

VOLCANO TRAILS

Sector Development Plan

July 2010 Draft



Volcano Trails Sector Development Plan

City of Albuquerque

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Chapter 1

Introduction. In 2004, the City Council called for a planning study of the larger Volcano cliffs area. Finding that “The Volcanic Escarpment of the Northwest Mesa has long been considered a unique landscape that requires special protection,” the Council expressed concerns over development trends with subdivisions being approved piecemeal without the guidance of an overall plan for the area. The Council recognized the need for a plan that would bring development in line with the West Side Strategic Plan, the Northwest Mesa Escarpment Plan, the Albuquerque / Bernalillo County Comprehensive Plan, and other previously established policies. Issues to be addressed included transportation, drainage, water and wastewater, a mix of land uses, view corridors, building height, massing and orientation, walls, parks, trails and open space, and phasing and timing of growth.

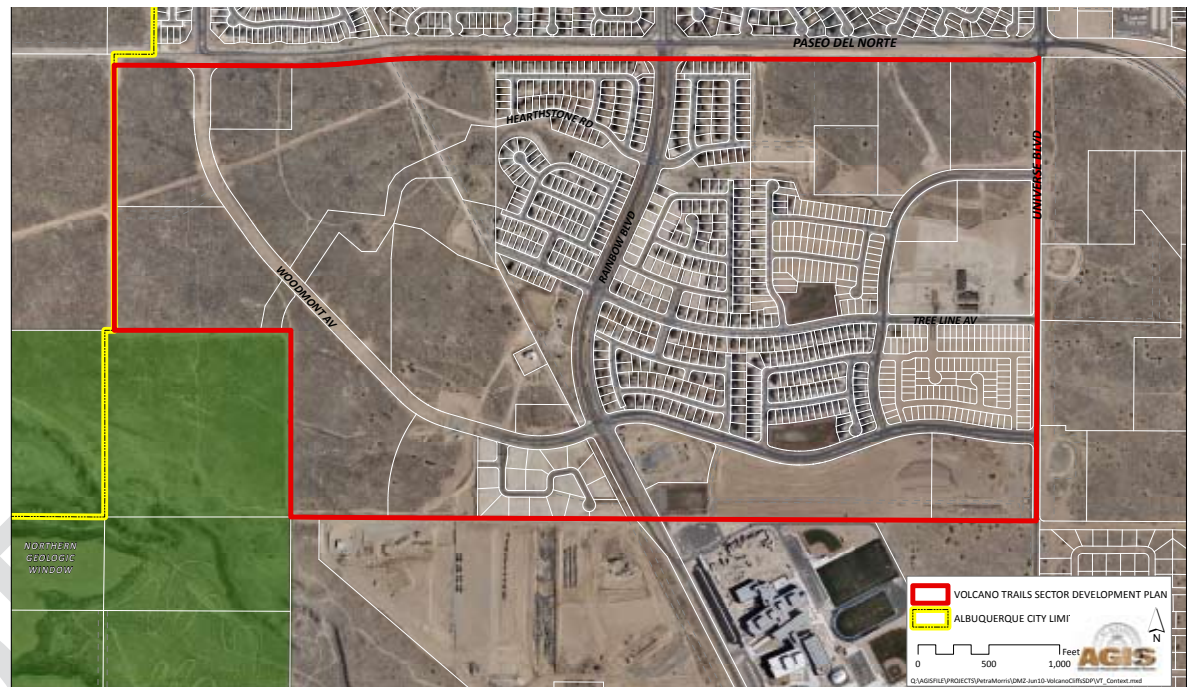


Exhibit 1, Trails Plan Area

The Planning study forecasted over 100,000 additional residents at final build out in the Volcano Mesa area and adjoining areas on the Northwest Mesa and identified how build out of exclusively single family residential subdivisions would increase the jobs/housing imbalances, adding to traffic demands and increasing the burden on West side and east-west transportation systems. The study identified an overall need for transit-supportive densities and design; additional mixed use centers; a large scale regional mixed use employment center; need for consolidation and connection of open space and trails along drainage channels and retaining access to exceptional views.

Introduction

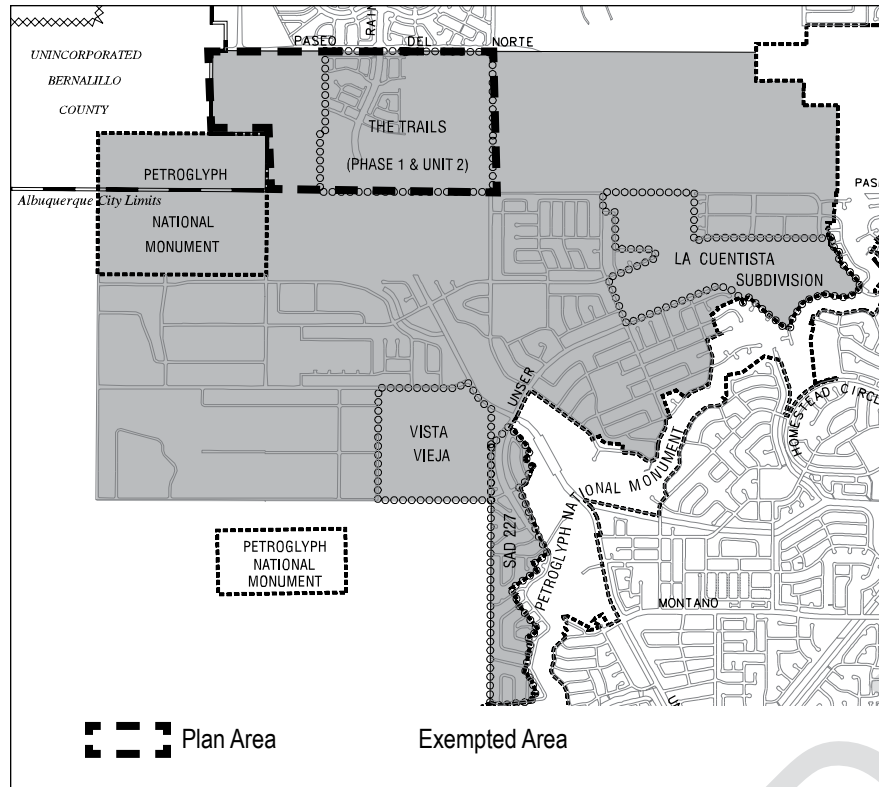


Exhibit 2, Exempted Areas

Purpose of the Plan. The Volcano Trails Sector Development Plan, “Plan” provides regulatory guidance for the development of the Trails, a 400-acre master planned community by Longford Homes consisting of residential villages, parks, trails, an Albuquerque Public Schools (APS) school site and neighborhood retail and services.

The Plan adopts zoning and land use strategies which support area wide policies for high quality development with a range of housing densities and that is responsive to the area’s unique location and landscape. The Plan’s strategies are based on implementing the policies of the 2010 WSSP Volcano Mesa amendment which identifies the Trails plan area for a pedestrian friendly residential development with limited neighborhood serving, commercial and mixed uses.

Plan Area. The Volcano Trails Sector Development Plan (See Exhibit 1, Trails Plan Area) covers the 400 acre Trails subdivision, located south of Paseo del Norte, and west of Universe Boulevard. The Plan area is part of the larger 3,532 acre Volcano Mesa planning area designated by the 2010 West Side Strategic Plan Volcano Mesa amendment which identifies the Plan area for predominantly single-family residential uses and small neighborhood-serving commercial areas (See Exhibit 3, Volcano Mesa Plan Areas).

During the initial planning process for the larger Volcano Mesa area which began in 2004, certain areas were exempted from consideration of new land use regulations. The exempted areas were those which had received preliminary approval as of October 11, 2004 when a development moratorium was instituted for the Volcano Mesa area, and for those areas that received final plat approval during the planning process. Although the area of the Trails known as Phase 1 and Unit 2, were exempted during that process, the developer agreed to make certain design modifications for the currently un-built portion of that exempted areas which are now made part of the Plan’s new zones (See Exhibit 2, Exempted Areas).

Area overview. The Plan area is located north of Volcano Vista High School, Tony Hillerman Middle School

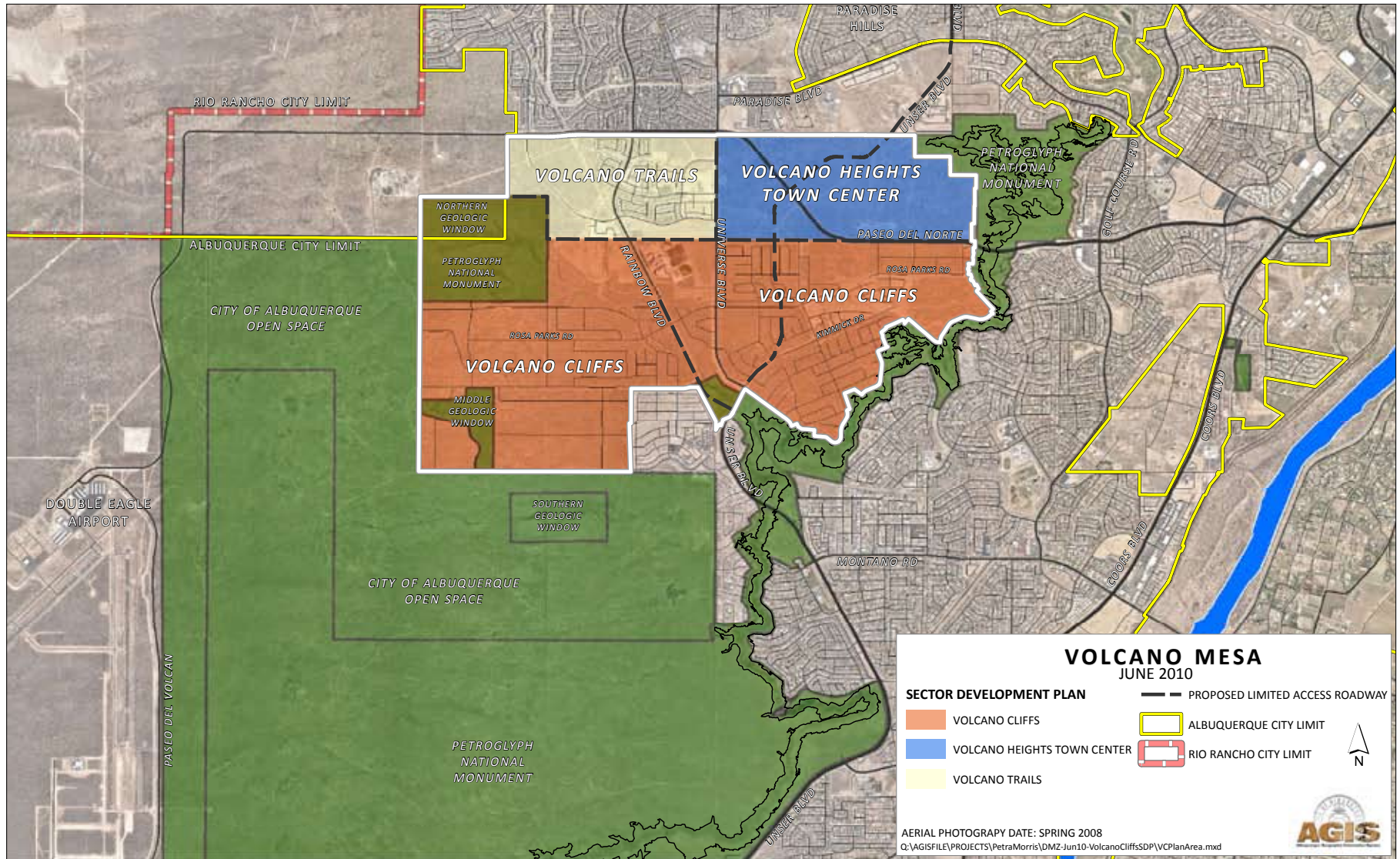


Exhibit 3, Volcano Mesa Plan Area

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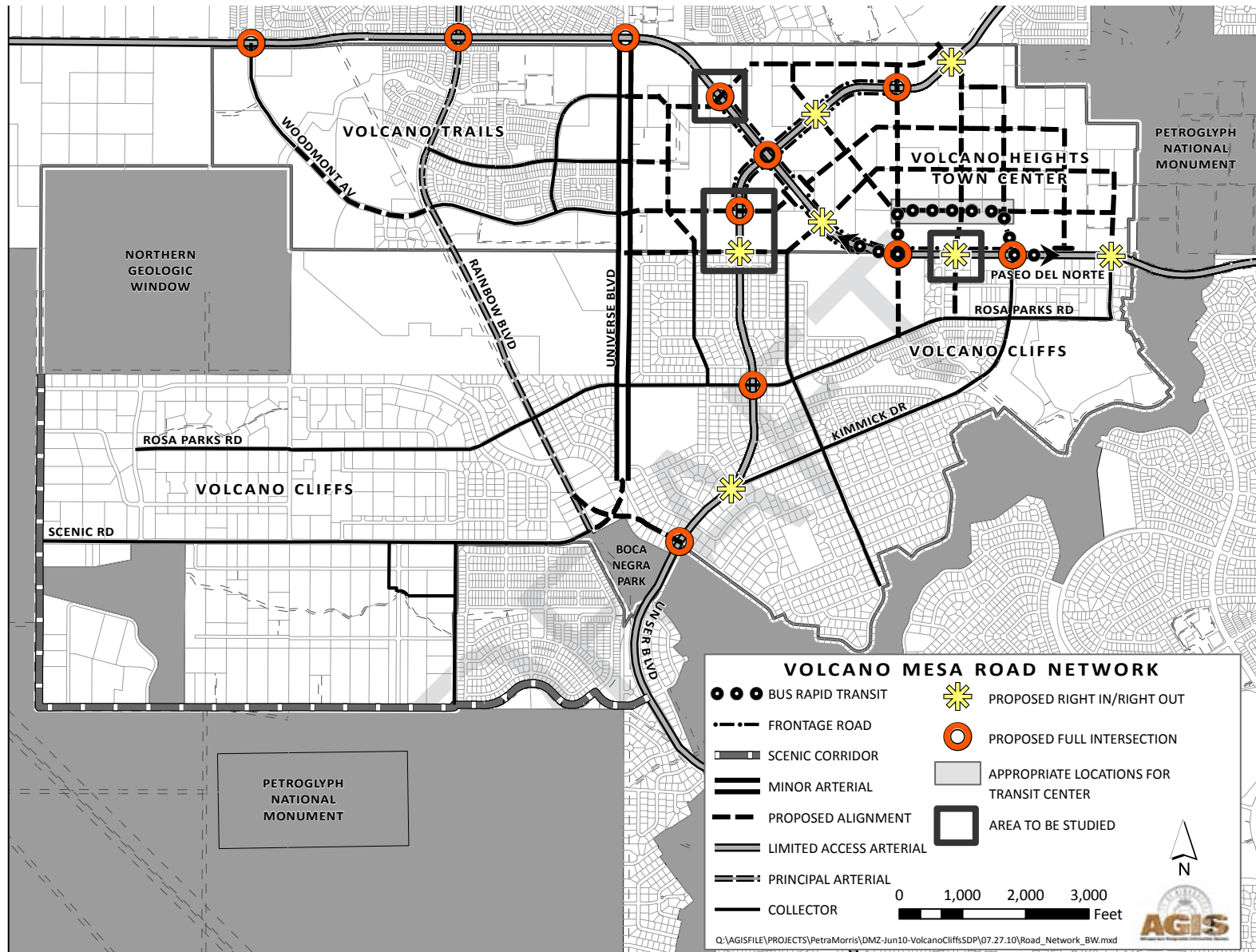


Exhibit 4, Volcano Mesa Roadway Network

and Tierra Antigua Elementary School and undeveloped lands held by the State of New Mexico. Paseo del Norte borders the area to the north and Universe to the East. To the west of the Plan Area is the Petroglyph Monument's North Geologic Window and undeveloped land in unincorporated Bernallilo county. Approximately XX percent of the Trails is complete. Vacant parcels remaining include the lots bordering the North Geologic window and APS and State of New Mexico lands, the areas designated for future commercial uses and a xx acre parcel designated for future APS use. (New APS language pending solidification of APS plans for the site.)

Transportation. The Plan's major road network, in various states of completion, includes: Rainbow Boulevard, a principal arterial, which bisects the plan area and provides access from Paseo Del Norte, a limited access major arterial, to the APS campuses of Volcano Vista High School, Tony Hillerman Middle School and Tierra Antingua Elementary School; Universe Boulevard, a designated minor arterial, which borders the Plan to the east; and Woodmont Ave, a designated collector, which upon completion will generally run east-west through the plan area from Paseo del Norte to Rainbow and Universe Boulevards eventually connecting outside of the Plan area with Unser Boulevard. Other collector streets include Treeline and Oakridge.

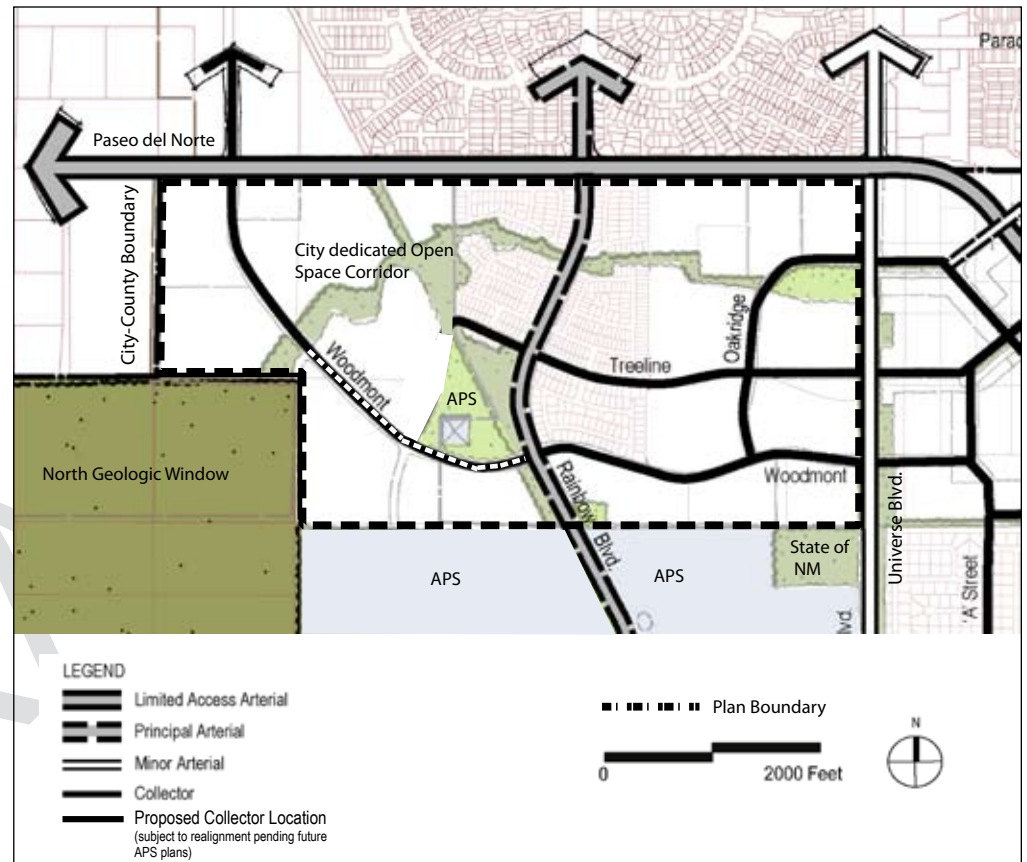


Exhibit 5, Trails Roadway Network

Open Space and Parks. The Plan's western boundary includes the Petroglyph National Monument's North Geologic Window. According to City Open Space, the North Geologic Window contains culturally significant resources which should be protected by access restrictions limiting use. Internal to the The Trails development, XX acres of open space including two parks, one of which has been dedicated, the other of which is still in the planning phases. This open space/park area forms a corridor which runs through the development providing trails and park sites for area recreation. The corridor connects to the dedicated open space corridor located

Introduction

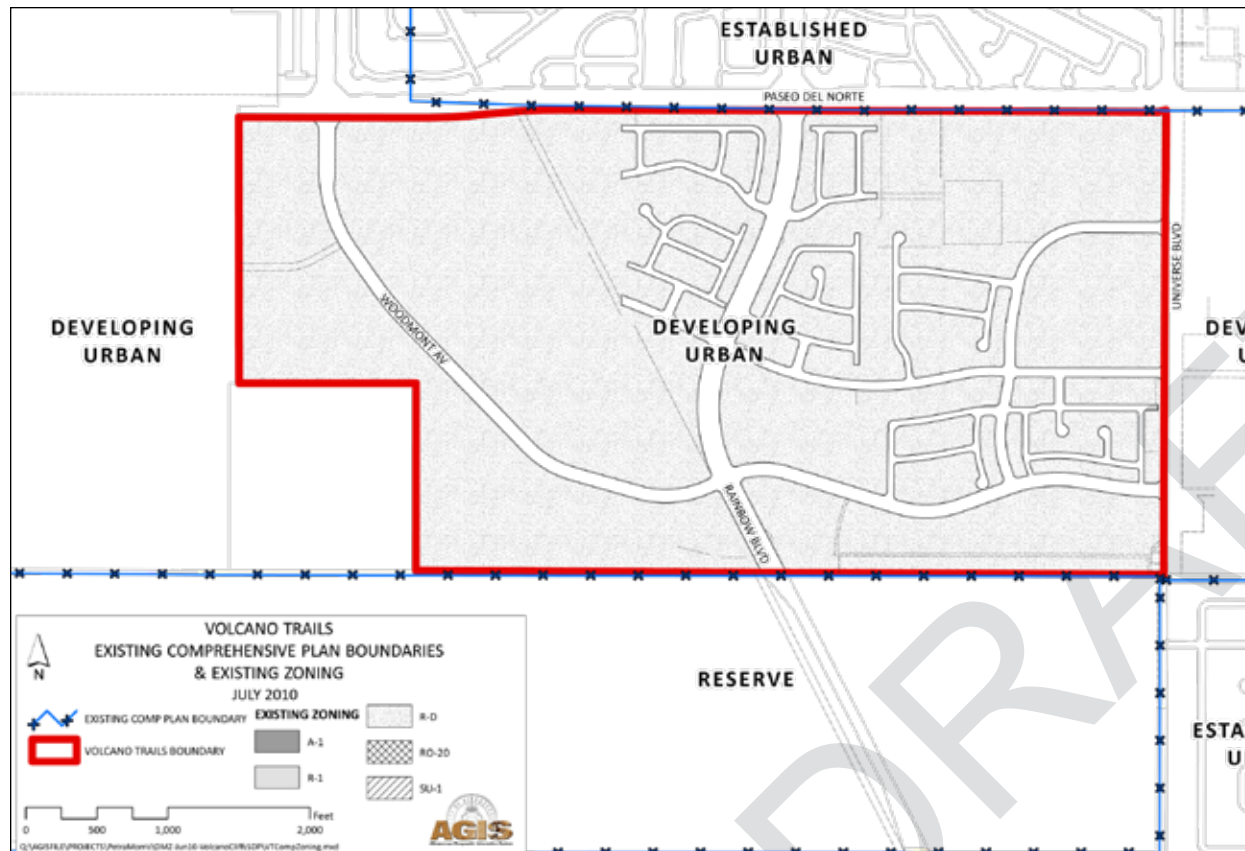


Exhibit 6, Existing Zoning and Comprehensive Plan Designation

along Universe, which runs the length of the Plan area.

Current Zoning. The Plan area is zoned for single family development (RD) at average suburban densities of 5 dwelling units per acre. Up-zoning from RD uses to RT or RLT uses, as allowed by the RD zone, has been sought in order to obtain more flexibility in lot sizes and greater density. In the RD zone, townhomes are permitted if a site development plan is approved by the Planning Director and DRB. If multi-family or commercial uses are desired then an RD sector development plan approved by the EPC is required, but the amount of commercial cannot exceed 15% of the RD zone covered by the sector plan. The expected total build-out for the Plan area under current zoning is xxx dwelling units. Expected build out with the proposed sector plan zoning is roughly the same, with the addition of xx sf of commercial uses.

The current single-use residential zoning prohibits integrating a mix of other uses which could make neighborhoods more walkable and convenient (e.g. neighborhood services). This Plan adopts new zoning for neighborhood serving commercial areas with pedestrian oriented design standards. It is the intention that this new commercial zoning will allow development that supports a wide range of transportation choices.

Planning Process. In 2010, at the direction of City Councilor Dan Lewis and Planning Director Deborah Stover, in consultation with area property owners, a new approach to developing long-range plans for this

special area of Albuquerque was initiated. The original Volcano Heights Sector Plan, which was adopted in 2006 but appealed to district court by the Volcano Cliff Property Owners Association, upon remand from court was divided into three separate, but related, “Rank 3” Sector Development Plans in order to address the diverse needs of and issues within each planning area. Language related to the overall development of the plan area, including analysis of existing conditions and consideration and general goals and policies for land use, transportation and open space were separated into the companion “Volcano Mesa” amendment to the West Side Strategic Plan, the “Rank 2” Area Plan that governs Albuquerque’s West Side.

The City sought input from stakeholders and property owners in a renewed planning process and used that input to guide the development of the three plans which were based on the original planning effort, but more specifically tailored to the goals and vision of affected stakeholders and property owners of each area. The three plans can generally be described as follows: the Volcano Cliffs Sector Development Plan (VCSDP), which includes the areas where small lots are individually owned and lower-density residential development will predominate; the Volcano Heights Sector Development Plan (VHSDP) which includes larger tracts of land that are designated a Major Activity Center where a mix of employment, commercial, and high- and medium-density residential development opportunities exist and, the Volcano Trails Sector Development Plan (VTSDP), which is primarily designated for medium density single family residential development held in consolidated ownership with larger tracts being developed by a master developer, Longford Homes.

Regulatory Tool. The Volcano Trails Sector Development Plan is a “Rank 3” Plan that provides policy and regulatory guidance for development within its boundaries. Its adoption sets land-use, design, and development standards for the area to ensure development outcomes that are more predictable for the community and affected stakeholders. Its strategies are based on implementing the goals and policies of the West Side Strategic Plan “Volcano Mesa” amendment, which identifies the Volcano Trails area as suitable for primarily residential development at a mix of densities and for small areas of neighborhood-serving mixed-use and commercial uses.

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Chapter 2

Goals for The Trails. The intent of the Plan's zoning and development standards is to create a context sensitive development that realizes the policies established by the WSSP Volcano Mesa amendment:

Promote Residential Diversity. Encourage a range of housing opportunities for various ages and incomes. The Trails development will include apartments, townhouses, small-lot and medium-lot single-family residential to attract a diverse population.

Create Healthy Residential Neighborhoods. Street and courtyard facing residences - with entrances and windows facing pedestrian paths - support neighborhoods and improve safety. Street-facing buildings, keep "eyes on the street and deter unwanted behavior. Furthermore, when paired with calm streets, street-facing architecture can encourage neighbors to come together and socialize. Blank walls, garage doors, and parking lots have deleterious effects on streets (and parks) and shall be avoided or mitigated.

Create Neighborhood Retail Centers. Encourage homes to be within walking distance of retail, commercial and community services. Convenience stores and other neighborhood retail, like a grocery store, drugstore and hardware store, are encouraged within Neighborhood centers.

Ensure Quality Design and Sensitivity to Climate. The quality of individual buildings contributes to the sense of place and permanence. These architectural and landscape standards apply to individual buildings, lighting, utilities, walls, and landscape design, with the intent of creating a high quality built environment with lasting character that draws on southwestern regional styles and traditions. Individual design expression and the diverse character of the land use districts can all flourish within an overall framework of quality. Architectural elements respond to unique southwestern climatic conditions. This means providing shade as relief from harsh sunlight and heat, and conserving water.

Create Neighborhood Edge/Transitions from Open Space areas and the Petroglyph National Monument. Landscaping, buildings, and roads are transitions from open space and the Petroglyph National Monument to the built environment. Roads or low density one story residential buildings shall abut the open space. Building colors should be in harmony with the desert palette. Preferred fencing is stucco walls, or "coyote fencing." Native vegetation should be used where ever landscaping is visible to the public.

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Chapter 3

This chapter establishes the framework necessary to implement the Plan. It establishes SU-2 zoning for properties within the Plan boundary and the development review process associated with the SU-2 zones. Not all properties are rezoned with this Plan. The areas exempted from the development moratorium during the planning process retain their existing RD zoning.

1. Zoning and Land Use Plan.

The **Zoning and Land Use Plan, Exhibit 7** establishes a framework for future growth that encourages walkable, transit-supportive districts, while also maintaining many of the area's scenic qualities and conserving unique ecological and archeological assets. Each zone is described below. The standards of the zones are located in the following section of this document.

SU-2 Trails/Village Center. Village Centers will put local retail, conveniences, schools and a “sense of place” within walking distance of most homes. Besides shops, each Village Center will include housing, a small park, and civic uses such as day care and community facilities. See page 16 for additional zoning information.

SU-2 Trails/Urban Residential. Urban Residential development allows a variety of urban housing types within a network of livable, pedestrian-friendly streets, including: courtyard housing, loft apartments, patio homes, townhouses, duplexes and detached single-family homes on small lots. See page 18 for additional zoning information.

SU-2 Trails/Suburban Residential–Small Lot. Suburban Residential–Small Lot development allows typical modern suburban lot sizes but with rear access alleys, houses moved up to the sidewalk, front porches and other features to create a more pedestrian-friendly environment. See page 20 for additional zoning information.

SU-2 Trails/Suburban Residential–Medium Lot. Suburban Residential–Medium Lot development allows homes on larger lots (+11,000 sq. ft.), respecting the existing platting, built in a way that protects the natural environment, preserves significant view corridors, and contains visible private open space. See page 22 for additional zoning information.

Zoning and Land Use

SU-2 Trails Residential Developing Area. Residential Developing Area allows for RD zoning and approval process. Lots without alleys shall be limited to a minimum lot size of 5000 sqft. On alley lots minimum lot size shall be 3000 sqft. All development in the Trails/RD zone shall meet applicable requirements in the General Standards section.

SU-2 Residential Developing Area. This area was exempted from the planning process and retains its existing zoning and is subject to the regulations of the RD zone per the City Zoning Code.

SU-2/SU-1 for Open Space. Open Space areas are dedicated City property.

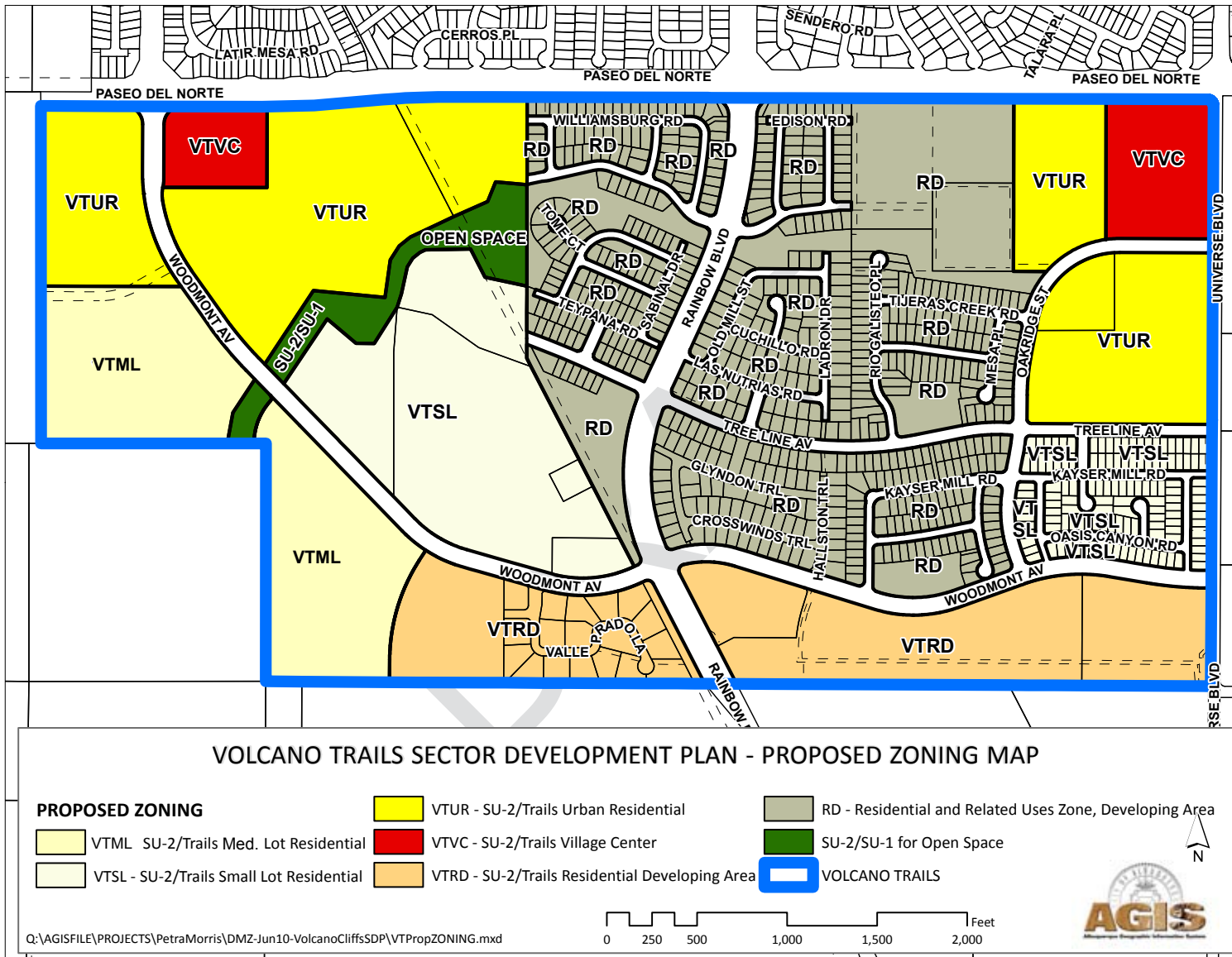


Exhibit 7, Zoning and Land Use Plan

2. Development Review Process.

It is important that the adoption procedures for development include a streamlined review and approval process when consistent with the Plan standards as well as provide flexibility to amend regulatory requirements. This process is illustrated in **Table 1**, below. When there is any inconsistency with other City regulations and standards, the regulations and standards contained in the Plan, take precedence over those other City regulations and standards.

Table 1, Development Approval Process, describes the development review and approval process for properties located within the Plan area.

Development Zone	Development Approval Process	Plan Type
SU-2 Village Center/SU-2 VC	DRB with Planning Director	Commercial Master Plan for Development
SU-2 Trails Urban Residential/SU-2 UR	DRB	No additional plan required
SU-2 Small Lot/ SU-2 SL	DRB	Site Plan for Subdivision
SU-2 Residential Developing Area/SU-2 RD	per RD zone, City Zoning Code	per RD zone, City Zoning Code
SU-2 Trails Residential Developing Area/SU-2 TRD	DRB	Site Plan for Subdivision
SU-2 Large Lot/SU-2 LL	DRB	Site Plan for Subdivision
SU-2 SU-1 Open SpaceArea/SU-2 SU-1 Open Space	DRB	Site Plan for Building Permit

Table 1, Development Approval Process

Permitted Modifications.

While the regulations adopted by the Plan attempt to address the varied application possibilities throughout the Plan area, no regulation can predict the range of unique conditions which may arise during its implementation. As such, modifications from the standards are permitted, as described in **Table 2, Modifications**.

Type of Modification	Definition	How Approved
(a) Minor	Modification from dimensional standards by no more than 10%.	Administratively by Planning Director
(b) Major	Any modification that is not considered a “minor” modification.	EPC
(c) Other	Modifications related to non-dimensional standards, i.e. color, and landscape.	Administratively by Planning Director
	Modifications to permitted and prohibited uses	EPC

Table 2, Modifications

3. The Zones. The following section contains the development standards for the new SU-2 zones established by the Plan. The section is divided into two parts, the zones and the general standards. The SU-2 RD and SU-2 SU-1 Open Space zones are regulated by the City Zoning Code with the following exceptions:

Previously Omitted Standards. The following regulations were established for Unit 2 and Phase 1 development prior to the adoption of this plan. Where there is a conflict between the requirements in this section and the requirements in the other sections of this regulation plan, this section shall prevail.

- The OS-4 park in the open space area may be amended so as to accommodate a 3 acre park area without decreasing the amount of open space dedicated.
- Street C, now on the south boundary of Unit 2-Tract 11, shall be moved to the proposed City Open Space area and connect from Rainbow to the middle school site. Street C shall be removed to the west of this point.
- The ultimate location of Street D may be changed based on the size and location of park / school site in Unit 2-Tract 12 and Unit 3-Tract 6.
- A new street connection shall be shown from Woodmont to the North Geologic Window adjacent to the open space shown in the land use plan.

SU-2 Trails/VC

Village Center Zone

Intent: *Mixed use areas at the neighborhood scale extend goods and services to locations that may not be able to support major retail, but might support small offices, shops, community facilities, residential with ground floor home occupations including office, retail and service activities. Mixed Use areas may be used to create small retail centers to provide a “sense of Place” for residential neighborhoods. Neighborhood Mixed Use zoning provides the opportunity for diverse housing retail, small parks and civic facilities to create vibrant communities.*

A. GENERAL

Permitted Uses

1. R-T, R-G, R-2, RC, O-1, C-1, with the following additions and exceptions:
 - a. Accessory units up to 650 sqft shall be permitted.
 - b. Parking structures shall be permitted with ground level uses along street façade.
 - c. Single family development is prohibited.
 - d. Gated and/or walled developments are prohibited.
 - e. Drive-in Restaurants, Drive-up Service windows, Parking lots, Off-premise signs are not permitted.
 - f. Signs, On-premise, as regulated in the C-1 zone §14-16-2-16(A)(11) with the following exception and addition:
 - i. Signs may project more than one foot into the R.O.W. per City Encroachment Agreement requirements.
 - ii. Height of free-standing signs shall not exceed 8 feet.
 - iii. See General Standards for additional requirements.
 - g. Vehicle sales, rental, service, repair and storage shall be in a completely enclosed building or located completely behind a building.
 - h. Conditional uses in R-T, R-G, R-2, O-1, C-1 shall be conditional uses, except as prohibited above.

Development Densities/Intensities

1. Allowable development intensities are as follows:
 - a. Minimum: 0.30 FAR
 - b. Maximum: 1.5 FAR
 - c. Residential Densities are as follows.
 - i. Minimum Average: 20 du/acre
 - ii. Maximum Average: 40 du/acre
 - iii. Residential densities apply to gross develop-

able area for residential uses, exclusive of site constraints such as undevelopable land and parks and inclusive of streets and parking.

2. See General Standards for calculation method.

Usable Open Space Requirements (on-site)

1. Multifamily dwellings:
 - Private: 60 square feet/du minimum
 - Shared: 80 square feet/du minimum
2. Off-site Open Space dedication requirements are met by existing parks and trails.
3. Plaza or Courtyard Public Space. All commercial development over 2 acres shall include a 1,000 sqft minimum privately owned and maintained public space adjacent to retail/office areas. Public Space shall be hardscaped, with seating and shading covering a minimum of 50% of the area. Shade coverage may be trees or other shading devices. Public Space shall be linked to the main entrance of adjacent structures by a public sidewalk and have pedestrian scale lighting and trash receptacles.
4. See General Standards for additional requirements.

Lot sizes

1. Lot sizes shall be limited as follows:
 - a. No minimum lot size.
 - b. Lot sizes shall be a maximum of 300 feet wide and 300 feet deep.
 - c. Lots may exceed 90,000 sqft if a pedestrian street a minimum of 12 feet wide connects a minimum of two public streets through the lot at least every 300 feet measured along the street façade.



Parking Requirements

1. Parking Calculations are as follows:
 - a. Residential: 1/unit minimum
 - b. Non-Residential: 1/1000 sqft minimum

2. See General Standards for additional requirements.

Building Articulation

1. The following standards shall apply:
 - a. Transparency: At least 25% of the ground floor facade of street-facing elevations shall be comprised of windows and/or entrances.
 - b. Residential garages shall be setback from the front facade. See General Standards.
 - c. A minimum of 50% of the street frontage shall be accompanied by portals, verandas and/or arcades. See General Standards.

2. See General Standards for additional requirements.

Landscape Requirements

1. The following requirements shall apply:
 - a. Shall meet city standard landscape requirements for non residential.
 - b. See Appendix B for plant list.
 - c. Walls shall be limited to 6 feet in height and 3 feet within the front yard setback. Walls may be up to 4 foot high within the front yard setback of residential buildings.

2. See General Standards for additional requirements.

B. BUILDING PLACEMENT AND FORM Setbacks and Building Frontage

1. Building setbacks and measured from the property line and shall be as follows:

- a. Front setback:
 - no minimum
 - 15 feet maximum
 - i. Exception. 50% of the building frontage may be setback an additional 20 feet for a landscaped courtyard or plaza.
- b. Side setback:
 - Attached: 0 feet minimum
 - Non-attached: 5 feet minimum
- c. Rear setback:
 - w/o alley: 15 feet minimum
 - w/alley: 5 feet minimum

2. Street Frontage Requirements:

For lots with 40 linear feet or more of street frontage:

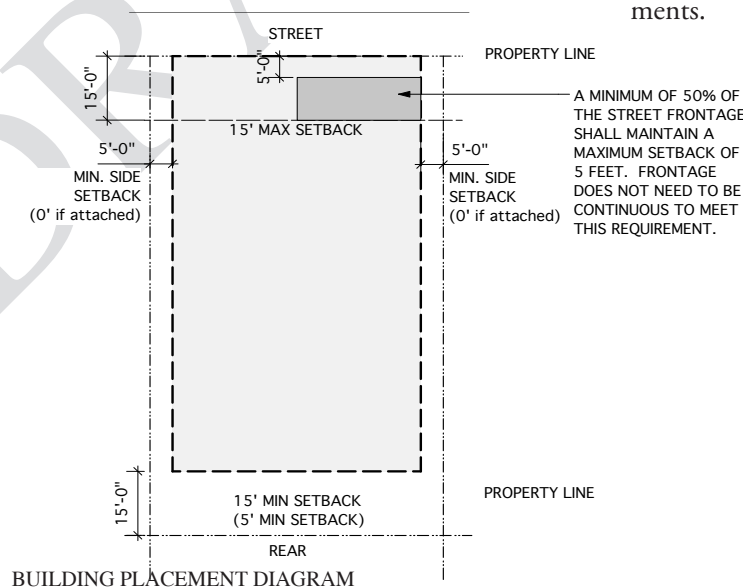
- a. A minimum of 50% of building façade shall maintain a setback of 5 feet. Street frontage need not be continuous.
- b. Landscaped plazas and/or passages may be used in lieu of building for up to 50% of the available frontage.

3 See General Standards for additional requirements.

Height

1. Building Height limits area as follows:
Maximum: 35 feet

2. See General Standards for additional requirements.



SU-2 Trails/UR Urban Residential Zone

Intent: *The Urban Residential zone provides a diverse range of mixed density housing in order to suit a range of lifestyles in a pedestrian oriented residential environment.*

A. GENERAL Permitted Uses

1. R-2, with the following additions and exceptions:
 - a. Accessory units up to 650 sqft shall be permitted.
 - b. Parking structures shall be permitted underground.
 - c. Gated and/or walled developments are prohibited.

Development Densities

1. Allowable development densities are as follows:
 - a. Minimum: 10 du/acre
 - b. Maximum: 20 du/acre
 - c. Residential densities apply to gross developable area for residential uses, exclusive of site constraints such as undevelopable land and parks and inclusive of streets and parking.
2. See General Standards for additional requirements

Usable Open Space Requirements - (on-site)

1. Multifamily dwellings:
 - Private: 60 square feet/du minimum
 - Shared: 80 square feet/du minimum
2. Off-site Open Space dedication requirement are met by existing parks and trails.
3. See General Standards for additional requirements.

Lot sizes

1. The following requirements shall apply:
 - a. On lots without alleys minimum lot size shall be 5000 sqft.

- b. On alley lots minimum lot size shall be 3000 sqft.

Parking Requirements

1. Parking Calculations are as follows:
 - a. Residential: 1/unit minimum
2. See General Standards for additional requirements.

Building Articulation

1. The following articulation standards shall apply to buildings in the UR zone:
 - a. Transparency: At least 25% of the area of the street-facing elevations shall be comprised of windows and/or entrances.
 - b. Residential garages shall be setback from the front facade. See General Standards.
2. See General Standards for addition articulation requirements.

Landscape Requirements

1. The following landscape requirements shall apply to all development in the UR zone:
 - a. One tree and 50% vegetative cover in front of all single family lots.
 - b. All development that is not single family residential shall follow City Standard Landscaping requirements.
 - c. See Appendix B for plant list.
 - d. Walls shall be limited to:
 - i. 4 feet maximum in front yard setback.
 - ii. Rear Walls are per City Standards
2. See General Standards for additional requirements.



B. BUILDING PLACEMENT AND FORM

Setbacks and Building Frontage

1. Building setbacks are measured from the property line and shall be as follows:

- a. Front setback: 5 feet minimum
10 feet maximum

- b. Side setback:
Attached: 0 feet minimum
Non-attached: 5 feet minimum

- c. Rear setback:
w/o alleys: 15 feet minimum
w/ alleys: 5 feet minimum

2. Street Frontage Requirements:

For lots with 40 linear feet or more of street frontage:

- a. A minimum of 50% of building façade shall maintain a front setback of 5 feet. Street frontage need not be continuous.
- b. Landscaped courtyards and/or passages may be used in lieu of building for up to 25% of the available frontage.

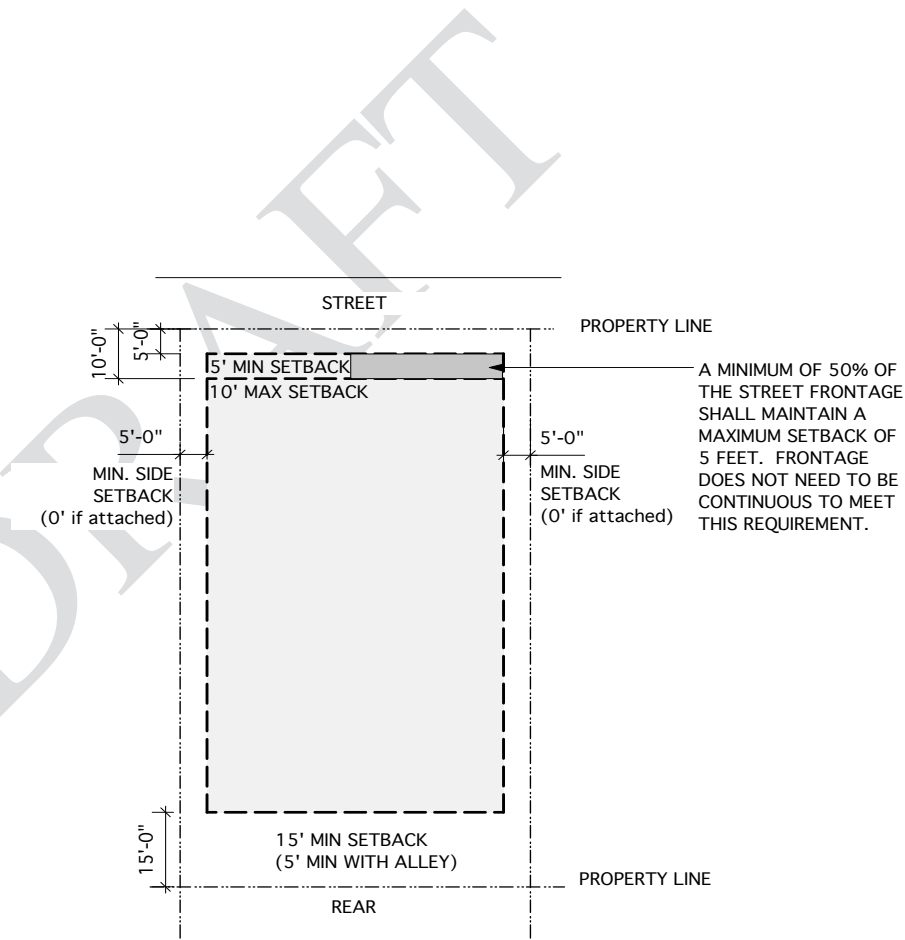
3. See General Standards for additional requirements.

Height

1. Building Height limits area as follows:

Maximum: 35 feet

2. See General Standards for additional requirements.



BUILDING PLACEMENT DIAGRAM

SU-2 Trails/SL Small Lot Zone

Intent: *The Small Lot zone consists of standard residential lot sizes, single family type houses moved up to the sidewalk with front porches, garages setback from the main facade and other features to create a more pedestrian friendly environment.*

A. GENERAL Permitted Uses

1. R-1 with the following additions and exceptions:
 - a. Accessory units up to 650 sqft shall be permitted.
 - b. Multiple single family houses are permitted on a single lot.
 - c. Gated and/or walled developments are prohibited.

Development Densities

1. Allowable development densities are as follows:
 - a. Minimum 1.5 du/acre.
 - b. Maximum 10 du/acre.
 - c. Residential densities apply to gross developable area for residential uses, exclusive of site constraints such as undevelopable land and parks and inclusive of streets and parking.

Usable Open Space Requirements (on-site)

1. Multifamily dwellings:
 - Private: 600 square feet/du minimum
2. Off-site Open Space dedication requirements are met by existing parks and trails.
3. See General Standards for additional requirements.

Lot sizes

1. The following requirements shall apply:
 - a. On lots without alleys minimum lot size shall be 5000 sqft.
 - b. On alley lots minimum lot size shall be 3000 sqft.

Parking Requirements

1. Parking Calculations are as follows:
 - a. Residential: 1/unit minimum.
2. See General Standards for additional requirements.

Building Articulation

1. The following requirements shall apply:
 - a. Transparency: At least 25% of the area of the street-facing elevations shall be comprised of windows and/or entrances.
 - b. Residential garages shall be setback from the front facade. See General Standards.
 - c. Each dwelling unit shall have a porch or stoop.
 - d. In all Suburban Residential–Small Lot zoned parcels in Units 1 and 2, garages may be either off alleys or accessed via a side drive where one of the garage sides abuts the back yard setback or is attached to the back of the house.
2. See General Standards for additional requirements.

Landscape Requirements

1. The following requirements shall apply:
 - a. One tree and 50% vegetative cover in front of all single family lots.
 - b. See Appendix B for plant list.
 - c. Walls shall be limited to:
 - i. 3 feet maximum in front yard setback.
 - ii. Rear Walls are per City Standards
2. See General Standards for additional requirements.



B. BUILDING PLACEMENT AND FORM

Setbacks and Building Frontage

1. Building setbacks (measured from the property line) and shall be as follows:

a. Front setback: 5 feet minimum
15 feet maximum

b. Side setback: 5 feet minimum

c. Rear setback:
w/o alleys: 15 feet minimum
w/ alleys: 5 feet minimum

2. Additional Setback Requirements

a. For Suburban Residential–Small Lot zoned parcels in Units 1 and 2, lots may have a zero foot (0') side yard set-back on one side.

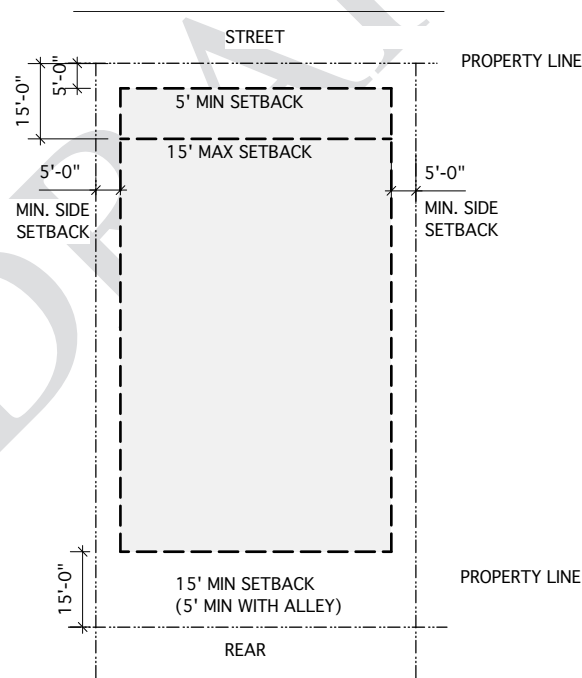
3. See General Standards for additional requirements.

Height

1. Building Height limits area as follows:

Minimum: none
Maximum: 26 feet

2. See General Standard for additional requirements.



BUILDING PLACEMENT DIAGRAM

SU-2 Trails/ML Medium Lot Zone

Intent: *The Medium Lot zone consists of larger residential lot sizes with increased front yard setbacks, height limitations and other features to reduce visual impact.*

A. GENERAL Permitted Uses

1. R-1 with the following additions and exceptions:
 - a. Accessory units up to 650 sqft shall be permitted.
 - b. Gated and/or walled developments are prohibited.

Development Densities

1. Allowable development densities are as follows:
 - a. Maximum 3 du/acre.
 - b. Maximum 8 du/acre for parcels located completely outside of 200 feet from the monument.

Usable Open Space Requirements (on-site)

1. Off-site Open Space dedication requirements are met by existing parks and trails.
2. See General Standards for additional requirements.

Lot sizes

1. Lot sizes shall be limited as follows
 - a. Lots up to 200 feet from the Monument or Major Public Open Space shall be a minimum of 11,000 sqft.
 - b. Lots within 200 up to 500 feet from the Monument or Major Public Open Space shall be a minimum of 6,000 sqft.
 - c. Minimum lot size for lots more than 500 feet from the Monument or Major Public Open Space shall be a minimum 5,000 sqft.

Parking Requirements

1. Parking Calculations are as follows:
 - a. Residential: 1/unit minimum
2. See General Standards for additional requirements.

Building Articulation

1. In Unit 2-Tract 8, the backs of houses shall not face the City Open Space to the immediate south. In addition, on lots to the north of the City Open Space, walls facing the open space shall be view walls.
2. The following standards shall apply
 - a. Transparency: At least 25% of the area of the street-facing elevations shall be comprised of windows and/or entrances.
 - i. Exception: Non-primary street facing elevations on Arterials or higher may satisfy this requirement with window cases. See General Standards.
 - b. Residential garages shall be setback from the front facade. See General Standards.
 - c. Each dwelling unit shall have a porch or stoop.
3. See General Standards for additional requirements.

Landscape Requirements

1. The following requirements shall apply:
 - a. One tree and 50% vegetative cover in front of all single family lots.
 - b. See Appendix B for plant list.
 - c. Walls shall be limited to:
 - i. 3 feet maximum in front yard setback.
 - ii. Rear Walls are per City Standards
2. See General Standards for additional requirements.



B. BUILDING PLACEMENT AND FORM

Setbacks and Building Frontage

1. Building setbacks are measured from the property line and shall be as follows:

- a. Front setback: 10 feet minimum
- b. Side setback: 5 feet minimum
- c. Rear setback:
 - w/o alley: 15 feet minimum
 - w/ alley: 5 feet minimum

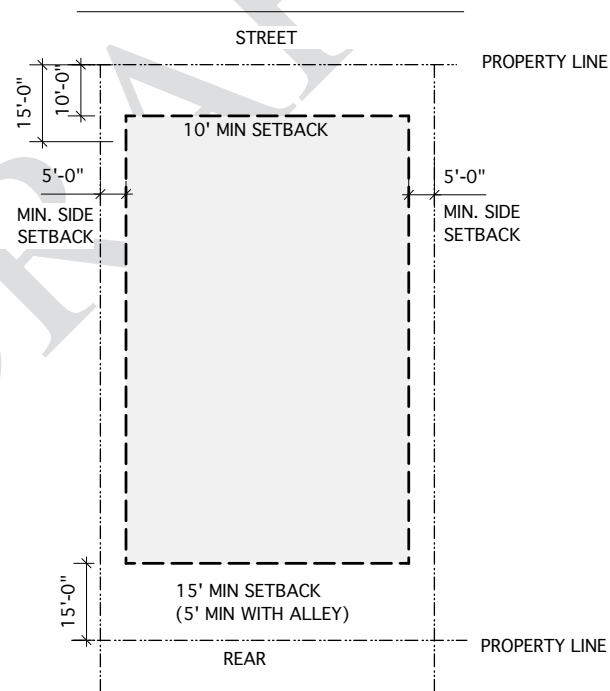
2. General Standards for additional requirements.

Height

1. Building Height limits area as follows:

- Minimum: none
- Maximum: 18 feet. A height allowance up to 26 feet is permitted for a maximum of 50% of the building footprint.

2. See General Standards for additional requirements.



BUILDING PLACEMENT DIAGRAM

General Standards

GENERAL STANDARDS

The General Standards are applicable to the following SU-2 zones: Village Center (VTVC), Urban Residential, (VTUR), Small Lot (VTSL), Medium Lot (VTML), Residential Developing Area (VTRD). The General Standards include General Requirements, Building Standards, Landscape Standards, Usable Open Space Standards, and Parking Standards.

Quality. The quality of individual buildings contributes to the sense of place and permanence. These architectural and landscape standards apply to individual buildings, lighting, utilities, walls, and landscape design, with the intent of creating a high quality built environment with lasting character that draws on southwestern regional styles and traditions. Individual design expression and the diverse character of the land use districts can all flourish within an overall framework of quality.

Climate. The architectural elements that respond to the unique climatic conditions of the southwest. In particular, this means providing shade as relief from harsh sunlight and heat, and conserving water.

Views. Important views from locations within Volcano Heights to the Rio Grande basin, across the city of Albuquerque and the Sandia Mountains should be protected and as development within the Trails will be visible from most of the City of Albuquerque care should be taken in order to achieve nonvisually intrusive development especially in the lower density residential areas adjacent to the Petroglyph National Monument. To minimize the visual impact of development, predominant colors used on structures will blend with the natural colors of the mesa.

GENERAL REQUIREMENTS

1. Where there is a conflict between the regulations in this document and those of the Northwest Mesa Escarpment Plan, the Northwest Mesa Escarpment Plan shall prevail.
2. The General Regulations section of the Zoning Code, §14-16-3 shall apply with the following additions and exceptions:

Density

1. Floor Area Ratio shall be defined as the gross floor area of all buildings at all levels, divided by the total of site area of a project, minus undevelopable areas. Parking structures shall not be counted toward the gross floor area calculations.

Heights and Setbacks

1. Heights shall be measured from approved grade.
2. Exceptions to Zone Height and Setback Requirements:
 - a. Chimneys, cupolas, flagpoles, and screened equipment may extend 10 feet beyond height limits.
 - b. Wall heights at edge of or within public right-of-way. Walls and fences adjacent to streets and roads and/or within public right-of-way shall be limited to 8 feet measured from low side of wall.
 - c. Conservation of Petroglyphs and geography. Rock outcrops—volcanic knolls or hillocks—occur randomly throughout the Plan area. All rock outcroppings containing petroglyphs shall be protected per §14-16-3-20. No petroglyph shall be defaced, altered, or moved without approval of a National Park Service representative from the Monument. Major rock outcroppings that exceed 3 feet in height and 6 feet in volume shall be conserved per §14-16-3-20. All other archeological sites shall be protected or mitigated per §14-16-3-20. Site treatment shall include preservation, avoidance, testing, or documentation of surface and/or subsurface remains. Development, trails, and recreation areas should be set back at least 50 feet from prehistoric petroglyphs or other sites with high archeological value, unless approved by City Planning Director.

General Standards

BUILDING DESIGN STANDARDS

The following Building Design Standards shall apply as specified below:

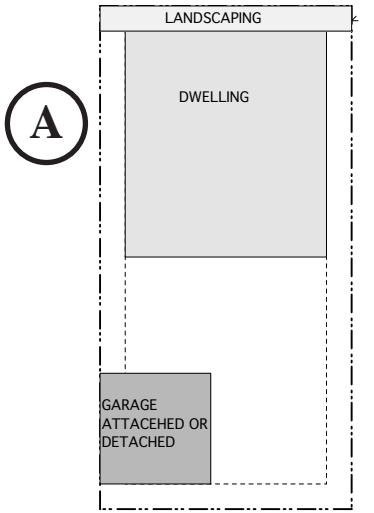
- a. **Exterior Finishes.** Building walls shall be stucco, masonry, adobe, native stacked stone (or synthetic equivalent). Plain block is not allowed for exterior walls. Wood and reflective panels shall not be used as an exterior finish. Stucco and concrete shall have integral color. Veneer materials shall extend around exterior corners at least one foot. Brick coping and trims are encouraged. Steel and synthetic wood substitutes are permitted for trim and detailing.
- b. **Massing and articulation.** Building Massing and articulation are required to be developed so that no more than 60 feet of wall may occur without an offset vertically or horizontally of at least 24 inches, or at the same interval, a change in material may be used for articulation.
- c. **Residential Garages.** Garages should not dominate the front facade. Street fronting garages shall be set back at least 10 feet from the front facade. Garages should not exceed 50% of the total front facade. Lots greater than 40 feet wide up to 50 feet in width, garages shall not exceed 65% of total facade and each garage facade shall be set back a minimum of 3 feet from other garage facades. Three car garages are not permitted on lots less than 50 feet wide. Three car garages on lots greater than 50 feet wide shall have third garage setback a minimum of 3 feet from the primary garage facade. See Table X for additional garage requirements.

LOT WIDTH	ALLOWABLE GARAGE TYPES	FRONT GARAGE SETBACK	SIDE GARAGE SETBACK	REAR GARAGE SETBACK
GREATER THAN 50 FEET	A, B, C, D, E, F	10' MINIMUM FROM FRONT FAÇADE	5' MINIMUM	5' MINIMUM
40 FEET TO 50 FEET	A, B, C, D, E	35' MINIMUM FROM FRONT FAÇADE	0' MINIMUM	5' MINIMUM
LESS THAN 40 FEET	A, B, C	35' MINIMUM FROM FRONT FAÇADE	0' MINIMUM	5' MINIMUM

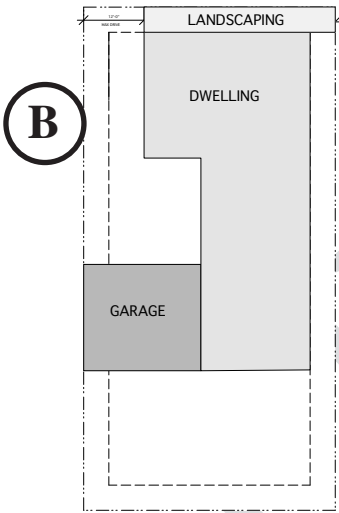
NOTE: 1. Garage type D shall have a minimum of 5 linear feet of fenestration on the street façade and be articulated to resemble main structure.
NOTE: 2. Garage type F may be access from either front or side.
NOTE: 3. Driveway access from street, including curb cut, is limited to 12 feet for Garage Types A, B, C, D, and E except in where providing access from alleys.

TABLE 3, GARAGE TYPES.

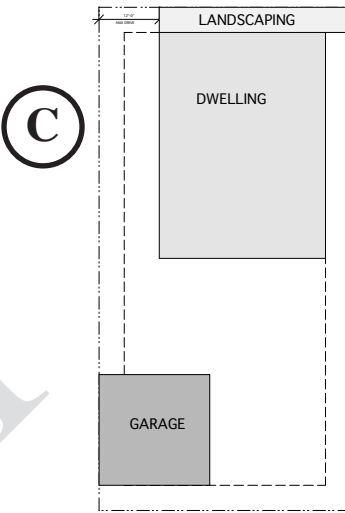
GARAGE TYPE DIAGRAMS



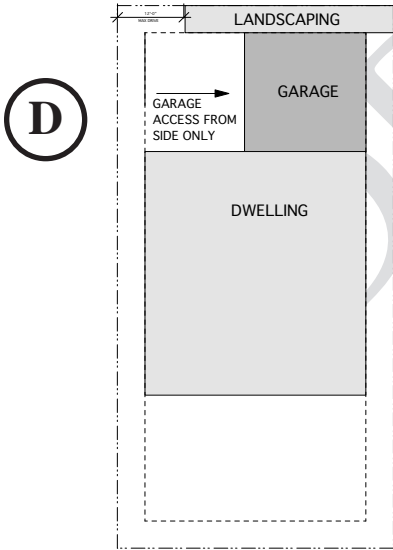
ALLEY ACCESSED GARAGE



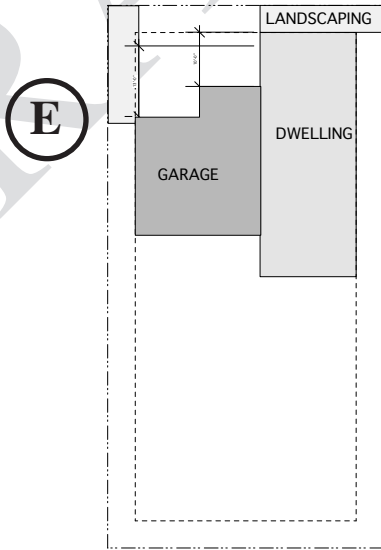
GARAGE OFF COURT



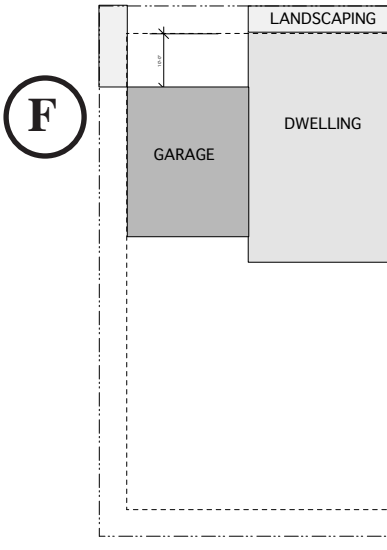
GARAGE BEHIND MAIN DWELLING



SIDE ACCESSED GARAGE



STEP BACK GARAGE



50% MAXIMUM GARAGE FRONTAGE

General Standards

d. **Roofs.** Reflective roofs are prohibited. Parapets shall hide flat roofs. Dimensional asphalt shall be used if asphalt roofing is specified. Solar panels are permitted on roofs. Flashing shall match roof or building color.

e. **Building Transparency.** Transparency is measured by taking the total area of all of the windows and entrances and dividing it by the total area of the street-facing building elevations. Glass block, mirrored glass, frosted glass, and other obscured openings may not be used to meet the building transparency requirement.

f. **Window cases.** Window cases shall be a minimum of 3 feet wide by 5 feet tall, shall be located a minimum of 30 feet on center and shall be occupied by print media at all times. Window cases have transparent fronts and shall not be backlit.

g. **Windows.** Windows shall be recessed in the façade so that the glass plane is a minimum of 1 1/2" back from the external plane of the adjacent wall. Glass on any surface shall not be reflective or mirror glass, that is, glass having greater than 15% average daylight exterior reflectance. Highly reflective or mirrored glass is prohibited. Glass for non-residential and mixed-use areas shall have light transmission between exterior and interior rated at a minimum of 90% for the ground story and at least 75% for the upper stories (modifications permitted as necessary to meet any applicable building and energy code requirements).

h. **Entrances, Porches, Stoops & Vestibules.** Entrances, Porches, Stoops & Vestibules. Entries for buildings shall connect to a street via a sidewalk, connecting directly and visibly from the street where possible, otherwise connecting via landscaped courtyard(s) or plaza(s). In addition, residential building entries shall have the following features with the floor area stipulated below:

- Apartment buildings– a covered porch or interior vestibule with 60 sq. ft. floor area and at least 6 feet clear in any direction; interior vestibule entry doors shall be accompanied by an overhang and clear glazing within the door or immediately to the side of the door.
- Single-family detached houses– a covered porch with 60 sq. ft. floor area and at least 6 feet clear in any direction.
- Townhouses– a covered porch, veranda or stoop with 40 sq. ft. floor area and at least 6 feet clear in any direction.

i. **Color.** Colors used on building walls and roofs in Suburban Residential–Small Lot, Suburban Residential–Medium Lot shall be earth tones and reflectivity standards consisting of “Approved Colors” specified in the Appendix. Other colors may only be used as accents. Buildings throughout shall not have highly reflective surfaces. Mechanical devices, roof vents and screening materials are also subject to this regulation, as are fences and walls. Trim materials constituting less than 10% of the façade’s opaque surface may be any color.

j. **Service Areas.** Service areas shall not be visible from streets or public open spaces. They shall be located away from streets or recessed within the building envelope. Service areas recessed within the building envelope, and facing streets or public open spaces, shall not comprise more than 20% of a building’s linear frontage; and shall be accompanied by roll-up doors. Free-standing equipment and refuse

containers shall be screened from view of streets and public open space.

k. **Commercial Signage.** Signs shall complement adjacent architecture. Letters shall not exceed 18 inches in height or width and 3 inches in relief.

l. **Awnings.** Awnings shall be cloth or equivalent, metal, or glass. “Quarter-cylinder” awning configurations are not permitted. Lettering on awnings is limited to 9 inches in height.

l. **Energy-Efficient Buildings.** Buildings that are energy efficient are strongly encouraged. Two or more of the following features shall be included in building design:

- fluorescent lighting;
- heat-exchange units;
- super-insulated low-emissive windows;
- passive solar heating;
- passive solar hot water;
- natural cross-ventilation;
- highly efficient appliances, heating and cooling systems; and
- generation of electricity through wind generation and photovoltaics.

DRAFT

General Standards

LANDSCAPE DESIGN STANDARDS

1. The following Landscape Standards shall apply to all zones as specified below:

a. **Walls & Fences Material Finishes & Design.**

Walls. Walls may be clad or plastered with stucco, brick and tile masonry, or native stone (or synthetic equivalent). Split face block is allowed throughout. Smooth exposed block, of any color, is allowed for a maximum of 50% of exterior walls outside of the front setback. Stucco and concrete shall have an integral color. The end of walls shall have a pier or pilaster that is at least 12 inches in width, to give a substantial appearance. For Parcels adjacent to the High School site, the backs of the parcels facing the High School site shall use a perimeter wall design approved by the City.

b. **Pedestrian Walkways.** Arcades, trellises awnings, and/or trees are encouraged along pedestrian paths for shade and spatial definition. In parking lots, pedestrian walkways shall not extend more than 75 feet without one of these features.

c. **On-Lot Trees.** Where buildings are placed more than 10 feet from a street-side property line, at least one tree shall be planted per property within the street-side setback. Properties with a street frontage over 100 feet shall have a minimum of one tree every 50 feet or less. Street trees on local streets shall be maintained by the property owner. Street trees on collector or higher capacity streets shall be maintained by the City Parks and Recreation Department.

d. **Site Lighting.** Lighting shall have a cut-off angle that directs light downward and only toward the property on which the light source is located. Light fixtures shall be of a type that throws light downward and have baffles, hoods or diffusers so that no light point source should be visible from a distance greater than 1000 feet. On-site light poles shall not exceed a height of 16 feet. High-intensity discharge lamps and sodium lamps shall not be used.

e. **Gateway Monuments.** Pillars or walls may be built at entry points to neighborhoods and projects. Walls shall not be more than 12 feet long and conform with “Walls & Fence” guidelines above. Pillars shall not be more than 3 feet in width and 10 feet in height. Pillars and walls shall be stucco, masonry, rammed earth, adobe, native stacked stone (or synthetic equivalent) or straw bale. Exposed plain block, of any color, is not allowed. Stucco and concrete shall have an integral color (see “Color” above).

g. **Grading.** Cut and fill slopes shall be no steeper than 3:1 on average; and retaining walls shall not exceed 4 feet in height unless incorporated within a building’s foundation, or unless approved by the City Hydrologist. Graded areas shall maintain the character of the natural terrain by varying gradients, undulating contours, and rounding the toe and crest of any slope greater than 10 feet in height. Fill shall be limited to the minimum required for site development and drainage. Fill shall not exceed the existing highest natural grade point on site, unless approved by the City Hydrologist for required drainage. Height shall be measured from the natural grade.

h. **Storm water Quality and Management.** Development projects shall incorporate unobtrusive storm water features that facilitate the detention and infiltration of storm water, and the filtration of pollutants from urban run-off. At all densities and intensities, appropriate techniques include:

- permeable pavers & concrete,
 - infiltration beds placed below paved areas,
 - stone-filled reservoirs and dry-wells, and
 - small “rain gardens” (low-lying with moisture-tolerant grasses, wildflowers, shrubs, and trees); and
 - vegetated swales (in courtyards and street medians and planting strips).
- Materials and treatments used for storm water management shall be natural in appearance. Channels lined by concrete or rip-rap are prohibited, unless necessary for public safety.
- Fencing shall be avoided, meaning that the bottom slopes of detention basins should be designed for safety. In addition, a hydrological study and design may be required of new development by the City of Albuquerque to identify appropriate storm water detention and energy dissipation features.

i. **Construction Mitigation.** Construction within the Plan area or parts of the area shall be mitigated as provided by the regulations in “Appendix X, Construction Mitigation.” These regulations are fully part of this regulating plan and shall be enforced as such.

j. **Appropriate Planting Lists.** The purpose of planting lists is to: reduce water usage, maintain the character of native plants now existing in the Monument, and to provide a harmonious landscape image. A plant list shall guide landscaping within the Plan area. Shrubs and trees shall be nursery grown. The Plan expressly supports enforcement activities to prevent illegal removal of naturally occurring vegetation from its existing location.

- List A - Petroglyph National Monument Plant List. These are the plant species that were inventoried by the National Park Service in 1994- 5 and represent almost 200 plants (amended).
- List B - Xeric Plant List. The plant species are the official xeric or low-water use plant list of the City of Albuquerque Water Conservation Office. The majority of the list is low and medium water-use plants. This xeric plant list is extensive and is maintained by the City. Contact the City of Albuquerque Water Conversation Office to obtain the most current information.
- Lots within adjacency to public lands such as the Petroglyph National Monument, arroyos and other Major Public Open Space area should primarily follow plant list A to limit impact of invasive and/or non-native plants on native vegetation.

General Standards

USABLE OPEN SPACE STANDARDS

1. Private Usable Open Space may be a yard, deck, balcony, porch or patio and shall have an unobstructed dimension of at least 6 feet.
2. Shared Usable Open Space shall be accessible to all project residents, and have unobstructed dimensions of at least 40 feet. Shared Usable Open Space may be park, courtyard, plaza, play area, community facility, roof garden, or some combination thereof.
3. Usable Open Space shall be privately maintained.
4. Off-site Open Space dedication requirements are met by existing parks and trails.

PARKING STANDARDS

1. **Parking Dimensions–On-Site.** Parking spaces may have a length of 18 feet; this may be reduced to 16 feet where cars can overhang wheel stops. Standard parking spaces may have a width of 9 feet, and compact parking spaces shall have a width of 8.5 feet. Within every parking lot or garage, up to 25% of all spaces shall be compact and shall be dispersed throughout any lot.
2. **Parking Dimensions–On-Street.** On-street parking spaces may have a length of 20 feet and a width of 7 feet.
3. **Landscaping.** Surface parking shall have one tree planted adjacent to every six parking spaces. Diamond-shaped tree wells (approximately 5 feet x 5 feet) are an efficient means to meet this requirement, as they take advantage of car overhangs. Surface parking lots may not exceed a dimension of 260 feet in any direction without providing a landscaped pedestrian walkway.
4. **Neighborhood Permit Parking.** Neighborhoods adjoining a Village Center, high school site, and access points to the Petroglyph National Monument, parks, and open space may initiate a petition and establish a Neighborhood Permit Parking system without regard to the percentage of on-street parking spaces used by persons who are not residents of the neighborhood.

Appendix A Approved Colors

Exterior color and reflectivity standards for residential areas

All of the illustrated colors have a “light reflective value” (LRV) within the range of 20% to 50% LRV rating and may be used in any residential area. Other colors may be submitted related to a specific site or more detailed plan, but they must have an LRV rating within this range.

The material samples shown are of stucco with integrated color as required in the VHAP.

Light and color work together. White reflects the radiant energy rays of the sun and black absorbs them. This principle has a significant impact on a house. Light colored reflective coatings are like a white shirt for a house and cut cooling costs. Dark colors are less reflective but can significantly increase the surface temperature of a wall. Finish coat colors with Light Reflective Values of 20% or lower are highly absorbent and will, in typical conditions, result in surface temperatures higher than acceptable sustained service temperature. Higher reflective values on external coatings reduce energy consumption and create higher performance buildings.

At the same time, the higher reflectivity value of lighter colors is a consideration for Volcano Heights because of the need to minimize the visual effect of development in the area on views from the rest of the city. In 1993 the High Desert Plan required an upper limit of 40% reflectivity. A balance between reflectivity and light absorption is recommended for Volcano Heights through a mid-range of color reflectivity.

The third consideration is the emphasis on the natural landscape in the VHAP. The recommended colors are selected to be in harmony with the natural setting and at the same time provide choice in color selection.

In keeping with New Mexico tradition, accent colors on front doors, window sash, and other incidental elements is allowed as long as the accent color does not overwhelm the building’s basic color or create a visual distraction from the adjacent streets, lots or public areas.

The color sample is for El Rey traditional cementitious stucco manufactured locally in Albuquerque. El Rey Premium Stucco Finish is a compound of cement, hydrated lime, sand aggregates and iron oxide pigments. Since the stucco is integrally colored it will never need to be painted. Like many natural landscapes, the traditional cement stucco is breathable and appears slightly different during each season and at alternate times of the day.

Other types of stucco with similar colors may be used, as long as they have integral color and meet the standards for reflectivity and harmony with the natural landscape.



Exhibit, 28
Approved Colors

Appendix B Native Plant List A

List of Plant Species of Petroglyph National Monument - Plants found by Bleakly during survey from August 1994 through September 1995. One hundred and ninety-two (192) plants from 40 families were identified. Arrangement is alphabetical by family, genus, and species with some synonyms and common names. An asterisk (*) before the name indicates plants listed in Barlow-Irick (1993). Nomenclature according to Kartesz (1994). Common names from various sources. Number of species in each family are in parentheses after family name. A “pound sign” (#) indicates that a voucher is housed at the UNM Herbarium.

ADIANTACEAE Maidenhair Fern Family (1)
Cheilanthes feei T. Moore SLENDER LIPFERN #

AGAVACEAE Agave or Yucca Family (1)
Yucca glauca Nutt. SMALL SOAPWEED

AMARANTHACEAE Pigweed Family (3)
Amaranthus acanthochiton Sauer GREENSTRIPE #
Amaranthus wrightii S. Wats. WRIGHT’S AMARANTH #
Tidestromia lanuginosa (Nutt.) Standl. WOOLLY TIDESTROMIA

ANACARDIACEAE Sumac Family (1)
Rhus trilobata Nutt. SKUNKBUSH, SKUNKBUSH SUMAC

APIACEAE (=UMBELLIFERAE) Parsley or Carrot Family (1)
Cymopterus acaulis (Pursh) Raf. var. fendleri (Gray)
Goodrich (Cymopterus fendleri Gray) FENDLER SPRINGPARSLEY #

ASCLEPIADACEAE Milkweed Family (1)
Asclepias subverticillata (Gray) Vail WHORLED MILKWEED

ASTERACEAE (=COMPOSITAE) Sunflower Family (42)
Acourtia nana (Gray) Reveal & King (Perezia nana Gray) DWARF
DESERT HOLLY, DWARF DESERTPEONY #
Aphanostephus ramosissimus DC. PLAINS DOZEDAISY #
Artemisia bigelovii Gray BIGELOW’S SAGEBRUSH #
Artemisia filifolia Torr. SANDSAGE, SAND SAGEBRUSH

Artemisia frigida Willd. FRINGED SAGE
Artemisia ludoviciana Nutt. ssp. albula (Woot.) Keck WHITE SAGEBRUSH #
* Bahia absinthifolia Benth. #
* Bahia dissecta (Gray) Britt.
Bahia pedata Gray BLUNTSCALE BAHIA #
Baileya multiradiata Harvey & Gray ex Gray DESERT MARIKINGOLD #
* Berlandiera lyrata Benth.
Brickellia californica (Torr. & Gray) Gray CALIFORNIA BRICKELLBUSH #
Chaetopappa ericoides (Torr.) Nesom (Leucelene ericoides (Torr.) Greene)
WHITE ASTER

* Chrysothamnus nauseosus (Pallas ex Pursh) Britt. ssp. bigelovii (Gray)
Hall & Clements #
Chrysothamnus pulchellus (Gray) Greene ssp. pulchellus
SOUTHWESTERN RABBITBRUSH #
Conyza canadensis (L.) Cronq. CANADIAN HORSEWEED
* Gaillardia pinnatifida Torr. #
Gaillardia pulchella Foug. FIREWHEEL
Gutierrezia sarothrae (Pursh) Britt. & Rusby BROOM SNAKEWEED #
Helianthus petiolaris Nutt. PRAIRIE SUNFLOWER
Hymenopappus flavescens Gray var. canotomentosus Gray YELLOW-FLOWERED
WHITE RAGWEED, COLLEGEFLOWER #
Machaeranthera canescens (Pursh) Gray HOARY TANSYASTER #
* Machaeranthera gracilis (Nutt.) Shinnery (Haplopappus gracilis
(Nutt.) Gray) #
Machaeranthera pinnatifida (Hook.) Shinnery (Haplopappus spinulosus
(Pursh) DC.) LACY TANSYASTER
Malacothrix fendleri Gray FENDLER DESERTDANDELION #
Melampodium leucanthum Torr. & Gray PLAINS BLACKFOOT #
* Microseris sp. Palafoxia sphacelata (Nutt. ex Torr.) Cory OTHAKE #
Parthenium incanum Kunth MARIOLA #
Pectis angustifolia Torr. var. angustifolia NARROWLEAF PECTIS #
Psilostrophe tagetina (Nutt.) Greene WOOLLY PAPERFLOWER
Sanvitalia abertii Gray ABERT’S CREEPING ZINNIA #
Senecio flaccidus Less. var. flaccidus (Senecio douglasii DC. ssp. longilobus
(Benth.) L. Benson THREADLEAF GROUNDSEL #
Senecio multicapitatus Greenm. ex Rydb. RAGWORT GROUNDSEL #

Senecio riddellii Torr. & Gray RIDDELL'S RAGWORT OR
GROUNDSEL #

Stephanomeria pauciflora (Torr.) A. Nels. BROWNPLUME
WIRELETTUCE #

Thelesperma megapotamicum (Spreng.) Kuntze HOPI TEA,
GREENTHREAD

Thymophylla acerosa (DC.) Strother (Dyssodia acerosa DC.)
PRICKLYLEAF DOGWEED #

Verbesina encelioides (Cav.) Benth. & Hook. f ex Gray
GOLDENCROWNBEARD, COWPEN DAISY

Xanthium strumarium L. COCKLEBUR

Zinnia grandifolia Nutt. ROCKY MOUNTAIN ZINNIA #

BIGNONIACEAE Bignonia Family (1)

Chilopsis linearis (Cav.) Sweet DESERT WILLOW

BORAGINACEAE Borage Family (4)

Cryptantha cinerea (Greene) Cronq. var. cinerea (C. jamesii Payson var. multicaulis
(Torr.) Payson) JAMES' CATSEYE #

Cryptantha crassisepala (Torr. & Gray) Greene var. elachantha I.M. Johnst.
THICKSEPAL CATSEYE #

Heliotropium convolvulaceum (Nutt.) Gray PHLOX HELIOTROPE
Lappula occidentalis (S. Wats.) Greene var. occidentalis (L. redowskii
(Hornem.) Greene) FLATSPINE STICKSEED #

BRASSICACEAE (=CRUCIFERAE) Mustard Family (7)

Descurainia pinnata (Walt.) Britt. WESTERN TANSYMUSTARD #
Dimorphocarpa wislizenii (Dithyrea wislizenii)

SPECTACLE POD; TOURISTPLANT

Lepidium lasiocarpum Nutt. var. lasiocarpum SHAGGYFRUIT
PEPPERWEED #

* Lepidium montanum Nutt.

Lesquerella fendleri (Gray) S. Wats. FENDLER BLADDERPOD #

CACTACEAE Cactus Family (6)

Echinocereus fendleri (Engelm.) F. Seitz PINKFLOWERED
HEDGEHOG CACTUS

Escobaria vivipara (Nutt.) Buxbaum (Coryphantha vivipara (Nutt.) Britt. &
Rose) SPINYSTAR

Opuntia clavata Engelm. CLUB CHOLLA

Opuntia imbricata (Haw.) DC. TREE or WALKINGSTICK CHOLLA

Opuntia phaeacantha Engelm. BROWNSPINE PRICKLYPEAR

Opuntia polyacantha Haw. PLAINS PRICKLYPEAR

CAPPARACEAE Caper Family (1)

Polanisia dodecandra (L.) DC. ssp. trachysperma (Torr. & Gray) Ilitis
SANDYSEED CLAMMYWEED #

CHENOPODIACEAE Goosefoot Family (5)

Atriplex canescens (Pursh) Nutt. FOURWING SALTBUCH

* Chenopodium denticatum A. Nels. #

Chenopodium fremontii S. Wats. FREMONT'S GOOSEFOOT #

Krascheninnikovia lanata (Pursh) Guldenstaedt (Ceratoides lanata (Pursh)
J.T. Howell; Eurotia lanata (Pursh) Moq.) WINTERFAT

CUCURBITACEAE Gourd Family (1)

Cucurbita foetidissima Kunth COYOTE or MISSOURI GOURD

CUPRESSACEAE Cypress Family (1)

Juniperus monosperma (Engelm.) Sarg. ONESEED JUNIPER

EPHEDRACEAE Jointfir Family (1)

Ephedra torreyana S. Wats. TORREY JOINTFIR or MORMON TEA #

EUPHORBIACEAE Spurge Family (7)

Chamaesyce parryi (Engelm.) Rydb. PARRY'S SANDMAT or SPURGE #
Chamaesyce serpyllifolia (Pers.) Small THYMELEAF SANDMAT or
SPURGE #

Chamaesyce serrula (Engelm.) Woot. & Standl. SAWTOOTH SANDMAT
or SPURGE #

Croton texensis (Klotzsch) Muell.-Arg. TEXAS CROTON #

Euphorbia dentata Michx. TOOTHED SPURGE #

* Tragia ambylodonta (Muell.-Arg.) Pax & K. Hoffmann

Tragia ramosa Torr. BRANCHED NOSEBURN

FABACEAE (=LEGUMINOSAE) Bean or Pea Family (14)

Astragalus amphioxys Gray var. amphioxys CRESCENT MILKVETCH #

Astragalus ceramicus Sheld. var. ceramicus PAINTED MILKVETCH #

Astragalus lentiginosus Dougl. var. diphysus (Gray) Jones SPECKLEDPOD
MILKVETCH #

Astragalus nuttallianus DC. SMALLFLOWERED MILKVETCH #

Caesalpinia jamesii (Torr. & Gray) Fisher JAMES' HOLDBACK

Dalea compacta Spreng. var. compacta COMPACT PRAIRIECLOVER #

Dalea formosa Torr. FEATHERPLUME

Dalea lanata Spreng. var. terminalis (Jones) Barneby WOOLLY

PRAIRIECLOVER #
Dalea nana Torr. ex Gray var. *carlescens* Kearney & Peebles DWARF
PRAIRIECLOVER #
Dalea scariosa S. Wats. (*Petalostemon scariosa* (S. Wats.) Wemple)
ALBUQUERQUE
PRAIRIECLOVER #
Hoffmannseggia glauca (Ortega) Eifert INDIAN RUSHPEA
Pediomelum hypogaeum (Nutt.) Rydb. (*Psoralea hypogaea* Nutt.) SCURFPEA #
Psorothamnus scoparius (Gray) Rydb. (*Dalea scoparia* Gray) BROOM

DALEA; PURPLE SAG

FUMARIACEAE Fumitory Family (1)
Corydalis aurea Willd. GOLDEN CORYDALIS, SCRAMBLED EGGS,
GOLDENSMOKE, BUTTER AND EGGS
GROSSULARIACEAE Gooseberry Family (1)
Ribes sp. GOOSEBERRY

HYDROPHYLLACEAE Waterleaf Family (4)
Nama hispidum Gray BRISTLY NAMA
Phacelia crenulata Torr. var. *crenulata* CLEFTLEAF WILDHELIOOTROPE #
Phacelia integrifolia Torr. GYPSUM SCORPIONWEED #
Phacelia ivesiana Torr. IVES PHACELIA #

LINACEAE Flax Family (2)
Linum aristatum Engelm. BRISTLE FLAX
*Linum australe Heller #

LOASACEAE Stickleaf Family (2)
Mentzelia albicaulis (Dougl.) Dougl. WHITESTEM BLAZINGSTAR
Mentzelia pumila (Nutt.) Torr. & Gray DWARF MENTZELIA #

MALVACEAE Mallow Family (5)
Sida abutifolia P. Mill. (*Sida filicaulis* Torr. & Gray)
SPREADING FANPETALS #
* Sida neomexicana Gray
Spheralcea angustifolia (Cav.) G. Don ssp. *lobata* (Woot.) Kearney
COPPER GLOBEMALLOW #
Spheralcea hastulata Gray (*Spheralcea subhastata* Coult.)
SPEAR GLOBEMALLOW #
Spheralcea incana Torr. ex Gray GRAY GLOBEMALLOW #

NYCTAGINACEAE Four O'clock Family (7)

Abronia fragrans Nutt. ex Hook. FRAGRANT WHITE SAND VERBENA
* Allionia choysia Standl. #
Allionia incarnata L. TRAILING WINDMILLS #
Boerhavia spicata Choisy (*B. torreyana* (S. Wats.) Standl.) CREEPING
SPIDERLING

* Mirabilis glabra (S. Wats.) Standl. (*Oxybaphus glaber* S. Wats.) #
Mirabilis linearis (Pursh) Heimerl NARROWLEAF FOUR O'CLOCK
Selinocarpus diffusus Gray SPREADING MOONPOD #

OLEACEAE Olive Family (1)
Menodora scabra Gray ROUGH MENODORA

ONAGRACEAE Evening Primrose Family (2)
Gaura coccinea Nutt. ex Pursh SCARLET BEEBLOSSOM
Oenothera pallida Lindl. PALE EVENINGPRIMROSE #

OROBANCHACEAE Broomrape Family (1)
Orobanche ludoviciana Nutt. (*O. multiflora* Nutt.) LOUISIANA
BROOMRAPE #

PEDALIACEAE Sesame Family (1)
Proboscidea louisianica (P. Mill.) Thelleng COMMON DEVILSCLAW,
DEVILSHORN, RAM'S HORN

PLANTAGINACEAE Plantain Family (1)
Plantago patagonica Jacq. (*P. purshii* Morris) WOOLLY PLANTAIN #
Plantago lanceolata L. NARROWLEAF PLANTAIN

POACEAE (=GRAMINAE) Grass Family (42)
Aristida adscensionis L. SIXWEEKS THREEAWN #
* Aristida arizonica Vasey
Aristida havardii Vasey HAVARD'S THREEAWN #
* Aristida pansa Woot. & Standl.
Aristida purpurea Nutt. var. *fendleriana* (Steud.) Vasey
FENDLER'S THREEAWN #
* Aristida purpurea Nutt. var. *neallyi* (Vasey) Allred #
* Aristida purpurea Nutt. var. *purpurea* #
* Bothriochloa barbinodis (Lag.) Herter #
Bothriochloa laguroides (DC.) Herter ssp. *torreyana* (Steud.) Allred & Gould
(*Andropogon saccharoides* Sw.) SILVER BEARDGRASS or SILVER
BLUESTEM #
Bouteloua aristoides (H.B.K.) Griseb. var. *aristoides* NEEDLE GRAMA #

Bouteloua barbata Lag. var. barbata SIXWEEKS GRAMA #
 Bouteloua curtipendula (Michx.) Torr. SIDEOATS GRAMA
 Bouteloua eriopoda (Torr.) Torr. BLACK GRAMA #
 Bouteloua gracilis (Willd. ex Kunth) Lag. ex Griffiths BLUE GRAMA
 Bouteloua hirsuta Lag. HAIRY GRAMA
 * Cenchrus carolinianus Walt. (Cenchrus incertus M.A. Curtis)
 * Digitaria californica (Benth.) Henr. #
 Elymus elymoides (Raf.) Swezey (Sitianion hystrix (Nutt.) J.G. Sm.; Elymus longifolius (J.G. Sm.) Gould) SQUIRRELTAIL #
 Enneapogon desvauxii Beauv. NINEAWN PAPPUSGRASS #
 Erioneuron pulchellum (Kunth) Tateoka (Dasyochloa pulchella (Kunth) Willd. ex Rydb.) FLUFFGRASS, LOW WOOLLYGRASS #
 Hilaria jamesii (Torr.) Benth. (Pleuraphis jamesii Torr.) GALLETA #
 * Koeleria macrantha (Ledeb.) J.A. Schultes
 (Koeleria cristata auct. p.p. non Pers.)
 * Lycurus phleoides Kunth
 Monroa squarrosa (Nutt.) Torr. (Munroa squarrosa (Nutt.) Torr.)
 FALSE BUFFALOGRASS #
 * Muhlenbergia arenacea (Buckl.) A.S. Hitchc.
 Muhlenbergia arenicola Buckl. SAND MUHLY #
 Muhlenbergia porteri Scribn. BUSH MUHLY #
 Muhlenbergia pungens Thurb. SANDHILL MUHLY #
 Muhlenbergia torreyi (Kunth) A.S. Hitchc. ex Bush RING MUHLY
 Oryzopsis hymenoides (Roemer & J.A. Schultes)
 Ricker ex Piper INDIAN RICEGRASS
 * Poa bigelovii Vasey & Scribn.
 Scleropogon brevifolius Phil. BURROGRASS #
 Setaria leucopila (Scribn. & Merr.) K. Schum.
 STREAMBED BRISTLEGRASS #
 * Setaria lutescens (Weigel) F.T. Hubbard ?
 Sporobolus contractus A.S. Hitchc. SPIKE DROPSEED
 Sporobolus cryptandrus (Torr.) Gray SAND DROPSEED #
 * Sporobolus flexuosus (Thurb. ex Vasey) Rydb. #
 Sporobolus giganteus Nash GIANT DROPSEED #
 Stipa comata Trin & Rupr. var. comata NEEDLEANDTHREAD #
 * Stipa neomexicana (Thurb. ex Coult.) Scribn.
 Stipa spartea Trin. PORCUPINEGRASS #
 Vulpia octoflora (Walt.) Rydb. (Festuca octoflora Walt.)
 SIXWEEKS FESCUE #

POLEMONIACEAE Phlox Family (1)

Ipomopsis pumila (Nutt.) V. Grant DWARF GILIA #

POLYGONACEAE Knotweed Family (4)

Eriogonum abertianum Torr. var. abertianum ABERT BUCKWHEAT #
 * Eriogonum effusum Nutt.
 Eriogonum polycladon Benth. SORREL BUCKWHEAT #
 Eriogonum rotundifolium Benth. ROUNDEAF BUCKWHEAT #
 Rumex hymenosepalus Torr. CANAIGRE; DOCK #

PORTULACACEAE Purslane Family (1)

Portulaca sp. PURSLANE

RANUNCULACEAE Crowfoot Family (1)

Delphinium sp. LARKSPUR

ROSACEAE Rose Family (1)

Fallugia paradoxa (D. Don) Endl. ex Torr. APACHE PLUME

SALICACEAE Willow Family

Salix sp. WILLOW

SCROPHULARIACEAE Figwort Family (3)

Epixiphium wislizenii (Engelm. ex Gray) Munz (Maurandya wislizenii Engelm. ex Gray) BALLOONBUSH #
 Penstemon ambiguus Torr. GILIA PENSTEMON or BEARDTONGUE
 * Penstemon sp.

SOLANACEAE Potato Family (6)

Chamaesaracha coronopus (Dunal) Gray GREENLEAF FIVE EYES #
 Datura inoxia P. Mill. THORNAPPLE; JIMSONWEED #
 Lycium pallidum Miers PALE WOLFBERRY
 Nicotiana trigonophylla Dunal DESERT TOBACCO #
 Physalis acutifolia (Miers) Sandw. (P. wrightii Gray) SHARPLEAF
 GROUNDCHERRY #
 Solanum elaeagnifolium Cav. SILVERLEAF NIGHTSHADE

VERBENACEAE Vervain Family (2)

Aloysia wrightii Heller ex Abrams WRIGHT'S BEEBRUSH #
 * Tetraclea coulteri Gray #

ZYGOPHYLLACEAE Caltrop Family (2)

Kallstroemia sp. CALTROP

Appendix C

Construction Mitigation

Policy CM: Any damage to the vegetation, slope, or placement of boulders due to or related to construction shall be mitigated as provided herein.

Policy CM-1: Prior to beginning construction, the property owner shall construct a temporary fence at the site boundary adjacent to the Escarpment Buffer, Major Open Space Area, archeological site or public or private conservation area to be maintained in natural desertscape to effectively barricade it from heavy equipment and vehicles. Photographs of the site in its original condition shall be submitted with the application for building permit, subdivision and/or site development plan.

Policy CM-2: Prior to beginning construction, the property owner shall construct a temporary fence at the Development Envelope boundary and at the parcel boundary (except for the interior lot lines of parcels developed at the same time) within the Conservation Residential, and Suburban Residential–Large Lot land use designations to protect natural desertscape in the Conservation Easement area to effectively barricade it from heavy equipment and vehicles.

Policy CM-3: Public- and private-sector projects within the Conservation Area and the Impact Area facing the Escarpment and adjacent to archeological sites must include geotechnical data and analysis that demonstrates to the satisfaction of the City Engineer that proposed trenching or blasting will not affect the face of the Escarpment, potentially causing erosion or caving of the slopes and boulders and thereby threatening the public safety or welfare or otherwise damage archeological resources.

Policy CM-4: The following applies in the selection of alignment and in site design.

a. Grading plans shall demonstrate that cut and fill has been kept to a minimum consistent the standards in this Plan. Generally, the overall topography of the site is not to be substantially altered.

b. Minimum width of disturbance to slopes and vegetation and minimum cut and fill, balanced against the need to provide for bikeways or other amenities within the right-of-way.

Policy CM-5: Replacement of boulders shall be to the approximate the original location, angle and surface exposure. Revegetation to approximate original cover with appropriate native or naturalized plants as identified in Plant List A is required within 90 days of project completion. A variance may be granted if the type of vegetation or time of year make revegetation within 90 days impossible. For infrastructure projects on public lands, the construction company shall post a warranty bond effective for three years after completion of the infrastructure work to insure successful revegetation.

Policy CM-6: The City shall be responsible for restoring existing damaged areas which lie within public open space. The property owner shall be responsible for restoring damaged areas on lands accepted by the City to meet open space requirements if that damage occurred after the adoption of the Volcano Heights Area Plan; this shall occur prior to title transfer if the land is to be deeded to the City, and shall be an ongoing responsibility of the property owner if the land remains private open space.

Policy CM-7: Existing cuts which are used as trail locations shall be stabilized and revegetated at the time of trail construction.

Policy CM-8: As public open space is acquired by the City, damaged areas shall be protected from further abuse and reseeded.

Appendix D

Stormwater Design and Management Standards

The 300 foot drainage corridor of the North and Middle Forks of the Boca Negra Arroyos shall remain as undisturbed desert with natural vegetation, rock formations, and drainageway intact. Only minimal alterations are permissible if essential for stormwater management or for the initial construction of a trail or recreational amenity.

Policy SDM-1: Channel treatments shall meet the following requirements:

Limited stabilization of natural channels, according to the policies contained in the “Facility Plan for Arroyos,” unless such treatment is determined to be infeasible by the City or the Albuquerque Metropolitan Flood Control Authority as appropriate.

Use of many small, unobtrusive structures, such as check dams or small drop structures, rather than larger, more obtrusive structures, when structural solutions are required.

Use of materials in treated channels which blend visually with the escarpment and adjacent open space. Naturalistic treatments, such as rip-rap, gabions, or tinted concrete, are the preferred treatment types.

Protection of canyons from erosion through control of developed flows and through stabilization techniques which are consistent with the visual character of the open space.

Policy SDM-2: Developed flows shall be managed to minimize their impact on the open space, North Geologic Window, archeological sites, and the Escarpment Face. The potential impacts of water retention should be thoroughly studied prior to use of detention areas to control flows.

Policy SDM-3: Within the large areas of open space, developed flows shall be modified through check dams or other means to approximate undeveloped flows to minimize impacts on the escarpment and to minimize the intensity of channel treatment required. However, the impact of check dams as a method of controlling flows should be thoroughly studied prior to their use.

Appendix E

Northwest Mesa Escarpment Plan and Volcano Mesa Area Plan Boundaries

