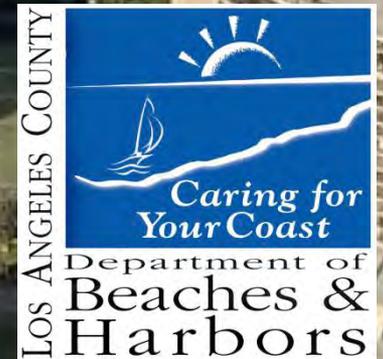
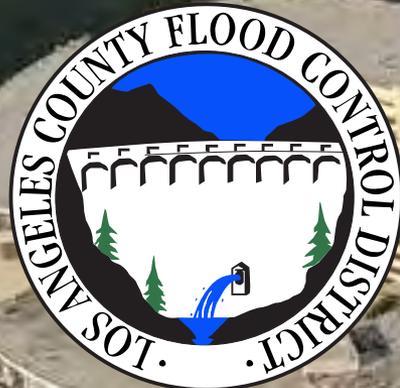


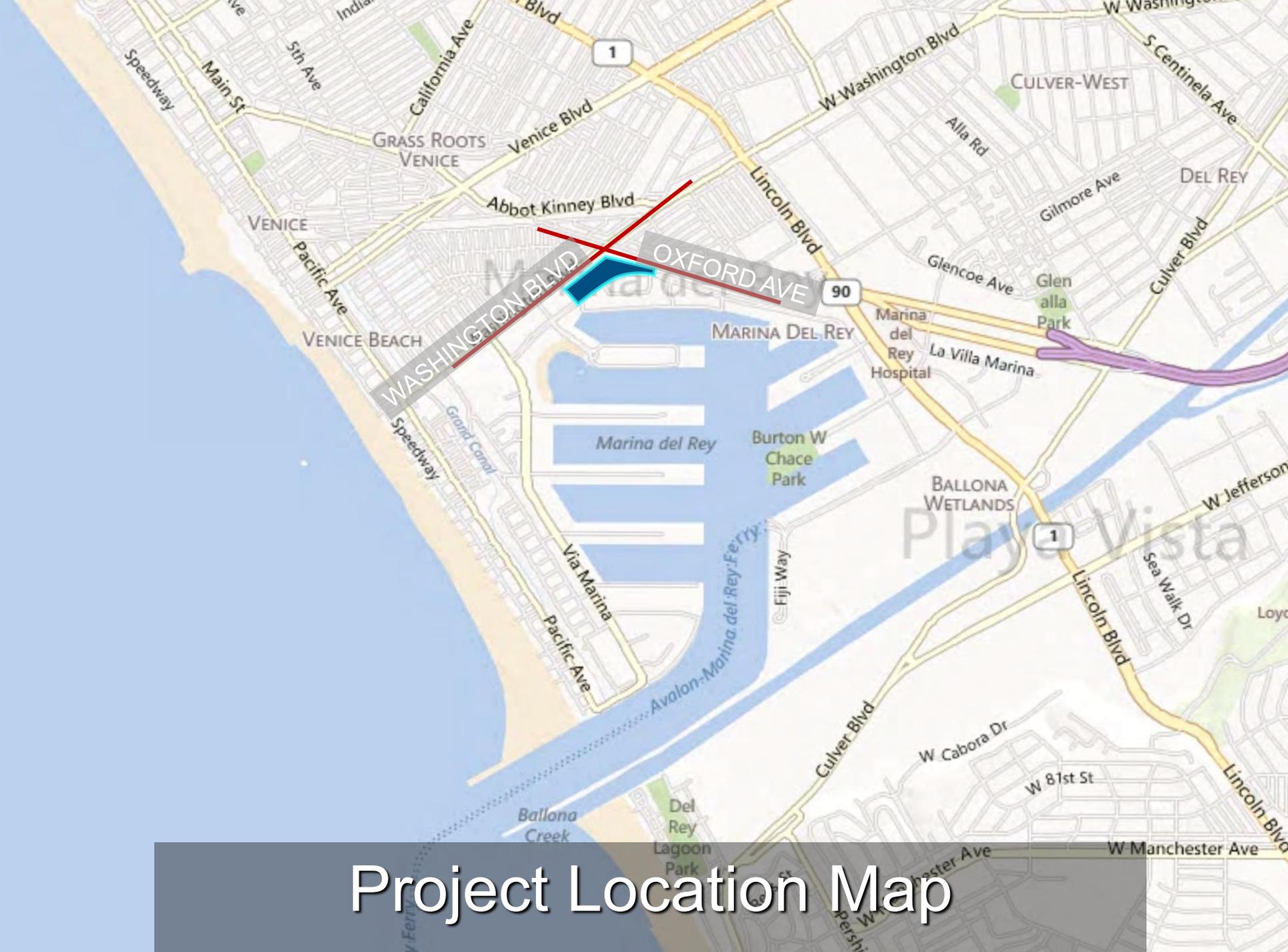
OXFORD RETENTION BASIN MULTIUSE ENHANCEMENT PROJECT

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

Watershed Management Division

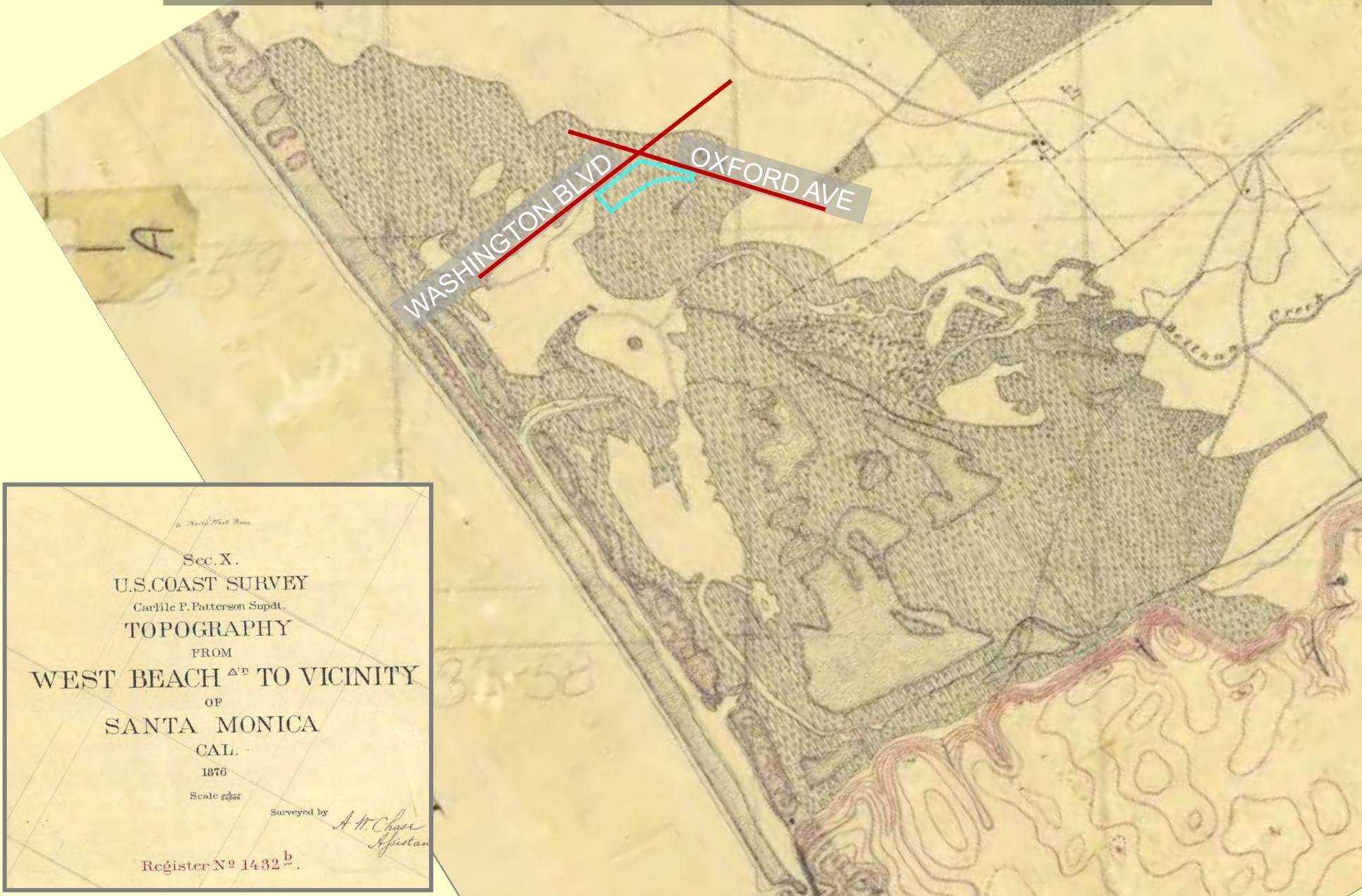
May 29, 2013





Project Location Map

Historic Ballona Marsh "T-Sheet" 1432b (1876)



to North-Tide Base

Sec. X.

U.S. COAST SURVEY

Carlisle P. Patterson Supdt.

TOPOGRAPHY

FROM

WEST BEACH ^Δ TO VICINITY

OF

SANTA MONICA

CAL.

1876

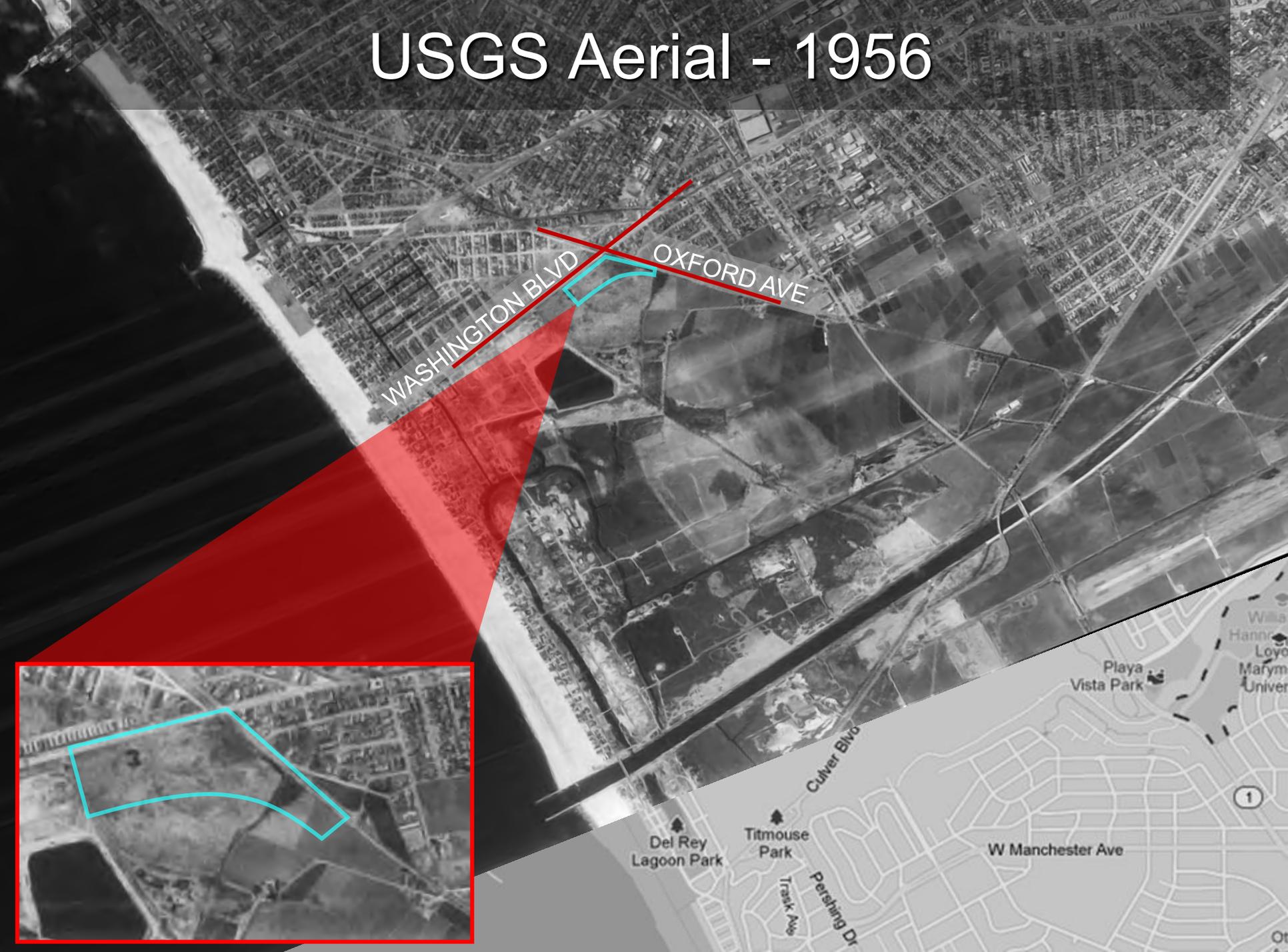
Scale $\frac{1}{25000}$

Surveyed by

*A. H. Chase
Assistant*

Register N^o 1432 ^b.

USGS Aerial - 1956



WASHINGTON BLVD

OXFORD AVE

Del Rey Lagoon Park

Titmouse Park

Culver Blvd

Pershing Dr

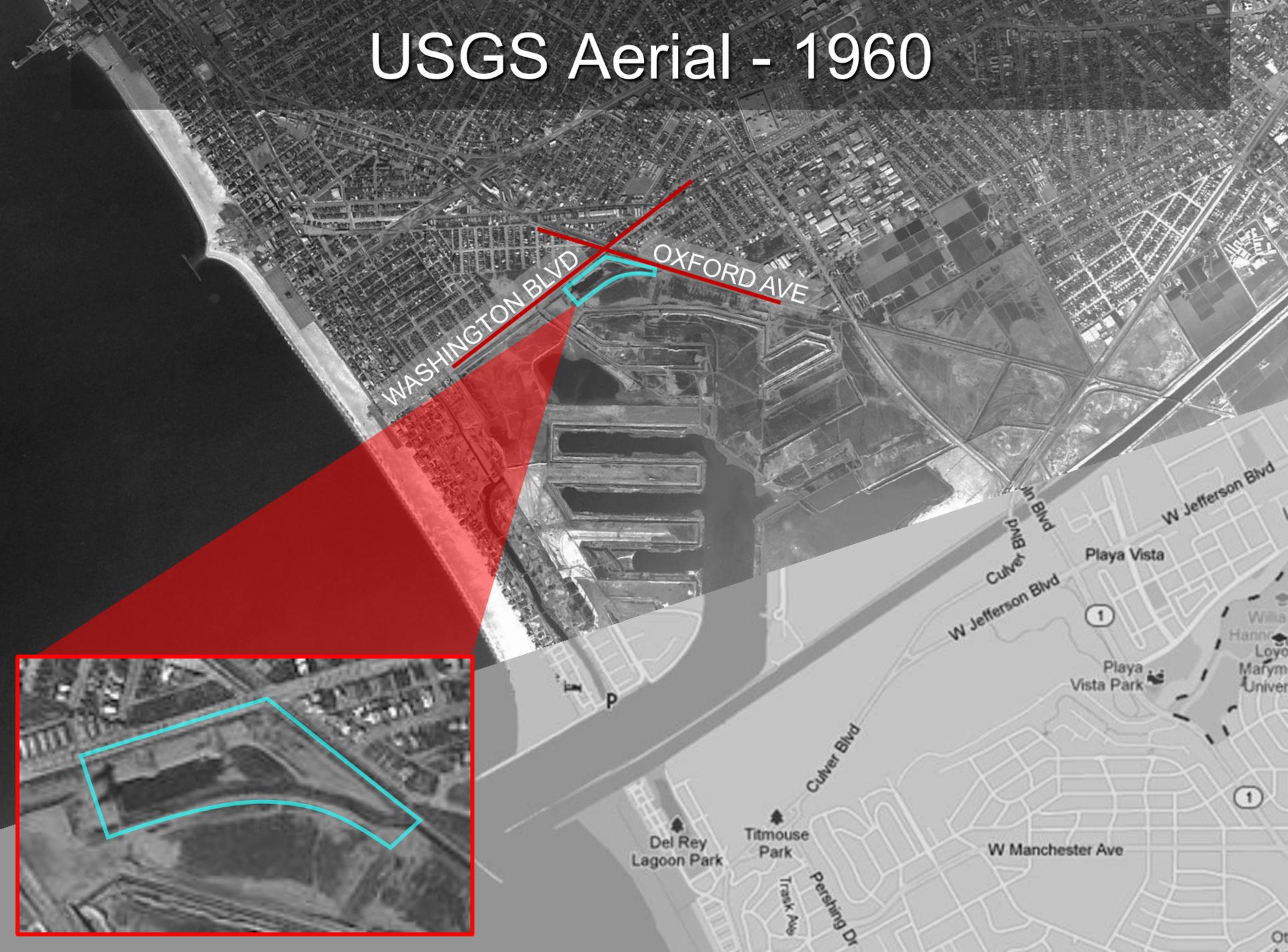
W Manchester Ave

Playa Vista Park

Loya Marym Univer

1

USGS Aerial - 1960



WASHINGTON BLVD

OXFORD AVE



W Jefferson Blvd
Culver Blvd
Playa Vista
Playa Vista Park

Del Rey Lagoon Park

Titmouse Park

W Manchester Ave

Culver Blvd

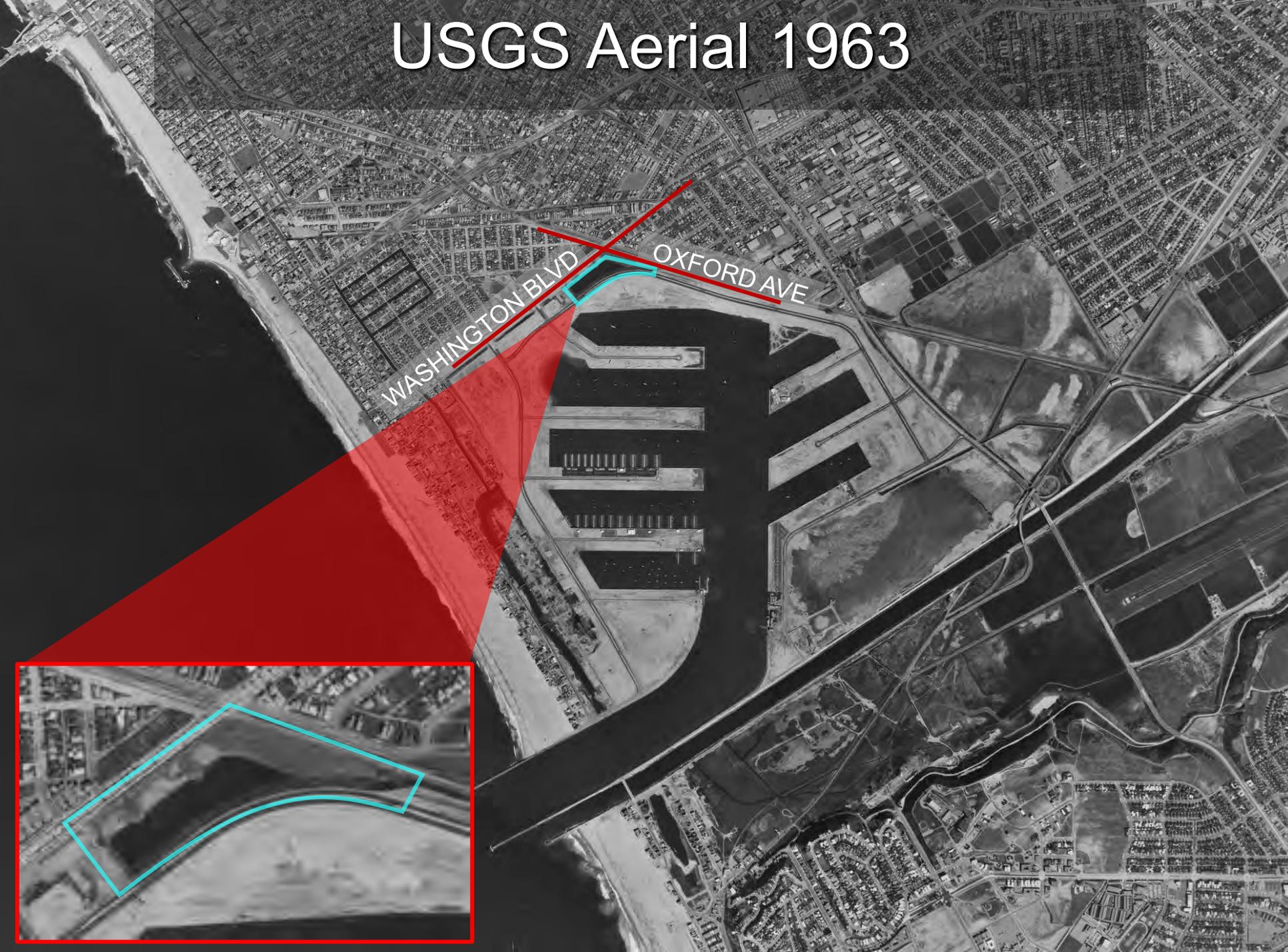
Pershing Dr

Titmouse Ave

1

1

USGS Aerial 1963

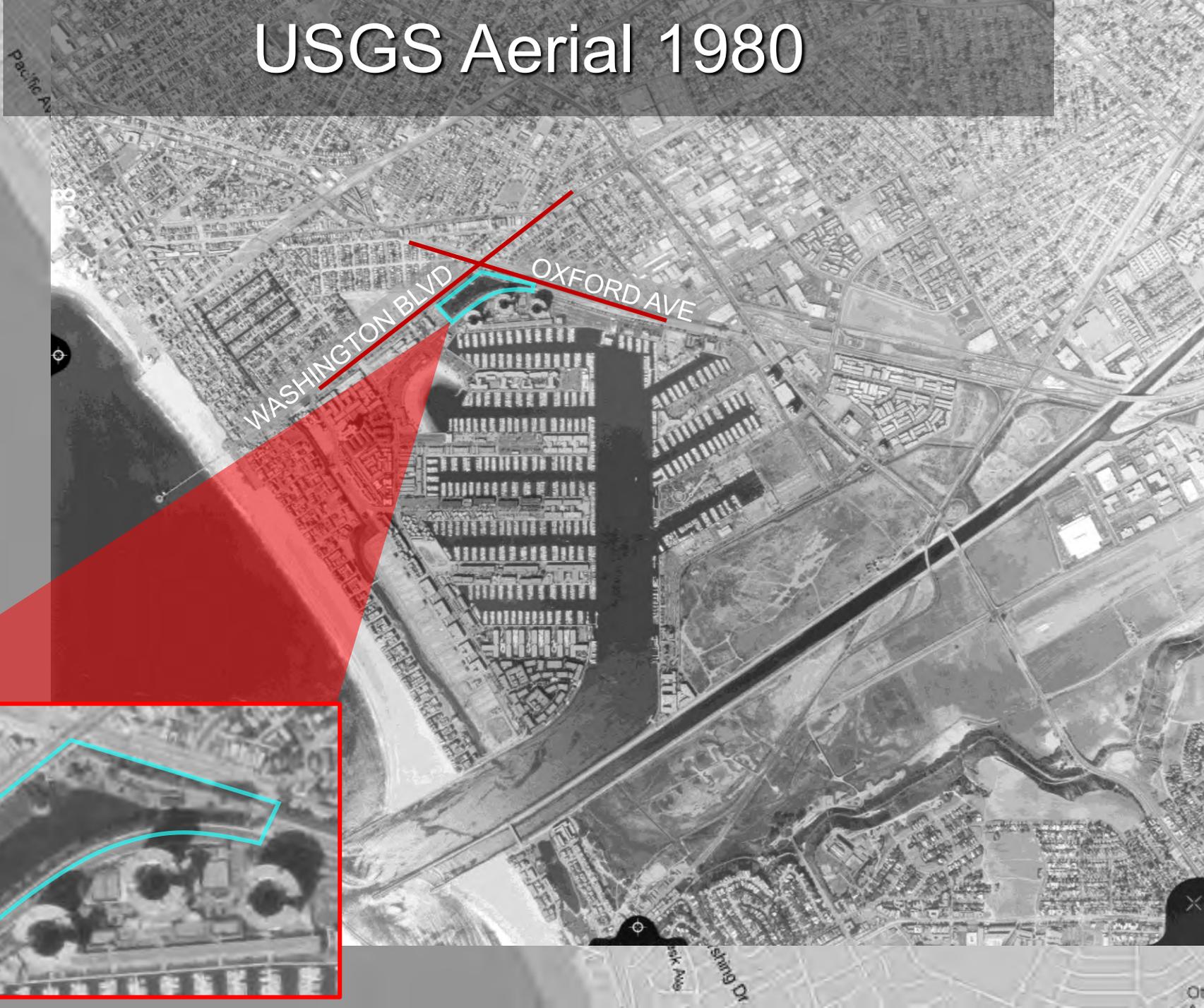


WASHINGTON BLVD

OXFORD AVE



USGS Aerial 1980



Current Aerial Image



Oxford Basin's Watershed



Oxford Basin's Hydraulic Function



Project Origination

- Flood Risk Management
- Remove accumulated sediment
- Improve water quality



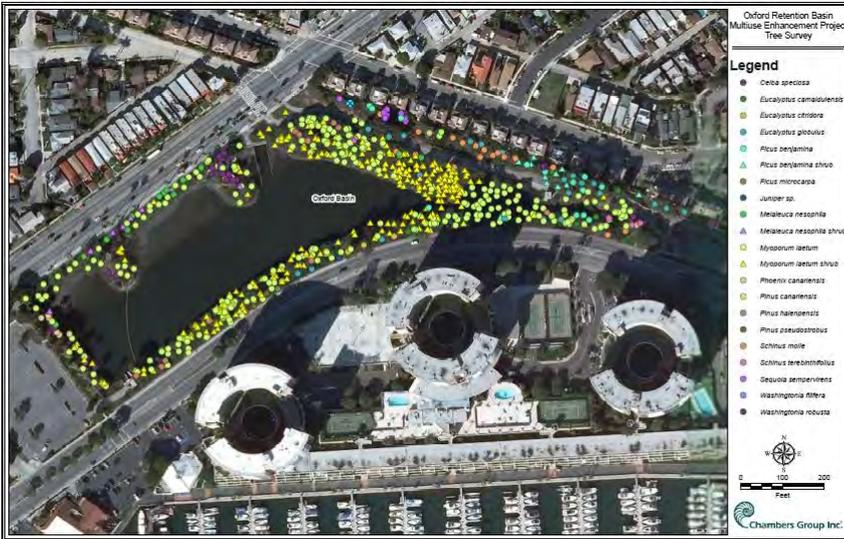
Community Outreach

- Wide-ranging community outreach since 2007 and earlier
- Over 20 presentations to various groups and public boards
- Input received resulted in significant project refinement



Extensive Studies

- Biological
- Soils
- Water Quality
- Post-Construction



True “Multi-Benefit” Project

- Flood Control
- Water Quality

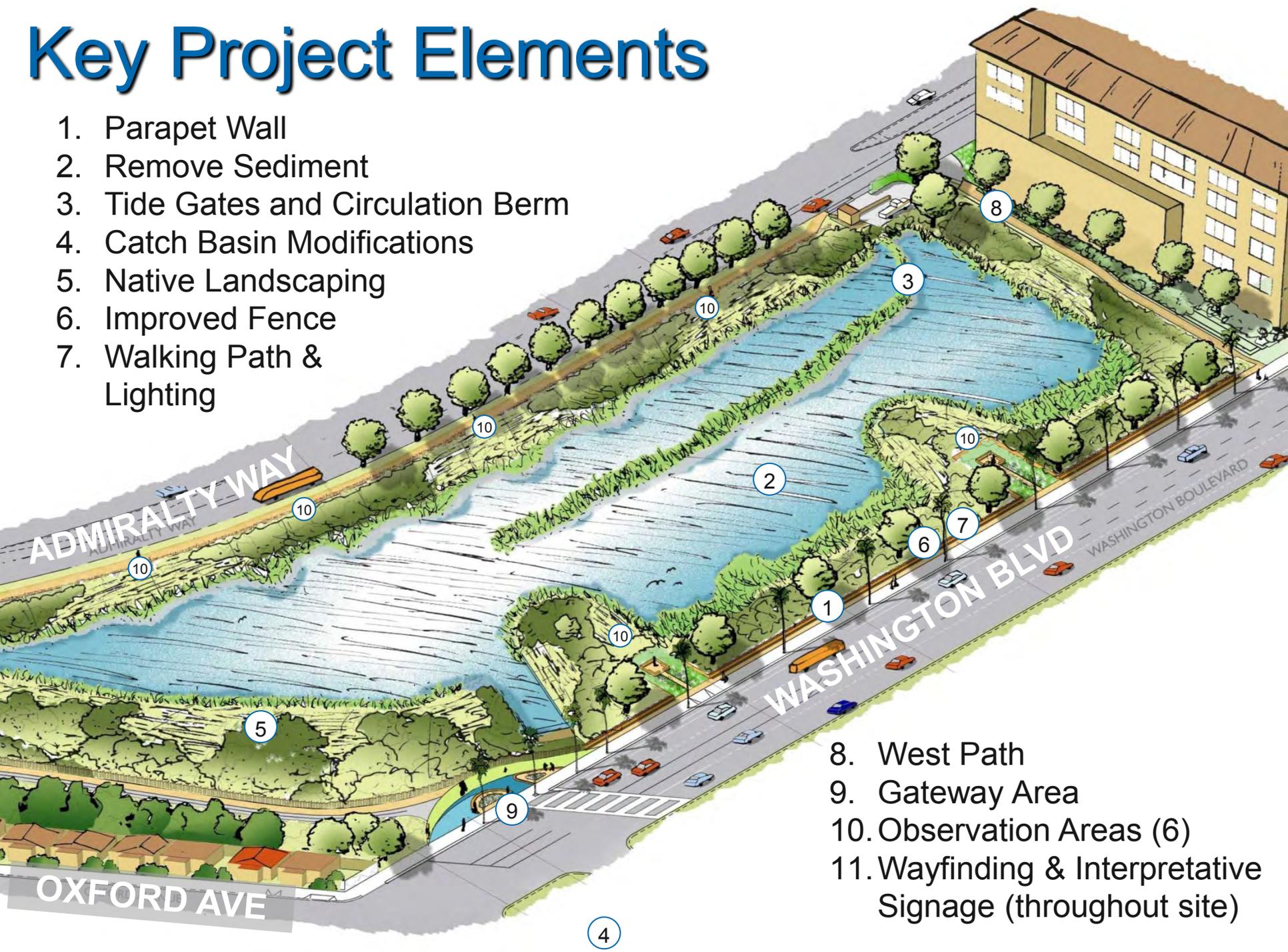


- Habitat
- Aesthetics
- Recreation



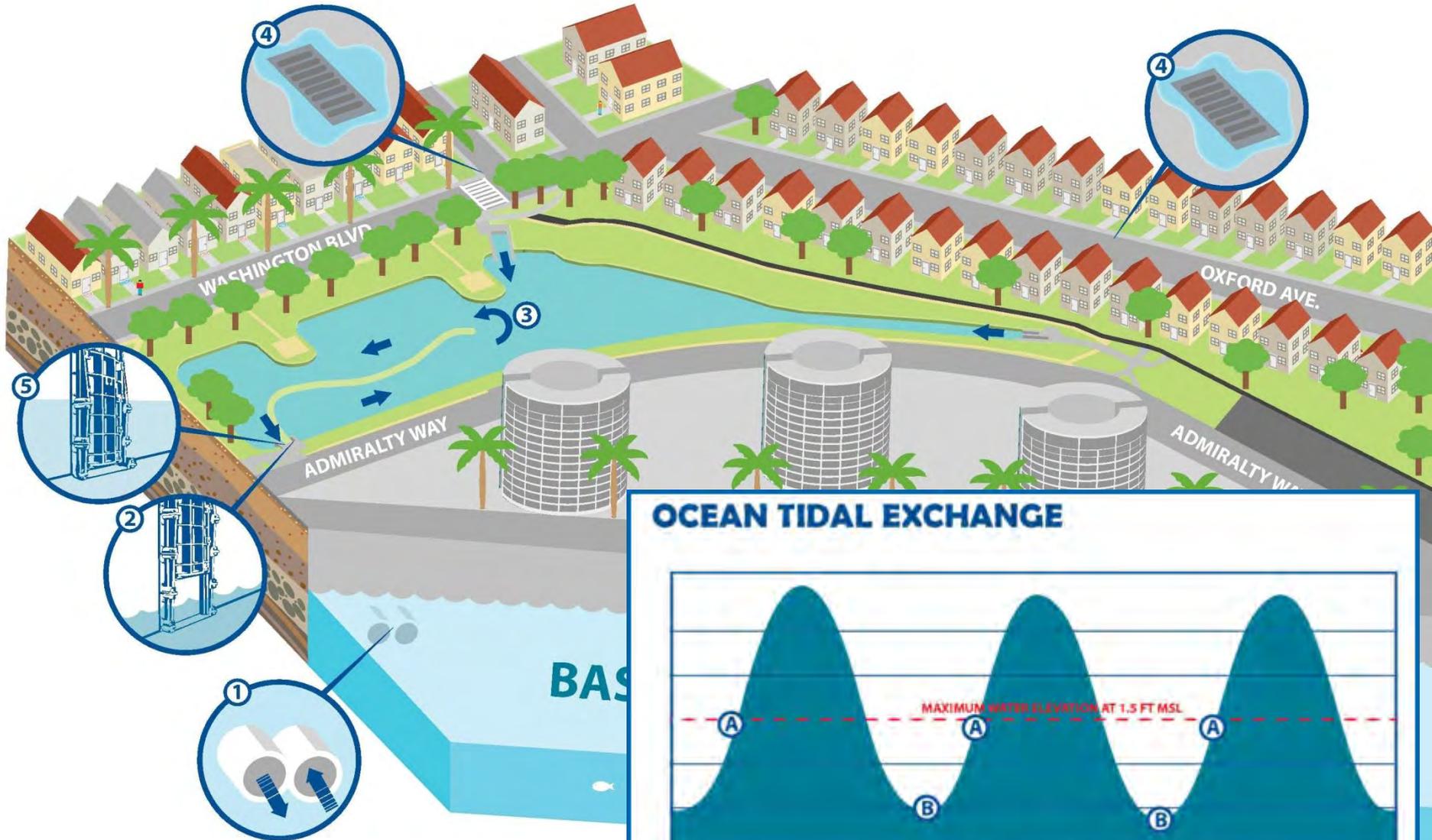
Key Project Elements

1. Parapet Wall
2. Remove Sediment
3. Tide Gates and Circulation Berm
4. Catch Basin Modifications
5. Native Landscaping
6. Improved Fence
7. Walking Path & Lighting

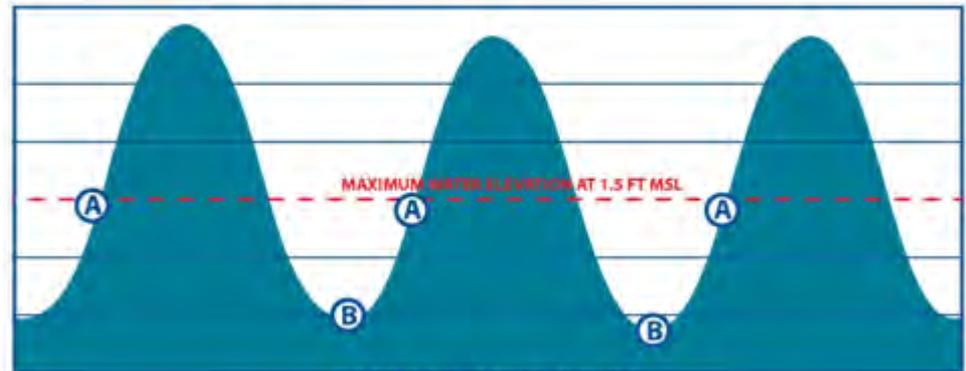


8. West Path
9. Gateway Area
10. Observation Areas (6)
11. Wayfinding & Interpretative Signage (throughout site)

Oxford Basin's Hydraulic Function

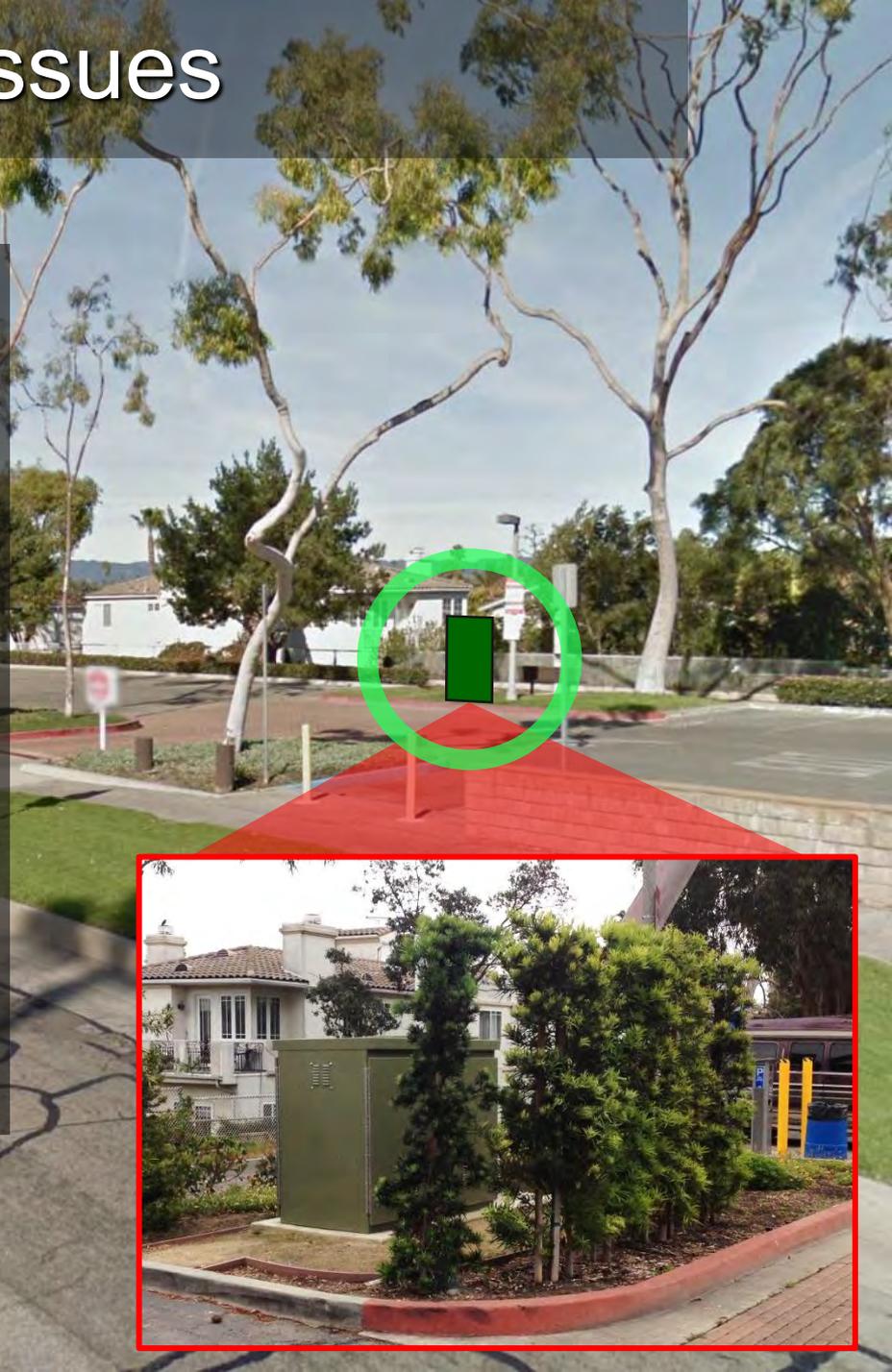


OCEAN TIDAL EXCHANGE



Odor Issues

- Known issue with venting sewer gas
- Air scrubber installed February 2012
- Ongoing troubleshooting
- LACDPW closely monitoring operation



West Path and Northwest Overlook (Oceana development shown)



Washington Blvd. looking southwest (current)



Washington Blvd. looking southwest (proposed)



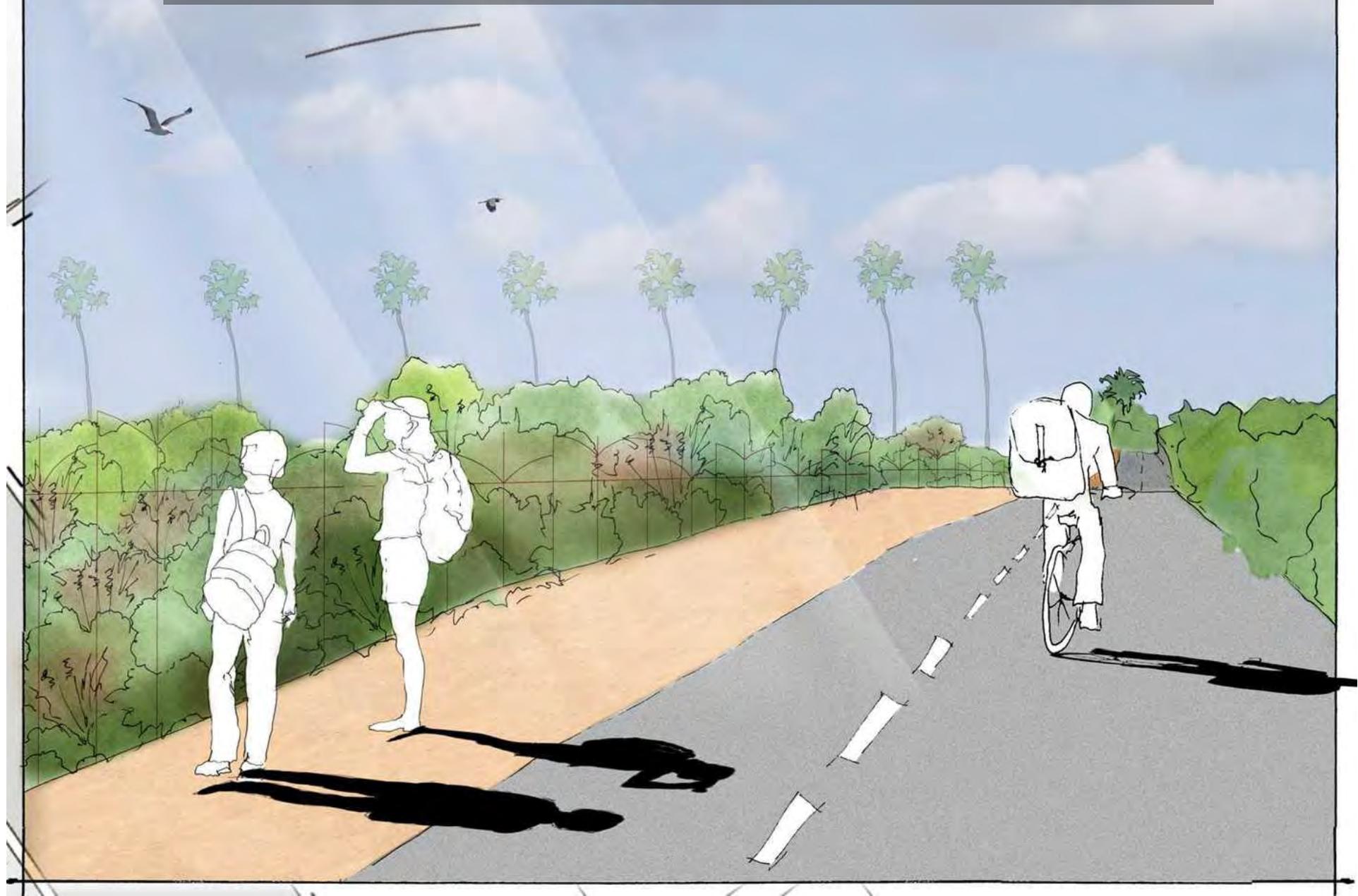
Gateway Area (current)



Gateway Area (proposed)



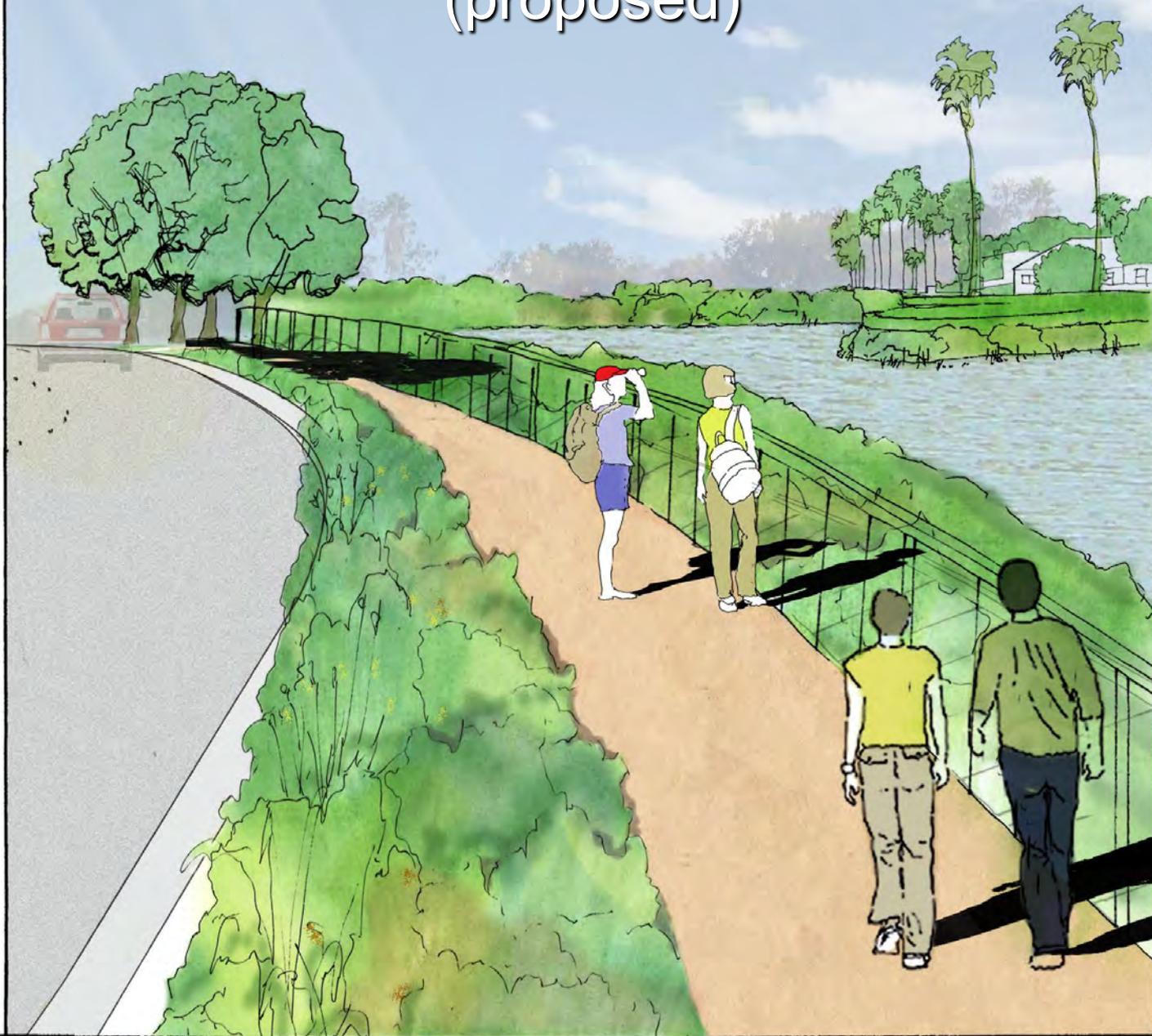
Pedestrian Path Next to Existing Bike Path (proposed)



Admiralty Way looking west (current)



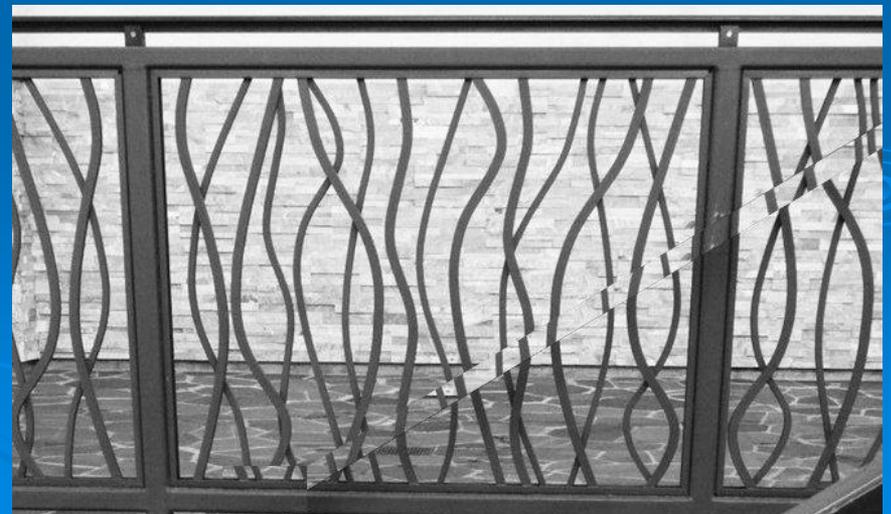
Admiralty Way looking west (proposed)



Example of Plant Palette – Madrona Marsh



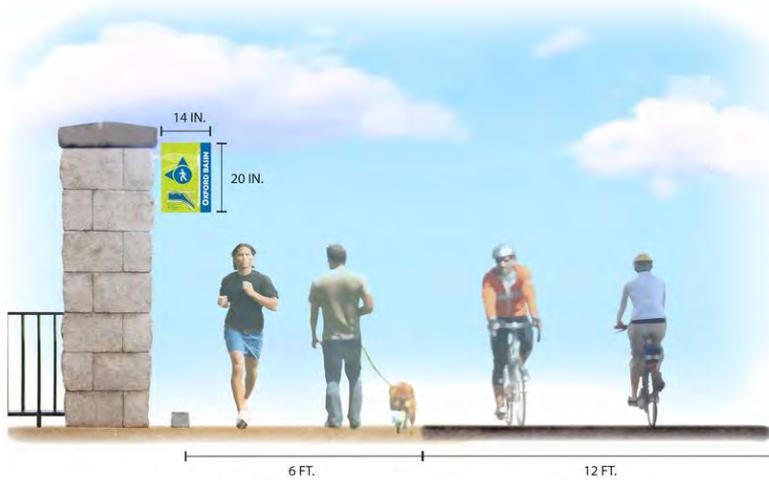
Steel Fence with Accent Panels



Overlook and Interpretive Sign



Examples of Signage



B2 Wayfinding Sign on Pilaster



C2 Wayfinding Sign on Pilaster



D1 Wayfinding Sign on Pilaster



G2 Wayfinding & Regulatory Sign



i1 Loop Map Sign on Pilaster



— Regulatory Sign on Fence



🐕 Dog Sign on Post

14 in.

OXFORD BASIN NATURE LOOP

WE INVITE YOU TO EXPLORE THE OXFORD BASIN NATURE LOOP AND DISCOVER ITS UNIQUE AND DIVERSE HABITAT. SOME OF THE SPECIES FOUND AT THE BASIN ARE SENSITIVE AND ARE ENDANGERED. WE ENCOURAGE YOU TO FIND MORE ABOUT THE ANIMALS AND THE PLACE THEY CALL HOME AS YOU ENCOUNTER OUR FIVE OBSERVATION AREAS. FOLLOW THE SIGNS AS THEY WILL SHOW YOU THE TRAIL DIRECTION AND THE MILES YOU HAVE TRAVERSED.



APPROX. LOOP PERIMETER IS:
.66 MILES
3 LAPS
= 2 MILES

OXFORD BASIN

24 in.



Loop Map Sign on Pilaster

NATIVE PLANTS: Can You Find Me ?

NATIVE PLANT COMMUNITIES OF OXFORD BASIN

NATIVE PLANTS

Native plants naturally occur in the region in which they evolved and are adapted to local rainfall, soil, and temperature conditions. Native plants have developed natural defenses to many insects and diseases, so they survive in landscapes with minimal use of water and fertilizers.

COASTAL SALT MARSH

This wetland plant community occurs along the coast where water flows from inland sources. Plants in this community are adapted to a high concentration of salt and oxygen depleted soils.

COASTAL SAGE SCRUB

This plant community, found along the coasts of northwestern Baja California is characterized by low-growing, aromatic species. Many plants in this community are summer or drought deciduous and drop larger leaves during mid-summer to conserve moisture.

WILLOW SCRUB

This dense plant community provides important browsing and foraging habitat for many riparian wildlife species. In coastal Los Angeles County, willow scrub often includes the shrubby Narrowleaf Willow.

COASTAL SALT MARSH



Salt Grass
Distichlis spicata



Southwestern Spiny Rush
Juncus acutus leopoldii



Pickleweed
Salicornia pacifica



Alkali Heath
Frankenia salina

COASTAL SAGE SCRUB



Purple Needlegrass
Nassella pulchra



California Sagebrush
Artemisia californica



California Buckwheat
Eriogonum fasciculatum



California Encelia
Encelia californica

WILLOW SCRUB



California Blackberry
Rubus ursinus



Desert Grape
Vitis girdiana



Mulefat
Baccharis salicifolia



Narrow Leaf Willow
Salix exigua

OXFORD BASIN



TIDES & THE MOON

TIDES

Tides are periodic rises and falls of bodies of water that are caused by the gravity force between the Earth and Moon. The gravitational attraction of the Moon causes the oceans to bulge out in the direction of the moon. Due to the rotation of the earth as this happens, two tides occur each day.

SPRING TIDES

Spring tides are strong tides that occur when the Earth, the Sun, and the Moon are in a line. The gravitational forces of the Moon and Sun both contribute to the tides. Spring tides occur during the full moon and the new moon.

NEAP TIDES

Neap tides are weak tides that occur when the gravitational forces of the Moon and Sun are perpendicular to one another in relation to the Earth. Neap tides occur during quarter moons.



OCEAN TIDAL EXCHANGE



TIDES IN MARINA DEL REY



TIDE GATE OPENS

The first tide gate is programmed to open during rising tides, sending water from Basin E into Oxford Basin. Water travels around the vegetated berm, until Oxford Basin's elevation reaches its maximum elevation of 1.5 feet above the mean sea level.



TIDE GATE CLOSES

The second tide gate opens during falling tides, forcing the water to circulate around the berm and out of Oxford Basin into Basin E. As this process occurs the water quality in Oxford Basin improves enhancing the habitat in Oxford Basin and the water that goes out to the ocean.

OCEAN, TIDES & STORMWATER



FROM THE DRAIN TO THE OCEAN

- 1 Water from Marina del Rey's Basin E moves in and out of Oxford Basin through two pipes that connect the two bodies of water.
- 2 The first tide gate is programmed to open during rising tides, sending water from Basin E into Oxford Basin.
- 3 Water from Marina del Rey's Basin E circulates around the vegetated berm improving oxygen levels in Oxford Basin.
- 4 Water from the drains in the streets collects in Oxford Basin.
- 5 The second tide gate opens during falling tides, forcing the water to circulate out of Oxford Basin into Marina Del Rey's Basin E.

WHEN IT RAINS, IT POURS

When it rains, the water pours in the drains and into the Oxford Basin. The two tide gates close to hold the water in the basin and release it as the sea level lowers.

- A Stormwater pours in drains.
- B Water flows to Oxford Basin.
- C Tide gates close to hold water.



OXFORD BASIN



THE LIFE & TIMES OF OXFORD BASIN



1800S: BALLONA MARSHLANDS



1928: SITE USED FOR AGRICULTURE



1956: SITE REHABILITATES FOR FUTURE BASIN



1965: OXFORD BASIN BUILT



1972: MARINA CITY CLUB TOWERS & OXFORD BASIN



1989: MARINA CITY CLUB TOWERS & OXFORD BASIN



2012: OXFORD BASIN TODAY



1920

1930

1940

1950

1960

1970

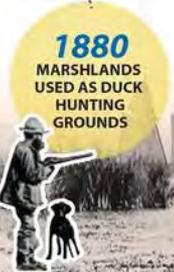
1980

1990

2000

2010

2020



1880
MARSHLANDS USED AS DUCK HUNTING GROUNDS



1937
ERECTION OF OIL WELLS THROUGHOUT VENICE PENINSULA



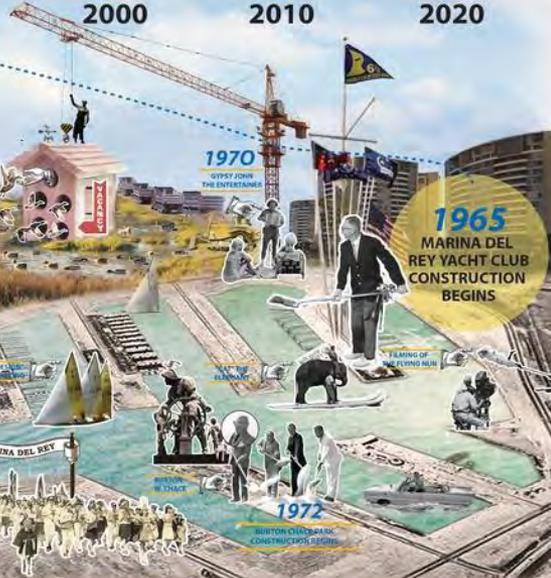
1965
BASIN DESIGNATED AS BIRD CONSERVATION AREA



1957
MARINA DEL REY HARBOR BASINS BEGIN



1963
MARINA DEL REY HARBOR BASINS COMPLETE



1970
GYPSY JOHN THE ENTERTAINER

1965
MARINA DEL REY YACHT CLUB CONSTRUCTION BEGINS

1972
BOSTON CHRYSLER BLDG CONSTRUCTION BEGINS

HISTORICAL PHOTOGRAPHY PROVIDED BY MARINA DEL REY HISTORICAL SOCIETY

OXFORD BASIN





Estimated Total Project Cost & Construction Schedule

- Target Construction Start: Spring 2014
 - Currently applying for permits
 - Mitigated Negative Declaration public review
- Estimated Construction Duration – 10 Months
- Estimated Total Construction Cost: \$6.7 Million
 - Supervisorial District 4 - \$1M
 - SMBRC Prop 84 Grant - \$2M
 - IRWM Prop 84 Grant – *up to* \$1.5M
 - LACFCD – \$2.2M to \$3.7M



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