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Desert Discovery Center Site Location Analysis

Prepared for the City of Scottsdale, Arizona



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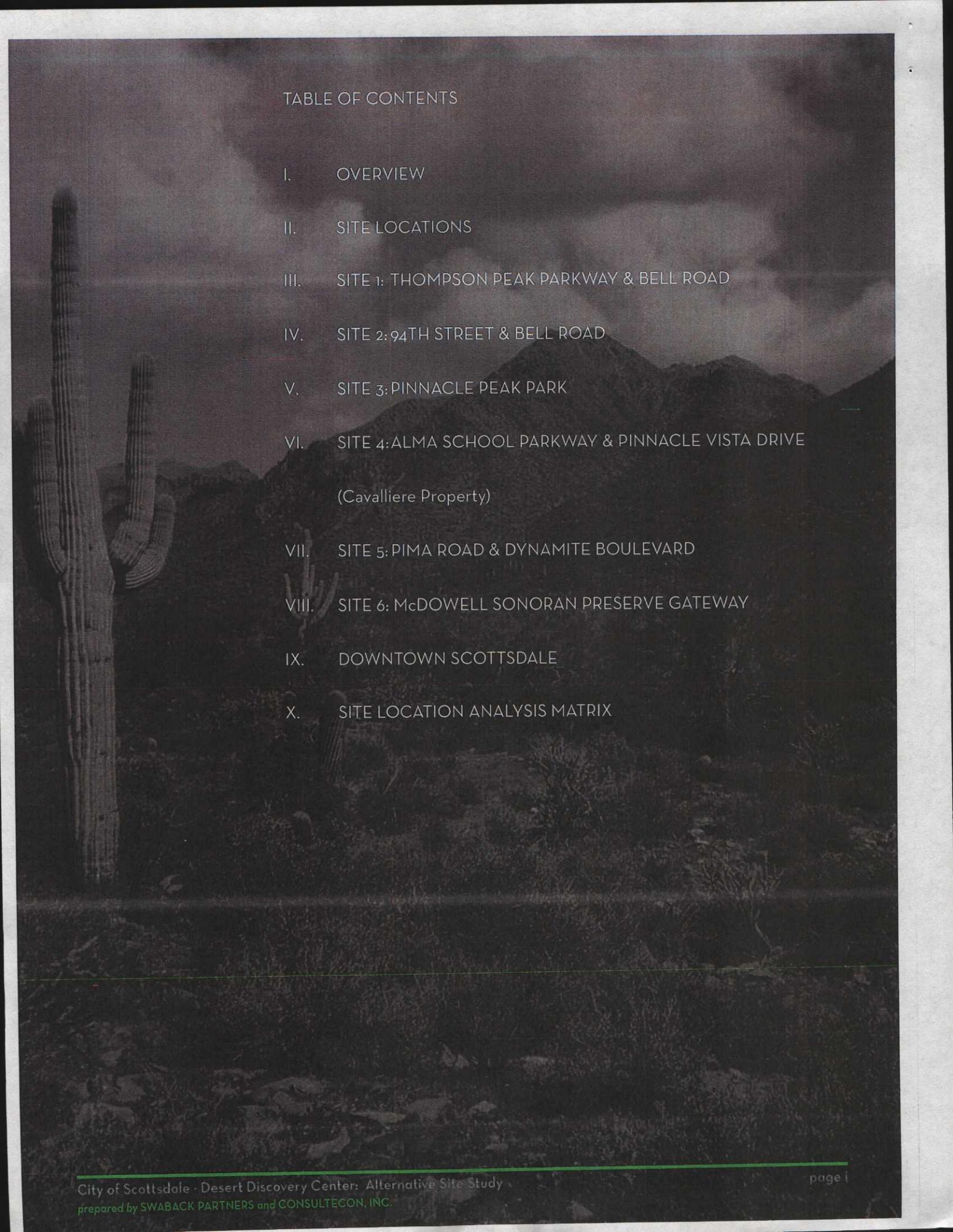


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I. OVERVIEW

Over approximately the last four years, the City of Scottsdale conducted the Phase 2 and Phase 3 Feasibility Study for the proposed Desert Discovery Center (DDC). These separate Phases of the Feasibility Study have focused on analyzing the feasibility of the DDC at a proposed project site location at The Gateway, within the McDowell Sonoran Preserve (MSP). The City has now determined it should study other possible sites for the DDC to be prudent in its work to see if another site might have more opportunities to provide flexibility in use/activity and/or less construction costs than The Gateway site. The objective of this report is to present information on a variety of the other possible sites so that they can be discussed objectively. The sites chosen for review were based on discussions with Staff, the DDC Phase 3 Feasibility Committee, and the city's McDowell Sonoran Preserve Commission, and were selected to be studied based on locations, size, availability, proximity to The Preserve, and through public suggestion.

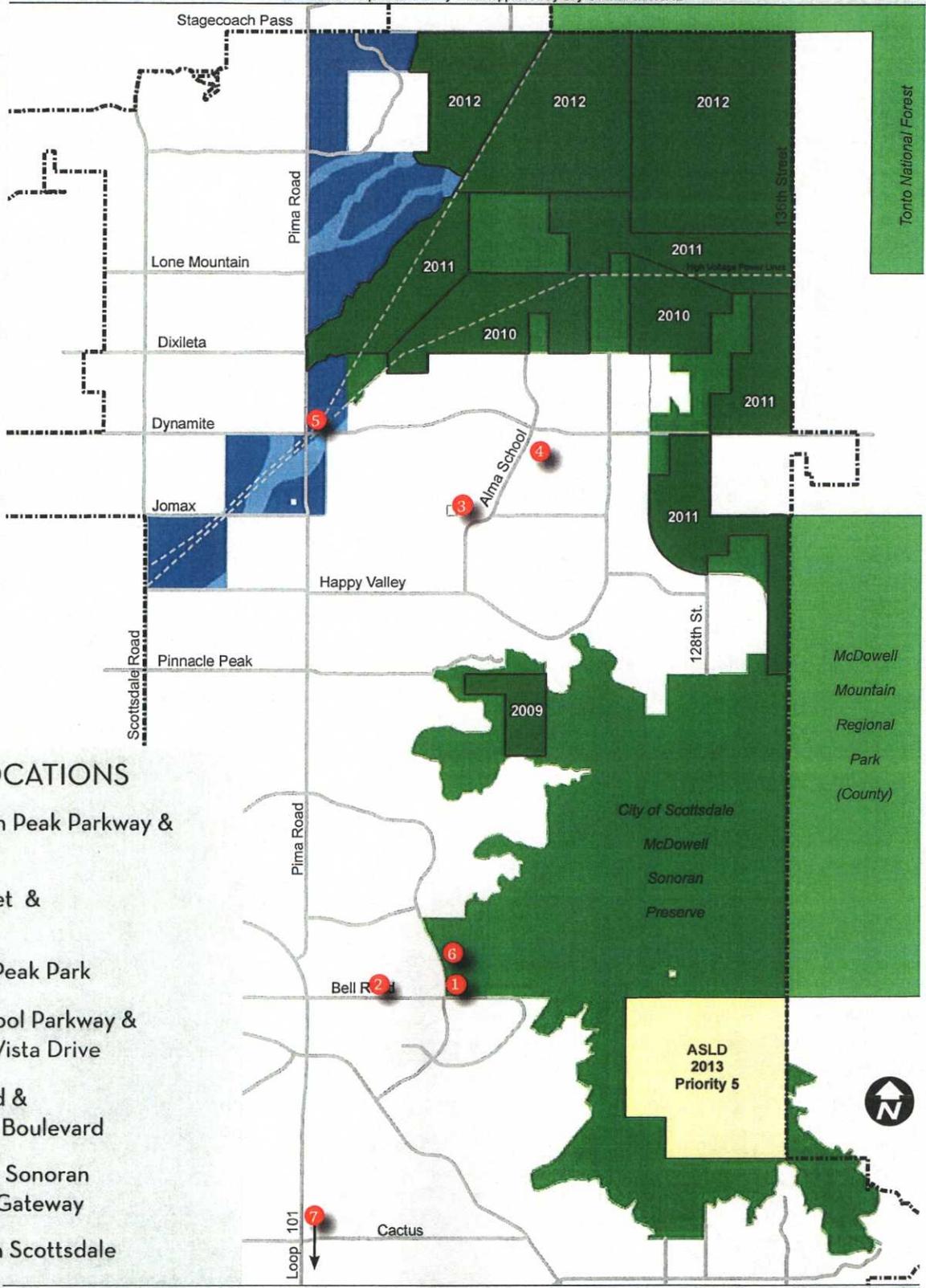
This report does not focus on specific site planning, or architectural design. Instead, this report will present general characteristics of each site that will help guide an objective evaluation by others as the discussion continues. In addition to physical site features, each site evaluates adjacent relationships, contextual factors and proximities, as well as accessibility--both from a visitor's ability to get to the site, but also its relationship to the Preserve itself. Each section includes a summary Conceptual Design Narrative for each corresponding site. This is included to help understand how each site might influence a different design direction over what was conceived during the Phase 2 Feasibility Study. The information presented will include location, neighborhood context, current zoning, overlay district designations, pertinent ordinance influences, physical site considerations, including landform characteristics, existing washes, existing vegetation, slope, and other environmental features. Additional factors are identified, such as access to infrastructure, including utilities, and the general public access, both from a site access, but also as it relates to proximity to major arterial, freeways, and public transportation. Site photos are included that show views from an approximate location of the DDC on each site, as well as, additional context photos as appropriate.

Six sites were identified for this report. Two of the six sites are located within the MSP boundaries now. One site is projected to be within MSP if it is eventually acquired. Two sites are not located within the MSP, but are adjacent to North Scottsdale park sites and have views of the MSP. One site is located out of the MSP, but can be linked with a path system thru a wash, and thru a subdivision to The Preserve. Additionally, a concept for a downtown "Portal" site is offered to support and direct interested visitors to the Preserve and the DDC. The location has not been determined, however, it is conceptually thought to be somewhere within downtown Scottsdale. The information presented for that site will be less specific to a physical location, instead focusing on more general characteristics of a downtown site. The exhibit on the following page depicts the general locations of the six northerly site. It does not depict a downtown Scottsdale site. The report is separated out into seven sections, each focused on the sites listed below:

1. Thompson Peak Parkway & Bell Road - Preserve - COS
2. 94th Street & Bell Road - Not in Preserve - COS
3. Pinnacle Peak Park - Not in Preserve - COS/as LD
4. Alma School Road & Pinnacle Vista Drive (Cavalliere Property) - Not in Preserve - Private
5. Pima Road & Dynamite Boulevard - Future Preserve Potential - ASLD
6. McDowell Sonoran Preserve Gateway - Preserve - COS
7. Downtown Scottsdale - "Portal" Concept

Preserve Land Status - November 2012

Note: Acquisition Priority 5 was approved by City Council on 7/3/12



Map Date: November 2012

II. SITE LOCATIONS

- 1 Thompson Peak Parkway & Bell Road
- 2 94th Street & Bell Road
- 3 Pinnacle Peak Park
- 4 Alma School Parkway & Pinnacle Vista Drive
- 5 Pima Road & Dynamite Boulevard
- 6 McDowell Sonoran Preserve Gateway
- 7 Downtown Scottsdale



Acres

ASLD 2013 Priority 5	ASLD Not Restricted	ASLD No Reclass	COS owned or preserved
2,400	581	3,521	27,800

Acres



Note: All acreage figures are approximate.

Description:

- Quarter Section 37-52 (SE Corner)

Size:

- Approx. 40 Acres

Zoning:

- R1-10 PCD ESL & R1-18 ESL & R1-10 ESL
- (Assume COS ESL in future)

Land Ownership Status:

- City of Scottsdale - McDowell Sonoran Preserve

Environmentally Sensitive Lands (ESL):

- Lower Desert ESL Landform (Map 24)

Natural Area Open Space (NAOS):

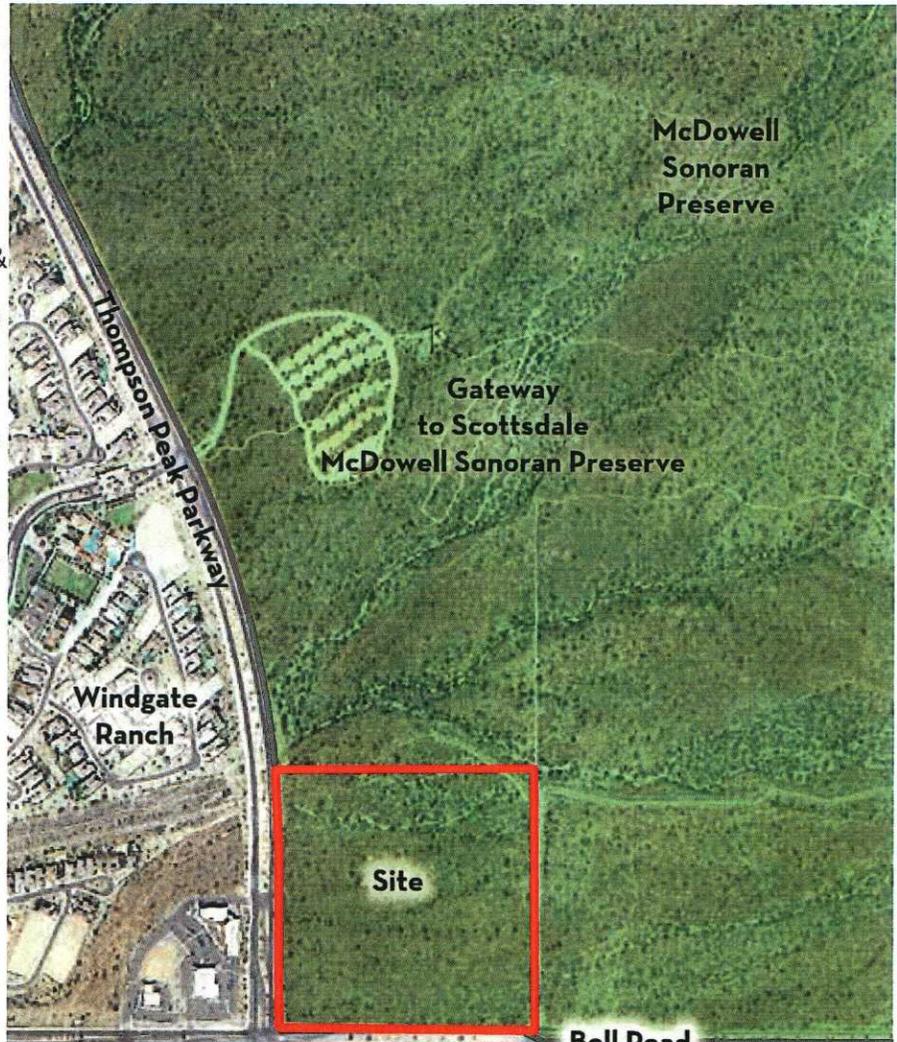
- High Priority NAOS (Map 24)

General Plan Character Area:

- Future Native Desert Character Area 6 (General Plan 2011)

Other Considerations:

- FEMA Flood Zone X
- Airport Influence Area: AC-1
- Bikeways: Dedicated Bike Lane & Shared Use Path



Site Context

EVALUATION CRITERIA:

This site is situated within the McDowell Sonoran Preserve. Located on the northeast corner of Thompson Peak Parkway and Bell Road, the site is approximately forty acres, with direct frontage on two arterial roads. It is in close proximity to the Gateway facility, which lies about one half mile to the north, but separated by a series of washes along its northern boundary.

It lies within the Preserve, which offers it unobstructed views of the McDowell Mountains. McDowell Mountain Ranch lies immediately to the south of Bell Road. Its immediate neighbor to the west is a small commercial center, and Windgate Ranch.

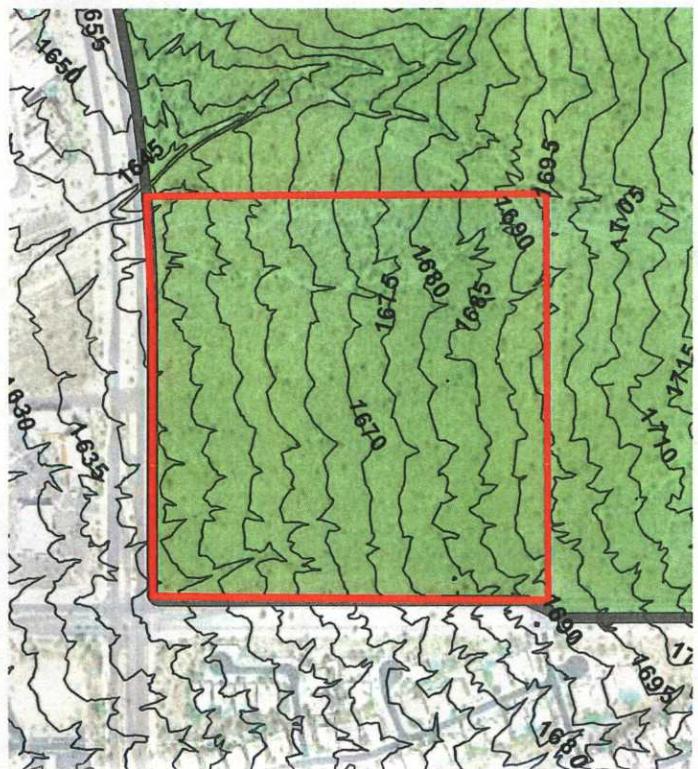
The exhibit on the previous page shows an enlarged aerial view of the subject site, along with pertinent site facts related to it. The exhibits on the following pages depict more detailed information related to the natural features.

The site is typical of a lower desert bajada. The aerial on the right depicts lower desert landform, with scattered vegetation cover. Braided washes along its northern boundary shows denser, more concentrated vegetation cover, both in density and size. An access point into this site aligns with 104th Street.

There is a gentle slope from east to west, with a gradient of about 4% for this site. This gentle rise continues east before rising dramatically to the McDowell Mountains and Thompson Peak almost 1/2 mile to the east. A more proximate set of hillforms to the northeast include a series



Aerial Context



Topography / Slope Context

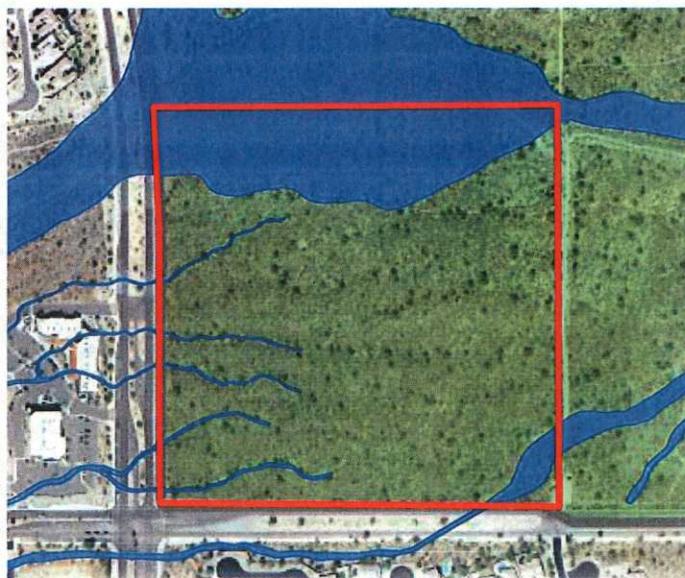
of trails that are part of the Gateway Trailhead, and these trails thread along the northern boundary of the subject site, and ultimately Thompson Peak Parkway.

There are several washes that braid through the site. The major wash along the northern boundary continues under Thompson Peak Parkway, with controlled drainage corridors within Windgate Ranch immediately west of the site.

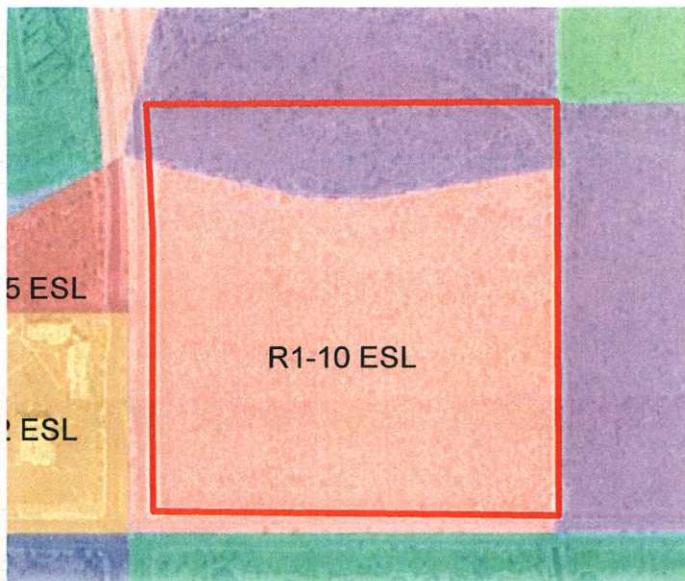
This site benefits from existing infrastructure on the two arterial roads on which it fronts--Thompson Peak Parkway and Bell Road. These offer flexible points of ingress and egress into the site. Additionally, the 101 Loop is three miles travel distance from the off-ramp at the 101 Pima exit. Other utilities are also accessible off each of these two arterial roads, including wet and dry utilities.

Distance to 101/Pima - 3 Miles

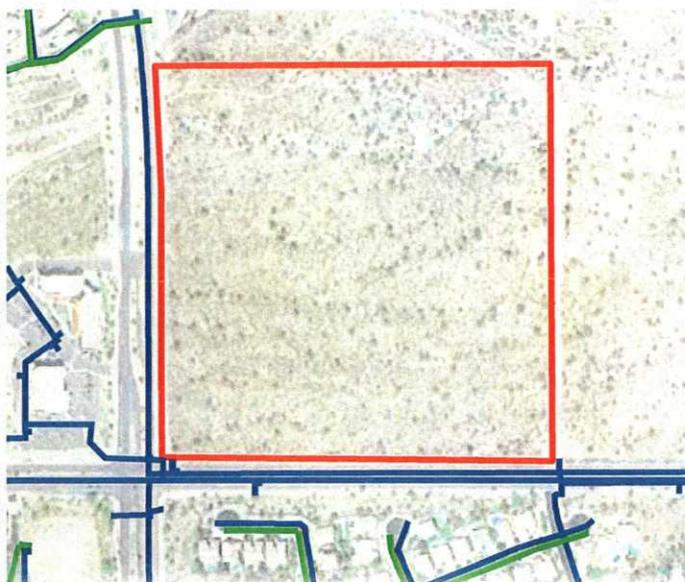
The following pages offer site panoramic photographs of the site oriented toward each of the cardinal directions, followed by a brief conceptual design narrative specific to this site.



Drainage / Wash Context

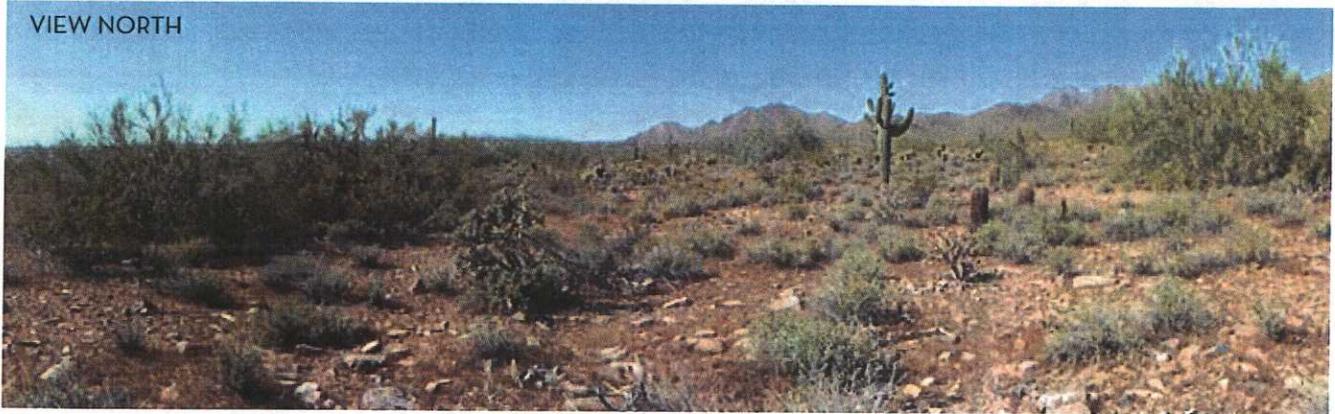


Zoning Context



Utility Context

VIEW NORTH



VIEW EAST

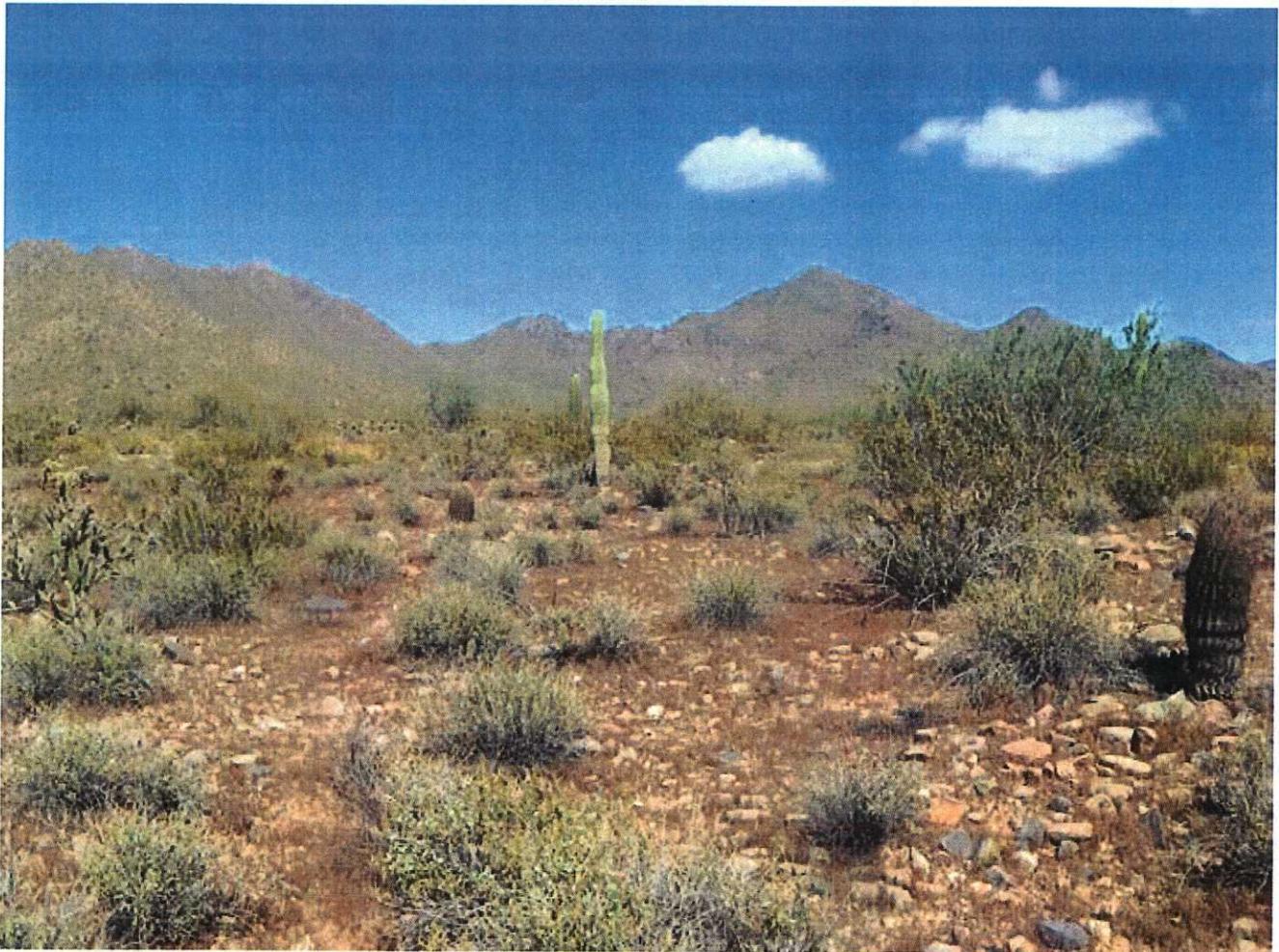


VIEW SOUTH



VIEW WEST





Conceptual Design Narrative

Easterly and northeasterly views of The Preserve dominate this site giving it a majestic setting for the DDC to be well integrated into the site. Direct access to Thompson Peak and Pinnacle Peak gives it perhaps a better opportunity for ingress and egress than is possible at The Gateway site. With 40 acres, the site is sized appropriately to be able to give a “sense of entry” in through a desert environment thus setting the stage for the visitor to enjoy a transition into an experience in the Sonoran Desert. Given that the site is so close to The Gateway and WestWorld site, it offers an opportunity to work with shared parking by using shuttle vehicles when there might be larger events. The current concept design for the DDC would be able to be transferred to this site with minor adjustments, should the same program be kept. Some traffic noise is evident on this site that will need to be mitigated. Being so close to The Gateway site the need to duplicate parking that exists there and could otherwise be shared makes the environmental impact on The Preserve probably greater by using this site. Neighborhoods to the south and west will need to be addressed in the design to minimize the impact of adjacency.

Market and Operating Considerations

Site 1 at Thompson Peak Parkway & Bell Road is highly accessible about 3 miles directly east of the Hwy 101 and East Bell intersection. This site could be designed to have a visible entry and to have good wayfinding signage. The site entrance would be seen prominently from a moderate traffic volume road. The facility itself might also be visible from nearby areas and the roadways which would enhance visibility, but conversely might not support an immersive visitor experience. The site's size would support the full DDC program. As Site 1 is easily accessible and would immerse visitors in the desert environment, it would serve residents, tourists and school groups well. However, the site quality is not as good as the Site 6 Gateway site, and at Site 1, new access road and site infrastructure would be needed. Site 1 would not be as well linked to the Preserve trail system as the Gateway site - particularly the Handicap accessible Bajada Nature Trail. On site activities would be more restricted than at the Gateway location. Length of stay on site would likely be shorter, opportunities to interact with the desert environment less impactful. The opportunity to combine with and enhance the Gateway site infrastructure and trails would be lost. Attendance patterns at the DDC would not fully benefit from the on-site presence of the users of the Gateway trailhead, and opportunities for food service and retail would also be reduced based on a less dramatic site and not having the Gateway trailhead users on-site.

The DDC's mission could be fulfilled at this site, but not to the degree as at the Gateway site. Attendance and operating potential is somewhat lower than at the Gateway site. Based on its market potential and lower degree of visitor engagement possible on-site, the economic viability of this site is lower than at the Gateway site. The tourism benefits and economic impacts at this location would be somewhat lower than at the Gateway, but this is a reasonable alternative to the Gateway site.

Description:

- Quarter Section 37-50 (SE Corner)

Size:

- Approx. 80 Acres

Zoning:

- R1-7 ESL (HD) PCD

Land Ownership Status:

- City of Scottsdale

Environmentally Sensitive Lands (ESL):

- Lower Desert ESL Landform (Map 24)

Natural Area Open Space (NAOS):

- High Priority NAOS (Map 24)

General Plan Character Area:

- Future Native Desert Character Area 5/7
- (General Plan 2011)

Other Considerations:

- FEMA Flood Zone AO
- Airport Influence Area: AC-1 (55 DNL)
- Bikeways: Dedicated Bike Lane & Shared Use Path



Site Context

EVALUATION CRITERIA:

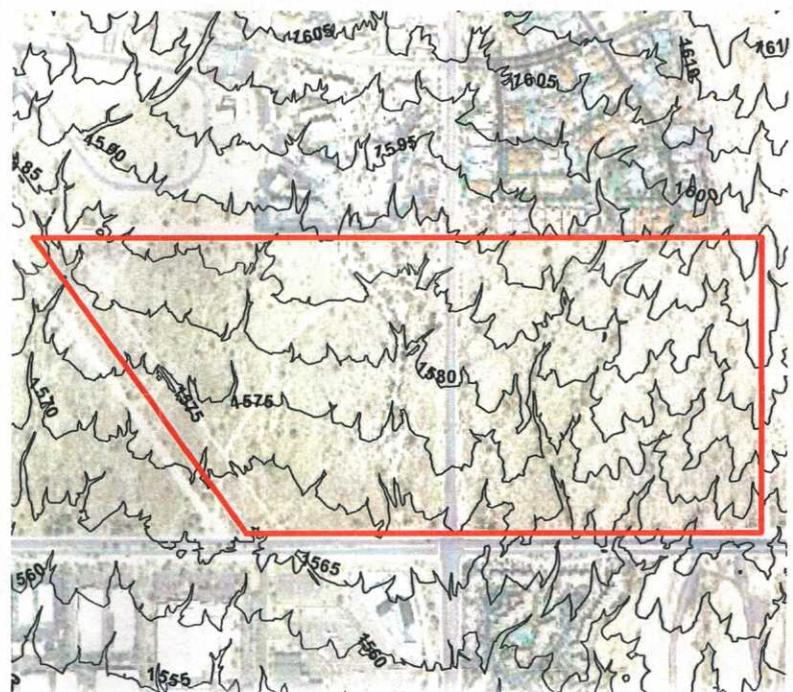
The 94th Street and Bell Road site is located one mile west of the McDowell Sonoran Preserve. This property is approximately 40 acres with Bell Road as its southern boundary and 94th Street, which runs north-south, splitting the site into two separate parcels. It is in close proximity to the Gateway facility, which lies about one mile to the east and one half mile north. Although it is not directly connected to the Preserve, a future planned trail easement through Windgate Ranch will allow access to the Preserve via a trail along Reatta wash.



Aerial Context

DC Ranch (Planning Unit 1) lies immediately to the north of subject site. The Salida del Sol condominiums residential development is located on the southeastern corner of Bell and 94th Street. Its immediate neighbor to the east is Windgate Ranch. Across Bell Road along the western half of the property is commercial development. One half mile to the south is WestWorld, a multi use event and equestrian center. Located directly 1.5 miles west is the TPC Scottsdale. Approximately 1.5 miles to the south-west is Scottsdale Airpark.

The most likely usable area is the eastern parcel, with the western parcel limited by an existing wash running north-south along its eastern edge and an electrical transmission easement with overhead



Topography / Slope Context

powerlines along its western edge. Access to the site is available on both Bell Road and 94th Street.

Although separated from the Preserve, unobstructed views of the McDowell Mountains are available toward the northeast and east respectively. Awareness of the DDC use would be enhanced by visibility to the site, accentuated by both the gradual rise in elevation from Bell Road and the volume of traffic on Bell Road. Views of the Desert Discovery Center's pavilion roof forms would likely be visible from the 101 freeway, approximately 1.5 miles west of the likely usable eastern portion of this site.

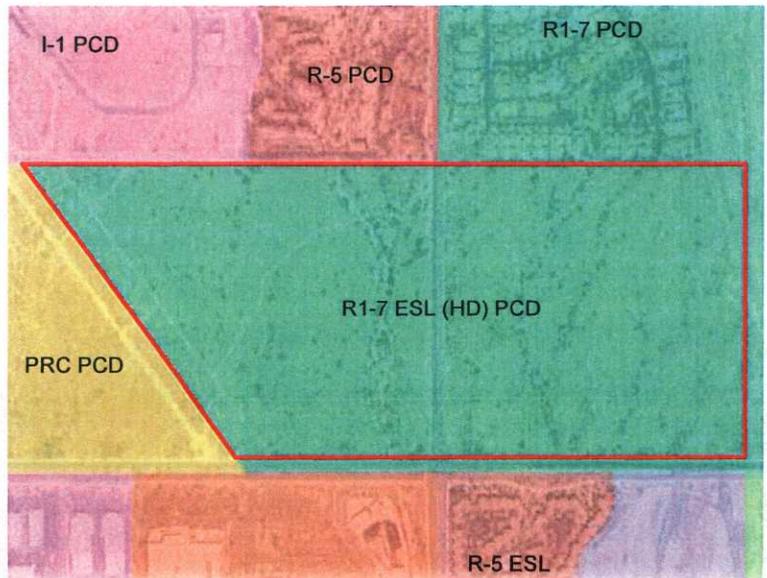
Distance to 101/Pima - 1.5 Miles

Shared use parking opportunity at WestWorld.

The following pages offer site panoramic photographs of the site oriented toward each of the cardinal directions, followed by a brief conceptual design narrative specific to this site.



Drainage / Wash Context

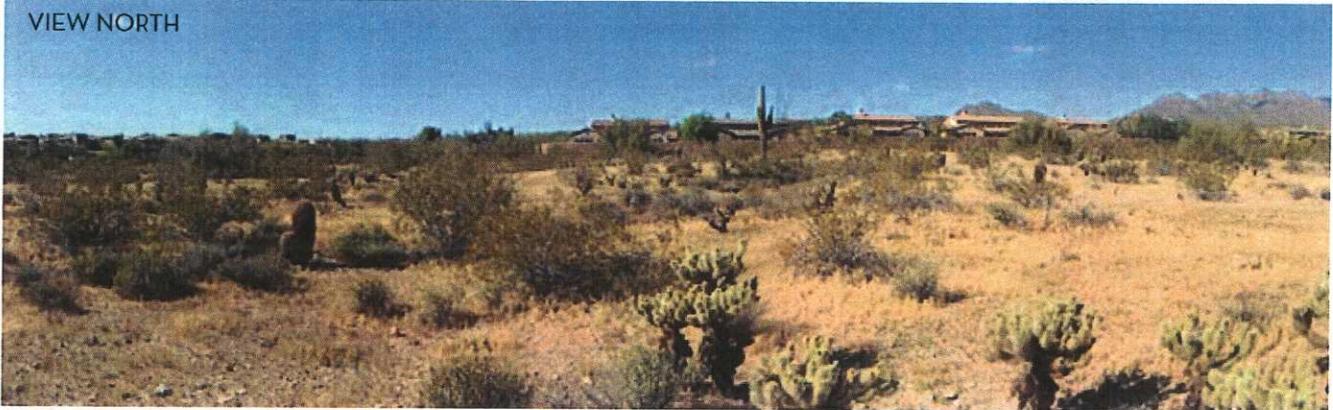


Zoning Context

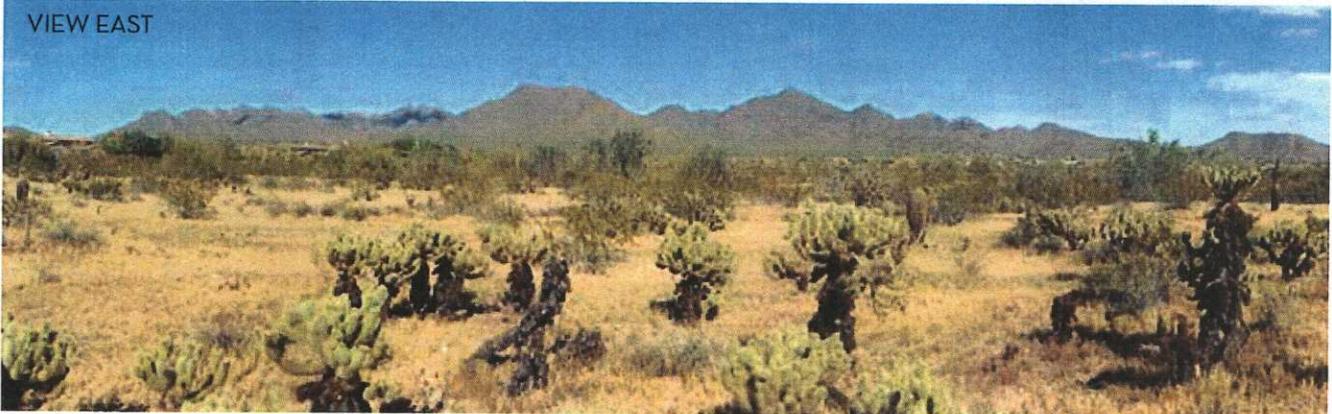


Utility Context

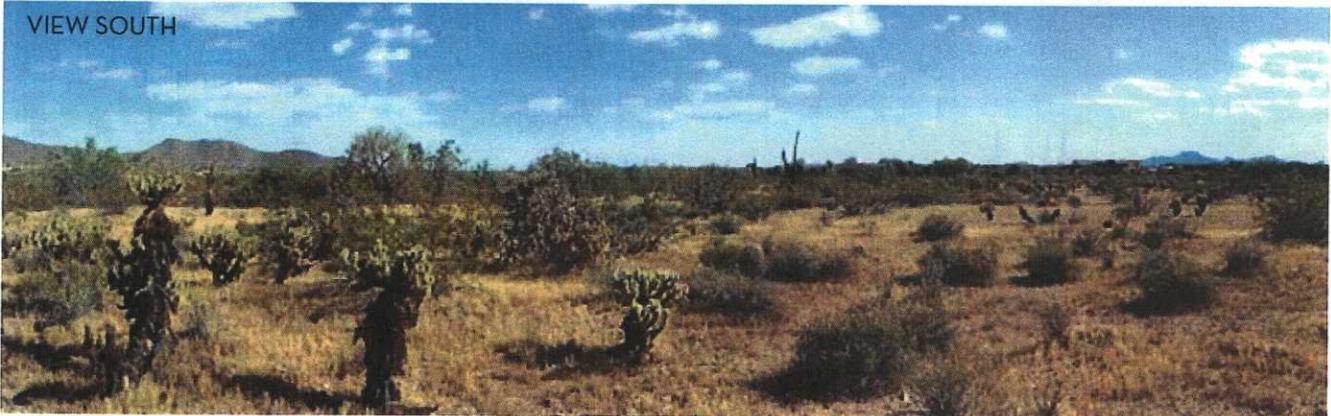
VIEW NORTH



VIEW EAST



VIEW SOUTH



VIEW WEST





Conceptual Design Narrative

Considering that this site is bisected by 94th street, it is assumed that preferred use would be on the approximately 40 acre site to the East. Easterly views to The Preserve exist, but will have a fair degree of foreground views of residences within the view shed. The site having residences directly up against the northern property line, and in the future, near the eastern property line, plus airport flight noise would suggest that the initial design concept for the DDC prepared for The Gateway site would need to be altered. For this site, an internal design Courtyard/Pavilion with framed views to the east. Also, it would be assumed that a setback buffer/or appropriate uses would need to be built-in to respect the adjacent residences. The parking lot may be more compact with tighter landscape islands, and opportunity for shared parking/shuttles of WestWorld. Excess open space on the site will probably be located near the edges of the site to allow for buffer. More of the building will be solid walls rather than the expanse of glass that was shown in the Phase 2 study due to the views being more affected by adjacent residences. The site connection to the actual Preserve would be through an existing wash that goes between residences and then crosses Thompson Peak Parkway, thus losing the pristine interconnection the DDC had at The Gateway site. It might be assumed most visitors would visit the DDC then drive over to The Gateway for trail access. The interpretive exhibits and overall concept would generally be left intact.

Market and Operating Considerations

Site 2 is highly accessible at less than 1.5 miles directly east of the Hwy 101 and from the Pima/East Bell intersection. This site would be highly visible and could be readily signed. The facility would be seen prominently from nearby areas and roadways. The site size would support the full DDC program, as currently developed. As Site 2 does not lend itself to creating an immersive visitor experience in the desert environment and would not provide ready access to McDowell Sonoran Preserve trails. Therefore, its appeal to residents, school groups and tourists would be lower than Sites 1 and 6. On site activities would be more restricted than at the Gateway location. The length of stay on site would likely be shorter, and opportunities to interact with the desert environment would be limited. The opportunity to combine with and enhance the Gateway site infrastructure and trails would be lost. Opportunities for food service and retail would be limited based on the site's characteristics and not having the Gateway trailhead users on-site.

The DDC's mission could only be partially fulfilled at this site. Attendance and operating potential is lower than at than Sites 1 and 6. Based on its market potential and lower degree of visitor engagement possible on-site, the economic viability of this site is lower than at Sites 1 and 6. The tourism benefits and economic impacts at this location would be lower than at Site 1 and Site 6.

Description:

- Quarter Section 49-52 (SE Corner)

Size:

- Approx. 20 Acres

Zoning:

- SC ESL / C-2 ESL (HD/HC)

Land Ownership Status:

- City of Scottsdale (3 acres)
& Arizona State Land
(acres)

Environmentally Sensitive Lands (ESL):

- Upper Desert ESL Landform (Map 37)

Natural Area Open Space (NAOS):

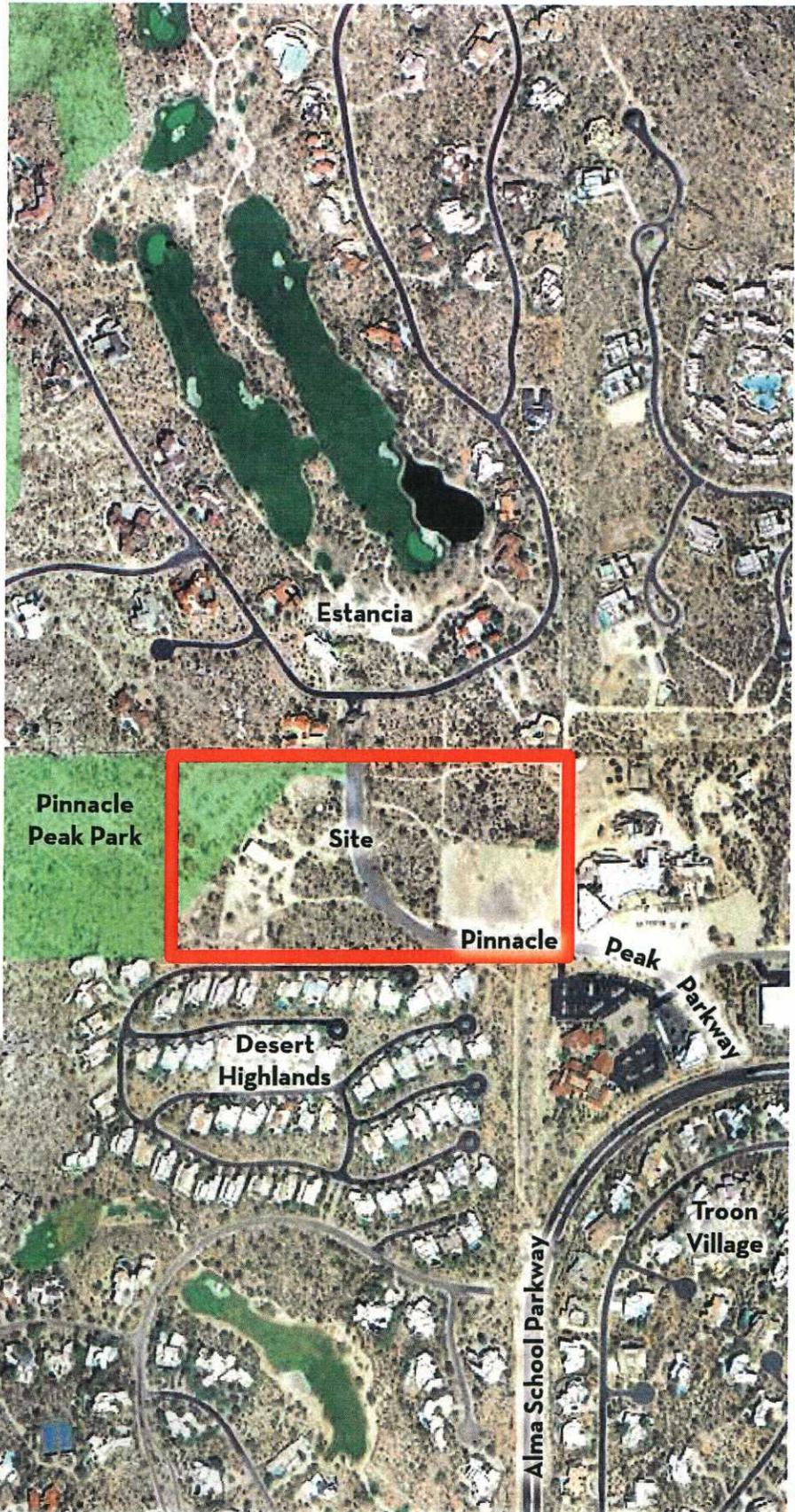
- High Priority NAOS (Maps 37)

General Plan Character Area:

- Future Native Desert Character Area 10
- (General Plan 2011)

Other Considerations:

- FEMA Flood Zone X



Site Context

EVALUATION CRITERIA:

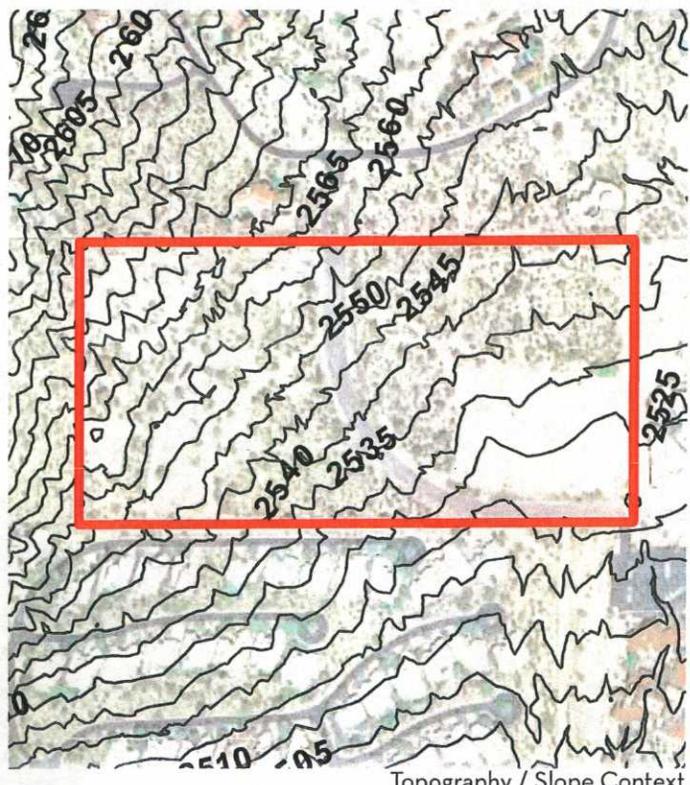
The Pinnacle Peak Park property is located at the west end of Jomax Road. The approximately twenty-acre site is bisected by 102nd Way, which provides access to the Estancia residential development, Pinnacle Peak Park, off of Alma School Parkway.

The general landform falls from west to east, and is relatively sparsely vegetated. There exists a large, approximately 2.5 acre cleared area in the south-east corner of the property that was previously used as parking for the commercial development to the east. Leading from this area are two trails that lead to the Pinnacle Peak trailhead. There exists approximately 30 saguaro cacti along the western edge of the eastern half of this property providing variety in natural desert landscaping.

The northern boundary to this property is the Estancia residential development. Directly west and adjacent to the property is Pinnacle Peak Park. The commercial development immediately east and adjacent to the property contains the Pinnacle Peak Patio Steakhouse and Microbrewery. The Desert Highlands residential development lies to the south-west of the property and a commercial development lies to the south-east containing the Sassi restaurant and Pinnacle Peak realty. Disconnected from the McDowell Sonoran Preserve, access to the Preserve lies approximately two miles north at Browns Ranch Trailhead and two miles to the east along Jomax Road, although no additional trailheads exist in the proximity of Jomax Road and 118th Street where the road terminates.



Aerial Context



Topography / Slope Context

The western portion of this property is currently home to the Pinnacle Peak Park trailhead, including a trailhead building and parking for approximately 90 vehicles. This trailhead sees approximately 250,000 visitors per year and most likely requires expansion of its parking area. Therefore the most likely usable area of this property for the DDC is the approximately 7.5 acre eastern portion, or realign 102nd Way between 102nd Way and the Pinnacle Peak Patio Steakhouse. In this area the existing disturbed area lends itself for continued use as parking. Access would be from Jomax Road.

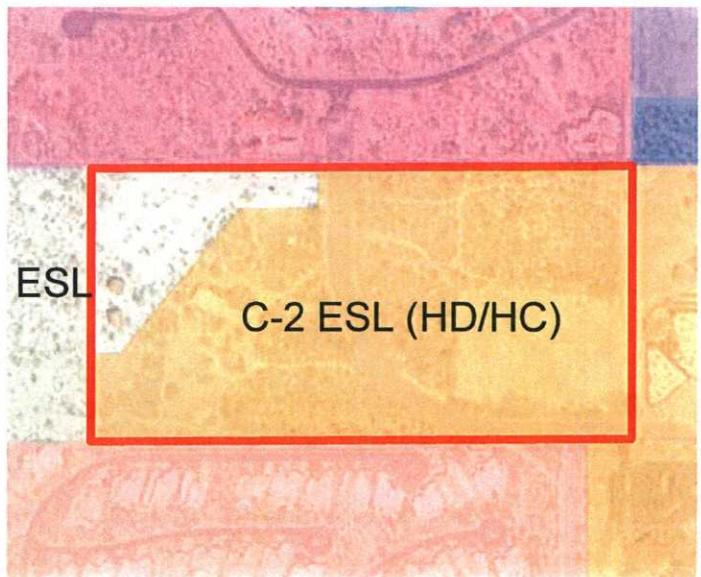


Drainage / Wash Context

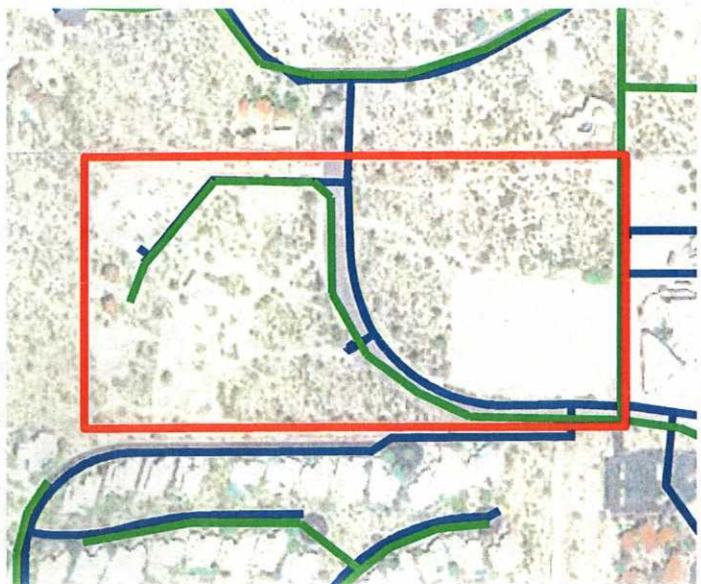
Although separated from the Preserve, unobstructed views of Pinnacle Peak are available immediately to the west. Views of Troon Mountain and the northern McDowell Range are made available toward the southeast.

Distance to 101/Pima - Over 7.5 Miles

The following pages offer site panoramic photographs of the site oriented toward each of the cardinal directions, followed by a brief conceptual design narrative specific to this site.

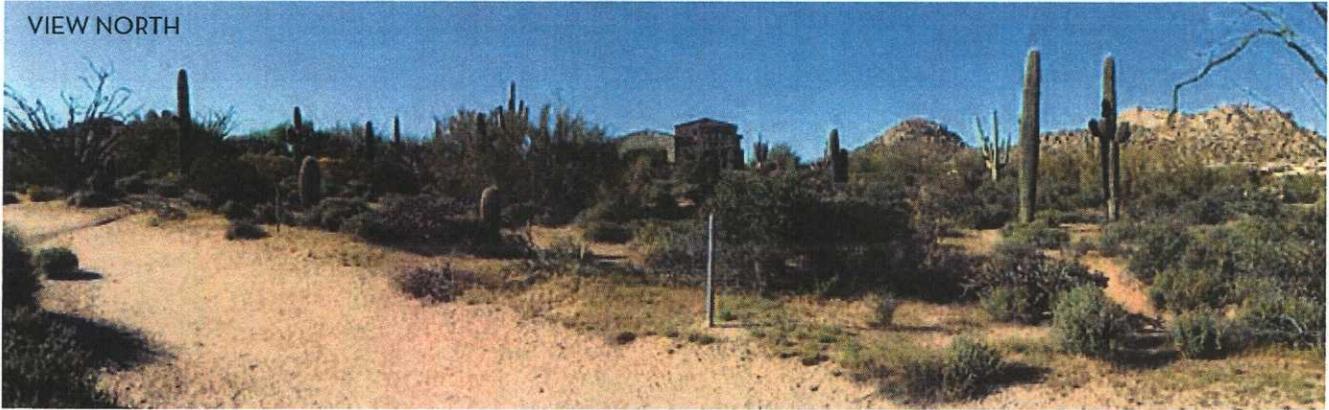


Zoning Context

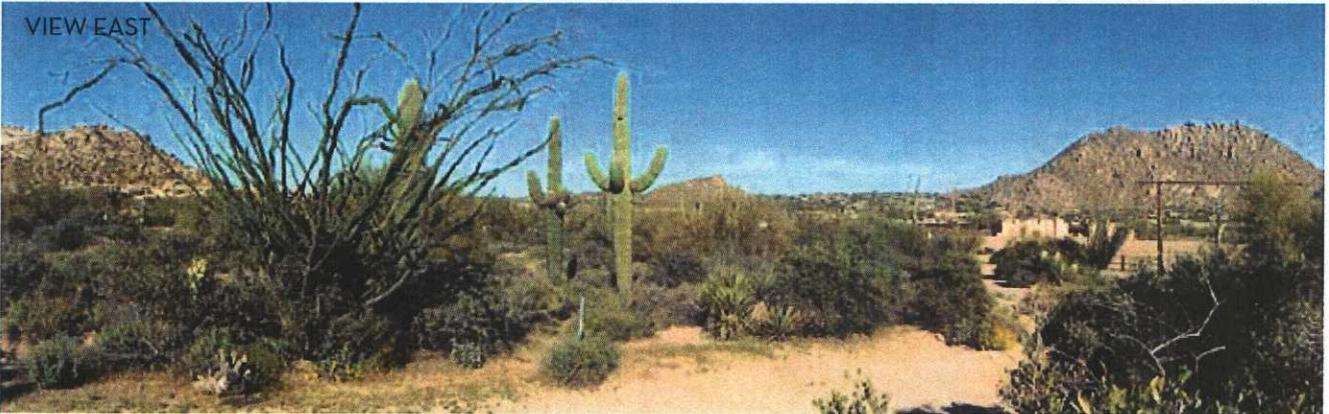


Utility Context

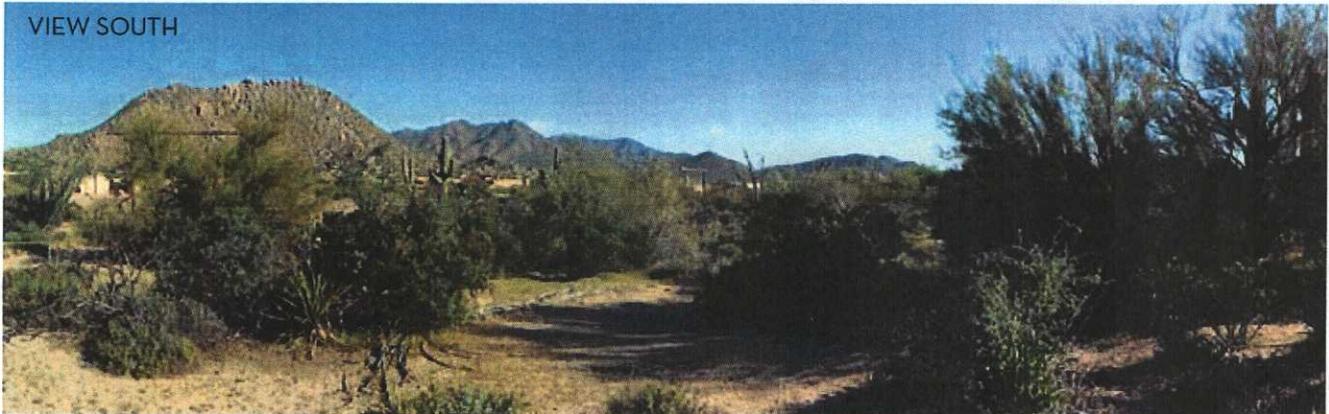
VIEW NORTH



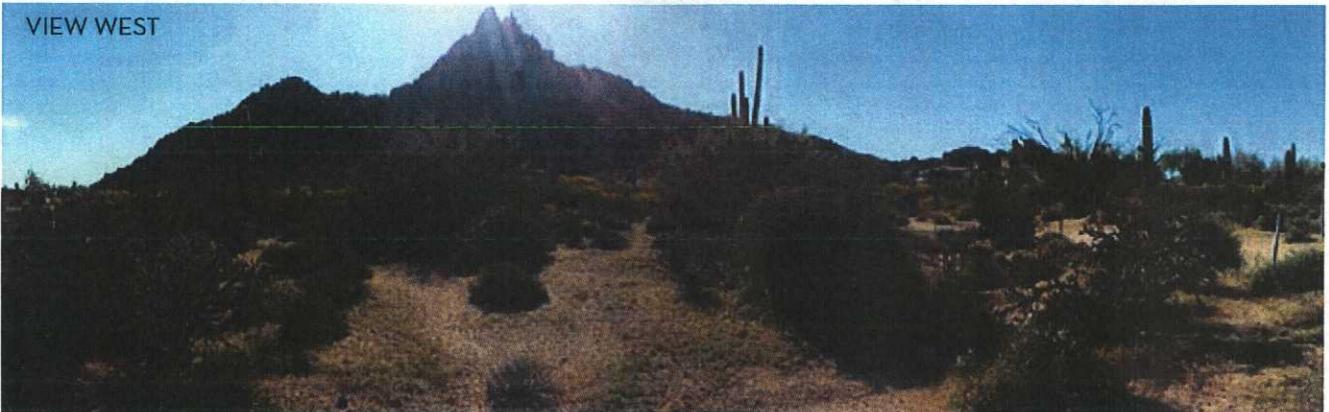
VIEW EAST

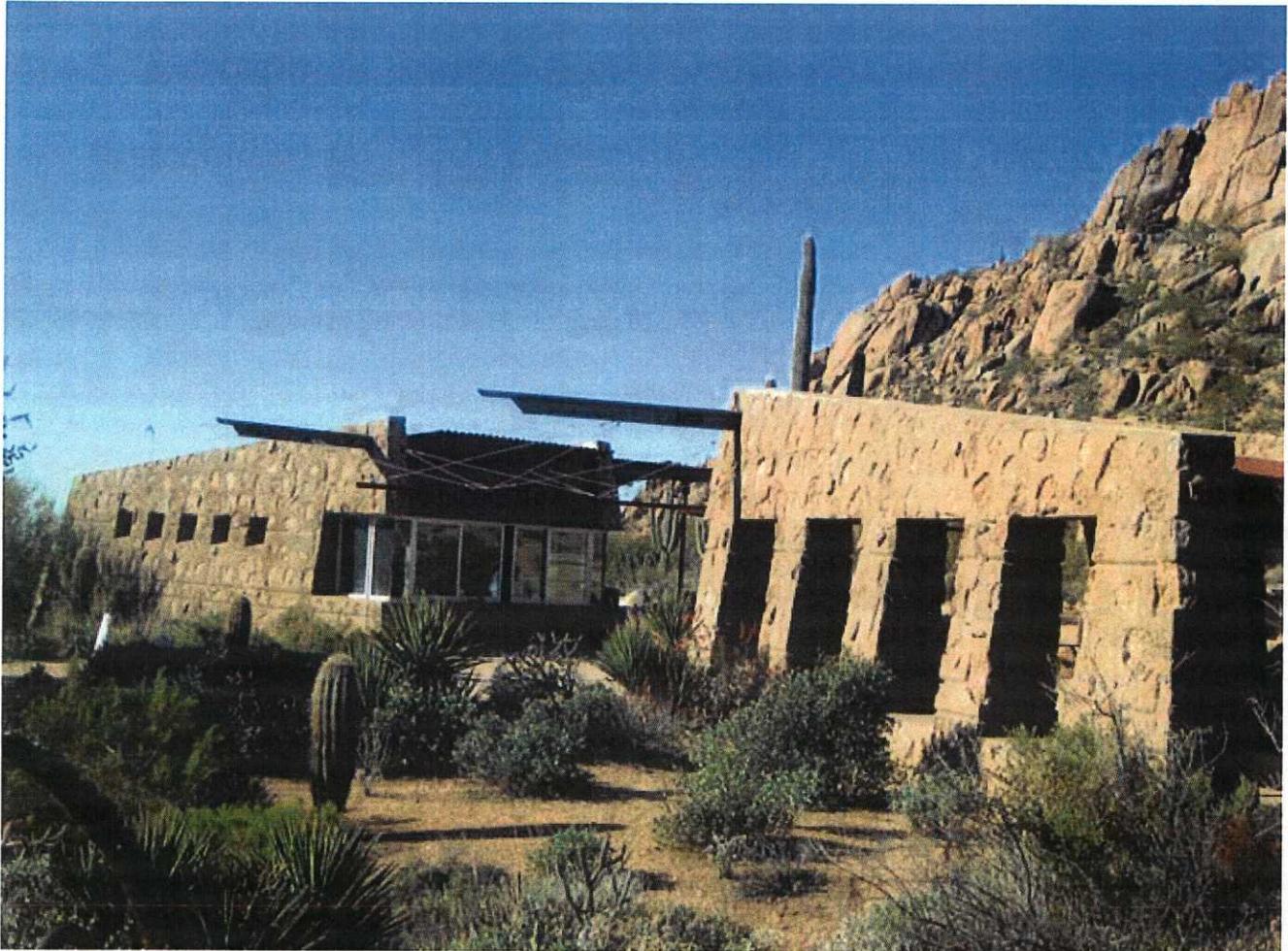


VIEW SOUTH



VIEW WEST





Conceptual Design Narrative

This site is currently developed as Pinnacle Peak Park with a powerful view of Pinnacle Peak to the northwest. It would be envisioned that this site would be conceptually integrated with the current facilities much like the Phase 2 drawings did with The Gateway facilities. The site would probably dictate a significantly smaller facility, and a completely different concept than the Feasibility Study concept, due to site constraints and anticipated comments from surrounding residents. The DDC would be more associated with Pinnacle Peak at this site rather than the MSP, since there would not be any direct connection to The Preserve. Existing parking would need to be expanded. The new plan for the DDC could attempt to heal the areas of the site that are currently scared. This site does offer the opportunity of connecting with the existing trail to Pinnacle Peak. However, given the lack of significant amount of trails, they might become overused if the DDC becomes an attractive destination. The distance to this site from a major freeway should also be considered as a potential for less visitation as well as affecting the economic viability of the site. The concept presented in the Phase 2 study of the building materials would probably be adjusted to integrate with the existing architecture of the park.

Market and Operating Considerations

Site 3 is not highly accessible to resident and tourist markets because it is nearly an 7.5 mile drive north from the interchange of Hwy 101 and Pima Road. This distance reduces the accessibility to resident and tourist markets, especially for school groups where the additional distance creates an impediment to visitation. Its visibility to general traffic is limited, as the site is not located on a major thoroughfare, but it would be exposed to the many users of Pinnacle Peak Park. While Pinnacle Peak Park receives heavy use (about 250,000 uses annually), it is reasonable to assume that there is a high degree of repeat use, and thus fewer individual users. The DDC at this site would benefit from an association with the desert landscape at Pinnacle Peak Park. However, this park is not part of the McDowell Sonoran Preserve, and already has a considerable volume of daily use which the co-location of the DDC would increase. The site size would not support the full DDC program and additional parking would need to be created. Adjacent uses include housing and commercial development. Based on the site related factors and potentially high volume of current and future site visitation, Site 3 does not lend itself to creating an immersive visitor experience in the desert environment. It would not provide access to McDowell Sonoran Preserve trails. Therefore, its appeal to residents, school groups and tourists would be lower than Sites 1 and 6. On site activities would be restricted by the smaller site size and length of stay on site would likely be shorter. Opportunities to interact with the desert environment would be limited. Opportunities for food service and retail might benefit from the high daily use patterns at Pinnacle Peak Park, but the potential to create a unique dining opportunity would be challenged by the site's characteristics.

The DDC's mission could only be partially fulfilled at this site. Attendance and operating potential is much lower than at Sites 1 and 2. Based on its market potential and lower degree of visitor engagement possible on-site, the economic viability of this site is lower than at the Gateway site. The tourism benefits and economic impacts at this location would be lower than at Site 1 and Site 2.

SITE 4

ALMA SCHOOL PARKWAY & PINNACLE VISTA DRIVE (Cavalliere)

Description:

- Quarter Section 37-52 (SE Corner)

Size:

- Approx. 38 Acres

Zoning:

- R1-7 ESL (HD) PCD

Land Ownership Status:

- Privately Held

Environmentally Sensitive Lands (ESL):

- Upper Desert ESL Landform (Map 24)

Natural Area Open Space (NAOS):

- High Priority NAOS (Map 38)

General Plan Character Area:

- Future Native Desert Character Area 10 (General Plan 2011)

Other Considerations:

- FEMA Flood Zone X



Site Context

EVALUATION CRITERIA:

This thirty-eight acre site is situated on the south-east corner of Alma School Parkway & Pinnacle Vista Drive, between Jomax Road, and Dynamite Boulevard, approximately two miles west of the McDowell Sonoran Preserve. A direct Preserve connection does not exist from this site.

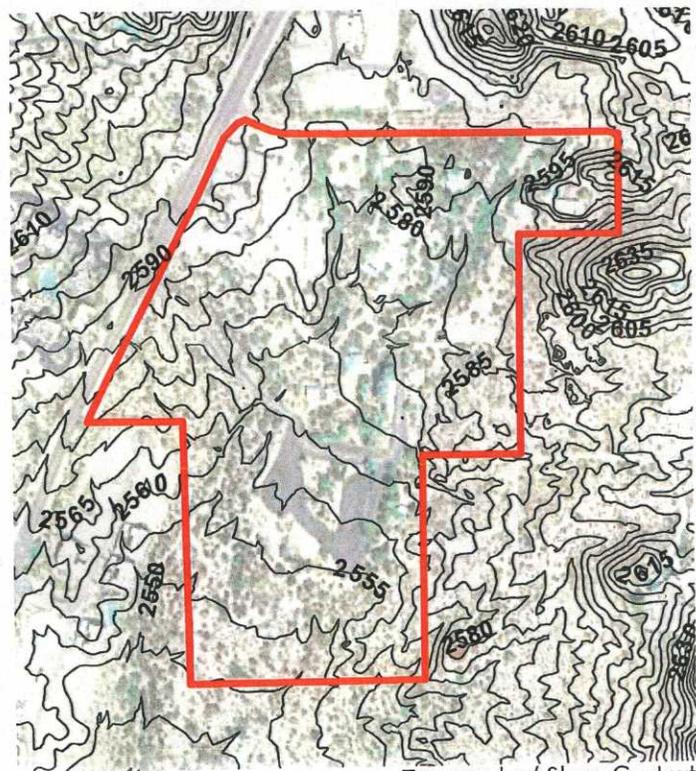
The general landform description can be summarized as undulating with existing disturbance, with numerous pockets of development and associated parking. In the larger context this area is at a relatively low point of the surrounding areas and promotes vegetative growth. Currently present on site is the Greasewood Flat bar and restaurant, as well as the presently closed Reatta Pass restaurant located on the north-west corner. The north-east portion of the property is occupied by a loose collection of numerous small residential structures, parking and storage areas.

Adjacent properties include the Rocks Club Condominiums to the west, the Four Seasons Resort at Troon North to the south-west, residential development across Pinnacle Vista Drive to the north, residential development to the east and finally open undisturbed land to the south. A small commercial property sits across Alma School Parkway, on the south-west corner of Alma School Parkway and Pinnacle Peak Drive.

The most likely usable area of this property would be the north-west corner presently occupied by the presently closed Reatta Pass restaurant. This portion is currently already



Aerial Context



Topography / Slope Context

disturbed and access could be provided off of Alma School Parkway. This area also includes off-street parking along Alma School Parkway.

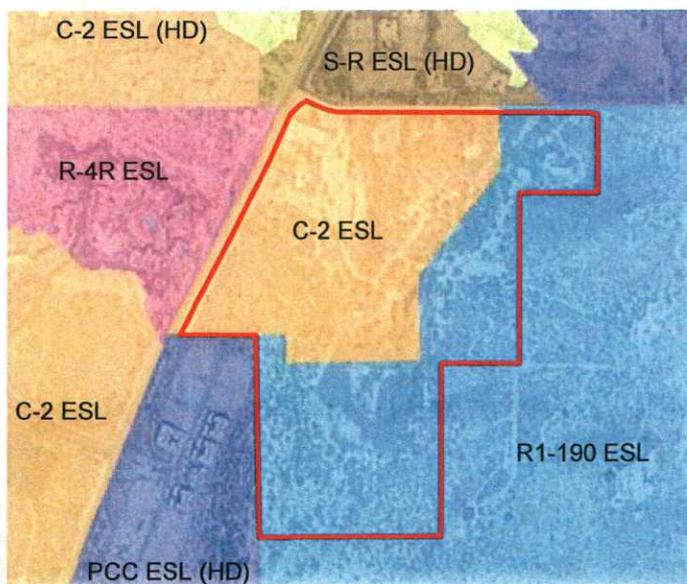
Views from the site include Pinnacle Peak to the west, Troon Mountain approximately one mile to the south and the northern edge of the McDowell Mountains approximately two miles to the south. Visibility to the site is high on the north-west corner, whereas much of the remaining site sits below the Alma School Parkway elevation and would not have a high degree of visibility. Relatively dense vegetation exists along the western edge of the property, limiting visibility from Alma School Parkway.

Distance to 101/Pima - Over 8 Miles

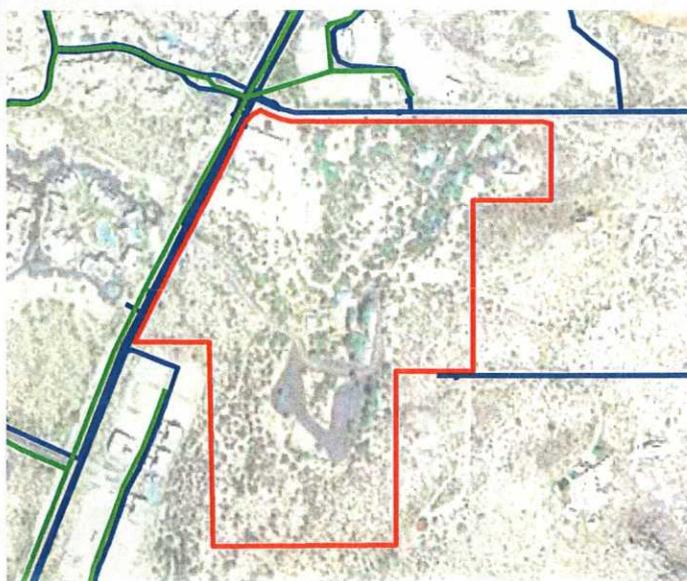
The following pages offer site panoramic photographs of the site oriented toward each of the cardinal directions, followed by a brief conceptual design narrative specific to this site.



Drainage / Wash Context



Zoning Context

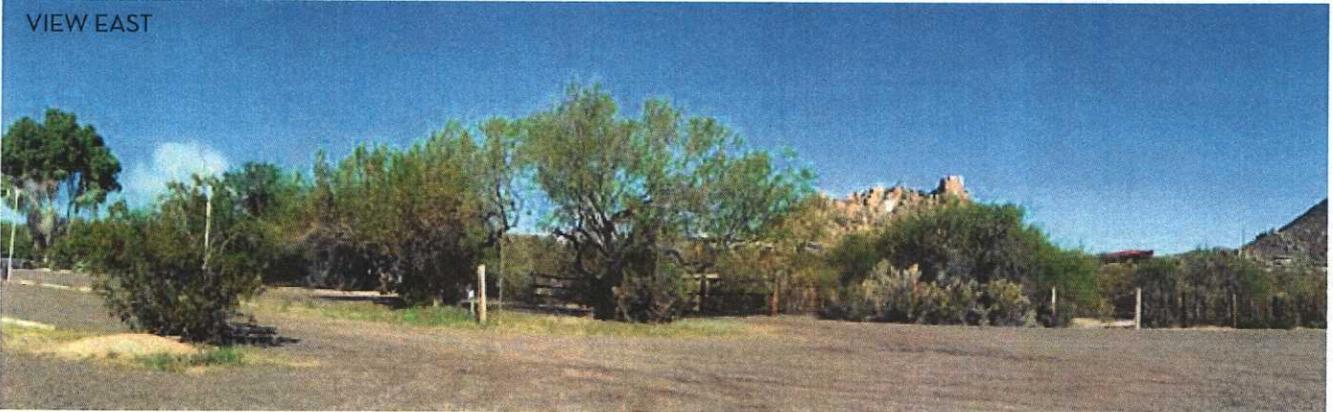


Utility Context

VIEW NORTH



VIEW EAST

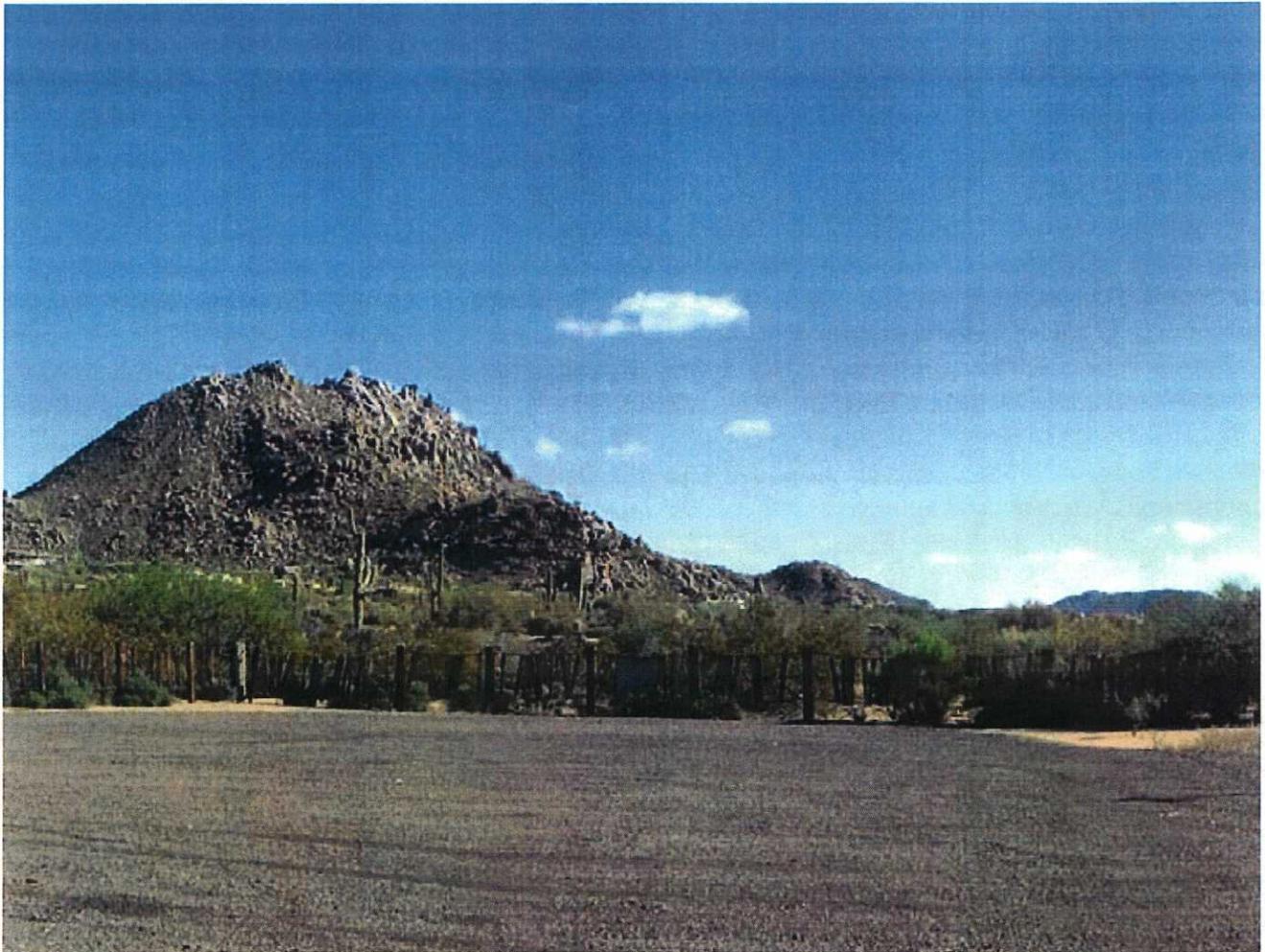


VIEW SOUTH



VIEW WEST





Conceptual Design Narrative

A currently developed site of several commercial buildings with a significant amount of misc. outbuildings give this site the initial added cost of site clean up and demolition that was not present in The Gateway site. Unknown environmental clean up hazards might also exist. Significant disturbance to the desert, and plant growth that has been watered in a non-natural way, all these factors give this site a significant hurdle to having it be a showcase of desert interpretation. Most likely this could become a showcase of desert revitalization and perhaps the concept of the DDC is adjusted to illustrate that point in the interpretive exhibits. The theme of this site could be about "healing" the desert. Adjacency to the George "Doc" Cavalliere Park could play into the programming of this site as well, but with it being located across a road might prove challenging. Since the site is the previous site of a well known restaurant and bar with a traditional western theme perhaps aspects of that could be woven into the complete redesign that will be necessary of the concept presented within the Phase 2 work. The cost beyond acquiring this site would be significantly more than The Gateway site since so much desert restoration would also be necessary. Surrounding residences to this site may be an impact to the design of this site, but since it has previously operated as a commercial site that impact could possibly be less by placing the DDC here. No opportunity for a direct pathway connect with the MSP exists for this site. Additionally, given the distance of this site from a freeway, its location could adversely affect its attendance figures and thus its economic viability.

Marketing and Operating Considerations

Site 4 is not highly accessible to resident and tourist markets because it is about 8 miles north of the interchange of Hwy 101 and Pima Road. This distance reduces the accessibility to resident and tourist markets, but especially for school groups where the additional distance creates an impediment to visitation. This site could be designed to have a visible entry and to have good wayfinding signage. However, Alma School Parkway does not receive a high traffic volume that would expose the DDC to pass-by travelers. This site does not have connection to McDowell Sonoran Preserve which limits its capacity to create an immersive visitor experience. Adjacent uses include housing and commercial development. Site 4 does not lend itself to creating an immersive visitor experience in the desert environment and would not provide ready access to McDowell Sonoran Preserve trails. Therefore, its appeal to residents, school groups and tourists would be lower than Sites 1 and 2. Length of stay on site would likely be shorter. Opportunities to interact with the desert environment would be limited. The site size would support the full DDC program; however, it is not certain whether developing the full program would be warranted given the site's lower attendance potential and likely shorter length of stay. Opportunities for food service and retail would be limited based on the site's characteristics. The development costs of this site might be higher because the site would have to be acquired.

The DDC's mission could only be partially fulfilled at this site. Attendance and operating potential is much lower than at Sites 1 and 6. Opportunities for food service and retail would be limited based on the site's characteristics and not having the Gateway trailhead users on-site. Based on its market potential and lower degree of visitor engagement possible on-site, the economic viability of this site is lower than at Sites 1 and 2. The tourism benefits and economic impacts at this location would be lower than at Sites 1 and 6.

Description:

- Quarter Section 37-52 (SE Corner)

Size:

- Approx. 290 Acres

Zoning:

- R1-7 ESL (HD) PCD

Land Ownership Status:

- State Land

Environmentally Sensitive Lands (ESL):

- Upper Desert ESL Landform (Map 24)

Natural Area Open Space (NAOS):

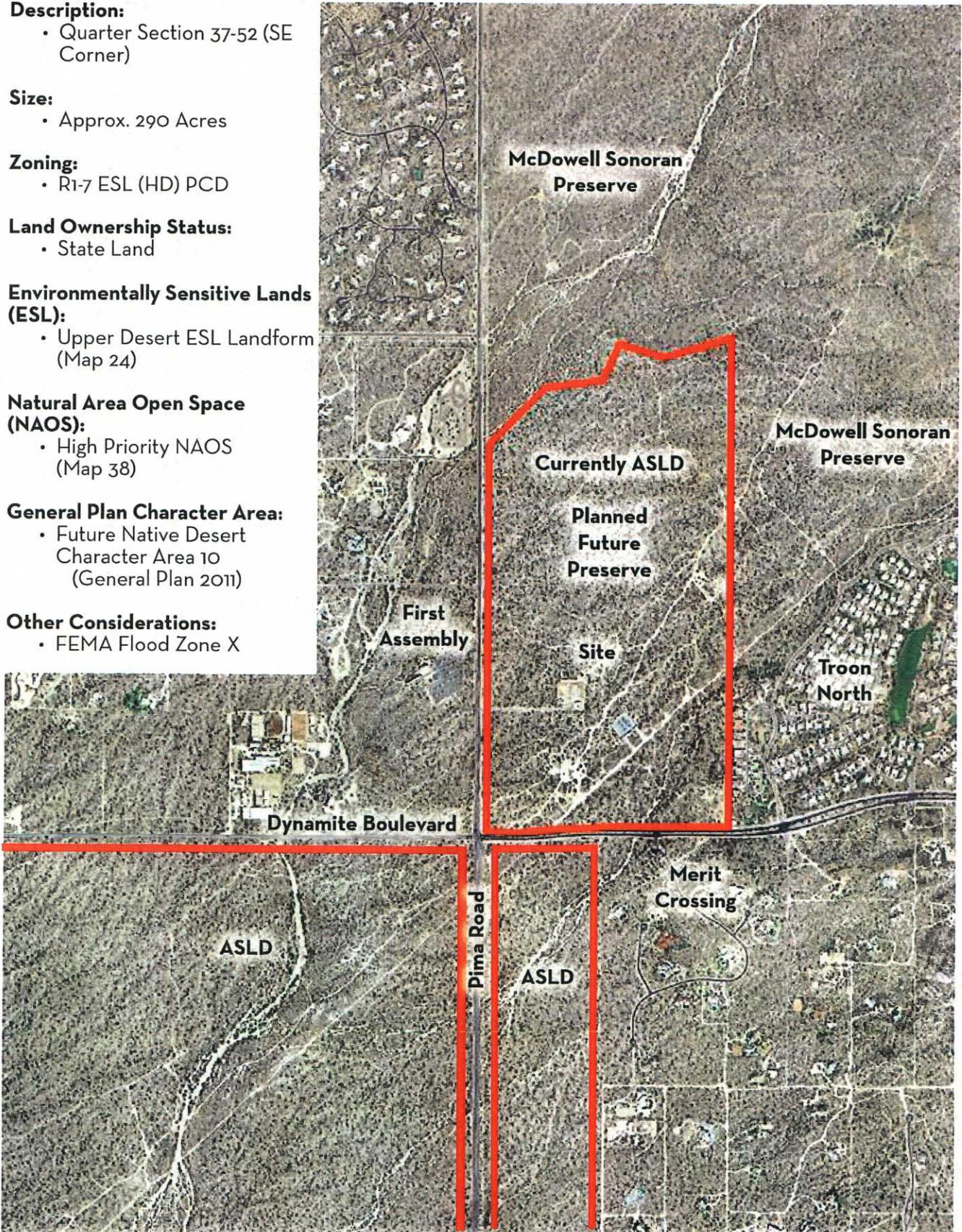
- High Priority NAOS (Map 38)

General Plan Character Area:

- Future Native Desert Character Area 10 (General Plan 2011)

Other Considerations:

- FEMA Flood Zone X



Site Context

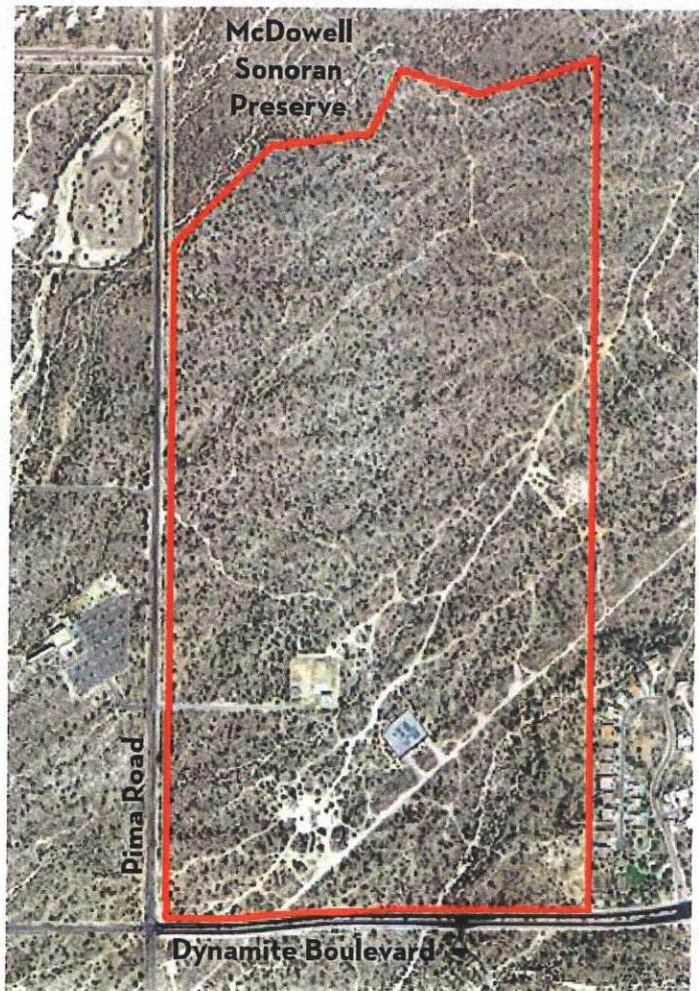
EVALUATION CRITERIA:

This property is located on the north-east corner of Pima Road and Dynamite Boulevard. At 290 acres, this is the largest of the alternative sites under study.

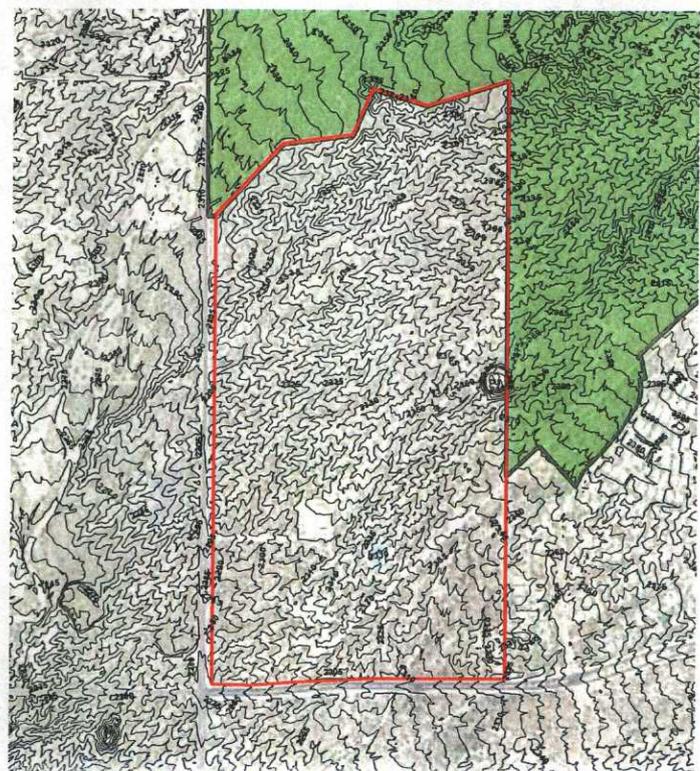
The general landform is of undulating desert floor with common contour variations of 10+ feet. This site is also densely vegetated Upper Sonoran Desert, offering a significant traffic buffer from Pima Road. There are several saguaro clusters spread throughout the site adding to an overall blend of Sonoran Desert vegetation. There are numerous existing trails on site, most currently used for all terrain vehicles, motorcycles, etc. These provide access to the State Trust Land to the north-east and to the Brown's Ranch trailhead anticipated for completion mid 2013.

Adjacent property uses include the Troon North residential development directly east along the site's south-eastern edge. The north-east site boundary is adjacent to City of Scottsdale owned undisturbed property in the McDowell Sonoran Preserve. West, across Pima Road is the Scottsdale First Assembly Dream Center, located approximately one half mile north of Dynamite Boulevard, and low density residential to the north-west. The northern edge of the property is adjacent to undisturbed City of Scottsdale McDowell Sonoran Preserve, including Rawhide Wash.

The most likely usable area of this site is the northern half of the property, as the southern half is occupied by an electrical transmission easement that runs diagonally across the south-east corner. Also present in the southern half is a disturbed area currently under lease by



Aerial Context



Topography / Slope Context

a landscaping company for material storage. Access to the site from the south would be largely south from Pima Road. Access could align with Via Dona road, approximately one half mile north of Dynamite Boulevard.

Views from the site include views to Pinnacle Peak, Tom's Thumb and the McDowell Mountains to the south-east, although they are through the overhead transmission lines. Views to the north-east show Brown Mountain and Cone Mountain, unique to this location relative to the rest of the sites under assessment.

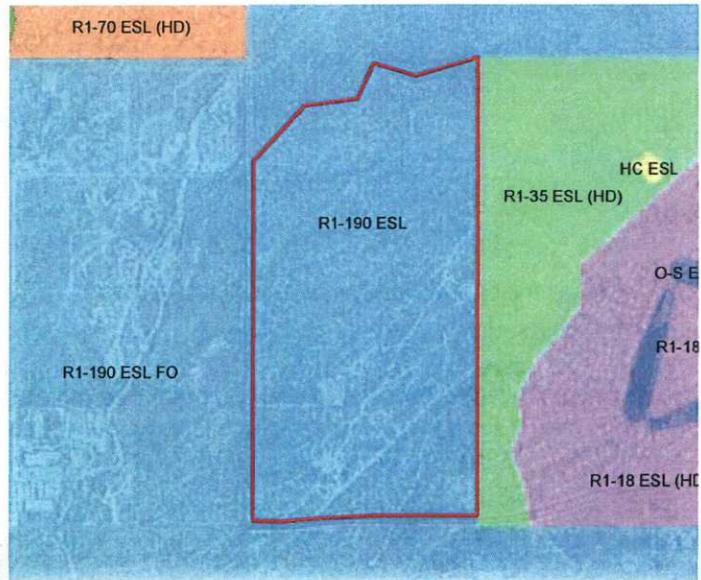
This site is currently planned as a trailhead for access to the McDowell Sonoran Preserve.

Distance to 101/Pima - 6.5 Miles

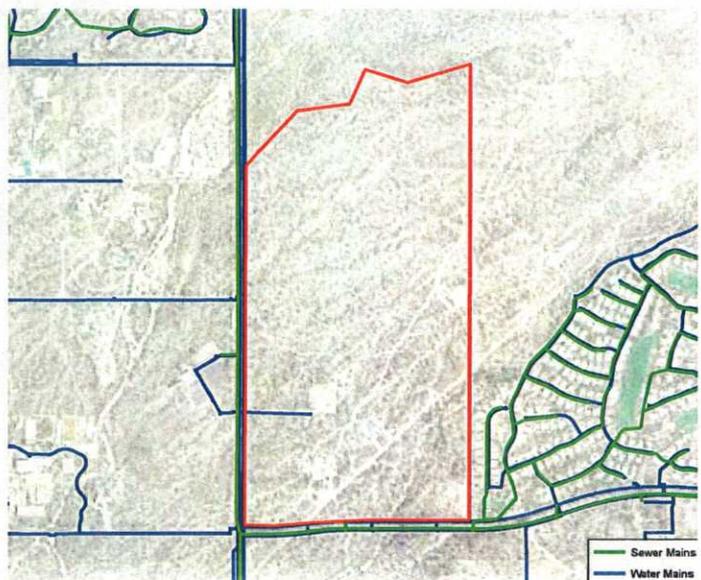
The following pages offer site panoramic photographs of the site oriented toward each of the cardinal directions, followed by a brief conceptual design narrative specific to this site.



Drainage / Wash Context



Zoning Context



Utility Context

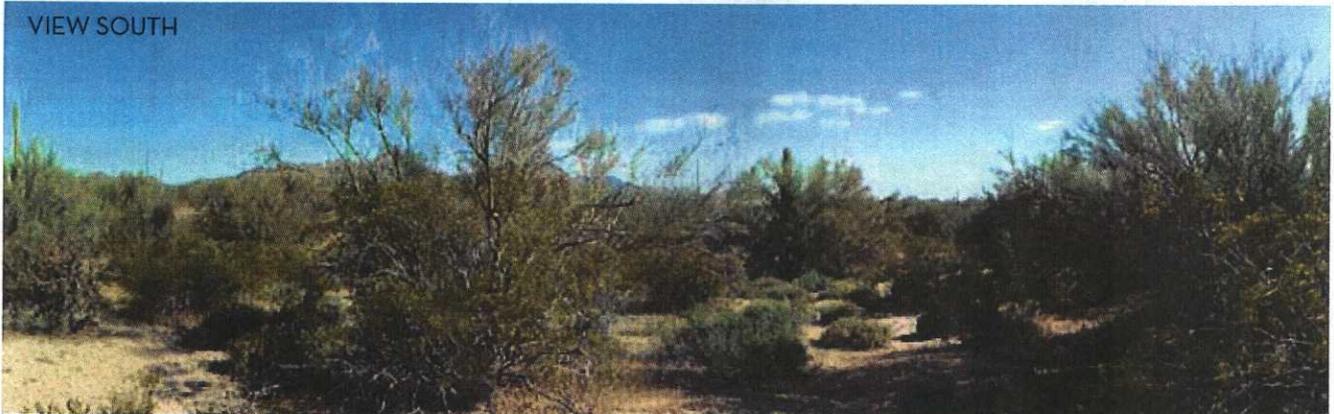
VIEW NORTH



VIEW EAST

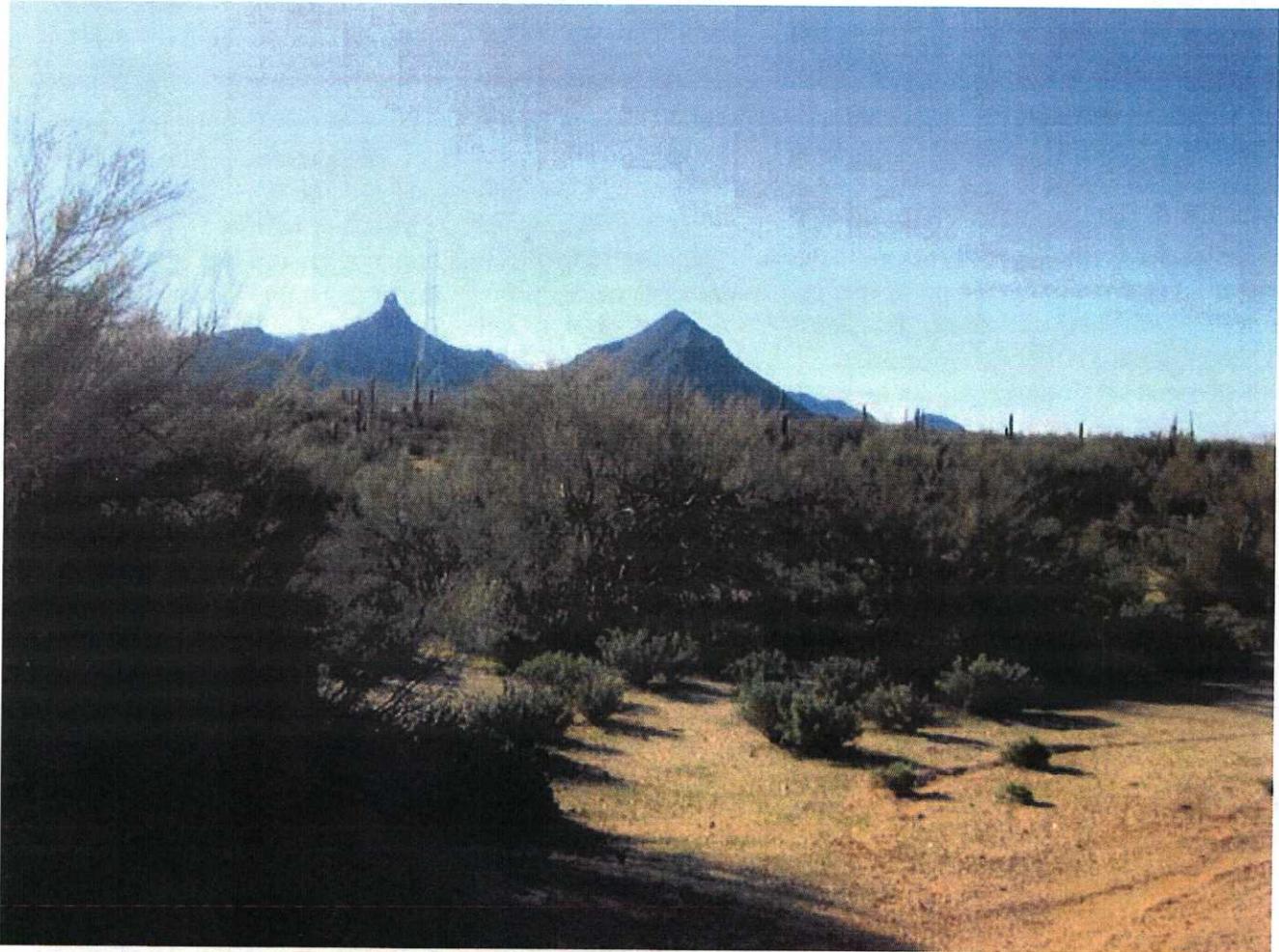


VIEW SOUTH



VIEW WEST





Conceptual Design Narrative

A site of significant size with high quality views give this site an opportunity that The Gateway site perhaps does not offer. Views of electric power transmission lines exist to the south, thus mandating that the DDC be located a good distance to the north, in order to minimize their affect on the quality of the visitor experience. Having said that, they clearly do affect it in many ways that do not occur at the The Gateway site. Should this site be acquired, an opportunity exists here that perhaps no other site would have. That being the ability to actually expand the concept of the DDC to include an alliance with a consortium of other organizations such as Liberty Wildlife, Southwest Wildlife, the Wallace Gardens, Wild at Heart, and others. Most if not all of these organizations are looking for new locations. With this scenario the DDC could also perhaps pursue a larger campus of activities that might include in addition to any combination of the above, an alliance with an institution of higher education such as ASU or U of A working with the DDC in a primary research capacity. All of this would possibly make this site an attractive alternative to The Gateway. The sites northern location should be further evaluated for programming for school children to determine if the distance from most schools would cause a drop off in attendance. The focus of this site might be more toward the DDC being an important institution of environmental studies geared more toward higher education and primary research, but still having a strong visitor attraction.

Market and Operating Considerations

Site 5 at Pima Road & Dynamite Boulevard is accessible about 6.5 miles directly north of the intersection of Pima Road and Hwy 101. This distance reduces the accessibility to resident and tourist markets, but especially for school groups where the additional distance creates an impediment to visitation. This site could be designed to have a visible entry and to have good wayfinding signage. The site entrance would be seen prominently from a high traffic volume road. The site size would support the full DDC program and could accommodate a larger program of site uses including partnering organizations focusing perhaps on conservation, education etc. If properly sited and planned to reduce the impact of electric power lines on the view shed, the DDC located at Site 5 could immerse visitors in the desert environment. This site is contiguous with areas in the north portion of the Preserve and will eventually be linked directly to the Preserve trail system with a currently planned future trailhead. At this time, the trail system in the northern reaches of the Preserve is only beginning to be developed, but it will be extensive and attractive by the time the DDC were to be developed. These trails would be of a different character due to a lush vegetative cover, but lack the immediate surroundings of mountain peaks that the Gateway location provides. A handicap accessible nature trail such as the Bajada Nature Trail could be developed as part of the complex here. Opportunities for food service and retail would also be reduced based on a more distant location and less dramatic views from the site as well as and not having the Gateway trailhead users on-site.

Description:

- Quarter Section 37-52 (SE Corner)

Size:

- Approx. 33 Acres

Zoning:

- R1-10 PCD ESL & R1-18 ESL & R1-10 ESL (Assume COS ESL for future)

Land Ownership Status:

- City of Scottsdale - McDowell Sonoran Preserve

Environmentally Sensitive Lands (ESL):

- Lower Desert ESL Landform (Map 24)

Natural Area Open Space (NAOS):

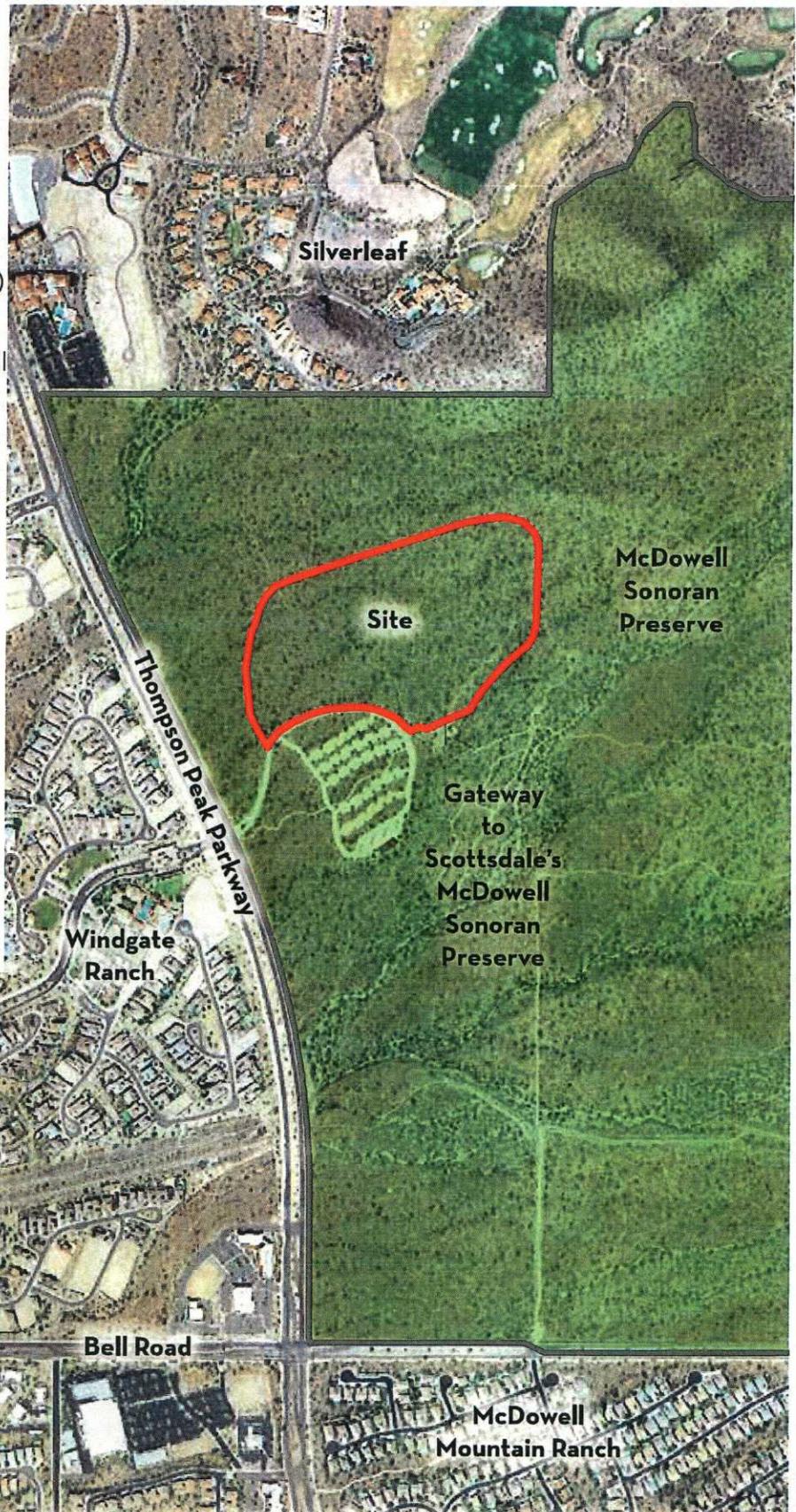
- High Priority NAOS (Map 24)

General Plan Character Area:

- Future Native Desert Character Area 6 (General Plan 2011)

Other Considerations:

- FEMA Flood Zone X
- Airport Influence Area: AC-1
- Bikeways: Dedicated Bike Lane & Shared Use Path



Site Context

EVALUATION CRITERIA:

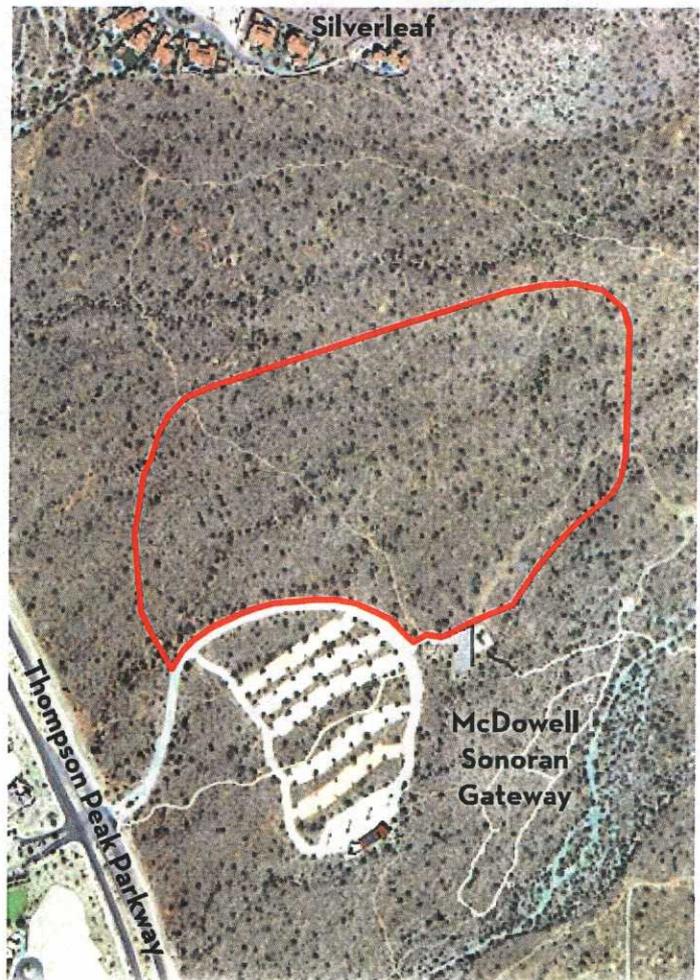
This site is situated within the McDowell Sonoran Preserve. Located between Silverleaf and McDowell Mountain Ranch, and east of Windgate Ranch, the site is approximately thirty-three acres, with direct access off Thompson Peak Parkway. It is immediately adjacent to the Gateway facility to the south, with the conceptual composition of desert pavilions set about a quarter mile east of Thompson Peak Parkway.

It lies within the McDowell Sonoran Preserve, which offers it unobstructed views of the McDowell Mountains, and access to the Preserve via the McDowell Sonoran Gateway facility. Its neighboring communities include McDowell Mountain Ranch to the south of Bell Road, Silverleaf to the north, and Windgate Ranch immediately west.

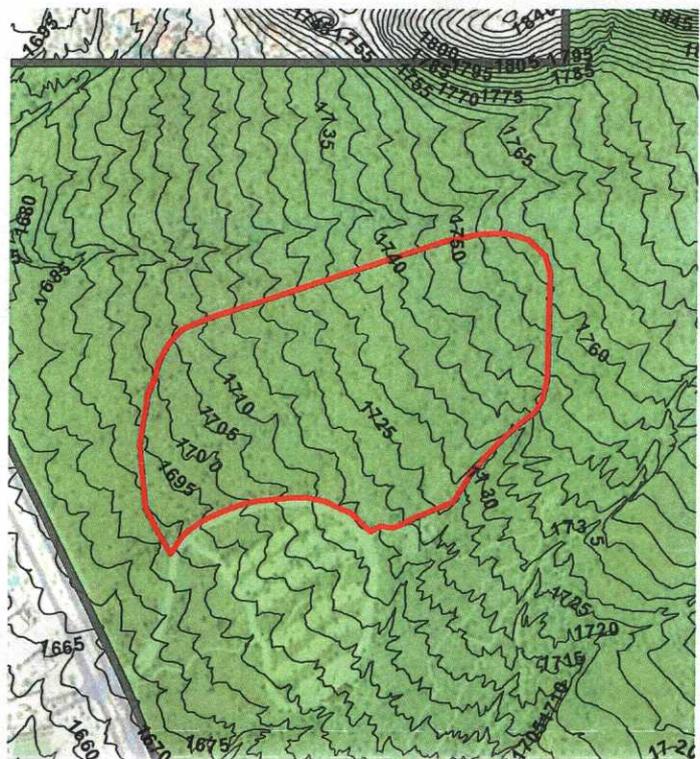
The exhibit on the previous page shows an enlarged aerial view of the subject site, along with pertinent site facts related to it. The exhibits on the following pages depict more detailed information related to the natural features.

The site is typical of a lower desert bajada. The aerial on the right depicts lower desert landform, with mature vegetation cover. Small braided washes traverse the site. Access to the Preserve and established trails leading out from the Gateway, including links to the surrounding communities.

There is a gentle slope from northeast to southwest, with a gradient of about 4% for this



Aerial Context



Topography / Slope Context

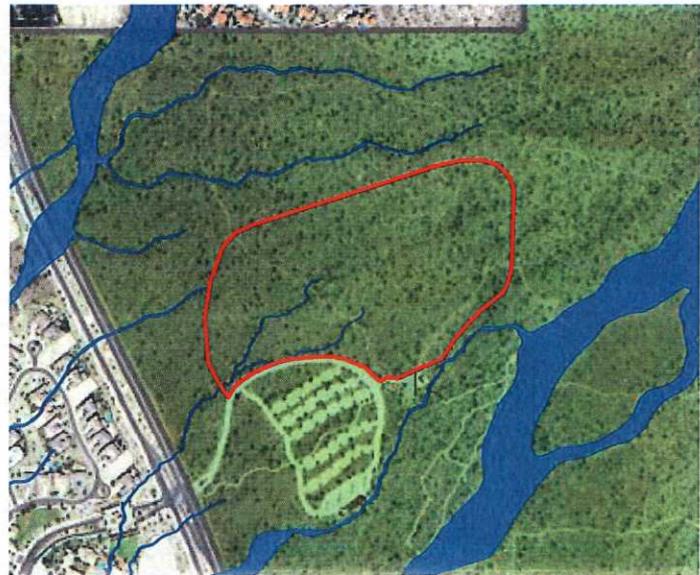
site. This gentle rise continues east for several miles before rising dramatically to the McDowell Mountains and Thompson Peak almost immediately to the east. A more proximate set of hillforms to the east include a series of trails that are part of the Gateway Trailhead, and these trails thread along the northern boundary of the subject site, and ultimately Thompson Peak Parkway.

There are several washes that braid through the site. The major wash along the northern boundary continues under Thompson Peak Parkway, with controlled drainage corridors within Windgate Ranch immediately west of the site.

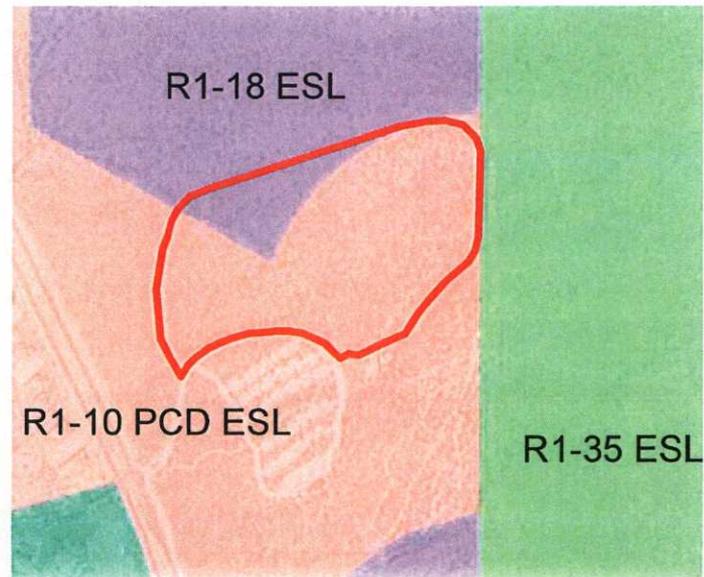
This site benefits from existing infrastructure including wet and dry utilities, as well as the opportunity of shared parking with the Gateway. This offers flexibility and easier opportunities for expansion without compromising points of ingress and egress into the Preserve. Additionally, the 101 Loop is just under three miles travel distance from either off-ramp--Raintree or Pima exits.

Distance to 101/Pima - 2.75 Miles

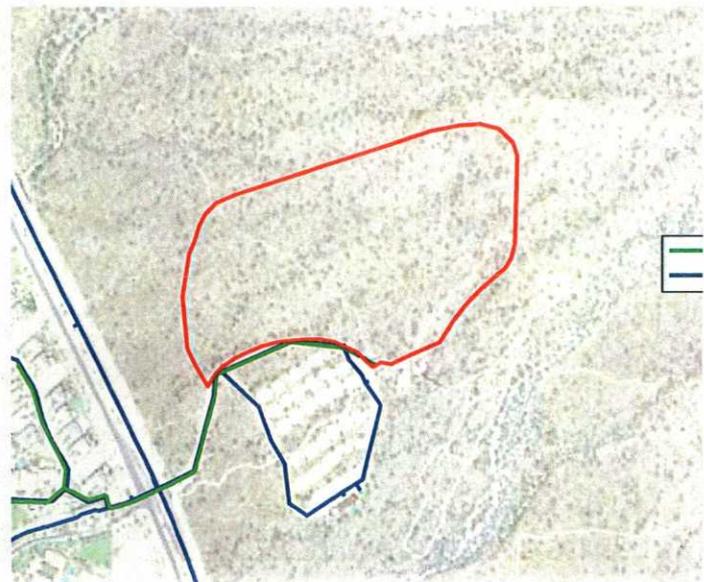
The following pages offer site panoramic photographs of the site oriented toward each of the cardinal directions, followed by a brief conceptual design narrative specific to this site.



Drainage / Wash Context

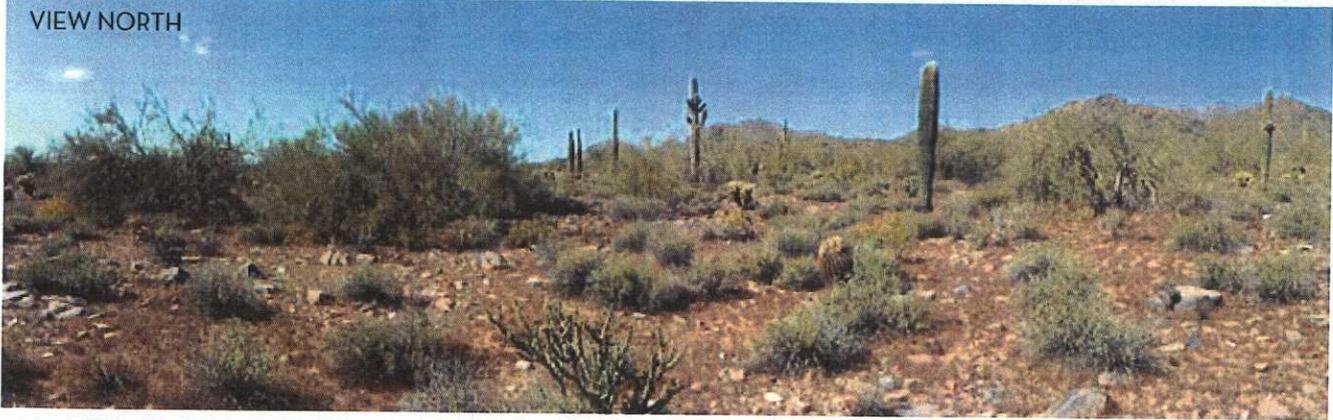


Zoning Context

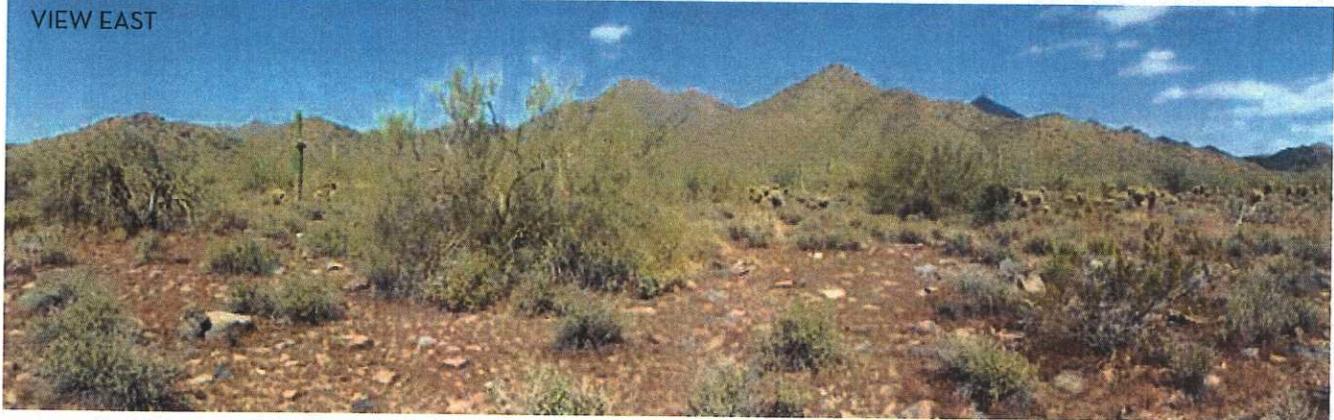


Utility Context

VIEW NORTH



VIEW EAST



VIEW SOUTH



VIEW WEST





Conceptual Design Narrative

With all that is known about this site, since it was the subject of the Phase 2 and 3 feasibility work, it is assumed that the extensive planning documentation is available for review, and is not repeated herein. This site offers high quality view potential, and the ability to interact with the existing Gateway facilities and The Preserve itself. Gentle slopes and the lack of significant site features in the area where the concept design indicates allows the building to be integrated with the site fairly easily. Existing site parking alleviates the need to build as much parking as some of the other sites, as it is assumed there will be some degree of joint use and off-site parking opportunities that might utilize shuttles in high attendance times. Although this site is currently heavily used in the mild weather season, it has yet to be fully analyzed how usage will balance out as other trailheads open. The site offers easy and close access to freeways and thus is very accessible to valley wide visitors.

Market and Operating Considerations

Site 6 is located along Thompson Peak Parkway north of Bell Road, and is highly accessible about 2.75 miles directly east of the Hwy 101 and East Bell intersection. This site has been the proposed site for the DDC in previous planning phases. This site has a visible entry and good wayfinding signage. The site entrance is seen from a moderate traffic volume road. The facility itself, by design, would have limited visibility from nearby areas and is designed to create immersive visitor experience. The site's size fully supports the full DDC program. However, it is unlikely that an expanded development footprint for partnering institutions would be developed here. It is possible that the Site 6 DDC could be developed in conjunction with Site 2 with partnering institutions and perhaps some back-of-house DDC functions at Site 2. The Site 6 Gateway is easily accessible and would immerse visitors in the desert environment, it would serve resident, tourist and school groups well.

The in-place Gateway trail head and parking is a factor to be considered at this location. The existing infrastructure relieves some development costs and allows for sharing of infrastructure which lessens the impact on the site. During peak periods, there would be overlap at this site between visitors who access the McDowell Sonoran Preserve trail system at the Gateway trailhead and DDC attendees. This overlap will have several effects: better parking utilization patterns and other site infrastructure, a different on-site experience for current users, and new food service and retail amenities for current users. It should be noted that increases in trail usage nearby to the Gateway could be offset by the opening of new trails planned for the north area of the Preserve. The operating sustainability of the DDC is supported by the presence of the Gateway trailhead and its users based on the additional market exposure provided which supports attendance, and the direct spending at this site.

The DDC's mission could be well fulfilled at the Gateway site. Attendance potential, economic viability and tourism and economic impacts at this location would likely be greater than at other sites for a DDC only development. In addition, because this site would offer the most immersive experience with the best view shed, in a relatively accessible location, this site is considered to have the greatest benefits for a DDC only development.

Description:

- Quarter Sections
18-44 | 18-45
17-44 | 17-45
16-44 | 16-45

Size:

- Approx. 2 Sq. Mi. Area

Zoning:

- Various

Land Ownership Status:

- Various

Environmentally Sensitive Lands (ESL):

- N/A

Natural Area Open Space (NAOS):

- N/A

General Plan Character Area:

- City of Scottsdale
Downtown Plan
(Adopted 2009)

Other Considerations:

-



Site Context



Conceptual Design Narrative

Locating the Desert Discovery Center somewhere in the Downtown Scottsdale Area, and thinking of it as a “Portal” concept to The Preserve, might give the Desert Discovery Center an opportunity to be accessed by more people on a daily basis who might be unaware of The Preserve. As such, the “Portal” type concept could be used to educate visitors more about the The Preserve, and encourage visitation to The Preserve. It could be located in a storefront or be allied in a shared space condition with another institution currently, or in the future, located Downtown. It could be imagined that the interpretive exhibits are limited to a focus on an introduction to The Preserve with a model, exhibits showing the location of trailheads, and some basic exhibits about the flora and fauna of The Preserve. It is assumed this “Portal” concept would probably not be revenue producing and thus might require a subsidy.

Market and Operating Considerations

A downtown location is not suitable for full build out of the DDC concept as conceived to date. The existing concept is based on the integration of an immersive learning center with the actual Sonoran Desert environment to create an impactful and highly desirable experience. Therefore, a downtown Scottsdale DDC would be alternatively positioned as a "portal" to the McDowell Sonoran Preserve. It would likely have a visitor center operating concept. This would include limited exhibits and information provision focused on developing the visitor's general knowledge of the Sonoran Desert and the Preserve in particular safety practices, and would invite them to experience it at any of the trailheads and trails. Thus, it would be helpful for tourists to Scottsdale to learn about what the Preserve offers, to provide information on how to access the Preserve and outfit themselves, and to provide an impetus to make the trip to one of the Preserve's trailheads. The audience in this scenario would be mostly out-of-town guests rather than area residents, as it would not feature highly repeatable experiences and would focus on basic information and orientation. This center would not likely be able to sustain a ticketed experience and would have at best limited retail and no food service. It would have limited staffing with volunteers likely to be an important component of operations. Non-earned revenues and/or outside funding would be necessary to support its operations. At this location, the DDC would have comparably limited mission fulfillment because the learning and experiences that the DDC as conceived would offer cannot be recreated in downtown Scottsdale. From an economic development perspective, the DDC downtown would augment the Preserve, but would not become a new and high profile destination. It would not contribute substantially to augmenting Scottsdale's brand or in creating economic impacts. It would augment the investment in the McDowell Sonoran Preserve, support safe use of the Preserve and disseminate knowledge of the Preserve and the Sonoran Desert.

Summary of DDC Site Related Factors

In addition to an Interpretive Center's design, size, and exhibits/interpretive content, its location and site qualities are central to its success. Following is discussion of key site factors relevant to potential location of the DDC. Data in Table 1 provides a summary of site related factors for the seven sites being evaluated.

- **Location and Accessibility.** The site must be highly accessible by automobile, , pedestrian access and bike trails. Accessibility includes distance from populations and activity centers, but also by the type of roads and wayfinding opportunities available. Clearly marked exits from area highways and local roadway signs with clear directions to the attraction must be developed.
- **Visibility and Prominence.** The site for an attraction must be appropriately visible and prominent. The entrance should be highly visible. The architectural design of the attraction must add to its visibility such that through its location, site, and design it becomes a destination.
- **Site Size and Qualities.** The site must be adequate in size, attractiveness, and relationship to the topic being interpreted. Access to the natural resources being interpreted is a major benefit. The site must foster the potential to create an outstanding built environment that relates to the natural resources being interpreted. Adequate parking to accommodate peak period attendance is vital to the success of a facility.
- **Adjacent and Nearby Uses.** Adjacent and nearby land uses should be supportive of the attraction. In the case of a nature based attraction, a lack of intrusion on the natural resources being interpreted is important.
- **Building Program and Visitor Experience.** The quality and breadth of the building program and visitor experience offered at the attraction must be well designed and presented. In the case of the DDC, the capacity of the site to support the development is important to its market and operating potential.
- **Availability.** The site should not present undue constraints to development from an ownership, site conditions, need for remediation, etc.

Summary of DDC Site Related Factors (Cont'd)

The following factors are an essential basis of a public interpretive facility such as the DDC's market and economic potential

- **Attendance potential.** The site related factors greatly influence the attendance potential of a visitor attraction. In the case of DDC this is especially true because the interpretive focus of the DDC is the McDowell Sonoran Preserve specifically and the Sonoran Desert generally. An immersive desert experience is much more appealing, authentic and impactful than a desert focused experience in an alternative location. Distance from residents and tourists and other location and site related factors affect attendance as well. There is a considerable variance in DDC attendance potential based on the chosen site.
- **Capacity to fulfill mission.** Site qualities and relevance to the subject matter affect the organization's capacity to fulfill its mission from an educational, conservation, and relevancy perspective. In addition, the number of visitors and the economic sustainability of an institution affect its capacity to fulfill its mission.
- **Outside funding and partnering.** The potential to attract outside funding, sponsorships, and partnerships is related to an organization meeting its mission, creating public benefits, and being a high profile destination that attracts residents and visitors. Some sites also have greater capacity or characteristics to accommodate on-site partners.
- **Sustainable operations.** On-site attendance is a primary factor in sustaining earned revenues to support DDC operations. In addition, the extent to which the DDC meets its mission, and provides substantial public benefits, it will be enhanced as a grant-worthy and gift-worthy institution, thus enhancing its operational sustainability. Partnering with other related educational or conservation institutions is another opportunity for developing sustainable operations.
- **Community benefits.** Public benefits of an education and conservation oriented visitor attraction include the contribution to preservation of natural resources through enhanced public knowledge, tourism industry development, economic impacts and improvement of residents' quality of life. A more attractive and well suited site generates benefits in all of these areas as it would foster a better and deeper understanding and appreciation of the Sonoran Desert environment and will attract more visitors; support the tourism economy and be a more appreciated quality of life amenity for area residents.

SUMMARY OF SELECTED SITE RELATED FACTORS FOR ALTERNATIVE SITES FOR THE DESERT DISCOVERY CENTER

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
	Thompson Peak Parkway & Bell Road	94th Street & Bell Road	Pinnacle Peak Park	Alma School Parkway & Pinnacle Vista Drive	Pima Road & Dynamite Boulevard	McDowell Sonoran Preserve Gateway
Location and Accessibility	Good - 3 Miles to 101 & Pima	Good - 1.5 miles to 101 & Pima	Moderate - 7.5 miles to 101 & Pima	Moderate - Over 8 miles to 101 & Pima	Moderate - 6.5 miles to 101 & Pima	Good - 2.75 miles to 101 & Pima
Visibility and Prominence	Good	Good	Moderate	Moderate	Good	Good
Site Size and Qualities	40 acres -Excellent	40-acres -Moderate	20 acres - Small	38 acres- Moderate	290 acres - Good	33 acres - Excellent
Connectivity to Preserve	Yes - Good connection to Preserve	No - Limited connection to Preserve via trail	No connection to Preserve	No connection to Preserve	Good connection to northern area of Preserve	Yes - Good connection to Preserve
Adjacent and Nearby Uses	No negative impacts	Some impacts from nearby uses	Some impacts from nearby uses	Some impacts from nearby uses	No impacts, except possibly high tension electric wires	No negative impacts
Building Program and Visitor Experience Potential	Can accommodate full DDC buildout	Can accommodate full DDC buildout	Buildout constrained by site size	Can accommodate full DDC buildout	Can accommodate full DDC buildout, but could add other partners and	Can accommodate full DDC buildout
Availability and Developability	Potentially available as it is part of Preserve	Potentially available as it is city owned	Potentially available but would be purchased	Potentially available but would be purchased	Potentially available, planned to be purchased for Preserve	Potentially available as it is part of Preserve
SUMMARY OF POTENTIAL SITE IMPLICATIONS						
Attendance Potential	Attendance potential somewhat lower than at Gateway	Attendance potential lower than at Gateway	Attendance potential lower than at Gateway	Attendance potential lower than at Gateway	Attendance potential somewhat lower than at Gateway for stand alone DDC, but possibly concept could be expanded to attract other audiences at this site	Highest attendance potential for a stand-alone DDC
Resident Market Attendance	Resident attendance potential somewhat lower than at Gateway	Resident attendance potential somewhat lower than at Gateway	Resident attendance potential lower than at Gateway	Resident attendance potential lower than at Gateway	Resident attendance potential somewhat lower than at Gateway	Highest resident attendance potential for a stand-alone DDC
Tourist Market Attendance	Tourist attendance potential somewhat lower than at Gateway	Tourist attendance potential lower than at Gateway	Tourist attendance potential substantially lower than at Gateway	Tourist attendance potential substantially lower than at Gateway	Tourist attendance potential lower than at Gateway	Highest tourist attendance potential for a stand-alone DDC
School Group Attendance	School group attendance potential similar to Gateway	School group attendance potential similar to Gateway	School Group attendance potential lower than at Gateway	School Group attendance potential somewhat lower than at Gateway	School Group attendance potential somewhat lower than at Gateway	Highest school group attendance potential for a stand-alone DDC
Restaurant Market	Lower than Gateway	Lower than Gateway	Lower than Gateway	Lower than Gateway	Lower than Gateway	Good opportunity
Meetings and Events Market	Lower than Gateway	Lower than Gateway	Minimal opportunity	Lower than Gateway	Lower than Gateway	Good opportunity
Capacity to Fulfill Mission	Strongly supports DDC Mission	Potentially supports DDC Mission	Lower potential for support of DDC Mission	Lower potential for support of DDC Mission	Potentially supports DDC Mission	Strongly supports DDC Mission
Outside Funding and Partnering	Possible	Possible	Lower potential due to smaller site footprint	Possible	Good opportunity	Possible
Sustainable Operations	Operating potential is somewhat lower than at Gateway	Operating potential is somewhat lower than at Gateway	Operating potential is lower than at Gateway	Operating potential is lower than at Gateway	Operating potential is somewhat lower than at Gateway	Operating potential is highest at Gateway
Tourism / Economic Impacts	Tourism / Economic Impacts potential is somewhat lower than at Gateway	Tourism / Economic Impacts potential is somewhat lower than at Gateway	Tourism / Economic Impacts potential is lower than at Gateway	Tourism / Economic Impacts potential is lower than at Gateway	Tourism / Economic Impacts potential is somewhat lower than at Gateway	Tourism / Economic Impacts potential is highest at Gateway
Community Benefits	Community Benefits are somewhat lower than at Gateway	Community Benefits are somewhat lower than at Gateway	Community Benefits are lower than at Gateway	Community Benefits are lower than at Gateway	Community Benefits are somewhat lower than at Gateway	Community Benefits are highest at Gateway
Land Ownerships Status	City of Scottsdale - McDowell Sonoran Preserve	City of Scottsdale	City of Scottsdale / Arizona State Land Department	Private	Arizona State Land Department	City of Scottsdale - McDowell Sonoran Preserve
Zoning	R1-10 PCD ESL & R1-18 ESL & R1-10 ESL (Assume COS ESL in future)	R1-7 ESL (HD) PCD	SC ESL / C-2 ESL (HD / HC)	C-2 ESL (HD)	R1-190 ESL (HD) PCD (Assume COS ESL for Future)	R1-10 PCD ESL & R1-18 ESL & R1-10 ESL (Assume COS ESL for future)
Source: ConsultEcon, Inc.						