9,530 (Overton Road to Lambert Lane)	
Overton Road	8,884 (Shannon Road to N. La Cholla Blvd.) 6,239 (La Cholla Blvd. to La Canada Drive)	
La Canada Drive	25,351 (Ina Road to Magee Road)	
N. Shannon Road	7,906 (Magee Road to W. Overton Road) 7,658 (Overton Road to Lambert Lane)	

d. Existing Bicycle & Pedestrian Ways

There are no existing pedestrian or bicycle ways in place on Overton Road nor on La Cholla Boulevard north of the Overton Road intersection, although pedestrian/bike paths and striped multi-use lanes are part of the current four-lane reconstruction of La Cholla Boulevard. South of Overton Road, La Cholla Boulevard already features striped multi-use lanes, together with pedestrian/bike paths that parallel the roadway.

La Canada Boulevard has striped multi-use/bike lanes and sidewalks on both sides of the street. Shannon Road has striped bike lanes or shoulders on most its segments within one mile of the subject site, but no sidewalks.

e. Public Roadway Improvements Underway or Planned

The Town of Oro Valley, in coordination with the Regional Transportation Authority (RTA), is well underway with the reconstruction of La Cholla Boulevard so as to provide a four-lane, divided arterial roadway northward

from Overton Road. This improvement project, expected to be completed in 2020, will create a continuous 4-lane divided arterial from River Road northward to Tangerine. The project is proceeding under Town of Oro Valley Plan No. OV-30-04/05-26.

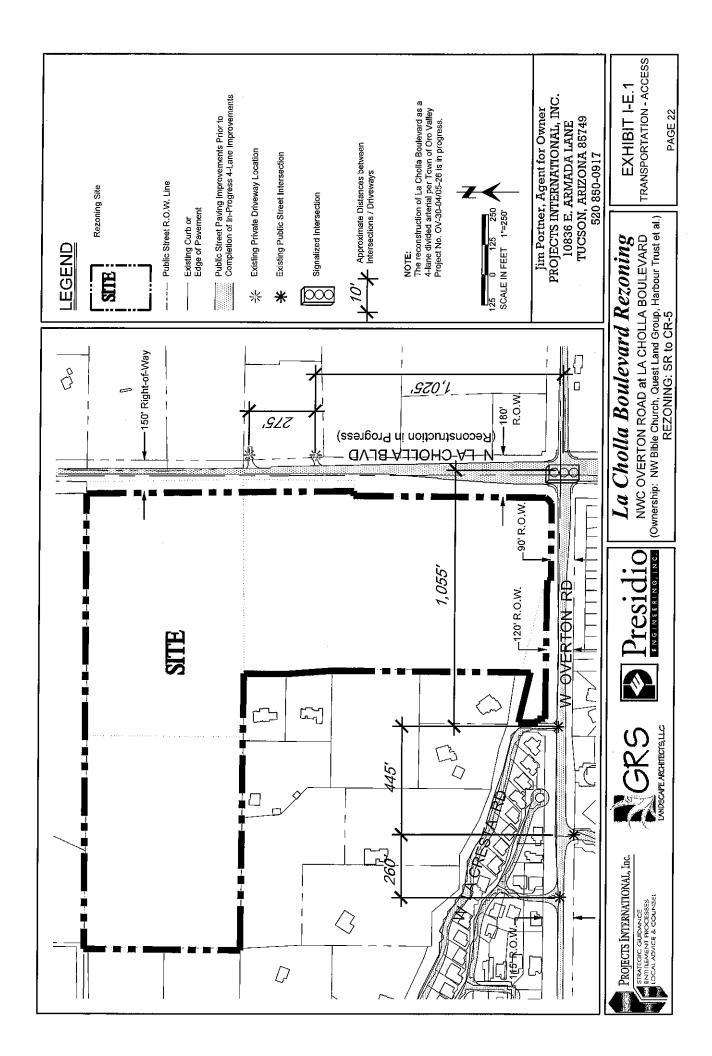
2. Distances from Site to Existing Nearby Driveways & Intersections

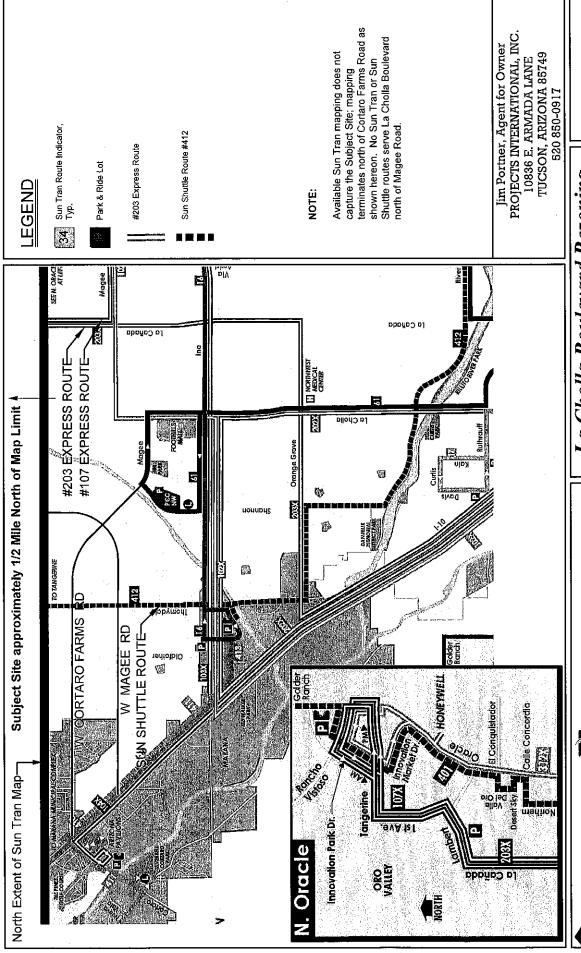
Nearby paved driveways and public street intersections in the vicinity of the subject property have been illustrated on Exhibit I-E.1 (Adjacent Driveways & Street Intersections).

3. Existing & Planned Transit Routes

There are no (0) current transit route on La Cholla Boulevard north of Magee Road. The existing Sun Tran and/or Sun Shuttle Routes in the general vicinity of the rezoning site have been illustrated on Exhibit I-E.2. Please note that existing Sun Tran mapping does not capture the subject property, since the mapping effectively terminates at Cortaro Farms Road.

Exhibits to Follow





La Cholla Boulevard Rezoning
NWC OVERTON ROAD at LA CHOLLA BOULEVARD

(Ownership: NW Bible Church, Quest Land Group, Harbour Trust et al.)
REZONING: SR to CR-5

EXHIBIT I-E.2 PUBLIC TRANSIT

PAGE 23





F. SEWERS

1. Size & Location of Existing Sewers

The rezoning site has the following existing public gravity sewer mains located within the rights-of-way of La Cholla Boulevard and Overton Road, respectively, along the site frontages.

□ La Cholla Boulevard: 8" to 18" main per PN G-86-068
 □ Overton Road: 8" main per PN G-84-084

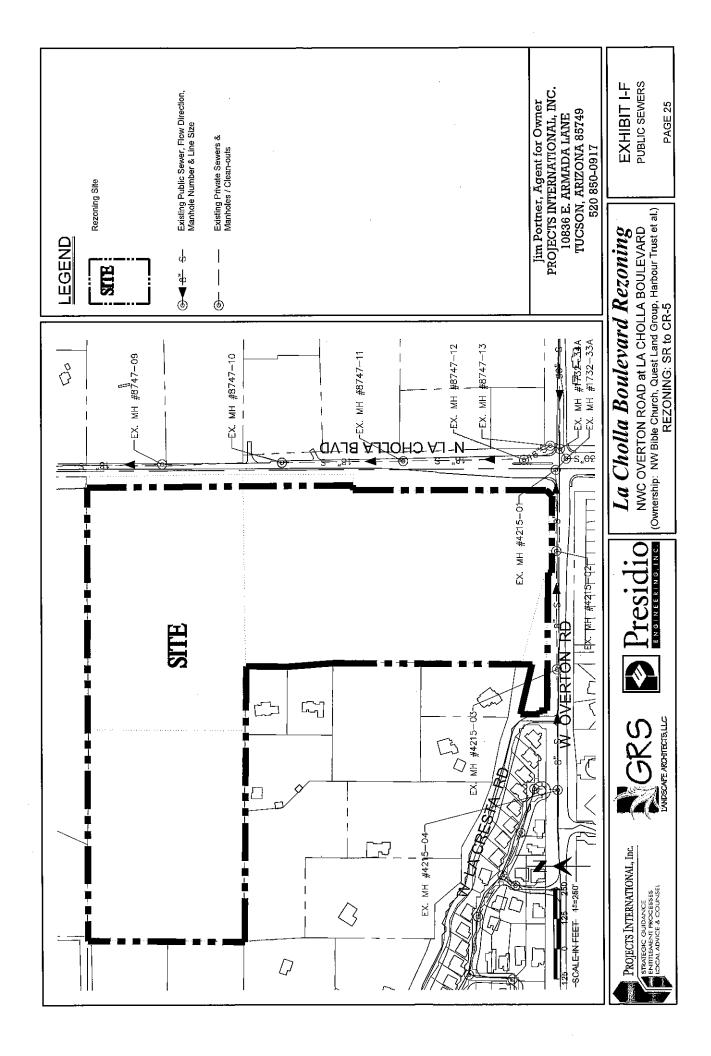
The Overton Road sewer is located along the lowest point of the project site and is thus well placed to provide sewer service to the site at or near Manhole #4215-02.

Please refer to Exhibit I-F for existing sewers pertinent to the rezoning site. A formal Type I Capacity Response letter (No. 2019-276) has been obtained from the Pima County Regional Water Reclamation District (PCRWRD) and is presented in Section II.I (p. 67) of this Site Analysis.

2. Any Constraints to Gravity Service

There are no constraints to providing gravity sewer service for the project nor in connecting its new sewers to the aforementioned public mains. Given the topography of the site, the entire proposed project will drain southward into this existing public sewer infrastructure.

Exhibit to Follow



G. RECREATION & TRAILS

1. Public Parks, Recreation Areas & Trails within One (1) Mile

See Exhibit I-G for mapping of the various trails and park facilities located in the general vicinity of the rezoning site.

Most notably, the proposed La Cholla/Honeybee #33 Loop Trail alignment traverses the extreme northeast corner of the subject property. This secondary trail alignment will ultimately provided direct connectivity to the Canada del Oro Wash Riverpark System, located approximately ¼ mile to the east (across La Cholla Boulevard).

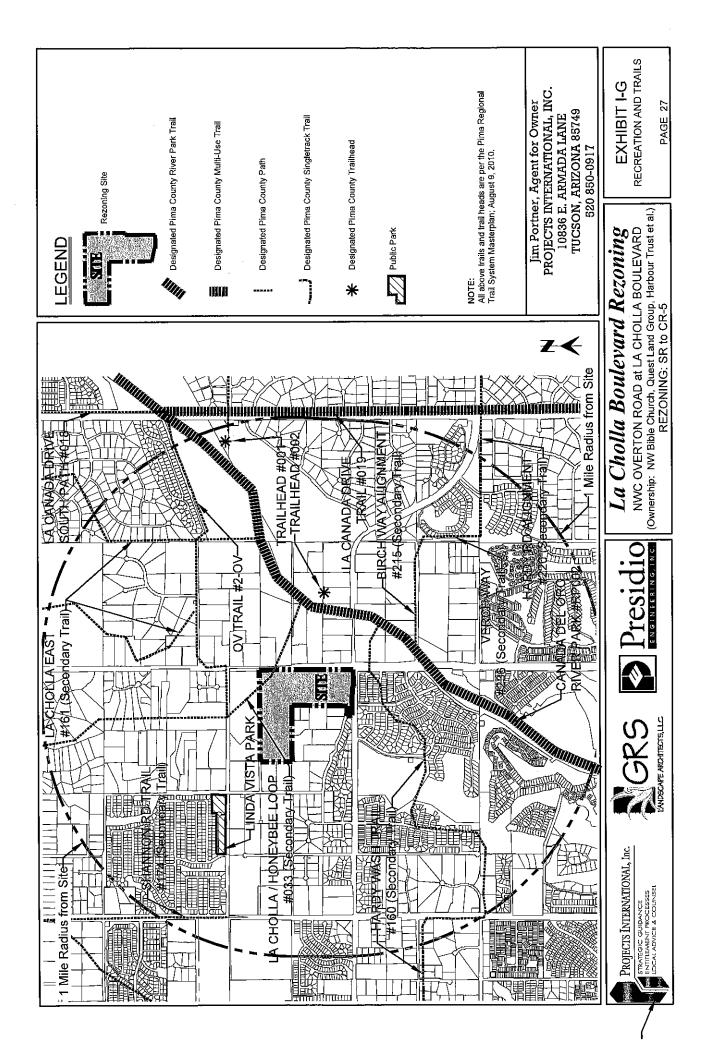
2. Trail Rights-of-Way

The conceptual alignment of the aforementioned La Cholla/Honeybee #33 Loop Trail (a secondary trail) is depicted on Exhibit I-G per the 2010 Pima Regional Trails System Masterplan. A segment of this trail alignment traverses the extreme northeast corner of the subject property within the existing La Cholla Wash drainage corridor. This existing wash conveys flows that traverse the site from the northwest to the southeast and which eventually cross La Cholla Boulevard.

No physical trail improvements currently exist on the subject property, nor on any of the properties located upstream or downstream of the rezoning site. The La Cholla/Honeybee Loop Trail #33, when eventually constructed, will provide direct connectivity to the Canada del Oro Wash Riverpark Trail system approximately ¼ mile to the east.

The developer will coordinate with the Department of Natural Resources, Parks and Recreation (DNRPR) at the time of future subdivision platting to determine whether any associated trail easements will be required for the La Cholla/Honeybee #33 Loop Trail.

Exhibit to Follow



H. CULTURAL RESOURCES, ARCHAEOLOGICAL & HISTORIC SITES

1. Records Check and Letter Report

A *Class III Cultural Resources Survey* was completed for subject property by MCA Consulting in August, 2018. The *Survey* reviewed the existing records in the AZSITE, ASM Archaeological Records Office, and NRHP databases, which include records from the Arizona State Museum (ASM), Arizona State University, the Bureau of Land Management (BLM), and other sources. The *Inventory* indicates that no archaeological sites, cultural resources, or historic properties are located on the subject property. The complete MCA Consulting *Survey* report is included as Appendix "C" of this Site Analysis.

a. Prior Field Surveys

A variety of past survey work has been completed in the surrounding general area and within the subject property. The aforementioned MCA Consulting *Survey* (see Appendix "C") lists all of the prior surveys that have been completed on and around the subject property.

b. Previously Recorded Archaeological or Historic Resources

No archaeological or historic sites of significance were found in any of the aforementioned prior surveys.

c. Probability of Buried Resources

There is a low probability of buried resources based upon the aforementioned *Survey*.

d. Recommendation as to Future Surveys

Based upon the aforementioned *Survey*, no further archaeological studies of the property are warranted. Routine discovery instructions apply to the owner/developer if future ground modifications reveal subsurface archaeological resources.

2. Survey Title

"A Class III Cultural Resources Survey of 51 Acres of Private Land Northwest of Overton Road and La Cholla Boulevard, Vista Del Oro, Pima County, Arizona".

I. COMPOSITE MAP

1. Description of Major Characteristics

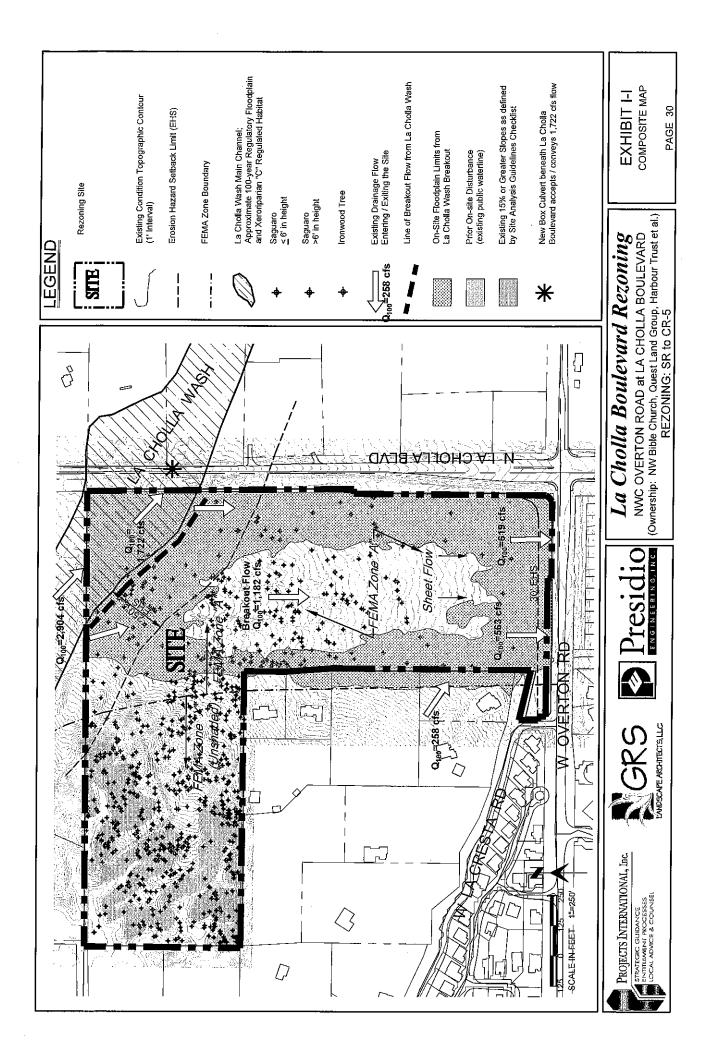
The site is generally unremarkable in terms of landform or significant features, except for the fact that it possesses a well-defined natural drainage that traverses the property. The specific characteristics cited in the Site Analysis Guidelines are respectively illustrated on Exhibit I-I (Composite Map) as follows:

- Topography. There are no restricted peaks and ridges, rock outcrops, or talus slopes on the property. As such, none of these topographic features are depicted on the Composite Map exhibit. The Exhibit will contain only the 1' contour interval mapping of the site, together with those areas of 15% slope or greater as defined by the Site Analysis Guidelines checklist.
- 2. **Hydrology.** The Composite Map exhibit contains the following identified items from the checklist: (a) the 100-year regulatory floodplains (La Cholla Wash breakout, etc.) traversing the site in the existing condition, (b) erosion hazard setbacks, (c) concentration points and 100-year volumes entering and leaving the site, and (d) sheet flood areas, and (e) regulated riparian habitat.

The following items from the checklist do not exist on the property and so will not be depicted on the Composite Map; (f) lakes, ponds, springs, etc.

3. **Biological Resources.** The Composite Map exhibit contains only the following identified item from the checklist: (a) all saguaros, mapped and categorized by their appropriate height category, and (b) ironwood trees.

The following items from the checklist do not exist on the property and so will not be depicted on the Composite Map: ; (c) pima pineapple cactus; (d) needle-spined pineapple cactus; and (4) areas in which disturbance is prohibited by an adopted Pima County ordinance or policy.



SECTION II:

Land Use Proposal

A. PROJECT OVERVIEW

This rezoning application is a second one pertaining to the same property. The original case (P18RZ00011) was ultimately withdrawn in May of 2019 when significant delays were encountered pertaining to the major drainage issues that impact the site. Since that time, the applicant and developer have worked closely with the Pima County Regional Flood Control District (RFCD) to provide extensively analyses of the upstream La Cholla Wash watershed and to develop more definitive solutions for capturing and conveying the significant off-site flows impacting the property. The level of analysis undertaken here is far above that which normally attends the rezoning process and is commensurate with the degree of detail that is normally not completed or provided until the subdivision platting stage. Given the extent of the drainage issues at play here, together with the general drainage concerns held by property owners in the area, it was clear that this enhanced level of analysis was appropriate for this particular rezoning.

The rezoning site is located at the northern reach of an extensive, developed and urbanized residential area. The northward growth of this region recently prompted Pima County to complete the construction of the new arterial, four-lane divided roadway cross-section for La Cholla Boulevard from Magee Road to Overton Road, including a major bridge across the Canada del Oro Wash. The anticipated and continued urbanization of the corridor has prompted the Town of Oro Valley to now proceed with the construction of that same four-lane arterial street section three miles further northward. This roadway project (which will be completed in 2020) cements La Cholla Boulevard as a major north-south transportation corridor from River Road to Tangerine Road.

The proposed residential rezoning will expand the existing residential/urbanized core that is already in place and will be comprised of approximately one hundred thirty-nine (139) single-family detached homes. Significant buffers (well in excess of those stipulated by Zoning Code requirements) will be established along the site boundaries adjoining the existing lower-density residences to the immediate west. These buffers will be comprised of a combination of natural desert, together with landscaped areas augmented with mature tree and shrub specimens salvaged from the property.

This development scheme concentrates density within the La Cholla Boulevard corridor, provides for significant open-space conservation, and effectively protects and buffers those lower-density residences already nearby. While densification and northward urbanization seems to be ultimately anticipated within the entire La Cholla Boulevard corridor, the proposed rezoning constitutes a suitable request and development construct for the immediate present.

1. Proposed Zoning Boundaries

The proposed rezoning request is comprised of four (4) existing tax parcels in their entirety (Parcel Nos. 225-04-002A, 225-04-002C, 225-04-003P and 225-04-008B). These parcels collectively total approximately 50.7 acres in gross area, reflecting recent right-of-way dedications to Pima County for a portion of La Cholla Boulevard.

2. Project Description

a. Proposed Development Use & Type

As indicated above, the site will be developed as a single-family residential subdivision containing approximately one hundred thirty-nine (139) single family detached homes. The southern portion of the rezoning site (approved for MLIU under comprehensive plan amendment Case No. P18CA00003) will have a gross density of approximately 4.3 RAC. The northern portion of the site (approved for LIU 1.2 under amendment Case No. P18CA00004) will have a gross density of less than 2.5 RAC, with a significant portion of its acreage being preserved as natural open space.

b. Proposed Development Response to Opportunities & Constraints

The site's major constraints are natural and environmental ones, most notably pertaining to habitat resources and regulatory floodplain associated with the La Cholla Wash (traversing the northeast corner of the property), together with lowland foothills that predominate the northwest portion of the rezoning site. Both of these constrained areas are set-aside as natural areas by the project's *Preliminary Development Plan (PDP)*.

The entire site is designated as *Multiple Use Management Area (MUMA)* and *Special Species Management Area (SSMA)* under the Maeveen Marie Behan Conservation Lands System (CLS), with a portion of it (within the previously mentioned La Cholla Wash corridor) also classified as Xeroriparian "C" regulated habitat. Beyond these considerations, the site also contains numerous saguaros and ironwood trees, thereby necessitating special care in applying and executing the Native Plant Preservation Ordinance (NPPO).

The Preliminary Development Plan (PDP) presented below in Section II.B responds to these natural constraints by employing significant set-asides for the CLS, regulatory-floodplain and habitat constraints identified. The new residential lots are located solely in that portion of the property that lies outside of these sensitive areas and which is characterized by flatter and more readily developable topography.

c. Conformance with Comprehensive Plan, etc.

This Project complies with its Designated Land Use Intensity Category.

The rezoning site was recently designated as a combination of *Medium-Low Intensity Urban (MLIU)* and *Low-Intensity Urban (LIU 1.2)* by the Pima County Board of Supervisors when they voted to approve comprehensive plan amendment Case Nos. P18CA00003 & P18CA00004, respectively, on October 16, 2018. No rezoning policies were attached to these newly-approved designations.

As mentioned earlier, the southern portion of the rezoning site (approved for *MLIU* under comprehensive plan amendment Case No. P18CA00003) will contain approximately 97 lots on 22.5 acres and thus have a gross density of approximately 4.3 RAC. The northern portion of the site (approved for *LIU 1.2* under amendment Case No. P18CA00004) will contain approximately 42 lots on 29 acres and therefore have a gross density of 1.4 RAC. A minimum of 45% of this northern portion will be open space, thus satisfying the density-bonus provisions of the *LIU 1.2* category. Both of the above densities therefore fall within those prescribed by Pima Prospers for *MLIU* and *LIU 1.2*.

This Project complies with the County's Pima Prospers Use of Land (Chapter 3) and Physical Infrastructure Connectivity (Chapter 4) policies. The pertinent policies are as follows: Land Use Element (Section

3.1), Environmental Element (Section 3.4), Housing & Community Design Element (Section 3.5), Transportation Element (Section 4.1), and Cost of Development (Sections 7.1 & 7.2). These are each discussed below:

Land Use Element (Section 3.1)

The proposed project works substantially toward the established Goal 1 objective (p.3.2) of integrating land use with physical infrastructure and resource conservation to insure long-range viability of the region. The requested rezoning integrates with the existing or already-planned transportation, wastewater, potable water, and utilities resources adjacent to or near the property and within the larger La Cholla Boulevard corridor. It represents a reasonable and prudent extension of the existing residential development pattern and, as such, can be effectuated off of the existing infrastructure framework rather than requiring the further expansion of it. The continued residential densification of the La Cholla Boulevard corridor takes advantage of these available efficiencies and enhances the opportunity for expanded multi-modal transportation and future transit options.

Environmental Element (Section 3.4)

The proposed project will be in full compliance with the Conservation Lands System (CLS) and its stated Goal 1 (p. 3.23) objective of conserving and protecting valuable natural resources, together with its enumerated Policies (pp. 3.23 thru 3.31). The *Preliminary Development Plan (PDP)* presented in Section II.B below provides for a significant natural-area set aside of the Xeroriparian "C" habitat and wildlife corridor that traverses the site, as well as the low foothills that predominate its northwest portion. These on-site set-asides respect applicable ordinances regulating riparian habitat and will further help satisfy the prescriptions of the CLS.

Housing and Community Design Element (Section 3.5)

The proposed rezoning furthers the Goal 8 (p. 3.45) objective of providing new development that is generally compatible and scale-appropriate, as well as the Goal 10 (p. 3.46) objective of ensuring development that reflects the character and sense of place of its given area. This project is guided by the simple goals of: 1) providing a single-family residential use that, as best as possible, fits with and responsibly extends the clearly emerging trend of urbanization in the area; and 2) respects and generally emulates the type, character, and density of this established/emerging residential pattern, while suitably buffering the small number of lower-density residences that exist nearby.

Transportation Element (Section 4.1)

The proposed rezoning furthers the Goal 1 (p. 3.45) objective of promoting a comprehensive and multi-modal transportation system. The La Cholla Boulevard corridor, especially given the current construction of same to provide a full four-lane arterial roadway section, is now clearly one of the most significant north-south transportation arteries within the overall County transportation system. Multi-modal objectives are furthered by fostering the intensification and residential densification of such corridors.

At present, La Cholla Boulevard is served by no (0) public transit routes or Sun *Shuttle* services north of Magee Road. Continued growth and urbanization through projects such as the one proposed will contribute toward the goal of achieving truly multi-modal, transit-rich corridors throughout the metro region.

Cost of Development (Sections 7.1 & 7.2)

The proposed rezoning furthers the principles of Section 7.1 and the *Goals and Policies* of Section 7.2 to achieve fairness in public infrastructure funding and to ensure that all new development pays its appropriate fair-share of same. The proposed project will assume the design and construction cost of all extensions or augmentations of public infrastructure necessary to serve its proposed residences and will further contribute to the public funding of regional transportation improvements through its participation in the Department of Transportation's impact fee program.

d. Interactions With Surrounding Property Owners; Attendant Issues

The surrounding property owners and nearby homeowners associations were consulted during the aforementioned comprehensive plan amendment cases (Case Nos. P18CA00003 & P18CA00004), the applications of which were recently approved by the Board of Supervisors on October 16, 2018. While there were no formal conditions of approval or rezoning policies

attached to these approvals, this rezoning proposal and its attendant *PDP* are in substantial conformance with the concept plans that were publicly presented to the neighbors and the public at the time of the plan amendment approval, including the significant set-aside and protection of the La Cholla Wash, its attendant regulatory floodplain and designated riparian habitat resources, together with preservation of the site's lower foothill areas.

As mentioned earlier, this rezoning application is the second formal filing on the same site. The initial rezoning case (P18RZ00011) was ultimately withdrawn in May of 2019 when significant delays were encountered pertained to site drainage. Since that time, the applicant and developer have worked closely with the Pima County Regional Flood Control District (RFCD) to analyze all drainage aspects in far more detail and to develop more definitive solutions for the capture and conveyance of stormflows.

The rezoning applicant will resume working with neighborhood representatives and homeowners association leadership so as to fully inform them of the current rezoning application and the specifics of the *Preliminary Development Plan (PDP)*, drainage particulars, buffering provisions, etc. These discussions and interactions will be on-going throughout the rezoning process and we will ensure that Pima County staff is kept abreast of their progress.

e. Impact on Existing Land Uses in the Surrounding ¼ Mile Area

The *Preliminary Development Plan (PDP)* presented herein depicts a new residential neighborhood that is generally similar in both type and character to the platted subdivisions which already exist in the established urbanized sector to the immediate south and further west. The rezoning site is more immediately abutted (to the adjacent west) by a handful of existing lower-density residences. The proposed new neighborhood will eliminate much of the natural desert which these neighbors have enjoyed heretofore, as well as introduce a foreground element into their previously unfettered view of the Santa Catalina Mountains. While one could argue that such impacts are the inevitable result of a growing community, mitigative measures have been incorporated into the project's *Preliminary Development Plan (PDP)*, including enhanced setbacks and buffering elements, to respect and reasonably address these impacts upon the existing residents.

f. Contribution to Smart Growth Principles

The proposed rezoning is consistent with, or furthers, several of the Smart Growth Principles as identified by the Smart Growth Network (SGN). These are individually discussed below:

Multi-Modal Transportation Opportunities

The continued northward expansion of the well-established residential district already in place within the La Cholla Boulevard corridor will further a

material contribution toward regional opportunities for multi-modal transportation. While La Cholla Boulevard has long been an important north-south artery within the metropolitan region, its standing in this regard has risen notably in recent years with the major arterial roadway improvements completed by Pima County northward to Overton Road, and now with the extension of that same four-lane divided cross-section to Tangerine Road by the Town of Oro Valley. These roadway improvements will not only provide a new continuous bike route from the central metropolitan core northward to Oro Valley and points beyond, but also set the stage for the extension of more robust transit opportunities. Sun Tran currently has no established routes nor Sun Shuttle services north of Magee Road. The continued northward urbanization of the La Cholla Boulevard corridor will help grow the population base necessary to justify extended Sun Tran services.

Take Advantage of Compact Building Designs

In the global perspective, the project will not "leap frog" into otherwise isolated areas, but will instead expand a large mass of existing single-family residential that is already well established in the immediate area. In doing so, it furthers a compact spatial arrangement of urbanization and merely represents an intelligent and practical expansion of a basic growth pattern that is already set.

From a site-specific perspective, the proposed *PDP* concentrates its residential improvements in those areas with limited environmental or habitat value, while providing for significant and contiguous set-asides of the site's valuable resources as undisturbed natural open space. This approach not only creates obvious efficiencies in on-site infrastructure, but also furthers regional conservation goals. The project proposes to preserve the site's entire Xeroriparian "C" regulated habitat in undisturbed fashion.

Rational Infrastructure Expansion and Improvements

Intelligent and efficient regional growth demands the intelligent and efficient use of established public infrastructure. Given that the proposed project is contiguous to an established urbanized residential area, the rezoning site is developable using the existing framework of public infrastructure that is already project convenient. No significant system expansions or augmentations are necessary to serve it.

Conservation of Natural Resources

The rezoning site falls within the *Multiple Use Management Area (MUMA)* classification of the Conservation Lands System (CLS) and is also subject to its Special-Species Management overlay, thereby increasing the CLS's established conservation and mitigation thresholds. The project will fully satisfy CLS requirements through a combination of significant on-site setasides and off-site mitigation.

Going forward, the site's final development program and subdivision platting will proceed in consultation with the Pima County Office of Sustainability & Conservation, and will be subject to their approval and acceptance of suitable off-site mitigation lands. The CLS topic is also discussed above in Section II.A.2.c (see "Environmental Element").

3. Compliance with the Pima County Zoning Code

At the time of this writing, we anticipate no portion of the Pima County Zoning Code which cannot be complied with in the ultimate design and construction of this project. In the event that any such particulars arise during final engineering and subdivision platting, these will be appropriately dealt with through staff interactions and any attendant processes (e.g. variances) that might be required.

B. PRELIMINARY DEVELOPMENT PLAN (PDP)

1. PDP Map and Overlay -- General Description

A Preliminary Development Plan (PDP), in accordance with Section II-B.1a-p of the Site Analysis Checklist, is provided as Exhibit II-B. This PDP illustrates a proposed single-family residential subdivision that protects the La Cholla Wash corridor traversing the site, as well as the lower foothills in the site's northwest portion, and which confines the new residential component to flatter areas that better facilitate efficient and cost-effective development.

In terms of timing and phasing, it is anticipated that the project will proceed as a single phase, with construction commencing some time in mid 2020 and continuing into 2021. This timing is consistent with the Town of Oro Valley's activities to expand La Cholla Boulevard to a four-lane divided cross-section, which has a projected completion timeframe of 2020.

2. Support Data

The following support data is provided here and is also reflected in notes on the PDP as appropriate:

a. Estimated Floor Area of Structures.

No commercial uses are included in this project.

b. Building Heights

The residential subdivision will contain both one-story and two-story residences in response to market demand. The maximum building height therein will not exceed that allowed under the requested CR-5 zoning, i.e. thirty-four feet (34').

c. Number of Dwelling Units

The PDP illustrates one hundred thirty-nine (139) residential lots. The typical lot widths range from forty feet (40') to fifty feet (50'), with typical depths of approximately one hundred twenty feet (120'). These lot dimensions are subject to minor modifications at the time of final subdivision platting, based upon available floor-plans and prevailing market preferences in force at the time.

d. Maximum & Minimum Residential Densities

The southern portion of the rezoning site (approved for *MLIU* under comprehensive plan amendment Case No. P18CA00003) will have a gross density of approximately 4.3 RAC. The northern portion of the site (approved for *LIU* 1.2 under amendment Case No. P18CA00004) will have a gross density of approximately 1.4 RAC, with a significant portion of its acreage being preserved as natural open space. With the above in mind, the combined gross density of the overall rezoning site will be less than 3.0 RAC.

e. Type of Landscaping

Landscaping within the developed portion of the subdivision will be a mixture of native preserved desert and xero-riparian landscape species. The proposed landscape program for the site is described more fully in Sections II.E (Biological Resources) and II.F (Landscape & Buffer Plan). A minimum 50' natural buffer will be used to protect adjacent residents to the immediate west. Landscaped areas and the natural buffer will be supplemented, where warranted, with transplanted specimens salvaged from the property.

f. Size & Description of Recreation Areas, Natural/Functional Open Space

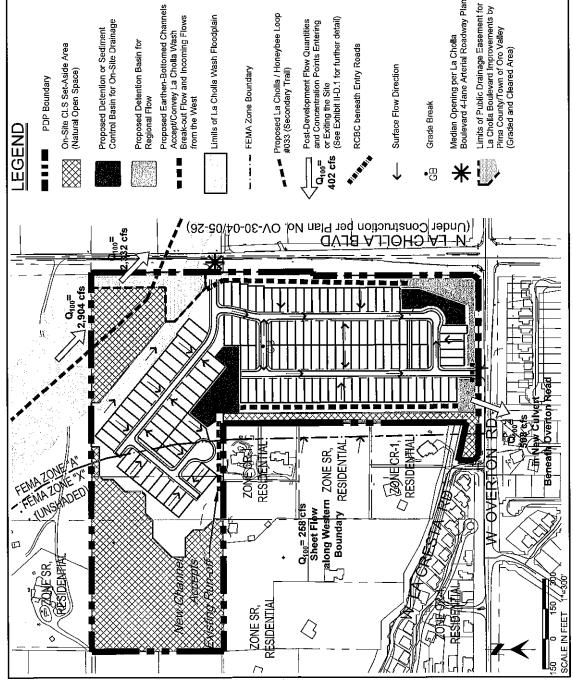
The project's most significant open space element is the natural area setaside for the La Cholla Wash floodplain and its riparian habitat corridor, together with the lower foothills being preserved in the northwest portion of the property. The designated La Cholla/Honeybee Loop Trail No. 033 alignment traverses the La Cholla Wash corridor. These areas are illustrated on the *PDP* and described more fully in Sections II.E. (Biological Resources) and II.L (On-Site Recreation and Trails.).

In accordance with Pima Prospers Section 4.8 (Goal 1, Policy 3.e) and Section 4.10 (Goal 1, Policy 2.e), sidewalks provided on both sides of the residential subdivision streets will promote connectivity from the new residential lots to the La Cholla Wash corridor and designated trail alignment.

g. Other Supplemental Information - Safe Streets

In keeping with the objectives of providing safe streets to schools, all new streets within the proposed subdivision will provide concrete sidewalks on both sides of the street, such that there is a continuous pedestrian system throughout the neighborhood and extending into the La Cholla Boulevard and Overton Road rights-of-way. These sidewalks will eventually connect to the public multi-use paths being built along La Cholla Boulevard by the Town of Oro Valley when it completes its reconstruction of La Cholla to a full four-lane arterial.

Exhibit to Follow



On-Site CLS Set-Aside Area (Natural Open Space)

Control Basin for On-Site Drainage Proposed Detention or Sediment

Proposed Earthen-Bottomed Channels Accept/Convey La Cholla Wash Break-out Flow and Incoming Flows

Limits of La Cholla Wash Floodplain

Maximum residential height is thirty-four (34') per the Pima County

BUILDING HEIGHT

Zoning Code. Project will contain both 1-story and 2-story

residences per market needs,

PARKING & LOADING

approximately one hundred thirty-nine (139) lots, together with

A single-family detached residential subdivision containing

PROPOSED USE

SR MLIU & LIU-1.2

Comprehensive Plan Designations:

Proposed Zaning: Existing Zoning:

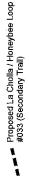
PROJECT PARTICULARS

50.70 AC 50.70 AC

Site Area After R.O.W. Dedications:

Overall Rezoning Site Area:

related drainage and detention facilities, perimeter buffers, etc.



(Parking & Loading Standards). Final design and compliance with

Parking and loading will be in accordance with Section 18.75

same will be demonstrated at the time of future site residential

subdivision plat review.

RESIDENTIAL SUBDIVISION PUBLIC STREETS

Proposed Right-of-Way Width:

Fravel Lanes: Sidewalks: Curbing:

or Exiting the Site (See Exhibit II-D.1 for further detail) Post-Development Flow Quantities and Concentration Points Entering

Median Opening per La Cholla Boulevard 4-lane Arterial Roadway Plans

CONSERVATION LANDS SYSTEM (CLS) PARTICULARS subdivision platting.

transplanted specimens from the property. Final details of same will

be provided in the required NPPO plan at the time of future

lower-density residences and vacant property located to the west of natural desert and graded/re-landscaped areas using salvaged and the rezoning site. These perimeter buffers will be a combination of

Perimeter landscape buffers are provided to protect adjacent

PERIMETER LANDSCAPE BUFFERS

2' Wedge Curbs on both sides

Allowed both sides

On-Street Parking:

Minimum Two (2) 12' Lanes 5' Sidewalks on both sides

Minimum 14.2 AC (this figure excludes the Public Drainage Easement). For CLS purposes, the Project Area is 49.2 AC Total Natural Open Space provided on-site:

PROJECTS INTERNATIONAL, Inc. STRATEGIC GUIDANCE ENTITEMENT PROCESSES LOCAL ADVICE & COUNSEL

GRS UNDSCAFE AROTTECTS, LLC



(Ownership: NW Bible Church, Quest Land Group, Harbour Trust et al.) REZONING: SR to CR-5 La Cholla Boulevard Rezoning NWC OVERTON ROAD at LA CHOLLA BOULEVARD

EXHIBIT II-B PLAN

PRELIMINARY DEVELOPMENT PAGE 40

C. TOPOGRAPHY & GRADING

Please refer to Exhibit II.C (Topography and Grading) for an illustration of the various conceptual grading and design features of the proposed development. In addition, the following required information is also provided:

1. Development Features on Slopes of 15% or Greater

Slopes of 15% and greater (as defined by the *Site Analysis Guidelines* checklist) do exist on the property and have been indicated on the *PDP* (Exhibit II.B) and Exhibit II.C. These slopes are located within the northwest portion of the property that is being preserved as a natural-area set-aside; none will be graded and so no further protective measures are necessary.

2. Natural Areas Used for HDZ Allowances

There are no areas being set aside as natural open space for the purposes of average cross slope or HDZ calculation on subject property. The site's average cross-slope calculation (as provided in Section I.B of this Site Analysis) is below 15%.

3. Disturbed, Revegetated and Natural Areas

The site is characterized by the following topography/grading facts:

a. Natural Open Space

Approximately 14.2 acres of the post-development site will be preserved as natural open space, constituting approximately 28% overall.

b. Revegetated Areas

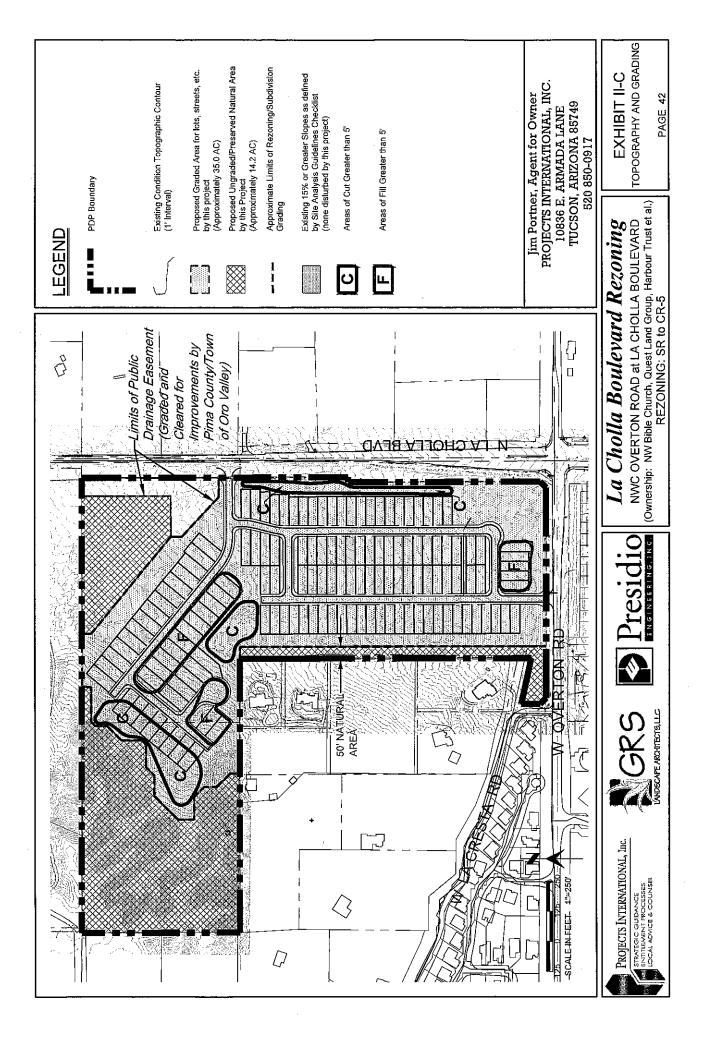
Revegetation will occur in those areas designated on the PDP for detention basins and drainage, as well as in certain perimeter buffer areas. In addition, there will be the customary landscaping of the new residential lots and streetscapes throughout the neighborhood.

c. Graded/Disturbed

Approximately 35.0 AC of the 49.2-acre project site will be graded/disturbed to construct the new residential subdivision and associated street and drainage/detention improvements; please note that 1.5 AC Public Drainage Easement is excluded from the overall project area. The approximate limits of grading have been illustrated on Exhibit I.C.

4. Maximum Grade Change; Areas By More than 5' of Cut or Fill

There are small areas where we anticipate that grading cuts and fills will exceed five feet (5') from existing grade. These are depicted on Exhibit II.C.



D. HYDROLOGY

The proposed development will be a residential subdivision, together with certain natural area set-asides. The developed portions will be mass-graded, as described in Section II.C (and as illustrated on Exhibit II-C). Please refer to Exhibit II-D.1 (Proposed Hydrology) for a conceptual presentation of the project's proposed drainage plan. In addition, and due to the significant complexities of this particular site and its drainage solution, please also refer to Appendix "D", which provides a more detailed and technical description of the project's design elements than can be accurately reflected in the body of this Site Analysis and attendant Exhibit II-D.1.

The hydrologic findings and proposed drainage solution presented herein are the result of significant background analysis of the upstream La Cholla Wash watershed and the other off-site storm flows impacting this site. For all intents and purposes, this work embodies a level of detail not normally undertaken until the future final engineering and subdivision platting stages. Given the complexities of the drainage realities on this particular site, however, together with the general drainage concerns held by property owners in the area, this more intensive level of analysis was warranted with this particular rezoning.

1. Post-Development On-Site Hydrology

A combination of natural open space, setbacks, and man-made drainage improvements will be used to accommodate surface drainage for this subdivision. Also refer to Exhibit II-D.1 for the following:

a. Preserved Natural Washes.

La Cholla Wash is the only wash impacting the site that contains a defined channel. This defined channel traverses the northeast corner of the site to La Cholla Boulevard, where its flow is conveyed beneath the roadway via newly built arch culverts. This flow path is to be preserved as a part of this project. .

The site is also impacted by southward sheet flow that breaks out from the same La Cholla Wash, as well as from flows generated off-site to the west and which move eastward onto the property.

The natural width of the break-out flow from La Cholla Wash is upwards of 800 LF, averaging out to just over 1 cfs per foot of width, while the western off-site generated flows are not conveyed within any defined natural water course.

Both the natural sheet flows from the west, and the flows resulting from the above-mentioned breakout, ultimately drain to the south. Under developed conditions, the above off-site flows will be collected and conveyed southward via a combination of protected fill and perimeter channels. The channels will be earthen-bottomed, but be appropriately armored on their sides to eliminate any erosion-hazard setback (EHS) requirement and thus fully protect and flood-proof the adjacent new residential lots.

b. Regulatory Floodplains and Quantities.

The project's incoming and outgoing Q100's are reflected on Exhibit II-D.1.

Under post-development conditions, this project proposes to reduce the amount of the La Cholla Wash break out flow from its current 1182 cfs to 572 cfs. This more than 50% reduction is possible through the installation of a new set of culverts beneath the project's entry road off of La Cholla Boulevard. The inlet invert of these new culverts is set slightly higher than those of the new arch culverts recently built with the La Cholla Boulevard public roadway improvements (see Appendix "D" for attendant technical analyses).

The differential offset of the respective culverts' inlets ensures that the majority of the La Cholla Wash Flow (and its sediment) continues eastward beneath La Cholla Boulevard, while controlling the amount of break-out flow and sediment directed southward to Overton Road; this latter volume is contained within a new channel along the project's eastern perimeter.

It is important to note that the respective flow peaks generated by the La Cholla Wash, by the flows originating off-site from the west (estimated to be 258 cfs), and by the flows originating on-site all occur at different times of concentration and thus are not directly additive.

Furthermore, on-site generated flows will be directed to internal detention basins that will reduce them to levels that are 10% below existing conditions, in accordance with Pima County critical-basin mandates, Additional basins along the southern boundary of the project will be utilized to further route and control the flow and sediment of the captured off-site flows.

Based upon the aforementioned differential culvert approach, together with the different times of concentration and attendant usage of the new basins being provided, it is estimated that the maximum developed flows being discharged to the south at Overton Road will be 508 cfs. This 508 cfs volume represents a substantial reduction from the exiting condition at this location. Based upon this reduced flow, it is proposed to convey the post-developed runoff beneath Overton Road via a new culvert structure and thus wholly eliminate the current at-grade drainage across the Overton Road pavement.

The above approach is also intended to allow for the ultimate removal of all lots from the current FEMA Flood Zone "A" designation through the processing of a CLOMR/LOMR, based upon fill, at the time of future subdivision platting.

c. Erosion Hazard Setbacks

Erosion hazard setbacks (EHS's) are measured from the top of natural bank or the edge of the floodplain, whichever is located closer to the centerline of the wash.

Under existing conditions, the only EHS currently shown on the site is a 250' setback associated with the main channel of La Cholla Wash (see Exhibit I-C.3). This EHS will be eliminated by the use of armored fill for lot construction that parallels the Wash's western floodplain limit (see Appendix "D", wherein perimeter drainage and channel exhibits are provided).

The armored fill along the northernmost lots will direct the La Cholla Wash flow southeasterly to the proposed differential-culvert configuration described above, where the majority of the La Cholla Wash flow will be conveyed beneath La Cholla Boulevard, while break out flow will be captured and conveyed by a proposed 2-cell, 10'x5' RCBC located beneath the project's entry drive off of La Cholla Boulevard. This captured flow will then be conveyed southward in a channel paralleling the site's eastern boundary. The channel banks will be armored to set the erosion hazard setback at the top of bank to protect the new adjacent lots.

Additionally, off-site generated flows from the west of the property will similarly be captured and conveyed southward within a channel that has appropriate bank protection to protect against erosion.

d. Pima County Regulated Habitat

Xeroriparian "C" regulated habitat is located within the north-easternmost corner of the property and is approximately 3.70 acres in area. This habitat is designated as a set-aside and will not be impacted by the proposed subdivision improvements. A separate portion of this habitat has already been impacted by the public drainage improvements attending the reconstruction of La Cholla Boulevard to a four-lane arterial roadway.

e. Proposed Drainage Structures

The project's proposed drainage structures are conceptually depicted on Exhibit II-D.1. Additional detail for the perimeter channels and basins discussed below is provided within Appendix "D".

The drainage structures being proposed for this project are further detailed below; this description proceeds from north to south, i.e. from upstream to downstream:

Northeast Drainage: Drainage impacting the northeast portion of the project consists primarily of the La Cholla Wash breakout flow and some minor local off-site generated flow. Proposed lots in this area will be raised on fill that will be armored. The angular orientation of this armored perimeter will direct the incoming runoff in a southeasterly direction toward the 2-cell arch culvert recently constructed beneath La Cholla Boulevard, and toward a second set of culverts to be located beneath the new subdivision's entry drive off of La Cholla Blvd. The inlet invert of these proposed culverts will be set above those of the La Cholla Boulevard roadway culverts. This configuration will capture 572 cfs of the La Cholla Wash flow and convey it southward along the east perimeter of the project.

East Drainage: Flows discharged by the above-referenced entry drive culverts will be conveyed southward along the project's east boundary within a trapezoidal channel, to a point of discharge into a new basin located along the southern boundary of the project.

Northwest Drainage: Flows being generated west of the proposed new lots in this area will be captured within a sediment control basin, then routed around the west edge of the lots, then ultimately conveyed within a trapezoidal perimeter channel to new central detention basins, beyond which it can flow southward.

<u>West Drainage</u>: Flows from the above northwest drainage area will be conveyed southward along the project's west boundary within a trapezoidal channel, ultimately discharging into a basin located along the southern boundary of the project.

Interior Subdivision Drainage: Interior drainage will be via the residential streets, along with catch basins and storm drain systems as needed to meet the Pima County Subdivision and Development Street Standards. Additionally, there is an interior/central basin planned to assist in meeting the project's critical basin requirements.

Southern Drainage: The southern drainage improvements consist of three basins and a series of arch culverts.

The first basin is abuts the southeast corner of the proposed residential lots and is intended to attenuate on-site generated flows per the project's critical basin classification. This classification requires that the peak discharge for the post-developed conditions be reduced 10% below existing volumes for the 2-year, 10-year, and 100-year peak discharges. This basin will discharge into the second basin described below.

The second basin is located at the extreme southeast corner of the site and adjoins the site's frontages along La Cholla Boulevard and Overton Road. This basin is primarily intended to accept the La

Cholla Wash break out flow and sediment load arriving from the north. The flow collected into this basin will ultimately be conveyed into the third basin (see below) via two (2) new 10'x3' arch culverts beneath the subdivision's entry drive off of Overton Road.

The third basin is in the southwestern corner of the site, along the project's frontage with Overton Road. This basin will also receive flows conveyed via the west-perimeter channel, as well as accept the flow from the second basin above. This basin will then discharge to the south, beneath Overton Road, via two (2) new 10'x3' arch culverts; these will drain into the existing open channel along The Bluffs subdivision on the south side of Overton Road.

The following summary provides even further detail on the above drainage structures and the overall drainage concept proposed with this project:

- Onsite Detention- and Sediment-Control Basins
 - o (refer to Exhibit II-D.1 and Appendix "D-")
 - o The annual sediment yield for all the on-site sedimentation basins is estimated at 800 cubic feet.
 - o Sediment control basin, northwest corner of subdivision
 - Accepting incoming flows from the low foothills in the northwest
 - Releasing the cleaner flow into the project's channels via weir outlet
 - o Centrally located interior detention basin
 - Capturing surface flows from the northern block of new lots and low foothills in the northwest
 - Will capture and convey its flow eastward within a lined channel, depositing it into the central detention basin.
 - 20,000 cu-ft of storage for detention
 - The outflow from the central basin will be approximately 101 cfs,
 - The outflow will enter the proposed new channel that parallels the site's western boundary and flows southward.
 - o Basin southeast corner of the project
 - 34,000 cu-ft. of storage for detention
 - o Regional Detention Basin
 - East and west channels drain southward to regional basins
 - Basins provide a minimal degree of detention
 - Flow exits the property in the same location as predeveloped natural floodplain limits into The Bluffs existing collector channel

- Armored Perimeter Drainage Channels
 - Proposed Eastern Channel Collector Channel
 - Bottom width=46 feet
 - Chanel Depth= 2.6 feet
 - Side slopes
 - Eastern and Western banks are armored to the maximum depth of the channel
 - East bank-armored up to 2 feet above invert
 - The armored banks provide protection from lateral migration
 - Benefits of armored side slopes:
 - o Eliminates the erosion hazard setback
 - Flood-proof the adjacent new lots; see Section II-D.1.c below.
 - Grade Control Structures
 - · Reduces the slope and velocity of flow
 - Placed approximately 100 feet apart
 - Minimize head-cutting.
 - o Western Channel Collector Channel
 - The regulatory sheet flows entering from the contributing watershed from the west
 - Q100 = 258 cfs, DA=65.3 ac
 - Conveyed as sheet flow across the proposed 50' wide natural buffer that parallels the project's west boundary.
 - Bottom width = 20-foot earthen bottom
 - Side slopes
 - 1:1 armored adjacent to the backs of the proposed new lots.
 - Armoring will eliminate the erosion hazard setback
 - Flood-proof the adjacent new lots
 - Grade-control structures
 - Reduces the slope and velocity of flow
 - Placed approximately every 100'
 - · Minimize head-cutting.
- The existing downstream offsite collector channel (along the north boundary of The Bluffs subdivision):
 - Designed Q100=771 cfs. (Per the "Overton Road Conveyance/Collector Channel Plans" as prepared by MMLA, Dated 12/18/96)PN 1296-49-QG-5001 & 2096A.)
 - Based upon the use of the differential culvert approach, combined with the different times of concentration and usage of the basins, it is estimated that the maximum developed flows being discharged at Overton Road will be 508 cfs

 Therefore, no new downstream/off-site drainage improvements are anticipated to be needed as a result of the project's development.

It should be noted that a detailed inspection and maintenance program, based upon Section 7 of the latest edition of the "Design Standards for Stormwater Detention and Retention for Pima County", will be provided within the full Drainage Report submitted at the time future platting and engineering.

f. Drainage Crossings & Attendant Structures.

There are three sets of drainage crossings proposed with this project as referenced below (these have already been further described above):

Beneath La Cholla Boulevard subdivision entry drive: 2-10'x5' RCBC's,; Q100= 572 cfs

Beneath Overton Road subdivision entry drive: 2 - 10'x3' arch culverts,; Q100 = 572 cfs

Beneath Overton Road: 2-10'x3' arch culverts; Q100 = 508 cfs

For more detail, see Appendix "D"; "Preliminary Regional Distribution of Flow Via Culverts at La Cholla Wash and Basin Routing, Technical Analysis Procedures", memo dated February 19, 2020.

g. Floodplain Encroachments & Associated Erosion Protection.

As described above, the La Cholla Wash breakout will be directed to the southeast via the use of protected fill, arriving at the above-discussed differential culvert configuration. The break out flow being will then proceed in a south-flowing collector channel along the east side of the proposed subdivision (see Section II.D.1.e above). While this channel will encroach into the site's existing-condition sheet flow floodplain, the sides of the channel will be lined and armored so as to prevent lateral migration of the wash. Further, there will be grade control structures approximately 100-feet apart to maintain the slope of the channel and eliminate the head cutting of the channel upstream. The invert of the channel is set below the existing grade such that the increase in water surface elevation is no more than 0.10 feet above the existing conditions.

Additionally, off-site sheet flow incoming from the west will also be captured in an earthen-bottomed channel and armored sides and will be appropriately conveyed southward along on the west side of the subdivision in a channel (also described in Section II.D.1.e above). This channel will also result in the floodplain encroachment of the on-site sheet flow existing conditions. The east side of this channel will be bank protected to flood-proof the adjacent new lots. There will be grade-control

structures approximately 100 feet apart to maintain the slope of the channel and eliminate head cutting. Both of these encroachments are justified and necessary to address the substantial sheetflow conditions that predominate the existing site and to suitably protect the proposed new subdivision lots being created.

h. Proposed Storm Drain Alignments & Inlets.

The subdivision's surface streets are limited to a maximum in-street flow of 50 cfs. Two methods will be used to remove accumulated runoff from the streets, i.e. COT Type 3 scuppers or Trench Grates. These strategies will be employed throughout the subdivision to appropriately collect and deal with in-street volumes. The specific location of these features will be detailed in final engineering design and in the full Drainage Report accompanying the project's tentative plat.

i. Drainage Easements.

It is not anticipated that any off-site drainage easements will be required.

j. Streets, Lots, Building Pads.

The streets are designed to convey the 10-year storm event within their curbs, and the 100-year event within the right-of-way. Further, as mentioned just above, the streets are designed to convey no more than 50 cfs within the street.

2. Preliminary Integrated Water Management Plan

The rezoning property is served by the Metropolitan Domestic Water Improvement District (MDWID), which has a potable and renewable water supply. A will-serve letter from Metro Water is provided in Exhibit II-D.2. MDWID advises us that their will-serve letters are valid for a period of two (2) years. The project's required Table "A", representing the developer's commitment to implement sufficient water conservation standards, will be provided at the time of future subdivision platting.

3. Proposed Hydrology

Post-Development discharges flowing onto the property will be lessened as a result of this subdivision development. Post-Development on-site generated discharges exiting the property will be detained and will meet adopted Pima County RFCD criteria for designated critical basins.

a. PDP Response to Constraints

The major site constraints impacting the property are: 1) the sheet flow from the La Cholla Wash breakout, 2) the sheet-flow generated onsite by its low foothills, and 3) the sheet flow from lands to the west. All

of these will be collected and directed within channels that are designed for conveyance and erosion protection against lateral channel migration.

Sediment transport issues will be addressed via sediment basins placed in strategic locations while being readily accessible for maintenance.

As mentioned above, on-site drainage is conveyed in the new streets and collected via trench grates or scuppers. This runoff will enter detention basins which will attenuate the flow so as to be below existing conditions.

b. Encroachment Justification

The existing floodplain pattern across the site is that of shallow sheet flow, where the volume is spread over an approximately 800 feet linear width. The off-site breakout flow from the La Cholla Wash spreads across the site to yield a flow of approximately 1 cfs per lineal foot of width.

The encroachment of this shallow sheet flow and its collection/conveyance within new on-site lined or armored channels allows us to concentrate these flows and manage their location, depth of flow, and sediment transport characteristics. This encroachment of flow will be contained within the banks of the new channels, with grade control structures used where appropriate to manage the slopes of the channel, the velocity of the water therein, and thus manage sediment transport.

Further, while the sheet flow will be consolidated and confined in the channels as described, both FEMA and RFCD require that the final water surface elevation does not increase more than 0.10 feet above the existing conditions. This will effectively minimize the sediment yield that crosses the Overton Road pavement.

These encroachments as described above are fundamentally necessary to realize any development potential for the subject property.

c. Table of Concentration Points Pre-Development/Post-Development

The following Table Nos. 2 & 3 reflect the Pre-Developed and Post Developed 100-year peak discharges associated with this proposed development. Also refer to Exhibit II-D.1.

Tables to Follow Next Page

TABLE 2: 100-YEAR PRE-DEVELOPED PEAK DISCHARGES			
CONCENTRATION POINT	AREA (AC)	Q ₁₀₀ (CFS)	
La Cholla Wash Entering Site	3.95 SQ-MI	2904	
La Cholla Wash Crossing La Cholla Boulevard	NA; Break-out	1722	
La Cholla Wash Break-out Entering Site	NA; Break-out	1182	
La Cholla Wash Break-out Exiting Site near its SE Corner	NA; Break-out	619	
Exiting Rezoning Site near its SW Corner	NA; Break-out	563	

TABLE 3: 100-YEAR POST-DEVELOPED PEAK DISCHARGES			
CONCENTRATION POINT	AREA	Q ₁₀₀ (CFS)	
La Cholla Wash Entering Site	3.95 SQ-MI	2904	
La Cholla Wash Break-out Entering Site	NA; Break-out	572	
La Cholla Wash & On-site Localized Flows Exiting Site near its SE Corner	Routed Break-out and On-Site (28.70 AC) Flows	0	
Exiting Rezoning Site near its SW Corner	Routed Break-out and On-Site (65.3 AC) Flows	508	

d. Potential Engineering & Design Features

Proposed engineering features have been discussed in detail above; also refer to Exhibit II-D.1 for a conceptual graphic and Appendix "D". The development of the subdivision has been designed to ensure flood-proofing of the new lots and to meet all applicable Pima County Floodplain

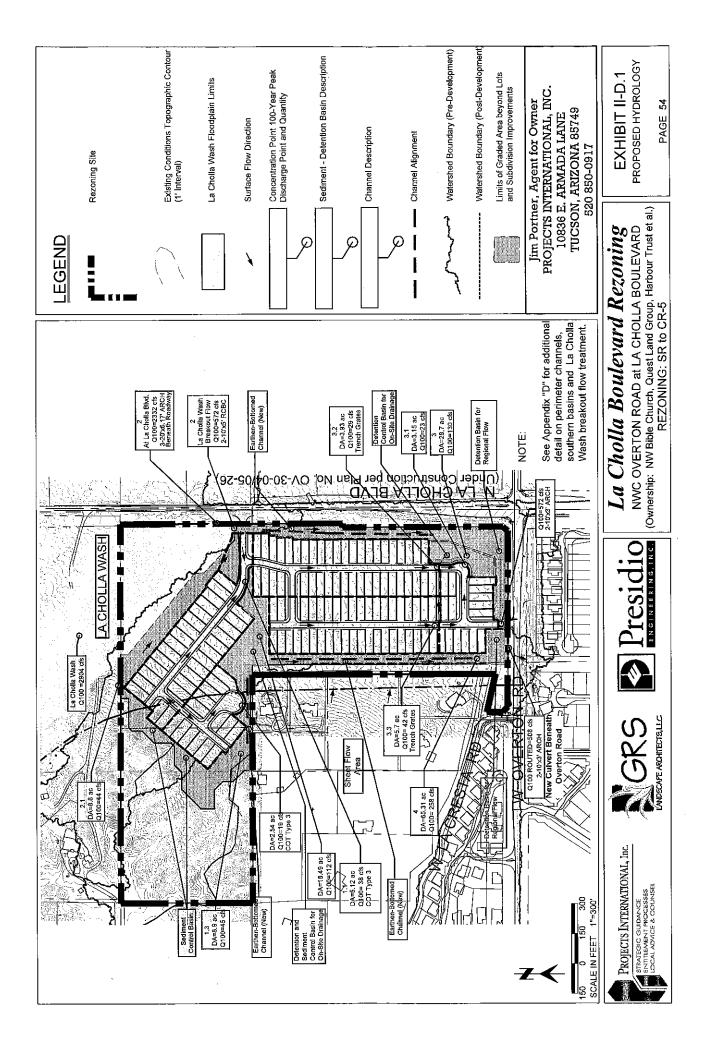
Ordinance requirements, irrespective of the imminent drainage improvements (multi-celled concrete box culvert) being made beneath La Cholla Boulevard to convey the La Cholla Wash flow.

e. Summary of Overall Development Impacts

The proposed project improvements will accommodate the respective existing flows incoming from the north and the west and will not increase flows into the downstream watersheds. The on-site drainage improvements required as a part of the residential development can be considered low-impact techniques, routine detention basins and reasonable channelization.

The site will meet all FEMA and Pima County RFCD critical basin and design requirements. The developer will dutifully file a Conditional Letter of Map Amendment (CLOMR) application with FEMA at the time of future subdivision platting.

Exhibit to Follow





In Emnil

November 16, 2018

John D. Wood, P.E., LEED-AP Presidio Engineering, Inc. 190 S. Stratford Drive, Suite #105 Tween, AZ 85716

Re: ±51.87 Acres on the NWC of La Chella Blyd. and Overton Road Vista Del Oro Subdivision CAP18-02

Dear Mr. Wood,

The Metropolitan Domestic Water Improvement District (District) is certified to provide water to the above referenced development and is designated as having a 100-year assured water supply,

Any onsite or offsite requirements deemed necessary to provide the domestic and fire flow water supply will be determined at the time of master plan submittal or whenever application for water service is received, and will be the linancial responsibility of the owner or those developing the property. Pipe sizing and system augmentation, if necessary, will be based on calculated demand for both domestic and fire flows as needed to adequately supply this area.

As a condition of water service, it will be a requirement for this development to dedicate aminimum 15-foot public water easement for the construction of a future pipetine by the District located adjacent to and west of the designated final right-of-way for La Cholla Blvd. The District will also require dedication of a permanent construction and maintenance casement adjacent to and east of the public water easement of a width necessary to connect to the existing westerly right-of-way of La Cholla Blvd., which would terminate upon dedication of the additional public right-of-way.

If an improvement plan has not been submitted within 2 years after the date of this letter, a recvaluation and reissuance of this will-serve letter will be necessary.

Please lei me know if you have any questions or expounts at 575-8100.

Sincerely.

Timothy Dinkel, P.E. Civil Engineer

Enclosure

o: Project File

Metropolitan Dontestic Water Improvement District F.O. Box 36678 Tucson, Arlzona 85740 (538) 575-8100 (539) 575-8454 FAX www.metrowater.com

> Exhibit II-D.2 Metropolitan Water District Will-Serve Letter

E. BIOLOGICAL RESOURCES

1. Expected Impacts

a. Conservation Lands System (CLS) Compliance

This development will affect the amount of undisturbed Multiple Use Management Area (MUMA) and Special-Species Management Area (SSMA) as shown Table 4 below:

CLS Category	Pre-Development Area	Post-Development Area
MUMA with SSMA	49.2 AC *	14.2 AC

^{*} excludes the 1.5 AC Public Drainage Easement from the 50.7 gross project area

Disturbance of the CLS area will be mitigated through a combination of onsite preservation and a contribution of approved offsite mitigation lands. Please refer to Exhibit II-E.

As reflected in the above Table, the 1.5 AC public drainage easement on the subject property has been entirely graded for drainage improvements by Pima County and the Town of Oro Valley as part of the La Cholla Boulevard roadway project. As such, it has been removed from the overall project area for CLS purposes.

b. Saguaros

There are a total of two hundred forty-nine (249) viable saguaros on the property, of which fifty-nine (59) are \leq 6' and one hundred ninety (190) are \geq 6'. It is anticipated that approximately twenty-seven (27) of the saguaros \leq 6' will be preserved on site; approximately one hundred twenty-three (123) of the saguaros \geq 6' will be preserved on site. Final numbers for the above, as well as the manner in which the remaining saguaros will be dealt with, will be determined with the formal Native Plant Preservation Plan (NPPP) provided at the time of future subdivision platting and development.

c. Ironwood Trees

The site was surveyed for Ironwood trees and five hundred eighty-three (583) viable specimens were found on the site. Approximately two hundred fifty-one (251) will be preserved in place, to be detailed with the formal Native Plant Preservation Plan (NPPP) provided at the time of future subdivision platting and development.

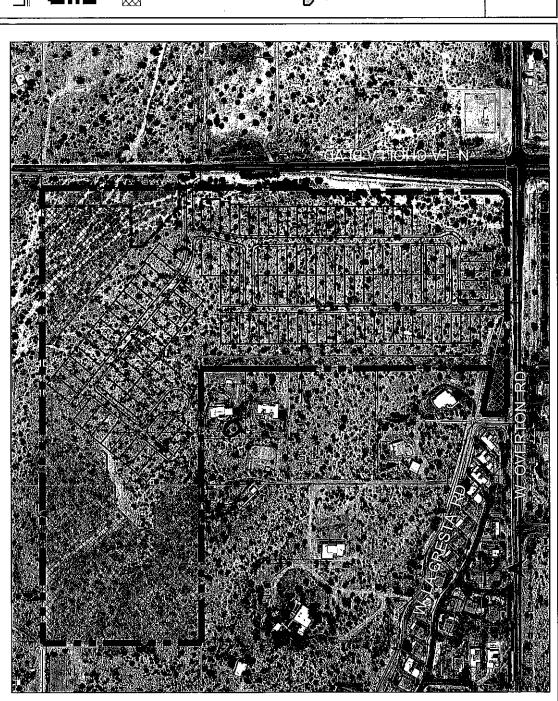
d. Pima Pineapple Cactus

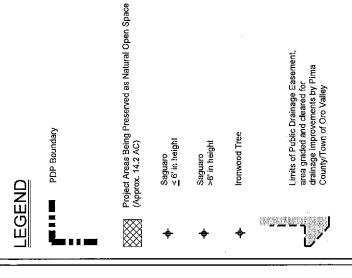
The site was surveyed for Pima Pineapple Cactus and no (0) specimens were found.

e. Needle-Spined Pineapple Cactus

The site was surveyed for Needle-Spined Pineapple Cactus and none (0) were found.

Exhibit to Follow





See Site Analysis text Sections II.E.1.b & c for estimates of preserved specimens.

PROJECTS INTERNATIONAL, INC. 10836 E. ARMADA LANE TUCSON, ARIZONA 85749 520 850-0917 Jim Portner, Agent for Owner

PROJECTS INTERNATIONAL, Inc.



La Cholla Boulevard Rezoning NWC OVERTON ROAD at LA CHOLLA BOULEVARD (Ownership: NW Bible Church, Quest Land Group, Harbour Trust et al.) REZONING: SR to CR-5

BIOLOGICAL RESOURCES **EXHIBIT II-E**

F. LANDSCAPE, BUFFERYARDS & VISUAL MITIGATION

1. Bufferyards in Accordance with Chapter 18.73

Exhibit II-F.1 depicts the location of required landscape bufferyards in compliance with Chapter 18.73 (Landscape and Screening) of the Pima County Zoning Code. The final determination of each particular bufferyard option (i.e. with its attendant width option, plant-density requirements, or if utilizing the natural option) will be determined at the time of future subdivision platting.

Graded and landscaped areas within any of the above buffers will be augmented with transplanted specimens salvaged from the property.

Exhibit II-F.2 provides cross-sections of key perimeter buffer locations where the proposed project abuts existing lower-density residences or vacant property zoned CR-1 & SR. Section A-A on Exhibit II-F.2 shows a worst-case situation along this particular boundary; most of the residential lots at this location will sit much further away than the lot shown in the illustration. Section B-B depicts the project's western boundary, wherein a minimum 50' natural buffer will be maintained, together with an additional setback landscaped with salvaged/transplanted specimens and nursery stock.

2. Conflicts with Bufferyards Due to Easements, Rights-of-Way, etc.

There is only one potential conflict with required bufferyards due to easements or rights-of-way. Along a portion of the site's northernmost La Cholla Boulevard frontage, Pima County possesses a public drainage easement, which will be graded and improved to accommodate a future culvert beneath the roadway when it is ultimately reconstructed to a four-lane arterial. Final details of our specific treatment along this particular segment will be detailed at the time of subdivision platting. The on-site project area behind this drainage easement is designated as natural area by the project's *Preliminary Development Plan (PDP)*.

3. Impacts of Transplanted/Salvaged Vegetation in Bufferyard Areas

Viable Saguaros and Ironwoods will be salvaged and transplanted into perimeter bufferyards, detention areas and other graded open spaces within the property. Saguaros will not be planted in the bottom of detention basins where they are subject to periodic inundation. The exact locations for all transplanted specimens will be shown on the project's Landscape Plan submitted at the time of future subdivision tentative platting.

Transplanted plant material, especially when used to enhance perimeter natural areas, will always be planted at a density which allows sufficient room for the ultimate size of the plant material.

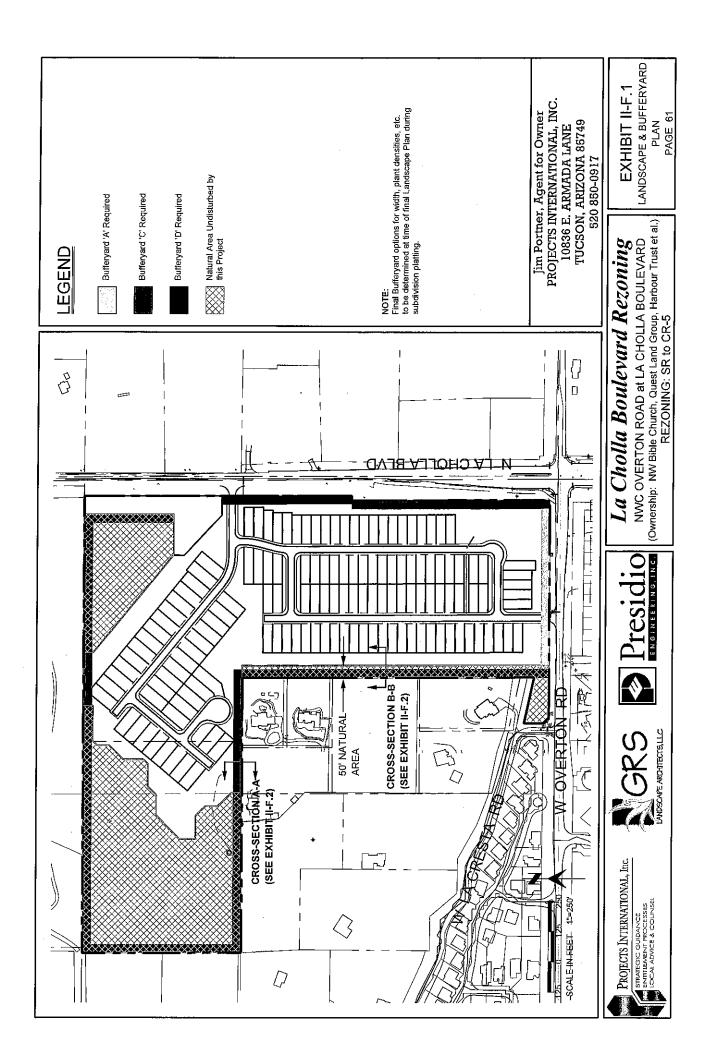
4. Mitigation of Visual Impacts

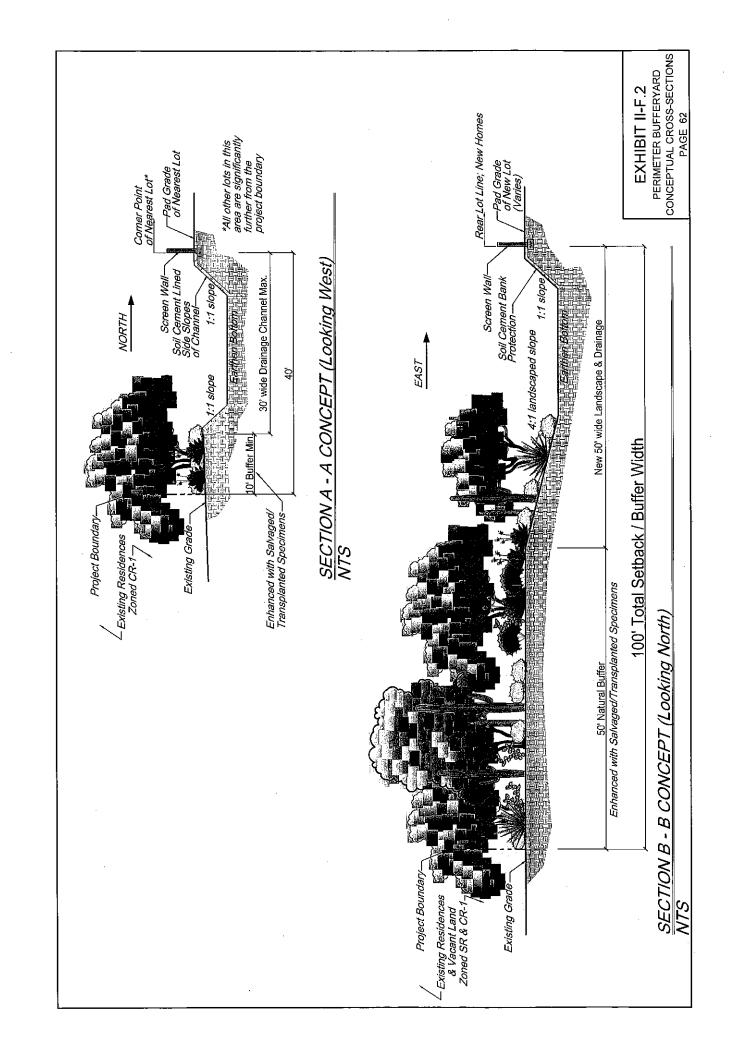
The primary viewshed is of the Santa Catalina Mountains to the east. Setbacks and a natural buffer, both well in excess of Code requirements, have been incorporated into the project's PDP along the site's western boundary. An additional landscaped area, to be supplemented with salvaged/transplanted specimens and nursery stock, has also been provided beyond this natural border (also see Exhibit II-F.2). These elements provide a significant, material PDP response for the expressed purpose of mitigating view impacts to existing residents to the west. Discussions are also underway with the developer to limit a portion of the proposed subdivision in this immediate area to single-story lots so as to further enhance view protection.

5. Significant Vegetation

There are no areas of regulated or otherwise significant vegetation on the property, other than the Xeroriparian "C" area located within the La Cholla Wash corridor in the far northeast corner of the rezoning site. This are is being preserved as natural area under the proposed *Preliminary Development Plan (PDP)* and will not be impacted by this project.

Exhibits to Follow





G. TRANSPORTATION

1. Configuration of Proposed Ingress/Egress and Its Rationale

A total of two (2) new vehicular ingress/egress points are proposed onto the existing public street network with this rezoning, one (1) each onto La Cholla Boulevard and Overton Road, respectively. Both of these new street intersections are in accordance with established PCDOT separation criteria from the existing public street intersections and other access points in the area.

With respect to the access point onto La Cholla Boulevard, this has been intentionally located to align with the proposed median opening of the imminent four-lane arterial roadway currently being constructed by the Town of Oro Valley (in conjunction with the RTA), under Plan No. OV-30-04/05-26. Utility relocation work for this project has already commenced and full construction is scheduled for completion in 2020.

It is understood that the Pima County 2016 Subdivision and Development Street Standards stipulate that three (3) points of "external connection" should be provided for a subdivision containing the number of lots being proposed in this rezoning. We would assert that a reduction of this number to two (2) is warranted in this particular case, based upon exception criteria found in Section 4.3 (p. 30) of the Standards.

The rezoning site is significantly constrained by existing "unconnected development" (cited in the Standards' exception criteria) to the adjacent west in the form of the existing low-density custom homes zoned CR-1 and SR already in place. As a result, we have no opportunity for connectivity along the site's entire western boundary because: 1) the adjacent lots are served only by dirt roads and driveways even further to their west; 2) there are no easements in place through these private properties, and 3) there is no willingness whatsoever for these owners to permit a new subdivision's traffic to proceed through their custom-home properties.

At the time of tentative platting, we will provide additional rationale as warranted to further explore this issue with DOT and justify the adequacy of the two access points being proposed.

2. Distances to Adjacent Access Points

See Exhibit II-G, on which the proposed street intersections and their distances to existing public street access points have been illustrated.

3. Associated Off-Site Roadway Improvements and Completion Schedule

As mentioned above, La Cholla Boulevard is being reconstructed to a full, four-lane divided arterial roadway by the Town of Oro Valley (in conjunction with the RTA), under Plan No. OV-30-04/05-26. This construction project is already well

underway and full completion is scheduled for 2020. As such, this new four-lane arterial improvement will be physically in place and operational before any new traffic impact from the proposed rezoning site is realized.

4. Change in ADT and Level of Service (LOS) for Public Streets

The trip-generation calculations for this Site Analysis were made using the accepted Institute of Transportation Engineers (ITE) trip generation category for a single-family residential subdivision, specifically:

· Single-family detached residences (Code 210); 10 trips per residential unit

Based upon the above, and in consideration of the submitted *Preliminary Development Plan (PDP)*, the trip generation for the project is as follows:

139 residences @ 10 trips/residence =

1,390 Trips

TOTAL TRIPS GENERATED BY PROJECT:

1,390 Trips

Based upon the project layout and its proposed access points onto La Cholla Boulevard and Overton Road, it is reasonable to assume a basic fifty-fifty split of these trips loaded on the two public streets. As such, both La Cholla Boulevard and Overton Road will each receive 695 additional daily trips from the project upon its full build-out, which is anticipated some time in 2023. These figures represent relatively small increases in ADT and would still leave both La Cholla Boulevard and Overton Road below their respective capacities.

5. Conformance with Pima County Concurrency Requirements

Per the traffic-volume and capacity data provided in Section I-E of this Site Analysis, Overton Road and La Cholla Boulevard are operating below capacity in the existing condition. The minor additional traffic generated by the proposed project will not significantly change this fact, especially in light of the fact that La Cholla Boulevard will be upgraded to a full four-land divided cross-section prior to full build-out of this rezoning's proposed subdivision.

6. Proposed Bicycle & Pedestrian Pathways

There are no existing sidewalks or bicycle lanes in place on either La Cholla Boulevard north of Overton Road, nor on Overton Road itself. Multi-use paths and bike lanes do, however, existing along La Cholla Boulevard south of Overton Road. These existing paths and bike lanes will be extended northward to Tangerine Road upon completion of the La Cholla Boulevards reconstruction (currently underway) to a four-lane divided cross-section.

The Pima County Department of Natural Resources, Parks & Recreation has identified future Trail No. 033 (La Cholla Wash/Honeybee) on its Regional Trails Masterplan. There is no projected timing for the construction of this trail.

The subdivision streets within the proposed project will have concrete sidewalks on both sides. These sidewalks will be extended to the La Cholla Boulevard and Overton Road rights-of-way so as to facilitate connection to future multi-use paths and/or public sidewalks along these streets.

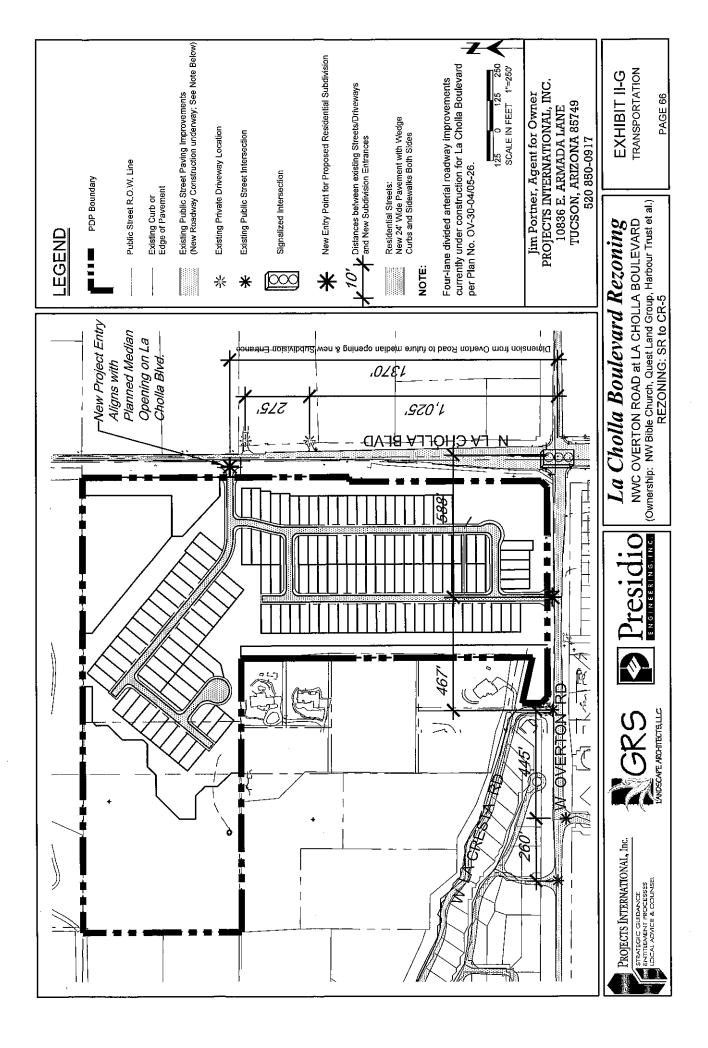
7. On-Site Street System

A forty-five foot (45') public street right-of-way is proposed for the onsite subdivision streets; this cross-section will contain a minimum of 24' of pavement, 2' wedge curbs, and 5' sidewalks on each side of the street.

8. Applicability & Timing of Traffic Impact Study (TIS)

The amount of traffic being generated by this development requires that a full Traffic Impact Study (TIS) be prepared at the time of future subdivision platting. Any necessary transportation/roadway improvements identified by the TIS shall be the responsibility of the developer.

Exhibit to Follow



H. ON-SITE WASTEWATER TREATMENT & DISPOSAL

1. Rationale for Non-Connection to Public System

Not applicable; no on-site wastewater treatment is proposed with this project. The project will connect to the public sewer system.

2. Soil Evaluations

Not applicable; no on-site wastewater treatment is proposed with this project.

3. Reserve Disposal Areas

Not applicable; no on-site wastewater treatment is proposed with this project.

I. SEWERS

1. Capacity Response Letter

Capacity Response Letter No. 2019-276, from the Pima County Regional Wastewater Reclamation Department (PCRWRD) is attached as Exhibit II-I.1.

2. Method of Sewer Service and Point of Connection to Public System

The proposed residential subdivision will connect to the 8" public sewer G-84-084, downstream of Manhole No. 4215-03 located within the rights-of-way of Overton Road. See Exhibit II-I.2 for a conceptual layout of the proposed on-site public sewer system.

3. Sewers Easements

All new proposed onsite sewers within the residential subdivision will be public and will be located beneath pavement or within designated common areas. Any additional public sewer easements required by RWRD will provided at the time of future subdivision platting.

4. Mitigation of Any Constraints to Gravity Service

There are no constraints to providing gravity service on this project.



JACKSON JENKINS DIRECTOR WASTEWATER RECLAMATION 201 NORTH STONE AVENUE TUCSON, ARIZONA 85701-1207

PH: (570) 724 8500 FAX: (520) 724-8635

November 18, 2019

Tanya Washington Presidio Engineering, Inc. 190 S Stratford Drive, #105 Tucson, Arizona 85716

Sewerage Capacity Investigation No. 2019-276 Type I

RE: Vista Del Oro, Parcel 22504002A, 22504002C, 22504003P, 22504008B Estimated Flow 30,888 gpd (ADWF)

P19WC00263

Greetings:

The above referenced project is tributary to the Tres Rios Water Reclamation Facility via the Cañada Del Oro Interceptor.

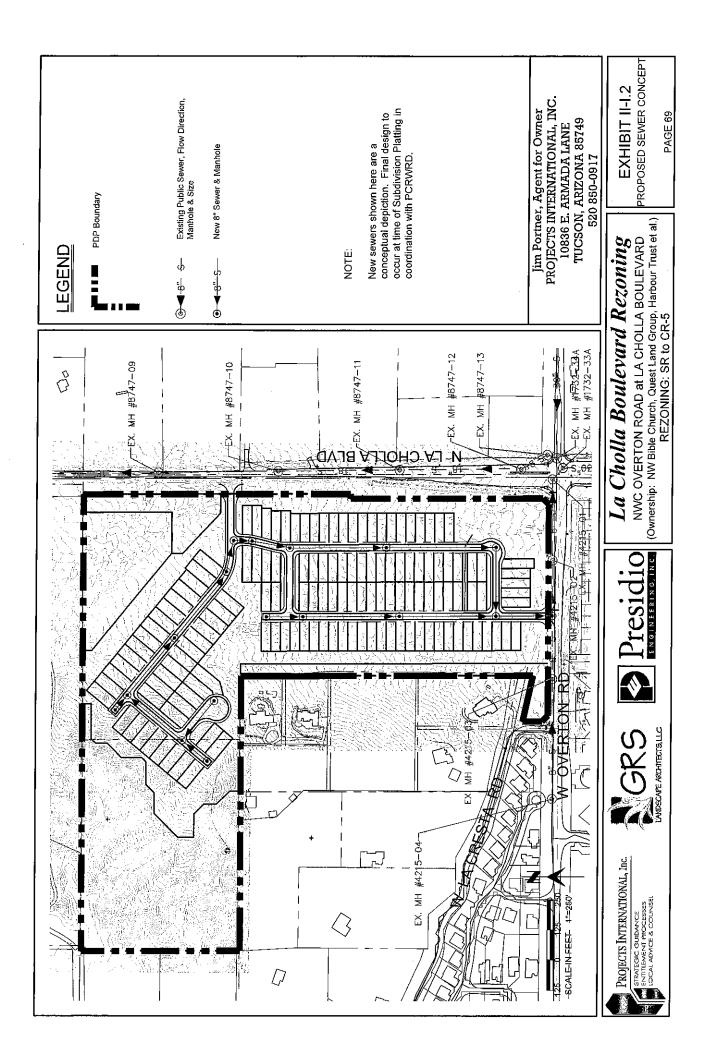
Capacity is currently available for a project this size in the public sewer G-84-084, downstream from manhole 4515-03.

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

If further information is needed, please feel free to contact us at (520) 724-6642.

Reviewed by: Olivia Cafiez, EPT

Exhibit II-I.1 RWRD Capacity Response Letter



J. WATER

REFER TO PRIOR SECTION II.D.2 OF THIS SITE ANALYSIS.

K. SCHOOLS

1. Access to Internal or Abutting Schools.

The site is within the Amphitheater Public Schools (APS). No schools immediately abut the rezoning site, but those serving it have been illustrated on Exhibit II-K.1.

2. Capacity Analysis by Amphitheatre Public School District.

The Amphitheater Public School District (APSD) has been consulted with respect to this rezoning request. The District's analysis indicates that sufficient capacity exists -- at the present time -- within the elementary, middle and high schools that will ultimately serve the rezoning site's proposed residential neighborhood. They are clear to note, however, that capacity is a fluid issue and can be affected by additional new development that is occurring within the District (see Exhibit II-K.2).

Please recognize that the attached APSD letter was furnished by them as part of the original rezoning case on this property (P18RZ00011) which had proposed 125 new residential lots. We have reached out to the District to update their letter if they so desire, but have received no response to date; we will continue to contact them.

This being said, the attached APSD letter demonstrates substantial capacity at all of the schools serving this site. The additional fourteen (14) lots now proposed under this new rezoning request will not materially change the District's capacity assessment.

3. Communication with MUSD Regarding Mitigation of Impacts.

Amphitheater Public Schools has established roof-top contribution program for new residential development. The developer has already executed a formal agreement with the District to participate in their contribution program (copy included as Appendix "E"). We have reached out to APSD to inquire if they will require a newly executed agreement for the present rezoning; we are awaiting their reply at the time of this writing.

Exhibits to Follow

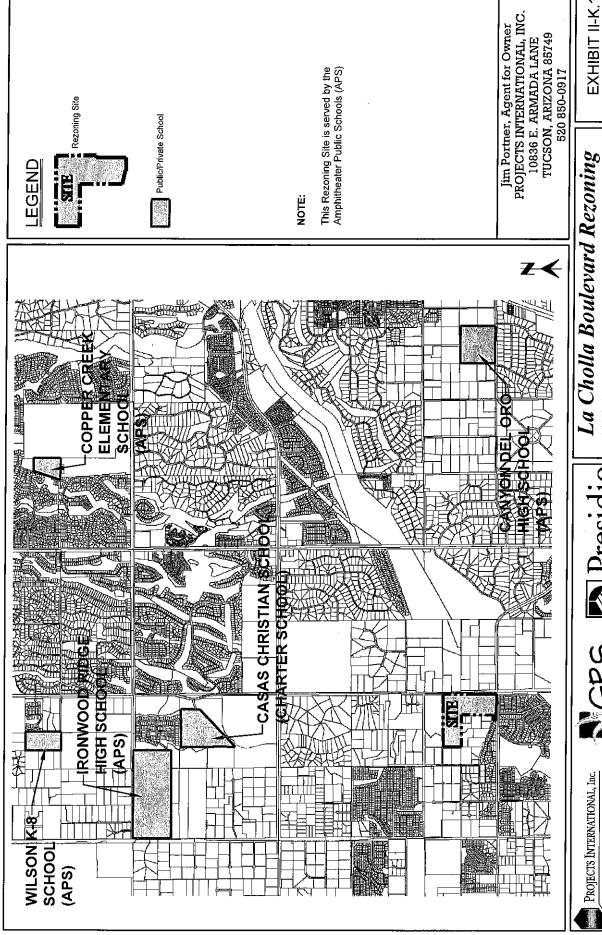


EXHIBIT II-K.1

(Ownership: NW Bible Church, Quest Land Group, Harbour Trust et al.)
REZONING: SR to CR-5 NWC OVERTON ROAD at LA CHOLLA BOULEVARD

Presidio

GRS WINSCAPE ARCHTECTS.LLC

PROJECTS INTERNATIONAL, Inc.

STRATEGIC GUIDANCE ENTITLEMENT PROCESSES LOCAL ADVICE & COUNSEL

PUBLIC SCHOOLS

PAGE 71



LEGAL DEPARTMENT

Michelle H. Tong, J.D. Associate to the Superintendent General Counsel

(520) 696-5156 • FAX (520) 696-5074

701 W. Wetmore Road • Tucson, AZ. 85705 • (520) 696-5000 • www.amphi.com

GOVERNING HOARD MEMBERS I

Deanna M. Day, M.Pd. President Vicki Cox Golder Vice President Scott K. Baker, Ph.D. Scott A. Leska Susan Zibrat

SUPERINTENDENT Todd A. Jaeger, J.D.

November 9, 2018

Via electronic mail

Jim Portner
Principal
PROJECTS INTERNATIONAL INC.
10836 E. Armada Lane
Tucson, AZ 85749-9460

RE: I

KB Home Development Northwest Corner of La Cholla Boulevard at Overton Road

52 Acres

Dear Mr. Portner

I am responding to your request for information regarding the capacity of Λ mphitheater schools impacted by your proposed development.

Using the 2000 demographic multipliers developed by the U.S. Department of Census, Bureau of Census, and adjusted for Amphitheater District's school organizational patterns, we project the following student populations to result from this project when built:

Academic Level	125 Residences
Elementary	26
Middle	28
High School	16
High School	10

The census multipliers we use to obtain these projections are 0.2075 clementary students per household, 0.2197 middle school students per household and 0.1282 high school students per household.

The capacity noted below is based on today's school enrollment. The schools which would be impacted by your project's proposed enrollment are listed below, along with the physical capacity available at each school *presently*. Please note that these schools will also be impacted by other

Amphitheater High School • Conyon del Oro High School • Ironwood Ridge High School

Amphitheater Middle School • Coronado K-8 School • Cross Middle School • La Cima Middle School • Wilson K-8 School

Copper Creek Elementary • Donaldson Blementary • Hollaway Elementary • Incornation Academy • Keeling Elementary

Mesa Verde Elementary • Nash Elementary • Painted Sky Elementary • Prince Elementary • Rio Vista Elementary • Walker Elementary • Riffito Center

Exhibit II-K.2 (Page 1 of 2) Amphitheater Public Schools Capacity Letter

Page 2

developments in this area which may have already been approved by the Council but which are not yet built.

The capacity noted below is based on yesterday's enrollment. The schools which would be impacted by your project's proposed enrollment are listed below, along with the physical capacity available at each school presently. Please note that these schools will also be impacted by other developments in this area which may have already been approved by the Council but which are not yet built.

	Spaces Currently
School Capacity	<u>Available</u>
750	271
800	162
2290	1004
	750 800

If I can provide any additional information, please feel free to contact me.

Sincerely,

Comie R. McFarland Legal Assistant

Exhibit II-K.2 (Page 2 of 2) Amphitheater Public Schools Capacity Letter

L. RECREATION & TRAILS

1. On-Site Recreation Elements

Due to the moderate number of residential lots (139) proposed in this subdivision, together with the nearby proximity of the Canada del Oro Riverpark and the regional recreation facilities present at Arthur Pack Regional Park approximately two miles to the west, the developer does not envision providing a private recreation facility within the proposed project.

At the time of future subdivision platting, the developer will work with the Department of Natural Resources, Parks & Recreation (DNRPR) to evaluate the project vis-à-vis Pima County Zoning Code Section 18.69.060 and to determine whether the development of the designated La Cholla/Honeybee Loop Trail No. 033 alignment through the site (a secondary trail) is deemed appropriate at this time by DNRPR, the amount of recreation in-lieu fees that are required, etc. No physical improvements for the La Cholla/Honeybee Trail presently exist anywhere in the project vicinity.

Any impacts of future designated-trail facilities on Conservation Lands System (CLS) natural areas will affect CLS compliance and will be compensated during finalization of the required off-site CLS mitigation at the time of subdivision platting.

2. Ownership & Maintenance of Recreation Elements & Natural Areas

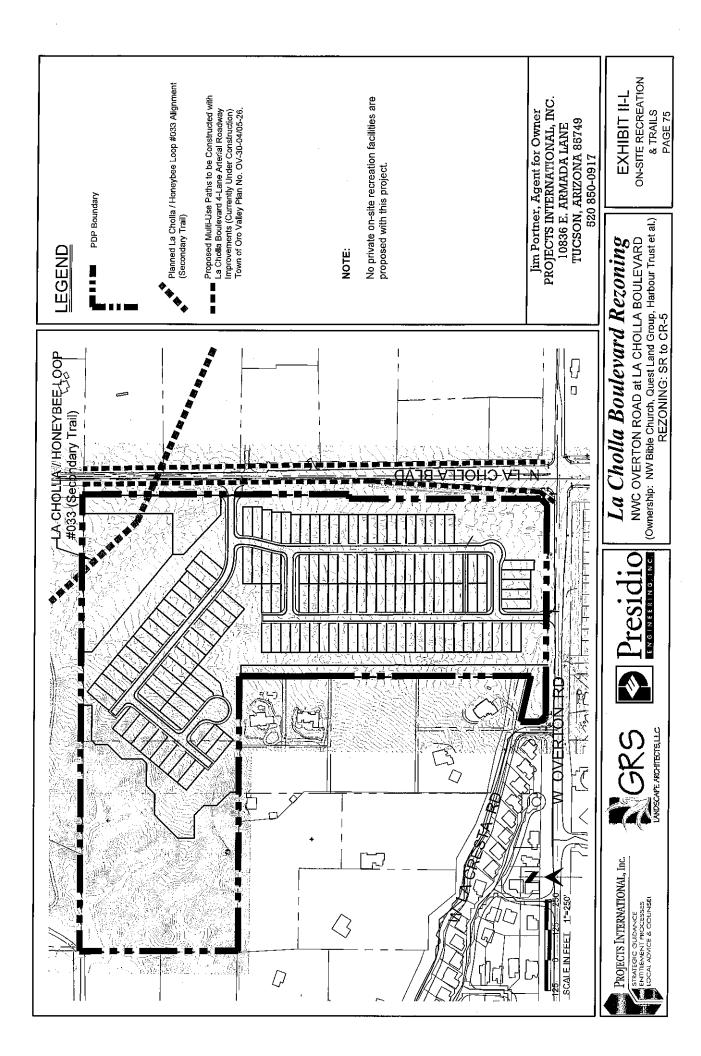
No formal private recreation area is contemplated for the new residential subdivision. Any minor recreation improvements that may be provided on-site (e.g. passive nature trails or small play areas within detention basins), would be located within designated common areas and be owned and maintained by the subdivision's homeowners association (HOA).

3. Proposed Public Trails In or Adjacent to the Development

As shown on Exhibit II-L, the proposed La Cholla Wash/Honeybee Loop Trail No. 033 alignment is located within the onsite La Cholla Wash corridor. NRPR has not yet established a timeframe from the ultimate construction of this secondary trail.

In accordance with Pima Prospers Section 4.8 (Goal 1, Policy 3.e) and Section 4.10 (Goal 1, Policy 2.e), the Preliminary Development Plan (PDP) reflects the aforementioned regional trail alignment, together with sidewalks provided on both sides of the subdivision streets, to facilitate potential future access to the trail at which time it is ultimately constructed.

The developer will coordinate with the Department of Natural Resources, Parks and Recreation at the time of future subdivision platting to determine whether any associated trail easements will be required for La Cholla/Honeybee Loop Trail.



M. CULTURAL RESOURCES: ARCHAEOLOGICAL/HISTORIC SITES

1. Mitigation Measures for Already Identified/Known Resources

As indicated in Section I-H of this Site Analysis, a records search was conducted for the site in August, 2018 by MCA Consulting (see Appendix "C"). No cultural resources or historic sites have been documented on the property. No further archaeological surveys are recommended. The standard cautions and protocol are provided if future construction activities reveal sub-surface archaeological resources.

2. Measures Employed if Archaeological Survey is Recommended

Not applicable; no further surveys are recommended at this time.

3. Submittal Timing, etc. of Mitigation Plan

Not applicable; no resources have been identified.

- a. Outline of Resource Assessment Program
 Not applicable for the same reasons stated directly above.
- Effective Preservation Plan or Data Recovery
 Not applicable for the same reasons stated directly above.
- c. Schedule of Mitigation Plan ImplementationNot applicable for the same reasons stated directly above.

N. ENVIRONMENTAL QUALITY

1. Dust Control During Construction

During construction, a Stormwater Pollution Prevention Plan (SWPPP), along with a Notice of Intent (NOI), will be prepared in accordance with Arizona Department of Environmental Quality (ADEQ) regulatory permit requirements. The SWPPP and NOI will discuss, among other items, the proposed dust-control and erosion-control measures that must be undertaken and suitably performed by the project's contractor as stipulations of the grading permit.