FLOURISH COLLECTIVE

INSPIRED LANDSCAPES
SUSTAINABLE FUTURES

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“BURBANK BIOCORRIDOR: BRIDGING NATURE, COMMUNITY, AND INNOVATION”

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Winter 2025

THE BIG IDEA

“The Burbank Biocorridor is more than a park—it’s a movement to reclaim urban spaces, restore nature, and drive climate innovation.

By capping the 134 Freeway, reconnecting green spaces, and revitalizing habitats, we are shaping a thriving model for sustainable cities. At its heart, a cutting-edge research center will not only restore the local ecosystem but also produce groundbreaking science to inspire global environmental action. This project is proof that together, we can transform urban landscapes into living ecosystems and lead the way toward a healthier, more sustainable world. The time to act is now. **Are you ready to change the world? We are!**

GOALS & OBJECTIVES

ECOLOGICAL RESTORATION

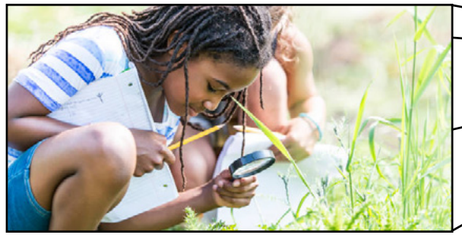
"The Burbank Biocorridor: Reclaiming our river, restoring native habitats, and creating a vital ecological link in the heart of Burbank."

SCIENCE & INNOVATION

"The Burbank Biocorridor: Where cutting-edge climate science meets tangible ecological restoration, creating a living laboratory for a sustainable future."

COMMUNITY & CONNECTION

"The Burbank Biocorridor: A place for community to gather, learn, and connect with nature, transforming a divided space into a shared green haven."



SITE HISTORY

Before 1769 — Indigenous Era

The Tongva people, indigenous to the Los Angeles Basin, relied on the river for sustenance, utilizing its resources for fishing, agriculture, and daily life.

1769 — Spanish Exploration

Spanish explorers, led by Gaspar de Portola, documented the river in 1769, marking the beginning of European interaction with the waterway.

1781 — Founding of El Pueblo de Los Angeles

The Spanish established the Pueblo de Los Angeles near the river, utilizing it as the primary water source for the settlement.

1781 — Zanja Madre Construction

The Zanja Madre, or "Mother Ditch," was an aqueduct built to channel water from the river to the pueblo for irrigation and consumption.

1914|1938 — Devastating Floods

Severe floods in 1914 and 1938 caused extensive damage, leading to public demand for effective flood control measures.

1938 - 1960 — Channelization by Army Corps of Engineers

In response to recurring floods, the U.S. Army Corps of Engineers undertook a massive project to channelize the river with concrete, transforming it into a flood control channel.

1980s - now — Environmental Movement and Revitalization Efforts

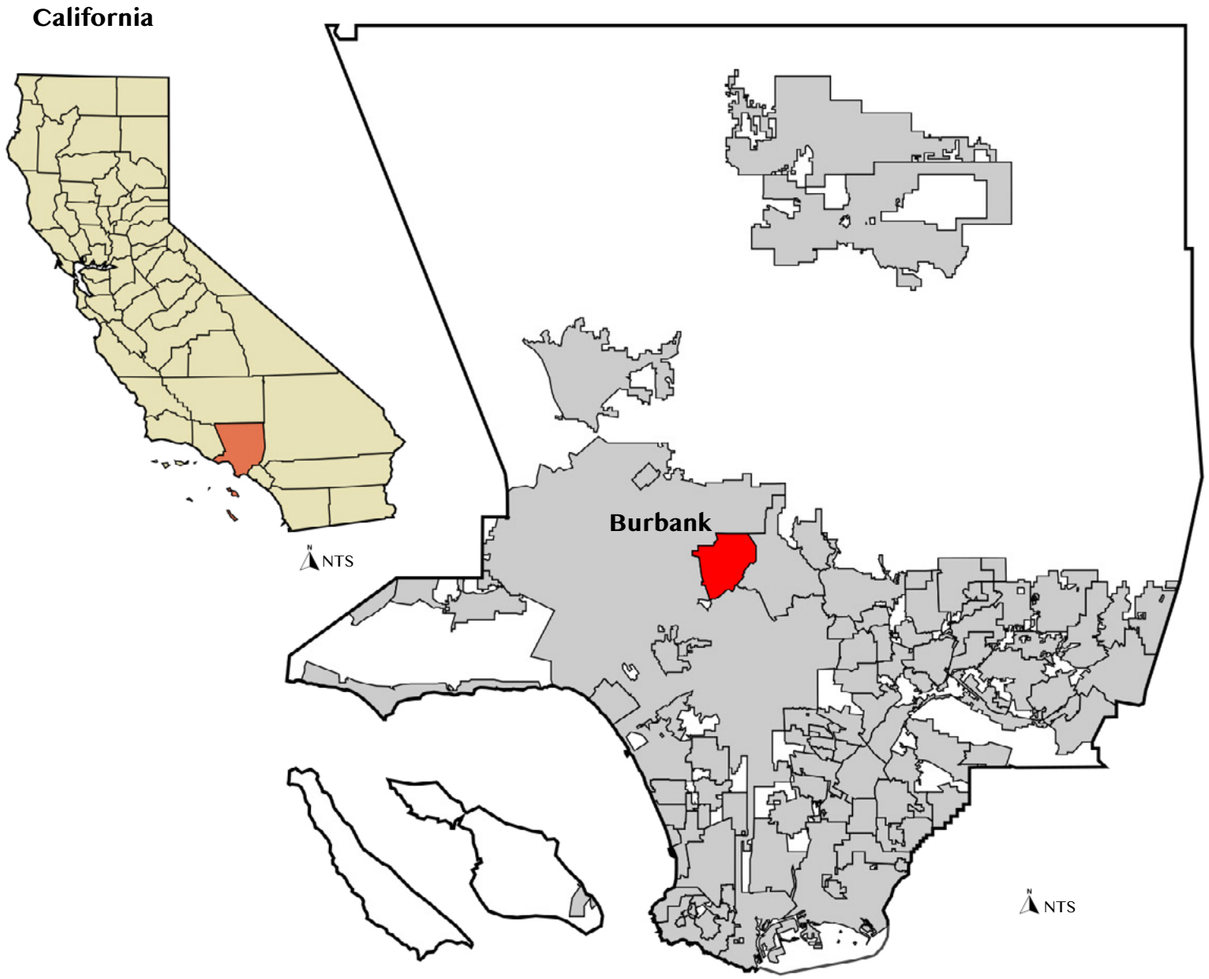
Growing environmental awareness spurred initiatives to restore the river's natural habitat, improve water quality, and enhance public access.

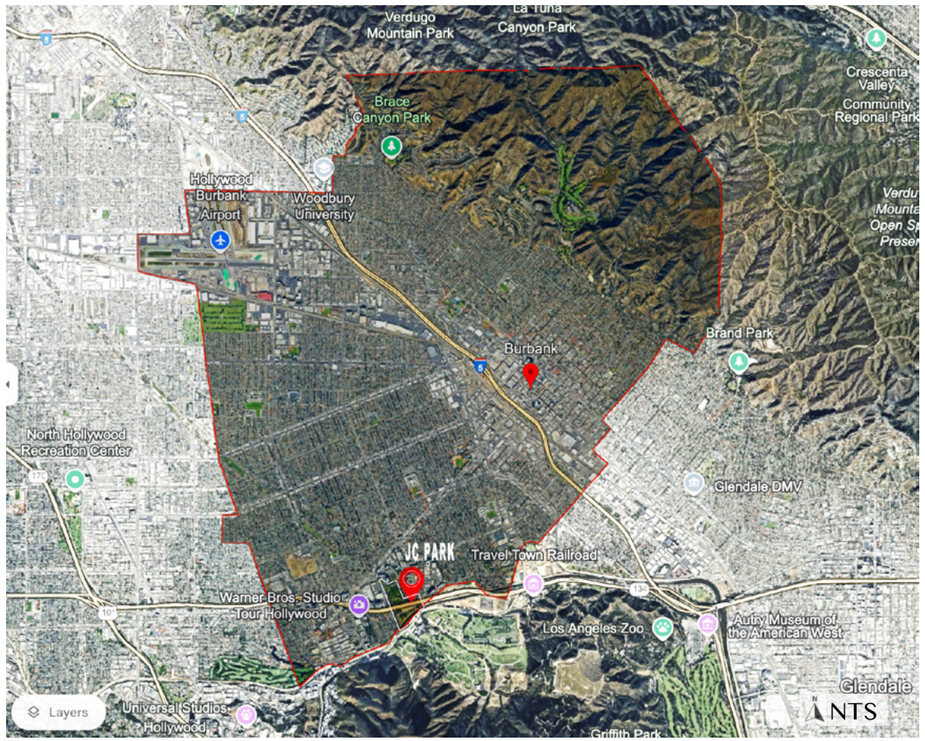
2020 — Los Angeles River Master Plan

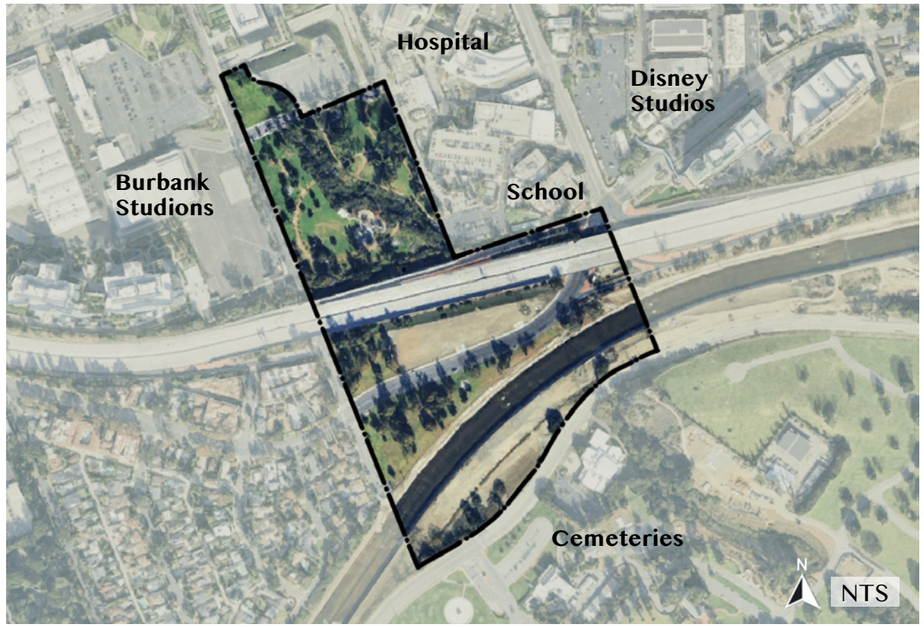
The updated Master Plan outlines comprehensive strategies for the river's future, focusing on ecological restoration, community engagement, and sustainable development.

Source: LA RIVER MASTER PLAN | LOS ANGELES TIME | LA CURBED

SITE LOCATION







Johnny Carson Park, located in Burbank, California, within Los Angeles County, is a key urban green space in the San Fernando Valley. Nestled between the Santa Monica Mountains to the south and Griffith Park to the southeast, the park is strategically positioned near the Los Angeles River and 134 Freeway, shaping its ecological and urban context. Surrounded by a mix of residential neighborhoods, commercial districts, and natural landscapes, the park functions as a critical recreational and ecological corridor, offering both active and passive open space for the community.

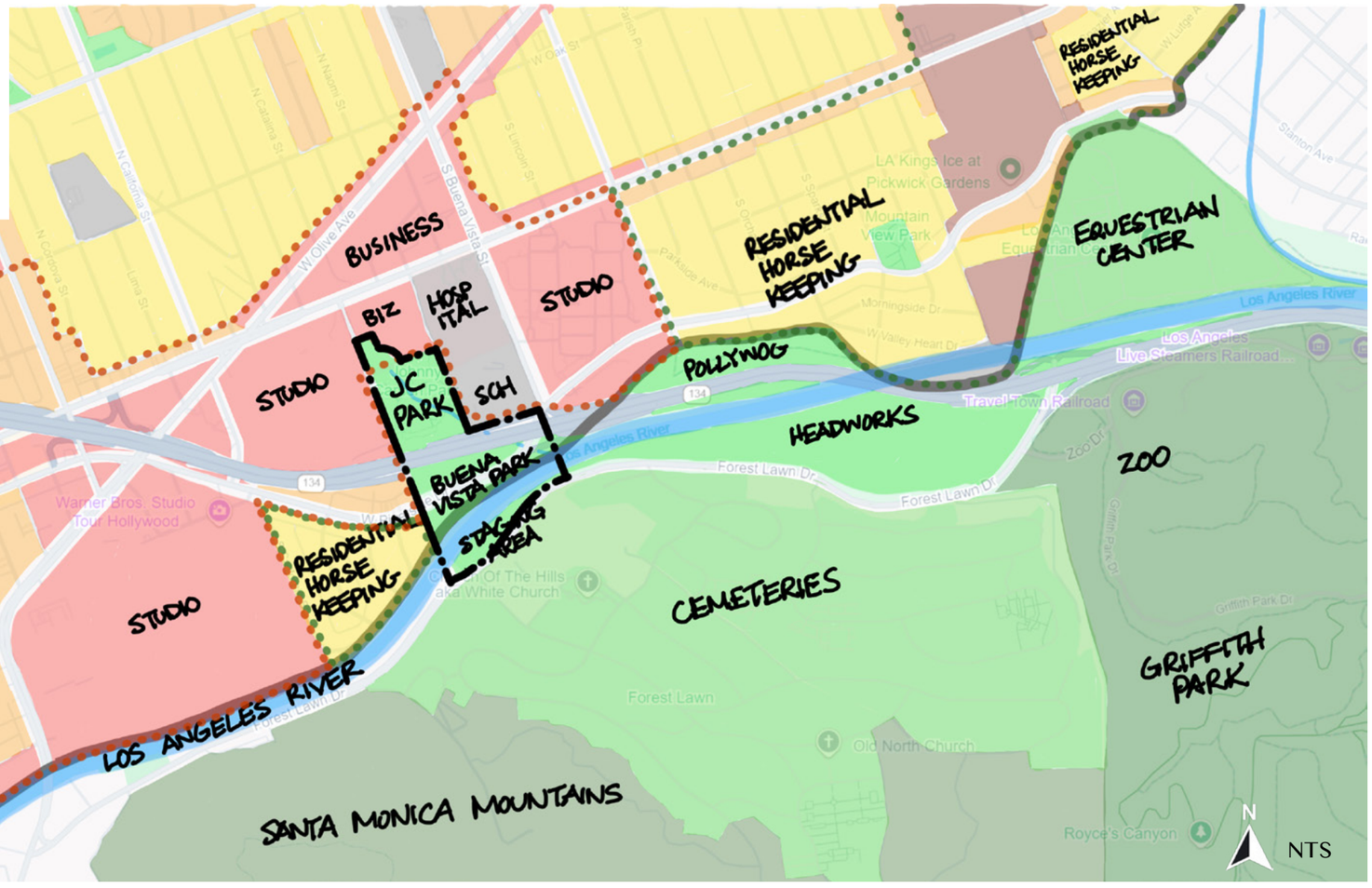
JC Park Address: 400 Bob Hope Drive Burbank, CA, 91505

Source: Google Earth | Wikimedia

SITE CONTEXT

JC Park is located in a dynamic area of Burbank, surrounded by a diverse mix of residential, commercial, recreational, and natural elements.

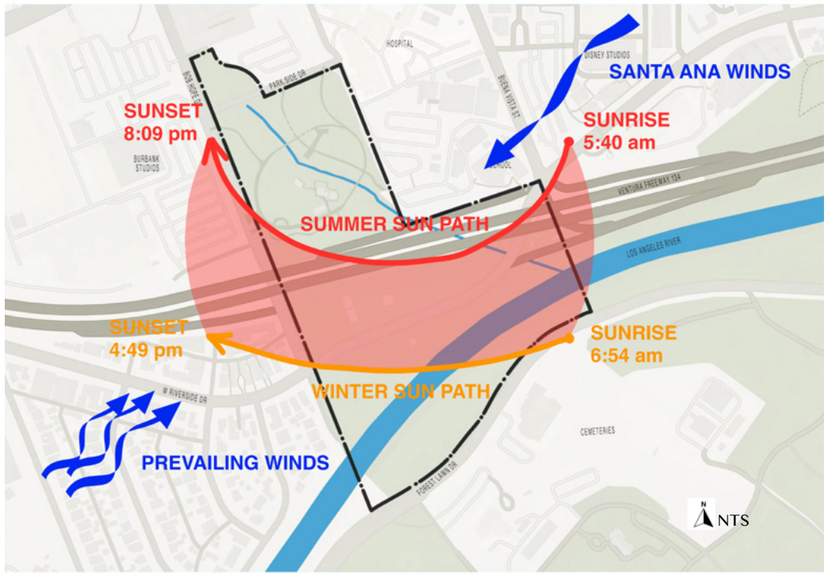
- Santa Monica Mountains & Griffith Park – These expansive natural areas provide a scenic backdrop, support local biodiversity, and offer extended recreational opportunities.
- Los Angeles Zoo – A major attraction that brings visitors to the area, offering potential connections to conservation themes within the park design.
- 134 Freeway – Presents noise and air quality challenges, emphasizing the need for sound buffers and strategic vegetation placement.
- Residential Neighborhoods – Surrounding homes and apartments make the parks essential green spaces for families, children, and daily outdoor activities.
- Horse Stables & Equestrian Trails – A strong equestrian presence influences trail design and necessitates accommodations for horseback riders.
- Cemetery – Provides a quiet, reflective space, contrasting with the parks' active recreational areas.
- Schools & Community Centers – The parks serve as outdoor extensions for educational activities, youth sports, and neighborhood gatherings.
- Business Areas & Studios – Located in Burbank, the entertainment industry contributes to park usage, with workers from nearby studios and offices utilizing the space for relaxation and recreation.



Source: Visit Burbank
Google Earth
City of Burbank General Plan Burbank 2035
LA RIVER MASTER PLAN

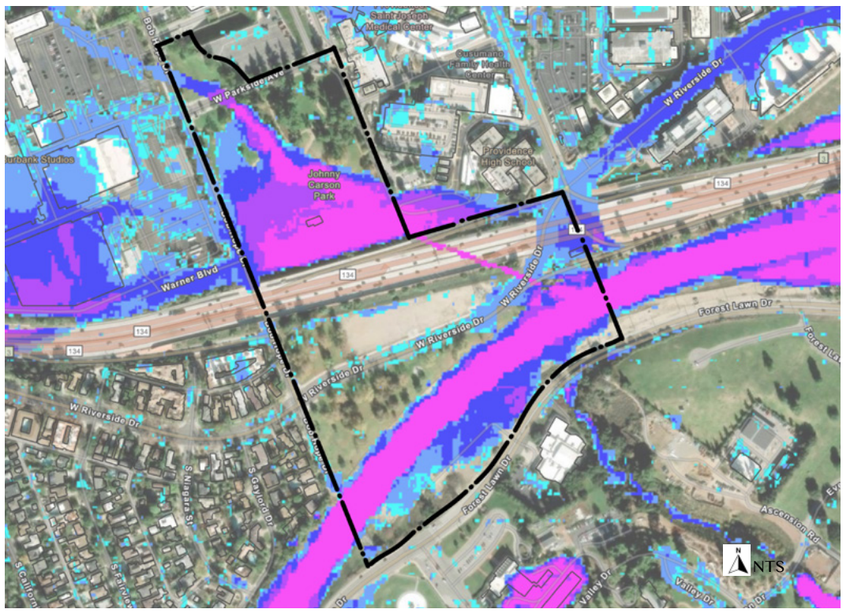
SITE ANALYSES

SUN AND WIND

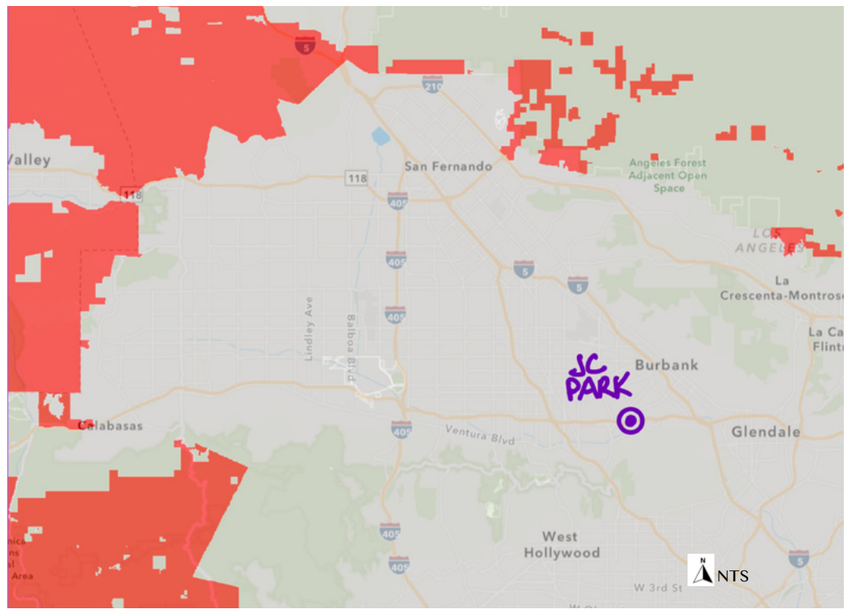


TOPOGRAPHY

FLOOD



FIRE HAZARD



LEGEND

SLOPE

SLOPE ORIENTATION

CONTOUR INTERVAL

- < 500’
- 501’ - 510’
- 510’ - 520’
- 521’ - 530’
- >531’

+HP - HIGH POINT

+LP - LOW POINT

100yr Composite Flood Hazard

LAOC 100yr composite flood hazard

- < Ankle (0.03 - 0.11 m)
- Ankle - Knee (0.11 - 0.45 m)
- Knee - Waist (0.45 - 1.0 m)
- Waist - Head (1.0 - 1.7 m)
- Over Head (> 1.7 m)

Fire Hazard Severity Zones in State Responsibility Area - September 29, 2023

- Moderate
- High
- Very High

Outside State Responsibility Area

SITE ANALYSES

CIRCULATION

LEGEND

- FREEWAY
- VEHICULAR
- HORSE TRAILS
- DEDICATED LANES
- BICYCLE FRIENDLY
- PRIMARY PEDESTRIAN
- SECONDARY PEDESTRIAN
- BUS STOP
- PROJECT BOUNDARY

AMENITIES & INFRASTRUCTURE

LEGEND

- PARKING
- PEDESTRIAN ACCESS
- FIT CORE
- PLAYGROUND
- BATHROOM
- PICNIC
- STAGE
- SCULPTURE
- WAYFINDING SIGN
- EDUCATIONAL SIGN
- ELECTRICAL TRANSMISSION TOWER
- ELECTRICAL BOX
- GAS PIPELINE
- BRIDGE
- RECYCLED IRRIGATION WATER
- DRAIN GRATE
- CULVERT

SITE

EXISTING TREES

Jacaranda mimosifolia
Pinus palustris
Pinus canariensis
Aesculus californica *
Tipuana tipu
Pinus sp.
Alnus rhombifolia *
Eucalyptus sp.
Pinus sp.
Koelreuteria paniculata
Ginko biloba
Betula nigra
Pinus palustris
Schinus molle
Sambucus nigra *
Schinus molle
Pinus sp
Platanus racemosa *
Pyrus calleryana
Ulmus parvifolia
Handroanthus heptaphyllus
Quercus agrifolia *
Liquidambar styraciflua
Quercus virginiana
Washingtonia robusta
Juglans californica *
Alianthus altissima

*** California native trees**

SITE FAUNA

*** Bird Corridor**

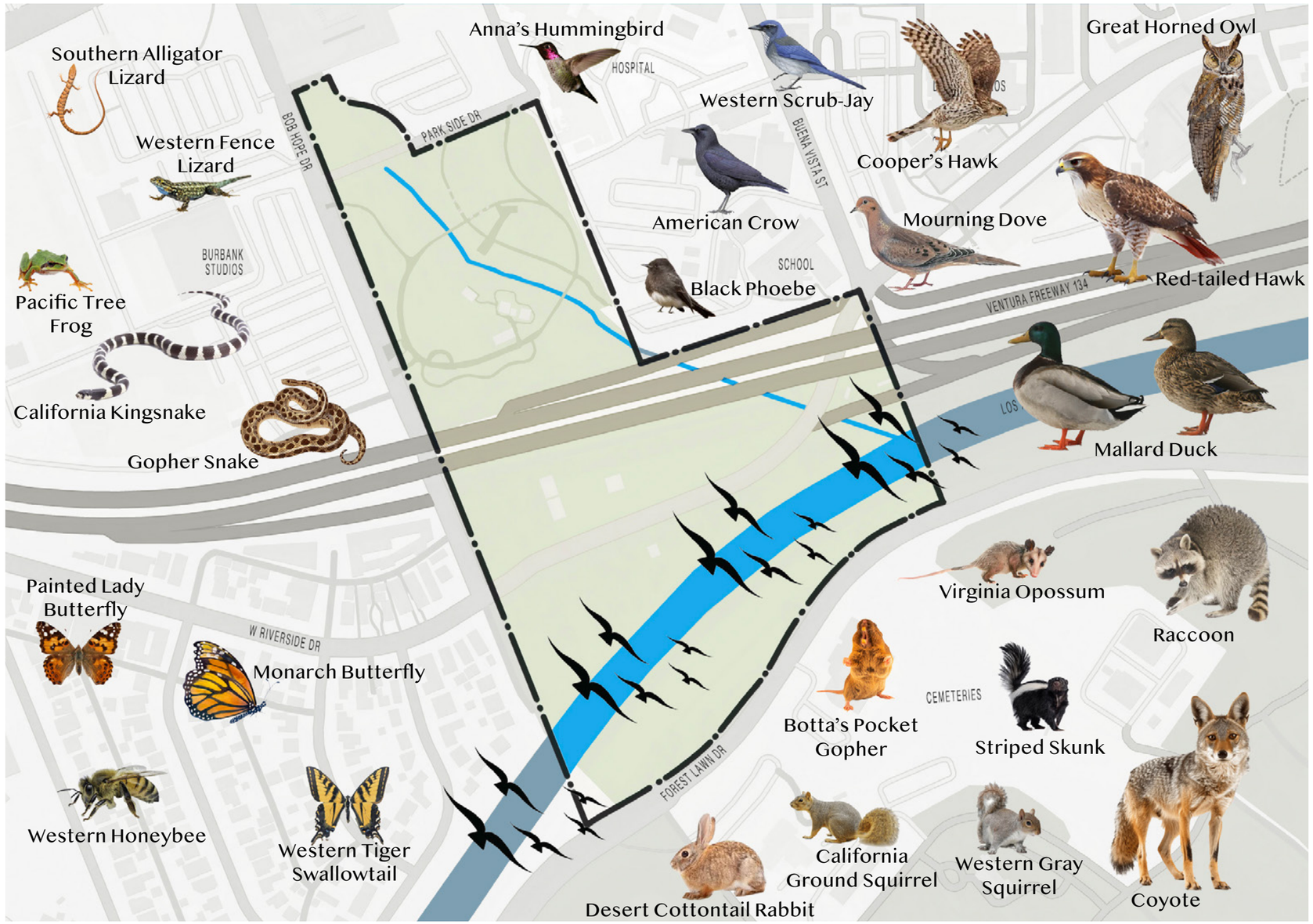
Mammals:
- Coyote (*Canis latrans*)
- Raccoon (*Procyon lotor*)
- Striped Skunk (*Mephitis mephitis*)
- Virginia Opossum (*Didelphis virginiana*)
- California Ground Squirrel (*Otospermophilus beecheyi*)
- Desert Cottontail Rabbit (*Sylvilagus audubonii*)
- Western Gray Squirrel (*Sciurus griseus*)
- Botta's Pocket Gopher (*Thomomys bottae*)

Birds:
- Red-tailed Hawk (*Buteo jamaicensis*)
- Cooper's Hawk (*Accipiter cooperii*)
- Great Horned Owl (*Bubo virginianus*)
- Western Scrub-Jay (*Aphelocoma californica*)
- American Crow (*Corvus brachyrhynchos*)
- Mourning Dove (*Zenaida macroura*)
- Mallard Duck (*Anas platyrhynchos*)
- Black Phoebe (*Sayornis nigricans*)
- Anna's Hummingbird (*Calypte anna*)

Reptiles & Amphibians:
- Western Fence Lizard (*Sceloporus occidentalis*)
- Southern Alligator Lizard (*Elgaria multicarinata*)
- Gopher Snake (*Pituophis catenifer*)
- California Kingsnake (*Lampropeltis californiae*)
- Pacific Tree Frog (*Pseudacris regilla*)

Insects & Pollinators:
- Western Honeybee (*Apis mellifera*)
- Monarch Butterfly (*Danaus plexippus*)
- Painted Lady Butterfly (*Vanessa cardui*)
- Western Tiger Swallowtail (*Papilio rutulus*)

Source: Ebird | City of Burbank



SITE CONSTRAINTS

1. **Channelized River & Water Quality** - The LA River is heavily channelized, diminishing its natural appeal and ecology. Polluted water limits interaction, requiring restoration to enhance habitat value.

2. **Freeway Proximity (134 Freeway)** - Traffic noise, air pollution, and visual disruption impact the parks. Emissions affect air quality, noise reduces tranquility, and the freeway acts as a barrier, limiting accessibility and influencing the microclimate.

3. **Balancing Uses** - Equestrian trails, passive recreation, and sports areas require careful zoning to prevent conflicts between pedestrians, cyclists, and horseback riders.

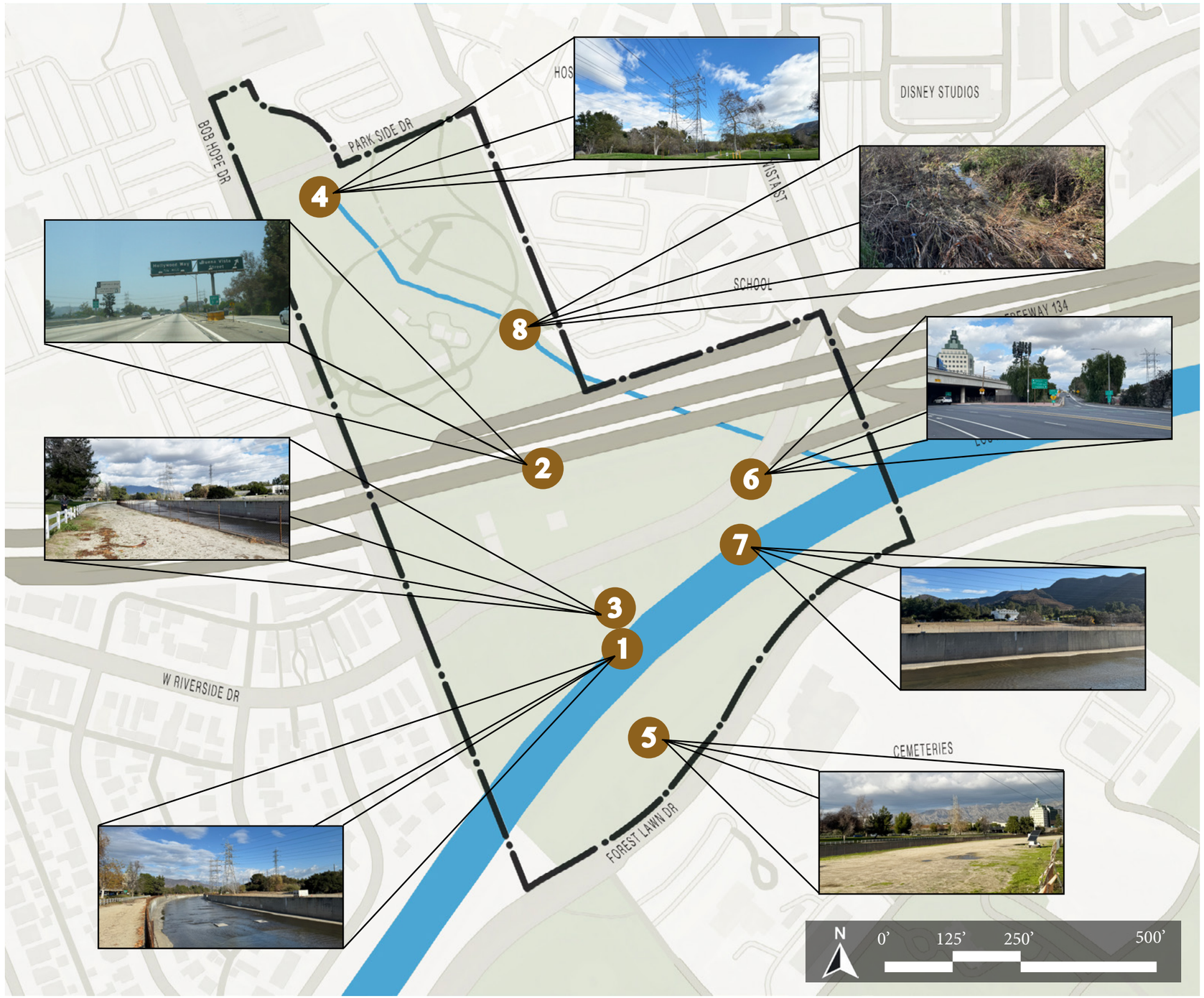
4. **High Tension Power Line** - Easement must be maintained under and around the power lines and towers.

5. **Sun Exposure & Slope Challenges** - The south-facing slope receives intense sun, limiting usability on hot days. Plant selection is restricted to species that tolerate heat, drought, and unpredictable weather conditions.

6. **Traffic & Accessibility Issues** - The high-traffic freeway makes access to the park difficult, while the lack of public transportation and limited parking spaces further restricts visitor accessibility.

7. **Barrier to Connectivity** - The Los Angeles River divides the site, restricting movement for both people and wildlife traveling from Griffith Park and Forest Lawn Memorial Park, limiting access and ecological continuity.

8. **Creek Bed Degradation** - The creek bed is overgrown with vegetation and littered with trash, impacting water flow, habitat quality, and the overall aesthetic of the site.



SITE OPPORTUNITIES

1. **Ecological Restoration** - Enhancing habitat, improving water quality, and adding native vegetation can transform the river into a thriving ecological corridor and scenic community asset.

2. **Creating an Ecological Research Center** - presents a unique opportunity to establish a hub for climate science, research, and education, fostering innovation, sustainability, and community-driven ecological restoration.

3. **Thoughtful Zoning & Design** - Clear signage, designated pathways, and strategic layout can ensure safe coexistence of equestrians, pedestrians, and cyclists, enhancing accessibility and user experience.

4. **Multi-Use Open Space** - The easement area can be utilized for low-impact recreation, native plant restoration, or pollinator-friendly landscapes while maintaining necessary clearances.

5. **Climate-Responsive Design** - Utilize drought-tolerant native plants, shade structures, and terraced seating to create comfortable, usable spaces while enhancing resilience to extreme weather.

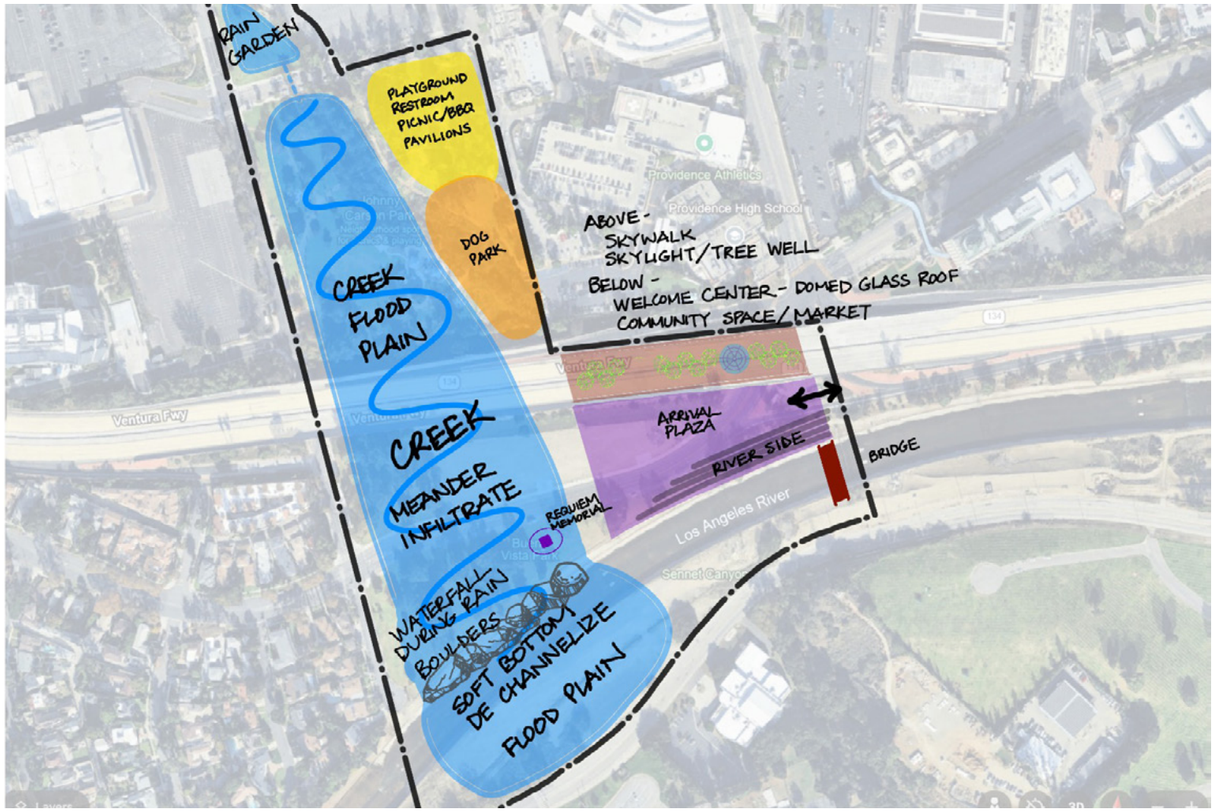
6. **Improved Connectivity** - Enhance multimodal access with pedestrian bridges, bike lanes, shuttle services, and wayfinding signage to increase accessibility and encourage diverse transportation options.

7. **Enhanced Connectivity & Habitat Corridors** - Build a pedestrian bridge over the LA River to reconnect the site, improve access, and strengthen ecological linkages between Griffith Park, Forest Lawn Memorial Park, and surrounding communities. Introduce wildlife crossings and riparian restoration to support biodiversity and habitat continuity.

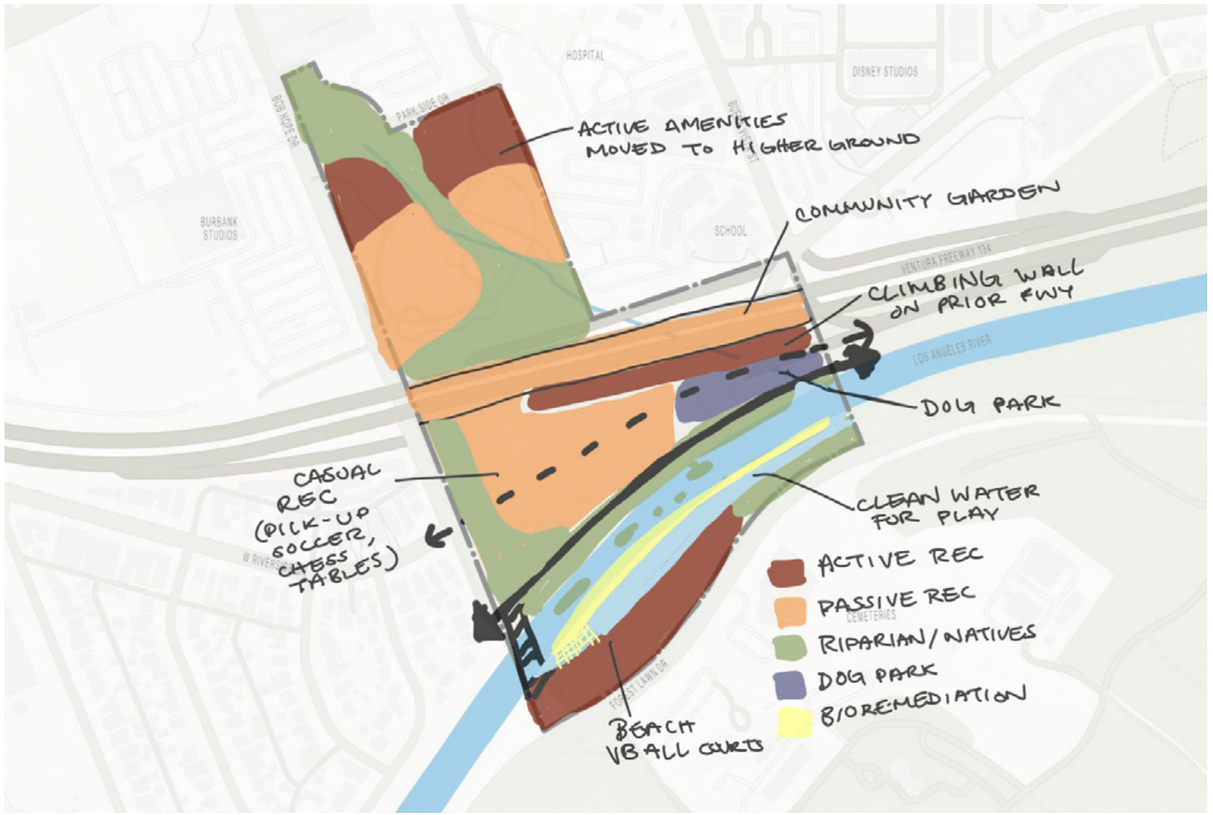
8. **Creek Restoration & Habitat Enhancement** - Restoring the creek bed through native plantings, erosion control, and cleanup efforts can improve water flow, enhance habitat quality, and create a more inviting, ecologically rich landscape.

CONCEPT DIAGRAMS

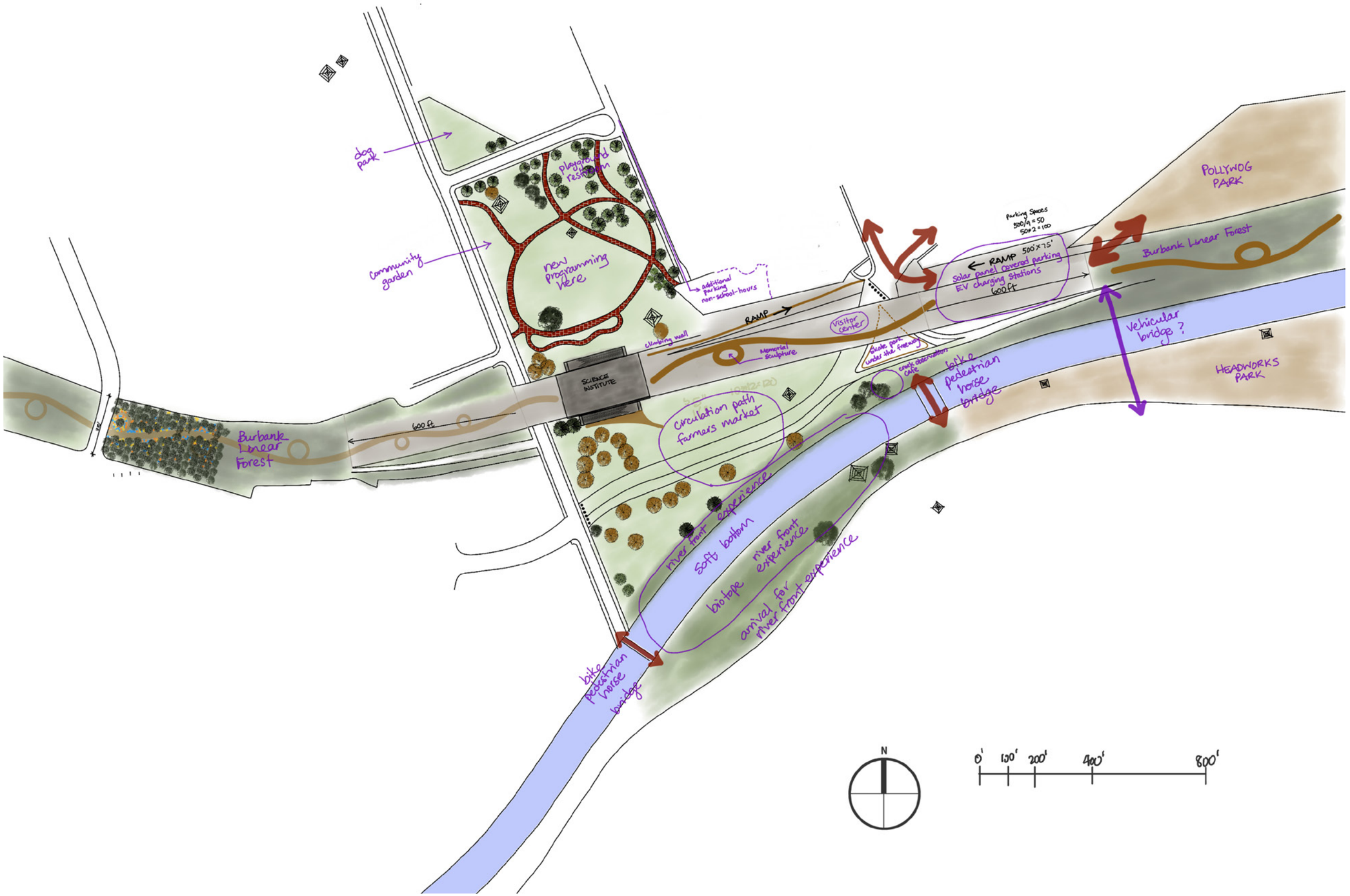
CONCEPT 1



CONCEPT 2



FINAL CONCEPT DIAGRAM



CASE
STUDIES

CLEANSING BIOTOPE

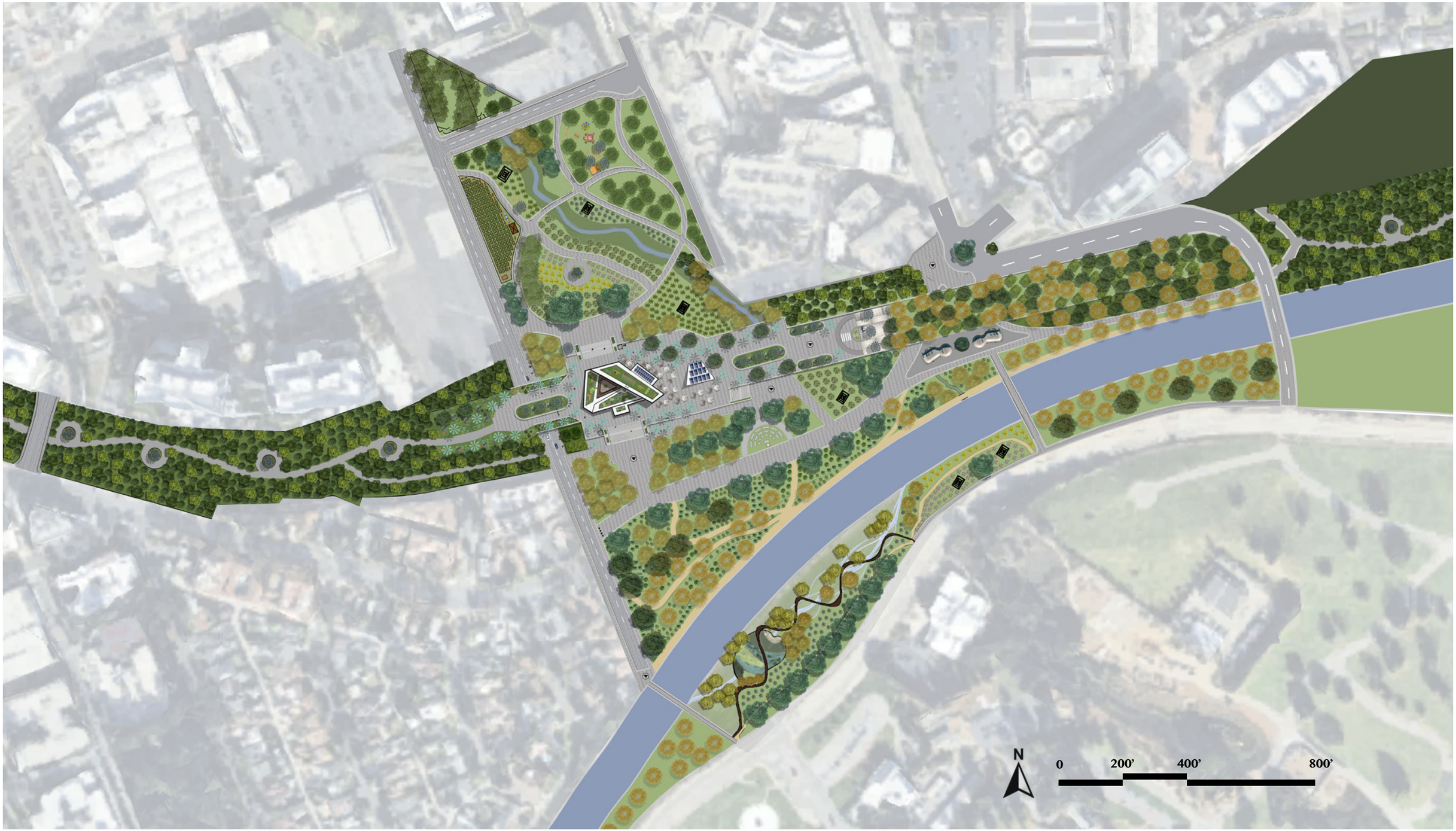
Kallang River in Bishan-Ang Mio Kio Park,
Singapore

- Series of specially engineered wetland cells tht offers the effective treatment of river and pond water.
- Specially selected wetland and aquatic plants that filter pollutants and absorb nutrients.
- Water from river is filtred through substrate.

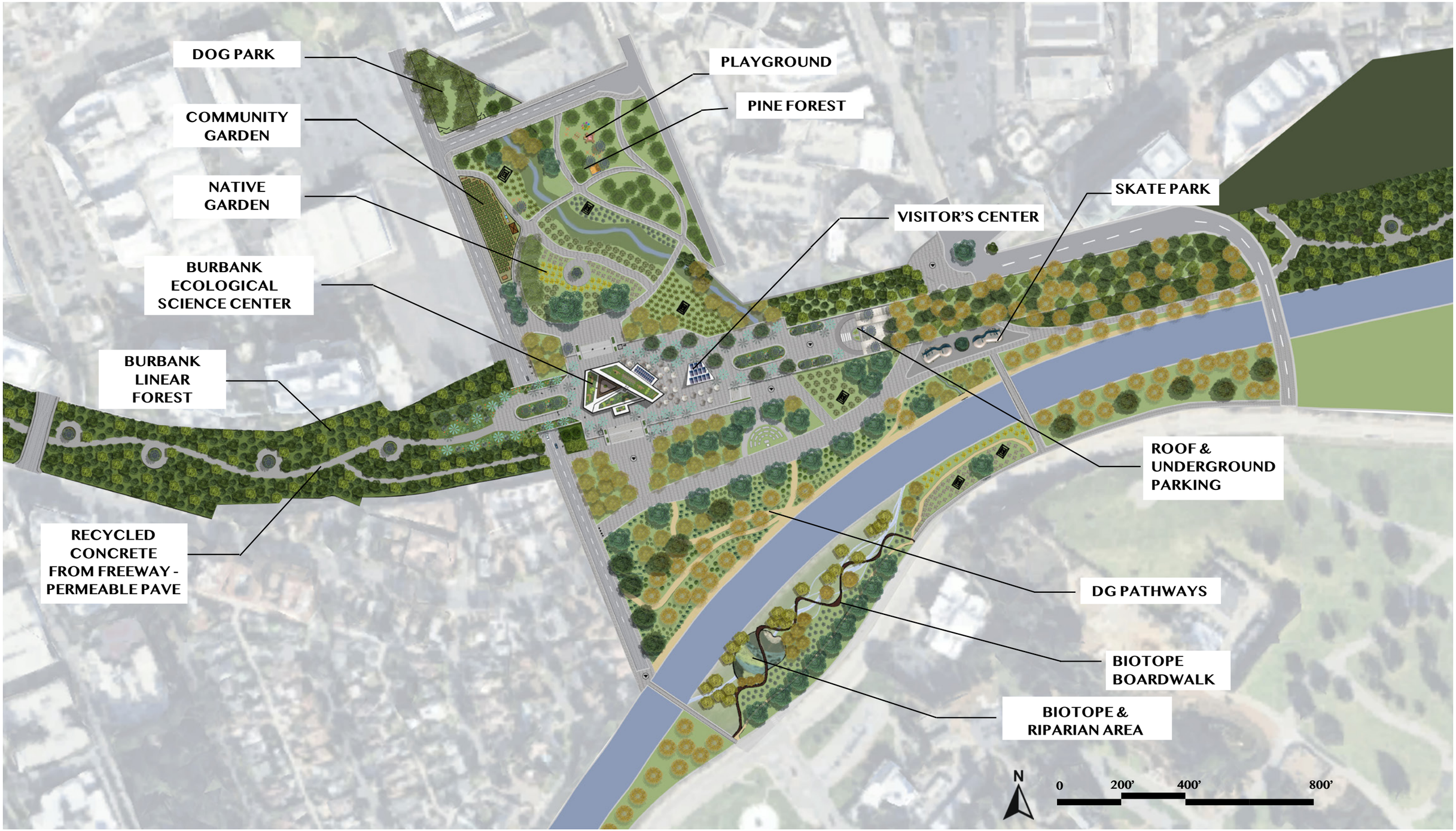
BROOKLY BRIDGE PARK

- The primary intention was to re purpose obsolete industrial waterfront into a dynamic public park that reconnects the community with the East River, emphasizing sustainability, recreation, and cultural engagement.

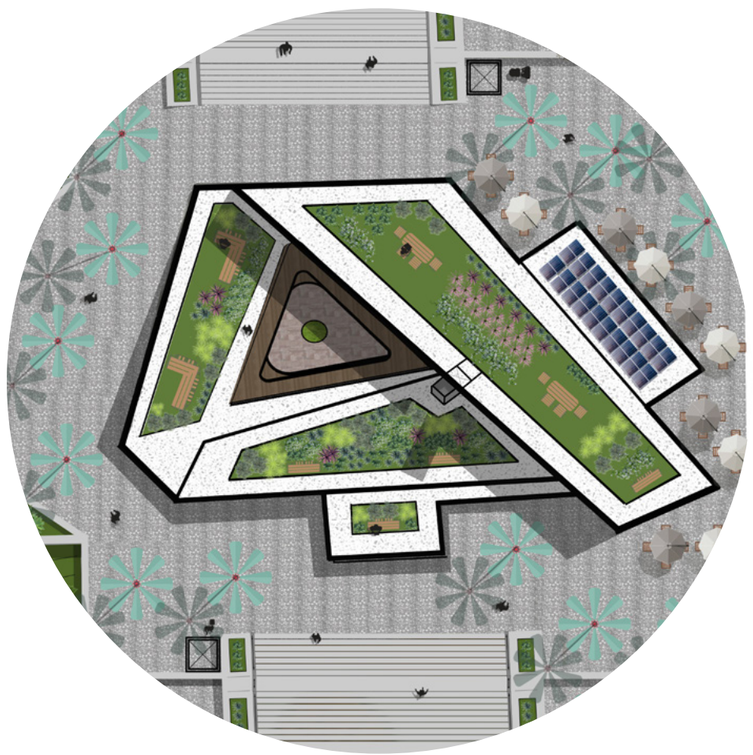
SITE PLAN



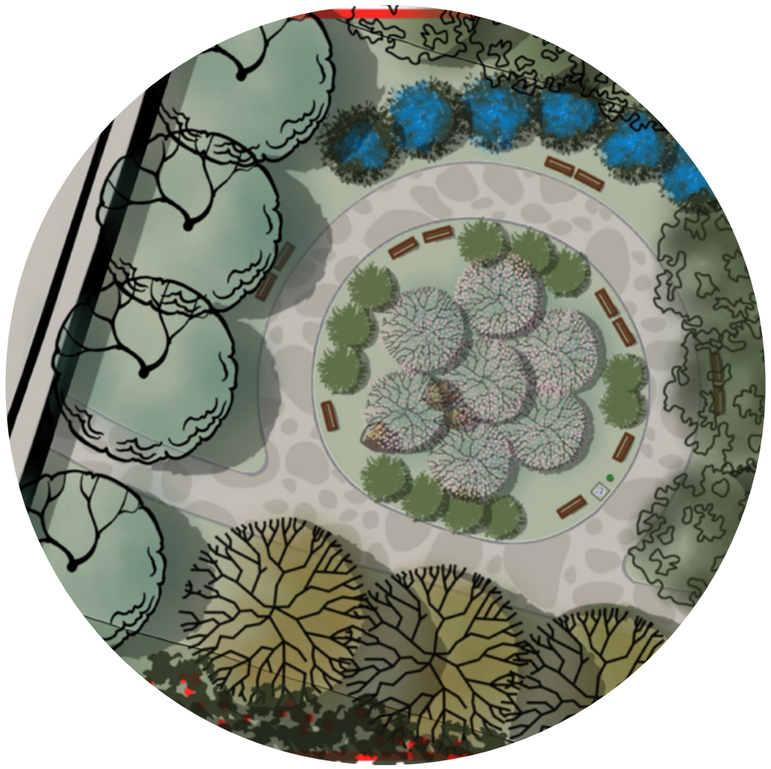
SITE PLAN CALLOUTS



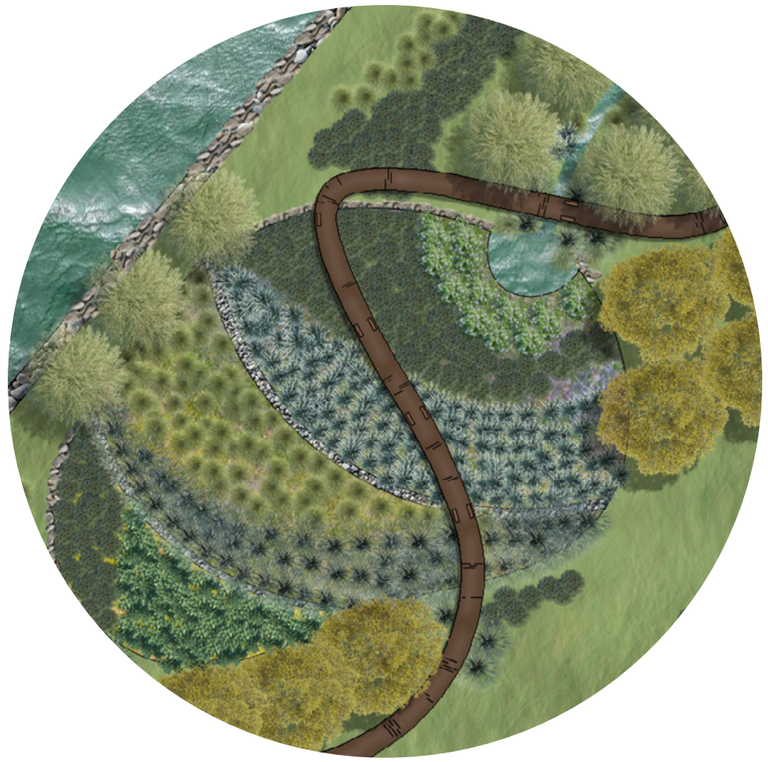
SITE DESIGN



ECOLOGICAL REGENERATION & RESEARCH



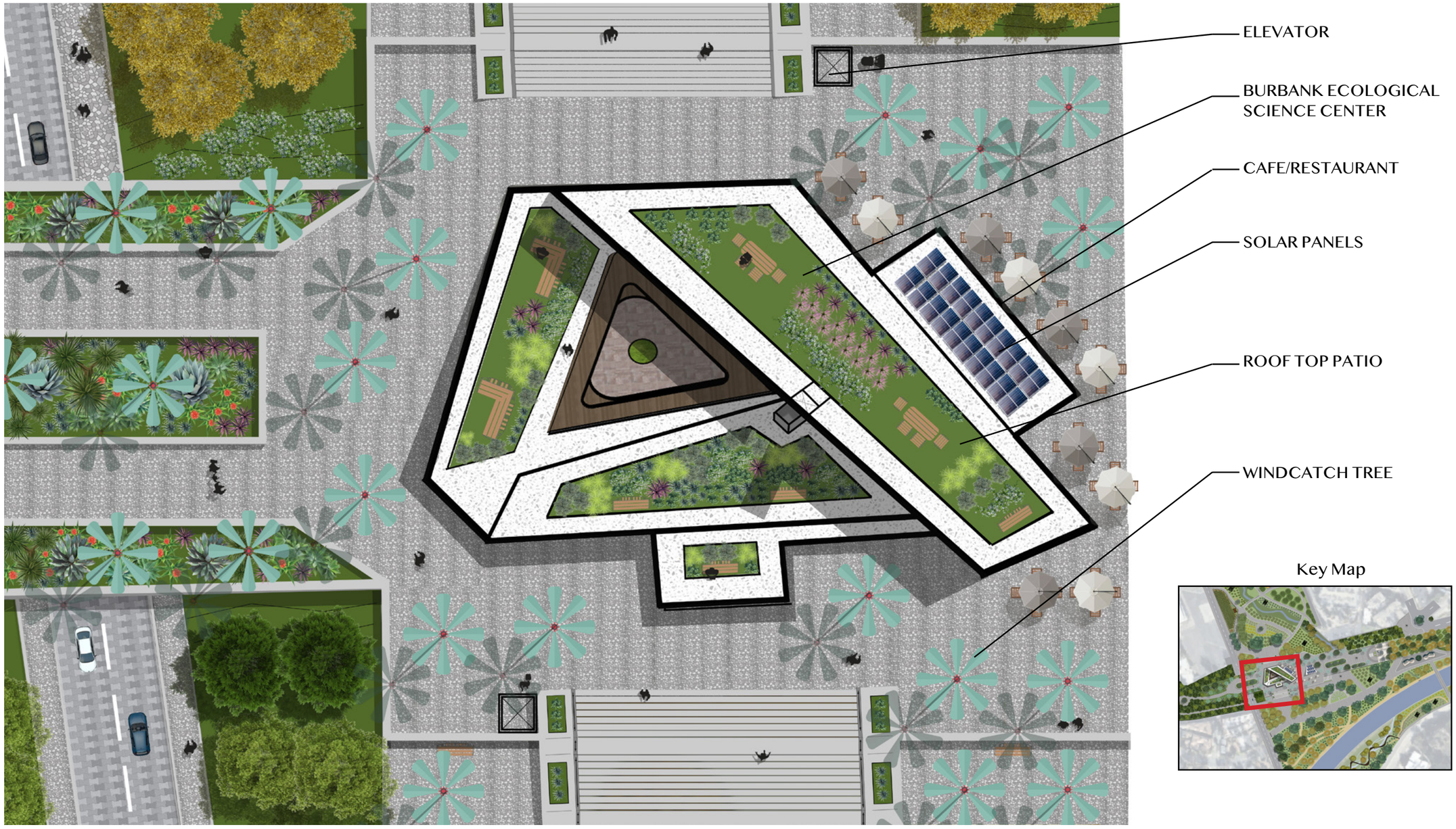
RECONNECTING GREEN SPACES & RESTORING BIODIVERSITY



WATER QUALITY & HABITAT RESTORATION

SITE ENLARGEMENT

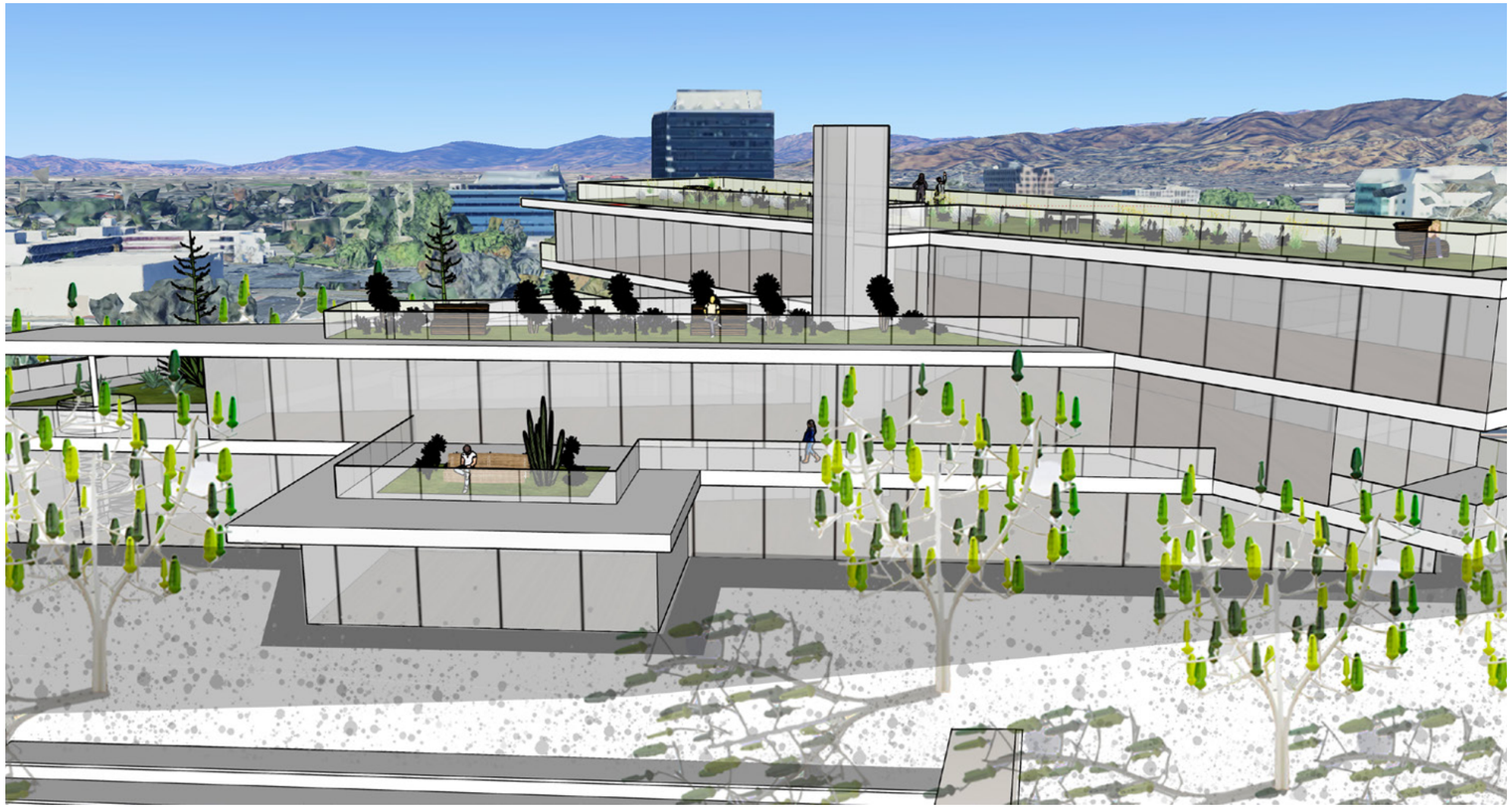
BURBANK ECOLOGICAL SCIENCE CENTER



Key Map

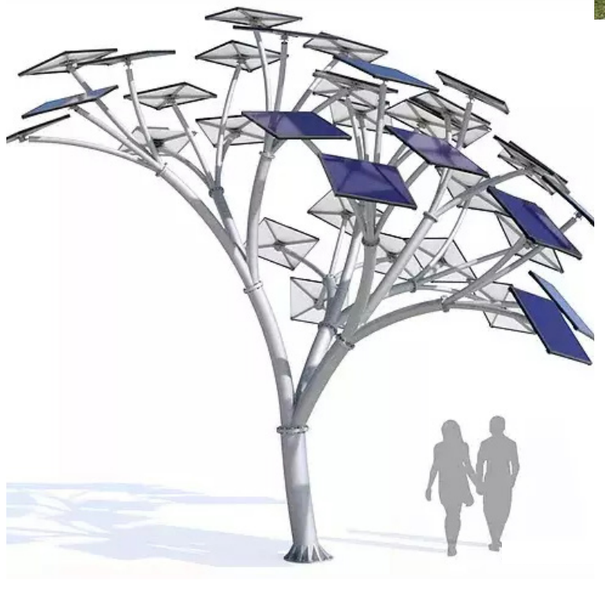
SITE PERSPECTIVE

BURBANK ECOLOGICAL SCIENCE CENTER



TREE PALETTE

WINDCATCH TREE



SOLAR TREE

GREEN ROOF PLANT PALETTE

Salvia leucophylla

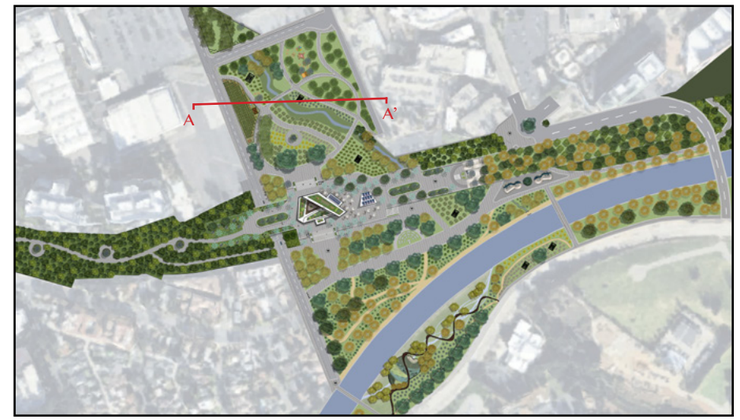
Epilobium canum

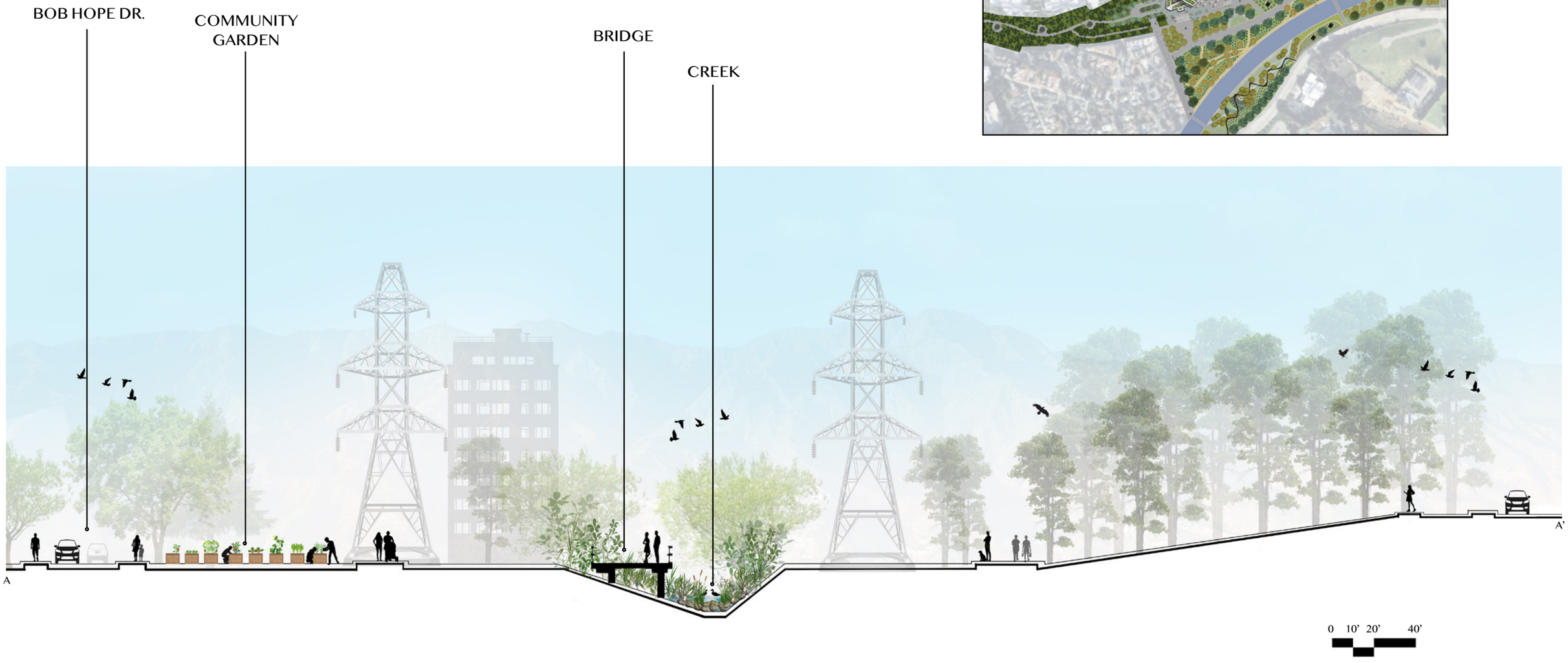
Hesperoyucca whipplei

Agave shawii

SECTION ELEVATION
JOHNNY CARSON PARK

Key Map





ENLARGEMENT
BURBANK LINEAR FOREST

Mesa Oak
Quercus englemannii

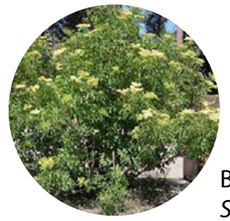
Black Sage
Salvia mellifera

Big Berry Manzanita
Arctostaphylos glauca

Valley Oak
Quercus lobata

Toyon
Heteromeles arbutifolia

Blueblossom
Ceanothus thyrsiflorus
Ceanothus



Blue Elderberry
Sambucus mexicana

Coast Live Oak
Quercus agrifolia

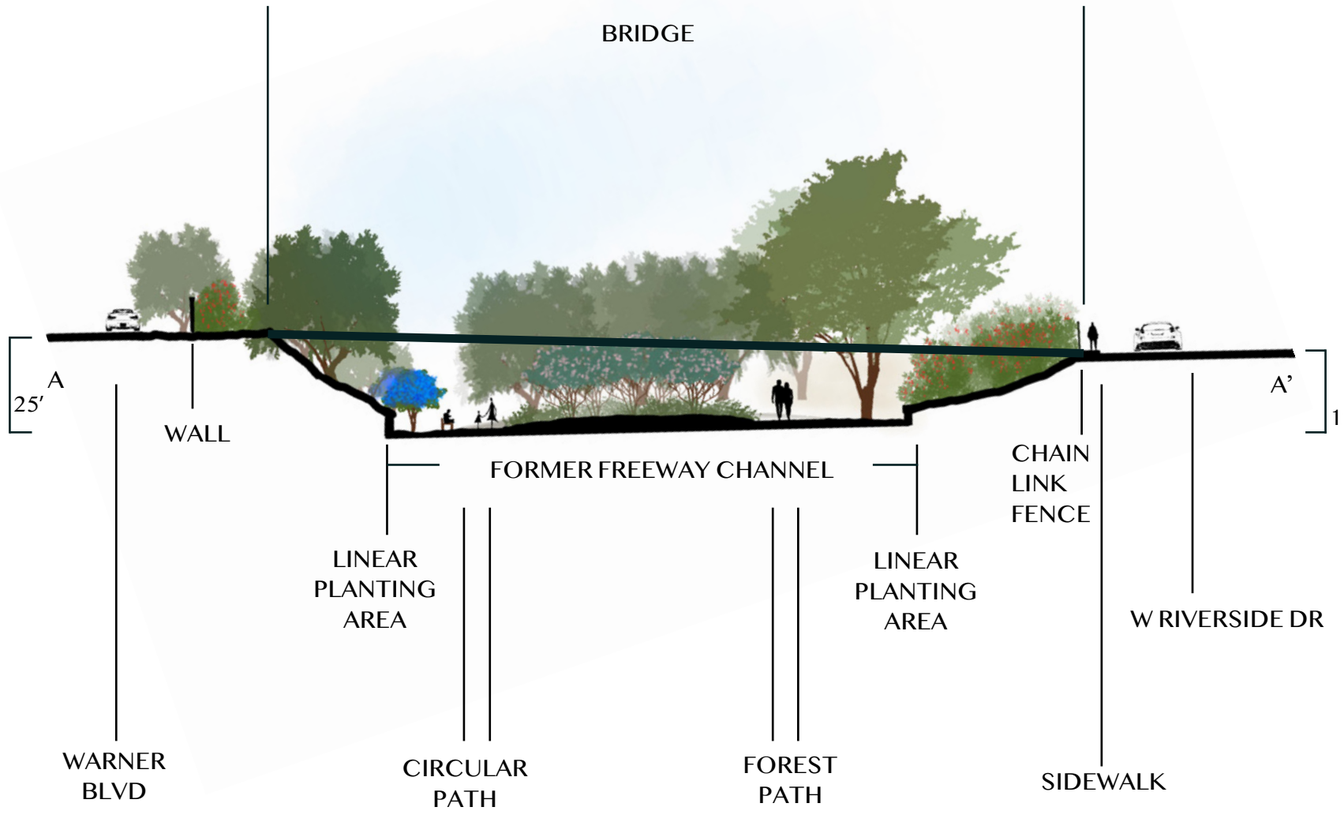
Key Map

Objectives: stormwater infiltration, shade, wildlife corridor, human recreation

Plant Palette: oaks of the southern California foothill and valley forests and woodlands with chaparral and coastal sage scrub plants

N 0’ 10’ 20’ 40’

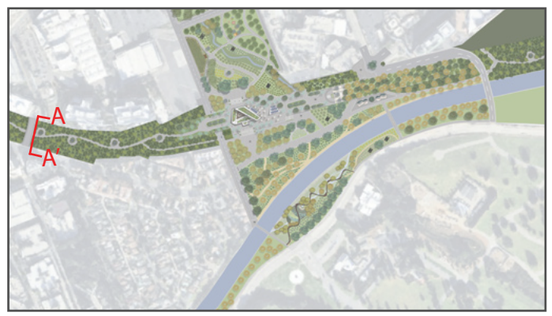
SECTION AND PERSPECTIVE
BURBANK LINEAR FOREST



The former freeway is sunken in long stretches. Streets are connected over the freeway by bridges. From the sidewalk on a bridge, pedestrians are treated to a peek into the canopy of a forest.

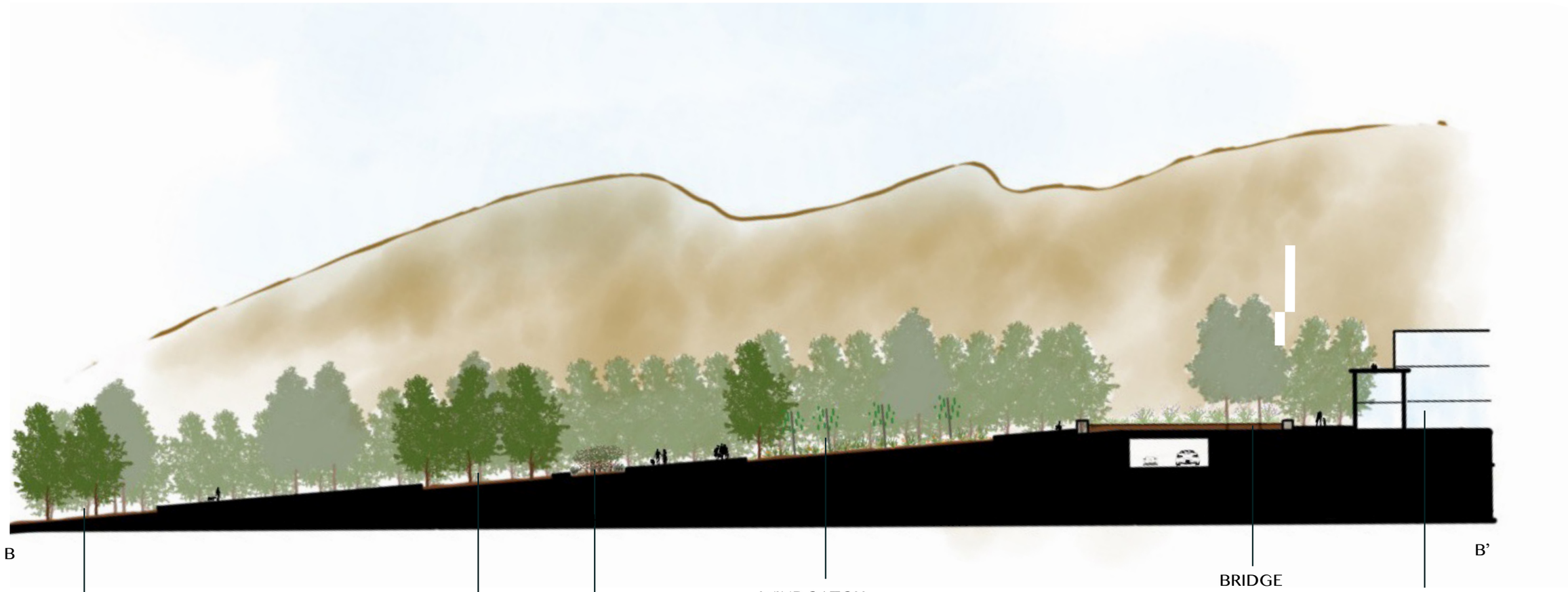
0’ 10’ 20’ 40’

Key Map



SECTION AND PERSPECTIVE

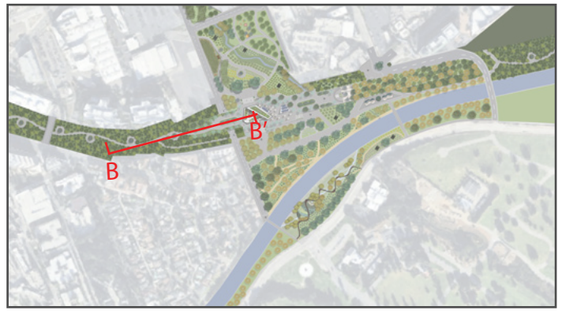
BURBANK LINEAR FOREST



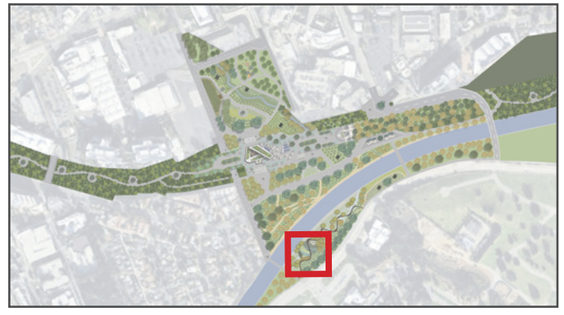
The western approach to the Ecological Center through the Linear Forest rises gradually at less than 5% grade. The bridge crossing over Bob Hope Drive is retained.

0’ 50’ 100’ 200’

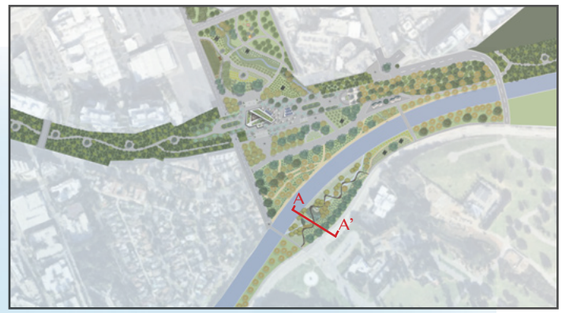
Key Map

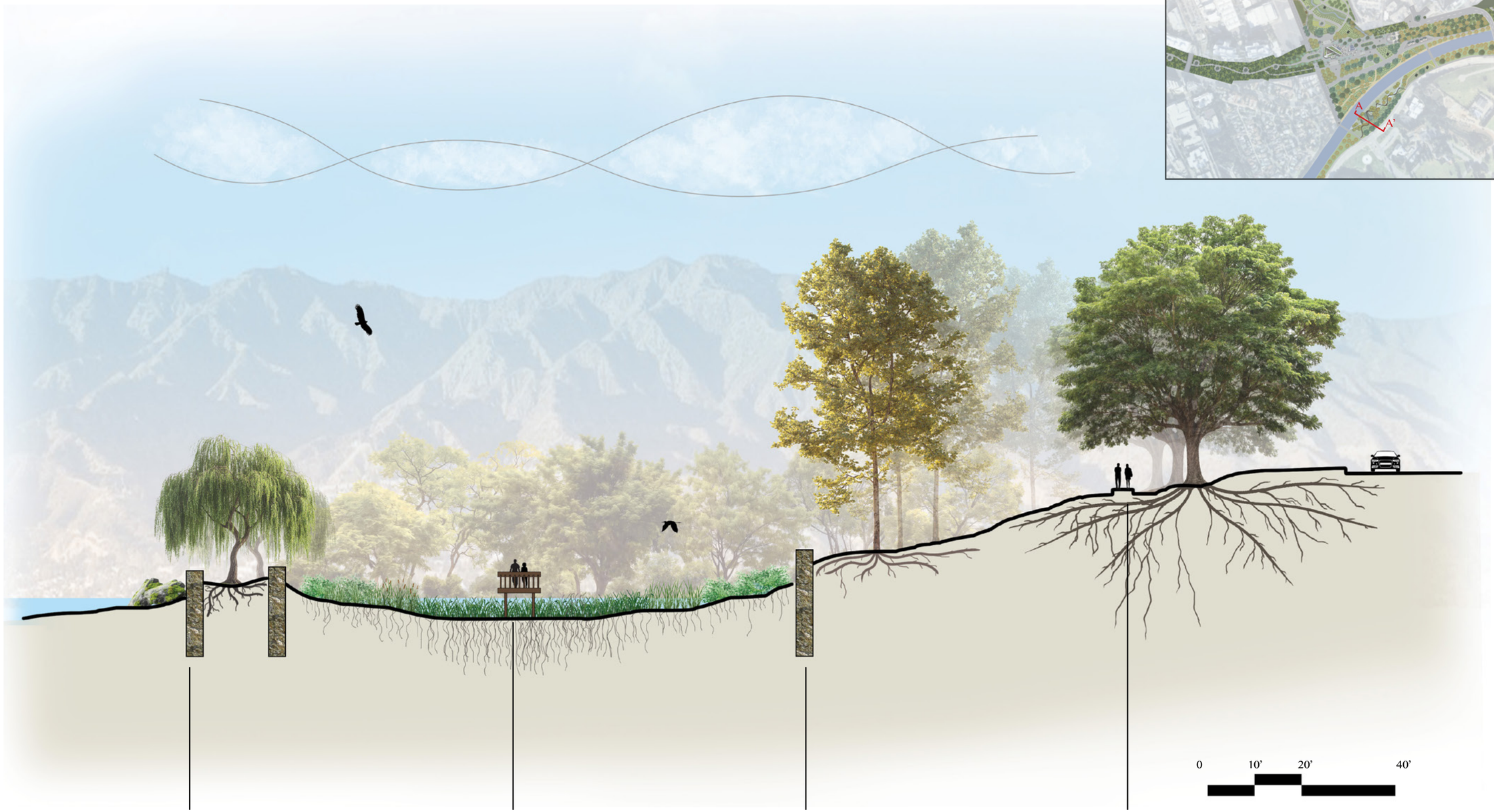


BIOTOPE AND RIPARIAN AREA
ENLARGEMENT

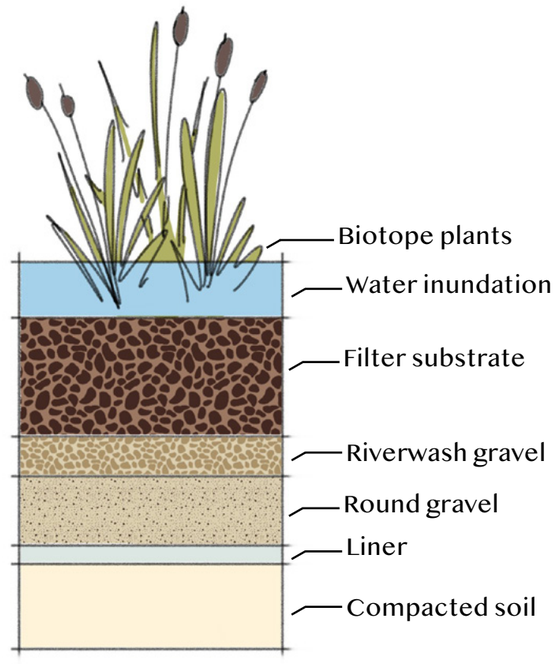


BIOTOPE AND RIPARIAN AREA
SECTION





BIOTOPE AND RIPARIAN AREA
PERSPECTIVE



DETAIL OF BIOTOPE LAYERS

BIOTOPE AND RIPARIAN AREA
PERSPECTIVE

BIOTOPE AND RIPARIAN AREA
PLANT MATERIALS & PROPERTIES

Coast Live Oak
Quercus agrifolia

Arroyo Willow
Salix lasiolepis

Freemont Cottonwood
Populus fremontii

Western Sycamore
Platanus racemosa

Mule Fat
Baccharis salicifolia

California Goldenrod
Solidago velutina ssp. californica

Mugwort
Artemisia douglasiana

Native Sedges
Carex spp.

Common Rush
Juncus patens

Broadleaf Cattail
Typha latifolia

California Bulrush
Schoenoplectus californicus

Hardstem Bulrush
Schoenoplectus acutus

Seep Monkeyflower
Erythranthe guttata

Yerba Mansa
Anemopsis californica

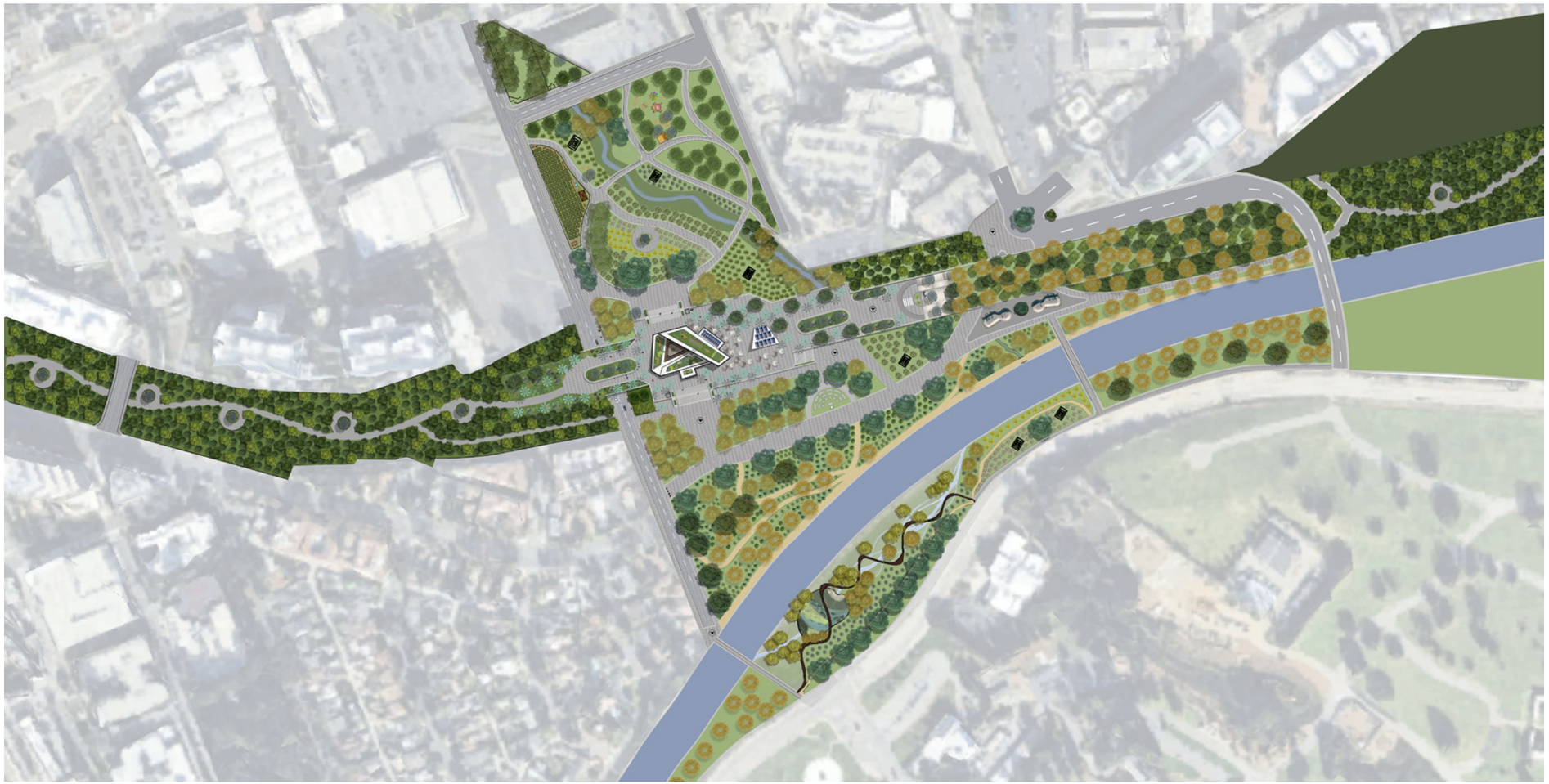
Mosquito Fern
Azolla filiculoides

Phytoremediation Properties									
	Pollutant								
Plant Species	**Ammonia**	**Bacteria**	**Cadmium**	**Copper**	**Nitrate**	**Nitrite**	**Lead**	**Selenium**	**Zinc**
Schoenoplectus acutus (Hardstem Bulrush)	✓	✓	✓	✓	✓	✓	✓		✓
Typha latifolia (Broadleaf Cattail)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Anemopsis californica (Yerba Mansa)			✓						✓
Juncus effusus (Common Rush)	✓			✓	✓				
Carex spp. (Native Sedges)			✓		✓				
Erythranthe guttata (Seep Monkeyflower)	✓	✓			✓	✓		✓	
Azolla filiculoides (Mosquito Fern)	✓	✓			✓	✓	✓	✓	
Salix spp. (Willows)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Populus fremontii (Fremont Cottonwood)	✓	✓	✓		✓		✓		
Platanus racemosa (California Sycamore)	✓			✓					✓
Solidago velutina californica (California Goldenrod)			✓			✓		✓	
Baccharis salicifolia (Mulefat)	✓	✓		✓	✓				✓
Aquilegia chrysantha (Golden Columbine)									
Artemisia douglasiana (Mugwort)	✓		✓		✓				
Oenothera elata (California Primrose)					✓	✓			✓
Epilobium canum (California Fuchsia)				✓			✓	✓	

FLOURISH COLLECTIVE

INSPIRED LANDSCAPES
SUSTAINABLE FUTURES

Callie Ham, Linda Hsi & Patrese Winter



THANK YOU!

Winter 2025