

# EAST CAMPUS

## *Development Plan*



Aggie  
Development

• 2016 •



## **Acknowledgments**

**Report prepared by:**

Dekker/Perich/Sabatini

**Report prepared for:**

Aggie Development Inc.

## **Contents**

<b>Introduction .....</b>	<b>3</b>
Executive Summary .....	3
Study Area .....	4
Vision .....	4
Guiding Principles .....	4
Process .....	5
<b>Existing Conditions Assessment .....</b>	<b>7</b>
Context / Adjacent uses .....	7
Topography .....	8
Open Space .....	9
Drainage .....	9
Elephant Butte Irrigation District (EBID) .....	10
Ownership .....	11
Utilities .....	12
Circulation/Access .....	13
NMSU Golf Course .....	14
Opportunities & Constraints .....	15
<b>Land Use Framework .....</b>	<b>16</b>
Phasing Plan .....	18
Access & Circulation .....	24
Trails & Recreation .....	25
Conceptual Golf Course Layout .....	26
Drainage .....	27
<b>Appendix .....</b>	<b>28</b>
Aggie Development Dialogue Notes .....	29
Golf Course Development Analysis .....	35

# EXECUTIVE SUMMARY

The East Mesa Campus Development Plan (Development Plan) provides a framework to guide future development on New Mexico State University (NMSU) East Campus land, approximately 2,300 acres on the east side of Interstate 25 in Las Cruces, New Mexico. This land is part of the larger NMSU campus that includes the main campus and Arrowhead Park, located west of Interstate 25. The Development Plan proposes short and long term improvements that further academic, research, and economic opportunities for the University. Portions of the East Campus land can be utilized to generate recurring revenue while generating long term value for NMSU.

The Development Plan is the result of a collaboration between members of the NMSU administration and faculty, Aggie Development administration and board members, and other stakeholders. The NMSU Master Plan 2006-2016, the updated 2013 Strategic Assessment and the 2013 Land Use Assessment and Strategic Development Plan helped inform this plan.

The planning team looked at the existing physical, jurisdictional, regional, and ownership attributes. Those conditions were mapped and compiled in an Opportunities and Constraints exhibit. The land provides short term opportunities for new growth along University Avenue and the potential to expand rodeo, golf and recreational facilities. The land is constrained by relatively steep slopes, limited infrastructure and natural drainage areas. This information was used to inform the Land Use Framework.

Key components of this Development Plan include:

- Develop about 36 acres along E. University Drive in Phase One;
- Develop a new 18-hole Championship Golf Course in Phase Two;
- Re-configure the existing golf course to create a nine-hole facility and open up about 92 acres for additional development in Phase Two;
- Extend Geothermal Drive and Sonoma Ranch Boulevard to create better access;
- Designate lands east of Sonoma Ranch Boulevard near "A" Mountain as a cultural/recreation area and create a system of trails that connect to this area;
- Ensure that new development is aligned with overall NMSU identity;
- Provide lands for Institutional Research east of the main campus;
- Designate some land as Special Purpose Programs as a future land bank for uses unknown at this time.

## ***Introduction***

The New Mexico State University (NMSU) Master Plan 2006-2016, updated 2013 Strategic Assessment and the 2013 Land Use Assessment and Strategic Development Plan provided a starting point for this master planning effort.

## ***Study Area***

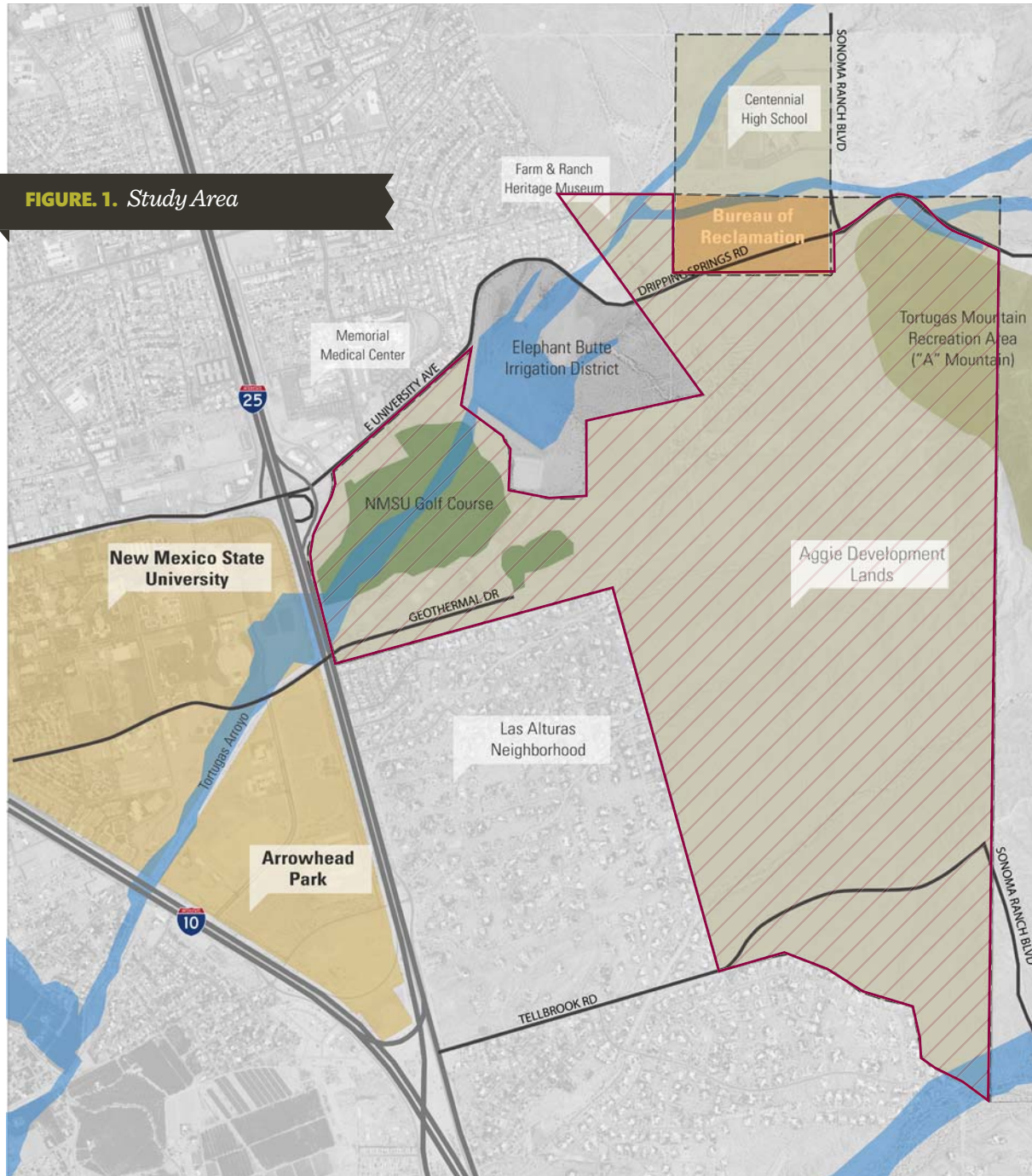
The Study Area is located east of Interstate 25 and south of University Ave., at the base of "A" mountain and north of Tellbrook Road. Existing uses include the 18 hole University Golf Course and clubhouse, the NMSU rodeo facility, and an assortment of NMSU research facilities. The total area encompasses approximately 2,300 acres. The majority of the property is vacant and underutilized.

## ***Vision***

The vision for a successful development plan is the transformation of the underdeveloped project area that will continue to further the academic programs of the University, while ensuring that the cultural resources, scenic views and current recreational uses are preserved. The University will support and encourage private/public partnerships that reflect the vision of the NMSU's East Campus Master Development Plan.

## ***Guiding Principles***

- *Position lands to create long term value for NMSU.*
- *Develop programs that continue the learning experiences for the students.*
- *New development to be compatible with the University mission.*
- *Generate reoccurring revenue for Aggie Development and NMSU. Position the property assets to derive the maximum return for the University with minimum risk.*
- *Use public private partnerships to develop core facilities such as a mixed use commercial center, golf course and rodeo complex.*
- *Connect to the campus and the greater community.*
- *Connect the East Campus to the NMSU campus and make it integral to the NMSU brand.*
- *Integrate sustainable development strategies.*
- *Extend the campus roadways, open space and bikeway network to the greater metropolitan area.*
- *Recognize the cultural and recreational significance of Tortugas (A) Mountain.*
- *Maintain the view corridor from the main campus to Tortugas (A) Mountain.*



**FIGURE 1.** Study Area

## Process

The project team initiated the master planning process with a thorough review of existing documentation, reports, and mapping pertaining to the East Campus site. From that review an existing conditions report identified opportunities and constraints, a high level identification of the marketplace and existing physical conditions. The research informed the development of a site condition report and base maps that became the basis for a design charrette, conducted with the University and various stakeholders.

### Design Charrette

The design charrette/workshop was conducted in late 2015 with the Aggie Development board, NMSU staff and administration as well as selected members of the Las Cruces real estate community. The workshop aimed to solicit ideas, concerns and opportunities and discuss how to proceed with a master development plan that encompasses such a large area.

Some key findings from the charrette were:

- *Develop a vision, mission and guiding principles;*
- *Identify potential uses for the property that may include a golf course, rodeo, education, research, health related, and commercial uses;*
- *Identify and address community concerns;*
- *Develop strong connections to NMSU and the region;*

- Identify and address utility constraints and limitations; and
- Create partnerships.

The complete report of the design charrette meeting is located in the Appendix on page 30.

**FIGURE 2. East Campus Land Development Concepts**



**OPTION 1**

- Golf course remains as is
- Development area along University, Las Alturas & Geothermal
- New driving range



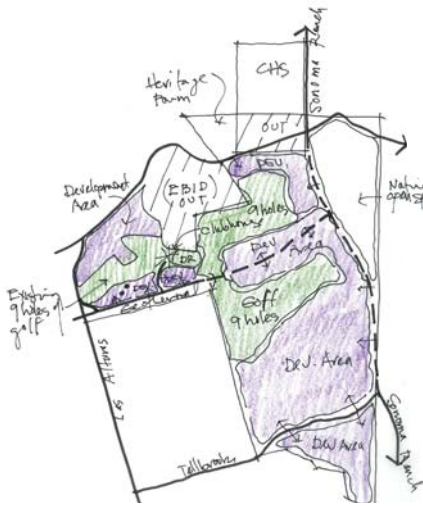
**OPTION 2**

- Add nine holes to the existing golf course remains as is
- Development area along University, Las Alturas & Geothermal
- Extend Geothermal to east to intersect with Sonoma Ranch extension south
- Development area along Geothermal & Sonoma Ranch Road



**OPTION 3A**

- Reduce existing golf course to nine holes
- Add new 18 hole signature golf course
- Development area along University, Las Alturas & Geothermal
- Extend Geothermal to the east to intersect with Sonoma Ranch Road extension south
- New development in clusters around old and new golf course



**OPTION 3B**

- Reduce existing golf course to nine holes
- Add new 18 hole signature golf course
- Development area along University, Las Alturas & Geothermal
- Extend Geothermal to the east to intersect with Sonoma Ranch Road extension south
- New development in clusters around old and new golf course

# EXISTING CONDITIONS ASSESSMENT

This section provides an overview of the existing land use framework, transportation network and circulation patterns and environmental features. This assessment informs future land use scenarios. It also provides a better understanding of specific site opportunities and constraints. The components are as follows:

- *Context/Adjacent Uses*
- *Topography*
- *Open Space*
- *Drainage*
- *Elephant Butte Irrigation District (EBID)*
- *Ownership*
- *Utilities*
- *Circulation/Access*
- *New Mexico State University Golf Course*
- *Precedent Case Studies*

## *Context / Adjacent uses*

The NMSU East Campus land comprises a total area of 2,300 acres and is located primarily to the east of the municipal boundaries of the City of Las Cruces and include an existing, 18 hole golf course stretching over 175 acres.

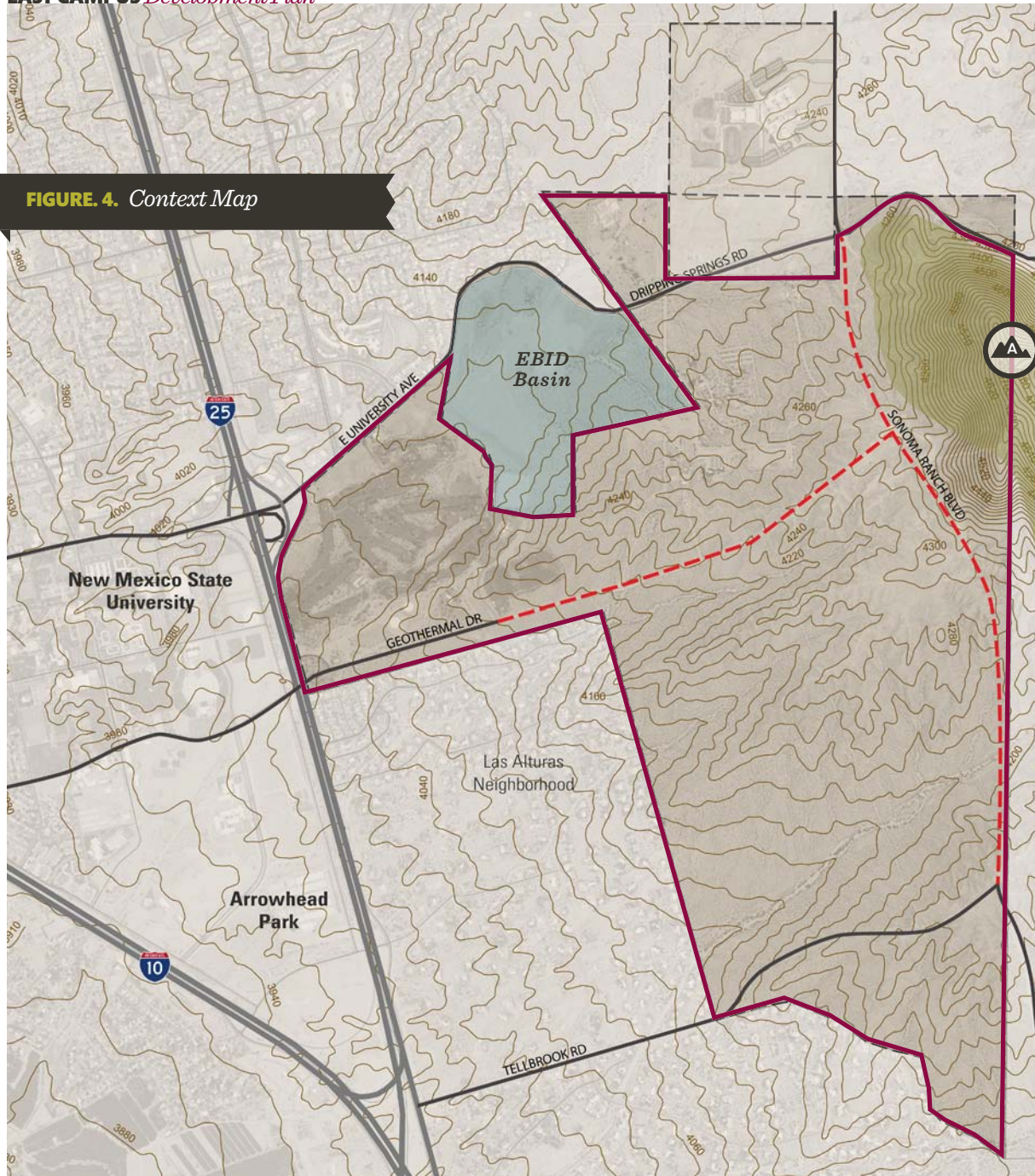
The study area effectively comprises the southeast corner of metropolitan Las Cruces. The residential communities lie directly to the west and the northwest, while Interstate 25 is located just west of the NMSU Golf Course, establishing the westernmost boundary. The Memorial Medical Center along with various medical office buildings and retail lie just north of the golf course.

The predominant feature to the east is Tortugas Mountain, locally referred to as "A" Mountain. Tortugas is the Spanish word for Tortoise and the "A" stands for the NMSU mascot, Aggies, and represents the school's connection to agriculture, which contains an observatory, antennae, and maintenance structures, along with a series of popular recreation paths.

**FIGURE 3.** *NMSU Golf Course*



**FIGURE 4.** Context Map



## Topography

The 2,300 acres are primarily made up of a series of ridges and drainage pathways that extend from the east to the west. The easternmost portions of the lands are significantly higher than those to the west, providing expansive views of the Lower Middle Rio Grande Valley and the City of Las Cruces. A portion of "A Mountain" lies within the property. The mountain rises to an elevation of 4,931 feet above sea level, approximately 1,000 feet above the City of Las Cruces.

### LEGEND

- Future Road
- 20 Foot Contours
- Tortugas "A" Mountain



## Open Space

### Constraints

Much of the area has been used as de facto, recreational open space by residents for decades. Future development may be perceived as a “loss” of open space.

The EBID detention basin is a significantly sized feature that occupies land near destinations and neighborhoods, possibly constraining development activities. The topography of the land consists of a series of ridges, slopes, and stormwater drainage ways creating uneven terrain.

### Opportunities

“A” Mountain, EBID, and the arroyos can be utilized as opportunities for more formalized open space as infrastructure and development take hold in the area. The stormwater drainage ways can be enhanced to provide more formalized recreation pathways. Similarly, the EBID basin could, potentially, double as recreation space with possible uses to include a driving range or a public park.

### *Rodeo Arena:*

A \$55 million Aggie Rodeo & Event Venue is proposed near the future intersection of Drippings Spring Road and Sonoma Ranch Boulevard. The 15,000 seat venue would bring large numbers of people to the campus and create additional opportunity for more development.

### *Golf Course:*

The existing NMSU Golf Course includes 18 holes of golf. Sections of the course lie directly adjacent to I-25 frontage access as well as University Avenue. These frontages create development opportunities that the University could leverage to bring in additional revenue. Reconfiguration of the golf course has been studied to look at multiple scenarios to allow for development to occur while minimizing impacts to the golf course. The recently completed golf clubhouse is conveniently located in an area that makes expansion and/or reconfiguration possible.

## Drainage

### Constraints

There are major and minor wash areas that impact the site. The East Campus storm water drainage has not been addressed by previous University Drainage Master Plans. Since the east campus is projected to experience a significant amount of development over the next decade, a full inventory and analysis of the drainage system will need to be performed before development proposals are considered.

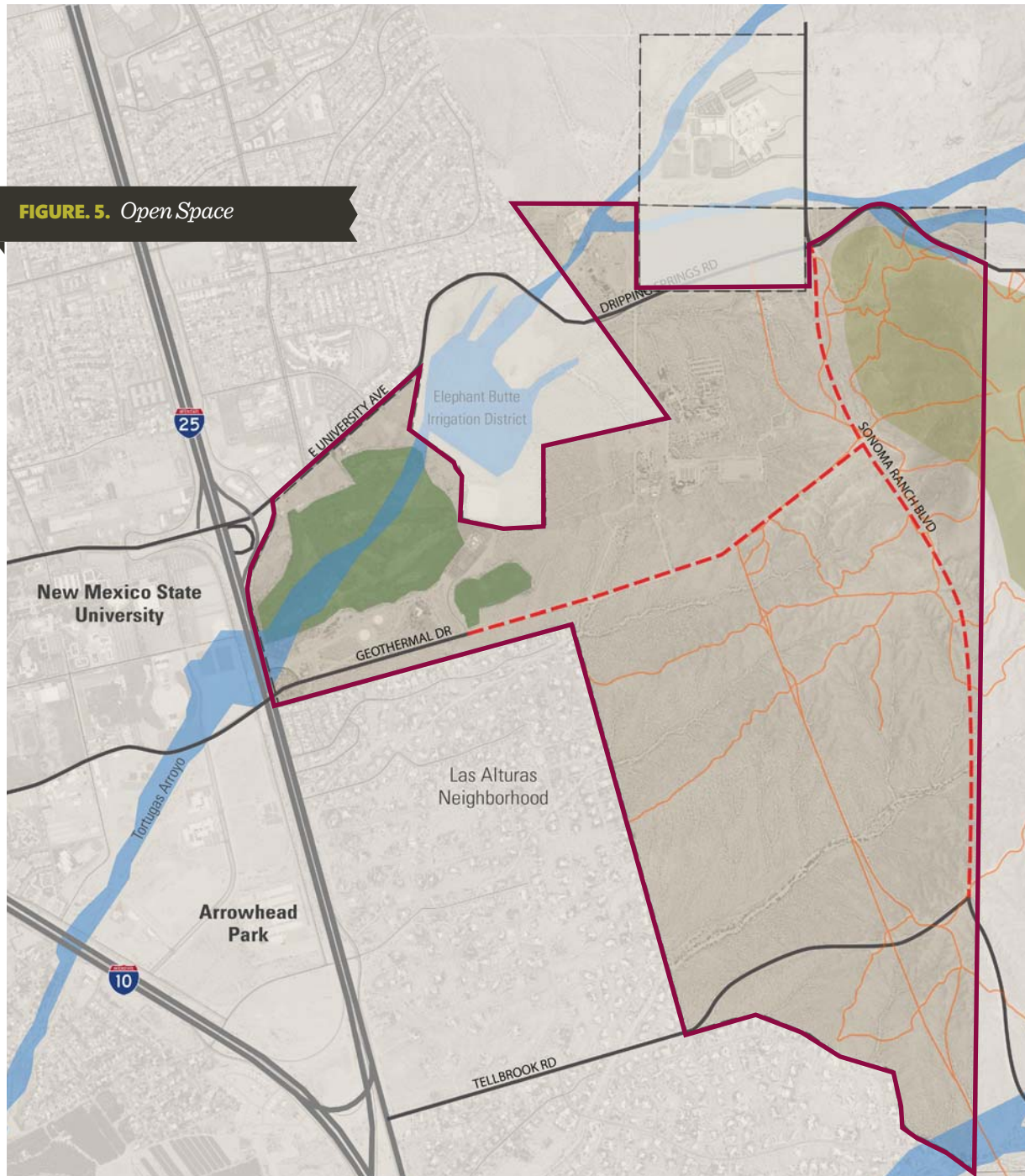
As development occurs on the east campus, increased flows should be addressed directly on East Campus Lands, not conveyed to the west campus which would amplify existing drainage problems.

### Opportunities

An opportunity exists to utilize the natural stormwater drainage channels as open space recreational pathways. The topography is such that it creates a series of these channels that primarily flow east to west from “A” Mountain.

Natural systems- detention basins and drainage ways- should be integrated into the fabric of the campus.

**FIGURE 5.** *Open Space*



## ***Elephant Butte Irrigation District (EBID)***

### **Constraints**

The EBID detention pond is a large piece of infrastructure that occupies valuable land along University Avenue. Its scale and location, centered within the developing East Campus, make it physically difficult to extend infrastructure through the site for development.

### **Opportunities**

The EBID detention basin presents multiple opportunities depending on EBID's willingness to accept alternative solutions to the treatment and management of the basin. These opportunities include adjusting its footprint to open up developable land as well as utilizing the basin as an extension of the recreational opportunities in the area.

Based upon preliminary discussions the Elephant Butte Irrigation District appears willing to discuss alterations to the detention basin of NMSU is willing to assume more responsibility for operations and maintenance.

### **LEGEND**

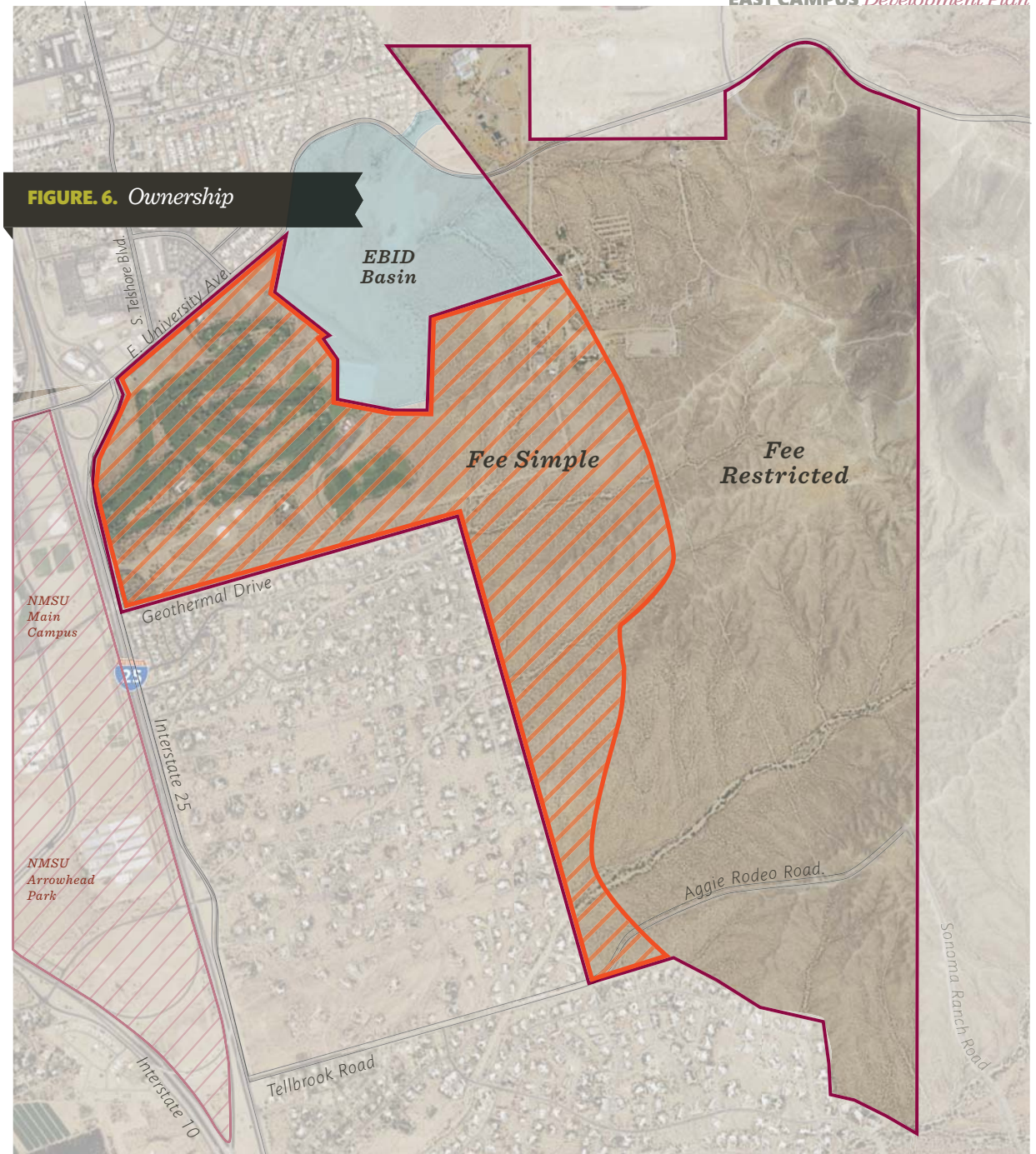
- Future Road
- Existing Trails
- Existing Open Space

## Ownership

Through a transaction with the Bureau of Land Management (BLM), NMSU obtained land that is required to further NMSU's educational mission. This fee restricted land must be used to benefit educational purposes at NMSU. What an educational benefit defines, however, still has to be clarified. The fee simple land does not have these restrictions.

<b>Land holdings</b>	<b>Acreage</b>
Fee Simple	689
Fee Restricted	1,611
Total	2,300

**FIGURE 6. Ownership**





**FIGURE 7.** Utilities

## ***Utilities***

The availability of utilities on the Aggie Development land is currently limited. Existing City infrastructure systems are located in close proximity to Campus lands, but future development in this area must include planning for these services.

### ***LEGEND***

- East Campus Boundaries
- - - Natural Gas
- - - Water
- - - Sewer

## Circulation/Access

### Constraints

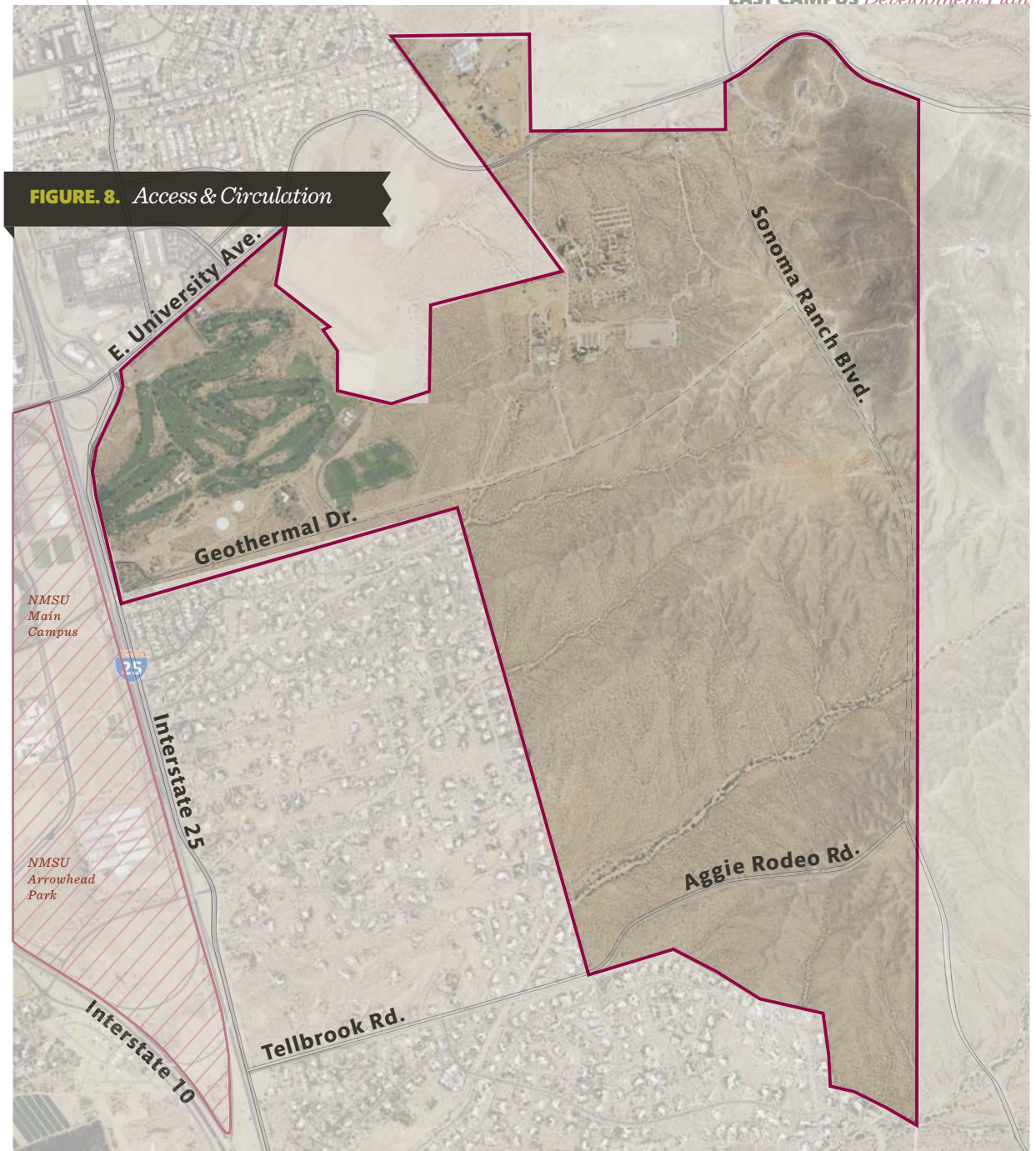
Access and circulation throughout the campus lands is limited. Access is provided from University Avenue, Geothermal Drive, and Tellbrook Drive. Geothermal Drive is only paved up to the NMSU Golf Course clubhouse and becomes a dirt road that extends east until it bisects the Observatory road. Tellbrook Drive extends through the Las Alturas neighborhood and cuts through the southern end of the NMSU property. The road is paved up to the intersection with Sonoma Ranch Boulevard.

### Opportunities

In order to obtain the highest and best use for the development of East Campus it is imperative that Sonoma Ranch Boulevard and Geothermal Drive are extended, as shown on the MPO Metropolitan Transportation Plan. The planned extension of S. Sonoma Ranch Boulevard would connect University Avenue with Tellbrook Road. This connection would create access to the eastern edge of the NMSU development lands. Similarly, the planned extension of Geothermal Drive to S. Sonoma Ranch Boulevard would create the framework for a major circulation system throughout the area.

S. Tellshore Blvd.

**FIGURE 8.** Access & Circulation



The extension of these streets also presents an opportunity to provide multi-modal transportation options. Their roadway design can accommodate cyclists and pedestrians by utilizing a complete streets approach, which involves a design that incorporates safe infrastructure for all potential users.

## ***NMSU Golf Course***

### **Constraints:**

The existing configuration of the golf course limits development opportunities along University Avenue and Las Alturas frontage road because the golf course extends to these major roadways.

There is no signage that leads people to the clubhouse. A visitor is required to already know where they are going to consult maps to arrive at the clubhouse. There are no visual indications that the NMSU golf course is, in fact, located here. There is a need to create a better entry sequence, through such elements as signage, plant materials, and entry monuments.

### **Opportunities**

The existing golf course can be reconfigured to create infill development opportunities on property that is relatively easy to develop and easily accessible from Las Alturas Drive and University Avenue. Potential uses include retail, housing, medical office, assisted living and post-acute care facilities.

The new clubhouse is in a great location to accommodate an expansion of the course. There is an opportunity to add an additional 18-holes, as well as move the driving range to another location and free up the current site for development.

**FIGURE 9. Opportunities & Constraints**



**DEVELOPMENT OPPORTUNITIES & CONSTRAINTS**

- Possible development of a new Rodeo facility in close proximity to the New Mexico Farm & Ranch Heritage Museum
- Reconfiguring Golf Course to increase development capacity for commercial/residential development.
- Opportunity to develop a rodeo arena, golf resort, housing, assisted living facility, alternative learning, commercial and medical.
- ➖ Large portion of the East Campus area has steep slopes and extensive wash area making development difficult and costly.

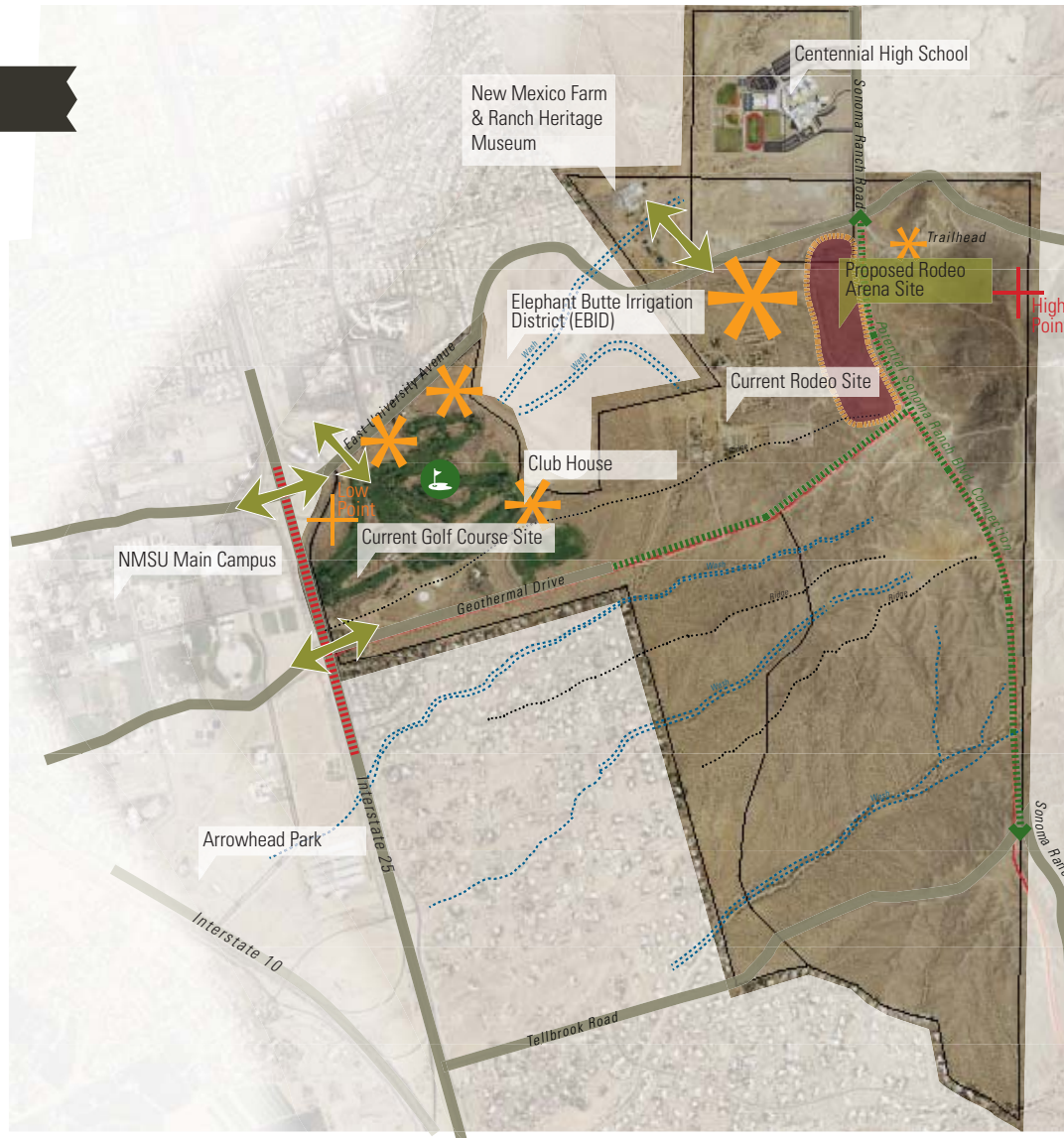


**INFRASTRUCTURE/UTILITIES OPPORTUNITIES & CONSTRAINTS**

- ➖ Limited availability and capacity
- Utilities would be included with any development proposal and or roadway extension

**LEGEND**

- ||| Constraint to circulation/ connectivity barrier and development barrier
- ||| Opportunity to improve circulation, create connections
- ↔ Opportunities to connect to areas of interest
- Existing connections
- ⊕ Elevation, high-point
- ⊖ Elevation, low-point
- ✱ Development Opportunity



**GOLF COURSE/ OPEN SPACE OPPORTUNITIES & CONSTRAINTS**

- Major and minor wash areas, ridges and steep topography all are opportunities to preserve open space.
- Portions of the EBID easements can also be preserved as open space areas.
- ➖ Current configuration limits the design development opportunities along University Avenue and Las Alturas Drive.
- ➖ Clubhouse/golfcourse needs better entry sequence, signage, plant materials, and entry monuments
- Clubhouse has capacity to operate an additional 18 hole golf course - need to provide additional parking areas.
- Reconfigure existing course to create development opportunities on University Avenue and Las Alturas Drive.



**CIRCULATION OPPORTUNITIES & CONSTRAINTS**

- ➖ Limited circulation to site - Geothermal Drive, University Avenue, Tellbrook Road
- Extension of Sonoma Ranch Road
- Extension of pedestrian, bicycle and transit ways

# LAND USE FRAMEWORK

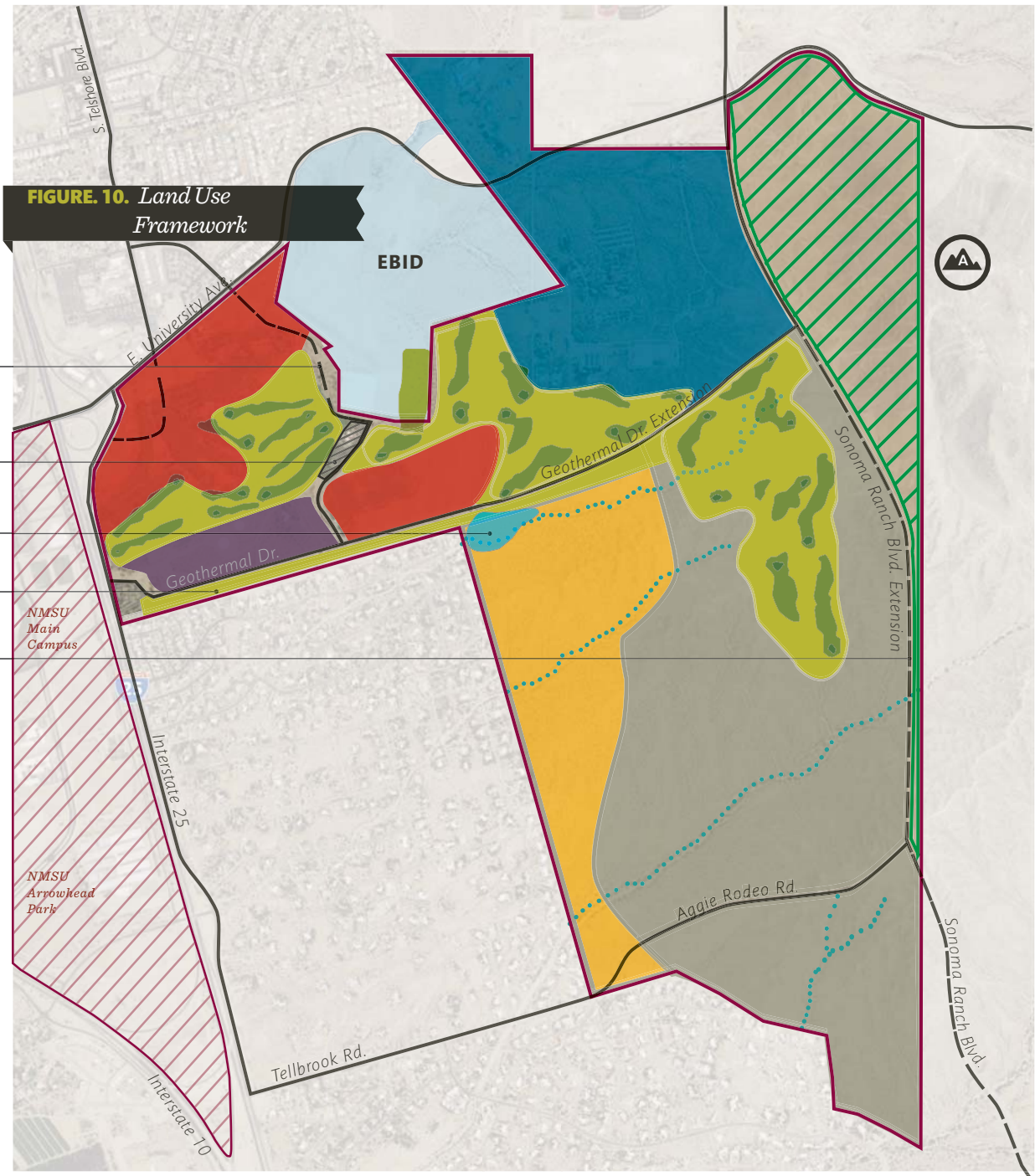
The land use framework responds to the existing opportunities and constraints, ownership constraints, the previous master plan for the area as well as the results of the design charrette/workshop.

The proposed uses include:

- *Mixed Use Commercial*
- *Research Programs*
- *Academic Programs*
- *Greenspace/Recreation/ Athletics*
- *Future Research and Programs*
- *Special Purpose Programs*
- *Cultural & Recreational Uses*

## **Mixed Use Commercial**

The mixed use commercial zone envisions to create a mixture of commercial, medical offices, and health related residential uses such as independent living, assisted living and alumni housing. Development in this zone would be phased with the





first phase located along the vacant parcels along University Ave. The second phase depends on the installation of a new 18-hole Championship University Golf Course east of the current facility along Geothermal Drive. When this facility is operational then the existing University golf course can be reconfigured into a 9 hole course and practice facility. This area is intended to generate recurring revenue for the University to fund academic and research programs.

**Research Programs**

This area of the master plan, builds off of the existing functions within the fee restricted lands. It includes the rodeo grounds, the NM Farm and Ranch Heritage Museum, and various University research programs that need a larger area to expand their research.

**Golf Research & Hospitality**

This zone constitutes a transitional space between the existing NMSU campus,

Arrowhead Park, and the East Campus. The uses envisioned for this zone will complement the NMSU Golf Course.

**Greenspace/Recreation/Athletics**

The greenspace/recreation & athletics area is designated for the new 18-hole University Championship golf course. The course was strategically located within the Main campus's principal east west axis in order to provide a use for the land while preserving the historic landscape feature. A championship course will further the academic needs of the PGA Golf Management program, the NMSU Golf Team, the turf management, and irrigation management programs of the University. The new Golf Course allows golf management students to work with a state of the art facility and it can be used to attract new students and for the student golf athlete to train and compete at a higher level.

**Future Research and Programs (Land Bank) -**

The future research and programs area is reserved for future uses not anticipated at this time. It is subject to the terms of the BLM land exchange.

**Special Purpose Programs (Land Bank)**

This category is carried over from the previous master plan and will provide areas for residential, academic and research uses. Limitations on property ownership as well as the proximity to the residential development to the west make this zone a challenge and will probably limit development in the near future.



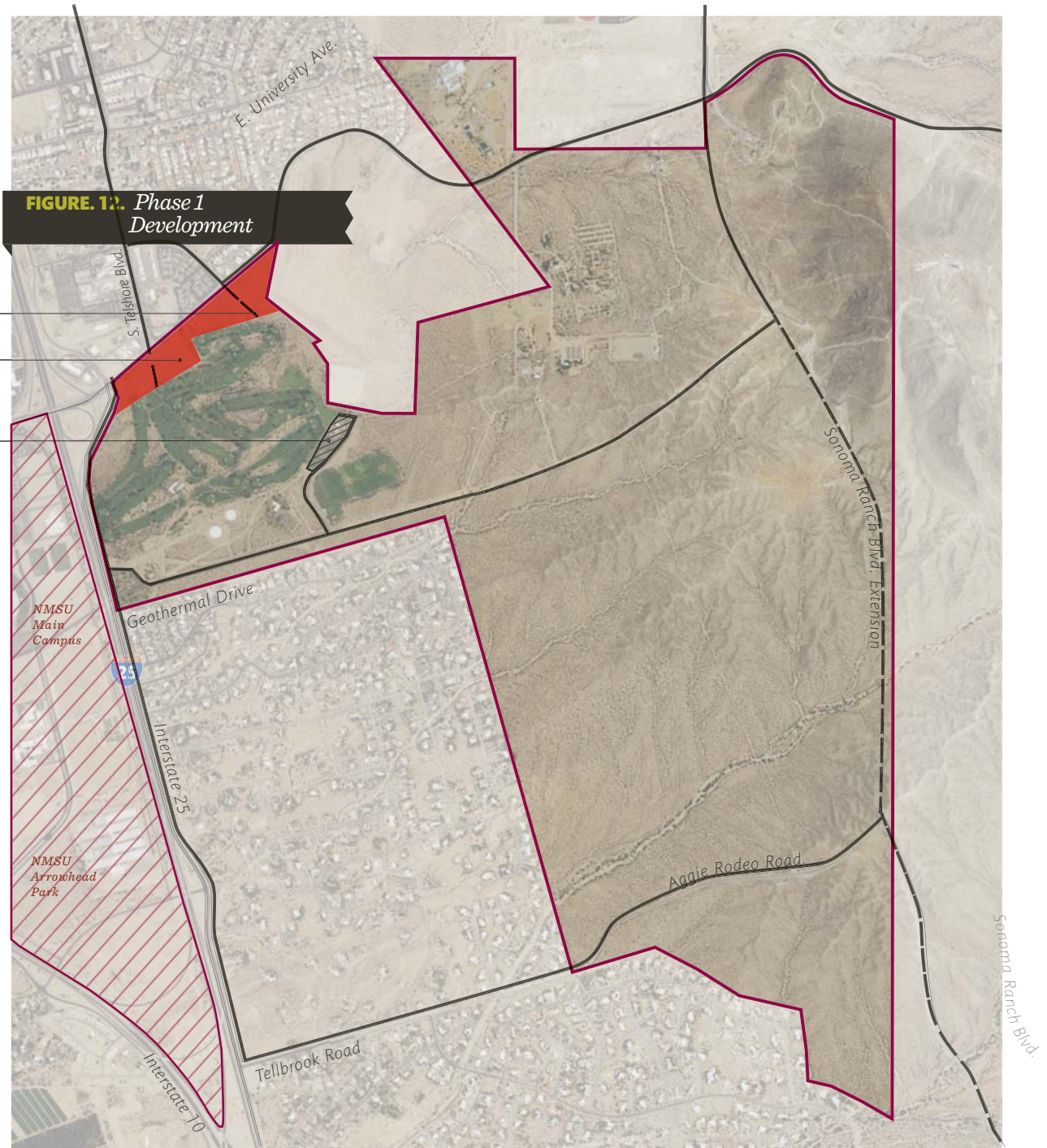
**FIGURE 11.** *Principal East-West Axis*

Tortugas (A) Mountain  
New Golf Course Location  
East-West Axis

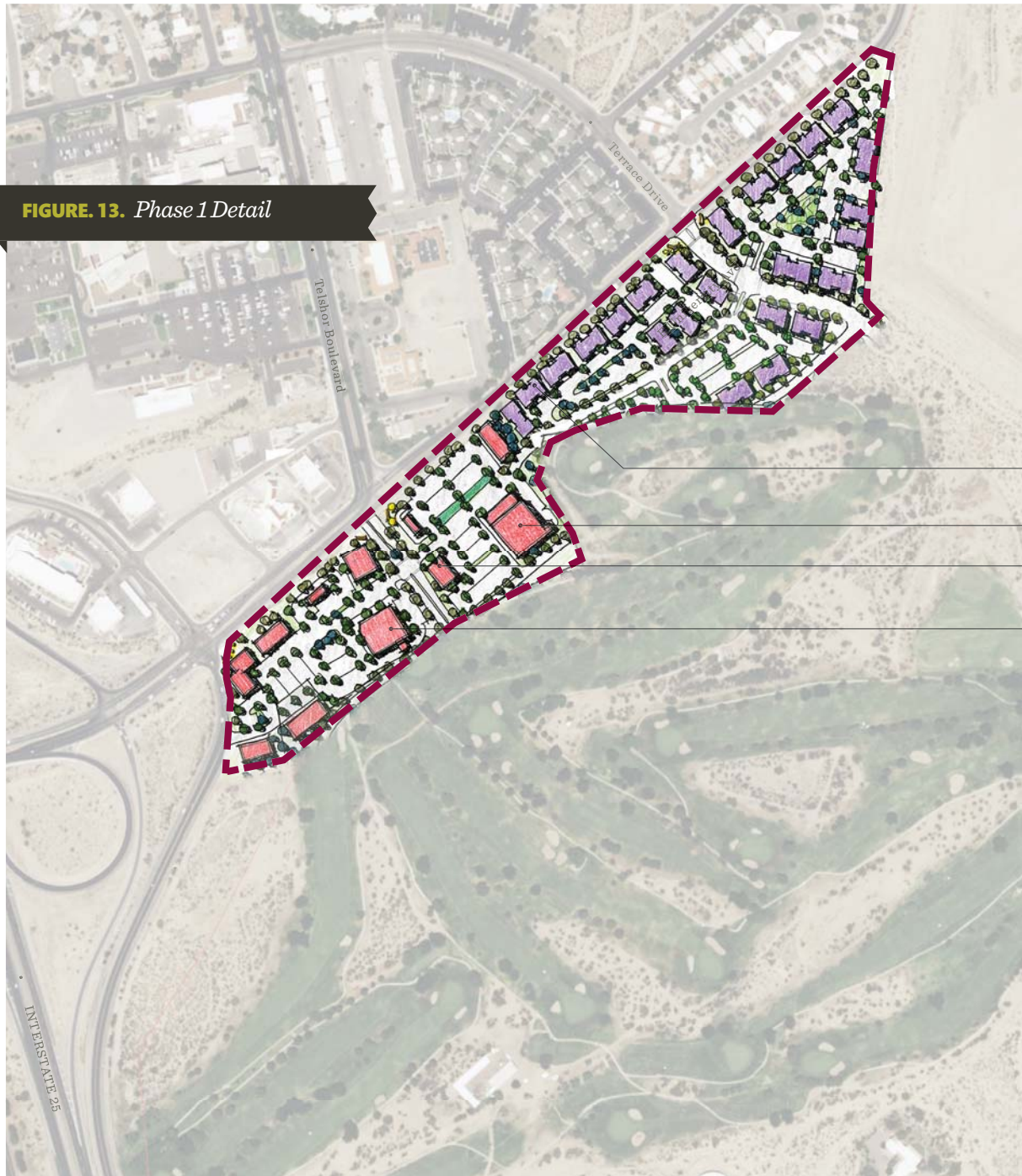
## Phasing Plan

### Phase 1

Phase 1 is proposed along E. University Ave. Potential uses include: retail commercial (grocery store, drug store, retail shops, restaurants, etc.). Given the sites proximity to the Memorial Medical Center, medical office and clinical spaces have good potential. Both Telshor Blvd. and Terrace Dr. can be extended into the site for immediate access and future connections. There is also an opportunity to create entry gateways, monuments and streetscape elements along University Ave. to tie the development visually to the NMSU main campus.



**FIGURE 13.** Phase 1 Detail



- Medical Offices
- Grocery
- Typical Retail
- Drug Store

***PHASE 1 DEVELOPMENT OVERVIEW***

<b>USE</b>	<b>ACREAGE</b>
Retail	16.2
Medical Office	20.2
Continuum of Care	0
Residential	4.6
<b>Total</b>	<b>36.4</b>

**Phase 2**

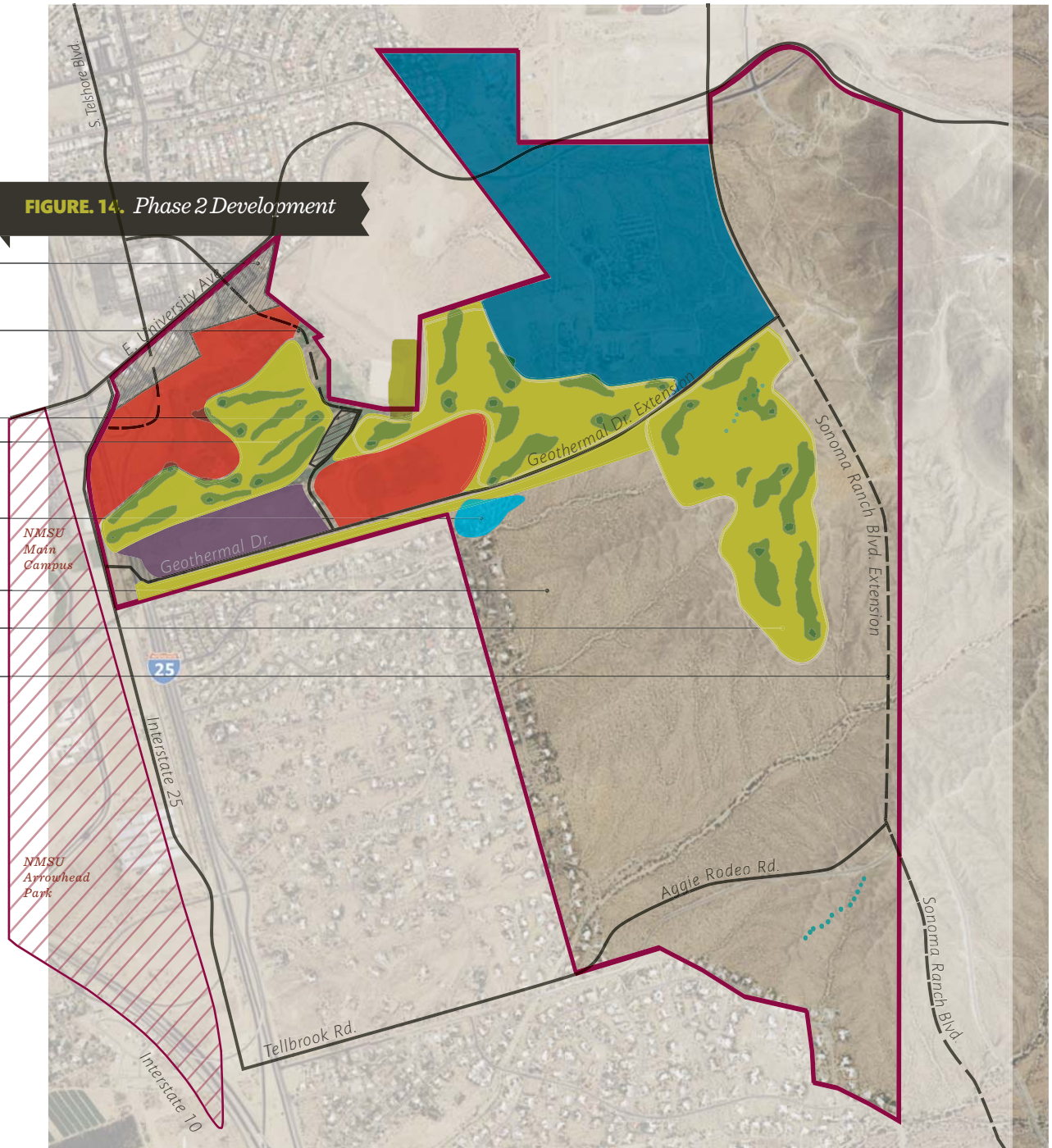
A number of projects have to occur prior to allow for the second phase to break ground. One of the most important projects is the construction of the new 18-hole golf course. It would allow for the existing golf course to be reconfigured to 9-holes and phase 2 of the mixed use commercial to be developed. At this point Terrace Drive can be extended to create the new access to the clubhouse and Telshor Blvd. can be continued into the mixed use commercial zone. Geothermal Drive can be extended to the east and Sonoma Ranch Blvd. south to intersect with it. This will allow for better connectivity between the academic program area along Geothermal Drive and the research program along Sonoma Ranch Blvd. Regional trail connections to "A" mountain and the Tortuga Arroyo can also be implemented. Entries and gateways would also be built during this phase.

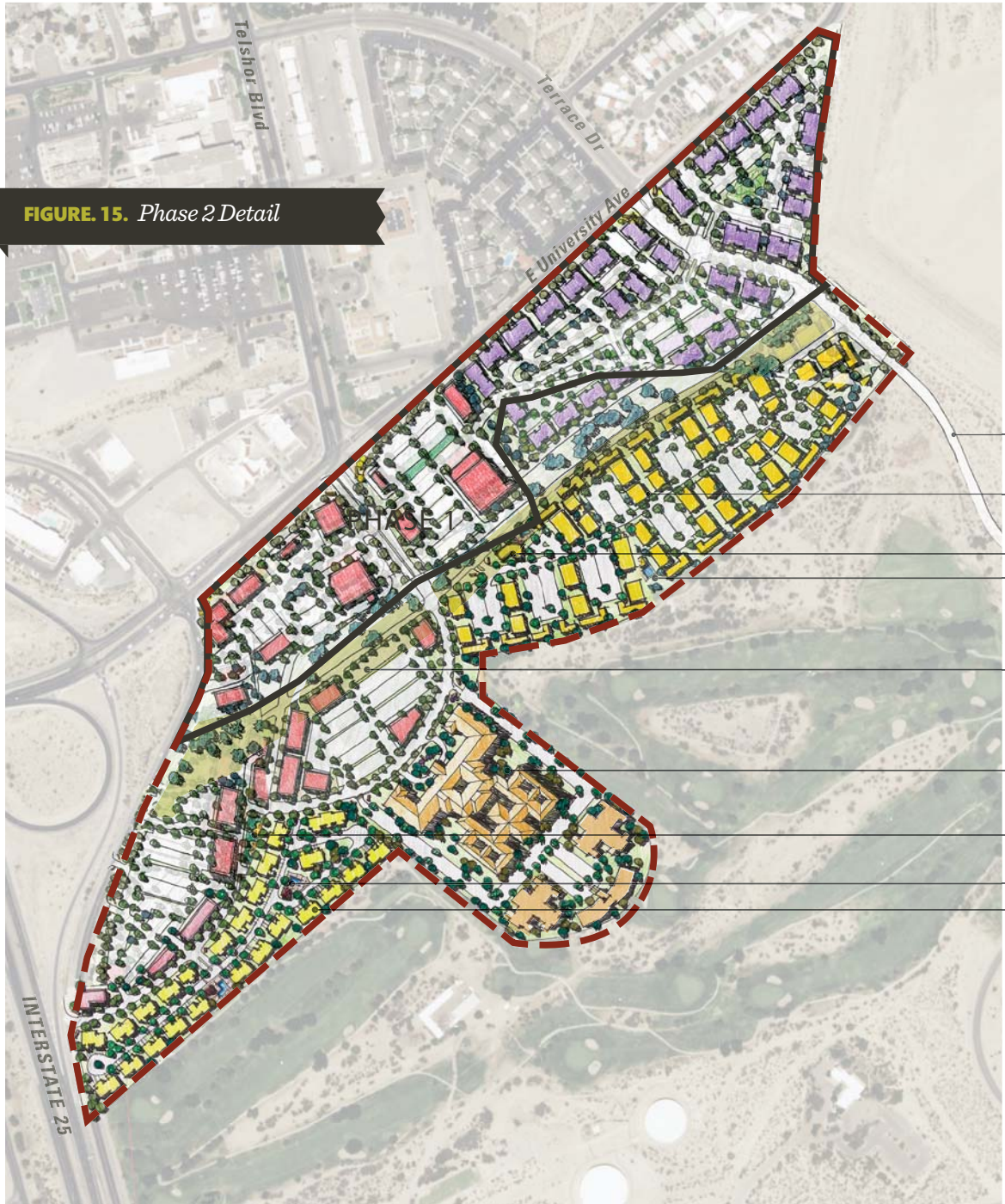
**FIGURE 14. Phase 2 Development**

- Phase 1 Commercial Development
- Terrace Rd. Extended to Existing Clubhouse
- Existing Clubhouse
- Reconfigured 9 Hole Golf Course
- Golf Course Irrigation Pond
- Future Phase
- New 18 hole Golf Course
- Sonoma Ranch Blvd. Extension

**LEGEND**

- Mixed-Use Commercial
- Research Programs
- Academic Programs
- Greenspace/ Rec./ Athletics
- Future Research and Programs (Land Bank)
- Special Purpose Programs
- Phase 1
- Existing Clubhouse
- Wash Areas





**FIGURE 15.** Phase 2 Detail

- New Road to Clubhouse
- High Density Housing / Medical Development
- Clubhouse Facility
- Recreational Area
- Open Space Spine
- Continuum Care Retirement Community
- Plaza
- Recreation Area
- Patio Homes

***PHASE 2 DEVELOPMENT OVERVIEW***

<b>USE</b>	<b>ACREAGE</b>
Retail	29.9
Medical Office	4.8
Continuum of Care	18.3
Residential	39.2
<b>Total</b>	<b>92.2</b>

## Character Sketches



**1) View Looking East**  
Towards "A" Mountain



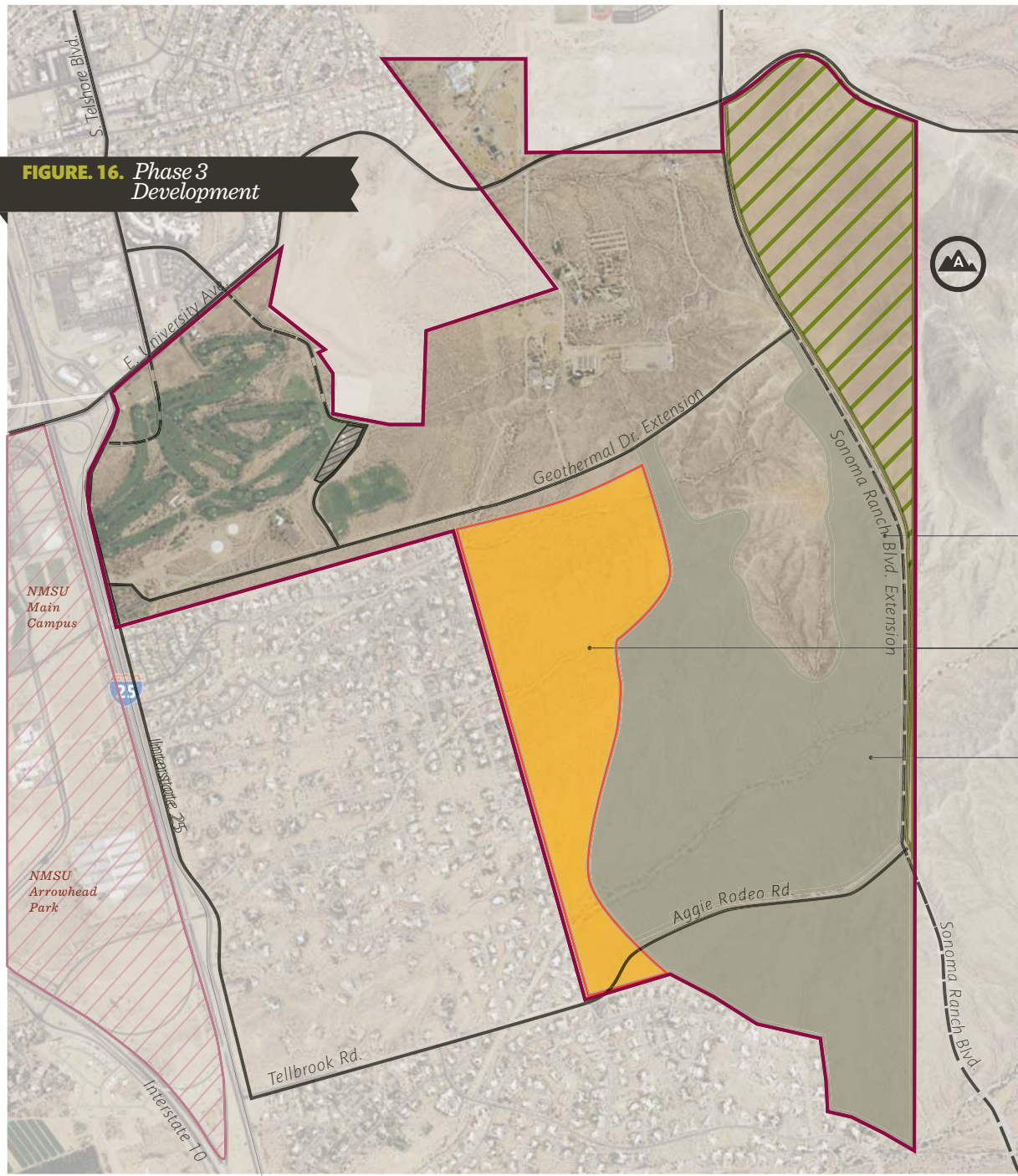
**2) View Looking South**  
Gateway Treatment



**3) View Looking North**  
Towards the Plaza & Destination Retail



**FIGURE 16.** Phase 3 Development



Proposed Sonoma Ranch Blvd. Extension

Special Purpose Programs (Land Bank)

Research Programs (Land Bank)

**LEGEND**

- Institutional: Research
- Special Purpose Programs
- Fee Simple Property
- ▨ Cultural / Recreational Area

**Phase 3**

Phase 3 extends to Sonoma Ranch Blvd. south and connects with the intersection of Tellbrook/Aggie Rodeo Road. This new road alignment opens up the remaining area for development and provides for a continuous and important North/South regional connection. The proposed trail connections can also occur.

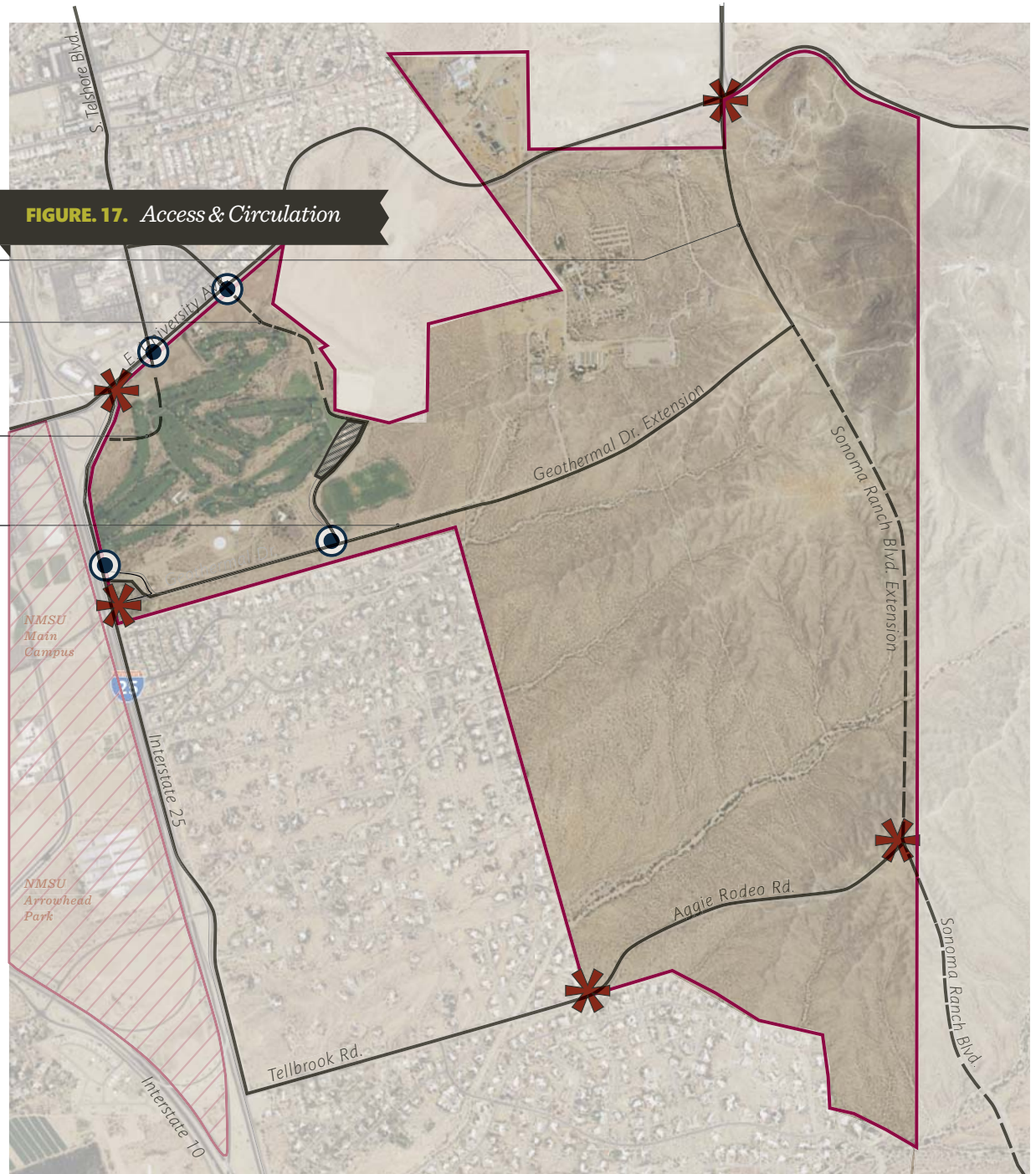
## Access & Circulation

Ensuring adequate access and connectivity throughout East Campus lands is a major goal of this plan. Access and circulation can be expanded through several roadway extensions. Extending Sonoma Ranch Blvd. from University Avenue to Tellbrook Road creates accessibility along the eastern edge of the campus. The planned extension of Geothermal Dr. to Sonoma Ranch Blvd. provides the framework for a major circulation system through the campus. These roadway extensions are critical in ensure adequate access and connectivity for the East Campus.

Gateway treatments should be utilized to identify major entrance points to facilitate wayfinding and develop an entry sequence. Gateways should include elements such as signage, monuments, and landscaping in a way that reinforces the overall brand of the campus.

**FIGURE 17.** *Access & Circulation*

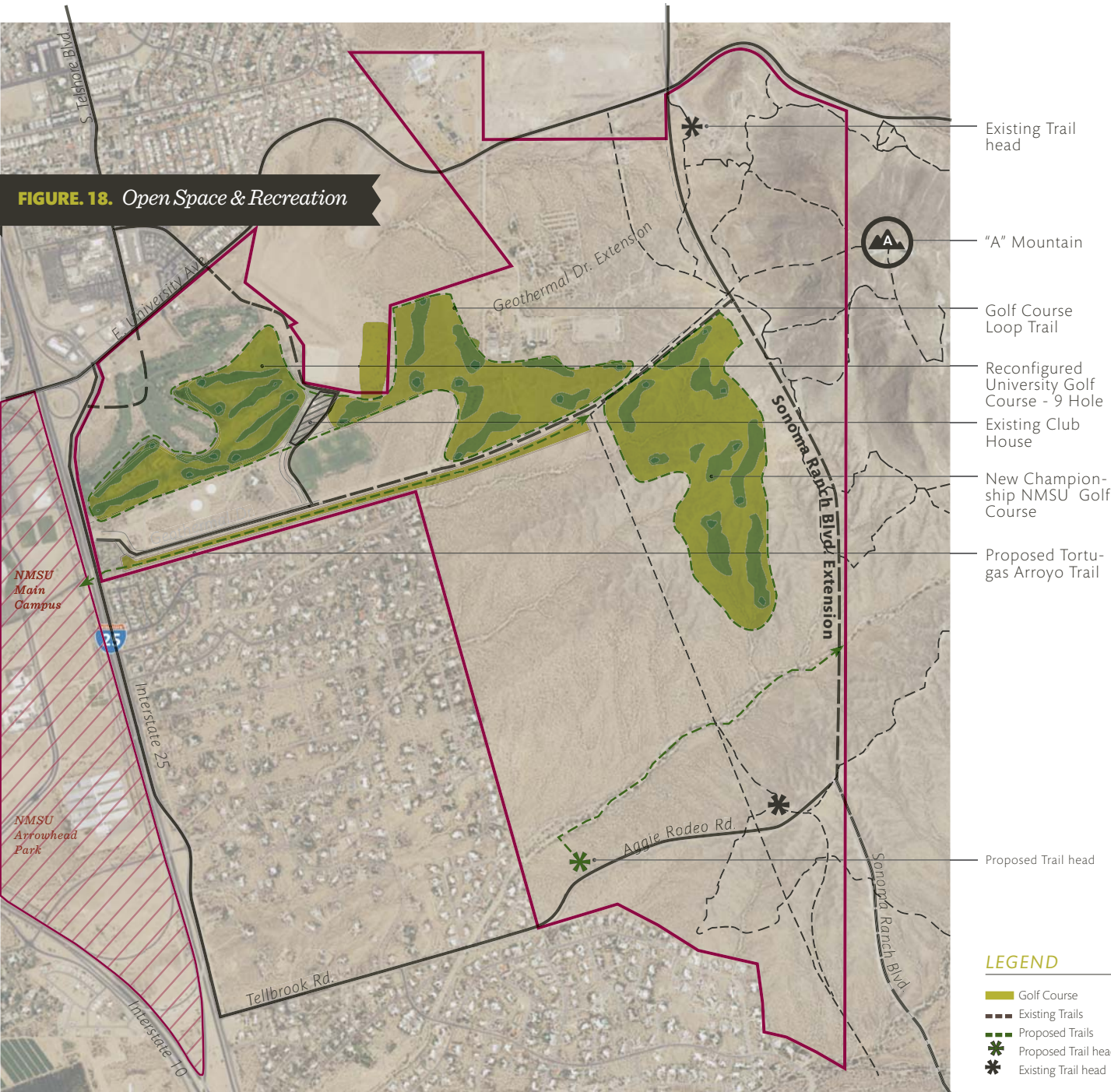
- Proposed Sonoma Ranch Blvd. Extension
- Proposed Terrace Drive extension to the existing clubhouse
- Proposed Telshor Blvd. Extension
- Proposed Geothermal Dr. Extension



**LEGEND**

- Access Points
- \* Gateways





**FIGURE 18.** *Open Space & Recreation*

## Trails & Recreation

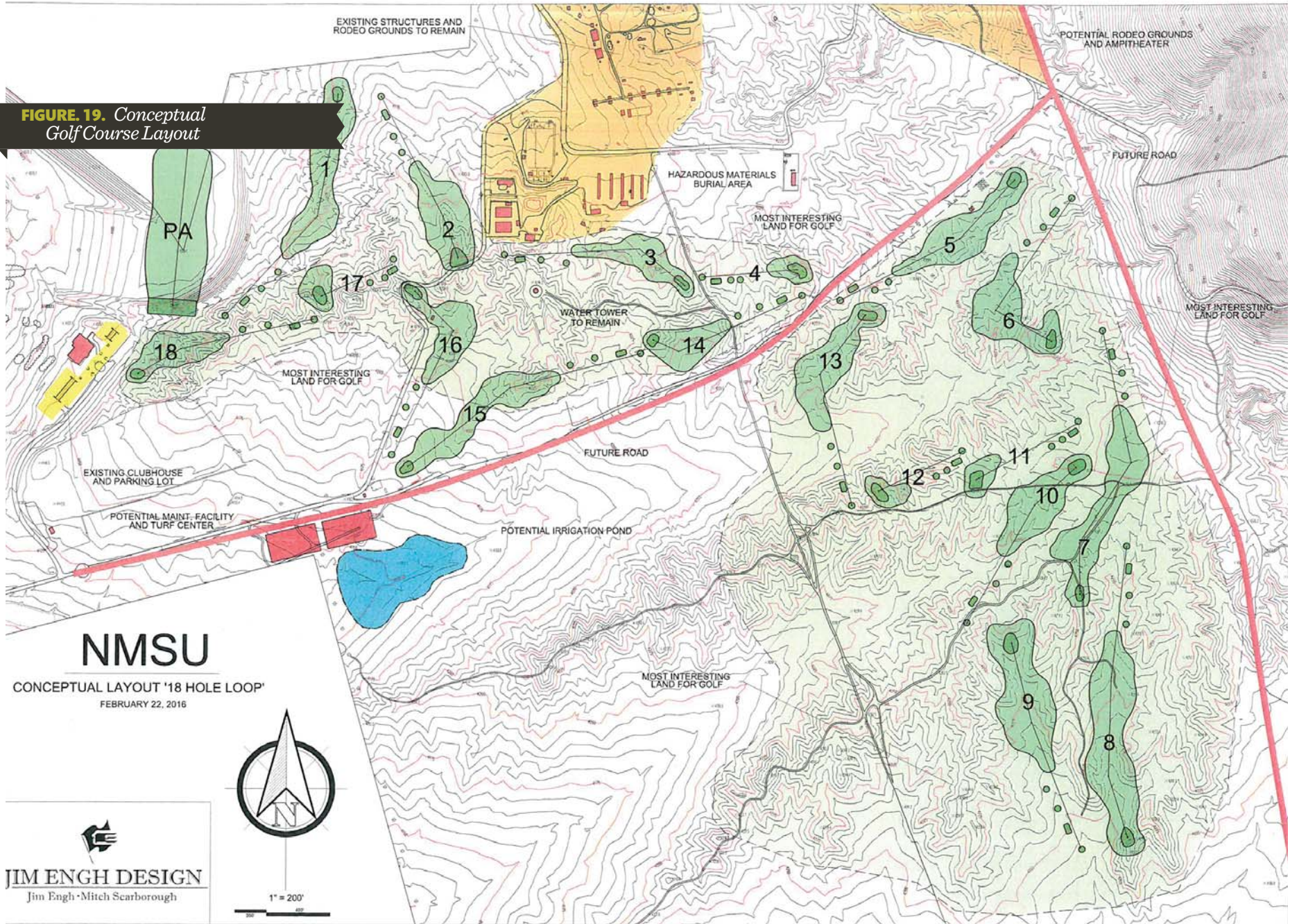
The trail and recreation system envisioned for East Campus lands utilizes the existing trail system and wash areas as much as possible. The new 18-hole golf course is a key public recreational element, whose strategic placement within the “A” Mountain view corridor provides a use for the land.

Proposed elements for the East Campus recreational system include:

- A new trail head opportunities at key intersections.
- An extension of the Tortugas wash trail to the “A” Mountain trail system.
- A loop trail around the existing 9-hole golf course tying the mixed use development to the open space to the east and south.
- Maintain view corridor from main campus to “A” Mountain.

### LEGEND

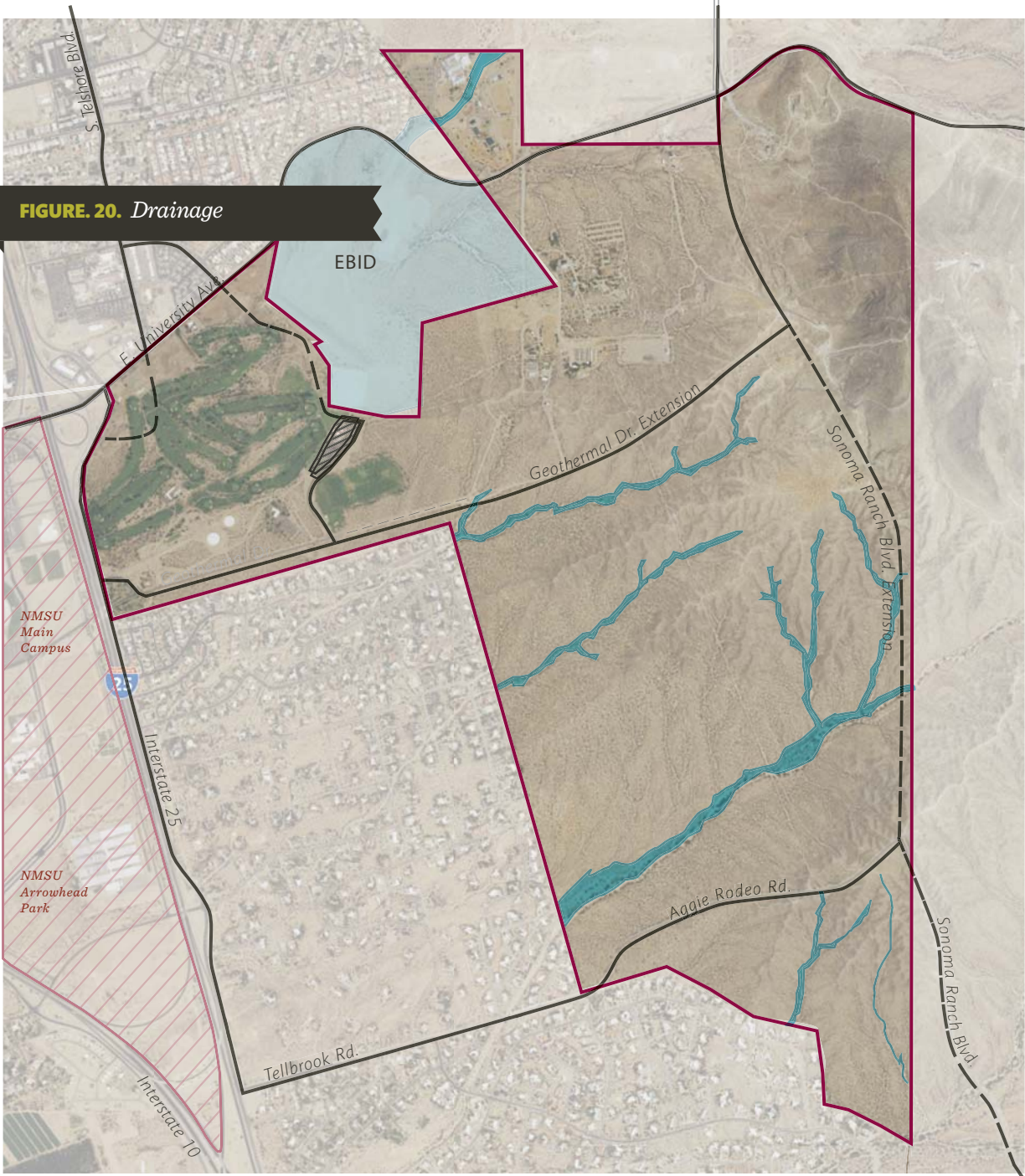
- Golf Course
- - - Existing Trails
- - - Proposed Trails
- \* Proposed Trail head
- \* Existing Trail head



## Drainage

Several arroyos and washes are located on East Campus lands. Future developments should be cognizant of and incorporate existing drainage patterns into site development plans. These systems should be improved to capture and store runoff with designs that encourage water retention and infiltration.

The Elephant Butte Irrigation district dam on its northern edge, east of the golf course will remain.

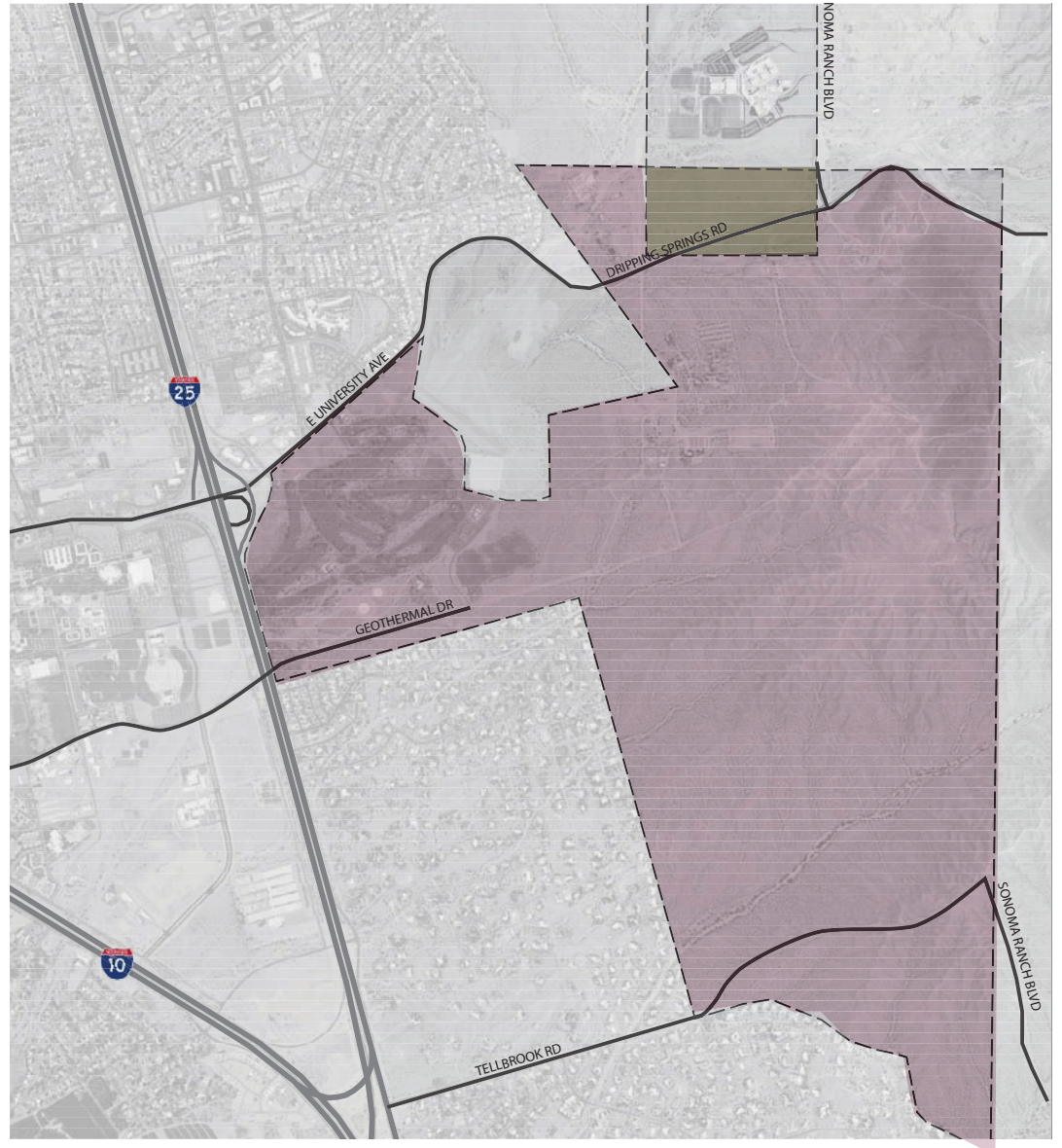


# APPENDICES

Aggie Development Dialogue Notes . . . 30  
Golf Course Development Analysis. . . . 36

# AGGIE NM STATE DEVELOPMENT PLAN

## Aggie Development Dialogue **NOTES** From Thursday, Nov. 19 2015



DECEMBER 2, 2015 DIALOGUE NOTES



**Thursday Nov. 19, 2015**

**Conference Room - Hadley Hall Room 130**

**Discussion included Aggie Development Board,  
NMSU Facilities, Realtors**

---

### *VISION STATEMENT*

*The vision for a successful East Campus Development Plan is the transformation of the underdeveloped 2,300 acres into a successful Town/Gown project that will require cooperation between NMSU, the City of Las Cruces, Doña Ana County and the private sector.*

*The underlying intent is to create a caring community that transforms lives through discovery and education. Extraordinary care will be taken to ensure that cultural resources, views of "A" Mountain and current recreational uses are preserved. Existing The University will support and encourage private development that reflects this vision of the NMSU's East Campus.*

The purpose of the meeting was to have Aggie Development stakeholders provide input on how best to plan the 2,300-acres of land on the east side of Interstate 25. Over the course of a day, various groups were invited to discuss overall ideas for development, guiding principles/strategies, existing constraints and opportunities, and NMSU issues. The following is a summary of these discussion and draft concepts that were presented.

### **Mission/Vision/Guiding Principles**

These guiding principles will direct the Aggie Development Plan. The bullets below reflect some of the issues and ideas raised during the dialogue.

- Create recurring revenue
- Maximize developable land, particularly adjacent to University Avenue.
- New development to be compatible with University mission.
- Integration of land use concepts with the overall community.

### **Community Concerns/Opportunities**

Apart from the University golf course, most of the 2,300 acres are not developed. However, the University desires to utilize land more fully. This will ultimately lead to a change in current uses of the land. Adjacent communities may object to a conversion of "open space" into developed land uses. Yet, with careful planning the land can accommodate outdoor activities while also increasing the value and return on the land. Some community issues are:

- Neighborhood invested in their perception of land as open space – a place to walk their dogs.
- Road extensions likely to be controversial with local communities.
- Road connection are identified by the long-range transportation plan.

### **Golf Course**

- Expansion or relocation of portions of existing golf course to be determined in cooperation with the design team chosen to create alternative golf course concepts.
- Integrate research (turf grass, water technology) into existing and any expansion of golf course.
- Have recreational uses tied into the perimeter of the golf course – perimeter hiking trail.
- Location of existing driving range could be repositioned as a site for an assisted living retirement facility or other, higher value uses as appropriate.

### **Open Space**

- Incorporate where feasible existing open space and recreational activities.

### **Connectivity**

- Future road extension may be controversial with the adjacent communities.
- Road extensions are identified by the long range transportation guide.

### **Educational facilities**

- Maintain educational facilities on East Mesa.

### **Rodeo/Amphitheater:**

- Currently Las Cruces does not have an adequate event center.
- The Rodeo/Amphitheater could act as a catalyst



- project to spur development.
- Great regional location between Dallas, San Antonio and El Paso.
- Rodeo/Amphitheater can become a regional magnet, attracting visitors from El Paso and surrounding communities.
- Attract national music/entertainment events and host equestrian events from NMSU.
- Enhance branding and elevate profile for the University.
- Located on property that would otherwise be difficult to develop (lack of access/infrastructure).
- Concerns to address- noise and light pollution.

### **Institutional/Health Care (40-50 acres)**

- Changes in healthcare and growing senior population
- Las Cruces as a retirement destination
  - Retirement homes in close proximity to universities have proven to be very successful. A symbiotic relationship can be created where the seniors and the University can profit.
  - Potential donors.
- Continuum of care and retirement facilities could be located along University Ave.
- Cooperation with hospital and Burren College of Osteopathic medicine (BCON)
  - Students are a source of primary care providers
- Utilize the proximity to the University

### **Residential developments**

- Example of precedent developments:
  - Condo-complex "Sun City"
  - Patio homes
  - Sonoma Ranch

### **Gateway**

- Create a gateway on University Ave. east of I-25
- Appealing and unified design of University Ave and streetscape

### **Partnership**

- Potential collaborative efforts of Arrowhead and Aggie Development – build off success of BCOM.
- Partner with City on utilities?
- Partner with EBID to increase developable land?

### **EBID**

- Potential to decrease EBID pond?

### **Utilities**

- Sewer and water are difficult to tie in to.
- Working with City to obtain utility access
- Electrical priority line runs under Geothermal - capacity not known.
- Water well close to existing rodeo facility
- Solar maybe an option.

### **Events**

- Celebrate the annual events – pilgrimage to A-Mountain.

- Create designated pathways that facilitate pilgrimage

### **Open Questions**

- Need to define what educational purpose means and what is allowed?
- What happens with existing research facilities?
- How to tie University and Arrowhead to Aggie Development
- How to limit access for motorized vehicles to A-mountain?
- What is the best Rodeo facility location and extend?
- How to tie in the community?
- Where to create public spaces?
- What is the economic strategy?
- What is the vision, objectives and priorities?
- Who will the development be targeted too?

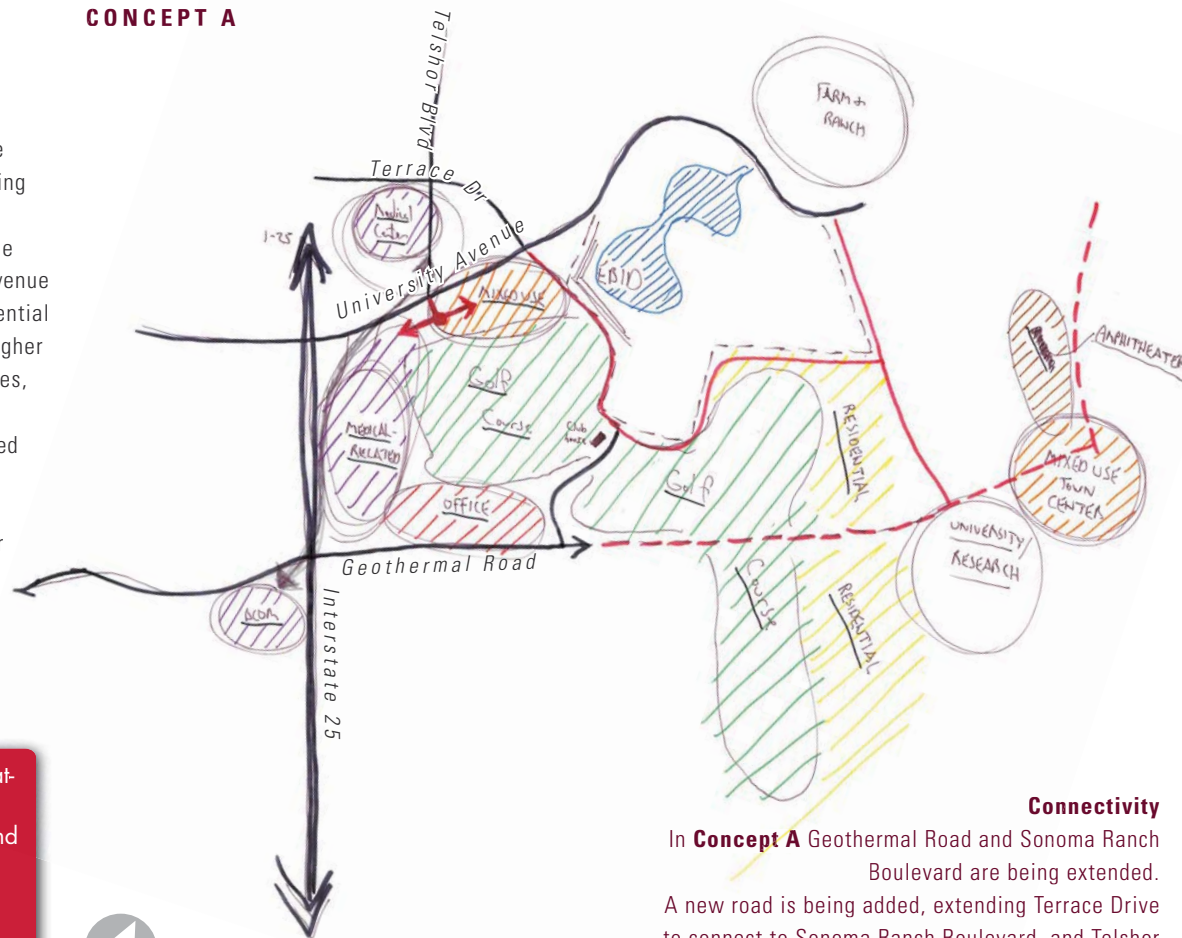
### **Design**

- Maintain view corridor to A-Mountain
- Increase walkability
- Create street wall - a unbroken line of buildings with a consistent setback at the thoroughfare, improving the pedestrian experience. First floor retail spaces, further aid the engagement with the street and become a pedestrian destination.
- Create public spaces
  - Area for food trucks



**Concept A** details potential future development patterns on Aggie Development land. In this concept commercial uses are located along Interstate 25 and University Avenue. The area identified as 'medical related' could include continuum of care and retirement facilities fronting the golf course to the east, while commercial activities are oriented towards the Interstate. The retirement development area along University Avenue includes commercial and residential uses. Residential uses in a mixed-use development are typically higher density and could include patio-and zero lot homes, as well as townhouses and apartments. In this concept, the golf course would be extended to the south, across the potential extension of Geothermal Road. To the east of the planning area an area of lower density, residential uses is identified.

**CONCEPT A**



**Note:** The following draft sketches were created during the Aggies Development Dialogue. These concepts explore potential land uses and development patterns. These will evolve over the duration of the planning process and will react to the future golf course footprint. They are works-in-progress that show a range of possibilities and are for internal use only.

**Connectivity**

In **Concept A** Geothermal Road and Sonoma Ranch Boulevard are being extended. A new road is being added, extending Terrace Drive to connect to Sonoma Ranch Boulevard, and Telshor Boulevard is being continued across University Avenue to access the mixed-use development.



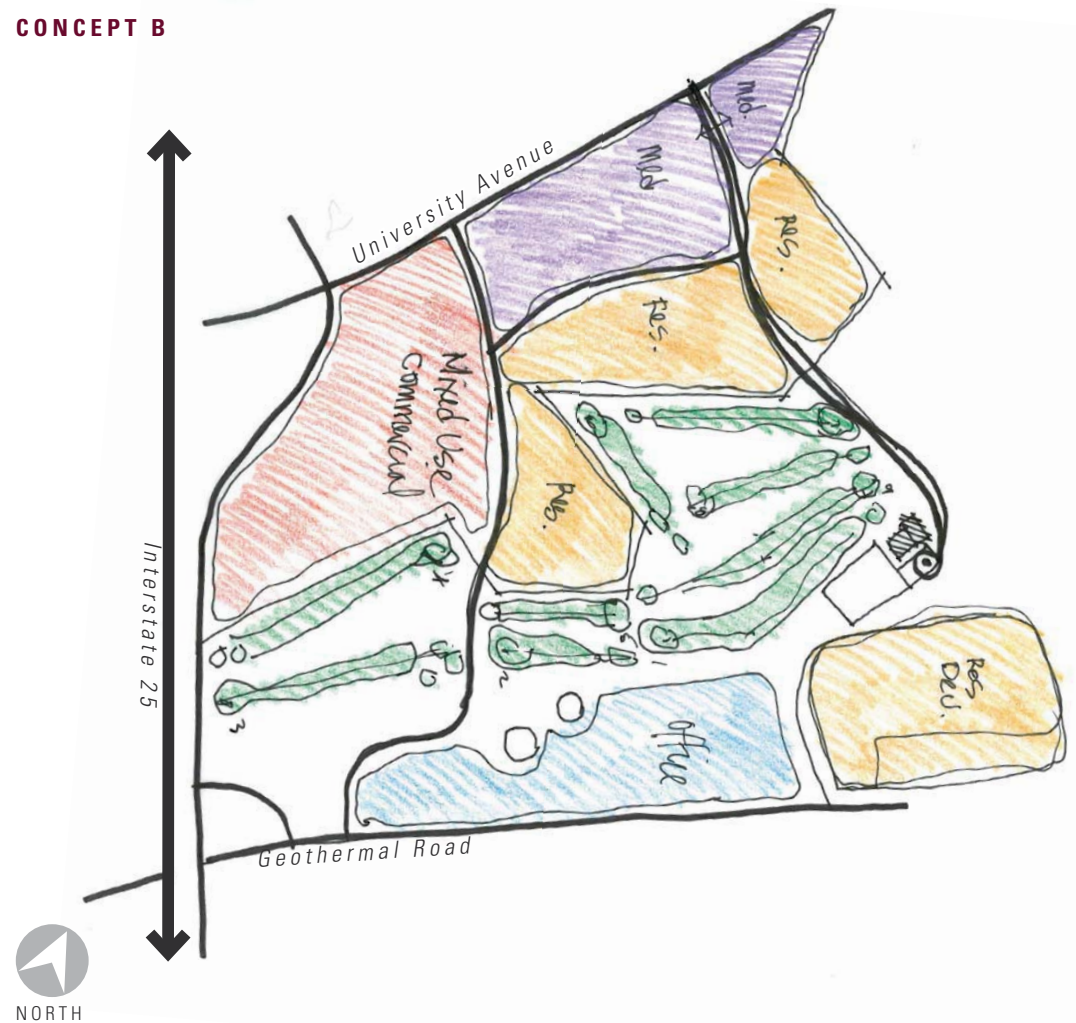


In **Concept B**, medical uses are located along University Avenue in close proximity to the hospital. A mixed-use/commercial development is located along Interstate 25. Residential uses are located behind the commercial and medical uses, fronting the golf course. These area could also include continuum of care and retirement facilities with golf course views and access.

**Connectivity**

In this concept, a new road dissects the commercial and residential uses, connecting University Avenue and Geothermal Road. Another proposed road connects University Avenue and the golf course club house.

**CONCEPT B**



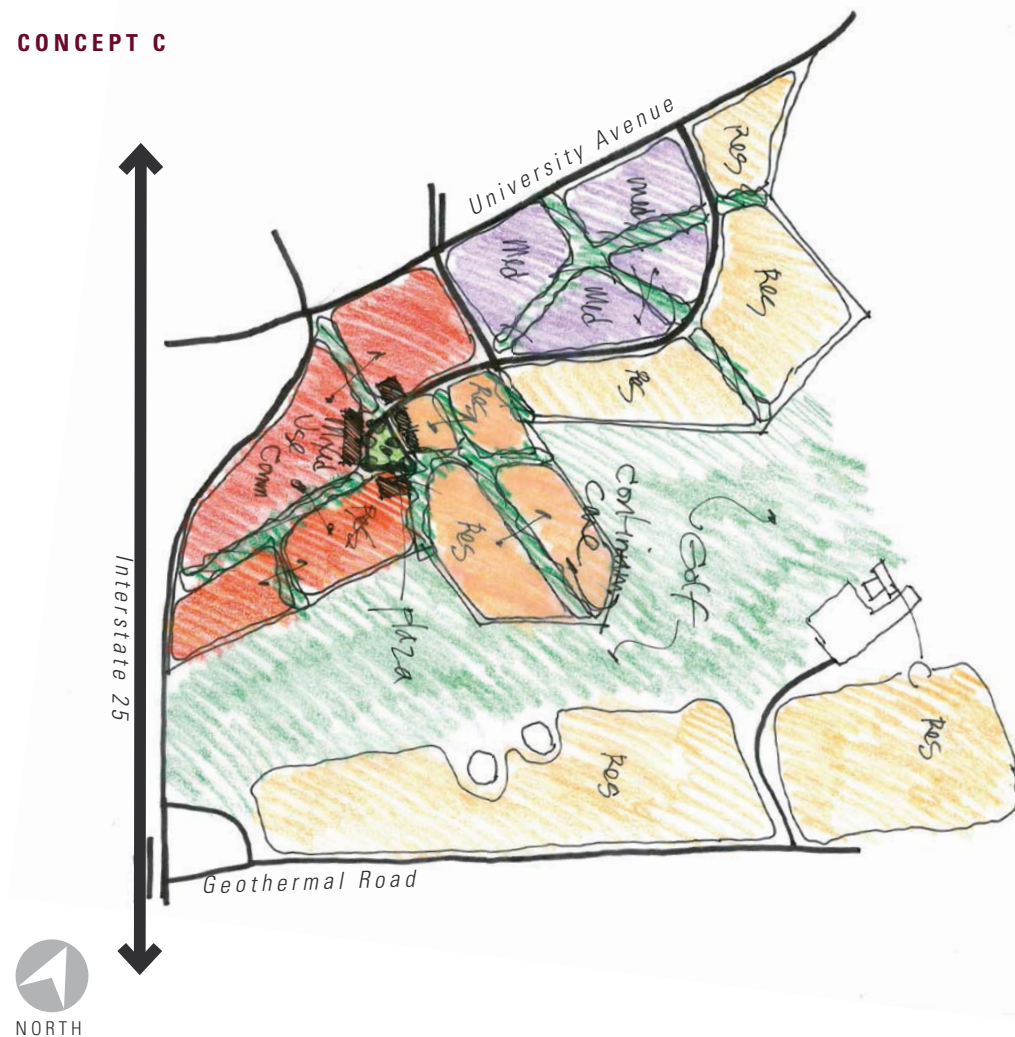
# AGGIE NM STATE DEVELOPMENT PLAN

In **Concept C**, mixed-use and commercial uses are located along the Interstate and University Avenue. Medical uses cluster along University Avenue. Again, residential uses are located behind the commercial activities, fronting the golf course. This area could be suitable for continued care and retirement facilities. More residential designations are located north of Geothermal Road.

### Connectivity

In this concept, a new roads are proposed to access the medial, commercial and residential areas.

### CONCEPT C



## Golf Course Development Analysis

*New Mexico State University*



Prepared by:  
Jim Engh Design, Inc.  
March 2, 2016

## Introduction

The basis for this analysis by Jim Engh Design, is to evaluate the land adjacent to the existing golf course / clubhouse, for use as a new 18-hole golf course. This would include the general character of the land, soil, water, power, costs and the image creation aspects of such a golf course. Within this analysis are two differing golf course layout possibilities that will display some conceptual ideas.

Jim Engh Design has been fortunate to have received unique acclaim within the golf course design industry for its body of work. Within that portfolio is the photograph chosen for the cover of this report, Lakota Canyon GC in New Castle Colorado. This photo is reminiscent of the mountainous background that is found at the NMSU campus and the potential for image creation that is possible through golf.

Certainly, many differing and unique landforms exist on planet earth. It is in-fact, the single most determining factor toward the potential quality of any golf course. Then it becomes the unique challenge of the golf course architect to choose how best to affect/control the land in order to achieve the function of a golf course. Having the wildly varying landforms existing on the planet and the unique perspective, creative approach and style



of each golf course architect, we are left with infinite possibilities as to how each golf course might be completed.

Four Mile Ranch, Canon City, Colorado

## Project Analysis

Examined will be physical attributes that are required to determine the viable potential for each golf course project. Obviously, at this early stage not all questions can be completely answered. However, some questions will be raised in order to be answered at a later time.

### Land Character

Consisting of rolling hills that have been formed by wind and water erosion over thousands of years, the land in question is almost perfectly suited to be used as a golf course. Vegetation consists mostly of low to medium growing shrubs, yucca and cactus that will be a physical and aesthetic benefit, without becoming a nuisance. Very little, if any, new vegetation would be required. Soils seem to be slightly varied between sand and loamy sand with in the site. Thus, perfect for growing grass.

Erosion, within the sandy loamy soils, has created landforms that resemble that of Scotland and Ireland, the home of golf. Significantly, cost for construction of a new golf course would be very low when compared to that of typical new golf courses constructed today. The priority would be to embrace the natural charter of the land, discovering, not creating, the dunes style course for which the land is whispering.



Also, understand that this style of golf course will be considerably different than any other course in Las Cruces or El Paso.

The location of the most unique and spectacular land that is best suited to creating the best golf course possible, happens to be located a reasonable distance from the existing clubhouse.

This will require a creative approach to best maximize the potential of the land.

### Construction Cost

Due to the rolling character of the land and the tremendous quality of the soil, the cost to construct a golf course on this land will be minimal. Obviously, the typical costs of irrigation, cart paths and greens construction might still be required. However, it is our intent to use the existing character of the land to discover the golf holes. This will greatly reduce the cost of excavation and other processes.

Upon analysis, I would place the golf course construction cost of this project to be similar to other projects that we have completed. Specifically, I look at Four Mile Ranch in Canon City, Colorado and Minot CC in Minot North Dakota to be most similar. The construction for these courses was in the range of \$3 - \$4 million.



Minot CC

Please understand that this estimate is based upon golf course construction cost. It does not include design, engineering, maintenance equipment, grow-in or water source delivery costs.

### Water

It is obvious that a reliable water source is required for a world-class golf course. We examined several possible options and have determined that two potentials for water exist for this project.

Firstly, there is and will be available water from the university. This is delivered through the same system that presently feeds water to the existing golf course. Alternatively, it is possible to drill a well on-site to a presumed depth of 1200ft to obtain suitable water. This cost is estimated to be \$400,000-\$500,000.

With minimal rainfall in the area and low humidity rates a reservoir pond on-site, could be constructed to store the water needed for times of shortage.

### Electrical Power

A source of power exists on the site with the power lines running to the existing educational buildings and rodeo grounds.

### Possible Constraints

Although there are many elements within this project that make it very desirable to pursue, there does exist a list of items that must be considered to be obstacles to overcome.

- Structures - Existing on the land and relatively near the present clubhouse are many structures that belong to the entomology department, a university rodeo ground and a hazardous burial area. Although not insurmountable, these



structures do create some difficulties in the routing of the golf holes. See The Layouts.

- Environmental/Flooding - Although, rainfall is quite low in the area, there is still a potential for stormwater rains to create an issue for the valleys within the project. Certainly, a local engineer should be retained at some point in the future to share with us, any requirements. Also, these same channels might be considered to be jurisdictional by FEMA or the US Army Corps of Engineers. Again, a consulting engineer may be required.
- Future Roads - Throughout the site are dirt roads and tracks that provide a variety of functions. It seems that the main

road, Geothermal Road, will become a permanent paved road in the future. Although this road has been considered in the golf course routings presented, the future of the smaller roads is not certain.

- Protected Vegetation - The consensus of the team was that there are no protected vegetation species on the land. However, a local expert may be required to assist with this matter.

### Perspective

JED has had several site visits and has spent great time both walking and driving the land. Throughout this time, it has become clear that our initial reaction is in-fact accurate. The land that is available for a new potential golf course is of a standard that is simply world-class.

This golf course project has many advantages over today's typical project. From a financial perspective, the course will be tremendously economical to construct. It will have the use of an existing clubhouse and infrastructure. Certainly, the reason for considering this project was a stroke of brilliance. Creating valuable development land by reducing the original golf course land is a revenue source that is simply not available to other projects.

Often overlooked is the “image creation” aspect of golf. Especially, a new golf course. Golf has the innate ability to gain attention on a national scale and to raise the image of an area or organization. If done to a high standard, with proper media exposure, a new world-class golf course can bring a unique and added identity to Las Cruces and especially to New Mexico State University. Keep in mind that there are very few world-class, university owned golf courses in the world. I can assure you that opening the golf course that I have envisioned on this land, in the name of NMSU would gain the imagination of the national media.

### The Layouts

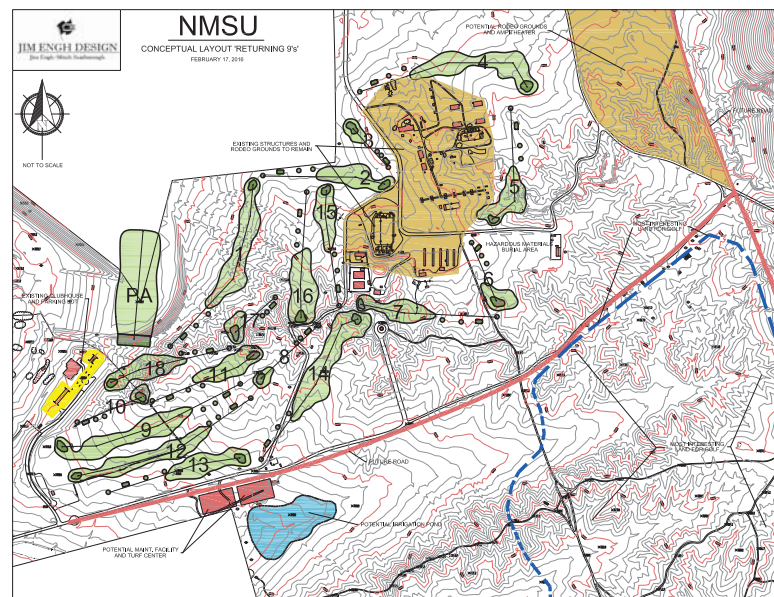
Upon visiting the land, it quickly became obvious that a decision would have to be made regarding the type of golf course layout that would be best for the project. Certainly, there is a tremendous financial advantage to having an existing, quality clubhouse facility. This feature alone makes the project exponentially more practical. However, along with this existing clubhouse comes the issue of placement for the new golf course.

Typically, the golf course architect has a considerable input as to the location of the clubhouse. And that location is often in a

place that will accommodate the implementing of two 9 Hole Loops, each would return to the clubhouse at holes 9 and 18.

Two very important aspects of the land have become obvious during the undertaking of this study. Firstly, is the existence of structures on the land that is near to the clubhouse. Secondly, we have recognized that the most interesting and best suited land for golf is not located adjacent the existing clubhouse.

Please view the layouts below to better understand the possibilities that presently exist for the golf course layout.



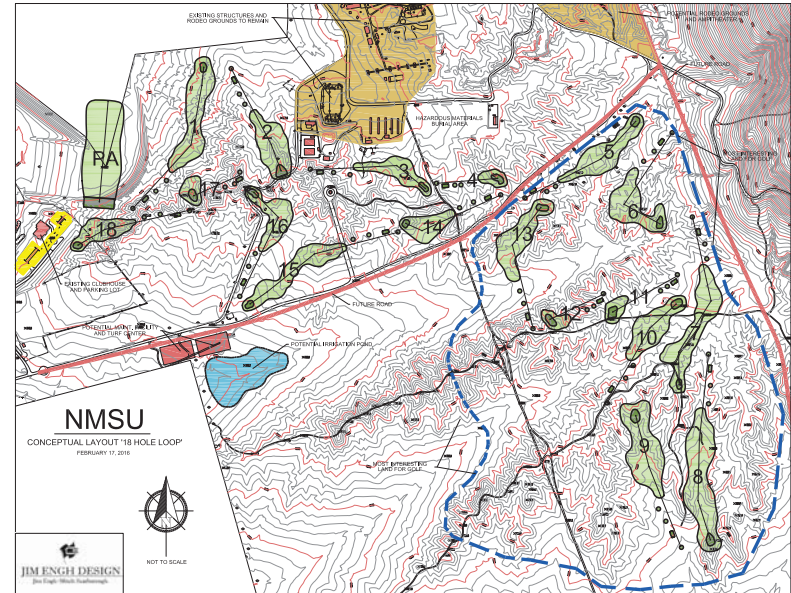
### Two 9 Hole Loops

Obviously, it is desirable to have the ability to manage golfers as they play a round of golf. It is also practical to be able to offer golfers the ability to play just 9 holes. However, constraints exist on this site that make two 9 Hole Loops somewhat impractical.



Specifically, the existing facilities of the rodeo ground, entomology lab and the hazardous burial area. Due to the close proximity to the existing clubhouse, the routing of the golf course must play within and directly around these unattractive structures. It also happens to be the least attractive land for golf on the site. This situation places the golf holes in a required area, as opposed to placing them on the best land for golf.

A returning 9 Holes Loop can only extend a certain distance from the clubhouse. Therefore, it is not possible to place these holes within the most exciting and spectacular land available for golf.



### 18 Hole Loop

As previously described, the best land for golf is not located near the existing clubhouse. Therefore, it will require the golf holes to extend out to these areas from the clubhouse. In effect, an 18 Hole Loop, will afford the opportunity to create the most interesting and spectacular golf course possible.

Certainly, the most important factor to having an 18 Hole Loop layout is the management of the golf course. And the opinion of

the existing staff is paramount to such a decision. I was both encouraged and impressed by the open-minded support for the 18 Hole Loop from Dan Koesters, Director of Golf and Jason White, Head Golf Professional, at the pro shop. And especially the enthusiastic support from Karl Olson, Golf Course Superintendent.

Especially important to this situation is the inclusion of an existing 9 Hole Loop that will accommodate those looking for a simple 9 Hole golf experience.

Obviously, the placement of the golf course on the most suitable land will require less cost for construction. However, almost more importantly, is that the golf course will provide a world-class facility to the university and to the city of Las Cruces. This will be a golf facility that, because of its spectacular nature, will bring local pride and national recognition to New Mexico State University.

## Conclusion

It has been an honor to have prepared this study for New Mexico State University. The excitement and enthusiasm from the NMSU staff has been overwhelming and I hope that we will be able to continue to work with all involved in the future.

The project has a strong financial situation with minimal construction cost, existing facilities and a sound funding source. Additionally, the character of the land will ensure that this golf course will be of world-class quality that will capture the imagination of the golf world on a national basis.

After much studying of this project, it appears to JED that this project is simply one the best situations that we have seen. It would be an extreme pleasure to continue to be involved with such a tremendous project

You have my sincere thanks

Jim Engh

