



Bullhead City

General Plan Amendment

October 01, 2005



Laughlin Ranch, LLC

A Master Planned Golf Community



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Table of Contents


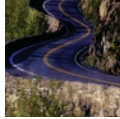








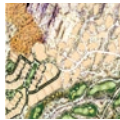
	Introduction.....	1
	Land Use Element.....	3
	Circulation Element	19
	Open Space and Recreation Element.....	27
	Housing Element	37
	Economic Development Element	39
	Environmental Planning Element	41
	Water Resources Element.....	43
	Waste Water Management Element.....	45
	Conservation, Rehabilitation & Redevelopment Element.....	47
	Cost of Development Element.....	49
	Growth Area Element	51

Figure 1: Land Use Plan.....	13
Figure 2: Villages Plan.....	15
Figure 3: Public Facilities Map	17
Figure 4: Roadway Sections	23
Figure 5: Arterial Roadway Strategy.....	24
Figure 6: Circulation Map	25
Figure 7: Parks and Open Space Map	33
Figure 8: Paths and Trails Map	35
Figure 9: Phasing Map	55

List of Figures

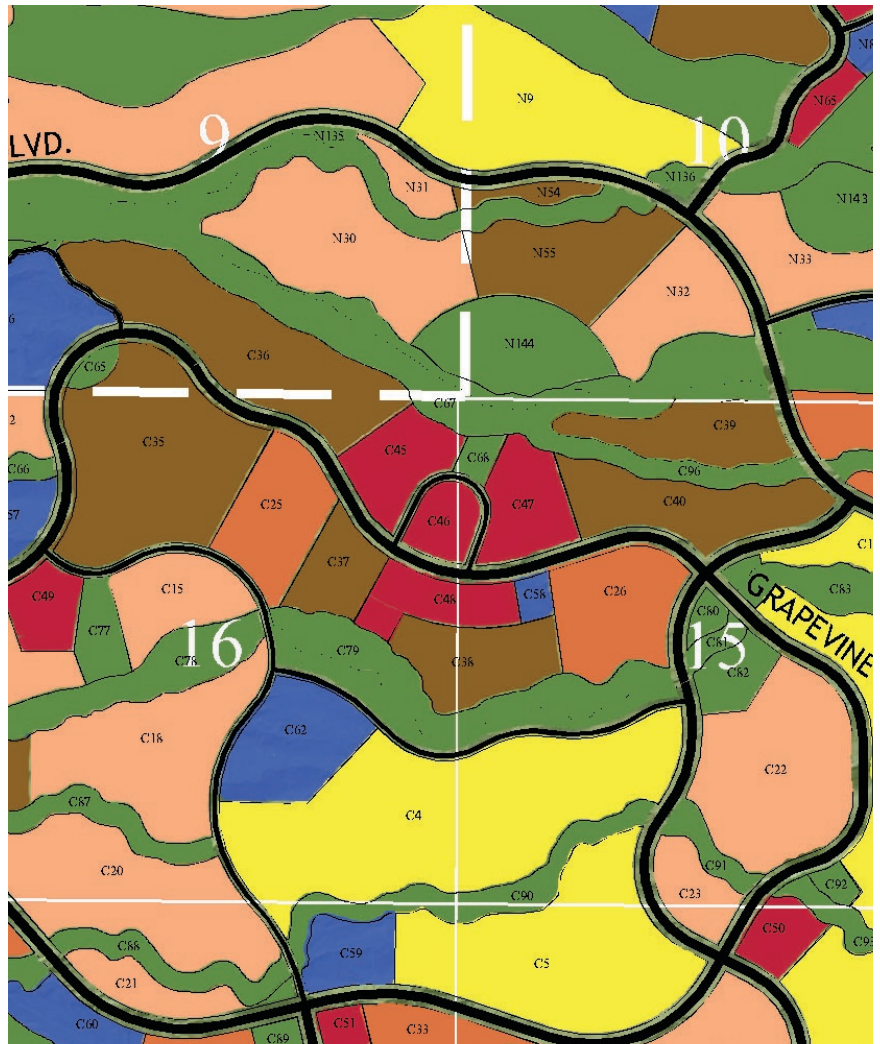
Table 1: Summary of Proposed Zoning by Category	4
Table 2a: Calculations of Land Use Areas and Population for Areas under Proposed Annexation.....	5
Table 2b: Calculations of Land Use Areas and Population for Areas within Current City Limits	6
Table 3: Proposed Publicly Owned/ Maintained Parks, Open Space, and Recreation Facilities	28
Table 4: Proposed Privately Owned/ Maintained Parks, Open Space, and Recreation Facilities	29
Table 5: Housing Stock by Type- Complete Build-out	37

List of Tables

Introduction

Purpose of the Laughlin Ranch General Plan Amendment

This Laughlin Ranch General Plan Amendment adds a total of 9,204 acres of additional development area to the existing Bullhead City General Plan, which was adopted by the City Council for the City of Bullhead on June 18, 2002. Laughlin Ranch encompasses the entire General Plan Amendment except Sections 12 (T20N, R21W), 23 (T20N, R21W), and portions of Sections 28 (T20N, R21W). Laughlin Ranch accounts for approximately 7,800 acres of total annexation. This is 73.39% of the total Laughlin Ranch Development which includes additional 2,828 acres already within the city limits of Bullhead City. All calculations and derived values for areas, population, housing counts, etc. in this General Plan Amendment dated October 01, 2005 are reflective of the Laughlin Ranch development only. Refer to the land use plan (Figure 1) for the extent of Laughlin Ranch development.



Partial view of the proposed Laughlin Ranch Master Plan. The commercial development in the center of the image (red colored parcels) is envisioned as one of three mixed-use village centers.

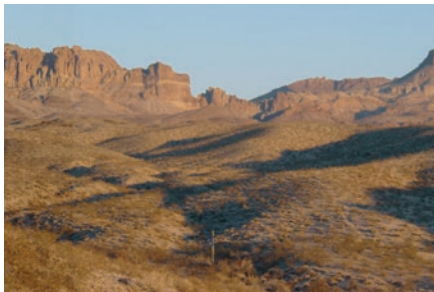
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Land Use Element



Laughlin Ranch development is about creating places and spaces to achieve a sense of community.



Land use plan emerges from the sensitivity to existing site conditions and by enhancing the desert character.

Introduction

The purpose of the Land Use Element is to identify types and general locations of future land uses. The element is prepared in conformance with ARS §9-461.05 and §9-461.06 and contains a land use map (Figure 1).

Current Situation and Future Trends

Approximately 95% of Laughlin Ranch land holdings remain undeveloped at the time of adoption of this General Plan Amendment. Initial development commenced in February 2004 with construction of the following:

- 18 hole championship golf course
- Premiere golf clubhouse and spa facility
- Initial phase of residential housing stock

The Golf Club was opened as scheduled in December 2004. Occupancy for the initial single-family residential housing component is on going. Planning for future land uses will help guide development decisions over the next decades.

The Bullhead City General Plan calls for most of the City's future growth in the Bullhead City Parkway Area. Most of the Laughlin Ranch's future growth is planned to develop outward from Laughlin Ranch Boulevard. Laughlin Ranch Boulevard is being designed as a major arterial roadway to link new development opportunities at Laughlin Ranch to existing city infrastructure and systems and to link future alignment of the Highway 95 corridor. The phasing map (Figure 9) articulates the current and potential development scenario for the property.

Laughlin Ranch is to emerge as a community that promotes sustainable living. It is laid out to encourage connections with important gathering places of varied nature from public, to semi-public, semi-private to private uses. Each place at Laughlin Ranch will be lived in.

The Laughlin Ranch General Plan Amendment includes the same land uses provided for within the existing Bullhead City General Plan. These uses include: Low Density Residential, Medium Density Residential, Medium High Density Residential, High Density Residential, Open Space, Public Lands, Commercial and Industrial. Careful consideration has been given to the adjacent development and existing infrastructure based on the City's General Plan and how it will integrate with the proposed Laughlin Ranch land use plan.

The topography of Laughlin Ranch, characterized by the alluvial washes that drain from the Black Mountains in the east, provide natural separation between the majority of land uses. The incorporation of many of the natural washes into the overall land planning fabric of uses is a major design element of Laughlin Ranch Master Plan.

Proposed Zoning with PAD (Planned Area Development)

The zoning regulations at Laughlin Ranch may be guided by a Planned Area Development Document (Approval of a PAD may be a future and

separate process). The document will be based on analysis of the type and distribution of existing zoning as described in the Bullhead City Zoning Ordinance (Title 17, Zoning Regulations).

Table 1, Summary of Proposed Zoning by Category shows the distribution of zoning throughout Laughlin Ranch

Table 1: Summary of Proposed Zoning by Category				
Zoning	Category	Under Annexation (Acres)	Percent (of Area under Annexation)	Within Existing City Limits (Acres)
Public & Semi- Public Lands	PL	330	4.23%	60
Residential: Single Family Limited	R1L	2930	37.56%	782
Commercial	C1/ C2/ C3	361	4.63%	139
Industrial	M1	0	0.00%	394
Multiple Family Residential	R2MF	1095	14.04%	204
Golf Course	GC	527	6.76%	259
Park/ Open Space #		953	12.22%	169
Other Open Space ###		1604	20.56%	821
TOTAL*		7,800	100.00%	2,828

Park/ open space includes all developed parks and wash areas designated as conservation parks.
 ### Other open space includes all natural washes, right of ways, streets and any other easements not part of zoning parcel categories.
 *All figures are estimates based on preliminary calculations.

Source: Swaback Partners, pllc

Laughlin Ranch has residential as the largest zoning category with 47.15% total area. This will provide for a wonderful new place to live with a wide mix of housing types and densities. This is inclusive of right-of-ways, pocket parks and other ancillary facilities within the particular residential communities. There are four golf courses planned that will provide facilities for both the residents of Laughlin Ranch and Bullhead City and for the incoming tourists and visitors. The golf courses will also have associated commercial and resort facilities. The zoning category of public and semi-public lands provides designated areas for public facilities such as schools- elementary to high school, fire and police stations and sites for future waste water treatment plants. The Other Open Space category is inclusive of all developed parks, natural open space and areas not covered under any of the specified zoning designations.

Pattern of Development

Two major washes traverse the region from east to west and provide natural separation between the majority of land uses. Over time, it is envisioned that these major parcels between Secret Pass Wash and Silver Creek Wash will evolve into three distinct villages that are integrated through roads, trails, open spaces and a variety of land uses.



Give the community an identity, a sense of place and a feeling of belonging.

The washes will also form pedestrian and non-motorized connections. For the “core” or “center” of these new villages, it is anticipated that densities and use activities will be at the highest levels. As future development moves to the east portions of the property, along the base of the Black Mountain, densities will decrease in order to put even more emphasis on open space and the beautiful natural qualities of the Mohave Desert.

Build Out Population and Land Use Discussion

Table 2a: Calculations of Land Use Areas and Population for Area under Proposed Annexation									
Land Use Description	Du/ Acre		Sub Totals	Total Acres	Percent	Residential Units		Population¹	
	Low	High				Low	High	Low	High
Residential									
Low Density Residential ²	0	3		1,302	16.69%	260	3,906	630	9,453
Medium Density Residential	3	6		1,420	18.21%	4,260	8,520	10,309	20,618
Medium High Density Residential	6	12		415	5.32%	2,490	4,980	6,026	12,052
High Density Residential	12	20		888	11.38%	10,656	17,760	25,788	42,979
			<i>Sub Total</i>	4,025	<i>Total units</i>	17,666	35,166	42,753	85,102
Commercial									
General Commercial ³				361	4.63%	0.25		7,240	
Regional Commercial ⁴				0	0.00%	0.25		0	
			<i>Sub Total</i>	361					
Industrial									
Light Industrial ⁵				0	0.00%	0.22		0	
General Industrial ⁵				0	0.00%	0.22		0	
			<i>Sub Total</i>	0					
Other									
Public/ Semi-Public ⁶				330	4.23%	0.15		8,625	
Park/ Open Space ⁷				953	12.22%			38	
Golf Course ⁷				527	6.76%			21	
Other Open Space ⁸				1,604	20.56%				
			<i>Sub Total</i>	3,414					
			<i>Total acres of area to be incorporated</i>	7,800	100.00%	<i>Total employment expected for area to be incorporated</i>		15,924	
Notes to Table: 1- Based on average household size of 2.42 2- For calculation purposes 0 du/ acre is considered to be 0.2 3- Based on 543 square feet per employee 4- Based on 500 square feet per employee 5- Based on 610 square feet per employee 6- Based on 250 square feet per employee 7- Based on 25 acre per employee 8- includes all natural washes, right of ways, streets, and any other easements not included in any specific zoning category									
Source: Swaback Partners, pllc									

Table 2a: Calculation of Land Use Areas and Population for Area under Annexation summarizes the maximum population and employment that could result if the entire incorporated area were developed in accordance with the land use plan. The residential densities utilized in Tables 2a and

2b are the maximum allowable densities of each land use category. In the event that every acre of the Laughlin Ranch was built out at the maximum allowable density under the land use map, the population will be approximately 85,102. The lower population figure of approximately 42,753 represents the population based on build out at the low end of allowable densities.

Table 2b: This table summarizes the development potential at the lower and higher ends for Laughlin Ranch areas which are within the current City limits. It projects residential housing units to be built, the corresponding population and expected employment generation.

Table 2b: Calculations of Land Use Areas and Population for Area within Current City Limits									
Land Use Description	Du/ Acre		Sub Totals	Total Acres	Percent	Residential Units		Population¹	
	Low	High				Low	High	Low	High
Residential									
Low Density Residential ²	0	3		24	0.85%	5	72	12	174
Medium Density Residential	3	6		719	25.42%	2,157	4,314	5,219	10,440
Medium High Density Residential	6	12		78	2.76%	468	936	1,133	2,265
High Density Residential	12	20		165	5.83%	1,980	3,300	4,792	7,986
			<i>Sub Total</i>	968	<i>Total units</i>	4,610	8,622	11,156	20,865
				Total Acres	Percent	Floor Area Ratio		Employment	
Commercial									
General Commercial ³				34	1.20%	0.25		682	
Regional Commercial ⁴				105	3.71%	0.25		2,287	
			<i>Sub Total</i>	139					
Industrial									
Light Industrial ⁵				269	9.51%	0.22		4,226	
General Industrial ⁵				125	4.42%	0.22		1,964	
			<i>Sub Total</i>	394					
Other									
Public/ Semi-Public ⁶				60	2.12%	0.15		1,568	
Park/ Open Space ⁷				169	5.98%			7	
Golf Course ⁷				259	9.16%			10	
Other Open Space ⁸				821	29.03%				
			<i>Sub Total</i>	1,309					
			<i>Total acres of area within current city</i>	2,828	100.00%	<i>Total employment expected for area within current city</i>		10,744	
Notes to Table:									
1- Based on average household size of 2.42				6- Based on 250 square feet per employee					
2- For calculation purposes 0 du/ acre is considered to be 0.2				7- Based on 25 acre per employee					
3- Based on 543 square feet per employee				8- includes all natural washes, right of ways, streets, and any other easements not included in any specific zoning category					
5- Based on 610 square feet per employee									
Source: Swaback Partners, pllc									



Balancing the amalgamation of the vision with various themes in a thoughtful manner.



Creating a mix of uses and establishing a variety of opportunities.



Exploring the immense opportunities and options for development.

The Bullhead City General Plan projects an annual population growth of 2.5% at the lower end and 5% at the higher end. It is anticipated that the development of Laughlin Ranch, because of its high quality, may result in an even greater demand for new housing in the Bullhead City region. This will in turn result in population increases that may go beyond the current estimates of 2.5% to 5%.

The build out population is a hypothetical projection of what the population will be if every parcel of land is developed in accordance with the land use plan. Land use areas are determined based on the Laughlin Ranch land use plan (Figure 1). The population projections are undertaken by formulas used by the City of Bullhead City in its General Plan. All standards being followed are identified in Table 2a and 2b.

Planning Considerations

Laughlin Ranch will be a premiere residential destination for a clientele that expects the best in housing types and options as well as specialty amenities such as golf, open space and community villages. Based on Bullhead City's geographic adjacencies to Las Vegas, Los Angeles and Metropolitan Phoenix, the forecast for increase in housing demand is certain. Bullhead City's new residents will be provided with housing, employment, retail, entertainment and appropriate levels of infrastructure at Laughlin Ranch. In addressing these needs, the following factors and planning issues may need to be considered:

- Laughlin Ranch's total land of approximately 10,628 acres is under control by a small number of entities, which will make collaborative planning with Bullhead City agencies more proactive and efficient.
- The topography of the region, especially the east-west washes that traverse Laughlin Ranch property, present significant opportunities for both development and preservation.
- Laughlin Ranch has a significant portion of the project planned for mixed-use development, which will result in a new dynamic setting for live, work and play environments.
- Most intense planned development will occur around the three identified mixed-use village cores.
- As new development occurs, it will be implemented in a way to compliment city infrastructure.

Goals, Objectives and Policies

Goals, objectives and policies are those set forth in the Bullhead City General Plan.

Land Use Categories

Land use definitions correspond to the established land use categories under the Bullhead City General Plan to assure consistent interpretation for each land use.

Land Use Map

The Laughlin Ranch proposed land use is based on the illustrative Land Use Plan (Figure 1) dated September 15, 2005 by Swaback Partners, pllc.

Land Use Plan Map Narrative

The Laughlin Ranch Land Use Map is a visual guide that articulates potential future development for the approximately 10,628 acre parcel. Of this total, approximately 26.61% is already within the city of Bullhead City limits. The total area under incorporation is 9204.10 acres of which 7,800 acres is part of the Laughlin Ranch development. The plan defines proposed land uses, approximate general sizes and locations, open space, roadway networks and land use adjacencies (see Figure 1- land use plan).

Laughlin Ranch land use plan is strategically organized to weave into the existing Bullhead City Master Plan and at the same time provide for new residential, diverse amenity and lifestyle opportunities for current and future residents of Bullhead City. The master-planning objective has been to create a sense of community for residents of Laughlin Ranch. For this the plan is laid out to evolve into three distinct villages defined by physical features and public and private amenities. The villages are categorized as – North Village, Central Village and South Village based on their site location (See Figure 2, villages plan). The villages are interconnected to each other and to the City of Bullhead City by a system of roadways, parks, paths and trails as well as amenity relationship that complement each other. The master plan is further organized with several mixed-use cores where densities, facilities and the activities will be highest. Each village center will flourish with gathering places, meeting areas, cafes, walkable streets and a mix of uses, including housing, commercial, retail, office, civic and open space.

Figure 3 is a public facilities map which clearly demarcates the proposed functions of parcels designated for public and semi-public uses. This importance to public facilities will help achieve the vision for Laughlin Ranch which corresponds with Bullhead City's standards of providing a safe, sustainable and high-quality living environment to the resident population.

Based on preliminary meetings with School Department and City officials, nine school sites have been identified. The sizes, locations and total number of sites has been carefully considered based on future demographic analysis. The nine sites include eight elementary schools, three middle schools and one high school. In general, each planned village has a series of accompanying school sites that will be utilized by the adjacent student population. Additionally, seven sites are designated for future waste water plant scheme. The remaining three public facility sites are located in the three village centers, providing fire and police services. In total 390 acres of public and semi-public land is well spread out across the site and the three villages.

The actual phasing and implementation of schools will be based on careful consideration of needs relative to the Laughlin Range exact build out scenario. The Owner/ Developer will continue to work closely with the City and school system with respect to the timing and initiation of new



A balance of function and comfort in response to the natural way of life.



Integration of land use principles and community oriented activities to create one common place.



Creating a mix of uses and establishing a variety of opportunities.

schools within the development.

Influencing Features

Laughlin Ranch planned development is responsive to the topographical features, natural views, adjacent land uses and relationship to the city and regional circulation context.

Development Response and Opportunities

Laughlin Ranch is an entirely new development on vacant land parcels. Its development response and opportunities are based on the Bullhead City's development response and opportunities.

Land Use Plan Implementation Guidelines

Land use plan implementation guidelines are in accordance with the Bullhead City General Plan.



Exploring possibilities for new and unique adjacencies and inter-relationships.



Responding to entire life cycle needs of a community.



Integrating the built, open and semi-open spaces to better accommodate recreation.



Building Laughlin Ranch in conjunction with the visions of the city of Bullhead City.

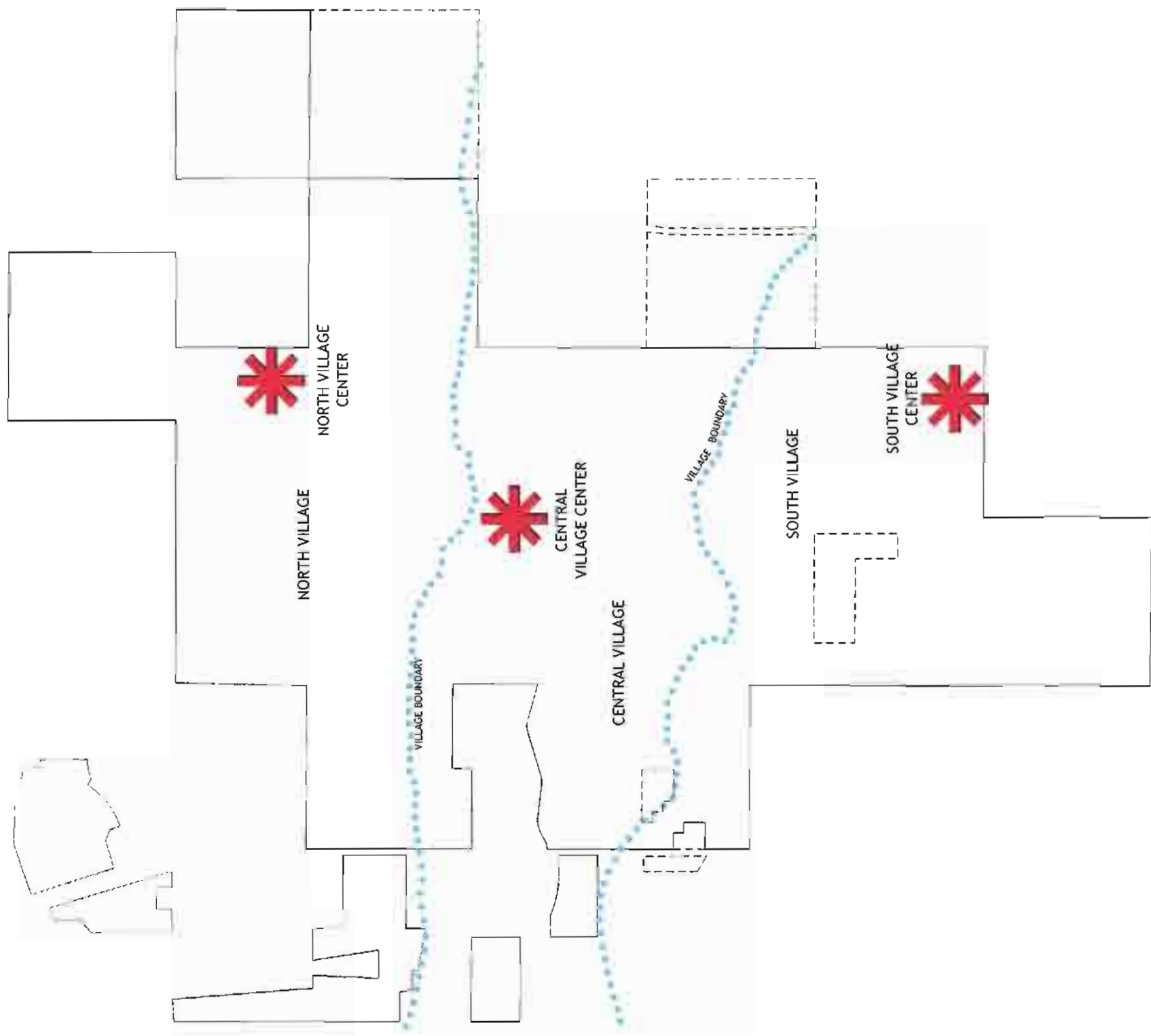
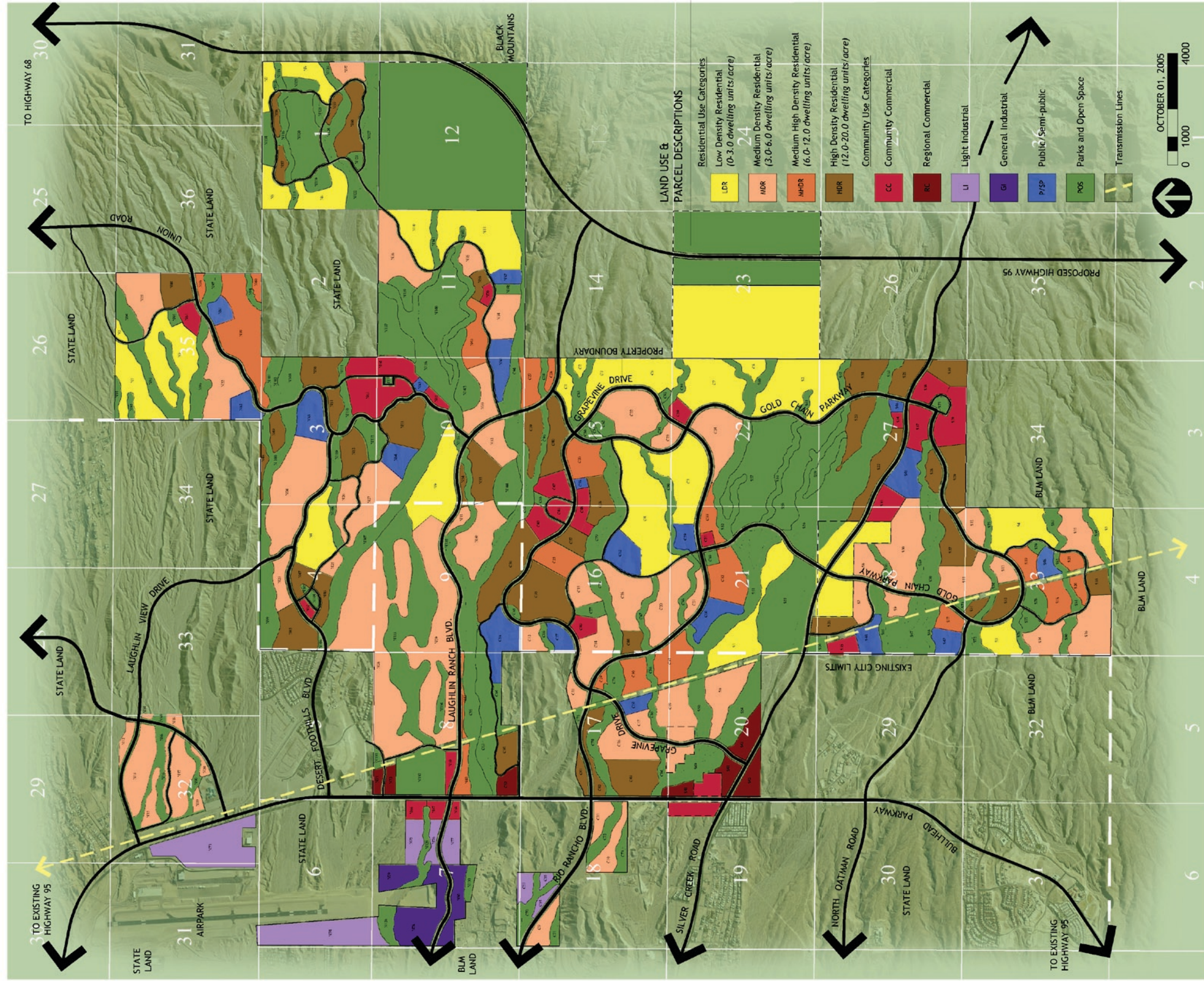


Figure 1, Land Use Plan



LAUGHLIN RANCH

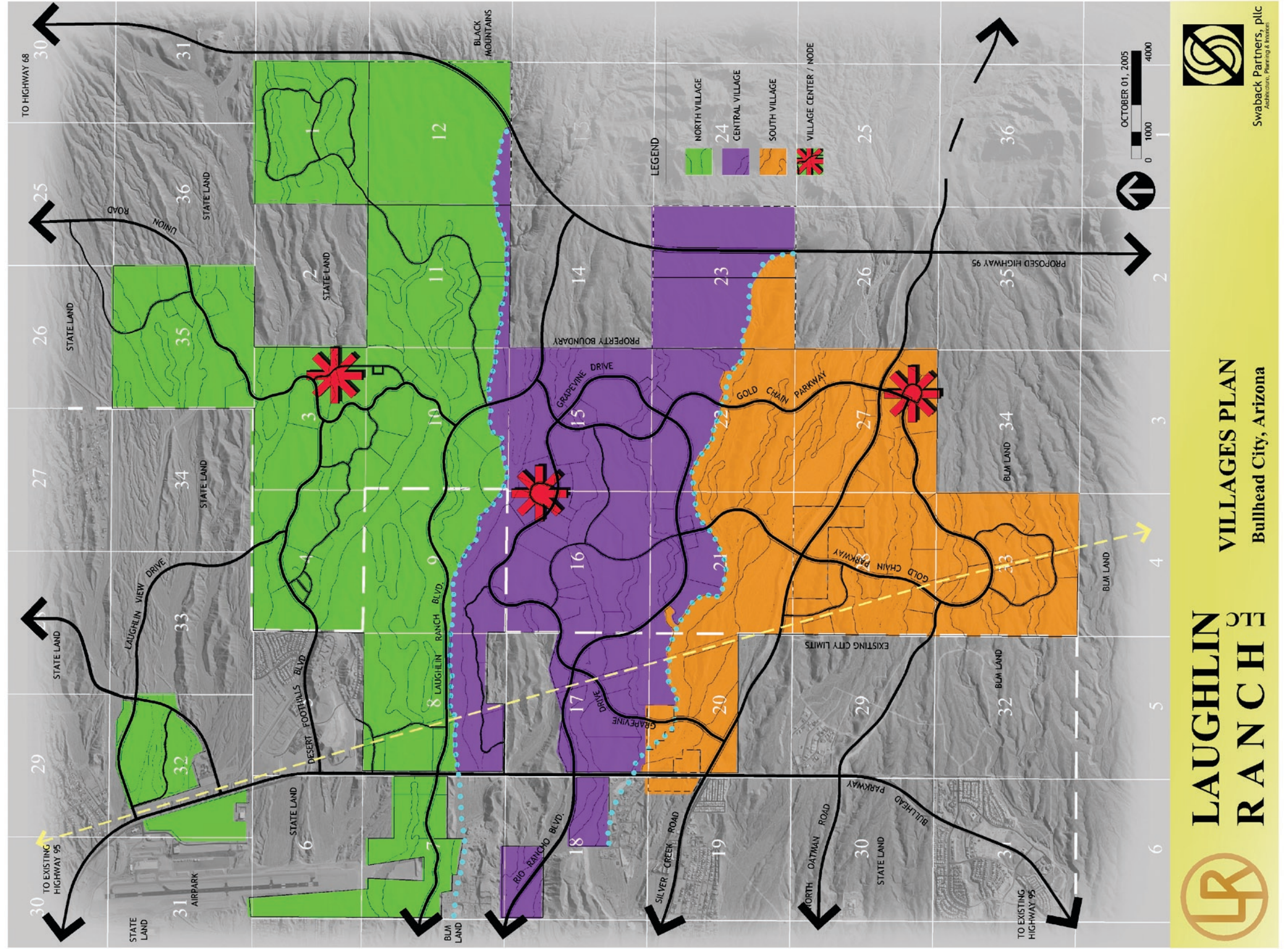
LAND USE PLAN Bullhead City, Arizona



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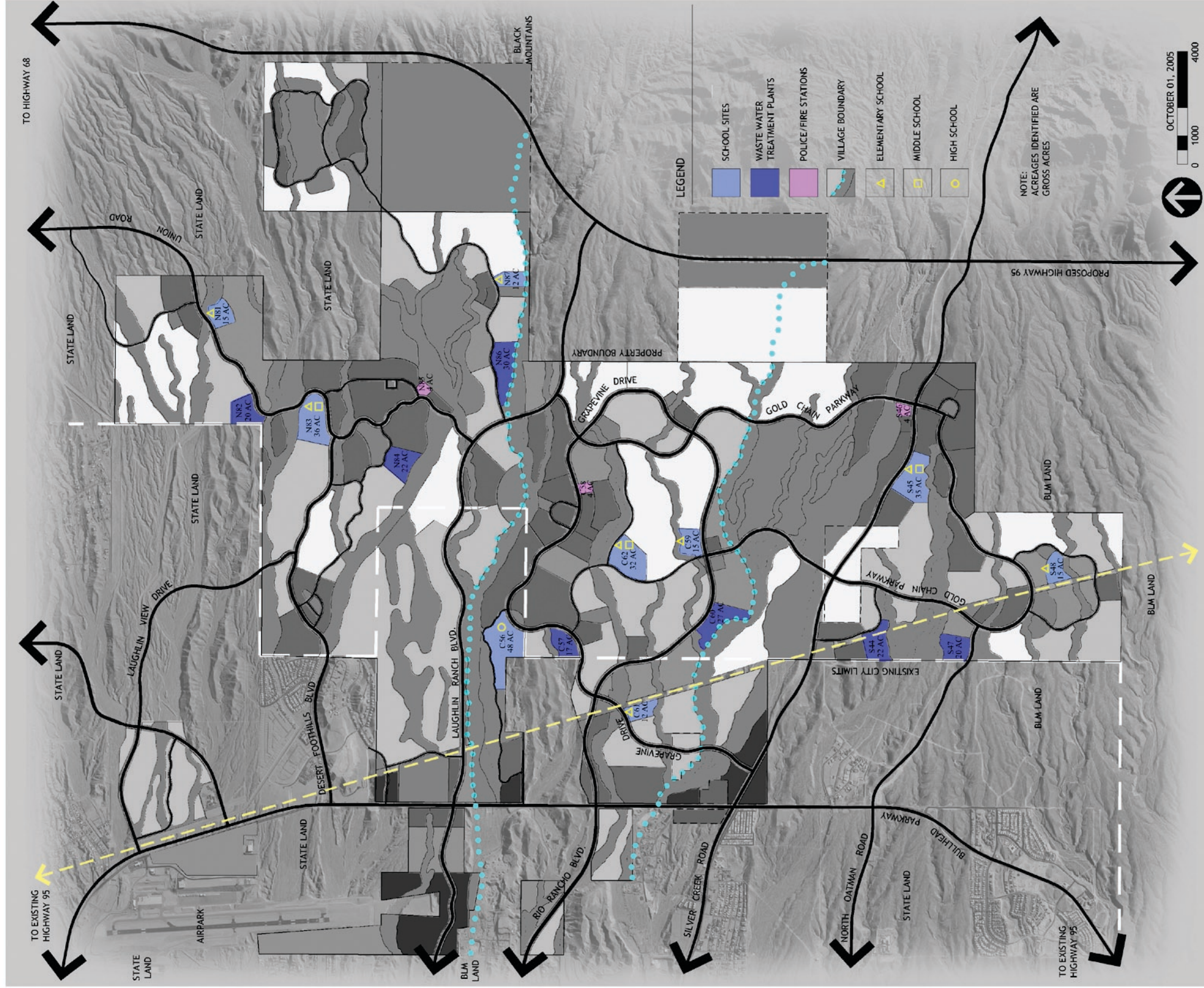
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Figure 2, Villages Plan



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Figure 3, Public Facilities Map



LAUGHLIN RANCH
PUBLIC FACILITIES MAP
Bullhead City, Arizona



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Circulation Element

Introduction

The Circulation Element examines the current and future mobility options for Laughlin Ranch and relating to Bullhead City. This Element is prepared in accordance with ARS §9-461.05.

Current Situation and Future Trends

Bullhead Parkway provides primary access to Laughlin Ranch with 2½ miles of street frontage. The existing or proposed arterial intersections are maintained and extended into Laughlin Ranch Master Planned area. This helps to retain the existing traffic planning and design for Bullhead Parkway. In the current phase, Laughlin Ranch Boulevard is the primary major arterial serving the north 1/3 of the project from Bullhead Parkway. Laughlin Ranch Boulevard will eventually be extended to intersect with proposed Highway 95 alignment. Gold Chain Drive is a minor arterial designed as a partial ring road connecting the Central and South Village. It also connects to the North Village via Laughlin Ranch Boulevard. It forms a north-south connection between Laughlin Ranch Boulevard and Silver Creek Road. Silver Creek Road along with North Oatman Road provide access to the south 1/3 of Laughlin Ranch. Silver Creek Road provides an additional link between Bullhead Parkway to proposed Highway 95 alignment. It will form an important link to Bullhead City from the proposed highway passing through Laughlin Ranch development. The Rio Rancho Boulevard alignment will link to the center portion of Laughlin Ranch.



Using natural features as signature element for streets and their intersections

Laughlin Ranch circulation system will provide future access to the north by connection to Highway 68 via Union Road. As previously described, Laughlin Ranch Boulevard and Silver Creek Road will provide east-west connections to proposed Highway 95 corridor. These connections will result in multiple alternative access points to Laughlin Ranch. Laughlin Ranch will utilize a combination of public and private roads throughout the project. Various other additional arterial, collector and local streets will complement the major street corridors and complete the circulation system within the project.

It is also believed that a system of open spaces, paths and trails will increase access throughout the site by alternative modes. Integration of the Laughlin Ranch development into Bullhead City's transit network will further help to reduce vehicular conflicts in future.



Using the option of curved versus straight.

Connections Between Highway 95 and Bullhead Parkway

The existing Silver Creek Road and the proposed Laughlin Ranch Boulevard Alignment will continue to provide the primary connections between Highway 95 and the Bullhead Parkway with intermediate connections to the Laughlin Ranch property. It is envisioned that Silver Creek Road will be updated and improved in the future within the area of Laughlin Ranch.

Functional Classification System Characteristics

Laughlin Ranch General Plan Amendment follows the same functional classification system as stated by the Bullhead City General Plan. Each category of the Bullhead City General Plan Functional Classification

System is discussed below. The circulation map (Figure 6) will serve as a guide to create the desired routes and road network hierarchy. The final alignment will be refined based on specific site conditions, engineering and construction needs or will be based on subsequent development of Laughlin Ranch land parcels.

Major Arterial Streets

The definition follows from the Bullhead City General Plan. Bullhead Parkway is a major arterial street serving Laughlin Ranch. Other major arterials are:
Laughlin Ranch Boulevard
Silver Creek Road (after proposed up gradation)

Minor Arterial Streets

The definition follows from the Bullhead City General Plan. The roadways that comprise the future minor arterial roadway system include:
Gold Chain Drive
Laughlin View Drive
Union Road
Rio Rancho Boulevard
North Oatman Road
Desert Foothills Boulevard
Grapevine Drive
Other loops as shown in the Circulation Plan

Collector Streets

The definition follows from the Bullhead City General Plan. The proposed roadways that comprise the collector network are as shown in the Circulation Plan.

Local and Limited Use Streets

The definition follows from the Bullhead City General Plan. These shall be designed and proposed based on the development of individual parcels.

The circulation elements shown in the Laughlin Ranch General Plan Amendment are anticipated to be further refined during the subsequent planning activities for the project. The final designation of lane requirements and intersection geometry will be determined based upon the specific development plans. They will be prepared to reflect on the detailed evaluation of constraints and opportunities on specific parcels. The final street designations will be based upon a traffic analysis which will evaluate the existing and proposed circulation system and anticipate the development of the Laughlin Ranch property and adjacent parcels that will share access to the proposed street system.

Street Design Guidelines

Laughlin Ranch street network is laid out and designed with special attention to the natural topography of the area. Health, safety and welfare will be the basis for all roadway design. In addition streets are laid out with attention to important views and with attention to generating special



Building bridges to allow for natural flow of water, growth of vegetation and movement of wildlife.



Developing a roadway system that is less about engineering and more about a unique experience.



Efficiently utilizing the hierarchy of roadway system- major arterial, minor arterial, collector street and limited use street.

definition and identity which is so often missing in typical suburban areas.

Laughlin Ranch development will largely follow the recommendations of Bullhead City General Plan for street design guidelines. It will however integrate landscape elements, bike paths and pedestrian facilities based on the character of the overall community. Some detailed cross section examples are shown (Figure 4) for limited use, local and collector streets.

Considering the time-period of Laughlin Ranch development, the circulation network will be phased in response to the calculated improvements in carrying capacity requirements as new areas are developed. The strategy for this, proposes securing the entire right-of-way first and a provision for a wider central landscaped median. As needed, additional traffic lanes will be incorporated by shortening the median width until the final street section is achieved. This strategy is visually articulated in Figure 5.



Protecting the land form for fun and adventure.

Transit System

Laughlin Ranch General Plan Amendment proposes regular connections with the Bullhead City transit systems- both dial-a-ride and fixed route services. Specific routes to Bullhead City central areas, airport and Laughlin casinos could attain appropriate and sustainable ridership levels. Laughlin Ranch General Plan Amendment envisions extensive opportunity to have a strong public transportation system both within Laughlin Ranch and in conjunction with Bullhead City. This condition will reduce traffic on roads and provide for a clean environment to the residents. This transit component could emerge as an excellent asset towards a long term development strategy.

Pedestrian and Bicycle Transportation

Laughlin Ranch General Plan Amendment provides for a widespread system of trails and pathways which is presented in detail in the Open Space and Recreation Element of this document. The open spaces, pedestrian trails and bike paths are designed as an inter-related system. These are responsive to the Bullhead City pedestrian and bicycle networks and are integrated with any regional systems. They also provide for alternative routes within Laughlin Ranch, linking the villages and their facilities with each other. These will form a popular alternative system and help in reducing the usage of the automotive for movement within Laughlin Ranch.



Providing a safe and stable trail treatment over steep slopes for easier accessibility.

The overall design issues separate the different traffic systems in order to minimize conflicts because of differing speeds of travel. Where vehicles, bicyclists and pedestrians share the same right-of-way, paths are specifically designed to be separate. This increases safety and ease of mobility.

Planning Considerations

- Any access through Laughlin Ranch property from proposed Highway 95 will have an effect on land use and development patterns. These will provide alternatives to Bullhead Parkway points of entry. This will help in rerouting traffic off Bullhead Parkway and

ease increased traffic volumes as a result of new Laughlin Ranch development.

- Laughlin Ranch development will fill in the land between existing Bullhead City limits and the proposed Highway 95 corridor. This will encourage commercial uses at new highway intersections and spur redevelopment of some sections along Highway 95.
- Construction of non-motorized connections through the east-west washes will provide ease of access along the property for pedestrians and bicycles.
- Vehicular roadway systems will be coordinated with adjacent land uses in and around Laughlin Ranch to ensure that the new development is efficiently, safely and conveniently accessed.
- Provisions for a regional highway system which, to the extent practical, are compatible with the physical environment, enhance the environmental quality and conserve the natural resources of the County
- Emphasis on introduction and support of a transit system.

Goals, Objectives and Policies

Goals, objectives and policies are those set forth in the Bullhead City General Plan.



Considering and detailing for all elements in roadway design- landscaped median.



Celebrating the distinctive neighborhoods and reinforcing their sense of place.



Creating a durable, safe and attractive streetscape.

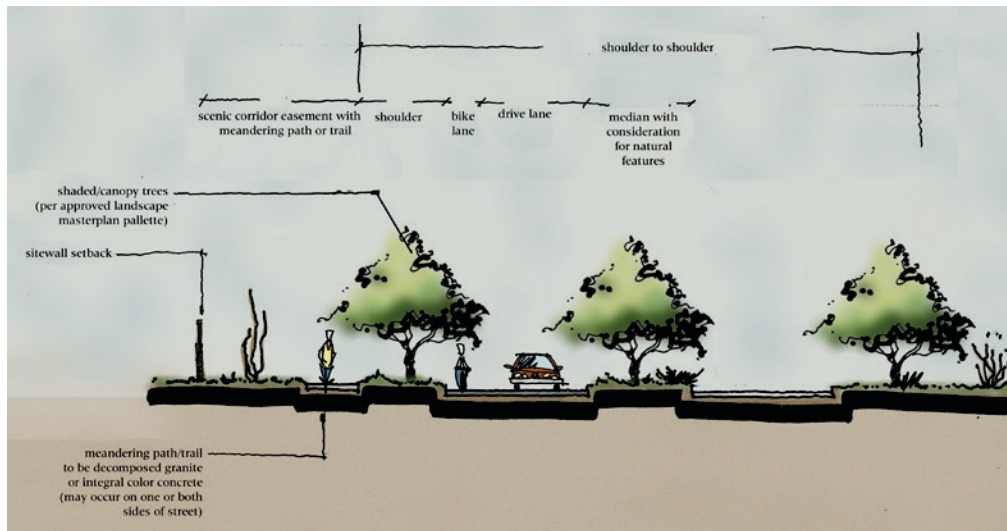
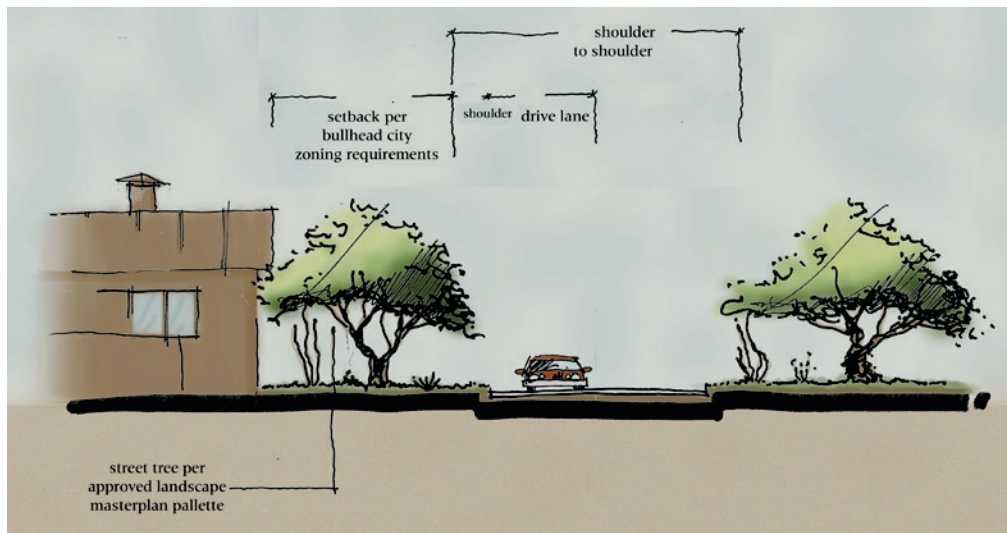
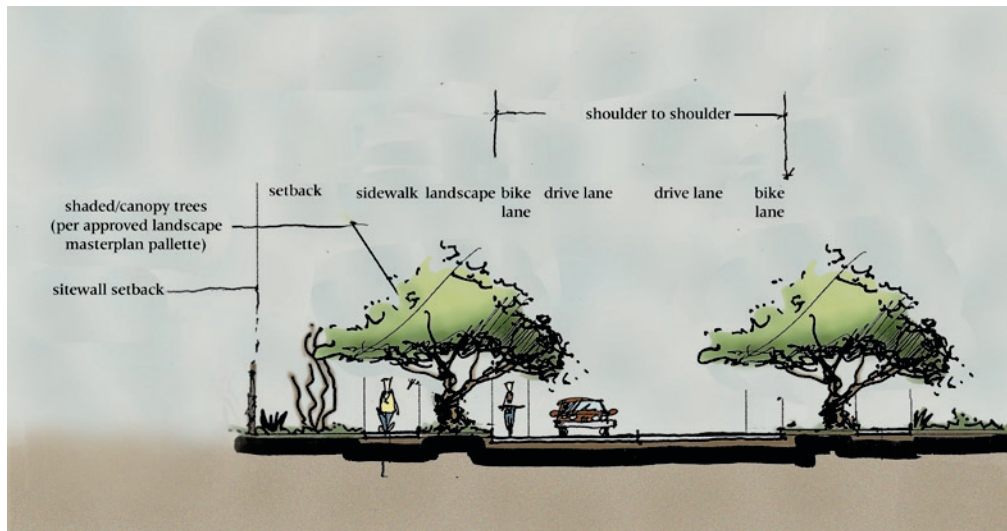


Figure 4, Roadway Sections

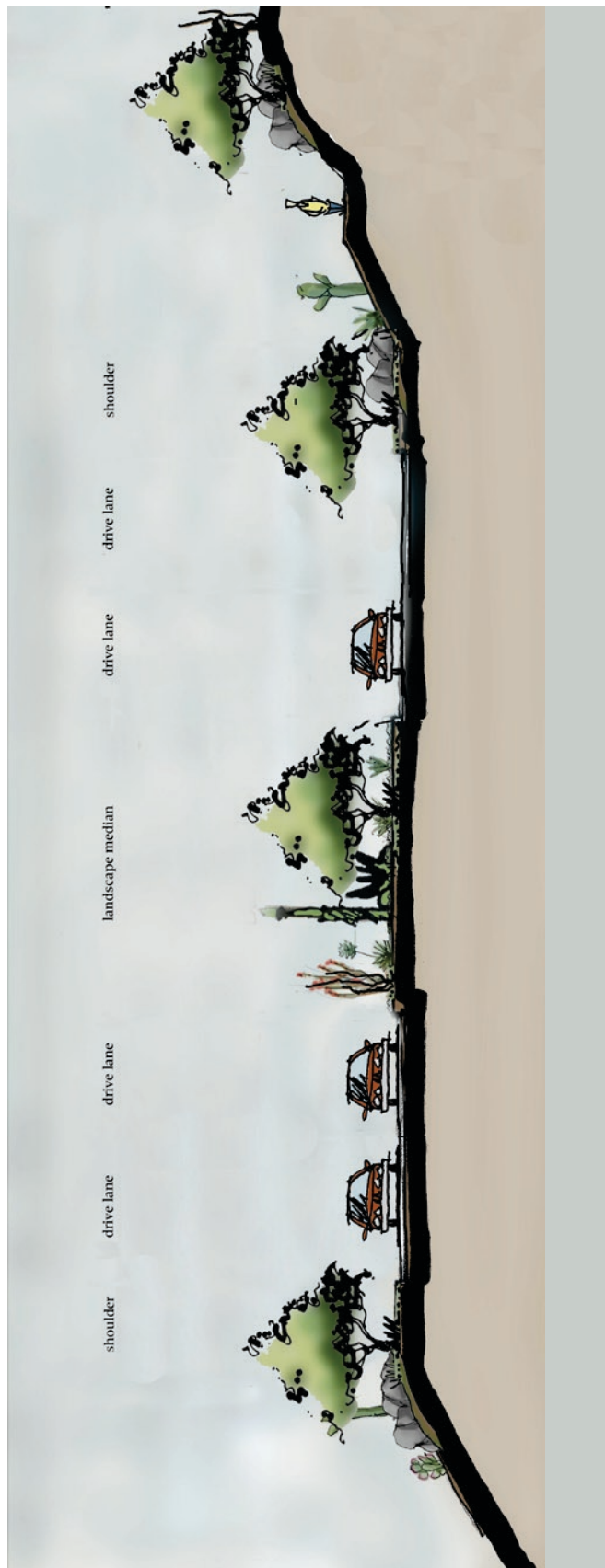
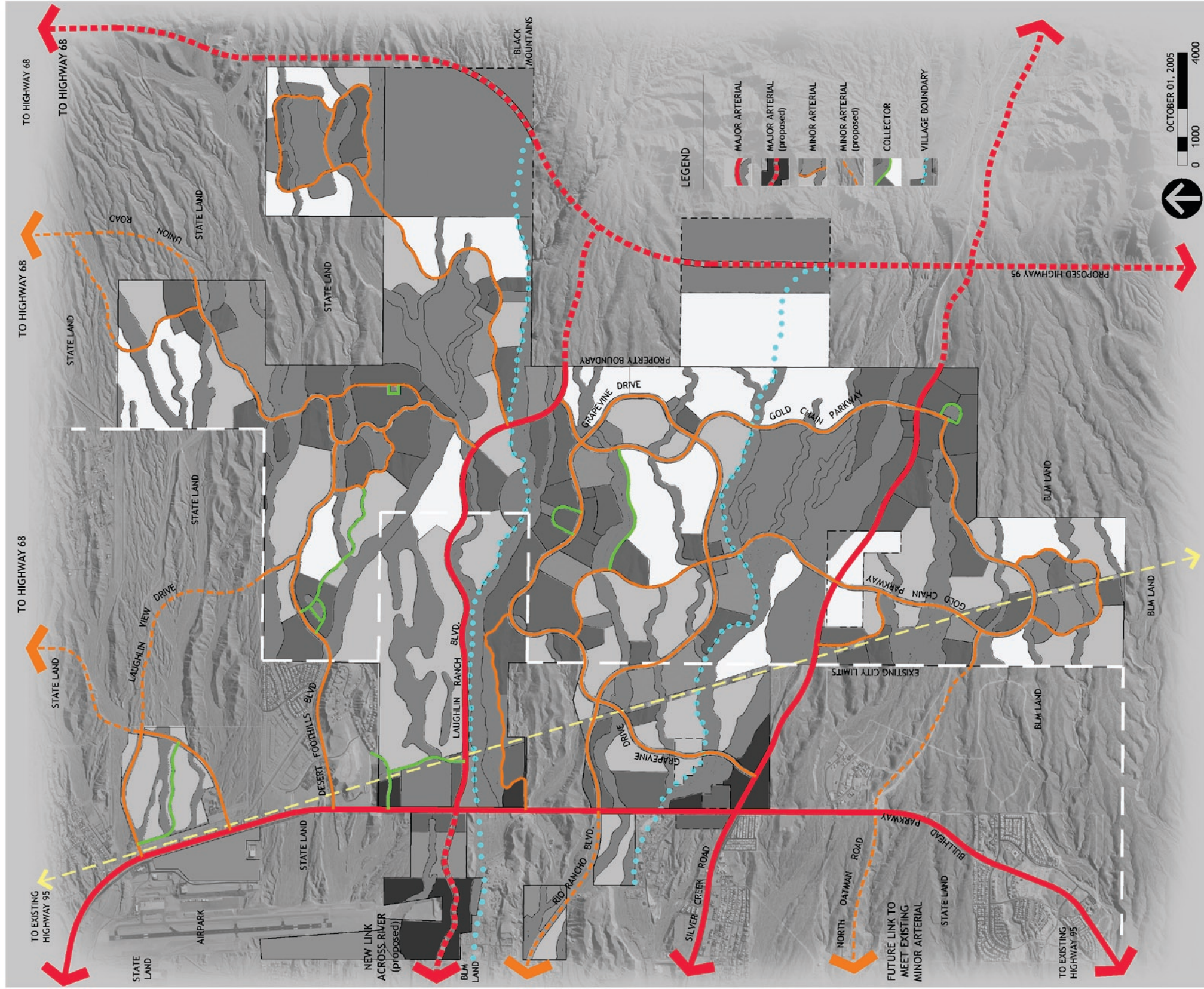


Figure 5, Arterial Roadway Strategy

Figure 6, Circulation Map



LAUGHLIN RANCH

CIRCULATION MAP Bullhead City, Arizona



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Architecture, Planning & Interiors

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Open Space and Recreation Element



Engaging the natural conditions in a respectful and creative way.



Providing quality open space throughout Laughlin Ranch development.

Introduction

The Open Space and Recreation Element addresses the conservation and expansion of the City's open space and recreation resources in a manner that is in concert with Laughlin Ranch's future development patterns and economic potential. In accordance with ARS §9-461.05 D (1), this element contains a description of existing open space within the City and projections of open spaces within Laughlin Ranch.

Current Situation and Future Trends

Laughlin Ranch contains numerous alluvial fan washes that will provide natural open space throughout the site. Two major washes bisect the site, Secret Pass and Silver Creek. These washes offer considerable open space opportunities for Laughlin Ranch. Besides long-range preservation and conservation of open space land, Laughlin Ranch will incorporate new green spaces, parks and recreation facilities. Of the 10,628 acres of Laughlin Ranch development, approximately 33.37% is designated open space that adds to the abundant Bullhead city inventory of open space.

The development of individual parks and green spaces throughout the Laughlin Ranch community will be governed by the parks & open space map (Figure 7). In addition to serving the Laughlin Ranch community, they join together with Bullhead City regional open space and trail system to provide additional amenities and desirable places. The planned golf courses will also be integrated into the overall strategy for open space and recreation at Laughlin Ranch.

Existing Open Space and Facilities

Laughlin Ranch is a very recent development and therefore most of the current land is vacant. Natural features such as washes and steep slopes will either be preserved in their current state or will be maintained as conservation parks.

Secret Pass Wash that runs across the site from Bullhead Parkway on west to proposed Highway 95 alignment on east, will establish the edge between the North and Central Villages. Most of the wash area on the western edge is to be preserved as open space. The central and eastern portions of the wash are proposed for a conservation park. The more developed areas along the wash corridor will be designated as regional parks. Adjacent to the wash on the northeast corner of Bullhead Parkway and Laughlin Ranch Boulevard is an 18-hole championship golf course. Laughlin Ranch Boulevard runs north to the wash following its path for the most part. A trail system will run parallel to the Laughlin Ranch Boulevard and traverse east up the Secret Pass through the "Narrows" connecting to the Black Mountains. This trail system will have both regional and community significance.

Silver Creek Wash passes through the southern half of Laughlin Ranch development demarcating the Central and South Villages. The wash borders the Silver Creek Road. It provides expansive views of the mountains to the east while buffering development on the north. The wash is partially preserved as natural open space with some

large parcels to be maintained as conservation parks. The area of the wash between the looping Gold Chain Parkway and the Wash Fans is proposed as a future golf facility. Trail opportunities will also be provided through the wash.

The two washes together create a strong east-west open space and trail corridor, which will well complement, the existing and planned north-south oriented trail system in Bullhead City. This is a factor well established by in the planning consideration of open space element of the Bullhead City General Plan.

Proposed Public Parks

The development of Laughlin Ranch will include a significant commitment to parks and open space. The area to be incorporated has two regional parks proposed in addition to one within the current city limits. They will provide recreational facilities for all ages. They will specifically have daytime and night-time ball fields, a need stated by Bullhead City General Plan in view of increasing population of children. Other publicly owned open space will include conservation parks which will provide natural setting for more passive recreational uses. It is the developers intent to build these parks for public use.



A diverse program with civic, social, financial, cultural and educational uses.

Table 3: Proposed Publicly Owned/ Maintained Parks, Open Space, and Recreation Facilities

Park	Type	Location	Current City Limits/ Area to be incorporated	Acres	Facilities/ Description
C63	Regional Park	Bullhead Parkway and Secret Pass Wash	Current city limits	64	Pat Tillman Memorial, amphitheater, baseball fields, bicycling/ bike trails, dog park, equestrian trails, family picnic area, playground/ tot lot, private party area, restrooms, scenic overlook, shelters, tables, volleyball courts
N144	Regional Park	Secret Pass Wash, North of Central Village core	Area to be incorporated with a portion in current city limits	35	Softball, baseball, playgrounds, indigenous flora and fauna, riparian habitat garden, garden pond, bird feeding stations, mountain bike trails, picnic facilities
S70	Regional Park	South-west section of Gold Chain Parkway loop	Area to be incorporated	83	Night-time softball, baseball, volleyball, play structure, soccer, sliding hill, fireplace seating, picnic grills, trails
Total acres within current city limits				70	
Total acres to be incorporated				112	
N96 & N97	Conservation Park	North most section of Laughlin Ranch	Area to be incorporated	51	Passive indigenous vegetation
N101 & N103	Conservation Park	East of central section of Union Road	Area to be incorporated	39	Passive indigenous vegetation
N122, N127	Conservation Park	North-east section of Laughlin Ranch	Area to be incorporated	81	Passive indigenous vegetation
C67 & C94	Conservation Park	Central and eastern sections of Secret Pass Wash	Area to be incorporated with some sections in current city limits	130	Passive indigenous vegetation

Table 3: Contd.

Park	Type	Location	Current City Limits/ Area to be incorporated	Acres	Facilities/ Description
C79 & C83	Conservation Park	South of Central Village to east edge of Laughlin Ranch	Area to be incorporated	78	Passive indigenous vegetation
C84 & S49	Conservation Park	Intersection of Silver Creek Road and Grapevine Drive	Current city limits	55	Passive indigenous vegetation
S55 & S56	Conservation Park	Central and eastern portion of Silver Creek Wash	Area to be incorporated	300	Passive indigenous vegetation
S72, S74 & S75	Conservation Park	South most section of Laughlin Ranch	Area to be incorporated	37	Passive indigenous vegetation
Total acres within current city limits				78	
Total acres to be incorporated				693	

Proposed Private Parks

The privately owned and maintained parks will be designed for communities and residents within the development. These include community parks, neighborhood parks and pocket parks. The golf courses at Laughlin Ranch will be privately owned and maintained.

Table 4: Proposed Privately Owned/ Maintained Parks, Open Space, and Recreation Facilities

Park	Type	Location	Current City Limits/ Area to be incorporated	Acres	Facilities/ Description
N114, N119, N120 & N121	Golf Course	North-east section of Laughlin Ranch	Area to be incorporated	109	18-hole golf course with driving range
N132, N133 & N134	Golf Course	Bullhead Parkway and Laughlin Ranch Blvd.	Current city limits	259	18-hole golf course with driving range
N137, N139, N140 & N143	Golf Course	South-east to North Village core	Area to be incorporated	185	18-hole golf course with driving range
S57, S58 & S59	Golf Course	North of Silver Creek Road between Gold Chain Parkway loop	Area to be incorporated	233	18-hole golf course with driving range
Total acres within current city limits				259	
Total acres to be incorporated				527	
N112	Community Park	North of Central Village core	Area to be incorporated	21	Tennis courts, play structure, enclosed pavilion, water feature, benches, trails, swimming pool
S77 & S78	Community Park	South most section of Laughlin Ranch	Area to be incorporated	26	Multipurpose courts, gazebos, barbecue area, pool, benches, trails
Total acres to be incorporated				47	
N95	Neighborhood Park	North most section of Laughlin Ranch	Area to be incorporated	5	Play structure, benches, tennis courts, recreation room
N102	Neighborhood Park	North of North Village core	Area to be incorporated	8	Picnic tables, water feature, benches, skate park

Table 4: Contd.

Park	Type	Location	Current City Limits/ Area to be incorporated	Acres	Facilities/ Description
N104	Neighborhood Park	South of Desert Foothills Boulevard	Area to be incorporated	3	Play Structure, trails, benches, basketball court, assembly room
N105	Neighborhood Park	South of Desert Foothills Boulevard	Area to be incorporated	2	Play structure, picnic tables, trails, benches, open fields
N113	Neighborhood Park	Within North Village core	Area to be incorporated	2	Wireless network, gazebo, benches
N117	Neighborhood Park	North half of North-east section of Laughlin Ranch	Area to be incorporated	2	Lighted tennis courts, water play structure, benches
N123	Neighborhood Park	North-east section of Laughlin Ranch	Area to be incorporated	5	Closed pavilion, volleyball, play structure, trails, water feature
N131	Neighborhood Park	North of intersection of Bullhead Parkway and Laughlin Ranch Boulevard	Current city limits	3	Trails, ball fields, bleachers, playground, sand pit
N136	Neighborhood Park	Intersection of Laughlin Ranch Boulevard and Newberry Street	Area to be incorporated	3	Trails, softball fields, athletic tracks, horseshoe pits
N145	Neighborhood Park	East edge of Secret Pass wash	Area to be incorporated	7	Trails, Open play fields, swimming pool
C64	Neighborhood Park	South-east to intersection of transmission lines and Laughlin Ranch Boulevard	Current city limits	12	Play structure, sliding hill, picnic tables, trails, crafts bazaar, snack bar
C65	Neighborhood Park	Along the Grapevine Drive loop	Current city limits	3	Trails, water feature, benches, volleyball court, playground
C68	Neighborhood Park	Central Village core	Area to be incorporated	4	Musical Fountain, garden café, benches, basketball court,
C75	Neighborhood Park	Intersection of transmission lines and Rio Rancho Boulevard	Current city limits	3	Picnic tables, water feature, benches, softball fields
C77	Neighborhood Park	West of Central Village core on Gold Chain Parkway	Area to be incorporated	10	Open pavilion, skating, play structure, picnic tables, benches, amphitheater
C80	Neighborhood Park	North intersection of Gold Chain Parkway and Grapevine Drive	Area to be incorporated	4	Play structure, benches, lighted open fields, recreation room
C82	Neighborhood Park	North intersection of Gold Chain Parkway and Grapevine Drive	Area to be incorporated	12	Chess tables, trails, open play fields, benches, baseball fields
C89	Neighborhood Park	Intersection of Rio Rancho Boulevard and Gold Chain Parkway	Area to be incorporated	5	Open play fields, tennis courts, horseshoe pits
C92	Neighborhood Park	Along eastern loop of Grapevine Drive	Area to be incorporated	4	Water feature, benches, gazebo, sand pit, skating
S64	Neighborhood Park	Intersection of transmission lines and Silver Creek wash	Area to be incorporated	10	Sculpture garden, gazebo, benches, baseball fields
S71	Neighborhood Park	South Village core	Area to be incorporated	5	Play structures, benches, athletic tracks and fields
S73	Neighborhood Park	North intersection of transmission lines and Gold Chain Parkway	Area to be incorporated	5	Open play fields, trails, basketball court, tennis courts
S79	Neighborhood Park	South most section of Laughlin Ranch	Area to be incorporated	5	Picnic tables, water feature, swimming pool, lighted fields
Total acres within current city limits				21	
Total acres to be incorporated				101	



Community parks and facilities complement the overall development plans at the city of Bullhead City.

In addition to the above private parks, each residential use designated land parcel will have pocket parks to serve the needs of the residents on that parcel. The locations and conditions of pocket parks will not be known in specific detail until development progresses. These will be developed based on the Bullhead City General Plan established criteria to serve a population of 500 to 2,500 persons within a driving distance of 1/4 mile. This General Plan Amendment estimates approximately 270 acres of pocket parks for the area to be incorporated. Their suggested locations are marked on the parks and open space map (Figure 7).

Major Wash Corridors

The Bullhead City General Plan sees great opportunity in east-west washes to be developed as regional open space corridors that could provide non-motorized linkages to the City, Colorado River and existing trail systems such as Colorado River Heritage Greenway Trail. This Amendment builds on the ideal and proposes to become part of this regional open space and trail system. Portions of Secret Pass Wash will be developed into two regional parks 99 acres in total area.

Parks and Open Space Standards and Criteria

Laughlin Ranch development will follow the standards and criteria developed by Bullhead City for determining the City's park needs, as stated in Bullhead City General Plan.

Neighborhood Parks will focus on serving children's walk-to or bike-to recreation needs. They may include a playground, tot lot, turf areas and picnic tables.

Community Parks will have gathering place and recreation facilities. They can be used by all sectors and age groups, and may even include play fields, community center, swimming pool and hard courts.

Regional Parks will incorporate natural site features and resources such as lakes and creeks and serve a region of the city. Facilities will include multi-purpose fields, ball fields, group picnic areas, playgrounds, swimming facilities, amphitheaters, tennis courts, multi-purpose hard courts, shooting sport facilities, concessionaire facilities, trails, nature interpretive centers, campgrounds, natural or historic points of interest and community multi-purpose centers.

Future Open Space and Developed Park Needs

Laughlin Ranch will fulfill developed park needs for the residents based on the NRPA standards being followed by Bullhead City General Plan. The standards suggest 6.25 to 10.50 acres of park land should be provided for every 1,000 residents. On the higher end, Laughlin Ranch estimates a population of 105,967 residents even though the lower projection of 53,909 seems more reasonable for the area to be incorporated. At 6.25 acres per 1,000 residents, Laughlin Ranch needs to provide for (based on previous park descriptions) between 337 and 662 acres of developed parks. The proposed plan shows 351 acres, plus pocket parks throughout the development.



Enhancing desirable destinations for visiting, working, playing and living.



Promoting visual continuity of natural open space and its elements.

Additionally, Laughlin Ranch will continue to provide open spaces to meet the accepted standards of Bullhead City. The standards require 10 acres of open space per 1,000 populations. At 10 acres per 1,000 residents, Laughlin Ranch needs to provide between 539 and 1,060 acres of open space. Laughlin Ranch has approximately 2,250 acres of natural open space and conservation parks. This figure is well above the NRPA standard.

Park and Open Space Definitions

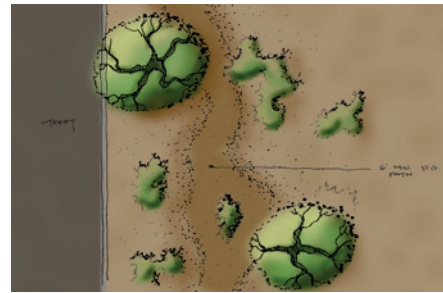
Laughlin Ranch will develop its current and future park and recreational facilities according to the classification system described by the Bullhead City General Plan.

Planning Considerations

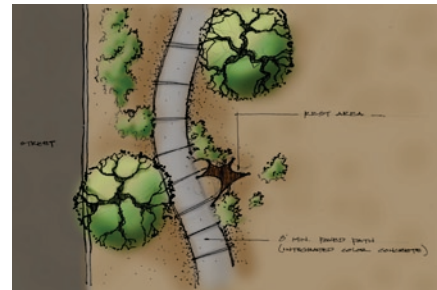
- To create a comprehensive parks and open space program for Laughlin Ranch within the framework of Bullhead City General Plan.
- As new desert land is developed for recreational and residential purposes, emphasis will be placed on providing adequate active park facilities.
- Additional non-motorized trails will connect park and open spaces to built land uses.
- Existing washes will be preserved and developed as open space corridors linking the Bullhead City on the west and Black Mountain to the east.
- Provide for flat lands for playing fields and sport recreation.
- Link recreational and community facilities with the open spaces in order to develop cultural facilities and entertainment venues.

Goals, Objectives and Policies

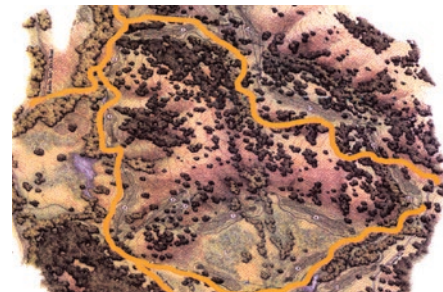
Goals, objectives and policies are those set forth in the Bullhead City General Plan.



Natural path and trail.

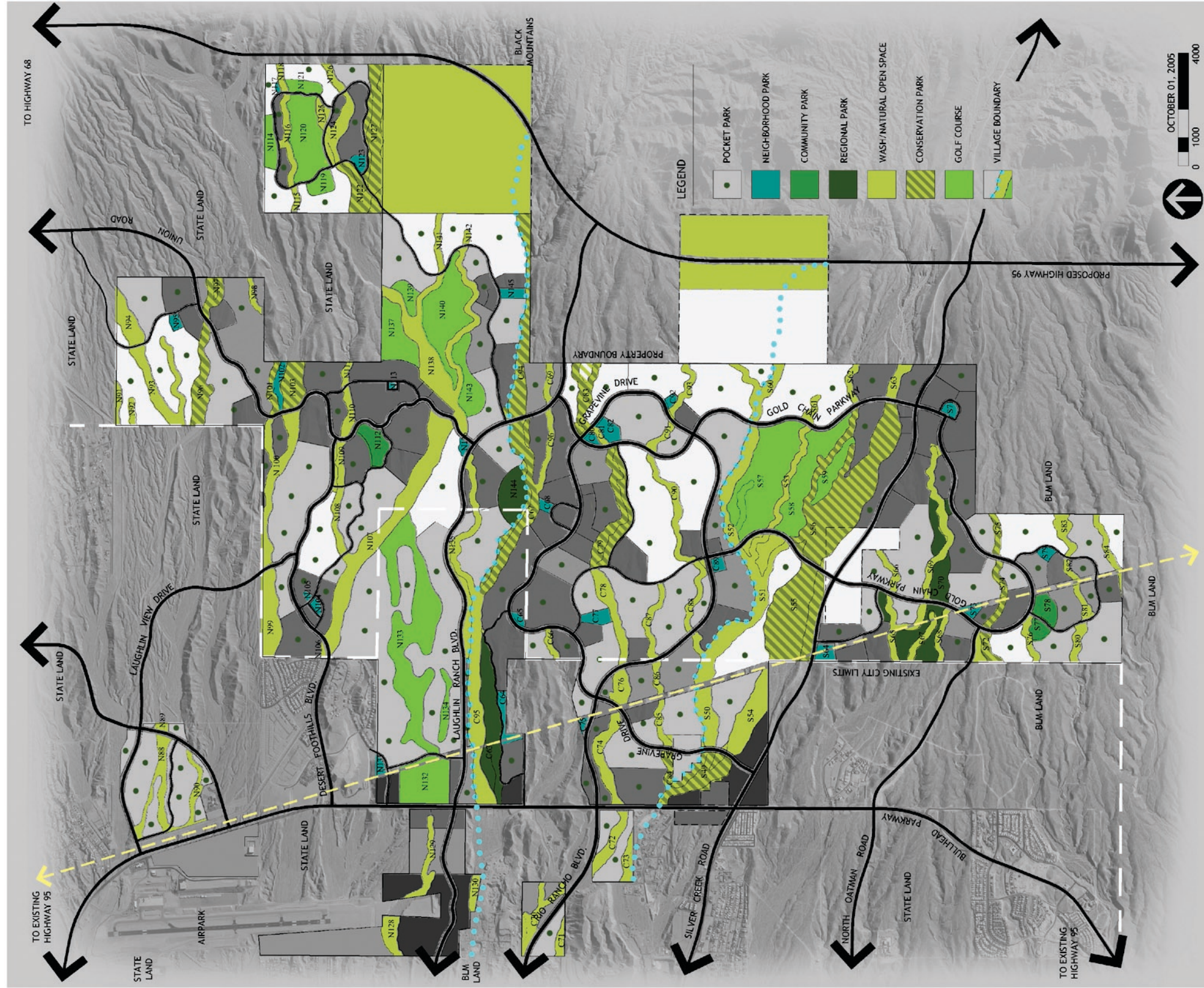


Roadside paved path and trail.



Developing a trail system that complements both natural and built environment.

Figure 7, Parks and Open Space Map



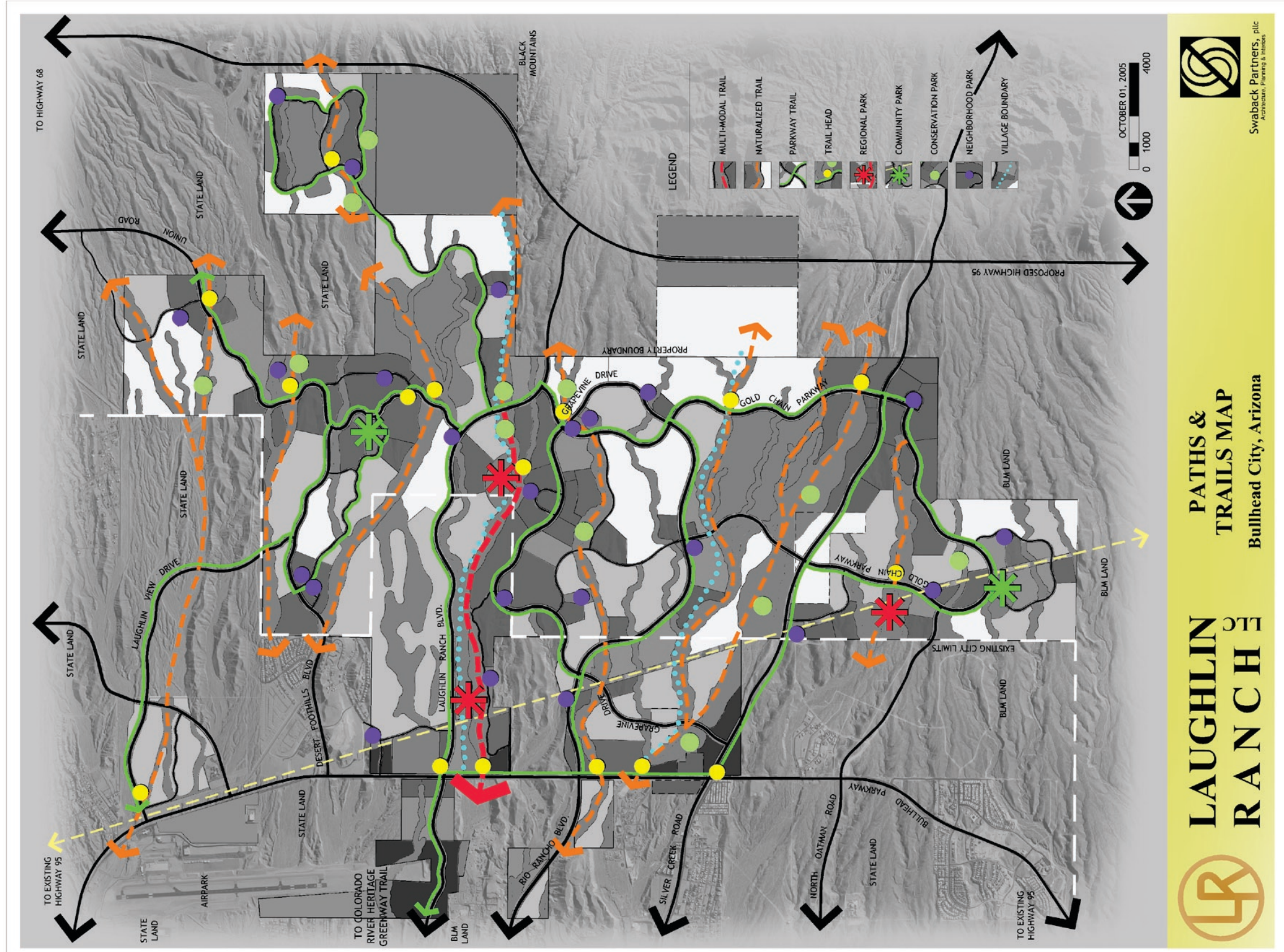
LAUGHLIN RANCH
PARKS & OPEN SPACE MAP
 Bullhead City, Arizona



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 Architecture, Planning & Interior

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Figure 8, Paths & Trails Map



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Housing Element

Introduction

The Housing Element addresses the issues of substandard housing conditions and the improvement of housing quality, variety and affordability. It is also designed to provide for the housing needs of all segments of the community regardless of race, color, creed or economic standing. The Housing Element complements the residential component of the Land Use Element by addressing these important community needs.

Current Situation and Future Trends

Laughlin Ranch will provide for a wide range of housing from entry level housing to luxury estates. Age restricted housing will be allowed within the development. The planning housing stock will also include rental opportunities.

Utilizing the density ranges of the General Plan, Laughlin Ranch is projected to provide between 22,276 and 43,788 dwelling units. Of these units, between 2,227 and 4,378 will be multi-family units. The balance of dwelling units will be made up of a combination of town homes and a wide variety of single-family housing.

Table 5: Housing Stock by Type- Complete Build-out				
	Single Family (70%)	Attached Homes (20%)	Multi family (10%)	Total
Lower Limit	15,595	4,454	2,227	22,276
Upper Limit	30,654	8,756	4,378	43,788



Attracting new residents and visitors to the richness of urban landscape at Laughlin Ranch.

Future Housing Demand

The entire Laughlin Ranch development could expect to hold a residential population of 105,967 persons at higher end on complete built-out. This will require new construction of at least 43,788 units. The mix of housing units is expected to change in the future, as Laughlin Ranch becomes a more desired location and the market response to the development is gauged. A suggested housing mix of 70% single-family homes, 20% attached units and 10% multifamily units is proposed. The actual mix and number of units would maintain pace with expected demand and market conditions.

Affordability

Housing affordability is heavily dependent on the external factors of interest rate on home loans. Recent increase in interest rates may have some minor effects on the housing sector. However, considering the growth trends for the state of Arizona and Bullhead City in particular, the mood of the housing sector continues to be upbeat and positive. Housing development at Laughlin Ranch will include housing products that shall add to the quality affordable housing opportunities available in Bullhead City. The product mix shall include starter homes on lot sizes conducive to the entry market. Such economical product will provide

quality construction in a controlled neighborhood environment for families in the beginning stages of their work cycle, seniors seeking a traditional detached living environment and residents earning moderate incomes seeking new construction options. Through a potential to utilize zero-lot line, attached town-home and patio home construction types, Laughlin Ranch will provide more opportunities for home or condominium home ownership than shall exist in developments offering only traditional detached single-family housing. Also, through multi-family components to be located in mixed-use centers and in village center areas, residents shall be given lower cost new construction options if traditional single-family lifestyles or cost affordability is not desirable or achievable.

Through the use of the community facilities district mechanism to help finance public infrastructure costs for the development, it is possible that initial offering prices for the range of housing options may be somewhat lower than if this mechanism was not utilized. It is anticipated that the housing options at Laughlin Ranch will be attractive to existing residents as well as inviting to new residents. Therefore, there should be a price effect felt throughout the City's existing housing market as the supply of space in older pre-existing units may also become increased possibly producing more affordability of occupancy in such units.

Planning Considerations

Several issues that emerge from the Bullhead City General Plan, may impact land use and the quality of life found in Laughlin Ranch. Those issues are:

- **Housing Quality:** Laughlin Ranch shall provide good quality of housing that shall contribute to environmental improvements for the Bullhead City.
- **Home Ownership:** Laughlin Ranch shall encourage home ownership that will bring in stability to the housing stock.
- **Affordability:** A mix of housing shall be provided in new developments at Laughlin Ranch: Small, single family detached homes and multi-family dwelling units will be affordable to a larger market.
- **Retirement Population:** Laughlin Ranch shall experience trends similar to the Bullhead City in becoming a major provider to the migrating retirement population.

Goals, Objectives and Policies

Goals, objectives and policies are those set forth in the Bullhead City General Plan.



Avoiding strictly standardized development, Laughlin Ranch will be an exercise in balancing uniformity with diversity.



An interesting mix of housing types to cater all tastes and preferences.



An attractive program of housing types- low density, medium density, high density.



Economic Development Element



Recognizing the need of amenities that have the potential to attract visitors who bring in economic benefit to the community.

Introduction

While this element is not required by state statute, it is included due to the importance of economic development to Bullhead City's future and the potential impact of economic growth could have on the City's land use and development patterns.

Current Situation and Future Trends

A development of the size, magnitude and vision of Laughlin Ranch is bound to have a tremendous economic impact both over short and long term. Not only will Laughlin Ranch create many temporary jobs over the decades during which it will be built but at the same time its land use designations will contribute greatly to increasing and diversifying the employment base of Bullhead City. It could be expected that a mix of employment including retail, service, basic and non-basic jobs will be generated by the Laughlin Ranch development.

Laughlin Ranch land use plan provides intense mixed-use village cores, regional and community commercial along major arterials and industrial land uses around the city airport. It plans for approximately 900 acres of retail and office property. Included in this is a regional mall site located at the northeast corner of Bullhead Parkway and Silver Creek Road. Along with these, public facilities such as schools, fire stations, police stations and other services will contribute to the increased job base. Additionally businesses in Bullhead City will benefit from the increasing population and contribute to further employment generation and economic activity. Overall, these new locally available jobs will benefit not only existing residents of Bullhead City, but also the new residents of Laughlin Ranch and Bullhead City.

Some of the sections of Laughlin Ranch property for which detailed development studies have been conducted give a more precise economic potential for the anticipated commercial and industrial uses. "The Gateway Center" which is planned at the industrial parcel in Section 7 to the west of Bullhead Parkway could approximately have 1.5 million square feet of built up space. Its nearness to the airport and adjacency with primary access to Laughlin Ranch could add further value to its significance as a center for business activity. It will cater to a wide variety of business operations from warehouses to light industries to office parks and large commercial establishments.

The neighborhood quality of Laughlin Ranch development will support development of small scale and local enterprise that can flourish in interior spaces as small stores or corner coffee shops. Village centers which are in the heart of Laughlin Ranch villages will, with their intensity of mixed-use development, vitalize the Laughlin Ranch community and the business atmosphere. The North Village Center will accommodate upto 650,000 square feet of commercial and office space. In keeping with its mixed-use definition, the Center will have a neighborhood park, 85,000 square feet of civic and public use along with an equally critical residential component. As the project progresses other similar sites could have even stronger development potential.

Another study has been conducted for the regional commercial property

at the North-east corner of Section 8 along the Bullhead Parkway. This prime location will provide for 150,000 square feet of high quality built space including a site for gas station. Sites like these will work to attract national and international chains of retail and other businesses to the city.

The mix of regional, community and neighborhood level economic strategies will be critical for sustainability of the economic projections and feasibility of assessments. All in all the entire Laughlin Ranch estimates to generate around 26,500 new jobs for the Bullhead City.

The four golf courses planned for Laughlin Ranch will not only provide jobs but will attract tourists. They will strengthen the destination quality of the region along with magnets like Laughlin and The Colorado River.

This tremendous development potential suggests a successful development investment, not only in home building, but in overall business expansion and change in area demographics. Laughlin Ranch is planned as a community to attract and serve people from all walks of life and income backgrounds. This healthy mix in resident population will upgrade the retail and service facilities to accommodate for newer needs. This will result in growth of new markets in Bullhead City thereby improving the overall local economy.

Such tremendous development activity will provide for much improved revenues to Bullhead City. Increased tax base will help fund increasing service demands, contribute to new capital projects and relieve dependence on non-local revenue sources.

Planning Considerations

- Commercial development and recreation amenities focused along Bullhead Parkway will serve the Laughlin Ranch residents, Bullhead City and the visitors alike.
- Take advantage of adjacent regional resources such as the Colorado River, Laughlin-Bullhead International Airport and the Laughlin, Nevada casinos.
- Promote development that results in fiscal benefits to Bullhead City.

Goals, Objectives and Policies

Goals, objectives and policies are those set forth in the Bullhead City General Plan.



Environmental Planning Element

Introduction

The Environmental Planning Element describes the natural resources of the Bullhead City planning area; identifies related planning issues; and sets forth goals, objectives, and policies for the protection of natural environment. ARS §9-461.05 requires this element to address the potential effects of the other planned elements on the environment, including natural resources and air and water quality. Protection of significant natural resources such as the Colorado River and larger ephemeral washes, their associated riparian habitats, and pristine upland desert scrub areas may affect the location, extent, and type of residential, commercial, industrial, and recreational development within the planning area.

Current Situation and Future Trends

The Laughlin Ranch Development is located within the northwestern extent of Mohave Desert on the western slopes of Black Mountains that drain to the Colorado River. Nearness to the River as a water resource gives the site and other neighboring desert regions a greater diversity of flora and fauna in comparison to species typically found across Mohave Desert. The area was also a good source of minerals. These favorable habitation conditions has made it into an attractive location for human habitation probably since prehistoric times. An archaeological study has identified 147 sites where evidence of prehistoric man have been located. Significant artifacts will be inventoried and/or collected using sensitive data recovery methods. Where a significant archaeological site falls within planned community natural open space it will be preserved in place and managed for public interpretation and education.



Laughlin Ranch development patterns have been framed so as to preserve the environment and at the same time improve the quality of life.

The site geology is volcanic rocks that are less than 2-million years old which are capped by relatively flat-lying younger lava flows. The rock material could be identified as extremely weathered granite, andersite, basalt and rhyolite. Some silicic igneous rocks can also be observed along with finds of sedimentary chert. Presence of sandstone, and silicified mud and siltstones is also noted. The site is also traversed by large number of dry washes some of which form gorges as deep as 200 feet at few locations.

The region is characterized by highly variable precipitation and temperature. Average annual precipitation is 6.31 inches over the past 30 year period. Temperature is typically warm with an annual mean temperature of 74.2°F with an average maximum of 88.7°F and a minimum of 59.6°F. Bullhead City is often the hottest recording station in Unites States during summer months with a record temperature reaching 126°F in June 1984. Due to high temperatures and low precipitation the relative humidity is low, a phenomenon common to desert regions. This region is currently experiencing conditions of a severe drought that began during the mid-1990s the effects of which are most evident in the regional flora.

Laughlin Ranch development area contains typical Mohave Desert plant species. Differences in elevation and proximity to surface and groundwater give the upper portions of many dry washes traversing the site some of the greatest diversity of species. Creosotebush is present

everywhere throughout the site. Blue paloverde, cat claw, desert willow, honey mesquite and smoke tree are some of the tallest and largest plants seen on the site. Species observed throughout the development area also included beavertail prickly pear, blackbrush, brittlebrush, bursage, chia, cholla, claret cup cactus, desert five spot, desert lavender, desert trumpet, dodders, ephedra, fishhook barrel cactus, fluff grass, Mohave aster, Mohave desert star, Mexican gold poppy, paperflower, pincushion cactus, saltbush, snakeweed, tangle foot, tansy mustard, and witerfat. Ocotillo can be observed at the easternmost edge of the site.

Some of the animal species that can be observed on the site are antelope squirrel, black tailed jackrabbit, wild burro, burrowing owl, coachwhip, collard lizard, common kingsnake, coyote, chuckwalla, desert cottontail rabbit, desert iguana, desert tortoise, Gambel quail, golden eagle, great horned owl, ground snake, hummingbird, kangaroo rat, Mojave rattlesnake, mourning dove, nighthawk, packrat, rat-tailed hawk, rosy boa, sidewinder, Texas horned lizard, and western patchnose snake.

Planning Considerations

- A major component to the design of Laughlin Ranch is the protection of the numerous washes that pass through the site. These washes provide a natural separation between development parcels. The integrity of the washes will be protected along with the associated vegetation.
- The protection and enhancement of Secret Pass is an important element to the environment of Laughlin Ranch. Not only does it provide an important drainage conduit from the Black Mountains, but it also has historical and recreational significance. Protection of the “Narrows” will be a high priority.
- Primary natural vegetation and wildlife habitats will be preserved. The Open Space and Recreation Element proposes conservation parks as its open space strategy where the intensity of natural desert flora and fauna shall be maintained at high intensity.
- Significant views to Colorado River and Black Mountains are preserved and maximized for public areas and houses. Electrical utility tower lines will provide minimum intrusion to land uses in close proximity.
- Almost all of the non-urban land area around Laughlin Ranch is untouched desert land. Increased activity needs to be sensitive to existing flora and fauna in the region.
- The riparian plant communities along the ephemeral washes that cut across the Laughlin Ranch site may get influenced by several factors, including the increase in surface water runoff, presence of non-native vegetation and proximity to newly constructed habitats.
- Higher traffic volumes and increased activity may impact the air quality and noise levels.

Goals, Objectives and Policies

Goals, objectives and policies are those set forth in the Bullhead City General Plan.



Water Resource Element



With increasing population and amenities, Laughlin Ranch development recognizes the growing need for conserving water.



Valuing the scarcity of water in desert environment, native and xeriscape plant palette is promoted.

Introduction

The Water Resource Element documents the capability of Laughlin Ranch incorporating area to meet its water needs for the growth anticipated through the planning horizon. Water resources are vital to sustain existing and future residential and commercial needs anticipated within this General Plan Amendment. This Element is prepared in accordance with ARS §9-461.05.

Current Situation and Future Trends

Currently, the Colorado River is the only source of water available to serve the Laughlin development. There are no other sources available at this time. The City of Bullhead City together with the Mohave Water Conservation District (MWCD) presently have allocations of Colorado River Water totaling 28,109 acre feet per year. The City's portion of that allocation is 23,309 acre feet and the MWCD has 4,800 acre feet. The combined allocation could serve a population of 117,121 based on a factor of 0.24 acre feet per person as set forth in the City's annual water resources fee report. As of this writing, the City has allocated about 12,700 acre feet of water and the MWCD has allocated 1,100 acre feet. Between the two contracts there are approximately 14,309 acre feet remaining. Water allocations are granted on a "first come first serve" basis.

The Laughlin Ranch development will need between 12,938 and 25,432 acre feet of water to serve the projected population of 53,909 and the high population of 105,967. The City and developer will have to work together to acquire additional water sources at some point in the future depending on the pace and intensity of build out of the property.

Bullhead City or a private provider will purvey water to Laughlin Ranch. Storage facilities to handle the water capacity will be located throughout the development.

This Amendment will include water use goals established by the 2001 Bullhead City Water Conservation Plan (BHCWCP). It will consider use of non-potable water such as reclaimed water, gray water or rainwater harvesting for landscape irrigation.

Water conservation measures such as using treated effluent for turf and landscape watering; along with mandatory installation of low flow plumbing fixtures will be implemented. Presently Laughlin Ranch has an agreement with the City to take all the sewage effluent from the City's Section 18 WWTF. This effluent is being used to irrigate the golf course. Additionally, the use of drought tolerant plant materials and efficient irrigation systems (drip/ low flow) are required. Design standards and CCR's will be implemented to include the drought tolerant plants with commercial and retail areas.

The golf courses throughout Laughlin ranch will eventually be entirely irrigated by treated effluent. They will additionally incorporate efficient irrigation systems that would be appropriately maintained.

Planning Consideration

- Establishing xeriscape design in the landscape.
- Laughlin Ranch shall continue to work with Bullhead City towards planning for water resource as per the General Plan.

Goals, Objectives and Policies

Goals, objectives and policies are those set forth in the Bullhead City General Plan.



Waste Water Management Element



Integrating waste water systems into the overall landscape.



Using natural slopes for surface drainage.

Introduction

The Waste Water Management Element is a new addition in the Laughlin Ranch General Plan Amendment. This Amendment gives extra importance to this aspect and does not want to stress the existing Bullhead City facilities and resources with this large a development.

Current Situation and Future Trends

Based on city of Bullhead City Section 208 Plan Amended, March 2004, the wastewater flows for 2002 are projected to be 4.8 MGD and these will grow to 13.5 MGD by the year 2020. Bullhead City currently has 7 wastewater treatment facilities, of which 5 are packaged plants and 2 are large plants. The long-term plan for Bullhead City is to migrate towards a two-plant system and expand those as regional facilities. The development strategy is designed to meet demands for the next 20-year needs. The first portion of the up gradation is phased from 2001-2006 and the rest is phased over the next 5 to 10 years.

The Laughlin Ranch incorporating area is a major development undertaking and will generate large quantities of wastewater. To prevent over burden on a city's resources and to avoid re-strategizing of the current initiatives underway, the Laughlin Ranch General Plan Amendment proposes that the majority of the incorporated area will be one hundred percent self sufficient in its waste water management. Development areas adjacent to and within the existing City limits will still utilize the existing City facilities. Laughlin Ranch is committed to working closely with the City is studying future technologies that may have positive impacts on wastewater management and operations.

The incorporating area may use a decentralized system for wastewater treatment. These decentralized facilities use constructed wetlands as part of the treatment process. Constructed wetlands are primarily biological filters that are very effective in removing BOD, TSS and organic nitrogen; nitrates are almost totally removed. Effluent from these facilities can be used to water parks, open space and golf courses. The Developer is working with the City evaluating the feasibility of these processes. Each designed facility serves up to 5,000 families. The facility design will incorporate both mechanical and natural means to treat and reclaim wastewater. The natural means incorporates the construction of wetlands that will be well integrated into the landscape design of immediate vicinity areas. The scale of this undertaking will make this a unique project across the country and will have the potential to make Bullhead City a strong center for sustainable development. The developer is aware that a wetlands wastewater treatment design must be approved by the City, Arizona Department of Environmental Quality, and if applicable the Environmental Protection Agency and the Army Corps of Engineers. Furthermore, under no circumstances will the City allow any wastewater treatment design that includes single-family residential septic tanks in the Laughlin Ranch development, except in accordance with the City's 208 Plan.

A total of seven sites (Figure 3) are planned for these wastewater treatment plants. They fall under the land use designation of Public/ Semi-Public Lands. Their development will be undertaken in a phased

manner in conjunction with increasing population demands. These facilities will be built by Laughlin Ranch developers and operated and managed by the city of Bullhead City. Their performance will be regularly measured and monitored for quality control purposes.

All on-site drainage shall be conducted as surface-drainage and will utilize natural slopes except as necessary to pass under roads and pathways. The surface drainage system shall be designed with on-site detention or retention basins as necessary.

Planning Considerations

- A well-designed environmentally friendly system for wastewater treatment will be installed at Laughlin Ranch incorporating area.
- The wastewater plants and associated wetlands will be integrated into the overall fabric of Laughlin Ranch development.
- Laughlin Ranch will comply with the Bullhead City's current storm water regulation by handling it separately as surface runoff from the wastewater collection systems.

Goals, Objectives and Policies

Goals, objectives and policies are those set forth in the Bullhead City General Plan.



Conservation, Rehabilitation & Redevelopment Element

Introduction

ARS §9-461.05 allows municipalities to prepare a Conservation, Rehabilitation and Redevelopment Element that specifies plans and programs for the elimination of blighted areas that may exist within the City. This Element also addresses community redevelopment, neighborhood preservation and revitalization, and other purposes authorized by law.

Current Situation and Future Trends

The entire Laughlin Ranch property is and has been vacant. Therefore, the Conservation, Rehabilitation and Redevelopment Element is not applicable. However, because of the size and remoteness of the property certain dumping activities have taken place, i.e. cars, mattresses, etc. Laughlin Ranch has sponsored a community “clean-up” project, and intends to continually clean and protect from future dumping activities throughout the development of the community. The development and maintenance of the site will help to alleviate this situation.

Planning Issues

- Laughlin Ranch will work to keep the quality of services and facilities to match with other areas of the Bullhead City.
- Currently there are no opportunities for any conservation, rehabilitation and redevelopment measures at the site. If required Laughlin Ranch shall carry those out with help of Bullhead City.

Goals, Objectives and Policies

Goals, objectives and policies are those set forth in the Bullhead City General Plan.

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Cost of Development Element

Introduction

ARS §9-461.05 requires that the General Plan include a Cost of Development Element. The Cost of Development Element is designed to identify policies and strategies that Bullhead City will use to require new development to pay its fair share towards the cost of additional public service needs generated by that new development, with appropriate exceptions when in the public interest. This element is required to include:

- A component that identifies various mechanisms that are allowed by law and that can be used to fund and finance additional public services necessary to serve the development including bonding, special taxing districts, development fees, in lieu fees, facility construction, dedications and service privatization.
- A component that identifies policies to ensure that any mechanisms that are adopted under this element result in a beneficial use to the new development bear a reasonable relationship to the burden imposed on the City to provide additional necessary public services to the development and otherwise are imposed according to law.

Implementation of the Cost of Development Element ensures that Bullhead City will be able to maintain pace with population growth and provide for needed capital facilities. The element provides a reasonable and rational method for requiring new residents and businesses to assume their fair share of the costs of growth while minimizing the burden on existing residents.

Current Situation and Future Trends

Laughlin Ranch came into being in 2002 through incorporation of several unused land parcels that were under the governance of Mohave County. Like in the other areas of Bullhead City developers in Laughlin Ranch will be required to construct streets, sewers, water mains, drainage facilities and other improvements in and adjacent to their subdivisions or developments. In addition the development of public facilities within Laughlin Ranch may be financed through a Community Facilities District (CFD).

The use of the CFD infrastructure financing mechanism enables new growth areas to be responsible for the public infrastructure costs of growth necessary to serve such new development. Through various financing mechanisms such as special assessments, general obligation bonding and revenue bonding, only those properties within the boundary of the CFD are responsible for their various public infrastructure costs of growth. Procedures regarding the use of a CFD for public infrastructure improvements shall comply with the form of development agreement adopted for Laughlin Ranch by the City Council and with applicable state law (ARS §48-701 et seq.). The establishment/ formation of a CFD is an action required to be taken by the governing body of a municipality. Once formed the governing body of the municipality may:

- serve as the board of the CFD, or
- appoint a five member board to serve as the board of the CFD.

The CFD will be managed by the CFD board. The CFD statutes provide

for an operating and maintenance tax to be levied on property within the CFD to finance CFD operating and maintenance costs. Laughlin Ranch has also agreed to provide funds to finance CFD operating costs. Unlike municipal improvement districts, the CFD mechanism does not require a pledge of bond repayment backed by the municipality's revenue sources. Assessments and ad valorem taxes on properties within the district, revenues from user fees and developer reserve funds shall serve as sources of repayment of district obligations. Before assessments or bonding may be put in place over district properties, extensive financial and marketing analyses shall be undertaken and reviewed by the CFD board. Such analyses shall also be reviewed and overseen by sophisticated financial underwriting firms and bond offerings will also have to survive additional scrutiny by the private investment markets.

Planning Considerations

- Competitive land costs and highway access would be long term selling points for Laughlin Ranch development to attract additional capital to support continued development over the next few decades.
- Currently Laughlin Ranch is planning to use CFDs as a financing technique. Over time, with a need for further expansion of resources, Laughlin Ranch may utilize alternative funding mechanisms.
- All future programs must be coordinated with overall city growth and development plans.

Goals, Objectives and Policies

Goals, objectives and policies are those set forth in the Bullhead City General Plan.



Growth Area Element

Introduction

Like most cities in Arizona, Bullhead City has experienced rapid growth that has transformed a small river town into a community of over 37,000 persons. Much of the development that has occurred in the City over the past two decades has been in the form of single-family subdivisions, manufactured home parks and commercial uses aligned along Highway 95. The construction of the Bullhead Parkway has now focused new residential development on the uplands part of the community.

ARS §9-461.05 requires that the City adopt a Growth Area Element. The purpose of the Growth Area Element is to direct new development into certain areas of the community based on the availability of existing or planned infrastructure, transportation, and other improvements. These areas should be capable of supporting concentrated development comprised of a variety of land uses including commercial, office, residential, tourism and industrial. In this sense, the Growth Area Element is designed to create significant activity centers or nodes in the City that provide a walkable environment, public open spaces, a mix of uses, housing choices and a sense of place, all served by adequate transportation modes.

Current Situation and Future Trends

Laughlin Ranch has committed to a number of methods to provide for its proportionate share of offsite public infrastructure improvements needed to serve the Laughlin Ranch development. The first mechanism is a voluntary contribution of development impact fees which will be assessed and collected at the time of building permit issuance. These fees have been calculated by the City to provide for various governmental services. The fees have been established in a manner which escalates over time to meet future needs. In addition, the project may utilize the Community Facility District (CFD) financing mechanism which will finance the public infrastructure costs for various on-site and off-site improvements required to serve the property. This infrastructure financing mechanism is a tool that assures that new growth areas pay towards the costs of public infrastructure development necessary to serve such development.

Road improvements both on and off-site are important components to the functioning of this development and to established commercial areas of the City. It is anticipated that road improvements may be funded and constructed utilizing the CFD, additional developer and municipal sources, as well as federal and state highway and transportation funds. As each phase of the development is finally and more specifically planned and constructed, concomitant roadway improvements shall be made to provide for a workable circulation system. Given that Laughlin Ranch shall also be developed as multiple retail, service and employment centers, it is expected that the traditional patterns of circulation shall be modified and that Laughlin Ranch shall promote more efficient and rational circulation patterns than currently exist in the area. It is expected that development at Laughlin Ranch will offer additional options for commuters decreasing sole reliance on the existing patterns/system of transportation.

Laughlin Ranch's development will enhance the ability of Bullhead City to compete more effectively for additional transportation improvement dollars and may act to speed up the scheduling and allocation of various funding resources to the Bullhead City area.

The General Plan has targeted the Bullhead Parkway as a growth area. Laughlin Ranch has 2½ miles of frontage along Bullhead Parkway making it a prime location for growth.

The overall phasing is explained in the phasing map (Figure 9). It is anticipated that the three villages will be phased out as: Phase I- North village; Phase II- Central village; Phase III-South village.

North village development has been further detailed to be carried out in 5 sub-phases. Sub-phase 1a as identified in the map is currently under construction. The golf course component is completely and currently in use. The residential lots and housing units are on sale and are being gradually occupied. This sub-phase will be followed by additional commercial and residential developments.

As explained in Circulation Element, street construction will be phased in two ways. One, based on completed sections temporary turnarounds meeting City standards will be constructed until street continuity according to the overall plan is achieved. Second, as development and property occupation will progress, the street lanes will be expanded within the secured right-of-way meeting all City standards.

Eastern portions of Laughlin Ranch Boulevard are currently under early design phase. As Section 10 becomes part of the development scenario, Laughlin Ranch Boulevard will be extended to the east to accommodate growth. Once the Central Village comes on line (2010-2012) portions of Gold Chain Parkway will be constructed. As development moves south, Gold Chain Parkway will be extended down to intersect with the Silver Creek Road thus completing an important north-south connection parallel to Bullhead Parkway.

As each development parcel based on the phasing plan is built, all amenities, parks and trail systems will be developed. Trails will be interlinked section by section as the work gradually progresses to develop Laughlin Ranch.

The ability to master plan and control over 10,628 acres will allow for an efficient vehicular circulation system, timely expansion of infrastructure and an orderly pattern of development. Open space corridors will be preserved throughout Laughlin Ranch, which extends to publicly owned land to the east. Finally, a Community Facilities District may be formed to provide for timely financed expansion of public infrastructure.

Planning Considerations

- Extensive publicity by Laughlin Ranch developers has raised the area profile.
- Further annexation will add opportunities for additional economic

development at Laughlin Ranch and Bullhead City as a whole.

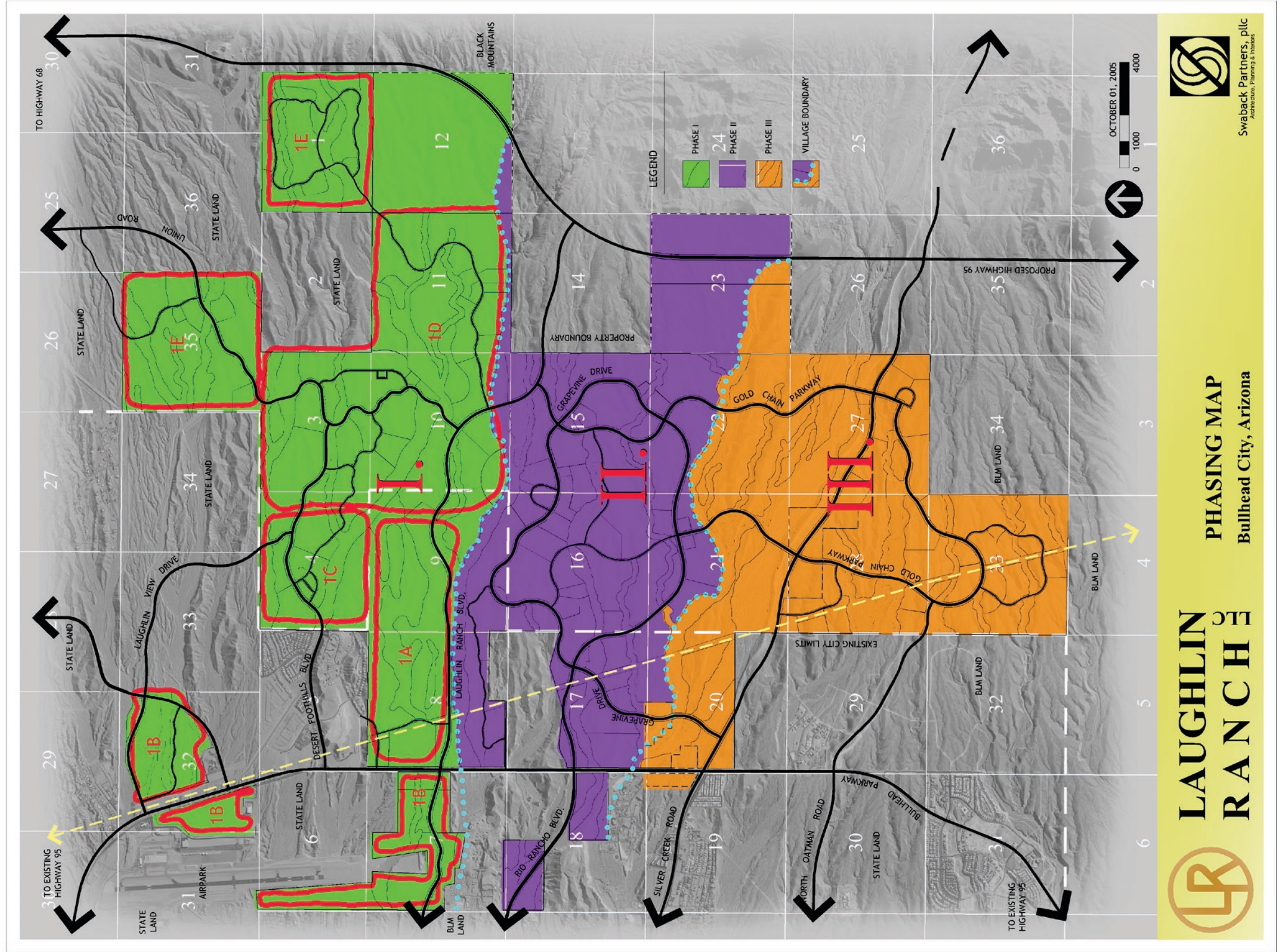
- Planning at Laughlin Ranch needs to keep pace with market changes. Good quality lifestyle, developing a sense of place within Laughlin Ranch and integration with the Bullhead City will be critical issues to address over the next few decades.
- Infrastructure upgrades will need to follow Laughlin Ranch and Bullhead City Growth Areas.

Goals, Objectives and Policies

Goals, objectives and policies are those set forth in the Bullhead City General Plan.

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Figure 9, Phasing Map



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