JOHNNY CARSON PARK REIMAGINED

ELIZABETH CRAMER, HEATHER WU, TRACY WOLK

Landscape Design 4: Environmental Analysis and Planning
ARCH-X 472.9
EMILY GABEL-LUDDY
WINTER 2023

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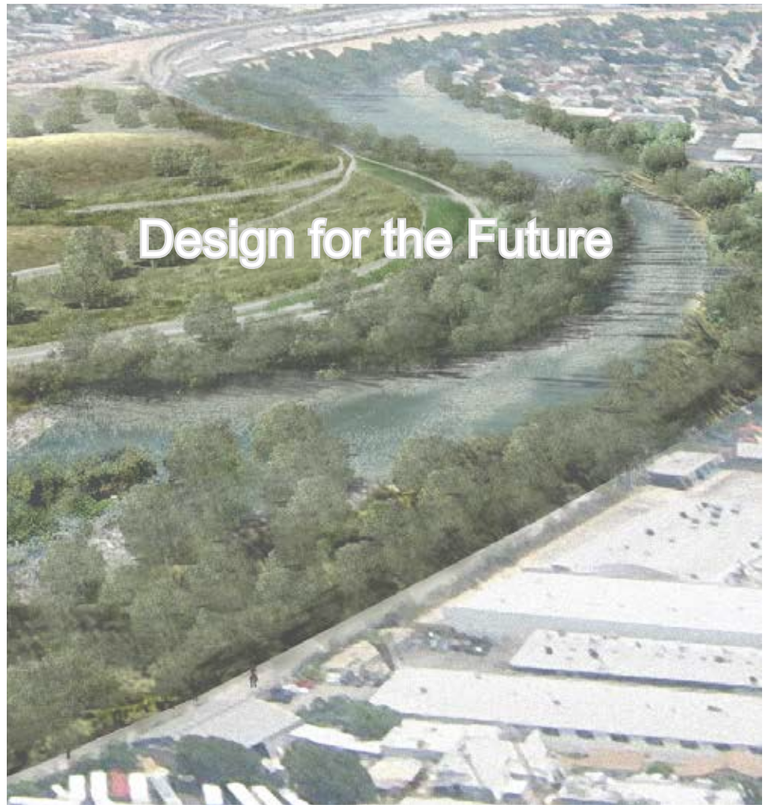
Project Overview

Site Analysis

Concept Development

Site Design

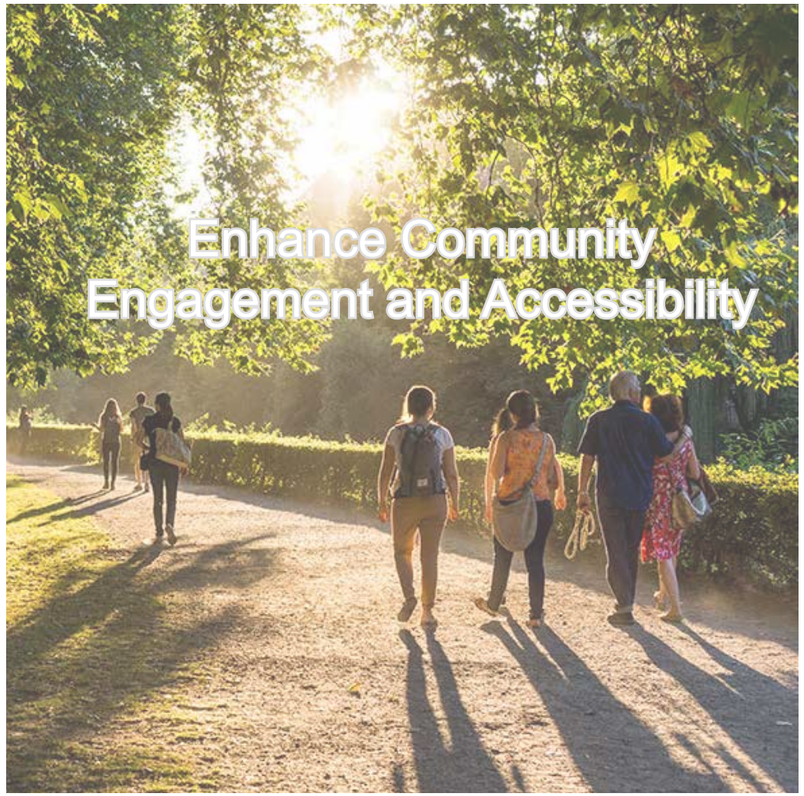
GOALS & OBJECTIVES



Climate change appropriate programming.

Refuge from the elements.

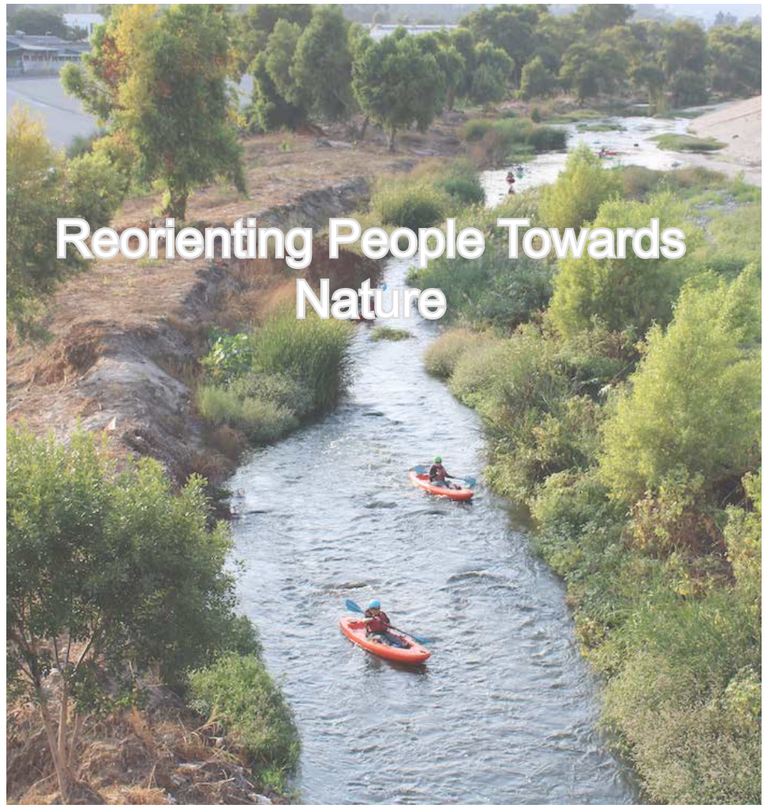
Ground water recharging.



Multi-generation use programming.

Increase accessibility from surrounding areas.

Education and entertainment.

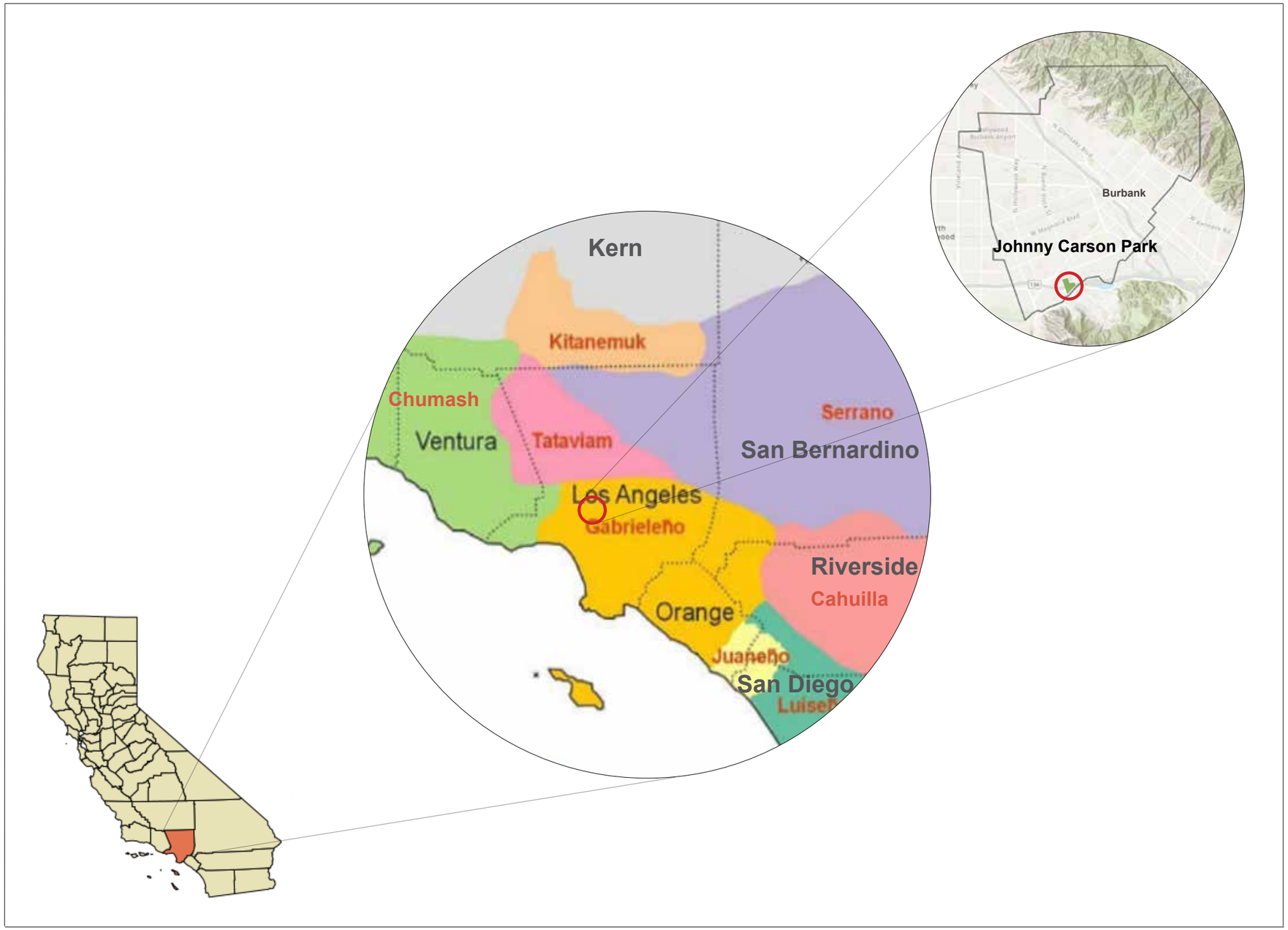


Re-wilding Los Angeles River.

Reviving forgotten waterways.

Foster relationship to natural landscapes for humans and animals.

LOCATION & HISTORY



LOCATION INFORMATION

Johnny Carson Park
Address: 400 Bob Hope Dr, Burbank, CA 91505
Size: 17 Acres
Elevation: 522 ft (159 m)
Regional Climate: Mediterranean, with winter rainfall and dry summers
Average Annual Rainfall: 16 in (40.6cm)
Average Summer High: 90°F (32°C)
Average Winter Low: 47°F (8°C)

A BRIEF HISTORY

Burbank, California is located at the Southeastern end of the San Fernando Valley in Los Angeles County. Originally inhabited by the Gabrieleno Tongva people for thousands of years; the first European settlers arrived in the 19th century. The Los Angeles river runs through south of Burbank, and was the original source of life for the city of Los Angeles. Areas around the Los Angeles River were where the Tongva and, later, the Spanish built the first settlements.

The area along that stretch of the LA river was known as “New Town” after a prominent landowner named David Burbank. In 1911 the city was officially named for him as Mr. Burbank developed much of the region’s early infrastructure, including the water and power system. In the early 20th century the region became a hub for the entertainment industry, with companies such as Warner Bros. and Disney establishing studios in the area. Today, Burbank is a vibrant city with a diverse population, a thriving entertainment industry, and is known for its well maintained neighborhoods and numerous parks and recreational areas including our site, Johnny Carson Park, formerly Buena Vista Park.

Site Analysis

CONTEXT

CONTEXT
ZONING MAP

LEGEND

City Boundary

RESIDENTIAL

Low Density Housing
High Density Housing
Single Family Residential Horsekeeping

COMMERCIAL

Media District
Commercial Businesses
Planned Development
Media District Boundary

OPEN SPACES/ PUBLIC FACILITIES

Public Facilities
Open Space
Open Space Historic Preservation Zone
Headworks Reservoir Boundary

CITY OF LOS ANGELES

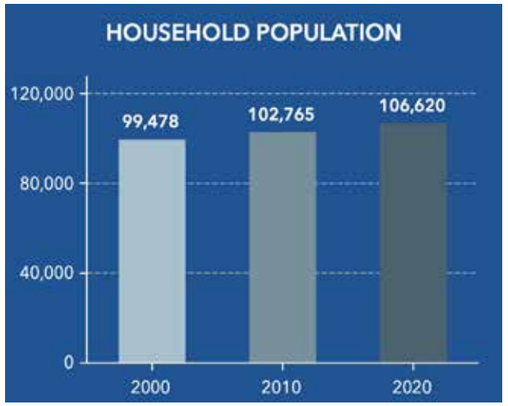
Low Residential
Medium Residential

SITE

Site Boundary

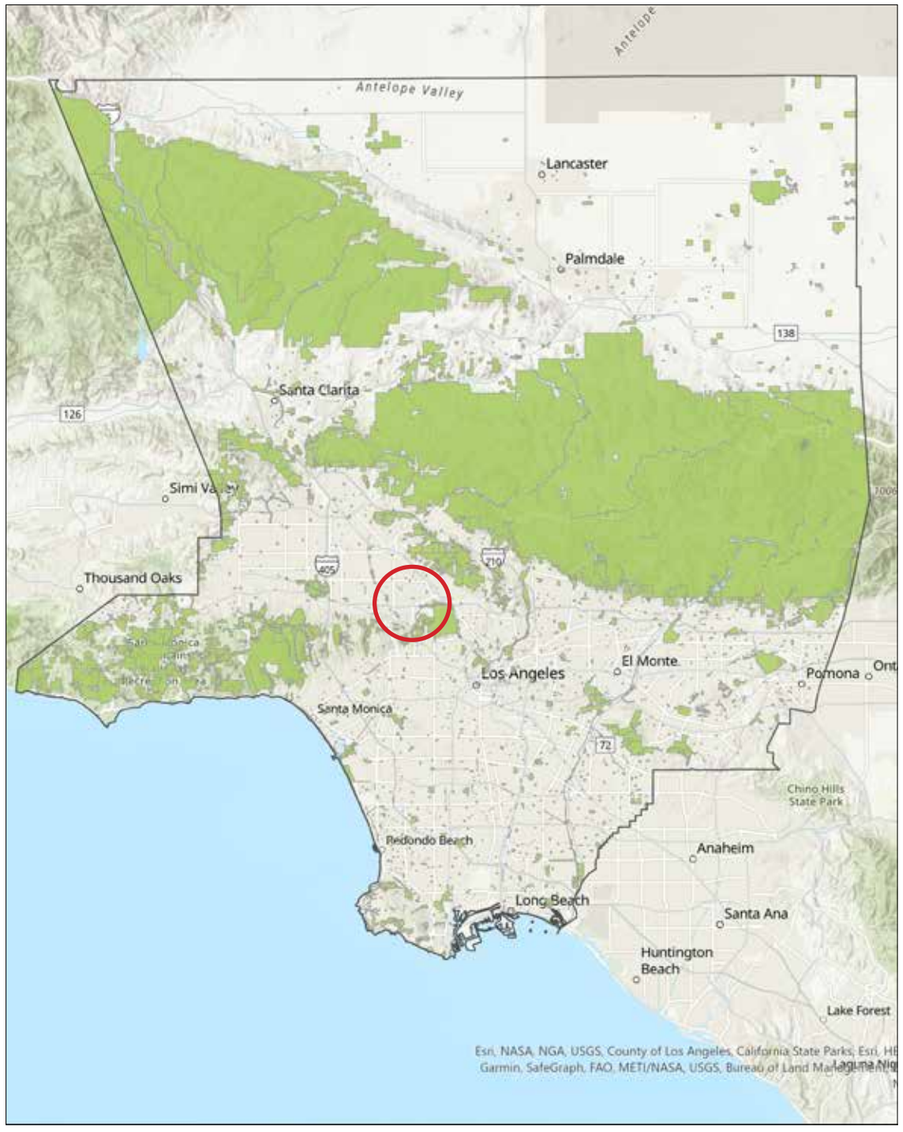
DEMOGRAPHICS

107,337	45,616	6,188.3	2.44	73.8
Total Population	Housing Units	Population Density	Average Household Size	Diversity Index



POPULATION BY AGE AND RACE	Less Than 18 Years	18 Years and Older
Total	18,958	88,379
1 Race	14,965	77,748
White	10,249	55,088
Black	541	2,537
American Indian/Alaska Native	150	658
Asian	2,001	10,567
Pacific Islander	35	81
Some Other Race	1,989	8,817
2 or More Races	3,993	10,631

SITE ANALYSIS - REGIONAL CONTEXT GREEN SPACES



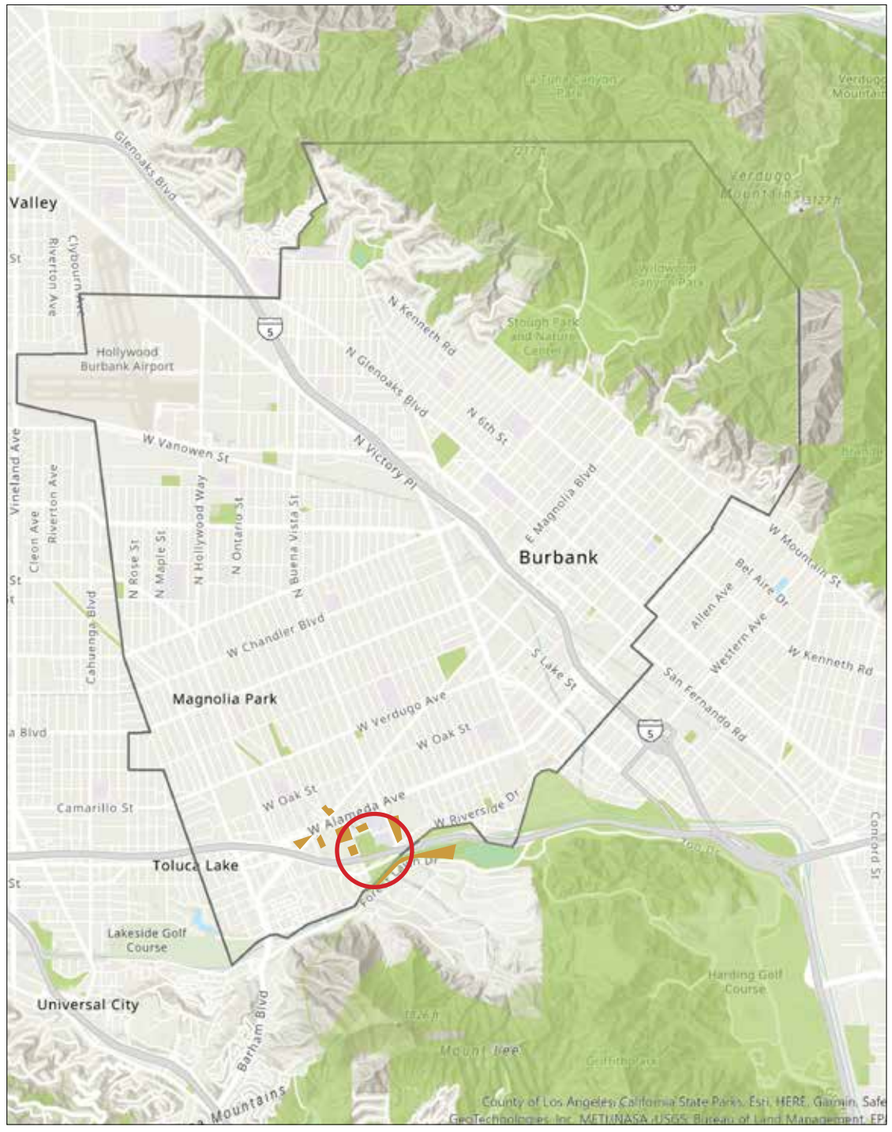
GREEN SPACES OF LOS ANGELES COUNTY

- Johnny Carson Park
- Open Spaces and Parks

Scale: 1:750,000

0 3.5 7 14 Miles

N



GREEN SPACES OF BURBANK

- Johnny Carson Park
- Open Spaces and Parks
- Burbank City Boundary
- Figure - Ground Spaces

Scale: 1:50,000

0 0.28 0.55 1.1 Miles

N

SITE ANALYSIS - REGIONAL CONTEXT ECOLOGY

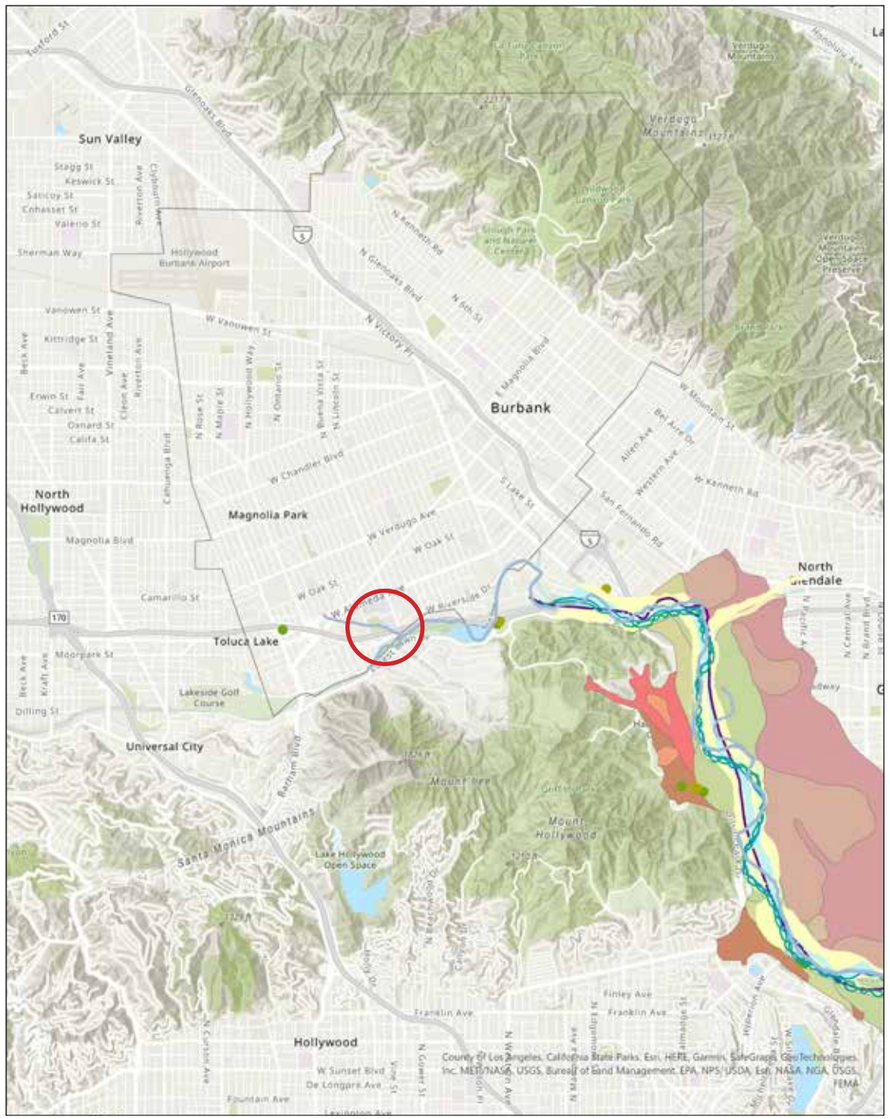
(SEA) ECOLOGY

- Johnny Carson Park
- Burbank Boundary
- Significant Ecological Area

Significant Ecological Areas (SEA) are officially designated areas within Los Angeles County with irreplaceable biological resources.

Griffith Park lies at the eastern end of the Santa Monica Mountains. It supports the coastal sage scrub, chaparral, riparian, and southern oak woodland plant communities that are typical in the interior mountain ranges of southern California. What makes Griffith Park important is its geographical location. It has become an island of natural vegetation surrounded by urban and suburban development.

Protected Trees: *Abies concolor, Acer macrophyllum, Acer negundo, Aesculus californica, Alnus rhombifolia, Arbutus menziesii, Arctostaphylos glandulosa (all subspecies), Arctostaphylos glauca, Calocedrus decurrens, Ceanothus spinosus, Juniperus californica, Quercus agrifolia, Quercus berberidifolia, Quercus engelmannii, etc*



ELYSIAN VALLEY HISTORICAL ECOLOGY

- Johnny Carson Park
- Tujunga sand
- Tujunga fine sand
- Tujunga fine sandy loam
- Hanford sand
- Hanford fine sandy loam
- Hanford sandy loam
- Hanford loam
- Holland sandy loam
- Chino silt loam
- Ramona loam; Yolo loam
- Ramona loam; Yolo loam
- Burbank Boundary
- Channel in 1897
- Riparian Soil Map of 1903
- Soil Map of 1916
- Channel Soils 1917
- Composite Topography 1925,1926, and 1928
- Channel in 1888
- Channel Sand 1888

Layer

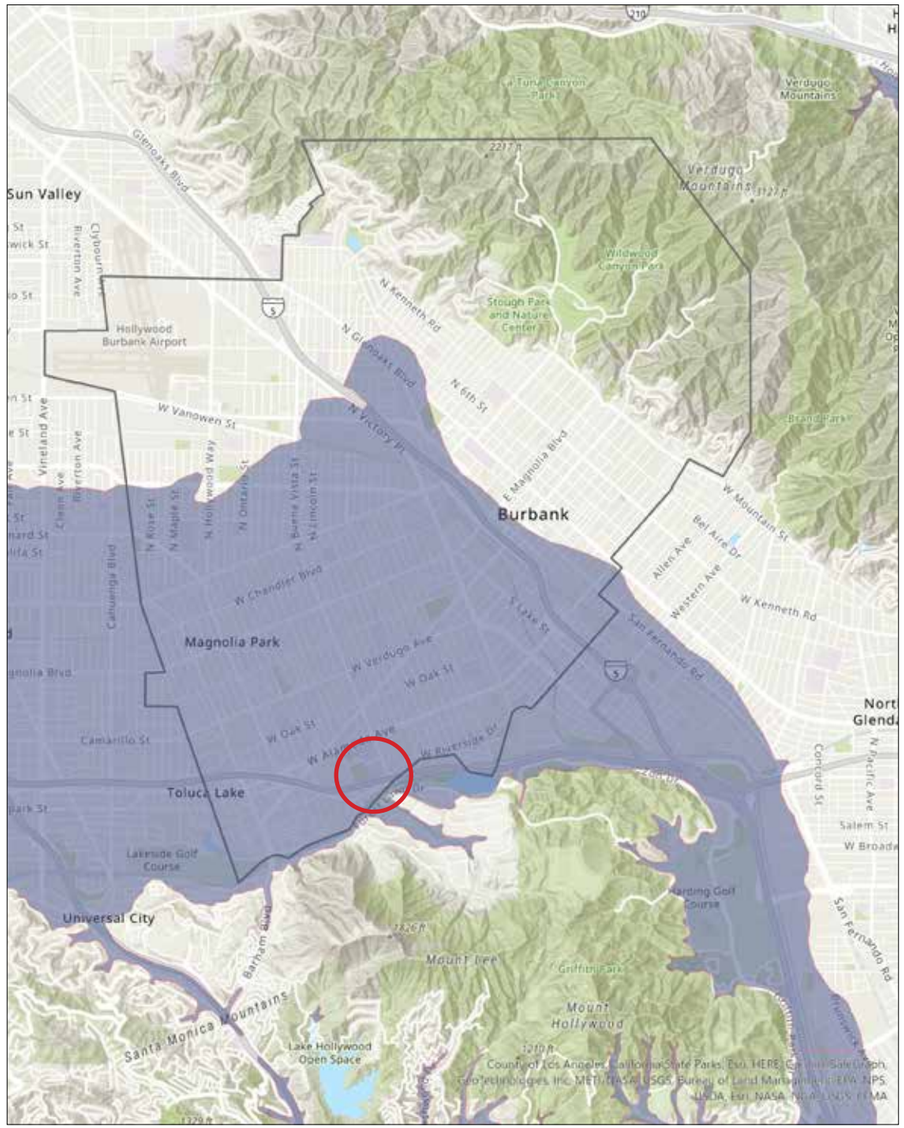
- Oak
- Sycamore
- Willow stumps

Layer2

- Riverwash

This GIS map takes database layers from historical geological maps to show what soils have been a part of the Elysian Valley (now buried under concrete and asphalt) , where natural streams and the LA River flowed, as well as what trees grew along the river. Foundational knowledge such as this can help us restore our future by looking back in time.

SITE ANALYSIS - REGIONAL CONTEXT ENVIRONMENTAL RISK

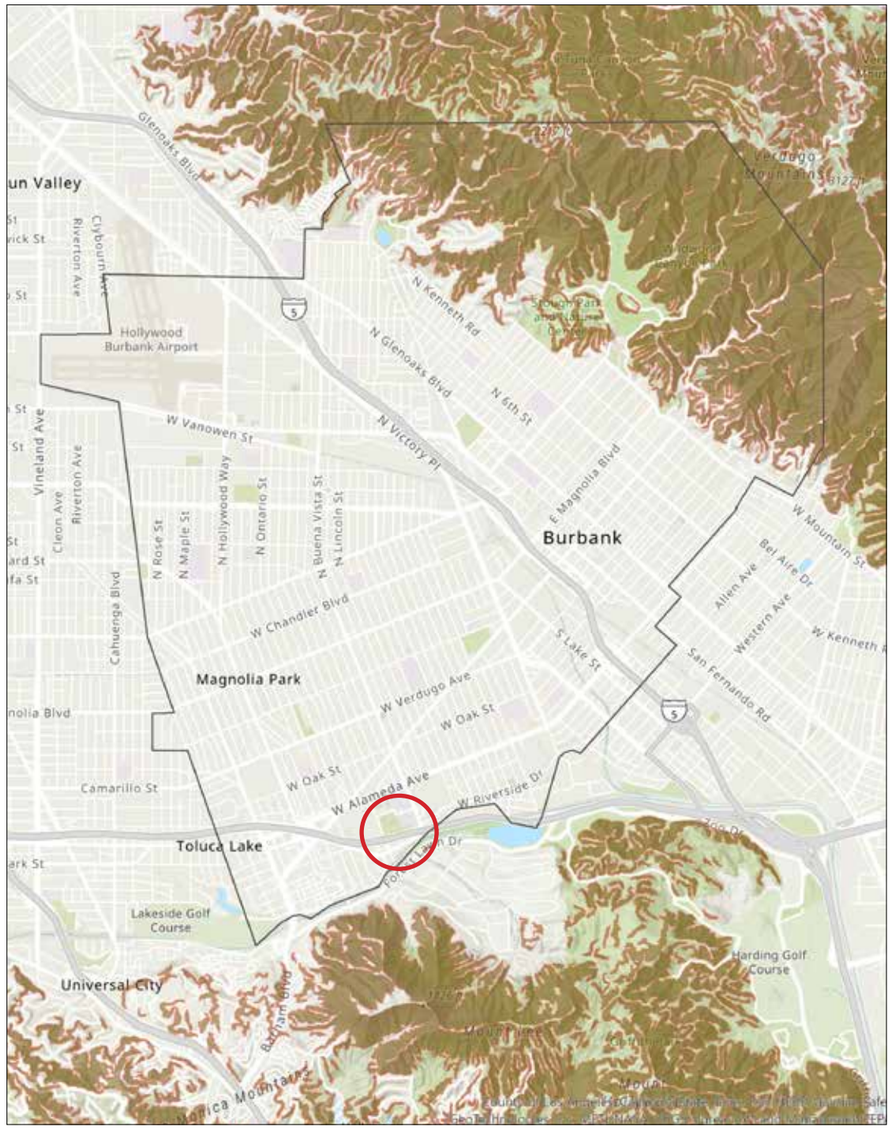


EARTHQUAKE LIQUEFACTION ZONE

- Johnny Carson Park
- Earthquake Liquification Zone
- Burbank City Boundary

Soil liquefaction is a phenomenon in which the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading. Johnny Carson Park sits within the earthquake liquefaction zone and a tremendous earthquake to the area can be catastrophic

Scale: 1:50,000 0 0.28 0.55 1.1 Miles N



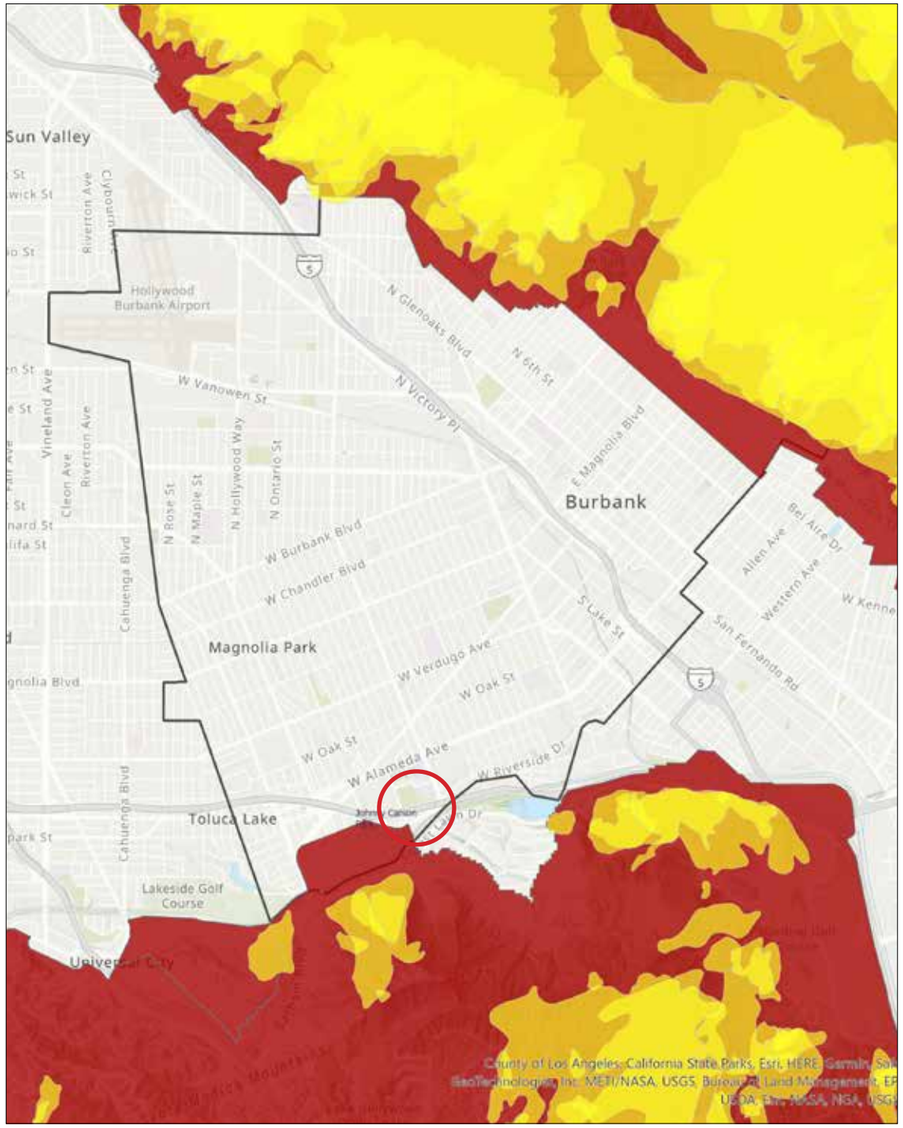
LANDSLIDE HAZARD ZONE

- Johnny Carson Park
- Burbank Boundary
- Landslide Hazard Zones

Landslide area by Sennett creek and Los Angeles River intersection

Scale: 1:50,000 0 0.28 0.55 1.1 Miles N

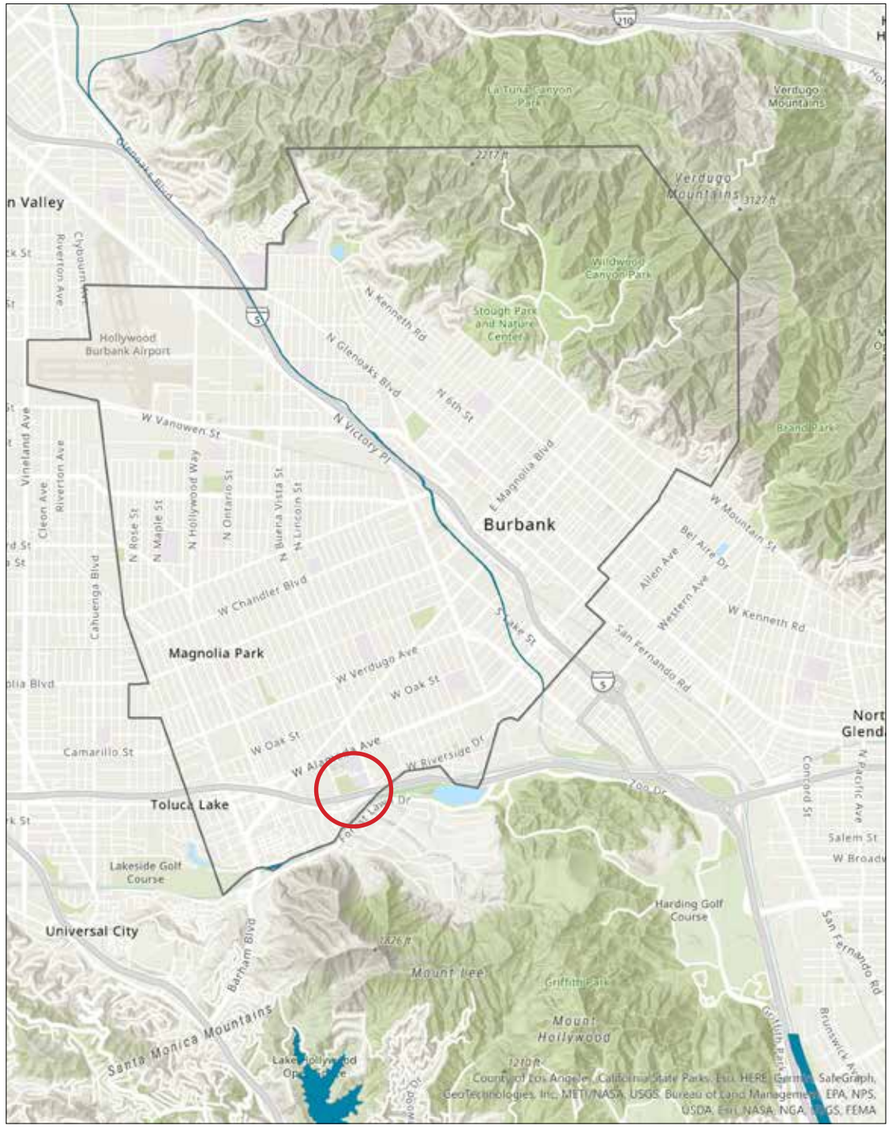
SITE ANALYSIS - REGIONAL CONTEXT ENVIRONMENTAL RISK



BURBANK FIRE ZONE

- Johnny Carson Park
- Burbank Boundary
- Los Angeles County Very High Risk Fire Zone

Johnny Carson sits on the border of the LA County's very high risk fire zone and that area will only increase as climate changes and temperatures rise



100 YEAR FLOOD PLAIN

- Johnny Carson Park
- Burbank City Boundary
- 100-Year Flood Plain

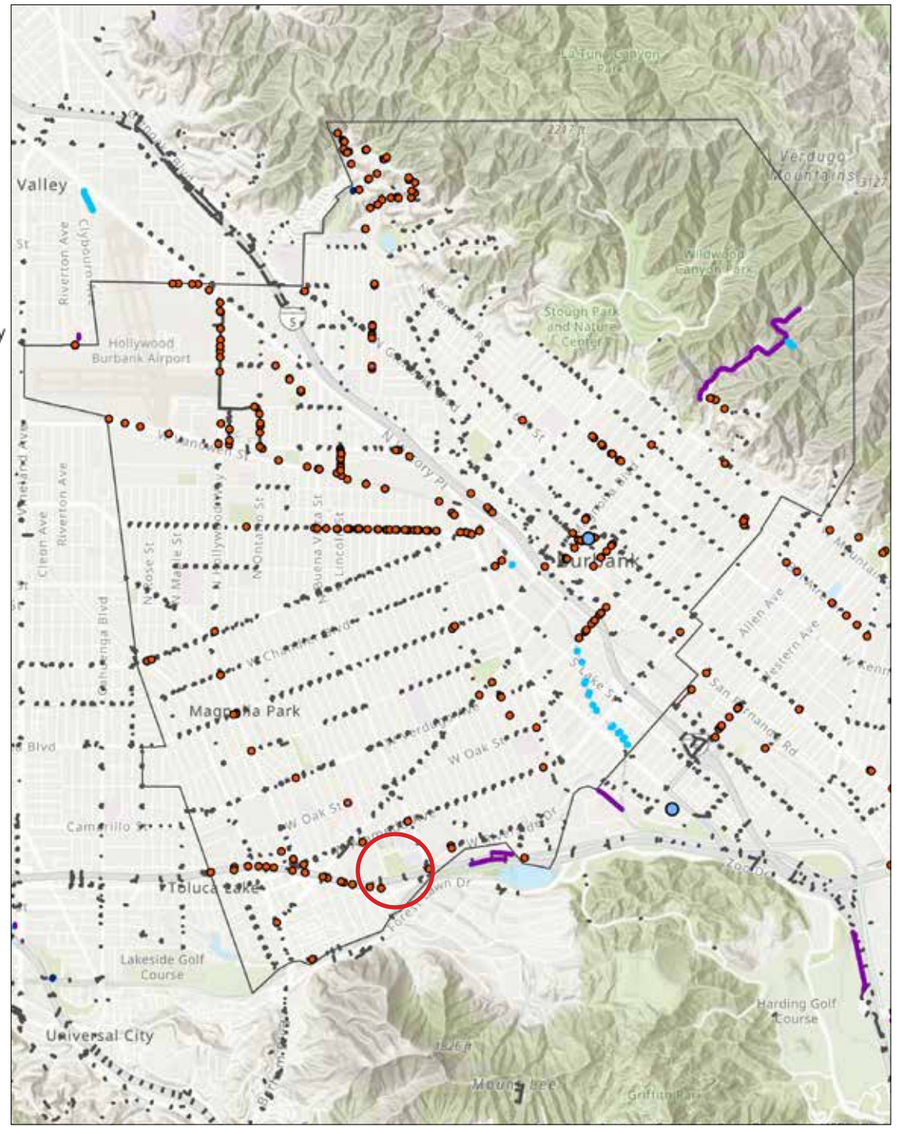
According to the 100 year flood plain, Johnny Carson should be safe from the 100 year flood if the concrete channel of the LA River remains intact, other flood remedies must be considered if the barrier is removed

SITE ANALYSIS - REGIONAL CONTEXT WATERSHED + STORM WATER MANAGEMENT

LOS ANGELES COUNTY WATERSHED

- Johnny Carson Park
- Los Angeles River Watershed
- Watershed Sub Basins
- Los Angeles River
- Los Angeles County Boundary

The LA county watershed drains into the LA river down to Long Beach into the Pacific Ocean. Water from Johnny Carson travels through storm water management systems into the LA river to join the watershed.



BURBANK STORM WATER MANAGEMENT

- Johnny Carson Park
- Burbank Boundary

Maintenance Hole
- Junction Structure

Open Channel
- Unimproved
- Ditch
- Swale

Lateral Line

Subtype
- Standard
- Sub Drain
- ForceMain

Culvert

Subtype
- Open
- Closed

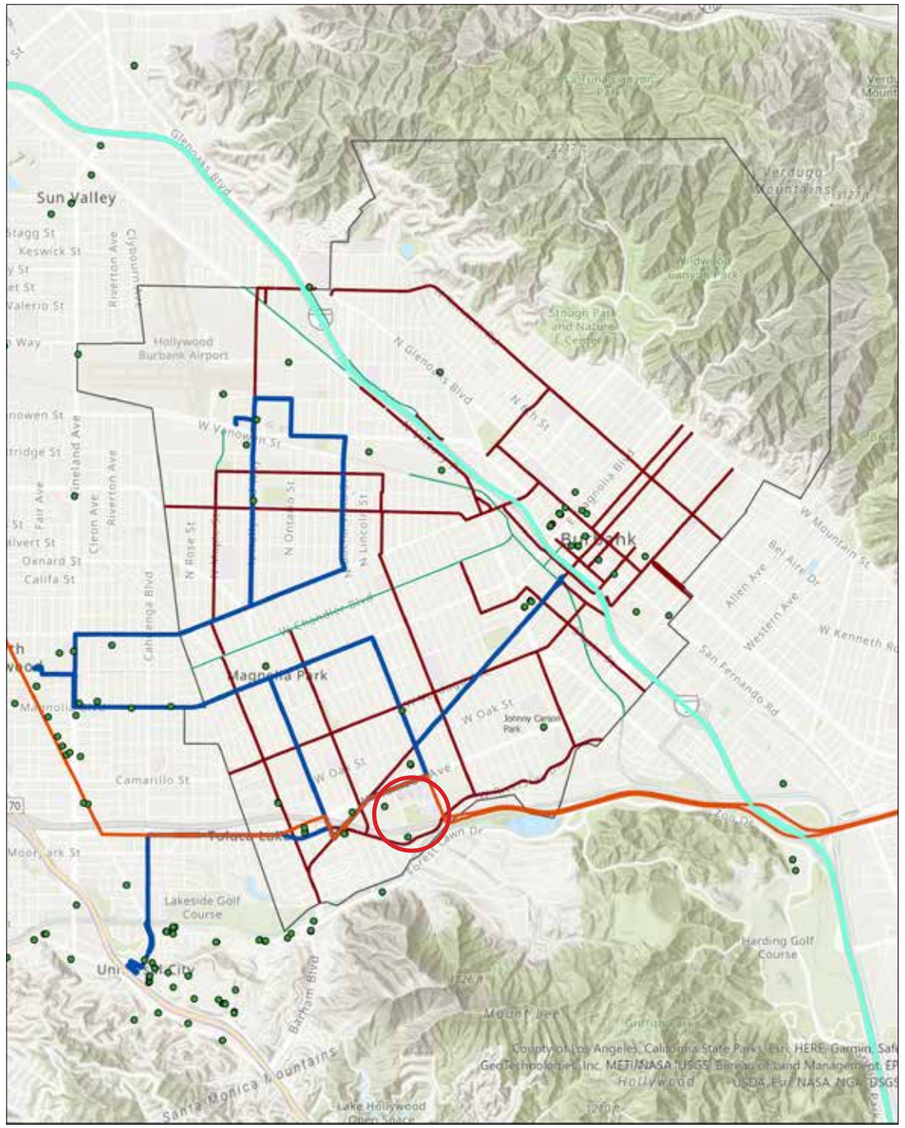
Pump Station

Subtype
- Pump Plant

Natural Drainage

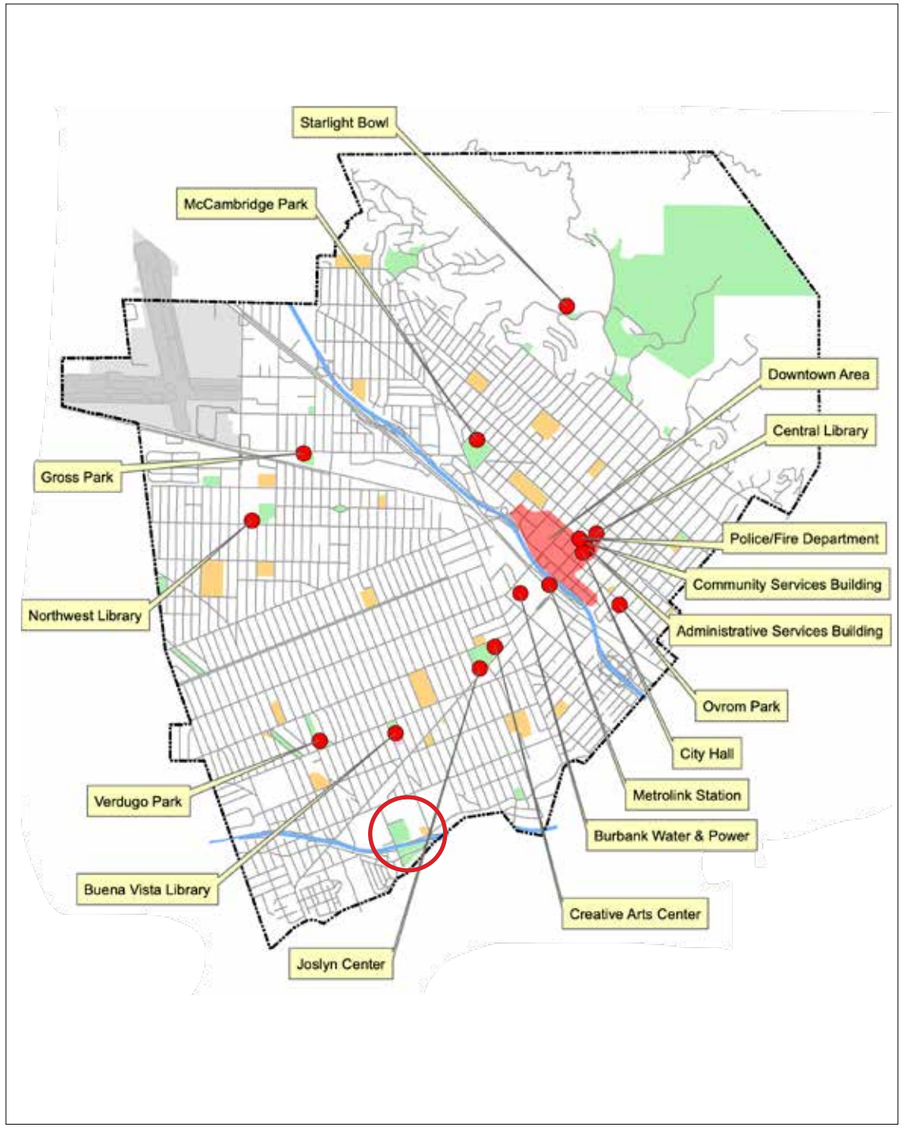
Subtype
- Stream

SITE ANALYSIS - REGIONAL CONTEXT TRANSPORTATION + PUBLIC WIFI ACCESS



REGIONAL TRANSPORTATION & EV CHARGING STATIONS

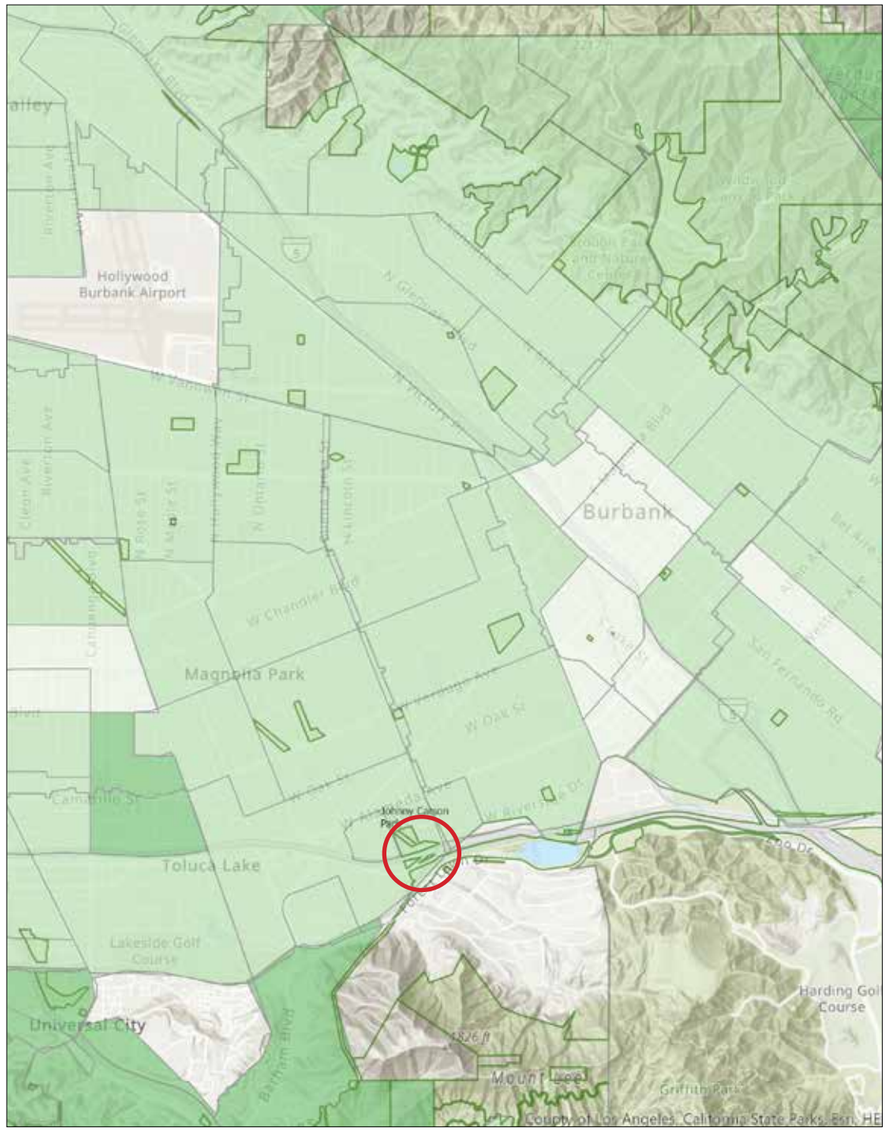
- Electrical Vehicle Charging Stations
- 409
- 419
- 422
- 423
- 549
- Observatory/Los Feliz
- BurbankBus
- Bike Route (Class 3)
- Chandler Bikeway
- Burbank Boundary
- Johnny Carson Park



PUBLIC WIFI LOCATIONS

- Wi-Fi Locations
- Downtown Wi-Fi Area
- Streets
- Freeways
- Bob Hope Airport
- Schools
- Libraries
- Recreation Areas
- City Boundary
- Johnny Carson Park

SITE ANALYSIS - REGIONAL AND ON SITE TREE COVERAGE



TREE CANOPY LAND COVERAGE BY PERCENTAGE

Percentage of Land Covered by Tree Canopy

- 0.498341 - 5.000000 %
- 5.000001 - 10.000000 %
- 10.000001 - 20.000000 %

Park Boundaries

- Park Boundaries
- Johnny Carson Park

Scale: 1:50,000 0 0.28 0.55 1.1 Miles N

TREE CANOPY OF JOHNNY CARSON PARK

Large Scale Trees
Pinus canariensis
Tipuana tipu
Quercus agrifolia

Medium Scale Trees
Alnus rhombifolia
Jacaranda mimosifolia
Sambucus nigra
Taxodium mucronatum

Small Scale Trees
Betula nigra
Ginkgo biloba

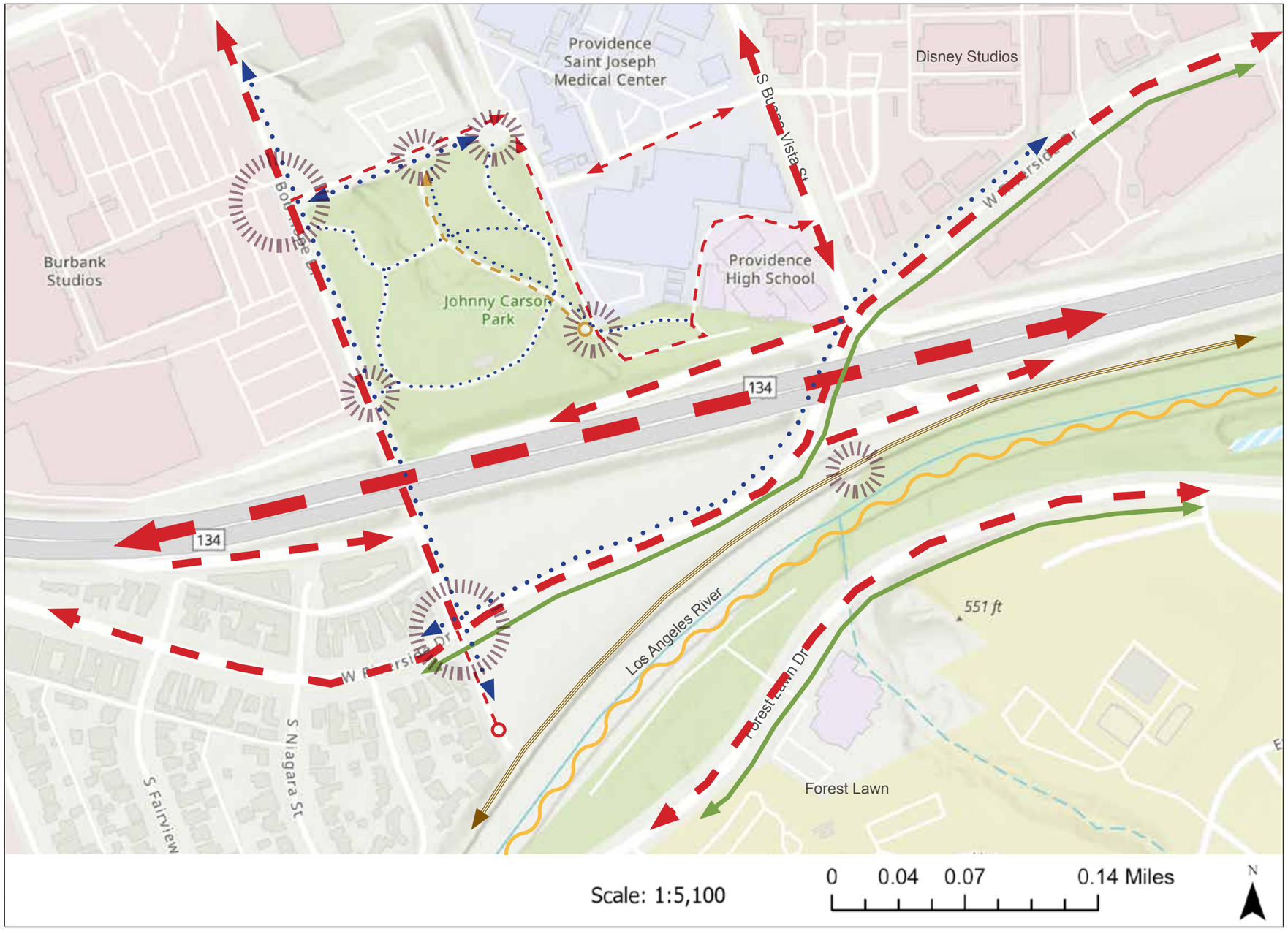
Scale: 1:3,000 0 0.01 0.03 0.06 Miles N

SITE ANALYSIS - INVENTORY

PLANT INVENTORY

1. *Alnus rhombifolia*
2. *Ginko biloba 'Princeton Sentry'*
3. *Jacaranda mimosifolia*
4. *Pinus canariensis*
5. *Quercus agrifolia*
6. *Sambucus nigra spp. Caerula*
7. *Tipuana tipu*
8. *Taxodium mucronatum*
9. *Betula nigra*
10. *Ceanothus griseus horizontalis*
11. *Eriogonum fasciculatum*
12. *Heteromeles arbutifolia*

SITE ANALYSIS - CIRCULATION



CIRCULATION AND ACCESS

Vehicular Circulation

- Primary Circulation
- Secondary Circulation
- Tertiary Circulation
- Service Vehicular Circulation

Pedestrian Circulation

- Primary Circulation
- Secondary Circulation

Horse Trail

- Primary Circulation

Bike Path

- Primary Circulation

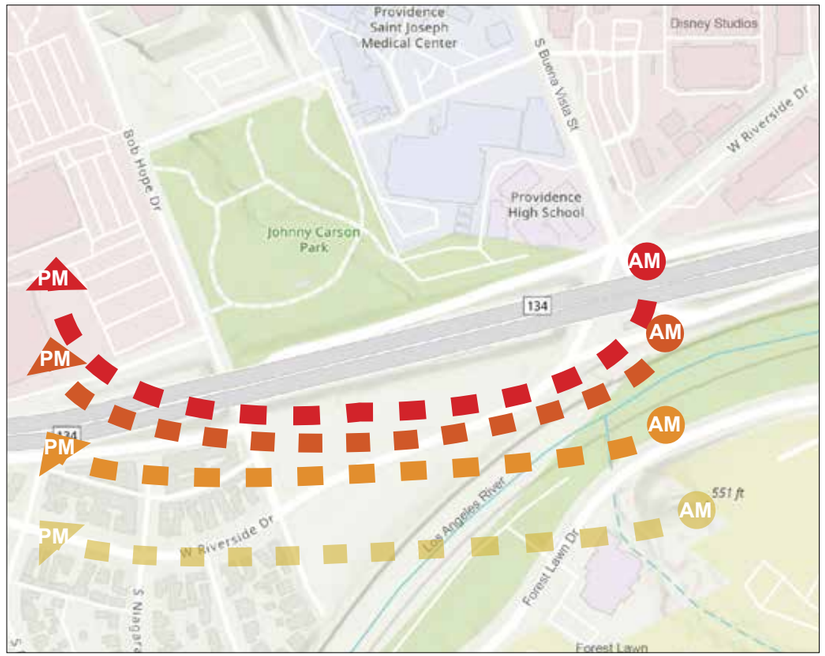
Bird Migration

- Primary Circulation

Access

- Primary Access

SITE ANALYSIS - ENVIRONMENTAL FACTORS

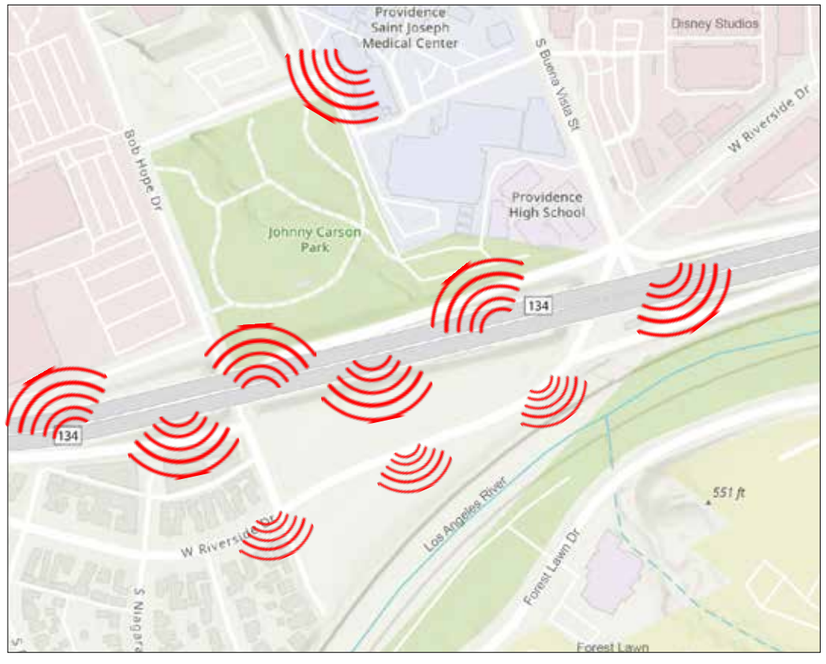


SUN PATTERNS

- Summer Solstice
- Fall Equinox
- Spring Equinox
- Winter Solstice

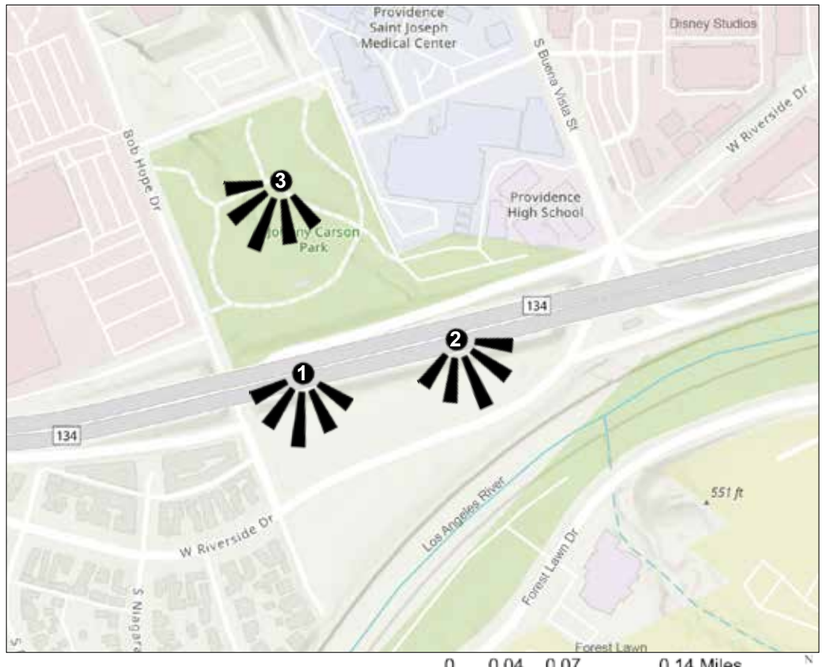
WIND PATTERNS

- Prevailing Wind
- Winter Wind



NOISE

- Noise from 134 Freeway Riverside Drive, and Saint Joseph Medical Center



VIEWS

- Primary View: Griffith Park Mountains and Forest Lawn
- Secondary View: Los Angeles River
- Tertiary View: View of park, Frank Gehry Building, 134 Freeway, Griffith Park Mountains

SITE ANALYSIS - CONSTRAINTS

SITE CONSTRAINTS

1. The 134 Freeway creates a divide between the open spaces and surrounding neighborhoods.
2. There is no dynamic programming to connect the diverse needs of the surrounding residential, business and work communities.
3. The changing climate creates unknowable future needs, requiring flexible programing from this site.
4. Many of the existing edges of the park currently function as built barriers to the park.
5. No current existing pedestrian connections between the park and several of the surrounding uses including the hospital, school and Studios.
6. There is little existing programming to aide with community events during extreme weather periods.
7. The LA River storm water channel does not allow any water to be sequestered on site.
8. West Riverside Drive remains a heavily used traffic corridor and it runs directly through the open green spaces.

SITE ANALYSIS - OPPORTUNITIES

SITE OPPORTUNITIES

1. The site can be radically transformed to become a place of decompression and refuge for both humans and nature while yielding to the ever changing demands of climate change.

2. The 134 Freeway can be radically changed to better address the needs of the surrounding population.

3. With less vehicular traffic, pedestrian traffic can be safely increased to better connect with the surrounding uses.

4. The concrete of the LA river can be punctured allowing the surrounding areas to benefit from sinking water onsite, and allowing inundation areas to become multi use.

5. The LA River can be widened with the sides sloped to make it more resilient to atmospheric rivers while allowing the river to become a part of the park, as opposed to separate from it.

6. With the puncturing of the river, wildlife can have access to the river for both food and water.

7. Flexible programming for multi-generational use, as well as use by hospital goers, and local workers.

8. Riverside drive can be made into a subterranean corridor to help connect the surrounding open spaces.

Concept Development

PRECEDENTS

CASE STUDY 1

ALAMEDA POINT

Location: Alameda, California
Landscape Architect: April Phillips Design Works
Project: 2015-2020
Construction: 2018-2020
Area: 68-acre master plan with 4 major parks on 15 acres of open space

Located in a historic district this waterfront lagoon engages the public as a key open space. The design connects people with the bay. Designed with open spaces, ecological systems, green infrastructure, and cultural aspects in mind.

CASE STUDY 2

MISSION VALLEY RIVER WALK

Location: San Diego , Calfiornia
Landscape Arichtect: Glen Schmidt, FASLA
Construction - To be finished 2025
Area: a 200-acre, master-planned walkable community in the heart of Mission Valley

The Mission Valley RiverWalk in San Diego is an ongoing riverwalk development that successfully integrates new housing, commercial space and outdoor recreation sites with a long neglected River. This river is the original lifeline of San Diego, where the city was born and developed. Since abandoned as development edged further out into previously undeveloped space, the riverwalk seeks to revive the original lifeline of the city.

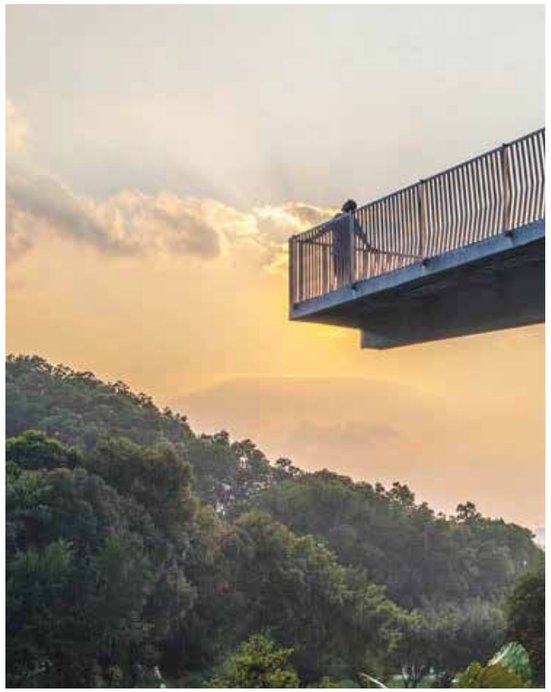
CASE STUDY 3

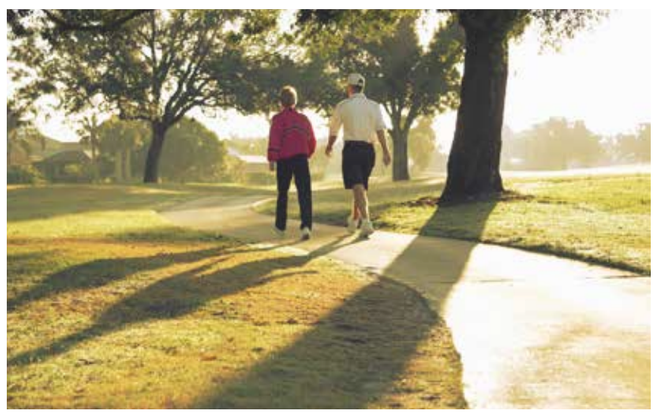
DĚTSKÉ HŘIŠTĚ VODNÍ VALY
River Loučná Embankment

Location: Vodní valy Město, 570 01 Litomyšl, Czechia
Landscape Architects: Partero – Jakub Finger, Mirka Svorová
Client: Karel Komárek Proměny Foundation
Program: Public space
Project: 2013-2015
Construction: 2015-2017
Area: 30,000 m2 (7.4 Acres)

Located in a historic distric in Czech Republic, this park was redesigned to connect two open spaces once divided by a river, creating more engagement between the public and nature.

INSPIRATION



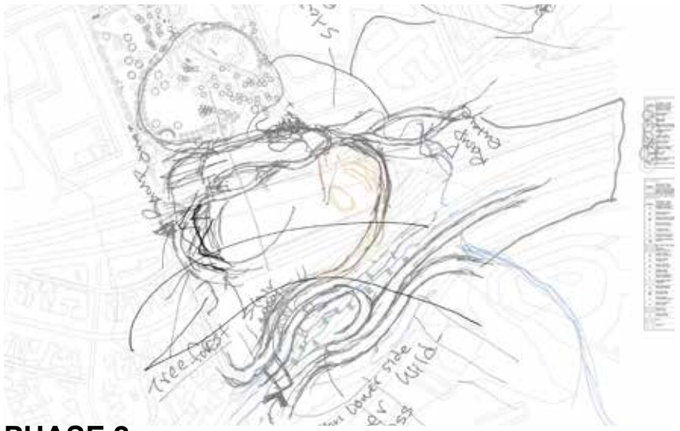


INSPIRATION

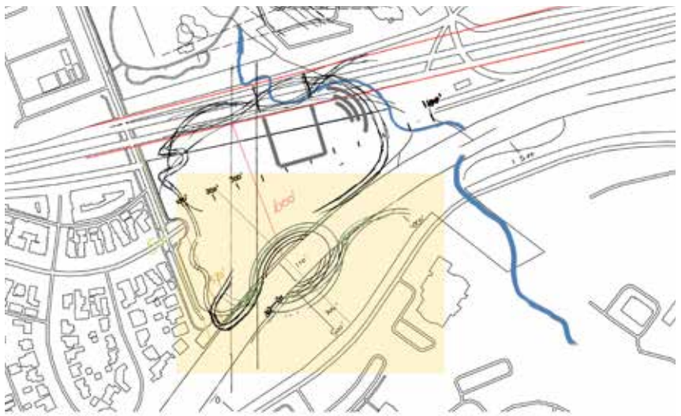
INSPIRATION

CONCEPT DEVELOPMENT

PHASE 1



PHASE 2



PHASE 3

PHASE 4

Cooling Center

Subterranean Roadway

Riverside Seating

Amphitheater

Amphitheater

Parti

Elevated Pathways

Site Plan

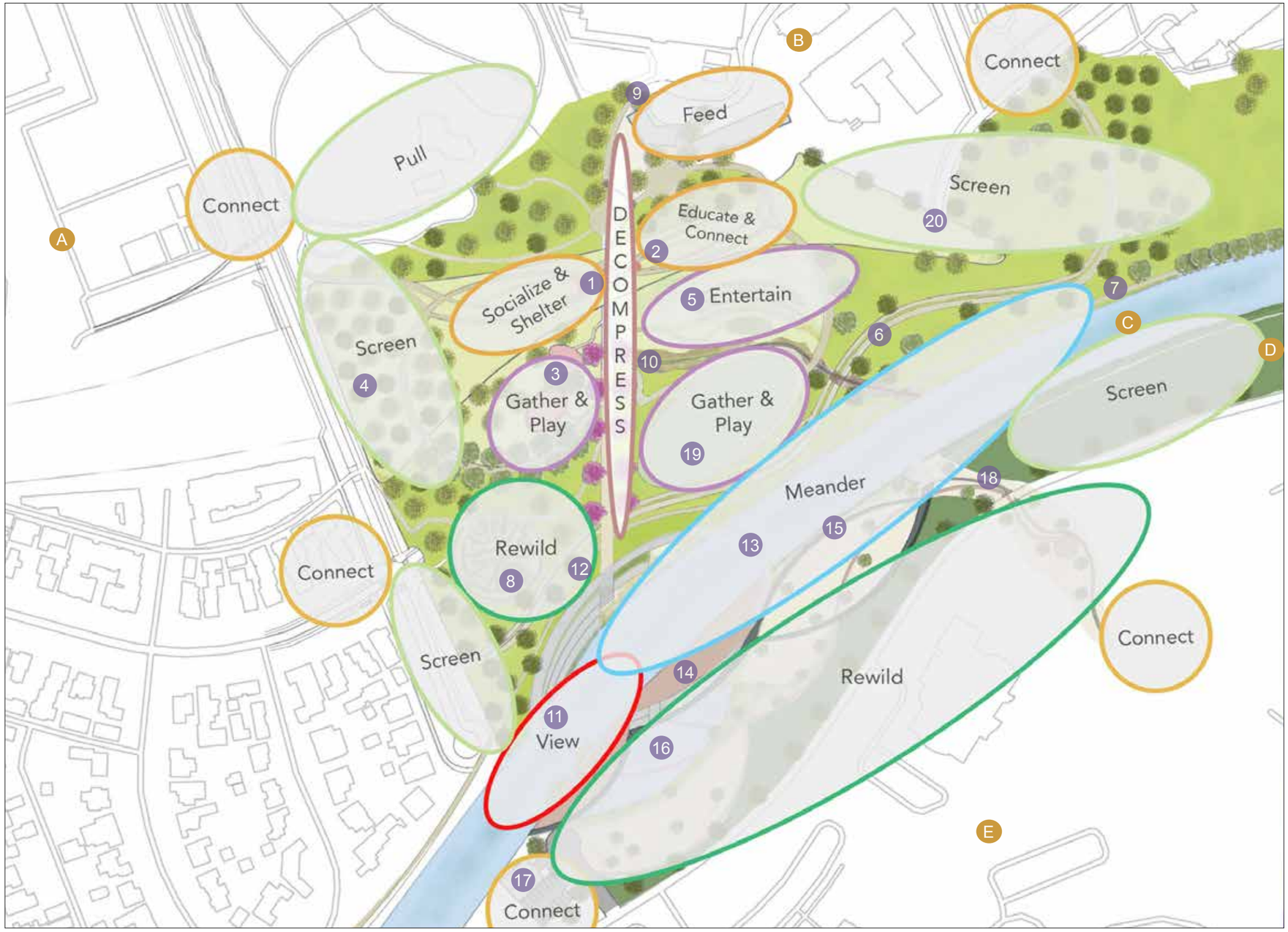
SITE PLAN

LEGEND

1. Cooling Center / Recreation Center
2. Rooftop Meadow and Viewing Area
3. Children’s Play and Picnic Area
4. Native Tree Grove
5. Amphitheater
6. Walking/ Bike Trail
7. Horse Trail
8. Labyrinth BioSwale
9. New East Entrance With Cafe
10. Rerouted Tujunga Wash
11. Los Angeles River Observation Deck
12. Terraced River Seating
13. Bridge to Native Wetlands
14. Elevated Viewing Deck
15. Elevated Pathways
16. Seasonal Wetlands + River Access Trails
17. Ecology Center
18. Sennett Creek Wildlife Tunnel
19. Open Space
20. Subterranean Riverside Drive

- A Burbank Studios
- B Providence High school
- C Los Angeles River
- D Headworks Reservoir
- E Forest Lawn

PROGRAMMING



LEGEND

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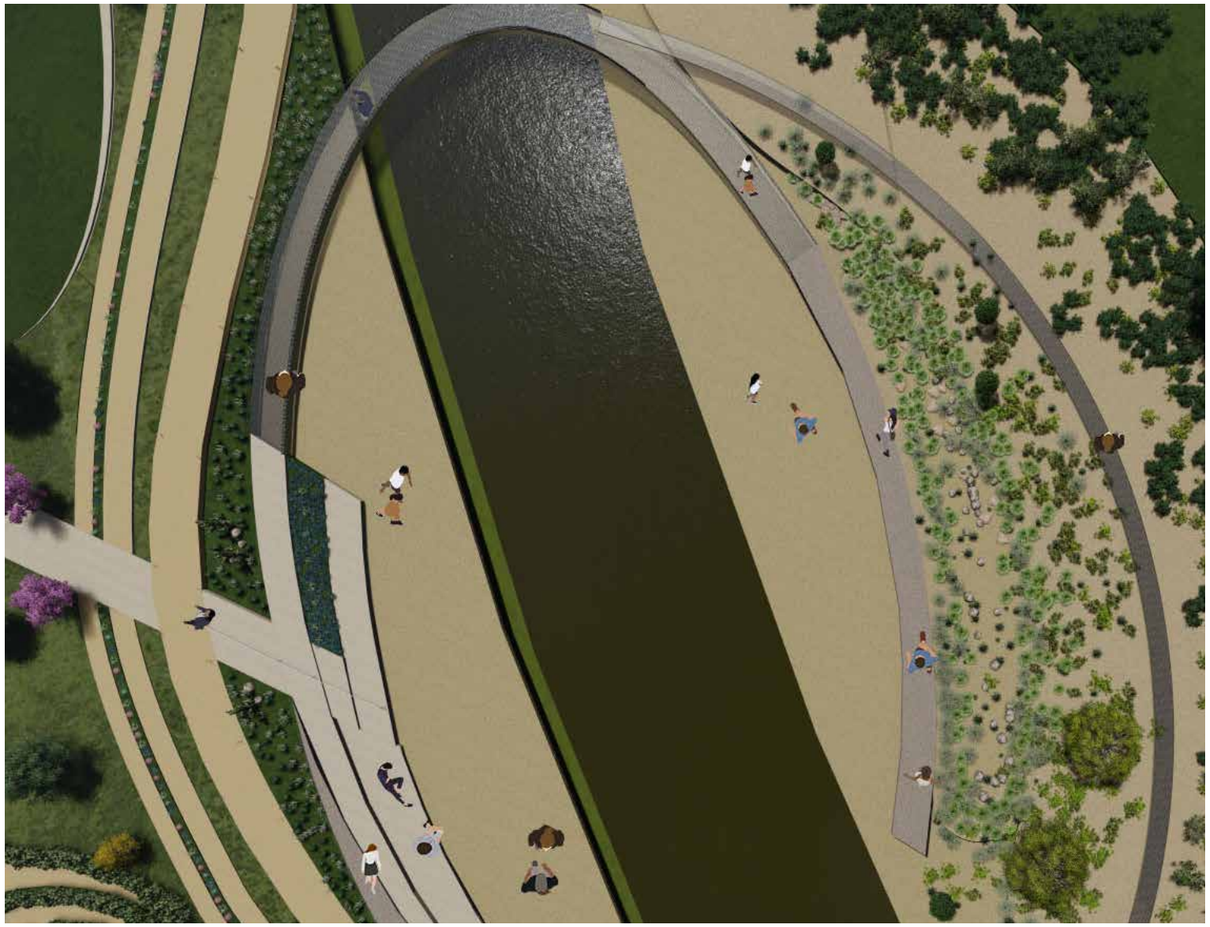
ENLARGEMENT + PERSPECTIVE ZONE 1



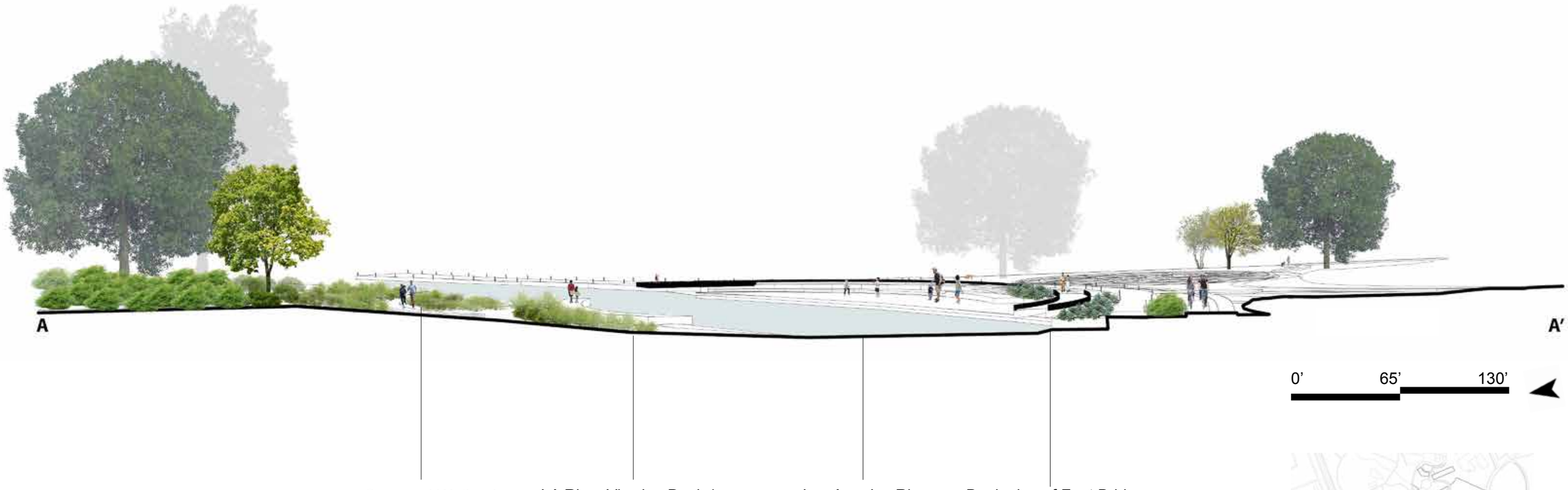
0’ 50’ 100’

ENLARGEMENT

PERSPECTIVE

The seasonal wash widens the Los Angeles River during wet seasons, allowing groundwater recharging and capturing on site. This area will be re-wilded with native riparian plants and be a habitat for animals. There is a new wildlife corridor connecting Sennett creek to the seasonal wetlands area, allow animals to interact with the Los Angeles River. Elevated metal mesh trails allow the area to be explored during wet season and dirt trails into wetland areas during dry season.

SECTION 1


A
A'
0’
65’
130’
Seasonal Wetlands
LA River Viewing Deck /
Landing Area of Foot Bridge
Los Angeles River
Beginning of Foot Bridge

ENLARGEMENT + PERSPECTIVE ZONE 2

0’ 50’ 100’

ENLARGEMENT

PERSPECTIVE

The labyrinth disguises a storm water catchment system, it will capture and retain water coming off the green roof and bike path, capturing 70% of water on site.

The walking path, bike path, and horse trails are separated for pedestrian safety.

SECTION 2

Native Forest

Labyrinth Bioswale

Bike/ Walking Path

0’ 50’ 100’

ENLARGEMENT + PERSPECTIVE ZONE 3

0’ 50’ 100’

ENLARGEMENT

PERSPECTIVE

Our mounded earth structure, built on the bones of the old Highway, merges the new park with the old. Bringing visitors together to the central focal point of the Tujunga wash, the cooling center provides programing space during the more frequent extreme weather events now visiting the region. With views on either side of the structure, instead of an outdoor room, we have a room outdoors that allows visitors to experience the calming feel of nature. Near the structure, an outdoor picnic and play area allows for views of the mountains and modified LA River.

SECTION 3

C

C’

Tree Covered Seating Area

Tujunga Wash Under Glass Walkway

Cooling Center

0’ 7’ 14’

References:
1. https://www.alamy.com
2. https://mooool.com
3. https://images.google.com