



***DRAFT FINAL 10-12-16***  
**PUENTE HILLS LANDFILL  
PARK MASTER PLAN**

**County of Los Angeles Department of Parks and Recreation**  
Supervisor Don Knabe, 4th District and Supervisor Hilda Solis, 1st District

**A PARK FOR ALL**





# **PUENTE HILLS LANDFILL PARK MASTER PLAN**

## **County of Los Angeles Department of Parks and Recreation**

John Wicker, Director  
Norma Garcia, Deputy Director  
Planning and Development Agency

## **County of Los Angeles Board of Supervisors**

Supervisor Don Knabe, Fourth District  
Supervisor Hilda Solis, First District

October 2016

Prepared by:

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PUENTE HILLS LANDFILL, LOOKING SOUTHWEST,  
MARCH 2015. AERIAL PHOTOGRAPH: SANITATION  
DISTRICTS OF LOS ANGELES COUNTY.

## **Acknowledgments:**

Gracious thanks to the hundreds of community participants, stakeholders and public officials who dedicated time, energy and vision to this grand park for future generations.

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Edward Humes, author of *Garbology, Our Dirty Love Affair with Trash* for sharing the human stories of the Puente Hills Landfill and revealing the staggering global impacts of our modern-day waste. Your journalism inspires our urgency for responsible stewardship of this earth.

# PUENTE HILLS LANDFILL PARK MASTER PLAN



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THE MULTI-LEVEL TOPOGRAPHY OF THE PUENTE HILLS LANDFILL, LOOKING EAST, MARCH 2015. AERIAL PHOTOGRAPH: SANITATION DISTRICTS OF LOS ANGELES COUNTY.

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**PROPOSED PARK TOP DECKS**

## 0.2 PARK STATEMENT

**ACROSS THE COUNTRY,  
THE PRACTICE OF TURNING  
LANDFILLS INTO PARKS IS  
INCREASINGLY POPULAR IN  
URBAN ENVIRONMENTS WHERE  
OPEN SPACE IS SCARCE.**

**A Park for All.** This project is about framing an extraordinary future today, for ourselves, our children, their children, and the ages beyond. This is that rare restoration endeavor that evolves over a long period of time, with the ground literally moving under one's feet over the decades. The closure of the Puente Hills Landfill presents an extraordinary opportunity to provide the region, the residents of the eastern San Gabriel Valley, and particularly those of the surrounding neighborhoods with a park that offers trails, fitness activities, access to an adjacent nature preserve area, and unique ways to experience stunning panoramic views and open space.

Creating a more livable environment for residents of the greater Los Angeles area includes providing additional parks and open space for park poor communities. With ever increasing urban density, the availability of over a hundred acres for park land is a boon to disadvantaged populations that need recreational space for family activities and fitness. The first of several conditional use permits between Los Angeles County and the Sanitation Districts in 1983 set in motion the eventuality that a regional park be developed within the larger landfill site once it closed.

The Puente Hills Landfill Park literally elevates a park into the hills, which over time will provide a distinctive recreational experience that takes advantage of the landfill slopes, the landfill capped top decks and regional trail connectivity on the Puente Hills ridgeline. The initial projects, a fraction of the total site, will establish a new narrative that will highlight the inherent beauty of the site and set the scene for stunning landscapes to evolve over the next generation.

At Puente Hills, an extraordinary place that has served Southern California for over half a century will be renewed. It will be unusually optimistic in its ultimate outcome, among the greatest and most beautiful public parks in the County, and in its faith in the greater community's commitment to the future. This project embodies the idea that infrastructure and beauty are at their best, inseparable and deeply meaningful. Eventually, more land within the landfill may become available for inclusion into the park to further support both recreational and wildlife connectivity in the Puente Hills.

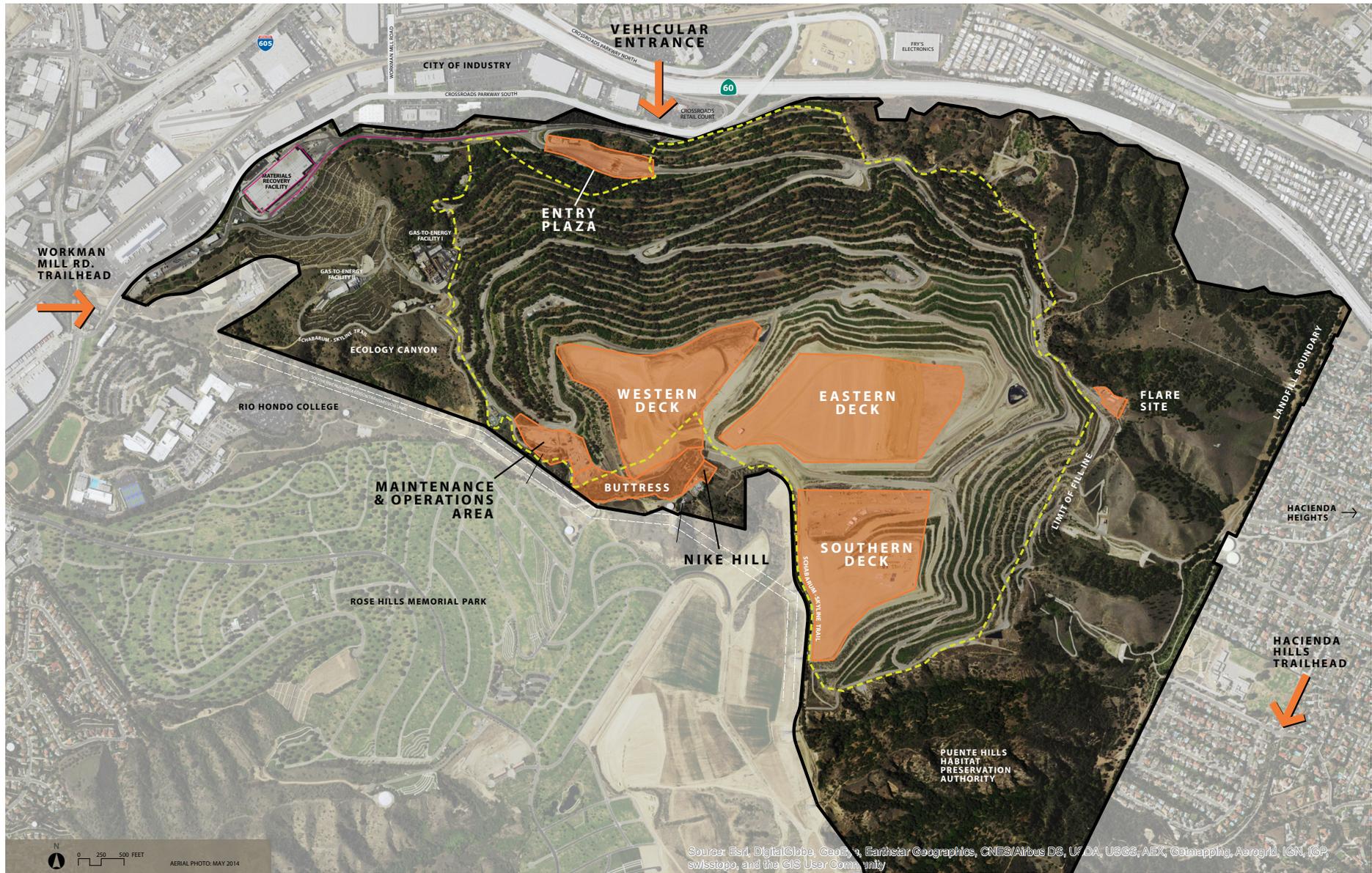


METHANE PIPES ON THE SOUTHERN DECK RIM CREATE A STRIKING JUXTAPOSITION WITH THE NATIVE OAK WOODLANDS AND THE CITY BEYOND.



# 1.0

## INTRODUCTION



SITE ORIENTATION MAP AND THE PROPOSED AREAS OF THE PARK.

# 1.1 INTRODUCTION

Located at the western tip of the Puente Hills rising high above the San Gabriel River, the site of a former landfill is being transformed into a regional park by the Los Angeles County Department of Parks and Recreation. The extraordinary placement of new parklands atop a capped mountain of waste inspires a sense of wonder and awe when viewing the scenic river and valley far below from the highest point on the site.

The landfill evolving over the decades is a profound marker of human history in the Puente Hills. Just as the Puente Hills Landfill was once native hills and canyons, once again the site will evolve to accommodate a regional park. The Puente Hills Landfill Park Master Plan will convert the nation's former largest landfill to a regional park for the greater Los Angeles area.

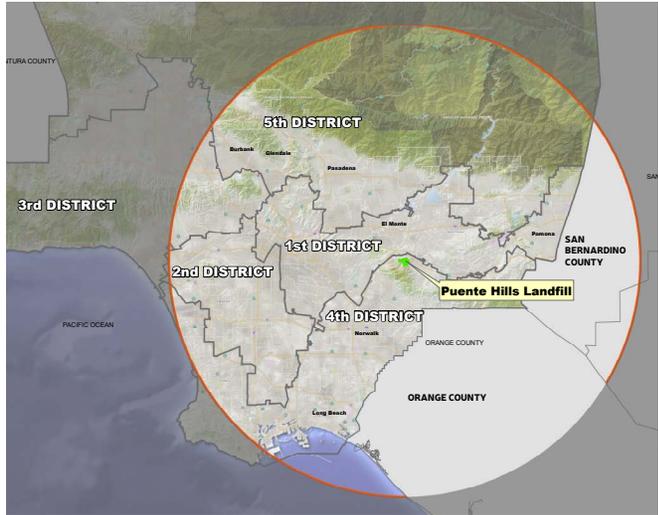
Approximately 142 acres set within the 1,365-acre former landfill site is included in the master plan for park development. The top decks of the landfill will be re-invented and improved over time to make the site function as a park from the first phase to the final phase. Park spaces, landscape and programming will transition and adapt as necessary as the landfill continues to settle. Layers of trails, layers of programmed spaces and layers of vegetation will be lightly placed into the Park in response to the dynamic shifting of the flat capped decks.

Threading through the vegetated slopes and lines of actively collecting methane pipes, the Schabarum-Skyline Trail provides an amazing and highly active trail connection through the landfill site that extends from the San Gabriel

River through the Puente Hills Significant Ecological Area. The east-west trail connectivity throughout Puente Hills is a unique and valued recreational component. This existing regional trail will remain the recreational backbone of the future park throughout its evolution over the next fifty to seventy five years.

Adaptation and flexibility of spaces will be on-going in response to post-closure landfill maintenance and repairs. Anchoring this ever-changing environment are three park structures strategically placed on non-fill. The Visitor Center will welcome patrons at the park entry, a scenic terrace will be part of the overlook at the very top and a trail lift will provide public transportation between the entry and the overlook.

**THE PUENTE HILLS LANDFILL, FORMERLY AMERICA'S LARGEST AND DEEPEST, IS READY FOR A NEW LIFE: TO BE UPCYCLED AND RECREATED INTO LOS ANGELES COUNTY'S NEWEST PARK**



**THE 25-MILE REGIONAL PARK SERVICE RADIUS AROUND THE LANDFILL COVERS A THIRD OF LOS ANGELES COUNTY AND PORTIONS OF SAN BERNARDINO AND RIVERSIDE COUNTIES.**

## PUENTE HILLS LANDFILL PARK STATISTICS:

- Master Plan Scope: 20 years
- Regional Park: 25-mile service radius
- The Park is approximately 142 acres or 9.6% of landfill property.
- Eventual park acreage: 600 acres, including side slopes (available after 75+ years)
- Total landfill property is 1,365 acres.
- Landfill operated for 56 years (1957-2013).
- Landfill contains 130 million tons of waste.
- Deepest fill area: 500 feet.
- The filled areas will shift and settle over time.
- Maximum settling: 125 feet.
- Time needed for majority of settling to occur: at least 30 years.
- Time needed for methane gas production to complete, making side slopes available for park use: over 75 years
- Highest point in park (Nike Hill): elev. 1,160'
- Park entry (Crossroads Pkwy South): elev. 300'
- Park Entry Plaza: elev. 400'
- Western trailhead (Workman Mill Rd.): elev. 240'
- Eastern trailhead (Hacienda Hills): elev. 500'
- Maximum elevation change: 920' (Western trailhead to Nike Hill)
- Trail lift: 1.2 mile route, 760' elevation change (Park Entry Plaza to Nike Hill)
- Site is the western terminus of the 31 mile-long Puente-Chino Hills Wildlife Corridor



PANORAMIC VIEW FROM NIKE HILL OVER THE WESTERN, EASTERN AND SOUTHERN DECKS OF THE LANDFILL



WESTERN AND EASTERN DECKS WITH NORTH VIEW TO THE SAN GABRIEL MOUNTAINS NATIONAL MONUMENT



**EASTERN DECK**

**SOUTHERN DECK**



**SOUTHWEST VIEW TO ECOLOGY CANYON AND RIO HONDO COLLEGE**



**EASTERN AND SOUTHERN DECKS WITH NORTHEAST VIEW OF THE SAN GABRIEL VALLEY**



## 1.2 MASTER PLAN PROCESS

The Puente Hills Landfill Park Master Plan is the first step of many down the path of transforming a landfill into a park. It represents a significant milestone of consensus building between the Sanitation Districts and Los Angeles County Department of Parks and Recreation. These two parties were joined to a common purpose by a Joint Powers Agreement in 1987. Most recently in the Conservation Open Space Policy of the Los Angeles County General Plan, adopted in October 2015, Los Angeles County designated the Puente Hills landfill site as “Recommended Open Space” and the ultimate use of the landfill site upon closure has been identified for recreational use.

The inherent site complexities have required extensive site study, discussion, review and feedback from all those involved. Multiple agencies, community groups, local and regional stakeholders and two Los Angeles County Supervisors have been, and will continue to be involved throughout the planning process.

The Los Angeles County Department of Parks and Recreation has taken the lead in the development of a concept plan and related technical studies. Ongoing management and maintenance requirements of the landfill continue to inform the proposed park design and park programming.

The Final Concept Plan and subsequent phasing plans are diagrammatic and flexible, providing a

road map for park development that will change and evolve over the life of the master plan and beyond.

### **Desired Outcomes of the Planning Process**

- Set the stage for a destination regional park and create a flexible & adaptive plan for evolving future needs.
- Provide sequential resource-efficient park phasing through full park build-out.
- Demonstrate through the public outreach process that the park vision, design and goals are responsive to the community, stakeholders, County agencies and the Board of Supervisors.
- Meet the operations and maintenance needs of both the Los Angeles County Department of Parks and Recreation and the Sanitation Districts, optimizing areas for shared facilities and operations.

An Environmental Impact Report (EIR) will be completed in early fall of 2016, informed by the Final Concept Plan and technical documents. Public comment on the EIR will lead to additional revisions to the draft document, resulting in the Final Master Plan. Adoption of the Final Master Plan is anticipated in October 2016. Portions of Phase One park construction may commence as early as 2019.

**FACING PAGE: “LIMIT OF FILL” MARKER AT THE SOUTHERN EDGE OF THE LANDFILL**

## 1.3 SITE HISTORY

### Landfill History

The Puente Hills Landfill first opened in 1957 as the privately-owned San Gabriel Valley Dump, operating in the Puente Hills canyons. In the mid-1960s, the Sanitation Districts identified the 500 acre dump site as a location to provide the long-term disposal capacity for the southern and eastern portions of Los Angeles County and in 1970, the Sanitation Districts purchased 1,214-acres for a landfill site which included the dump. The Sanitation Districts renamed it the Puente Hills Landfill and operated the Class III sanitary landfill (restricted from liquid, hazardous or radioactive wastes) as a regional solid waste disposal site, ultimately enlarging the site to its present 1,365 acres.

In 1983, The Los Angeles County Department of Regional Planning approved Conditional Use Permit No. 2235-(1) which allowed for the continued operation and expansion of the Puente Hills Landfill. Notably, Condition No. 21 of the CUP required the Sanitation District to enter into an irrevocable agreement with the County of Los Angeles or alternate public agency to designate the refuse-filled (referred to as “fill”) portions of the site as open space in perpetuity. The two entities entered into a Joint Powers Agreement (JPA) in 1987 which required the Sanitation District to offer the County portions of fill areas for park and recreation purposes after they were brought to finished or final elevation and grade and no longer needed for landfill operations.

The JPA also acknowledged the Sanitation District’s need to operate and maintain the environmental control systems in the designated



PHOTO CREDIT: Venue / v-e-n-u-e.com

open space areas and that the park and any subsequent improvements would not impair the Sanitation District’s activities or systems that protect public health, safety, and the environment. In 2002, the County extended the permit for the Landfill’s operations with CUP Case No. 02-027-(4) and conditions related to the final recreational use of the site were further refined.

Over the years, the landfill has employed numerous innovative, environmental approaches including generating electricity from landfill gas, managing materials recovery and recycling programs, and acquiring and maintaining local native habitat as open space. “Tipping fee” surcharges for deposited waste created funds that established the Puente Hills Native Habitat Preservation Authority. These funds are also for the acquisition and preservation of land, and for the development of the future Landfill Park.

On October 31, 2013, the Puente Hills Landfill ceased operations after 56 years of receiving trash from homes and businesses in over 60 cities and unincorporated areas within Los Angeles County. Refuse has been placed on approximately 602 acres of the 1,365 acre premises. Final protective clay earthen caps cover the fill areas at varying thicknesses of 5 to 12 feet, and prevent stormwater from infiltrating into the fill.

Although the Puente Hills Landfill is closed and no longer accepting trash, operations and post-closure maintenance will continue for 75+ years until the buried trash is fully settled and stable. In 2016, the JPA is expected to be amended and

**ABOVE: LANDFILL OPERATIONS IN 2012, WITH WASTE COVERED EACH DAY BY A SOIL LAYER.**

SAN JOSE CREEK

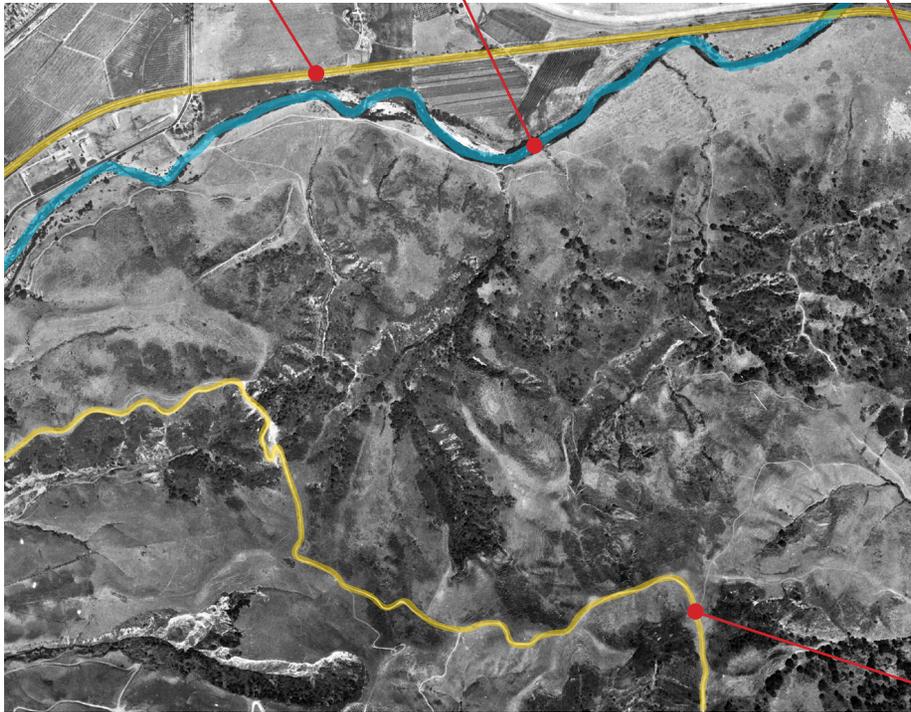
THE MATERIALS RECOVERY FACILITY (MRF) AT THE BASE OF THE LANDFILL SORTS RECYCLABLE MATERIALS.

A FUTURE "WASTE-BY-RAIL" SYSTEM WILL SHIP TRASH IN CONTAINERS 200 MILES SOUTH TO A NEW LANDFILL NEAR THE SALTON SEA.

130 MILLION TONS OF WASTE OVER 56 YEARS FILLED AND BURIED THE CANYONS. SOME FILL AREAS ARE NOW 500 FEET DEEP.

DURING THE ENSUING SIX DECADES SAN JOSE CREEK WAS CHANNELIZED NORTH OF THE RAILROAD LINE.

UNION PACIFIC RAILROAD LINE



1954

2015

SCHABARUM-SKYLINE TRAIL REMAINS RELATIVELY UNCHANGED DURING THE LAST SIX DECADES.

THIS PAGE: COMPARISON OF 1954 AND 2015 AERIAL PHOTOGRAPHS.

restated by the two parties, to incorporate developments from the park master planning process and include more detailed agreements about respective roles and responsibilities in the development, operation and maintenance of specific areas of the site.

### Cultural Resources Survey Overview

A cultural resources survey was completed for 11 areas where park facilities are proposed at the Puente Hills Landfill, pursuant to environmental planning regulations of the California Environmental Quality Act (CEQA) for this park master planning process. The survey was completed July 8, 2015, by ECORP Consulting, Inc. Except for a portion of Nike Hill, all areas are graded, disturbed, or covered by landfill.

Results of the records search conducted at the South Central Coastal Archaeological Information Center (SCCIC) indicate that 15 cultural resources studies have been previously conducted between 1978 and 2011 on the landfill property, which includes the Project survey areas.

A total of 13 cultural resources had been previously documented on the landfill property, (Table 1). All were evaluated as not significant and the archaeological sites were destroyed by landfill operations.

A search of the Sacred Lands File was conducted with the Native American Heritage Commission (NAHC) in Sacramento, California. The search was requested to determine whether there are sensitive or sacred Native American resources in the vicinity of the Project area that could be affected by the Project. The NAHC reports that a search of the Sacred Lands File failed to indicate the presence of Native American cultural resources in or near the Project area.

### Cultural Landscape

The Puente Hills Landfill is a highly altered landscape. The existing canyons were filled with refuse and then covered with soil taken from elsewhere on the Landfill property. The engineered slopes that contain the covered refuse were terraced and trees (pine, eucalyptus, and pepper) and shrubs were planted. This artificial landscape was created between 1970 and 2013 and was not in its final form until circa 2013. Because it is not yet 50 years old, the landscape is not considered a historical resource.

There are no known Historical Resources in the Project area, therefore the Project will not result in significant impacts to any known Historical Resources.

### Nike Missile Site (Nike Hill) History

Nike Hill gets its name from the historical guard structure and plaque which were moved to the hill to commemorate the Cold War-era Nike missile sites that ringed Los Angeles County around 1954-1974. For two decades a ring of 16 Nike missile sites surrounded the Los Angeles basin to protect the region from Soviet bombers. However, there was never a Nike missile site at this location.

The State of California Department of Parks and Recreation has record of the resource as “Nike Air Defense Missile LA-14/29 Commemorative Site.” The guard structure was relocated from its original location, Site LA-14 in South El Monte off Workman Mill Road. It also commemorates Site

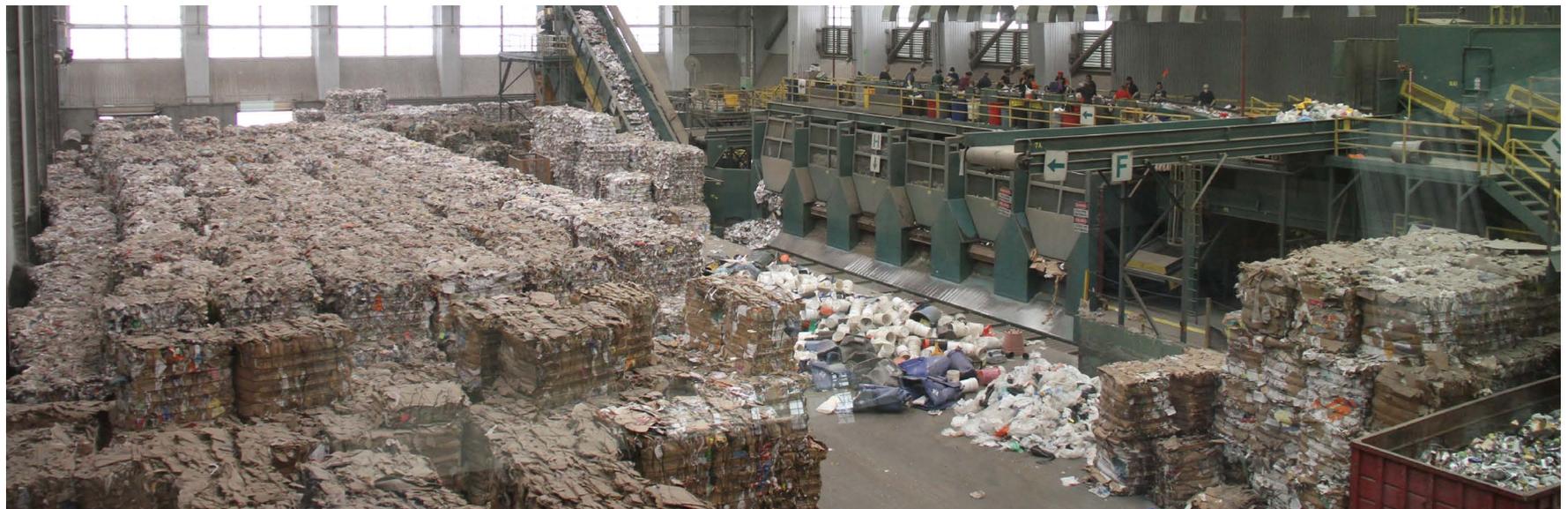
LA-29 which was in the Puente Hills in Brea, now since cleared and redeveloped. The Nike Missile Site consists of a guard house and a plaque that were moved from elsewhere. The Nike Missile Site (P-19-188496) has been evaluated as not eligible for the California Register of Historical Resources.

No archaeological material more than 50 years old was found during survey of this area. The Nike Missile Site (P-19-188496) is not eligible for the CRHR and is not a Historical Resource as defined by CEQA.

**TABLE 1: PREVIOUSLY RECORDED CULTURAL RESOURCES ON THE LANDFILL PROPERTY**

Resource Designation	Period	Description	Recorded By
P19-002553	Prehistoric	Four mano fragments	R. Shepard 1997
P19-002554	Prehistoric	Three mano fragments	R. Shepard 1997
P19-002555	Historic	Brick platform for an oil well	R. Shepard 1997
P19-002556	Historic	Livestock watering trough and access road	R. Shepard 1997
P19-002557	Historic	Platform with bricks dated 1921	R. Shepard 1997
P19-002558	Historic	Material from demolished corral with scattered cattle or horse bones	R. Shepard 1997
P19-002559	Prehistoric	Ground stone fragments	R. Shepard 1997
P19-002560	Prehistoric	Ground stone fragments	R. Shepard 1997
P-19-188496	Historic	Nike Missile Site	W. Becker and M. Bassett 2009
P-19-190505	Historic	SCE transmission line	W. Becker and H. Crane 2010
P-19-190508	Historic	SCE transmission line	W. Becker, H. Crane, and M. Bassett 2010

Source: ECORP Consulting, Cultural Resources Survey for the Puente Hills County Regional Park Master Plan Project, July 2015.



CLOCKWISE FROM TOP LEFT: (1) LANDFILL OPERATIONS IN 2008. (2) NIKE HILL GUARD STRUCTURE. (3) THE PUENTE HILLS MATERIALS RECOVERY FACILITY (MRF), WHERE WORKERS SORT RECYCLABLE MATERIALS AT THE BASE OF THE LANDFILL. THE FACILITY HELPS LOS ANGELES COUNTY MEET THE 50 PERCENT DIVERSION RATE REQUIRED UNDER CALIFORNIA LAW. (1) AND (3): PHOTO CREDIT: SANITATION DISTRICTS OF LOS ANGELES COUNTY.

## 1.4 ONGOING LANDFILL SETTLEMENT AND ENVIRONMENTAL CONTROL SYSTEMS

### Regulatory Requirements

Federal and State regulatory requirements include the post-closure activities of inspection and maintenance, environmental monitoring and as-needed repairs. It is anticipated that ongoing maintenance, inspections and monitoring activities of the in-place environmental systems during the post-closure of the landfill will occur on a regular basis for a minimum of 30 years from its closure on October 31, 2013.

The extensive environmental control systems include the final cover, surface water drainage system, landscape and irrigation, containment structure, groundwater quality protection system, bio-gas recovery systems, and fire control measures. Facilities that will continue to operate include the Materials Recovery Facility (MRF), the Puente Hills Field Office, and the landfill gas management facilities including the energy conversion plant and associated flares, several maintenance yards, and the water system reclamation, storage and irrigation.

### Landfill Settlement

Decomposing landfill trash will lose about 25% of its volume over roughly 30 years, leading to the layers of trash shifting and settling over time. This decomposition process occurs because the organic trash in landfills such as yard waste and kitchen scraps break down over time. As they break down and get compacted, gases are released and collected in pipes. Older areas of the landfill which have been settling for decades



**LANDFILL GAS COLLECTED BY A NETWORK OF PIPES FUELS TWO GAS-TO-ENERGY PLANTS. ELECTRICITY PRODUCED POWERS 70,000 HOMES, THE SAN JOSE CREEK WATER RECLAMATION PLANT AND SANITATION DISTRICTS OFFICES.**

are reaching their stable point. This ongoing and inconsistent settling limits the types of development that can take place on the surface in the near term. Such settlement will cause foundations to break and sink, utility and irrigation pipes to burst, roads and paving to crack and heave, light poles to tilt, and sports fields to crumple.

### Landfill Gas

The Landfill will remain the Sanitation Districts' responsibility for possibly the next 75 to 100 years, until the landfill stops producing methane as determined by the Los Angeles Regional Water Quality Control Board.

Gas is contained by low gas permeability liners that line the bottom and walls of the landfill by causing lateral and downwards movement of the gas. About 1,500 landfill gas collection wells

at depths of 60 to 100 feet collect gas from the perimeter and slopes of the landfill. Horizontal trenches 100 to 260 feet apart made of 15 to 18 inch diameter pipes collect gas that is drawn through the openings between the pipes into header pipes.

Above-surface header pipes are located on the side slopes beginning approximately 30 feet below the top decks, and placed every 40 feet apart to collect bio-gas. As the gas leaves the waste and enters the cooler above-ground landfill gas collection, the water vapor in the gas condenses. This condensate then flows to a treatment center before flowing into the sewer. The gas is destructed by flaring or energy generation. About 52 megawatts of electricity are created in the Puente Hills Gas-to-Energy facilities and the remaining gas is burned in existing flares.



**LANDFILL SETTLEMENT PROJECTION (ISO-SETTLEMENT CONTOURS).** THIS EXHIBIT SHOWS THE ESTIMATED AMOUNT OF SETTLEMENT IN FEET, WHICH WILL OCCUR OVER A 30-YEAR PERIOD. THE EASTERN DECK WHICH CONTAINS THE DEEPEST FILL AREA, WILL SETTLE THE MOST—APPROXIMATELY 125 FEET IN 30 YEARS.

### Ongoing Inspection and Maintenance Activities

Specific types of work required to maintain these systems include plumbing and pipe fitting, electrical, instrumentation and welding. Continuous plumbing and pipe fitting work is required to maintain the integrity of the environmental control and the irrigation systems. Some systems are centrally located and others are located throughout the landfill. Routine inspections will determine the extent of the maintenance and associated equipment required for each system.

### Ongoing Monitoring Activities

Environmental monitoring requires regular sampling and chemical analysis of the landfill gases, the Leachate Collection and Removal System (LCRS), groundwater, and surface water runoff. For this task landfill employees use gated access points along the boundary of the site.

Inspections of the side slope and top deck clay caps for surface cracks, differential settling, ponding or erosion will be necessary after every significant rain event or major earthquake during the settlement period. The protective clay caps vary in thickness from 5 to 12 feet and must remain sealed to keep stormwater from infiltrating the landfill.

Both surface and sub-surface pipes have been placed throughout the landfill for methane gas collection. Surface pipes, both on the terraced slopes and on the top decks, may crack and leak as the landfill settles. The Sanitation Districts' maintenance staff must be able to inspect, monitor, maintain and extend this pipe system until methane production subsides or ceases per regulatory requirements. Buried pipes are also monitored in place to ensure that they are performing to standard.



**THE PUENTE HILLS LANDFILL GAS-TO-ENERGY FACILITIES CONVERT METHANE INTO ELECTRICITY.**

The Sanitation Districts staff will also continue to measure emissions from the surface of the top deck to ensure that landfill operations meet South Coast Air Quality Management District standards.

### Water Concerns

All precipitation and subsequent runoff will not be allowed to pond and percolate into the landfill. The top decks will be maintained at a minimum two percent slope to shed surface water. Additional drainage controls, structures and facilities on the top decks will be necessary to divert run-off into the existing drainage system. When necessary, temporary structures shall be installed as needed to comply with this requirement.

It may be possible to provide some runoff storage by installing rainwater catchment systems, assuming that it does not interfere with top deck operations or structural integrity. Since the drainage system is based on gravity and the landfill will settle at different times, it is impor-



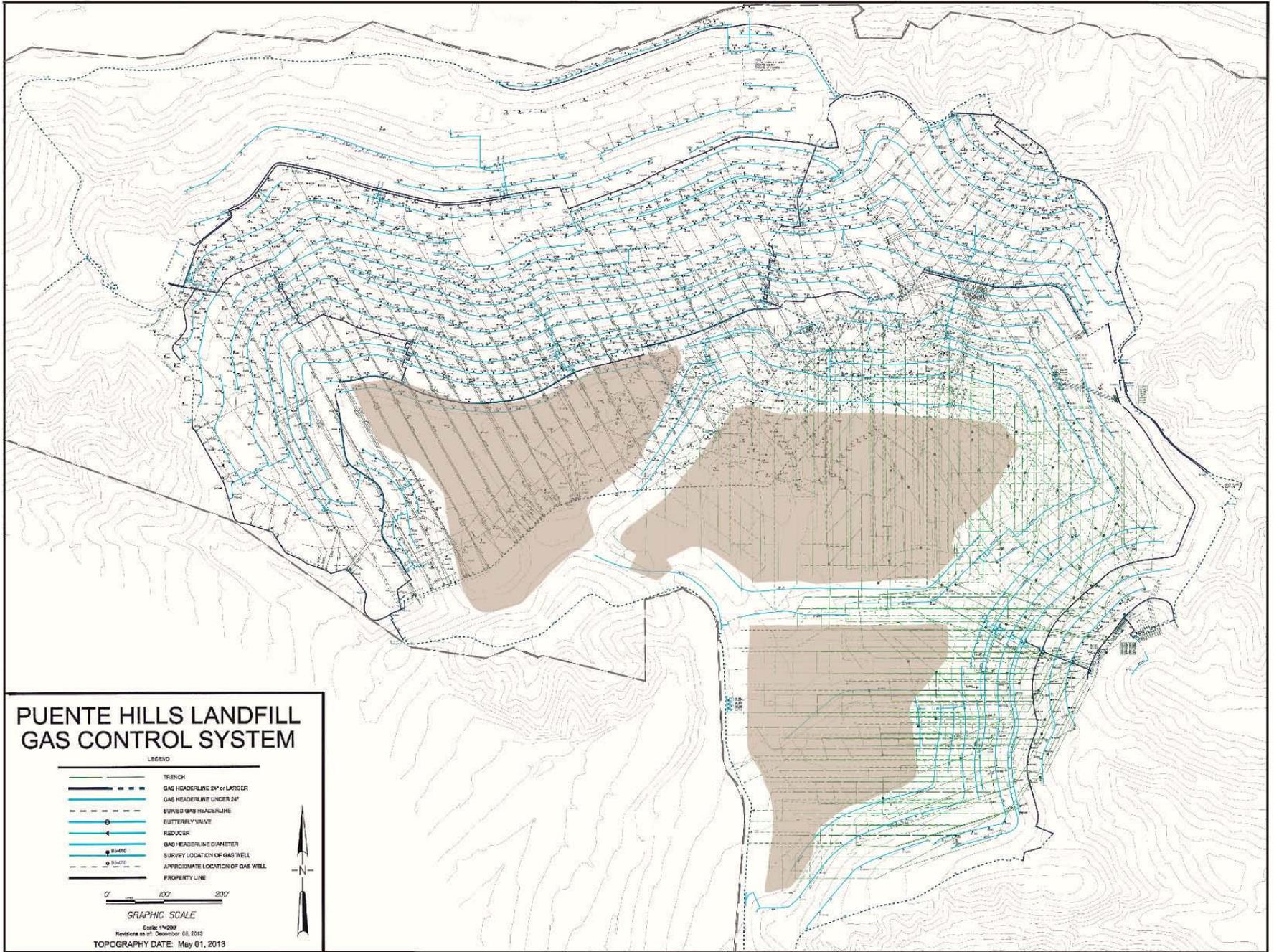
**SITE MONITORING WELL AT THE SOUTHERN ENTRY ALONG THE SCHABARUM-SKYLINE TRAIL.**

tant to make sure the drainage system is working properly. If drainage is no longer effective in an area, additional drains must be added or the slope must be reconstructed to at least a two percent grade. To avoid unplanned ponding, soil must be continuously added to low spots on the top deck.

### Soil Stockpile

Approximately 300,000 cubic yards of soil is stockpiled on 27 acres of the 40-acre Western Deck for use by the Sanitation Districts to maintain the clay caps of the fill areas.

A portion of the soil stockpile is proposed to be improved for recreational use as described further in Section 3.4, Western Deck.



A MAZE OF PIPES DRAWS OFF THE METHANE GAS PRODUCED BY THE LANDFILL, DIRECTING IT TO THE "GAS-TO-ENERGY" FACILITIES. THIS GAS CONTROL SYSTEM EXTENDS THROUGHOUT THE TOP DECKS OF THE PARK.

## 1.5 SITE ADJACENCIES AND REGIONAL SIGNIFICANCE

### Site Adjacencies

To the south, the site borders native hillsides and canyons managed by the Puente Hills Habitat Preservation Authority (Habitat Authority). Rose Hills Memorial Park and Mortuaries (Rose Hills) bounds the majority of the Park to the southwest, and Rio Hondo College neighbors the landfill to the west.

Surrounding land uses include office, light industrial and commercial uses to the west and north, residential use to the east, and a Southern California Edison electrical transmission line right-of-way along the southern border.

The multi-use Schabarum-Skyline Trail constructed and maintained by DPR adjoins the site connecting east-west over the former landfill.

Adjacent preserve areas which are aesthetically and ecologically significant to the site and to the region include approximately 230 acres within the landfill boundary currently managed by the Habitat Authority.

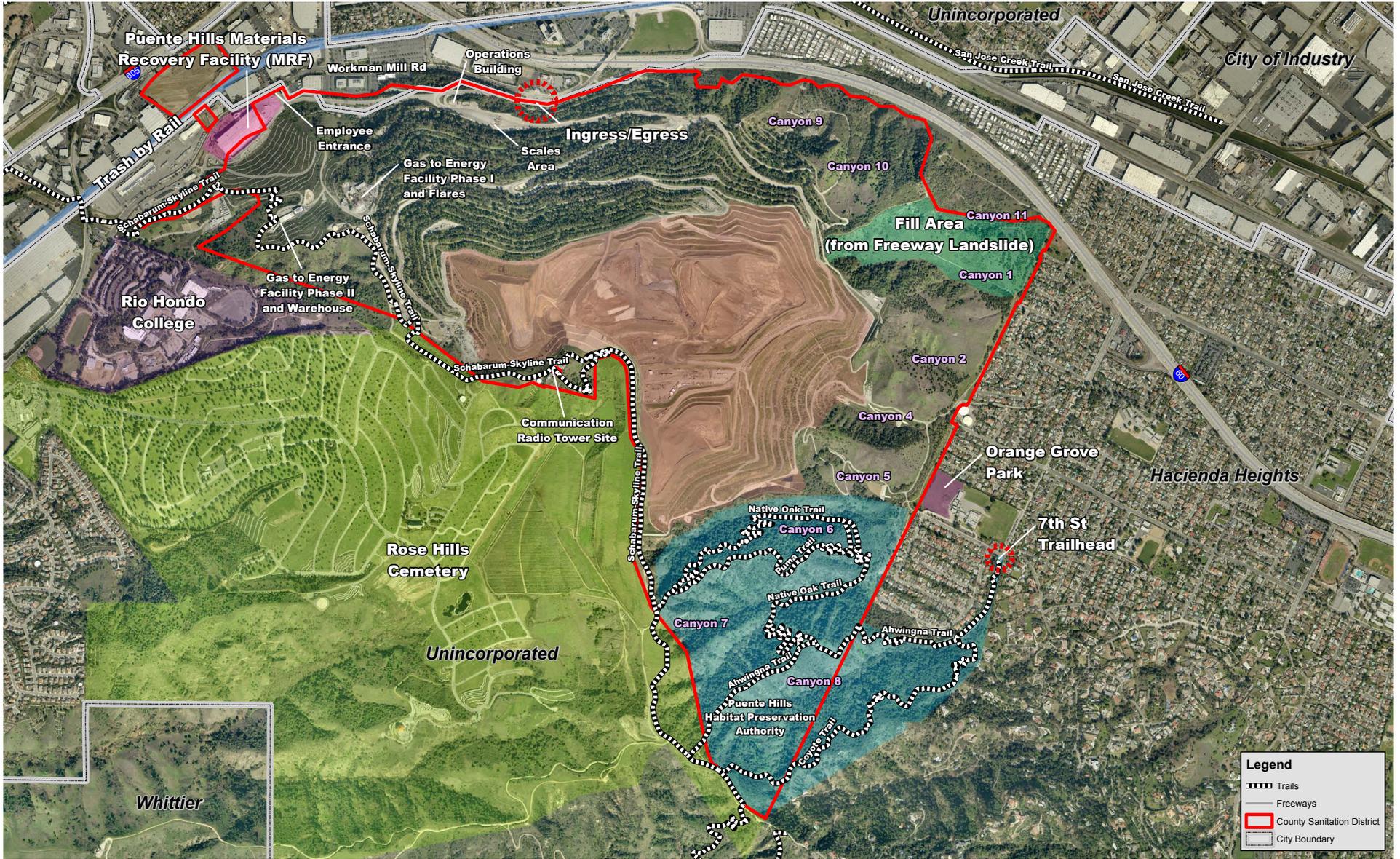
Located at the eastern landfill site boundary is a constructed riparian habitat and an oak tree replacement planting area maintained as natural open space. Ecology Canyon on the west face of the landfill is a 24-acre site and designated as a Significant Ecological Area (SEA) which is used by Rio Hondo College for study purposes.

These open space preserve areas are highly valued for resident and migrant wildlife populations and for native plant communities which include some highly valuable patches of pristine plant communities. The east-west migration of particular wildlife species through the Puente-Chino Hills is considered critical to the biological viability of some animal populations, specifically the Mountain Lion.

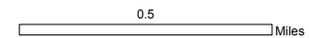
Two water troughs are located on the landfill site to support equestrian use of the Schabarum-Skyline trail and also support wildlife habitat in the greater Puente Hills.

Per Conditional Use Permit (CUP) 92-250 (4) from August 1994, a permanent 50-foot setback along the common boundary between Rose Hills Memorial Park and the landfill was established to provide a buffer from landfill operations and is landscaped, irrigated and kept in good repair by the Sanitation Districts.

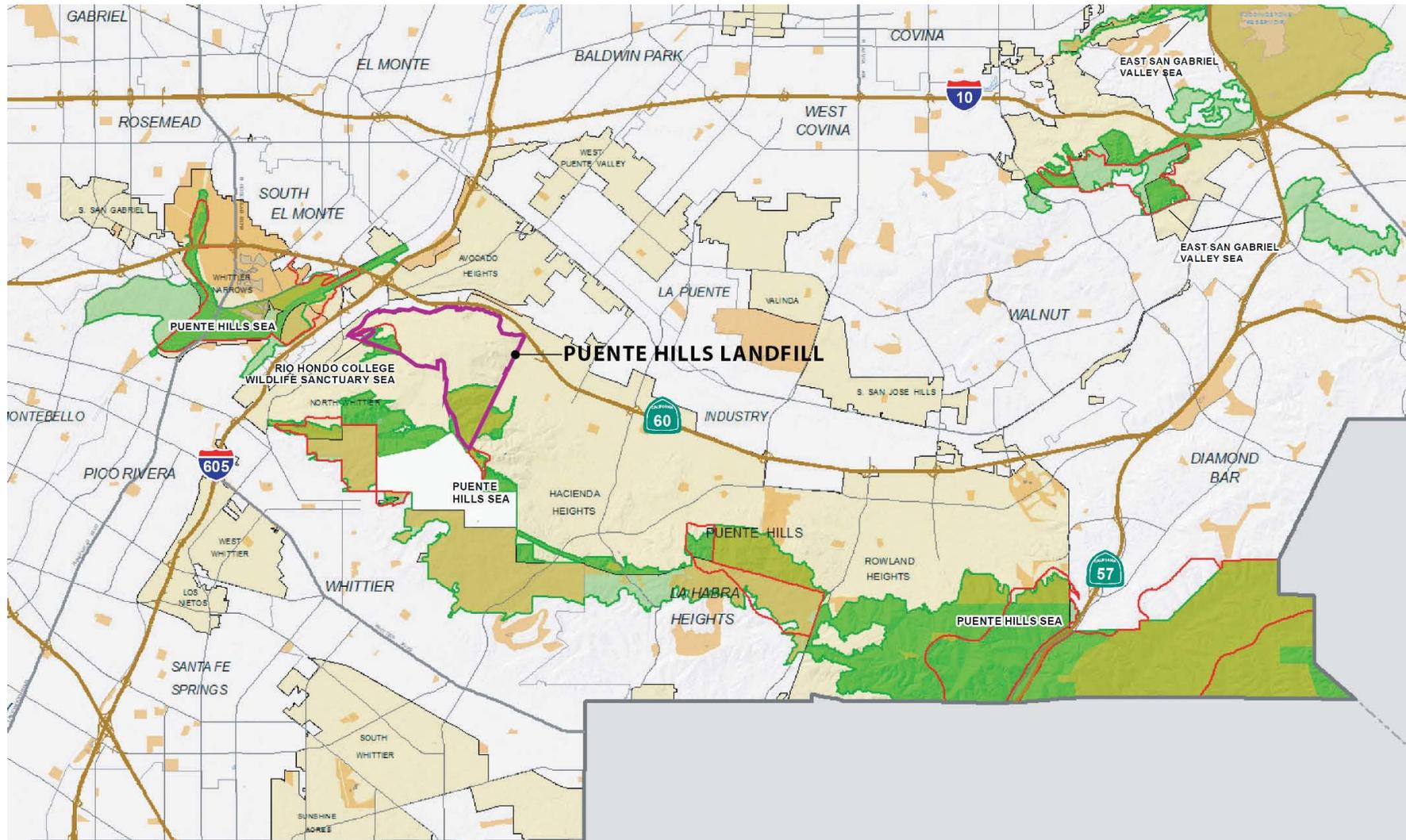
The permit resulted in an Amended Setback and Easement Agreement between the Sanitation Districts and Rose Hills Memorial Park, which addresses issues such as noise abatement, limits of operations, shared water storage reservoir, and other technical concerns regarding the operations of the landfill. Additionally the permit includes Rose Hills access for ingress and egress through the post-closure landfill.



**PUENTE HILLS LANDFILL ADJACENCIES ANALYSIS**  
 County of Los Angeles | Department of Parks & Recreation



Date: 07/30/2015  
 Map Prepared By: Planning and Development  
 Aerial: LARA/C3, ANCHY  
 Roads: CAMS  
 Trails: DPR



**PUENTE HILLS LANDFILL SHOWN IN RELATIONSHIP TO THE PUENTE HILLS SIGNIFICANT ECOLOGICAL AREAS (SEAs).**

Detail from Map: "Significant Ecological Areas and Coastal Resource Areas," General Plan, Los Angeles County Department of Regional Planning. Proposed SEA boundaries approved by Los Angeles County Board of Supervisors, October 6, 2015.

**LEGEND:**

- Significant Ecological Area (Proposed)
  - Coastal Resource Area\*
  - Significant Ecological Areas (Adopted)
  - Open Space
- Base Features**
- Perennial Water Body
  - Intermittent Water Body
  - Dry Water Body
  - City Boundaries\*\*
  - Unincorporated Area
  - National Forest

### **Regional Significance**

The Department of Parks and Recreation has the opportunity to create a new regional park uniquely situated at the western end of the Puente-Chino Hills and adjacent to the Habitat Authority. Portions of the landfill site lie within a greater Significant Ecological Area (SEA) connecting Chino Hills to the east all the way to the San Gabriel River to the west. SEAs are officially designated areas within the County identified for their biological value, and need for special management, as defined by the County's General Plan.

These areas contain rare or unique biotic resources; are critical to maintaining wildlife; preserve mostly undisturbed County habitat types; or serve as linkages. The landfill boundary overlaps with portions of the Rio Hondo College Wildlife Sanctuary SEA and the Puente Hills SEA. These areas are currently accessed by the Schabarum-Skyline Trail on the southern edge of the park. While preserving the existing SEA boundaries, the park improvements will enhance native habitat, improve the existing wildlife corridor and strengthen local biodiversity.

### **The Puente-Chino Hills Wildlife Corridor**

The park site is at the western tip of the Puente-Chino Hills wildlife corridor, which stretches 31 miles to the Cleveland National Forest in Orange County. The Puente-Chino Hills are vital habitat for wildlife, now surrounded by urbanization and a natural, physical link between the Santa Ana Mountains and the San Gabriel River. The San Gabriel River flows from and links to the San Gabriel Mountains. By virtue of these linkages, the Puente-Chino Hills function as both an important regional connection and a resident habitat area for wildlife populations.



**THE PUENTE-CHINO HILLS WILDLIFE CORRIDOR CONSISTS OF 31 MILES OF VITAL HABITAT. THE PARK SITE LIES AT THE WESTERN TIP OF THIS BIOLOGICALLY DIVERSE CORRIDOR.**

## 1.6 DEMOGRAPHICS AND PARKS TRENDS

As a regional park the Puente Hills Landfill Park will serve two of the fastest growing regions in the state. The region's demographics and shifting social trends will influence future decades of park growth and program development. California's population growth is expected to continue at a rate of approximately 11% annually. This high rate is expected to continue into 2020 which will mean greater population densities and higher levels of urbanization. Most of California's growth has been in its major metropolitan areas such as Los Angeles. The Inland Empire is the second fastest growing region, after the Sierra foothills with Riverside County growing 26 percent and San Bernardino County growing almost 17 percent in the 2000's.

Growth in the Latino community is a trend that is observed countywide and in particular within the 25-mile service radius of the Puente Hills Landfill Park. Hispanics account for 69% of the population within one mile of the proposed park and 70% within five miles. The Latino community's preferences in recreational amenities and programming must be considered in the planning of the Puente Hills Landfill Park.

Income levels closest to the Park within 1 mile are higher than at the 5 mile and 25 mile radius, suggesting that the region may require a different range of park services than the local community. Housing near the park is predominantly single family owner occupied. Renter occupied units

	1 mile		5 miles		25 miles	
Total Population	4,653		489,864		10,126,607	
White	848	18%	44,364	9%	2,574,321	25%
Black	60	1%	4,110	1%	736,059	7%
American Indian	5	0%	18,678	0%	18,678	0%
Asian	515	11%	90,737	19%	1,599,708	16%
Pacific Islander	0	0%	771	0%	28,542	0%
Other race	6	0%	558	0%	23,066	0%
Two or more races	25	1%	3,733	1%	194,128	2%
Hispanic	3,192	69%	344,666	70%	4,952,101	49%

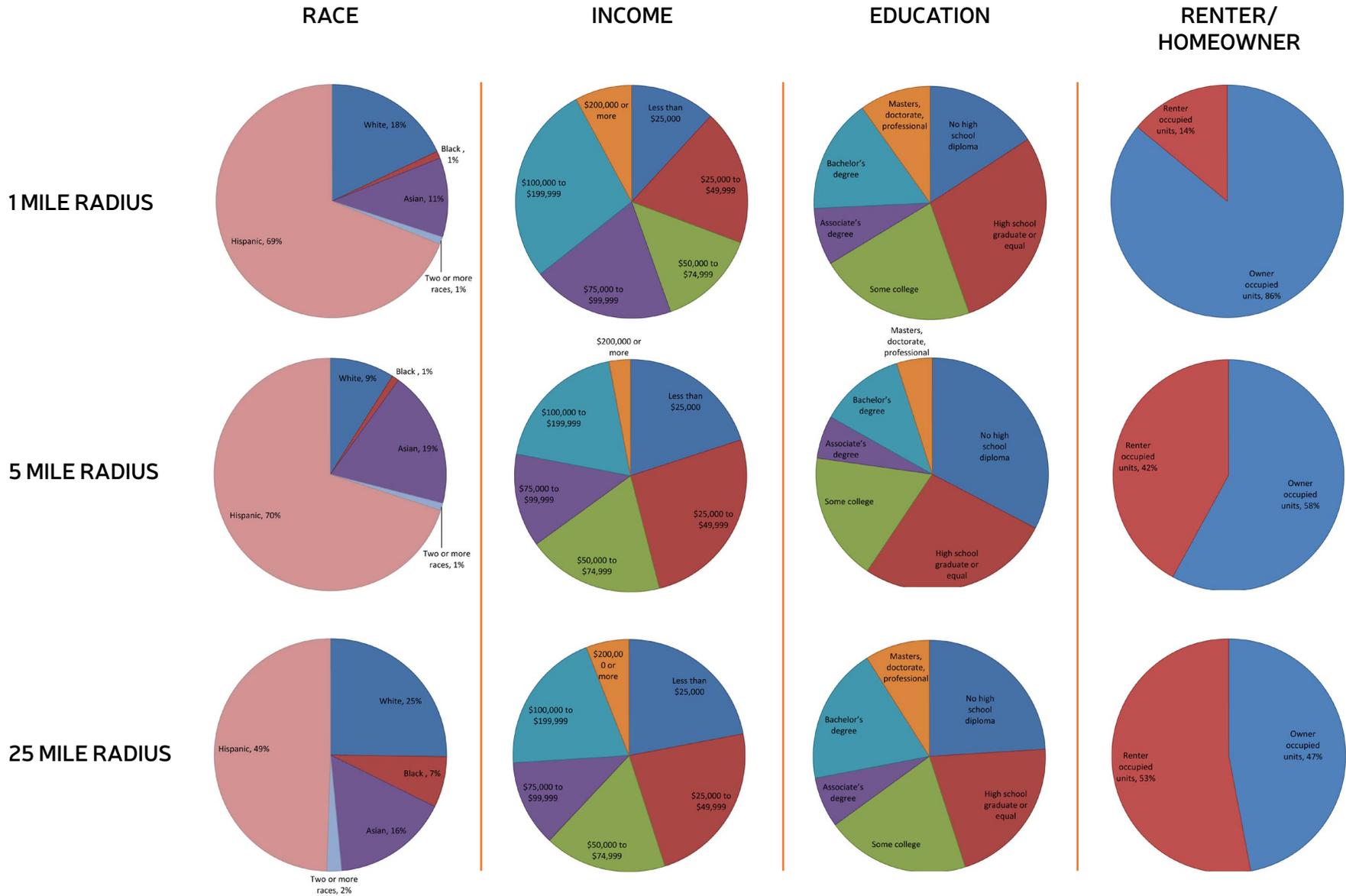
increase at 5 miles to 42% and increase again at 25 miles to 53%. The Park's open space and recreation will be vital for this population.

### Trends Impacting Parks and Recreation

Future park trends greatly affect the development and implementation of the Park Master Plan. Overarching considerations include well-documented links between health and exposure to green trees and nature, wellness and daily exercise, and human population growth and wildlife habitat protection. A park that inspires a healthy lifestyle can and will also protect and enhance wildlife populations over generations to come. A key component to meeting the trends and needs of the future is planning for sustainability within the park with a commitment to moving forward with new technologies designed to reduce environmental impacts.

Southern California regional park needs follow the national trends listed below. Parks must:

- Motivate a healthy lifestyle
- Manage an increase in visitorship
- Connect people with nature, reduce nature deficit disorder. "Nature Deficit Disorder" describes the modern problem of children growing up with diminishing exposure to nature, in a digitally immersed society
- Connect new and existing park and open space
- Connect users to their parks
- Stay relevant to millennials
- Serve an aging population
- Increase sustainability within parks: green infrastructure will become increasingly important in the future
- Engage diverse communities
- Develop funding partnerships



**DEMOGRAPHICS FOR THE 1-, 5-, AND 25-MILE RADIUS POPULATIONS AROUND THE PUENTE HILLS LANDFILL PARK.**

Source: U.S. Census Bureau, 2009-2013 American Community Survey.

## 1.7 COUNTYWIDE PARKS NEEDS ASSESSMENT

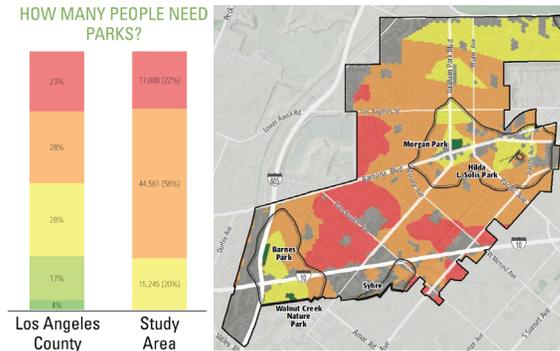
### Puente Hills Landfill Park Will Provide Needed Parkland Benefits for Park-Poor Communities

The recently completed *Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment*, adopted by the Board of Supervisors on July 5, 2016, determined that various communities adjacent to the Puente Hills Landfill Park site have a “Very High Need” or “High Need” for parks, including:

- Bassett/West Puente Valley (Unincorporated community)
- Valinda (Unincorporated community)
- Baldwin Park (City)
- El Monte (City)
- La Puente (City)

All of these communities have fewer than one acre of parkland per 1,000 residents, significantly lower than the County average of 3.3 acres per 1,000 residents and the County General Plan goal of 4 acres per 1,000 residents. Also, the percentage of residents in these communities living within one half-mile of a park is below the Countywide average of 49 percent.

The Parks Needs Assessment establishes the first-ever framework to assess park need from a Countywide perspective, and “In initiating the Parks Needs Assessment, the Board of Supervisors has affirmed the importance of parks as essential infrastructure in the County. Healthy, safe communities have thriving parks that contribute to public health and well-being, create a sense of place, increase community cohesion, improve the environment, and boost the economy.” (Executive Summary)



**EXAMPLE: THE CITY OF BALDWIN PARK HAS “VERY HIGH PARK NEED.” ONLY 22% OF RESIDENTS LIVE WITHIN 1/2 MILE OF A PARK, COMPARED TO THE 49% COUNTY AVERAGE. THE CITY ONLY HAS 0.3 PARK ACRES PER 1,000 PEOPLE, VS. THE COUNTY AVERAGE OF 3.3.**



**PARKS ARE KEY INFRASTRUCTURE NEEDED TO PROVIDE QUALITY OF LIFE BENEFITS FOR ALL COUNTY RESIDENTS.**

**GRAPHICS: LOS ANGELES COUNTYWIDE COMPREHENSIVE PARKS & RECREATION NEEDS ASSESSMENT**

## PARKS AND PUBLIC HEALTH IN LOS ANGELES COUNTY:

A companion report includes key takeaways which inform master planning of the Puente Hills Landfill Park.

*Parks and Public Health in Los Angeles County* (Los Angeles County Department of Public Health, May 2016) complements the Parks Needs Assessment and provides further information on the important relationships between parks and public health. Important takeaways include:

- **Provide recreational programming for increased physical fitness.**

“The presence of recreational programming has been shown to greatly increase the numbers of persons engaging in moderate to vigorous physical activity in parks and other recreational settings.”

- **Provide programming to activate spaces and increase physical activity, safety and social cohesion.**

“By activating outdoor spaces via ... organized activities, programming can help parks feel safe ... Programming can therefore increase social cohesion as well as increase physical activity.”

- **Provide safe bike and pedestrian access to, within and between parks.**

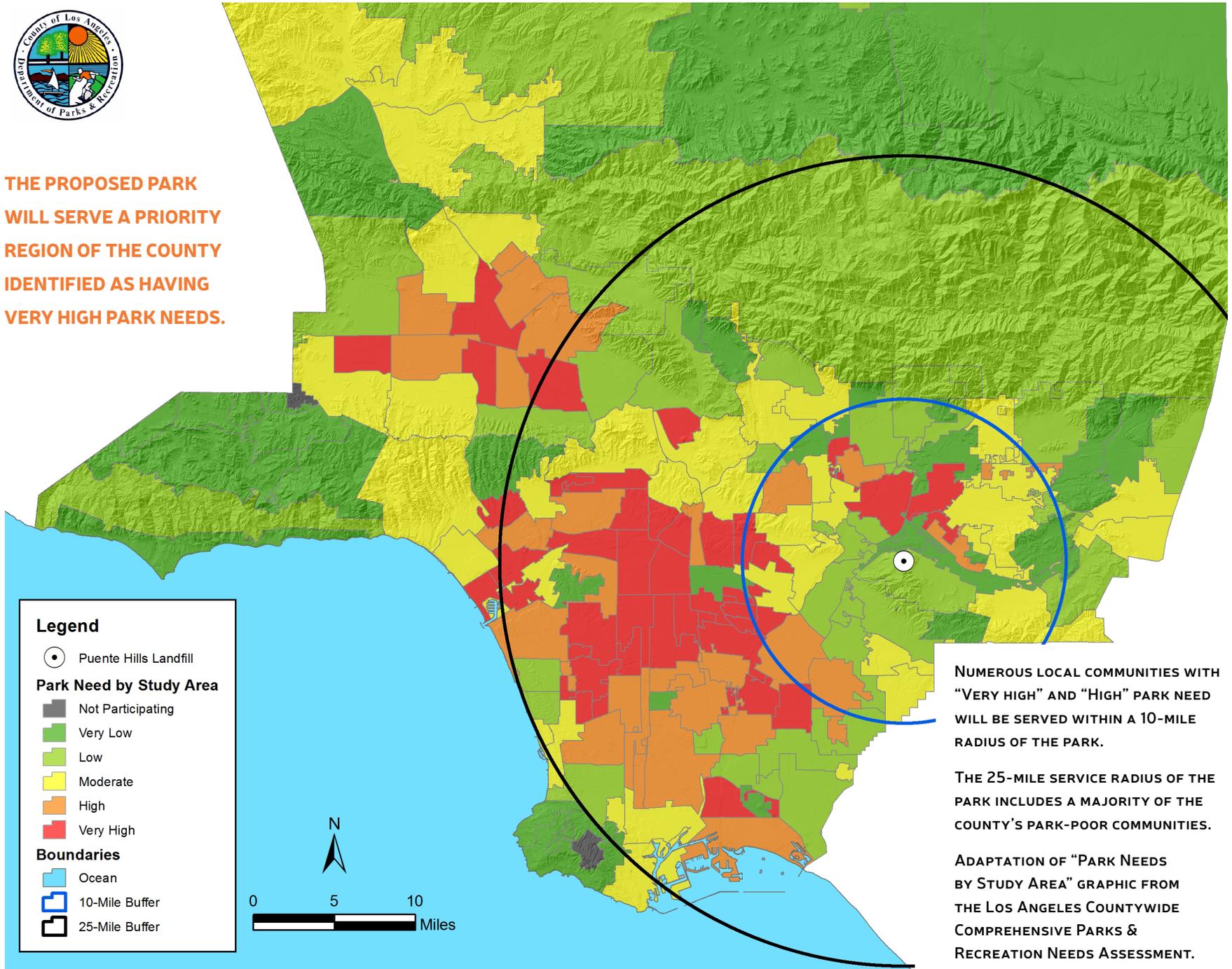
“Parks and the streets around them should be designed to encourage easy and comfortable access for all types of users, including those without a car. Bike and pedestrian paths within the park should connect and integrate with public transit stations and the transportation patterns of the surrounding community to encourage maximum use.”

- **Provide parks to improve community health and economics.**

“Cities and communities with less park space per capita on average had higher rates of premature mortality from cardiovascular disease and diabetes, higher prevalence of childhood obesity, and greater economic hardship compared with cities and communities with more park space per capita.”



**THE PROPOSED PARK  
WILL SERVE A PRIORITY  
REGION OF THE COUNTY  
IDENTIFIED AS HAVING  
VERY HIGH PARK NEEDS.**



**Legend**

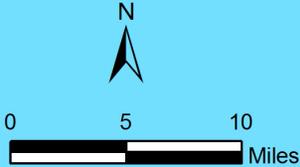
● Puente Hills Landfill

**Park Need by Study Area**

- Not Participating
- Very Low
- Low
- Moderate
- High
- Very High

**Boundaries**

- Ocean
- 10-Mile Buffer
- 25-Mile Buffer



**NUMEROUS LOCAL COMMUNITIES WITH  
“VERY HIGH” AND “HIGH” PARK NEED  
WILL BE SERVED WITHIN A 10-MILE  
RADIUS OF THE PARK.**

**THE 25-MILE SERVICE RADIUS OF THE  
PARK INCLUDES A MAJORITY OF THE  
COUNTY’S PARK-POOR COMMUNITIES.**

**ADAPTATION OF “PARK NEEDS  
BY STUDY AREA” GRAPHIC FROM  
THE LOS ANGELES COUNTYWIDE  
COMPREHENSIVE PARKS &  
RECREATION NEEDS ASSESSMENT.**

## 1.8 COMMUNITY WORKSHOPS AND VISIONING

Creation of the Park vision was reliant on the early outreach efforts to adjacent communities, special interest groups and agencies. Over the 18-month project planning timeline, the Department of Parks and Recreation in tandem with the consultant team listened to and documented the public’s needs and interests.

Based on the terms of the Conditional Use Permit which identified both passive open space and recreation as appropriate for the new park, a rich variety of park elements were selected for initial discussion and voting. A preliminary distilling of workshop information resulted in the development of several schematic park designs. This alternative plan development process actively sought diverse opinions, as listed below, to form three multi-layered, community-driven designs. The preferred design reveals the concept of a “park for all users” that reflects the opinions and efforts of many people.

- 5 Community workshops with Spanish, Mandarin and Korean translation

Workshops	Date	Attendance (signed-in)
Community Visioning	8-24-15	124
Alternative Concepts	9-30-15	111
Preferred Park Concept	11-3-15	65
Environmental Scoping	1-27-16	80
Public Outreach & Draft EIR Review	6-29-16	96



A SERIES OF FIVE COMMUNITY WORKSHOPS INVITED A COLLABORATIVE PARK VISIONING AND PLANNING PROCESS.

- 6 Mobile outreach events
- 5 Technical Advisory Committee meetings

### Interactive Public Feedback Methods:

- Post-it note visioning
- Electronic preference voting
- Sticker preference voting
- Flip chart comment stations
- Chalkboard “selfie” stations
- Workshop comment cards, letters and e-mails

### Six distinct park components emerged from this early process:

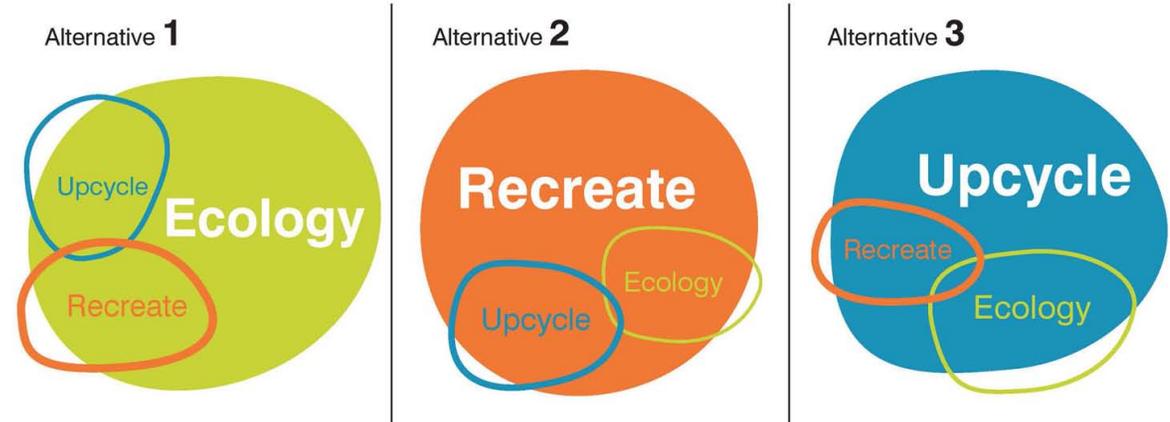
**Provide connections to nature:** Local residents hope the future park will complement or expand the neighboring Habitat Authority Nature Pre-

serve area. The public majority wants the site to be as natural as possible, with native habitat for wildlife emphasized. Given that the industrial qualities of the site will remain for up to seven decades, the master plan can identify the first steps towards this goal while building a park for public recreation.

**Provide ways for people to be healthy and active:** Regionally, the public is seeking fitness and recreation opportunities including trails for hiking and running, mountain biking and equestrian use. A strong bicycling constituency also emerged. Some users desire bike trails. Others voiced the need for a public bike skills park in the area and hoped the Park will offer activities for which they currently must travel further.



THE THEMES OF ECOLOGY, RECREATE AND UPCYCLE WERE CONSIDERED.



**Provide active sports facilities:** Both local residents and citizens from surrounding cities who experience the regional shortage of municipal sports fields voiced the need for these facilities. Due to the technical difficulties of the site's extreme land settling, however, it was determined that sports fields would be unsustainable at this site for at least the next 30 years, due to tremendous challenges to keep fields safe, level, irrigated and properly maintained.

**Provide access:** The local community emphasized the need for access to the large park from all directions. People also want the extremely hilly site to offer access and experiences to all users, regardless of mobility. Opinions are not unanimous on this topic as some homeowners have experienced unwanted activity at the neighborhood entries. As park phases are implemented over the decades, access issues will be reviewed and analyzed to find equitable solutions.

**Alleviate pressures on the existing Puente Hills trails:** Documented trail survey counts indicate that local trail usage is growing exponentially. The increased trail use has put pressures on

trailheads, parking, trail maintenance, residential congestion and wildlife habitat. Focusing on park ecology as a central theme lends hope that the future park will offer expanded trails and alleviate the problem of local hills being "loved to death."

**Provide gateways to environmental stewardship:** People are interested in the site as a catalyst for learning about critical environmental issues. An emphasis on park sustainability includes new technologies, environmental stewardship and education. Educational components that draw on the landfill's history and location include gas to energy conversion, recycle and reuse, and waste stream reduction in the post-industrial era.

**Park Themes: Ecology, Recreate, Upcycle**  
 The design team coalesced the main themes that emerged from site analysis and the community/ stakeholder visioning process into three alternative concepts.

**Ecology:** Emphasize habitat enhancement, native flora and fauna, nature education and programs, trails, scenic overlooks, and interpretation.

**Recreate:** Provide dynamic, active fitness options. Expanded fitness, family activities and programming.

**Upcycle:** Elevate the opportunity for a hybrid park to co-habitate with a working industrial facility; highlight the fascinating infrastructure and leverage the landfill site's history to inspire environmental awareness, sustainability, and innovation.

Results of public voting clearly selected ecology as the main theme. However, family recreation and fitness dominated the selection of recreational elements that were chosen for the new park. The preferred park concept retains aspects of the other themes as each alternative proposes unique solutions that can be transferred over to the ecology theme. As the ongoing post closure landfill maintenance will continue to be integral to future park development, the preferred park concept will embrace the specific requirements necessary for the environmental systems on the site. The design recommendations of the Draft Master Plan will remain flexible as co-operation agreements are finalized.

## 1.9 COMMUNITY ENGAGEMENT PROCESS

The outreach process is integral to the planning framework for ongoing discussion regarding the Puente Hills Landfill Park. The Department of Parks and Recreation remains committed to an open and equitable public process as the park plan is scrutinized in more detail through the CEQA process.

A robust dialogue continues between multiple agencies, policy makers, experts, communities, and local and regional stakeholders in anticipation of the final park design and its significance as a regional facility.

Comments received from the Draft Environmental Impact Report public comment period are gathered and formatted as part of the Final Environmental Impact Report. Interest in the project is anticipated to increase as public engagement continues throughout the duration of the project.

### Stakeholder Input Summary

A total of 18 organizations participated in a fact-finding and visioning process. Although all residents, employees, and visitors, are “stakeholders” in the neighborhoods’ long-term future, these initial meetings targeted individuals representing a diversity of interests and organizations to explore a broad range of issues and needs. The individual/small group nature of these discussions enabled participants to be more candid and in-depth than they otherwise might be in a larger community forum. Moreover, discussions could be focused on the topics important to each individual organization.



COMMUNITY FEEDBACK ACTIVITIES INCLUDED CHALKBOARD “SELFIE” STATIONS TO SHARE WHAT PARTICIPANTS LOOK FORWARD TO AT THE FUTURE PARK.

Outcomes reflected public input with one major addition. The majority of stakeholders envisioned a park as a destination with a “WOW” factor that is completely unique to the region and would contribute to local economic improvement.

### Interviews, Presentations and Tours

- 18 stakeholder interviews
- 8 Park Ambassadors
- 12 community events
- 7 city and school board presentations
- 13 community group presentations
- 19 youth/school outreach presentations
- 2 public information hike/bike site tours
- 3 agency and media site tours

### Communications

- E-mail blasts: Database of 660+ residents, officials, agency and organization representatives
- Postcards: 3 workshop notices to database addresses and 5,500 properties within 1/2 mile of the project boundary
- Flyers: Local schools, community centers, churches, organizations
- Project website: [www.PuenteHillsLandfillPark.org](http://www.PuenteHillsLandfillPark.org) regularly updated with outreach schedule, workshop presentation archive, EIR documents, project background, photo gallery, inspiration and media links, e-mail subscription and contacts, with language translation engine



MOBILE OUTREACH AT COMMUNITY EVENTS SPREAD AWARENESS OF THE MASTER PLAN.

- Social media: Facebook, Twitter and Instagram accounts with sharable posts and videos
- Online media kit: Press release, Frequently Asked Questions, graphics
- Park4All public education campaign
- 8 Park Ambassador videos
- Compilation video for the Board of Supervisors

### **California Environmental Quality Act (CEQA) Process Input**

- 39 comment letters received for EIR Scoping Period
- 56 comment letters received for Draft EIR

### **Petitions of Support**

Two community petitions received support. As of October 12, 2016:

- 910 signatures, 294 additional change.org online signatures, and 75 comments support “the ‘Park for All’ Vision, Objectives and Plan”
- 402 change.org online signatures and 123 comments support “Create a Bike Park and Trail System at Puente Hills Landfill Park!”

### **City and School Board Resolutions and Letters of Support**

Resolutions and letters of support were received in response to the Draft EIR from:

- City of Baldwin Park, resolution
- City of El Monte, letters of support
- City of Industry, resolution
- City of South El Monte, resolution
- Rio Hondo College, resolution
- Hacienda-La Puente Unified School District, resolution



THE PARK VISION AT FULL BUILDOUT



# 2.0

## PARK MASTER PLAN: SITE-WIDE



## 2.1 PARK VISION AND OBJECTIVES

### **The Park Vision**

A highly industrial landscape will be lightly re-tooled to provide a recreational experience emphasizing the enjoyment of trails, fitness, scenic views at the top of the site, landfill history and the flora and fauna of the Puente Hills. New park elements will incorporate some of the fascinating industrial structures, adding to the unique qualities of this special place.

As a destination, facilities planning and development must encompass and solve the challenges of recreating on a landfill. This will be accomplished by inviting the public to gather in two specific areas, one area at the bottom and one area at the top of the mountain. From these distinct gathering spots, a variety of recreational activities will be available. The combination of unique and exciting facilities structures combined with unique and exciting park programming will provide a dynamic choice of recreational opportunities.

The front entry of the Park will be transformed to accommodate a park entry visitor center, a shuttle service gathering area, a trail lift and lim-

ited parking. Park visitors will be encouraged to board a shuttle, hike the Schabarum-Skyline Trail from Workman Mill Road, or take the aerial trail lift car which will ascend to a trail lift structure and scenic overlook located over the edge of the Nike site.

A one-way loop park road with an adjacent multi-use trail will accommodate vehicles, shuttles, bicycles, equestrians and pedestrians. All trails, including the Schabarum-Skyline trail, will remain the central recreational element of the park with improvements to the trailheads, wayfinding, signage and trailside plantings.

Creating spaces for people while co-existing with post-closure landfill operations requires the construction of park elements which are either perched above the capped areas or easily moved on and off the shifting decks. Structures and amenities that cantilever over the site and aerial zip lines that are built over the slopes are light on the land. Custom site furniture, stairclimbs and slides can be easily moved and will be designed to be de-constructed and re-constructed as necessary to meet on-going maintenance needs.

Phased park development will include recreational elements that support sustainable technologies. These include bicycle rental, solar technology, a partially solar powered scenic trail

lift to reduce emissions, electric car hook-ups, a Leadership in Energy and Environmental Design (LEED)-certified building, LEED environmental criteria, guided tours to the Materials Recovery Facility, a MRF cam to view the daily waste cycle stream, interactive landfill settling measurement structure and rainwater capture. Later park phasing will include the de-commissioned Flare area. This industrial relic may evolve into a park destination with interpretive, educational and concessionaire components.

Landscape planting specifically for habitat enhancement will expand the mixed native chaparral and coastal sage scrub currently established on both the western and eastern slopes of the landfill. Underplantings of coastal sage scrub on the western deck slopes will in time connect the wildlife corridor between the adjacent preserve area and Ecology Canyon Significant Ecological Areas.

The landfill top decks will gradually evolve to native and drought tolerant grasslands dotted with compatible shrubs for wildlife cover with shaded trails throughout the decks for park visitors. A land bridge planted with native grasses and ephemerals will span the main park road and enclose a portion of the parking area.

## 2.2 PARK OBJECTIVES

1.	<b>Park For All</b>	Develop a “Park For All” that offers diverse, healthy, passive and active recreational experiences and programming for visitors of all ages, abilities, interests and backgrounds.
2.	<b>Unique Regional Destination</b>	Develop a regional destination park which uniquely reflects the site’s history, urban-wildland location, scale and topography.
3.	<b>Range of Recreation and Outdoor Fitness</b>	Develop a range of active and passive amenities to meet varied recreational demands and provide outdoor fitness opportunities to help address national trends related to inactivity, obesity and nature-deficit disorder.
4.	<b>Gateway to Nature for Diverse New Audiences</b>	Attract diverse, new audiences, particularly underrepresented or disadvantaged populations, to inspire connection to outdoor activities, nature, and environmental stewardship.
5.	<b>Integrated Recreation and Habitat</b>	Integrate active recreational facilities with natural habitats to enhance and sustain both the recreational and ecological functions of the park.
6.	<b>Wildlife Habitat Connectivity</b>	Promote and support wildlife movement and habitat connectivity through the Puente Hills Significant Ecological Area (SEA), the Rio Hondo College Wildlife Sanctuary SEA and the San Gabriel River.
7.	<b>Environmental Sustainability</b>	Demonstrate environmentally sustainable design and practices.
8.	<b>Multi-modal and Universal Accessibility</b>	Provide multi-modal, universal access and circulation into and through the park to the extent feasible.
9.	<b>Education and Interpretation</b>	Incorporate design elements for education and interpretation on the park’s unique landfill history and natural environmental features.
10.	<b>Captivating Trail Experience</b>	Provide a captivating trail experience within the park which also alleviates the overuse and degradation of the adjacent trail network.
11.	<b>Public Health, Safety and Landfill Operations</b>	Balance development of park facilities with landfill maintenance activities to protect public safety, water quality and meet the Sanitation Districts’ regulatory requirements.
12.	<b>Balance Multiple Objectives</b>	Balance multiple project objectives in a manner that considers the complex site constraints, park needs of the overall region, and the competing interests and needs of adjacent entities.

## 2.3 ILLUSTRATIVE SITE PLAN



Puente Hills Landfill  
**PARK MASTER PLAN**

UPDATED:  
SEPT. 20, 2016



## 2.4 PARK FEATURES

The idea of a “Park for All People” shapes a new concept for a premier recreational experience in the heart of the Southland’s dense urbanization. Unlike traditional lands developed for parks, the functional patterning of the landscape for industrial use now becomes the new post-industrial language for many of the new park features including roads, forested slopes and scenic overlooks.

Inherent in the topography of this landfill mountain is a fitness course to wellness. Inherent in its ridgeline connectivity to the Puente Hills wildlife corridor and the Schabarum-Skyline trail are the solutions to an urban population’s nature deficit. Over time, with the puzzle pieces in place, the Park will be spectacularly responsive to its place above the San Gabriel Valley, greeting families at the Visitor Center and beckoning them to walk the Puente Hills ridgeline and play on the mountain top.

### **Access & Circulation:**

- Separate park traffic from Materials Recovery Facility (MRF) and Rose Hills traffic
- Roundabout to merge and turn safely
- One-way park road to control access and minimize conflict
- Trail lift for car-free experience

### **Ecology & Environmental Stewardship:**

- Visitor Center
- Interpretive overlooks & elements
- New trails: outer and inner loops
- Schabarum-Skyline Trail improvements

- Native plantings: grasslands and understory
- Native plant nursery
- Bird observation overlook
- Wildlife-proof trash cans
- Renewable energy, solar power
- Planted pedestrian bridge
- Materials Recovery Facility (recycling) tours
- Trail lift provides scenic views & site interpretation
- Eco-friendly mini café
- Westside bridge connection to Rio Hondo College

### **Recreate:**

- Running loops with mile markers
- Exercise terrace
- Stair climbs
- Play areas
- Picnic areas
- Performance space
- Bike rental
- Bike skills area
- Dog park
- Slides
- Zip lines
- Flare tower climb
- Temporary art installations

### **Hillside Amenities**

Utilizing the steepness of the site for fitness and gravity play, four stair climbs and two slides are proposed. Two zip lines are also located at the top elevation which will extend in opposite directions over the Park.

### **Fitness Amenities On The Top Decks**

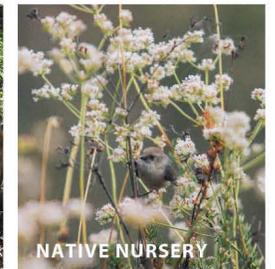
One of the top deck trails will be dedicated to a fitness running loop with distance markers. As the Western deck has settled more rapidly, this area will be developed first with a bike skills area utilizing the Sanitation Districts soil stockpile. Future phasing may move the bike skills area to the Eastern deck. A bike rental will be available for park patrons. The decommissioned Flare site will be developed for climbing and fitness as it is an intriguing feature adjacent to the Eastern deck.

### **Children’s Nature Play**

Nature play with loose parts (i.e. sticks, rocks, log rounds, fabric, crates, ropes, etc.) for young children is an ideal program in a park that must remain flexible in its use of any top deck area for many decades. The Park will encourage child fitness, waste stream awareness, history of the San Gabriel Valley and the Puente Hills, nature play with natural materials, wildlife education and native plant nursery growing.

### **Picnic Areas**

Picnic areas throughout the Park will be located near parking areas for family use. These areas will be planted to provide buffer and shade wherever possible. To encourage environmental stewardship the Park will promote zero-waste management and food containment to keep resident wildlife healthy.



THE PROPOSED PARK ELEMENTS WILL SUPPORT A WIDE RANGE OF RECREATION ACTIVITIES FOR A DIVERSE POPULATION.

## 2.5 VEHICULAR AND MULTI- MODAL TRANSPORTATION

One of the key objectives for park development is to provide multi-modal access and circulation throughout the Park and to ensure that inclusive mobility accommodations are provided for all user groups and people of differing abilities. Creating an internal park circulation loop road essentially re-purposes existing roads, with the addition of a connector road, to form an intensely utilized circulation system for multi-modal recreational activities.

Land use conversion challenges facing the Department of Parks and Recreation (DPR) are most evident in the continuing demands for road use for a variety of non-park activities. Site challenges related to the Park's former use as a landfill are ongoing. The topography of the site is an enormous challenge for the public, the Sanitation District, and DPR to navigate on a daily basis. Roadways will be shared by park traffic, Material Recovery Facility trucks, landfill maintenance equipment and potential Rose Hills processions. Limited road widths, bracketed by methane pipes and concrete drainage channels of varying sizes, will be re-designed to accommodate a multi-use trail as well as vehicular traffic. Additional maintenance resources will be necessary as continuous landfill settling is creating unpredictable environmental conditions affecting the park road loop.

### **Park Circulation**

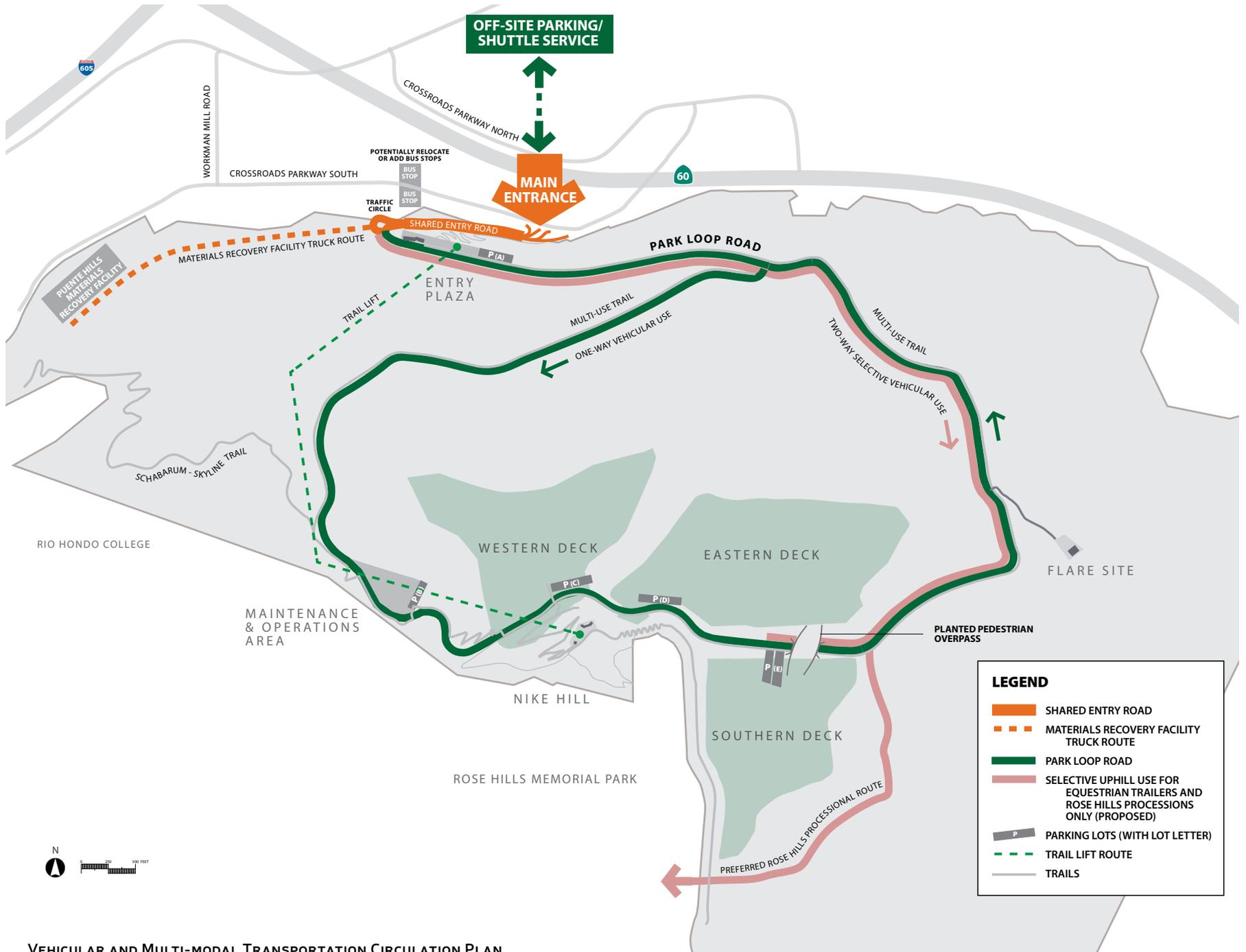
The paved park road which begins at Crossroads Parkway South turns into the site and branches to the east and west. These branches will be joined at the top by a new connector road segment that



**(ABOVE) A ROUNDABOUT WILL SEPARATE PARK USERS FROM MATERIALS RECOVERY FACILITY TRASH TRUCKS.  
(BELOW) THE TRAIL LIFT WILL BE A DISTINCTIVE PARK FEATURE OFFERING UNIVERSAL ACCESS TO SCENIC VIEWS.**

will complete the loop road. In anticipation of the various traffic needs required of these roads, internal park shuttles and a trail lift are proposed in order to relieve the potential for traffic congestion. Both regional and internal multi-modal transportation opportunities will contribute greatly to the sustainability, educational and habitat protection ideals that the park embraces.

Single occupancy vehicles on the top decks will be limited in order to encourage fitness, enhance park aesthetics and support the existing habitat corridor that connects the Significant Ecological Areas in the Puente Hills. Limitation of vehicles on the top decks will ensure that the mountain trail hike and the magnificent viewshed overlook from the Nike Hill are valued and protected as vital recreational components of this park. As the



VEHICULAR AND MULTI-MODAL TRANSPORTATION CIRCULATION PLAN.

park matures and phased development is evaluated, elimination of parking lots and cars on the top decks altogether may become a priority as open space becomes increasingly valuable for recreation and/or habitat protection.

**Multi-modal park transportation solutions include:**

- Multi-use trail along the loop road throughout the park
- Seven miles of trail development
- Multi-use ADA entry access from Crossroads Parkway South
- Additional bus stops near the park entry
- Future connectivity to the Rio Hondo College Metrolink station
- Internal electric park shuttles for park patron pick-up and drop-off
- Event busing and/or shuttle service from off-site parking facilities
- Trail lift from Entry Plaza to the top of Nike Hill
- Equestrian staging area
- Bicycle rental

**Internal Park Transportation and Parking**

Traffic at the park entrance may be controlled by a modified road system that includes crosswalks, additional signalization or a roundabout and additional road lanes. The front entry of the park will share a common-gated entrance off of Crossroads Parkway South with Sanitation Districts

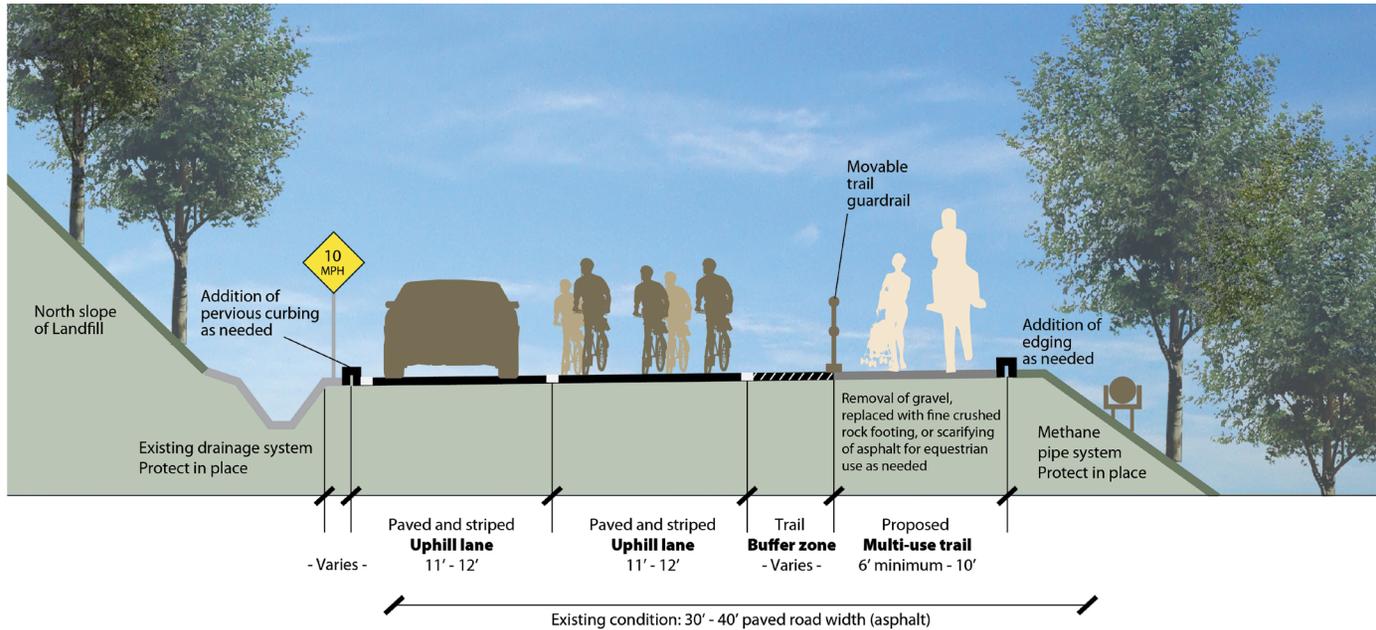
Materials Recovery Facility (MRF). The MRF is designed specifically for the salvage of recycled materials and will remain in operation at this location into the foreseeable future. Daily truck trips to the MRF are frequent and anticipated to increase.

Ongoing inspections, maintenance and monitoring of the former landfill will require shared park roads and park space. The Entry Plaza associated with the Visitor Center will provide shuttle drop-off, bus loading and unloading, and park visitor gathering. A parking area at the base will be utilized for a trail lift loading and for park patrons using the stair climb to the Western deck and other fitness activities.

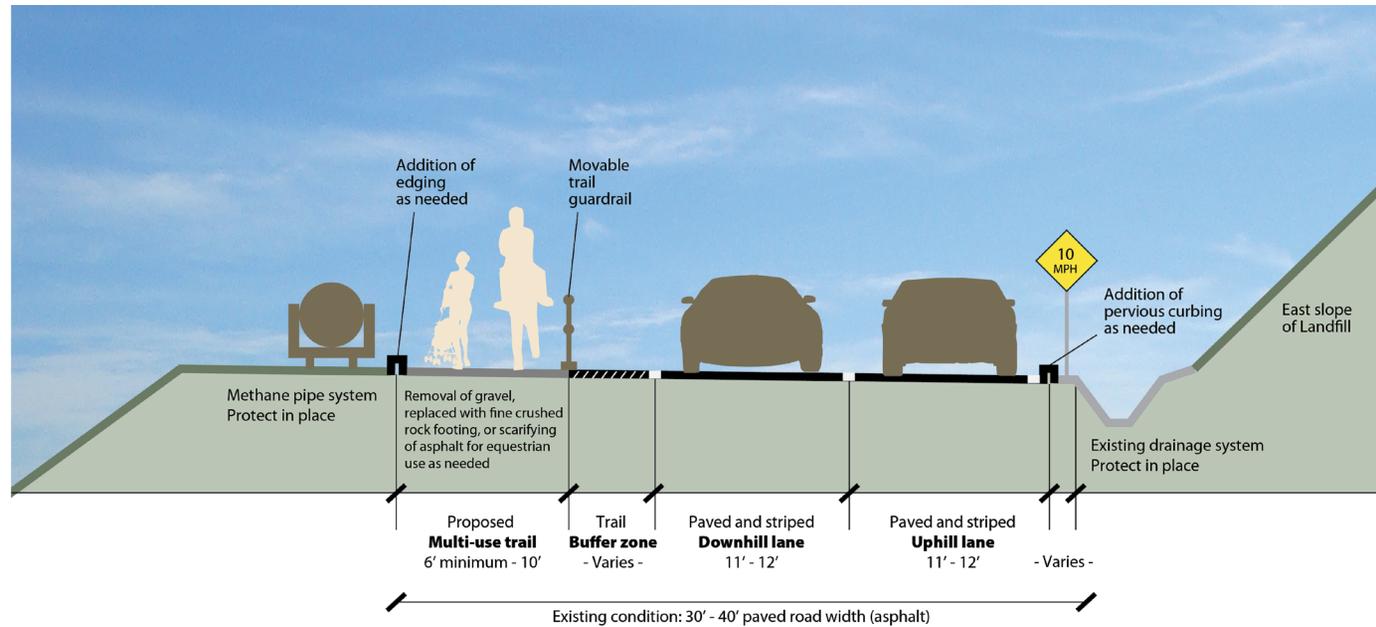
Five small gravel parking areas located near park facilities on the top decks are necessary for programming flex space loading and unloading, family use, and for trail staging. Although the Park will encourage alternative modes of transportation, some parking will be necessary. The strategy for cars on the landfill is to disperse vehicles in five parking locations located close to the park loop road in order to preserve the expansive views from each of the top decks and from the Nike site outwards to the west, north and east.

A trail lift is proposed as a transportation system option for park visitors to access hilly, difficult-to-navigate terrain. The trail lift will provide the opportunity for all park visitors, especially those

with mobility difficulties to ascend 760 feet to the highest elevation of the park to enjoy the scenic views at the overlook. Visitors will rise above the treeline, taking in bird's eye views of the Park, the Gas-to-Energy Plant, and 360-degree vistas. The Puente Hills Landfill Park trail lift is an environmentally friendly and efficient method to connect two points when the challenge is steep topography. These cable-propelled people movers effectively reduce the impact of single-occupancy cars in the Park.



**CONCEPTUAL WEST SIDE PARK ROAD SECTION: Two lanes up**



**CONCEPTUAL EAST SIDE PARK ROAD SECTION: One lane up, one lane down**



## 2.6 MULTI-USE TRAILS AND EXISTING TRAIL ENHANCEMENT

A series of multi-use trails designed to climb the mountain, loop around the top of the park and link to the existing Schabarum-Skyline Trail will add over 14 miles of new trail experiences to the region. Trail users will be rewarded with extraordinary 180+ degree views high above the San Gabriel Valley.

### **The Schabarum-Skyline Trail**

Hikers, wildlife viewers, equestrians, and mountain bikers currently use the Schabarum-Skyline Trail which currently hugs the southern landfill boundary. This regionally significant trail connects the San Gabriel Valley to the Puente Hills and the adjacent preserve areas.

An existing segment of the Schabarum-Skyline Trail on Rose Hills' property will be relocated so the trail is completely within the park boundary. This trail segment will be located on the M&O buttress fill area along with a section of the park loop road and an ADA accessible switch-back trail up to the scenic overlook. From the Schabarum-Skyline Trail, visitors will be able to connect to each of the park decks.

Enhancing the existing trail will be a priority for elevating the trail experience. Trails in the Puente Hills have experienced a tremendous increase in use in recent years, and the Schabarum-Skyline trail is anticipated to become a major recreational component of the park. Enhancements to the trail and the County's Workman Mill Road Trailhead will include signage, wayfinding, additional design elements and plantings.



THE SCHABARUM-SKYLINE TRAIL ENTERS THE PARK FROM THE SOUTH AND THREADS UP AND OVER NIKE HILL.

The steep slopes provide a premier trail workout experience. With one hour of trail climbing, a hiker can reach Nike Hill starting from the Workman Mill Road trailhead to the west, or the Hacienda Hills Trailhead to the east, via the Ahwigna Trail.

### **Park Loop Road Multi-Use Trail**

At Crossroads Parkway South, a visually beautiful, switchback ADA ramp and trail will provide safe access up to the Park Entry Plaza, avoiding the vehicular entry. The Park Loop Road Multi-Use Trail then begins, following the side of the road uphill to the top decks of the park, providing a challenging fitness climb and four-mile trail loop.

### **Internal Park Trails**

An **Inner Loop Trail** connecting the three decks will evolve as the decks settle and stabilize. From this main trail, decomposed granite paths will connect to ADA-compliant **Deck Loop Trails** around the edge of each top deck. Internal paths and trails across the top decks will provide a scenic recreational experience and lead to the

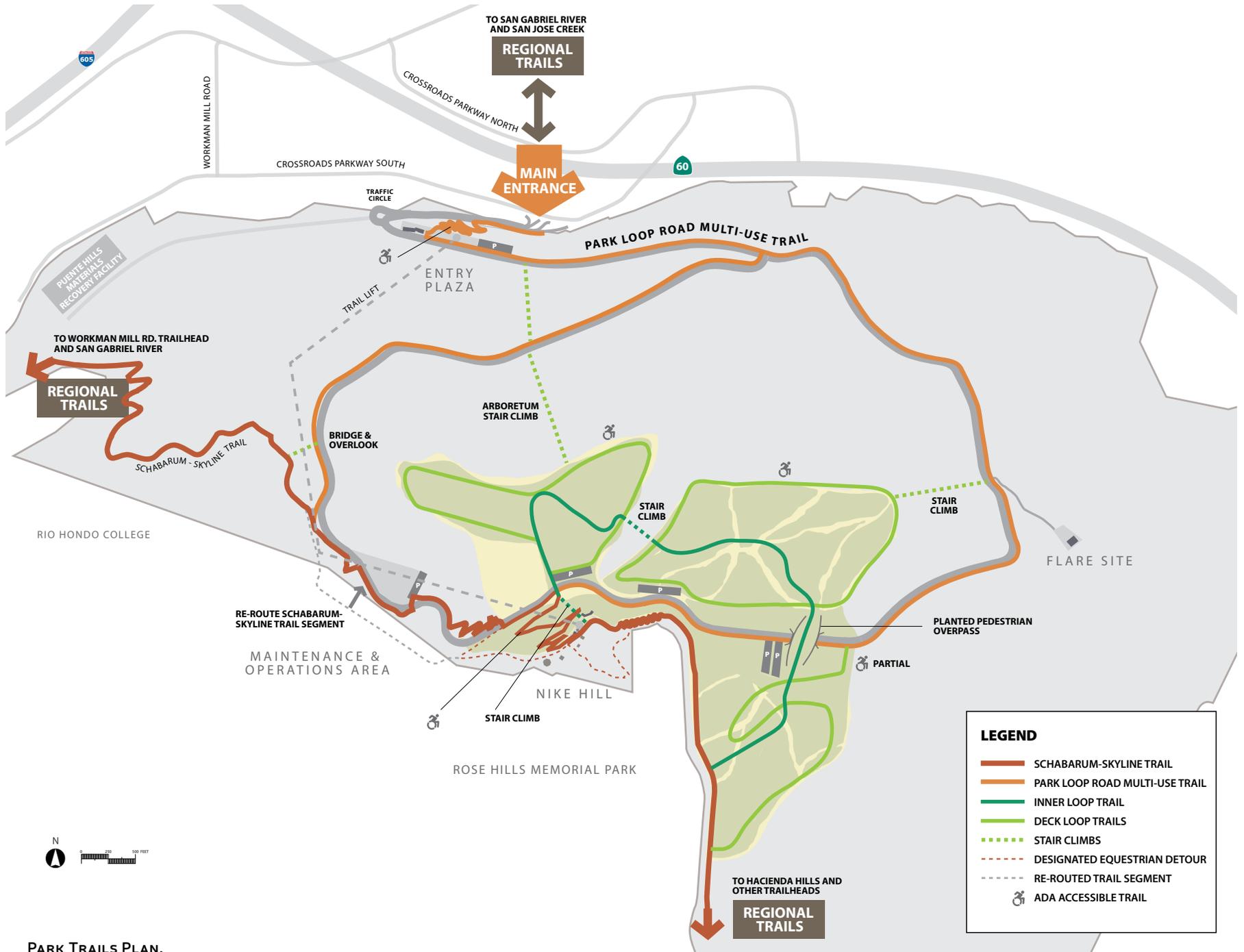
various interior park spaces. The top deck trail systems may combine or separate trail users: pedestrians, equestrians and bicyclists.

### **Connectors: Stair Climbs and Bridges**

Four stair climbs and two bridges are key circulation connectors for the Park. The Nike Hill stair climb is within Phase I. Both the planted pedestrian overcross connecting the eastern and southern decks, and the pedestrian bridge overlook on the west side of the Schabarum/Skyline trail will be the last park features to be installed due to landfill settlement.

### **Design goals for internal and adjacent trails:**

- Improve existing trailheads
- Improve existing multi-use trail condition
- Enhance planting
- Design and implement wayfinding signage
- Add trail interpretation
- Add mileage markers
- Provide fitness trail loops
- Link park trails to regional trails
- Implement stair climbs and bridges in key locations in later park phases



PARK TRAILS PLAN.

## 2.7 PARK STRUCTURES & ARCHITECTURAL STYLE

The architecture for the Puente Hills Landfill Park will create a sense of place and style that basks in light and sits lean and light on the land.

Puente Hills Landfill Park will be realized in a time of rapid technological advancement and new environmental aspiration. Technologies of today and tomorrow will allow for virtually every surface to be a source of energy production and conservation. This will build on a major legacy of the Park, the enormous production of energy from methane. Carbon-free photovoltaics, wind, water capture-and-cleanse, all of these exist today and will be second nature in these buildings and places.

All surfaces, roofs, walls, and ground plane will be designed to control, conserve, cleanse, and utilize nature's resources, particularly the water and sunlight that come in contact with them.

The landscape will be an important partner to the proposed patios, projecting balconies and adjacent outdoor spaces that the architecture creates. Canopied places of arrival and focus will nurture community pride, gathering, work (for staff), and repose.

While not necessarily large in actual area, each roof structure will be designed to mark its place with an appropriate level of importance. Roofs and canopies will harness and control the sun's

light and energy while providing shade and dappled light. These canopies will unify indoor and outdoor spaces to enhance the activities that will happen under them.

The buildings will be designed to be energy neutral, at minimum, and energy producers ideally. Fresh air, natural light, easy indoor-outdoor flow will be the basic attributes of sustainable and inspiring buildings. In a Southern California park setting, the opportunity for sustainable design is most appropriate. The buildings aspire to be of the highest standards of sustainability.

Color will be a powerful and cost-effective tool to enhance the Park, predominantly emphasizing natural places and processes, and succinctly spotlighting the handful of small, but powerful new places of focus within the vast 1,365-acre site. Earthen colors will meld built form, particularly stairs and path-related structures, into the land.

Light, occasionally bright and fresh color will be employed to provide a sense of joy and playfulness. These colors—whites, reds, oranges, yellows, greens, blues, silvers, black and grays—will embrace the inventiveness of this Park. Nature, the rustic, and the relationship to the past, present, and future drive this mixed palette of earthen tones and brighter colors, each in its place—to maximize the powerful sense of place that is Puente Hills.

White and silver canopies capture the sun's light and its shadows in ways that can be exhilarating. Fresh and light as they provide protection from harsh sun, they will also highlight the blueness of the sky above these canopies on both clear and gray days. Transformation of this place is the big idea here. It can be the embodiment of the awesome optimism of this endeavor in simultaneously bold and delicate ways.

The Visitor Center will have a large canopy that will unite the existing Sanitation Districts and new Parks & Recreation offices. They will meld new indoor rooms and outdoor patios and terraces with spectacular overlooks to the north, and the verdant slopes of Puente Hills' northern slopes to the south. It will capture the essence of the place, a working post-industrial site and a park, all coming together at the Visitor Center.

Prefabricated service structures will be selected to match the high-tech architecture style created for the Park. The Nike Hill overlook with its canopies and terraces extending out from the hill will showcase the ravishing views of a large portion of Los Angeles County.

**FACING PAGE,  
UPPER: RENDERING OF THE PARK ENTRY PLAZA.  
MIDDLE: TRAIL LIFT EXAMPLE, FUNCHAL TELEFERICO  
MADEIRA, PORTUGAL  
LOWER: MODULAR BUILDING EXAMPLE FOR  
MAINTENANCE & OPERATIONS YARD BY FROG DESIGN**



## 2.8 ADAPTIVE AND MOBILE POP-UP STRUCTURES

Conditions on the landfilled decks will require the use of adaptive and mobile structures in lieu of traditional park structures and elements. The Sanitation Districts' gas monitoring engineers must be able to scan all surfaces for soil cracks. Structures like shade pergolas, park furniture and fencing, therefore, cannot be permanent on the decks and must be solved with alternatives. Instead, adaptive and mobile structures and vehicles can do the same jobs as fixed park elements, with the added benefit of being able to "pop-up" around the park and adapt to changing needs.

These items should aspire to be functional art pieces which uniquely define the park. Using public art funding for innovative designs, these structures can express the park's distinct identity.

### **Mobile ranger vehicles and activity push carts**

A recent phenomenon fusing rangers, hands-on activities and food truck culture, mobile "roving ranger" vehicles are flexible, portable interpretive centers with eye-catching graphics, staff and interactive experiences.

Examples range from the National Park Service's \$92,000 "LA Ranger Troca" truck to the Friends of the Los Angeles River's "River Rover," a 38-foot long, \$500,000 mobile visitor center/classroom. For smaller activities, simple push carts like those used at the Huntington Library and Gardens, or tables and chairs, can be set up for pop-up programming with live plants, artifacts, and other objects.

### **Shade structures**

Pop-up tents and larger tensile shade structures will be needed to provide shade at numerous locations until tree canopies mature. These offer opportunities for striking aesthetic designs. Anchoring can be accomplished with stakes in the ground and ballast blocks or bags (weights).

### **Performance shell**

The performance shell is a major structure on the Western Deck. Remarkable units are available which can be taken down or relocated as needed, but are optimized for structural efficiency and sound quality (see photo, Section 3.4).

### **Movable fencing**

At least four types of semi-permanent or temporary fencing will be required at the park:

#### **Separation fencing: Multi-use trail/Road**

Approximately 17,000 feet of low fencing will separate the park loop road from the multi-use trail. The Sanitation Districts periodically patch the road or re-asphalt it as it buckles due to subsurface settling, and the multi-use trail may require similar maintenance. The fencing must be impermanent to allow such access.

#### **Demarcation fencing: Decks/Slopes**

Approximately 19,000 feet of boundary-marking fencing will be needed to demarcate off-limits landfill slope areas. This fencing at the decks' edges may be located downslope of visitors, to keep scenic views clear. Continuous wire fencing will likely be too costly for the great distances required, would be challenging to move for

monitoring access and maintenance, and could appear off-putting and cage-like. Instead, an inexpensive solution like low posts and rope or chain, familiar in zoos and botanical gardens, may effectively demarcate the park boundary.

#### **Perimeter fencing: Bike skills, Nature play**

Fencing of these areas can be low and informal, indicating the boundary of the bike skills or nature play areas, but not requiring seamless security like the dog park or nursery.

#### **Secure perimeter fencing: Dog park, Nursery**

Secure semi-permanent fencing will be required for the dog park area to keep dogs from escaping, and for the native plant nursery area to deter wildlife from consuming young plants.

#### **Furniture: picnic tables, benches, trash cans**

Park furniture on the decks will likely need to be loose. Although installing footings in the soil cover is possible, over time these items may upheave due to differential settling. Instead, lighter, loose furniture which spreads its weight distribution can allow flexible adjustment in response to changing conditions.

#### **Storage containers/sheds**

Secure on-deck storage may be needed for loose items such as banners, folding tables and chairs, hands-on materials, etc. On the Western Deck, nature play materials may stay outside or be stored in bins. On the Eastern Deck, bike rental is envisioned in a converted cargo container or the like. These storage containers/sheds will need to be movable for monitoring access.



CLOCKWISE FROM UPPER LEFT: A TEMPORARY/ SEMI-PERMANENT PERFORMANCE SHELL (PICTURED BY SOUNDFORMS), WOULD ALLOW FOR SANITATION DISTRICTS' MONITORING NEEDS. A MOBILE RANGER VEHICLE LIKE THE NATIONAL PARK SERVICE'S "ROVING RANGER" CAN PROVIDE POP-UP PROGRAMMING ANYWHERE IN THE PARK. SHADE STRUCTURES SUCH AS "STRETCH TENTS" WILL OFFER VERSATILE COVER FOR EVENTS. MOVABLE DEMARCATION FENCING CAN ADD TO THE CHARACTER OF THE PARK. ALL STRUCTURES, EVEN CANOPIES, SHOULD ASPIRE TO BE FUNCTIONAL ART PIECES THAT DEFINE THE PARK (BALL-NOGUES STUDIO).

## 2.8 PRELIMINARY GRADING, DRAINAGE, EROSION CONTROL & WATER QUALITY PLANS

The park experience will, throughout the many phases of growth, be defined by the previous industrial shaping of the landscape. Visible stripes on the mountainsides reveal the intensive grading and drainage patterning necessary to shed water rapidly off of the top decks and slopes. Also visible for miles around is the flat topped profile of the site contained within the Puente Hills; the telltale signature look of a modern landfill. The complex functions that initially created the aesthetics of the landfill will remain in place for many decades to come. A maturing of the park landscape will be a dynamic process, influenced by the shifting, settling land and the capacity to gradually alter what is there now in order to nurture the needs of people and enhance native habitats for wildlife.

### **Site Hydrology**

Stringent water restrictions on the top decks require close monitoring of both natural rainfall and proposed irrigation in order to prevent infiltration into the fill and protect groundwater quality. However, the top deck's monolithic clay cover ("mono-soil") also needs planted cover to prevent erosion, and a certain moisture (water balance) maintained to prevent cracking and gas escape, while avoiding soil saturation and soil percolation. Erosion control and positive drainage are the fundamental requirements of the park's three top deck areas.

Reliance on seasonal rainfall alone in a region experiencing drought conditions is difficult and most likely is not an option for the maintenance of protective plant cover. The goals of sustainability for the park must include the maintenance of drought tolerant plantings for erosion control, water balance in the clay caps of the top decks plus the establishment of the hedgerows, grasslands and coastal sage scrub slopes that make up the park landscape.

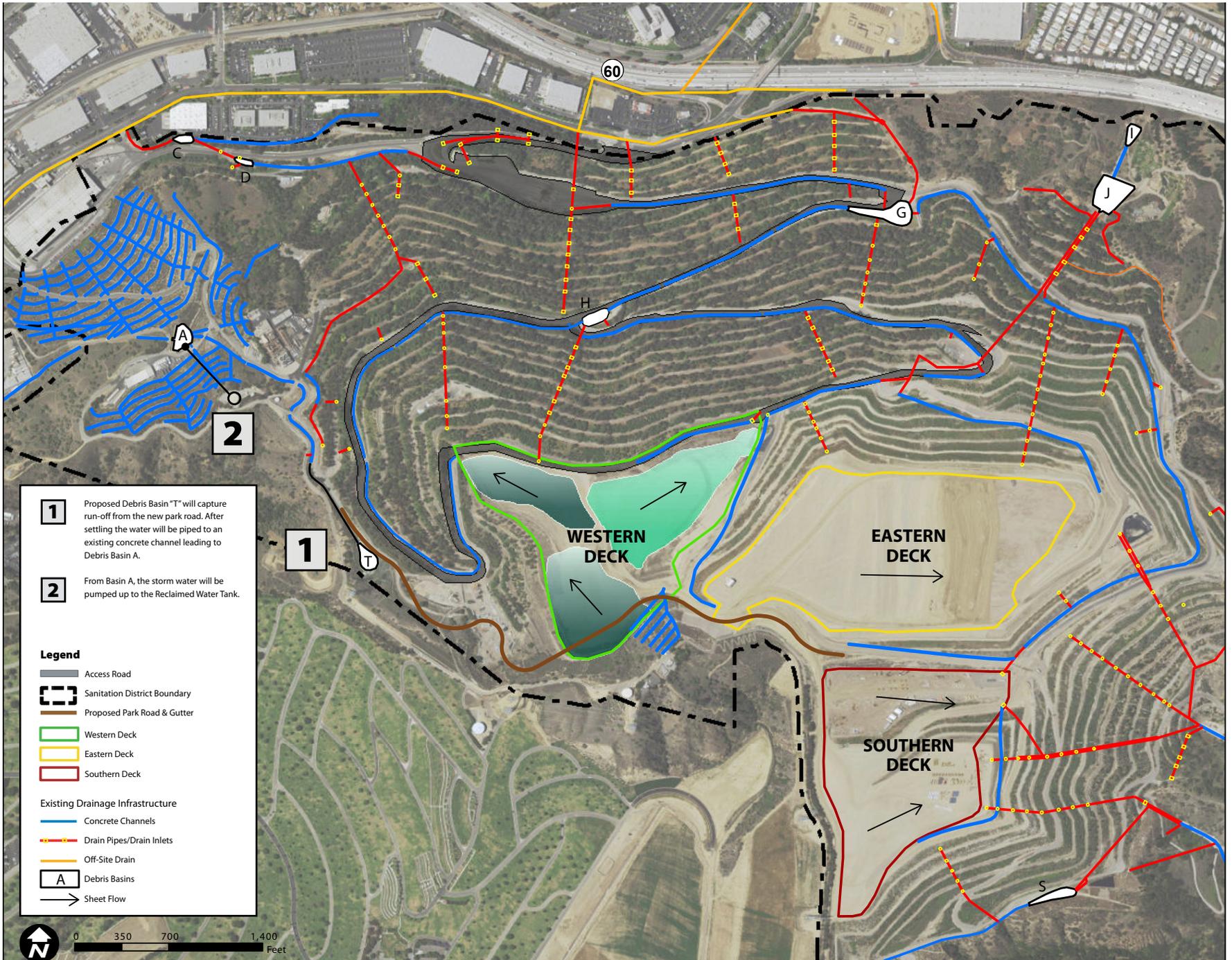
Future application of monitoring tubes and soil moisture probe technology may bridge the reduced water need requirement of the landfill caps with the shade and aesthetic needs of a park landscape. These strategically placed irrigation components can ensure that the wetting systems beneath a shallow layer of import material will not saturate the clay soil and may provide the solution to new plant establishment.

### **Water Capture**

Although the Sanitation Districts use reclaimed water from the San Jose Creek Water Reclamation Plant for the establishment and maintenance of plant material, dust control and soil compaction, stormwater capture may become necessary in order to supplement the allotment of reclaimed water available for the park. Water conservation has reduced the availability of reclaimed water as well. Proposed stormwater capture includes the creation of a sediment basin,

utilization of the existing drainage system and a water treatment mechanism. Efforts to capture stormwater runoff for irrigation may be necessary to counterbalance or remove salt buildup over time from the reclaimed water supply.

Steps towards a sustainable park include approvals from regulatory agencies. The balance of parkland needs and environmental system monitoring and maintenance will require on-going communication, research, discovery and creative solutions. Over time, the overarching park objectives of sustainability and education will gain momentum. The availability and placement of utilities, water sources, and park structures will significantly define what the Park becomes.



THE EXISTING DRAINAGE SYSTEM PREVENTS STORM WATER PERCOLATION INTO THE LANDFILL.

## 2.10 SUSTAINABILITY PLAN

The realization of a new future for this magnificent site harnesses the existing innovations of gas to energy and recycling with new sustainable technologies. By actively modeling environmentally sustainable design and practices, the Park as it evolves will place the County in a regional leadership role for sustainable practices. The over-arching goals for the Park will be:

- Modeled on healthy systems and processes.
- Compatible with responsible stewardship of the planet.
- Evaluated for reduction of impacts on scarce resources.
- Capitalize on contextual opportunity with the regional ecology of the Puente/Chino Hills.

Park planning and practice will consist of:

- Plans that will be evaluated against sustainable design performance criteria.
- Sustainable landscapes that may model on the Sustainable SITES Initiative rating system.
- Sustainable buildings that may model on the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) criteria.
- Recreational elements that will be developed that are "light on the land" and support sustainable technologies.
- A prefab building for the Maintenance and Operations facility that will be implemented.
- Use of existing topography vs. extensive land grading as a design feature and mitigation measure.

- Minimized pavement application reduces the impacts of stormwater runoff.
- Mobile, "pop-up" programming vs. resource-intensive bricks-and-mortar facility needs is part of the park programming objectives.
- An native plant nursery will provide educational and habitat enhancement opportunities on-site.

Renewable Energy Systems will consist of:

- Solar (photo-voltaic) panels will be a part of infrastructure development.
- Electric vehicle hook-ups will be installed
- Electricity generated at the on-site Gas to Energy facility can be used at the Park.
- Hybrid technology including solar/electrical and electrical/natural gas may be utilized for:
  - Trail Lift
  - County maintenance Equipment (solar powered blowers)
  - Park vehicles
  - Mobile educational carts
  - Concessionaire facilities

Sustainable design features will include:

### *Multi-Modal Transportation*

- Limit vehicular access over time as the park matures.
- Provide for off-site parking.
- Utilize solar-powered electric park shuttles.
- Design and implement partial solar-powered electric trail lift. (Model: Telluride "Green Gondola Project" powered by local solar arrays)

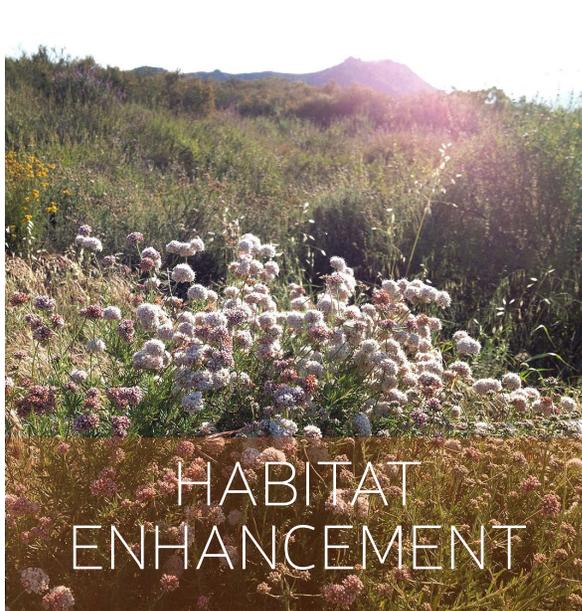
- Promote regional transit, biking, walking, hiking and equestrian access.
- Provide bicycle rental.
- Capitalize on regional connections to Emerald Necklace, Schabarum-Skyline Trail and potential future Metrolink station(s).

### *Water Management*

- Capture and reuse stormwater utilizing existing on-site retention basins for 'soft water' flush of saline build-up.
- Share existing recycled water system for supplemental park irrigation.
- Commit to low-water, native plantings to reduce water consumption and enhance habitat.

### *Reuse and reduction of waste*

- Explore creative reuse of reclaimed materials and discarded products.
- Enforce plastic bottle ban. The park will have water refilling stations. Visitors are encouraged to bring their own reusable bottle or purchase one. (Model: Bottle-free policies at National Parks such as Zion and Grand Canyon have eliminated 60,000 plastic water bottles per park, equal to 5,000 pounds of plastic waste avoided annually).
- Create programs to include interpretive & public art utilization of recycled materials.



HABITAT  
ENHANCEMENT



RENEWABLE  
ENERGY



RAIN  
CAPTURE



SUSTAINABLE  
DESIGN



NO DISPOSABLE  
BOTTLES



WASTE  
AWARENESS

**PUENTE HILLS LANDFILL PARK WILL TAKE A LEADERSHIP ROLE IN THE COUNTY FOR DEMONSTRATING SUSTAINABLE PRACTICES.**

**PHOTO CREDITS, CLOCKWISE FROM TOP LEFT: ANTHONY BEVILACQUA; TATMOUSS; WATER STORAGE TANKS, INC.; SAN FRANCISCO ZERO WASTE; GLOBALTAP; HOPE S. PHILBRICK.**

## 2.11 PARK LANDSCAPE

The proposed planting is a rich mosaic of ecologies. This industrial, altered landscape is a novel ecology; patches of natives and non-natives that are mixed on the top decks of the landfill. The park, as part of the landfill, is not covered over. By moving park users through shade and sun, planted and open, the created moments of the industrial landscape are revealed. Sown grassland strips of varying heights create strata of texture. Over this are shrub layers in patterns that define outdoor rooms for flexible park spaces. The ecology of the Park is the 'base layer' on top of which are the flexible programmed spaces, the bird observation areas, the interpretive areas and the trails throughout the top decks.

### **Hedgerow Planting**

The dominant design focus is a weaving concept that pulls together the various landscape planes as experienced from the ground and as viewed from above. Long allees of shrubs or trees are strategically planted to emphasize the industrial nature of the spaces through the architectural angling and composition of the plantings. The dark lines throughout the plan indicate "hedgerows". These hedgerow plantings create and define specific spaces on the vast flat landscape of the top decks. The hedgerows act like stitches, functioning to weave the disparate landforms together visually and functionally. These will evolve over time as top decks continue the settling process in a dynamic and shifting environment.

A secondary design concept that moves through all areas of the park is to reveal and frame the industrial landscape against the backdrop of the park and the adjacent landscapes that vary so greatly in function and aesthetics. The striking juxtaposition of lush green grass to the south, with native hills to the east, and flat, arid landscapes on the top deck are embraced by a park design that further challenges the senses.

Order from the surrounding visual tapestry is found by searching for the meaning of the various lines and planes laid out over the park landscape. By this exercise park users are stimulated by the various opportunities presented to them in such an unusual fashion. Flexible spaces for recreational programmed uses are then found to be lightly placed into the landscape in a very temporary and ephemeral way that is completely unique and site specific.

### **Native Planting**

Parkland buffering, screening and shade are the transformative landscape plantings to be initiated over the first two phases of park development. Edge conditions created between paths, trails and slopes may be planted with a chaparral-coastal sage scrub mix to blend with the existing slope planting. Suitable native and drought tolerant trees and large shrubs proven effective on the eastern landfill slopes that are tall enough to provide shade are the Mexican Elderberry, Toyon, Laurel Sumac, Sugar Sumac and Lemonade Berry.

The park landscape is strategically designed throughout the parklands and the landfill slopes to provide the following functions:

- Create shade on the top decks
- Organize the flexible spaces
- Provide safe planting barriers between park use and ongoing landfill operations
- Move park users through the park from one event to another
- Indicate an event such as a stair-climb
- Protect and buffer one use from another
- Increase habitat quality and quantity over time

### **WHAT IS A HEDGEROW?**

**A HEDGEROW IS A LINE OF CLOSELY SPACED NATIVE SHRUBS AND TREES, PLANTED AND TRAINED TO FORM A BARRIER OR TO MARK THE BOUNDARY OF AN AREA.**



**LARGE NATIVE SHRUBS SUCH AS TOYON, ELDERBERRY AND SUMAC WILL FORM HABITAT-ENHANCING PARK HEDGEROWS.**

## 2.12 LANDSCAPE & HABITAT PLAN

Although the landfill and top decks comprise a disturbed landscape, the proximity of the natural open space of the Puente Hills to urban populations makes the park site a potentially valuable biological resource. To visually transform the landfill into a regional park over a period of 30 years, each phase of park development will require selective plantings for screening, shade, barriers, aesthetics and habitat enhancement. The Master Plan proposes to create a park landscape that is inclusive of connectivity to adjacent preserve wildlands and identifies areas of the site for strategic habitat enhancement efforts.

In general, the urban adjacencies impact wildlife in this area to such an extent that the future park site offers only marginal local corridor value on its own and does not provide any additional connectivity for the fragmented areas within the Puente-Chino Hills wildlife corridor. The mission then of the landscape habitat plan is to create and effectively maintain larger habitats within a wildlife corridor and providing a larger urban buffer for less tolerant species.

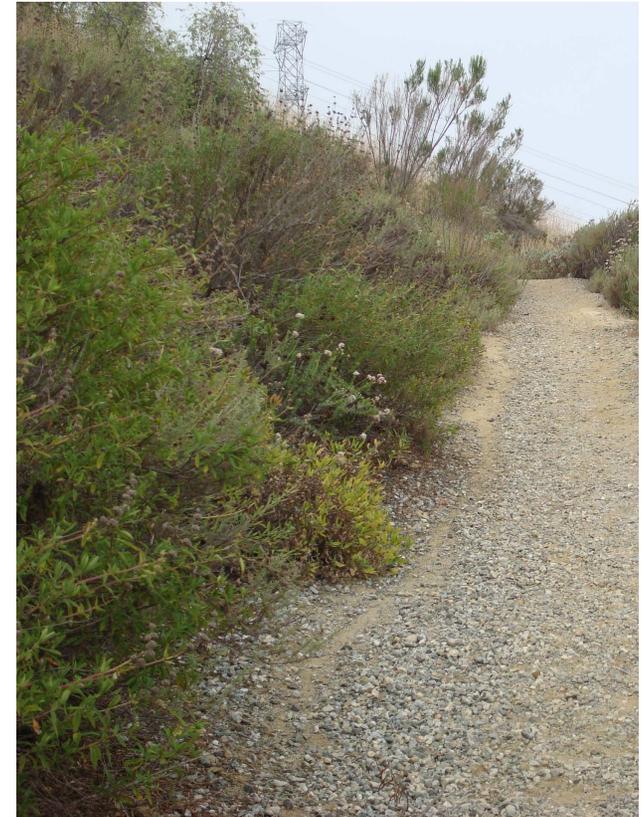
Most of the non-fill sites and areas adjacent to the top decks are vegetated and provide some shelter as wildlife moves through the area. Mature ornamental plantings on the northern slopes change to California native plant ecologies on the eastern and western slopes of the landfill. The landfill slopes provide the cover and habitat to facilitate wildlife movement if not residency.

Continual land shifting and settling demands that maintenance be allowed to cut, prune and remove vegetation for necessary repair to the decks and slopes. However, over time, the dominant coastal sage scrub proposed as underplanting on the northern slopes and the Nike Hill slopes will expand resident habitat and increase connectivity for certain species.

The approach for phasing of the landscape includes a salt tolerant plant palette. One of the most significant constraints is soil quality and salinity. Over time, top deck plantings will move towards California natives. Survival rates and plant evolution will determine the final percentage of natives and non-native plants in the heavy clay soil environment.

Transformative landscape planting for park aesthetics and wildlife corridor enhancement will include the following:

- Provide ecological connectivity to the adjacent Significant Ecological Areas (SEAs) to the east and west of the park.
- Enhance a wildlife corridor by providing the natural resources to support wildlife movement through the area including the parklands.
- Improve the regional environment by providing a landscape that is resilient and enhances site sustainability.
- Identify wildlife corridor area and coordinate on-site nursery growing and planting of native plants for food, cover and shelter.



**ABOVE: COASTAL SAGE SCRUB ON THE PLANTED EASTERN SLOPES OF THE LANDFILL.  
FACING PAGE: WILDLIFE AT HOME ON THE LANDFILL.**



PHOTO CREDIT: SANITATION DISTRICTS OF LOS ANGELES COUNTY

## 2.13 PARK PROGRAMMING

The former landfill site offers a wondrous and varied landscape into which the park will develop. This diverse setting with its visual and topographic extremes encourages a wide range of recreational activities for all user groups. Its topography attracts the bicycle enthusiast, the fitness groups and hikers. The extraordinary views and vast flatlands beckon equestrians and families with children.

The Master Plan promotes a lively mix of programs by developing the setting for a host of recreational activities. Over time, the various educational, technology, and stewardship programming components may strengthen further in response to community need.

Ultimately, the goal of the park plan and phasing plan is to provide for a flexible program that will become increasingly diverse and focused in response to regional and local interests.

### **Programming Goals**

- Create a distinctive programmatic identity for the park that incorporates nature, art, recreation, education, sustainable technologies, and open space. Partner with the Los Angeles County Arts Commission to fund arts competitions.
- Partner with stewardship groups to cultivate a native plant nursery program, volunteer program, community planting and maintenance, educational curriculum, nature programs and tours.
- Provide adaptability and flexibility into the park design framework to accommodate changes over time.
- Concentrate active programs and structures at two locations; at the front entry Visitor Center and at the Nike site at the highest elevation.
- Concentrate activities close to the spine of the Schabarum-Skyline trail and loop top deck trails and park elements back to the spine to preserve open space, maintain a wildlife corridor, and enhance habitat.

The transformative power of the landfill conversion has the potential over time to invite the region, if not the nation, to a site that identifies itself as a destination for clean technology, education and recreation. Rising to the challenge of creating greener urban environments, the new regional park will be at the heart of California's goals and policies regarding sustainable urban environments.

The rare and unique achievements of the former landfill operations will be an on-site example for the education components featured at the Visitor Center. The complex technologies of the landfill and the Materials Recovery Facility will be incorporated into the park program.

The park programming and design is geared to limit single occupancy vehicles in order to encourage multi-modal transportation. Transportation methods include bicycling, hiking, riding on horseback, shuttle service and a partially solar powered trail lift. Off-site parking and a park shuttle will take visitors to the trail lift at the entry plaza or to the top western deck for special programmed events. The trail lift will bring park visitors up from the front entry visitor's center to the highest point of the Nike site over the western side of the former landfill.



FITNESS &  
WELLBEING



NATIVE PLANT  
NURSERY



NATURE  
EDUCATION



ART  
EXPLORATION



HABITAT  
PLANTING



OUTDOOR  
PERFORMANCES

PARK PROGRAMMING WILL BE FLEXIBLE TO RESPOND TO EVOLVING PARK FACILITIES AND CHANGING COMMUNITY INTERESTS, WHILE OFFERING A LIVELY MIX OF OPPORTUNITIES FOR A DIVERSE REGION. PHOTO CREDITS, CLOCKWISE FROM TOP LEFT:

## 2.14 INTERPRETIVE AND CIVIC ART PROGRAM

Thematically rich, this landfill park site is full of material—literally—for interpretation and artistic reflection. Numerous subjects emerge from the site’s dramatic juxtapositions of history, future, city, nature, waste, conservation, industry, infrastructure and environment.

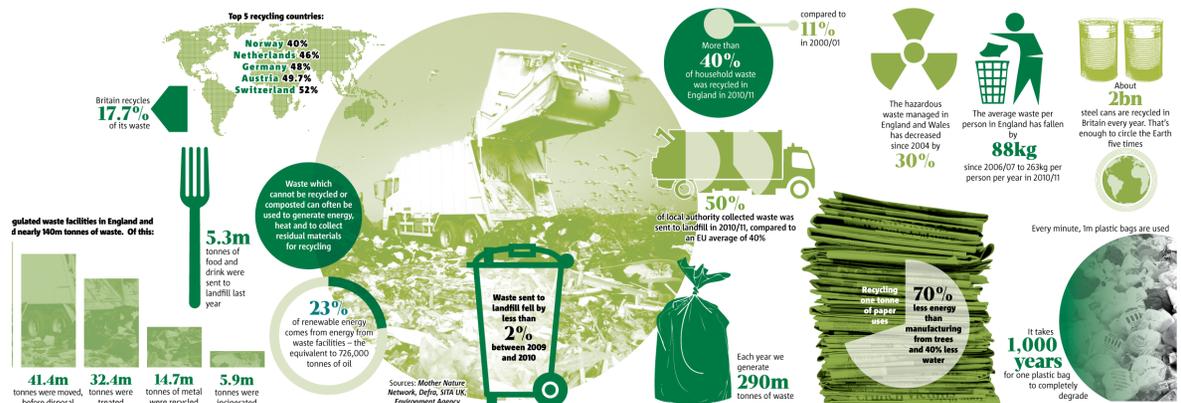
Many of the park’s most interesting stories are not obvious. One hundred thirty million tons of trash are completely invisible, covered under layers of planting and soil. Although the signatures of the landfill reveal hints such as unusual pipes, mysterious monitoring equipment, and terraced mesas, the park requires clever artistic interpretation to peel back the hidden layers and engage the public’s intellect.

Interpretive opportunities abound. As the Park is designed to display the site within the context of the Puente Hills, every point within the park can enrich the visitor experience. Interpretive themes may include:

### Waste Education and Interpretation

A key “light bulb moment” will be when park visitors gazing out to the striking mountain panorama realize that they are perched on a mountain of trash.

This site reveals the urgent opportunity and responsibility to examine the profound impacts of modern disposable culture and its severe toll on the natural environment. These massive landforms, some 500 feet deep, are made of the Los Angeles region’s collective trash.



The Puente Hills Landfill received national media coverage and a starring role in the book “Garbology,” for its mammoth scale of operations, industry innovations and eventual closure. Its evolution into a park with a conscience opens up a new chapter and role in serving the public.

The transformation of this park into a special destination will not ignore or hide the fundamental issue, waste, that created this place. By promoting creative ways to reuse resources and by tackling waste reduction through education and interpretation, Puente Hills Landfill Park can be a catalyst for change in Los Angeles County. A key point is that landfills result from collective waste, and only collective solutions will set the region on a more sustainable trajectory.

Education and interpretation of the landfill, waste stream, gas to energy conversion, history of the site, impacts of waste around the world, resource depletion, habitat loss and ocean garbage patches are just some of the many themes that can be developed for the park.

Interpretive signage, cameras into the MRF, tours to the MRF, park elements constructed from recycled materials, park structures that meet LEED criteria are significant topics for educational development.

Surprisingly, several other sister landfills are clearly visible from the park: in the Montebello Hills to the east and the BKK Superfund site in West Covina. Mapping the region’s numerous landfills will highlight their quantity, proximity and the impacts of our often hidden waste stream processes.

### Artistic interpretation

A few examples of site-specific opportunities are listed below:

#### ■ Settlement Measuring Stick

An oversized sculpture at the Flare Site positioned to visually mark and record the Eastern Deck’s settlement over time. Future generations will see how high the landfill used to be, and how much it has settled, possibly 125 feet.

#### ■ Window into our Trash

A glass window exhibit embedded into a landscaped slope, revealing a cross-section of buried waste from each decade. (e.g. 1964 cereal boxes, 2003 cell phones)

#### ■ Landfill Growth Rings

Large labels along the park loop road mark the accelerating years of the landfill’s growth (“1963”, “1973”, “1983”, “1993”, “2003”, “2013”) as visitors ascend to the top of the landfill.

#### ■ Stained glass trash

At the scenic overlooks, embedded in clear acrylic/glass panels or flooring: colorful, thinly sliced collages of landfill waste.

#### ■ Ribbons of E-waste

Undulating lengths of electrical cords, fiber optics and circuitry, encased in acrylic arches and bands.

#### ■ Waving Inflatable Tubes

Occasional eruptions of color and movement.

#### ■ Artist-in-Residence Program and Partnerships

Led by artists, designers and architecture makers and curators.



“UPCYCLED” PIPES AS INTERPRETIVE VIEWING SCOPES. DISCARDED SECTIONS OF METHANE PIPES CAN GAIN A NEW LIFE AS SIGNATURE PARK VIEWING SCOPES, PROVIDING A PEEK INTO THE GROUND, OR FOCUSED ON DISTANT LANDMARKS AND SITE PHENOMENA.

FACING PAGE: ARTISTIC AND INTERPRETIVE OPPORTUNITIES. (UPPER) ARTIST DUSTIN YELLIN CREATES 3D COLLAGES WITH LAYERS OF GLASS AND RESIN. (MIDDLE) WASTE-IN-FOCUS PHOTOGRAPHY PROJECT DOCUMENTED ONE WEEK OF FAMILIES’ WASTE. CREDIT: PETER MENZEL AND FAITH D’ALUISIO. (BOTTOM) WASTE INFOGRAPHICS. CREDIT:

## Site History and the Puente-Chino Hills

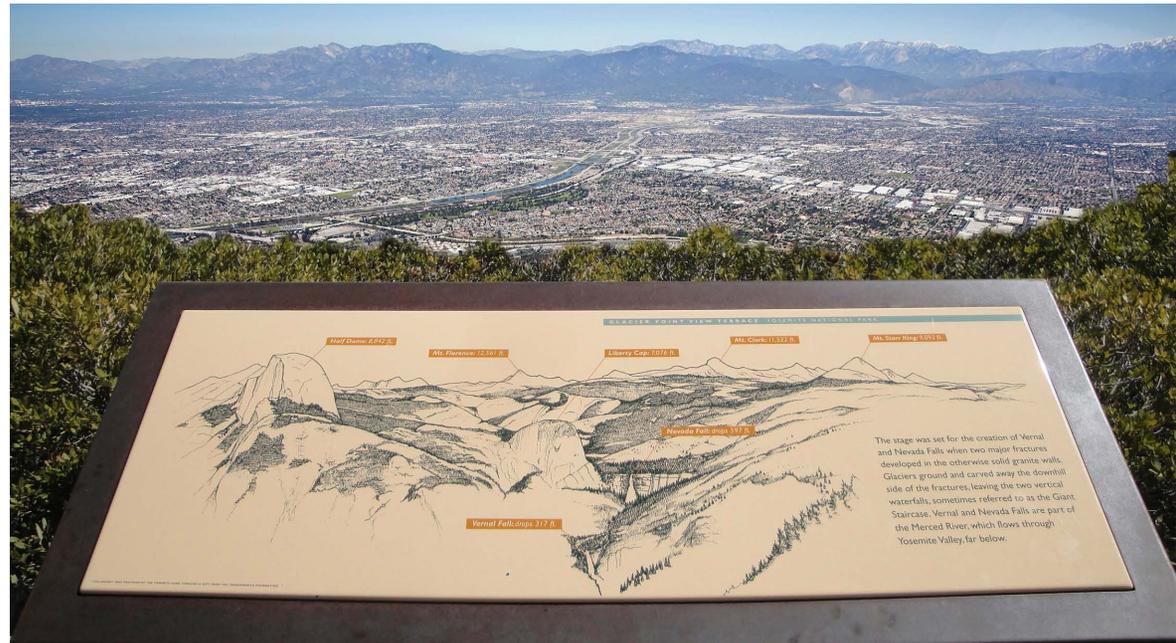
For thousands of years indigenous people utilized the Los Angeles basin for hunting and gathering. In the 1700s the Spanish Missions converted the land to agriculture and cattle grazing. But it was the arrival of the railroad and the discovery of oil in the earth's fault lines that moved the region into the industrial age. Interpretive themes may include:

- Landfill history, Nike Missile history
- Puente-Chino Hills history
- Created by seismic uplift, Whittier Narrows
- Tongva-Gabrielino history in region
- Ethnobotany: Cultural uses of plants

## Native flora and fauna

Home to many special creatures and plants, the Puente-Chino Hills are a refuge of natural beauty and biological significance in a sea of urbanization. Nature surrounds the landfill and the Puente-Chino Hills wildlife corridor stretches about 26 miles southeast all the way to the Cleveland National Forest (almost 25,000 acres).

- Plant communities including coastal sage scrub, grasslands and oak woodlands
- Identification and information of resident and migrating species including deer, coyote, mountain lion, rabbit, raptors, birds, bats, insects, lizards, and pollinators
- A plant nursery will be part of the park's educational component. Native and drought tolerant plants will be grown to actively replace and replant park areas requiring patching, repair or re-construction due to landfill settling.
- Ideal locations for bird observation and wildlife observation will be marked along particular trails. Habitat restoration planting and monitoring will be identified.



VIEW FROM NIKE HILL TO THE SAN GABRIEL MOUNTAINS NATIONAL MONUMENT WITH A SUPERIMPOSED EXAMPLE OF MOUNTAIN PEAK IDENTIFICATION AND INTERPRETATION (SIGN CREDIT: YOSEMITE NATIONAL PARK)

## Regional Connectivity

The on-going efforts to restore regional open space and link communities can be illustrated from the advantage point atop Nike Hill.

## Mountains, Rivers, Natural Landmarks

- Peaks of the San Gabriel Mountains
- San Gabriel River
- Rio Hondo River
- Residential development
- Industrial impacts

## Urban/Suburban Connections

- Local landmarks
- Downtown Los Angeles skyline
- San Gabriel Valley cities
- Residential development
- Industrial impacts

## Landscape of Infrastructure

- River settling basins, flood control
- San Jose Creek water reclamation plant
- Freeways, rail shipping lines
- Oil drilling, power lines, landfills



**(CITY)**  
UNDERSTANDING OUR  
INFRASTRUCTURE  
LANDSCAPE

**(SITE)**  
LANDFILL HISTORY,  
INNOVATION,  
SUSTAINABLE LIVING

**(ECOLOGY)**  
NATIVE WILDLIFE + PLANTS,  
EFFORTS TO IMPROVE  
HUMAN IMPACTS

**(MOUNTAINS + RIVERS)**  
NATURAL + CULTURAL HISTORY  
OF THE SAN GABRIEL VALLEY

**(INDUSTRY)**  
GETTING TO  
ZERO WASTE

**(COMMUNITY)**  
PERSONAL IMPACTS  
MULTIPLIED,  
WHAT CAN I DO?

**(HABITAT)**  
IMPORTANCE OF THE  
PUENTE-CHINO HILLS, HABITAT  
PRESERVATION AUTHORITY

INTERPRETIVE THEMES: PUENTE HILLS LANDFILL PARK IS RICH IN INTERPRETIVE CONTENT WHICH CAN BE LINKED TO SPECIFIC PARK LOCATIONS AND VIEWS.

## 2.15 PARK SAFETY MECHANISMS

The phased park construction incrementally builds upon itself, ultimately emerging from its industrial roots into a uniquely beautiful, intriguing, safe and inviting public space. Each phase stands alone, yet will tie into the previous accomplishments including strategically placed infrastructure for emergency situations. The park will, at all times, meet public health and safety regulations, such as those required by the Los Angeles County Fire Department and other applicable regulatory agencies. Damage from earthquakes may be unavoidable over a 75 year park phasing plan. Known fault lines in the Puente Hills and the Whittier Fault to the west of the park could cause local or regional damage. Although the Puente Hills Landfill Park places few facilities throughout the site, potential damage to utilities from earthquakes can occur without warning.

The construction of a park loop road in phase one ensures generous access to all proposed park facilities. However, the heavy traffic at the one park ingress and egress from Crossroads Parkway could be an emergency or evacuation bottle-neck. Given the many demands on the park entry, several ingress and egress road sites at the perimeter of the landfill must act as emergency access points.

### **Ingress and Egress**

In the case of a park visitor emergency, first responders from the adjacent municipalities with emergency facilities in response to and emergency/evacuation situation range in distance from 3 to 13 miles from the park entry. In an emergency, all the bench roads within the landfill

area, not open to the public, would be available for emergency vehicle use. Emergency vehicles (in unusual or extreme disaster situations) may be able to access the Materials Recovery Facility (MRF) area located on the former landfill site via the existing gated access road and/or a new internal off-street access road.

The existing main entrance off of Crossroads Parkway South and the Entrance Station area would serve as the primary emergency ingress and egress. Two additional ingress and egress sites on the west and south park boundaries include the Rio Hondo College entrance road and the Rose Hills road network. The most appropriate ingress and egress site would depend on the type and severity of the emergency and subsequent evacuation procedures.

The back side ingress and egress at the street end on Orange Grove and up the Eastern Canyon either at Canyon 4 or Canyon 5 could service park emergencies as a second option if the main entry is blocked by traffic, landslide, fire, or other emergency event requiring evacuation of park users.

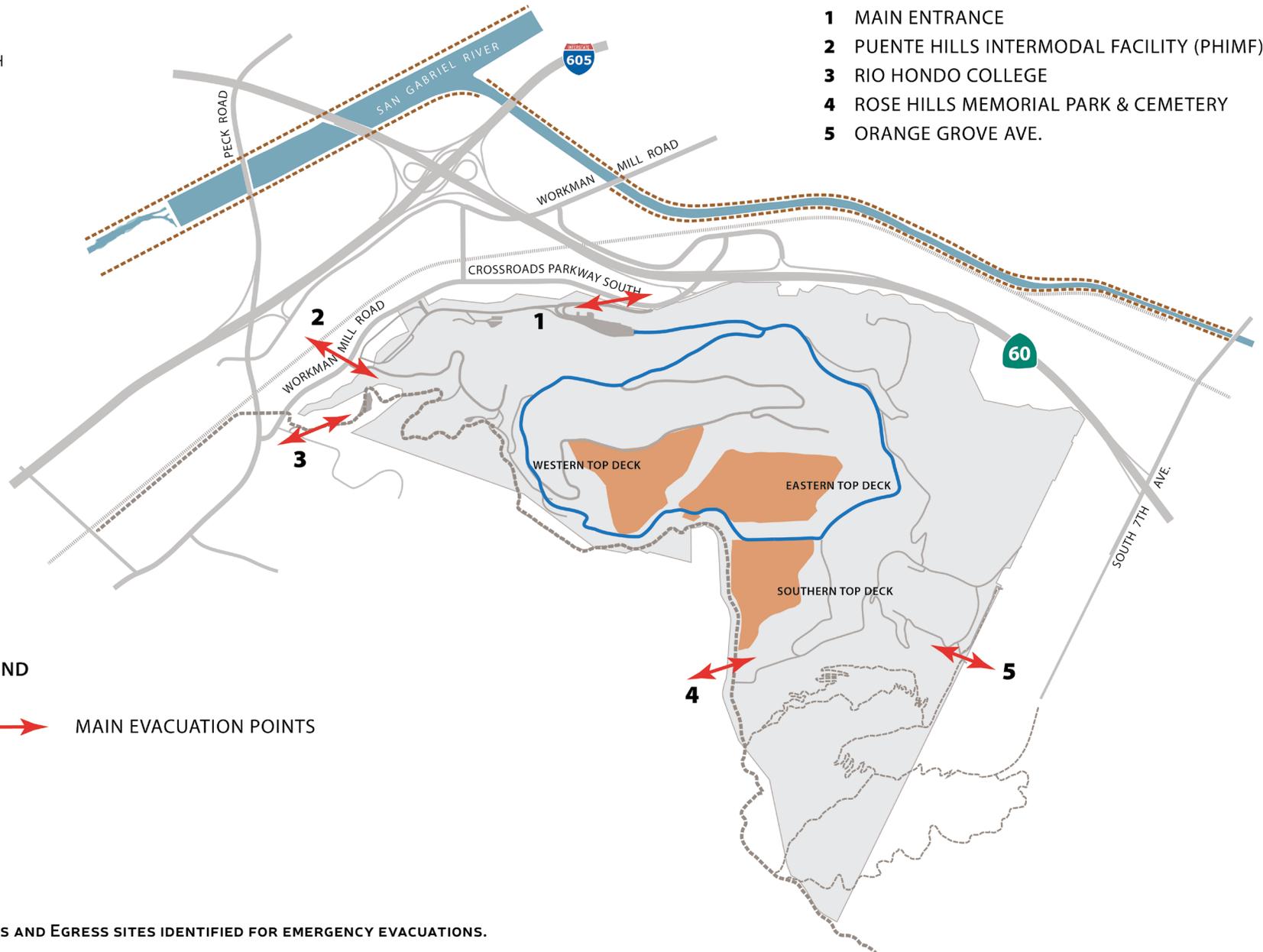
### **Emergency Response**

A County Animal Services Coordinator serves within the “Operations” section and is trained in disaster response, animal care, and animal rescue if equestrians and their horses become part of the Puente Hills Landfill park evacuation equation. All counties of California have a local Office of Emergency Services (OES) to identify hazards and to prepare for, respond to, mitigate, and help recover from both large and small local incidents.

The county OES is a coordinating agency that brings together local agencies to focus on unified responses to disaster

If the degree of emergency intensifies to a site-wide issue affecting the park and landfill, emergency aid and the County of Los Angeles Disaster Routes have been developed for the region. Guidance for such an emergency is to be structured to be consistent with the Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS), and all relevant County, State, and Federal Laws.

Regulatory requirements for specific activities related to Puente Hills Landfill operations remain in effect post-closure. These include: 1) Emergency Action/Fire Prevention Plan (EAP), 2) Spill Prevention, Control and Countermeasure Plan (SPCC), 3) Hazardous Materials Business Plan, and 4) Storm Water Pollution Prevention Plan (SWPPP) which contains a Liquid Discharge Emergency Response Plan for release of landfill liquids to surface water.



INGRESS AND EGRESS SITES IDENTIFIED FOR EMERGENCY EVACUATIONS.

## 2.16 OPERATIONS AND MANAGEMENT PLANNING

The designation of “Special Use” within the County of Los Angeles’ General Plan is a powerful term, utilized for single purpose facilities that serve a greater regional recreational need.

Accompanying this designation is the assignment of a dedicated County park staff whose sole mission is the successful management, protection, and development of the facility in perpetuity. The Puente Hills Landfill Park requires this designation in order for the County to apply the focus and dedication, and allocate the funding necessary to build this park which is like no other. Not only is a steep learning curve necessary for park staff due to the challenging nature of the landfill requirements, but the phasing plan will require two to three decades of committed effort to achieve. The enormity of tasks and resources needed to realize the Puente Hills Landfill Park Master Plan’s vision may very likely rival the significant resources utilized for the successful restoration, programming and management operations of the Hollywood Bowl, a beloved Los Angeles iconic venue that is classified as a special use facility.

In order to responsibly manage and enhance these complicated “Special Use” parklands as park staff in collaboration with many agencies and associated experts, must have the knowledge and specific skills to oversee and guide the interim approvals and implementation processes. A park administrator along with a programming director will provide the oversight

and authorization to direct the planning/phasing process, habitat enhancement and redevelopment functions including recreational programming.

The goal of “Sustainable Park” is an equally important designation within the County of Los Angeles’ General Plan. Sustainable design and management practices have the capacity to repair ecosystems to a great extent by taking advantage of the natural processes within the environmental context of the site. This comprehensive approach to park design is the key component of the master plan vision. This single goal permeates every decision throughout all phases of park development. Proposed recreational infrastructure is light on the land or is suspended above the park. Sustainability is also folded into every programmed event and educational/interpretive component.

The Puente Hills Landfill Park will be overseen by a dedicated park director; a senior supervisor position within the Department of Parks and Recreation, a programs director and a staff of park workers. Vital management tasks for the Park’s ultimate success include:

- Direct the master plan vision for the site
- Provide sustainable energy strategies
- Oversee the development and build-out of the site through Phases 1 through 3

- Plan for implementation of Phases 4 and 5
- Organize programs that are suitable and flexible for each phase of development and can change over time
- Oversee and coordinate with ongoing landfill operations
- Operate and maintain the Park and its facilities
- Formulate an outreach plan and engage in continuous community outreach
- Provide long-range planning and funding sources to ensure the Park’s continued viability

**SURFACE CRACKS AND ESCAPING METHANE REQUIRE CONSTANT ATTENTION AND MAINTENANCE OVER THE NEXT 30 YEARS AS THE LANDFILL CONTINUES TO SETTLE.**



## 2.17 CONSISTENCY WITH THE LOS ANGELES COUNTY GENERAL PLAN

Maintaining a steady course to implement the vision for this exceptional park requires an unflinching dedication to the primary park goals and objectives as set forth in the County General Plan (2015). Beyond the technical and operational demands, the phased transformation to parkland will be a prolonged undertaking affecting regional planning for county agencies, political entities and the community. In addition to the goals and policies of the Conservation and Natural Resources Element, specific goals and policies adopted into the Park & Recreation Element are inextricably linked with its ultimate success.

### **An allowed Regional Park under land use designations**

The Project site has two land use designations. The western portion of the site is designated as “Public and Semi-Public” (P) in the Land Use Element of the Los Angeles County General Plan. The eastern portion of the site is designated as “Open Space - Parks and Recreation” (OS-PR) in the Hacienda Heights Community Plan. As a regional park, the Project is an allowed use under both land use designations.

### **Consistent with and supports the following goals and policies in the Parks and Recreation Element of the General Plan:**

#### ***Goal P/R 1:***

#### ***Enhanced active and passive park and recreation opportunities for all users.***

Policy P/R 1.1: Provide opportunities for public participation in designing and planning parks and recreation programs.

Policy P/R 1.2: Provide additional active and passive recreation opportunities based on a community’s setting, and recreational needs and preferences.

Policy P/R 1.3: Consider emerging trends in parks and recreation when planning for new parks and recreation programs.

Policy P/R 1.5: Ensure that County parks and recreational facilities are clean, safe, inviting, usable and accessible.

Policy P/R 1.10: Ensure a balance of passive and recreational activities in the development of new park facilities.

Policy P/R 1.11: Provide access to parks by creating pedestrian and bicycle-friendly paths and signage regarding park locations and distances.

#### ***Goal P/R 2:***

#### ***Enhanced multi-agency collaboration to leverage resources.***

Policy P/R 2.6: Participate in joint powers authorities (JPAs) to develop multi-benefit parks as well as regional recreational facilities.

#### ***Goal P/R 3:***

#### ***Acquisition and development of additional parkland.***

Policy P/R 3.1: Acquire and develop local and regional parkland to meet the following County goals: 4 acres of local parkland per 1,000 residents in the unincorporated areas and 6 acres of regional parkland per 1,000 residents of the total population of Los Angeles County.

Policy P/R 3.3: Provide additional parks in communities with insufficient local parkland as identified through the gap analysis.

#### ***Goal P/R 4:***

#### ***Improved accessibility and connectivity to a comprehensive trail system including rivers, greenways, and community linkages.***

Policy P/R 4.1: Create multi-use trails to accommodate all users.

Policy P/R 4.4: Maintain and design multi-purpose trails in ways that minimize circulation conflicts among trail users.

#### ***Goal P/R 6:***

#### ***A sustainable parks and recreation system.***

Policy P/R 6.1: Support the use of recycled water for landscape irrigation in County parks.

Policy P/R 6.4: Ensure that new buildings on County park properties are environmentally sustainable by reducing carbon footprints, and conserving water and energy.



REGIONAL OPEN SPACE CONNECTIONS IN THE SAN GABRIEL VALLEY: THE PUENTE HILLS LANDFILL PARK WILL BE A MAJOR DESTINATION TO WHICH REGIONAL TRAIL AND MULTI-MODAL CONNECTIVITY IS A VITAL COMPONENT.

## Implementation of Strategic Plan Goals

The Project furthers the Board-approved County Strategic Plan Goals of Operational Effectiveness/Fiscal Sustainability (Goal 1), Community Support and Responsiveness (Goal 2), and Integrated Service Delivery (Goal 3) by providing additional recreational opportunities and open space through the development of a new regional park with a variety of features and amenities.

## Coordination with the Department of Regional Planning

All of the immediate adjacencies impact the Park. Their integration and evolution with the Park over the next 20-50 years is of critical importance, rather than requiring the Park itself to do all of the heavy lifting. While the Master Plan does not govern surrounding uses, it permits the Board of Supervisors to make goals, policy statements and set forth actions which could materially effect future planning. Once embedded in an adopted County document, these items gain weight and can be used to advance the Park's objectives, better protect the Park and integrate future development with the Park.

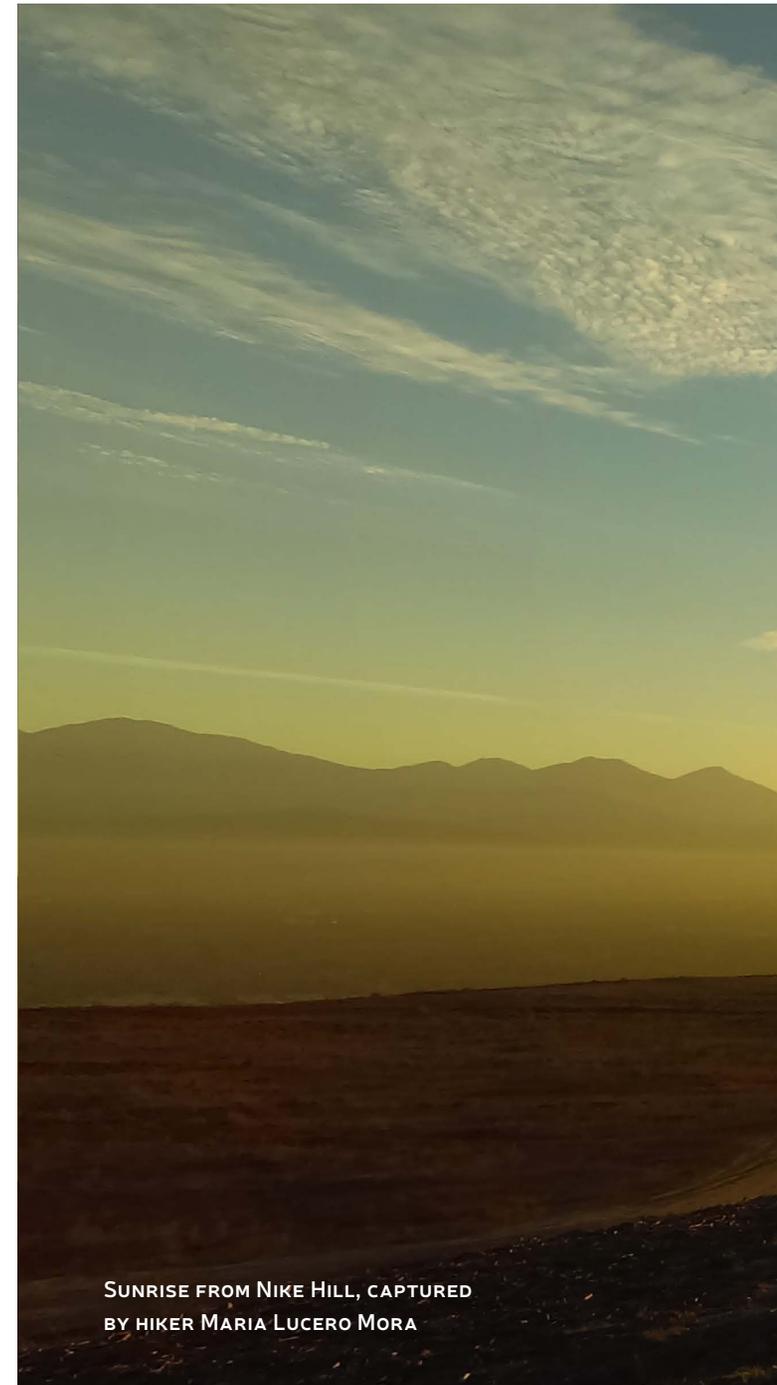
## Recommended goals and actions include:

**Goal:** The County recognizes Puente Hills Landfill Park as a significant public facility and that future land use and circulation planning or development projects in adjacent areas should respect the Park and be developed in a manner that supports park functions and uses to the maximum extent feasible.

**Policy:** The County Department of Parks and Recreation and Department of Regional Planning will coordinate to ensure that all planning and

permit activities in the communities surrounding the Puente Hills Landfill Park are conducted in a manner that minimize or do not interfere with Park operations and character.

- i. **Action:** The County Departments of Parks and Recreation and Regional Planning should coordinate on all permits in areas adjacent to the Park to review opportunities to provide uses that are complementary to or supportive of the Park.
- ii. **Action:** The County Departments of Parks and Recreation and Regional Planning should coordinate to ensure that proposed developments adjacent to the Park consider both direct and indirect impacts to park facilities and operations.
- iii. **Action:** The County Departments of Parks and Recreation and Regional Planning will coordinate on all future community plans, specific plans or other regional planning documents that affect the park to review options to provide and encourage land uses that are supportive of the park through:
  - Encouraging businesses that complement the park
  - Exploring creative options to encourage uses supportive and complementary of the Park such as provision of shared facilities such as parking or access improvements through use of tools such as bonus density, granting of modifications, fee waivers or reductions or other incentive-based programs.
  - Install multimodal transportation facilities.
  - Provide regional trail connectivity to the Park from the north, east and west.



SUNRISE FROM NIKE HILL, CAPTURED  
BY HIKER MARIA LUCERO MORA





THE HIGHEST POINT OF THE PARK, NIKE HILL, FEATURES A REMNANT OF COLD WAR HISTORY, A RELOCATED GUARD STRUCTURE THAT FRAMES THE PANORAMIC VIEWS.



# 3.0

## PARK AREA DESCRIPTIONS

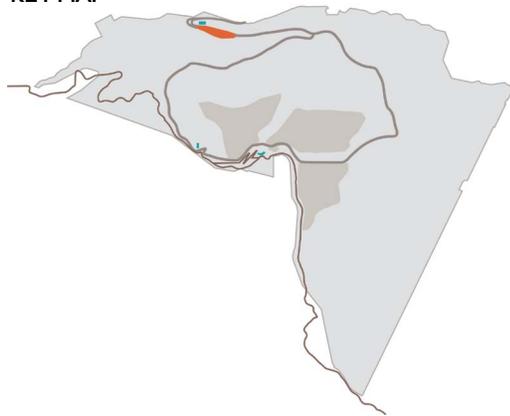
### 3.1 PARK ENTRY PLAZA

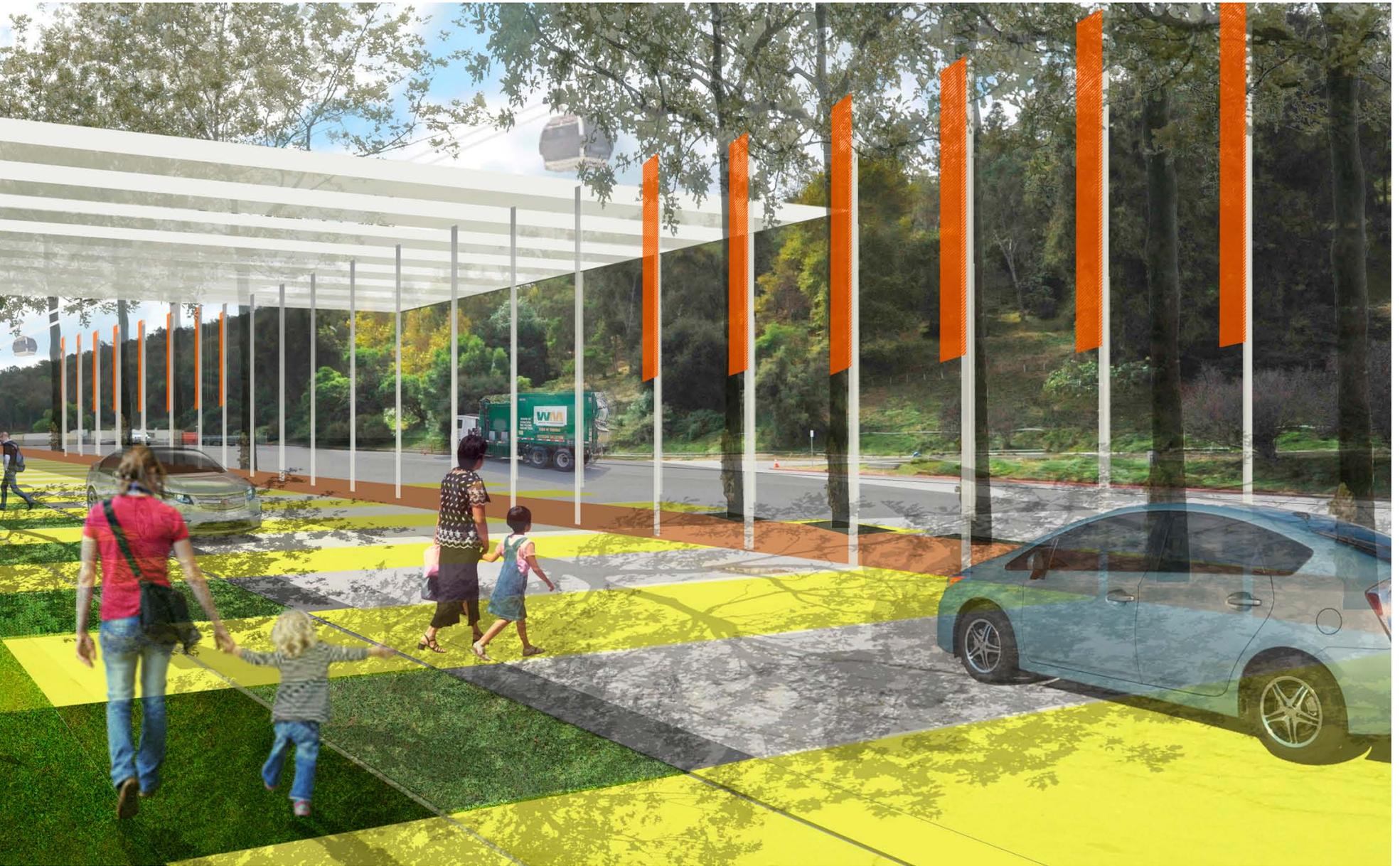
A transformative park experience begins at the base, where the former sanitation truck scales area is recast as a welcoming park entry.

The main arrival plaza will be both the gateway to the greater park and a destination itself. The pavilions and buildings will accommodate staff, and a visitor welcoming center for the public. Pathways from the city below will lead to it and a new garden park entry and parking will welcome the community. Refer to page 80 for a detail plan of the proposed arrival plaza.

New indoor rooms and outdoor patios and terraces with spectacular overlooks to the north, and the verdant slopes of Puente Hills' northern slopes to the south. This will be a point of departure for paths and the trail lift. As a destination, it will be a place to learn about the Park, to picnic, and to simply enjoy being in Puente Hills.

#### KEY MAP





**THE VISITOR CENTER WILL BE DESIGNED WITH A LARGE CANOPY THAT WILL UNITE THE EXISTING SANITATION DISTRICT AND NEW DEPARTMENT OF PARKS AND RECREATION OFFICES. THE BUILDING WILL CAPTURE THE ESSENCE OF THE PARK, AN ACTIVE WORKING AND PASSIVE RECREATIONAL PARK, ALL COMING TOGETHER AT THE VISITOR CENTER.**

A lush tree-covered north-facing slope drops down to the Park Entry Plaza. Referred to as 'The Arboretum' for its exceptionally green and leafy collection of trees, this area will feature a challenging stair climb for an impressive forest fitness experience. This verdant and wooded landscape has been grown over decades with abundant reclaimed water to screen terraced slopes from view. The tree camouflage may now serve the public in a greater capacity—to show the landfill slopes up close and get heart rates pumping up to the Western Deck.

Depending on time of implementation, developing the stair climb may require creative design to get users up and over large gas pipelines and approximately 18 maintenance bench roads. Inspiration may be drawn from the existing metal step-bridges that allow maintenance staff to pass over the large pipes. Strategic fencing may be required to keep users on the stair climb and away from landfill maintenance areas. This worthy effort to develop the planted slope into a publicly usable space will result in another signature park feature, attractive, distinctive and memorable.

Activities associated with the Materials Recovery Facility (MRF) and sanitation trucks will be part of the entry plaza, highlighting the stimulating mix of passive open space, public recreation and industrial function. The separated Sanitation Districts/MRF truck area is required for off-loading functions of certain types of truck customers. Other MRF customers use the area for removing and replacing tarps on their trucks. These shared uses in the Park Entry Plaza will continue and are forecasted to increase as MRF traffic increases in the future. A relocated storage area, equal in square footage to the existing fenced one, will shift locations to maximize utilization of the area.

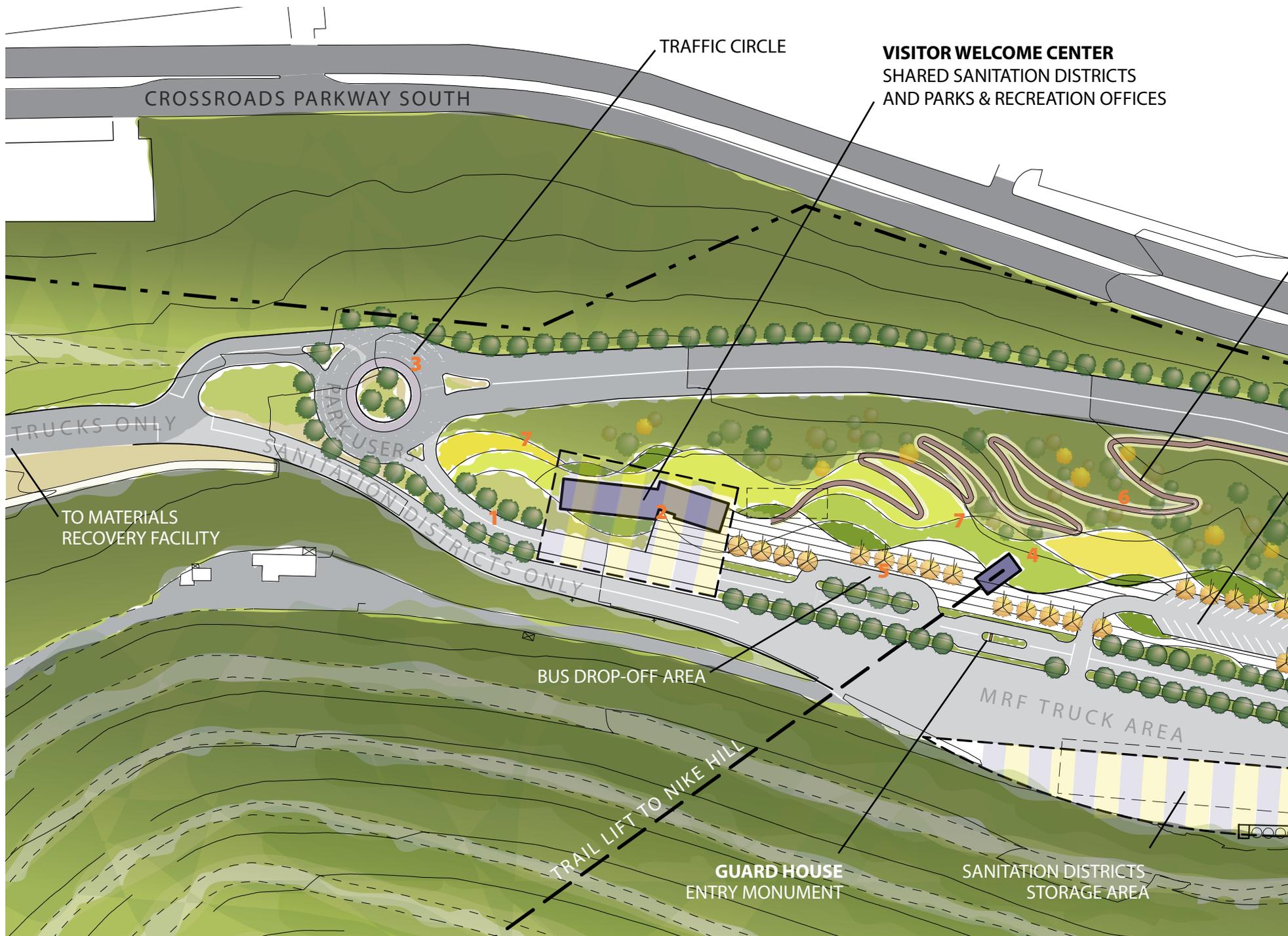


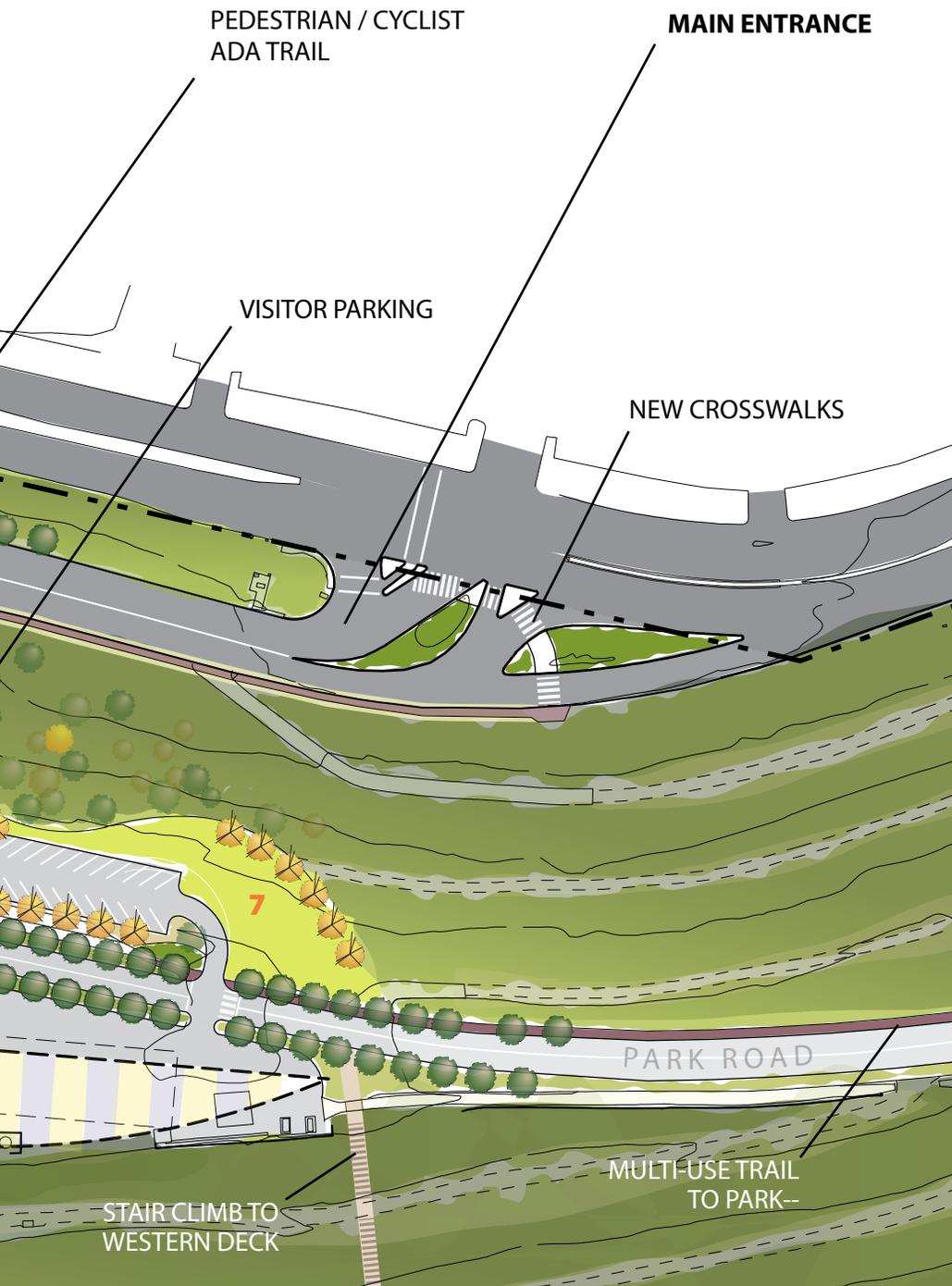
**ABOVE: 215 ACRES OF WELL-PLANTED NORTH-FACING SLOPES ARE A DISTINCT SITE ASSET. DUBBED “THE ARBORETUM” IN THE MASTER PLAN, THIS MOST LUSH AREA OF THE LANDFILL RISES TO THE TOP DECKS.**

**LEFT: AN EXAMPLE OF THE STAIR CASES REQUIRED TO SURMOUNT THE SURFACE PIPE LINES, AND THE EXISTING LUSH TREE-COVERED SLOPES OF THE LANDFILL ADJACENT TO THE PARK ENTRY PLAZA.**

**RIGHT: THE ARBORETUM STAIR CLIMB WILL BE A MEMORABLE FITNESS CHALLENGE AS VISITORS CLIMB FROM THE PARK ENTRY PLAZA UP TO THE WESTERN DECK THROUGH THE ARBORETUM.**







AREA PLAN:  
PARK ENTRY  
PLAZA

## PARK ENTRY PLAZA ELEMENTS:

(See next page for numbered photographs)

### Entry, access & circulation

- Vehicular main entrance
- ADA pedestrian & cyclist trail access
- Traffic circle or signal
- Tree-lined park road

### Visitor welcome center & shared staff offices

- 7,000 sf building
- 3 concessionaires
- Educational foyer
  - Live-feed "MRF cam"
  - Interpretive exhibits
- Joint staff & administration offices for Park staff and Sanitation Districts
- Materials Recovery Facility (MRF) tours

### Plaza

- Bus drop off
- Shuttle pick-up/drop off (to off-site parking & MRF tours)
- Interpretive area
- Ornamental plantings
- Visitor garden

### Trail lift base tower

### Parking lot A (60 spaces)

- Public and Staff parking

### Guard house and entry monument

- Visitor rules & safety regulations

### Separated Sanitation Districts area

- MRF truck area
- Storage & equipment area

### Stair climb entry to Western Deck

**PARK ENTRY PLAZA ELEMENTS - EXAMPLE TYPOLOGIES:** (See numbered locations  on previous page)



**1** LANDSCAPED ENTRY MEDIANS WITH TREES



**2** VISITOR CENTER AND SOLAR CANOPY



**5** ECO-SHUTTLE AND BUS TURNAROUND WITH PARKING



**6** ADA PEDESTRIAN/CYCLIST TRAIL



**7** LANDSCAPED ENTRY



**3** TRAFFIC ROUNDABOUT



**4** TRAIL LIFT STATION



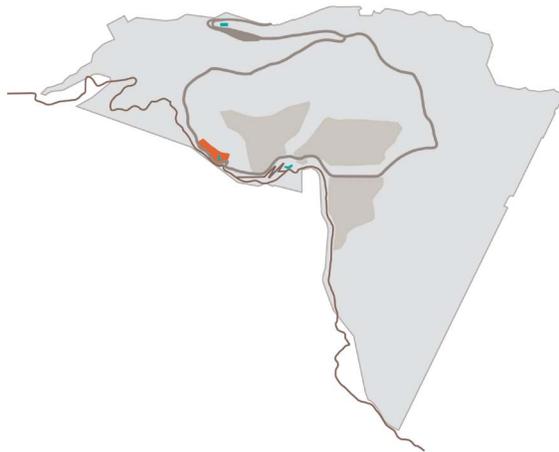
## 3.2 MAINTENANCE AND OPERATIONS AREA

For park users, the redesigned Maintenance and Operations (M&O) area is the second stop along the park loop road.

Vehicles continuing on the park road will drive up to the Western Deck using a new road segment integrated into the Sanitation Districts' new soil buttress. This 300,000 cubic yard soil embankment stabilizes the cut and filled areas at the base of Nike Hill.

Visitors seeking a fitness challenge may park in Lot B, hike the switchback trail up to the Western Deck, and continue further up to Nike Hill.

### KEY MAP



The M&O area serves an important function as shared maintenance and operations space for both the Sanitation Districts and Park staff. The yard will be fenced to secure maintenance equipment. The shared building will provide Park staff with offices, a break room, general storage and a restroom. Separate public park restrooms will have entrances adjacent to the parking lot.

The Schabarum-Skyline trail realignment in this area will provide a seamless connection from the existing eastern trail segment, to the M&O area, continuing up to the Western Deck and Nike Hill.

## MAINTENANCE AND OPERATIONS AREA ELEMENTS:

### Shared M&O yard

- Park maintenance
- Sanitation Districts
- Secure access to maintenance road

### Park maintenance building

- 1,650 sf
- 2 offices
- Break room
- Storage
- Staff restroom

### Parking lot B (20 spaces)

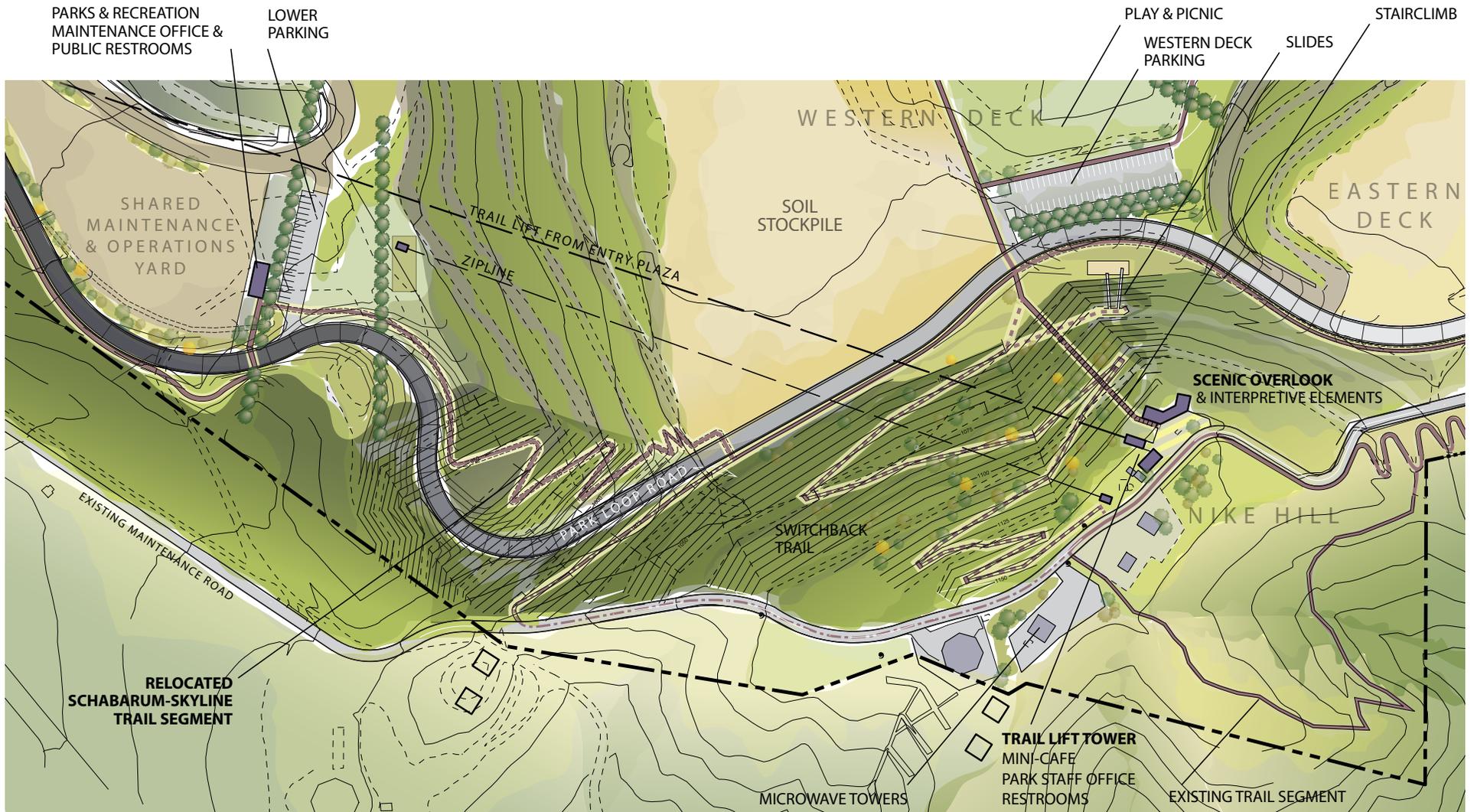
### Public restroom

- Outward side of maintenance building

### Zipline landing pad

### Circulation

- New park road segment from M&O area, to the Western Deck, integrated into the soil buttress
- Trail connection linking M&O area parking lot to Western Deck and Nike Hill, relocating the Schabarum-Skyline trail segment



**AREA PLAN:  
MAINTENANCE AND OPERATIONS AREA, BUTTRESS ROAD  
AND TRAIL, WESTERN DECK AND NIKE HILL**

- MULTI-USE TRAIL
- - - ADA PEDESTRIAN & BICYCLE ONLY
- · · · · EQUESTRIAN-ONLY
- ▬▬▬▬▬ STAIRCLIMB

SCALE 0 75 150

DRAFT ISSUED: 3-8-2016



### 3.3 NIKE HILL

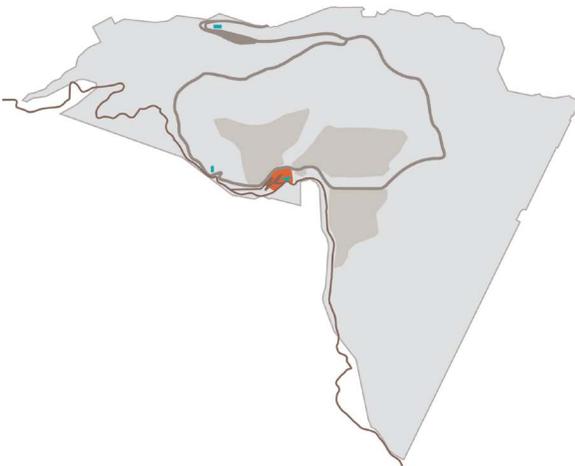
**At the highest point, the heart of the park offers breathtaking views for miles, and a panoramic survey of all the park decks.**

Park visitors using the trail lift will travel 1.2 miles from the Park Entry Plaza, gaining 760 feet of elevation before arriving at Nike Hill, the highest point in the park at 1160 feet above sea level.

The trail lift tower and Nike Hill plaza will connect to two scenic overlooks cantilevered out from the hill: one wing pointing north-west overlooking the Western Deck, and one wing pointing north-east surveying the Eastern and Southern Decks.

Spectacular views of the front range of the San Gabriel Mountains National Monument and a large swath of Los Angeles County unfold from east to west, prompting awe and introspection. For views of this caliber to be available for all to

#### KEY MAP



enjoy from within the city is an exceptional rarity and gift to the public, especially when no comparable location offers this vantage.

Architecture's role here is to frame the striking vistas and provide a sense of comfort and delight on the mountaintop. The Park, its landscapes and views are really doing the work. Canopies and terraces will provide some weather protection and a simple, but memorable sense of place.

As the heart of the Park, the Nike Hill plaza and lift tower will provide a mini-cafe or food truck space, staff office to organize programming, and public restrooms.

Artistic interpretive features at the scenic overlooks will reveal key topics, from landfill history and environmental stewardship, to local geography and mountain peak identification.

Nike Hill gets its name from the historical guard structure and plaque which were moved to the hill to commemorate the Cold War-era Nike missile sites. The guard structure and plaque will be relocated to an appropriate position within the new Nike Hill layout to continue sharing this fascinating local history.





## NIKE HILL ELEMENTS:

### Scenic Overlook

- Two cantilevered decks
- Panoramic views
- Observe “yellow irons” (bulldozers, backhoes, earth movers, etc.) at work on soil stockpile
- Interpretive elements

### Trail Lift Structure

- 2,000 s.f. building
- Plaza
- 1 concessionaire / Mini-cafe
- Restrooms
- Park staff office

### Circulation

- Stairclimb from Western Deck
- Switchback fitness ADA trail
- Slides
- Improved equestrian trail segment

### Zipline Launch Pad

### Programming

- Nature programs & hikes
- Scenic interpretation

NIKE HILL AS SEEN FROM THE WESTERN DECK. UP TOP, VISITORS MAY ARRIVE BY TRAIL LIFT, TAKE IN VIEWS AT THE OVERLOOKS, AND WALK DOWN TO THE WESTERN DECK. THE ACCESSIBLE SWITCHBACK TRAIL, STAIR CLIMB, SLIDES AND LOOP TRAILS PROVIDE MULTIPLE FITNESS OPTIONS AND PARK CONNECTIONS.





## 3.4 WESTERN DECK

### The first park deck to open will be an energetic hybrid—establishing new park activity alongside working equipment

The stockpile on the Western Deck will remain in use until depleted, after which the Park may use the land and the full 40 acres of the Western Deck. Park visitors might observe the unusual choreography of Sanitation Districts machinery weaving through the Park on maintenance roads, transporting stockpiled soil to other decks.

The western “horn” of the Western Deck (approx. 13 acres) looks out north-east and sits in a flat bowl with one wall being the slope of the Eastern Deck. This secluded area is set aside as a performance space so live events such as concerts and kite festivals can activate this initial territory of the Park and establish a park presence.

#### KEY MAP



The eastern “horn” of the Western Deck is the northern portion of the soil stockpile and will be used last by the Sanitation Districts. A 5-acre bike skills course will be a compatible interim use for this area. The soil can be graded and sculpted and serve the community for years until it is needed as landfill cover/repair material in the future.

### WESTERN DECK ELEMENTS:

#### Soil stockpile

- Will remain actively in use by Sanitation Districts
- “Yellow irons” (bulldozers, backhoes, earth movers, etc.) will dig up and transport soil to needed locations across the landfill
- Soil mix is specifically certified for filling emerging cracks in the landfill cap surface
- Security fencing

#### Interim bike skills course

- Located on the eastern “horn”/northern portion of the soil stockpile until needed for landfill use
- An ideal match for sculptable soils which need to remain primarily undeveloped

#### Parking lot C (30 spaces)

- Screened by trees from Nike Hill and Western Deck views

#### Outdoor performance meadow:

- Grassland patches
- Performances
- Open play
- Kite flying

#### Children’s nature play area

#### Picnic area

#### Western Deck Loop Trail (1 mile)

- Interpretive element

#### Inner Loop Trail

- Stair climb to Eastern Deck
- Stair climb & switchback trail to Nike Hill

#### Programming

- Outdoor concerts, performances



THE WESTERN DECK. FACING PAGE: PROPOSED RENDERING. BOTTOM ROW: THE WESTERN DECK’S INDIVIDUAL SPACES ARE WELL SUITED FOR: AN INTERIM BIKE SKILLS AREA ON THE STOCKPILE, A NATURE PLAY AREA WITH LOOSE PARTS, AND PERFORMANCE AREA, WHERE A MOBILE BANDSHELL MAY BE A SOLUTION FOR FLEXIBLE PROGRAMMING.



## 3.5 EASTERN DECK

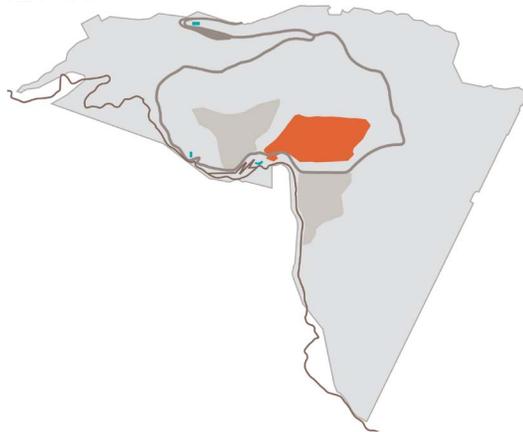
**360 degrees of open vistas provide numerous opportunities for overlooks, fitness and interpretive elements.**

The 49-acre Eastern Deck offers a broad expanse for nature, recreation and fitness, and presents unparalleled views in all directions along a 1.25-mile loop multi-use trail.

If Nike Hill offers the highest point to survey all the park and distant views, the Eastern Deck pushes the visitor directly out into the view. Each point along the loop trail offers a different visual surprise, from Downtown Los Angeles, to San Jose Creek, to the rooftops of Hacienda Heights, even distant Mt. San Jacinto rising in the east.

The Eastern Deck contains the deepest fill in the landfill, to 500 feet. Since this deck will experience the most settling over 30 years—up to 125’—flexible programming will suit it well: put up, taken down, and moved around in response to changing conditions.

### KEY MAP



The perimeter loop trail will be developed first, offering scenic views and an extensive fitness loop while the deck continues to settle. Trail users will be flanked by native plantings of coastal sage scrub and grassland species. With ample room, the Eastern Deck offers the opportunity for separation of hiking/walking, biking and equestrian trails to provide the best possible recreational experience for all users, and provide safe separation of users moving at different speeds. A bicycle rental station, perhaps housed in a repurposed shipping container, will offer

visitors the opportunity to take out mountain bikes and enjoy hard-packed decomposed granite paths braided along the perimeter.

As settling diminishes and the park spaces are more fully developed, the Eastern Deck will become the central deck of the Park which connects to all other areas.

A stair climb (pictured in the center of the rendering) will link the Eastern and Western Decks through the internal loop trail which



**FROM THE EASTERN DECK'S 1.25-MILE MULTI-USE LOOP TRAIL (RIGHT SIDE OF IMAGE ABOVE), WALKERS, RUNNERS, CYCLISTS AND EQUESTRIANS WILL OVERLOOK THE WESTERN DECK'S OUTDOOR PERFORMANCE AREA (LEFT SIDE OF IMAGE ABOVE) AND TAKE IN PANORAMIC VIEWS OF THE MOUNTAINS. A STAIR CLIMB WILL CONNECT THE TWO DECKS.**

passes through all three decks. The Eastern Deck connects to Nike Hill using a path from the parking lot to the zig-zag equestrian trail. Once settling is complete, a planted pedestrian overcrossing can provide safe passage from the Eastern Deck, over the park road to the Southern Deck to continue the inner loop trail. A fourth connection will link to the Flare site once it is developed.

## **EASTERN DECK ELEMENTS:**

**Parking lot D** (40 spaces)

### **Bicycle rental**

- Staffed container of rental bikes
- Located at intersection of park trails

### **Hedgerow walks and spaces**

### **Grassland patches**

### **Group picnic area**

### **Bike skills course**

### **Dog park**

### **Eastern Deck Loop Trail** (1.25 miles)

- Interpretive overlooks and elements
- Bird observation

### **Inner Loop Trail**

- Stair climb to Western Deck
- Stair climb & switchback trail to Nike Hill

### **Planted pedestrian bridge**

- Crosses over park road for safe, seamless access to Southern Deck

### **Programming**

- Nature walks, programs





**STRUCTURED ALLEES (LANES OF TREES) WILL GUIDE PARK USERS TO OPENINGS WHICH FRAME THE SAN GABRIEL MOUNTAINS STRETCHING ACROSS THE BROAD MESA OF THE EASTERN DECK. RIGHT: EXISTING SITE PHOTO.**





**THE EASTERN DECK'S VAST SPACE IS WELL SUITED FOR A VARIETY OF ACTIVITIES, INCLUDING: A DOG PARK/AGILITY COURSE, FITNESS CLASSES AND BICYCLE RENTAL AND TRAILS.  
FACING PAGE: A RENDERING OF THE EASTERN DECK'S EASTERN EDGE, WITH ENHANCED NATIVE PLANTINGS AND IMPROVED TRAIL ACCESS.**





## 3.6 SOUTHERN DECK

**Entering on foot through the southern entrance reveals the contrast of landfill, nature, and city.**

The 28-acre Southern Deck is more removed from the central hub of the park, offering quiet solitude and a strong connection with the Schabarum-Skyline Trail. The broad expanse of land makes this a restful location for picnic areas, nature exploration, and interactive art installations. A native plant nursery will give volunteers an active role in propagation and restoration planting.

By foot or bicycle, the southern entrance to the Park is via the Schabarum-Skyline Trail and leads to the Southern Deck. Hikers arrive at the landfill park boundary after at least an hour's vigorous climb up through small canyons.

### KEY MAP



The change in scale and surroundings is palpable, coming from the native hills and oak woodland canyons to the fenced corridor along Southern California Edison (SCE) transmission towers and Rose Hills Memorial Park. The enormous landforms of the landfill decks appear, indicating arrival at the constructed landscape of the Park.

Although the Southern Deck is closest to the native hills, one feels the contrast of landfill, nature and city strongly. The site is ripe for interpretation on the intersection of these topics. A large methane pipe runs along the deck's edge, unlike the Western and Eastern decks. Further down the trail, mysterious pipes and pumps are visible signatures of the site, jabbed into the earth like injection needles and stitches.

Parking Lot E will accommodate a staging area for equestrian parking, and trailhead parking so hikers and cyclists may connect to the Schabarum-Skyline Trail going north into the park or south into the Puente Hills.



### SOUTHERN DECK ELEMENTS:

#### Parking lot E (50 spaces)

- Trailhead parking
- Equestrian staging area

#### Hedgerow walks and spaces

#### Picnic area

#### Native plant nursery

#### Grassland patches

- Art installations

#### Southern Deck Loop Trail (1 mile)

- Interpretive overlooks and elements

#### Inner Loop Trail

- Connects to Schabarum-Skyline Trail

#### Planted pedestrian bridge

- Crosses over park road for safe, seamless access to Eastern Deck

#### Programming

- Native plant nursery volunteer program, propagation, restoration planting
- Nature walks, programs

**LEFT: COMPONENTS OF THE LANDFILL INFRASTRUCTURE DOT THE LANDSCAPE, CONSTANT REMINDERS OF THE SITE PAST AND CONTINUING INDUSTRIAL USE.**

**RIGHT: PARK USE OF THE SCHABARUM TRAIL ALONG THE WESTERN EDGE OF THE SOUTHERN DECK WILL BE ENHANCED FOR ALL USERS.**







**FROM THE SOUTHERN DECK, THE VIEWS TO THE RIDGELINES AND SMALL CANYONS OF THE PUENTE HILLS HABITAT PRESERVE ADD TO THE CONTEMPLATIVE QUIET OF THIS PARTICULAR LOCATION OF THE PARK. BELOW: THE PROPOSED NATIVE PLANT NURSERY'S VOLUNTEER ACTIVITY WILL CULTIVATE NEW GENERATIONS OF CARETAKERS AND NATIVE HABITAT FOR THE PARK.**



## 3.7 FLARE SITE

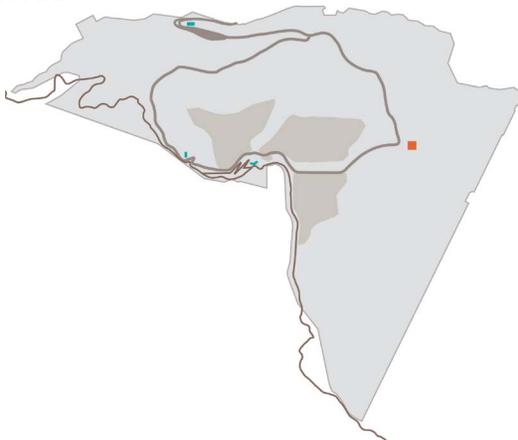
**The shuttered gas-to-energy plant offers a unique symbol of the park through creative adaptive reuse.**

The Flare facility is available for adaptive reuse because it is no longer in use. Methane gas from an older part of the landfill slowed to the point that it was decommissioned, which also relieved noise and vibration. Activation of the area is limited by utilities needed for public use, namely sewer and water. The site has electricity.

With the necessary utilities, the industrial relic may evolve into a signature park landmark with interpretive, educational and concessionaire components. If restroom and water facilities can be provided in a mobile/portable capacity, the site may be used more immediately in a creative pop-up fashion.

A stair climb connecting the Eastern Deck to the Flare site will be built to provide direct access. The hillside surrounding the Flare site will have

### KEY MAP



trails integrated to provide new views overlooking the site's native eastern canyons and cities that stretch to the eastern horizon.

The centerpiece of the Flare Site is the flare tower itself. Its long life before it flamed out was deeply industrial, in tomorrow's Puente Hills it will become a joyous symbol of renewal and the revitalization of the community in nature. Hill towns with their steeped skyline can be harkened to in this amazing setting, by transforming the tower and some of the remaining appendages with fresh color, bringing a sense of lightness and fun to this incredible view site.

The tower and two new simple structures will be brought together with a light, white, and airy canopy and a vibrant ground plane, succinctly making a memorable perch where the past and the future come together. The site at once provides extraordinary views and yet feels nestled, away and unseen, from the city below.

### FLARE SITE ELEMENTS:

#### Flare cafe

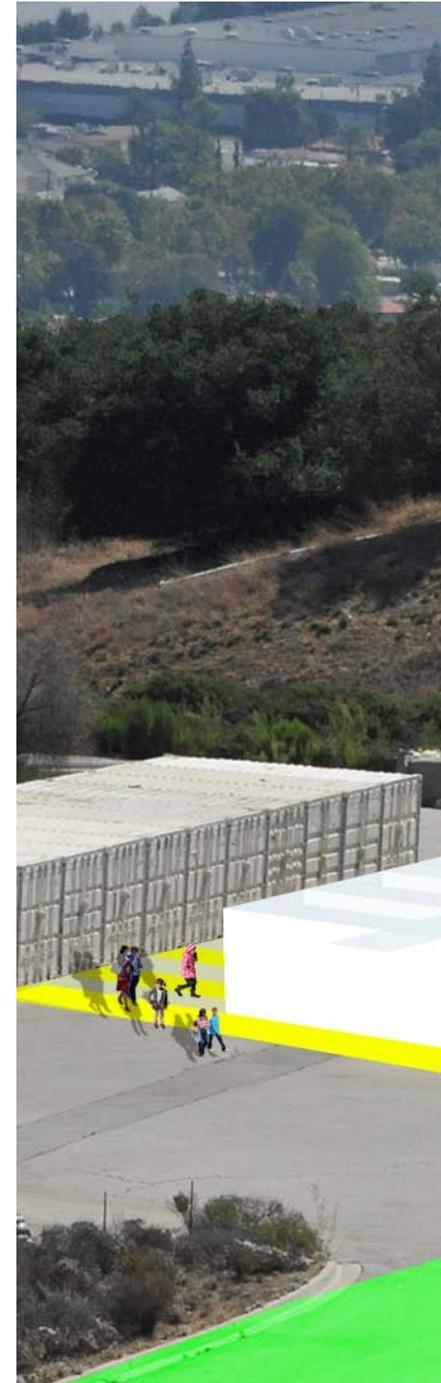
#### Interpretive center

#### Flare tower climb

- Adaptive reuse

#### Life-Size settlement measuring stick

- Interpretive art installation
- View towards eastern slope
- Future generations will see how high the landfill used to be, and record how much it has settled—possibly 125 feet







STAIR CLIMB INSPIRATION: EXISTING METAL STEPS GO UP AND OVER METHANE PIPE LINES TO PROVIDE MAINTENANCE ACCESS.

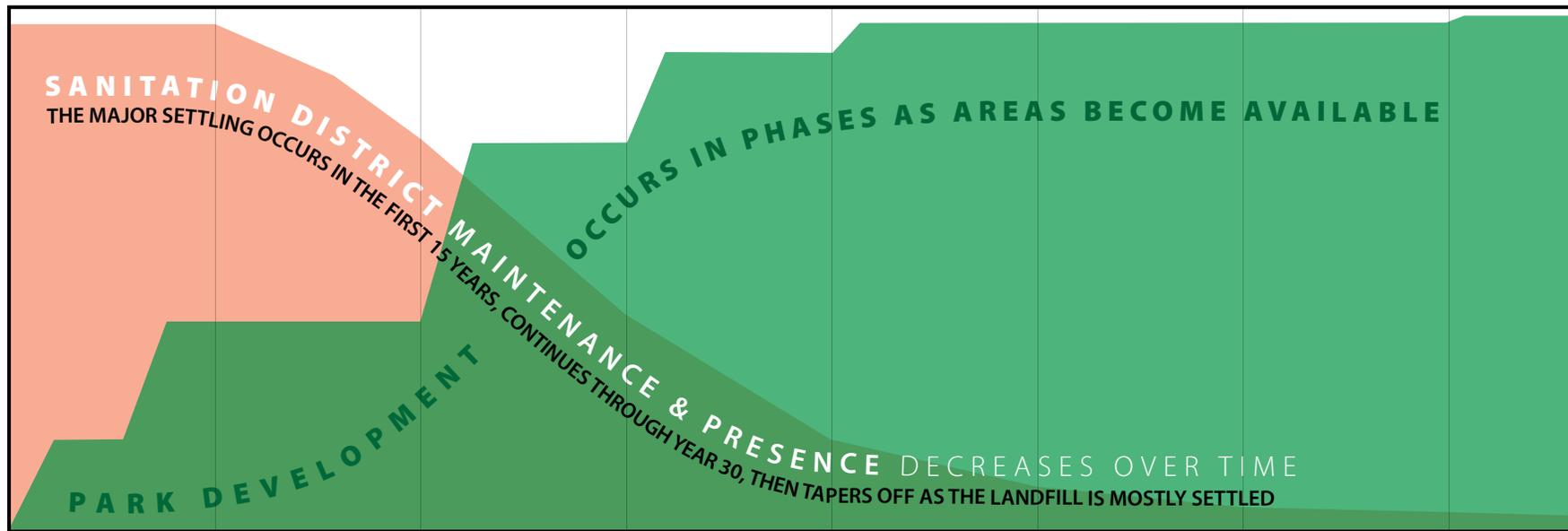


# 4.0

## PHASING

YEARS AFTER LANDFILL CLOSURE

0 (2013)      10 (2023)      20 (2033)      30 (2043)      40 (2053)      50 (2063)      60 (2073)      70 (2083)



**I**      **II**      **III**      **IV**      **V**      **VI** (*Re-evaluation*)

**PARK MASTER PLAN: 20 year timeline**

**MASTER PLAN UPDATES: Reassess needs, landfill settling, technology, park/rec trends, demographics**

## 4.1 PHASING PLAN

### Description

The Master Plan envisions three major phases of development over the next 30 years plus two more phases that will receive greater scrutiny for applicability in 2043.

In the first decade, park development will occur on non-fill areas and the Western Deck, providing the basic park infrastructure for park visitors and park maintenance. The neighboring Eastern and Southern Decks will continue to lose elevation, up to 125 feet over a 30 year period. As top deck settlement slows and gas production decreases, the parklands on the capped areas will become more stable.

The additional phases capture proposed park elements that can be implemented when environmental systems are no longer required and the parklands are not subject to land closures. Once settled, the final park elements can be implemented.

The site transformation will be incremental and selective. Each phase is designed to build upon the last in response to public interest for a variety of programs and specific park elements.

Early investments in jointly used maintenance areas and offices will begin the co-agency transition to manage the site as a public space. Extensive infrastructure such as trails, roads, utilities and structures will be laid into the site to accommodate a wide range of future park activities.

All phases will layer new landscape plantings to establish a complex novel ecology over time that reflects the soil conditions and continual shifting of the top decks.

What is built and open in Phase One must elevate the site to a level where the juxtaposition of the industrial and the beautiful create a fascinating regional park destination. Beyond the infrastruc-

ture, distinctive park elements must be strategically located to showcase the assets of the Puente Hills to provide recreation that is unique to the region.

The ever-changing parklands must be safe and secure during a lifetime of transition that may take 50 to 75 years. Management goals regarding wildlife and habitat enhancement encompass a healthy environment for all park users. Finally, public involvement and stakeholder partnerships throughout all phases will guide and evolve the programming and management of the park.

## PHASE I A- Years 1-5

### Prepare Site Infrastructure for a Park and Construct Key Recreational Elements

During the early stages of park building, strategic placement of infrastructure will open the site up to the public. Improvements begin at the front entry with a visitor center, staff offices, parking and a shuttle drop-off. Consolidation and improvements of existing maintenance areas include an operations office. The placement of this structure in the Maintenance and Operations (M & O) yard is a critical component of future joint agency site management coordination. The park road and adjacent trail will be developed on the eastern side and up to the Western Deck area. An overlook terrace will extend out from the top of Nike Hill as a destination spot for hikers.

#### Park Access and Entry

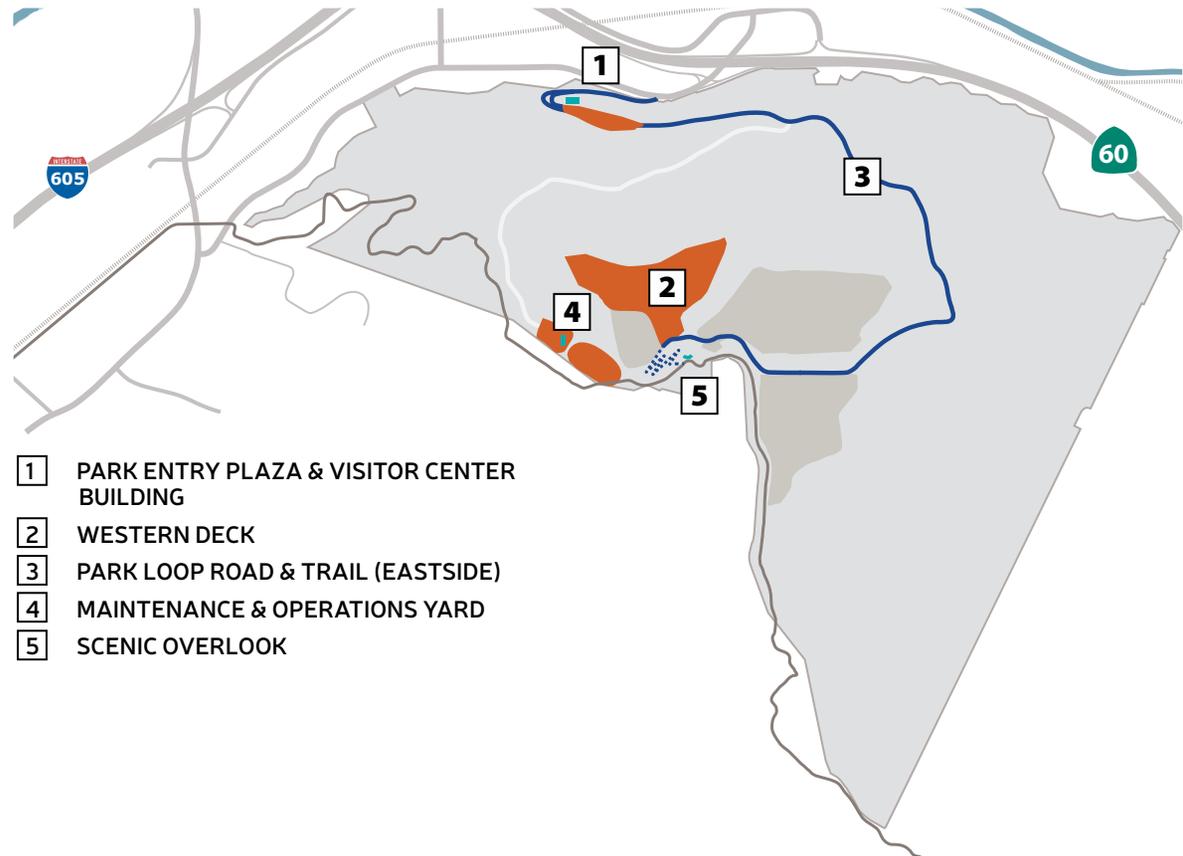
- Establish shared agency facilities.
- Provide entry monument, controlled access, Parking Lot A, bus parking, shuttle drop-off, and emergency vehicle turn-around.
- Align park road with Park Guard House/Island.
- Install planting and irrigation.

#### Park Circulation

- Build park road and multi-use trail on eastside to reach Western Deck.
- Build Parking Lot C.
- Build switchback trail to Scenic Overlook.
- Install planting and irrigation.

#### Structures

- Construct Entry Plaza Visitor Center and shared staff offices.
- Construct pre-fabricated Maintenance Office. Re-organize M&O Yard for co-operations. Construct pipe racks as needed.
- Design and construct a portion of the Scenic



- 1 PARK ENTRY PLAZA & VISITOR CENTER BUILDING
- 2 WESTERN DECK
- 3 PARK LOOP ROAD & TRAIL (EASTSIDE)
- 4 MAINTENANCE & OPERATIONS YARD
- 5 SCENIC OVERLOOK

Overlook with interpretive/art element at the Nike site.

- Design and construct moveable and light flex park furniture, railings, dividers, mileage markers, etc.
- Place one public restroom, location to be determined.

#### Top Deck Development

- Activate Western deck with trails, stair climb, planting, programming, and parking.
- Selectively plant trees, shrubs and grasses in newly activated areas for park use.

#### Park Elements

- Provide wayfinding and directional signage.
- Design and implement interpretive signage for the Scenic Overlook and Western Deck.
- Design and construct Bike Skills area on Western deck.
- Design and construct security fencing and gating.
- Design and construct moveable and light flex park furniture, railings, dividers, and mileage markers.
- Select Concessionaires: coffee cart at Scenic Overlook & bicycle rental.



## PHASE IB - Years 1-5

### Prepare Site Infrastructure for a Park and Construct Key Recreational Elements

The main park loop road and adjacent multi-purpose trail is the invitation to proceed to the top where views and passive recreational elements are developed or enhanced. The loop road provides the circuit from which future park features will expand out from. Extensive trail development on the top decks and buttruss area will increase access for all park users.

#### Park Access and Entry

- Construct Sanitation Districts maintenance yard and canopy.

#### Park Circulation

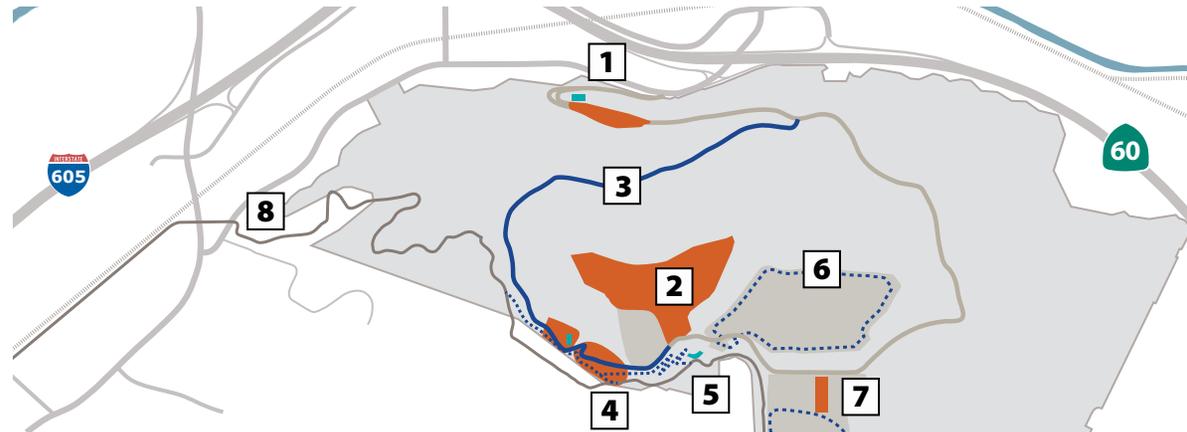
- Complete park loop road and multi-use trail on westside, through M & O and buttruss areas.
- Establish new trails into buttruss area around M & O Yard.
- Build parking lots B, D & E (M & O, Eastern and Southern Decks).
- Improved Schabarum-Skyline trail, trailhead design, signage and wayfinding design and implementation at western entrance from Workman Mill Road.
- Install planting and irrigation.
- Provide southern entry gateway.

#### Structures

- Design and construct enlarged Scenic Overlook at the Nike site.
- Design and construct moveable and light flex park furniture, railings, dividers, mileage markers, etc.
- Place second staff and public restroom, location to be determined.

#### Top Deck Development

- Provide additional Western Deck trails,



- 1 PARK ENTRY PLAZA, VISITOR CENTER, SANITATION DISTRICTS STORAGE YARD (ADDITIONAL IMPROVEMENTS)
- 2 WESTERN DECK (ADDITIONAL IMPROVEMENTS)
- 3 PARK LOOP ROAD & TRAIL COMPLETION (WESTSIDE)
- 4 BUTTRUSS ROAD & TRAIL RELOCATION
- 5 SCENIC OVERLOOK EXPANSION
- 6 EASTERN & SOUTHERN DECK LOOP TRAILS
- 7 EQUESTRIAN STAGING AREA
- 8 SCHABARUM-SKYLINE TRAILHEAD

- planting, programming, and parking as needed.
- Provide Eastern Deck loop trail.
- Provide Southern Deck loop trail and primitive equestrian staging area.
- Selectively plant trees, shrubs and grasses in newly activated areas for park use.

#### Park Elements

- Expand wayfinding and directional signage.

- Design and implement interpretive signage for the Scenic Overlook and Western Deck.
- Design and construct security fencing and gating.
- Design and construct moveable and light flex park furniture, railings, dividers, and mileage markers.
- Select Concessionaires: coffee cart at Scenic Overlook and bicycle rental.



## PHASE II - Years 6-20

### Expand Phase I Park Structures, Park Ecology and Implement Trail Lift

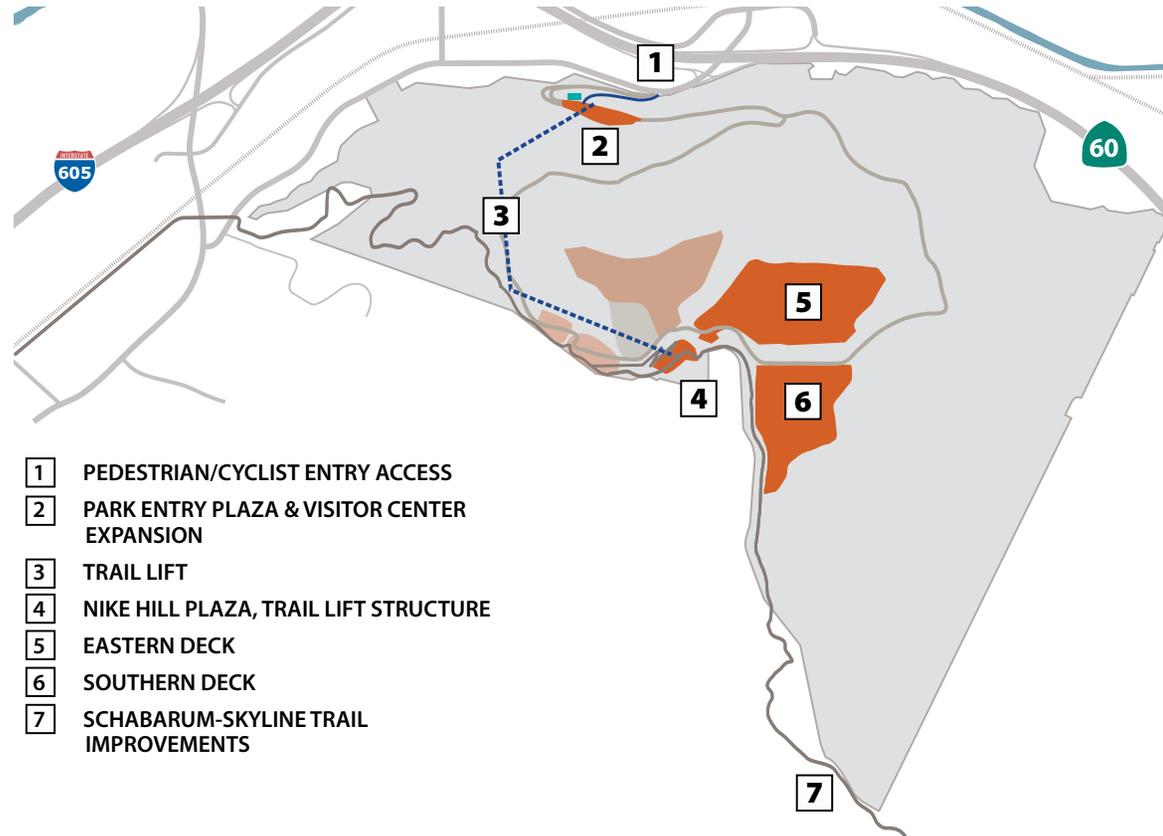
During the second phase of park development, structures will be improved or finalized. More emphasis will be placed on the park ecology and site stewardship. Successful programs initiated during the first phase of park development will evolve and change to accommodate public interests. In response to programmatic refinements, the park settings will also evolve. New programs will be initiated as spaces take shape on the Western Deck and the soil stockpile used for cap maintenance decreases in area. Additional trails and circulation refinements especially at the park entrance will enrich the expanding park experience. Defining the park spaces with plantings provides the opportunity to enhance wildlife habitat throughout the site and onto the western slopes. Experimental plantings during the first phase will be assessed for growth and soil coverage efficacy. New plants will be selectively chosen to provide shade, aesthetics and habitat. A native plant nursery will be established as interest in educational stewardship programs increase, inspired by the site transformation.

#### Park Access and Entry

- Design and construct ADA pedestrian and bicycle entry access.
- Expand Entry Plaza area and parking in response to Trail Lift Implementation.
- Planting and irrigation of entry hillside and entry plaza area.
- Decorative fencing and gating at park entry.

#### Park Circulation

- Improved Schabarum-Skyline trail, trailhead design, signage and wayfinding design and implementation at eastern entrance from the Habitat Authority Preserve Area.



- Improve the former equestrian trail on the southeast side for safety and aesthetics. Connect back to existing north slope trail.
- Connect Park to regional trail improvements as segments are completed.
- Intensive planting and irrigation.

#### Structures

- Expand Visitor Center structure or canopies per construction phasing plan.
- Design and install Trail Lift, associated queue areas and towers.
- Design and install Trail Lift structure in Entry Plaza.

- Design and install Trail Lift structure at Scenic Overlook to include café, restroom and staff office. Construct plaza between the Scenic Overlook and the Trail Lift structure.
- Upgrade County lease area on the south side of the existing maintenance road for Park aesthetic and functional compatibility.
- Construct additional moveable and light flex park furniture, railings, dividers, and mileage markers. Modify designs as necessary per public and staff assessment.
- Place two staff and public restrooms, locations to be determined.
- Expand M & O area as necessary.



### Top Deck Development

- Expand Eastern Deck trails and facilities.
- Expand Southern Deck trails and facilities, improve Equestrian staging area and implement native and drought tolerant plant nursery.
- Expand planting and irrigation.

### Park Elements

- Expand wayfinding and directional signage.
- Design and implement interpretive signage for the Eastern and Southern Decks.
- Expand and enrich picnic, children's nature play, interior trails and trailheads with materials, placement, signage, and wayfinding.
- Relocate/rework park elements that conflict or are not successful.

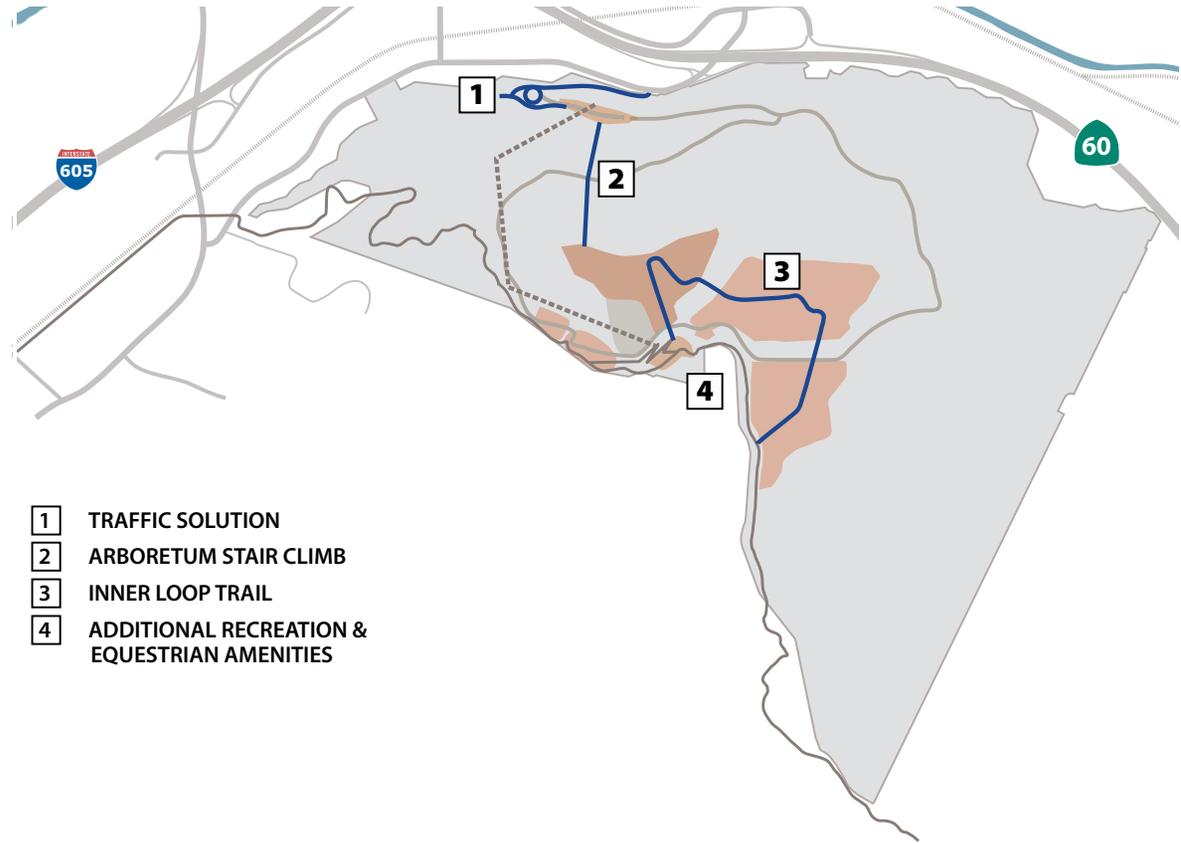
- Expand educational components.
- Design and construct security fencing and gating.
- Design and construct moveable and light flex park furniture, railings, dividers, and mileage markers.
- Select Concessionaires: mini café at Trail Lift and Visitor Center.

## PHASE III - Years 21-30

### Reconfigure Park Access and Expand Park Acreage

In response to cumulative traffic impacts at the park entrance due to the anticipated Materials Recovery Facility truck trip increase and Rose Hills funeral processions, major alterations to the park access road and entrance into the park are anticipated. A standard level of service for all site users will be established as the park reaches the final decade of the Master Plan process. A variety of traffic design alternatives that ensure park user safety will be explored and implemented.

Extreme elevational changes of the top decks in the first 20 years of park development are anticipated to slow down considerably. Phase 3 proposes to fully activate the top decks for a variety of recreational experiences. This phase expands the acreage of the Eastern and Southern decks to new programs and facilities. These areas will be fully open to the public to support new uses. The end of landfill settlement in some areas of the park, particularly the Western Deck will open the potential for a fully developed wildlife corridor through the Puente Hills. Adaptive management of wildlife habitat will be of primary interest as the expanse of natural areas on the top decks is fully implemented. In this phase, the Master Plan anticipates circulation improvements and recreational enhancements of particular earlier-stage program areas.



#### Park Access and Entry

- Design and implement park access and shared access traffic solution(s).
- Update entry and wayfinding signage.

#### Park Circulation

- Design and implement stair climbs.
- Continue improvements to the Schabarum-Skyline trail, trailhead design, signage and wayfinding.
- Finalize and strengthen regional connections from north, west and east into and out of the site for multi-modal uses. Connect Park to regional trail improvements as segments are completed.
- Continue planting and irrigation.

#### Structures

- Modify interiors to meet requirements of evolving programming.
- Add public restrooms as necessary. Reconstruct restroom buildings to meet new sustainable design standard. Provide sewer line hookup if possible—locations to be determined.
- Expand stormwater capture infrastructure.

#### Top Deck Development

- Expand Eastern Deck trails and facilities.
- Expand Southern Deck trails and facilities.
- Design and construct Bike Skills area on Eastern deck.



- Add intensive area planting and irrigation.
- Add additional fencing and gating to meet design expansion.
- Underplant non-native slopes with native planting for future wildlife corridor.

#### **Park Elements**

- Install the Zip Line.
- Install slides.
- Expand wayfinding and directional signage.
- Design and implement interpretive signage for the Eastern and Southern Decks.

- Expand and enrich picnic, children's nature play, interior trails, signage, and wayfinding.
- Relocate/rework park elements that conflict or are not successful.
- Expand educational components.

## PHASE IV - Years 31-40

### Complete Significant Park Connections

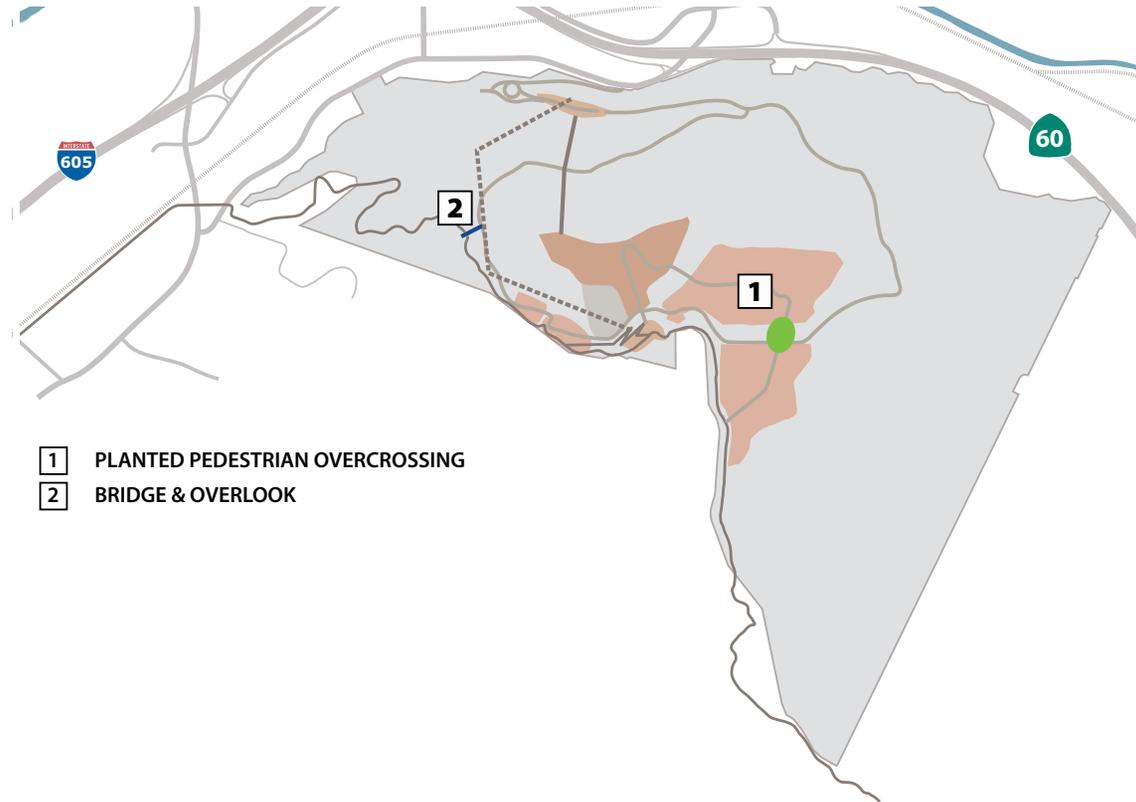
Future phasing beyond the reach of the Master Plan focuses on those elements that provide missing connectivity. At this time, the environmental systems will be predominantly off-line. The land will stabilize. Trails and circulation patterns will have been established.

Important connector bridges will improve access between park areas. A planted pedestrian overcrossing that connects the Eastern and Southern decks, planted with native grasses and shrub hedgerows can be implemented when the decks are completely stable. This land bridge will allow park users to cross between decks unimpeded by the road traffic below which may include Rose Hills cemetery processions by this time.

A pedestrian bridge and overlook on the west side will connect Rio Hondo College and other west side trail users to the realigned Schabarum-Skyline Trail and park loop road.

#### Structures

- Design and implement Planted Pedestrian Overcrossing.
- Design and implement westside pedestrian Bridge and Overlook
- Implement soil production for Planted Pedestrian Overcrossing.
- Grow on-site nursery plants for Planted Pedestrian Overcrossing.
- Provide irrigation.





## PHASE V - Years 41-50

### Adapt Flare Facility for Reuse and Acquire Additional Parkland

The final touches to a grand and beautiful park are envisioned to include creative reuse of the dormant Flare facility and additional parkland acquisitions of the eastern canyons.

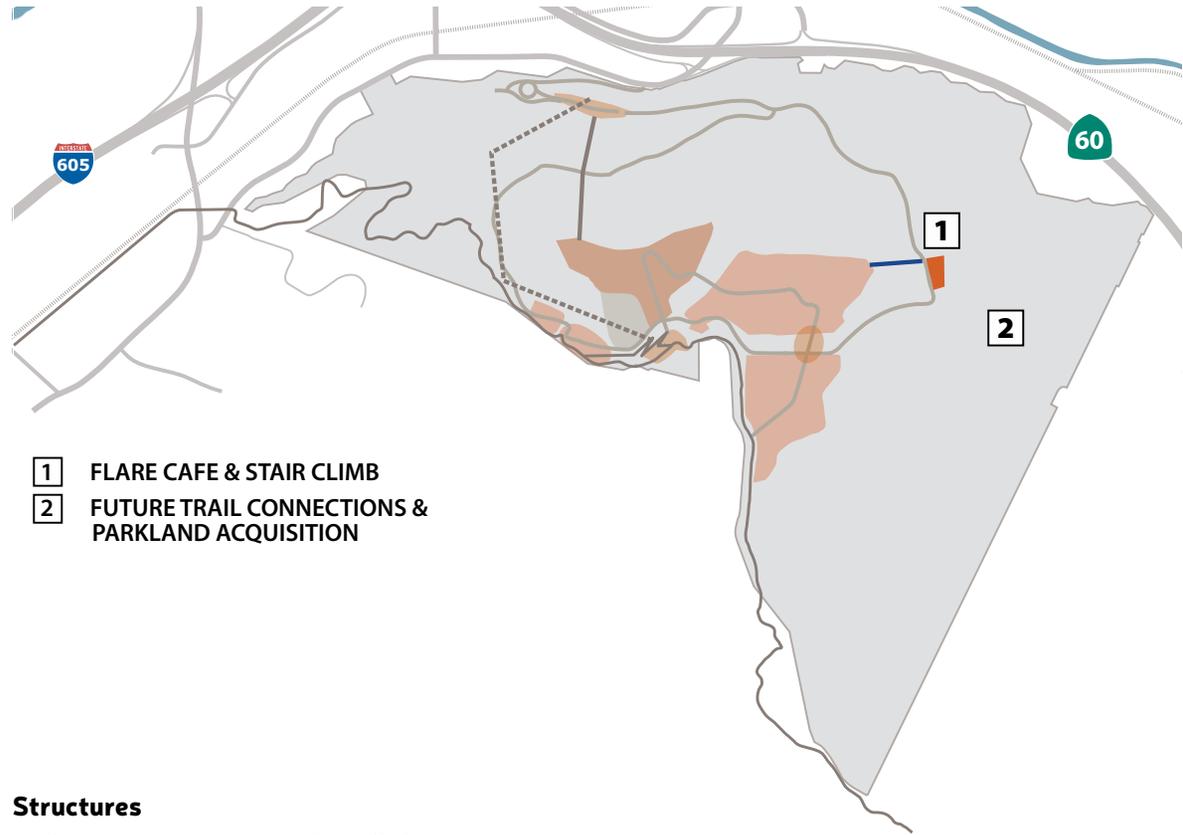
The Flare facility is available for adaptive reuse in any phase because it is no longer in use. Methane gas from an older part of the landfill slowed to the point that the flare was decommissioned.

Activation of the area is limited, however, by the need for utilities for public use, namely sewer and water. The site has electricity.

With the necessary utilities, the industrial relic may evolve into a signature park landmark with interpretive, educational and concessionaire components. If restroom and water facilities can be provided in a mobile/portable capacity, the site may be used more immediately in a creative pop-up fashion.

A stair climb connecting the Eastern Deck to the Flare site will be built to provide direct access. The hillside surrounding the Flare site shall have trails integrated to provide new views overlooking the native eastern canyons, wildlife habitat, and cities stretching to the eastern horizon.

Finally, the viability of land acquisition for eastside canyons, trails and trailheads will be determined by the communities they would serve and by the whole-hearted approval of all involved over several generations.



- 1 FLARE CAFE & STAIR CLIMB
- 2 FUTURE TRAIL CONNECTIONS & PARKLAND ACQUISITION

#### Structures

- Design and implement Flare Cafe.
- Bring utilities to Flare site.
- Provide planting and irrigation.

#### Park Circulation

- Design and implement stair climb from Eastern Deck to Flare site.
- Provide new multi-use trails, signage and wayfinding.
- Connect new internal trails to the regional trail system.

#### Parkland Expansion

- Acquire Eastern canyon lands and develop park trails.



## PHASE VI - Years 75+

### Expand to Full Buildout with 602+ Acres of Side Slopes and Stockpile Transition

It will take beyond 75 years for gas production within the landfill to decline to such a level that the surface gas pipes may be removed and the side slopes become available to the park.

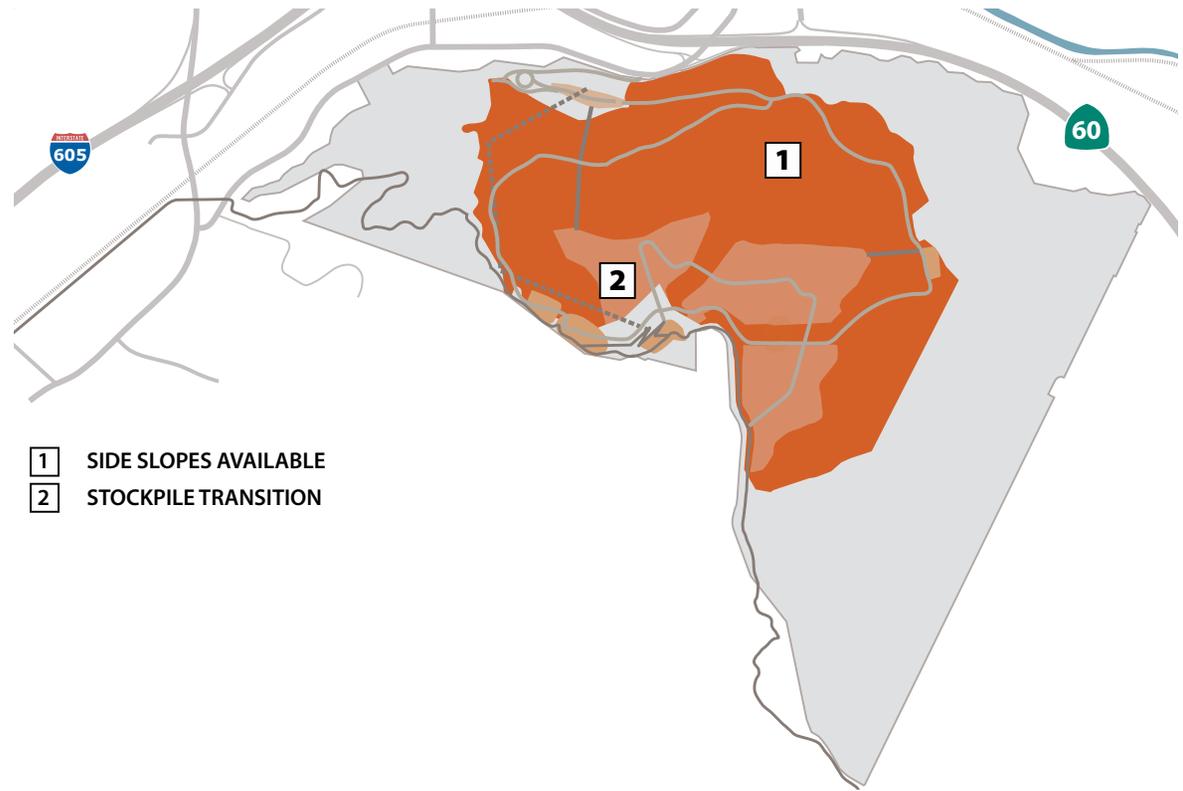
As of this writing, the Sanitation Districts's oldest landfill has not reached this point at 75 years since closure, and Puente Hills, which has some of the nation's deepest levels of fill, can be expected to exceed that projection.

Once the landfill has stabilized and is no longer producing methane, the outer gas infrastructure may be removed. Removing the miles of pipe ringing the slopes will provide a bountiful source of reusable material and opportunity for creative reuse at the park.

Independently, the eventual depletion of the soil stockpiles will also enable two smaller park transitions.

The first will occur when the southern stockpile is finally used and depleted. The area may need to be filled to have positive drainage and become a usable park area. At such time, the Sanitation Districts will begin harvesting the northern stockpile. The interim bike skills course located there will need to be relocated, possibly swapping locations.

Similarly, when the northern stockpile is finally diminished to a point where the remaining soil can be transported to a different location like the Maintenance & Operations (M&O) area, the final



- 1 SIDE SLOPES AVAILABLE
- 2 STOCKPILE TRANSITION

transition may take place so the entire Western Deck can be fully utilized. At such time, the uses of the Western Deck should be reassessed and redesigned so it will no longer be fragmented, and become one cohesive deck.

#### Parkland Expansion

- Integrate landfill side slopes into the park when they become available.
- Design and implement transition plans for the soil stockpile areas.





EASTERN SLOPES: BIO-GAS FROM THE LANDFILL IS COLLECTED IN A NETWORK OF SURFACE PIPES TO PRODUCE ENERGY. THIS SLOPE WILL SETTLE ~100 FEET IN 30 YEARS.



# 5.0

## REFERENCES



## 5.0 REFERENCE DOCUMENTS

### **Supplemental reports prepared for the Master Plan:**

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2015. Demographic, Recreation, Park Trends and Needs Report. August 8.

2015. Site Analysis Report. September 8.

2015. Stakeholder Interviews Summary Report. September 14.

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### **Sept. 2016. Puente Hills Landfill Park Master Plan Final Program Environmental Impact Report.**

Contains comprehensive list of reference documents. Appendices include:

- Initial Study/Notice of Preparation and Scoping Comments
- Air Quality/Greenhouse Gas
- Biological Resources
- Cultural Resources
- Geotechnical Study
- Grading, Drainage, and Utilities
- Noise
- Traffic

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2015. Los Angeles County General Plan. October 6.

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Appendix E: Conservation and Natural Resources Element Resources, Puente Hills SEA, Rio Hondo College Wildlife Sanctuary SEA.

Puente Hills Habitat Preservation Authority.

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Continued Operation of the Puente Hills Landfill, Volume VI: Final Environmental Impact Report. Jan. 2002. Sanitation Districts of Los Angeles County.







ARBORETUM  
STAIR CLIMB

EXISTING  
NATIVE  
PLANTINGS

NATIVE  
UNDER PLANTING  
**WESTERN DECK**

**EASTERN DECK**

PICNIC  
INTERPRETIVE  
ELEMENT

PERFORMANCE  
SPACE

NATIVE  
UNDER PLANTING

INTERPRETIVE  
OVERLOOK

RUNNING LOOPS

BIRD  
OBSERVATION  
OVERLOOK

RUNNING LOOPS

BIKE SKILLS

OPEN PLAY

OPEN PLAY

STAIR  
CLIMB

DOG PARK

GROUP  
PICNIC

STAIR  
CLIMB

GRASSLAND  
PATCHES

INNER LOOP TRAIL

GRASSLAND  
PATCHES

NATIVE  
UNDER PLANTING

PLAY &  
PICNIC

COASTAL SAGE  
SCRUB

BIKE  
RENTAL

BIKE  
SKILLS

SHARED  
MAINTENANCE  
YARD

SOIL  
STOCKPILE  
(FUTURE MEADOW)

SLIDES

PEDESTRIAN  
PLANTED  
OVERCROSSING

MAINTENANCE OFFICE  
& RESTROOM

ZIPLINE

EQUESTRIANS ONLY

**NIKE HILL**

SCENIC  
OVERLOOK &  
INTERPRETIVE  
ELEMENTS

RESTROOM

TRAIL-  
HEAD  
PARKING

NATIVE  
PLANT  
NURSERY

RUNNING LOOPS

EXISTING  
NATIVE  
PLANTING

AREA

ADA  
ACCESSIBLE  
TRAIL

STAIR CLIMB

MICROWAVE  
TOWERS

EXISTING  
TRAIL SEGMENT

INTERPRETIVE  
ELEMENT

PICNIC

EQUESTRIAN  
STAGING  
AREA

**SOUTHERN DECK**

TRAIL LIFT  
TOWER  
MINI CAFE  
STAFF OFFICE  
RESTROOMS

SCHABARUM SKYLINE TRAIL

GRASSLAND  
PATCHES

INTERPRETIVE  
ELEMENT

TEMPORARY  
ART  
INSTALLATIONS

COASTAL  
SAGE SCRUB

NATIVE  
UNDER PLANTING

PUENTE HILLS  
HABITAT  
PRESERVATION  
AUTHORITY

INTERPRETIVE  
ELEMENT