



# North Domingo Baca Park MASTER DEVELOPMENT PLAN

City of Albuquerque Department of Municipal Development



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# SECTION I EXECUTIVE SUMMARY

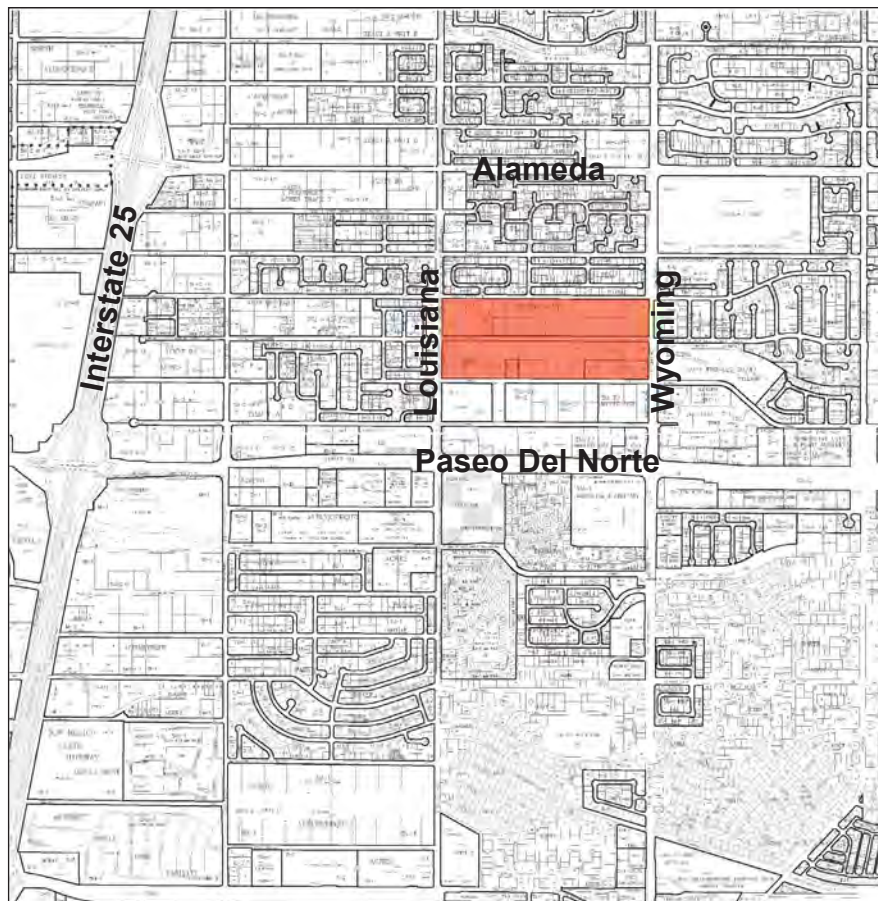
## PURPOSE OF THE DOCUMENT

This document is a Master Development Plan for North Domingo Baca Park, a multi-use, community park in North Albuquerque Acres. North Domingo Baca Park is bounded by Wyoming Boulevard on the east, Carmel Avenue on the south, Louisiana Boulevard on the west, and Corona Avenue on the north. The 32-acre park site, and adjacent 27-acre AMAFCA property which is available for joint use, allows for a wide range of activities to serve the interests of the greater community as well as the local neighborhoods.

The North Domingo Baca Park Master Development Plan (similar to the City’s Site Development

Plan for Subdivision) has a broad focus. The history of the project, the project’s goals, existing site conditions information, and the park program are presented in this document. These elements combined have shaped the layout of the park in terms of access, facility location, and programming. The park program and park design standards are described in detail to communicate the visual and aesthetic qualities of the park elements. The general location and design criteria for buildings, parking areas, multi-purpose fields, landscaping, etc. are also included in this document. The Master Development Plan is the overall guide for future development at North Domingo Baca Park. Future development of specific park elements shall be consistent with the final approved version of this Plan.

Due to the size and programmed facilities at



North Domingo Baca Park Site Vicinity

North Domingo Baca Park, implementation of improvements will require a phasing strategy. This document will provide the framework for the phased development of North Domingo Baca Park. The Master Development Plan allows for a flexible response as future recreational needs are identified or modified, and funding strategies are developed. This Master Development Plan applies to the lands currently under ownership by the City of Albuquerque and the Albuquerque Metropolitan Arroyo and Flood Control Authority (AMAFCA).

## PROJECT HISTORY

The Parks and Recreation Draft Park System Facility Plan of 1993 identified the need for a community park in the North Albuquerque Area. AMAFCA began purchasing land for a dam and water conveyance facility. Once complete, AMAFCA disclosed some excess property was available for purchase and in a 1997 and agreement between the City of Albuquerque and AMAFCA was executed. The agreement outlines the specifics for acquisition, by the City, of AMAFCA-owned property outside of the dam, and responsibilities in terms of platting and development of drainage improvements. The City acquired land between 19xx and 2001 by purchase from AMAFCA, through “detached open space” requirement from developers in the area, and from private landowners. Since 1993, the Kinney Dam and Window G Channel have been constructed, and residential development has occurred west, north and east of the site. This development, and funding of \$500,000 from the Quarter-Cent Open Space / Park Tax, provided the impetus for developing a Master Plan for North Domingo

Baca Park. The Quarter-Cent Open Space / Park Tax was established in 1996 to accomplish land acquisition of Major Public Open Space, and land acquisition and development of parks.

In 1997, Consensus Planning was retained to prepare, in conjunction with City staff and community members, the Master Development Plan for North Domingo Baca Park. As part of the planning process the Project Team has solicited significant input from the surrounding community. This input has aided in our efforts to create a Master Development Plan which meets the needs of the community. In Summer 1998, the decision was made to shift the planned location of AFD Station 20/La Cueva Community Police Substation from a site at Louisiana Boulevard and Signal Avenue to North Domingo Baca Park. The Substation is incorporated into the Master



View of the Park looking west, 2001

Plan concept and is located at the corner of Wyoming Boulevard and Corona Avenue, the northeast corner of the Park. The consultant for AFD Station 20/La Cueva Community Police Substation processed a zone map amendment and Site Plan for Building Permit through the Environmental Planning Commission (EPC) in

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November, 1998. Construction of the Substation was completed in 2000.

In July 1999, a Master Development Plan for the Park was approved by the EPC. This Master Development Plan did not include eleven lots along Carmel Avenue, beginning at Wyoming Boulevard, as they were still in private ownership. The City's goal was to acquire these eleven lots and incorporate them into the planning for the Park. The purchase of these lots was critical to the Park planning in that the Wyoming/Carmel intersection and Carmel frontage were the preferred location for a suite of community buildings, including a multi-generational center and pool complex. The approved Master Development Plan did not include these features as the remaining site constraints made their inclusion impractical.

The approval of the Master Development Plan was appealed by the owner of five of the lots at Wyoming and Carmel because they were not interested in selling their land, instead wanting to develop the site themselves. The appeal was heard by the Land Use Planning and Zoning Committee (LUPZ) of the City Council on September 15, 1999. The appeal was denied by LUPZ and a recommendation to not grant the appeal was forwarded to the full Council. The City moved forward with the purchase of the eleven lots. In the interim period, the Master Development Plan approval was never validated through final sign-off by the Development Review Board (DRB), thus voiding the original approval. This current Master Development Plan now incorporates the entire Park site as originally envisioned by the City and community leaders.

## **PARK GOALS**

- Provide recreational and activities which serve both the neighborhood and the community needs.
- Provide for the integration of the future facilities (i.e. Fire/Police Substation, multi-generational center, pool complex, library) into the overall park design relative to pedestrian and vehicular circulation.
- Promote the multi-use of the existing and proposed drainage improvements to provide additional recreational opportunities.
- Design the park to serve as a focal point and activity hub for the surrounding community (residents within a 3-mile service area).
- Develop a Community Park which serves as a buffer between residential subdivisions to the north and the intense commercial activity proposed along Paseo Del Norte.
- Develop park access patterns which provide for safe and efficient separation of vehicles and pedestrians, and promote multi-modal transportation options.
- Preserve the City's natural resources through innovative design approaches which respond to water conservation and solar exposure.
- Develop design standards which promote a vision of quality for all site improvements.
- Develop and prioritize funding needs, and develop a project schedule.

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## **MASTER DEVELOPMENT PLAN RECOMMENDATIONS**

The Preferred Master Plan Concept, and the park design standards which accompany it, establish an overall format for the development of North Domingo Baca Park and its program components. Future development within the Park shall be in accordance with the Master Development Plan.

A great deal of detailed planning, design and engineering work remains to be done before the entire vision of the Park will be realized. Some of this follow-up work is listed within the Phasing Plan section of the document.

### Recommendations

- Temporary improvements to North Domingo Baca Park must be mindful of the eventual long-term implementation of the Master Development Plan. Therefore, short-term improvements need to be viewed as re-movable, convertible, or disposable unless they are consistent with long-term design concepts within the Park and comply with all City regulations.
- Landscape irrigation within the Park will use the non-potable water system.
- General design guidelines for architectural style; material and colors; signage; lighting; and park furnishings are included in this Plan, but specific Site Plans for Building Permit shall be prepared and approved by the EPC for the Multi-Generational Center, Library, and Aquatics Complex.
- Planning and programming for the development of North Domingo Baca Park should be an open process, with recreational users, neighborhoods, and other agencies providing input on these issues.



## SECTION 2 SITE ANALYSIS

### EXISTING CONDITIONS

#### Topography

The site has a relatively gentle slope from east to west, typically around 3 percent, but an overall change in elevation of almost 70 feet. Central to the site, several earthen stockpiles and drainage courses create areas of steeper slopes. The Kinney Dam, at the western end of the site, is



*Kinney Dam looking north*

characterized by steep engineered slopes. A terraced bench was designed into the dam to provide for future recreational uses. This area will only flood during larger storm events. Access roads from Carmel Avenue and Corona Avenue are provided for maintenance of the dam area.

#### Stormwater Drainage

The Kinney Dam abuts the western portion of the park site and receives stormwater from several locations. Off-site flows from the Falcon Ridge subdivision are discharged by underground pipe directly into the dam inlet channel. The Window G channel, a stepped soil cement section, terminates at the east boundary of the

site at Wyoming. A 60-inch storm drain line from Wyoming discharges directly into the channel. A 30-inch line was extended along Carmel to accept the future Carmel drainage.

#### Domestic Water

Several waterlines exist in close proximity to North Domingo Baca Park, including: a 10-inch PVC line in Wyoming Boulevard; a 16-inch DIP line in Louisiana Boulevard; an 8-inch PVC line in Corona Avenue; and an 8-inch PVC line in Carmel Avenue. A water zone boundary between Zone 3E and Zone 4ER crosses the site approximately 600 feet west of Wyoming Boulevard. This zone boundary required that the water lines be looped through the park. Two 8-inch PVC stubouts are provided off of Corona and Carmel to tie together through the park. The exact alignment of this connection will need to be coordinated during the detailed design for the complex of buildings in this area.

#### Non-Potable Water

A non-potable water line has been extended to North Domingo Baca Park to serve the irrigation needs of the Park. The non-potable line runs along Wyoming Boulevard and then west along Carmel Avenue. Stubouts are provided at fixed locations to allow the landscape areas for the



*Window G Channel releasing into Park site*

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various facilities (Multi-Generational Center, Library, Pool Complex and general Park development) to be metered separately. The irrigation components will be specifically designed for use with the non-potable water source.

#### Natural Gas

A 4-inch High Pressure (HP) line runs along the east side of Louisiana Boulevard, a 6-inch HP line along the east side of Wyoming Boulevard, and a 2-inch HP line along south side of Corona from Wyoming to Louisiana.

#### Electrical

There are two existing 3-phase overhead electric (OHE) lines in the vicinity. One is located on the west side of Wyoming Boulevard which abuts the site and the second OHE line is located on the west side of Louisiana Boulevard. Overhead electric lines also exist central to the site and serve former mobile residential units.

#### Sanitary Sewer

A 21-inch PVC line runs along the centerline of Wyoming Boulevard with manholes at Carmel, Anaheim and Corona. Also, 8-inch SAS lines run down Corona and Carmel, from Wyoming to Louisiana.

#### Roadways/Access

Wyoming Boulevard and Louisiana Boulevard will be the primary streets which provide regional access to North Domingo Baca Park. The intersection of Wyoming and Carmel is signalized to allow controlled turning movements. All other intersections will be four-way stops. Access to the park from Wyoming will be limited to right in/right out movements. Additional access points will be taken off of Corona and Carmel. The Trails & Bikeways Facility Plan

calls for trails along Wyoming and the Window G channel. These facilities will serve to link the park with the surrounding community.

#### Adjacent Land Uses

North Domingo Baca Park is located in North Albuquerque Acres, approximately ¼-mile north of Paseo Del Norte. The properties to the north across Corona Avenue are zoned R-D, and have developed as single-family residential (Falcon Ridge and Eagle Pointe subdivisions). The property along Louisiana Boulevard, immediately south of the Kinney Dam is developed as an office development (zoned O-1). The remaining land along Carmel is zoned SU-2/R-2 and SU-2/Mixed Use, and is currently vacant. Land to the east is zoned R-D (developed as an animal clinic and drainage uses) and SU-1/PRD (developed as an apartment complex). Land to the west is zoned R-D and developed as a single-family residential subdivision (La Cueva Oeste). La Cueva High School is located approximately 1/4-mile to the northeast.

#### Soils

The soil at North Domingo Baca Park consists of Embudo gravelly fine sandy loam, with slopes from 0-5 percent. The surface layer of this soil type at North Domingo Baca is thick and slightly darker than is typical, and the substratum is limey and cobbly. Runoff is medium, and the hazard of water erosion is moderate. This soil is subject to periodic flooding and control of moisture is needed for proper compaction. This soil type is not expected to create any major constraints in the design and development of North Domingo Baca Park.

#### Vegetation

The soil type listed above falls within Native Plan Community No. 4, which consists mainly



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of grasses mixed with some shrubs and annual plants. Black Grama is the dominant grass with Sand Dropseed, Mesa Dropseed, Galleta, Three-awn, Blue Grama, Alkali Sacaton, Bush Muhly, Indian Ricegrass, and Fluffgrass being less abundant. Annual plants generally include Tandymustard, Indian Paintbrush, Woolly Indian-wheat, Lambsquarters, Russian-thistle, and Bladderpod. Apache Plume is the dominant shrub and generally occurs in the drainage-ways.

### Climate

The average annual precipitation typical for this part of Albuquerque is approximately 8.1 inches. Temperatures average from 70F to near 100F in the summer, and 30-40F range during the winter months. Nighttime winter temperatures dip into the teens and near 0F on occasion. Prevailing summer winds come from the southeast, while winter winds blow from the northwest, and spring winds are generally from the southwest.

### Views

The North Domingo Baca Park site offers fantastic background views of the Sandia and Manzano Mountains to the east. The lower tip of the Jemez Mountains can be seen to the north. Distant views to the west reveal the Rio Grande Valley and the volcanoes and escarpment of the West Mesa. Generally, the foreground views are positive and offer a pleasant viewshed surrounding the site.

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## **SECTION 3 COMMUNITY ISSUES**

### **COMMUNITY RECREATION NEEDS**

The 1993 Draft Park System Facility Plan, A Rank II Plan, acknowledged the social and economic benefits of providing quality parks and recreation facilities. The City of Albuquerque's current park system is dominated by neighborhood-scale parks and is lacking in the provision of community and regional-scale parks. Over half of the neighborhood parks in Albuquerque are less than 3 acres in size and, in many instances, overused for organized recreation. Many of these neighborhood parks do not have on-site parking, therefore, vehicles of park visitors tend to overwhelm the surrounding neighborhoods. One of the key recommendations of the Draft Park System Facility Plan is the elimination of programmed use of neighborhood parks for organized recreation and provide larger community and regional parks for this purpose.

The Draft Park System Facility Plan defines community parks as 15-75 acres in size and able to serve the recreation needs of a community within a 1-1/2 mile radius (3-mile service area) of the park. Community parks should be located near arterial level streets and, where feasible, linked to the trail and transit system.

North Domingo Baca Park will fill the current void in the North Albuquerque Acres area and provide much needed recreational opportunities. Additionally, it will relieve the surrounding neighborhood parks from programmed sports activities. North Domingo Baca Park, under this proposal, will provide numerous recreational opportunities for visitors of all ages and abilities.

Results from the 1997 Youth Recreation Needs Assessment, an interactive survey of over 600 Albuquerque Public Schools middle school students, indicated the need for more swimming pools and water play facilities; more parks, playing fields, and courts; and more skate/roller blade facilities.

### **PUBLIC INVOLVEMENT PROCESS**

The public involvement process for North Domingo Baca Park has been extensive to date, and, as is typical for this scale of project, will continue throughout the phased development of the Park. A Public Advisory Committee (PAC), consisting of representatives from the surrounding neighborhood associations, was formed to provide ongoing input on the Master Development Plan.

- A PAC meeting was held on June 16, 2004 to establish a working group to work with the Design Team throughout the duration of the project, and to obtain input from the PAC regarding the facility program for North Domingo Baca Park.
- A second PAC meeting was held on August 18, 2004 to respond to issues outstanding from the June 16th PAC meeting, review the proposed facility program based on Technical Team and Public Advisory Committee input, review site plan concepts based on the facility program-including drainage channel alternatives, and present financial information relative to the project funding. The Design Team presented three (3) concepts, with the primary difference between the concepts being the treatment of the drainage channel through the park. The first concept showed an open channel;

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the second concept illustrated a partially covered channel; and the third concept illustrated a completely enclosed channel.

- A public meeting was held on October 6, 2004 to present the preferred Master Plan concept for North Domingo Baca Park, present financial information relative to the project funding, and identify the proposed project schedule.
- The project was also presented to members of the Sonora Homeowner's Association, and the Eagle Pointe Neighborhood Association.

A Technical Team, consisting of staff members from the various City departments, and various agencies with an interest in North Domingo Baca Park. The Technical Team met on three occasions (June 6, 2004, July 14, 2004 and August 11, 2004) to review and establish the facility program for the project, review conceptual alternatives for the site, and review department/agency planning and funding for the project.



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## **SECTION 4 MASTER PLAN**

### **MASTER PLAN**

The Master Plan for North Domingo Baca Park is the outcome of several community meetings which provided discussion on design refinements, including positioning of parking areas, and expansion of areas for non-programmed uses. The facilities program for North Domingo Baca Park includes elements that are typically found in community-scale parks. Both active and passive forms of recreation are included to satisfy a broader range of potential park users. The program of facilities was refined based on public input received at a public meeting held on June 16, 2004, and direction from the projects Technical Team. The following text describes those activities intended for the park. Due to the flexibility of the Master Development Plan, activities may be added or deleted based on the community's future needs, preferences, and available funding. Significant changes to the Master Development Plan will require approval by the Environmental Planning Commission.

There are several existing conditions which are driving the master planning process and layout for North Domingo Baca Park.

- The Louisiana intersections at Carmel and Corona will be unsignalized.
- The drainage connection between the Window G Channel at Wyoming Boulevard to the Kinney Dam creates a potential barrier between park activities, while also presenting unique design opportunities.
- Areas of floodplain exist adjacent to Carmel

Avenue and Corona Avenue. Construction of drainage improvements through the park will remove these lands from the floodplain. Drainage improvements within North Domingo Baca Park will be a joint effort between the City of Albuquerque and AMAFCA.

- Vehicular access to the site from Wyoming Boulevard will be limited to right-in/right-out movements for southbound traffic. The Wyoming intersection at Corona will be unsignalized and the intersection at Carmel is signalized.

#### Kinney Dam

The Kinney Dam is an engineered flood control detention facility with specific restrictions on multi-use for recreation facilities. However, the dam was designed with a terraced bench suitable for use as a soccer field or other activity. This area will flood only during larger storm events. The existing maintenance roads provide an opportunity to create a trail network around the perimeter of the site.

In order to maintain the integrity of the dam structure, improvements on the slopes are not allowed.

#### Multi-Purpose Fields

Areas for organized sports are a primary focus of North Domingo Baca Park. Area for 4 full-size soccer fields is provided at North Domingo Baca Park. One soccer field is located within a raised portion of the Kinney Dam. The dam was specifically designed to allow for this use and will sequentially flood during larger storm events. Access is provided by adjacent parking areas and pedestrian links utilizing the dams mainte-

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MASTER PLAN GRAPHIC

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nance roads. The three main fields will terrace down from east to west, with a sloped grass area between the fields to allow for spectator seating. Typical elements to be associated with the fields includes benches and picnic tables, spectator seating, shade (trees and ramadas), trash receptacles, and parking.

#### Tennis Courts

The Plan identifies six (6) tennis courts adjacent to the Carmel Avenue, south of the sports fields. The courts will be lighted for nighttime use. The courts are also enclosed with a 10'-12' chain link fence with wind screen fabric. Shaded seating areas and picnic facilities will be located adjacent to the courts.

#### Modular Skate Facility

A modular skate facility is located immediately south of AFD Station 20/La Cueva Community Police Substation. The skate area is proposed to be lighted, and it's location along Wyoming Boulevard will provide optimum visibility to the facility. Detailed design has not begun yet on the facility, however, the intent is for the skate area to use modular components, or be a hybrid skate area, using some modular features and some fixed concrete elements. Other elements to be provided at the skate area include benches and picnic tables, ramada structures, spectator seating, shade, trash receptacles, and parking.

#### Off-Leash Dog Exercise Area

A 2.25-acre site immediately north of the multi-use fields has been identified for an off-leash dog exercise area (dog area). The dog area is an enclosed area for unleashed dogs to socialize and play. The area would be enclosed by a 4' chain link fence, and include such amenities as shaded seating areas, benches, picnic tables,

trash receptacles, shade (trees and ramadas), and ground surface treatment.

#### Active Recreation Area

Located adjacent to the children's play area and picnic facilities are basketball courts and space for other court games. The concrete court areas shall be designed for maximum flexibility to allow for additional activities such as roller hockey. Additional paved areas for children's games will be located here, as well as adjacent to the plazas and children's play areas. All courts shall be oriented in a north-south direction for optimum solar consideration. Typical elements to be associated with these facilities include, benches and picnic tables, ramadas, spectator seating, shade, trash receptacles, and parking.

#### Children's Play Area

An age-separate children's play area is located adjacent to the large picnic pavilion. The play area shall be designed in accordance with the 1990 Americans with Disabilities Act (ADA), and be accessible to children with varying abilities. The play areas shall be designed to grow with the children and offer the chance to progress through a series of activities that challenge them physically, mentally, and socially. The play areas shall be designed with appropriate age separation of activities to minimize conflicts between older and younger children. Also, natural forms and materials such as earthen mounding and/or boulders should be considered to encourage play activities that challenge the children's creativity and imagination.

Additional elements which contribute to the success of the playground design include adequate shade, benches and picnic tables, trash receptacles, and bicycle racks.



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### Park and Ride Area

A 50-space park and ride area has been provided adjacent to the Multi-Generational Center. The spaces would be incorporated into the larger parking area for the Center, with easy access to a future bus stop/shelter along Wyoming Boulevard.

### Buildings

Several community buildings are arranged in the southeast corner of the site, proximate to the signalized intersection at Wyoming Boulevard and Carmel Avenue. The orientation and arrangement of these buildings and associated outdoor spaces are to be viewed as placeholders within this Master Development Plan. An alternative arrangement, or the possible combining of buildings may be defined during the detailed planning for these facilities. A detailed Site Plan for Building Permit shall be approved by the EPC for each of these buildings, or combination thereof, prior to their development. Only if the general location of this grouping of buildings shifts to another part of the Park, affecting the overall layout of the Park, will an amendment to this Master Development Plan be required.

#### I. Multi-Generational Center

The multi-generational center, shown approximately 40,000 square feet in size, is sited at the intersection of Wyoming and Carmel, giving it a prominent location within the Park. The Center, including gymnasium, encumbers approximately 5 acres of the Park. The Center will feature programs for all age levels of the community, and offer programs throughout the day and evening. The programming for this facility has not occurred, however, the program typically includes: meeting room(s); arts and crafts area; kitchen; dining room; exercise room;

computer room; game room; gymnasium; restrooms with showers and lockers; administrative office space; and outdoor gathering space.

#### 2. Library

An approximately 15,000 square foot footprint is identified as a placeholder for a library. The library, including parking, outdoor spaces, etc. encumbers approximately 2 acres of the Park.

#### 3. Pool Complex

The planning for a pool complex at North Domingo Baca Park considers a complex similar to the one developed adjacent to West Mesa High School. The site area for the pool complex is approximately 6 acres, including the required parking area. The program is proposed to include areas for therapeutic needs, adult and youth needs in separate facilities, ADA access/zero depth pool, toddler components, Olympic-size pool, and indoor/ outdoor facilities. The administration building would include restrooms, showers, locker area, administrative office space, maintenance/storage areas, meeting room, etc. Detailed programming for the facility will occur at a later date, and as funding for the project is secured.

### Picnic/Shade Facilities

A large picnic pavilion ( $\pm 4,000$  S.F.) to serve community-size events is centrally located within the park adjacent to the soccer fields and active recreation area. Numerous small picnic shelters ( $\pm 250$  S.F.) are randomly located throughout the park to provide for family-size picnic gatherings. All picnic facilities should be equipped with picnic tables, benches, and trash receptacles, and also be in close proximity to

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drinking fountains and restrooms.

### Restrooms and Drinking Fountains

Restroom facilities will be available within building facilities located at the Park. Additional restroom facilities specific to scheduled sport events will be provided by the organization scheduled to play. The Park will provide a designated location, access, and screening (vegetation or fencing) for the restroom facilities. Drinking fountains will be available within building facilities located at the Park. Park users are encouraged to bring their own refreshment.

### Pedestrian/Bicycle Path

Pedestrian and bicycle paths are provided throughout the park to link activities and provide access around and through the park. Appropriate amenities related to the path system include shade, benches/seatwalls, picnic tables, trash receptacles, and bicycle racks.

### Parking

#### Facility Parking Requirements

Parking requirements to meet the needs of the facility program total 1,035 spaces and distributed as follows:

Multi-Generational Center	250 spaces
Library	90 spaces
Pool Complex	250 spaces
Multi-Purpose Fields	240 spaces
Tennis Courts	30 spaces
Modular Skate Facility	50 spaces
Off-Leash Dog Exercise Area	25 spaces
Park and Ride Area	50 spaces
Active Recreation Area	50 spaces

Four major parking areas are designated within the Master Plan. Accessible spaces will be provided in each of these areas per the City of Albuquerque Zoning Code. Areas for bicycle parking will be distributed throughout the Park and at all of the buildings.

1. South of the Multi-Purpose Fields – This area holds approximately 325 spaces and is intended to serve the multi-purpose fields, the tennis courts, and general park use.
2. Corona Avenue – This parking area holds approximately 160 spaces and serves the off-leash dog exercise area, the multi-purpose fields, the active recreation/picnic area, and general park use.
3. Community Building Area – The three parking areas associated with the community buildings hold approximately 460 spaces. These areas are separated by landscape buffering to minimize the visual impact of a large parking area. These areas will serve all of the community buildings and not have designated parking areas for each of the buildings.
4. Underground Parking Facility – This facility is currently located beneath the Multi-Generational Center and Library and holds approximately 225 spaces. If the community buildings are rearranged, the location of the underground parking facility will be adjusted accordingly.

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## **SECTION 5 DESIGN STANDARDS**

### **ARCHITECTURE**

The following guidelines are intended to provide design flexibility while creating a festive atmosphere at North Domingo Baca Park. It is important to maintain design consistency for all architectural elements throughout the park. The future design of all major buildings and elements at the Park will require review by the Environmental Planning Commission.

- Buildings and structures erected within the site shall comply with all applicable City of Albuquerque zoning and building code requirements as well as other local applicable codes.
- Appropriate building design shall ensure articulation of all building faces, rather than placing all emphasis on the front elevation of the structure and neglecting or downgrading the aesthetic appeal of the side and rear elevations. Finished building materials must be applied to all exterior sides of buildings and structures. Any accessory buildings and enclosures, whether attached or detached from the main building, shall be of similar compatible design and materials.
- Buildings should employ variety in structural forms to create visual character and interest. Avoid long, unarticulated facades. Facades should have varied front setbacks, with wall planes not running in one continuous direction for more than 50 feet without a change in architectural treatment (i.e. 3' minimum offset, fenestration, material change, etc.).
- Entries to structures should portray a quality appearance while being architecturally tied into the overall mass and building composition.
- Glazing walls, windows and doors are key elements of any structure's form and should relate to the scale of the elevation on which they appear. The use of recessed openings helps to provide depth and contrast on elevation planes. Glazing should respond to climate, view, and orientation.
- Sensitive alteration of colors and materials can produce diversity and enhance architectural forms.
- The staggering of planes along an exterior wall elevation creates pockets of light and shadow, providing relief from monotonous expanses of facade.
- Highly reflective surfaces; exposed, untreated, precision block walls; and materials with high maintenance requirements are undesirable and should be avoided.
- Wall materials should be chosen that can be easily repaired, and will withstand abuse by vandals or accidental damage by machinery.
- Berming in conjunction with landscaping can be used at the building edge to reduce structure mass and height along facades.
- The roofline at the top of the structure shall incorporate offsets to prevent a continuous plane from occurring.



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- All rooftop equipment shall be screened from the public view by materials of the same nature as the building's basic materials.

## **SETBACKS**

The use of building and parking area setbacks is required to provide space for the creation of visually attractive streetscapes surrounding North Domingo Baca Park. Required within these setbacks will be pedestrian walkways, screening devices, and landscape improvements.

Buildings shall be located according to the following minimum setback dimensions:

- 50 feet from the R.O.W. line of Wyoming Boulevard
- 35 feet from the R.O.W. line of Corona Avenue and Carmel Avenue

Parking areas shall be setback as follows:

- 30 feet from the R.O.W. line of Wyoming Boulevard
- 15 feet from the R.O.W. line of Corona Avenue and Carmel Avenue

## **BUILDING HEIGHT**

Building height should be considered to fit the scale and context of Park surroundings and minimize impact to adjacent neighborhoods. The maximum height for all buildings at North Domingo Baca Park shall not exceed 36 feet as measured from the adjacent finished grade.

## **PEDESTRIAN AND BICYCLE PATHS**

Pedestrian paths in heavy use areas shall be constructed of asphalt or concrete. All bicycle

paths shall be constructed of asphalt or concrete and designated for bicycles only. All bicycle and pedestrian paths shall be designed to meet the standards recommended by the American Association of State Highway and Transportation Officials (AASHTO). Where bicycles, pedestrians, and skaters are to share the same path, the path shall be a minimum of 15' wide and may have a striped pedestrian lane. Pedestrian-only paths shall be a minimum of 5' in width. Where paths cross roadways or parking areas, designated crosswalks shall be highlighted with contrasting paving materials and signage.

Rest areas should be provided, at various locations the paths. Shade structures or canopy trees should be provided for shade. Amenities associated with the rest areas should include seating/benches, litter receptacles, etc.

## **PARKING AREAS AND ROADS**

Special care should be given to the design of the parking areas in order to minimize their visual impact. Parking areas should be divided into smaller areas and visually separated by planted islands. To shade the parking areas, one large canopy tree shall be planted for every eight parking spaces, with no parking space being more than 72 feet from a tree trunk. Earthen berming, low walls, and/or trees and shrubs shall be used to define and screen parking areas from surrounding streets and park activities. Specific design of parking areas and access roads shall be in accordance with the City's Development Process Manual (DPM).

## **LIGHTING**

For safety and security, exterior lighting will be provided for all park areas which will be used at night. Those areas include parking areas, the large picnic pavilion, and portions of the

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pedestrian/bicycle paths. To ensure a quality development, it is important to consider the daytime appearance of lighting fixtures. The lighting element is another site feature which contributes to the park's overall character. Sports lighting for night use of the multi-purpose fields will not be provided.

The following general guidelines should be considered in the design of the lighting system:

- Placement of fixtures and standards shall conform to state and local safety and illumination requirements. All exterior installations must be provided with ground-fault interruption circuits.
- Individual lighting fixtures should blend with the architectural character of the building and other site fixtures.
- A design objective of the site lighting system must be to maximize public safety while not affecting adjacent properties, buildings, or roadways with unnecessary glare or reflection. Shielded source fixtures shall be used to meet this objective.
- Area lighting should be used to highlight public spaces and walkways. The use of walkway level lighting, such as bollard lights or wall pocket lights, is encouraged to accent pedestrian zones.

Height standards for light fixtures shall be as follows:

- 20 foot maximum height for parking areas and roads

- 12 foot maximum height for pedestrian/bicycle paths
- Buildings shall be limited to building-mounted fixtures
- 30 foot maximum height for tennis courts, modular skate area, and active recreation area

## **SIGNAGE**

A signage program shall be developed as detailed design for the park is undertaken. Signage serves three important functions: to direct park users to various facilities, to inform park users regarding community events or educational aspects of the park, and to identify specific buildings or facilities.

The following signage standards were developed as reasonable criteria to regulate the size, location, type, and quality of sign elements within North Domingo Baca Park. All signs shall be in accordance with the City of Albuquerque Zoning Code.

### Park Entrance Signs

One (1) freestanding monument-type sign of no greater than twenty-four (24) square feet per face is allowed at each of the 3 vehicular access points. One (1) freestanding monument-type sign of no greater than 50 square feet is allowed along Wyoming Boulevard. Freestanding signs shall not be higher than 6 feet above adjacent grade.

### Building Signs

Park buildings allowed one facade-mounted sign whose area shall not exceed 10 percent of the area of the facade to which it is applied. The sign

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may be backlit or lit with accent lighting.

### Directional Signs

Directional signs for pedestrian and bicycle trails, parking areas, etc. may be up to 8 feet in height. Directional signs shall be made of stone/masonry, concrete, or anodized metal.

### **SCREENING /WALLS AND FENCES**

The effective use of screening devices for parking lots, loading areas, refuse collection, and delivery/storage areas is essential to limit their adverse visual impact on the park and surrounding developments. The guidelines established in the landscape and setback sections will provide the main element to screening objectionable views and activities.

The following are standards to ensure effective screening of negative elements:

- Parking areas shall be screened from adjacent streets with a combination of plant materials, walls, and earthen berming. Such screening shall have a minimum height of 3 feet.
- All outdoor refuse containers shall meet City specifications and be screened within a minimum 6 foot high masonry enclosure.
- The design and materials for refuse collection enclosures shall be compatible with the architectural theme of the site.
- No refuse collection areas shall be allowed between any street and building front.
- Barbed wire or concertina wire shall not be

allowed in North Domingo Baca Park.

### **SITE FURNITURE**

The use of a consistent design for all types of site furniture will serve to unify different areas of the park. Site furniture is typically located in areas of more active recreation or pedestrian movement and consists of the following: benches, picnic tables, trash receptacles, bicycle racks, bollards, tree grates, and information kiosks. Selection of fixtures should be based on design compatibility, durability/maintenance needs, vandal-resistance, cost, comfort, and handicap accessibility.

### **LANDSCAPE**

Parks in general are intended to be aesthetically pleasing with distinguishing characteristics, considerate of health, safety and welfare of the park user, universally accessible, responsible water users, considerate of maintenance issues, and meet the recreation needs of the citizens of Albuquerque.

The design for North Domingo Baca Park encourages year-round use of the facilities. The proposed plant palette matches that use by encouraging materials that provide function, interest, color, etc. through all four seasons. Turf areas and shrub plantings at the park perimeter, within parking areas, and other non-recreational areas will consist primarily of low water use varieties. The landscape concept for the entire park will be to demonstrate the aesthetic qualities of native or naturalized plant materials. Requirements of the City's Street Tree Ordinance shall be followed for the streets around the Park.

Specific plant materials will be used for a variety of purposes, including the following:

- buffer/screen - plant materials will be used to buffer certain facilities from noise and winds, and screen views to/from objectionable elements;
- shade/climate control - shade trees will be used extensively around the perimeter of the ballfields and activity areas to provide a welcome retreat for players and spectators;
- define uses or activities - trees and shrubs will be used to define specific areas of the park;
- highlight specific features - trees and shrubs will be used to frame elements, provide foreground and background interest, etc.
- sensory stimulation - fragrant and flowering trees and shrubs are used to stimulate the senses of sight, smell, and touch; and
- education - areas of the park will be planted to serve as an educational tool to teach people about the native landscape.

#### Multi-Purpose Fields

The primary focus of the sport fields will be recreational turf grasses. The planting bed will require amendment to create a rich, healthy growing medium for the turf. Turf species will be carefully selected in accordance with the specific use requirements of the area. The intense, year-round use of the fields will require that hardy species of turf that can withstand heavy use by used throughout the fields. The perimeter of the sport field will be planted with groupings of deciduous and evergreen trees to provide numerous and varied opportunities for

shade and picnic areas.

#### Kinney Dam

Due to the visually imposing nature of the dam from surrounding areas, bold massings of native and adapted trees and shrubs will be used to soften this view. Flowering shrubs and trees will be used to highlight the pedestrian areas adjacent to the dam. To maintain the structural integrity of the dam and minimize potential trash build-up areas, planting within the dam will be limited to providing turf on the terraced recreation area.

#### Parking Areas

The parking lots shall be designed to minimize the visual expanse of asphalt. This may be achieved by breaking the required parking into smaller, physically separated spaces. Providing large planter areas within the parking areas will also serve to provide shade, reduce glare, and soften the visual image of the areas. Large deciduous canopy trees shall be provided throughout the parking areas. Wherever possible, parking areas should be graded to provide opportunities for harvesting rainwater run-off in large planter islands.

#### Landscape Buffers

Landscape buffers help to frame the park boundaries and serve as a park identifier. The alignment of the channel adjacent to Corona serves to buffer the residential neighborhood to the north from the more active recreation areas central to the site. To further buffer the residential area, a combination of randomly planted evergreen and deciduous trees and shrubs shall be provided. Where space allows, earthen berming should be incorporated to provide additional buffer in an interesting and

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playful manner.

### Naturalistic Zones

The park has several areas that present unique opportunities to create naturalistic zones that reflect the native vegetation of the area. These areas will also provide wildlife habitat areas. These areas will be characterized by natural groupings of native trees, shrubs, and groundcovers that provide food and habitat for animals in the park. These areas include the zones at the exterior base of the dam, various locations along the channel, and unprogrammed space north of the channel.

### **IRRIGATION**

A fully automated irrigation system with centralized computer control shall be used at North Domingo Baca Park. Satellite controllers shall be linked to the main controller by radio which will be tied to the Park Management computer monitoring system. Mainline piping shall be provided according to standard City specifications. Gate valves will be located at strategic points along the mainline piping system to allow for isolation of sections for maintenance reasons. Sprinklers for the sports fields shall be state-of-the-art for maximum efficiency in water distribution. Temporary irrigation shall be provided for all areas receiving native seed mixes until established. Shrub and groundcover areas shall utilize drip irrigation technology. All

irrigation components shall be readily available for maintenance and/or replacement.

A non-potable water line has been extended to North Domingo Baca Park to serve the irrigation needs of the Park. The non-potable line runs along Wyoming Boulevard and then west along Carmel Avenue. Stubouts are provided at fixed locations to allow the landscape areas for the various facilities (Multi-Generational Center, Library, Pool Complex and general Park development) to be metered separately. The irrigation components will be specifically designed for use with the non-potable water source.

### **UTILITIES**

To mitigate the negative visual image presented by some utility equipment and to ensure the overall aesthetic quality of North Domingo Baca Park:

- All electric distribution lines within the park shall be placed underground.
- Transformers, utility pads, backflow prevention enclosures, and telephone boxes shall be appropriately screened with walls and/or vegetation when viewed from the public right-of-way.



## SECTION 6 GRADING AND DRAINAGE

### MASTER PLAN DRAINAGE REPORT

#### INTRODUCTION

The North Domingo Baca Park is located in the Northeast Heights of Albuquerque. It is bounded on the north by Corona Avenue, on the east by Wyoming Boulevard, on the south by Carmel Avenue and on the west by the Kinney Dam and Louisiana Boulevard. The total park area is approximately 38 acres. The Park location is indicated on Figure 1, Location Map.

According to the City of Albuquerque (COA) Development Process Manual (DPM), Section 22.2, Hydrology, Figure A-1, the project is located entirely within Precipitation Zone 3. The design storm is the 100-year, 6 hour storm event. The Peak Discharge per acre is found in Table A-9 of Section 22.2. The runoff volume is estimated using the excess precipitation found in Table A-8.

This drainage report investigates the design storm peak runoff rates and volumes for three conditions:

- the existing conditions
- Phase I development conditions
- full development conditions.

#### EXISTING CONDITIONS

The western 25 percent of the parcel is taken up by the Kinney Dam, which is owned by AMAF-CA. This portion of the parcel is not included in the drainage analysis. The existing conditions drainage basins are shown on Sheet 1 of 3, which is included at the end of this report.

The remaining 75 percent of the parcel is native soils and vegetation with some manmade disturbance. However, the observed existing man-made disturbances are not significant enough to affect the Land Treatment type. Therefore, the entire parcel under consideration is classified as Land Treatment A for the existing conditions computations.

The existing site is divided into three sub-basins. Basin X1 is the southern portion of the parcel and it drains directly into the dam's pool partially by sheet flow and partially by shallow concentrated flow. Basin X2 captures all runoff on the northern portion of the parcel and the existing dikes direct the flow to the existing soil cement rundown and into the dam's pool. Basin X3 is a portion of the parcel that is cut off from Basin X2 by the existing north dike. Runoff from Basin X3 flows directly into the dam's pool near the northeast corner of the pool.

The design storm runoff for the three existing conditions sub-basins is:

$$\text{For X1, } Q_{100} = (17.4098 \text{ AC}) \times (1.87 \text{ cfs/AC}) \\ = 32.56 \text{ cfs}$$

$$\text{For X2, } Q_{100} = (20.1181 \text{ AC}) \times (1.87 \text{ cfs/AC}) \\ = 37.62 \text{ cfs}$$

$$\text{For X3, } Q_{100} = (0.8055 \text{ AC}) \times (1.87 \text{ cfs/AC}) \\ = 1.51 \text{ cfs.}$$

A spreadsheet summarizing the above calculations is included as Table 1. The total existing conditions runoff from the park site is 71.68 cfs. However, adding in the off-site flows, which include the Window 'G' channel (2250 cfs) and the 66" RCP (237 cfs), the total flow to the dam, including the park site, is about 2559 cfs.

## RUNOFF FROM EXISTING CONDITIONS DRAINAGE BASINS

BASIN DESIGNATION	AREA (ACRES)	IMPERV. (ACRES)	LAND TREATMENT (ACRES)			PEAK DISCH. (CFS)
			A	B	C	
X1	17.4098	0	17.4098	0	0	32.56
X2	20.1181	0	20.1181	0	0	37.62
X3	0.8055	0	0.8055	0	0	1.51
TOTALS	38.3334	0	38.3334	0	0	71.68

**TABLE 1**

The runoff volume can be found using the excess precipitation in Table A-8 of Section 22.2. The estimated runoff volume is  $[(38.3334 \text{ AC}) \times (0.66 \text{ IN.})] / 12 \text{ IN/FT} = 2.11 \text{ AC FT}$

### PHASE I DEVELOPMENT

In Phase I of the Park's development, a concrete box culvert will be constructed to convey a major portion of the 100-year storm off-site flow through the park. The extent of Phase I development is shown on Sheet 2 of 3, which is included in the back pocket of this report. The box culvert will be constructed from the downstream end of the existing Window 'G' channel to the existing soil cement rundown in to the Kinney Dam pool. Ultimately, it will convey all the Window 'G' flow (2250 cfs), all flow from the 66" RCP (237 cfs) that drains the adjacent portion of Wyoming Blvd. and some additional flow from the park site by way of storm inlet connections into the box culvert. However, these storm inlet connections will be constructed later as the park develops but stub-outs will be provided in Phase I construction. The final design of the box culvert will be presented in a subsequent design analysis report that will be prepared by Smith Engineering Company for Phase I development. The culvert will be sized

to convey the full development flows stated in the Full Development section of this report.

The majority of the Park will remain undisturbed during Phase I construction and after Phase I construction is complete. Therefore the majority of the Land Treatment will remain as type A. However, disturbance and subsequent compaction of the soil above and adjacent to the box culvert will change a portion of the site into Land Treatment C. The amount of change is indicated in the spreadsheet in Table 2.

The drainage basins resulting from the Phase I construction are shown on Sheet 2 of 3. The "mound" of dirt that will cover the box culvert upon completion of Phase I (PI) construction will create a new drainage divide between the north and south portions of the Park site. The new drainage basins are designated PI-1 and PI-2. The peak runoff from the 100-year storm is 56.10 cfs and 21.33 cfs, respectively. Sub-basin PI-3 is the same as sub-basin XI in the existing conditions. A spreadsheet summarizing the computation of the runoff is included as Table 2.

## RUNOFF FROM PHASE 1 CONDITIONS DRAINAGE BASINS

BASIN DESIGNATION	AREA (ACRES)	IMPERV. (ACRES)	LAND TREATMENT (ACRES)			PEAK DISCH. (CFS)
			A	B	C	
P1-1	28.1013	0	25.8532	0	2.2481	56.10
			92%		8%	
P1-2	9.4266	0	7.0600	0	2.3566	21.33
			75%		25%	
P1-3	0.8055	0	0.8055	0	0	1.51
TOTALS	38.3334	0	33.7187	0	4.6047	78.94

TABLE 2

Phase I construction will increase the Park site peak rate of runoff by approximately 7 cfs. The total peak flow rate to the dam will increase by approximately 0.3 %.

Runoff volume = [(33.7187 AC) x (0.66 IN) + (4.6047 AC) x (1.29 IN)] / 12 IN/FT = 2.35 AC FT. The Phase I runoff volume will increase by 0.24 AC FT. The computed developed condition runoff volume to the Kinney Dam is 394 AC FT. Phase I will increase the runoff volume by 0.06%. The Lower North Domingo Baca Detention Dam Properties (Kinney Dam) is included as Appendix A.

### FULL DEVELOPMENT

The North Domingo Baca Park Master Plan is shown on Sheet 3 of 3, which is included in the back pocket of this report. This shows the currently proposed, fully developed site conditions. The fully developed site will include buildings, hard surfaced playing courts and parking lots and turf grass fields. The land treatment types will change from nearly all A to nearly all B, C and D as indicated in Table 3. The exception is Basin B12, which includes the XI and P1-3 basin and will remain undisturbed after full development.

The designated basins are established to coincide with proposed parcel development. For example, Basin B-1 and B-2 are the proposed Multi-Generation Center and its parking lot respectively.

A storm drain system will convey some of the Park runoff to the proposed box culvert and some directly to the dam's pool. The turf grass playing fields will sheet flow directly to the dam's pool as well.

A summary of the full development drainage calculations is included as Table 3. The full development runoff is approximately 134 cfs. This is an increase from the existing conditions runoff (72 cfs) of approximately 62 cfs.

As stated in the Existing Conditions section, the total flow to the dam is estimated to be 2559 cfs. The full development conditions runoff will increase this number to approximately 2621 cfs, which is an increase in peak discharge of approximately 1.02%.

The proposed, full development storm drain system is also shown on Sheet 3 of 3. A summary of

this system is shown in Table 4 and Table 5, for the South and North sides of the Park, respectively. Phase I construction of the box culvert will include pipe stub-outs to accommodate the full development storm drain system.

2.5 AC FT from the existing conditions runoff volume of 2.11 AC FT.

The volume runoff increase is  $(2.5 \text{ AC FT} / 394 \text{ AC FT}) \times 100 = 0.6\%$ .

### RUNOFF FROM DEVELOPED CONDITIONS DRAINAGE BASINS

BASIN DESIGNATION	AREA (ACRES)	IMPERV. (ACRES)	LAND TREATMENT (ACRES)			PEAK DISCH. (CFS)
			A	B	C	
B1	2.4978	0.9016	0	0.7981	0.7981	9.35
		36%		32%	32%	
B2	0.9558	0.9080	0	0	0.0478	4.72
		95%			5%	
B3	5.0396	1.0079	0	3.2254	0.8063	16.23
		20%		64%	16%	
B4	1.3395	0.3493	0	0.4951	0.4951	4.75
		26%		37%	37%	
B5	1.7477	1.6603	0	0	0.0874	8.64
		95%			5%	
B6	1.2973	1.2324	0	0	0.0649	6.41
		95%			5%	
B7	2.7809	1.0451	0	0.8679	0.8679	10.50
		38%		31%	31%	
B8	1.4488	1.3764	0	0	0.0724	7.16
		95%			5%	
B9	2.0032	0.8906	0	0.8901	0.2225	7.55
		44%		44%	12%	
B10	2.8684	2.7250	0	0	0.1434	14.17
		95%			5%	
B11	13.2215	0.6611	0	12.5604	0	35.98
		5%		95%		
B12	3.1329	0.3133	0.4590	2.3606	0	8.57
		10%	15%	75%		
TOTALS	38.3334	13.0710	0.4590	21.1975	3.6059	134.03

TABLE 3

The estimated runoff volume for the proposed full development of the Park is as follows.

$$[(0.46 \text{ AC}) \times (0.66 \text{ IN}) + (21.20 \text{ AC}) \times (0.92 \text{ IN}) + (3.61 \text{ AC}) \times (1.29 \text{ IN}) + (13.07 \text{ AC}) \times (2.36 \text{ IN})] / 12 \text{ IN/FT} = 4.61 \text{ AC FT or an increase of}$$



### FULL DEVELOPMENT DRAINAGE SYSTEM - SOUTH SIDE

DRAIN INLET (DI) DESIG.	Q100 TO DI	DOWNSTRM DI	CUMULATIVE Q100 (cfs)	PIPE SIZE (IN)	PIPE SLOPE (FT/FT)	PIPE LENGTH (FEET)	PIPE CAPACITY (CFS)
B1-3	4.67	B4-2	4.67	18	0.0200	270	14.85
B4-1	2.37	B4-2	2.37	18	0.0075	100	9.10
B4-2	2.38	B6-2	7.04	18	0.0200	310	14.85
B6-1	3.20	B6-2	3.20	18	0.0075	100	9.10
B6-2	3.21	B9-2	10.24	18	0.0300	400	18.19
B9-1	3.77	B9-2	3.77	18	0.0075	170	9.10
B9-2	3.78	B10-2	14.01	18	0.0300	570	18.19
B10-2	7.08	B10-1	21.09	24	0.0100	100	22.62
B10-1	7.09	KINNEY DAM	28.18	24	0.0200	100	31.99

TABLE 4

### FULL DEVELOPMENT DRAINAGE SYSTEM - NORTH SIDE

DRAIN INLET (DI) DESIG.	Q100 TO DI	DOWNSTRM DI	CUMULATIVE Q100 (cfs)	PIPE SIZE (IN)	PIPE SLOPE (FT/FT)	PIPE LENGTH (FEET)	PIPE CAPACITY (CFS)
B1-1	2.34	B1-2	2.34	18	0.0075	100	9.10
B1-2	2.34	B2-1	4.68	18	0.0075	100	9.10
B2-1	4.72	BOX CULV	9.40	18	0.0100	20	10.50
B3-1	3.24	B3-2	3.24	18	0.0200	80	14.85
B3-2	3.25	B3-3	6.49	18	0.0200	100	14.85
B3-3	3.24	BOX CULV	9.73	18	0.0200	40	14.85
B3-4	3.25	B3-5	3.25	18	0.0075	200	9.10
B3-5	3.25	BOX CULV	6.50	18	0.0075	40	9.10
B5-1	4.32	B5-2	4.32	18	0.0075	110	9.10
B5-2	4.32	BOX CULV	8.64	18	0.0075	150	9.10
B7-1	5.25	B7-2	5.25	18	0.0075	190	9.10
B7-2	5.25	BOX CULV	10.50	18	0.0200	200	14.85
B8-1	3.58	B8-2	3.58	18	0.0075	100	9.10
B8-2	3.58	BOX CULV	7.16	18	0.0075	100	9.10
B12-1	8.57	KINNEY DAM	8.57	18	0.0250	120	16.61

TABLE 5



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**BASIN MAP - EXISTING CONDITIONS**

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BASIN MAP - PHASE 1 DEVELOPMENT

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**BASIN MAP - DEVELOPED CONDITIONS**

## **SECTION 7 PROJECT BUDGET**

The following is a preliminary breakdown of project component budgets for various elements of the North Domingo Baca Park. In each of the components, cost estimates for utilities, site lighting, landscaping, irrigation, design/permitting, tax, and administrative costs are included. At the current Master Development Plan level, detailed design and construction cost estimates cannot be identified, however, the preliminary estimates below are provided for gross budgetary information, and are subject to modification over time.

### 1. Park Recreation Elements

Play Fields	\$1 - \$1.2 mil.
Tennis Courts	\$.6 - \$.8 mil.
Off-Leash Dog Exercise Area	\$.3 - \$.4 mil.
Modular Skate Area	\$.3 - \$.35 mil.
Recreation Courts/Play Areas	\$.6 - \$.8mil.
Parking Lots and Access	\$.6 - \$.8 mil.
Landscaping and Trails	\$3 - \$4 mil.

### 2. Public Buildings

Multi-Generational Center	\$11 - \$14 mil.
Library	\$4 - \$5 mil.
Pool Complex	\$10 - \$12 mil.

### FUNDING OPPORTUNITIES

The North Domingo Baca Park project represents a program scope which may exceed \$32 - \$40 million over a 10-15 year development period. It is the intent of this Master Development Plan to encourage private/public partnerships to help fund the Park and its various elements.

### Public Funding Opportunities

North Domingo Baca Park has already received intra-governmental funding from AMAFCA and the State. The following options are continued capital possibilities for funding mechanisms by government agencies.

1. **City Bond Funding:** The City holds General Bond Election every two years, which would be a potential source for funding for the Park.
2. **City Operational Funds:** The City General Fund may contribute to operational costs for the Multi-Generational Center, Library, and Aquatic Complex. To date the City has not allocated operational funds to these projects.
3. **State General Funding:** The State of New Mexico issues General Obligation monies at each Legislative Session for capital projects.
4. **AMAFCA:** AMAFCA collects tax revenues which are used for construction of drainage improvements. As discussed, a Memorandum of Understanding is in place between the City and AMAFCA for the design and development of North Domingo Baca Park. AMAFCA has partnered with the City in consolidating the land for the Park, and is considering contributing to the construction of the box culvert through the Park.

### Private Funding

Privately Operated Venues on Leased Land: Opportunities for privately constructed and

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operated facilities exist in the Park, including the Aquatic Complex and the Multi-Generational Center.

Phase 4  
\$2,297,000 – Arroyo Design and Construction (IN DESIGN)

#### CURRENT PROJECT FUNDING

Phase 1  
\$227,200 – Storm drain line relocation/grading (COMPLETE)

Phase 5  
\$550,000 – Play Area and Modular Skate Area (SCOPING PHASE)

Phase 2  
\$564,000 – Utility Extensions and Street Construction (COMPLETE)

Phase 6  
\$706,000 – Multi-Generation Center Design (SCOPING PHASE)

Phase 3  
\$214,000 – Master Plan Update/Channel Design (IN DESIGN)



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## **SECTION 8 PHASING PLAN**

The North Domingo Baca Park will develop in phases over an extended period of time. The earliest phases of development have already occurred (land acquisition, some drainage, roadway and utility improvements, and development of the AFD Station 20/La Cueva Community Police Substation).

The timing of the phases is also subject to the availability of funding. For this reason, the phases within North Domingo Baca Park will need to remain flexible. Subsequent phases will be defined and prioritized in the future as funding sources are more clearly identified.

Grading may occur outside of the phase boundaries when necessary to balance the earthwork for a particular phase.

### **INITIAL PHASES**

The following facilities currently have funding and are either in the design phase, or will be under design within the year.

- Box culvert connecting Window G Channel to the Kinney Dam
- Modular Skate Facility
- Children's Play Area
- Multi-Generational Center (programming phase)

### **FUTURE REVIEW/APPROVAL PROCESS**

The major building elements at North Domingo Baca Park, including the Multi-Generational Center, Library, and Pool Complex, shall be reviewed and approved by the Environmental Planning Commission (EPC). It is the intent of this Master Development Plan that all other Park features proceed directly to the Design Review Committee (DRC) for review and approval of a work order.



## APPENDIX A - GENERAL PLANT LIST

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### Large Deciduous Trees

Scientific Name	Common Name
Fraxinus oxycarpa spp.	Ash spp.
Fraxinus pennsylvanica spp.	Ash spp.
Fraxinus velutina spp.	Ash spp.
Gleditsia triacanthos inermis	Honey Locust
Pistachia chinensis	Chinese Pistache
Platanus wrightii	Arizona Sycamore
Populus acuminata	Lanceleaf Cottonwood
Populus fremontii	Cottonwood
Robinia x ambigua	Idaho Locust
Robinia pseudoacacia	Black Locust
Tilia cordata	Littleleaf Linden

### Small Deciduous Trees

Scientific Name	Common Name
Cercis occidentalis	Western Redbud
Chilopsis linearis	Desert Willow
Crataegus crusgalli 'Inermis'	Hawthorn
Forestiera neomexicana	New Mexico Olive
Koelreuteria paniculata	Golden Raintree
Malus spp.	Crabapple
Prosopis glandulosa	Honey Mesquite
Prosopis pubescens	Screwbean Mesquite
Prunus cerasifera	Purpleleaf Plum
Prunus virginiana	Chokecherry
Pyrus calleryana	Ornamental Pear
Robinia neomexicana	Rose Locust
Sophora japonica	Pagoda Tree
Vitex agnus-castus	Chaste Tree

### Evergreen Trees

Scientific Name	Common Name
Cupressus arizonica	Arizona Cypress
Cupressocyparis leylandii	Leyland Cypress
Juniperus chinensis spp.	Juniper
Picea pungens	Blue Spruce
Pinus edulis	Pinon Pine
Pinus flexilis	Limber Pine
Pinus nigra	Austrian Pine
Pinus sylvestris	Scotch Pine
Thuja spp.	Arborvitae
Yucca elata	Soaptree Yucca

## APPENDIX A - GENERAL PLANT LIST

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### Deciduous Shrubs

Scientific Name	Common Name
<i>Amorpha fruticosa</i>	False Indigo
<i>Berberis thunbergii</i>	Barberry
<i>Buddleia davidii nanhoensis</i>	Butterflybush
<i>Caesalpinia gilliesii</i>	Bird of Paradise
<i>Caryopteris clandonensis</i>	Blue Mist Spirea
<i>Chamaebatiaria millefolium</i>	Fernbush
<i>Chaenomeles japonica</i>	Flowering Quince
<i>Chrysothamnus nauseosus</i>	Chamisa
<i>Cornus alba</i>	Dogwood
<i>Cornus stolonifera</i>	Redtwig Dogwood
<i>Cotoneaster</i> spp.	Cotoneaster
<i>Euonymus alata</i> 'Compacta'	Burning Bush
<i>Genista tinctoria</i>	Summer Broom
<i>Hibiscus syriacus</i>	Rose of Sharon
<i>Ilex cornuta</i>	'Burford' Holly
<i>Ilex wilsonii</i>	Wilson Holly
<i>Lagerstroemia indica</i>	Crape Myrtle
<i>Potentilla fruticosa</i>	Shrubby Cinquefoil
<i>Prunus besseyi</i>	Western Sand Cherry
<i>Prunus x cistena</i>	Dwarf Plum
<i>Psorothamnus scoparia</i>	Broom Dalea
<i>Punica granatum</i>	Pomegranite
<i>Rhus</i> spp.	Sumac
<i>Ribes aureum</i>	Golden Currant
<i>Rosa rugosa</i>	Rugosa Rose
<i>Rosa woodsii</i>	Woods Rose
<i>Salvia greggii</i>	Cherry Sage
<i>Spiraea</i> spp.	Spirea
<i>Syringa vulgaris</i>	Common Lilac
<i>Weigela florida</i>	Weigela

### Evergreen Shrubs

Scientific Name	Common Name
<i>Abelia grandiflora</i>	Glossy Abelia
<i>Arctostaphylos uva-ursi</i>	Kinnikinnick
<i>Artemisia</i> spp.	Sage
<i>Artiplex canescens</i>	Fourwing Saltbush
<i>Baccharis salicina</i>	Desert Broom
<i>Berberis</i> spp.	Barberry
<i>Ceratoides lanata</i>	Winterfat
<i>Cotoneaster</i> spp.	Cotoneaster
<i>Cowania mexicana</i>	Cliffrose
<i>Cytisus scoparius</i>	Scotch Broom

## APPENDIX A - GENERAL PLANT LIST

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Dasyilirion wheeleri	Sotol
Elaeagnus pungens	Silverberry
Ephedra viridis	Mormon Tea
Ericameria laricifolia	Turpentine Bush
Euonymus spp.	Euonymus
Fallugia paradoxa	Apache Plume
Genista hispanica	Spanish Broom
Hesperaloe parviflora	Red Yucca
Juniperus spp.	Juniper
Ligustrum japonicum	Waxleaf Privet
Mahonia aquifolium 'Compacta'	Oregon Grape
Mahonia repens	Creeping Oregon Grape
Nandina domestica	Nandina
Nolina microcarpa	Beargrass
Nolina texana	Beargrass
Opuntia spp.	Cholla
Photinia fraseri	Photinia
Prunus caroliniana	Carolina Cherry
Pyracantha lelandii	Firethorn
Raphiolepis indica	India Hawthorn
Rosmarinus officinalis	Rosemary
Salvia dorrii	Desert Sage
Santolina chamaecyparissus	Lavender Cotton
Spartium junceum	Spanish Broom
Vauquelinia californica	Arizona Rosewood
Viburnum x burkwoodii	Viburnum
Yucca baccata	Datil
Yucca glauca	Soapweed

### Herbaceous Perennials and Annuals

Scientific Name	Common Name
Abronia sp.	Sand Verbena
Achillea millefolium	Yarrow
Agave parryi	Century Plant
Agastache cana	Giant Hyssop
Antennaria rosea	Pussytoes
Argemone squarrosa	Prickly Poppy
Artemisia frigida	Fringed Sage
Artemisia ludoviciana	Prairie Sage
Asclepias tuberosa	Butterflyweed
Aster bigelovii	Purple Aster
Baileya multiradiata	Desert Marigold
Berlandiera lyrata	Chocolate Flower
Callirhoe involucrata	Poppy Mallow
Calylophus sp.	Sundrops

## APPENDIX A - GENERAL PLANT LIST

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Castilleja sp.	Indian Paintbrush
Centaurea cyanus	Cornflower
Centaurea cineraria	Dusty Miller
Cerastium tomentosum	Snow in Summer
Ceratostigma plumbaginoides	Dwarf Plumbago
Chrysanthemum maximum	Shasta Daisy
Coreopsis spp.	Coreopsis
Cosmos bipinnatus	Cosmos
Delosperma cooperi	Purple Iceplant
Delosperma nubigenum	Yellow Iceplant
Dianthus barbatus	Sweet William
Dianthus deltoides	Maiden Pink
Dyssodia acerosa	Wild Marigold
Echinacea purpurea	Purple Coneflower
Eschscholzia californica	California Poppy
Gaillardia x grandiflora	Gaillardia
Gilia tricolor	Bird's Eyes
Helianthus annuus	Sunflower
Helianthus maximilliaia	Maximillian Sunflower
Hemerocallis hybrids	Daylilies
Iris hybrids	Bearded Iris
Kniphofia uvaria	Red Hot Poker
Liatris punctata	Gayfeather
Linum perenne	Blue Flax
Lobelia cardinalis	Cardinal Flower
Lupinus spp.	Lupine
Mirabilis multiflora	Four O'Clock
Papaver nudicaule	Iceland Poppy
Penstemon spp.	Penstemon
Petalostemon purpureum	Prairieclover
Perovskia atriplicifolia	Russian Sage
Phlox paniculata	Summer Phlox
Phlox subulata	Creeping Phlox
Psilostrophe tagetina	Paperflower
Ratibida columnifera	Coneflower
Rudbeckia hirta	Black-eyed Susan
Salvia azurea grandiflora	Blue Sage
Salvia greggii	Autumn Sage
Senecio longiflora	Silver Groundsel
Solidago hybrids	Goldenrod
Sphaeralcea coccinea	Scarlet Globemallow
Tagetes erecta	African Marigold
Tagetes patula	French Marigold
Talinum calycinum	Flame Flower
Thymus serpyllum	Creeping Thyme



## APPENDIX A - GENERAL PLANT LIST

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Verbena bipinnatifida	Fern Verbena
Verbena rigida	Purple Verbena
Vinca minor	Periwinkle
Zauschneria californica	Hummingbird Plant
Zinnia grandiflora	Desert Zinnia

### Ground Covers

Scientific Name	Common Name
Artemisia frigida	Fringed Sage
Baccharis pilularis	Coyotebush
Cerastium tomentosum	Snow-in-Summer
Clematis ligusticifolia	Western Virginsbower
Cotoneaster dammeri spp.	Cotoneaster
Delosperma nubigenum	Ice Plant
Euonymus fortunei	Wintercreeper
Juniperus horizontalis spp.	Juniper
Mahonia repens	Creeping Mahonia
Melampodium leucanthum	Blackfoot Daisy
Oenothera sp.	Evening Primrose
Penstemon caespitosus	Mat Penstemon
Phlox subulata	Moss Phlox
Santolina chamaecyparissus	Lavender Cotton
Thymus spp.	Common Thyme
Verbena peruviana	Verbena
Vinca minor	Periwinkle
Zinnia grandiflora	Rocky Mt. Zinnia

### Vines

Scientific Name	Common Name
Campsis radicans	Trumpet Vine
Clematis ligusticifolia	Western Virginsbower
Euonymus fortunei	Wintercreeper
Hedera helix	English Ivy
Lonicera japonica 'Halliana'	Hall's Honeysuckle
Parthenocissus inserta	Woodbine
Parthenocissus quinquefolia	Virginia Creeper
Parthenocissus tricuspidata	Boston Ivy
Rosa banksiae	Lady Bank's Rose
Wisteria sinensis	Wisteria

### Grasses

Scientific Name	Common Name
Agropyron smithii	Western Wheatgrass
Bouteloua curtipendula	Sideoats Grama
Bouteloua gracilis	Blue Grama

## **APPENDIX A - GENERAL PLANT LIST**

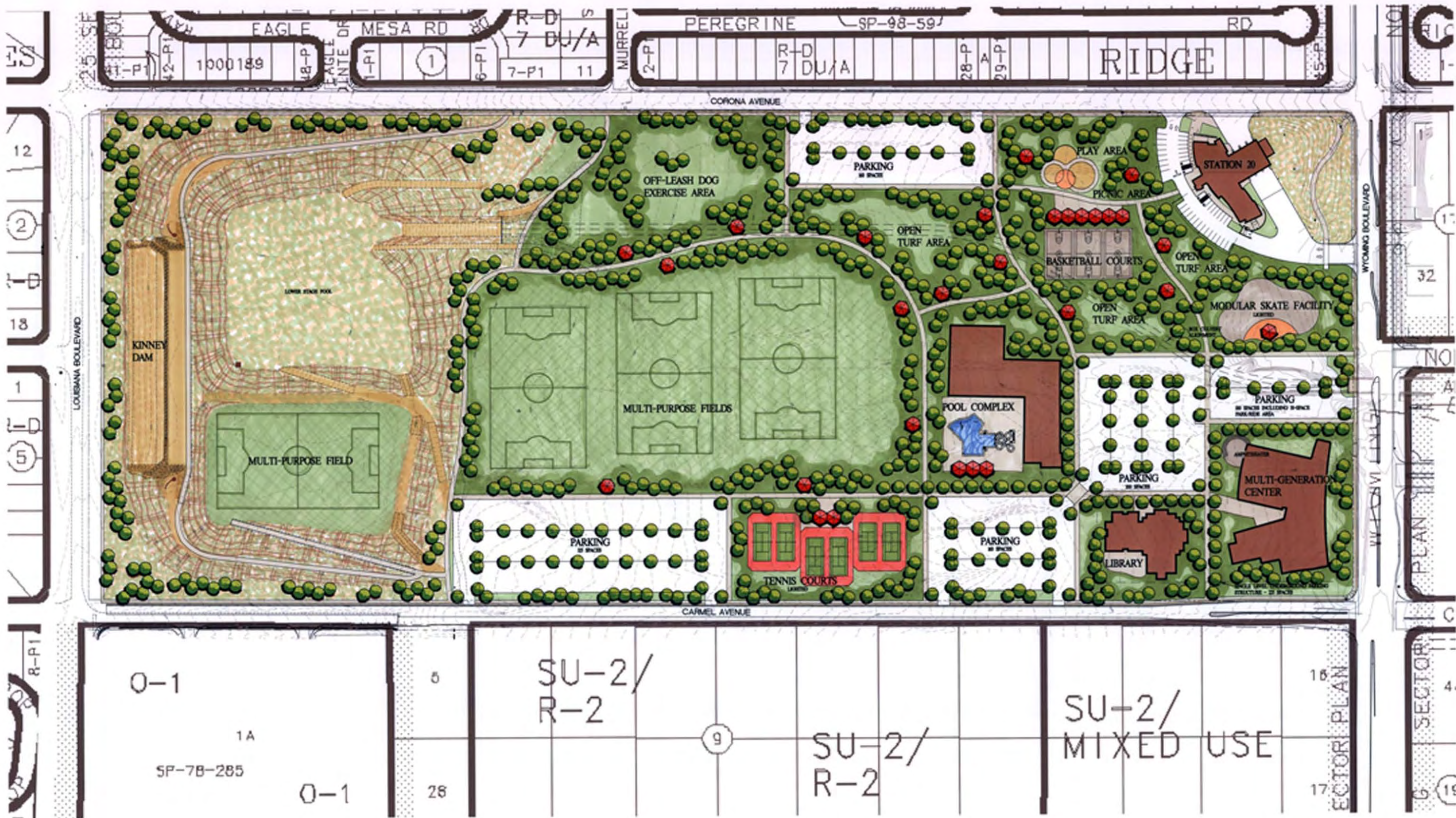
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Buchloe dactyloides	Buffalograss
Festuca ovina	Sheep's Fescue
Festuca ovina glauca	Blue Festuca
Festuca elatior	Turf Tall Fescue
Helictotrichon sempervirens	Blue Avena
Hilaria jamesii	Galleta
Oryzopsis hymenoides	Indian Ricegrass
Poa pratensis	Kentucky Bluegrass
Schizachyrium scoparium	Little Bluestem
Sporobolus cryptandrus	Sand Dropseed
Sporobolus wrightii	Giant Sacaton

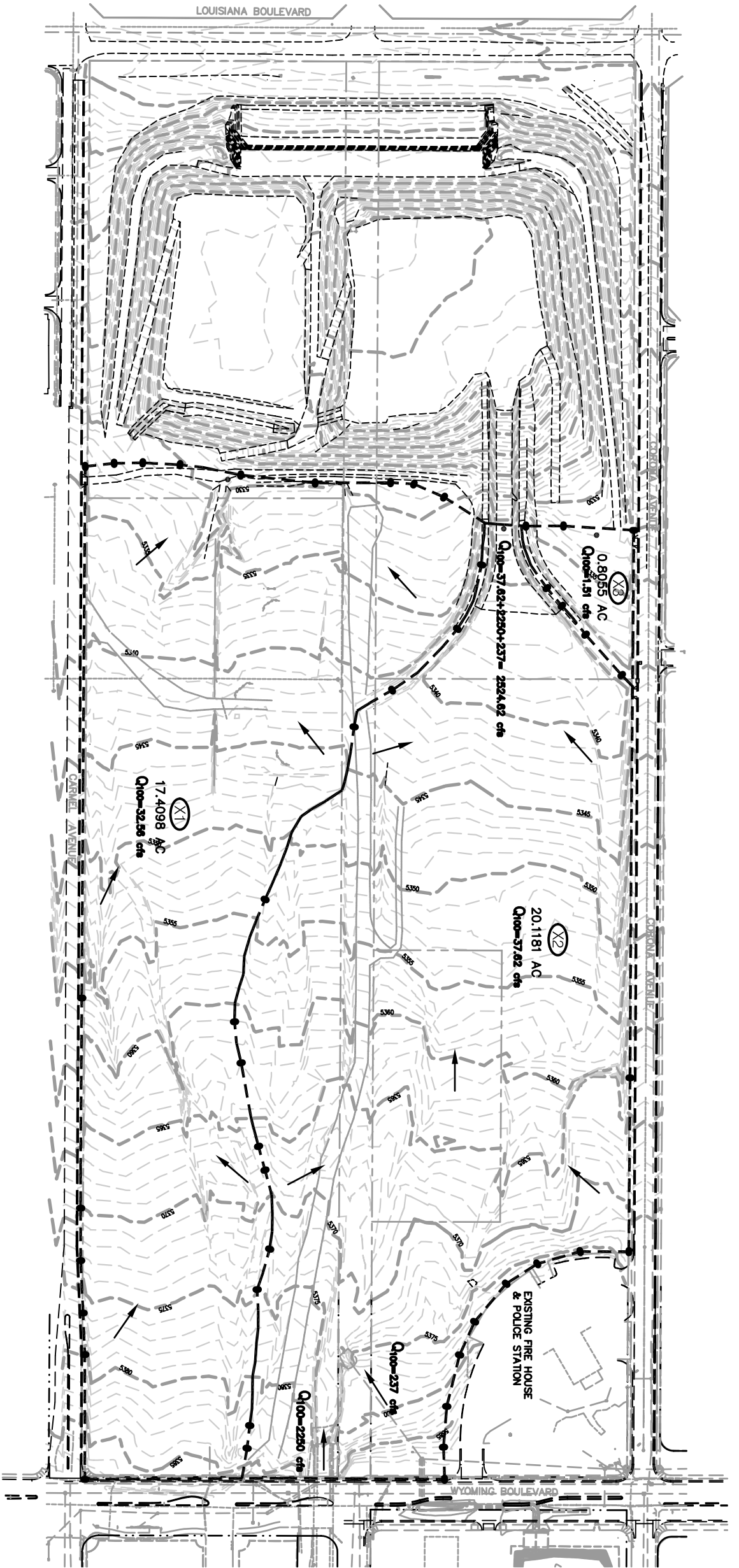


# NORTH DOMINGO BACA PARK

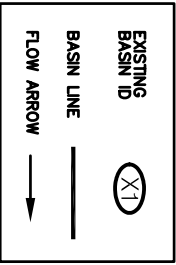
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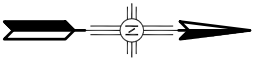


**LEGEND**



RUN-OFF FROM EXISTING CONDITIONS DRAINAGE BASINS

BASIN DESIGNATION	AREA (ACRES)	IMPERV. (ACRES)	LAND TREATMENT (ACRES)			PEAK DISCH. (CFD)
			A	B	C	
X1	17.4098	0	17.4098	0	0	32.56
X2	20.1181	0	20.1181	0	0	37.82
X3	0.8055	0	0.8055	0	0	1.51
<b>TOTALS</b>	<b>38.3334</b>	<b>0</b>	<b>38.3334</b>	<b>0</b>	<b>0</b>	<b>71.89</b>



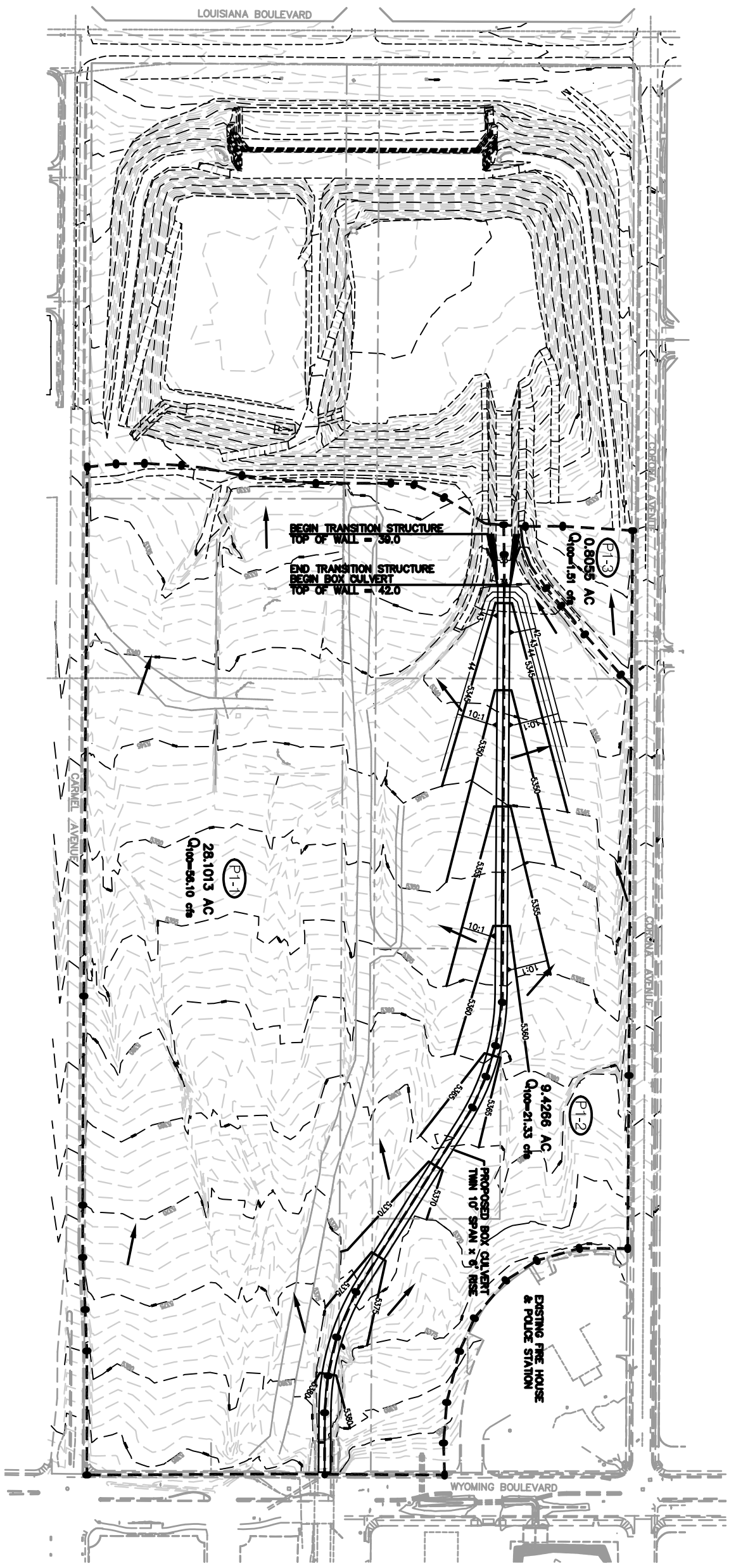

**South Engineering Company**  
 A Full Service Engineering Company  
 1020358  
 1020358B

CITY OF ALBUQUERQUE  
 DEPARTMENT OF MUNICIPAL DEVELOPMENT  
 TITLE: **NORTH DOMINGO BACA PARK MASTER PLAN DRAINAGE REPORT BASIN MAP - EXISTING CONDITIONS**  
 Design Review Committee City Engineer Approval

City Project No.	Zone Map No.	Sheet	of
	C-19	1	3

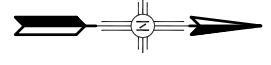
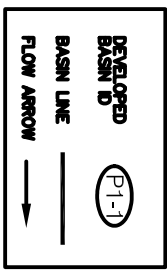
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REVISIONS			FIELD NOTES						CONTRACTOR		
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									FIELD VERIFICATION BY	DATE	
									DRAWINGS CORRECTED BY	DATE	
									<b>MICRO-FILM INFORMATION</b>		
									RECORDED BY	DATE	
									NO.		

DESIGNED BY	GN	DATE	NOV 2004
DRAWN BY	KSH	DATE	NOV 2004
CHECKED BY	GN	DATE	NOV 2004



RUNOFF FROM PHASE 1 CONDITIONS DRAINAGE BASINS

BASIN DESIGNATION	AREA (ACRES)	IMPERV. (ACRES)	LAND TREATMENT (ACRES)			PEAK DISCH. (CFD)
			A	B	C	
P1-1	28.1013	0	24.9332 89%	0	2.2481	58.10
P1-2	9.4286	0	7.0600 75%	0	2.3586	21.33
P1-3	0.8055	0	0.8055 100%	0	0	1.51
TOTALS	38.3354	0	32.7987	0	4.6067	78.94



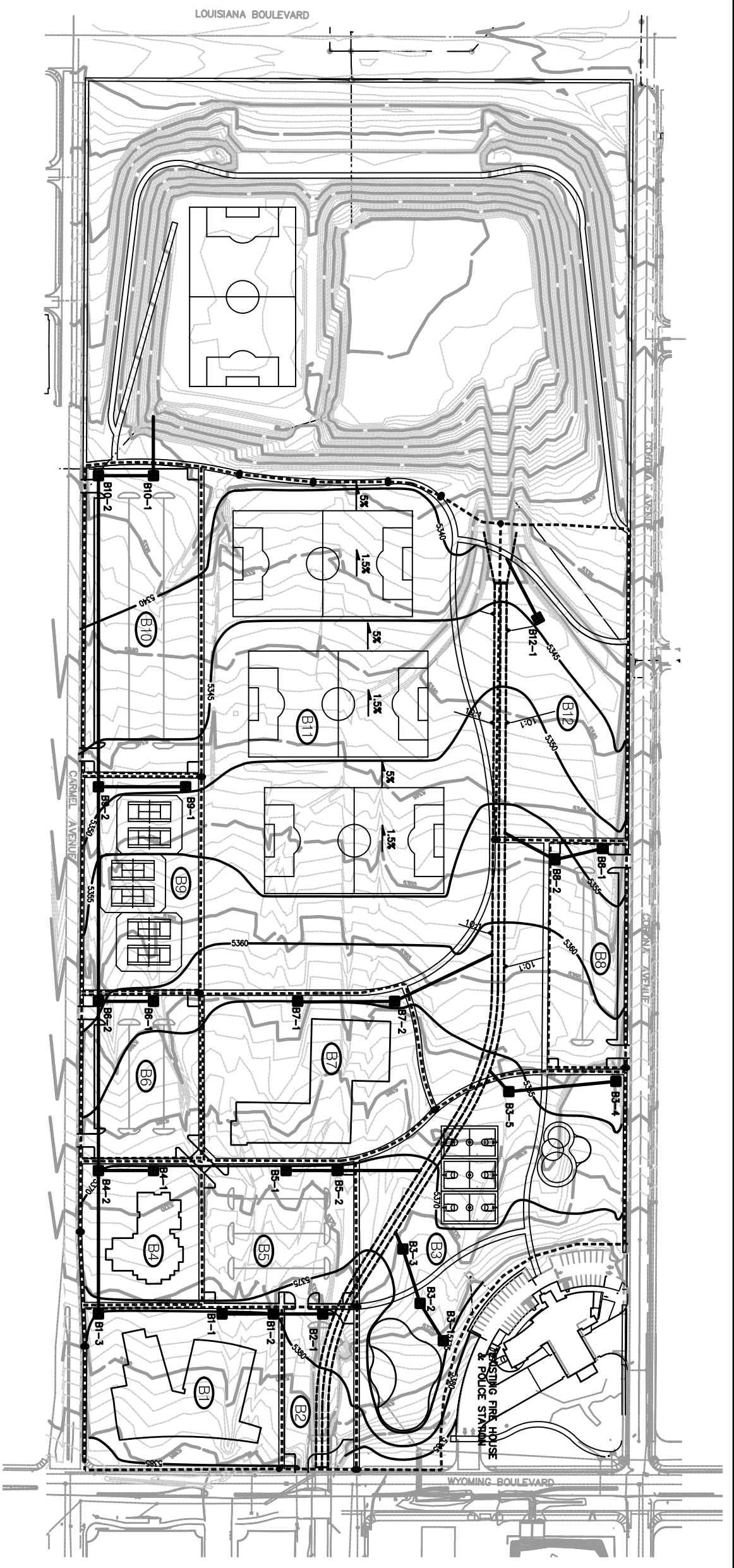
**Smiths Engineering Company**  
 7100 Service Road, Suite 100  
 Albuquerque, NM 87113  
 505.263.3598

CITY OF ALBUQUERQUE  
 DEPARTMENT OF MUNICIPAL DEVELOPMENT  
 NORTH DOMINGO BACA PARK  
 MASTER PLAN DRAINAGE REPORT  
 BASIN MAP - PHASE 1 DEVELOPMENT  
 Design Review Committee City Engineer Approval

City Project No. \_\_\_\_\_  
 Zone Map No. C-19  
 Last Design Update \_\_\_\_\_  
 Sheet 2 of 3

ENGINEERS SEAL			SURVEY INFORMATION			BENCH MARKS			AS BUILT INFORMATION		
			FIELD NOTES						CONTRACTOR		
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		DESIGNED BY GN							INSPECTOR'S ASSISTANCE BY	DATE	
		DRAWN BY KSH							FIELD VERIFICATION BY	DATE	
		CHECKED BY GN							TRAINING CORRECTED BY	DATE	
									<b>MICRO-FILM INFORMATION</b>		
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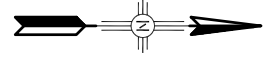
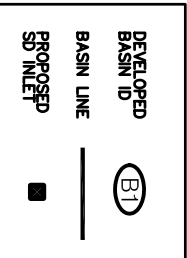




RUNOFF FROM DEVELOPED CONDITIONS DRAINAGE BASINS

BASIN DESIGNATION	AREA (ACRES)	IMPERV. (ACRES)	A	B	C	PEAK DISCH (CFS)
B1	2.4976	0.9015	0	0.7861	0.7861	8.25
B2	0.9256	0.9083	0	0	0.0278	4.72
B3	5.0396	1.0079	0	3.2254	0.8063	16.22
B4	1.3295	0.3493	0	0.4951	0.4951	4.75
B5	1.7477	1.6603	0	0	0.0874	6.64
B6	1.2873	1.2924	0	0	0.0049	6.41
B7	2.7908	1.0451	0	0.8679	0.8679	10.50
B8	1.4488	1.3784	0	0	0.0724	7.16
B9	2.0032	0.8906	0	0.8801	0.2226	7.55
B10	2.0984	2.7250	0	0	0.1424	14.17
B11	13.2215	0.6611	0	12.5604	0	35.98
B12	3.1326	0.3132	0.4530	2.3626	0	6.57
TOTALS	38.3334	13.0710	0.4530	21.975	3.8168	134.03

LEGEND



CITY OF ALBUQUERQUE  
 DEPARTMENT OF MUNICIPAL DEVELOPMENT  
 NORTH DOMINGO BACA PARK  
 MASTER PLAN DRAINAGE REPORT  
 BASIN MAP - DEVELOPED CONDITIONS  
 Design Review Committee City Engineer Approval

NO.	DATE	REMARKS	BY
DESIGNED BY	GN	DATE NOV 2004	
DRAWN BY	KSH	DATE NOV 2004	
CHECKED BY	GN	DATE NOV 2004	

ENGINEERS SEAL	SURVEY INFORMATION	BENCH MARKS	AS BUILT INFORMATION
	FIELD NOTES		CONTRACTOR
	NO. BY DATE		WORK STARTED BY DATE
			INSPECTOR'S ACCEPTANCE BY DATE
			FIELD VERIFICATION BY DATE
			DRAWINGS CORRECTED BY DATE
			MICRO-FILM INFORMATION
			RECORDED BY DATE
			NO.

City Project No. \_\_\_\_\_  
 Zone Map No. C-19  
 Sheet 3 of 3