

Technical Report for Schematic Design & Air Pollution Reduction Measures Report

NATURAL PARK at Ramona Gardens Housing Development



PRESENTED TO **LEGACY LA**



Mountains Recreation &
Conservation Authority



VS₂ Consulting Inc.
create • restore • thrive



swa



FUNDED BY



The
Rosalinde and Arthur
Gilbert Foundation



RED GREEN BLUE FUND OF THE LIBERTY HILL FOUNDATION

The Natural Park at Ramona Gardens Housing Development

Combining community priorities, air pollution reduction measures, ecosystem science and engineering, the **Natural Park** will improve public health by transforming land between Ramona Gardens and the 15-lane freeway corridor into a beautiful 'Nature in the City' park. This innovative '**Big Nature/La Naturaleza en Grande**' plan features an Anti-Pollution Green Buffer with over 15,000 native trees, shrubs and plants and a pollution/sound barrier to reduce air pollutants and noise, recycle stormwater, build resiliency to climate change and provide green open space for families and children to gather, walk and play.

Legacy LA

Legacy LA is a non-profit, community-based youth development organization dedicated to long-term community change. Legacy LA positively intervenes in the lives of young people by providing tools to transform their lives and communities, including alternatives to gangs and violence. Legacy LA's flagship youth leadership program uses a social justice model to increase youths' knowledge of community issues, civics, and community organizing to build their capacity to address public health and environmental justice issues and systems that affect their lives. Legacy LA is a leader in the effort to address public health problems in Boyle Heights by improving air quality, education, and employment conditions and creating green open space.

Community Conservation Solutions (CCS)

CCS is a non-profit organization that implements innovative projects to benefit both human and natural communities. CCS develops nature-based solutions that address public health and other problems by using an ecosystem science approach to improve air quality, reduce greenhouse gases, clean and re-use stormwater, build resiliency to climate change, restore native habitat and create recreation and green open space in communities with the greatest needs.

Mountains Recreation and Conservation Authority (MRCA)

The MRCA is dedicated to the preservation and management of local open space and parkland, wildlife habitat, watershed lands and trails, and to ensuring public access to public parkland. The MRCA provides natural resources and scientific expertise, regional planning services, and education and leadership programs.

For more information, contact

www.conservationsolutions.org
or www.legacyla.org
or sarah.kevorkian@mrca.ca.gov

THE PROJECT TEAMS

Project Teams included Legacy LA, Community Conservation Solutions and the Mountains Recreation and Conservation Authority

Feldman Consulting Project Lead, Direction and Design

Feldman Consulting provides strategic and practical guidance on complex environmental, community, land use and water issues to move projects from vision to successful implementation. We specialize in innovative approaches and on integrating multiple benefits to create landmark conservation, park, community-serving and development projects.

VS2 Consulting Inc. Civil Engineering, Stormwater and Sustainability

VS2 Consulting Inc. provides planning, civil and environmental engineering, and project/program management services to institutional, public, and private clients. We leverage our expertise, local knowledge, and innovative approach to help deliver sustainably-conceived and engineered solutions to our client partners.

SWA Landscape Architecture

SWA is a landscape architecture, urban design and planning firm, with seven studios worldwide. SWA's public park portfolio focuses on improving quality of life in cities by addressing issues of density, pollution, sustainability, community programming, arts, and culture.

Land IQ Habitat Restoration and Soil Science

Land IQ specializes in providing solutions to challenging agricultural and environmental problems throughout the western United States. Native habitat restoration services include revegetating and reclaiming disturbed landscapes, and natural resources planning, analysis, and management.

WSP USA Air Quality Research and Analysis

WSP USA is the U.S. operating company of WSP, one of the world's leading engineering and professional services firms. Dedicated to serving local communities, we are engineers, planners, technical experts, strategic advisors and construction management professionals. WSP USA designs lasting solutions in the building, transportation, energy, water and environment markets.

P2S Mechanical, Electrical and Plumbing Engineering

P2S is a consulting engineering and commissioning firm committed to innovative designs, sustainable solutions, and exceptional services. P2S believes in helping its customers succeed by providing high-quality professional engineering services that are responsive to the needs of the company and the greater community.

Miyamoto International Structural Engineering

Miyamoto International is a global structural engineering and disaster-risk reduction firm providing resiliency expertise that sustains industries and safeguards communities around the world.

Murow Development Consultants Cost Control Consultant

Murow Development Consultants serves the land development and construction industry throughout the western U.S. The firm has ten divisions specializing in dry utility consulting and coordination, bid administration, project and construction management, cost estimating and budgeting, entitlement services, and litigation support.

Technical Report for Schematic Design & Air Pollution Reduction Measures Report

NATURAL PARK at Ramona Gardens Housing Development

Public Health • Air Quality • Stormwater • Native Habitat • Green Open Space • Walking Trail • Recreation



Mountains Recreation & Conservation Authority

PROJECT TEAM



VS₂ Consulting Inc.
create • restore • thrive



swa



RED GREEN BLUE FUND
OF THE LIBERTY HILL
FOUNDATION



The Natural Park at Ramona Gardens is part of California Climate Investments, a statewide program that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment—particularly in disadvantaged communities. For more information, visit the California Climate Investments website at www.caclimateinvestments.ca.gov.

LOCATION MAP



FIGURE 1: The Ramona Gardens Housing Development is in one of the most polluted communities in California and is next to 15 lanes of freeway and transit corridor. This includes the I-10 freeway (one of the busiest in the United States) carpool and bus lanes and a Metrolink train line. The Natural Park project site is immediately adjacent to the transit corridor.

CONTEXT MAP



CONTEXT PHOTO



COMMUNITY PRIORITIES FOR NATURAL PARK

The elements below were identified as top priorities by residents and community members through community workshops, Legacy LA's door-to-door survey of 500 residences at Ramona Gardens, and meetings with stakeholders. Community input was the driving force in development of the 'Big Nature/La Naturaleza en Grande' concept design for the Natural Park at Ramona Gardens.



Gathering input from all ages at a community workshop



Sean Vargas, VS2 Consulting Inc. receives community input on concept plan. Photos by David Ng

FIGURE 2: Community Priorities for Natural Park

ILLUSTRATIONS:
ANTI-POLLUTION
GREEN BUFFER



swa

VS₂ Consulting Inc.
create • restore • thrive

LAND IQ



NATURAL PARK AT RAMONA GARDENS

Cross-section
at Middle of Natural Park

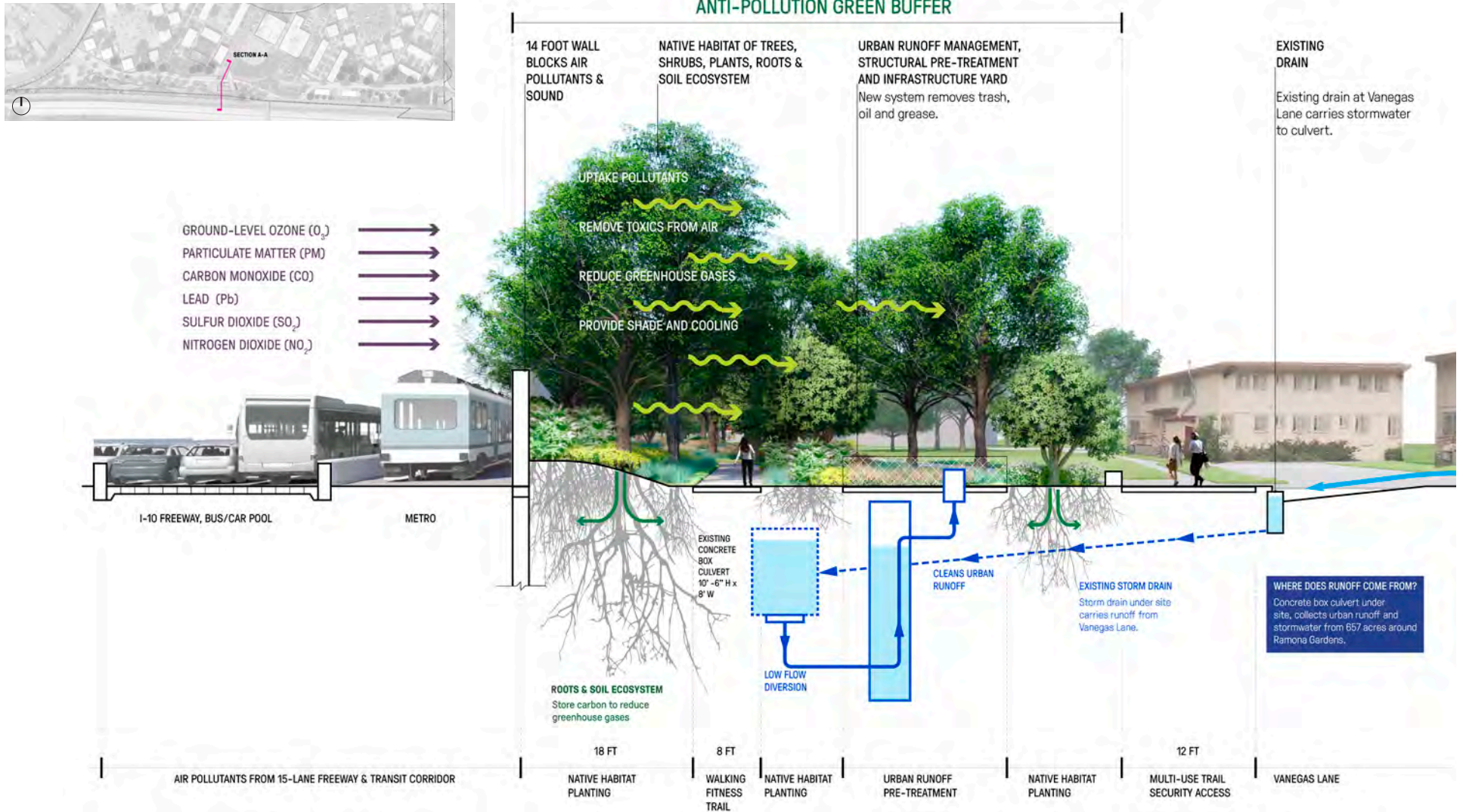


FIGURE 13: Cross-section at middle of Natural Park shows above-ground and below-ground elements



swa

VS₂ Consulting Inc.
create • restore • thrive

LAND IQ



NATURAL PARK AT RAMONA GARDENS

Anti-Pollution Green Buffer
Arroyo & Walking Trail



FIGURE 5: Artist's rendering of Anti-Pollution Green Buffer, Arroyo & Walking Trail



swa

VS₂ Consulting Inc.
create • restore • thrive

LAND IQ



NATURAL PARK AT RAMONA GARDENS

La Plaza Verde



FIGURE 6: Artist's rendering of La Plaza Verde on an event or swap meet day



swa

VS₂ Consulting Inc.
create • restore • thrive

LAND IQ



NATURAL PARK AT RAMONA GARDENS

The Active Place: The Summit



FIGURE 17: Artist's rendering of active recreation zone, courts and walking trail at Indiana Avenue



swa

VS₂ Consulting Inc.
create • restore • thrive

LAND IQ



NATURAL PARK AT RAMONA GARDENS

Longitudinal Cross-section
Vanegas Lane to La Plaza Verde

ANTI-POLLUTION GREEN BUFFER

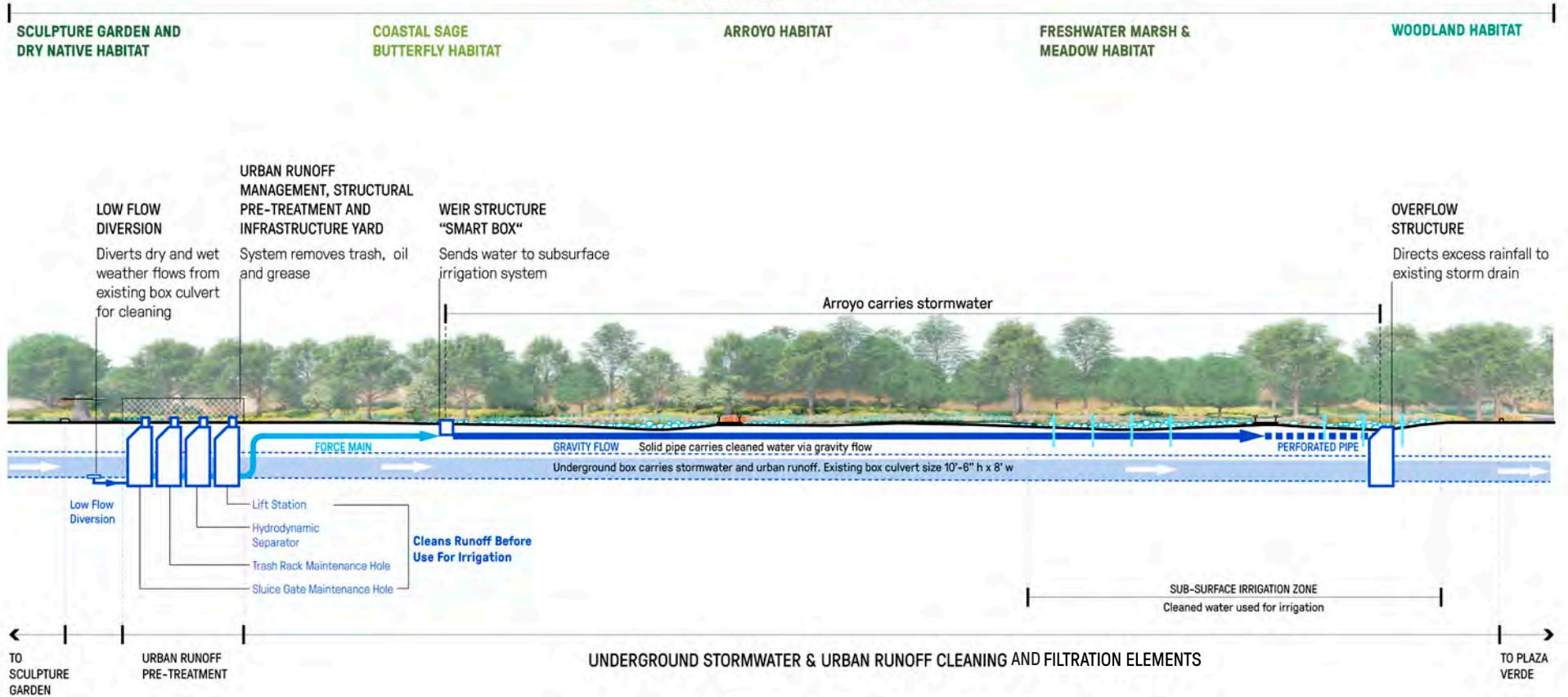


FIGURE 15: Longitudinal Cross-Section from Vanegas Lane to La Plaza Verde at Murchison Street

ILLUSTRATIVE
SITE PLANS:
ANTI-POLLUTION
GREEN BUFFER



swa

VS₂ Consulting Inc.
create • restore • thrive

LAND IQ



NATURAL PARK AT RAMONA GARDENS

Big Nature Illustrative Plan



FIGURE 10: Natural Park Illustrative Plan



swa

VS₂ Consulting Inc.
create • restore • thrive

LAND IQ



NATURAL PARK AT RAMONA GARDENS

Big Nature Illustrative Plan

Native Habitat & Anti-Pollution Green Buffer



A Living Partnership: Native Trees, Plants and Soil Biome Reduce Air Pollutants and Store Carbon

The Natural Park restores a healthy ecosystem of trees and plants native to this part of Southern California.

- **Above-ground:** Year-round leaf canopies in many layers
- **Below-ground:** Extensive root systems and soil organisms
- 153 trees
- 110 tree-sized shrubs
- Over 15,000 understory plants, flowers, native grasses

Anti-Pollution Green Buffer

Reduces air pollution and noise from the 15-lane freeway by integrating:

- Earth Mounds
- Native Habitat: Trees, Large Shrubs, Plants, Grasses
- Extensive Leaf Canopies and Root Systems
- Healthy Soil Ecosystems
- Pollutant Barrier and Sound Wall, 14 feet high

FIGURE 12: Illustrative Plan: Native Habitat & Anti-Pollution Green Buffer



swa

VS₂ Consulting Inc.
create • restore • thrive

LAND IQ



NATURAL PARK AT RAMONA GARDENS

Big Nature Illustrative Plan

Urban Runoff and Stormwater Re-Use

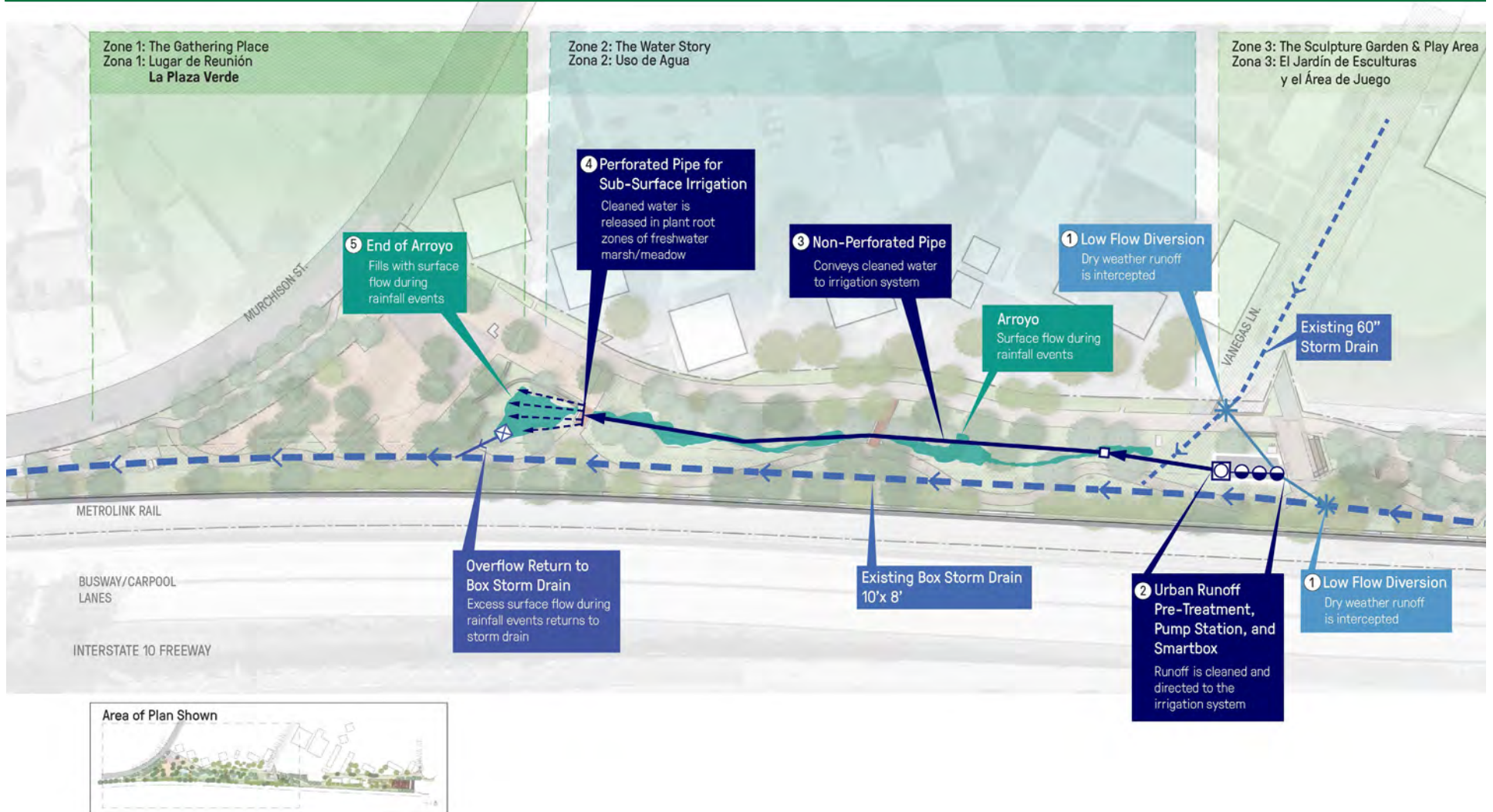


FIGURE 14: Illustrative Plan: Urban Runoff and Stormwater Re-Use



swa

VS₂ Consulting Inc.
create • restore • thrive

LAND IQ



NATURAL PARK AT RAMONA GARDENS

Big Nature Illustrative Plan

Public Use, Art and Recreation

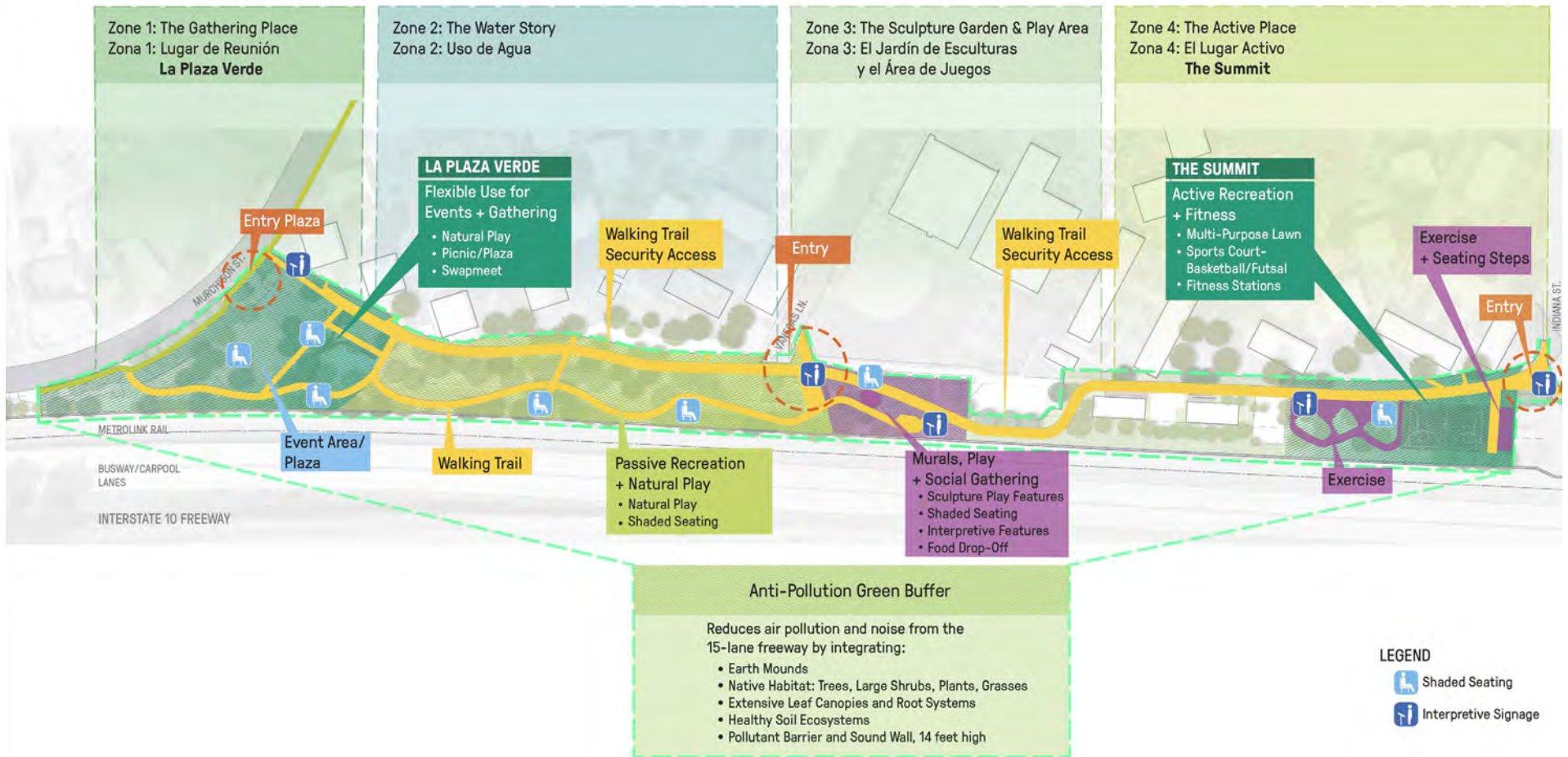


FIGURE 16: Illustrative Plan: Public Use, Art and Recreation



swa

VS₂ Consulting Inc.
create • restore • thrive

LAND IQ



NATURAL PARK AT RAMONA GARDENS

Layout Plan
On Event / Swap Meet Day



KEY

- | | | | |
|---|---|--|---|
| <ul style="list-style-type: none"> --- PROJECT BOUNDARY --- HOUSING AUTHORITY OF CITY OF L.A. / OTHER OWNERSHIP BOUNDARY --- AIR RENEWAL BUFFER ZONE (10 METERS FROM WALL) UTILITY EASEMENT | <ul style="list-style-type: none"> SPECIAL PAVING 1 SPECIAL PAVING 2 CONCRETE COMPACTED DECOMPOSED GRANITE (DG) | <ul style="list-style-type: none"> WOOD PLAYING RUBBER SURFACE BASKETBALL / FUTSAL COURT SOFTSCAPE MARSHLAND PLANTING | <ul style="list-style-type: none"> EXISTING TREE NEW TREE NEW TREE |
|---|---|--|---|
-
- | | | | | | |
|---|---|--|--|--|---|
| <ul style="list-style-type: none"> (A) MURCHISON ST ENTRY (B) BIOSWALE (C) SIDEWALK (D) 10 FOOD STALLS W/ HOOK UP | <ul style="list-style-type: none"> (E) LOCATION FOR SINK (F) ONE WAY VEHICULAR DRIVE (G) 56 REGULAR STALLS (H) SEATING WALL | <ul style="list-style-type: none"> (J) SEAT WALL & PARK SIGNAGE (K) BRIDGE (L) VANEGAS LANE ENTRY (M) FOOD DROP-OFF / ACCESS | <ul style="list-style-type: none"> (N) AIR RENEWAL BUFFER PLANTING (P) SCULPTURE PLAY FEATURES: <ul style="list-style-type: none"> • SHADED SEATING • MURALS AND ART • INTERPRETIVE FEATURES | <ul style="list-style-type: none"> (Q) MULTI-PURPOSE LAWN (R) FITNESS STATION (S) PICNIC TABLES (T) INDIANA ST ENTRY | <ul style="list-style-type: none"> (U) EXERCISE / SEATING STEPS (V) PARK ENTRY SIGNAGE (#) NO. OF STALLS / TENTS |
|---|---|--|--|--|---|

FIGURE 9

EXHIBIT 5

ABOUT THE PROJECT TEAM

Community Conservation Solutions (CCS) Project Direction and Design

CCS is a non-profit organization that implements innovative projects to benefit both human and natural communities. CCS develops nature-based solutions that address public health and other problems by using an ecosystem science approach to improve air quality, reduce greenhouse gases, clean and re-use stormwater, build resiliency to climate change, restore native habitat and create recreation and green open space in communities with the greatest needs.

VS2 Consulting Inc. Engineering and Stormwater, Green Infrastructure

VS2 Consulting Inc. provides planning, civil and environmental engineering, and project/program management services to institutional, public, and private clients. We leverage our expertise, local knowledge, and innovative approach to help deliver sustainably-conceived and engineered solutions to our client partners.

SWA Landscape Architecture

SWA is a landscape architecture, urban design and planning firm, with seven studios worldwide. SWA's public park portfolio focuses on improving quality of life in cities by addressing issues of density, pollution, sustainability, community programming, arts, and culture.

Land IQ Habitat Restoration and Soil Science

Land IQ specializes in providing solutions to challenging agricultural and environmental problems throughout the western United States. Native habitat restoration services include revegetating and reclaiming disturbed landscapes, and natural resources planning, analysis, and management.

WSP USA Air Quality Research and Analysis

WSP USA is the U.S. operating company of WSP, one of the world's leading engineering and professional services firms. Dedicated to serving local communities, we are engineers, planners, technical experts, strategic advisors and construction management professionals. WSP USA designs lasting solutions in the building, transportation, energy, water and environment markets.

P2S Mechanical, Electrical and Plumbing Engineering

P2S is a consulting engineering and commissioning firm committed to innovative designs, sustainable solutions, and exceptional services. P2S believes in helping its customers succeed by providing high-quality professional engineering services that are responsive to the needs of the company and the greater community.

Miyamoto International Structural Engineering

Miyamoto International is a global structural engineering and disaster-risk reduction firm providing resiliency expertise that sustains industries and safeguards communities around the world.

Murow Development Consultants Cost Control Consultant

Murow Development Consultants serves the land development and construction industry throughout the western U.S. The firm has ten divisions specializing in dry utility consulting and coordination, bid administration, project and construction management, cost estimating and budgeting, entitlement services, and litigation support.





Mountains Recreation & Conservation Authority



FUNDED BY



The Rosalinde and Arthur Gilbert Foundation



RED GREEN BLUE FUND OF THE LIBERTY HILL FOUNDATION



The Natural Park at Ramona Gardens is part of California Climate Investments, a statewide program that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment—particularly in disadvantaged communities. For more information, visit the California Climate Investments website at www.caclimateinvestments.ca.gov.



Printed on recycled paper