

Memorial Park

The Proposed Plan

"Memorial Park Tomorrow"

NELSON
BYRD
WOLTZ
LANDSCAPE
ARCHITECTS

PRESENTATION OUTLINE

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MEMORIAL PARK MASTER PLAN PROCESS

CLIENT GROUP



MEMORIAL PARK
CONSERVANCY



DESIGN TEAM

In September, 2013 Nelson Byrd Woltz Landscape Architects was selected to lead the design efforts. After an 8 month research phase, the team moved on to programming and design, with the planning process to reach completion April, 2015.

NELSON
BYRD
WOLTZ
LANDSCAPE
ARCHITECTS



Civil Engineering



Environmental
Engineering



Public Space Management &
Design



Cultural Resources &
Public Process Planning



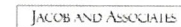
Public Relations



Wayfinding & Signage



Bike Park Design



Soil Science Consulting



Traffic Engineering



Historical Consulting



Forestry Consulting



Lighting Design



Videography



Graphic and Web Design



Golf Course Design
Consulting



Social Media Consulting



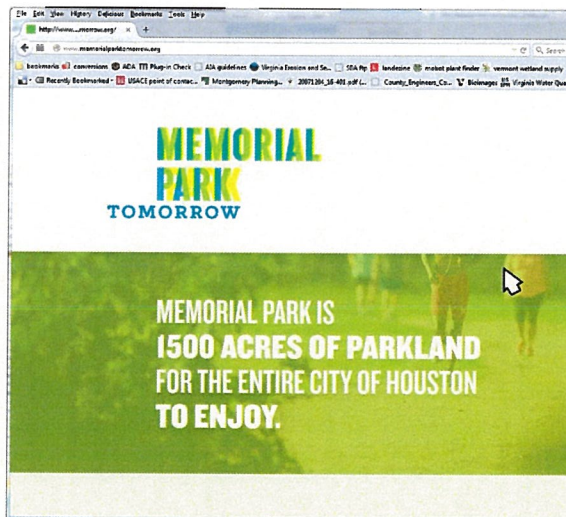
Land Surveying

ENGAGING HOUSTONIANS IN THE MASTER PLAN PROCESS

The master planning team has engaged 3,300 participants in public process via public meetings, online input, and focused workshops.



1200 participants
Joined eight public meetings



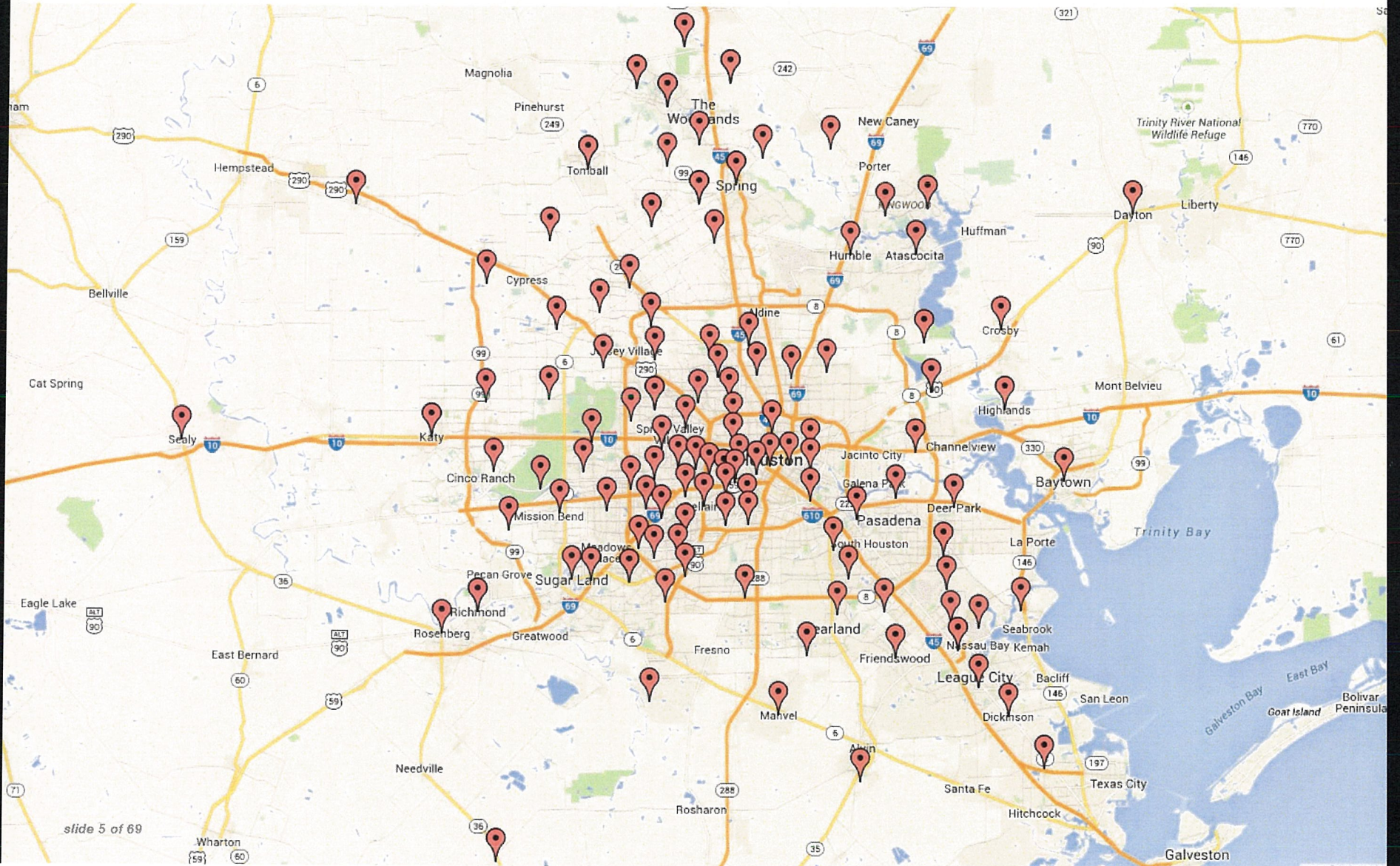
1,829 participants
Engaged online



288 participants
Joined twenty focused workshops

A PARK FOR ALL HOUSTONIANS

A recent survey of 774 runners using Memorial Park showed that people had come from 134 different zip codes, all across Houston to use the park.



GUIDING PRINCIPLES

RECONNECT...

the land, waterways, trails, people, and memories.

CONSOLIDATE...

compatible uses together in appropriate areas.

RESTORE...

the ecology of the park and our connection to it.

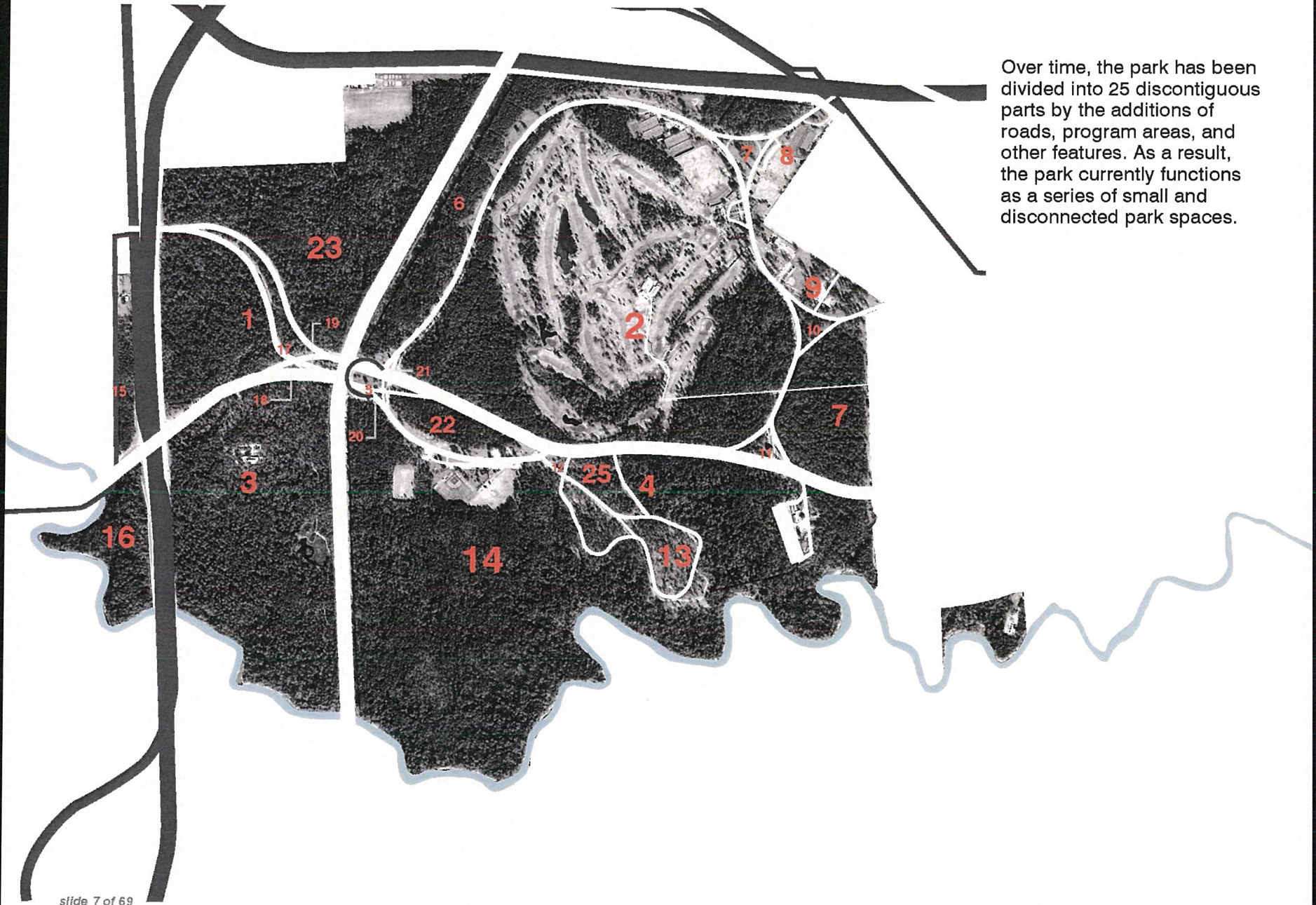
ENHANCE...

the overall park experience and its amenities.

TEND...

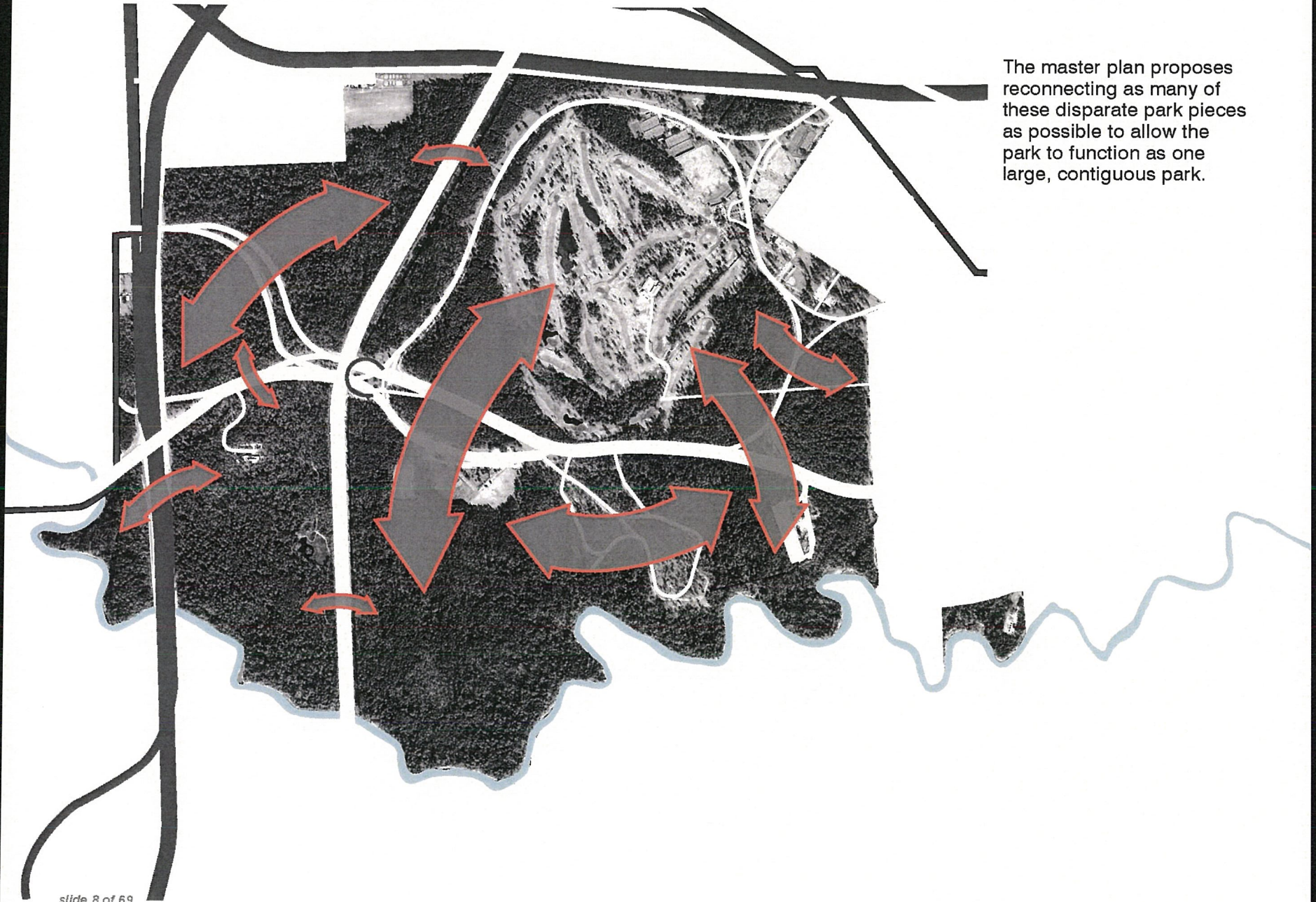
the land and our cultural history and maintain balance through responsible management.

EXISTING CONDITION: DIVIDED PARK



Over time, the park has been divided into 25 discontinuous parts by the additions of roads, program areas, and other features. As a result, the park currently functions as a series of small and disconnected park spaces.

VISION: RECONNECTED PARK



The master plan proposes reconnecting as many of these disparate park pieces as possible to allow the park to function as one large, contiguous park.

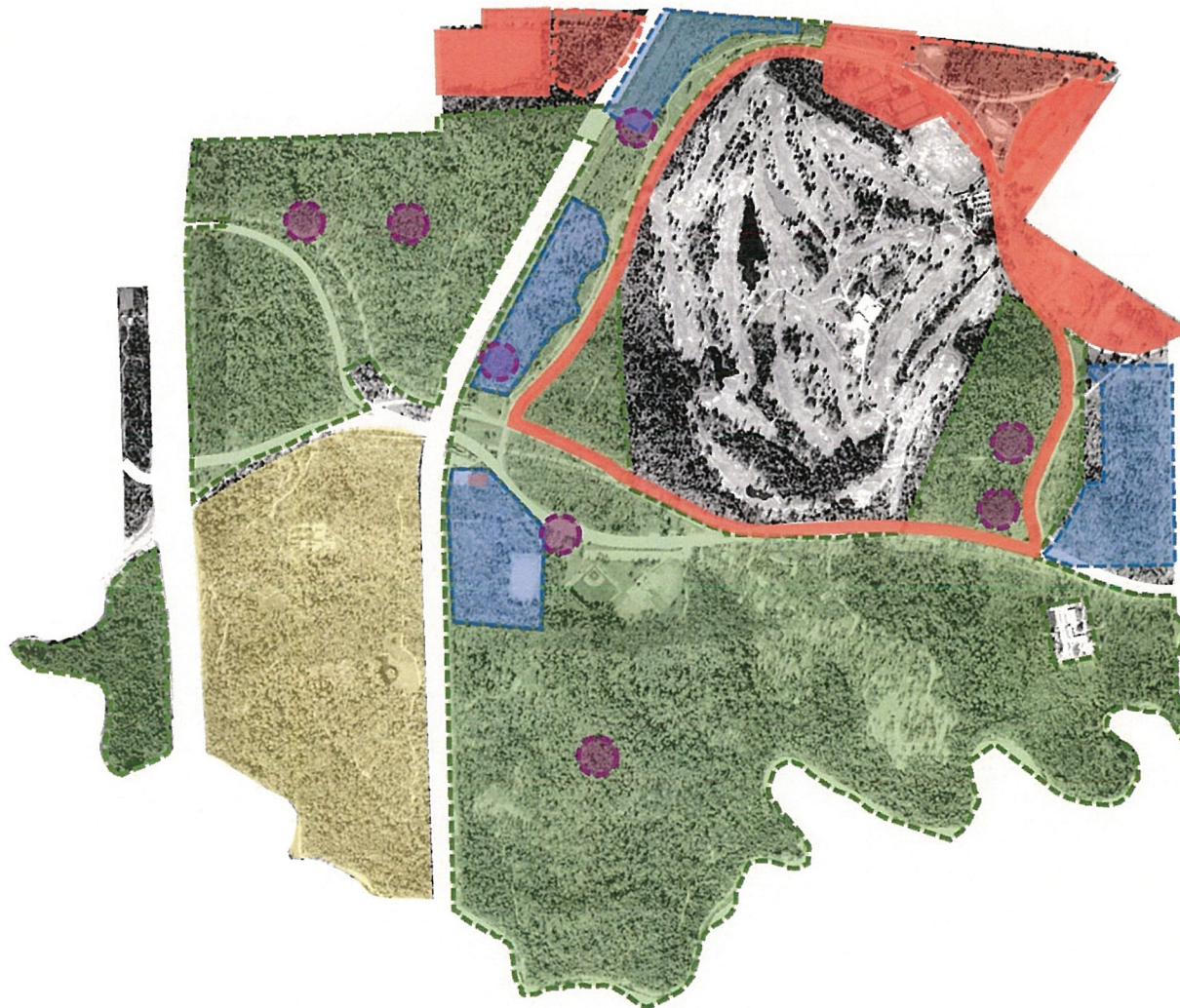
EXISTING CONDITION: PROGRAM AREAS SMALL AND FRAGMENTED



In the park's current configuration, program areas are small and fragmented. Trail use areas to the south and west sides of the park are interrupted by ball fields and the large picnic loop. Active recreation features are scattered in several parts of the park.

- Legend**
- Active recreation
 - Urban Wilderness (trail use)
 - Arboretum and Nature Center
 - Picnic Area

VISION: CONSOLIDATE PARK PROGRAM AND USES



The master plan proposes merging program areas to clarify the park's organization and to provide continuous park experiences. Trail use areas are combined to the south and west sides of the park. Active recreation is clustered in the northeast where light and sound from major roads are more compatible with large-scale recreational use. Picnic grounds are dispersed throughout the site, and major cultural and historical resources are interpreted through landscape spaces.

Legend




- Active recreation
- Relocated active recreation
- Urban wilderness (trail use)
- Dispersed picnic areas
- Historical Resources
- Arboretum and Nature Center

EXISTING CONDITION: IMPACTED PARK



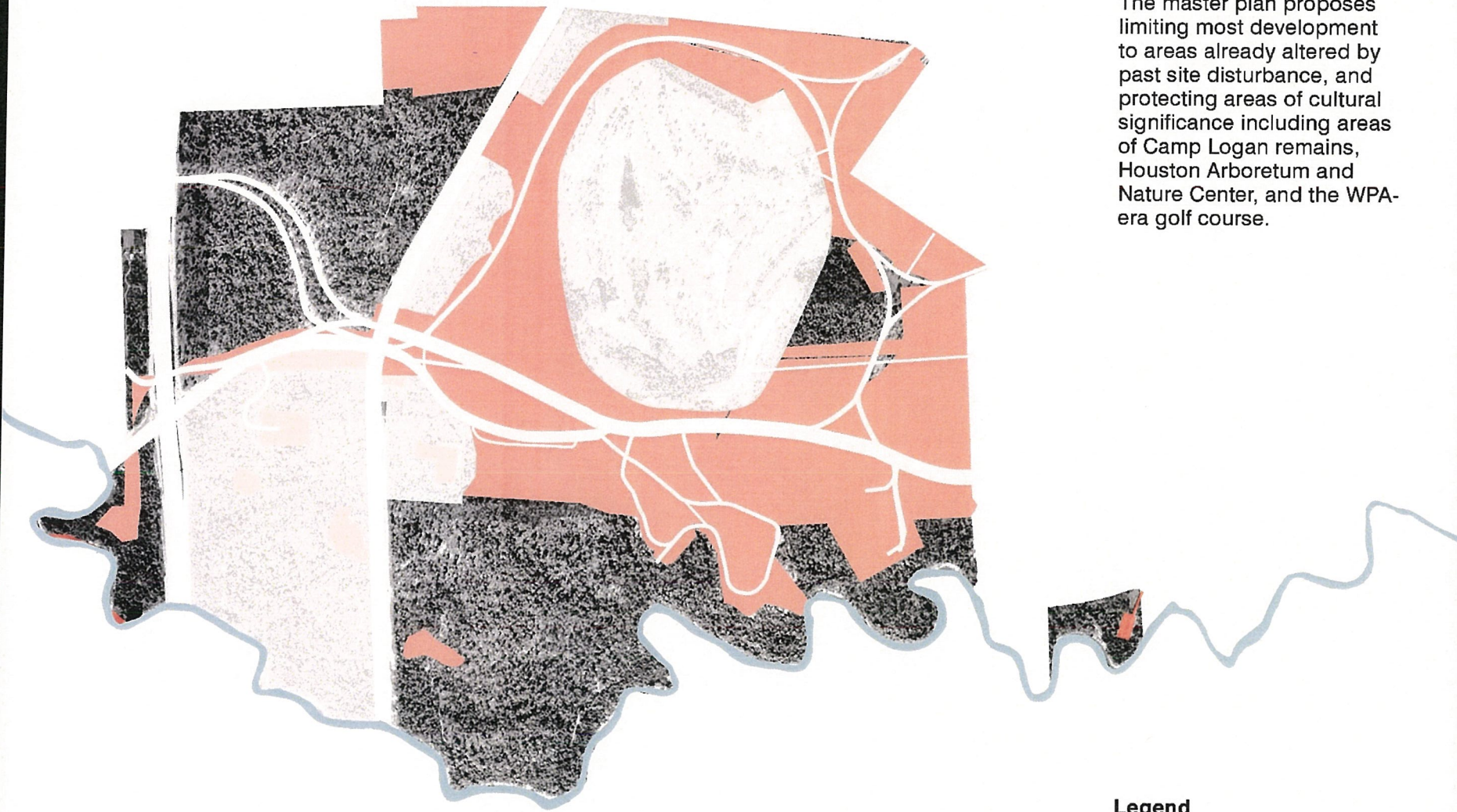
Areas shown colored in this diagram have been impacted by man-made grading, roads, program features, and clearing activities.

Legend

-  Previously Impacted areas
-  Water features
-  Altered Buffalo Bayou

VISION: LIMIT AREAS OF FUTURE IMPACT TO THOSE ALTERED BY PAST DEVELOPMENT

The master plan proposes limiting most development to areas already altered by past site disturbance, and protecting areas of cultural significance including areas of Camp Logan remains, Houston Arboretum and Nature Center, and the WPA-era golf course.

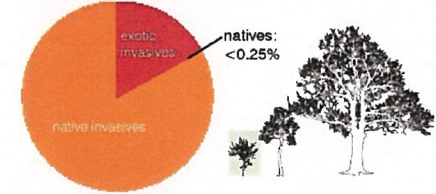


- Legend**
-  Previously Impacted areas
 -  Cultural Resources

EXISTING CONDITION: SAVANNAH WITH INVASIVE SPECIES (BERG OLIVER ASSOC.)



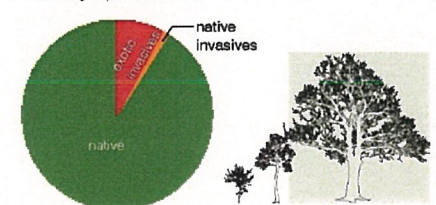
Understory Species < 12 feet



Midstory Species 12' - 25'



Overstory Species > 25'



Old Archery Range invasive study by Advanced Ecology, Ltd.

The park has become a savannah, marking a shift from 50 years of being a forest. This landscape is similar to one the Karankawa, the park's native inhabitants; would have known: resilient to fluctuating weather patterns and

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hospitable to many types of fauna. Invasive species have overrun the park; however, and require immediate and ongoing attention. (Hogg Bird study by Advanced Ecology above.)

Legend

- Forest
- Savannah
- Prairie

VISION: RESTORE & TEND ECOLOGICAL COMMUNITIES

The design seeks to reconnect ecological corridors. Continuous flows of water, wildlife, and plant communities will be restored through restoration of four habitat types:

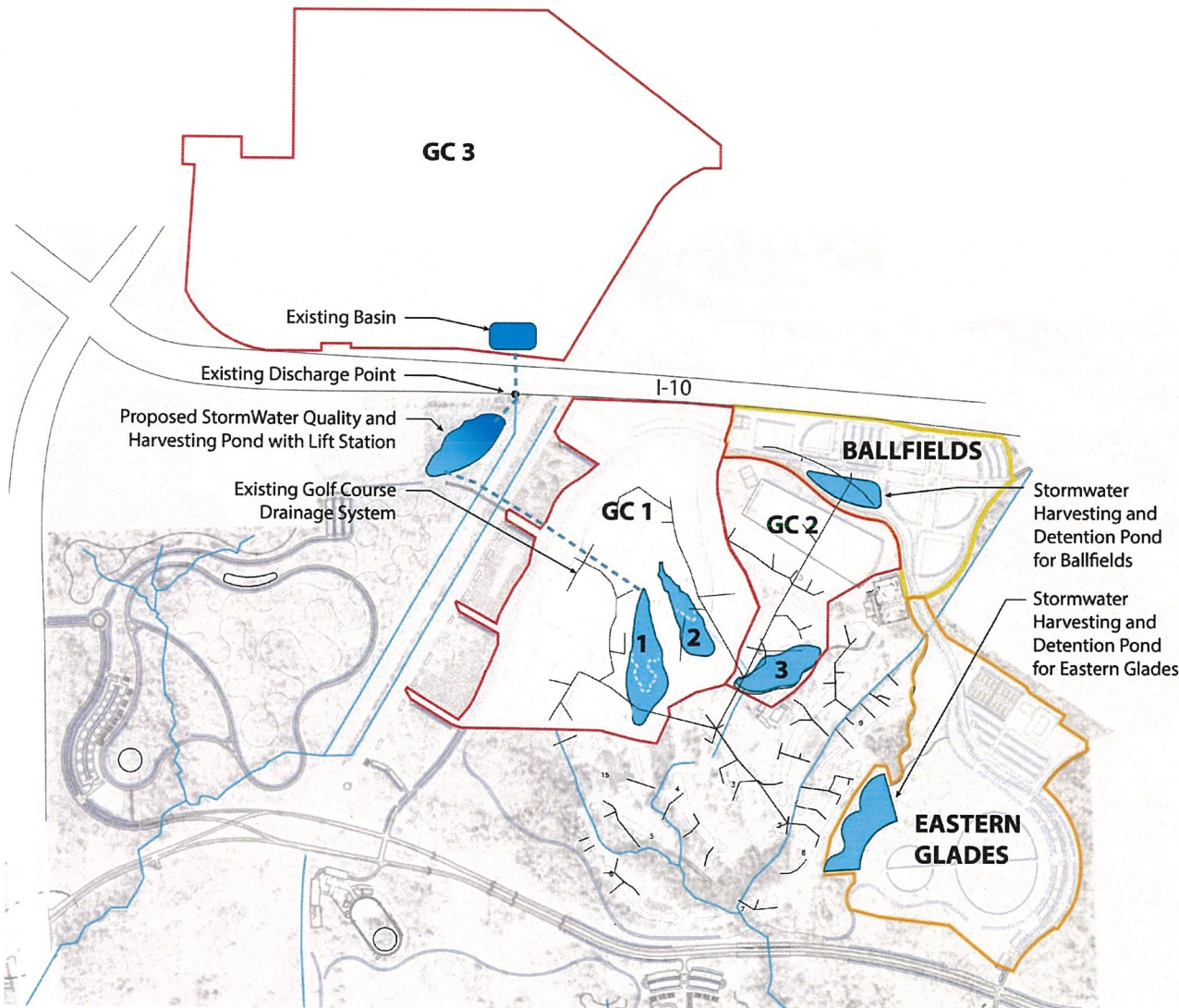
1. Riparian forests
2. Pine/Hardwood Forests
3. Savannah landscapes
4. Discrete Native Prairie



Legend

- Riparian Forest
- Pine-Hardwood Forest
- Pine-Hardwood Savannah
- Native Prairie
- Naturalized Golf Course
- Wet Savannah and Prairie
- Bog Areas
- Ponds and Stream Corridors

STORMWATER REUSE STRATEGY



Objective:
Reduce park potable water irrigation use with rain water collected on site (and north of the park)

Watershed Phases:
Water collection from the following watersheds will offset irrigation demand as modeled:

GC1 = 48% golf course demand

GC1+GC2 = 54% golf course demand

GC1+GC2+GC3 = 100% golf course demand

Ballfields = 50% offset

Eastern Glades = 75% offset

Legend

- Ballfields Watershed
- Eastern Glades Watershed
- Golf Course Watersheds
- Collection Ponds
- Treatment Pond
- Existing Streams

ECOLOGICAL STORMWATER MANAGEMENT: OVERALL PLAN

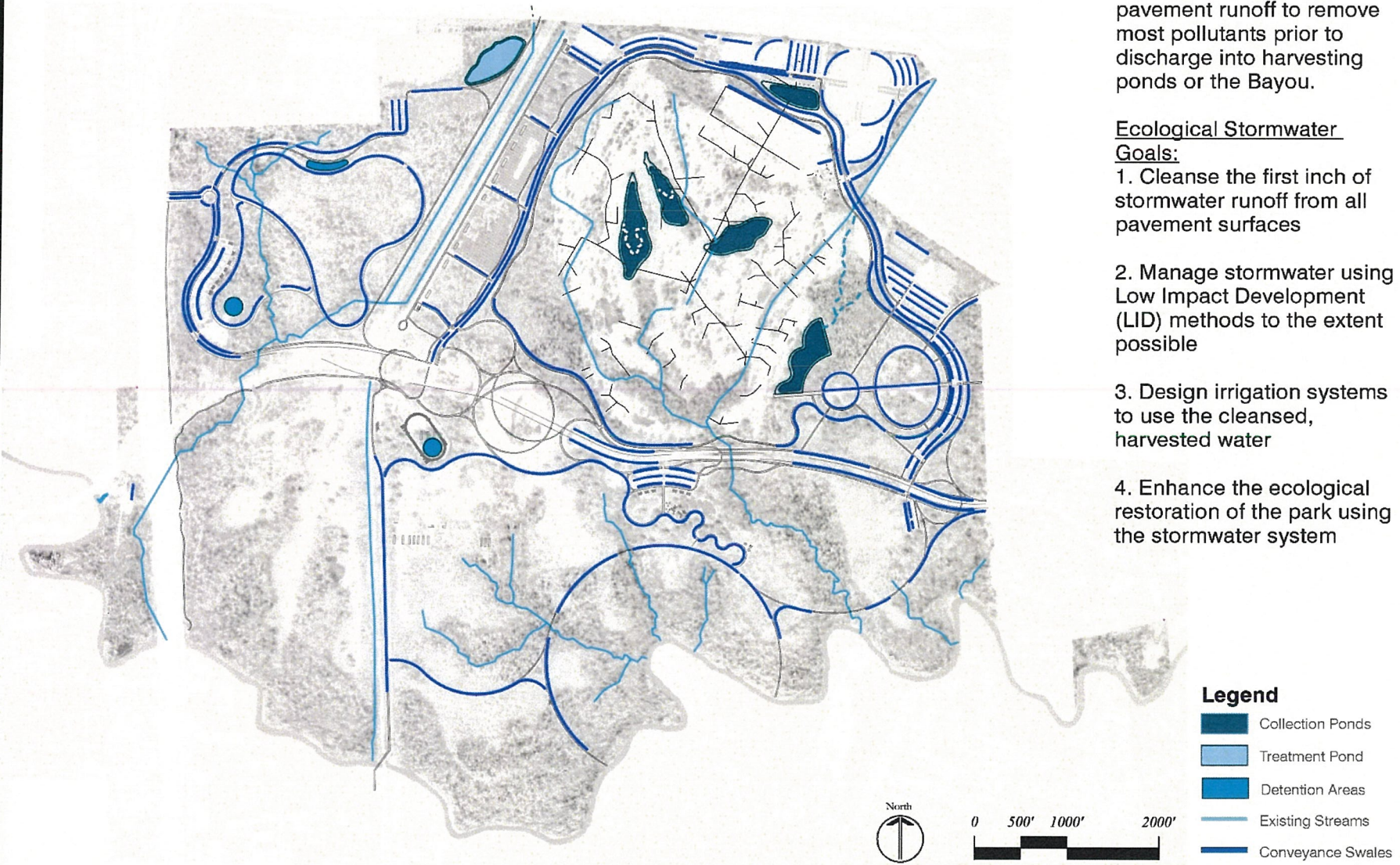
Objective:

To cleanse stormwater pavement runoff to remove most pollutants prior to discharge into harvesting ponds or the Bayou.

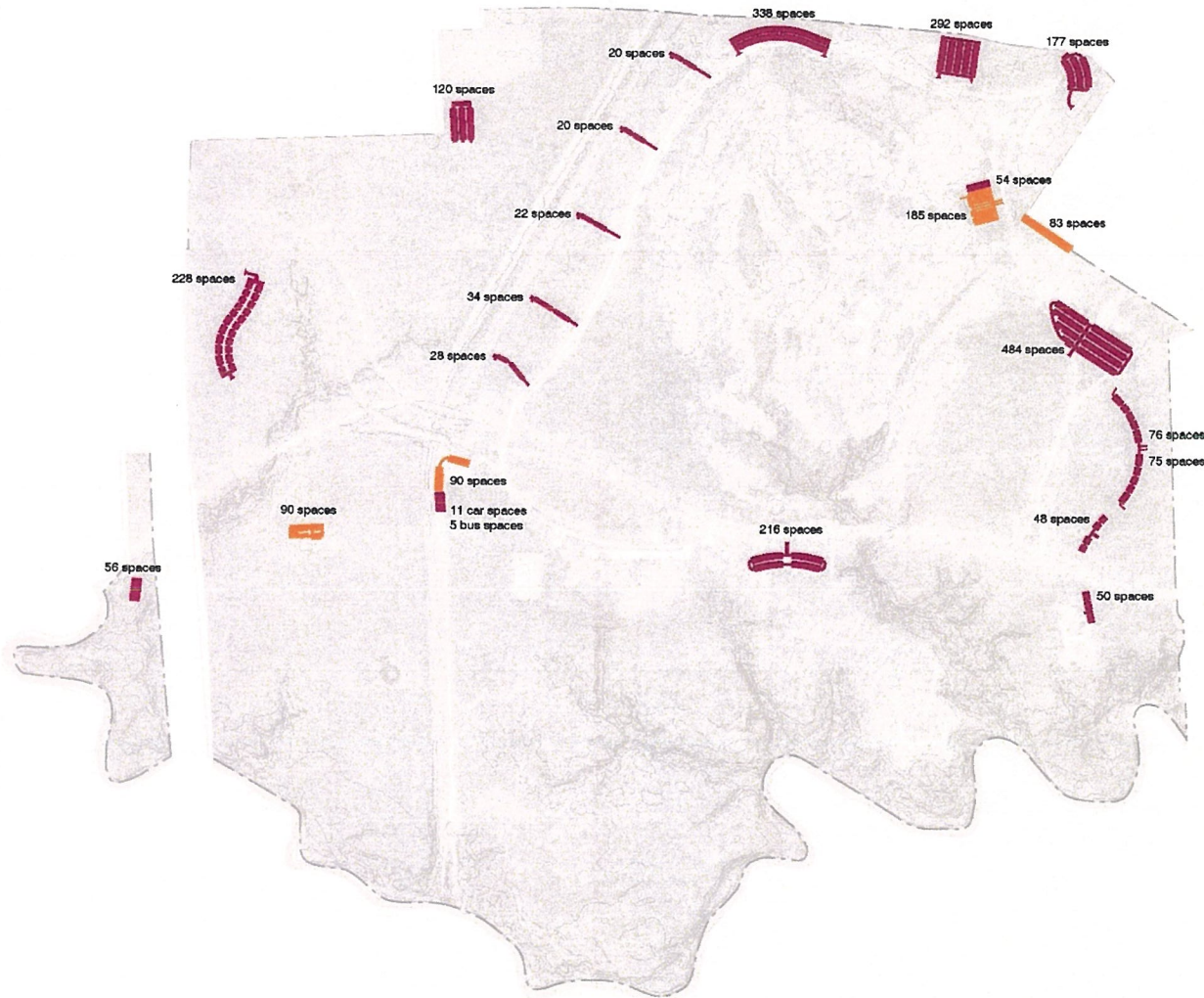
Ecological Stormwater

Goals:

1. Cleanse the first inch of stormwater runoff from all pavement surfaces
2. Manage stormwater using Low Impact Development (LID) methods to the extent possible
3. Design irrigation systems to use the cleansed, harvested water
4. Enhance the ecological restoration of the park using the stormwater system



PROPOSED PARKING



Dispersed parking lots provide improved access to park activities. Parking along Memorial Loop Road is removed, allowing for two way traffic and a more park-like feeling. Discrete parking areas now provide access to all parts of the site.

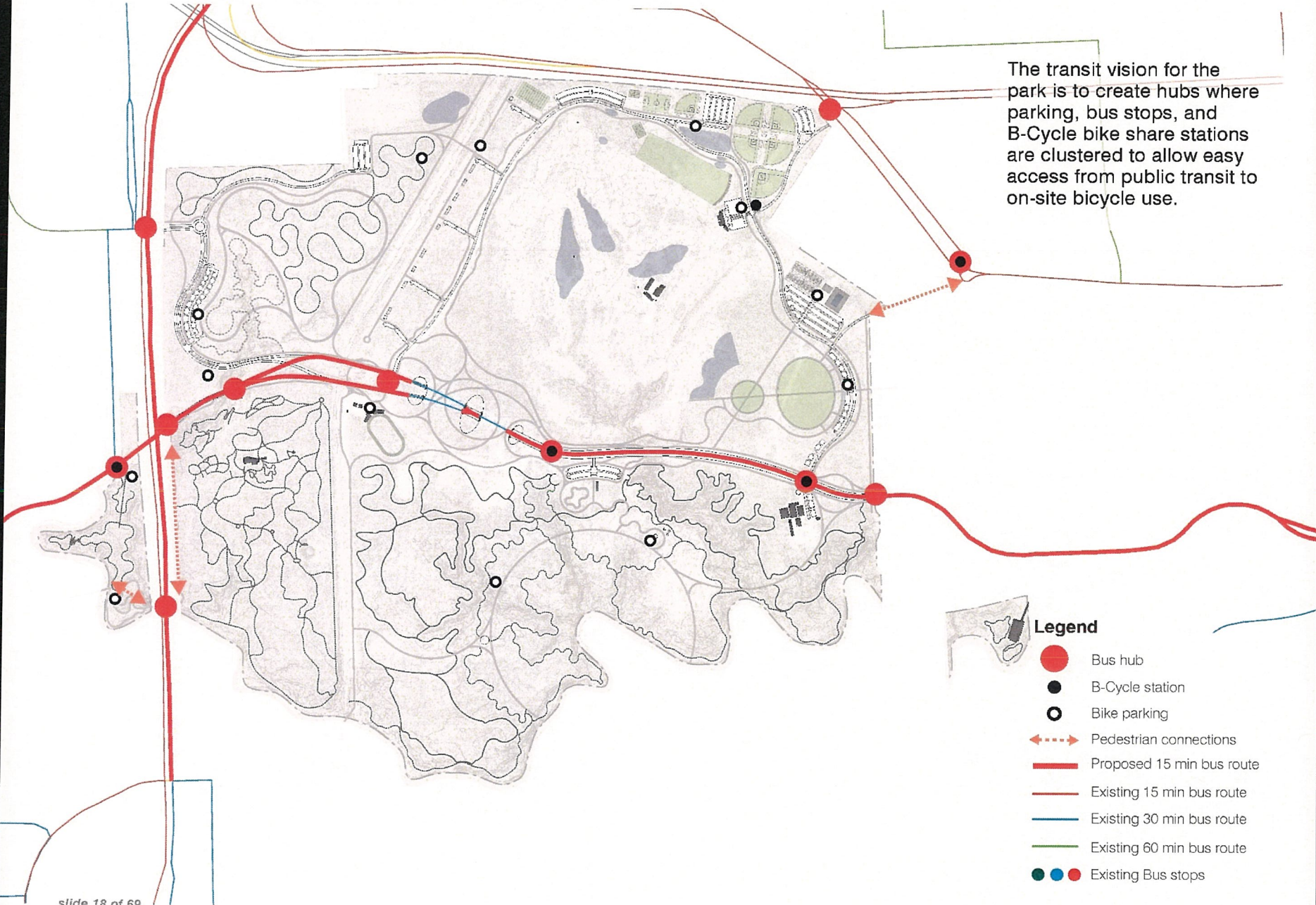
The proposed parking design provides greater than **30% increase** in parking capacity.

Legend

- Existing
- Proposed

PROPOSED TRANSIT/BIKE CONNECTIONS

The transit vision for the park is to create hubs where parking, bus stops, and B-Cycle bike share stations are clustered to allow easy access from public transit to on-site bicycle use.

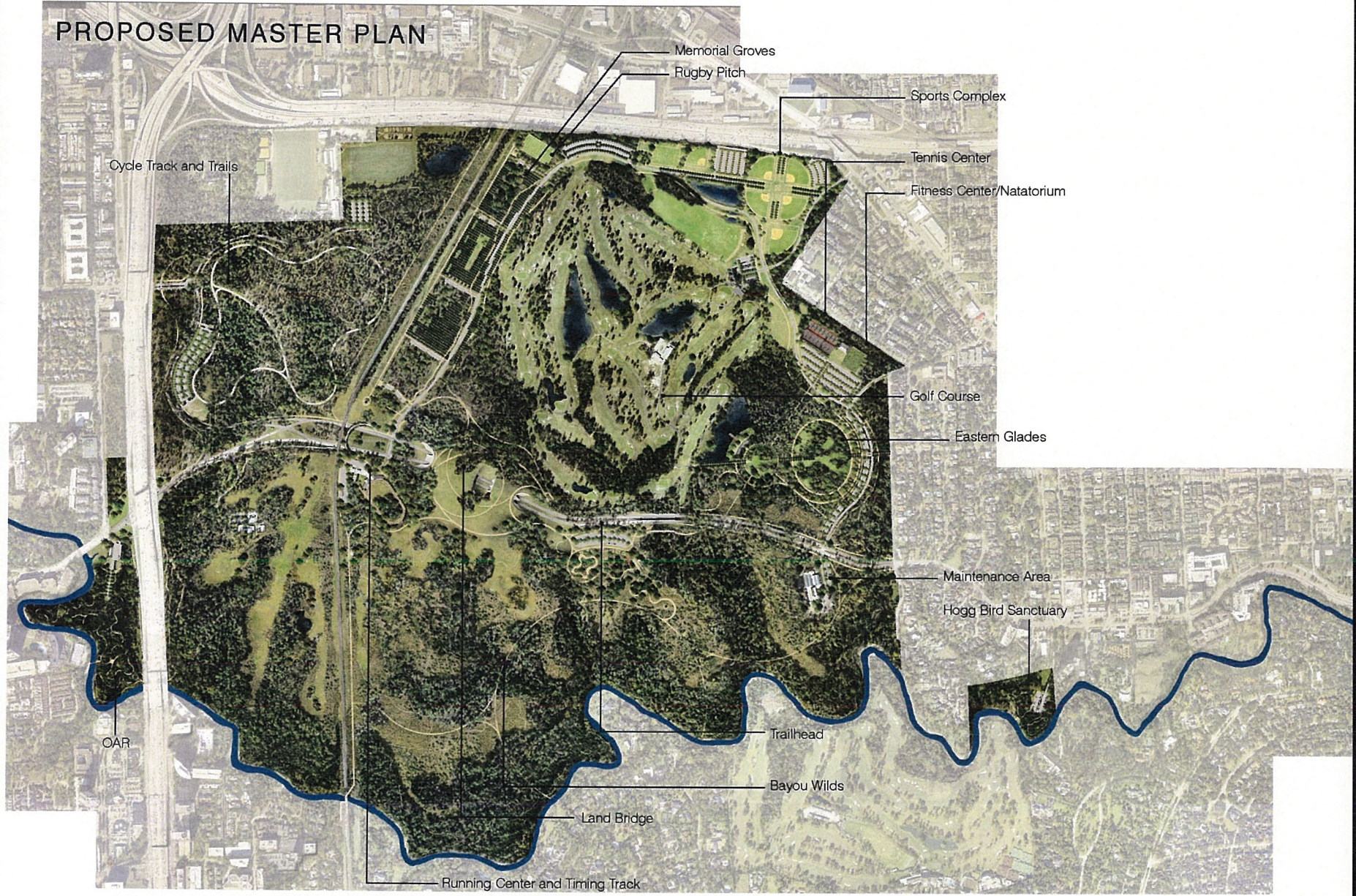


- Legend**
- Bus hub
 - B-Cycle station
 - Bike parking
 - - - - - Pedestrian connections
 - Proposed 15 min bus route
 - Existing 15 min bus route
 - Existing 30 min bus route
 - Existing 60 min bus route
 - ● ● Existing Bus stops

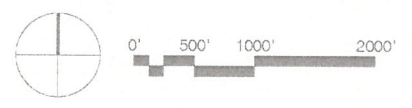
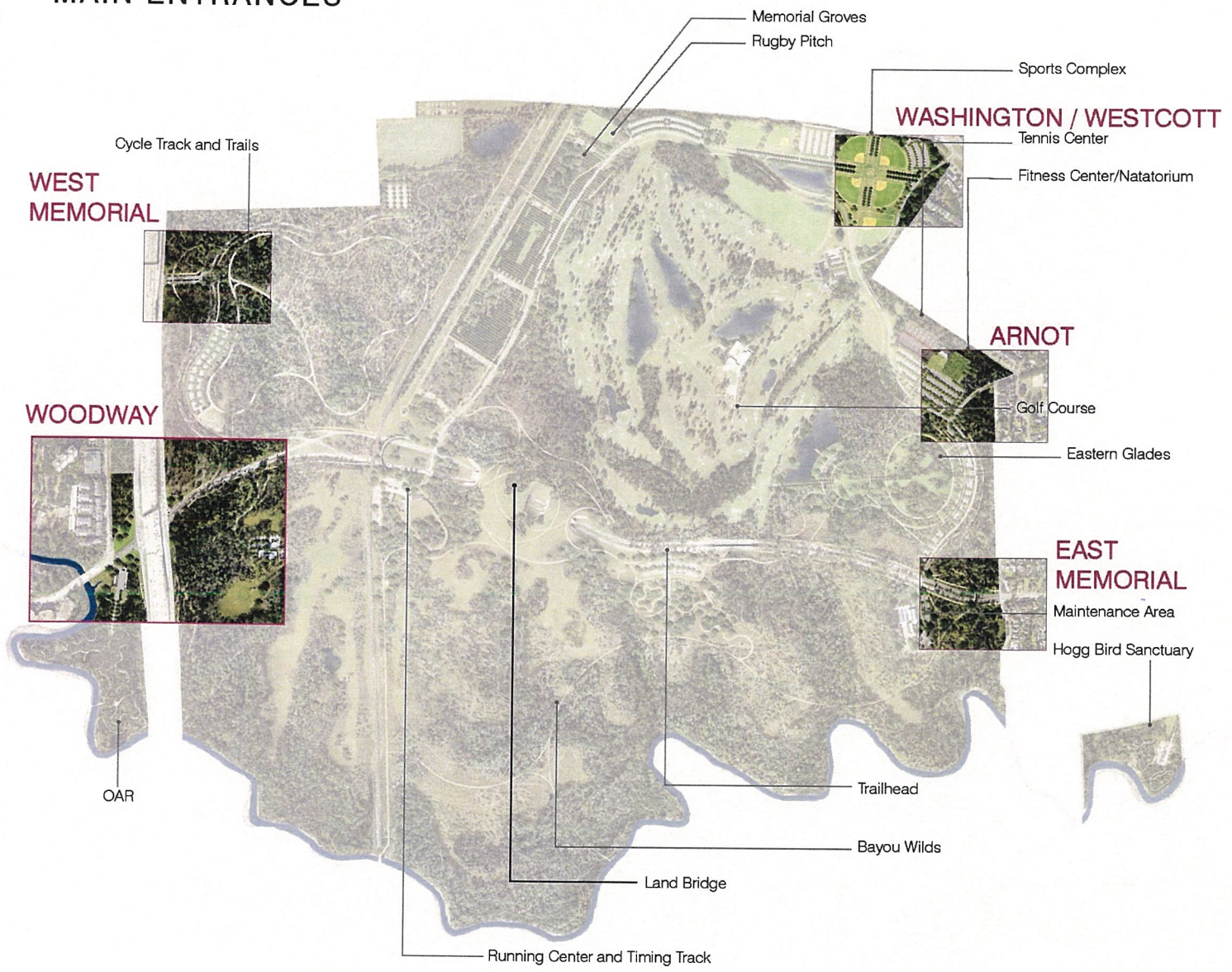
EXISTING SITE



PROPOSED MASTER PLAN



MAIN ENTRANCES



WOODWAY ENTRANCE



Artist's Rendering at I-610 and the old Archery Range (OAR)

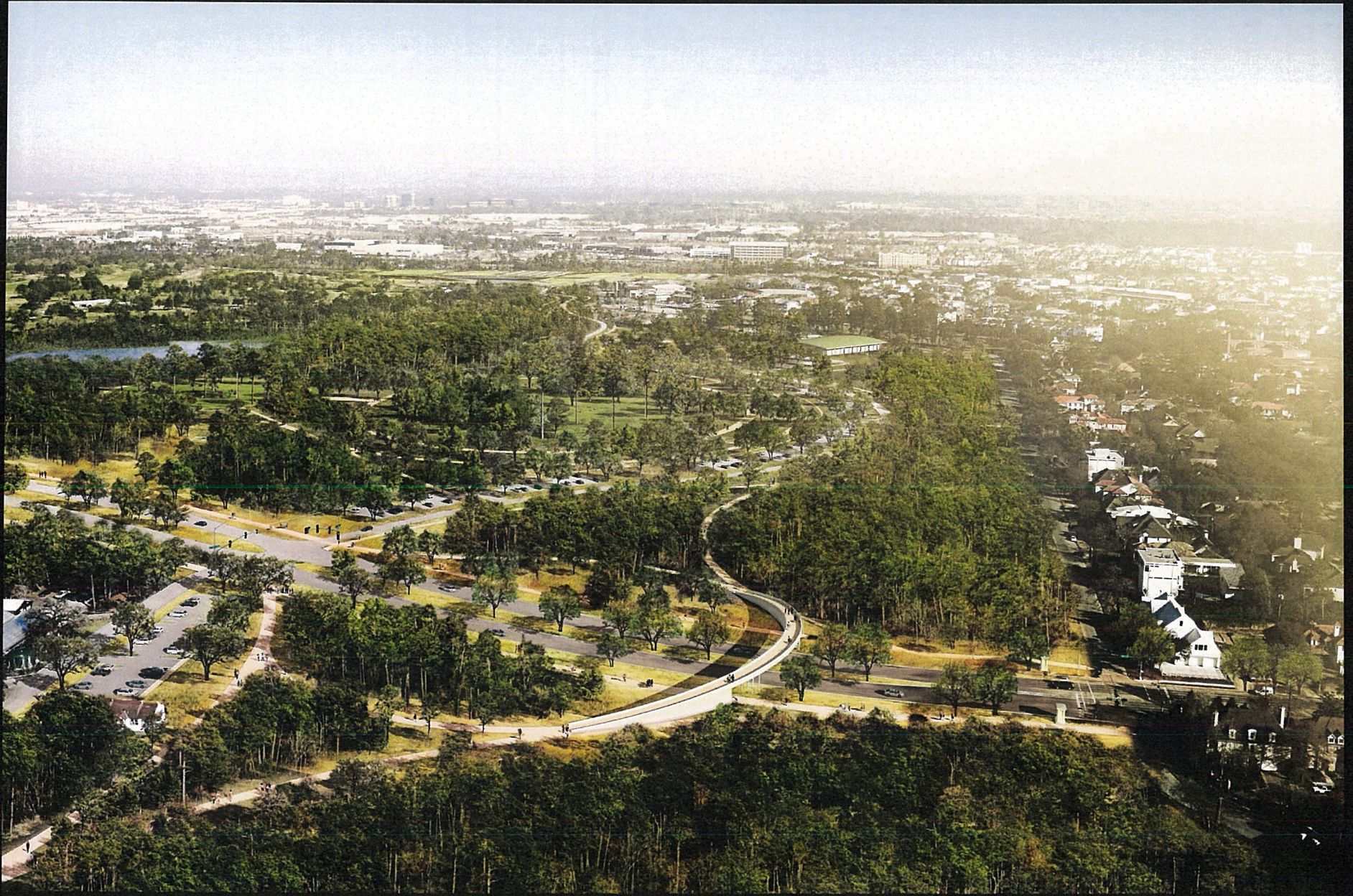
WOODWAY ENTRANCE



Section looking East toward I-610 from the Old Archery Range



EAST MEMORIAL DRIVE ENTRANCE



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Artist's Rendering toward Memorial Drive between Crestwood and Memorial Loop Rd.

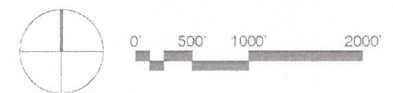
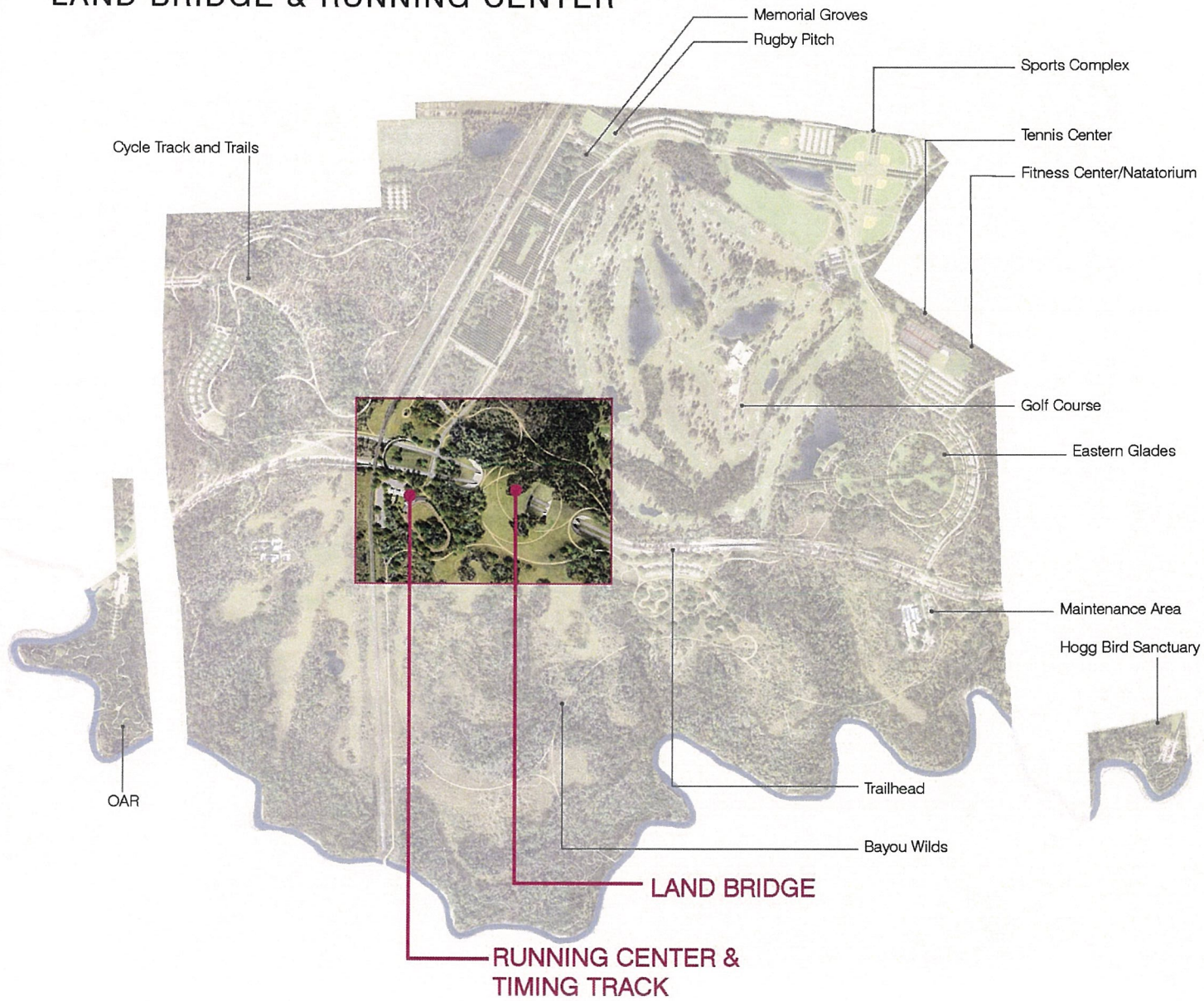
EAST MEMORIAL DRIVE AT CRESTWOOD



Section looking West into the park from Crestwood



LAND BRIDGE & RUNNING CENTER





- 01 Living Bridge (Existing)
- 02 Land Bridge
- 03 Memorial Groves
- 04 Paths (natural surface)
- 05 Running Center
- 06 Pavilions
- 07 Timing Track
- 08 Parking
- 09 Seymour Lieberman Trail



LAND BRIDGE

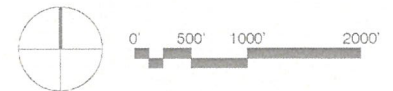
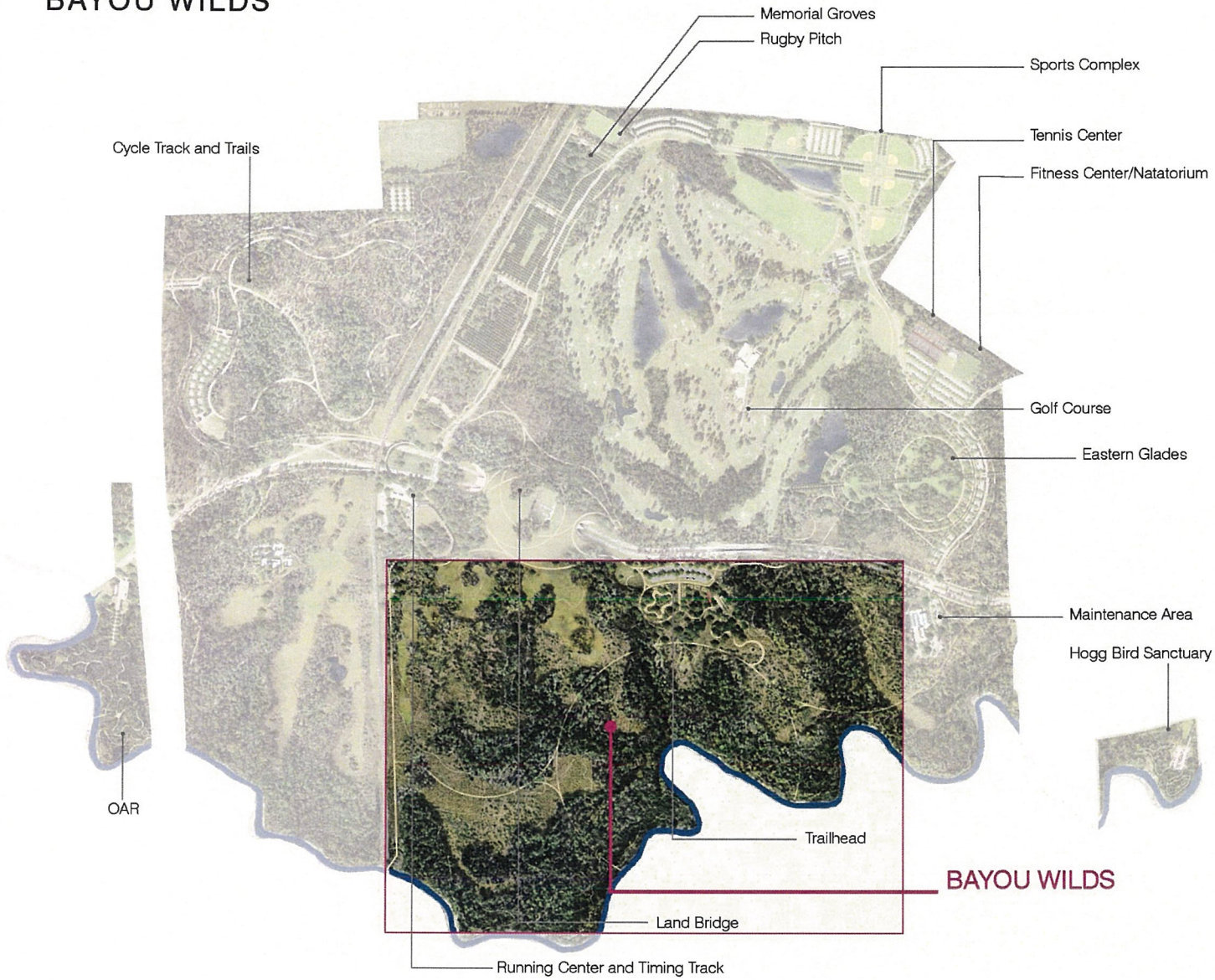


RUNNING TRAIL CENTER



Artist's rendering: view south from Memorial Drive toward the Bayou Wilds and Uptown District

BAYOU WILDS





- 01 Parking
- 02 Trail Heads
- 03 Pavilion & Picnic
- 04 Southern Arc Path (natural surface)
- 05 Observation Tower & Climbing Walls
- 06 Pump Track
- 07 Nature Playground
- 08 Children's Biking Loop (hard surface)
- 09 Children's Biking Loop (natural surface)
- 10 Mountain Bike Trails (natural surface)
- 11 Hiking Trails (natural surface)
- 12 Buffalo Bayou

0' 125' 250' 500'

BAYOU WILDS' SOUTHERN ARC TRAIL



Artist's rendering by Mir: view southwest toward Buffalo Bayou and the Uptown District

LOOKOUT TOWER

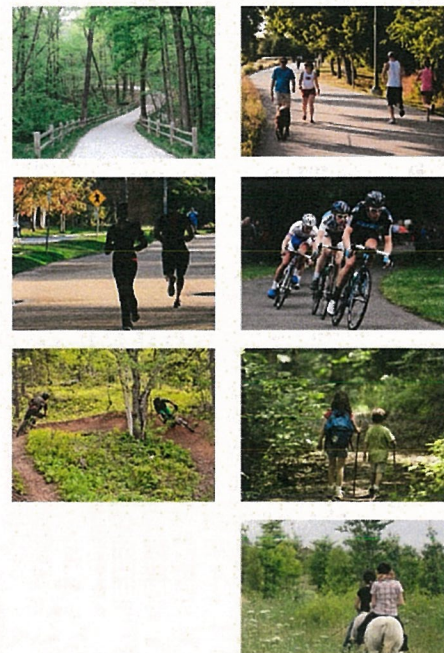


slide 33 of 69 Artist's rendering: lookout tower over savannah

BAYOU OVERLOOK



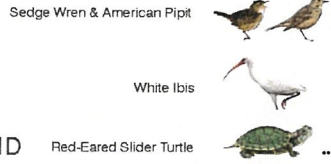
PROPOSED TRAIL NETWORK



- Legend**
- Running Track
 - Cycle Track
 - Multi-Use Trails
 - Seymour Lieberman Trail
 - Natural Surface Hiking Trails
 - - - - - Natural Surface Mountain Bike Trails
 - Equestrian Trails
 - - - - - Equestrian and Pedestrian Trails
 - Boardwalks
 - Bayou Access
 - - - - - Bayou Boat Route

RESTORATION ECOLOGY: RIPARIAN CORRIDOR

Target Wildlife & Ecological Zones:
BAYOU to WOODLAND



BAYOU EDGE

MATURE MIXED BOTTOMLAND FOREST

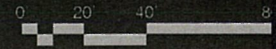
WELL-DRAINED MIXED WOODLAND



Section A: Southern Arc Trail

12 boardwalk

4-6" natural surface hiking trail



RESTORATION ECOLOGY DETAIL: PINE-HARDWOOD FOREST



Quercus alba / White Oak
Quercus laevis / Southern Red Oak
Quercus prinus / Chestnut Oak

Carya ovata / Shagbark Hickory
Carya alba / Bitternut
Morus rubra / Red Mulberry

Asplenium platyneuron / Florida Hobblebush
Leucosthesis pycnantha / Florida Leucosthesis
Itea virginica / Sweetspire

Quercus laevis / Southern Red Oak
Quercus alba / White oak
Quercus stellata / Post Oak

Mitchella repens L. / Partridgeberry
Eupatorium serotinum / Ironweed
Oncoclea sensibilis / Sensitive Fern

Catalpa bignonioides / Southern Catalpa
Crategeus texensis / Texas Hawthorn

Tilia caroliniana / Carolina Beezwood
Sarcocolla arbutum / Sarcocolla
Celtis occidentalis / Hackberry

Callicarpa americana / Beautyberry
Symphoricarpos orbiculatus / Coral Berry
Rubus thibetis / Dewberry

Amorpha illinoensis / Showy Blue Star
Coccoloba drummondii / Rain Lily

Quercus prinus / Chestnut Oak
Quercus stellata / Post Oak
Quercus virginiana / Southern Live Oak

Pinus taeda / Loblolly Pine
Pinus echinata / Short Leaf Pine

Andropogon tamariscus Michx. / Splitbeard Bluestem/Oats
Muhlenbergia capillaris / Gulf Muhly
Schizanthium scoparium / Little Bluestem

BAYOU WILDS HIKING TRAIL



Artist's rendering: view in a Savannah ecosystem

BAYOU WILDS BIKING TRAIL

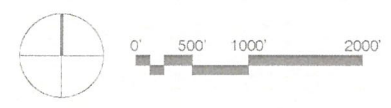


slide 39 of 69 Artist's rendering: view in Hardwood-Pine ecosystem

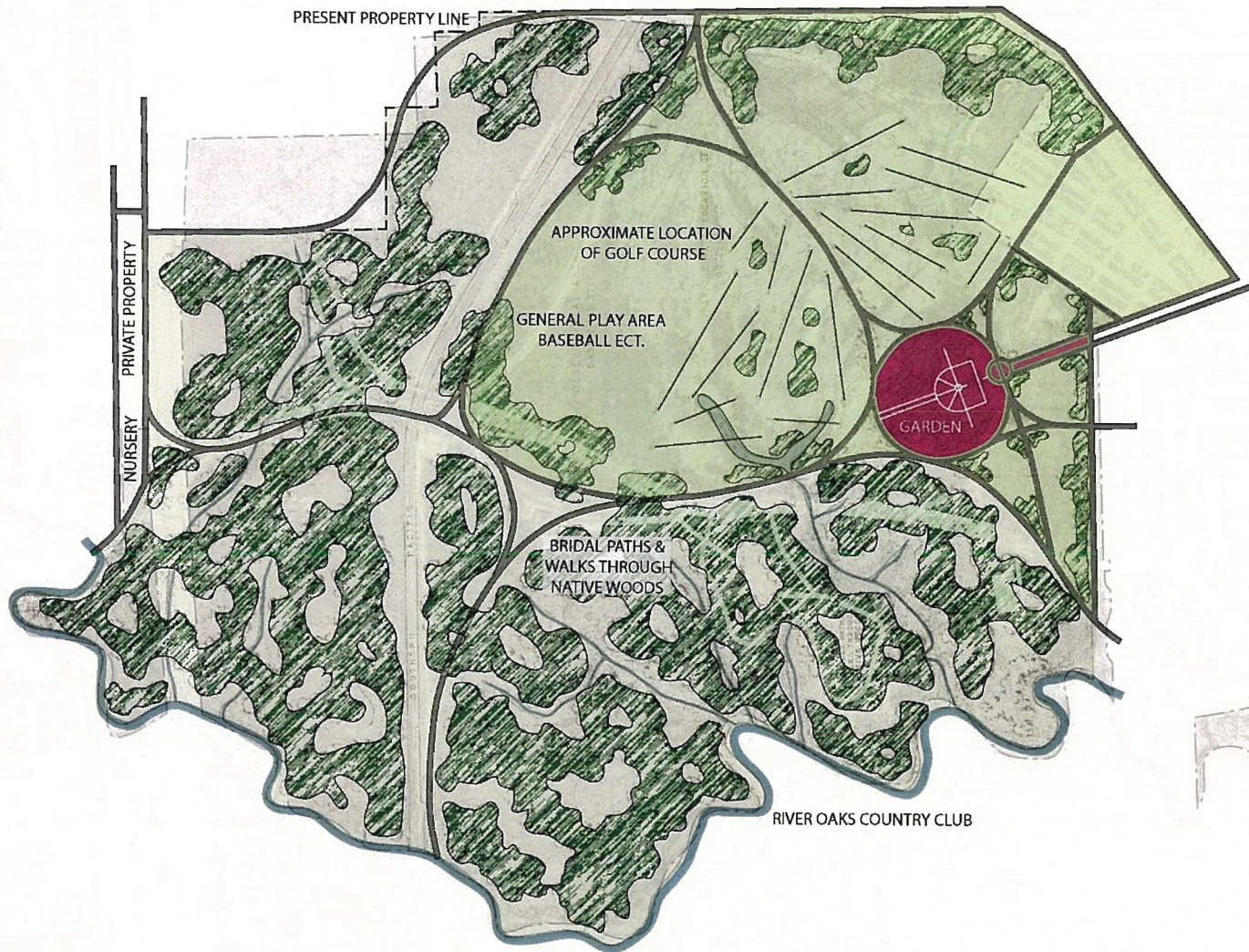
KIDS' BIKE LOOP



EASTERN GLADES



PARK'S FOUNDING MASTER PLAN



1924 Proposed Entry & Gardens, golf course, and scenic roads by Hare & Hare Landscape Architects.

Approved during the time of the park's founders.

Although many parts of the plan were never built, the proposed organization of spaces remain relevant and culturally significant.

PRELIMINARY PLAN FOR
MEMORIAL PARK - HOUSTON, TEXAS
 PREPARED FOR THE BOARD OF PARK COMMISSIONERS BY
 HARE & HARE LANDSCAPE ARCHITECTS & CITY PLANNERS

- Legend**
- Cultivated Garden
 - Presumed High-Use Areas
 - Presumed Lower-Use Areas



- 01 Eastern Glades
- 02 Eastern Garden Glade
- 03 Pond Esplanade
- 04 Pond and Cypress Grove
- 05 Parking
- 06 Multi-use trail
- 07 Seymour Lieberman Trail



EASTERN GLADES



slide 44 of 69 Artist's rendering: view from Memorial Dr. East and Crestwood to Eastern Glades and proposed pond

EASTERN GLADES

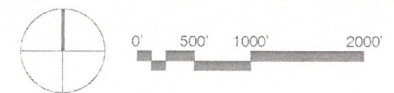
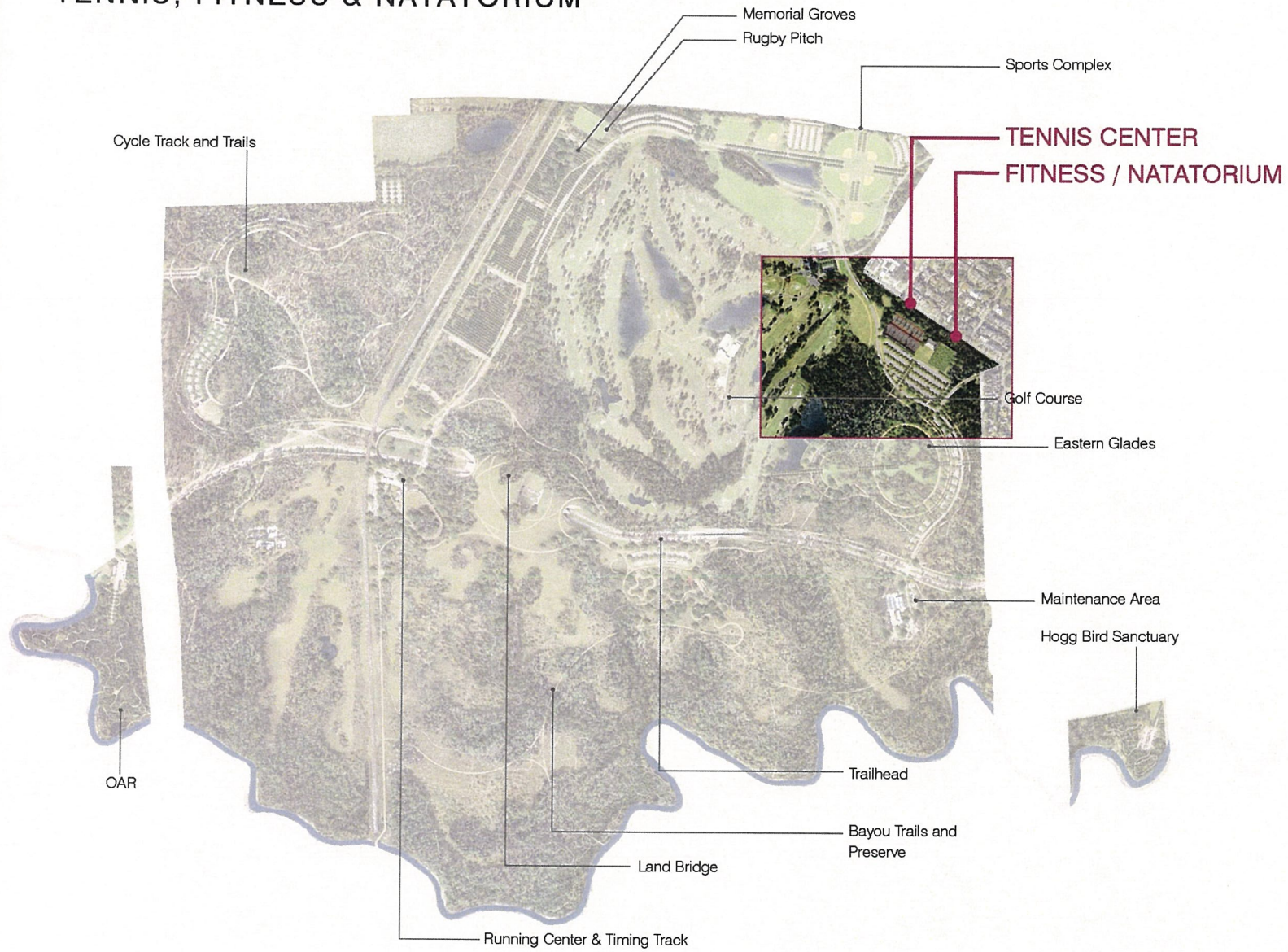


EASTERN GLADES



slide 46 of 69 Artist's rendering: view inside Eastern Glades and promenade

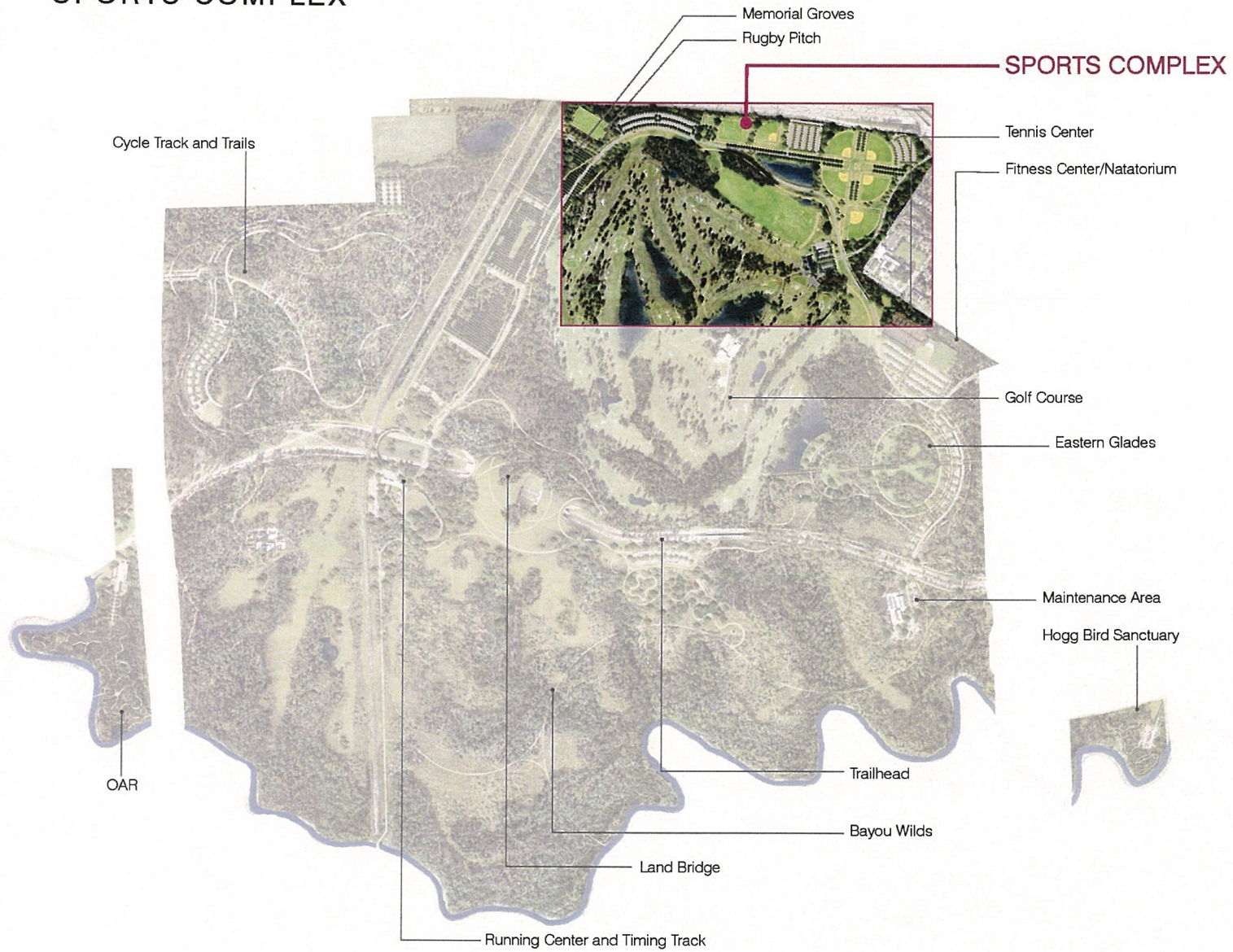
TENNIS, FITNESS & NATATORIUM



- 01 Parking
- 02 Tennis Courts
- 03 Fitness Center
- 04 Natatorium (Indoor Swimming)
- 06 Memorial Loop Drive
- 07 Multi-use Trail
- 08 Seymour Lieberman Trail
- 09 Golf Course
- 10 Dense perimeter planting
- 11 Haskell Street
- 12 Arnot Street
- 13 Crestwood Drive



SPORTS COMPLEX





- 01 Softball field
- 02 Baseball field
- 03 Pond
- 04 Driving Range
- 05 Golf Clubhouse
- 06 Croquet Court
- 07 Soccer Field
- 08 Volleyball Court
- 09 SLT
- 10 Multi-use trail
- 11 Parking
- 12 Picnic area
- 13 Rugby Pitch

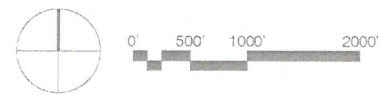
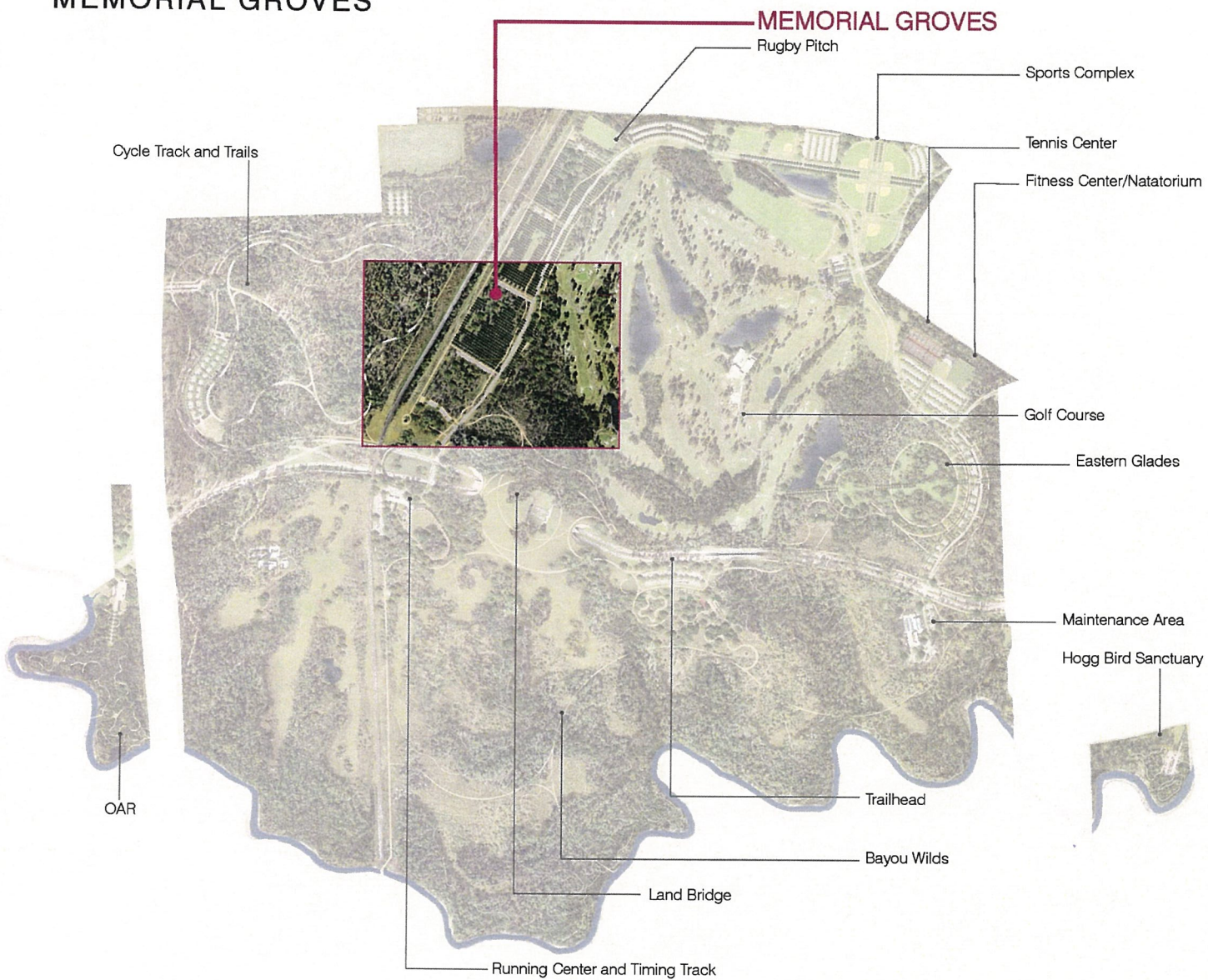
SPORTS COMPLEX



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Artist's rendering: view east along Memorial Loop Rd. toward downtown

MEMORIAL GROVES





- 01 Memorial Loop Drive
- 02 Parallel Parking and Accessway
- 03 Multi-use trail
- 04 Seymour Lieberman Trail
- 05 Picnic Areas
- 06 Large Group Picnic Area
- 07 Existing Motts
- 08 Memorial Groves Pine Planting
- 09 Golf Course



MEMORIAL GROVE



MEMORIAL GROVE



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Artist's rendering: view into Memorial Groves

HISTORICAL PHOTOGRAPH OF CAMP LOGAN CIRCA 1918



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STREET, CAMP LOGAN, HOUSTON, TEXAS.

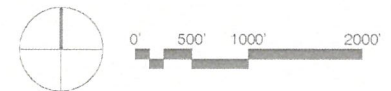
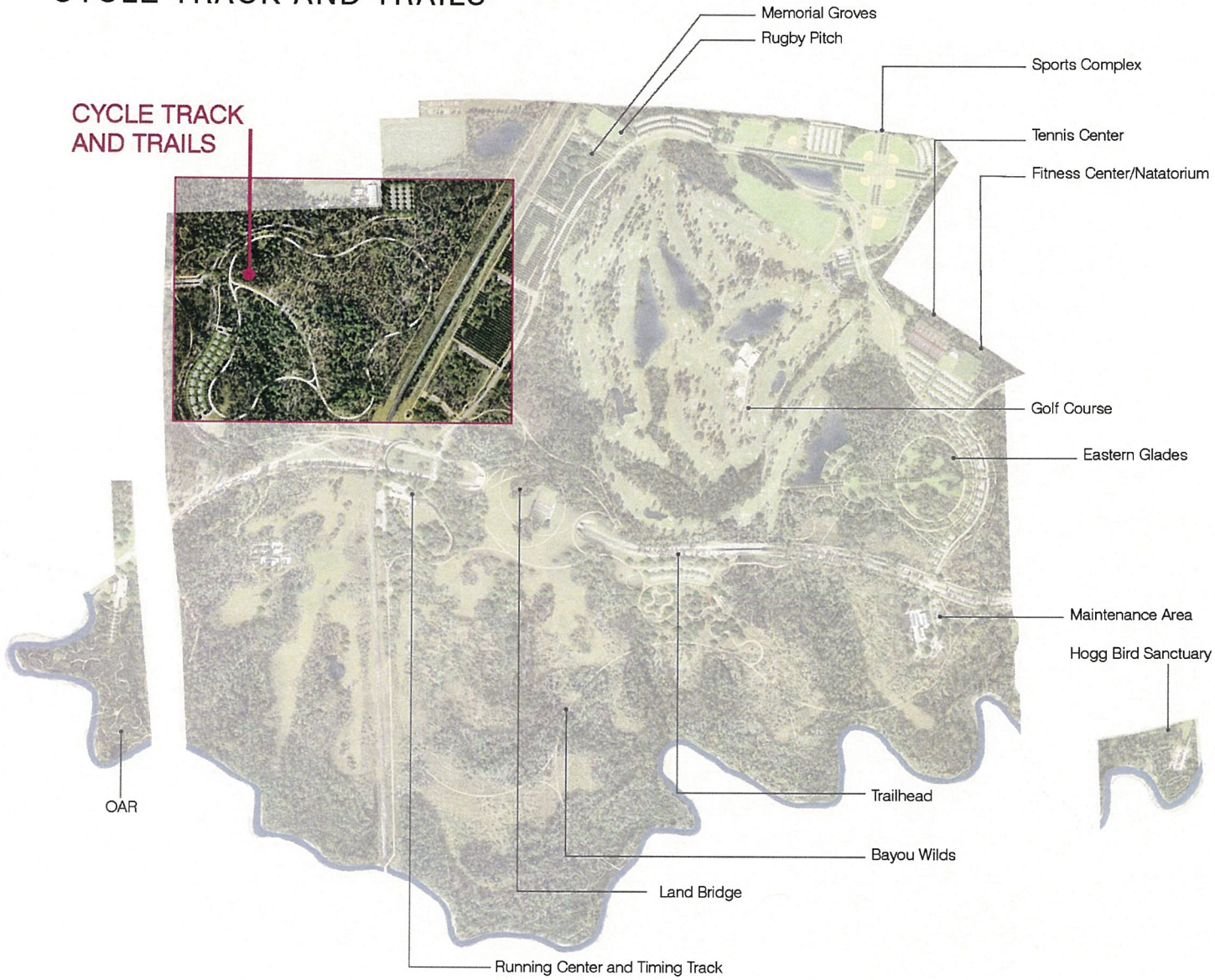


PRECEDENT PROJECTS

(Left) Precedent: pine grove
(Top) Hardberger Park picnic area, San Antonio, TX
(Bottom) Existing Camp Logan latrine foundation, Memorial Park

CYCLE TRACK AND TRAILS

CYCLE TRACK AND TRAILS



- 01 Parking
- 02 Cycle Track
- 03 Equestrian/Hiking Trails
- 04 Multi-use trails
- 05 Memorial Drive

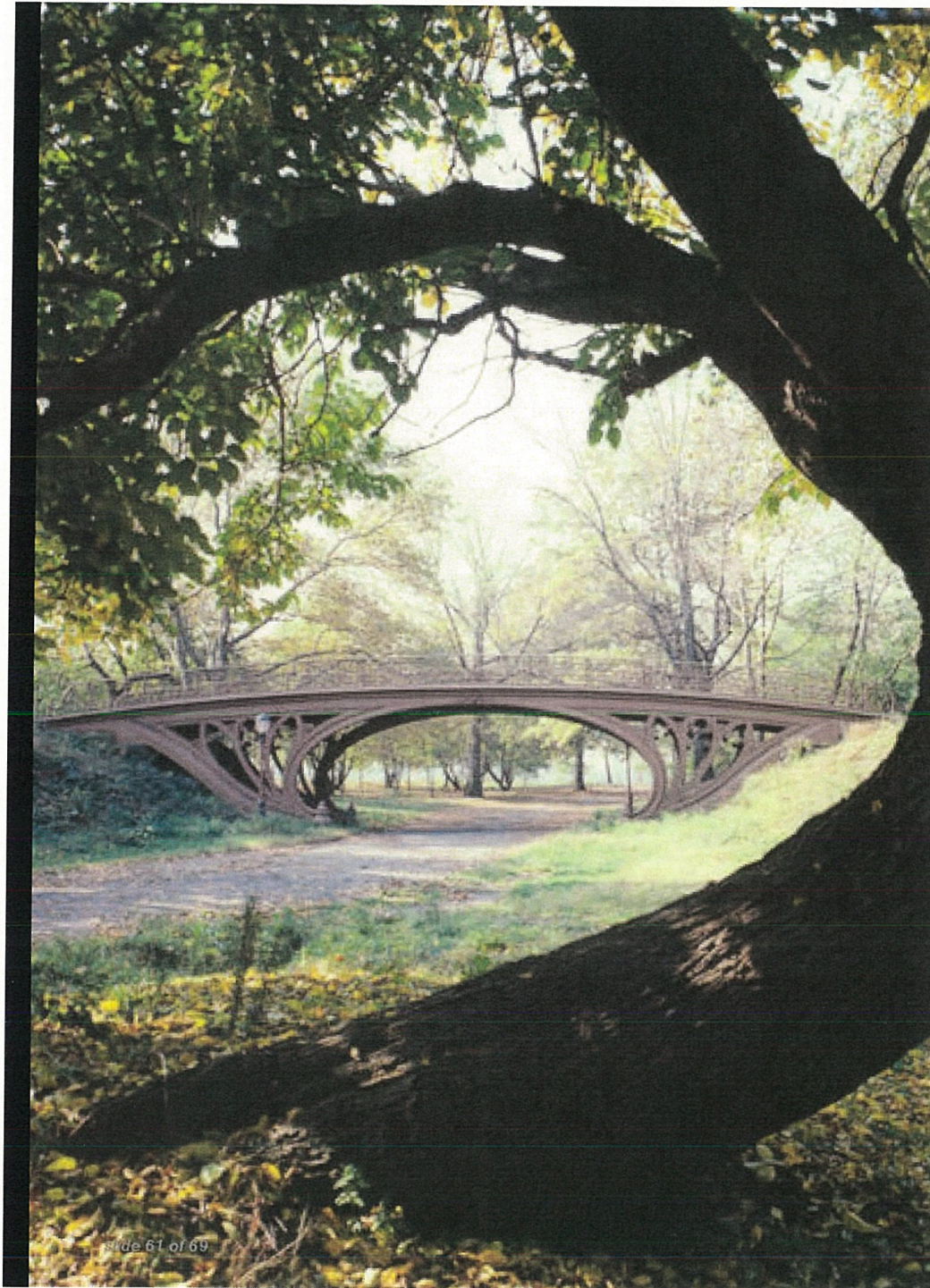


0' 125' 250' 500'

CYCLE TRACK



slide 60 of 69 Artist's rendering: view within a hardwood-pine forest to the cycle track



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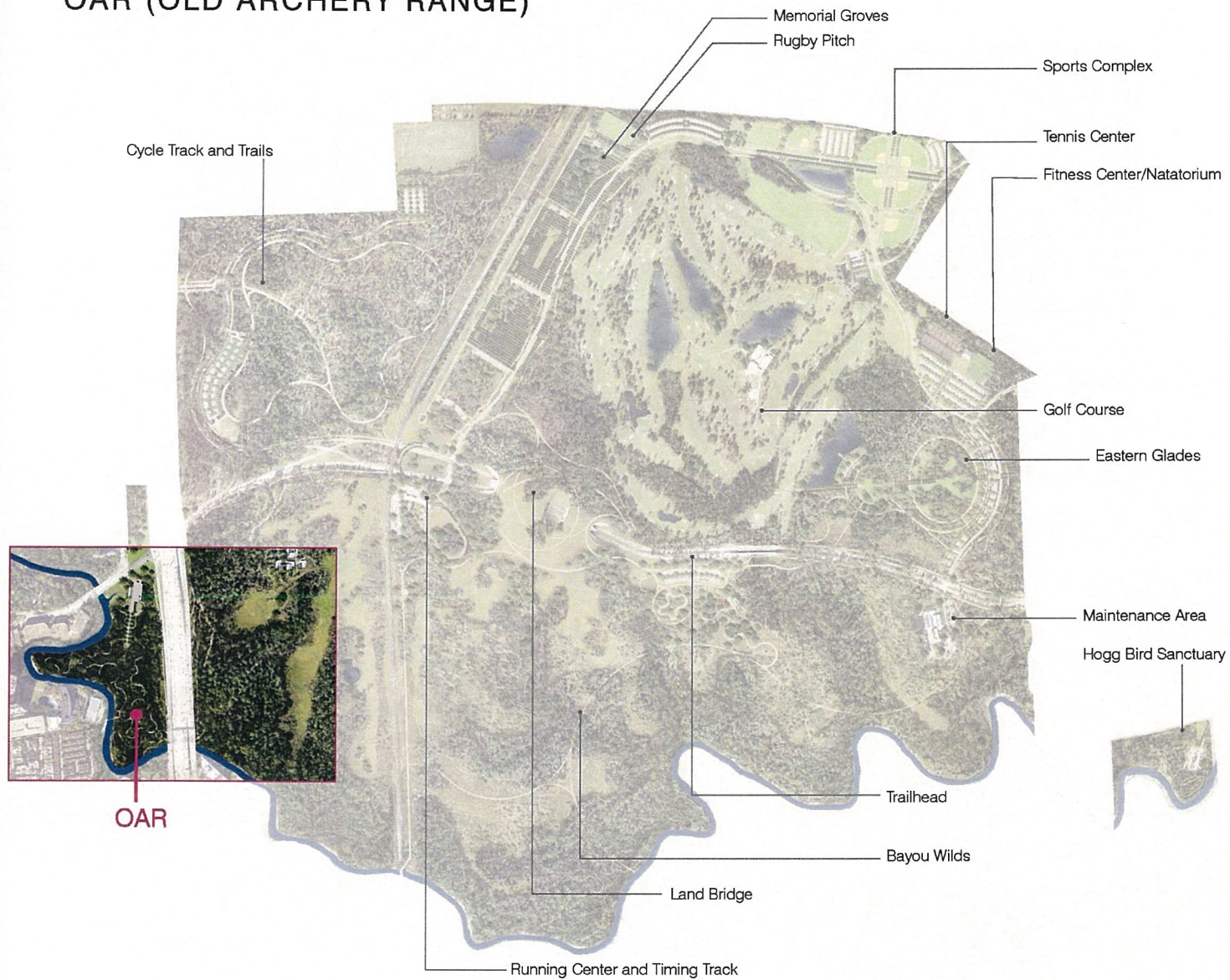
PRECEDENT PROJECTS

(Left) Precedent: Central Park Trail bridge, New York, NY

(Top) Precedent: Equestrian trails

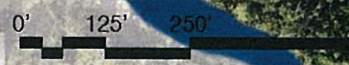
(Bottom) Precedent: hard surface cycle track

OAR (OLD ARCHERY RANGE)





- 01 Entrance off Woodway
- 02 Parking
- 03 Bayou Access
- 04 Pedestrian Bridge
- 05 Orientation Point
- 06 Observation Tower
- 07 I-610

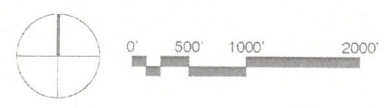
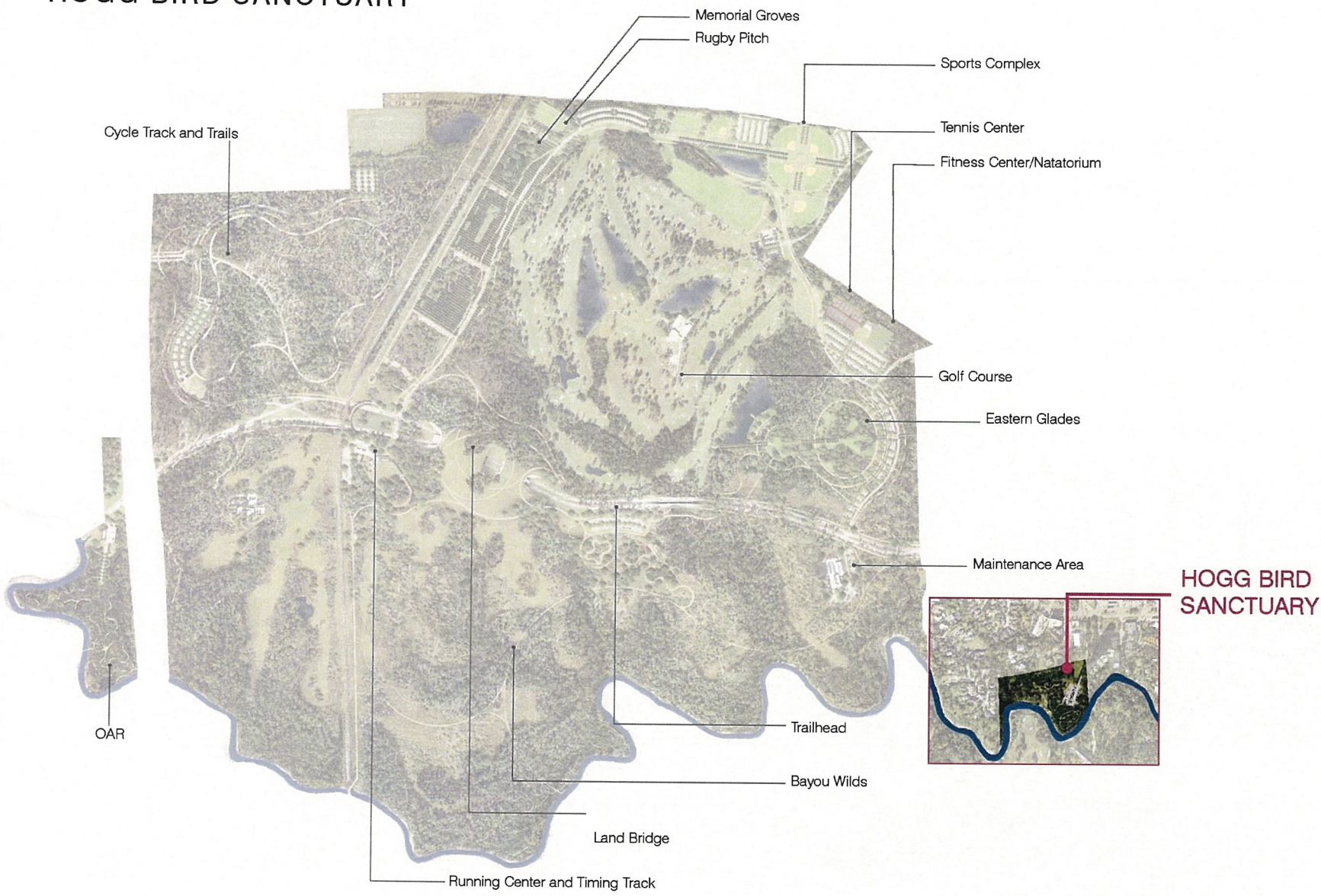


OAR PRECEDENTS



(Above Left) Precedent: Lookout Tower, Tiree, Scotland
(Above Top) Precedent: Berkshire Boardwalk, Stockbridge, MA
(Above Bottom) Precedent: Bronx River Alliance, Bronx, NY

HOGG BIRD SANCTUARY





- 01 Memorial Drive
- 02 Westcott St.
- 03 Existing Parking Lot
- 04 Natural Surface Trails
- 05 Restored Bird Habitat
- 06 Garden Club of Houston Project



BAYOU WILDS HIKING TRAIL



MAINTENANCE STRATEGY

Improve day-to-day care through expanding existing partnership roles and responsibilities.

Increase MPC's role in maintenance (following the models of other Houston Parks: Hermann, Buffalo Bayou, Bayou Greenways and others: Central Park).

Develop proposed operations and maintenance plan with HPARD, the City of Houston, and MPC (currently in progress).

Expand MPC's role in the management of naturalized areas as well as other areas of park maintenance in cooperation with HPARD. Delay could impact fund-raising efforts.

Maintain MPC's commitment to increasing the amount of annual funding available for park maintenance.

NATURAL RESOURCE CARE

- Invasive control
- Ecological restoration
- Hazard tree removal
- Stump grinding
- Gardens maintenance
- Turf care/mowing/trimming (mowing, blowing, edging)
- Brush hog / transition zone maintenance
- Spot watering
- Mulch landscaped areas
- Irrigation maintenance

SITE AMENITIES MAINTENANCE

- Trail repair
- Site furnishings care (kiosks, benches, fire pits, picnic tables, exercise equipment)
- Power washing, paint touchups/ repainting
- Paths/sidewalks maintenance

SANITATION SERVICES

- Trash removal
- Restroom cleaning



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