



Summary Report

# Comprehensive Master Plan

‘A Vision For The Great Park of The 21st Century’

Created by

The Great Park DESIGN STUDIO

On behalf of

The City of Irvine

The Orange County Great Park Corporation

Approved by

Board of Directors

September 27, 2007



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and

The involved and dedicated Citizens of Orange County







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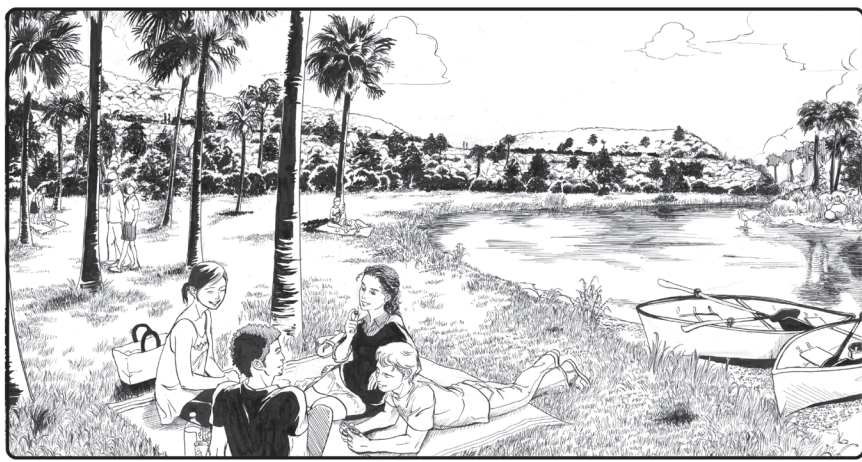
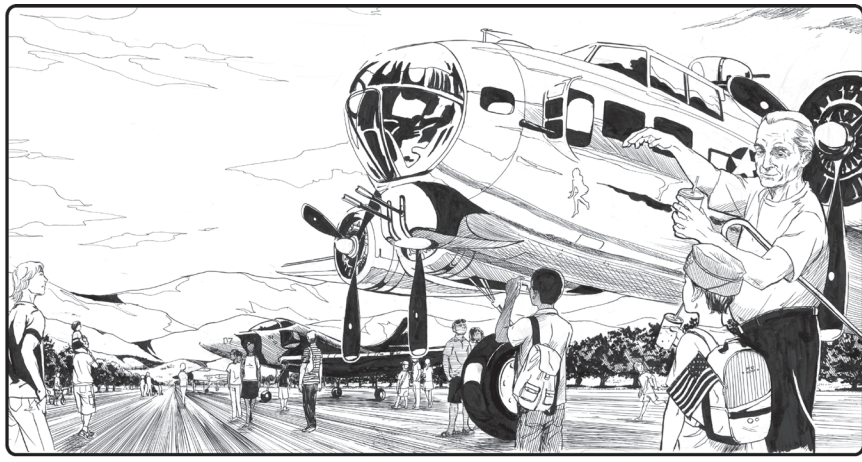
# Introduction

In March 2005, the Great Park Corporation approved the Master Designer selection process calling for an international design competition to determine the firm to create a Master Plan for Orange County Great Park.

While responses to the Request for Qualifications were being prepared, the Corporation set in motion an extensive public outreach program, conducting County-wide opinion polling as well as numerous stakeholder planning sessions culminating in a day-long park planning conference at Chapman University in June 2005.

The Corporation received twenty-four Statements of Qualification which were screened by a Design Jury of experts in the fields of architecture and landscape architecture. The jury recommended seven firms to advance to the second stage of the competition.

The seven semi-finalists were confirmed by the Board and moved forward to prepare conceptual designs for the Orange County Great Park. In July they attended a two day workshop and site visit. In September, the conceptual designs were displayed for public review and comment at the Irvine City Hall.



Competition Conceptual Design



# Introduction

A second Design Jury met and critiqued the submittals. On September 22 and 23, the designers presented their conceptual designs to the Board of Directors and the public.

In October, the Board selected three Master Designer finalists. During November and December, the Board visited the finalists' offices and project sites and deliberated on the merits of all the outstanding submittals.

In January 2006, the Great Park Corporation selected Ken Smith and his collaborating partners (Mary Miss, Mia Lehrer (Mia Lehrer + Associates), Enrique Norton (Ten Arquitectos), Steven Handel (Green Shield Ecology), Buro Happold, Fuscoe Engineering, and Gafcon) as the Master Designer for the Orange County Great Park.

This team of dedicated professionals, now known as the Great Park Design Studio, has moved forward to prepare a Master Plan for the first great metropolitan park of the 21st Century.



Competition Conceptual Master Plan





## Park Background

### **Comprehensive Master Plan**

This submittal is a work product. It is a summary of Design Studio work conducted from April to mid-October 2006 and follows the Critical Issues Assessment prepared by the Design Studio in February-March 2006. This plan was adopted by the planning commission on August 7, 2007.

### **Public Participation**

Public participation has been an integral part of the design process of developing this Master Plan and will continue to play an important role in shaping the design and program of the park. A preliminary listing of park program opportunities has been identified that responds to public input.

### **A New Kind of Park**

In the heart of Orange County a new kind of park is being created, one where visitors experience a new kind of relationship between the built environment and the natural world. As parks have long been, the Great Park is an oasis, a place of pleasure, activity, and reflection. But it is much more. It is a place that connects our history and our current needs, knitting together the communities of Southern California while restoring the region's natural heritage. It is a place where new ideas for social and environmental sustainability

are investigated and tested. The citizens of Orange County are key participants in imagining these new ideas to create a healthier and more sustainable future.

### **Three Park Experiences in One**

The Great Park is actually three park experiences in one. The Canyon is a beautiful oasis - a place to wander and daydream, for families to picnic and for children to explore. It includes a variety of special plantings, from a Meditation Garden to one of the world's most striking palm collections. The Habitat Park is an ecological backbone that provides species diversity, native communities and wildlife. The Fields and Memorial Park commemorates the history of the site as both a productive agricultural landscape and more recently, a military base. This area includes a military memorial, preserved historic features, an open corridor, timeline and the major athletic facilities of the sports park.

### **A Sustainable Oasis**

Promoting health is a major goal of the park. The health of the individual becomes a means of understanding the importance of social and ecological health in the region. The Great Park is a showplace of sustainability, demonstrating new ideas, structures, systems and technologies toward a

goal of creating a healthy balance between meeting human needs and promoting environmental health. To accomplish this, the park will set sustainability indicators in five categories; energy, water, materials, nature and people.

### **The Living Park**

Unlike any other park, the Great Park is a place of experimentation and change, as aspects of social and environmental sustainability are investigated, tested, and built. The Living Park will be a research and outreach center for collaboration between artists, scientists and visitors to participate in finding solutions to problems of our time and to help interpret and make evident connections between people and place.

### **Ecological Backbone**

Ecologically complex restored habitats are found in three major areas of the park – the Wildlife corridor, Agua Chinon, and the Canyon. Additionally the Bosque will provide a rich and diverse arboretum of trees and shrubs. The Wildlife Corridor is a native habitat restoration and wildlife travel corridor that will be off limits to park visitors. The Agua Chinon is a restored stream environment with native habitats and access to visitors with nature trails. The Canyon

# Park Background

is predominately native plantings with an overlay of cultural species including palms and pines. The Canyon will have trails, small use areas, streams and water features distributed along its length and a 26-acre lake will be the focal feature of the lower canyon Cultural Terrace and Botanic Garden. The Bosque is a mix of native and horticultural species designed for continuous seasonal display. Vegetation in the park will emphasize native species as a botanical backbone with an overlay of “California Friendly” species that are xeric, non-invasive, low-maintenance, and well suited to the climate and conditions of Southern California. Additionally culturally significant plantings will include, orchards, and agricultural plantings, and lawns. The park Vegetation areas will consist of 61% native plantings and overall 75% will be “California Friendly.”

## Hydrology

The Great Park will develop a sustainable hydrology of natural streams and engineered water features on the site. The Agua Chinon will be restored as a functioning stream with seasonal floodplain and aquifer recharge. Natural water from the Borrego Channel will be diverted through the site along the the Wildlife Corridor then returned to the Borrego once it leaves the site. The Canyon stream, and

lakes will be supplied with recycled water from the Irvine Ranch Water District and the lake will serve as a reservoir for the parks irrigation. Reclaimed water from the groundwater reclamation plant will be used to supplement stream flow. A series of bio-swales will be constructed to handle and clean on site run-off and several natural treatment wetlands will provide biological cleaning of runoff water.

## Park Once and Spend The Day

The park circulation is designed to promote sustainable means of transportation. There will be five major park entries, Trabuco Square and Gate, the Palm Canyon Entry, the Agua Chinon Sycamore entry, the Bosque Entry and the Orchard Entry. Strong connections are developed between adjacent neighborhoods and the park. The Lifelong Learning neighborhood's Main Street extends into the Sports Park to provide an urban space for organizing the sports complex. Local streets orient toward a series of small Pocket Parks in the Bosque. The Promenade of the Senses will provide a formal connection between the Cultural Terrace and the Transit Oriented Development and the Great Park Station at the Irvine Transit Center. Approximately 5000 parking spaces are distributed around the site with a major concentration serving the Cultural Terrace and the Sports Park. A Park

Shuttle will traverse the entire site running in two directions with stops at all major features and facilities. Orange bicycles will be provided and small electric vehicles will be provided for the mobility impaired. The park will contain over 50-miles of park trails, including a 5-mile jogging path at the Canyon and a two-mile jogging path at the Bosque. There will be trails for bicycles, hikers, equestrians, and just plain walking.

## Major Park Facilities Include

- Upper Canyon
- Cultural Terrace - Lower Canyon
- Botanical Garden
- Aircraft Museum
- Open Meadows and Grove
- The Time Line
- The Promenade
- Bowling Green and Linear Open Space Corridor
- Sports Park
- Trabuco Entry
- Bosque
- Aqua Chinon and Wildlife Corridor
- Orchard Parking
- Park Maintenance Facilities and Service and Security Corridors.

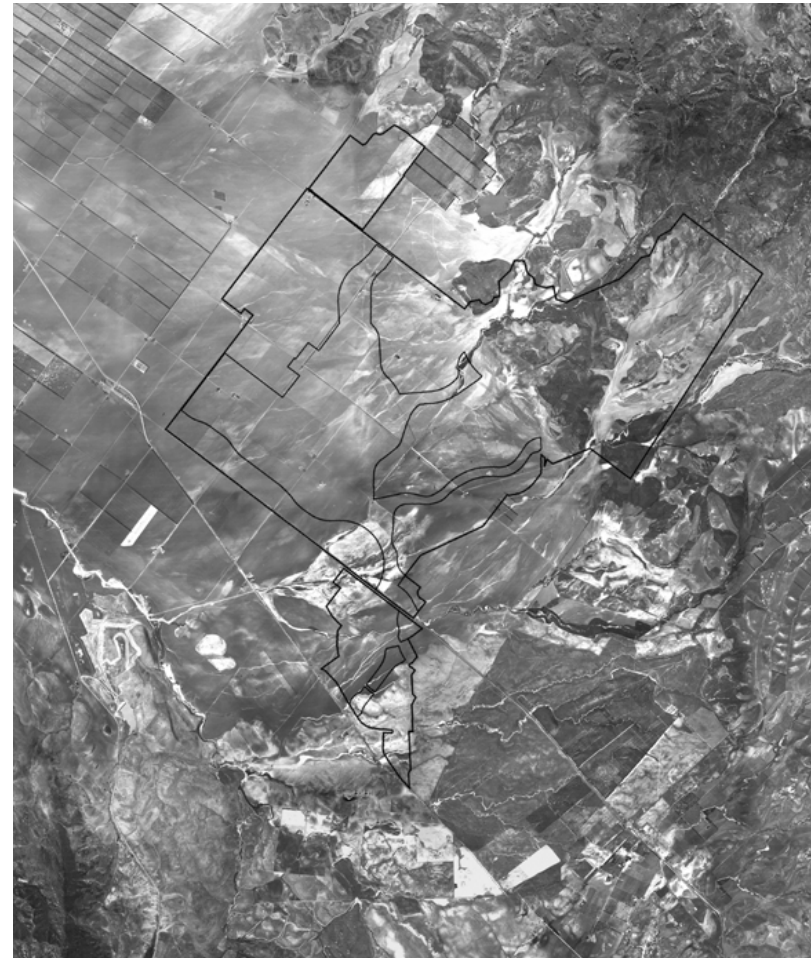


# Master Plan Process

In October 2006, the Great Park Corporation approved a Preliminary Master Plan for the Orange County Great Park in concept and directed that the staff and Great Park Design Studio submit the plan for review and approval by the City of Irvine.

The Master Plan was prepared as a vision statement that established the framework for the overall park design. The plan is future oriented and illustrates key design concepts as well as potential features and programming opportunities. It shows the Master Designer's vision for the Orange County Great Park unconstrained by the City's General Plan and zoning intensity standards and previous environmental analysis.

Essential components of the Master Plan are the sustainability goals adopted by the Great Park Board as well as the ecological backbone and "living park" concepts brought forward by the Design Studio.



El Toro Marine Base Circa 1938



El Toro Marine Base Circa 1946



## Master Plan Process



El Toro Marine Base Circa 1977



El Toro Marine Base Circa 2005

The Master Plan includes potential land additions in anticipation of the City receiving and approving an Amended Overlay Plan from Heritage Fields. In addition, the Master Plan assumes Board approval of public-private partnerships for development opportunities in the Sports Park, as envisioned in the Griffin Structures report, and the potential for an amphitheater site overlooking the Lake.

All of these possible features will require subsequent Board decisions to be included into the approved Master Plan. Furthermore, changes to the Master Plan will trigger the City of Irvine's discretionary review process, at which time the potential impacts of new uses or activities will be appropriately evaluated.

The key concepts and elements of the Master Plan are included in this document but the reader is encouraged to review the full document for a better understanding of the founding principles that will guide the development of the Orange County Great Park.

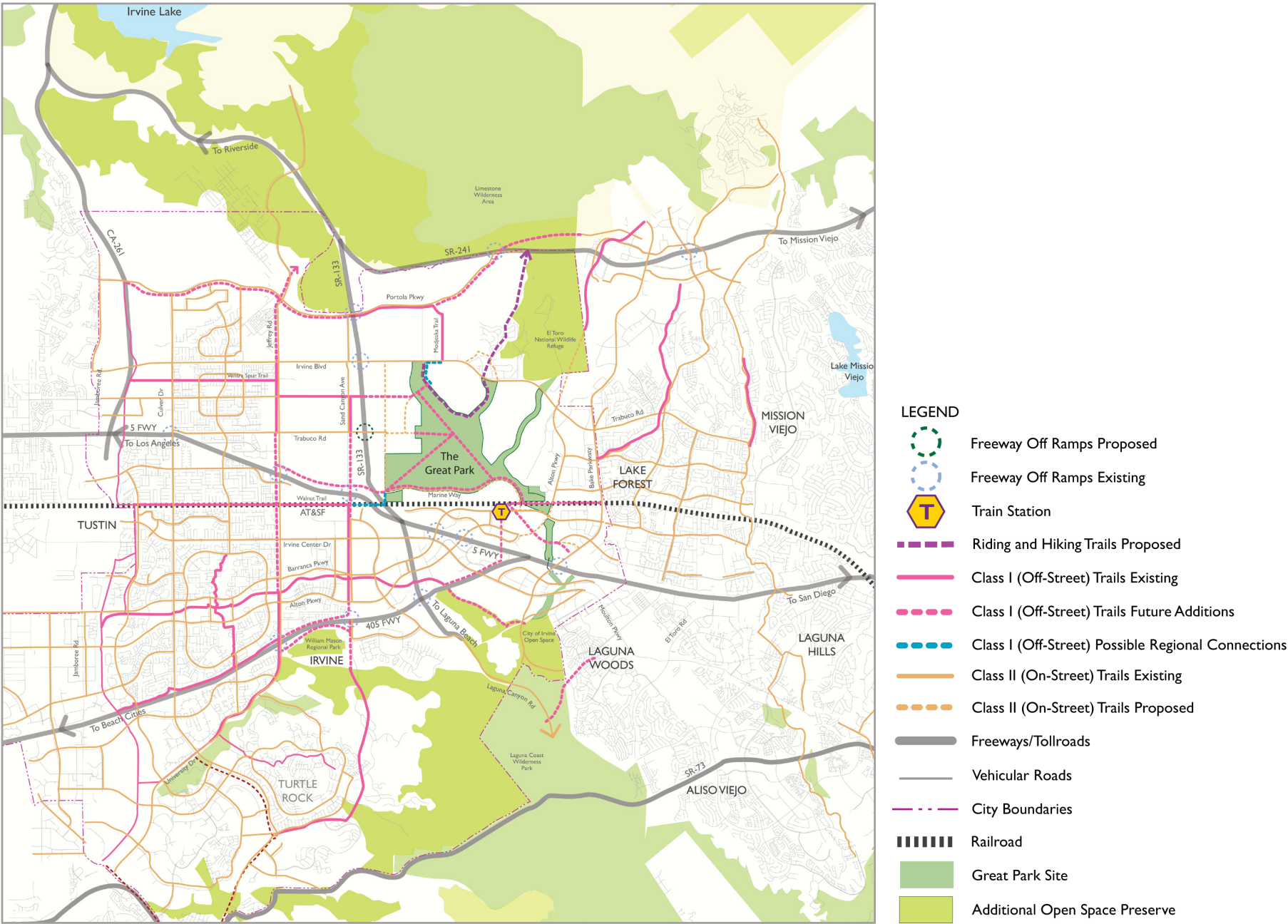


# Regional Connections

This park is an asset for the Orange County community. Regional connections are important to The Great Park and there will be many ways to arrive — by freeway, train, bicycle, or on foot. Key regional connections occur at the north, south, east, and west edges of the park, taking advantage of every opportunity to tie into larger regional systems. The goal, through coordination between city and county agencies, is the successful implementation of a comprehensive network of trails.

The park site is ideally situated near major freeway systems, Golden State Freeway –5, San Diego Freeway – 405 and Toll way 133. Major arterial roadways in Irvine link the freeway off-ramps to the park and allow for access to all major entrances and parking.

The Irvine Transportation Center is conveniently located in close proximity to the park. From the station there will be shuttles available and the possible introduction of a fixed guide way system.



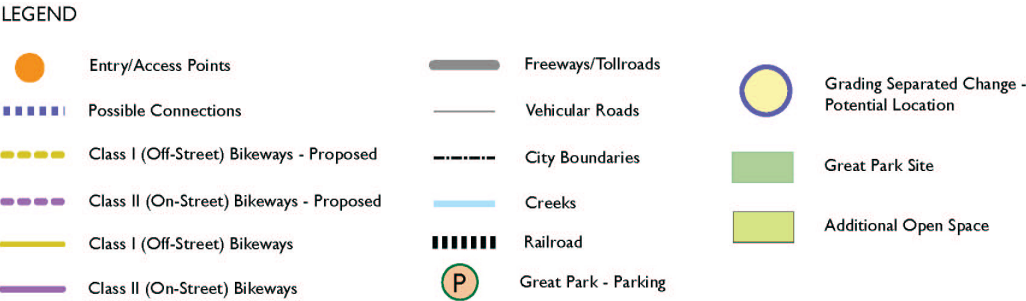
Vicinity Map



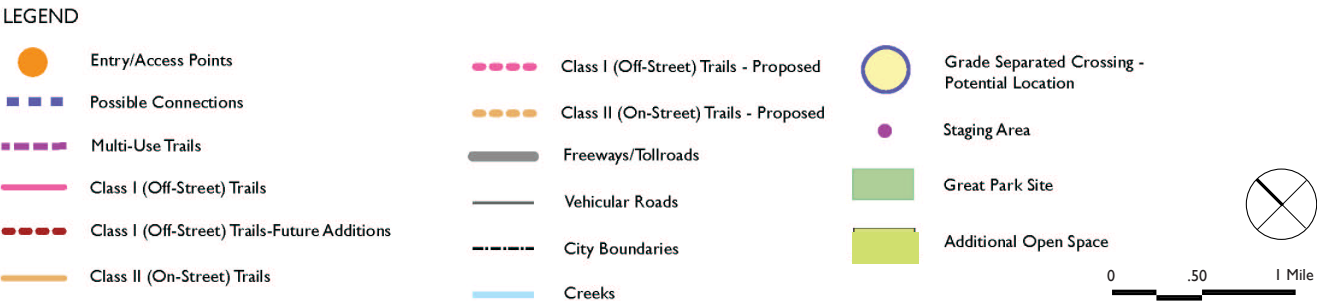
# Regional Connections



Bicycle Trails



Riding / Hiking / Multi-Use Trails





## A New Kind of Park



The Canyon





When the kids suggested I move to the Great Park communities, I thought they were crazy. I was sure I would miss all my friends in the old neighborhood. But it was the best move I ever made. I love living right next to the Great Park. I take some classes in the Lifelong Learning District, sometimes I volunteer at the Botanic Garden. I've started playing chess in the Bosque, where it's pretty cool in the afternoons. Some days I even do the exercise circuit. Imagine, at my age! I wasn't in this shape when I was 50 years old.

**Seymour**



# Three Park Experiences in One

The Great Park is actually three park experiences in one. The Canyon is a beautiful oasis—a place to wander and daydream, for families to picnic or go boating, and for children to explore. It includes a variety of special plantings, from a Meditation Garden to one of the world's most striking palm collections. Special features such as the rockery and the grotto are destinations to observe our county's nature beauty. Water features abound, from Turtle Island to vernal pools and gentle brooks. Color from birds, butterflies, and flowers are present throughout the year. The Botanic Garden at the south end is the place to learn about plants and culture and join a group for a deeper understanding of the environment around us.



Aerial Photo



# Three Park Experiences in One



Bird's Eye View

The Habitat Park, accounting for a major portion of the park's acreage, is an ecological magnet that draws wildlife and enriches the experience of the park's human visitors. The habitats here join up with existing preserves and allow visitors the wander through the unique ecological communities that make southern California unique. From oak woodlands to wildflower meadows, each turn of the trail and each change of season give examples of our healthy sustainable habitats, now restored to the site

The Fields and Memorial Park commemorates the history of the site from the earliest known times to the present. As a home to the first native Americans, through the Spanish, Mexican, and early statehood eras, to the productive agricultural landscape and, more recently, a military base, the Great Park land has many human stories to tell, and figures in the family history of thousands of people. All are honored here. The Fields area also includes the major athletic facilities of the Sports Park, serving citizens of all ages and abilities.

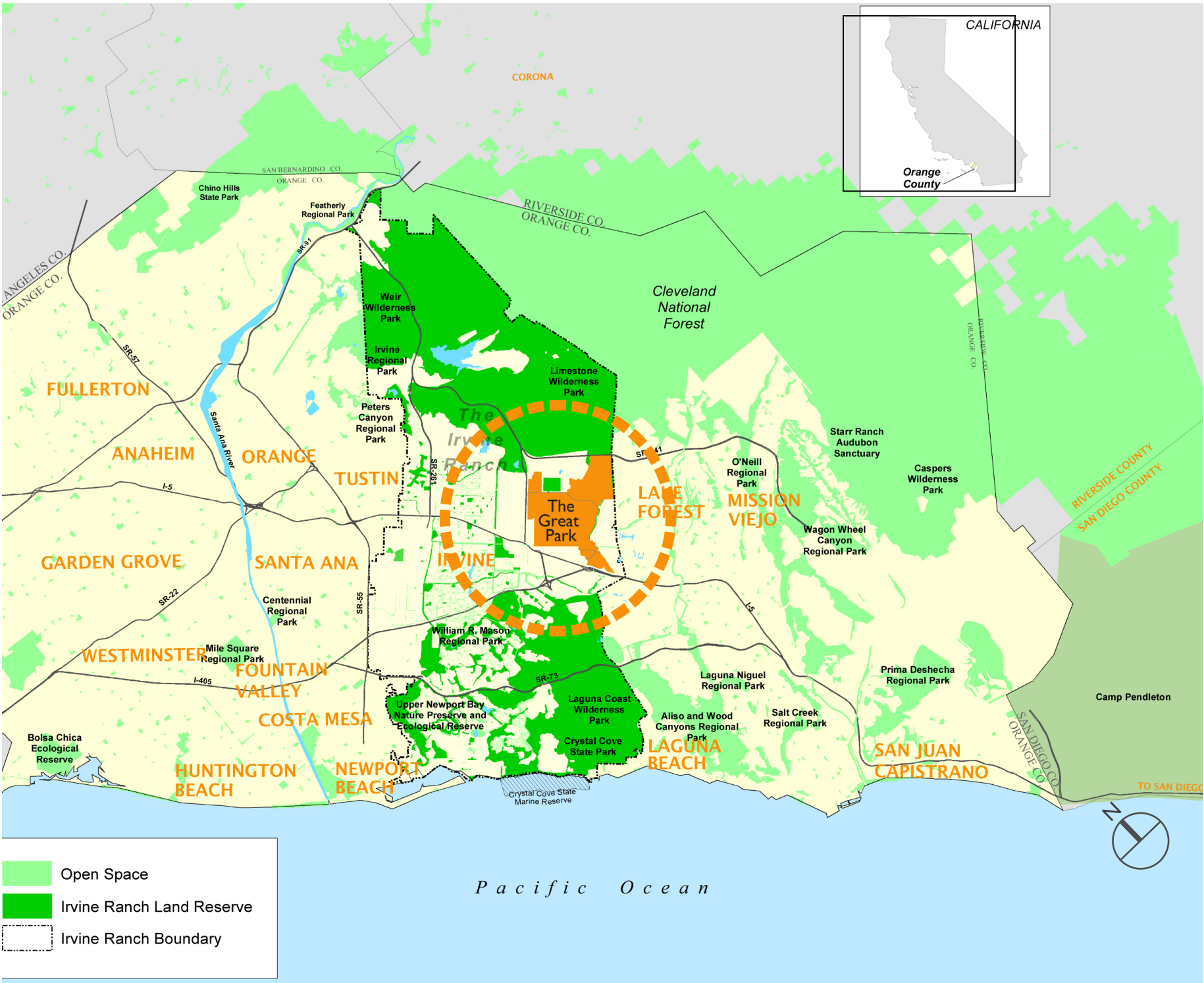


# A New Kind of Park

Orange County is a growing and changing community, becoming a major metropolitan area. This Great Park will play an important role in the future of this community.

To stand on the former runways and appreciate how big and expansive the space is, one gets a sense of what Orange County used to be like. Orange County used to be a place of great scale and limitless expectation, a place of space and opportunity. When you drive around Orange County today, you realize that it is being built out and – places like the the El Toro Airbase, and places like the former groves and fields – are being lost. Connections to the history of these places are being lost. The Great Park gives the opportunity to create a new kind of park, a park that preserves and builds these connections, and a park that is very important to the future of this community.

The opportunity at hand is for the Great Park to become a catalyst to manage change, make connections, and model a healthy, sustainable future for the county, the nation, and even the world.

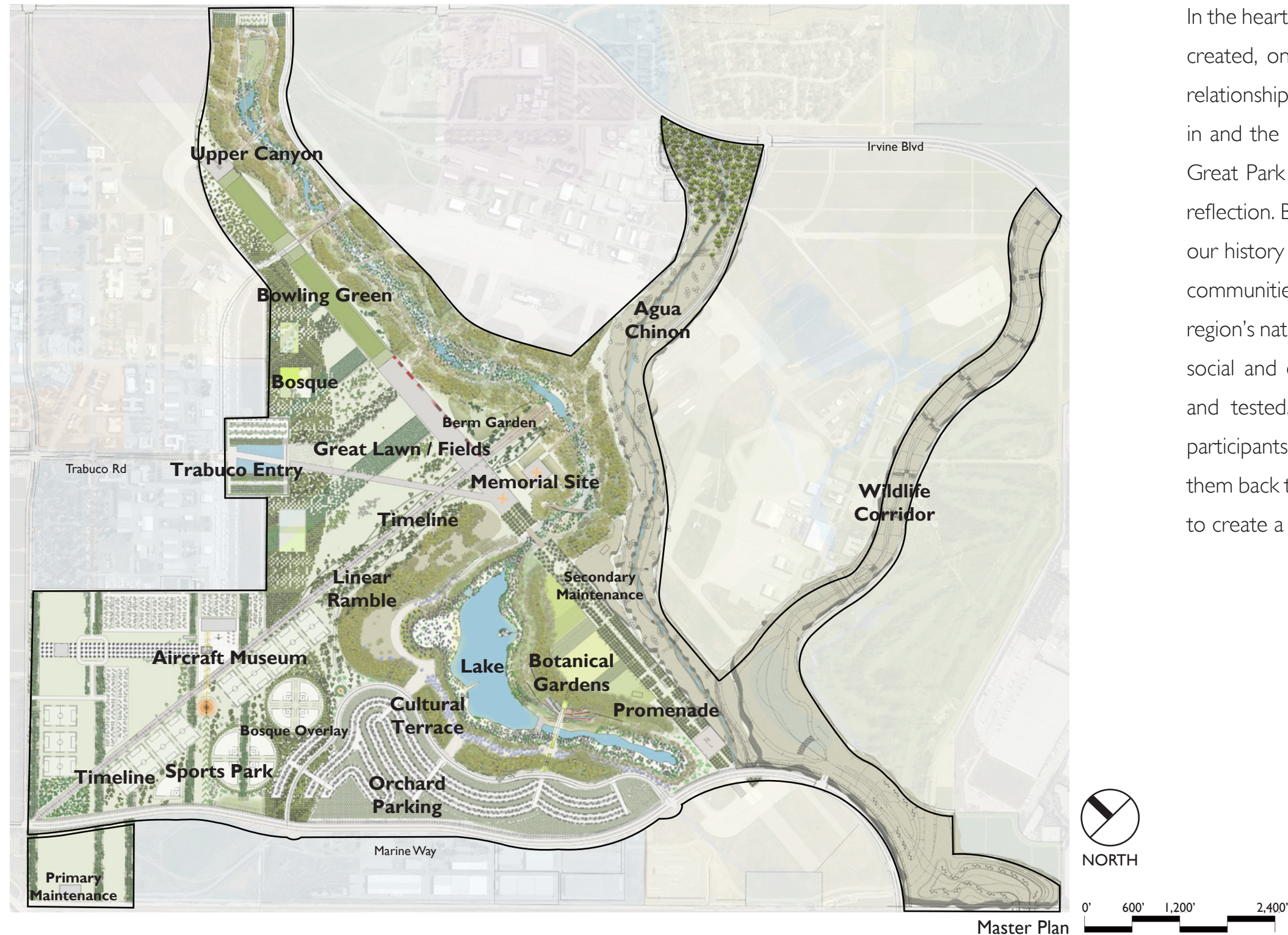


Regional Map



# A New Kind of Park

In the heart of Orange County a brand new park is being created, one where visitors experience a new kind of relationship between the built environment they live in and the natural world. As parks have long been, the Great Park is an oasis, a place of pleasure, activity, and reflection. But it is much more. It is a place that connects our history and our current needs, knitting together the communities of Southern California while restoring the region's natural heritage. It is a place where new ideas for social and environmental sustainability are investigated and tested. The citizens of Orange County are key participants in imagining these new ideas and bringing them back to their homes, communities, and workplaces to create a healthier and more sustainable future.





## A New Kind of Park

Change and development has had a profound effect on Orange County. There has been a shift from open fields and open vistas to suburban development. As the county continues to grow, the opportunity of the Great Park is the beginning of a new future for Southern California – at the heart of the county, the vast openness of the former El Toro Air Station is being programmed for this future. Surrounding the site, a framework of commitment to the stewardship of the land is already in place. The Great Park occupies an essential place of connection: The Limestone Wilderness Park and the Laguna Coast Wilderness Park are both national landmarks, joined in a mountains to sea connection by the Great Park and its surrounding communities.

The park sits at the geographic center of Orange County. It will play an important role in the linking of communities and forming connections for the neighborhoods that surround it.



View of Runway Looking North



# A New Kind of Park

The park design focuses on several opportunities to develop different kinds of connections:

- Ecologically, the park is a vital link in the chain of land reserves stretching from the mountains to the sea; It ties into existing land reserves and makes critical connections linking together critical ecologic systems and water reserves in this part of the county.
- Socially, the park will connect to the communities for all residents of the county; The Park will knit together riding, hiking and multiuse trails from all parts of the county, completing an existing bicycle network within the county, linking all neighborhoods to the park and communities beyond.
- Culturally, the park connects and celebrates the sense of history here – what came before us. The fields, the timeline, and the memorial deal with remembering the history of the site.



Bird's Eye View

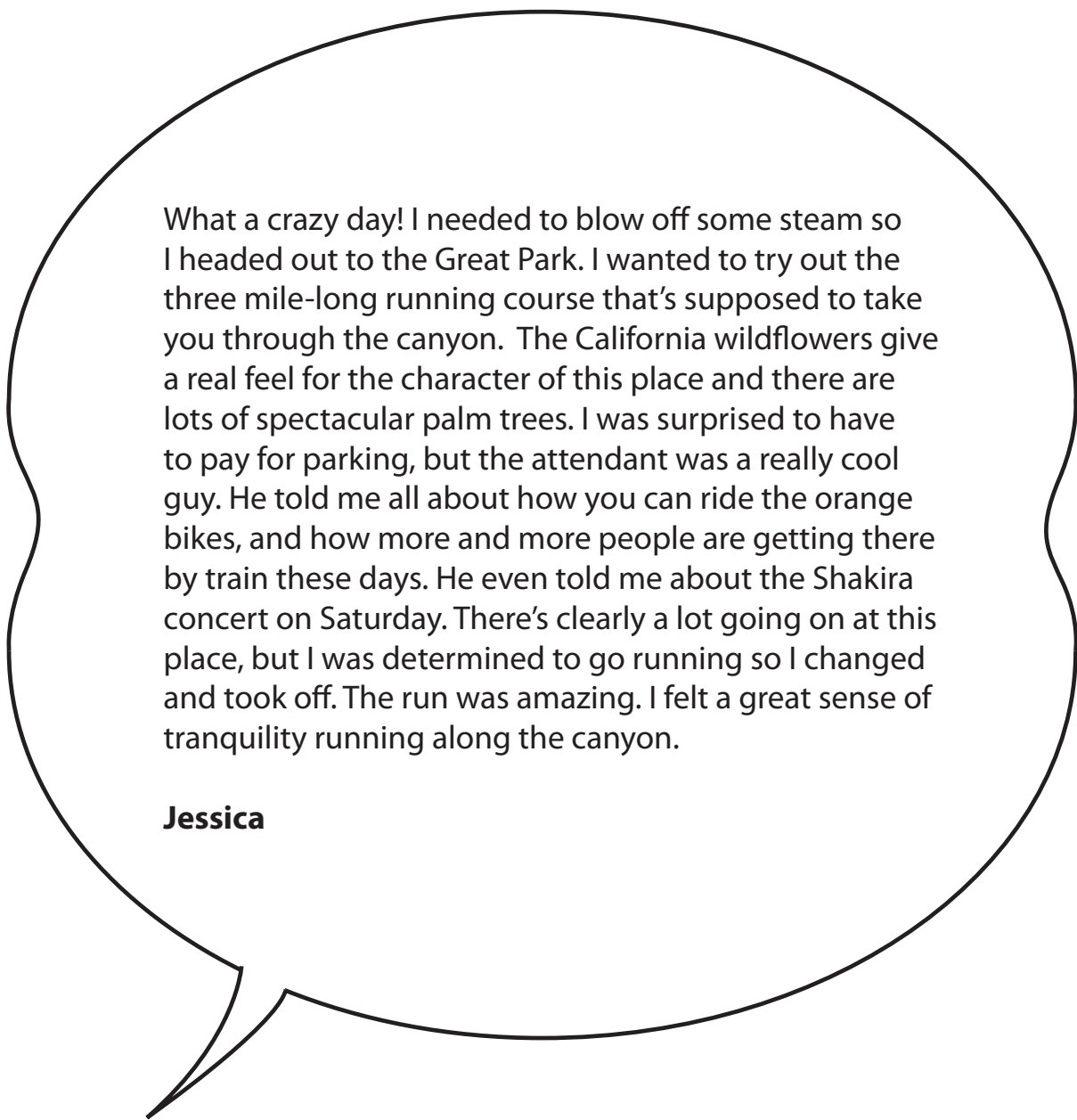


## A Sustainable Oasis



Lower Canyon





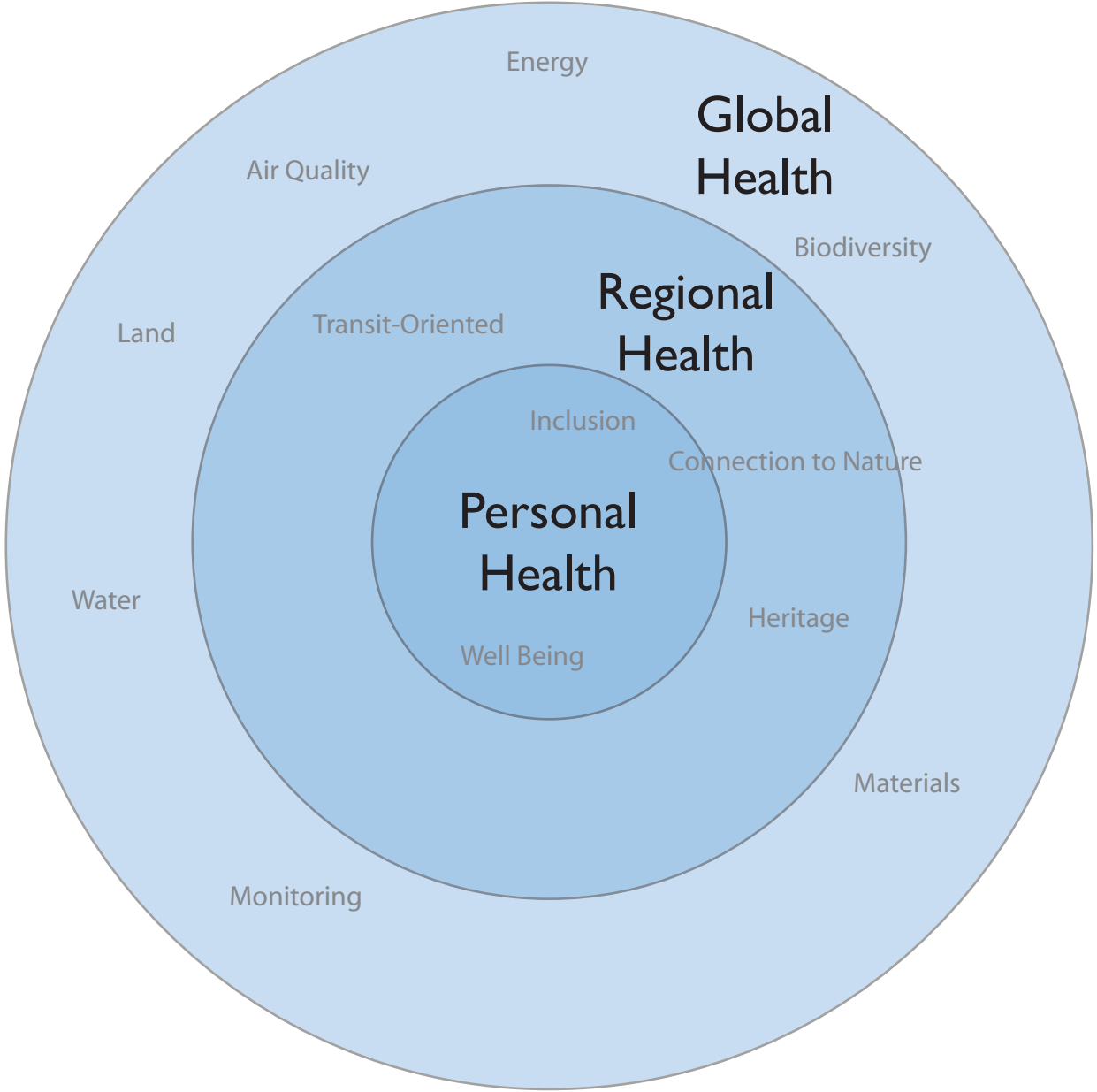
What a crazy day! I needed to blow off some steam so I headed out to the Great Park. I wanted to try out the three mile-long running course that's supposed to take you through the canyon. The California wildflowers give a real feel for the character of this place and there are lots of spectacular palm trees. I was surprised to have to pay for parking, but the attendant was a really cool guy. He told me all about how you can ride the orange bikes, and how more and more people are getting there by train these days. He even told me about the Shakira concert on Saturday. There's clearly a lot going on at this place, but I was determined to go running so I changed and took off. The run was amazing. I felt a great sense of tranquility running along the canyon.

**Jessica**



# Sustainable Oasis

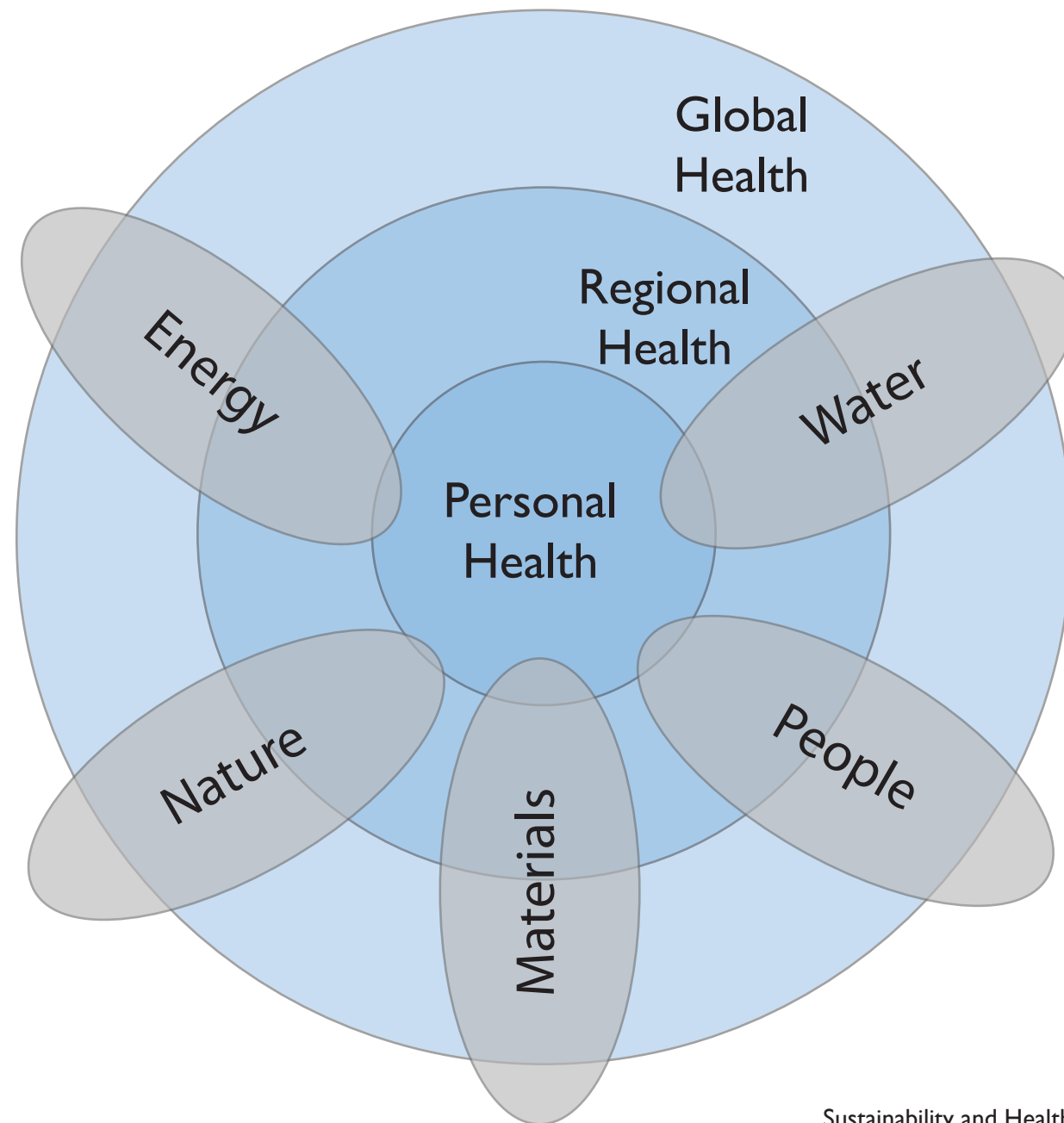
Sustainability is a major goal of the park. The health of the individual becomes a mirror to reflect our understanding the importance of the social and ecological health in the region. Hikers and joggers share the landscape with birds, butterflies, and other wildlife. Orange bikes offer visitors a fun and healthy way to explore all elements of the Park: the natural treatment wetlands, the restored Agua Chinon stream, and the many habitats and plantings in the Canyon. Fresh organic food grown at the Botanic Garden and, perhaps, in the Production Fields is available in park cafes and at the Farmer’s Market. At the Great Park, the health of the individual and the health of social and ecological systems are inseparable.



Sustainability and Health



## Sustainable Oasis



Sustainability and Health

The Great Park is a showplace of sustainability, demonstrating new ideas, structures, systems, and technologies. To help the park succeed in its goal of creating a new balance between meeting human needs and promoting environmental health, it is necessary to understand the consequences of our actions and the effectiveness of potential solutions. To accomplish this goal, the park embraces and implements a set of sustainability indicators that will be tracked by a series of performance standards. Sustainability will be measured in five major categories:

- **Energy**— Conservation and on-site generation
- **Water**— Conservation, recycling in natural treatment wetlands, and capturing runoff
- **Materials**— Salvaged, recycled, ecologically engineered, and waste neutral
- **Nature**— Restored native habitats, enhanced biodiversity, and ecological connections
- **People**— Activities and experiences that foster physical, social, and cultural well-being



# Sustainability Vision

Our goal is to create a place where sustainability becomes a tangible experience. Through the Living Park concept, sustainability can be explored in many ways, not only technologically but also in experiential, educational and interpretive ways. To turn this goal into a reality, projects will be created to address critical issues of our time (such as water or energy) reveal the site's history or provide meaningful social spaces within and beyond the park. These projects are intended to arouse visitors' interest and curiosity to make these pressing issues of the 21st Century accessible to all.



Sustainability vision with amended overlay proposal



## Sustainability Vision



## 400kW Photovoltaic Array

A proposed 1 acre PV array will cover an outdoor pavilion near the great lawn and will be the largest of many renewable energy installations in the Great Park (these locations to be determined).



## Native Plantings

Most of the park will be planted with native species which provide wildlife habitat, are adapted to the Southern California climate and remind visitors of natural heritage of the region.



## Aircraft Museum

This museum will be one of the strongest public reminders of the El Toro military air field history. Many other references to the diverse history of the site will be found throughout the Great Park.



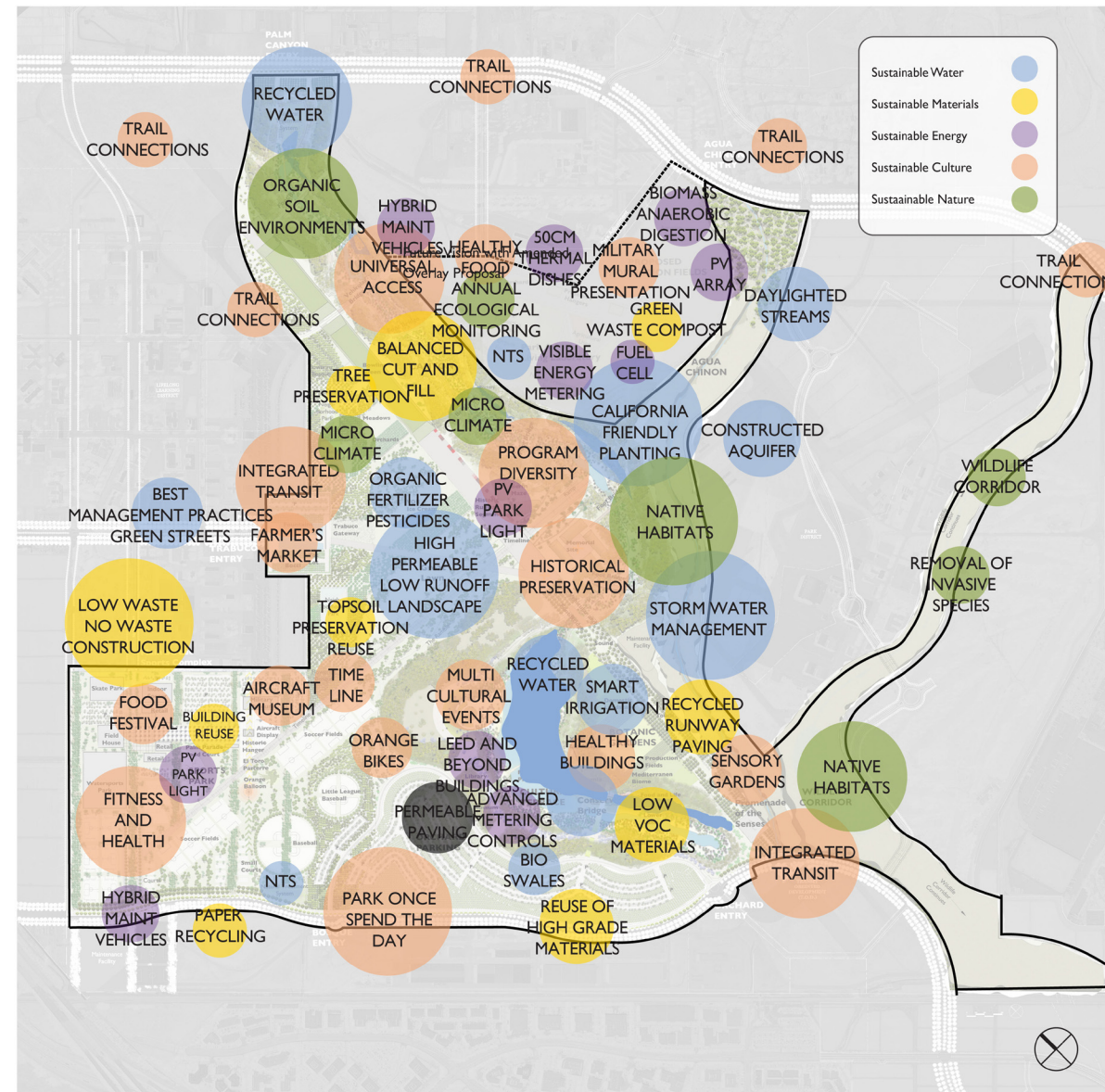
## Sitewide Composting

All green waste from demolition and subsequent park development on the site will be brought to a composting facility which will provide organic supplements for soil amendments.



## Reclaimed Water Supply

Irrigation needs for the Great Park will be minimal, but the areas requiring irrigation will be served by reclaimed water from the Irvine Ranch Water District.



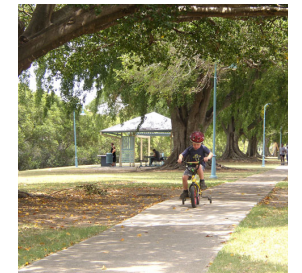
## Shuttle to Mass Transit

Strong physical and transportation connections to the Great Park have been made by the planning of the TOD and the Irvine station. Shuttle loops will quickly transport people into and around the park.



## Agua Chinon

Daylighting of a channelized stream will provide new opportunities for natural water quality enhancements.



## Reuse of Base Demolition

Portions of the runway will remain and demolition materials will be reused on-site. Redwood planks may be reused as bridge planks.



## Canyon Microclimate

Down at the bottom of the canyon visitors will find a cool, calm oasis even on the hottest days in Southern California.



## Wildlife Corridor

This corridor will be an important corridor connection the Cleveland National Forest to the Laguna Coast Wilderness areas and the multiple habitats in the Great Park. Human access will be limited to maintenance and monitoring of animal activities.



## Integrated Transit System

Visitors can park once and spend the day, moving through the park on hiking trails, bikes, a Park shuttle or a fixed guideway. Visitors can even get to the park by regional rail, regional bike riding and hiking trails or pedestrian connections with the neighboring communities.



# Sustainability Goals

## Vision

Sustainability permeates every aspect of the Great Park’s design. It addresses the social and environmental problems of our time, solving them both locally and globally. It is about improving the quality of life for individuals, strengthening communities, and making the world a healthier place. It inspires visitors to rethink their connections to nature, to history, and to their community. It generates and demonstrates new ideas and technologies, inspiring people to make changes in their own lives. These ideas and technologies are generated in the park, but they will have a profound impact far beyond the park’s boundaries. Key indicators and metrics will measure the park’s performance in improving its level of sustainability. But more important than the actual level of sustainability at any time is the commitment to move consistently toward long-term goals.

## Goals

### Biodiversity

Provide ecological habitats and connections to reflect the local natural heritage, and to enhance biodiversity in the region

### Connection to Nature

Bring nature and environmental education opportunities into the greater Orange County area

### Land

The US Navy is performing remediation of the land generally through mechanical means. The Great Park will develop healthy, living soil through natural soil amendments and other means as necessary - perhaps with phytoremediation.

### Air Quality

Improve air quality of both internal and external environments

### Water

Protect and conserves both natural and potable water resources

### Well Being

Protect and improves the health and productivity of those who visit and work there

### Energy

Reduce the use of fossil fuels and emissions of greenhouse gases

### Materials

Minimize the impact of construction materials and the generation of waste

### Inclusion

Encourage community participation and civic engagement so that all visitors can obtain an equivalent experience in the park

### Heritage

Instill a sense of place that references the history of the site and the region

### Transit-Oriented

Provide a transit oriented development for the surrounding community with less-polluting transportation choices and connections within and beyond the park

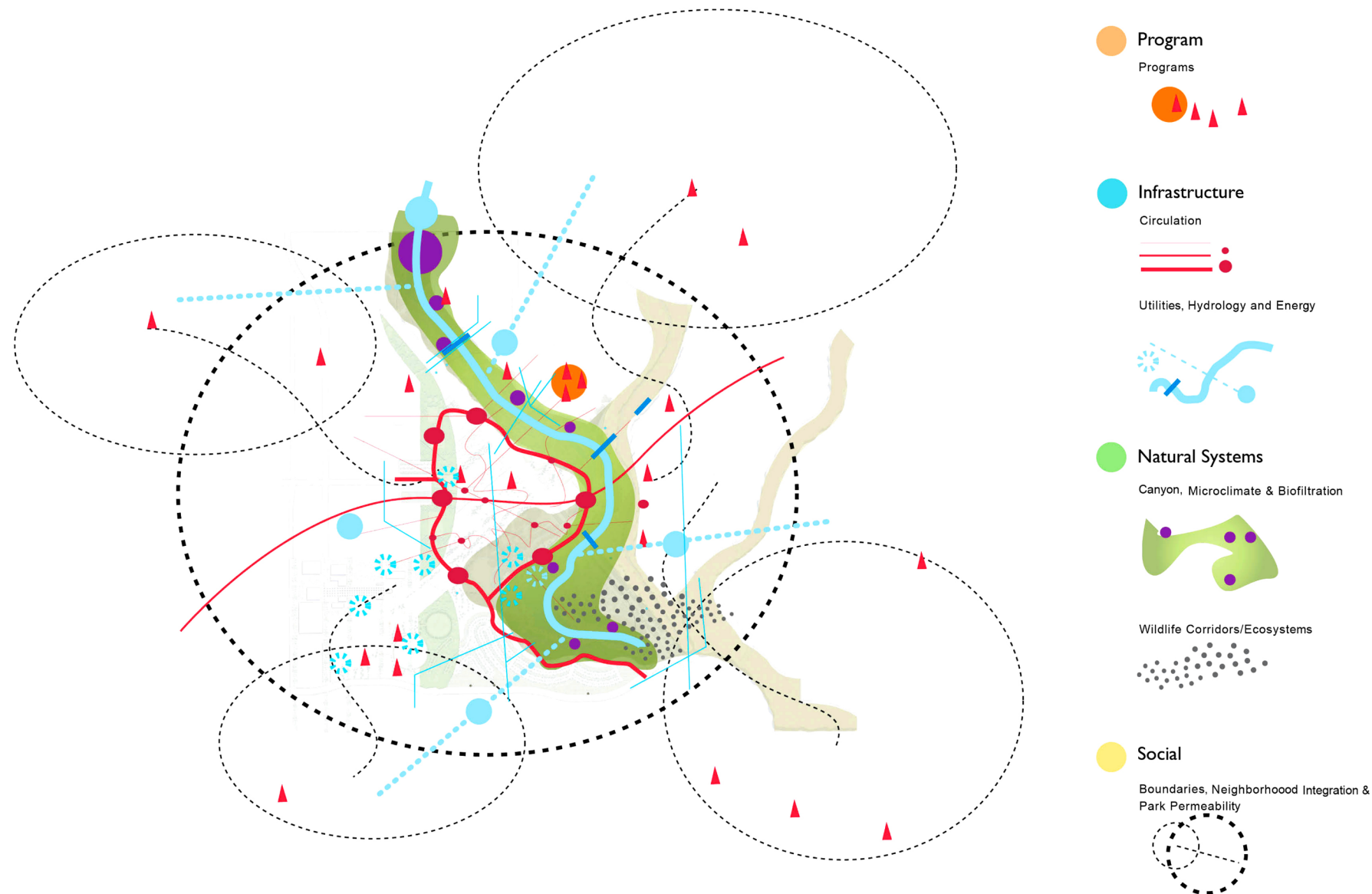
### Monitoring

Incorporate ongoing measurement and monitoring of key sustainability metrics



# The Living Park

Unlike any other park, the Great Park is a place of experimentation and change as aspects of social and environmental sustainability are studied. New ideas and opportunities are investigated, tested, and built over the next five, 50, or 100 years. Because the issues are so complex, it is impossible for individuals to understand all the problems or recognize the most effective solutions. For this reason, collaboration is at the core of the park's vision. Working with scientists, hydrologists, and involved citizens, artists and designers make sustainability a tangible experience. This conceptual diagram shows the relationships of artists/designers interventions to the larger park elements and community context. Using the senses of sight, touch, taste, sound, and smell, they will arouse the curiosity of visitors, and invite their participation in finding solutions for the pressing problems of our time.

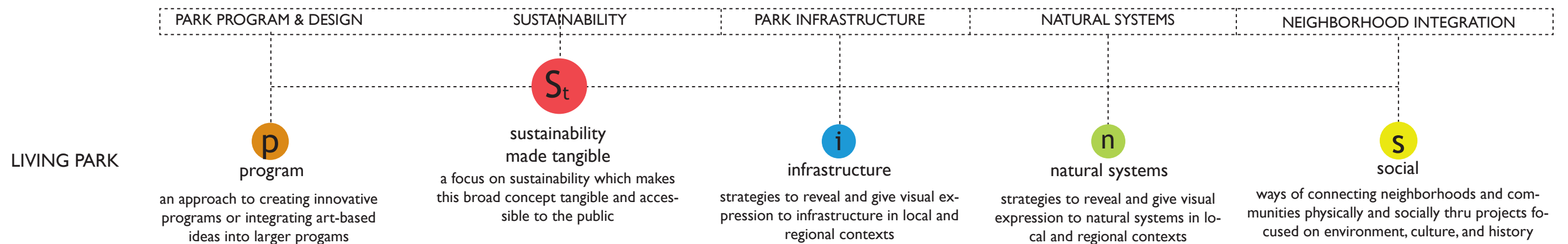
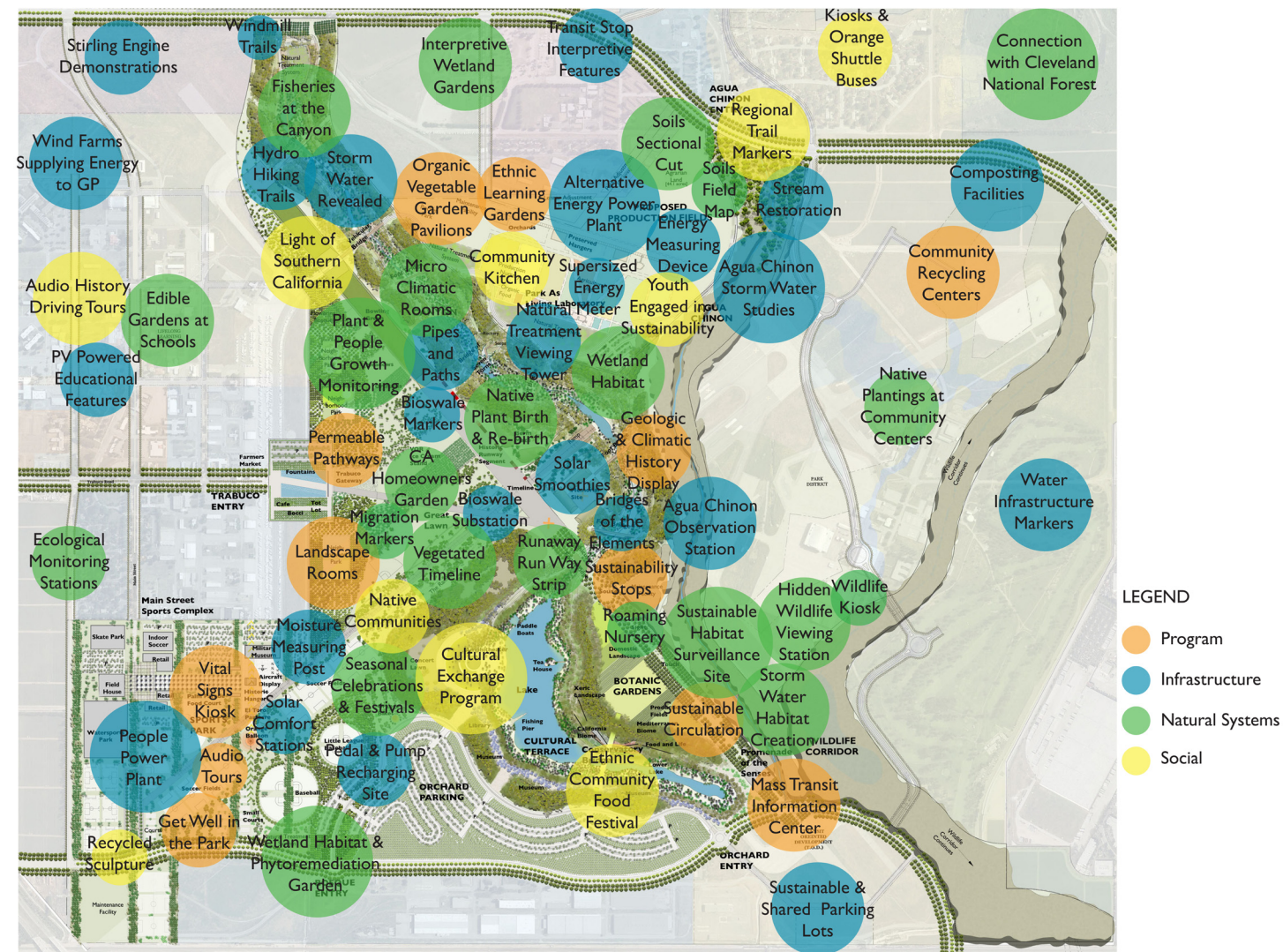


Living Park Diagram



# The Living Park

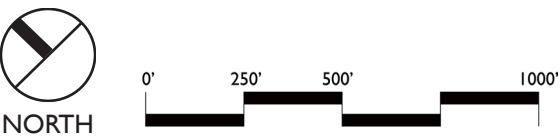
Educating the public about environmental and social sustainability is an important part of the park's mission. Whether focusing on environmental issues or learning about the history of the site, the citizens of Orange County will be able to enjoy a kind of public space where education is approached in a very unique way. Rather than the conventional use of interpretive signage, the park will provide educational experiences by engaging visitors with the creative and innovative projects to address these questions and many more.





# The Living Park

This Living Park will be implemented through the establishment of a Research and Residency Center. This will be a place where artists and designers can collaborate with ecologists, botanists, biologists, social scientists and involved citizenry. Through these collaborations projects will be developed to investigate and research issues such as storm water run-off or alternative energy uses within the park. Social projects might involve making connections between the park and its surrounding neighborhoods. Other opportunities can include investigating the archaeology of the area, major structures in the park, hydrological systems or communications. The work might take the form of prototypes, temporary installations, permanent works or theoretical investigations. The idea is to design a process to engage park visitors in exploring important issues that will define our future.



Sustainability vision with amended overlay proposal.

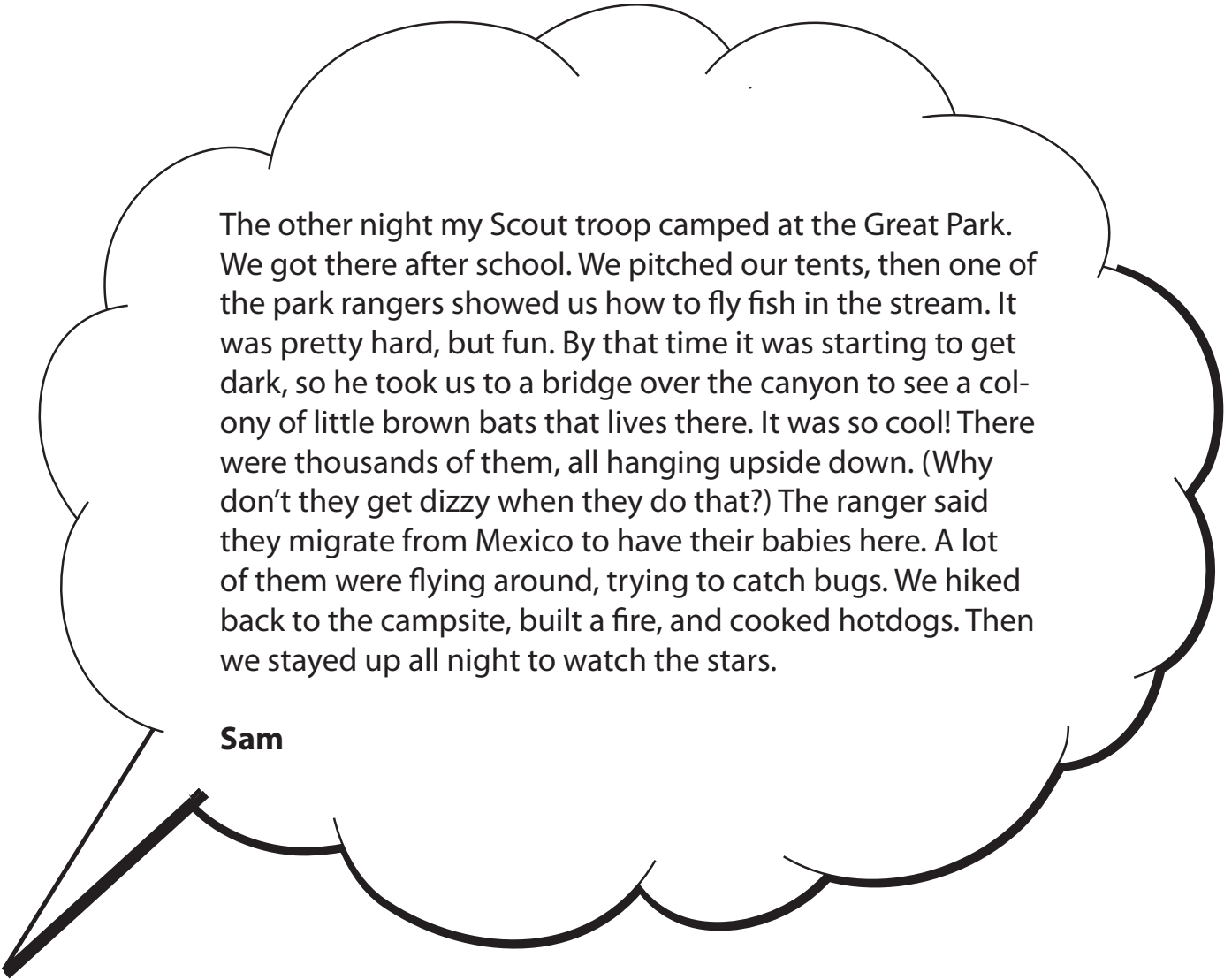


## Ecological Backbone



Laguna Canyon, 2006





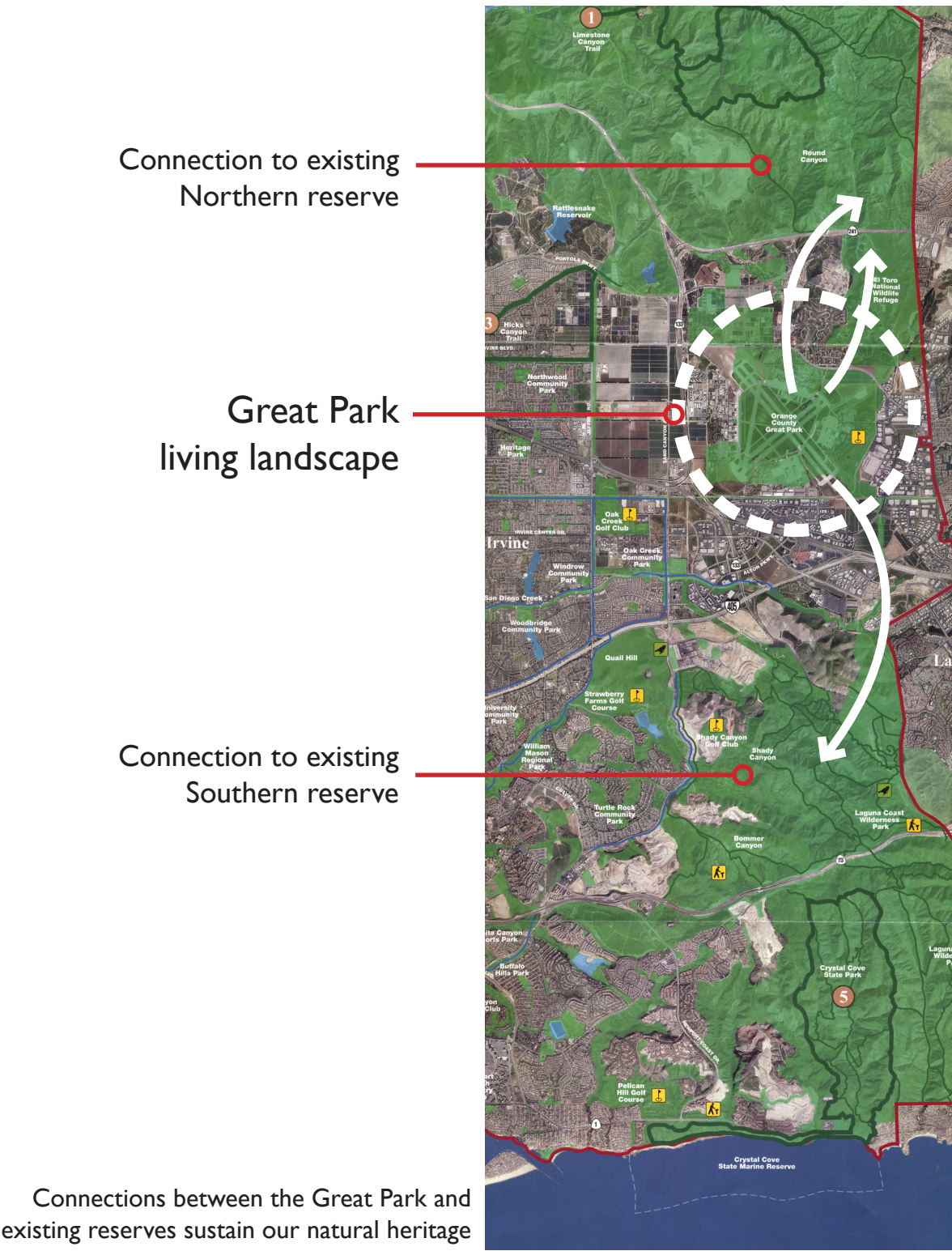
The other night my Scout troop camped at the Great Park. We got there after school. We pitched our tents, then one of the park rangers showed us how to fly fish in the stream. It was pretty hard, but fun. By that time it was starting to get dark, so he took us to a bridge over the canyon to see a colony of little brown bats that lives there. It was so cool! There were thousands of them, all hanging upside down. (Why don't they get dizzy when they do that?) The ranger said they migrate from Mexico to have their babies here. A lot of them were flying around, trying to catch bugs. We hiked back to the campsite, built a fire, and cooked hotdogs. Then we stayed up all night to watch the stars.

**Sam**



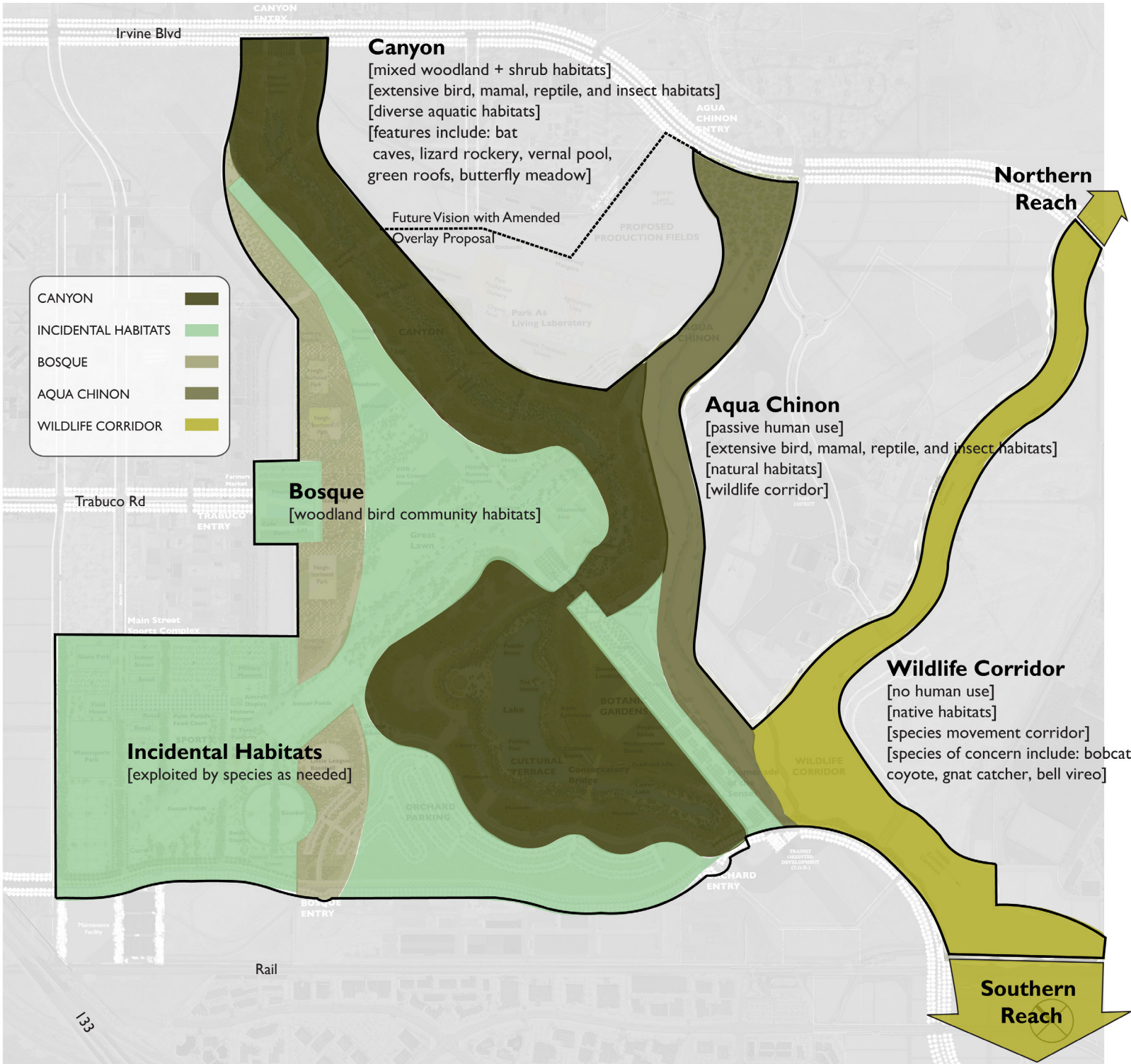
# Ecological Backbone

The Great Park’s ecological backbone will increase the biodiversity value of adjacent preserves, from the mountains to the north to the coastal preserves near Laguna to the south. This will help maintain a healthy natural environment in the region. Natural waterways are reestablished and historic habitats are restored, bringing back Orange County’s natural heritage. The wildlife corridor is completely reserved for wildlife movement and is designed to be inaccessible to human traffic. Agua Chionon, once trapped in a concrete pipe, will again be a living stream. Here trails will enable the public to experience a mosaic of habitats for relaxation and environmental understanding. This stream corridor will change through the seasons as water flows surge and ebb, reintroducing the public to the patterns of our seasonal creeks. The Canyon will be the site of many cultural programs and the widest number of habitat types; each visit will reveal new experiences for the public. Even the more cultural areas of the Great Park have a predominance of native southern California species, ensuring persistence, low management needs, additional wildlife habitat, and an appreciation of the unique landscape of this part of North America.





# Ecological Backbone



Ecological Backbone Diagram

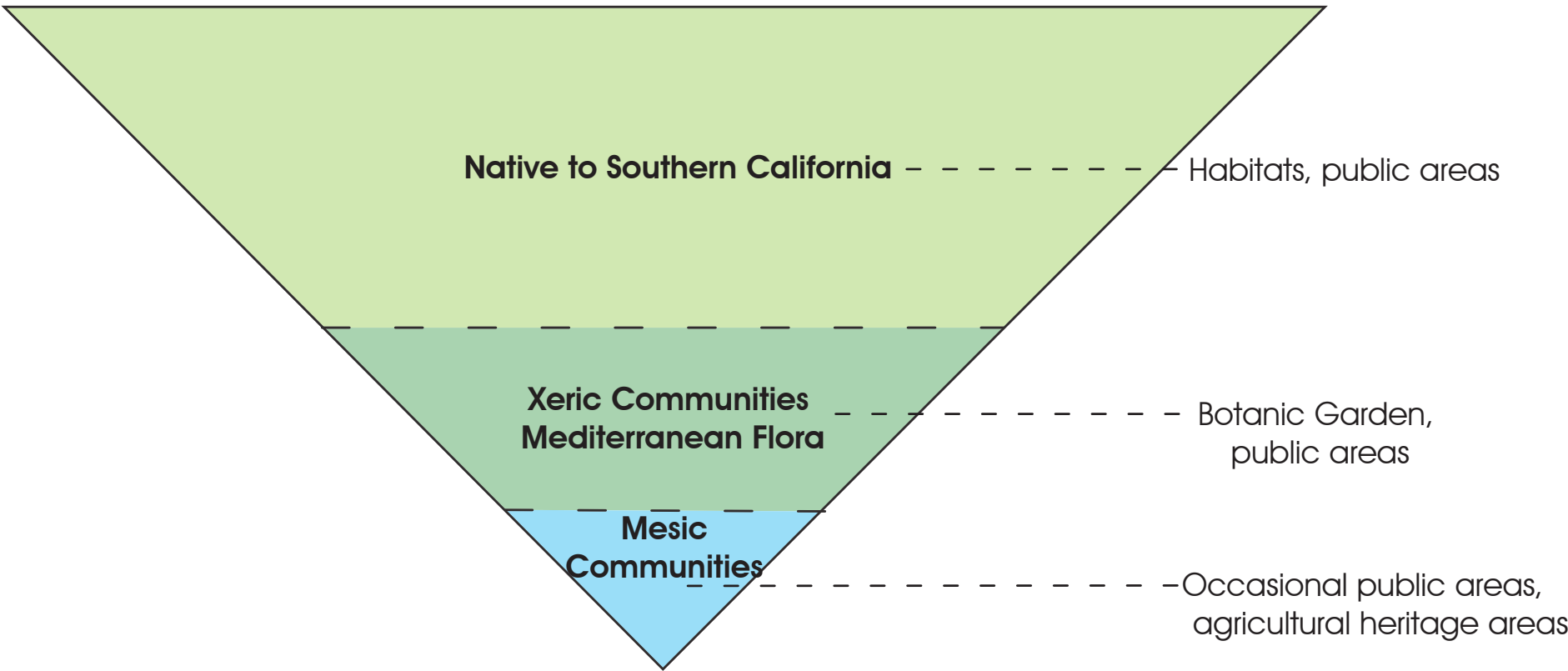
Transforming the sterile expanse of the El Toro airbase into a living landscape is fundamental to the vision of the Great Park. Ecologically complex restored native habitats are found in three major sections of the park—the Wildlife Corridor, Agua Chinon, and the Canyon. Native plant communities are found in other areas as well, including the Botanic Garden. Constructed by following ecological principles and restoration protocols, these habitats will need only modest management as the decades pass. The Wildlife Corridor, off limits to the general public, is reserved for animal movement from the mountains to the sea, helping to build sustainable diversity across Orange County. Agua Chinon also links preserves North to South, but it is crisscrossed by paths so that visitors can enjoy this natural area. Among the palm trees and other plantings in the Canyon are a variety of critical habitats, such as vernal pools that support amphibians, specialized plants, and other species that require standing water in the spring. Hundreds of acres of wildflower meadows, grasslands, oak and walnut woodlands, coastal sage scrub, and varied streamside habitats will support birds, butterflies, and other animals long missing from the site. Incidental habitats will occur in the more culturally oriented park program areas, like in the Bosque and the Fields.



# California Native and California Friendly

One of the sustainability goals of the Great Park is to highlight and restore Southern California’s unique and diverse native vegetation. Major sections of the park contain only native plants, including Aqua Chinon and the Wildlife Corridor. The Canyon is also planted predominantly with native vegetation. Some areas of the park, such as the sports fields, public lawns, and agricultural heritage plantings and potential cultural gardens, contain fewer native species. Overall, the Great Park includes 75 percent native and “California-friendly” non-native plants. California-friendly plants have modest water needs and do not appear on any of the state’s current invasive plant lists. This type of landscape design clearly demonstrates the beauty and value—visually, ecologically, and economically—of using native species or others that are appropriate for the region’s semi-arid climate. The park is a model of wise land use for the 21<sup>st</sup> century, demonstrating how people and nature can live together in a mutually beneficial way.

Great Park Planting Pyramid





Landscape Percentages - Native and California Friendly

Natural		% Native	% Friendly
	AGUA CHINON	100%	100%
	UPPER CANYON	75%	85%
	WILDLIFE CORRIDOR	100%	100%
	(Percentage based on acreage) <b>SUBTOTAL</b>	<b>89%</b>	<b>93%</b>
Cultural	LOWER CANYON	47%	77%
	BOTANICAL GARDEN	40%	65%
	BOSQUE	30%	65%
	FIELDS / GREAT LAWN	22%	54%
	BOWLING GREEN	20%	75%
	SPORTS PARK	15%	30%
	ORCHARD & AGRICULTURAL AREAS	36%	40%
	OTHER SMALL AREAS	24%	68%
	(Percentage based on acreage) <b>SUBTOTAL</b>	<b>33%</b>	<b>59%</b>
		<b>61%</b>	<b>75%</b>



# California Natives



## Coastal Sage Scrub

Coastal Sage Scrub (CSS) is a biologically complex and diverse community that once dominated much of the landscape in Orange County. Today, only 15% of this community remains, as most has been lost to agriculture and urbanization. CSS is typically located on dry slopes to flats from sea level to 3000 feet, and a marked difference occurs between the composition of plants occurring on north versus south facing slopes. This dynamic community tends to be dominated by small to medium-sized drought deciduous shrubs that have adapted various forms of protection to survive the challenging forces of fire, drought, and periodic flooding characteristic of this ecosystem. The selection of plant species will maximize the attraction to animals and emphasize habitat value through dense plantings.



## Grasslands and Meadows Environment

A blend of native grasslands and wildflower meadows will be punctuated by trees, typically oaks, scattered through the landscape. This rare and highly biologically productive environment will provide native wildlife with important nesting and foraging opportunities. Wildflower meadows create a seasonal flowering display, especially during the spring, which will welcome visitors to the Great Park and invoke images of California's past. Due to a long history of disturbance and urban development in these environments, only a fraction of this natural habitat still remains. Drought-tolerant native herbaceous species must be used in planting and special attention will be paid to invertebrate food plant biodiversity, particularly to encourage butterfly diversity. Management is required to regulate habitat change as desired and to continually control invasive species, as these habitats can be sensitive to invasion.



# California Natives



## Woodland Environment

This woodland environment is composed predominantly of oaks mixed with walnuts and madrone, with an understory of shrubs including coffeeberry and laurel sumac. The community is a spatially open to moderately dense forest that sustains a rich diversity of plant and animal species. A wide range of microhabitats are supported as the woodlands provide valuable habitat for foraging and also offer important cover and shelter sites for many different animal species including songbirds and mammals. The underlying land must have complex surface structure, and treatment is needed to create landscapes that are not flat. Diverse native species must be selected to maximize wildlife habitats, and planting design will replicate natural habitats with a complex vertical structure. This community must also be continually monitored and managed for the invasion of alien species.



## Streamside Environments

Streamside environments can be supplied with permanent and/or ephemeral water sources. Many different community types composed of a wide variety of plant species and associated animal species may be found in these environments. Included in this diverse array of communities are riparian forests, freshwater marshes, and ephemeral pools. Riparian woodlands and freshwater marshes are biologically diverse habitats and can be productive and dynamic systems used by a variety of wildlife. Many amphibians and aquatic insects support the Park's food web. Restoration of these habitats includes restoring microhabitat diversity in watercourses and along edges. Plantings must be varied across hydrologic zones and allow for the natural expansion and retreat as water budgets change. Rookeries and islands should be created in the habitats, and invasive species must be monitored and controlled.



# Xeric Landscapes / Cultural Landscapes



## Southern California

Southern California in particular falls within the chapparral biome of the Mediterranean climate zone. Characteristics are mild wet winters with dry, hot summers. This distinct climate pattern is found in five regions of the world making up only 2% of the world's land mass yet contain about 20% of the earth's plant species. Within the matrix of the Great Park one of the goals is to highlight the uniqueness of the vast array of native vegetation. In addition to Coastal Sage Scrub, Grasslands and Meadows, Woodlands and Streamside Environments, additional habitats will be reintroduced to the site. Tecate cypress is a rare southern California mountain native to be incorporated into the design of the park. Another important habitat is the Palm Oasis habitats which attract many wildlife species because of the near permanent water supply. Coniferous forests associated with California coast ranges and mountains of Southern California will also be celebrated.



## Parkscape

The Parkscape further diversifies the Great Park landscape to celebrate the Native, California-friendly and ornamental plant material of the Mediterranean Flora by utilizing a palette that is also drought tolerant and suitable to the Southern California Orange County climate. To build on the City of Irvine's protection of historic windrows that evoke the memory of Orange County's Citrus groves, playfields are defined by windrows of trees and hedges. Adjacent to the sports fields, the Palm Parade marches from the Field House to the Aircraft Display and El Toro Parterre made of a variety of vegetation. Palms and California-friendly trees create shaded spaces for people to stroll and gather along the Promenade of the Senses and on the Cultural Terraces. The Great Lawn and the Bowling Green with Southern California blend turf grass, ornamental and native grasses offer citizens opportunities for cultural events, festivals and general play.



## Xeric Landscapes / Cultural Landscapes



### Orchards, Fields and Community Gardens

Upon arrival in the Great Park from Marine Way, the historic importance of Citrus in Orange County is celebrated in the Orchard Parking. Compatible with the natural landscapes of the Aqua Chinon, Wildlife Corridor and portions of the Canyon; agricultural Orchards, Fields and Community Gardens become habitat extensions for birds, bees and other native pollinators. At the same time, agricultural plant materials benefit from a natural path of many migratory birds and the potential for integrated pest management practices near wildlife corridors and habitat areas located in the Great Park. The Fields give opportunity for farmers and the community to sustain the healthy choice provided by Farmer's Markets and Food to Fork production. Foods grown in close proximity to restaurants and residential areas are a very desirable option. Community Gardens provide an inter-generational bond by joining elders with children to gardens.



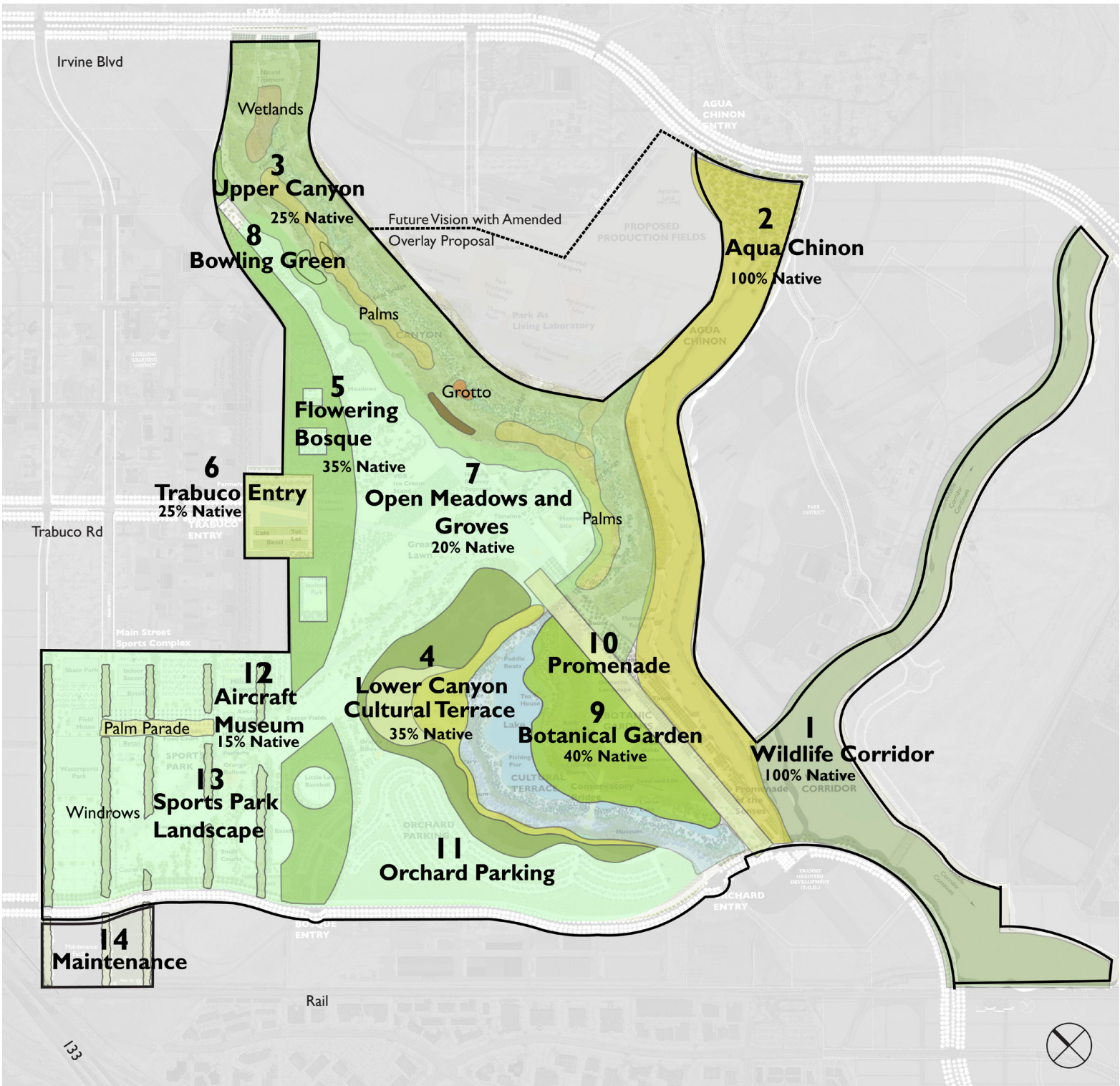
### Open Meadows and Groves

Between the Bosque and the Upper Canyon is the Meadows, where groves of citrus trees, nut and avocado trees celebrate Orange County's agricultural past. An expansive wildflower meadow dotted with lupines and poppies in spring and golden sunflowers in fall is crisscrossed by paths for close-up views of butterflies and songbirds. These pockets of special habitats, ensure the butterflies, moths and skippers have everything they need to to add their beauty to our landscapes. Flowering trees from the Bosque border the area, providing a shady connection with adjacent neighborhoods. A Great Lawn accommodates sunbathers, Frisbee players, and picnickers, in addition to festival and other large public gatherings. The park will also incorporate hedgerows to recreate those that buffer winds essential to the agriculture of the area. This distinctive look will again provide a buffer from the elements, provide shade, and create a strong reminiscent landscape identifiable with Orange County region.



# Vegetation Communities

The Great Park is a landscape of tremendous biodiversity. The park not only creates hundreds of acres of new living space for wildlife, but by connecting existing natural areas it enables plant seeds to disperse and animals to travel. This builds population persistence, genotypic diversity, and secures species sustainability against local disturbances and stresses. The restored native habitats are complemented by many special plantings. The restoration of soils and vegetation will allow natural processes of community development to proceed, adding new species and individuals over the decades in response to changing local physical conditions. The Bosque is an open woodland of flowering trees, lovely in all seasons. Citrus and avocado orchards and wildflower meadows are scattered throughout the park, celebrating the region's agricultural and natural heritage. Among the Canyon's many attractions are a fern grotto, rocky outcrops, and a palm oasis, each representing a unique plant community. A variety of sustainable plantings, including a butterfly garden, grow at the Botanic Garden. People are an integral part of these landscapes, enjoying activities from biking to quiet contemplation.



Vegetation Communities Diagram



## Vegetation Communities

**1 WILDLIFE CORRIDOR** will be predominantly Riparian with Fresh Water Marsh growing in the wetter locations of the corridor. The planting of Coastal Sage Scrub will create a thick low growth creating both a physical and visual barrier to the wildlife corridor.

**2 AGUA CHINON's** natural water channels will be bordered with riparian vegetation and in the wetter locations, Fresh Water Marsh. As the wetter areas become drier landscape zones, the planting transitions into Coastal Sage Scrub and Oak Walnut Woodland.

**3 UPPER CANYON** will have a native backbone, overlaid with special landscape collections: Coastal Sage Scrub, Oak Walnut Woodlands, Riparian, Fresh Water Marsh, Vernal Pools, Wildflower Meadows, and Oak Grassland Savannah. The special collection will include: Palm Grove, Fern Grotto, Coniferous Forest, and Tecate Cypress stands.

**4 LOWER CANYON** will be a mixture of California Native and California Friendly plant material. Wildflower Meadows will be incorporated on the Cultural Terrace berms. Oak Walnut Woodland planting will be located on berms between the Great Lawn and the Lake. A

palm collection will be planted at the lakes edge and high canopy flowering shade trees on the Terrace.

**5 BOSQUE** planting will include a mixture of California Native and California Friendly plant material, predominantly flowering. The plant selection will provide seasonal interest through-out the year.

**6 TRABUCO ENTRY** has a large hedge of California Bay (Umbelluaria californica) with high canopy shade trees in the background in the plaza. Mixture of California Natives and California Friendly Plant Palette.

**7 OPEN MEADOWS AND GROVE** will be planted with tree groves and meadows type vegetation will be designed with clearly defined planter bed edges.

**8 BOWLING GREEN** will be planted with tree groves and meadow type of vegetation will be designed with clearly defined planter bed edges. California Natives mixed with California Friendly, tree glove planting, real and/or synthetic turf.

**9 BOTANICAL GARDEN** landscape planting palette will be developed to support the special programs and plant collections for the Botanical Gardens.

**10 PROMENADE** is also known as the “Avenue of the Senses” with a plant palette is to support the formality of the space. The planting will be a mixture of California Native and California Friendly plant material and will be carefully selected to enhance the senses. It will also include high limb canopy trees for shade.

**11 ORCHARD PARKING** will include the Valencia Orange, Navel Orange, a small planting of the Spanish Orange, which was the first orange to be planted in Southern California; and citrus varieties, such as, grapefruit, tangerines, lemons, tangelos, and other types.

**12 AIRCRAFT MUSEUM** will be planted with California Friendly Plant Material, a Palm Parade planting, and foundation planting around structures.

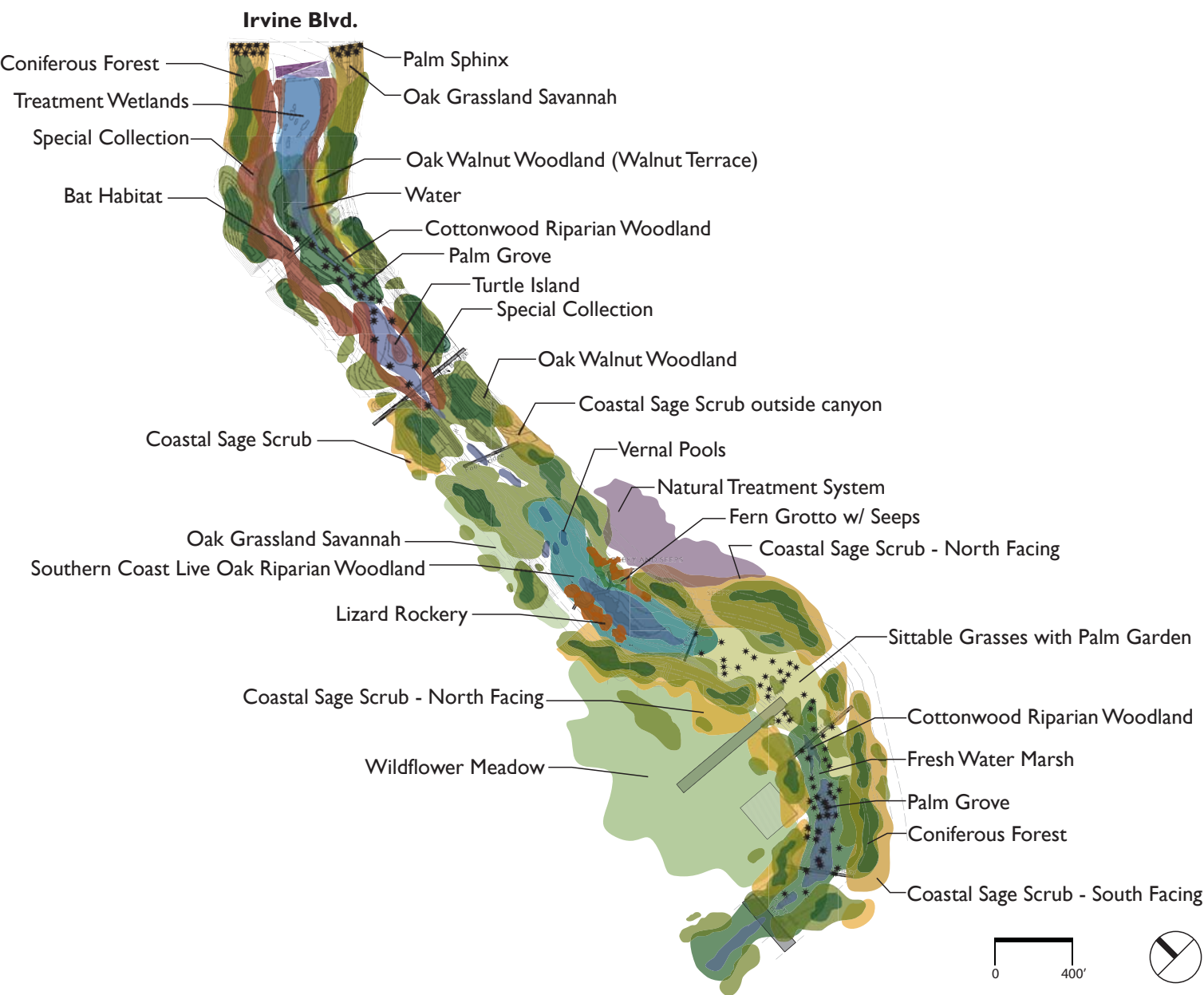
**13 SPORTS PARK** playing fields will be planted with real and synthetic turf. Windrows with different tree selection will be planted through-out the Sports Park. California Natives mixed with California Friendly, windrows planting, real and synthetic turf.

**14 MAINTENANCE AREA** will require tolerance from many maintenance activities. California Natives mixed with California Friendly plant palette.



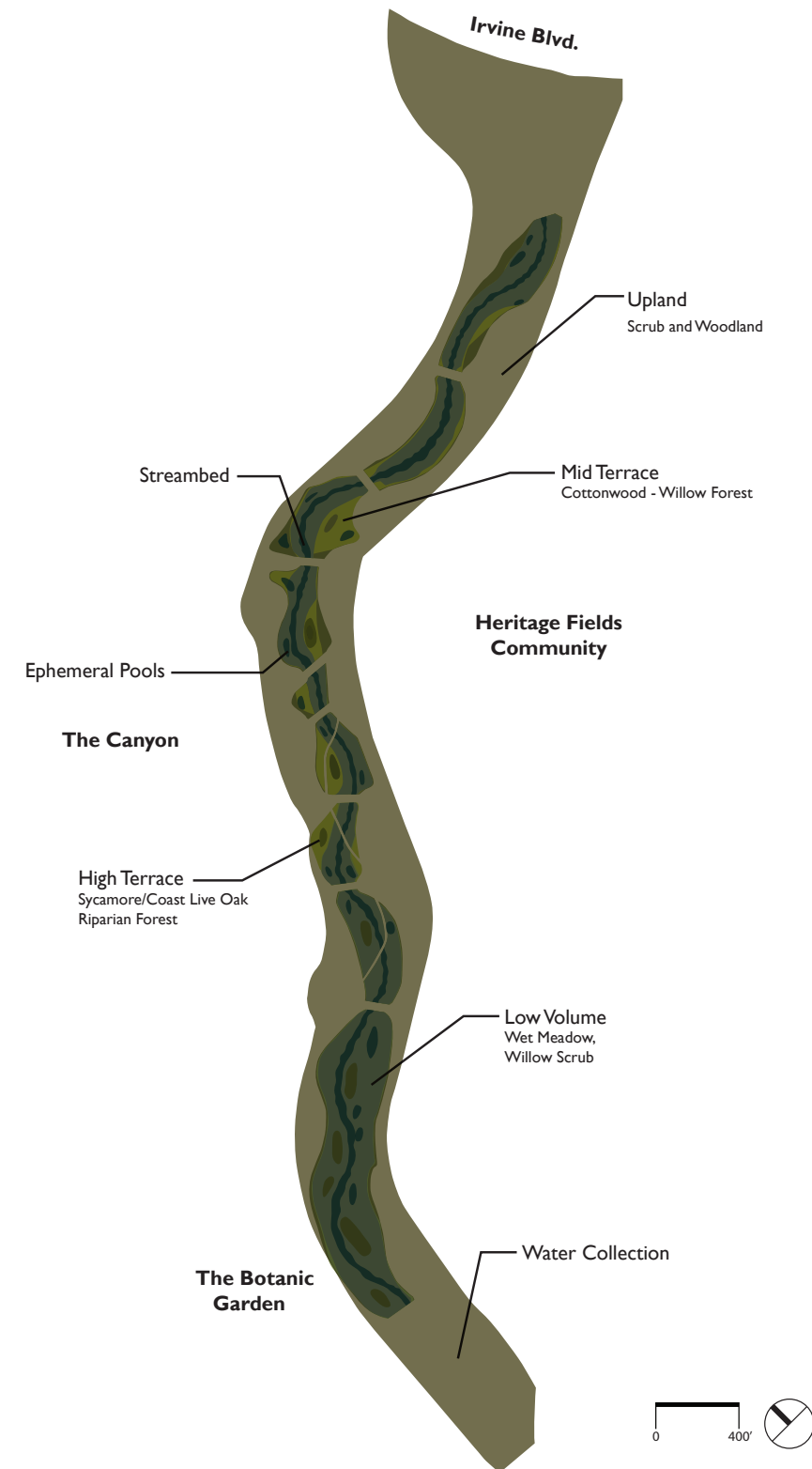
# The Canyon

This sinuous 60-foot deep canyon is the park’s largest new feature, replacing the current flat topography of the air base. It is roughly two miles in length opening up in the Lake at Cultural Terrace. The Canyon also acts as a window into the Park with views afforded from Marine Way on the Northern end and Irvine Boulevard at the South. Many trails for hikers of all abilities and cyclists meander through an oasis of new vegetation, including native habitats and palm groves that serve conservation interests. Each turn on the trails offers new experiences, a rocky outcrop with lizard habitats, a turtle island in the new water feature, a fern grotto, or varied slope shapes. Bridges cross the Canyon bring pedestrian and vehicle access. The upper Canyon is a quiet retreat, while the lower Canyon holds the extensive cultural terrace and new botanic garden. The Canyon is a magnet for the public with opportunities for everyone with interests in nature, education or performances.





# Agua Chinon



This stream corridor, long buried at El Toro Air Base, will be uncovered and reconstructed to harbor native habitats while supporting human activities. The natural water channels will be bordered with riparian vegetation. Engineered features will slow water flows, serving conservation needs. Restored side slopes will harbor native vegetation of shady oaks and walnuts; the dryer soils will have wildflower meadows and coastal sage scrub. This stream corridor will attract dozens of native bird species, and be the site of recreation trails and education programs for the wide public. The visual experience of Agua Chinon will change from season to season and year to year. Access for all is available through trails, and many stops on the Great Park's transportation system.



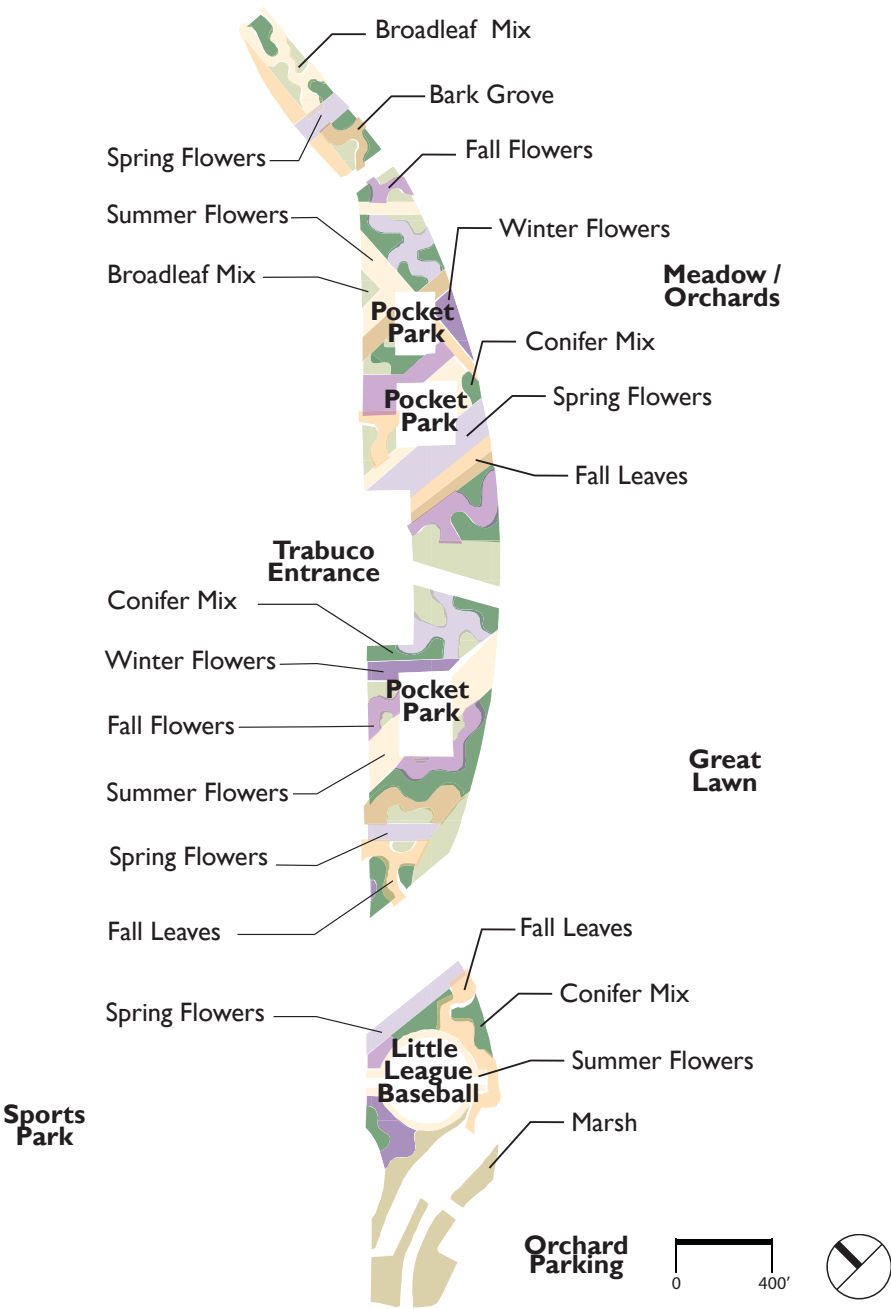
# Wildlife Corridor

Planning for the wildlife corridor involves close collaboration among ecologists, civil engineers, and hydrologists. This sensitive parcel of the Great Park complex is dedicated to enhancing movement of animals across the park lands, joining the mountain reserves to the North and the coastal reserves to the South. No human access is permitted. Plantings must allow movement across this space. Water is supplied by Borrego Creek and by on-site supplies. Fine grading plans for this site have been advanced as construction of this side of the park is to begin in 2007. After grading and water systems have been reviewed and approved by regulatory agencies, final details of the planting design will be developed. The basic plant communities and living barriers (keeping animals in and people out!) are detailed on the vegetation diagram to the right.



# The Bosque

The Great Park Bosque forms the western edge of the park. Housing the Trabuco Road entrance of the Park, this will be one of the first landscapes which will introduce visitors to the sustainability goals of The Great Park. The species included in the Bosque will be a blend of predominantly native and non-invasive California friendly flowering trees with a mixture of vegetated under story and open areas. These will offer opportunities for wildlife viewing, education on the benefits of using sustainable trees in the home landscape, quiet reflection, picnics, and casual strolling. The Bosque will also offer visitors a shady respite, a place to meet up with friends and a launching site to explore the rest of The Great Park.





## Cultural Heritage



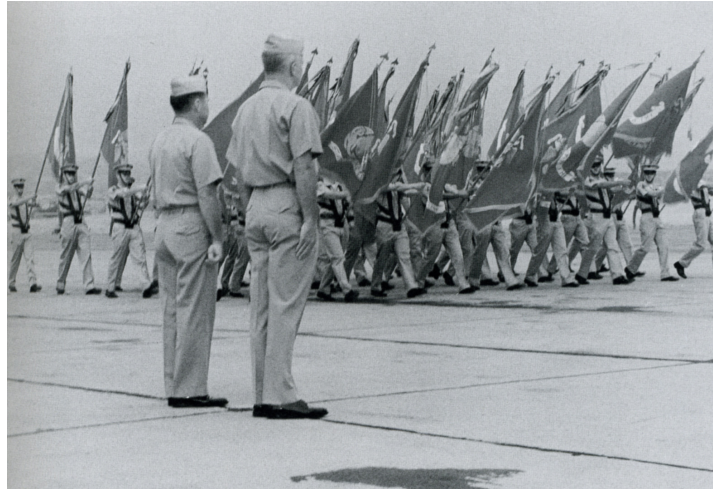
Citrus Orchard and El Toro Airfield

I took a train up from San Diego this morning – I'm hoping I can get around the park without my car. I'm meeting with my friend Jim. We were stationed here in the 60's. We've been planning to meet up and see the Aircraft Museum for months and I'm hoping to see the old Marauders and maybe a Chinook. Seeing the old control tower brings back memories. We spent a lot of time there drinking coffee and shootin' the bull. It's kinda nice being back here after all these years.

**Dennis and Jim**



# Preservation

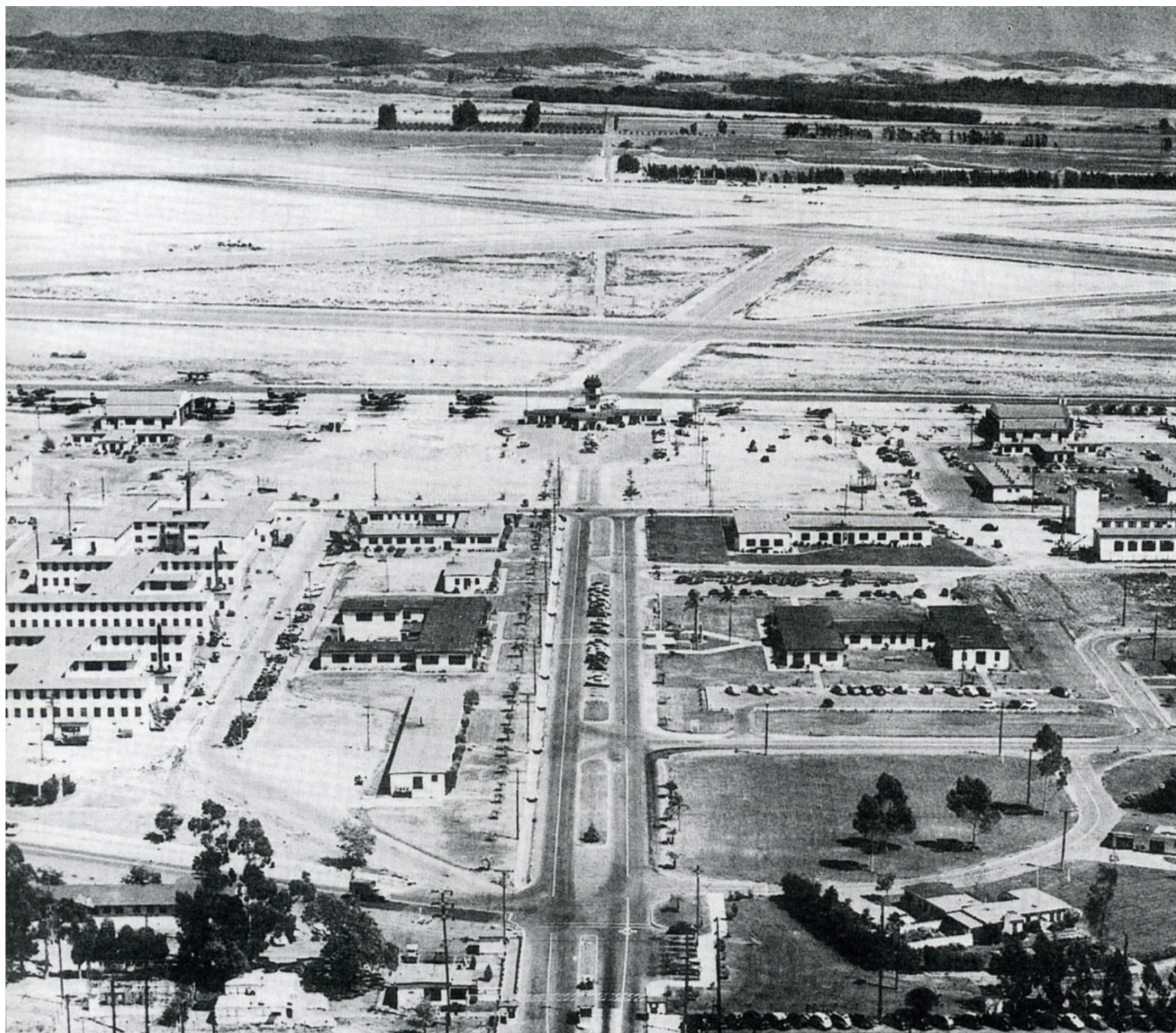


Early El Toro





## Preservation

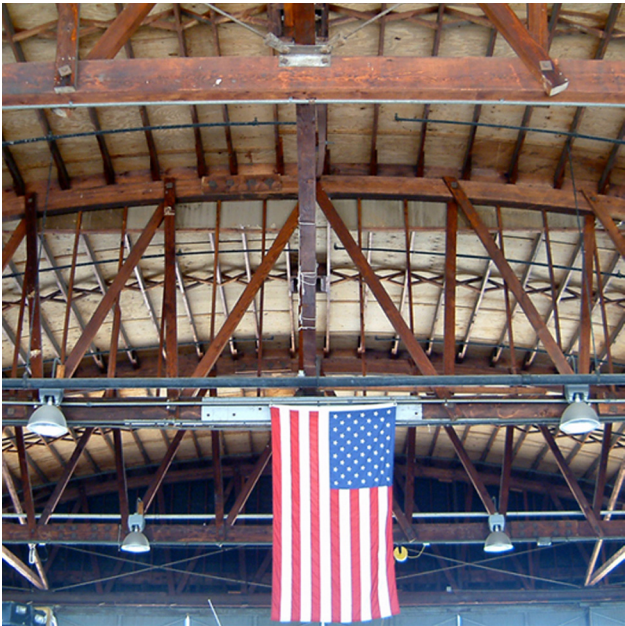


Early El Toro

Decades of service to the nation by the Marine Corps are honored here. Visitors relive history by walking among actual components of the El Toro Air Airbase, which stand as tributes. A central section and the two end points of the great two-mile-long, concrete runway remain. Its entire footprint remains distinct, an open space at the park's core that preserves a sense of the base's vast scale. Specific to the El Toro occupation of this land, a timeline on the historic taxiway bisecting the site includes the commemoration of major moments in the history of the base. The runway markers, original hangars, historic planes, and museum exhibits evoke the human dramas that played out during the base's long life. Within the Sports Park there is the Palm Parade Ground for special events and displays, keeping the memorial program fresh and compelling. The memorial site occupies an area of preserved concrete at the central crossing point of the runway marking a contemplative space to reflect on the sacrifices that have anchored our freedoms. This contemplative memorial pays homage to the servicemen and women, refugees, and local citizens who all shared this space to build the American future.



# Preservation



1



2



3



4



5



6



7



8

Preservation Site Photos

- 1. Redwood
- 2. Control Tower
- 3. Ammunition Bunker
- 4. VOR Facility
- 5. Iconic Base Graphics + Facilities
- 6. Elements within Ammended Overlay Land
- 7. Hangar 244
- 8. Gymnasium Mural



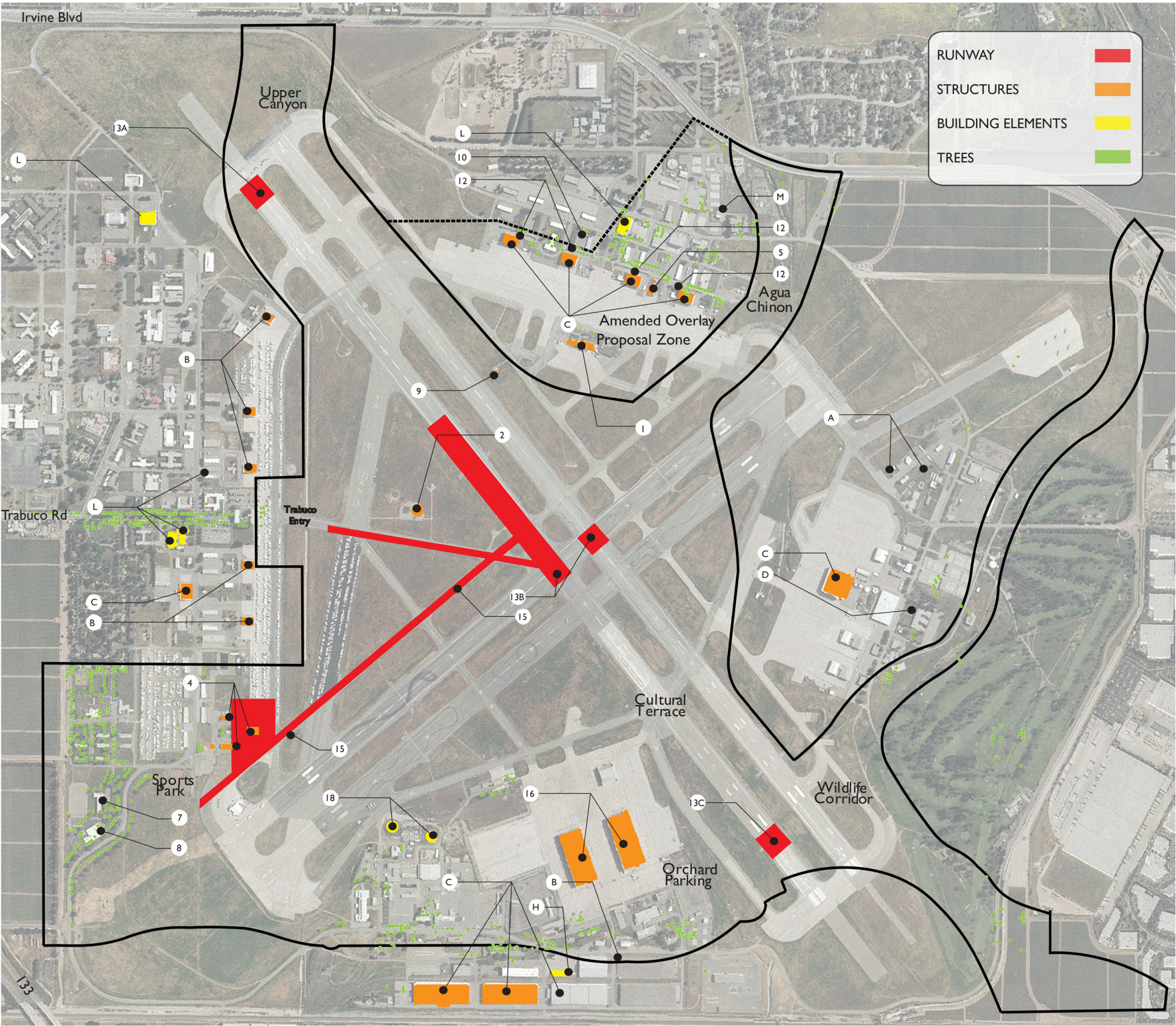
Park Property / Amended Overlay Area

- Structures to Preserve In-Situation:  
1 Control Tower (Building #378)  
2 V.O.R. (VHF Omni-directional Radio Range)  
3 Hangars (#605, #606, #114, #115)  
4 Hangar and Adjacent Buildings (#242, #244, #245)  
5 Wind Tunnel Machine Building (#716)  
6 Installations Department Building (#368)  
7 B.O.Q. (#375)  
8 Commissioned Officer's Club (#791)  
9 Red/White Checkerboard Units (#860, #861, #862)  
10 Steel Tower (Building #665)  
11 Wood Gazebo  
12 Four (4) Retaining Walls Behind Hangars
- Runway Retention:  
13 Runway Retention  
14 Corridor Retention  
15 Existing Hardscape to be Preserved
- Structures with Wood Salvage Potential:  
16 Buildings: #297, #296
- Historic Airbase Elements to Warehouse for Future Use:  
17 Emergency Fireboxes  
18 Water Tanks

Off Park Property

- Structures to Preserve:  
A Wooden Towers
- Structures for Wood Salvage:  
B Wood Truss, Internal Support and Hangar Doors  
Buildings: #2, #5, #7, #10, #289, #624  
Buildings: #49, #317, #318, #319, #360, #371
- Historic Airbase Elements to Warehouse for Future Use:  
D HQ Squadron Flagpoles  
E Tank Track Fencing (adjacent to #360)  
F Emergency Fireboxes  
G Runway Signage and Lighting  
H Interior Signage and Lights (Building #359)  
K Exterior Murals  
L Interior Murals  
M Rotating Light Beacon  
N Quonzet Hut

NOTE: Subject to negotiation and agreement between the city and Heritage Fields.



Preservation Plan



# Preserving the Open Space Corridor



Open Space Corridor Diagram



## Preserving the Open Space Corridor



Bowling Green

The preservation of an open space corridor in the place of one of the colossal north-south runways of the airbase reserves in the park a sense of the expansiveness that was once predominant in Orange County. Focusing on the vistas at each end, the north of this axis delivers the Santa Ana Mountains, while the Southern end looks toward the coast, framing the San Joaquin Hills. Within the park, these views terminate a processional spanning the entire site, connecting adjacent neighborhoods with a programmed corridor of open space. At one end is an enormous open lawn called the Bowling Green, and at the other is a series of engaging plazas called the Promenade of the Senses, each designed to stimulate a different sense – sight, touch, sound, smell, and taste.



# Preserving History



Living Artifacts



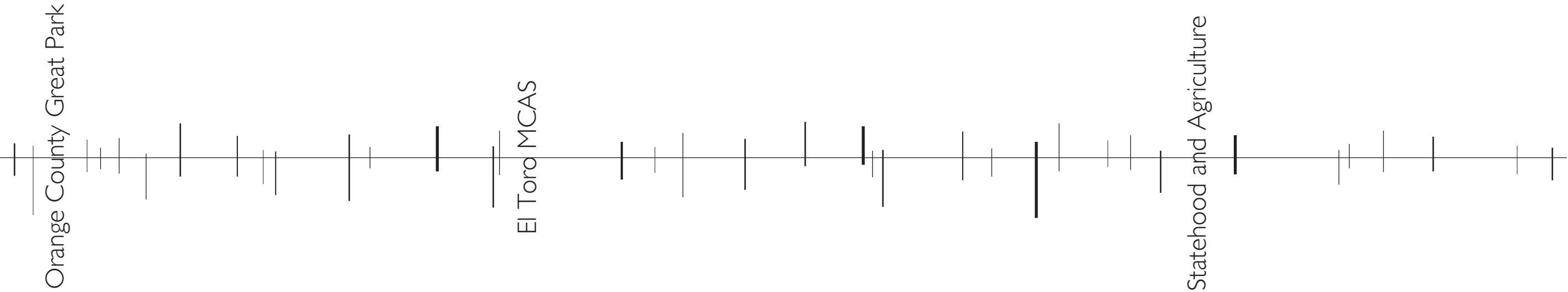
El Toro Recycling



The Great Picture



The Oral History Project



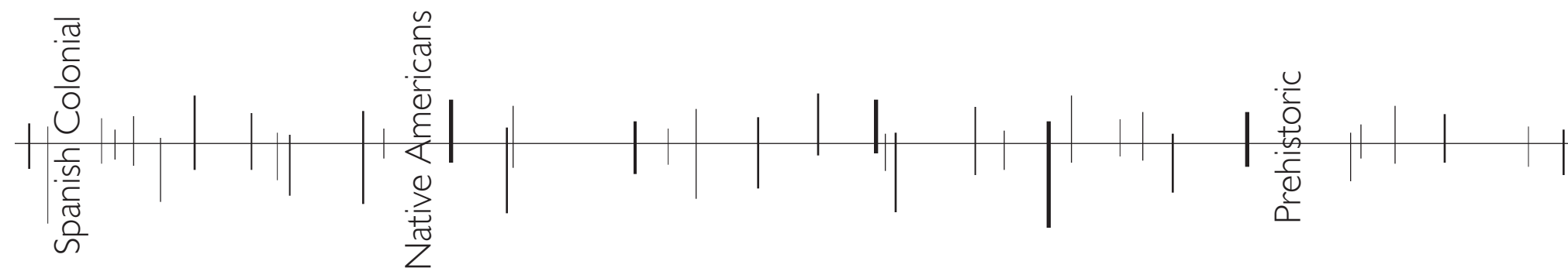


## Crossing Space and Time



The Timeline

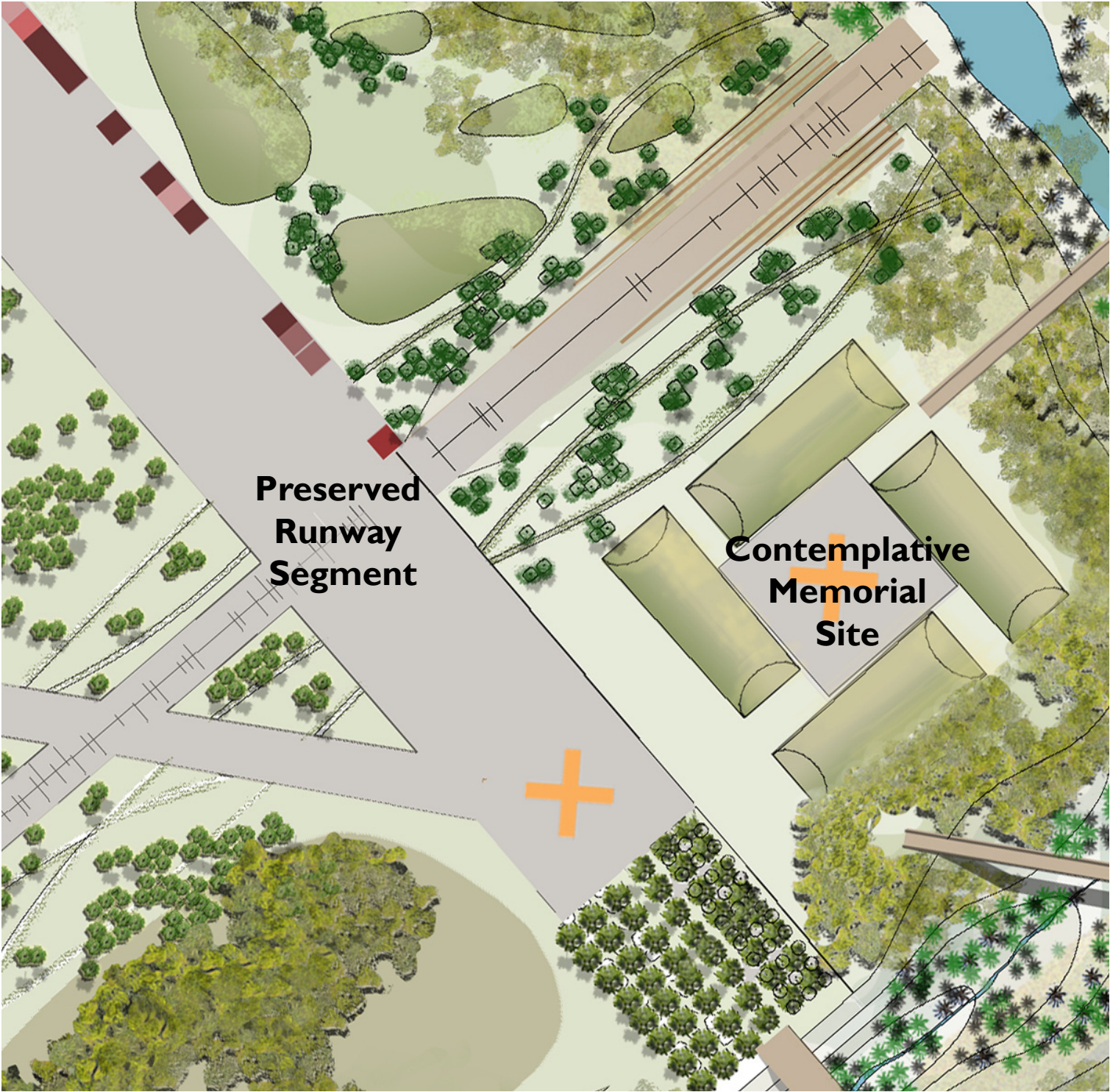
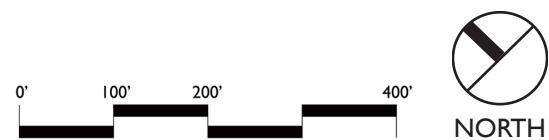
The Great Park site has a long, natural and cultural history. The site over time is commemorated in a walkable Timeline, a landscape art feature that marks the key epochs and events that have affected this landscape. Running East to West along one of the original taxiways of the El Toro airfield, the Timeline forms a central spine connecting major areas of the park. Beginning at the bottom of the Canyon, it crosses El Toro's major runway, extending into the Sports Park. From the geologic events that shaped this land and the Native Americans who were its first inhabitants, the timeline takes us through the Spanish colonial period, through statehood and the agricultural heritage, through the military era, into contemporary culture and the construction of the Great Park. By honoring the people who have lived and worked here, we build upon the past to create a new future for Orange County.





# Memorial Site

This commemorative and contemplative space at the geographical center of the site is reserved for those who served their country and those who supported them. The memorial site is formed at the intersection of the former main runways. A preserved square of the original runway concrete – 240' x 240' - more than an acre in size, is bounded by earthen berms reminiscent of the Quonset huts and ammunition bunkers typical of the base. In preserving this moment with a physical space, the convergence of lives of those who served are to be commemorated. The history of these men and women, and the families and communities from Orange County will be honored.



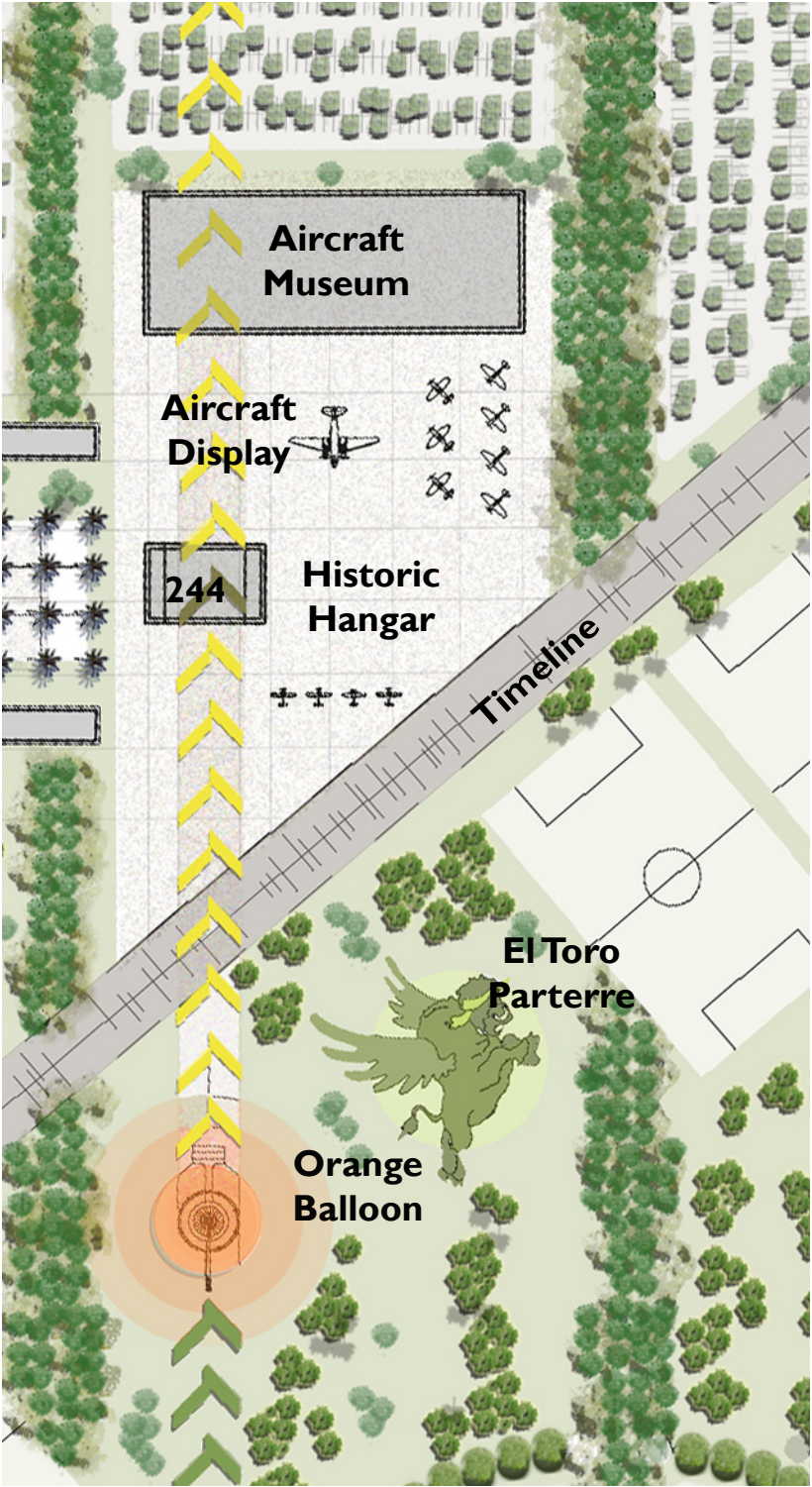
Memorial Plan Enlargement



# Aircraft Museum



Hangar 244



Aircraft Museum Plan Enlargement



Hangar 244, a 1944 aircraft hangar which was later used by the Marines as the El Toro Museum will be preserved and used again as a military museum and site for displaying an aircraft collection.

This hangar will be restored to house a collection of aircraft of the like that flew from the base and will be collected for display and interpretation on the tarmac outside hangar 244. This will be the site for the aircraft display, recalling the history of flights, their crews, and their missions. Nearby another structure will be constructed to serve as a support museum to house a military museum dealing with issues of military history, war and peace. The museum anchors the Timeline, marking history and linking the site to contemporary culture.

For a first-hand experience of aviation, the Orange Balloon will be located adjacent to the museum site, giving park visitors a bird's eye view. At its height of 500', the Balloon will offer views of as much as 16 miles in all directions. It will go up early in the construction process and become an icon for the park, serving as an early visitor center, and providing a platform from which to witness progress. From almost anywhere in the County, the Park will be visible.





## A Park for Everyone

Un parque para todos

一座大眾的公園

Un parc pour tout le monde

Công viên

모두를 위한 공원

A park for everyone

एक पार्क सबके लिए

Een parc voor iedereen

פארק לכל אחד

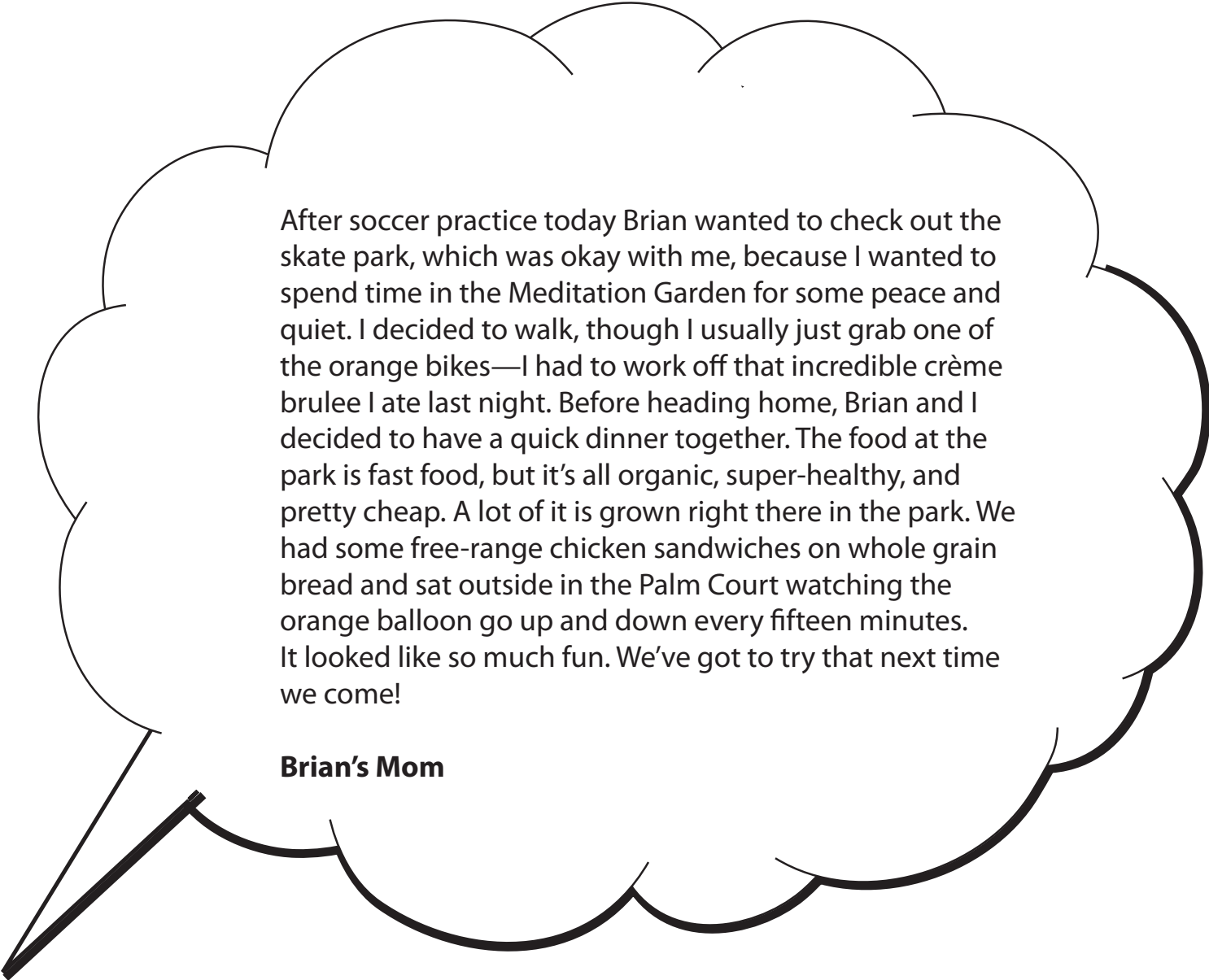
Ein park für jeder

みんなの公園

En parkera för alla

Un parco per tutti





After soccer practice today Brian wanted to check out the skate park, which was okay with me, because I wanted to spend time in the Meditation Garden for some peace and quiet. I decided to walk, though I usually just grab one of the orange bikes—I had to work off that incredible crème brulee I ate last night. Before heading home, Brian and I decided to have a quick dinner together. The food at the park is fast food, but it's all organic, super-healthy, and pretty cheap. A lot of it is grown right there in the park. We had some free-range chicken sandwiches on whole grain bread and sat outside in the Palm Court watching the orange balloon go up and down every fifteen minutes. It looked like so much fun. We've got to try that next time we come!

**Brian's Mom**



# Public Participation

The public has played a major role in creating the Great Park. During the Master Plan phase, three intensive sessions were held with stakeholder groups, including veterans, environmental groups, and artists. As a result, the Great Park truly is a park for everyone, reflecting the interests, values, and backgrounds of all the citizens of Orange County. Museums, agricultural plantings, and educational programs honor the people who have lived and worked on this land in the past. The El Toro military airfield is commemorated with historic planes, exhibits, a contemplative memorial, and the stories of the men and women who once served here. A variety of park programs, from nature trails to public festivals, celebrate the area's rich diversity of communities and cultures.

A public participation campaign to view and comment on the plan was launched October 14, 2006 and conducted through November 2, 2006. The vision for the 1,347-acre park was displayed on an 80-foot-by-80-foot floor map of the park plan spread across the quad of Irvine City Hall. People walked around and on the Great Park Preliminary Master Plan map which was about the size of a movie theater screen. Public comments were collected and reviewed by the Great Park Corporation and the Great Park Design Studio.



Preliminary Master Plan Exhibit





# Brainstorming Ideas

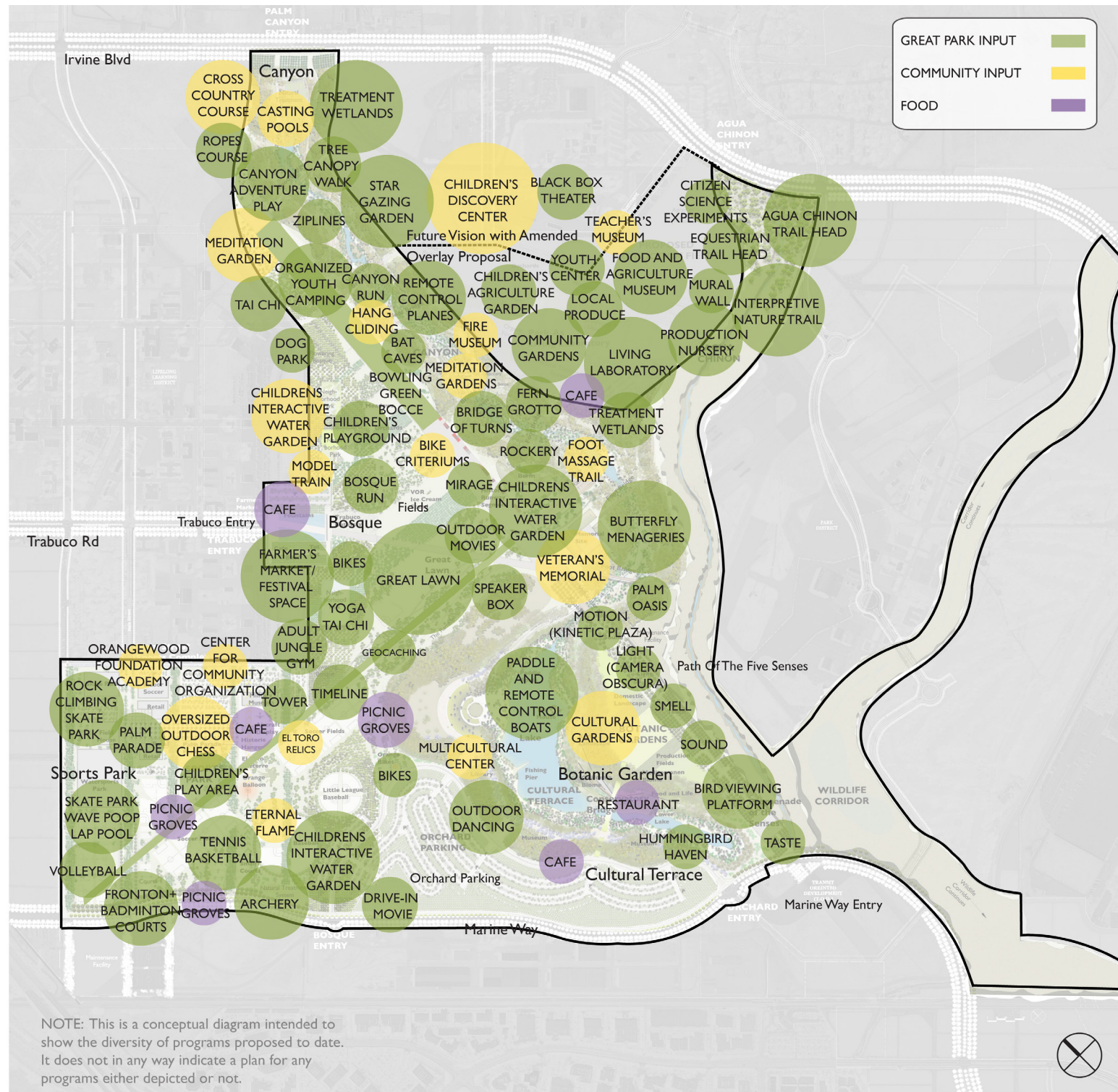


Public Participation Photos

- Integrity
- Authenticity
- Relevant
- History, Ongoing Layers, Future
- Subtlety
- Destination
- Destination for Whom?
- New Paradigm
- Different Local Park
- Fusion of Art and Science
- Not Just a Pretty Place
- Inherent Publicness /Civic Place
- Foster Community
- Rainbow/Diversity
- Informal
- Sustainability
- Arrival
- Understanding Sustainability
- Concerts and Events
- Inspires, Models, Teaches
- Discovery
- New
- Forward Looking
- 21st Century Park
- Place to “Hang Out”
- Social Gathering Space
- Not Overly Manicured
- A Social Space that Explores Health
- Human Cultural and Natural Landscape of Southern California
- Building on Past for Healthier Tomorrow
- Celebrating All Aspects of Past
- Agricultural Heritage
- Military History
- Native American Heritage
- Site History
- Personal space Between the Public Realm
- Entry
- Park Sustainability is One Part
- Sports



## Preliminary Park Program Opportunities



## ACTIVITIES

## Upper Canyon

- Palm oasis
- Natural treatment wetlands
- Fly fishing pools
- Organized camping
- Cross country course
- Ropes course
- Ziplines
- Tree canopy walk
- Meditation gardens
- Stargazing garden
- Canyon run
- Bat caves
- Fern grotto
- Rockery
- Birdwatching
- Butterfly watching
- Foot massage trail
- Hiking trails
- Equestrian trails
- Biking trails

## Lower Canyon

- Palm oasis
- Lake
- Paddleboats and rowboats
- Remote-control boats
- Jetty
- Island tea house
- Meadow
- Cultural Terrace
- Botanic Garden

### Park Program Opportunities Diagram



# Preliminary Park Program Opportunities

**Promenade**

Interactive features: sight, sound, touch, smell, taste

**Cultural Terrace / Lower Canyon**

Museums  
Library  
Hummingbird haven  
Outdoor dancing  
Café  
Shade Trees

**Botanical Garden**

Conservatory  
Visitor center  
Garden trails  
California native gardens  
Food and health gardens  
Home demonstration gardens  
Nature discovery gardens  
Guided tours  
Café  
Gift shop  
Indoor theater  
Exhibits  
Galas  
Festivals  
Citizen science experiments  
Workshops and classes

**Open Space Corridor**

Bowling Green  
Bocce court  
Preserved runway

**Living Park**

Think tank nature center  
Natural treatment wetlands  
Organic farm fields  
Production nursery  
Children's discovery center  
Community gardens  
Children's agriculture garden  
Food and agriculture museum  
Museum of Fire  
Mural wall  
Youth center  
Teacher's museum  
Citizen science experiments  
Remote-control planes  
Archery  
Black box theater

**Agua Chinon**

Daylighted stream  
Flood plains  
Vernal pools  
Wildlife habitat  
Nature trails  
Equestrian trail  
Bird viewing platform

**Wildlife Corridor**

Upland habitat  
Wetland habitat  
Wildlife movement

**Aircraft Museum**

Restored 1944 hangar  
Historic aircraft  
El Toro visitors center and registry  
El Toro bull  
Eternal flame  
El Toro Timeline  
Oral History Project

**Great Park Balloon**

500' observation platform

**Sports Park**

Main Street sports complex  
Sport fields and courts  
Rock climbing  
Skate park  
Palm Parade Food Court  
Picnic groves  
Outdoor chess  
Children's play area  
Children's interactive water garden

**The Linear Ramble**

**Trabuco Entry**

Farmers market  
Great fountain  
Shade trees  
Tot lot  
Outdoor cafe  
Moveable seating  
Park shuttle  
Bike station  
The Great Gate

**Open Meadows and Grove**

Citrus, nut and avocado orchards  
Great Lawn  
Public festivals  
Picnic groves  
Contemplative veteran's memorial  
Children's interactive water garden  
Outdoor movies  
Speaker box

**Bosque**

Pocket parks  
Dog park  
Children's interactive water garden  
Model trains  
Bosque run  
Exercise circuit  
Yoga  
Tai chi  
Adult jungle gym  
Fruit and nut trees

\* Some aspects of these programs are dependent on the realization of the proposed Amended Overlay Plan.



# Park Areas

The center of the park will be largely an open area, with the heart of the park being free of major structures. The heart of the park is in fact a big open space, harkening the historic roots of Orange County. The fields will have a great lawn of 60 acres or more, an area which will be able to accommodate large events.

Adjacent to the Fields and open areas are the neighborhood edges of the active park, consisting of the Bosque and the Sports Park.

Along the runway alignments is an open corridor running the entire length of the site. It will accommodate a right of way for the future fixed guideway transit system which will run along this corridor. This will provide an important connection between the park and the future Great Park train station, within the transit oriented development.

The Canyon is the primary topographic feature of the park, occupying the center and extending across the site. The Canyon combines the natural and wildlife areas of the site – consisting of the Agua Chinon corridor and the Wildlife corridor - with the cultural programs – consisting of the lower canyon and the Cultural Terrace.

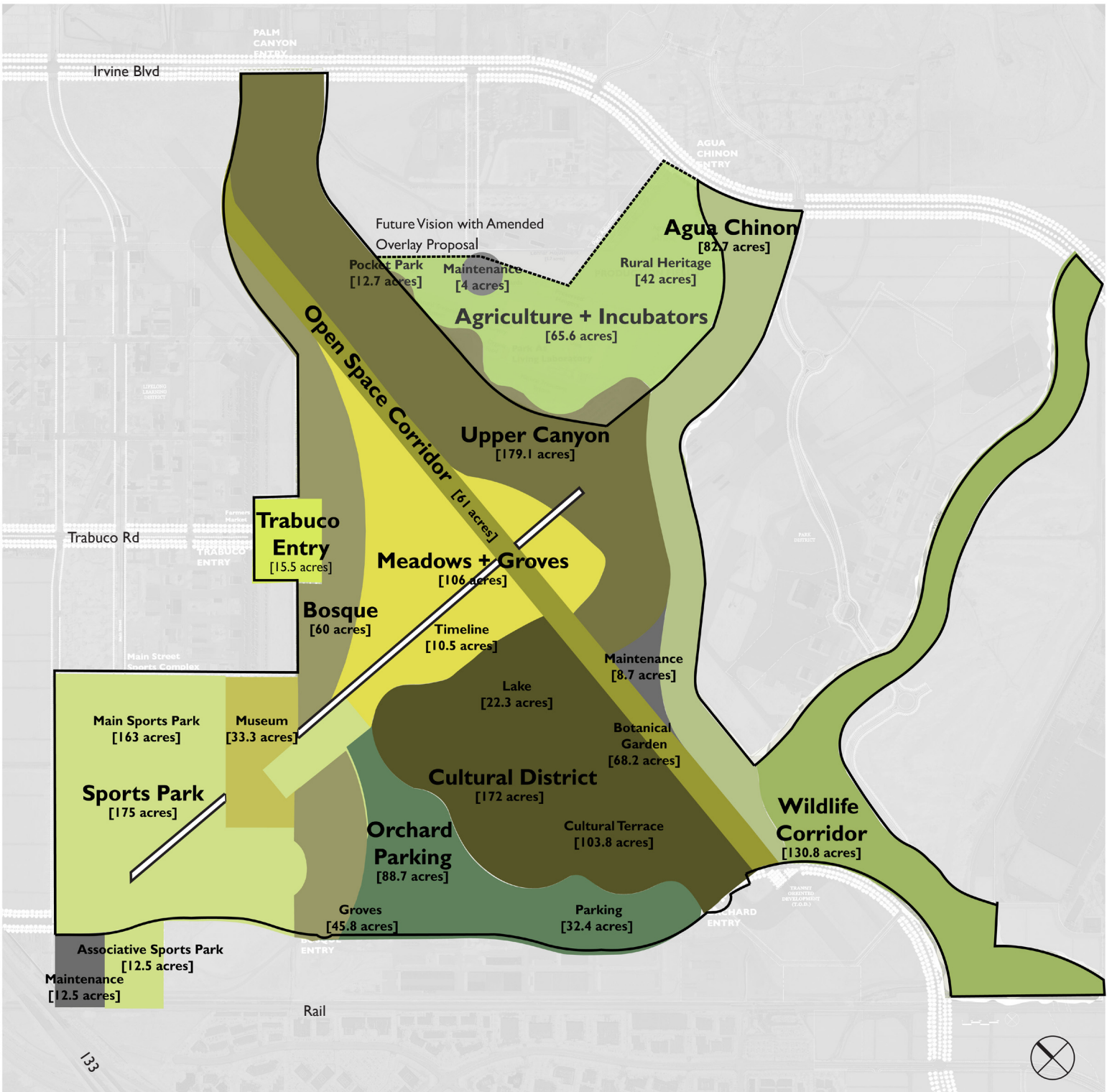


Park Diagram



# Park Areas

KEY:	
Orchad Parking [88.7 acres]	
Groves 45.8 acres	
Parking 32.4 acres	
Cultural District [172 acres]	
Lake 22.3 acres	
Cultural Terrace 103.8 acres	
Botanical Garden 68.2 acres	
Sports Park [175 acres]	
Main Sports Park 163 acres	
Associative Sports Park 12.5 acres	
Meadows + Groves [106 acres]	
Agriculture + Incubators [65 acres]	
Agricultural / Rural Heritage 42 acres	
Pocket Park 12.7 acres	
Maintenance [25 acres]	
Maintenance 8.7 acres	
Central Maintenance 12.5 acres	
Maintenance 4 acres	
Museum [33.3 acres]	
Timeline [10.5 acres]	
Rural Heritage [42 acres]	
Wildlife Corridor [130.8 acres]	
Agua Chinon [82.7 acres]	
Upper Canyon [179.1 acres]	
Trabuco Entry [15.5 acres]	
Bosque [60 acres]	
Open Space Corridor [61 acres]	



Park Areas Diagram

Total acreage is dependent on boundary verification.



Dear Mom,

I went to the Mehregan Festival yesterday in the huge meadow area of the new Orange County Great Park. More than 25,000 people were there! School has been great, but I've been a little homesick. However, all the Persian food made me feel like I was back in Iran. There were scores of colorful tables covered with wild marjoram, pomegranates, apples, pistachios, almonds, all kinds of sweets, flowers, and rose water. At lunchtime we prayed and embraced as we threw handfuls of marjoram, senjed seeds, and sugarplums over each others' heads. Then we danced all afternoon.

**Satara**

After a couple of days at Disneyland we headed to the new Orange County Great Park. What a place! We parked and were excited about exploring with the orange bicycles. We rode to the Bosque where the trees were in full bloom. I was left with the children while my wife disappeared to enjoy the Foot Massage Trail. We spent an hour in the children's agriculture garden. It would really be fun to see those things at home in Amsterdam.

**Pieter**



## Great Park Balloon and Visitor's Center



Visitor's Center



Great Park Balloon

The Great Park Balloon is the first major attraction of the Orange County Great Park, a 1,347 acre public space on the site of the former El Toro Marine Corps Air Station in Orange County, California. Balloon riders can soar between 250-400 feet above the surrounding landscape, enjoying a bird's eye view of the transformation of the retired air station into the first great metropolitan park of the 21st Century. The balloon is the largest tethered helium balloon in the country. It is environmentally safe, non-polluting and totally silent. It is tethered to the ground with a steel cable and is never in a state of free flight.

In addition to acting as a gateway to the Great Park Balloon, the Great Park Visitors' Center features a number of exhibits on one of the guiding principles of the development of the Great Park – sustainability.

Sustainability – the idea of enhancing rather than degrading the environment – will permeate every aspect of the design and construction of the 1,347 acre Great Park. The exhibits in the visitors' center introduce visitors to this principle and illustrate just a few of the many ways it will be integrated into the Park.

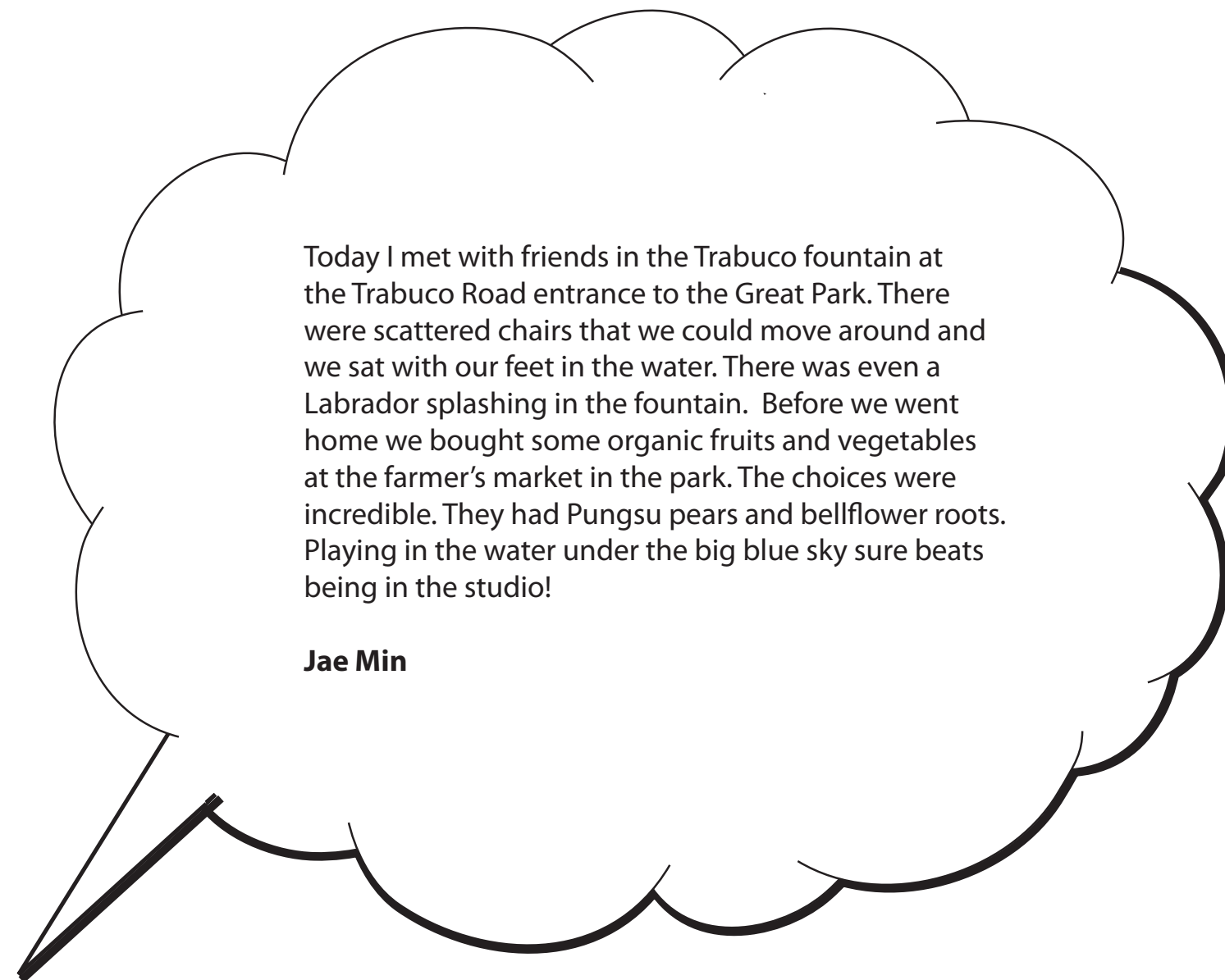


## Park Circulation



Entry at Trabuco Road





Today I met with friends in the Trabuco fountain at the Trabuco Road entrance to the Great Park. There were scattered chairs that we could move around and we sat with our feet in the water. There was even a Labrador splashing in the fountain. Before we went home we bought some organic fruits and vegetables at the farmer's market in the park. The choices were incredible. They had Pungsu pears and bellflower roots. Playing in the water under the big blue sky sure beats being in the studio!

**Jae Min**



## Arriving at the Park

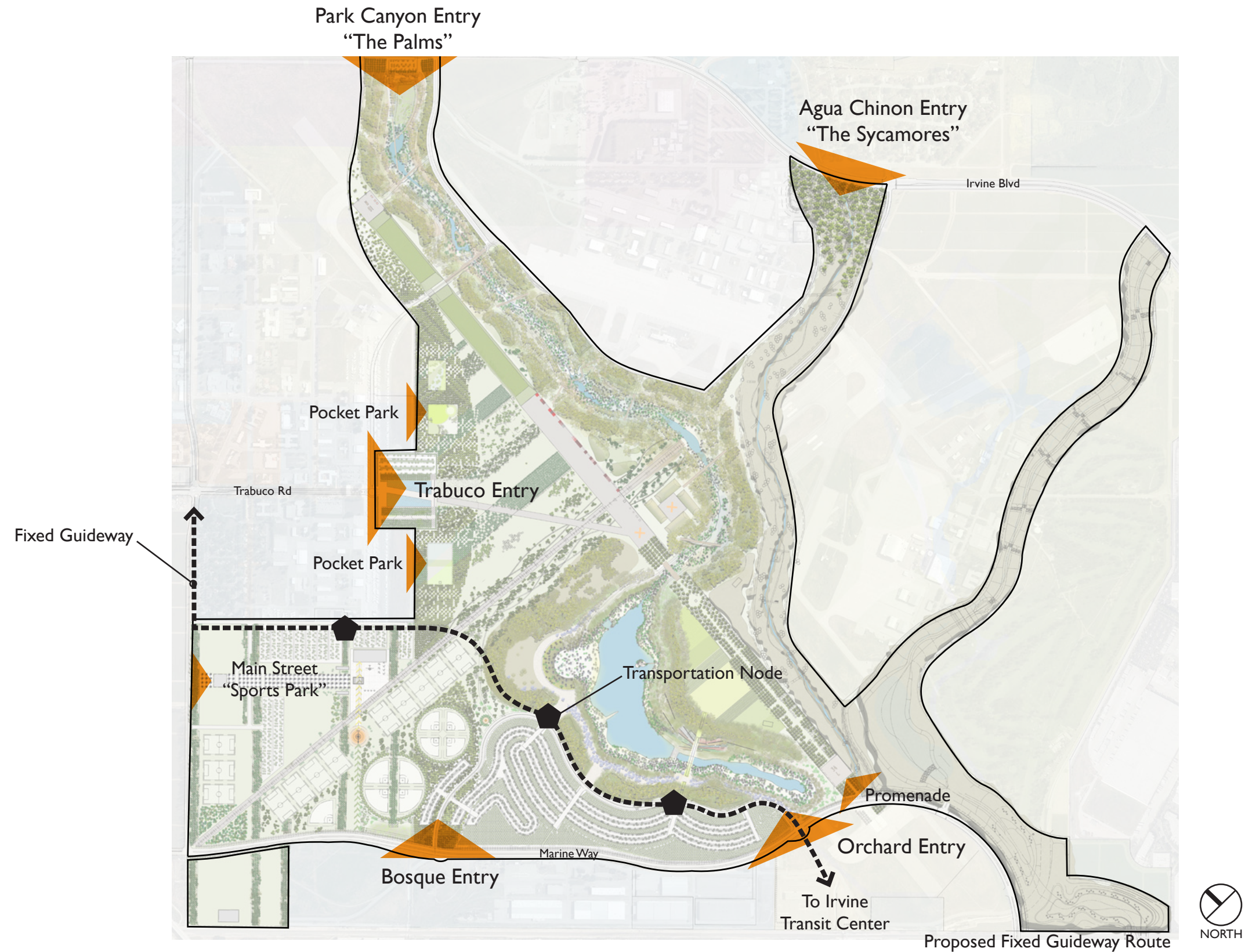
The fixed guideway will interface with the Orange County urban rail project bringing visitors to the Great Park. Three major stops will transport Great Park visitors to the Conservatory Bridge, Cultural Terrace, and Sports Park. The rail will loop from the Transit Oriented Development and make additional stops at Heritage Fields and the Lifelong Learning Districts. Riders will also have a chance to get glimpses of the Great Park orchards, the lake beyond the cultural terrace, soft rolling berms, groves of flowering trees at the Bosque, and sports fields. As part of the Irvine urban rail guideway project, the guideway is a future integral transit element linking Irvine regional transportation center and the city of Fullerton's transportation center.



Fixed Guideway



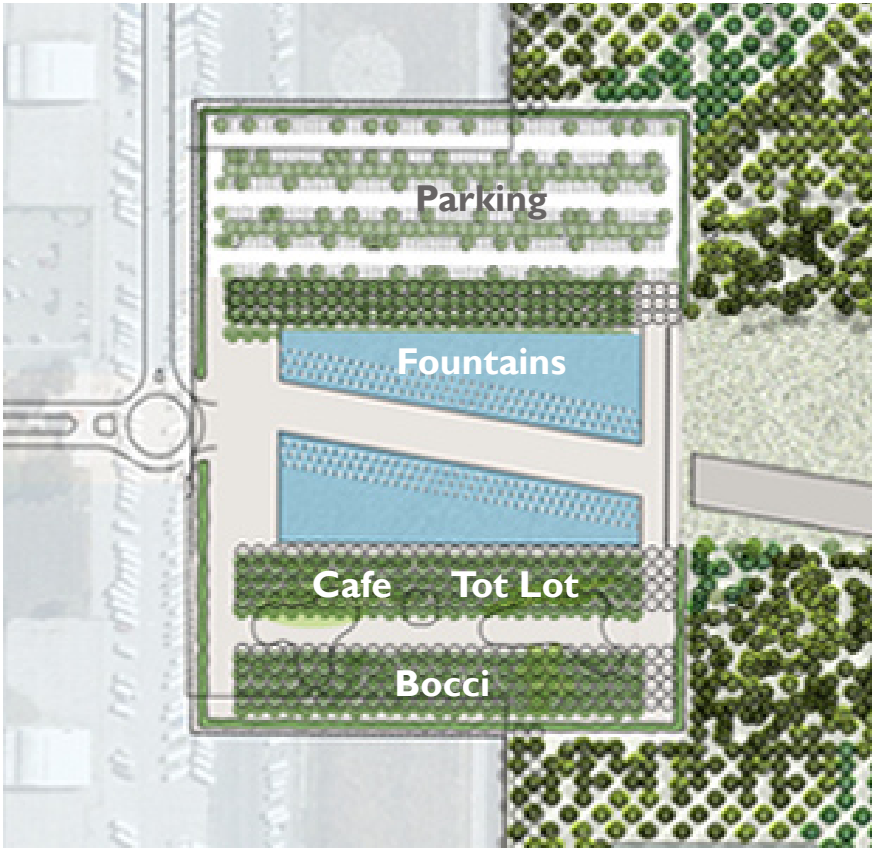
# Arriving at the Park



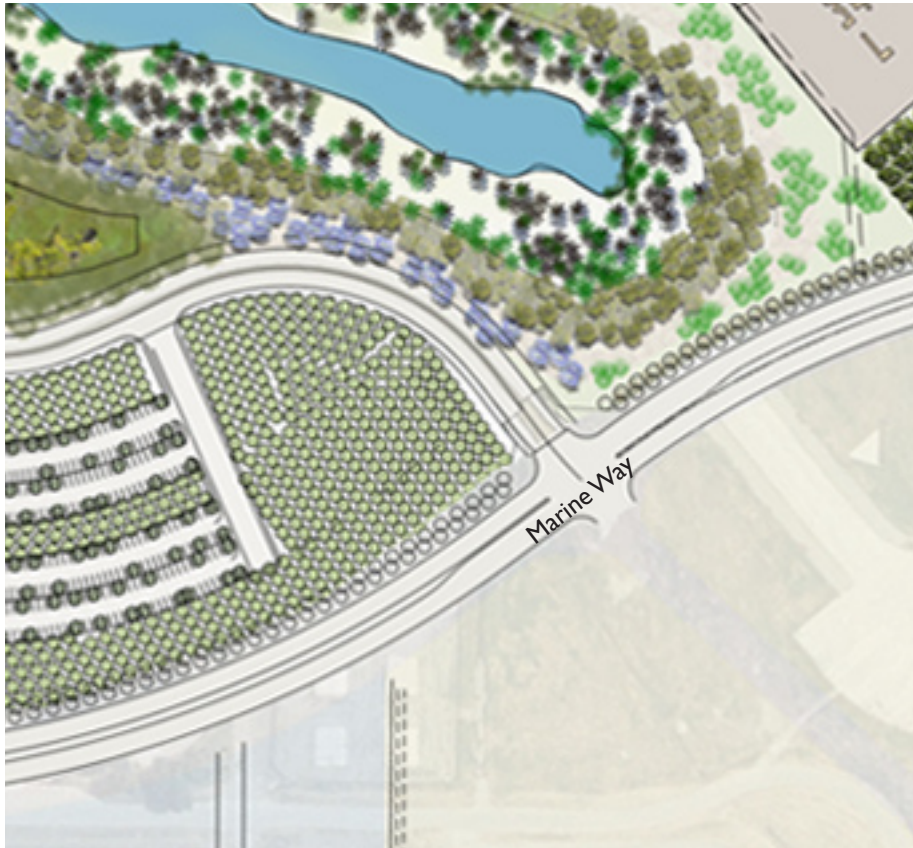


# Arriving At The Park

Each of the major entrances to the Great Park is a celebratory space featuring water as a focal point. Arriving from Trabuco Road, visitors encounter two dramatic reflecting pools with fountains. Here it is possible to park, sit and enjoy the fountains, grab a bite to eat, or shop at the farmer’s market. Beyond the fountains, a monumental gateway frames a spectacular view of the landscape. Visitors arriving at the Palm Canyon Entry off Irvine Boulevard find a grove of California fan palms leading to a natural treatment wetland and the upper Canyon stream. At the Orchard Entry off Marine Way sinuous plantings of citrus trees lead to the Lake, Cultural Terrace, and Botanical Garden. The Agua Chinon Entry is the gateway from which the newly restored stream can be explored.



Trabuco Entry



Great Park Boulevard West  
Orchard Entry





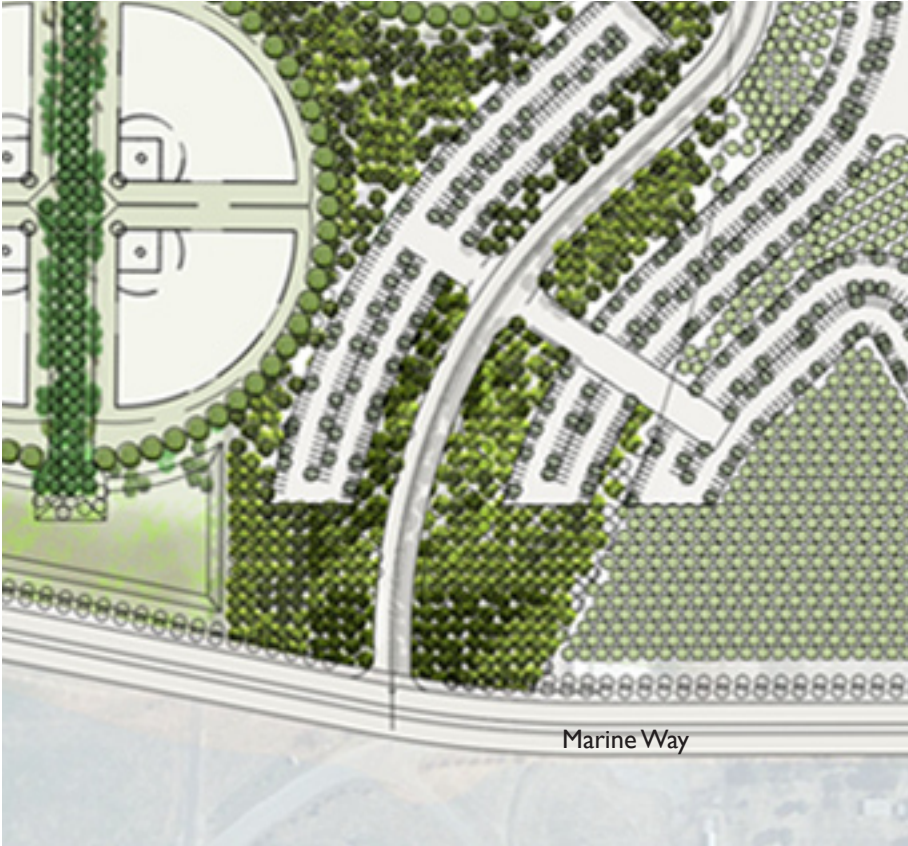
Arriving At The Park



Park Canyon Entry



Agua Chinon Entry



Great Park Boulevard East  
Bosque Entry



# “Park Once and Spend The Day”

The Great Park is designed to promote sustainable means of transportation. It is easy to come by mass transit, arriving at the Irvine Station near Marine Way. It is easy to bike, because the park’s bike trails mesh with the city’s and county’s regional trail network. Those coming by car can park once and spend the day. Once they arrive visitors have a selection of ways to get around that do not require gasoline and generate pollution. They can use an orange bike or the shuttle that traverses the entire site. Walkers and hikers have a choice of gentle or challenging routes. All sections of the park are accessible to all people, regardless of physical ability.

Park Shuttle



Orange Bike

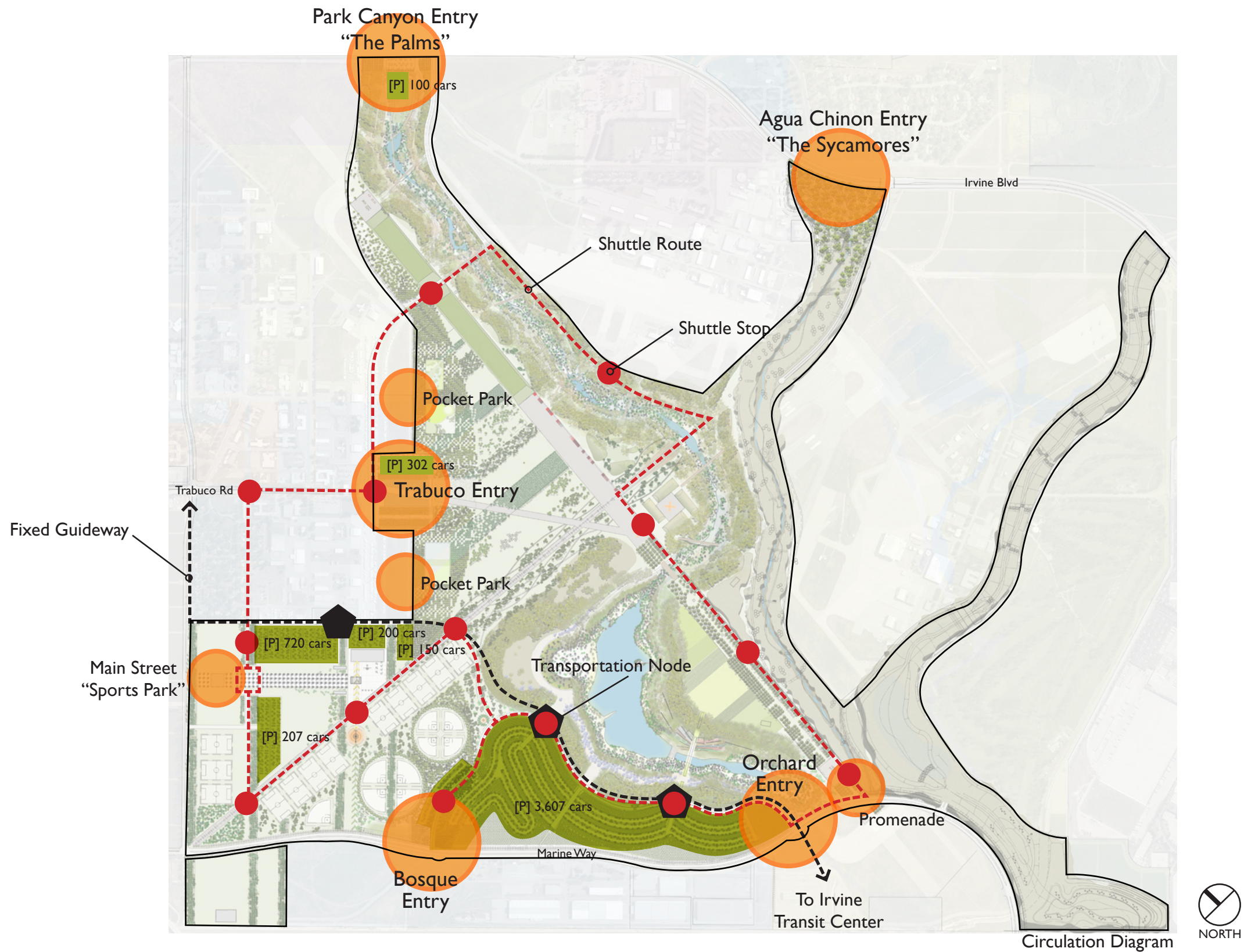


Small electric vehicles for mobility impaired



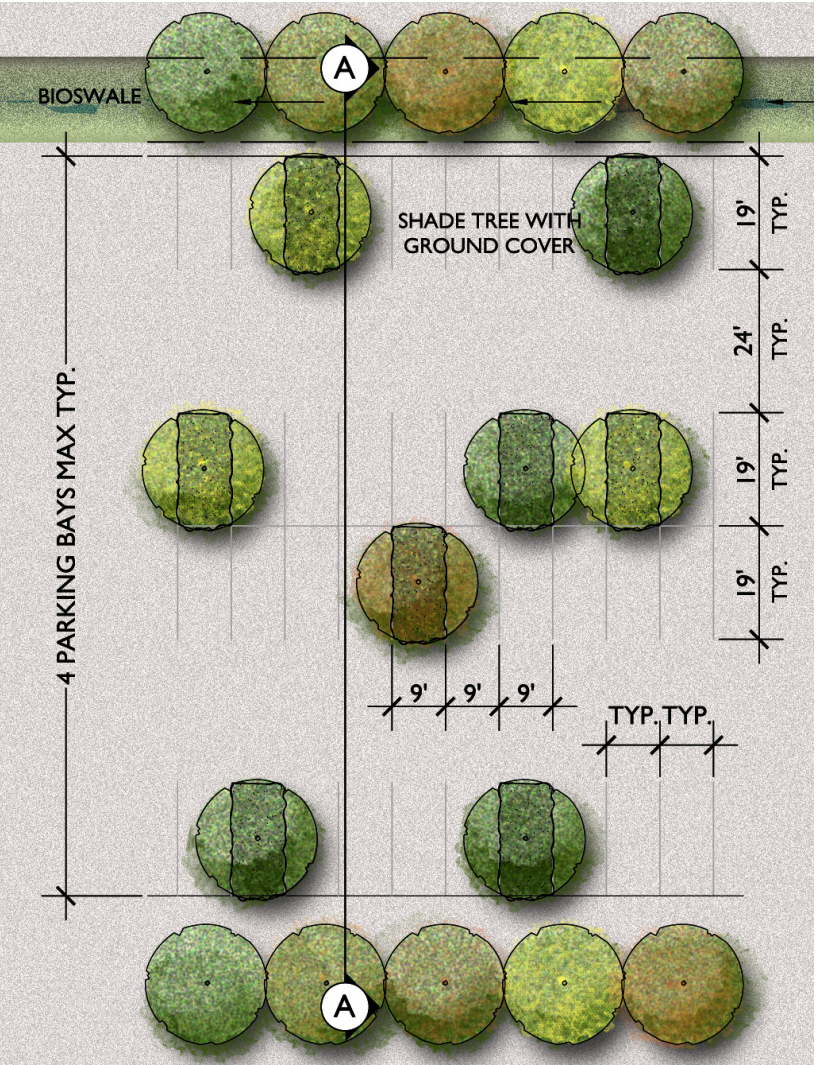
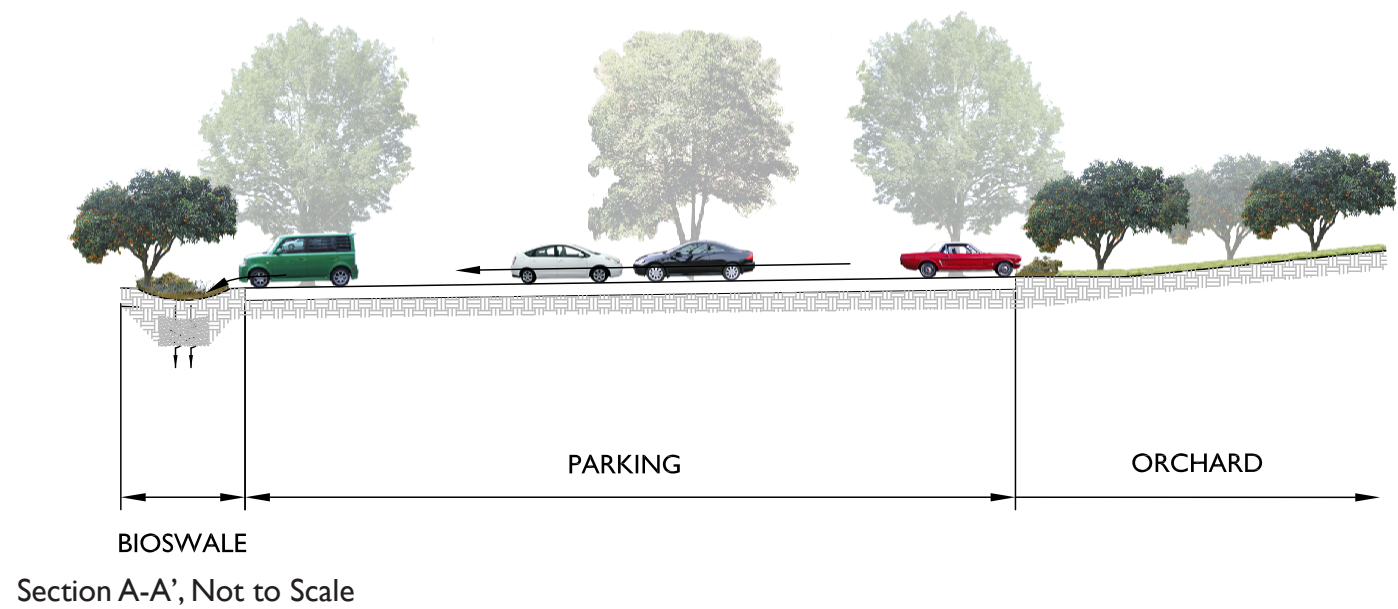


# Circulation and Parking

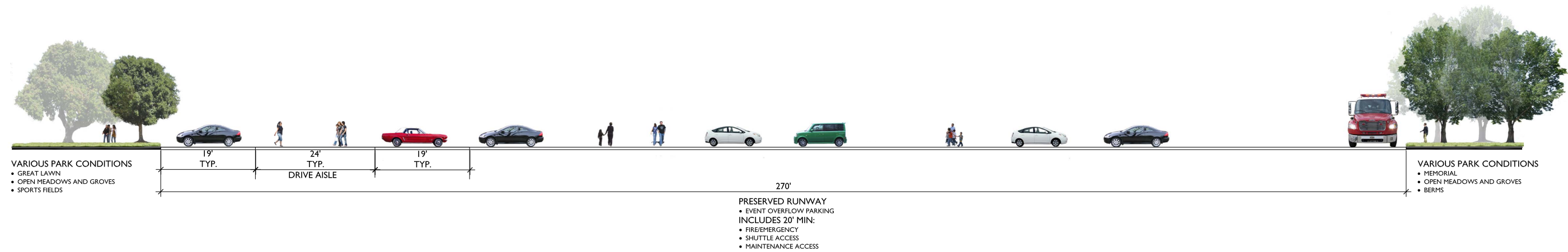




Parking



Typical Parking Configuration Plan, Not to Scale

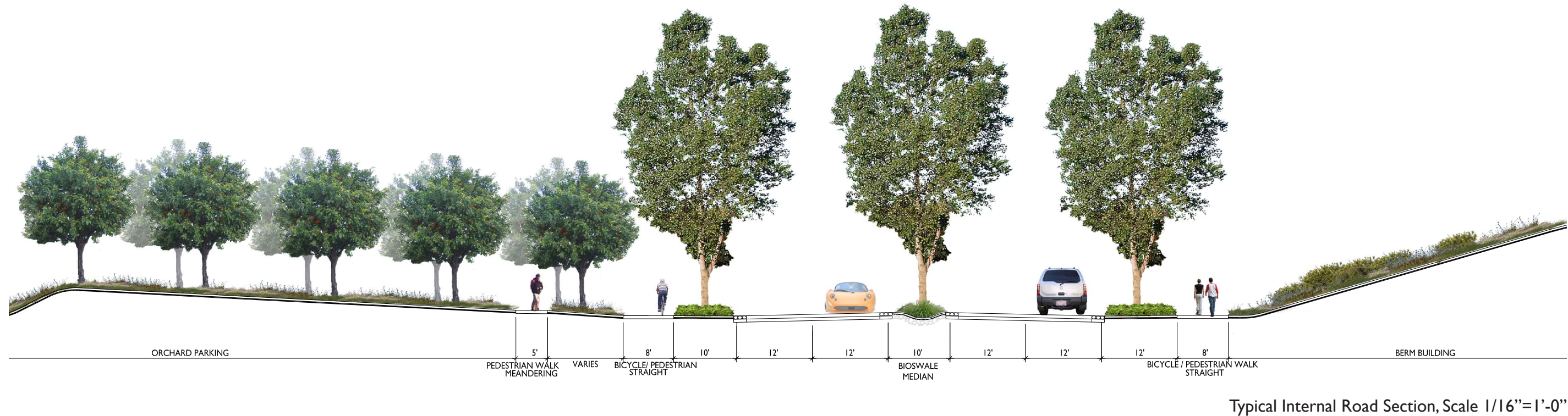
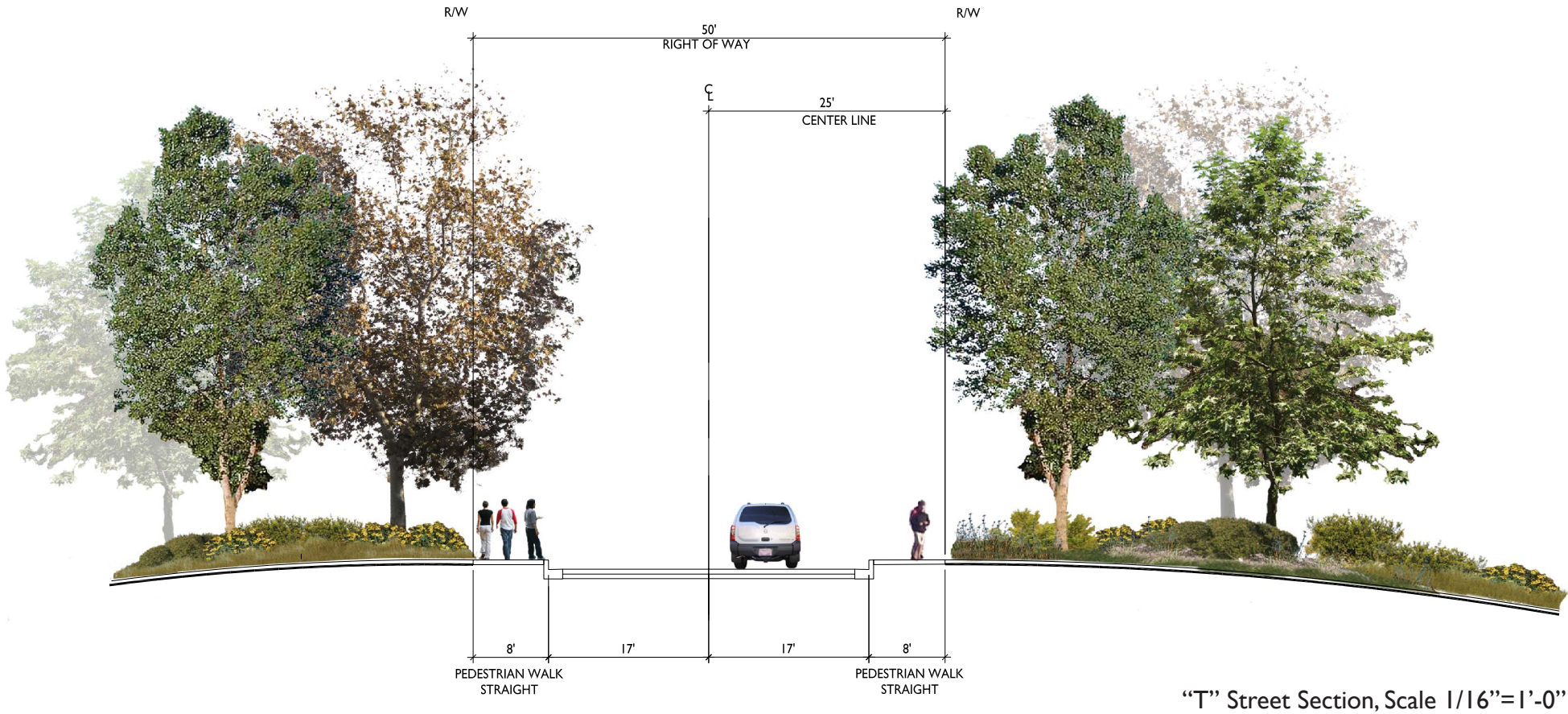


Overflow Parking Configuration Section, Not to Scale



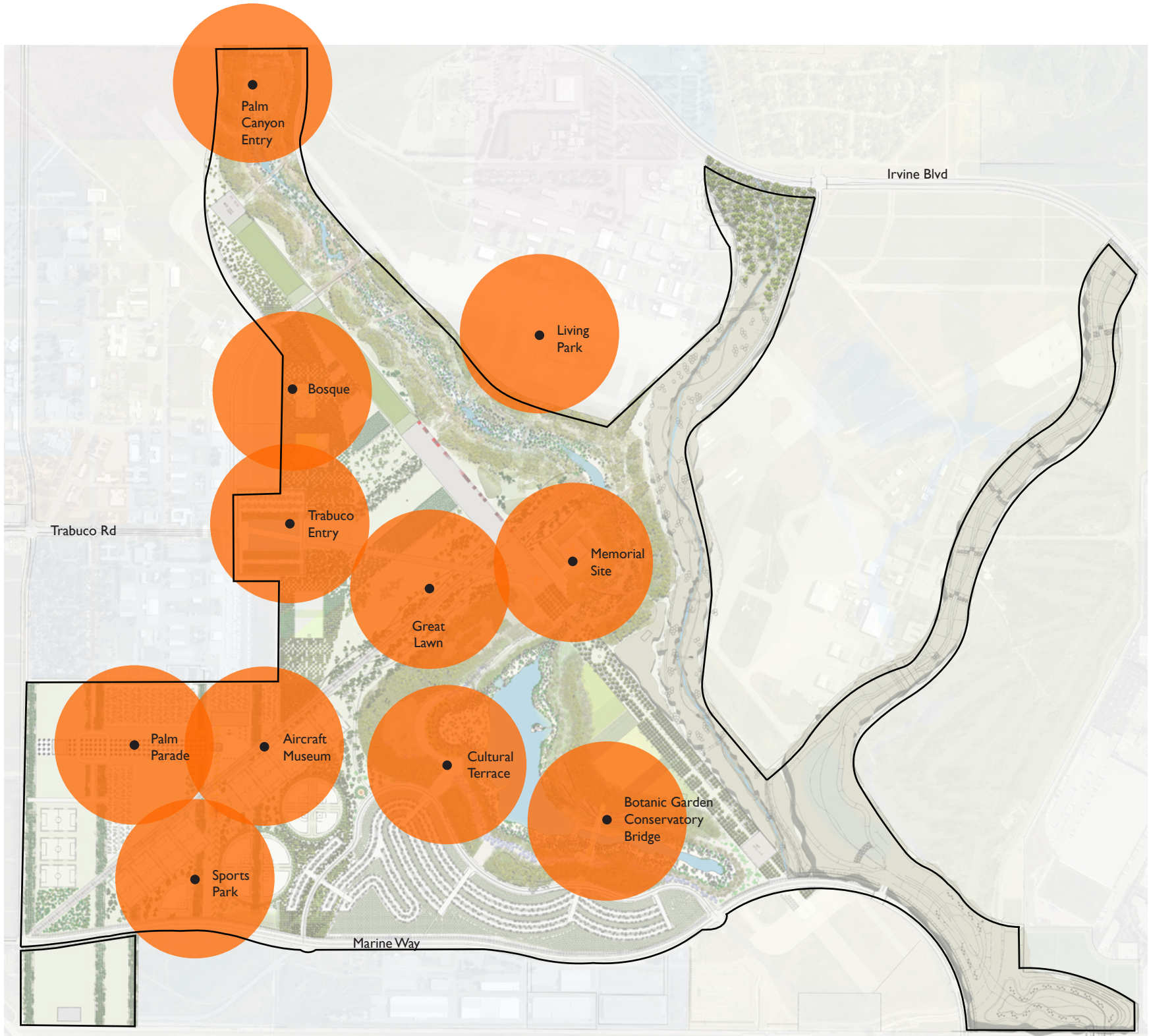
# Roads

The roadways at the Great Park will feature environmentally sustainable public street measures referred to as ‘Green Streets’ as prepared for the City of Irvine Redevelopment Agency. Run-off in streets will be captured through various strategies including bio-swales, infiltration/exfiltration trenches, bio-infiltration and bottomless catch basins. Convenient, expedient and efficient travelways dedicated for buses, and future trolley/light rail provide alternatives to use of cars with the Great Park. Improving shade and reducing heat is accomplished through enhanced tree canopy, use of permeable paving, reduction of and use of reflective colored paving material. All of these ‘Green Street’ features will improve the quality of natural environment at the Great Park.





# Leisure Zones



Leisure Zones Diagram

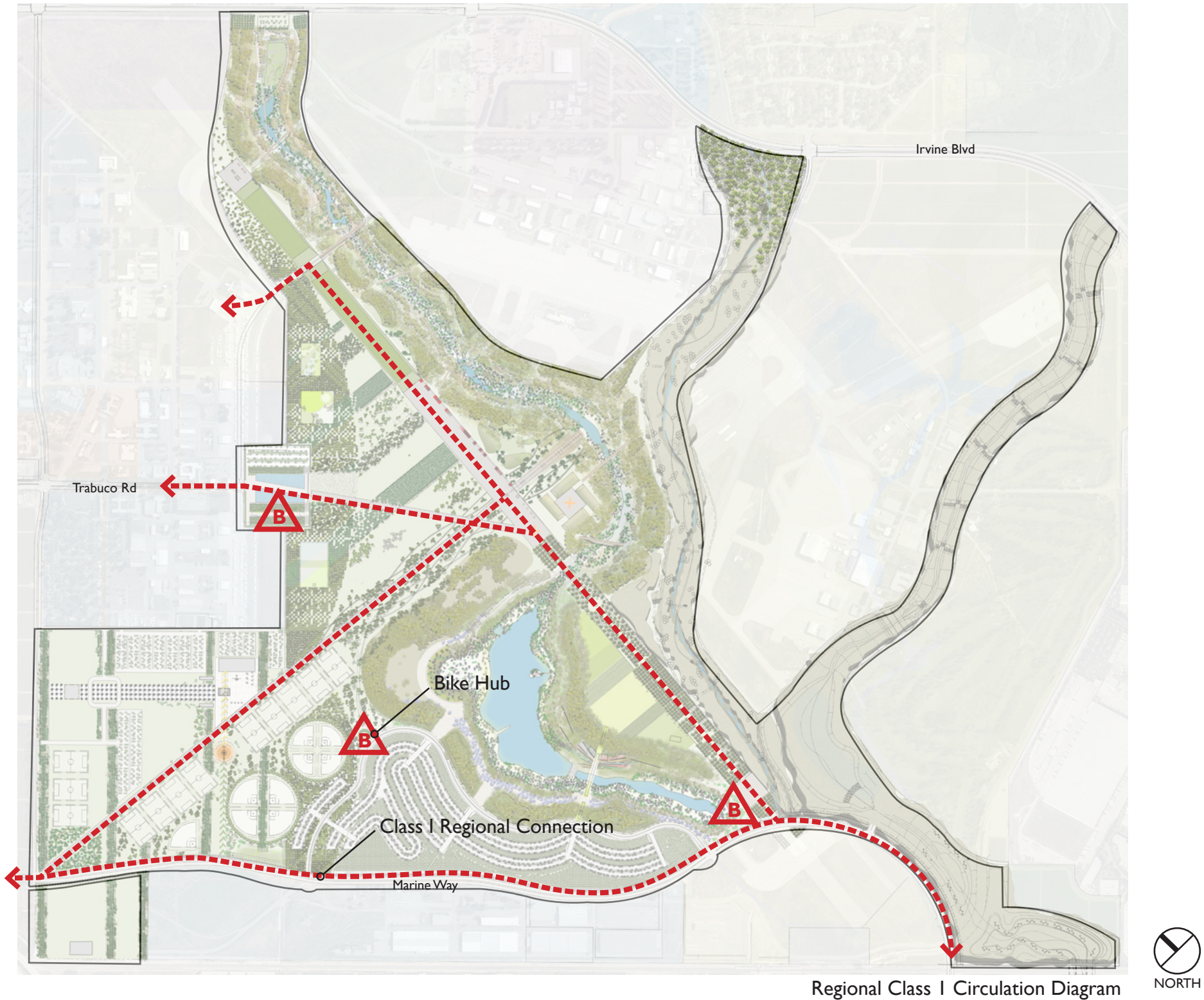


# Major Trails

The Great Park will have extensive trail systems. The trails will operate on a multitude of levels from the promenades that take you directly to your destination to trails that meander allowing for a range of experiences while en-route. The trail systems will include walking, jogging, biking and additional multi-use trails.

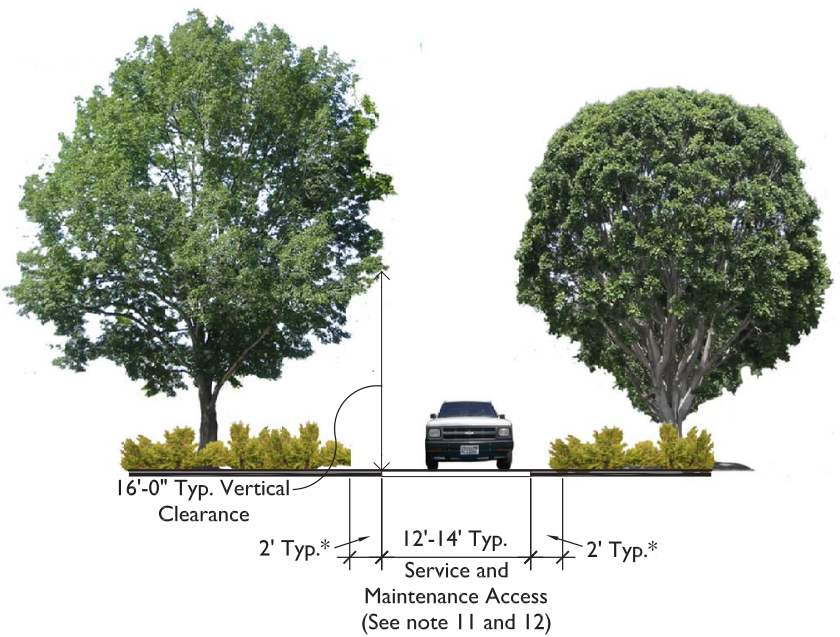
Trail circulation has been broken down into three levels: the macro trail system delineates major park connections; a general park trail systems allows the park visitor to explore the intricacies to the park; strong regional connections encourage visitors to arrive to the Great Park on foot or via bicycle.

Whether by car or public transportation, once you arrive at one of the parking locations of the Great Park, the macro trail systems utilizing the old runway and taxiways of El Toro will allow direct access across the park. There will be multi-use trails surrounding the Bosque, through the Canyon and within Agua Chinon. Trail access will be clearly marked and trail maps will be placed around the park to assist with way finding.

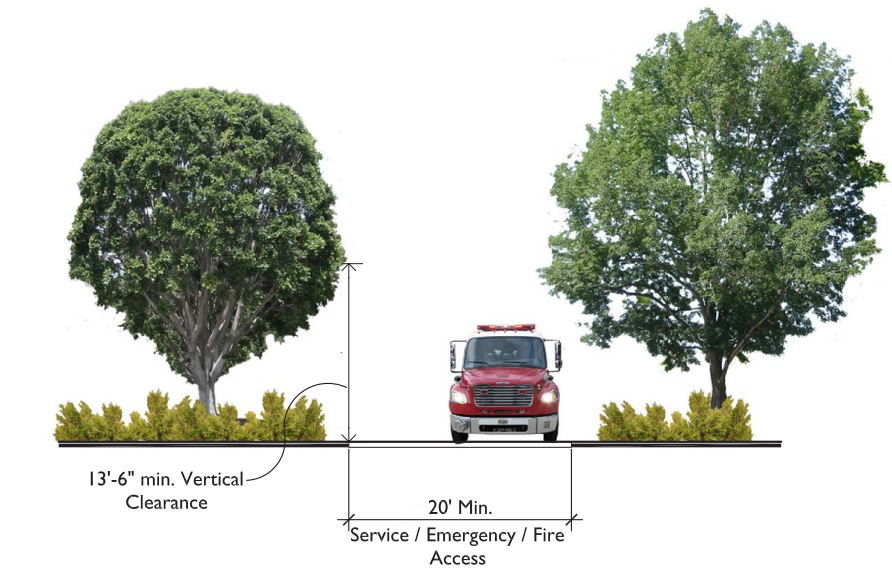




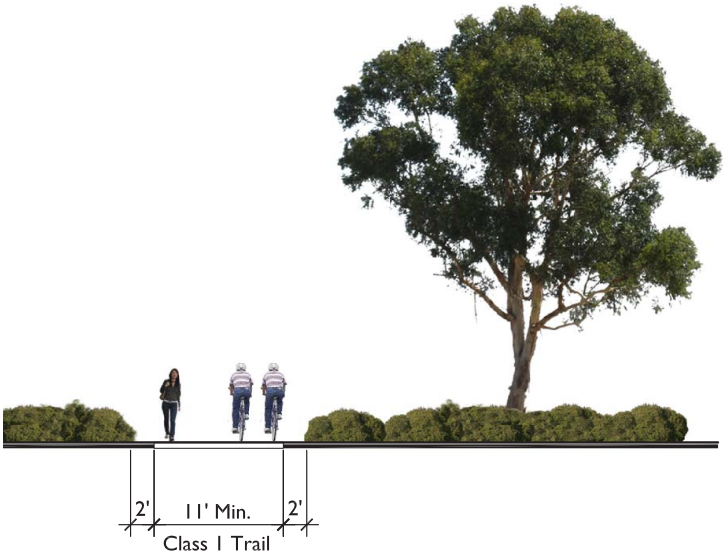
Trails



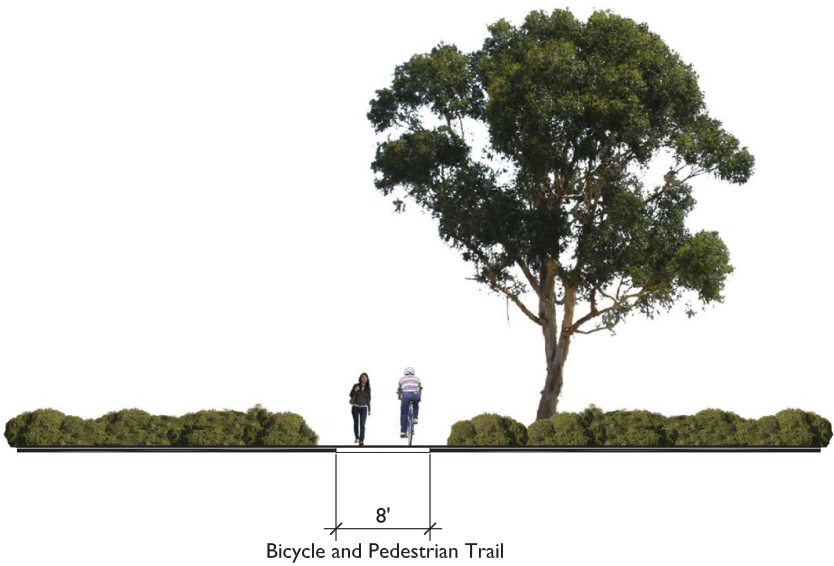
Typical Maintenance and Service Access (Paved and Unpaved)



Typical Service and Emergency Access (Paved and Unpaved)



Class I Bicycle and Pedestrian Trail (Paved)



Typical Bicycle and Pedestrian Access (Paved and Unpaved)



Typical Pedestrian Only Access (Paved and Unpaved)

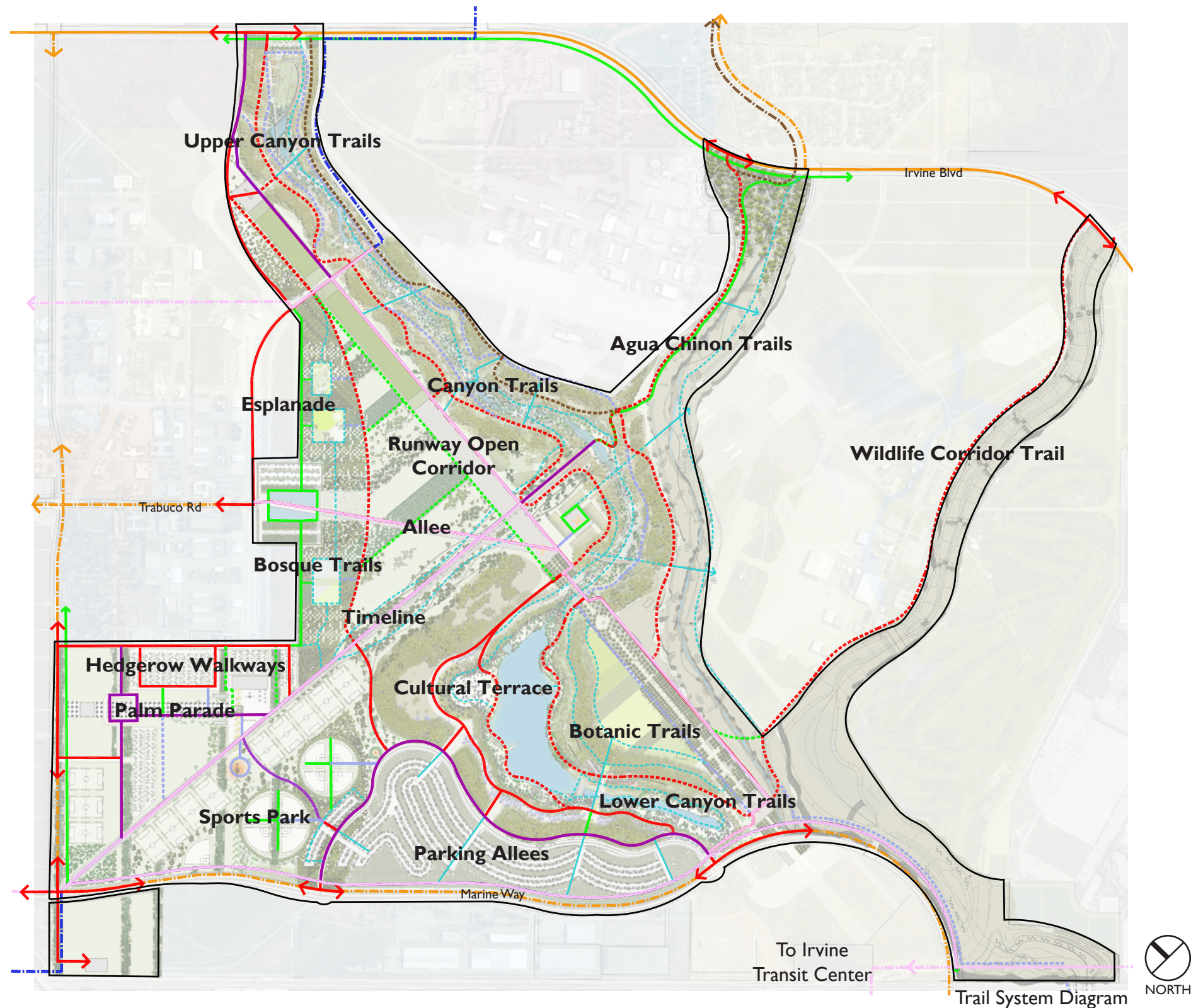


Riding and Hiking Access (Unpaved)



## Backbone Trails

The general park trail system has been incorporated in all of the various park zones; such as the Canyon trails, Linear Rambles, and the Bosque trails. This network of pathways will allow park visitors access to all areas of the park. Some trails are more urban like the paths located on the Cultural Terrace, some more rustic like in the Canyon and some integrated with landscape art features such as the Timeline.





## Park Districts



Bird's Eye View



I've already been to the new Great Park many times since it opened a few months ago. I try to get there every couple of days, because there's so much to see. Now every time I go I explore a separate little section of the park. Yesterday I spent a couple of hours around the lake. I had a great time hiking along the shore, watching boaters paddle by. I even found this great place where the lake changes levels. I was behind a waterfall looking out at the park through a veil of water. What a beautiful view that was!

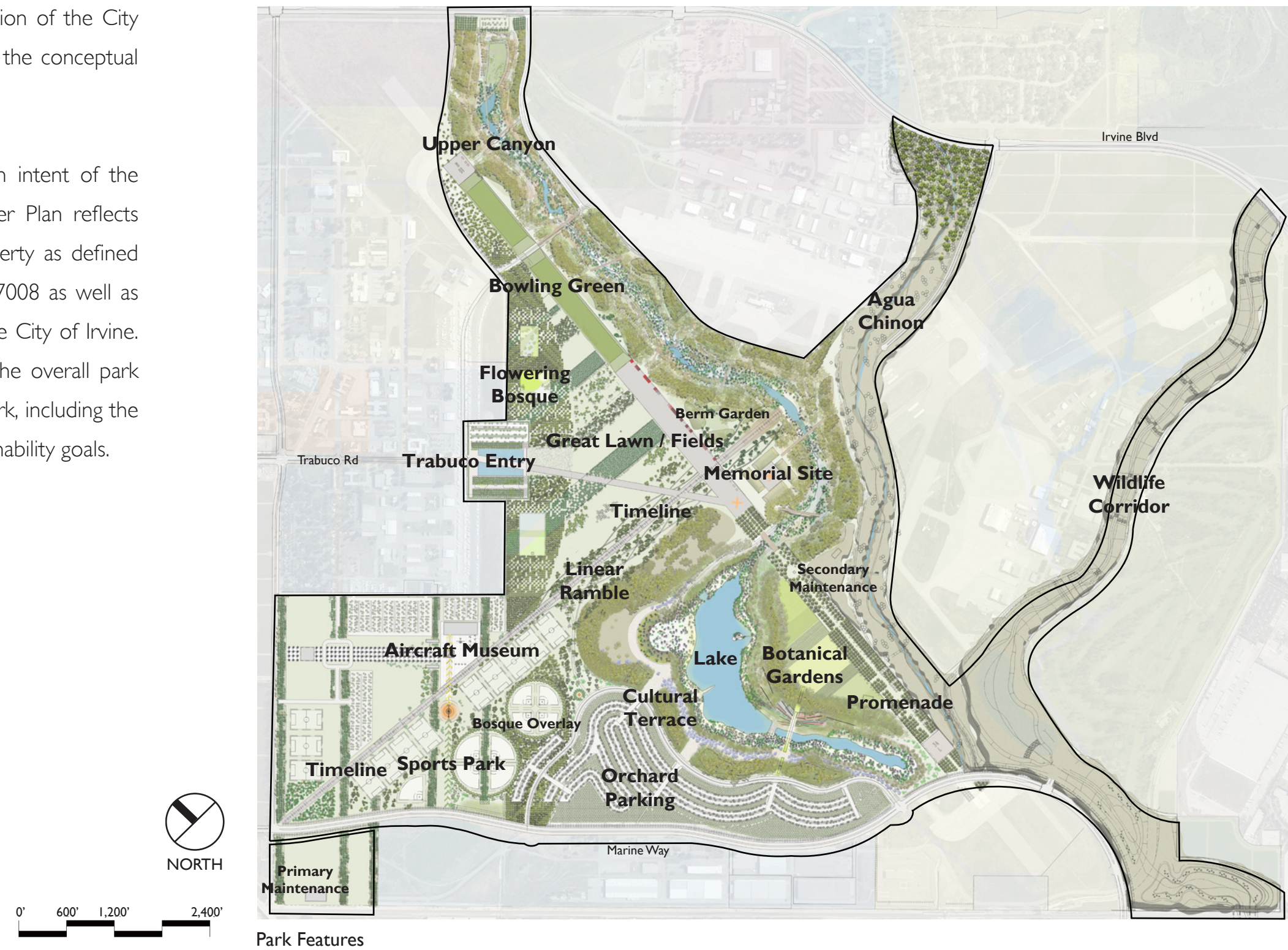
**Holly**



# The Park

In August 2007, the Planning Commission of the City of Irvine approved the Master Plan for the conceptual design of the Great Park.

The Master Plan represents the design intent of the Great Park Design Studio. The Master Plan reflects the precise boundary of the City property as defined by Vesting Tentative Tract Map No. 17008 as well as the current regulatory framework of the City of Irvine. Approval of the plan moves forward the overall park design for the Orange County Great Park, including the key design concepts and adopted sustainability goals.





Park Features

Upper Canyon	151.4 acres
Bowling Green	34.2 acres
Great Lawn / Fields	55.4 acres
Bosque	65.7 acres
Bosque Overlay	35.4 acres
Trabuco Entry	13.1 acres
Berm Garden	12.4 acres
Memorial Site	15.2 acres
Secondary Maintenance	7.1 acres
Aircraft Museum	23.4 acres
Timeline	11.5 acres
Sports Park	133.3 acres
Cultural Terrace	92.7 acres
Lake	26.2 acres
Botanical Gardens	59.0 acres
Promenade	21.4 acres
Orchard Parking	82.5 acres
Linear Ramble	17.7 acres
Agua Chinon	84.3 acres
Wildlife Corridor	178.6 acres
Primary Maintenance	24.8 acres
<b>TOTAL PARK ACREAGE</b>	<b>1,145.3 acres</b>

Subsequent discretionary actions will be required for some components of the park while others will be able to proceed through the approval of construction drawings. In all cases, the Design Studio will comply with the conditions of approval adopted by the Planning Commission. One early process will be the submittal of Great Park design standards for consideration by the City. These alternative standards will be evaluated by the City for compliance with current regulatory restrictions, consistency with adopted standards, and life-cycle costs. It is anticipated that alternative standards will be used in the Great Park to achieve a unique sense of place befitting the first great metropolitan park of the 21st Century.

The Great Park Design Studio is moving forward to the next phase of development with the preparation of Schematic Design documents for the entire park.



# The Canyon



The Canyon



# The Canyon

The Park's centerpiece, the Canyon, is a great oasis, including a sinuous stream water feature with a string of small pools, one of the world's most impressive collections of palms, and a diverse mosaic of natural habitats alive with bird song and color. Some slopes are rocky outcrops, others are welcoming woodlands. As it winds through the landscape, the approximately 2 mile Canyon offers endlessly changing patterns of sun and shade throughout the day. Hiking, riding, and bicycle paths invite visitors to unwind and explore, while benches offer moments of repose. At its southern end, where the Canyon flows into the Lake, there is boating and picnicking. The Lake is flanked on one side by the Cultural Terrace, and on the other by the Botanic Garden's spectacular terraced plantings with its handsome Tea House.





# The Canyon



Precedent Typology: Palm Springs, California





# The Canyon



3D Computer Model: Lower Canyon and Lake

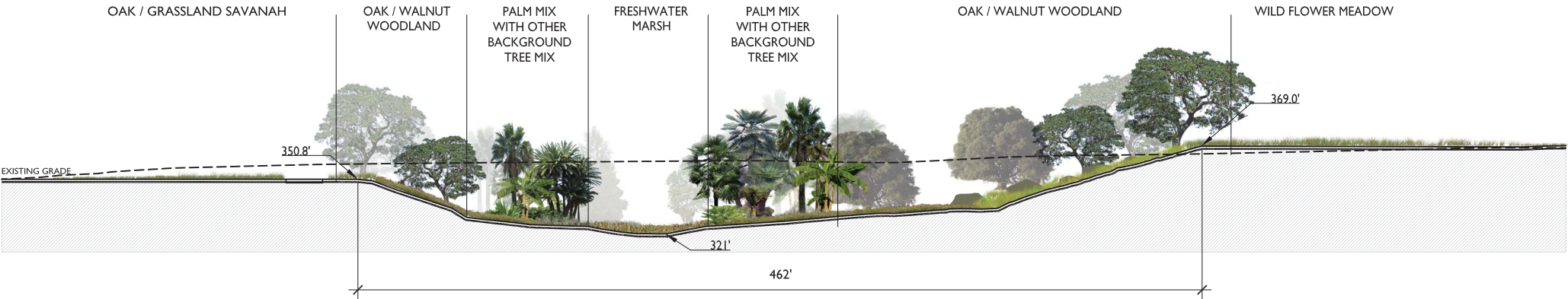
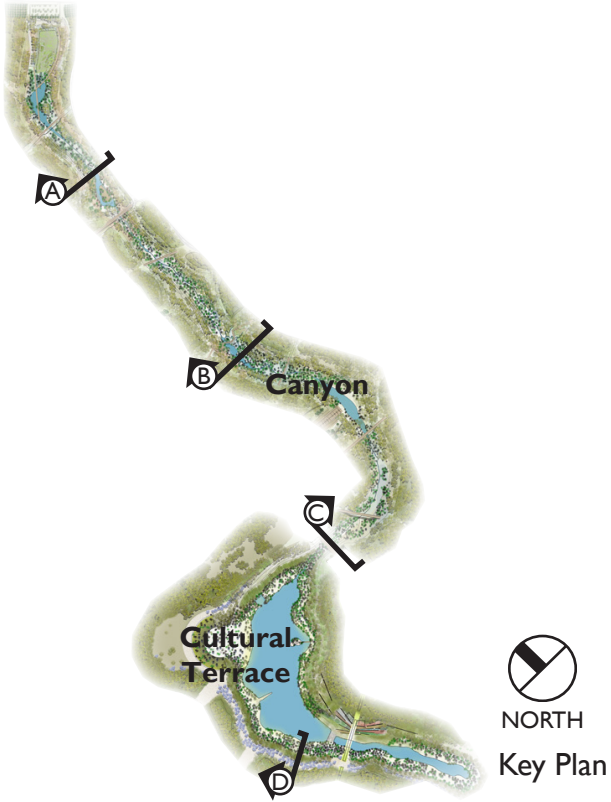
Two miles long and up to 60-feet deep, the Canyon is the Great Park's most dramatic new topographic feature. More than 70 feet wide at its narrowest point, it expands to over 1,300 feet at its southern end to accommodate the cultural facilities and 26-acre Lake. Selective cuts through the Canyon walls frame views of the surrounding neighborhoods and distant mountain landscapes. Up to nine bridges span the Canyon, including the striking Conservatory Bridge that links the Cultural Terrace to the Botanic Garden. The Bridge of Turns zigzags across the upper Canyon. Consistent with the park's sustainability mandate, much of the material used to build the bridges comes from the old El Toro buildings. For example, recycled redwood rafters from the hangars line some pedestrian bridges, a beautiful and uniquely Californian gesture.



# The Canyon



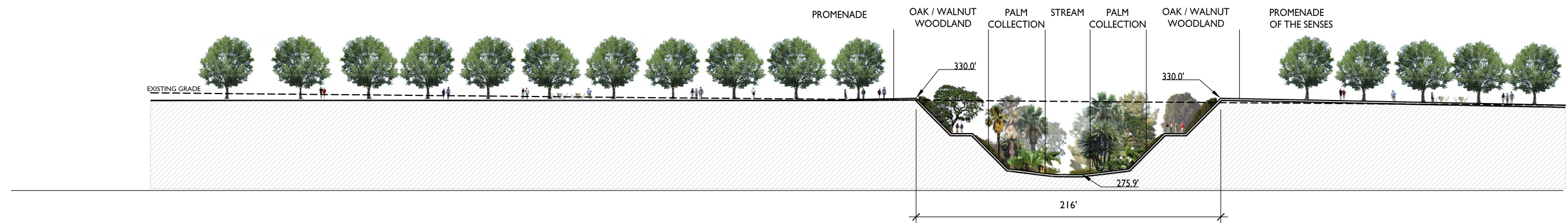
Section A Canyon at Bowling Green



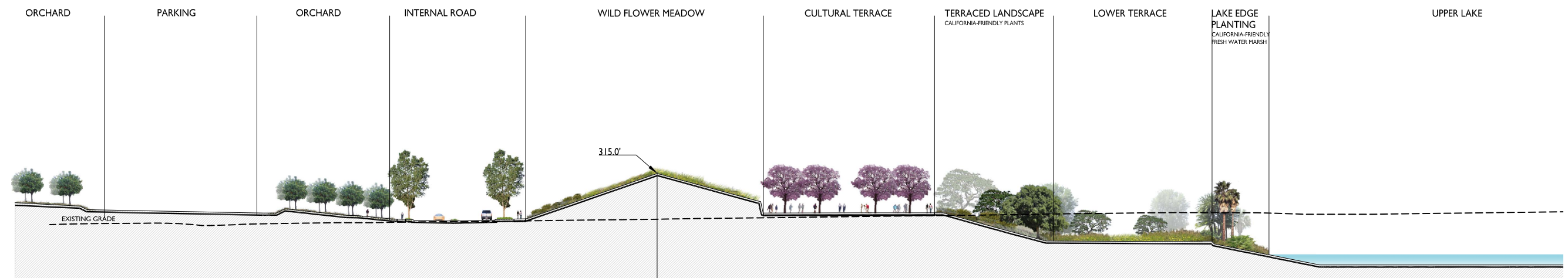
Section B Canyon at Runway Preservation



# The Canyon



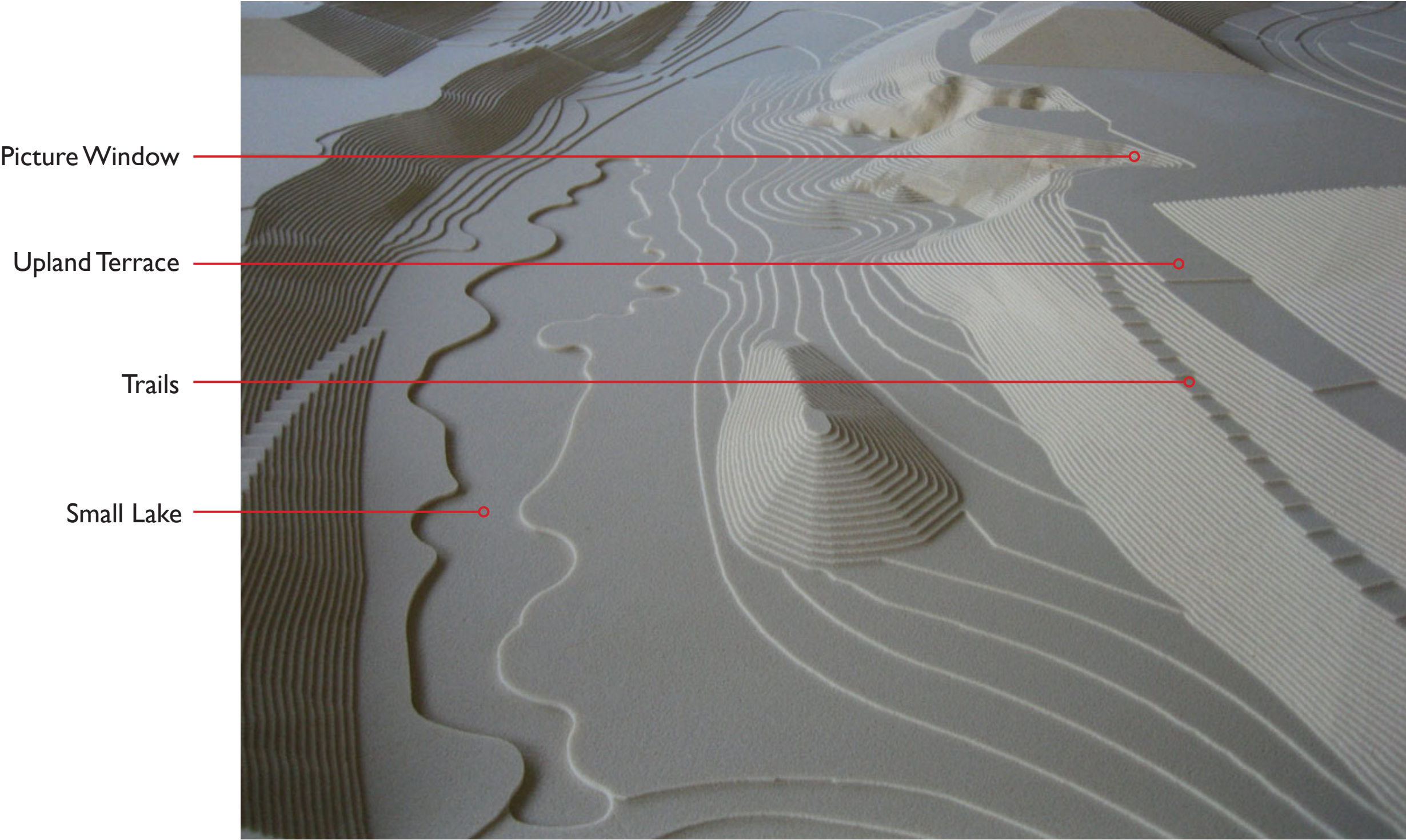
Section C Canyon at Promenade of the Senses Crossing



Section D Canyon at Cultural Terrace



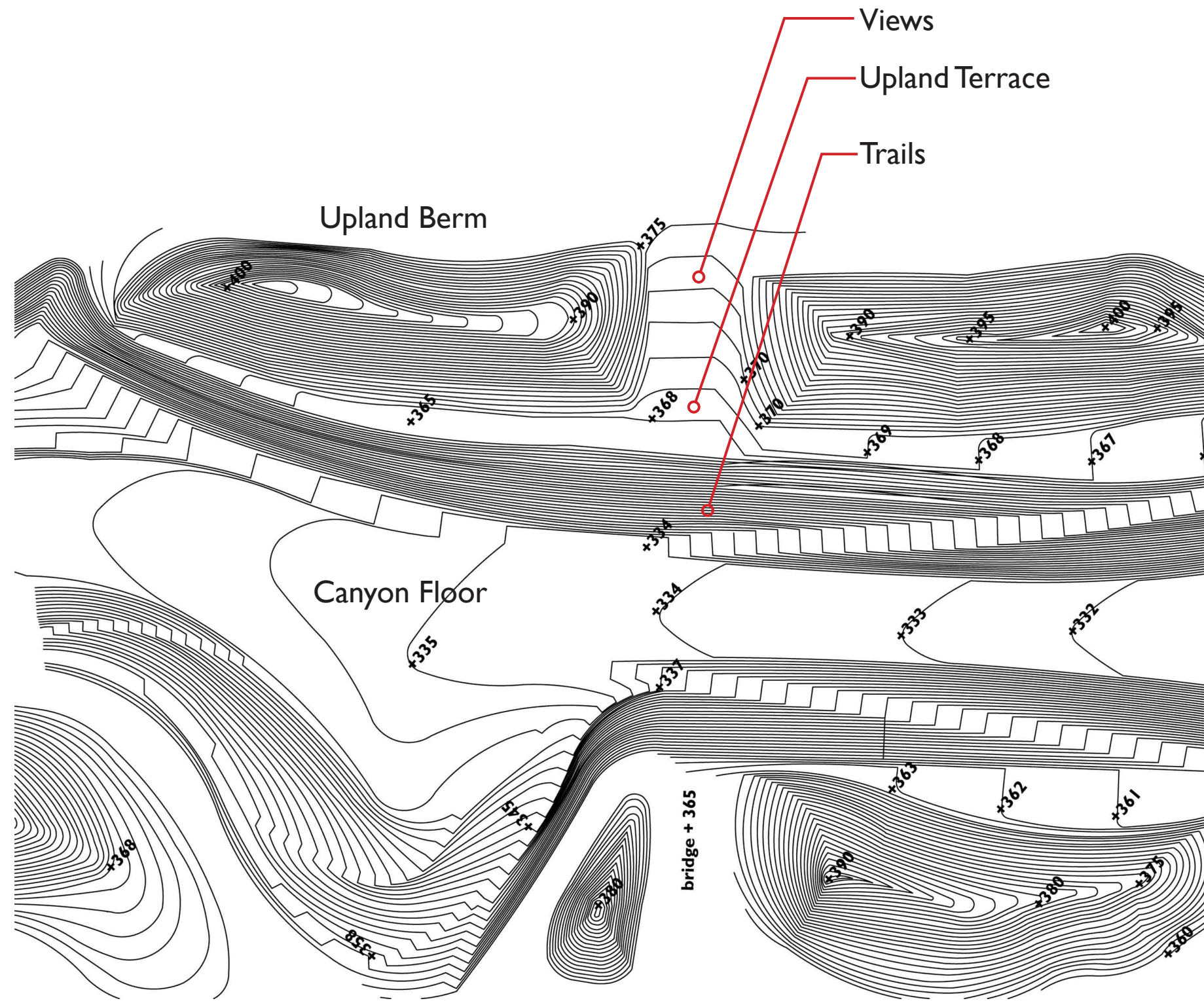
The Canyon



Canyon Contour Model



## Canyon Security and Accessibility



Canyon Topography

The Canyon will be constructed by excavating roughly thirty feet below-grade and building berms of approximately 30 feet height on either side with the excavated soil. The Canyon will be carefully engineered and graded to ensure its slopes work in a safe and secure way. View corridors through the Canyon, and across the Canyon to the other side provide clear lines of sight. The typical condition is an upland terrace that runs the entire length of the inside of the Canyon on both sides. The Canyon terrace is very carefully scaled so that it is typically 24-30 feet at its narrowest and can range up to 60-70 feet wide. This width enables access for park maintenance and security. The trail system is integral to the paths and terraces in the Canyon. The design intention is to well-exceed the minimum standards for accessibility. Trails will be more accessible and easier to use than what the codes define.



## Bridges and Views



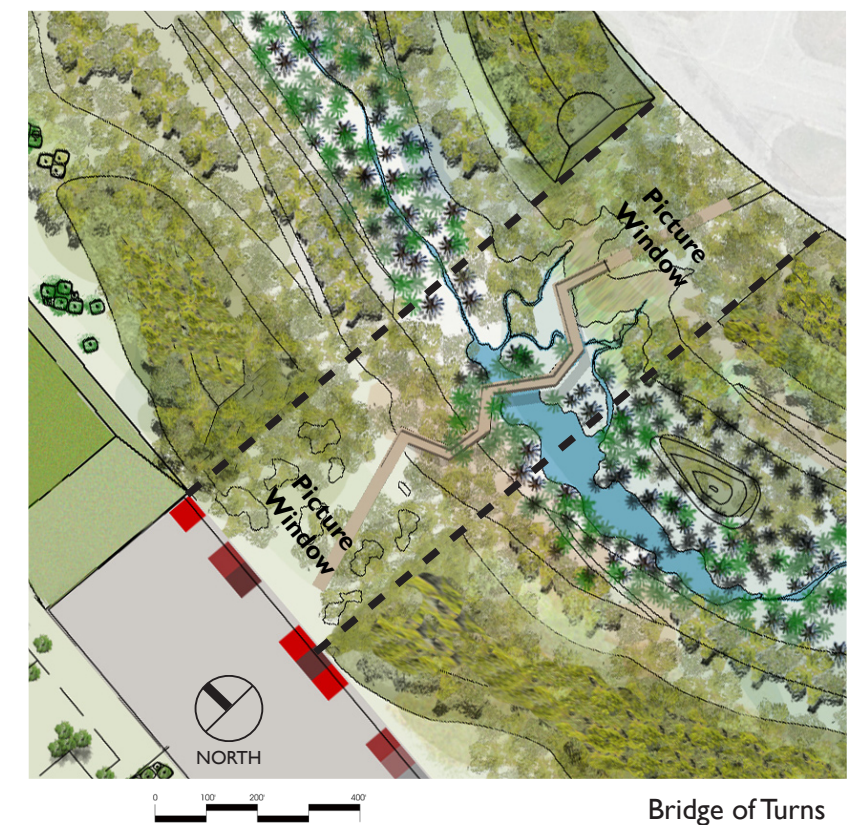
Bridge of Turns



## Bridges and Views

There are a series of vehicular and pedestrian bridges that cross the Canyon which are critical for circulation within the park. Seven bridges designated for either vehicles or pedestrians transverse the canyon and also at the promenade and lake.

Several major picture windows frame a series of open views across the cultural terrace and canyon to ensure that one can see from inside the park to the outside, and from outside in. These windows frame the views of the park toward the mountains.





# The Cultural Terrace

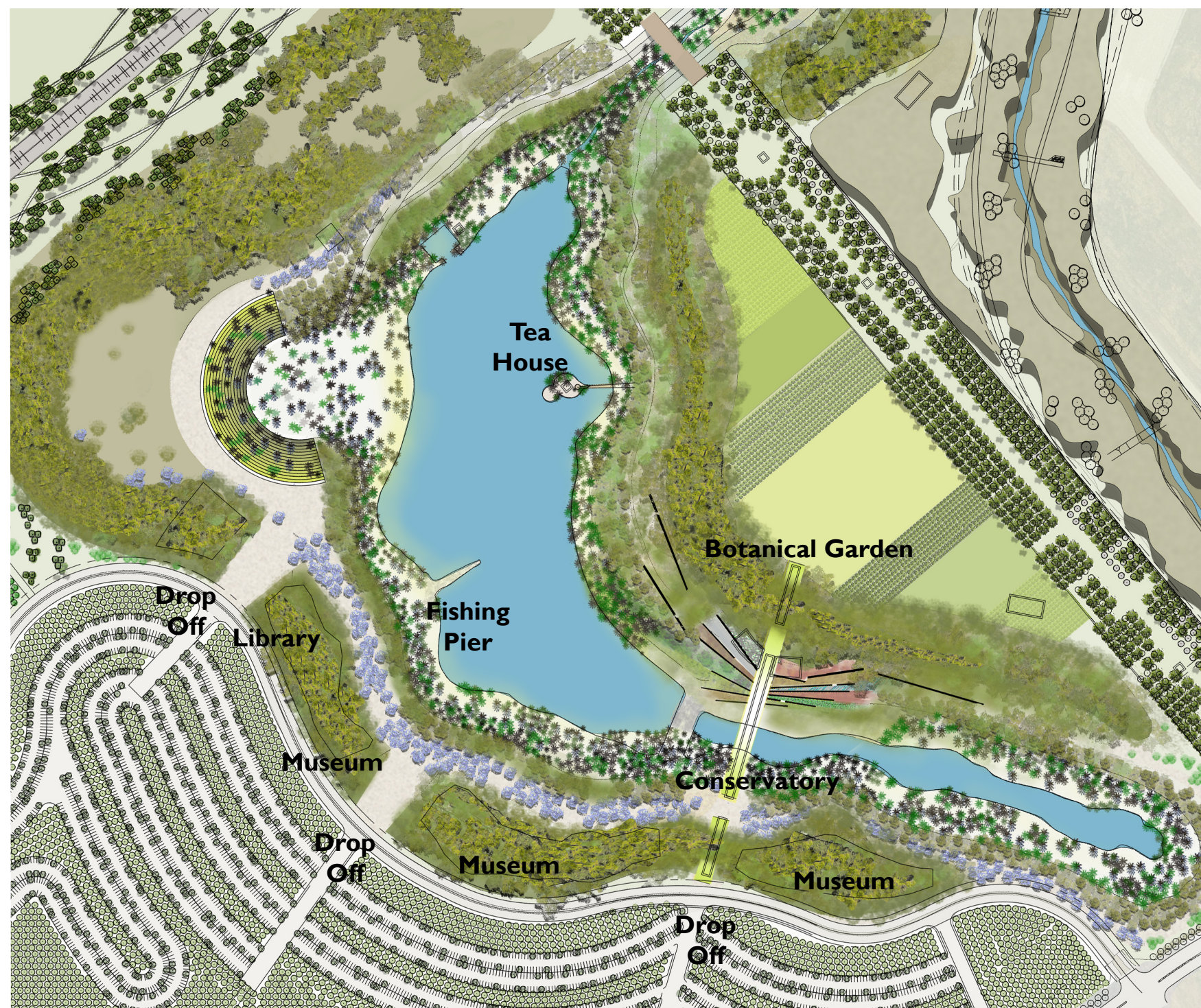


Cultural Terrace



# The Cultural Terrace

The Cultural Terrace is the social and cultural center of the Great Park. A hundred foot-wide shade tree-lined terrace serves as a key pedestrian and social space linking the major cultural facilities. Here, visitors can sip coffee, eat lunch at a café, people-watch, drop into the future library or one of the museums. They can also cross the Conservatory Bridge to the Botanical Garden, or catch the shuttle to other parts of the park. The cultural facilities are nestled inside a series of sculpted earthen landforms that meander along the southern edge of the Canyon. The buildings are oriented for sweeping views of the Canyon, runway remnants, local foothills, and nearby Santa Ana Mountains.



Cultural Terrace Plan Enlargement



# The Cultural Terrace

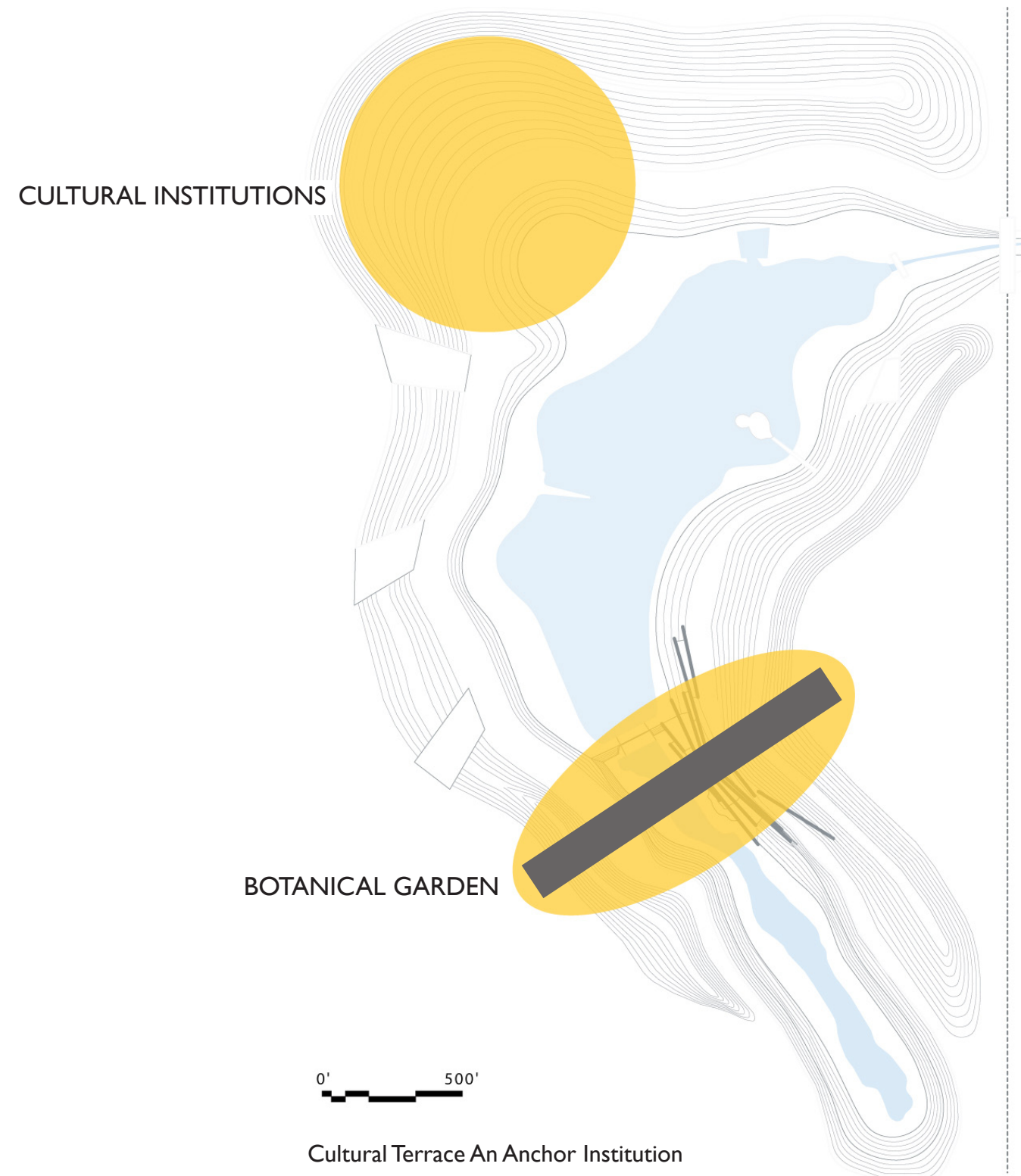


Cultural Terrace



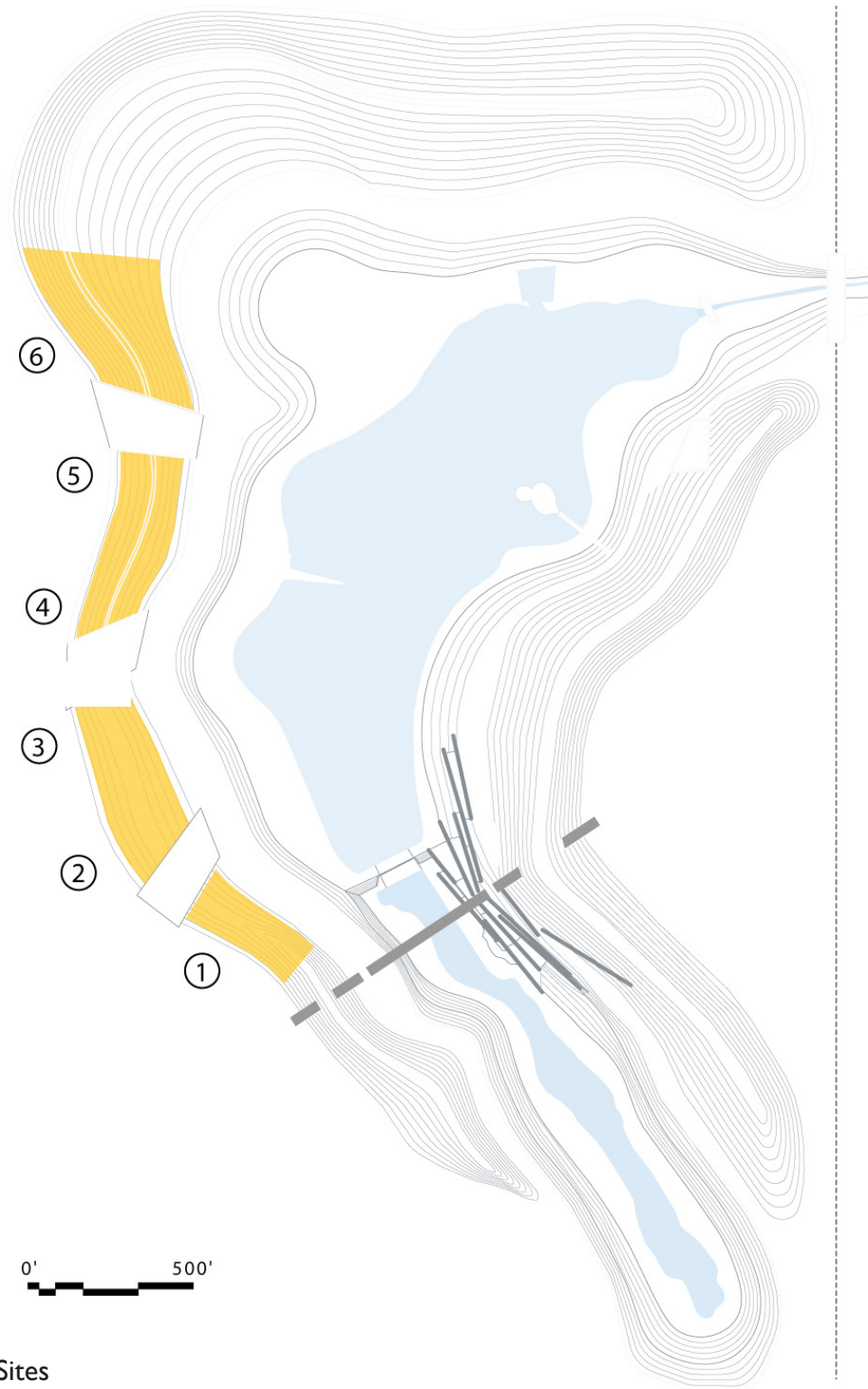
## The Cultural Terrace

The Cultural Terrace will be anchored by cultural institutions including the Botanical Garden. Located on opposite sides of the Lake, they are major attractions for park visitors and contribute greatly to the synergy of the cultural district. As new venues are built, there will be an opportunity to collaborate on programming, marketing and outreach strategies. The fantastic location with views of the Lake and great access to parking will make it a very desirable address.

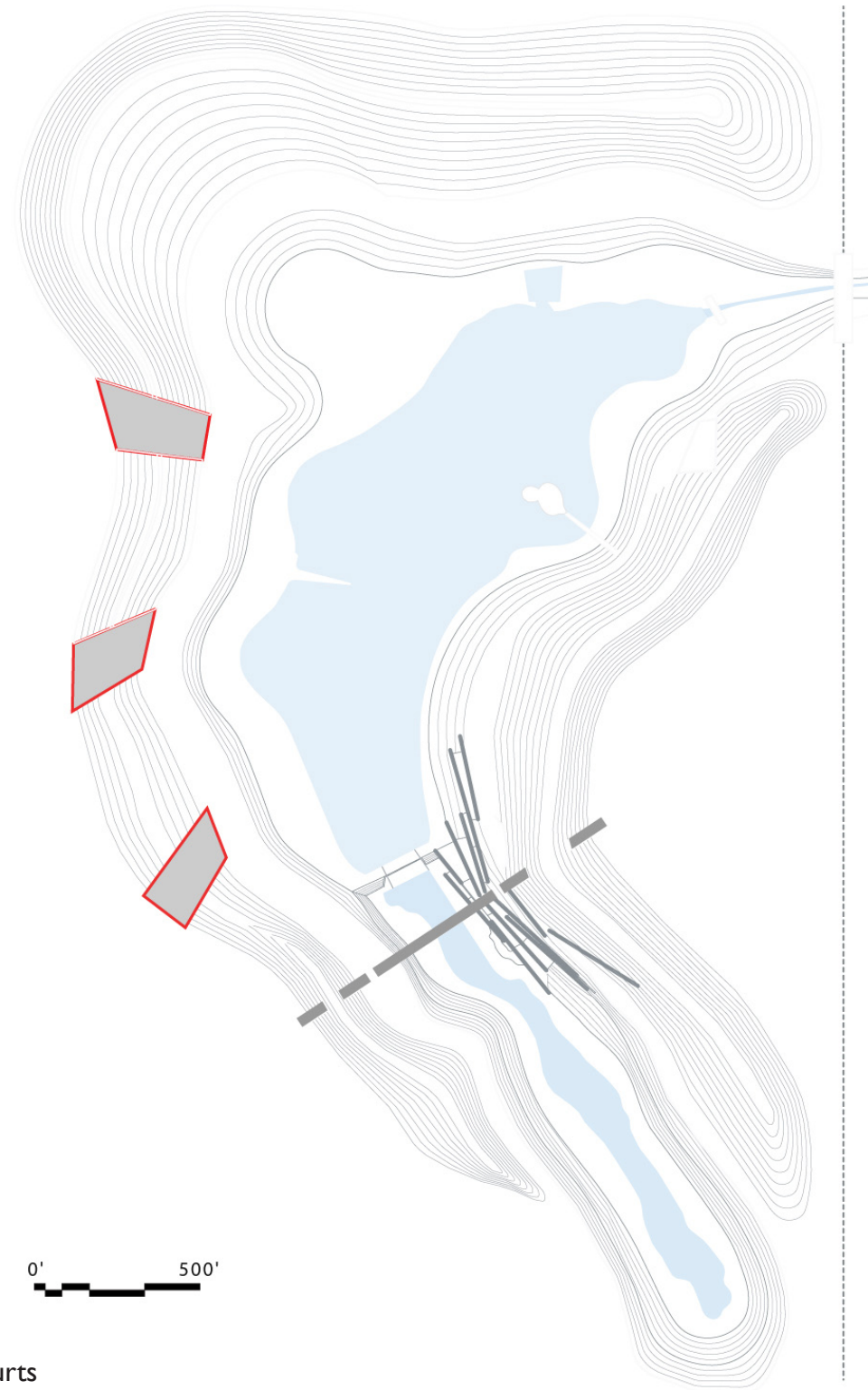




# The Cultural Terrace



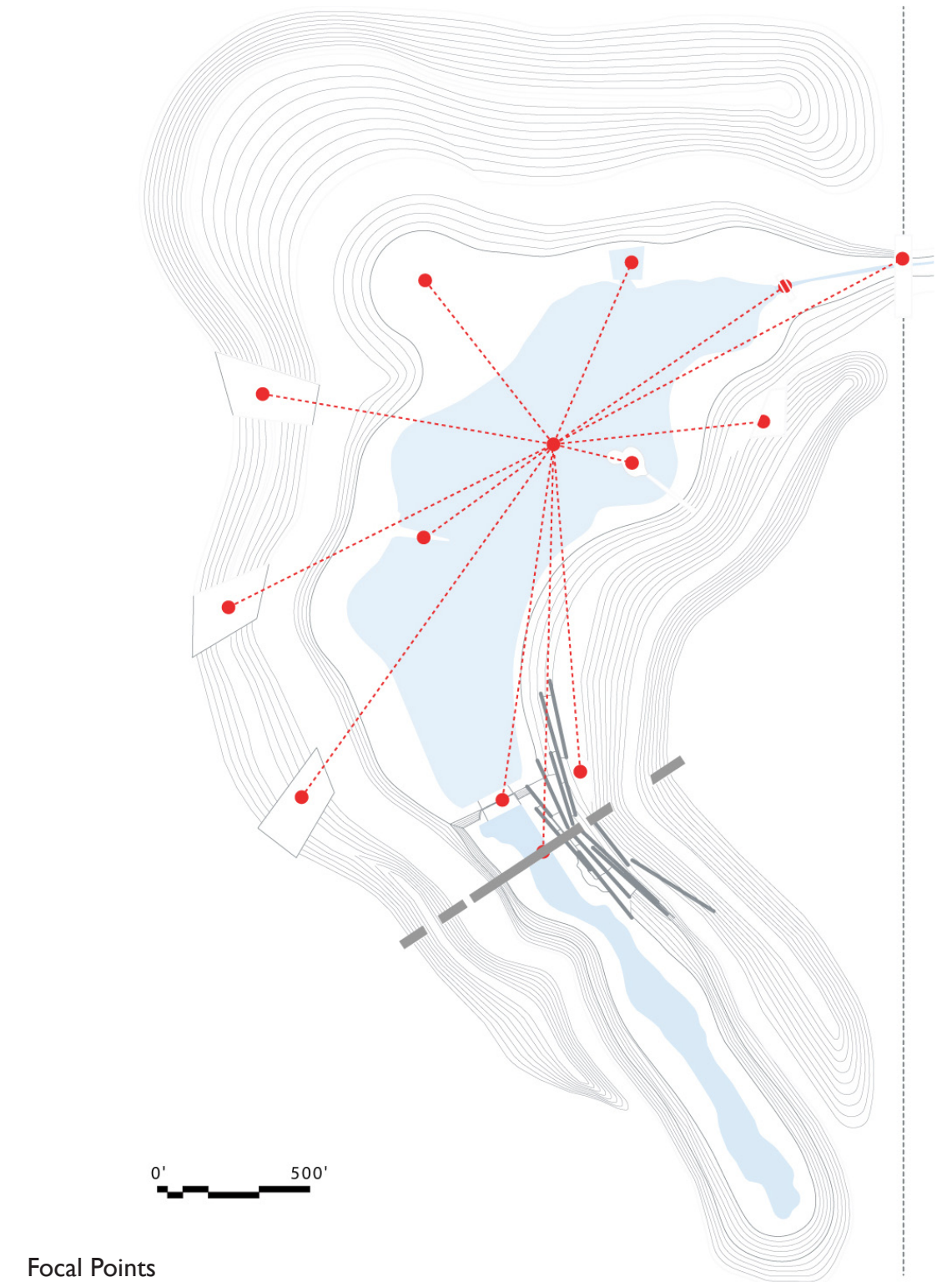
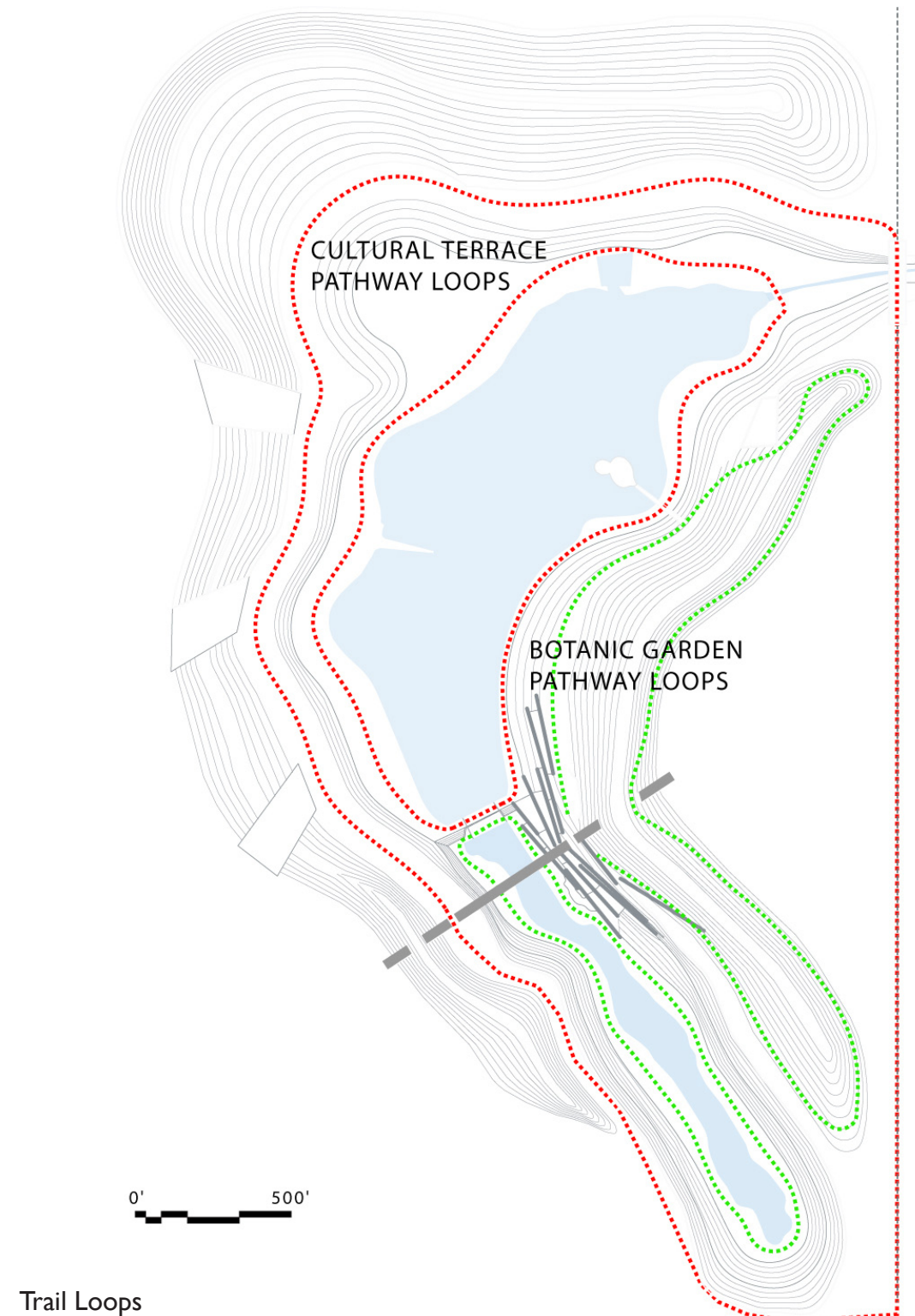
Potential Institutional Sites



Terrace Courts

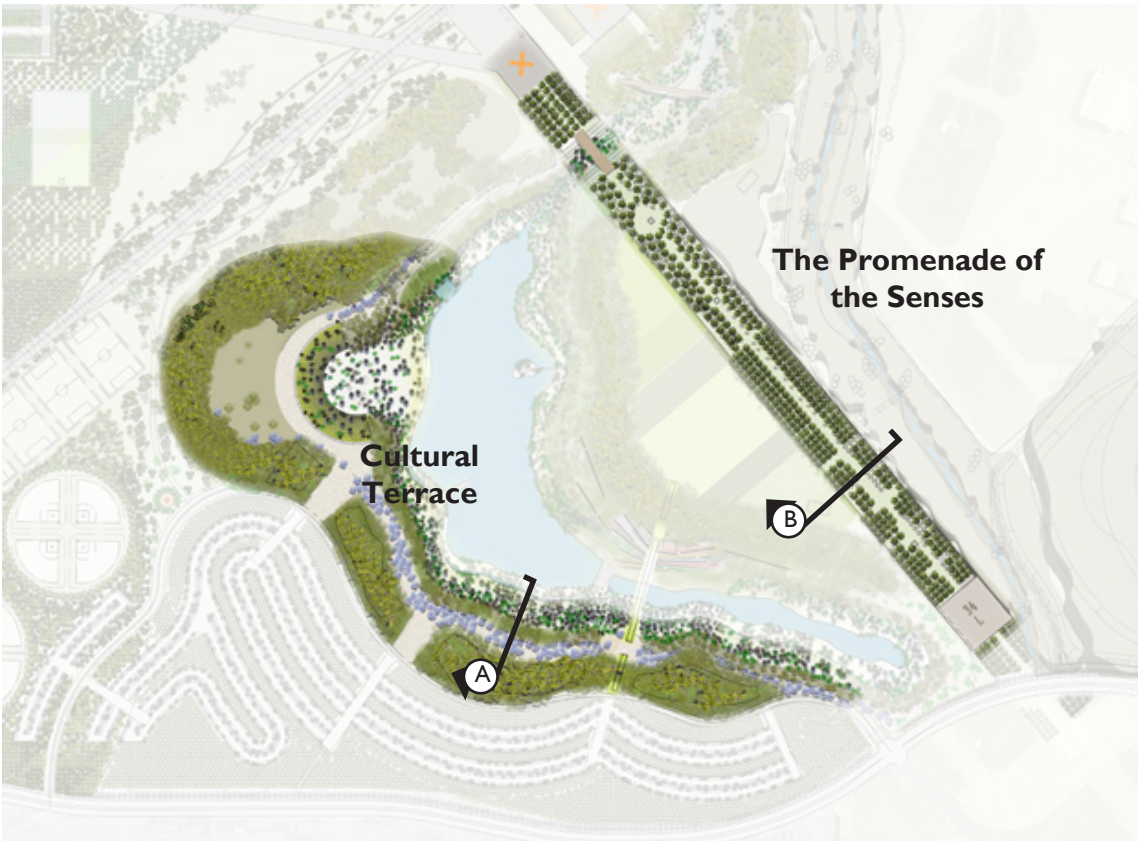


# The Cultural Terrace

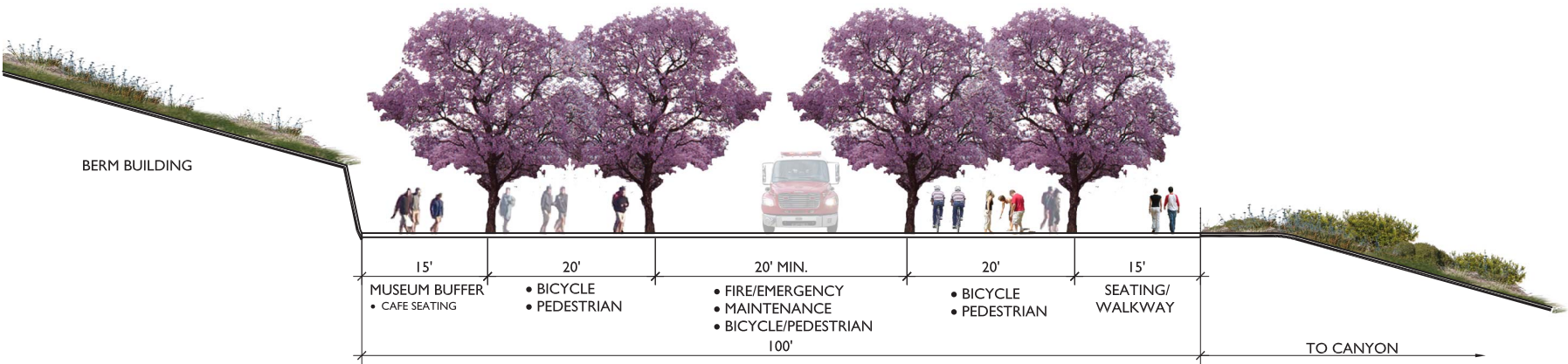




# The Cultural Terrace



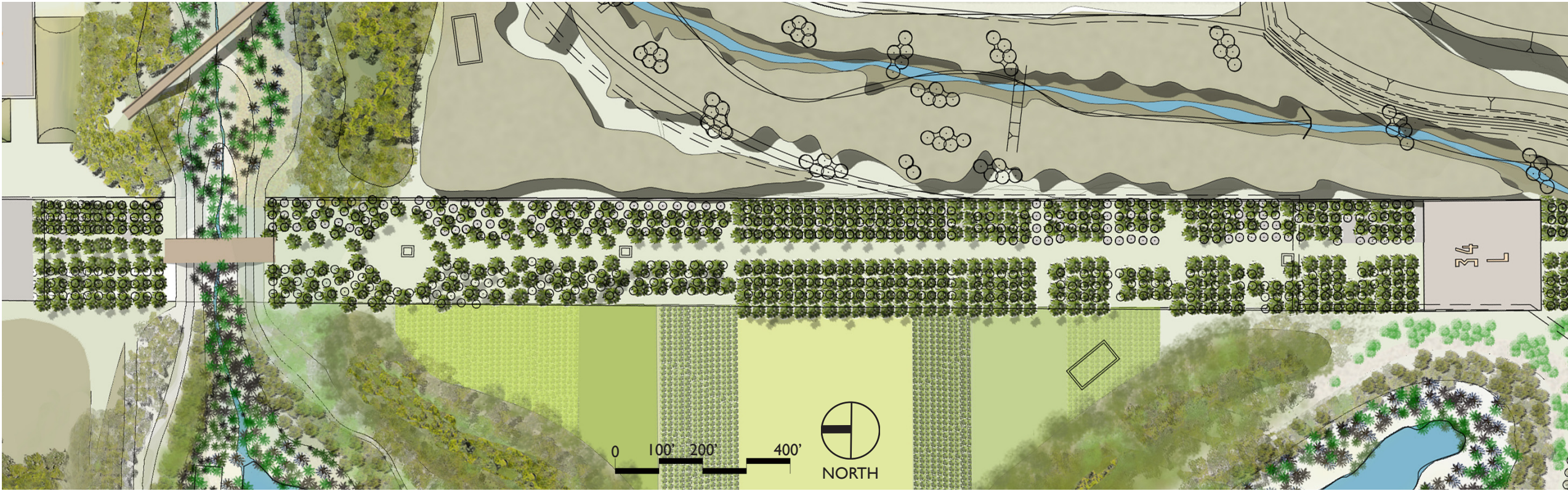
Key Map



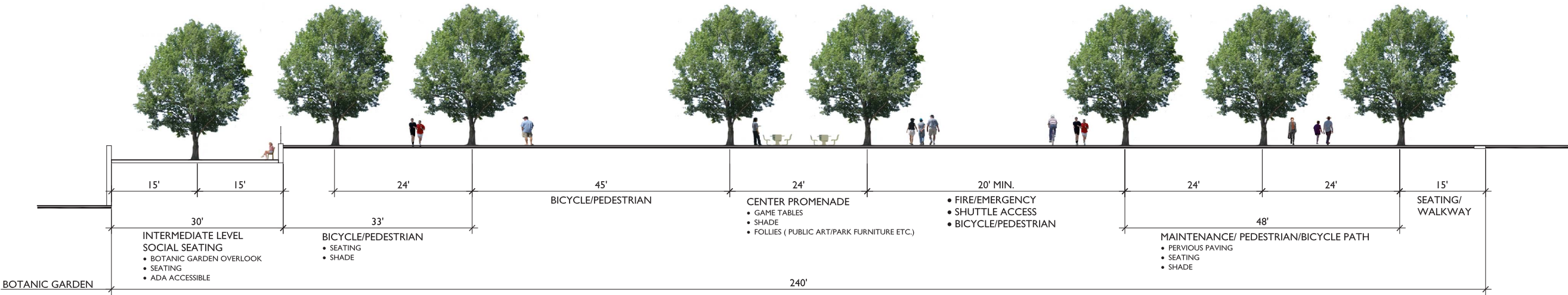
Section A Cultural Terrace  
Scale 1"=20'-0"



# The Promenade of the Senses



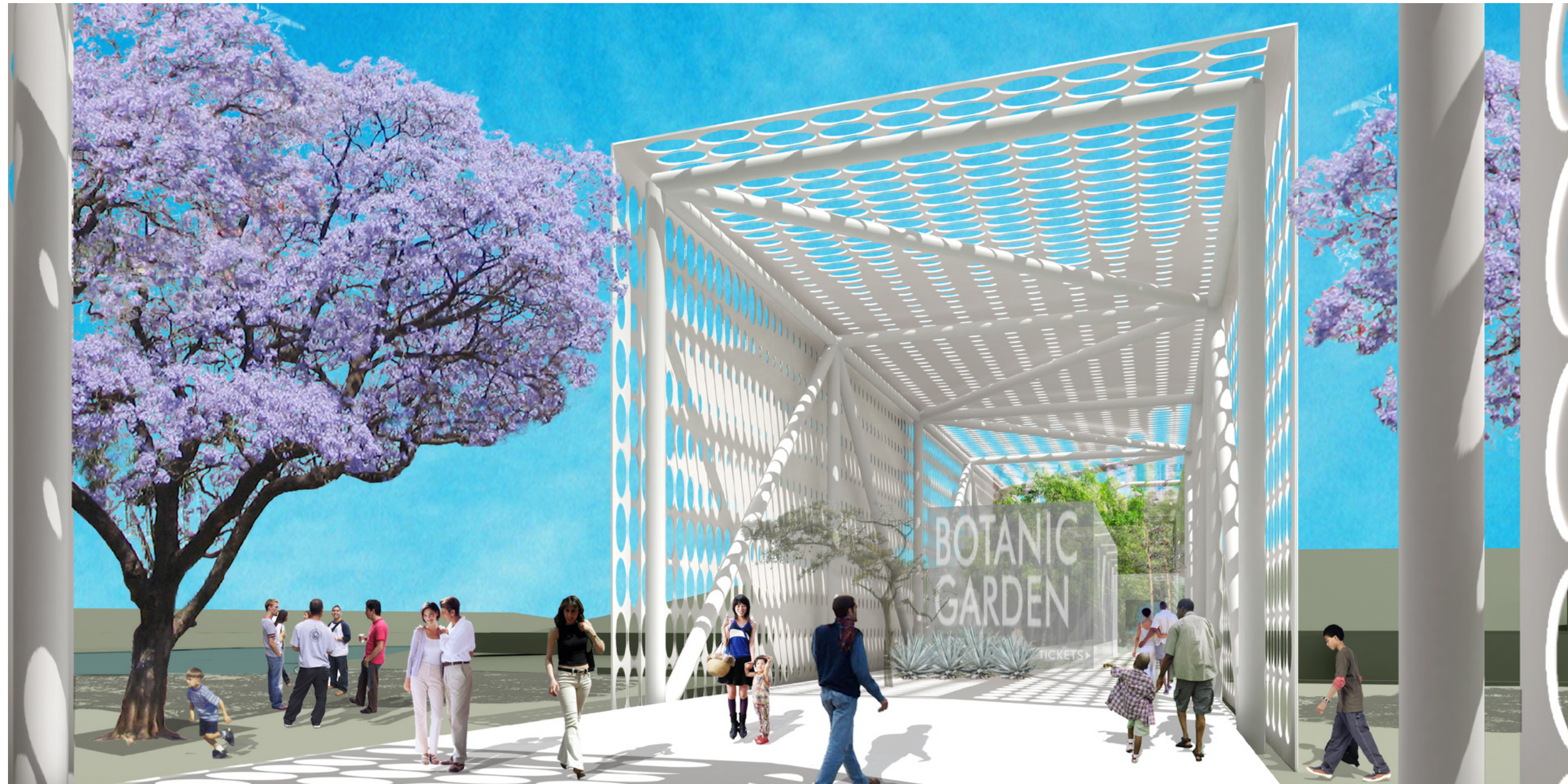
Promenade of the Senses



Section B Promenade of the Senses  
Scale 1"=20'-0"



# The Botanical Garden



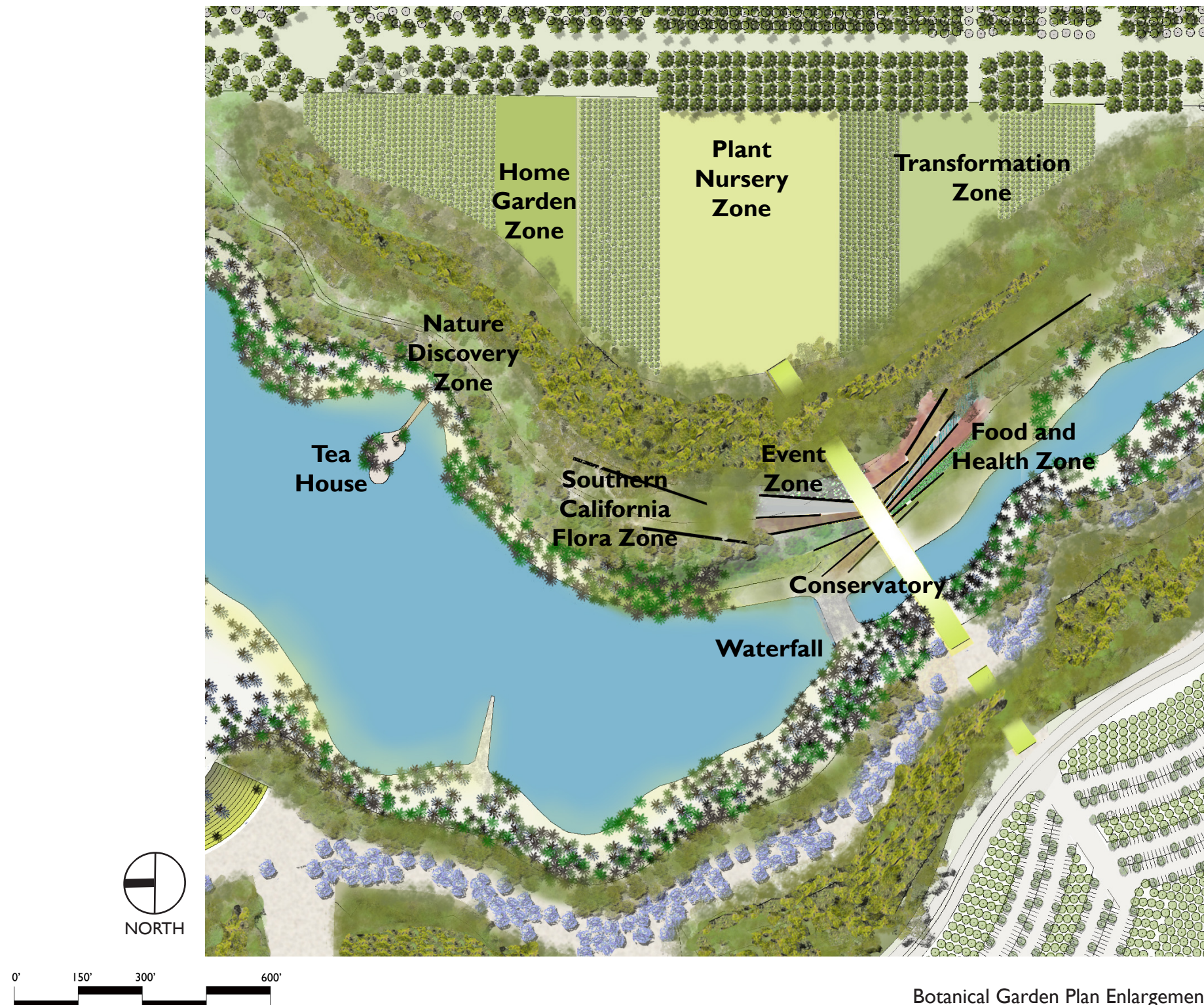
Conservatory Bridge



# The Botanical Garden

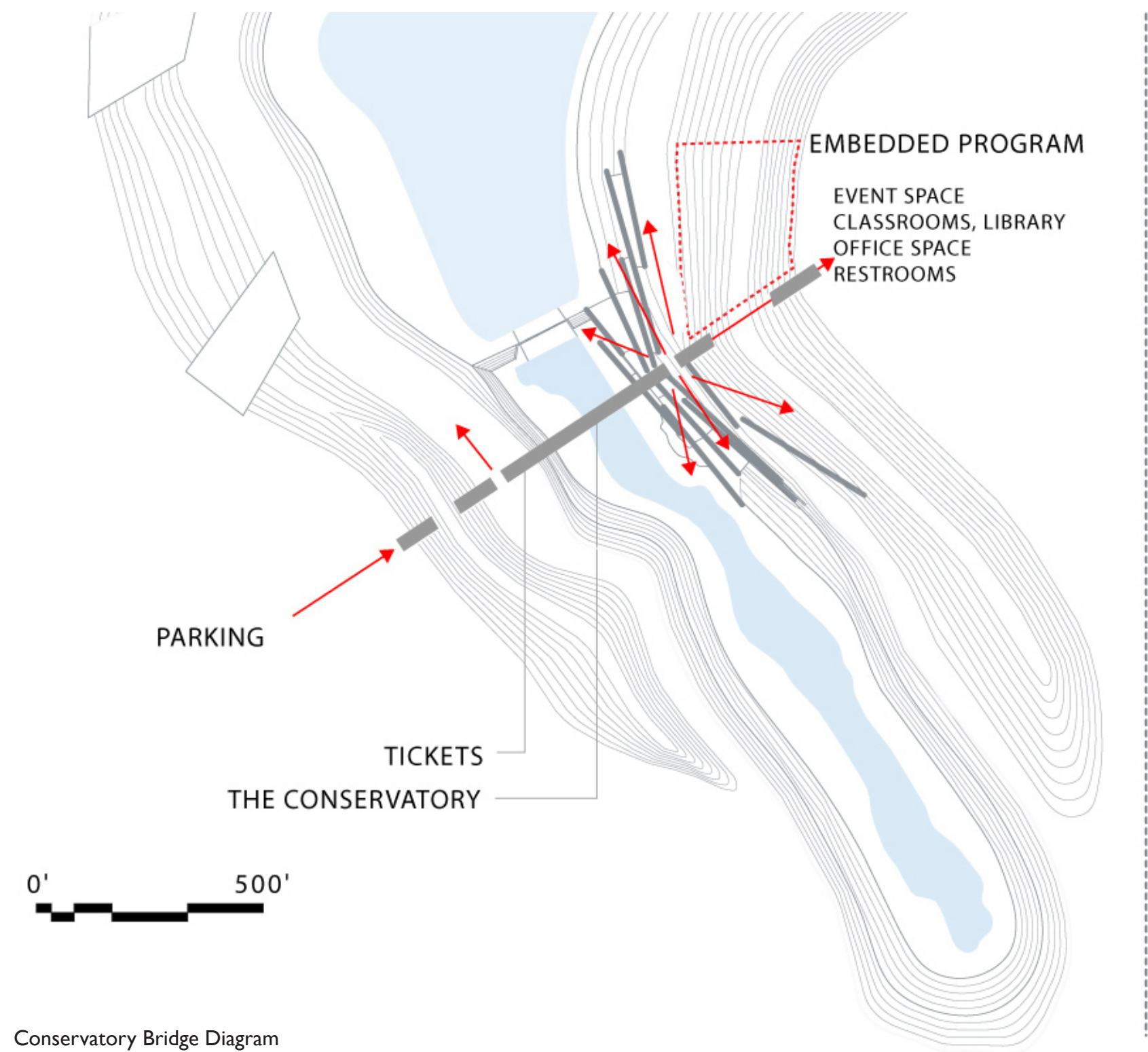
The Great Park Botanical Garden redefines the role of a world-class botanic garden in the 21<sup>st</sup> century. It is a showplace of spectacular landscape design, but also is much more:

- A living classroom where children and adults experience the beauty and fascination of plants as living organisms and learn how plants are essential for the food, oxygen, and other needs that sustain life on Earth — including human life.
- A living theater in which horticulture, ecology, art, and performance, not just signs full of facts, help visitors imagine a mutually beneficial relationship between people, plants, and the natural environment of Southern California.
- A place where visitors collaborate with scientists and other experts to create a healthy, sustainable future for all.
- A beautiful series of spaces that illuminate the seasonal changes and hydrological cycles of southern California.
- A rich mosaic of synergistic human and natural ecosystems evolving together over time.





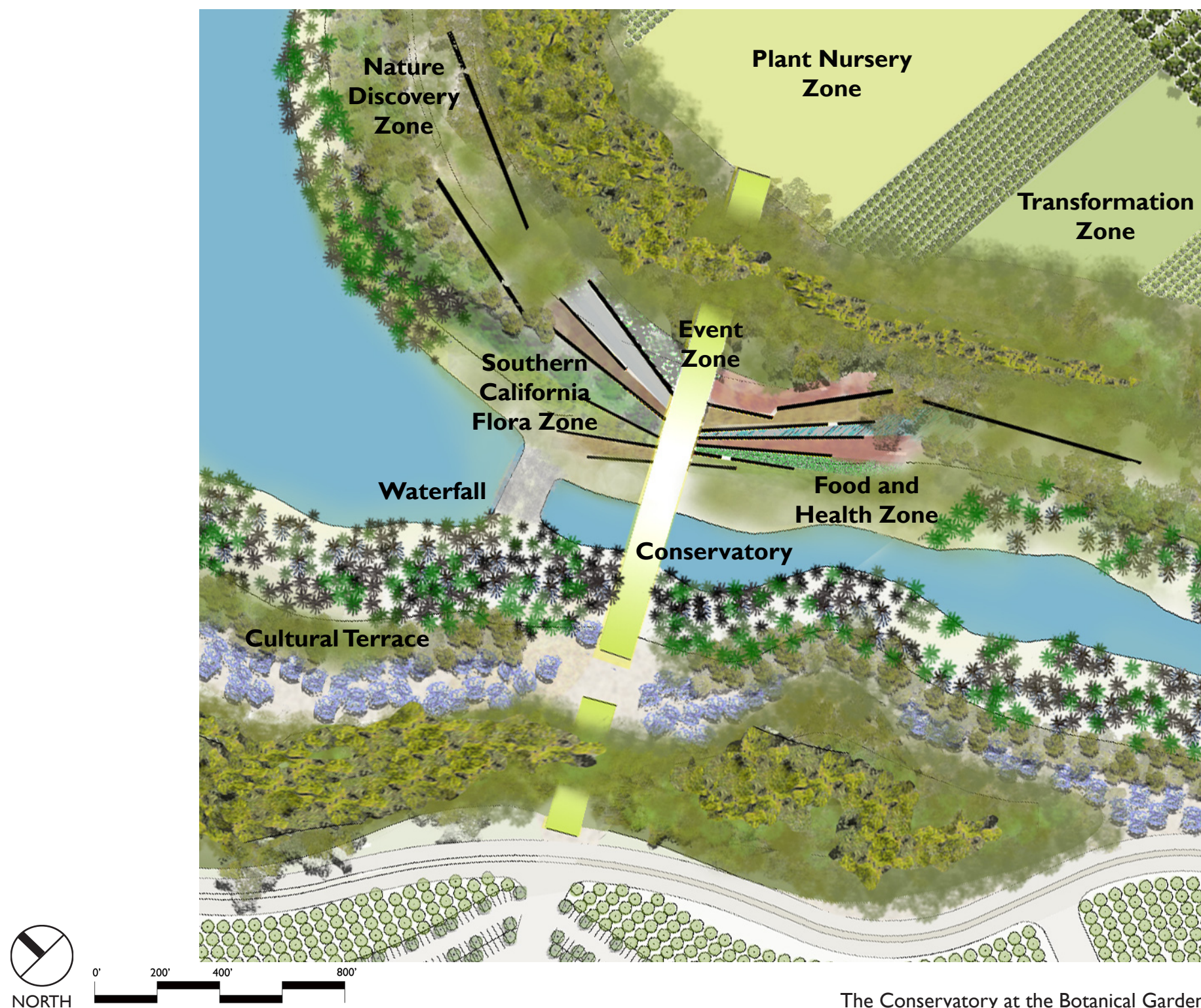
# The Botanical Garden





# The Botanical Garden

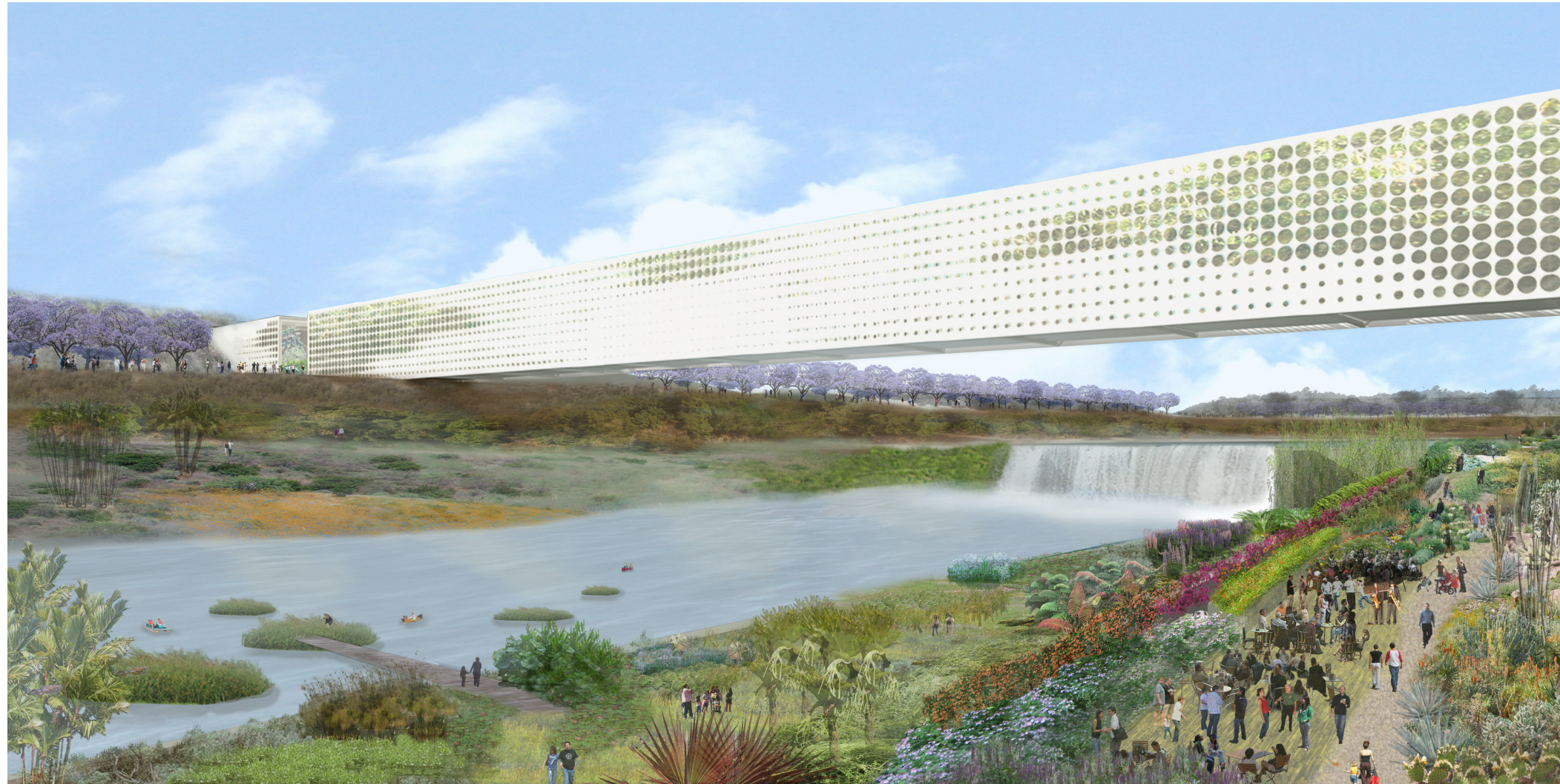
Visitors are immediately immersed in the world of plants from the moment they leave the Cultural Terrace and enter the Conservatory Bridge. This magnificent structure is iconic, providing a new architectural paradigm for botanic gardens in the 21<sup>st</sup> century. It links the Botanical Garden and Cultural Terrace, an elegant expression of the connection between people and the rest of nature. The building is one with the landscape, delivering the visitor to a series of multi-level long landscaped terraces carved into the Canyon slope. The Bridge and terraces offer panoramic views of the Lake, Garden, Park, and surrounding landscape from many perspectives. The Conservatory Bridge also serves as the Botanic Garden's Visitor Center, with spaces for permanent and temporary exhibits, a gift shop, and other features including a potential Butterfly Pavilion.



The Conservatory at the Botanical Garden



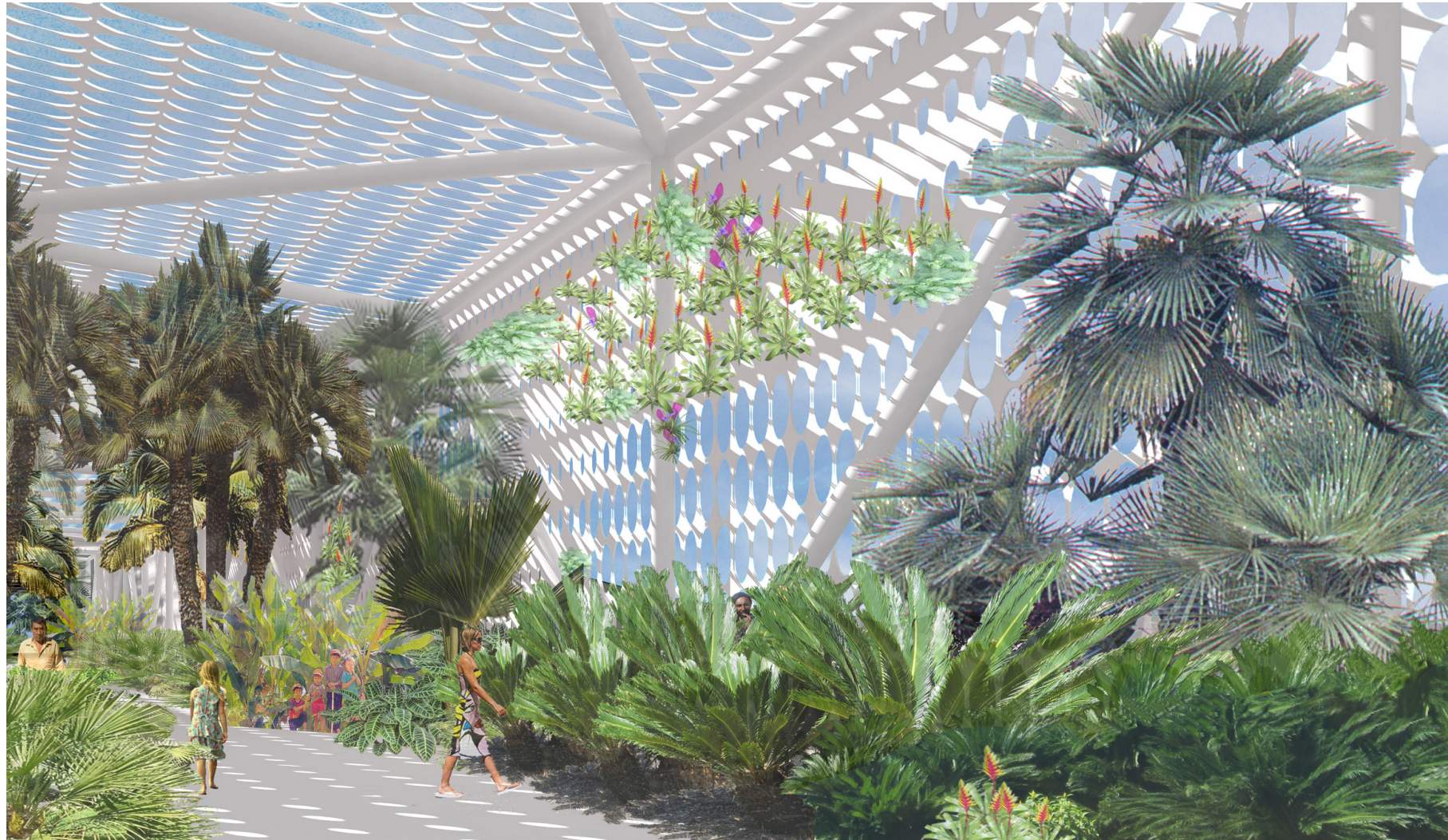
# The Conservatory



The Conservatory Bridge at Lake



## The Conservatory



Perspective inside the Conservatory Bridge

What makes the Great Park Botanical Garden truly innovative is its active engagement of visitors. Here, visitors are not merely passive viewers but rather active participants in creating a sustainable future. Rather than conventional static plant collections and managed gardens, the Botanical Garden is comprised of zones of engagement where visitors interact with the landscape. The Botanical Garden's education and science programs are designed to demonstrate that people can have a positive impact on the environment, while moving visitors along a continuum of involvement and sustainability:

- From passive viewing of horticultural displays, to
- Informal interpretation and experiential installations on the grounds, to
- Workshops, classes, and other kinds of formal education, to
- Collaboration with researchers in citizen science projects, to
- Community involvement through land steward training and other outreach programs.



# The Conservatory

The porous structure of the Conservatory Bridge builds on the tradition of the Lath House at Balboa Park in San Diego to create a contemporary standard. This structure will breathe with natural ventilation and provide necessary shade for the collections. The conservatory is a bridge and gateway which is a seamless part of the botanic garden experience.



Precedent Typology: Lath House, Balboa Park, San Diego, California

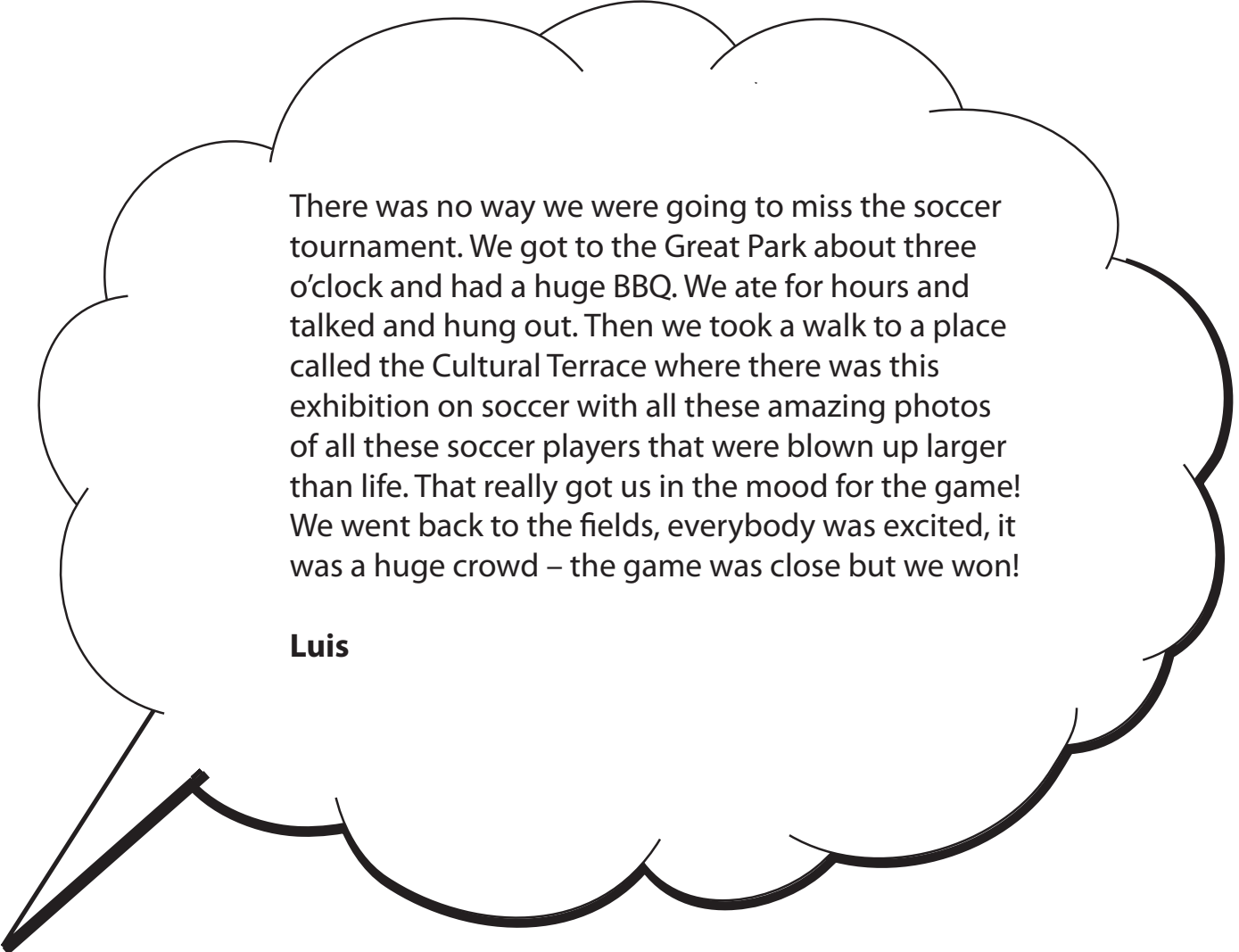


# The Conservatory



Conservatory Bridge at Sunset





There was no way we were going to miss the soccer tournament. We got to the Great Park about three o'clock and had a huge BBQ. We ate for hours and talked and hung out. Then we took a walk to a place called the Cultural Terrace where there was this exhibition on soccer with all these amazing photos of all these soccer players that were blown up larger than life. That really got us in the mood for the game! We went back to the fields, everybody was excited, it was a huge crowd – the game was close but we won!

**Luis**



# Sports Park



Sports Park Plan Enlargement

In the southwest section of the Park, with quick access from Marine Way and in the Life-long Learning district's Main Street, the world-class Sports Park accommodates individual and team sports, all ages and skill levels. Among the facilities are soccer fields, ball and bat fields, a watersports park, a skate park, a climbing wall, and courts for tennis, frontenis, handball, and other activities. There are places for family and friends to picnic before and after games. Windrows and other plantings integrate the Sports Park into the larger Great Park landscape.

Scattered throughout the park are additional spaces for athletic activity. The Bosque includes areas for children's play, bocce, and impromptu games. The Bowling Green is available for lawn bowling and croquet. In the upper Canyon are ziplines and other active sport facilities, including mountain bikes. Trails that traverse the park accommodate riding, walking, running and cross-country course. Together, over 200 acres of the park support a healthy, active lifestyle.

The Sports Park is more than just the sum of its parts. It is an important social and urban extension of the adjacent communities.



# Sports Park

The sports component of the park will include interesting urban forms – combining social spaces with sports programs, thereby connecting the active parts to the rest of the Park. The key idea is to bring Main Street from Life Long Learning Center into the Sports Park, and to take sports into the Great Park. The major sports complex will be a Main Street development, with its buildings and spaces fronting on Main with a familiar, traditional urbanism. The Palm Parade connects the sports complex to the Aircraft Museum, including a food court for healthy things to eat and drink between games. The soccer fields will be located along the Timeline, extending into the Park, providing access for teams and maintenance. The parking for the Sports Park is peripheral, with a series of parking lots around the edges to provide easy access to the various fields directly and conveniently.

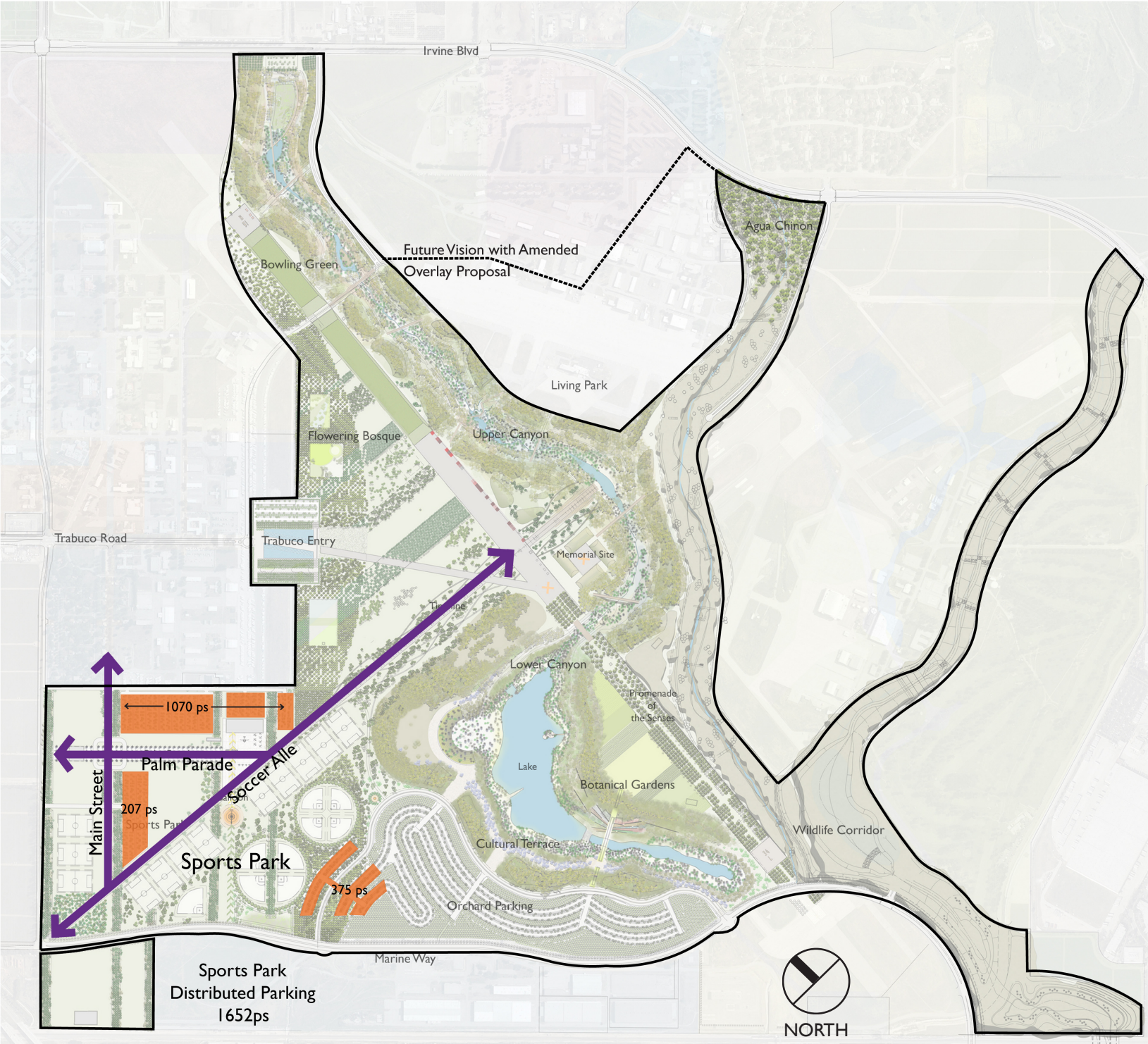
When people go to the Sports Park, it is as much about going to play as it is about the social time with friends, family, and community. Building in social spaces for picnicking and gathering is an integral function of the Sports Park. The social life of the Sports Park is as important its active life.



Sports Park



# Sports Park



Sports Park Diagram

APPROVED PROGRAM	QUANTITY
OPEN SPORTS FIELDS	
Soccer (11 Regulation fields, 1 outdoor soccer stadium with 400 seats)	12
Soccer Jr. (Overlaid fields)	8
BAT & BALL FIELDS	
Baseball-Little League	4
Softball	5
MIXED SMALL COURTS AREA (not shown)	
Tennis Courts	12
Frontenis / Handball (27.88 x 42.65 feet)	2
Basketball	15
BUILDINGS	
Field House (26,000 sf)	1
ACTION SPORTS PARK (20 acres)	
Skateboard Park (Approx. 30,000 sq. ft.)	1
Multi-use Fields	4
Plaza/Ped. Mall (375,000 sq. ft.)	1
OTHER SUPPORT FACILITIES	
Walking/Jogging Track (over 30 miles of internal primary trail system, approx. 6 miles within the sports district, including distance markers)	included
Children's Play Area	2
Youth Play Area	3
Other (Concessions; Lavs; Group Picnic)	5
SPORTS PARK MAINTENANCE	
Served by maintenance facility (2)	1



## Open Meadows and Grove

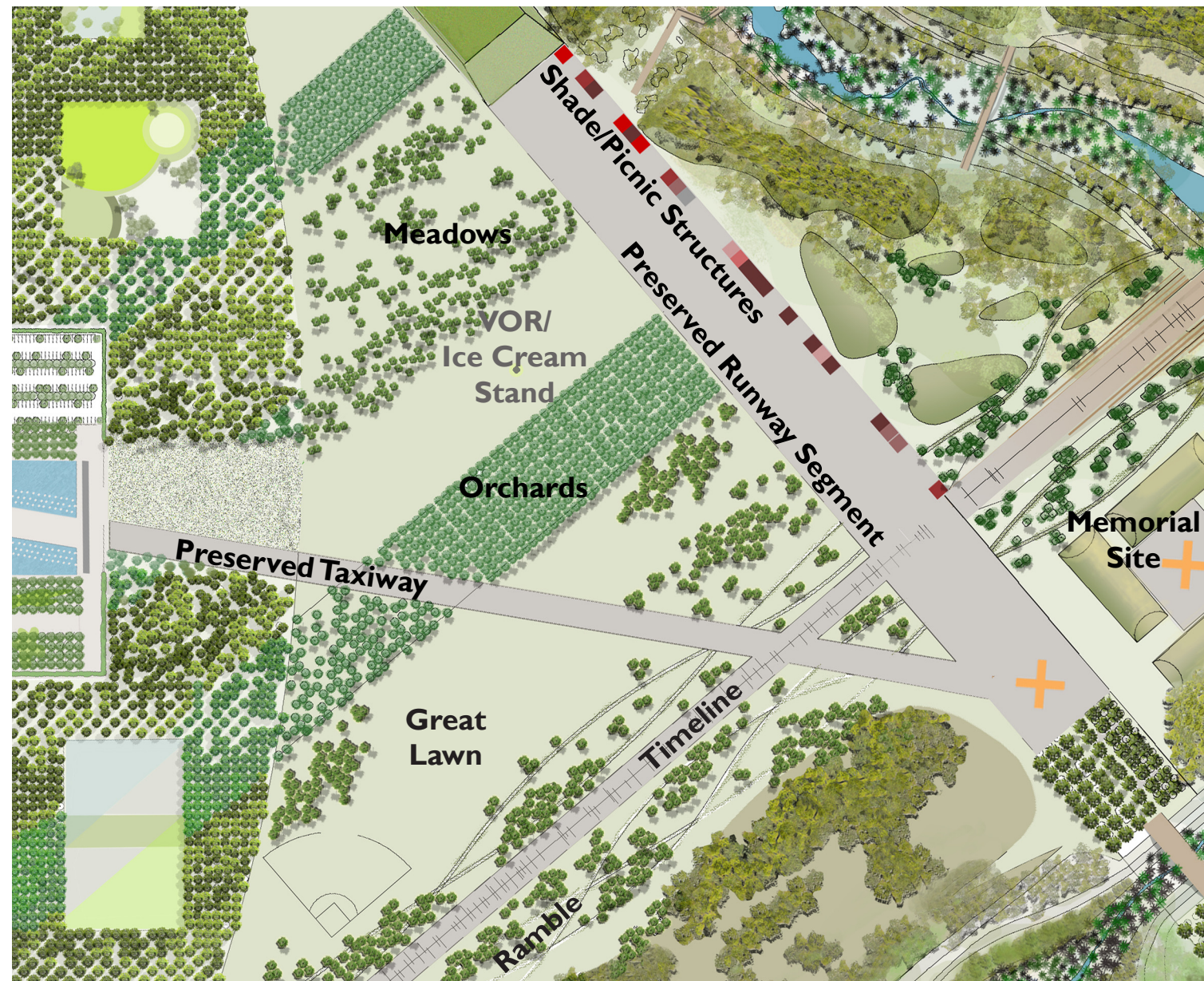


Precedent Typology: Long Meadow, Prospect Park, Brooklyn, New York

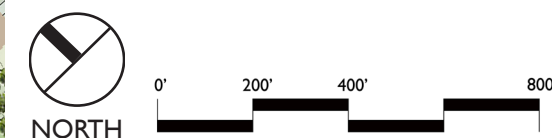


# Open Meadows and Grove

Between the Bosque and the Upper Canyon is the Open Meadows and Grove, where groves of citrus, nut, and avocado trees celebrate Orange County's agricultural past. Flowering trees from the Bosque border the area, providing a shady connection with adjacent neighborhoods. A Great Lawn accommodates sunbathers, Frisbee players, and picnickers, in addition to festivals and other large public gatherings. An expansive wildflower meadow dotted with lupines and poppies in spring and golden sunflowers in fall is crisscrossed by paths for close-up views of butterflies and songbirds.

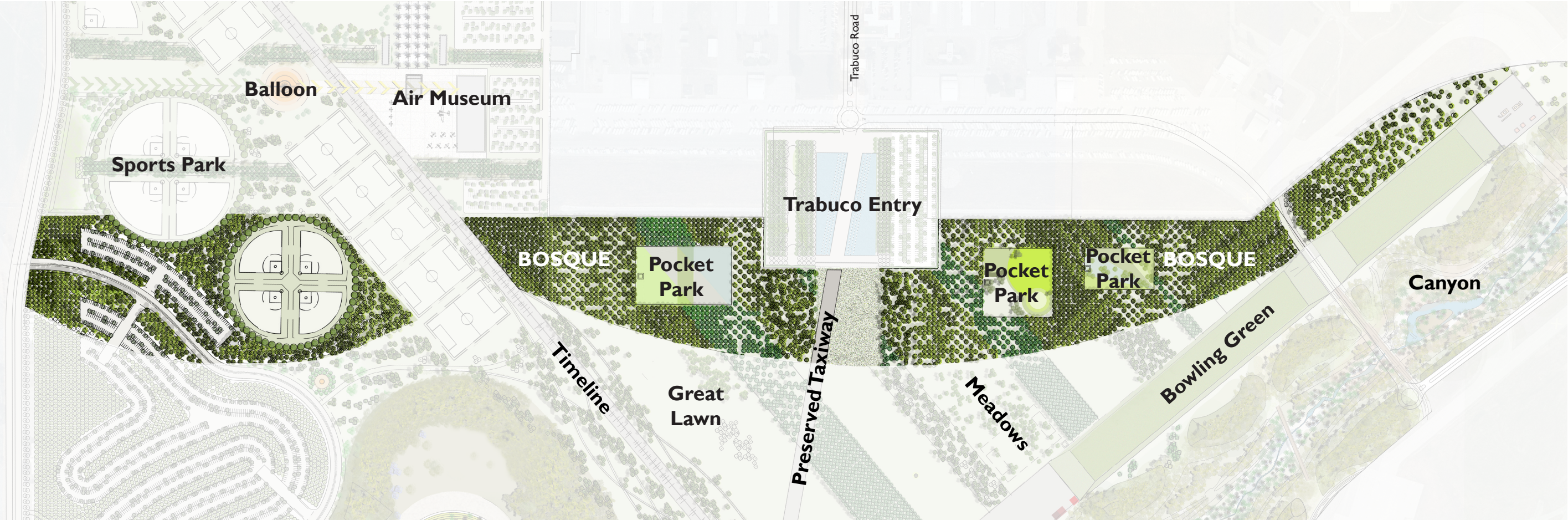


Open Meadows and Grove Plan Enlargement

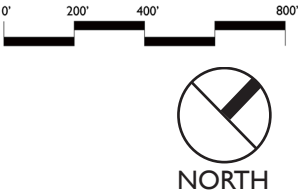




# Bosque



Bosque Plan Enlargement





## Bosque



Neighborhood Pocket Park

Along the park's long western edge is the Bosque, a flowering arboretum, characterized by a large open woodland of colorful, fragrant, and interesting trees offering shade and beauty in all seasons. The Bosque defines the edge of the park for the neighboring communities, inviting them into the Great Park and offering the benefits of living adjacent to a park of this scale. As soon as visitors enter the Bosque they know they have left the busy suburban life and entered the green refuge at the heart of Orange County. Inside the flowering woodland are a series of pocket parks, including an interactive water garden and a playground for children. A dog park provides room for their pets to run and play. There are also intimate places for adults to relax and unwind, sit and read, practice yoga, play a game of chess, or chat with friends.





## Park Infrastructure

The Great Park design will rely on a sound foundation of infrastructure and operating systems. In the effort to articulate these systems, this section of the Preliminary Master Plan identifies the critical thinking to date.

To enable success, the site itself requires clearing and grading to prepare it for vertical construction. This also involves the preservation and dismantling of existing buildings, as well as early development of several components of backbone infrastructure.

These include plans and processes related to:

- Recycling Materials
- Grading and Topsoil Preservation
- Stormwater Management and Conservation
- Water Quality Assurance
- Access and Vehicular Circulation
- Underground Utilities
- Integration with Heritage Fields
- Wildlife Corridor
- Site and Clean-up Compatibility
- Sustainable Infrastructure Systems

In the effort to make this the first truly sustainable park of the Twenty-first Century, this park will depart from convention, where feasible, to use sustainable systems of environmental control. These will include innovative, yet proven technologies for pavements, soil placement, utilities, irrigation, water conservation, and stormwater management. Operation and maintenance strategies, and special criteria for construction are being identified and considered along with the infrastructure for expansion into future technologies. In total, the Great Park will have some \$150 million invested in backbone infrastructure – a significant investment to both serve each visitor and also endure through the future for generations to come.

The Preliminary Master Plan focuses on these categories of sitework improvements to locate, quantify, and characterize them. This validates the assumptions made for the design and verifies the feasibility of implementing the Park features as planned.



Yesterday I finished my training and officially became a volunteer ranger at the Great Park. We all got our badges and uniforms—a shirt and shorts, to make it easy to bike around the park. That’s how we get around. When we’re not pedaling around on those cute orange bikes we’re either on one of those small solar-powered electric vehicles or on foot. Do you know what’s so different about being a ranger at this park? So much of our training focused on people skills, to make the park experience extra special for all the different people who come here, whether to relax, learn, or play.

**Emma**



# Neighborhood Integration

There are nearly 14 miles of common perimeter between the Park and the surrounding Heritage Fields Communities. Furthermore, they will share infrastructure (roads, drains, and sewers) and a coordinated demolition and preparation program as part of construction. They also have a valuable opportunity to deploy designs that serve both the Park and adjacent neighborhoods, saving money, time and resources. Synergies include roads; bridges; shuttle; trails; habitat restoration; transit centers; and other infrastructure. A collaborative planning and design effort is underway to assure opportunities are maximized while adjoining designs remain compatible.



Property Constraints Diagram



# Green Street Initiatives

The Great Park will be served by collector streets that bring visitors in and efficiently deliver them to parking destinations. Access to the Park is accomplished by Trabuco Road (West); Irvine Blvd. (North); Bake Parkway (East) and Marine Way (South). Once inside the Park area visitors will use College Road, Main Street, Marine Way, and Great Park Boulevard to travel to parking areas. Subsequent movement within the Park will be by park shuttle, pedestrian or bicycle. No additional vehicular roads (other than parking access, service, and emergency) are provided within the Park.

Selected roadways within the park incorporate “Sustainable Travelways” as prepared for the City of Irvine Redevelopment Agency. Features such as inverted and planted parkways, porous pavement, curbless edges, and tree canopies will be prevalent. Vehicular ingress and egress will be solved by way of traffic calming designed to improve safety and promote shared pedestrian and bicycle use.



“Sustainable Travelways” Features

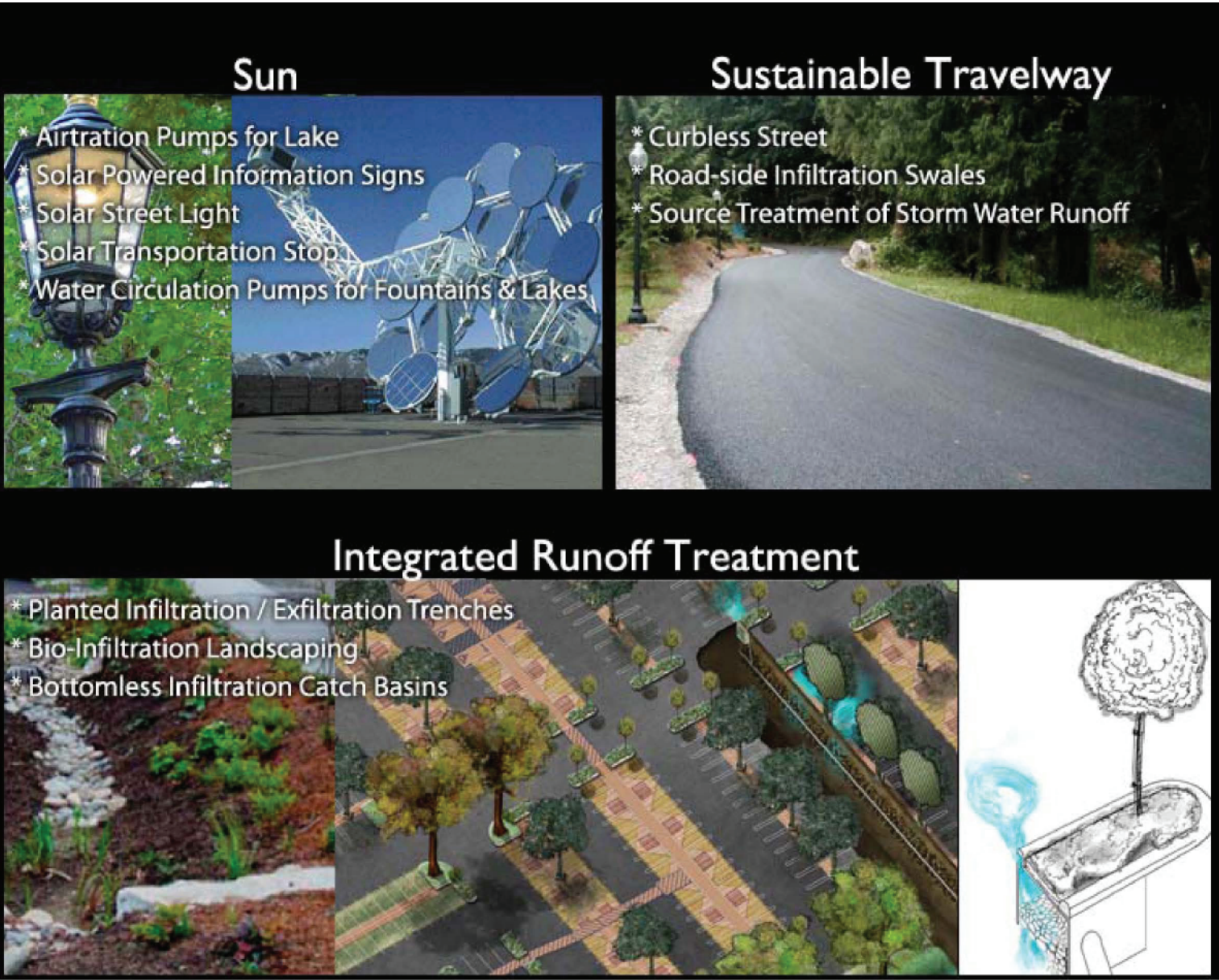


# Sustainable Infrastructure

The Park will feature sustainable principals within its infr astructure. Several greencomponents are currently being considered.

- Large rainfall impoundments and groundwater recharge areas within the Agua Chinon. Recharge for the Wildlife Corridor will provide wildlife nourishment and support the overall sustainability goals planned for the park.
- Numerous local infiltration zones for urban run-off to recapture excess flow into the groundwater aquifer.
- Permanent recycling of debris and landscape waste on-site.
- Deployment of green street designs, such as porous travelways; dark sky lighting; traffic calming; pervious trails and parkways; tree canopy grouping along roads for shade; low reflective and colored pavements; underground irrigation; and structured soil placement to promote aeration/ infiltration while confining roots.

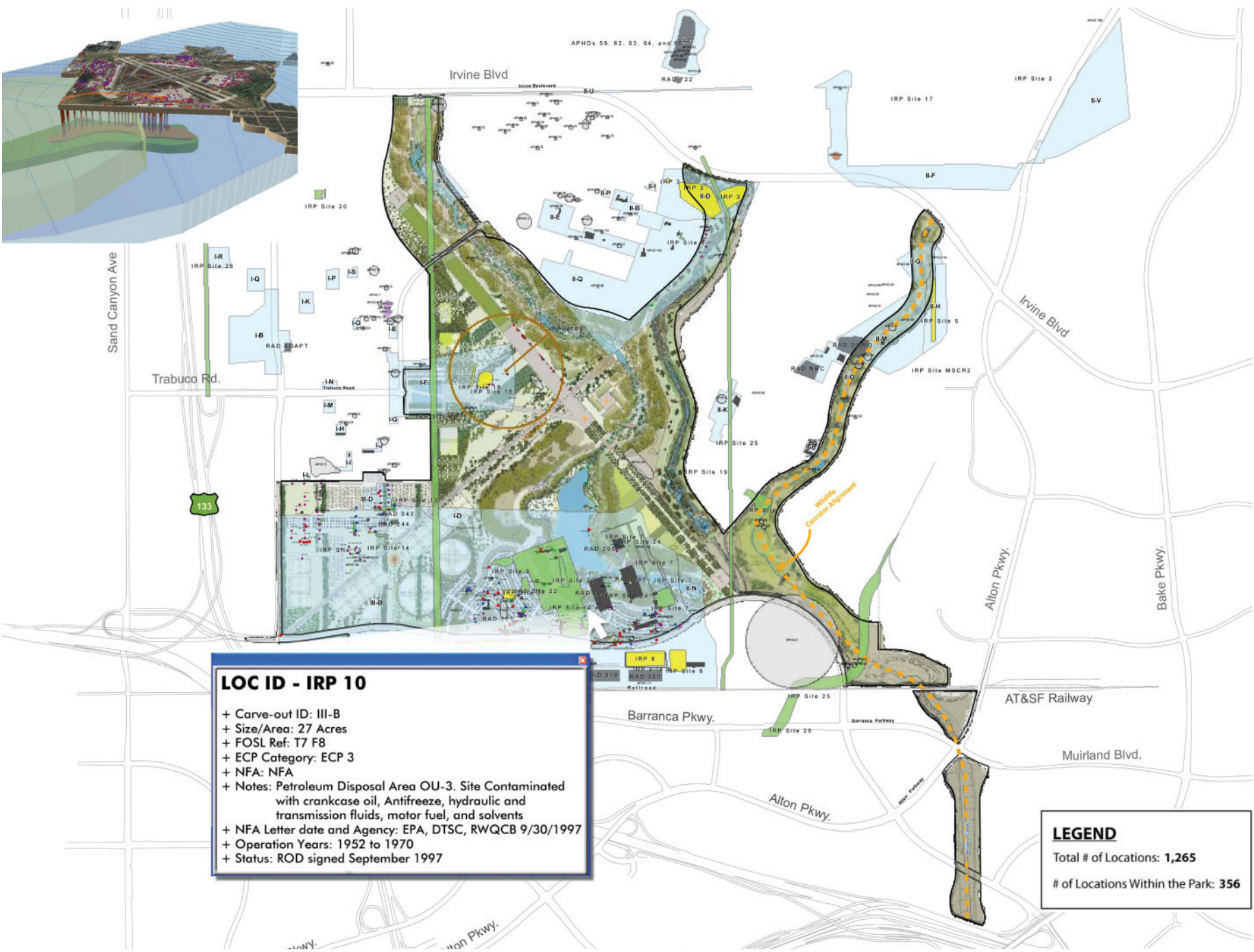
This eco-adaptive approach to engineered systems will enable the Park to become more self sustaining and be a model for others to follow.



Sustainable Infrastructure Principals



# Remediation Areas



Remediation Site Diagram

There are 1,265 clean-up sites on the El Toro property, with 356 of these within the Park. The U.S. Navy is obliged and engaged to clean them up to satisfactory completion (estimated 2012). The Preliminary Master Plan sets forth a simple three-point process:

- Locate and characterize existing sites with a GIS database to monitor progress and consider them in the design
- Compare sites to the proposed Park plan and evolve a smart design that enables the Park features to be accomplished without interfering with them
- Document specific engineering designs to remove, mitigate, or avoid the sites enabling agency clearances and permits

The comparison step is underway in order to inform designs to ensure that Park features will be compatible with the on-going clean-up operations. Groundwater modeling, introduced hydrology, surface grading, remedial barriers, and final surface uses are being designed to work within this constraint.



# Site Demolition and Preparation

There are over 600 acres of hard pavement to be removed and 120 buildings to be dismantled and recycled on the Orange County Great Park site. This work will launch the construction phase by making the site ready for design implementation.

All pavements will be recycled at a recycling center located adjacent to the Great Park. Gravels and cobbles will be reused for infiltration media and roadbed support. Large leaves of concrete will be stacked for retaining walls and waterfalls, as well as laid down for trail steps as El Toro Stone. Organic building materials (drywall & wood) will be used as soil amendment while reusable components (redwood beams) are used in new construction.

Several buildings will be preserved and reused as part of the Park and many special military base features will be salvaged for memorial purposes.

**NOTE:** Pursuant to the recycling agreement between the city and Heritage Fields.

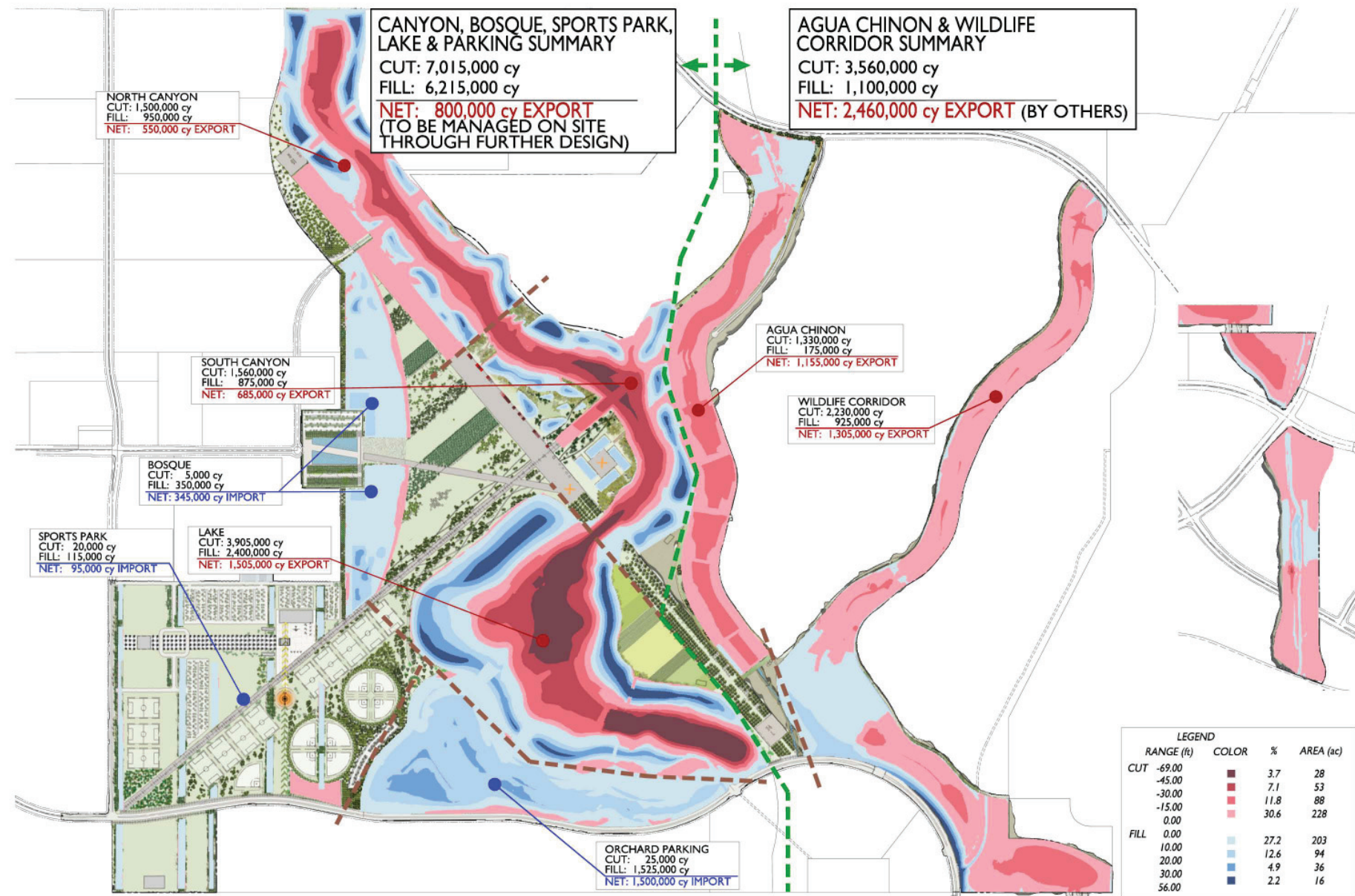


Site Preparation Diagram



# Grading and Soils

After demolition and cleaning, a mass grading operation will commence, moving earth in bulk to construct the major terrain features. Over 5 million cubic yards of earth will be excavated and placed in fills on the site. The soil has been investigated for structural integrity and it will be moved and placed under the supervision of engineers to ensure the newly created surfaces support the intended uses (lake, canyon, buildings). The earthwork involved will balance itself so no trucking or export is necessary. The location of rich organic topsoil has been mapped and high quality soil will be conserved and used to cap the planted areas.



NOTE: Subject to negotiation and agreement between the city and Heritage Fields.

Mass Grading Diagram

NOTE: Subject to negotiation and agreement between the city and Heritage Fields.

Soils Diagram

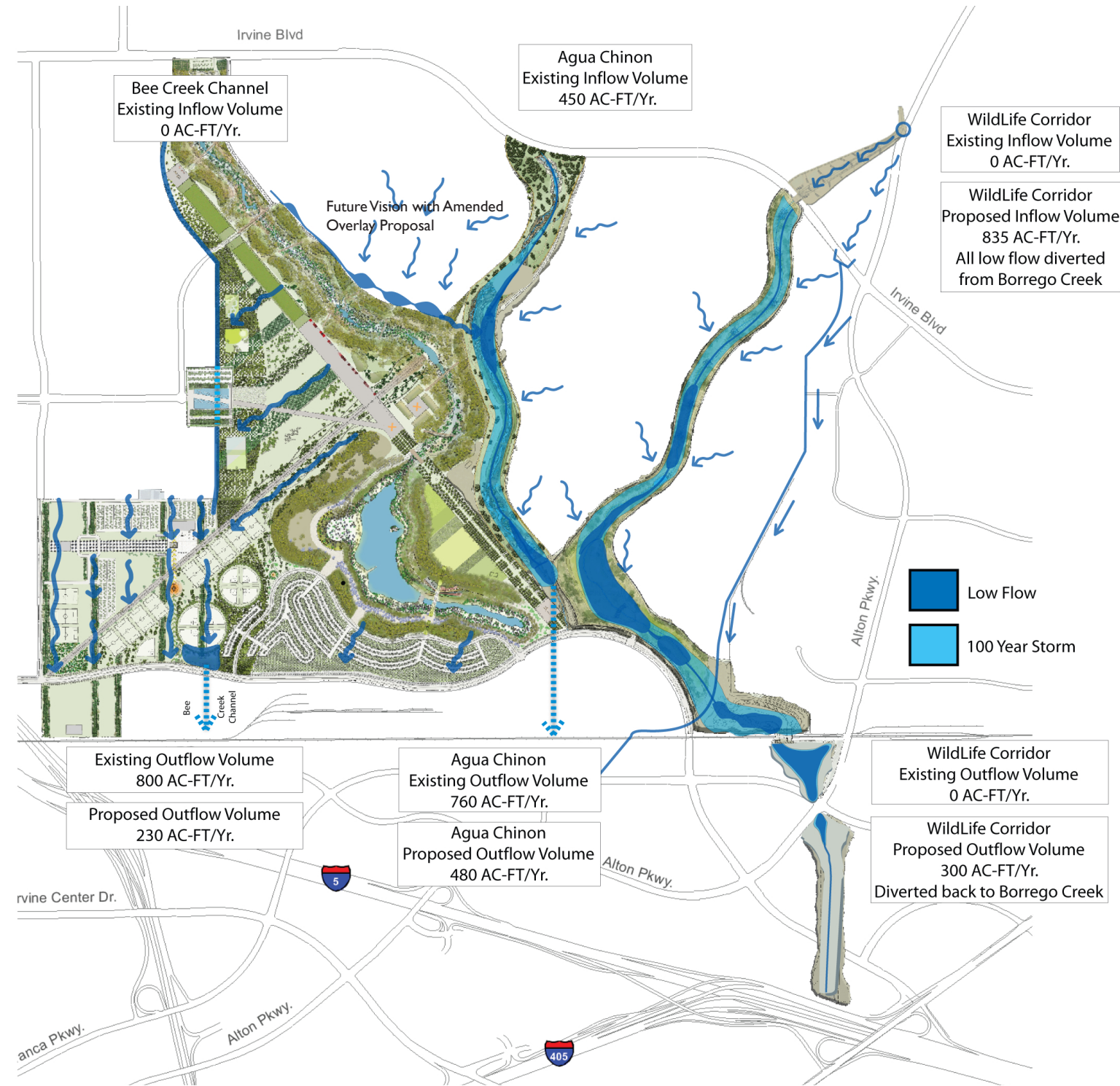




# Stormwater and Water Conservation

There are four (4) primary water courses crossing the site: Bee Canyon; Agua Chinon; Borrego Channel (Wildlife Corridor); and Serrano Creek. Agua Chinon will be restored to riverine or natural open drainage ways; Borrego Channel remains an improved concrete flood channel, but a portion of its' flow (10%) will be split and diverted to Wildlife Corridor then returned to the channel downstream. Serrano Creek will be restored and fortified with natural planting and materials for drainage purposes. These drainages will collect rainfall run-off by way of a storm drain and open swale network. Much of the run-off will be impounded and spread within these drainages to promote infiltration. Our objective is to minimize flood flows exiting the site (lost water) and maximize re-capture to the groundwater aquifers (conservation). Current designs indicate over 1000 acre-feet (the volume of water 1' deep over one acre) will be saved.

**NOTE:** The calculations are currently being reviewed and coordination with RBF is on-going.  
A final revised exhibit to follow.

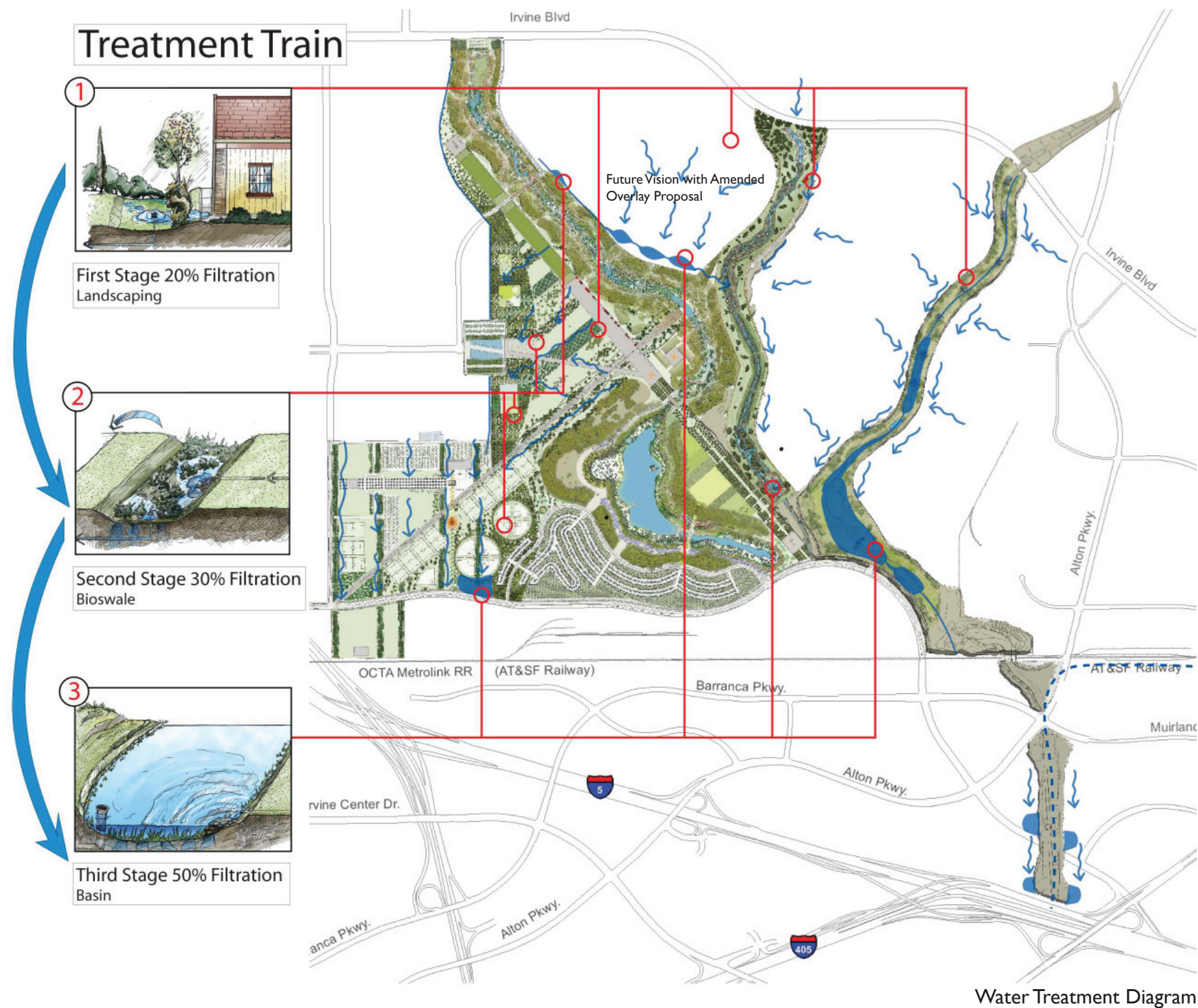


Stormwater and Water Conservation Diagram



# Water Quality

There is no new water. All the water we use was the same the dinosaurs used. Our obligation to future generations is to keep our water clean for their future use. To this end, the Park will have an array of natural treatment systems (NTS) implemented in a three (3) stage treatment process. Basically, all areas developed with buildings, roads, and other facilities will integrate Best Management Practices, such as porous pavement, structural infiltration devices, and litter and debris entrapment vaults. This comprises Stage One. Surrounding these facilities will be bioswales and infiltration/exfiltration media integrated into landscaping zones. This is Stage Two. Finally, after run-off has coursed through these stages, it is captured downstream in treatment wetlands that add vegetative uptake and solar exposure. This is Stage Three, polishing the water and finalizing the pollutant removal. Monitoring and maintenance will be facilitated by locating the NTS next to roads, trails, and access ways. Locations will be selected to ensure upstream areas of dissimilar use and are segregated to facilitate monitoring.



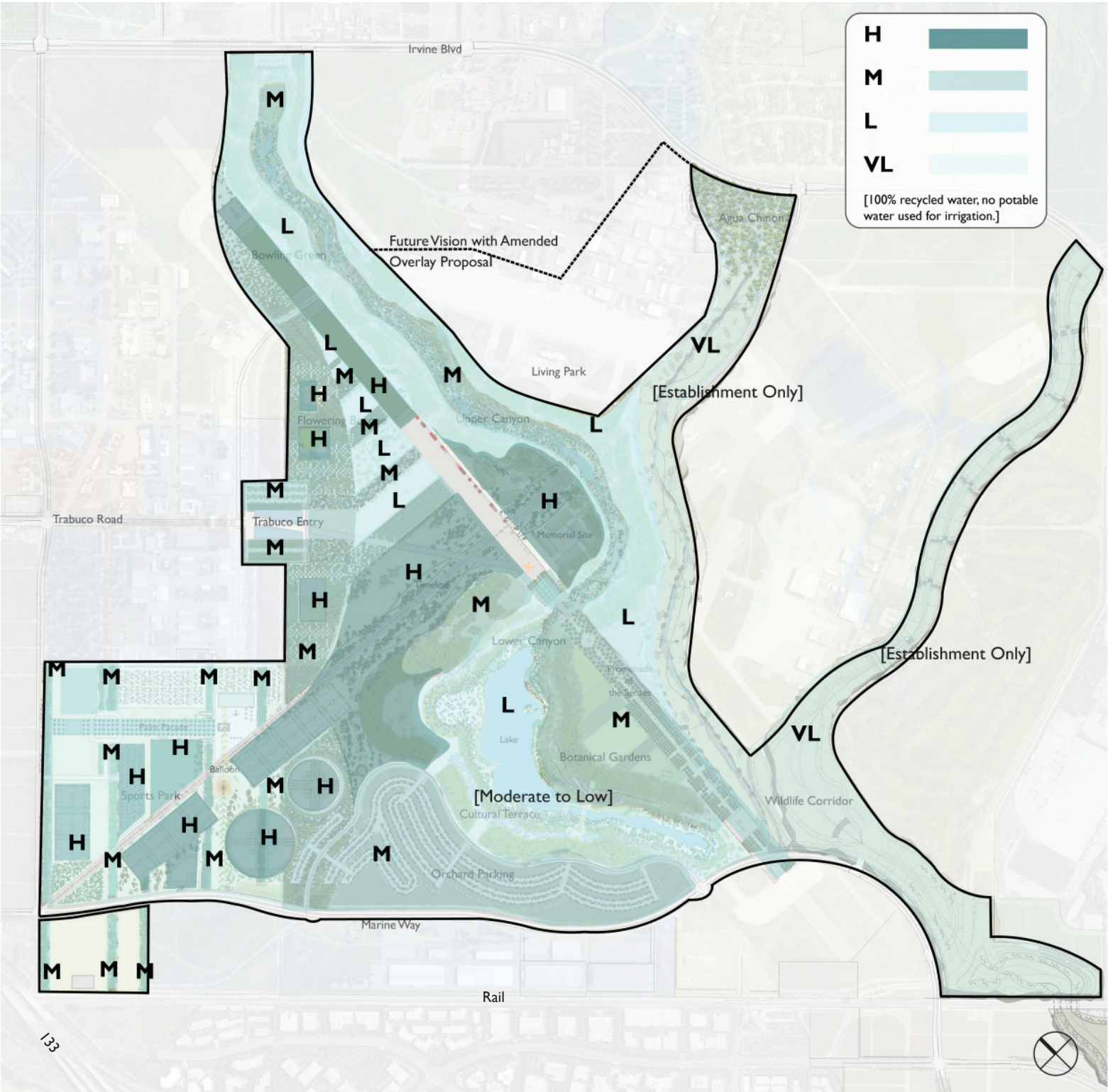


# Irrigation

To minimize the amount of water required for irrigation, the majority of the plants at the Great Park are either native to Southern California or California friendly, with modest water needs. The park's irrigation system is designed to maintain optimum plant health while conserving and protecting water resources and the environment. The water supply for the park is provided by the Irvine Ranch Water District and is recycled. No potable water is used to provide supplemental water for the landscape. To ensure that there is ample water when necessary, the Great Park Lake acts as a reservoir for the irrigation system. Because water needs are so dependant on the weather, the irrigation system is supported and controlled by state-of-the-art technology that automatically monitors changing weather conditions.

## Plant Irrigation Divisions

- H = High** Plants require ample moisture
- M = Moderate** Plants require regular moisture.
- ML = Moderate to Low** Plants require less than regular moisture. Soaking every one to two weeks.
- L = Low:** Plants require substantially less than regular moisture. Soaking every two or three weeks.
- VL = Very Low** Adapted to region. Little or no supplemental watering required.



Irrigation Systems Diagram

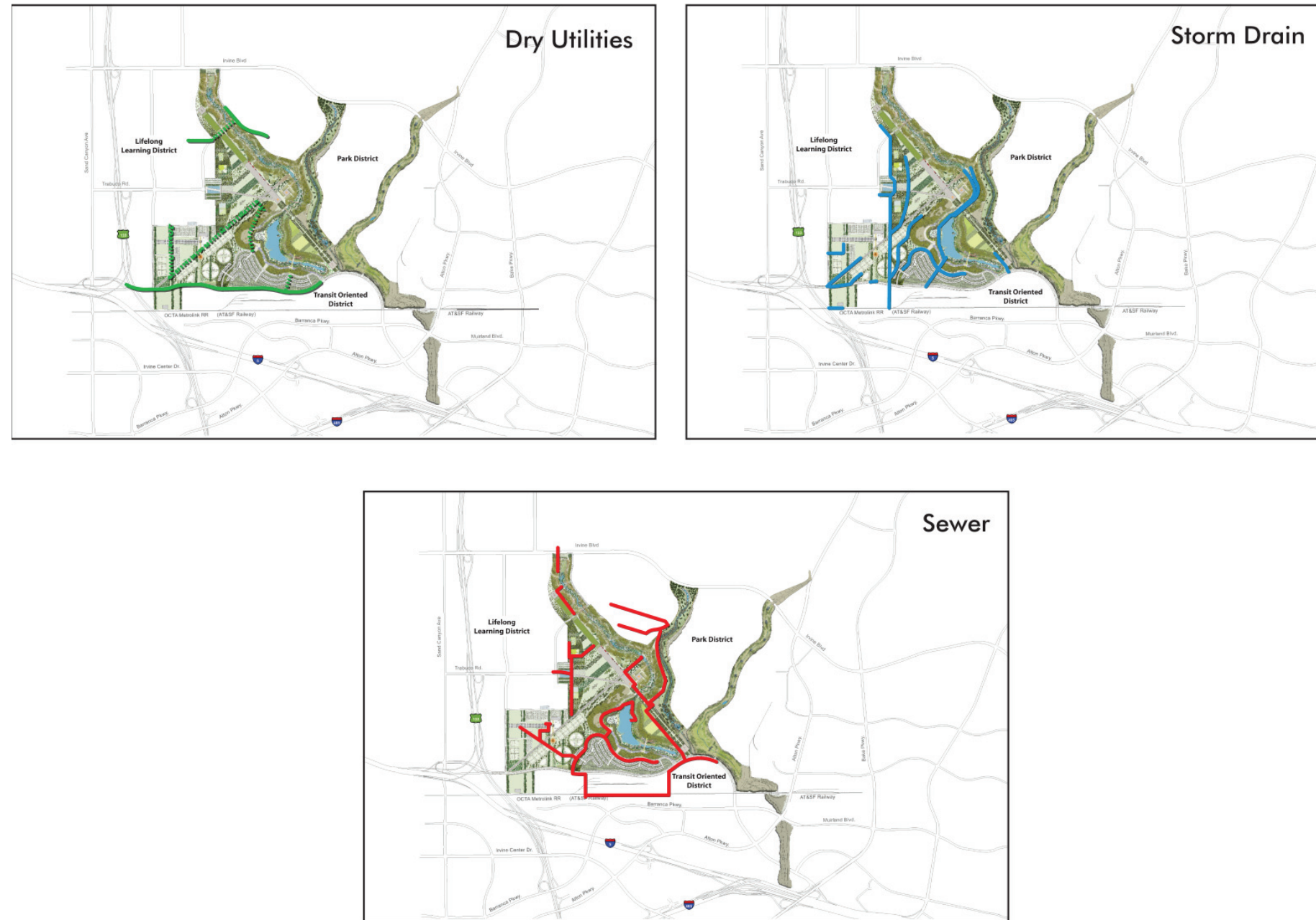


# Utilities

The Park and its surrounding communities will extend multiple underground pipelines and conduits to serve the needs of its features. Most trunk line utilities will be placed in the roadways and along the perimeter of the Park, with smaller direct service lines extending into the Park for specific uses. The Preliminary Master Plan calls for the following services:

- Local storm drains and catch basins
- Sanitary sewer (delivers effluent to IRWD for treatment recycling)
- Domestic water for potable uses
- Recycled water (from IRWD) for irrigation and water features, including the Lakes
- Special plume water recovery lines to serve feed water to the Canyon Creek
- “Dry” utilities such as gas, power, and television
- Special conduit for Fiber Optic system allowing area intranet and inter-connectivity
- Special conduit for DC voltage generated by onsite Solar Power and future technologies

All utilities will be conveyed to either public agencies or operated by a Local District.





# Opportunities and Challenges

In April 2006, the Great Park Design Studio submitted their initial work product identifying critical issues to be addressed in the Master Plan. Issues involving boundary adjustments, access and circulation, park edges, and neighborhood integration were highlighted for further study to ensure that the plan is workable and realistic. An early success of this issues identification process was the adjustment of the common boundary line between the City's and Heritage Fields' properties. Collaboration continues with Heritage Fields on a number of common issues, such as preservation of military memorabilia, edge treatments, backbone infrastructure, and hydrology (drainage facilities).

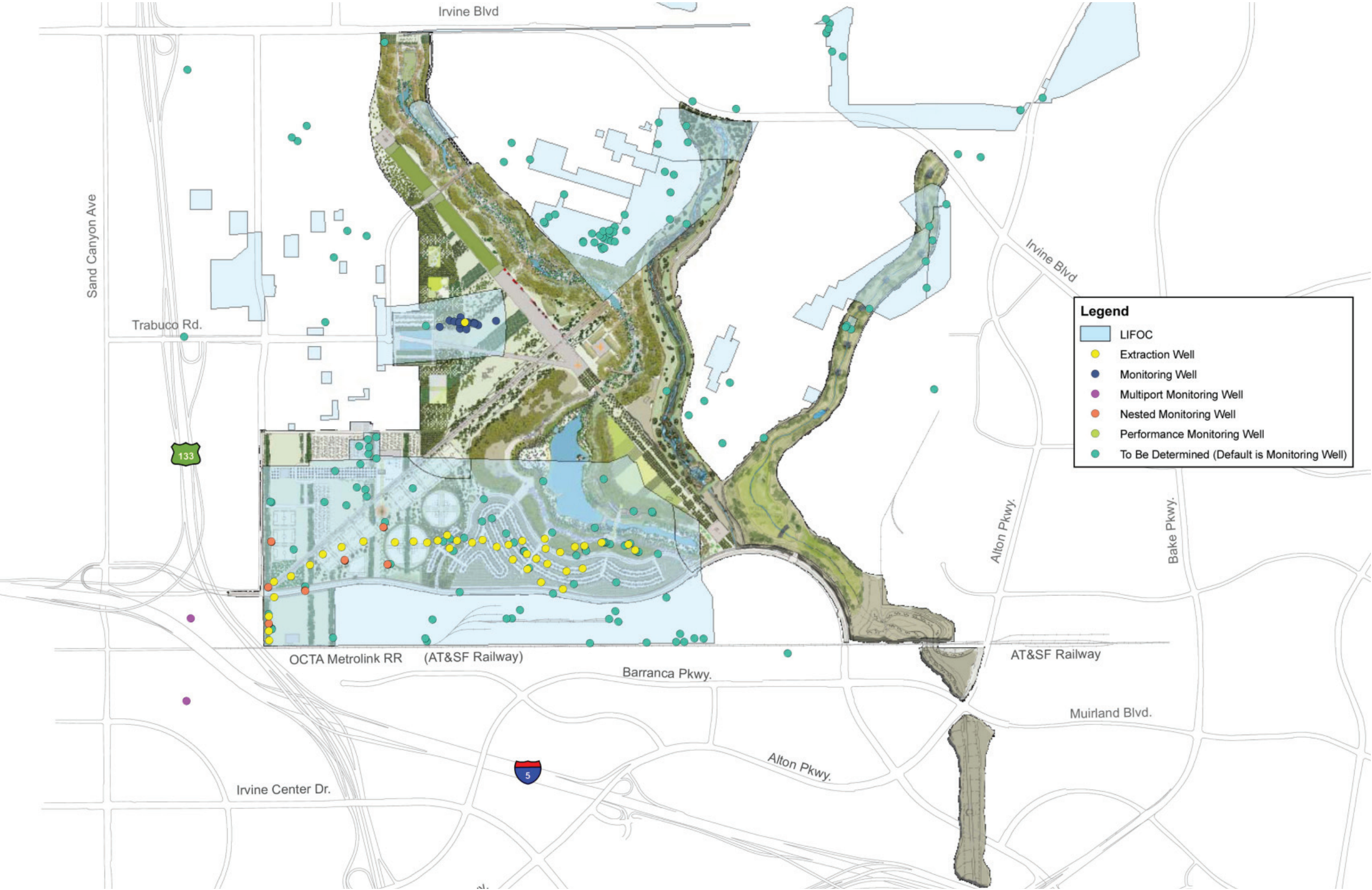
Three critical issues that will continue to inform the planning process are: (1) Navy remediation activities (2) Federal Aviation Administration facilities and restrictions and (3) Recorded encumbrances. As the Master Plan proceeds, more critical issues may emerge. The Great Park Design Studio will continue to assess the issues and refine the design through the Schematic Design process. The Critical Issues report continues to serve as a reference document for the complex nature of development at the former Marine Corps Air Station at El Toro.



Park Boundary Diagram



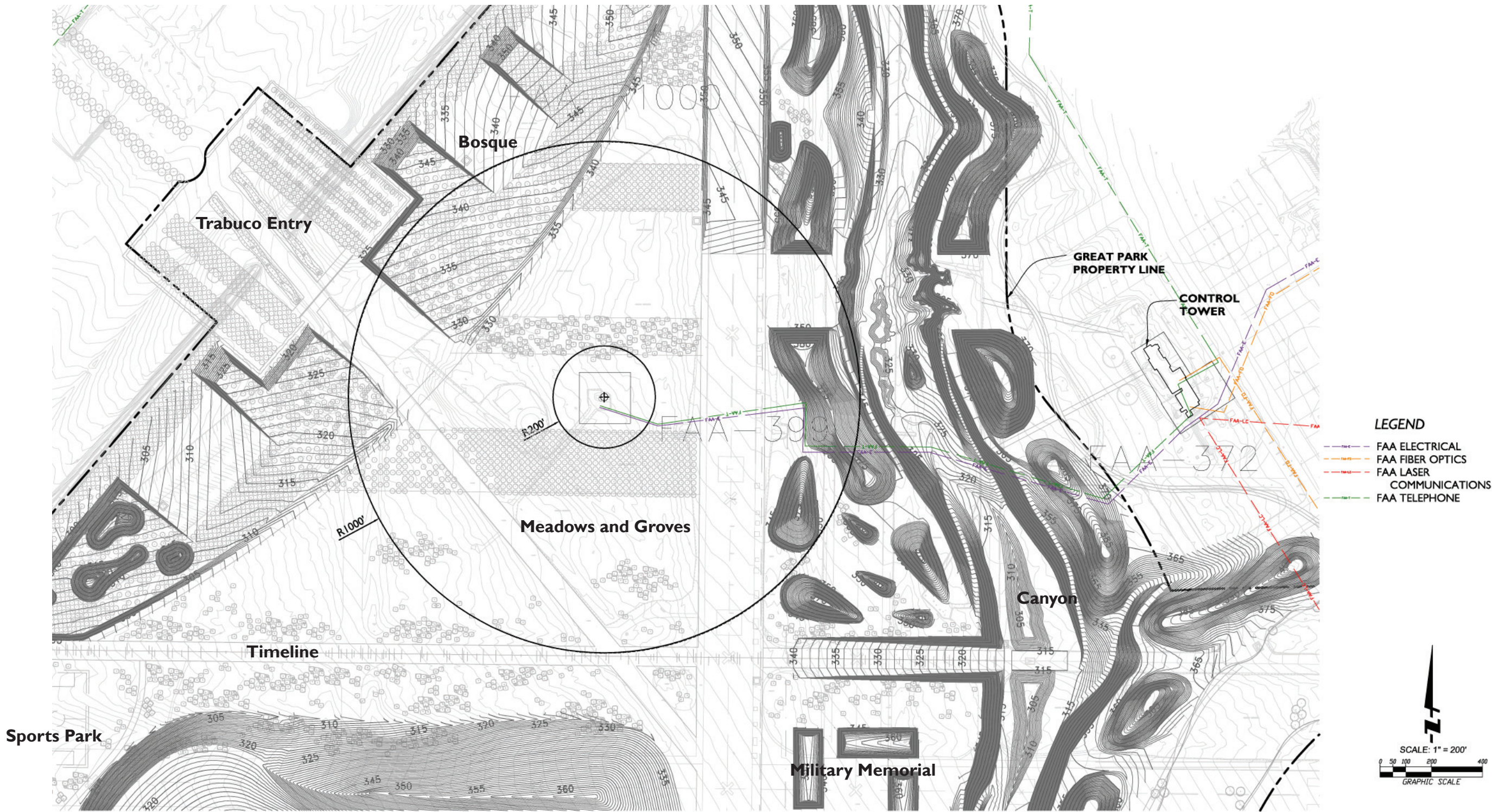
# LIFOC Wells



LIFOC Wells Diagram



# VOR Constraints



VOR Constraints Plan



----- Existing Easement Lines  
 - - - - - FAA Easement Lines  
 ..... Gunite Canal Highline  
 - . - . - . Proposed Easement Lines  
 [Green Box] FAA Property  
 [Orange Box] LIFCO Areas



# Site Easement

The boundary and easements shown hereon are per north American Title Company application for a policy of title insurance per order no. 7002439-23 Dated as of January 25, 2006. The items below are exceptions to coverage per schedule B of said order. All items shown in schedule b are listed. Those items which are plotable items have a hexagon enclosing the item number. Surveyor’s observations are noted within square brackets “[xxx...]”.

2. Rights of way for road and incidental purposes within a 60 foot strip for Trabuco road as described in deeds to the County of Orange recorded February 26, 1906 in book 123 page 316 of deeds; and recorded June 17, 1943 in book 1195, page 287 and July 1, 1944 in book 1263, page 136, both of official records.

Note 1: By resolution of the Board of Supervisors of Orange County dated November 17, 1942 a portion of Lambert and Trabuco Road within the el toro naval air base as shown on record of survey map filed in book 12, page 42 of record of surveys was vacated and abandoned subject to such easements for all utilities located therein, a certified copy of which resolution was recorded november 20, 1942 in book 1169, page 556 of official records.

Note 2: By resolution no. 60-17 Adopted January 6, 1960 by the Board of Supervisors of Orange County additional portions of Trabuco Road were vacated and abandoned subject to such easements for all utilities located therein, a certified copy of such resolution was recorded january 12, 1960 in book 5050, p.Age 577 of official records.

Note 3: By resolution of the Board of Supervisors of Orange County, dated December 12, 1984, portions of Irvine Boulevard road were vacated and abandoned subject to such easements for all utilities located therein, a certified copy of which resolution was recorded january 8, 1985 as instrument no. 85-005008 Of official records.

3. Terms, conditions & easements as set forth in an instrument recorded Ooctober 9, 1914 in book 259 page 314 of deeds,  
For: Public highway and incidental purposes  
Over: A portion of said land

9. Rights of way for gunite canal, canal access, water transportation, public road and pipelines as disclosed by the final judgment and decree of condemnation rendered in the District Court of the United States in and for the Southern District of California, Central Division in an action entitled United States of America, plaintiff vs. 2318,833 Acres of land, and others, defendants case no. 2504-Y civil, upon the terms and conditions contained therein, a certified copy of which decree was recorded July 12, 1944 in book 1264 page 154 and recorded November 3, 1949 in book 1923 page 151, both of official records.

11. An easement affecting the portion of said land & for the purpose stated herein & incidental purposes. No representation is made as to the present ownership of said easement.  
For: public utilities  
Recorded: january 29, 1943 in book 1179 page 94,  
Of official records

12. Any right-of-way over a strip of land 50, feet in width, through the northeasterly portion of said block 141 for a public highway known as Lambert Road, as conveyed to County of Orange by deed recorded December 8, 1947 in book 1597 page 504 of official records.  
Note: by resolution no. 60-17 Adopted January 6,1960 by the Board of Supervisors of Orange County additional portions of Trabuco Road were vacated & abandoned subject to such easements for all utilities located therein; a certified copy of such resolution was recorded January 12, 1960 in book 5050, page 577 of official records.

17. Easements for water and fuel pipelines, storm drains, gunite canal, utilities, railroad spur etc., Roads and incidental purposes, as set out in decree entered August 27, 1953 and supplemental judgment entered July 7, 1960, and upon the terms and conditions contained therein, in the matter of United States of America vs. The Irvine Company and others in United States District Court Southern District of California, Central Division Case No. 15821-Wb civil. Certified copies of which decrees were respectively recorded September 1, 1953 in book 2567 page 100; July 13, 1960 in book 5327 page 139; and October 31, 1978 in book 12904 page 176, all of official records.

48. Utility easements as set out & delineated upon exhibit “B”, attached to & made a part of the deed from the Irvine Company to the United States of America, recorded July 29, 1976 in book 11831, page 1062 of official records, Orange County.

By deed dated May 9, 1978, recorded May 17, 1978 in book 12678 page 1089 and by deed dated February 11, 1983, recorded February 23, 1983 as document no. 83-081517, Both in official records, Orange County, the United States of America granted to the Irvine Company such easements defined in said deeds as “an easement and right of way for the construction reconstruction operation, maintenance repair and use of roads, utilities and drains, together with the right to assign, grant or transfer the same” etc. The grantor therein reserves the right to use said land for any purpose whatsoever respecting grantees rights.

By deeds recorded June 30, 1978 in book 12739 page 1708; August 25, 1978 in book 12816 page 1176; September 18, 1978 in book 12844, page 927; and March 23, 1983 as instrument no. 83-0123328, All of official records, the Irvine Company granted to the Irvine Ranch Water District easements for water and sewer facilities and water transmission purposes, within those easements as described in the above-mentioned deed from the United States of America.

A quitclaim deed dated February 10, 1983, recorded February 23, 1983 as document no. 83-081516 In official records, from the Irvine Company of the United States of America (Department of the Navy), recites that it is for the purpose of eliminating easement rights only shown in deed recorded May 17, 1978 in book 12678, page 1089 and following of official records, Orange County.

The remaining interest of the Irvine Company has since passed to the City of Irvine, pursuant to quitclaim deed recorded June 28, 1994 as instrument no. 94-0425499 o f official records.

49. Easements for roads & utilities & incidents thereto, as reserved by the Irvine Company, a corporation and as set out on a map attached to a deed recorded July 29, 1976 in book 11831, page 1053 of official records and as described in the deed from the United States of America to the Irvine Company, recorded May 17, 1978 in book 12678 page 1099 of official records.

Note: the interest of the Irvine Company has since passed to the City of Irvine, pursuant to a quitclaim deed recorded June 28, 1994 as instrument no. 94-0425499 of official records.

54. An easement affecting the portion of said land & for the purpose stated herein, snd incidental purposes.  
In favor of: Irvine Ranch Water District.  
No representation is made as to the present ownership of said easement.  
For: Sewer Facilities  
Recorded: July 19, 1979 in book 13234 page 780 of official records  
Affects: a portion of the land.

57. An easement affecting the portion of said land & for the purpose stated herein, and incidental purposes.  
In favor of: Southern California Edison Company.  
No representation is made as to the present ownership of said easement.  
For: Public Utilities  
Recorded: April 25, 1980 in book 13588 pages 1181 Page 1185 of official records  
Affects: a portion of the land

58. An easement affecting the portion of said land & for the purpose stated herein, and incidental purposes. No representation is made as to the present ownership of said easement.  
For: Slopes  
Recorded: May 21, 1980 in book 13613 page 331 of official records  
Affects: a portion of lots 283 and 306

59. An easement affecting the portion of said land & for the purpose stated herein, and incidental purposes. No representation is made as to the present ownership of said easement.  
For: Irrigation Lines  
Recorded: May 21, 1980 in book 13613 page 335 of official records  
Affects: a portion of the land



Site Easement

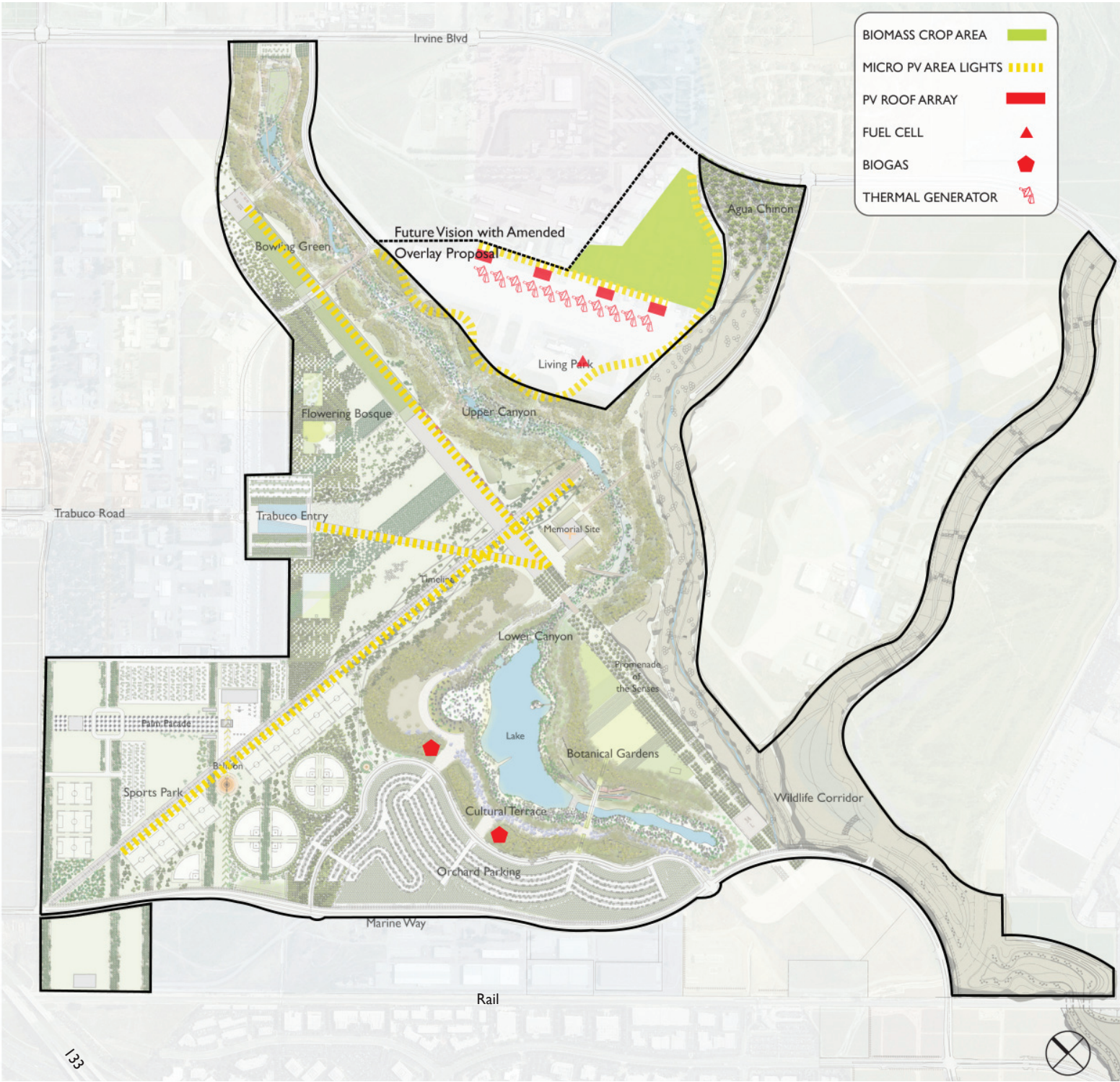
60.	An easement affecting the portion of land for the purpose stated herein, and incidental purposes. No representation is made as to the present ownership of said easement.	For: Recorded: Affects:	Ingress and Egress October 12, 1981 in book 14253 page 567 of official records a portion of the land	Affects: 108.	No. 2000-0570758 of official records a portion of block 172 An easement affecting the portion of said land & for the purpose stated herein, & incidental purposes.
	For: Recorded: Affects:	Storm Drain May 21, 1980 in book 13613 page 340 of official records a portion of the land		In favor of:	The City of Irvine . No representation is made as to the present ownership of said easement.
62.	An easement affecting the portion of said land & for the purpose stated herein, & incidental purposes.	For: Recorded:	Street, Highway October 8, 1980 in book 13781 page 419 of official records	For:	The construction, maintenance and repair of a right turn lane at alton parkway and Barranca Parkway
In favor of:	City of Irvine. No representation is made as to the present ownership of said easement.	Affects:	a portion of the land (Alton Parkway and Muirlands Boulevard)	Recorded:	October 14, 2000 as instrument no. 2001-0560566 of official records
64.	An easement affecting the portion of said land & for the purpose stated herein, & incidental purposes. No representation is made as to the present ownership of said easement.	Affects:		Affects:	a portion of lot 307 of block 172
For: Recorded:	Drainage Ditches January 28, 1981 in book 13927 page 1483 of official records			C.	[An unrecorded easement to be granted to the Irvine company for irrigation water line purposes as shown on those legal descriptions and plats By RBF, dated August 6, 2003 and indexed as RBF jn-102619.04]
Affects:	a portion of the land as shown on the map filed in book 12 page 42 of record of surveys				
66.	An easement affecting the portion of said land & for the purpose stated herein, & incidental purposes.	In favor of:	Southern California Edison Company No representation is made as to the present ownership of said easement.		
For: Recorded:	Public Utilities March 23, 1981 in book 13990 page 1837 of official records	For: Recorded:	Sanitary sewer, storm drains, pipelines, public utilities March 26, 1996 as instrument no. 19960144770 Of official records		
Affects:	a portion of the land	Affects:	a portion of vacated trabuco road		
69.	An easement affecting the portion of said land & for the purpose stated herein, & incidental purposes.	107.	An easement affecting the portion of said land & for the purpose stated herein, & incidental purposes.		
In favor of:	City of Irvine No representation is made as to the present ownership of said easement	In favor of:	The Irvine Ranch Water District No representation is made as to the present ownership of said easement.		
		For: Recorded:	Public Utilities October 24, 2000 as instrument		



# Renewable Energy Generation

The Great Park will install over 1 MegaWatt of renewable energy generation on-site through a variety of technologies. Throughout the park, site lighting will have small photovoltaic cells attached to the lamp posts and charge small batteries to power lights at night. A small hydrogen fuel cell demonstration will also be installed in the park, likely in the control tower building. Incentivized funding sources for all of these technologies exist and are being investigated.

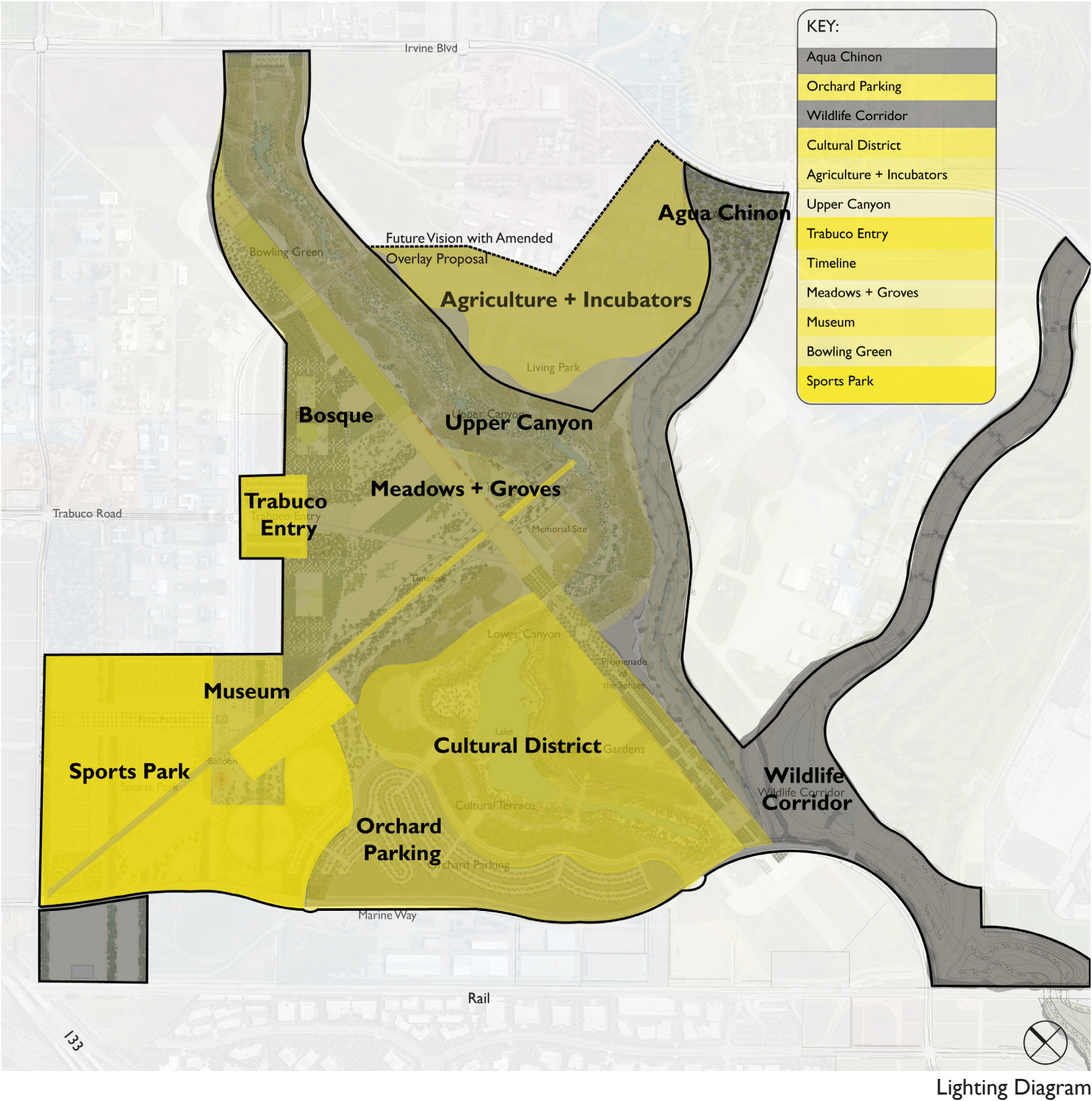
Many more initiatives will be enabled with the realization of the ammended overlay plan. Over 1 acre of photovoltaics will cover the roof areas of the Future Vision of the Amended Overlay Proposal area hangars and generate over 400kW at peak output. In front of the hangars and next to the agricultural production zone of the living park will be 15 solar collectors which have mirror dishes with a diameter of over 30 feet and will generate over 500kW at peak output. Also in the production zone, over 40 acres of switch grass or other biomass crops will be grown for use in an anaerobic digester gas energy facility.



Renewable Energy Generation Diagram



# Lighting



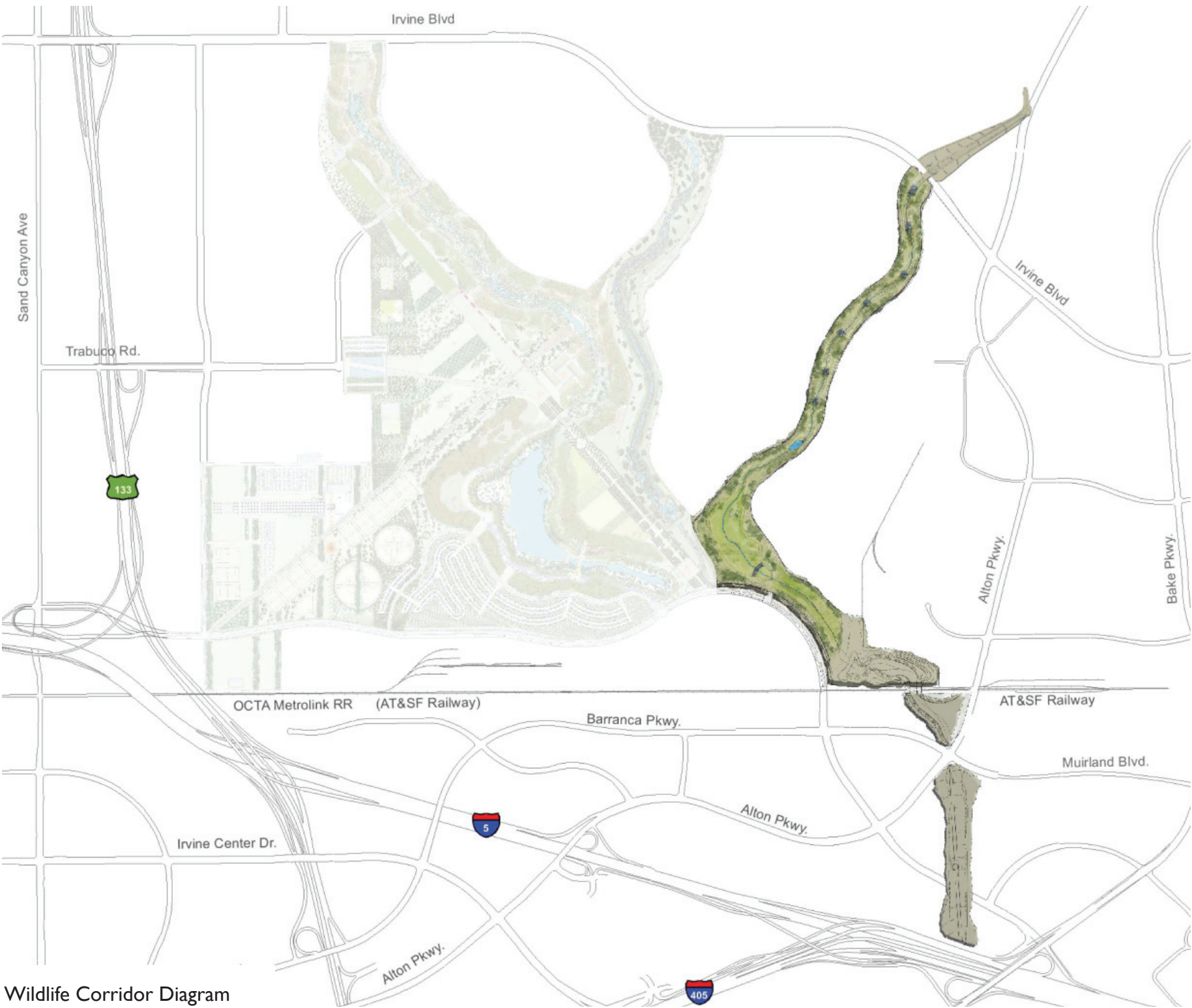
Lighting is an important element that makes the park a safe and environmentally friendly place. In the natural areas in the North and East, including the upper Canyon, Agua Chinon, and the Wildlife Corridor planned dark zones will create a supportive environment for wildlife. By contrast, the Southwest portion of the park is a hub of activity after sunset. Here, artful illumination enhances the experience of visitors. This area includes the Cultural Terrace and the Sports Park where nighttime athletic activities require the highest intensity of lighting. Iconic park elements such as the Orange Balloon are also illuminated. Vehicular and pedestrian paths connecting the park and surrounding neighborhoods are lit with energy-efficient lamps. In the upper Canyon and other public areas that close at dusk, security lighting is set on motion sensors to conserve energy. Coordinating light levels with adjacent uses to the park is also a guiding principle in the design.



# Wildlife Corridor

This feature of the Park is the carefully designed and engineered corridor created specifically as a viable and enduring habitat for natural species. Beginning with site grading, the corridor consists of sculpted platforms for micro-climates and different plant species, hydrology (surface water), geomorphology (soil and groundwater), structures (rock and rubble used for water riffles and pools), and access ways for monitoring and maintenance. The 3.5 mile long Wildlife Corridor will have additional engineered features such as:

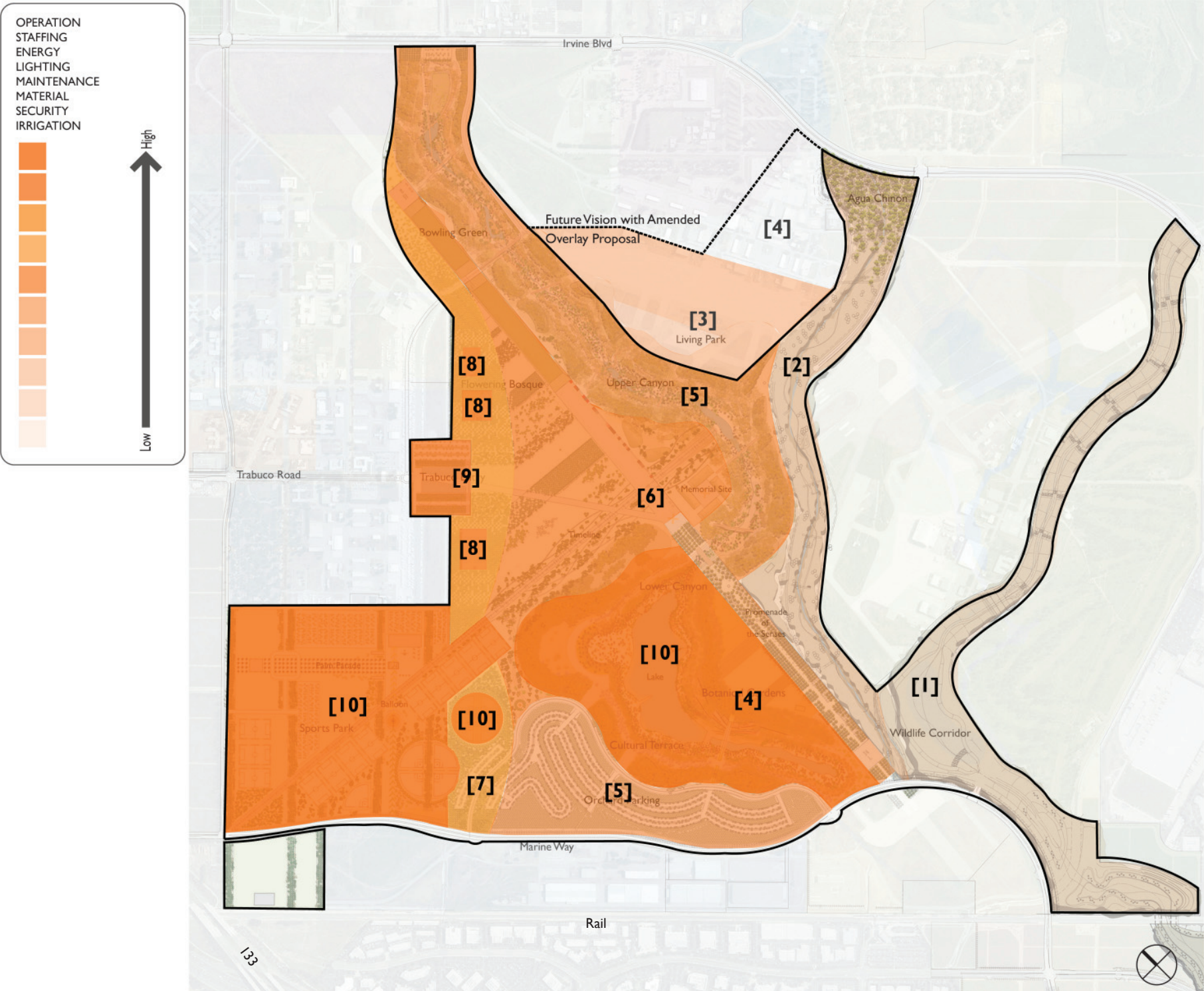
- Low flow splitter to divert Borrego Wash flows and provide the hydrology
- Impounds and rock riffles to create pooling and infiltration of storm flows
- Seeps to bring infiltrated water from adjoining treatment wetlands
- Retaining structures of runway rubble forming habitats and reinforcing of slopes
- Vehicular bridge crossings minimizing shade effects while using imbedded lighting to prevent light trespass
- Concealed utility crossings with access that minimizes impact to habitat
- Berms and screening to buffer adjoining development areas





# Zones of Management

This diagram shows a first-pass look at the maintenance and operational costs of the Great Park. Specifically, the Park is broken into areas described in terms of order of magnitude costs. Areas of the greatest anticipated costs appear the darkest on this diagram. A gradient of costs across the park is apparent when comparing the density and intense activity anticipated in the Sports Park or the Cultural Terrace with more natural areas like the Wildlife Corridor. These assumptions do not necessarily include costs of construction.



Zones of Management Diagram



# Revenue Generation



Revenue Generation Diagram



# Strategic Business Plan

Based on the Master Plan, the Orange County Great Park Strategic Business Plan will be developed, outlining all financial aspects of the park's development and eventual continuing operations. Rather than a static tome, the business plan will be a living document, updated as financial conditions change and transactional decisions are carried out.

The business plan's contents will include financial projections based on supportable assumptions and narrative strategies for implementing each critical component of the plan, including the roles and responsibilities of all participating staff, agencies, organizations, consultants and partners involved in the park's design, development and operations.

The strategic plan will be a product of a collaborative effort between OCGP staff, financial consultants and the design team. The plan will begin with clearly stated and measurable economic objectives and principles. The strategy which follows will support a path for achieving each of the stated objectives.

## Components of the plan will include:

- A best estimate of the park's development costs, phasing and cash flow;
- A detailed financial modeling tool to facilitate decision making and measuring the effects of changes in financial assumptions;
- A policy for identifying and securing private funding sources;
- An approach for identifying and securing public funding sources such as community facilities district bond sales proceeds; tax increment financing; federal, state and local grants and bonds for infrastructure, transit, air quality mitigation, parks/open space, historical preservation, and other relevant purposes; and
- A plan for continuing park operations, maintenance, security and event programming.

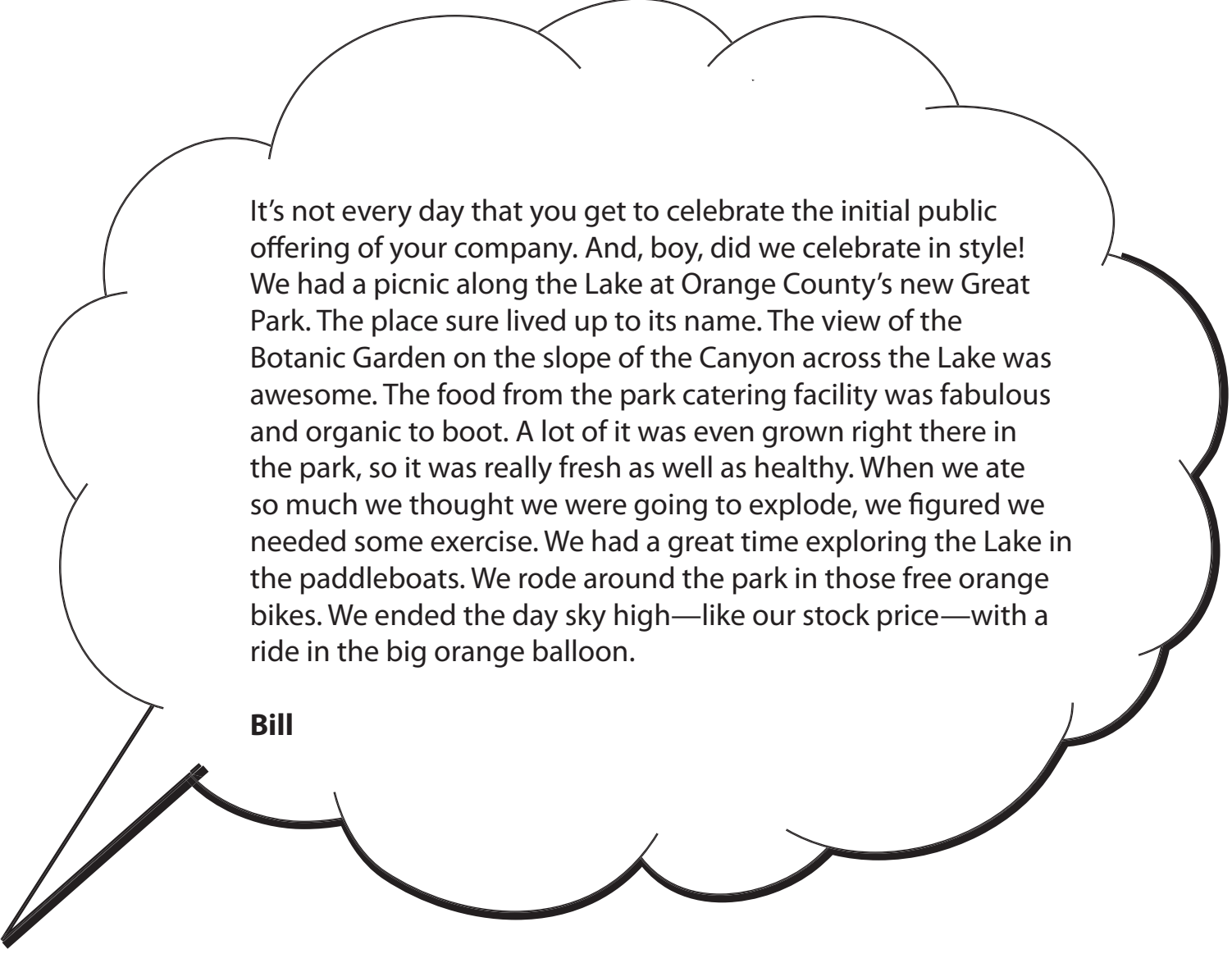




# Appendices Index

- A Identifying Critical Issues Report (4/13/06)
- B Master Plan (Approved by Planning Commission Aug. 2, 2007)
- C Conditions of Approval (Planning Commission Aug. 18, 2007)
- D Mitigation Monitoring Program (June 2003 (Modified July 2007))
- E Task 2 Deliverables – Sustainability - Buro Happold (2/9/07)
- F Task 2 Deliverables – Park as Living Laboratory - Mary Miss (2/9/07)
- G Task 2 Deliverables – Landscape Architecture - Mia Lehrer + Associates (2/9/07)
- H Task 2 Deliverables – Ecology - Green Shield – Ecology (2/9/07)
- I Task 2 Deliverables – Engineering – Fuscoe Engineering (12/15/06)
- J Approved Master Plan Cost Estimate (9/13/07)





It's not every day that you get to celebrate the initial public offering of your company. And, boy, did we celebrate in style! We had a picnic along the Lake at Orange County's new Great Park. The place sure lived up to its name. The view of the Botanic Garden on the slope of the Canyon across the Lake was awesome. The food from the park catering facility was fabulous and organic to boot. A lot of it was even grown right there in the park, so it was really fresh as well as healthy. When we ate so much we thought we were going to explode, we figured we needed some exercise. We had a great time exploring the Lake in the paddleboats. We rode around the park in those free orange bikes. We ended the day sky high—like our stock price—with a ride in the big orange balloon.

**Bill**



