2. PROJECT DESCRIPTION

2.1 Project Location

The project involves improvements proposed at LAX, situated within the City of Los Angeles and Los Angeles County. As depicted in Figure 1-1 in Chapter 1, *Introduction and Executive Summary*, LAX is bordered by the communities of Westchester and Playa del Rey (part of the City of Los Angeles), the City of El Segundo, the City of Inglewood, the unincorporated community of Lennox, Dockweiler State Beach, and the Pacific Ocean. The airport is located approximately 12 miles southwest of downtown Los Angeles. Figure 1-2 in Chapter 1, *Introduction and Executive Summary*, provides an aerial view of the existing airport.

2.2 Project Objectives

The project is to complete a Specific Plan Amendment Study (SPAS) that fulfills Section 7.H of the LAX Specific Plan consistent with the definition of the SPAS set forth in the LAX Master Plan Stipulated Settlement. The objectives associated with completion of the SPAS process are described below.

1. Provide North Airfield Improvements that Support the Safe and Efficient Movement of Aircraft at LAX

The runways and taxiways within the north airfield at LAX were designed and constructed in the late 1960s. The commercial aircraft fleet in operation at that time, and used as the basis for designing the airfield geometrics (i.e., runway/taxiway widths, lengths, slopes, separation distances, dimensions for safety area setbacks and clearances, etc.), consisted of aircraft types that were substantially smaller and lighter than today's commercial aircraft, and had substantially different performance characteristics (i.e., braking, turn radius, etc.). For example, the commercial aircraft fleet in operation in the late 1960s and 1970s was dominated by aircraft such as the Boeing 727. The Boeing 747 was introduced into commercial service in the early 1970s and soon became one of the most popular aircraft for international and long-distance flights, particularly at LAX. In October 2008, scheduled flight operations of the Airbus A380 began at LAX. Provided in **Table 2-1** below is comparison of the size and weight of the three subject aircraft.

Table 2-1

Aircraft Size Comparison

	Boeing 727	Boeing 747-400	Airbus A380
Wingspan	108'	195'	261'
Length	153'	231'	239'
Tail Height	34'	64'	79'
Maximum Takeoff Weight	200,000 lbs	833,000 lbs	1,235,000 lbs

Source: Boeing, 2012 and Airbus, 2012. Boeing, Commercial Airplanes 727 Specifications, Available: http://www.boeing.com/commercial/727family/product.html, accessed January 2012; Boeing, Commercial Airplanes 747 Specifications, Available: http://www.boeing.com/commercial/747family/pf/pf_domestic_prod.html, accessed January 2012; Airbus, A380 Dimensions and Key Data, Available: http://www.airbus.com/aircraftfamilies/passengeraircraft/a380family/a380-800/specifications, accessed January 2012.

In addition to the overall growth in the size of airplane types over the past several decades, the wingspans of many current aircraft types, such as the Boeing 737, have increased with the addition of

winglets (i.e., wingtip extensions that reduce induced drag, and increase fuel efficiency), which typically add approximately 15+/- feet to the wingspan.

Problems associated with the outdated airfield design include, but are not limited to, the following:

- LAX does not have an airfield, in either the north complex or the south complex, that is fully designed for the largest aircraft types currently in service (i.e., Aircraft Design Group (ADG) V aircraft, such as the Boeing 747-400, and ADG VI aircraft, such as the Airbus A380).
- The north airfield configuration requires non-standard operating procedures, which are not optimal for safety and increase aircraft delay.
- The primary north airfield departure runway (6R/24L) is too short for certain larger aircraft (e.g., fully-loaded Boeing 747-400) on long-haul flights, requiring those aircraft to taxi to the south airfield, resulting in less efficient operations and disproportionate environmental impacts.
- The outdated airfield design creates a situation where aircraft are at increased risk of hazards. Those hazards include potential collisions with other aircraft, such as when a landing aircraft might move in the path of a departing aircraft (incursion).[24] Other potential hazards include, but are not limited to, insufficient side-by-side passing clearances between certain types of aircraft arriving/departing on runways and aircraft on nearby taxiways. Such hazards contribute to the potential for conflicts between taxiing aircraft and ground vehicles on runways, taxiways, and nearby service roads.
- With one exception, the north airfield configuration does not comply with FAA Runway Safety Area (RSA) requirements.
- The north airfield high-speed taxiways are not in compliance with FAA Engineering Brief No. 75.
- The north airfield does not provide sufficient areas at the end of the runways for holding arriving flights and sequencing departing aircraft.
- The existing Runway Protection Zone (RPZ) associated with Runway 6L/24R includes residential uses.

In identifying and evaluating alternatives to the north airfield improvements called for in the LAX Master Plan, LAWA is seeking to provide north airfield improvements that support the safe and efficient movement of aircraft at LAX; specifically, such improvements:

- Are consistent with FAA design standards for the largest aircraft types currently in service and anticipated for the future (ADG V and VI aircraft) for all weather conditions;
- Minimize modifications of standards, waivers, or operational restrictions, all of which reduce airfield efficiency and level of service;
- Reduce the potential for airfield hazards, including incursions, and enhance the overall safety of airfield operations through runway and taxiway design;
- Accommodate a greater percentage of departing aircraft, thereby increasing airfield efficiency;
- Provide sufficient areas at the ends of the runways for holding arriving flights and sequencing departing aircraft; and
- Minimize or eliminate the extent to which Runway Protection Zones overlay residential areas.

2. Improve the Ground Access System at LAX to Better Accommodate Airport-Related Traffic, Especially as Related to the Central Terminal Area

Travelers, visitors, employees, vendors, and others utilizing the commercial passenger terminal at LAX, defined by the Central Terminal Area (CTA), have various ground access options including private vehicles, transportation service providers (i.e., taxis, shuttles, limousines, etc.), and public transit. Ground

[24] As further discussed in Section 4.7.2, *Safety*, a runway incursion is defined by FAA as "Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft."

access within the CTA, where departing and arriving passengers are dropped off and picked up at curbside or can park their vehicles, is provided by an upper-level roadway and a lower-level roadway that loop around the center of the CTA and connect with surface streets on the east side of the CTA. The subject roadway system poses a number of concerns relative to traffic flows including, but not limited to, the following:

- CTA roadway system design currently creates queuing, weaving, and conflict points at various locations that impede traffic flow;
- During peak travel times, inbound airport traffic currently extends out of the CTA roadways onto public streets and may worsen as airport activity returns and grows;
- Curbside demand is unevenly distributed, especially during peak periods, creating concentrations of passengers that are not accommodated by the existing curbside system;
- As cumulative regional traffic increases, there will be less time certainty for airport users without easy access to the airport from the regional transit system; and
- The roadway system is not designed to efficiently accommodate security screening of vehicles entering the CTA.

In identifying and evaluating alternatives to the ground access system delineated in the LAX Master Plan, particularly as related to the related Yellow Light Projects, LAWA is seeking to improve the ground access system at LAX to better accommodate airport-related traffic, especially within the CTA. In particular, LAWA is seeking to:

- Design CTA roadway segments and curbside areas that reduce traffic "bottlenecks" and congestion;
- Reduce the volume of private vehicles accessing the CTA by reconfiguring and developing airport facilities that allow for alternative drop off and pick up of passengers outside the CTA;
- Reduce roadway congestion and improve performance and reliability of the airport ground transportation system by providing a grade-separated/dedicated transportation system that connects airport and transit facilities to the CTA; and
- Integrate LAWA's ground access system improvements with regional transit facilities nearby, including the recently approved Metro Crenshaw/LAX Transit Corridor and Station.

3. Maintain LAX's Position as the Premier International Gateway in Supporting and Advancing the Economic Growth and Vitality of the Los Angeles Region

LAX serves a key role in the region's economy. This is particularly true relative to LAX's position as the international gateway for the western United States. According to a study completed in 2007 by the Los Angeles Economic Development Corporation (LAEDC), over the course of 2006 an average transoceanic flight traveling round-trip from LAX everyday added $623 million in economic output and sustained 3,120 direct and indirect jobs in Southern California with $156 million in wages.[25] Given the continued growth in, and reliance on, new large aircraft such as the Airbus A380 by major airlines operating on those long-distance international routes, it is important that LAX be able to effectively accommodate those aircraft.

LAX is a major employer on both a local level and a regional level. According to the LAX Master Plan Final EIS/EIR, on-airport employment at LAX provided almost 59,000 jobs and, on a larger-scale, LAX-related regional employment provided over 400,000 jobs and $60 billion in economic output.[26]

In addition to being a major provider of permanent positions at the airport, LAX is also a major provider of construction jobs, particularly over the last several years through the economic recession. According to an economic impact analysis completed by the LAEDC in April 2011, construction of the airfield

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25 Los Angeles Economic Development Corporation, The Economic Activity Development on Overseas Flights at LAX, August 2007.

26 City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX), Tables F4.4.1-1, F4.4.1-2, and F4.4.1-3, April 2004.

improvements (i.e., Crossfield Taxiway Project), terminal improvements (i.e., Bradley West Project), and other related improvement underway at the time, will create 39,900 jobs over the course of the program, or an average of 5,500 to 6,000 jobs per year. Of these, between 3,500 and 4,000 jobs will be in construction industries.[27]

It is LAWA's desire to provide improvements that further enable LAX to support and advance the economic growth and vitality of the Los Angeles region.

4. Plan Improvements That Do Not Result in More Than 153 Passenger Gates at 78.9 MAP

In identifying and evaluating alternatives to the demolition of Terminals 1, 2, and 3, LAWA is seeking to maintain consistency with the LAX Master Plan design for a total of 153 passenger gates, which was based on a future passenger activity level of 78.9 million annual passengers (MAP) at LAX in 2015. The need to demolish portions of Terminals 1, 2, and 3 is due to the reconfiguration of the north airfield as contemplated in the LAX Master Plan. As described in Section 1.1, the demolition of those terminals and the reconfiguration of the north airfield are both Yellow Light Projects being addressed in SPAS. The formulation of alternatives for reconfiguration of the north airfield includes various options for moving runways and associated taxiways northward or southward, each of which has implications relative to Terminals 1, 2, and 3. The formulation of potential alternatives to the demolition of Terminals 1, 2, and 3 is substantially influenced by the alternatives for the north airfield reconfiguration. While the extent to which terminals are reconfigured under each terminal alternative will vary depending on which airfield reconfiguration alternative it is linked to, LAWA is seeking to maintain consistency between all terminal alternatives such that none of them results in more than 153 passenger gates at the projected passenger activity level of 78.9 MAP.

5. Enhance Safety and Security at LAX

During the preparation of the LAX Master Plan, which began in the 1990s, Alternative D was formulated following the events of September 11, 2001 and integrated into the CEQA review process for the LAX Master Plan as the "Enhanced Safety and Security Plan." In now identifying and evaluating alternatives to the Yellow Light Projects, which are key elements of the LAX Master Plan, LAWA is seeking to maintain the ability of the LAX Master Plan, if and as modified by the outcome of the SPAS process, to enhance safety and security at LAX.

6. Minimize Environmental Impacts on Surrounding Communities

LAX is a major international airport located within a very urbanized area, with established communities situated directly to the north, east, and south. These communities are affected to varying degrees by existing operations at the airport. Recognizing that these existing effects to the surrounding communities may change based on the alternatives being considered in SPAS, LAWA seeks to identify and apply ways to avoid, reduce, or minimize environmental impacts on surrounding communities.

7. Produce an Improvement Program that is Efficient, Sustainable, Feasible, and Fiscally Responsible

The nature and scope of improvements associated with the Yellow Light Projects are substantial. Each of those projects represents a major undertaking, requiring substantial funding; considerable planning, engineering, and design; and major construction activities. The costs for each of these major improvement projects would be financed primarily by Airport Improvement Program grants, Passenger Facility Charges (PFCs), and bond sales, all of which are subject to federal requirements regarding expenditure of airport funds, and which will also be utilized to finance other airport improvements outside of the scope of SPAS. The ability to successfully fund such improvements is, to a large extent,

[27] Los Angeles Economic Development Corporation, Economic Impact Analysis - LAX Airfield and Terminal Construction Projects, 2011.

dependent on whether certain airport activity levels are reached. Additionally, the types of improvements associated with the Yellow Light Projects and the alternatives thereto represent major long-term investments in the airport's infrastructure that must be efficient and sustainable for many years. The construction of these major improvements poses the potential for major disruptions to existing airport operations. In identifying and evaluating alternatives to those Yellow Light Projects, LAWA is seeking to produce an improvement program that is efficient, sustainable, feasible, and fiscally responsible.

2.3 Project Characteristics

2.3.1 Alternatives Addressed in this Draft EIR

As described above in Chapter 1, *Introduction and Executive Summary*, the primary focus of the SPAS is on potential alternatives to the following LAX Master Plan improvements defined in the Stipulated Settlement as the Yellow Light Projects:

- Development of the Ground Transportation Center (GTC), including the baggage tunnel, associated structures and equipment;
- Construction of the Automated People Mover (APM) 2 from the GTC to the CTA, including its stations and related facilities and equipment;
- Demolition of CTA Terminals 1, 2, and 3;
- North Runway re-configuration as contemplated in the LAX Master Plan, including center taxiways; and
- On-site road improvements associated with development of the GTC and construction of APM 2.

Nine alternatives offering various options to the Yellow Light Projects are addressed within this Draft EIR for SPAS. The SPAS alternatives represent a set of potential amendments to the LAX Specific Plan. The alternatives are intended to provide solutions to the problems that the Yellow Light Projects were designed to address, which are described below:

> **Problems the North Airfield Reconfiguration was Designed to Address:** Under existing conditions, the north airfield does not meet FAA standards for ADG V and VI aircraft under any weather conditions. Failure to meet these standards results in restricted operations when ADG V or VI aircraft utilize the north airfield, impacting operations of all aircraft on the north airfield. Restricted operating procedures increase operational delays and aircraft-related emissions and adversely affect passenger convenience. Additionally, without a centerline taxiway and other airfield improvements, there is an increased risk of incursions and collisions. Further, Runway 24L is not long enough to accommodate some fully-loaded departing aircraft, resulting in higher utilization of the south airfield by these aircraft.
>
> The north airfield configuration set forth in the LAX Master Plan was designed to accommodate the largest aircraft types currently in service and anticipated for the future (ADG V and VI aircraft), reduce the risk of runway incursions, enhance the safety and efficiency of aircraft operations at LAX, and provide a better balance in heavy aircraft operations between the north airfield and the south airfield. The north airfield configuration set forth in the LAX Master Plan would achieve these goals by relocating Runway 6R/24L 340 feet to the south of the existing runway centerline in order to accommodate a 75-foot-wide centerfield taxiway between Runway 6L/24R and Runway 6R/24L with 520 feet separation between each of the runway centerlines and the new taxiway centerline. The north airfield design set forth in the LAX Master Plan would provide for a Modified Group VI airfield. ADG VI standards are designed to accommodate the new generation of wide-bodied airplanes that began to operate at LAX in 2008. These aircraft, referred to as new large aircraft or NLA, have significantly wider wingspans, taller tail sections, and longer fuselages. In the absence of an airfield that meets ADG VI aircraft standards, operational restrictions are imposed to accommodate NLA at LAX. These restrictions affect the operation of all aircraft at the airport.

Problem the Demolition of Terminals 1, 2, and 3 was Designed to Address: Under the LAX Master Plan, substantial portions of Terminals 1, 2, and 3, notably the piers/concourses, would be demolished in order to provide room for the relocation of Runway 6R/24L 340 feet to the south of the existing runway centerline. The existing terminals would be replaced by a linear concourse that would provide aircraft gates and passenger holdrooms but no passenger processing capacity. Under the LAX Master Plan, the passenger processing capacity provided by existing Terminals 1, 2, and 3 would be replaced by new passenger processing facilities in the interior of the CTA (where the existing parking garages are currently located). Only the demolition of Terminals 1, 2, and 3 is a Yellow Light Project.

Problem the Ground Transportation Center was Designed to Address: Under the LAX Master Plan, the function of the GTC is to replace CTA curb front for drop off and pick up of passengers and to replace a portion of the private vehicle parking area and all of the commercial vehicle (e.g., taxis, shuttle vans, and limousines) staging area. The GTC was designed to allow closure of the CTA to private vehicle access and provide the curb front function at a location well-removed from the main terminal area to enhance security within the CTA. The GTC, in conjunction with the Intermodal Transportation Center (ITC) and other parking facilities proposed as part of the LAX Master Plan, also provided replacement parking for the existing parking that would be eliminated under the LAX Master Plan, such as in the CTA and Parking Lots C and D.

Problem APM 2 was Designed to Address: Under the LAX Master Plan, the function of APM 2 is to provide connection between the planned GTC and the CTA.

The types of improvements used to define the key characteristics of each SPAS alternative and to address the issues listed above can be grouped into the following three categories:

- Airfield Improvements - Airfield improvements include changes to the runways, taxiways, navigational aids, and service and maintenance roads associated with the north airfield. The primary differences in airfield improvements associated with the various SPAS alternatives pertain to:
  - Separation distances between runways and taxiways. Separation distances largely determine the maximum size aircraft that can freely operate on that system under various visibility conditions, and, in certain visibility conditions, would either require FAA approval of special operating procedures (i.e., Modifications of Standards or other forms of operational waivers) or would be prohibited;
  - Whether an increase in the separation distance between Runway 6L/24R and Runway 6R/24L would allow for the construction of a centerfield parallel taxiway between the runways, to enable aircraft arriving on the outboard (6L/24R) runway to exit onto the center taxiway and hold while aircraft are departing on the inboard (6R/24L) runway, thereby allowing the departing aircraft to safely pass before the arriving aircraft proceeds to the terminal gates;
  - The extent to which the Lincoln Boulevard and the Argo Drainage Channel would have to be modified in order to accommodate a northerly shift in the alignment of Runway 6L/24R;
  - Whether Runway 6R/24L would be extended 1,250 feet eastward to provide greater departure length in west flow condition that would better accommodate departures of large aircraft on long-haul flights and improve the balance between the north airfield and the south airfield relative to such departures;
  - Whether Runway 6L/24R would be reconfigured or extended to relocate its associated RPZ with respect to residential uses, and/or to improve the north airfield and the south airfield relative to the operation of aircraft;

- How Runway Safety Area (RSA) requirements would be met, in terms of runway extensions, declared distances,[28] displaced thresholds,[29] or a combination thereof; and
- Separation distances between Runway 6R/24L, Taxiway E, Taxilane D, the adjacent vehicle service road, and the aircraft gates/parking positions at the north end of the CTA, which largely determine the maximum size aircraft that can either freely operate on that system or would be subject to certain limitations, particularly as related to the interface between aircraft going to or from the gates at Terminals 1 through 3 and aircraft taxiing to the east end of Runway 6R/24L for departure.

- Terminal Improvements - Terminal improvements consist primarily of additions/demolitions to existing terminals/concourses, and, for most SPAS alternatives, the construction of a new terminal - Terminal 0 ("zero"). The primary differences in terminal improvements for the various SPAS alternatives are directly related to the movement of runways and taxiways under each alternative. Specifically, the alternatives differ in the location of their building limit lines (i.e., the "object free" safety area along runways and taxiways where no part of a structure can be present) and their aircraft parking limit lines (APLL) (i.e., the safety clearance setback area along runways and taxiways into which no part of an aircraft parked at a gate can extend). The northernmost limit of concourse building area and/or aircraft gate parking positions is defined by the southernmost safety clearance distance for the runways and taxiways in the north airfield. Depending on the location and design of the runways and taxiways associated with each alternative, the locations of the building limit line and APLL may differ between alternatives.

  In general, the building lines and APLLs associated with most of the alternatives extend southward, overlapping, to varying degrees, portions of the concourse areas for Terminals 1 through 3, which would require removal (demolition) of those building areas that encroach past the building limit line and/or the elimination or reduction in aircraft size capability of gate parking positions that encroach past the parking limit line. Conversely, the building and parking limit lines associated with several alternatives do not extend as far south as the limit lines defined in the LAX Master Plan, which assumed the movement of Runway 6R/24L 340 feet south and defined the northerly building limits for the Tom Bradley International Terminal (TBIT) West Gates, currently under construction as part of the Bradley West Project, and the future Midfield Satellite Concourse (MSC). In those cases, establishing building and parking limit lines farther north than the current LAX Master Plan limit lines would allow the opportunity for a future northward extension (i.e., an addition to) the north concourses for Bradley West and the MSC.

  While the amount of concourse area and the layout of aircraft gates vary between alternatives, all of the SPAS alternatives include no more than 153 passenger gates.

  Certain alternatives propose a westerly realignment of the Terminal 3 concourse to provide a wider alleyway between the concourses at Terminals 2 and 3 for aircraft taxiing.

  For those alternatives that include development of the new Terminal 0, the existing alignment of Sky Way (the primary access road connecting CTA to southbound Sepulveda and 96th Street Bridge) would be shifted east, into the area now occupied by the Park One parking lot, providing an improved entrance roadway into the CTA.

- Ground Access Improvements - Ground access improvements consist of changes to on-airport and off-airport roads, addition of specific transportation facilities, development of dedicated access (i.e., busway or APM) into the CTA, and changes in parking locations. While the focus of SPAS is on alternatives to the Yellow Light Projects, such as the GTC and its associated roadways and one of the two APM systems proposed under the LAX Master Plan (APM 2), the ground access improvements proposed under the various SPAS alternatives also take into consideration key non-

[28] Declared distances are the distances the airport operator declares available for an aircraft's take-off run, take-off distance, accelerate-stop distance, and landing distance requirements to obtain a standard safety area.

[29] A displaced threshold is a threshold that is located on a point on the runway other that the designated beginning of the runway to satisfy approach surface criteria and/or RSA length requirements.

Yellow Light projects that are integral parts of the overall ground access system. Such projects include the Consolidated Rental Car Facility (CONRAC), the ITC, the APM connecting the ITC and CONRAC to the CTA, and the West Employee Parking facility. The ground access improvements proposed under the various SPAS alternatives represent different combinations of options to the Yellow Light Projects. Due to integral nature of these key non-Yellow Light projects with the overall ground access system, the SPAS alternatives include proposed modifications to, or proposed deletion of, these non-Yellow Light projects.

Provided below is an overview of the nine SPAS alternatives addressed in this Draft EIR. The details of each alternative are provided after the following overview.

Alternatives 1 through 4 are "fully-integrated" alternatives that include specific improvements in all three categories: airfield improvements, terminal improvements, and ground access improvements. Alternatives 5 through 7 focus on variations to the airfield improvements, which, in turn, affect the terminal improvements. Alternatives 8 and 9 focus on variations to the ground access improvements.

Although the primary focus of Alternatives 5 through 9 is on specific categories of improvements, there is a certain amount of compatibility or "interchangeability" between the SPAS alternatives. Specifically, the airfield and terminal improvements in Alternatives 5 through 7 are equally compatible with the ground access improvements in Alternatives 1, 2, 8, and 9. Likewise, the ground access improvements in Alternatives 8 and 9 are equally compatible with the airfield and terminal improvements in Alternatives 1, 2, 5, 6, and 7. In other words, the proposed ground transportation system incorporated into Alternatives 1 and 2 could function in the same manner with Alternatives 5, 6, or 7. That would also be the case for the ground transportation systems under Alternatives 8 and 9, which could be developed under Alternatives 5, 6, or 7, and could also replace the ground transportation system currently proposed for Alternatives 1 and 2. On the other hand, Alternatives 3 and 4 are unique "fully-integrated" alternatives and are not considered to have elements that are "interchangeable" with the other SPAS alternatives. While Alternatives 5, 6, and 7 focus on options for airfield/terminal improvements and Alternatives 8 and 9 focus on options for ground access improvements, these five alternatives (Alternatives 5 through 9) would only address all of the problems that the Yellow Light Projects were designed to address in conjunction with another alternative (Alternatives 1 through 4), or portion thereof.

The following describes each of the nine SPAS alternatives, including an overview of the alternative and details regarding the specific improvements and characteristics associated with that alternative. The description of each alternative includes a delineation of major modifications to existing airport facilities that would be required for that alternative. The nature and extent of improvements associated with each alternative, as described below, generally reflects the technical, economic, and environmental characteristics of each alternative.

The nine SPAS alternatives addressed within this Draft EIR were formulated at a programmatic level of conceptual planning, and no design or engineering plans, or construction phasing plans or schedules, are available for any of the alternatives. In general, however, it is anticipated that all of the improvements proposed under each alternative would be completed by 2025, with construction beginning in 2015.

Following the descriptions of the nine alternatives presented in Sections 2.3.1.1 through 2.3.1.9, Section 2.3.1.10 summarizes other existing airport facilities that would be affected by the SPAS alternatives.

2.3.1.1 Alternative 1

Overview

Alternative 1 is a fully-integrated alternative, consisting of airfield, terminal, and ground access components. The distinguishing airfield improvement feature of this alternative is the movement of Runway 6L/24R 260 feet north, along with the addition of a centerfield taxiway, the extension of Runway 6R/24L, improvements to Taxilane D and Taxiway E, and relocation of the service road. Terminal Improvements include addition of new Terminal 0, loss or modifications to concourse areas and/or gates

at Terminals 1, 2, and 3, and the modification and potential northward extension of concourse area and gates at TBIT and the future MSC. Ground access improvements include modification of Sky Way; development of an Intermodal Transportation Facility (ITF) at 98th Street west of Airport Boulevard; development of an elevated/dedicated busway along 98th Street, with a bridge over Sepulveda Boulevard and stops at Manchester Square (future surface parking), the future Metro LAX/Crenshaw Light Rail Transit Station at/near Century and Aviation Boulevards, the ITF, and the CTA; and the relocation of Lincoln Boulevard, a portion of which would be below grade and/or tunneled. This alternative is illustrated in **Figure 2-1**.

2.3.1.1.1 Airfield Facilities

Alternative 1 meets FAA airport (runway) design standards for ADG V with a Category II/III outboard runway (Runway 6L/24R) and Category I inboard runway (Runway 6R/24L), and provides sufficient space between Runway 6R/24L and the centerfield taxiway for ADG V aircraft to hold prior to crossing the runway with a pilot line-of-sight of the end of Runway 24L. This alternative provides the FAA standard ADG VI runway-to-taxiway separation between Runway 6L/24R and the centerfield taxiway for approach visibility at or above one-half mile (Category I approaches). Taxiway E and Taxilane D dimensions would meet ADG V standards.

Runway Modifications

Runway 6L/24R

- Relocate 260 feet north of current location to accommodate a new centerfield parallel taxiway (see below) and to provide for ADG V separation distances
- Extend 604 feet west so that the RPZ no longer extends over residential areas
- Establish dual displaced thresholds to remove existing residences from the RPZ (east end displaced threshold) and maintain existing westerly aircraft landing heights (west end displaced threshold)
- Widen to 200 feet to meet FAA standards

Runway 6R/24L

- Remains in its current location
- Extend 1,250 feet east to meet RSA requirements and maximize aircraft takeoff length
- Shift 6R landing threshold 104 feet east to meet RSA requirements
- Reconstruct east 2,000 feet for grade compliance

Taxiway Modifications

Centerfield Taxiway

- Construct an 82-foot-wide centerfield taxiway between Runways 6L/24R and 6R/24L, with a centerline separation distance of 500 feet to Runway 6L/24R and 460 feet to Runway 6R/24L, to enhance safety and reduce incursions and other airfield hazards, while providing for ADG V separation distances; also provide exit taxiways from Runway 6L/24R to the centerfield taxiway, taxiways from the centerfield taxiway to and across Runway 6R/24L, and other related airfield taxiway improvements

Taxiway E

- Rebuild western 2,190 feet to straighten alignment (0 to 64 feet southerly relocation)
- Extend 950 feet east to support easterly extension of Runway 6R/24L and to provide additional hold area for departing aircraft

Taxilane D

- Relocate varying distances (ranging from 15 to 19 feet) north to provide ADG V separation distances between the taxiway and APLL
- Extend 745 feet east to support easterly extension of Runway 6R/24L and 5,145 feet west to provide for dual full-length taxiways in the north airfield

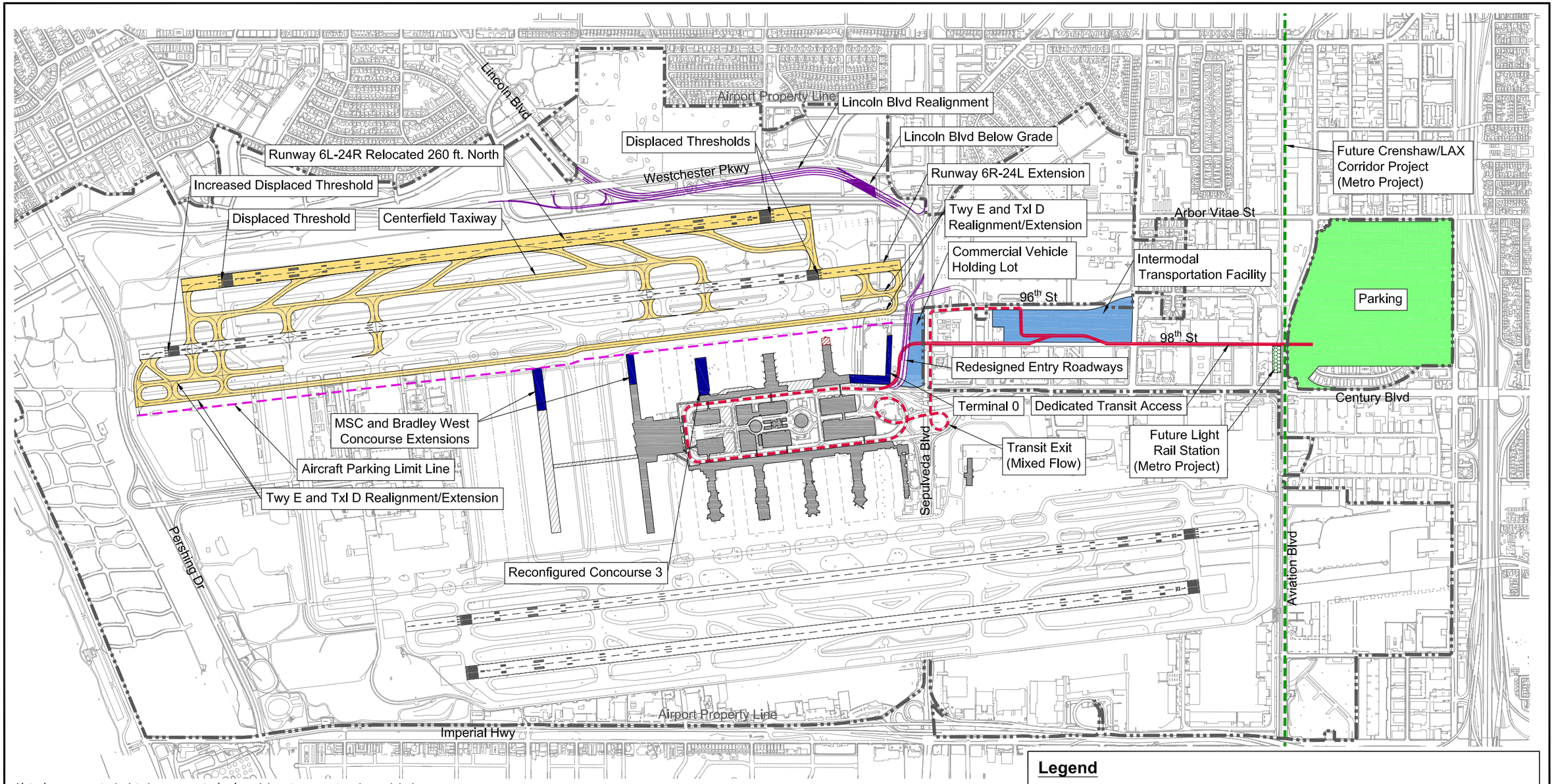
Other Airfield-Related Features

- Cover the entire length of the Argo Drainage Channel (9,857 linear feet) such that the weight of an aircraft could be supported within the RSA by converting the existing open unlined channel to a concrete box culvert
- Relocate Lincoln Boulevard northward between Sepulveda Boulevard and Westchester Parkway, and depress the eastern portion of the road segment to be compatible with the object free area requirements for the east end of Runway 6L/24R, which would require approximately 540 linear feet of the road segment to be tunneled
- Relocate the service road that currently lies between Taxiway E and Taxilane D to a location 142 feet south of Taxilane D centerline to increase the separation between the two taxiways to allow for simultaneous operations with larger aircraft than currently accommodated, improve safety and efficiency, and meet FAA standards
- Taxiway E and Taxilane D dimensions, based on proposed improvements, would meet ADG V standards
- In the eastern portion of the airfield, the APLL would move south to a location 852 feet south of the existing Runway 6R/24L centerline. Beginning just west of Taxiway S, the APLL would move south an additional 50 feet (902 feet south of the Runway 6R/24L centerline).
- Relocate and/or remove existing facilities as specifically described in Section 2.3.1.10 below and as listed in **Table 2-3** and shown in **Figure 2-10**

2.3.1.1.2 Terminal Facilities

Proposed modifications to terminal facilities, including aircraft gates, under Alternative 1 would include the following:

- Construct a new Terminal 0 with seven gates in the western portion of the area now occupied by Park One to replace gates lost or downsized at Terminals 1 through 3
- Demolish approximately 177 feet of the Terminal 1 concourse to accommodate the southerly movement of the APLL
- Demolish and reconstruct the Terminal 3 concourse and associated gates, with the building centerline shifted 40 feet to the west to increase the width of the alleyway between Terminals 2 and 3 to allow for dual-directional aircraft movement and comply with FAA standards
- Demolish and replace the northerly end of the TBIT concourse and associated gates (with new concourse and gates in line with the new Bradley West concourse) to the Alternative 1 APLL
- Provide the opportunity to extend the northerly end of the future MSC to the Alternative 1 APLL
- As a result of moving the APLL south to meet ADG V standards, several gates would be eliminated or downsized (i.e., would accommodate smaller aircraft types)
- The commuter facility currently in use east of Sepulveda Boulevard would be maintained
- West remote gates would be eliminated upon completion of the airfield and terminals improvements
- The total number of gates used at LAX for scheduled passenger service would be 153



Note: Improvements depicted are conceptual only and do not represent engineered design.

0 1,500 ft
Scale

north

Prepared by: Ricondo & Associates, Inc., 2012.

Legend

- Airfield Improvements
- Terminal Improvements
- Terminal Demolition
- Non-SPAS Terminal Improvements
- Aircraft Parking Limit Line
- Roadway Improvements
- Ground Access Facilities
- Parking
- Transit Access (Dedicated)
- Transit Access (Mixed Flow)
- Future Metro Light Rail Project

LAX Specific Plan Amendment Study Draft EIR

Alternative 1

Figure
2-1

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2.3.1.1.3 Ground Access Facilities

Ground Access

Under Alterative 1, the characteristics of the airport ground access system would be as follows:

- Maintain private vehicle access to the CTA
- Relocate Sky Way (upper and lower level roadways) eastward between the future Terminal 0 and Sepulveda Boulevard to provide additional roadway and curbfront in the CTA, while allowing the development of Terminal 0
- Add new curbside space at Terminal 0
- Relocate the commercial vehicle holding lot south of 96th Street, between Sepulveda Boulevard and the relocated Sky Way to meet RSA and RPZ requirements
- Construct a new ITF on 14 acres between 96th and 98th streets and between Vicksburg Avenue and Airport Boulevard. Key features of the ITF include public parking and remote passenger pick up/drop off. In addition, arriving passengers could travel to the ITF to board door-to-door shuttles or scheduled buses.
- Construct public and employee parking in Manchester Square
- Construct a dedicated busway between Manchester Square and the CTA, primarily using the 98th Street corridor, including a bridge over Sepulveda Boulevard and stops at the future Metro LAX/Crenshaw Light Rail Transit Station at/near Century and Aviation Boulevards and the new ITF. The busway would be grade-separated into the CTA, where it would merge with mixed-flow traffic on the upper-level roadway; exiting the CTA, buses would be in mixed-flow, re-entering the elevated busway east of Vicksburg Avenue.
- Provide connectivity to public transit via the LAX dedicated busway, with a stop/connection at the new Metro transit station at Aviation/Century. LAX shuttle bus from the Metro Green Line Aviation Station would be discontinued.
- Relocate Lincoln Boulevard to the north, outside of the Runway 6L/24R RSA, with a portion below grade and/or tunneled

Parking

Under Alternative 1, the characteristics of airport parking within the control of LAWA would be as follows:

- Generally, no changes to existing CTA parking conditions would occur as a result of SPAS, although future pricing structures may change long-term/short-term composition
- Parking Lot E, would no longer be used for employee parking, although this property could be used for other airport purposes in the future. Changes to the use of this parking area would occur independently from SPAS.
- No changes are proposed to Public Parking Lot C
- Parking Lot D would provide approximately 1,944 employee parking spaces. The Jenny Lot east of Parking Lot D would provide approximately 2,000 employee parking spaces. These parking areas were not in use in the 2010 baseline year; however, their use for parking is occurring independently from SPAS.
- Development of the ITF would include approximately 4,900 short-term public parking spaces to facilitate passenger drop off and pick up outside of CTA
- Construct parking within Manchester Square, including 4,200 long-term spaces and 3,500 employee parking spaces
- No public or employee parking is proposed for the area referred to as Continental City

- The existing Park One parking would be eliminated to allow development of Terminal 0 and the relocated entry roadway
- The West Employee Parking facility would not be constructed

2.3.1.1.4 Elimination of LAX Master Plan Components

Under Alternative 1, the following non-Yellow Light projects approved as part of the LAX Master Plan would be fully or partially eliminated:

- Demolition of all CTA parking structures and replacement with passenger terminals (partially eliminated)
- West Employee Parking facility
- CONRAC in Parking Lot C
- Parking north of 111th Street
- ITC in the area referred to as Continental City
- APM between ITC, CONRAC, and CTA (APM 1)

2.3.1.2 Alternative 2

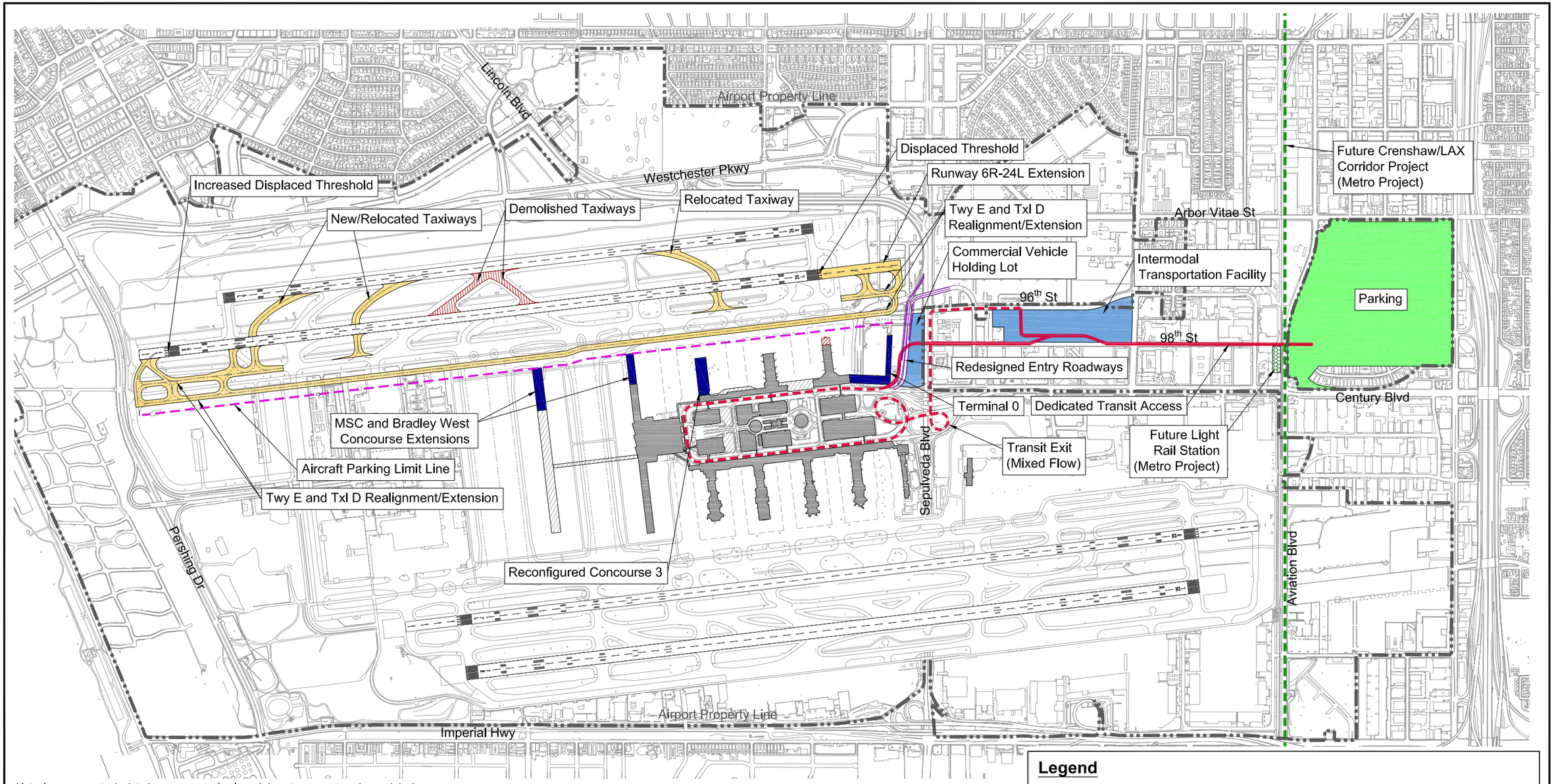
Overview

Alternative 2 is a fully-integrated alternative, consisting of airfield, terminal, and ground access components. This alternative is distinguished by the fact that it does not propose a northerly relocation of Runway 6L/24R or a southerly relocation of Runway 6R/24L. This alternative does not include a centerfield taxiway, but does include the modification and addition of high-speed runway exits (taxiways) to enhance the safe and efficient movement of arriving aircraft.

Many of the improvements associated with Alternative 2 are the same as those associated with Alternative 1, including Runway 6R/24L, Taxiway E and Taxilane D, service road relocation, terminal and gate modifications, and ground access components. Improvements associated with Runway 6L/24R under this alternative, including connecting taxiways, are different than Alternative 1. Because there would be no northerly relocation of Runway 6L/24R under Alternative 2, it does not require the modifications to the Argo Drainage Channel (other than those required under existing conditions to meet federal RSA requirements) and Lincoln Boulevard described above for Alternative 1. This alternative is illustrated in **Figure 2-2**.

2.3.1.2.1 Airfield Facilities

Alternative 2 meets FAA airport design standards for ADG V with a Category II/III outboard runway (Runway 6L/24R) and Category I inboard runway (Runway 6R/24L), and provides sufficient space to hold ADG IV aircraft or smaller on crossing-taxiways (e.g., AA, Z, W), but is not sufficient to hold larger ADG V and VI aircraft. The restrictions and operating procedures in place today would remain with this alternative. This alternative includes taxiway improvements between the two runways to meet taxiway and runway interface recommendations. The recommendations call for taxiways used for runway crossing to be located in the first or last third of a runway to enhance the safety of crossing operations. Taxiway E and Taxilane D dimensions would meet ADG V standards. This alternative would not require modifications to the Argo Drainage Channel (other than those required under existing conditions to meet federal RSA requirements) and would not require relocation of Lincoln Boulevard.



Note: Improvements depicted are conceptual only and do not represent engineered design.

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Alternative 2

Figure **2-2**

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Runway Modifications

Runway 6L/24R

- No relocation, extension, or widening of Runway 6L/24R
- Existing RPZ for Runway 6L/24R, which includes residential uses, would remain

Runway 6R/24L

- Improvements are the same as Alternative 1

Taxiway Modifications

- No centerfield taxiway
- Reconfigure taxiways connecting Runways 6L/24R and 6R/24L to meet federal safety standards
- Improvements to Taxiway E, Taxilane D, and the service road are the same as Alternative 1
- The APLL would be the same as Alternative 1

2.3.1.2.2 Terminal Facilities

Proposed modifications to terminal facilities, including aircraft gates, under Alternative 2 would include the following:

- The terminal facilities would be the same as Alternative 1
- The gate configuration would be the same as Alternative 1

2.3.1.2.3 Ground Access Facilities

Ground access facilities and parking would be the same as Alternative 1, with the exception of Lincoln Boulevard, which would not be relocated.

2.3.1.2.4 Elimination of LAX Master Plan Components

This alternative would eliminate the same non-Yellow Light projects approved as part of the LAX Master Plan as would Alternative 1.

2.3.1.3 Alternative 3

Overview

Alternative 3 is the CEQA "No Project" Alternative and represents what would reasonably be expected to occur in the foreseeable future if the LAX Master Plan (i.e., "Alternative D") and all of the LAX Master Plan improvements, including the Yellow Light Projects, were implemented as originally envisioned. Analysis of Alternative 3 will allow decision-makers and the public to compare the impacts of implementing alternatives to the LAX Master Plan with the impacts that would occur under the LAX Master Plan.

Alternative 3 is a fully-integrated alternative, consisting of airfield, terminal, and ground access components. The distinguishing airfield improvement related to this alternative is the movement of Runway 6R/24L 340 feet south, along with the addition of a new centerfield taxiway, extension of Runway 6L/24R, and relocation and improvements to Taxiway E, Taxilane D, and service roads. Related terminal improvements include demolition of the concourses/gates at Terminals 1, 2, and 3 and replacement with a new linear concourse, elimination of the northernmost gates at TBIT, and replacement of the existing CTA parking structures with new passenger processing terminals. Key ground access improvements include closure of the CTA to private vehicles; development of a GTC at Manchester Square, an ITC at the area referred to as Continental City with a pedestrian bridge to the existing Metro Green Line Station, and a CONRAC at Parking Lot C; development of two APM systems to link the ITC, CONRAC, and CTA and link the GTC and CTA; construction of new on-airport roads east of and parallel to Aviation Boulevard; reconfiguration and expansion of Parking Lot E located west of La Cienega Boulevard; and

construction of a West Employee Parking facility. There would be no modifications to the Argo Drainage Channel (other than those required under existing conditions to meet federal RSA requirements) or Lincoln Boulevard under this alternative. This alternative is illustrated in **Figure 2-3**.

2.3.1.3.1 Airfield Facilities

Alternative 3 meets FAA airport design standards for ADG V with a Category II/III outboard runway (Runway 6L/24R) and Category I inboard runway (Runway 6R/24L), and provides sufficient space between Runway 6R/24L and the centerfield taxiway for ADG VI aircraft to hold prior to crossing the runway with a pilot line-of-sight of the end of Runway 24L. This alternative provides ADG VI runway-to-taxiway separation between Runway 6L/24R and the centerfield taxiway for approach visibility at or above one-half mile (Category I approaches). Taxiway E and Taxilane D would meet ADG V standards.

Runway Modifications

Runway 6L/24R

- Remains in its current location
- Extend 1,495 feet west to maximize runway length
- Establish displaced threshold on 6L to meet RSA requirements

Runway 6R/24L

- Relocate 340 feet south of the current location to accommodate a new centerfield parallel taxiway (see below) and to provide for ADG VI separation distances consistent with the LAX Master Plan ALP
- Extend 135 feet west and 1,280 feet east to maximize runway length
- Establish dual displaced thresholds to meet RSA requirements
- Widen to 200 feet to meet FAA standards

Taxiway Modifications

Centerfield Taxiway

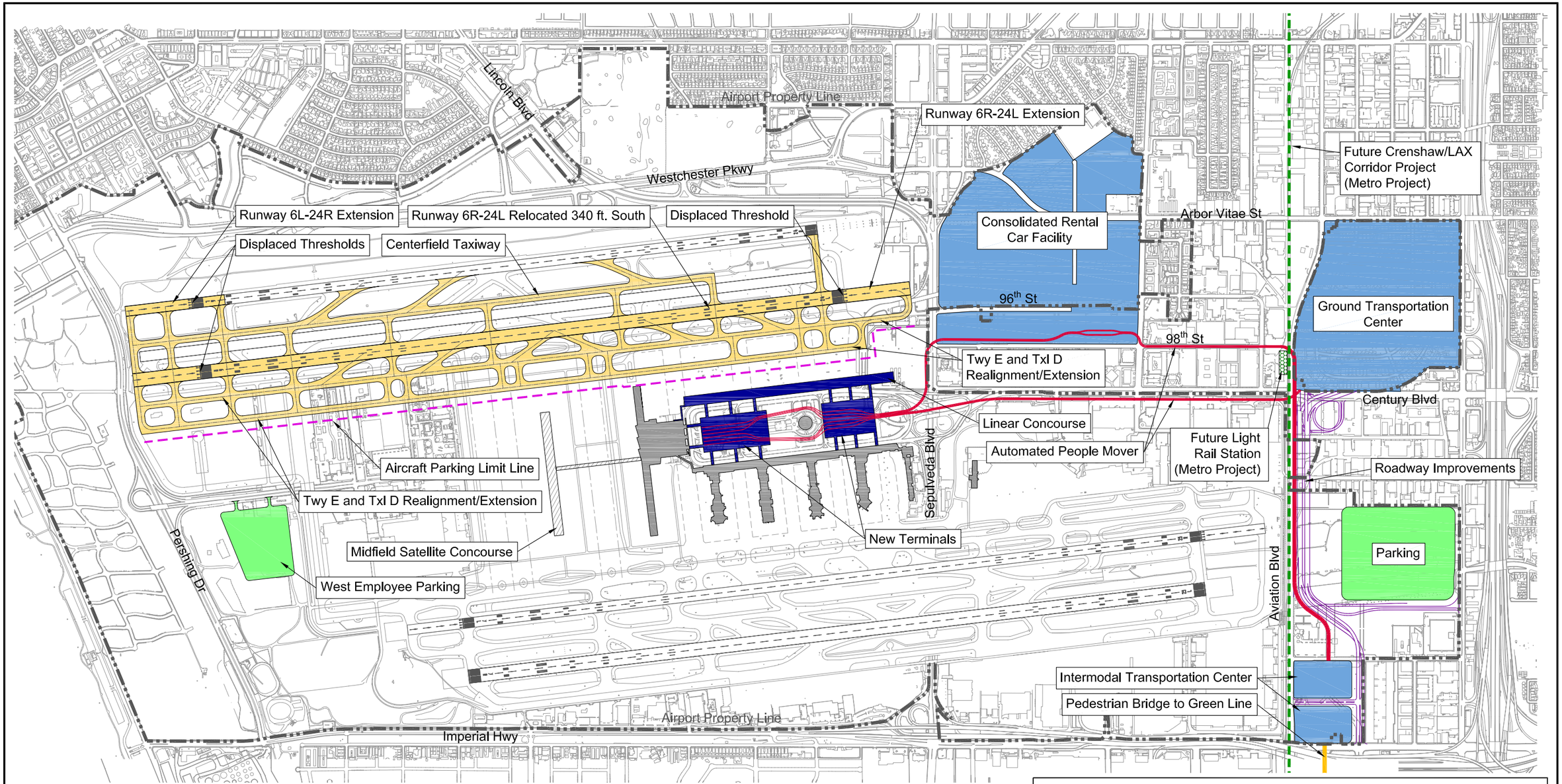
- Construct a 100-foot-wide centerfield taxiway between Runways 6L/24R and 6R/24L, with a separation distance of 520 feet from each runway to enhance safety and reduce incursions and other airfield hazards, while providing for modified ADG VI separation distances; also provide exit taxiways from Runway 6L/24R to the centerfield taxiway, taxiways from the centerfield taxiway to and across Runway 6R/24L, and other related airfield taxiway improvements

Taxiway E

- Relocate varying distances (ranging from 290 to 340 feet) south to meet ADG V separation distances
- Extend 980 feet east to support easterly extension of Runway 6R/24L
- Widen to 100 feet to meet ADG VI standards in place when Alternative D was proposed

Taxilane D

- Relocate varying distances (ranging from 355 to 409 feet) south to meet ADG VI separation distances
- Extend 90 feet east to support easterly extension of Runway 6R/24L and 5,145 feet west to provide for dual full-length taxiways in the north airfield
- Widen to 100 feet to meet ADG VI standards in place when Alternative D was proposed



Note: Improvements depicted are conceptual only and do not represent engineered design.

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Scale
north

Prepared by: Ricondo & Associates, Inc., 2012.

Legend

- Airfield Improvements
- Terminal Improvements
- Non-SPAS Terminal Improvements
- Aircraft Parking Limit Line
- Roadway Improvements
- Ground Access Facilities
- Parking
- Automated People Mover (APM)
- Future Metro Light Rail Project

LAX Specific Plan Amendment Study Draft EIR	**Alternative 3**	Figure **2-3**

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Other Airfield-Related Features

- Construct a new service road between Taxiway E and Taxilane D
- Construct a second service road south of Taxilane D
- Taxiway E and Taxilane D dimensions would meet ADG V standards
- The APLL would move south to a location 1,165 feet south of the existing Runway 6R/24L centerline (825 feet south of the future Runway 6R/24L centerline)
- Existing RPZ for Runway 6L/24R, which includes residential uses, would remain
- Relocate and/or remove existing facilities as specifically described in Section 2.3.1.10 below and as listed in **Table 2-3** and shown in **Figure 2-10**

2.3.1.3.2 Terminal Facilities

Proposed modifications to terminal facilities, including aircraft gates, under Alternative 3 would include the following:

- Demolish concourses associated with Terminals 1 through 3 and construct linear concourse
- Demolish existing parking structures within the CTA and replace with four new passenger processors
- As a result of moving Runway 6R/25L south, all of the gates at Terminals 1, 2, and 3 would be demolished and replaced with a linear concourse with 20 gates
- The taxiway and runway relocations would also result in the reconfiguration of gates at TBIT
- A total of 23 commuter gates would be located east of Sepulveda Boulevard, at or near the location of the existing commuter terminal, for a total of 153 gates used at LAX for scheduled passenger service
- All of the west remote gates would be eliminated

2.3.1.3.3 Ground Access Facilities

Ground Access

- Eliminate private vehicle access to the CTA
- Construct new on-airport ground access system east of the CTA, consisting of a GTC, ITC, CONRAC, and a surface parking facility (i.e., reconfiguration and expansion of Parking Lot E), connected by two separate APM systems and a new roadway network
- CTA access would be provided via the APM systems and FlyAway buses
- Consolidate employee parking in a West Employee Parking facility

Transportation Centers

- Construct GTC at Manchester Square as a primary access center for most private and commercial vehicles. The GTC would provide passenger drop off and pick up and private vehicle parking.
- Construct ITC at the area referred to as Continental City to serve as the primary connection point between the airport, the Metro Green Line, and regional bus service. The ITC would provide public parking and curbside for charter, regional, and other buses.
- Construct a pedestrian connection between the ITC and the Metro Green Line Aviation Station

Consolidated Rental Car Facility

- Construct a CONRAC at Parking Lot C (inclusive of Parking Lot D and the Jenny Lot), including a 150,000-square-foot customer service building, an APM station, and a 9,000-space ready/return garage

Automated People Mover Systems

- Construct APM 1 between the ITC and the CTA, along Aviation Boulevard and 96th Street, with a stop at the CONRAC
- Construct APM 2 between the GTC and the CTA, along Century Boulevard

On-Airport Roadway System

- Develop a new roadway system at the east end of the airport, between ITC and GTC
- Remove Sky Way and 96th Street access to the CTA to accommodate the easterly extension of Runway 6R/24L, Taxiway E, and Taxilane D
- Close existing CTA curbside and replace with curbsides within GTC and ITC

Parking

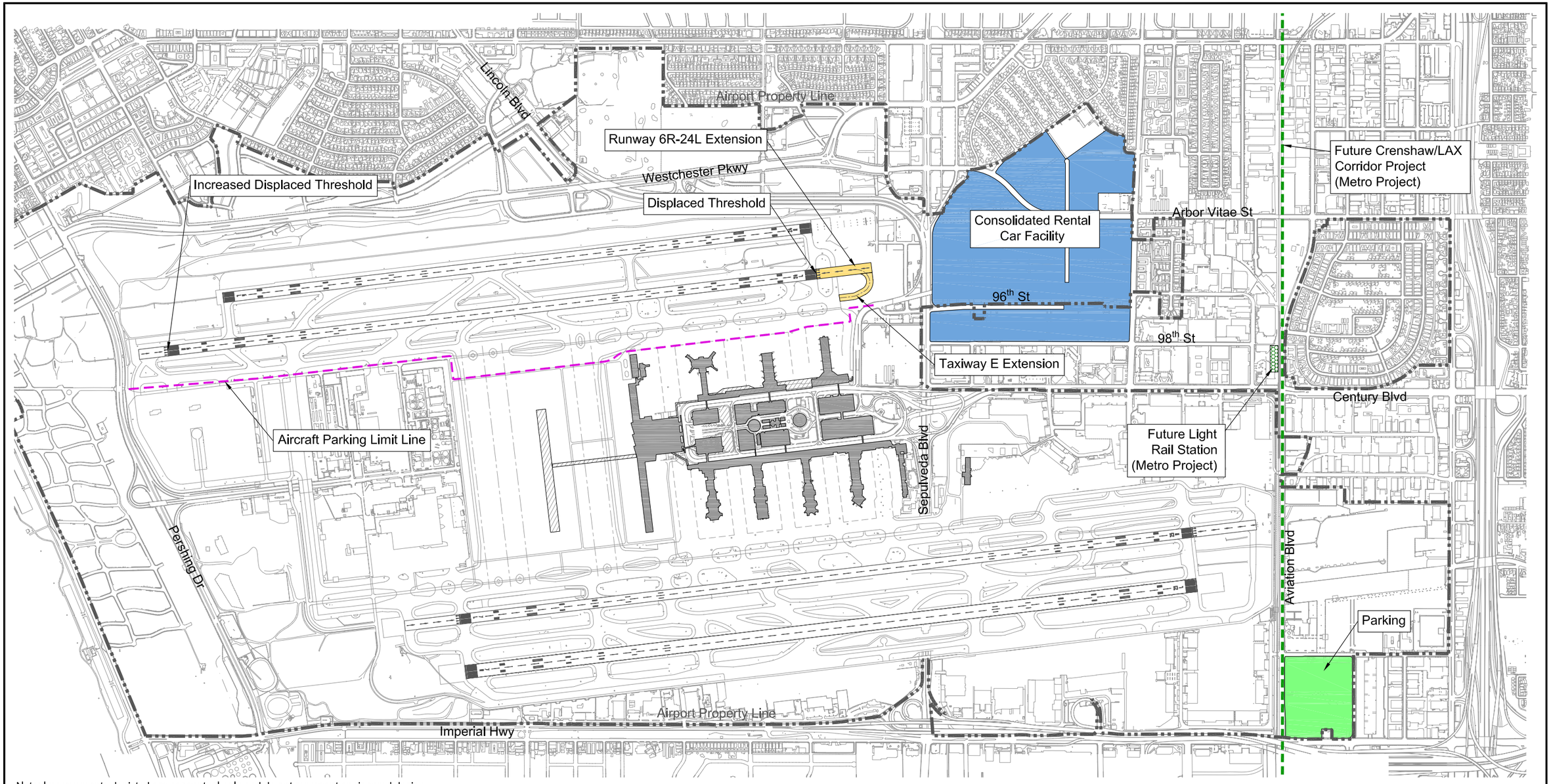
- Demolish all CTA parking structures and lots
- Eliminate Park One parking facility to accommodate airfield and terminal improvements
- Eliminate Parking Lots C, D, and the Jenny Lot to accommodate CONRAC
- Provide 7,515 public parking spaces in the GTC
- Provide 9,127 public parking spaces in the ITC
- Reconfigure and expand Parking Lot E to provide a surface lot north of 111th Street with 5,470 public parking spaces
- Construct a West Employee Parking facility with approximately 12,400 employee parking spaces
- Maintain an additional 1,200 employee spaces at Avion Drive/Century Boulevard

2.3.1.4 Alternative 4

Overview

Alternative 4 represents what would reasonably be expected to occur if all ongoing and reasonably foreseeable non-Yellow Light improvements identified in the LAX Master Plan (i.e., "Alternative D") were implemented, and none of the Yellow Light Projects or any of the identified alternatives to the LAX Master Plan Program were constructed or implemented. Analysis of Alternative 4 will allow decision-makers and the public to evaluate the impacts of simply eliminating the Yellow Light Projects from the LAX Master Plan Program.

Alternative 4 is a fully-integrated alternative, consisting of airfield, terminal, and ground access components. Ongoing and reasonably-foreseeable non-Yellow Light projects that would be developed include the Bradley West Project, an extension to Runway 6R/24L for RSA improvements, the MSC and related new passenger processor and connector within the CTA, and various terminal improvements. In addition, a CONRAC at Parking Lot C would be constructed and a new parking structure would be developed at the ITC site to accommodate the public parking displaced by the CONRAC. A portion of the Argo Drainage Channel would be covered to comply with existing RSA requirements by converting a portion of the existing open unlined channel to an enclosed concrete box culvert. There would be no modifications to Lincoln Boulevard under this alternative. This alternative is illustrated in **Figure 2-4**.



Note: Improvements depicted are conceptual only and do not represent engineered design.

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Scale

north

Prepared by: Ricondo & Associates, Inc., 2012.

Legend

- Airfield Improvements
- Non-SPAS Terminal Improvements
- Aircraft Parking Limit Line
- Ground Access Facilities
- Parking
- Future Metro Light Rail Project

LAX Specific Plan Amendment Study Draft EIR	Alternative 4	Figure 2-4

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2.3.1.4.1 Airfield Facilities

The Alternative 4 airfield facilities represent existing conditions with an easterly extension to Runway 6R/24L and Taxiway E to meet federal RSA requirements. The existing north airfield meets FAA airport design standards for ADG V with a Category II/III outboard runway (Runway 6L/24R) and Category I inboard runway (Runway 6R/24L), and provides sufficient space to hold ADG IV aircraft between the runways, but not sufficient to hold ADG V and VI aircraft. No centerfield or connecting taxiway improvements are included with this alternative. The restrictions and operating procedures in place today would remain with this alternative. Taxiway E dimensions meet ADG V standards and Taxilane D dimensions meet ADG IV standards, except in the area adjacent to Terminal 1 where only ADG III standards are met. The RPZ associated with Runway 6L/24R would not move, maintaining the current overlay with residential uses.

Runway Modifications

Runway 6L/24R

- No relocation, extension, or widening of Runway 6L/24R
- Existing RPZ for Runway 6L/24R, which includes residential uses, would remain

Runway 6R/24L

- Improve Runway 6R/24L to meet federal RSA requirements, including an 835-foot easterly extension of the runway and a shift in the 6R landing threshold 104 feet east

Taxiway Modifications

- No centerfield taxiway
- Extend Taxiway E 535 feet east to support the easterly extension of Runway 6R/24L and to provide additional hold area for departing aircraft

2.3.1.4.2 Terminal Facilities

- No proposed changes to terminal facilities
- No proposed changes to gates

2.3.1.4.3 Ground Access Facilities

Ground Access

- Maintain private vehicle access to the CTA
- Construct CONRAC in Parking Lot C

Parking

- Public parking within Parking Lot C, and future parking within Parking Lot D and the Jenny Lot, would be displaced by the CONRAC
- Construct new public parking structure in the area referred to as Continental City to replace the lost parking noted above
- Consolidate employee parking to existing Parking Lot E

2.3.1.4.4 Elimination of LAX Master Plan Components

Under this alternative, the following non-Yellow Light projects approved as part of the LAX Master Plan would be fully or partially eliminated:

- Demolition of all CTA parking structures and replacement with passenger terminals (partially eliminated)
- West Employee Parking facility
- Reconfiguration and expansion of Parking Lot E north of 111th Street
- ITC in the area referred to as Continental City
- APM 1 between ITC, CONRAC, and CTA

2.3.1.5 Alternative 5

Overview

As noted above in Section 2.3.1, the focus of this alternative is on airfield improvements and associated terminal improvements, as may be compared to such improvements proposed under Alternatives 1 through 4. This alternative is compatible with the ground access improvements associated with Alternatives 1 and 2, as well as the ground access improvements associated with Alternatives 8 and 9, described below. The distinguishing feature of this alternative is the movement of Runway 6L/24R 350 feet north. Similar to Alternative 1, a new centerfield taxiway would be constructed, Runway 6R/24L would be extended, Taxilane D and Taxiway E would be modified/improved, and the service road would be relocated. Under this alternative, the taxilane/taxiway improvements would meet FAA design requirements to fully accommodate ADG VI aircraft. (Under Alternatives 1, 2, and 6, the taxiway configuration would either not meet or only partially meet ADG VI design standards, which would impose certain limitations and special requirements during the operation of those aircraft.) The increased runway-taxiway separation requirements under this alternative would cause the aircraft taxiway operations area to extend farther south than under Alternatives 1, 2, and 6, which, in turn, would result in comparatively less concourse and/or gate area for the potential TBIT extension and MSC extension. Under this alternative, a greater portion of Lincoln Boulevard would be below grade and/or tunneled than under Alternative 1. This alternative is illustrated in **Figure 2-5**.

2.3.1.5.1 Airfield Facilities

The Alternative 5 airfield meets the minimum design requirements (i.e., runway and taxiway separation distances) for a full ADG VI airfield, including an ADG VI Category II/III outboard runway (Runway 6L/24R) and an ADG VI Category I inboard runway (Runway 6R/24L). Taxiway E and Taxilane D dimensions would meet ADG VI standards.

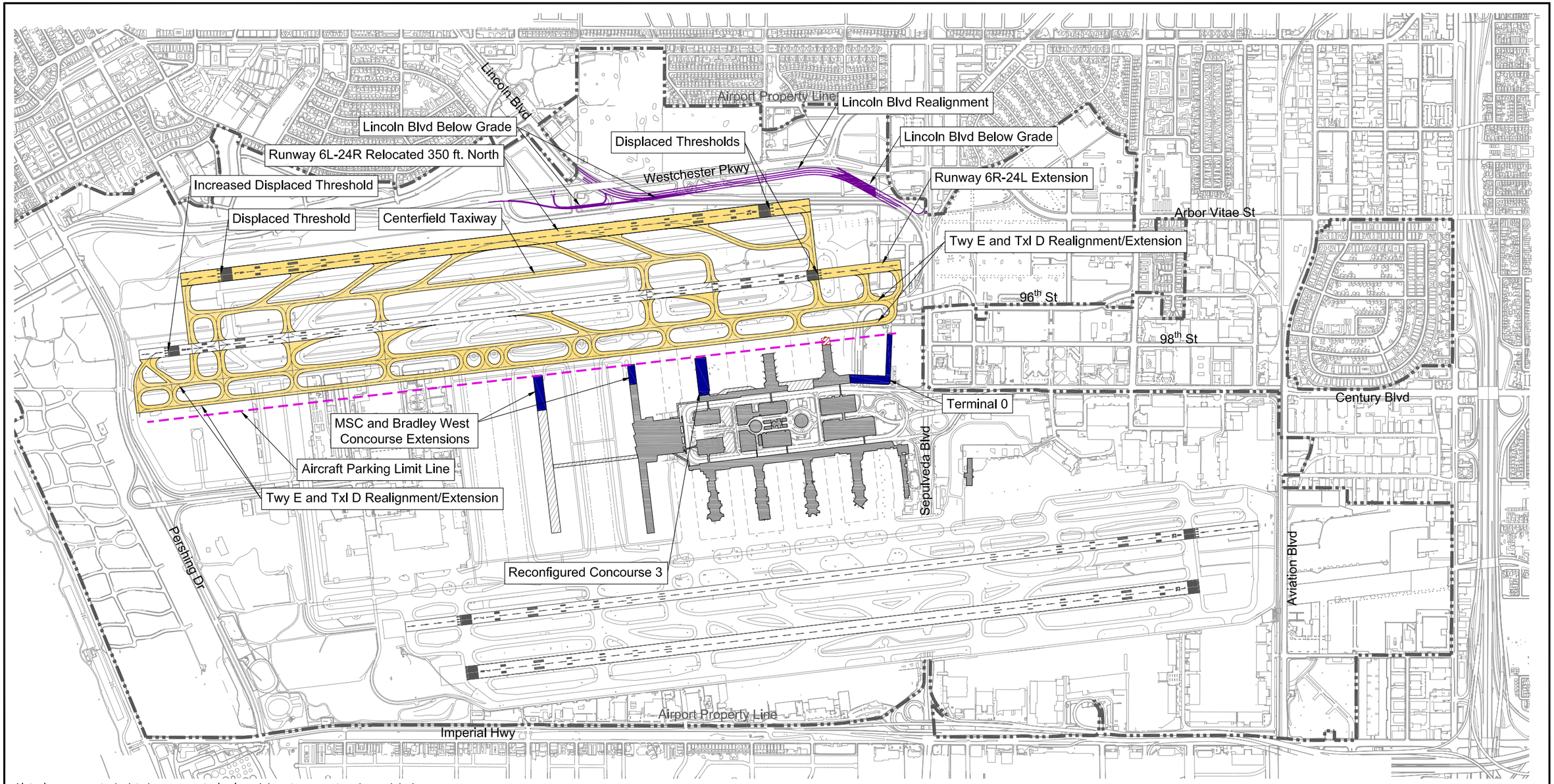
Runway Modifications

Runway 6L/24R

- Relocate 350 feet north of current location to accommodate a new centerfield parallel taxiway (see below) and to provide for ADG VI separation distances
- Extend 604 feet west so that the RPZ no longer extends over residential areas
- Establish dual displaced thresholds to remove existing residences from the RPZ (east end displaced threshold) and maintain existing westerly aircraft landing heights (west end displaced threshold)
- Widen to 200 feet to meet FAA standards

Runway 6R/24L

- Improvements are the same as Alternative 1



Note: Improvements depicted are conceptual only and do not represent engineered design.

0 1,500 ft
Scale

north

Prepared by: Ricondo & Associates, Inc., 2012.

Legend

- Airfield Improvements
- Terminal Improvements
- Non-SPAS Terminal Improvements
- Terminal Demolition
- Aircraft Parking Limit Line
- Roadway Improvements

LAX Specific Plan Amendment Study Draft EIR	**Alternative 5**	Figure **2-5**

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Taxiway Modifications

Centerfield Taxiway

- Construct an 82-foot-wide centerfield taxiway between Runways 6L/24R and 6R/24L, with a centerline separation distance of 550 feet to Runway 6L/24R and 500 feet to Runway 6R/24L, to enhance safety and reduce incursions and other airfield hazards, while providing for ADG VI separation distances; also provide exit taxiways from Runway 6L/24R to the centerfield taxiway, taxiways from the centerfield taxiway to and across Runway 6R/24L, and other related airfield taxiway improvements

Taxiway E

- Relocate varying distances (50 to 114 feet) south to provide ADG VI Category I runway-to-taxiway separation distance
- Extend 950 feet east to support easterly extension of Runway 6R/24L and to provide additional hold area for departing aircraft

Taxilane D

- Relocate varying distances (70 feet to 124 feet) south to provide ADG VI taxiway-to-taxilane and taxilane to APLL separation distances
- Extend 675 feet east to support easterly extension of Runway 6R/24L and 5,145 feet west to provide for dual full-length taxiways in the north airfield

Other Airfield-Related Features

- Cover the entire length of the Argo Drainage Channel (9,857 linear feet) such that the weight of an aircraft could be supported within the RSA by converting the existing open unlined channel to an enclosed concrete box culvert
- Relocate Lincoln Boulevard northward between Sepulveda Boulevard and Westchester Parkway. and depress the eastern and western portions of the road segment to be compatible with the object free area requirements for Runway 6L/24R, which would require approximately 765 linear feet of the eastern portion of the road segment to be tunneled
- Improvements to Taxiway E, Taxilane D, and the service road are the same as Alternative 1
- Relocate the service road that currently lies between Taxiway E and Taxilane D to a location south of Taxilane D to increase the separation between the two taxiways to allow for simultaneous operations with larger aircraft than currently accommodated, improve safety and efficiency, and meet FAA standards
- Taxiway E and Taxilane D dimensions would meet ADG VI standards
- The APLL would move south to a location 1,041 feet south of the existing Runway 6R/24L centerline
- Relocate and/or remove existing facilities as specifically described in Section 2.3.1.10 below and as listed in **Table 2-3** and shown in **Figure 2-10**

2.3.1.5.2 Terminal Facilities

Proposed modifications to terminal facilities, including aircraft gates, under Alternative 5 would include the following:

- The basic features associated with the terminal components of this alternative would be the same as Alternative 1. However, due to the more southerly APLL, the northerly building limits and/or gating area associated with the potential TBIT concourse extension and MSC extension would be more southerly than under Alternative 1, by approximately 164 feet and 114 feet, respectively.

- As a result of moving the APLL south to meet ADG VI standards, several gates would be eliminated or downsized
- The commuter facility currently in use east of Sepulveda Boulevard would be maintained
- All of the west remote gates would be eliminated
- The total number of gates used at LAX for scheduled passenger service would be 153

2.3.1.5.3 Ground Access Facilities

Alternative 5 includes airfield and terminal components only. This alternative is compatible with the ground access improvements associated with Alternatives 1, 2, 8, and 9.

2.3.1.5.4 Elimination of LAX Master Plan Components

Under this alternative, the following non-Yellow Light terminal project approved as part of the LAX Master Plan would be partially eliminated. (Since this alternative focuses on airfield and terminal components only, non-Yellow Light Project ground access components are not considered under this alternative but, rather, would be reflected in whichever other alternative Alternative 5 is paired with - see explanation in Section 2.3.1.)

- Demolition of all CTA parking structures and replacement with passenger terminals

2.3.1.6 Alternative 6

Overview

Similar to Alternative 5, the focus of Alternative 6 is on airfield improvements and associated terminal improvements, as may be compared to such improvements proposed under Alternatives 1 through 4. This alternative is compatible with the ground access improvements associated with Alternatives 1 and 2, as well as the improvements associated with Alternatives 8 and 9. The distinguishing feature of this alternative is the movement of Runway 6L/24R 100 feet north. Similar to Alternative 1, a new centerfield taxiway would be constructed. All other physical aspects of the airfield and terminal improvements associated with this alternative would be essentially the same as those of Alternative 1, described above, with a lesser portion of the Argo Drainage Channel requiring covering (i.e., conversion to a concrete box culvert) and a lesser portion of Lincoln Boulevard requiring tunneling. This alternative is illustrated in **Figure 2-6**.

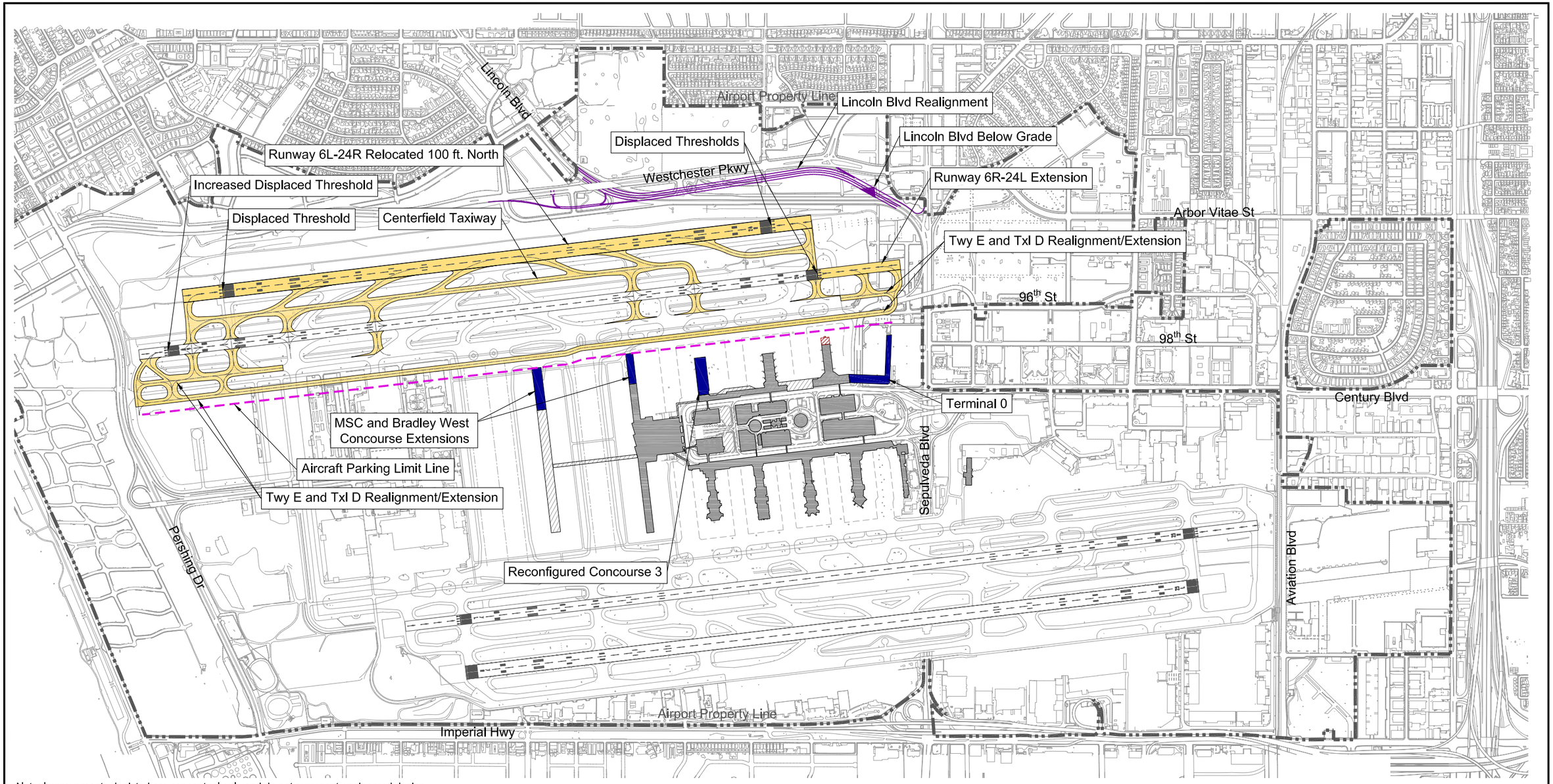
2.3.1.6.1 Airfield Facilities

Alternative 6 meets FAA airport design standards for ADG V with a Category II/III outboard runway (Runway 6L/24R) and Category I inboard runway (Runway 6R/24L). This alternative provides sufficient space between Runway 6R/24L and the centerfield taxiway for ADG V aircraft to hold prior to crossing the runway with approach visibility at or above one-half mile (Category I approaches). Taxiway E and Taxilane D dimensions would meet ADG V standards.

Runway Modifications

Runway 6L/24R

- Relocate 100 feet north of current location to accommodate a new centerfield parallel taxiway (see below) and to provide for ADG V separation distances
- Extend 604 feet west so that the RPZ no longer extends over residential areas
- Establish dual displaced thresholds to remove existing residences from the RPZ (west end) and maintain existing westerly aircraft landing heights (east end)
- Widen to 200 feet to meet FAA standards



Note: Improvements depicted are conceptual only and do not represent engineered design.

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Scale

north

Prepared by: Ricondo & Associates, Inc., 2012.

Legend

- Airfield Improvements
- Terminal Improvements
- Non-SPAS Terminal Improvements
- Terminal Demolition
- Aircraft Parking Limit Line
- Roadway Improvements

LAX Specific Plan Amendment Study Draft EIR	**Alternative 6**	Figure **2-6**

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Runway 6R/24L

- Improvements are the same as Alternative 1

Taxiway Modifications

Centerfield Taxiway

- Construct an 82-foot-wide centerfield taxiway between Runways 6L/24R and 6R/24L, with a centerline separation distance of 400 feet to each runway, to enhance safety and reduce incursions and other airfield hazards, while providing for ADG V separation distances; also provide exit taxiways from Runway 6L/24R to the centerfield taxiway, taxiways from the centerfield taxiway to and across Runway 6R/24L, and other related airfield taxiway improvements

Other Airfield-Related Features

- Cover a portion of the Argo Drainage Channel (1,400 linear feet) such that the weight of an aircraft could be supported within the RSA by converting the existing open unlined channel to an enclosed concrete box culvert
- Relocate Lincoln Boulevard northward between Sepulveda Boulevard and Westchester Parkway. and depress the eastern and western portions of the road segment to be compatible with the object free area requirements for Runway 6L/24R, which would require approximately 252 linear feet of the eastern portion of the road segment to be tunneled
- Improvements to Taxiway E, Taxilane D, and the service road are the same as Alternative 1
- The APLL would be the same as Alternative 1
- Relocate and/or remove existing facilities as specifically described in Section 2.3.1.10 below and as listed in **Table 2-3** and shown in **Figure 2-10**

2.3.1.6.2 Terminal Facilities

Proposed modifications to terminal facilities, including aircraft gates, under Alternative 6 would include the following:

- The terminal facilities would be the same as Alternative 1
- The gate configuration would be the same as Alternative 1

2.3.1.6.3 Ground Access Facilities

Alternative 6 includes airfield and terminal components only. This alternative is compatible with the ground access improvements associated with Alternatives 1, 2, 8, and 9.

2.3.1.6.4 Elimination of LAX Master Plan Components

Under this alternative, the following non-Yellow Light terminal project approved as part of the LAX Master Plan would be partially eliminated. (Since this alternative focuses on airfield and terminal components only, non-Yellow Light Project ground access components are not considered under this alternative, but rather would be reflected in whichever other alternative Alternative 6 is paired with - see explanation in Section 2.3.1.)

- Demolition of all CTA parking structures and replacement with passenger terminals

2.3.1.7 Alternative 7

Overview

Similar to Alternatives 5 and 6, the focus of Alternative 7 is on airfield improvements and associated terminal improvements, as may be compared to such improvements proposed under Alternatives 1 through 4. This alternative is compatible with the ground access improvements associated with

Alternatives 1 and 2, as well as the improvements associated with Alternatives 8 and 9. The distinguishing feature of this alternative is the movement of Runway 6R/24L 100 feet south. Similar to Alternative 1, a new centerfield taxiway would be constructed, Runway 6R/24L would be extended, Taxiway E and Taxilane D would be modified/improved, and the service road would be relocated. The southward movement of the runway and associated southerly relocation of Taxiway E and Taxilane D would cause the aircraft taxiway operations area to extend farther south than under Alternatives 1, 2, 5, and 6, which, in turn, would result in comparatively less concourse and/or gate area for Terminal 3, potential TBIT extension, and potential MSC extension. There would be no modifications to the Argo Drainage Channel (other than those required under existing conditions to meet federal RSA requirements) or Lincoln Boulevard under this alternative. The RPZ currently associated with Runway 6L/24R would continue to overlay existing residential uses. This alternative is illustrated in **Figure 2-7**.

2.3.1.7.1 Airfield Facilities

Alternative 7 meets FAA airport design standards for ADG V with a Category II/III outboard runway (Runway 6L/24R) and Category I inboard runway (Runway 6R/24L). This alternative provides sufficient space between Runway 6R/24L and the centerfield taxiway for ADG V aircraft to hold prior to crossing the runway with approach visibility at or above one-half mile (Category I approaches). Taxiway E dimensions would meet ADG VI standards and Taxilane D dimensions would meet ADG V standards.

Runway Modifications

Runway 6L/24R

- No relocation, extension, or widening of Runway 6L/24R

Runway 6R/24L

- Relocate 100 feet south of current location to accommodate a new centerfield parallel taxiway (see below) and to provide for ADG V separation distances
- Extend 1,250 feet east to meet RSA requirements and maximize aircraft takeoff length
- Shift 6R landing threshold 104 feet east to meet RSA requirements
- Widen to 200 feet to meet FAA standards

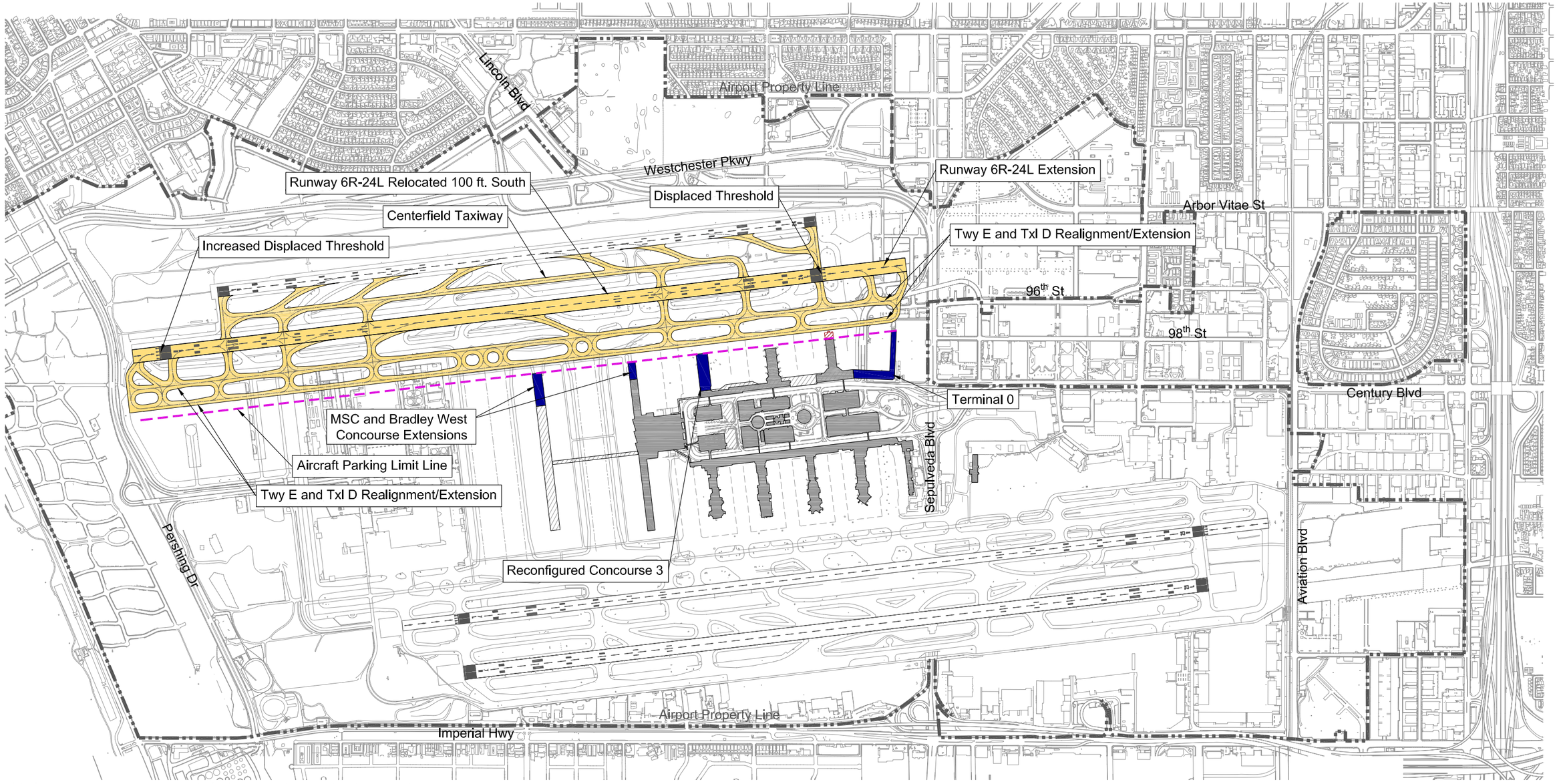
Taxiway Modifications

Centerfield Taxiway

- Construct an 82-foot-wide centerfield taxiway between Runways 6L/24R and 6R/24L, with a centerline separation distance of 400 feet to each runway, to enhance safety and reduce incursions and other airfield hazards, while providing for ADG V separation distances; also provide exit taxiways from Runway 6L/24R to the centerfield taxiway, taxiways from the centerfield taxiway to and across Runway 6R/24L, and other related airfield taxiway improvements

Taxiway E

- Relocate varying distances (ranging from 150 to 214 feet) south to provide ADG VI runway-to-taxiway separation distances
- Extend 950 feet east to support easterly extension of Runway 6R/24L and to provide additional hold area for departing aircraft



Note: Improvements depicted are conceptual only and do not represent engineered design.

0 1,500 ft
Scale

north

Prepared by: Ricondo & Associates, Inc., 2012.

Legend

- Airfield Improvements
- Terminal Improvements
- Non-SPAS Terminal Improvements
- Terminal Demolition
- Aircraft Parking Limit Line

LAX Specific Plan Amendment Study Draft EIR	**Alternative 7**	Figure **2-7**

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Taxilane D

- Relocate varying distances (ranging from 119 to 185 feet) south to provide ADG VI taxiway-to-ADG V taxilane separation distances
- Extend 650 feet east to support easterly extension of Runway 6R/24L and 5,145 feet west to provide for dual full-length taxiways in the north airfield

Other Airfield-Related Features

- Relocate the service road that currently lies between Taxiway E and Taxilane D to a location south of Taxilane D to increase the separation between the two taxiways to allow for simultaneous operations with larger aircraft than currently accommodated and meet FAA standards
- Taxiway E dimensions would meet ADG VI standards and Taxilane D dimensions would meet ADG V standards
- The APLL would move south to a location 1,052 feet south of the existing Runway 6R/24L centerline (952 feet south of the future Runway 6R/24L centerline)
- Existing RPZ for Runway 6L/24R, which includes residential uses, would remain
- Relocate and/or remove existing facilities as specifically described in Section 2.3.1.10 below and as listed in **Table 2-3** and shown in **Figure 2-10**

2.3.1.7.2 Terminal Facilities

Proposed modifications to terminal facilities, including aircraft gates, under Alternative 7 would include the following:

- The basic features associated with the terminal components of this alternative would be the same as Alternative 1. However, due to the more southerly APLL, the northerly building limits and/or gating area associated with Terminal 3, TBIT concourse potential extension, and MSC potential extension would be more southerly than under Alternative 1.
- As a result of moving the APLL south to meet ADG VI standards, several gates would be eliminated
- The commuter facility currently in use east of Sepulveda Boulevard would be maintained
- All of the west remote gates would be eliminated
- The total number of gates used at LAX for scheduled passenger service would be 153

2.3.1.7.3 Ground Access Facilities

Alternative 7 includes airfield and terminal components only. This alternative is compatible with the ground access improvements associated with Alternatives 1, 2, 8, and 9.

2.3.1.7.4 Elimination of LAX Master Plan Components

Under this alternative, the following non-Yellow Light terminal project approved as part of the LAX Master Plan would be partially eliminated. (Since this alternative focuses on airfield and terminal components only, non-Yellow Light Project ground access components are not considered under this alternative, but rather would be reflected in whichever other alternative that Alternative 7 is paired with - see explanation in Section 2.3.1.)

- Demolition of all CTA parking structures and replacement with passenger terminals

2.3.1.8 Alternative 8

Overview

Alternative 8 includes ground access improvements that could be integrated in place of the improvements proposed under Alternatives 1 through 4. This alternative is compatible with the airfield and terminal

improvements associated with Alternatives 1, 2, 5, 6, and 7. The distinguishing feature of this alternative is the development of a CONRAC in addition to parking at Manchester Square, and the development of parking at the Avis facility (east of Parking Lot C). All other ground access aspects of this alternative are comparable to those of Alternatives 1 and 2, with the exception of the realignment of Lincoln Boulevard, which is only associated with the airfield improvement alternatives. This alternative is illustrated in **Figure 2-8**.

2.3.1.8.1 Airfield Facilities

Alternative 8 includes ground access and parking components only. This alternative is compatible with the airfield improvements associated with Alternatives 1, 2, 5, 6, and 7.

2.3.1.8.2 Terminal Facilities

Alternative 8 includes ground access and parking components only. This alternative is compatible with the terminal improvements associated with Alternatives 1, 2, 5, 6, and 7.

2.3.1.8.3 Ground Access Facilities

Ground Access

- Maintain private vehicle access to the CTA
- Improvements associated with Sky Way, curbside at Terminal 0, the relocated commercial vehicle holding lot, and the new ITF are the same as Alternative 1
- Construct a CONRAC in a portion of Manchester Square, including a customer service area and a structured parking facility to accommodate approximately 1,000 stalls for quick turn-around and 5,800 stalls for ready return. Additional surface parking would be constructed to accommodate a portion of the total demand for staging and storage of rental vehicles by the various operators.
- Construct a dedicated busway between Manchester Square and the CTA, primarily using the 98th Street corridor, with a stop at the new ITF. The busway would have the same features as Alternative 1.
- Provide connectivity to public transit via the LAX dedicated busway, with the same features as Alternative 1

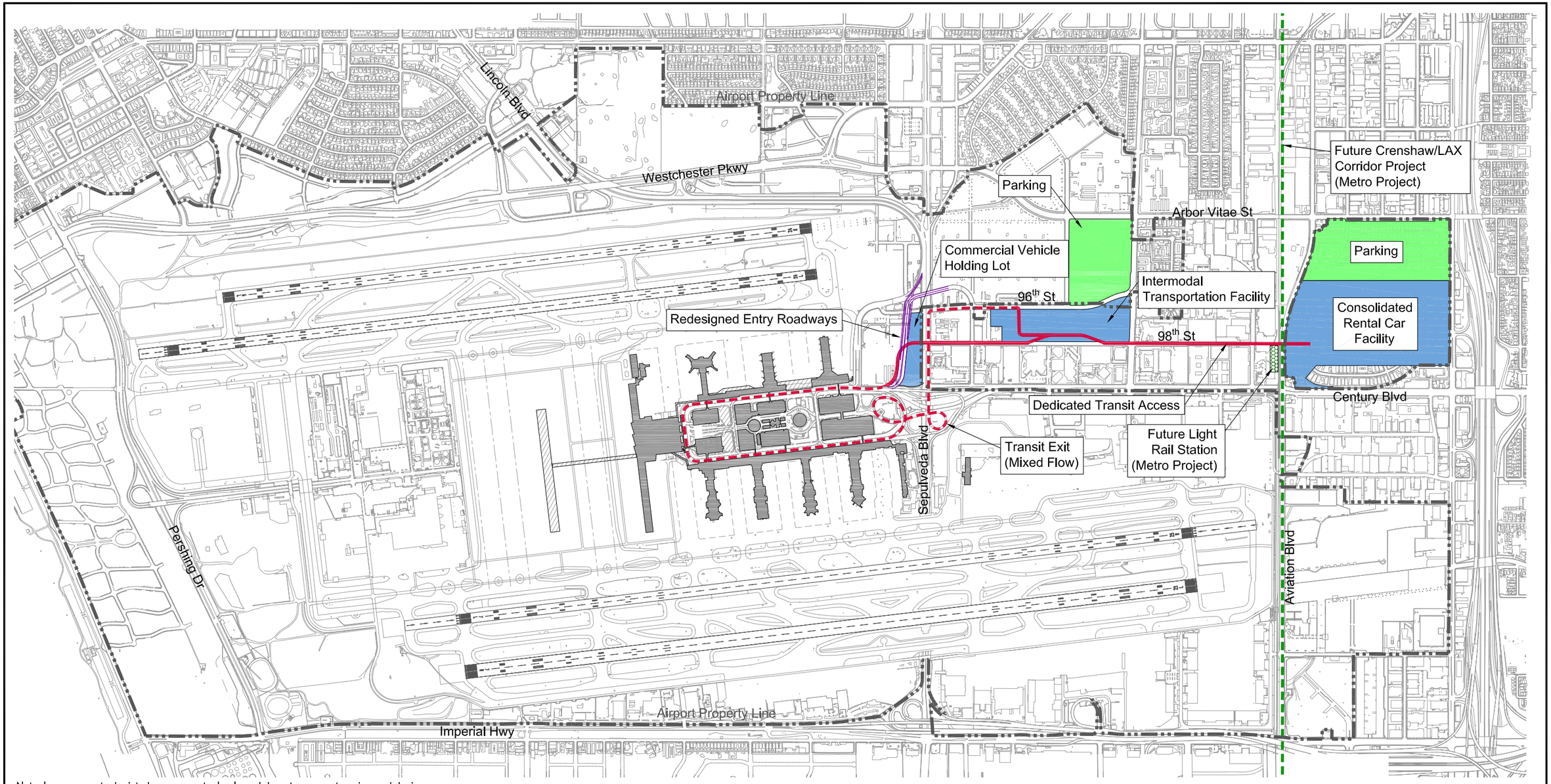
Parking

- Parking associated with the CTA, Parking Lots C, D, and E, the Jenny lot, and the ITF would be the same as Alternative 1
- Construct approximately 2,750 employee parking spaces in the existing Avis rental car lot
- Construct approximately 4,200 public parking spaces in a portion of Manchester Square
- No public or employee parking is proposed for the area referred to as Continental City
- The existing Park One parking would be eliminated
- The West Employee Parking facility would not be constructed

2.3.1.8.4 Elimination of LAX Master Plan Components

Under this alternative, the following non-Yellow Light projects approved as part of the LAX Master Plan would be eliminated. (Since this alternative focuses on ground access components only, non-Yellow Light Project terminal components are not considered under this alternative, but rather would be reflected in whichever other alternative Alternative 8 is paired with - see explanation in Section 2.3.1.)

- West Employee Parking facility
- CONRAC in Parking Lot C (would be developed in Manchester Square instead)
- Reconfiguration and expansion of Parking Lot E north of 111th Street



Note: Improvements depicted are conceptual only and do not represent engineered design.

0 1,500 ft
Scale

north

Prepared by: Ricondo & Associates, Inc., 2012.

Legend

- Non-SPAS Terminal Improvements
- Roadway Improvements
- Ground Access Facilities
- Parking
- Transit Access (Dedicated)
- Transit Access (Mixed Flow)
- Future Metro Light Rail Project

LAX Specific Plan Amendment Study Draft EIR	**Alternative 8**	Figure **2-8**

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- ITC in the area referred to as Continental City
- APM 1 between ITC, CONRAC, and CTA

2.3.1.9 Alternative 9

Overview

Similar to Alternative 8, Alternative 9 includes ground access improvements that could be integrated in place of the improvements proposed under Alternatives 1 through 4. This alternative is compatible with the airfield and terminal improvements associated with Alternatives 1, 2, 5, 6, and 7. The distinguishing features of this alternative are the development of an APM system, instead of a busway, along 98th Street, and development of a CONRAC in addition to parking at Manchester Square. The APM would be located within an elevated/dedicated corridor on the same alignment as the busway under the other alternatives. Within the CTA, the APM would be located on a new elevated guideway. All other ground access aspects of this alternative are comparable to those of Alternatives 1 and 2, with the exception of the realignment of Lincoln Boulevard, which is only associated with the airfield improvement alternatives. This alternative is illustrated in **Figure 2-9**.

2.3.1.9.1 Airfield Facilities

Alternative 9 includes ground access and parking components only. This alternative is compatible with the airfield improvements associated with Alternatives 1, 2, 5, 6, and 7.

2.3.1.9.2 Terminal Facilities

Alternative 9 includes ground access and parking components only. This alternative is compatible with the terminal improvements associated with Alternatives 1, 2, 5, 6, and 7.

2.3.1.9.3 Ground Access Facilities

Ground Access

- The ground access facilities associated with this alternative would be the same as Alternative 8, with the exception of the busway between Manchester Square and the CTA, which would be an APM instead
- Construct an elevated APM between Manchester Square and the CTA, primarily using the 98th Street corridor, including a bridge over Sepulveda Boulevard and stops at the future Metro LAX/Crenshaw Light Rail Transit Station at/near Century and Aviation Boulevards and the new ITF. Within the CTA, the APM would be located on an elevated guideway above the upper level roadway, existing parking structures, or Center Way. The number of stations in the CTA has yet to be determined but could range from 3 to 5.
- An APM maintenance facility would be constructed, likely in Manchester Square

Parking

- The parking components of this alternative would be the same as Alternative 8

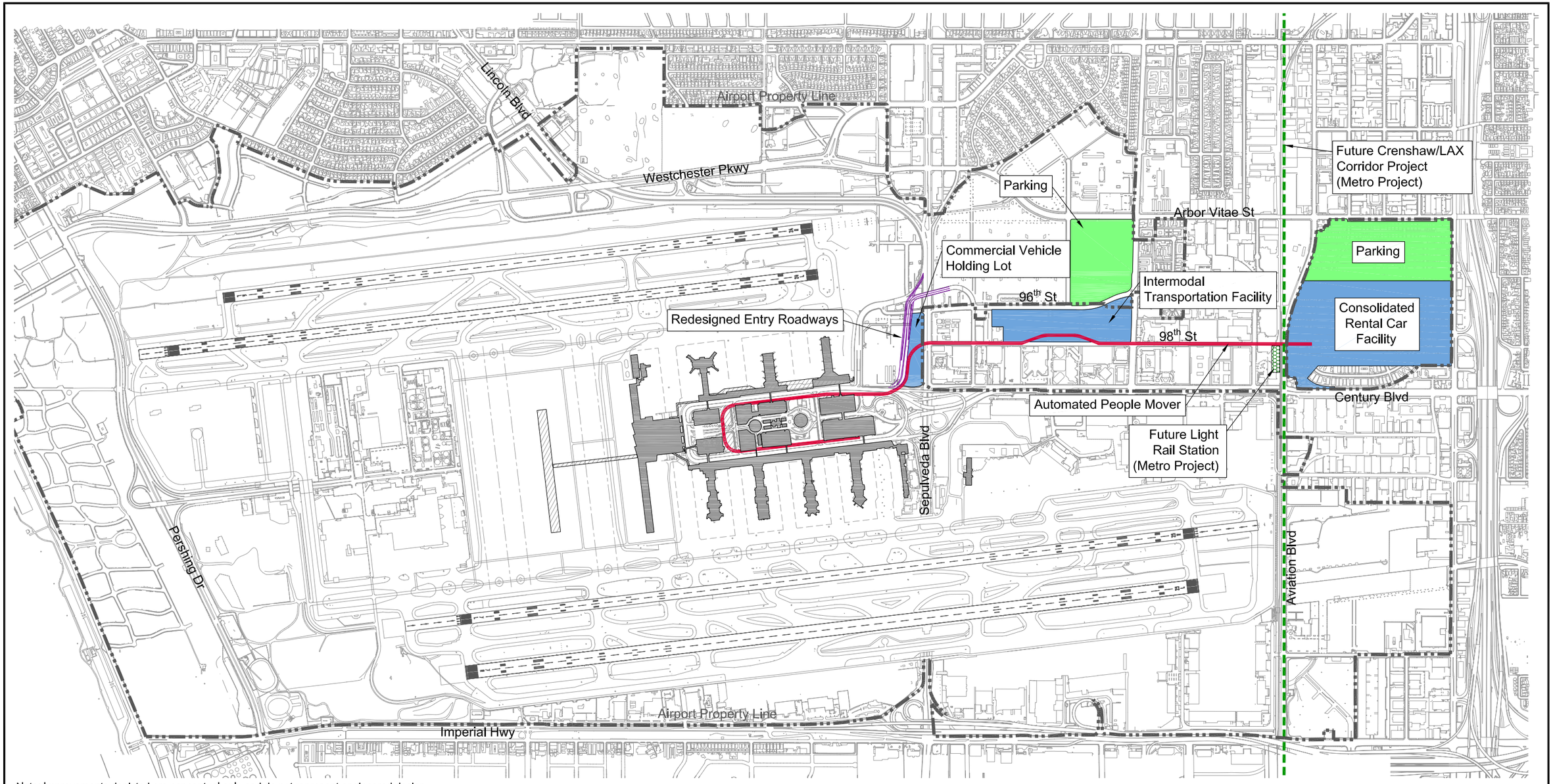
2.3.1.9.4 Elimination of LAX Master Plan Components

Under this alternative, the following non-Yellow Light projects approved as part of the LAX Master Plan would be eliminated. (Since this alternative focuses on ground access components only, non-Yellow Light Project terminal components are not considered under this alternative, but rather would be reflected in whichever other alternative Alternative 9 is paired with - see explanation in Section 2.3.1.)

- West Employee Parking facility
- CONRAC in Parking Lot C (would be developed in Manchester Square instead)
- Reconfiguration and expansion of Parking Lot E north of 111th Street

- ITC in the area referred to as Continental City
- APM 1 between ITC, CONRAC, and CTA

A summary of the key characteristics of the nine alternatives is presented in **Table 2-2**.



Note: Improvements depicted are conceptual only and do not represent engineered design.

0 1,500 ft
Scale

north

Prepared by: Ricondo & Associates, Inc., 2012.

Legend

- Non-SPAS Terminal Improvements
- Roadway Improvements
- Ground Access Facilities
- Parking
- Automated People Mover (APM)
- Future Metro Light Rail Project

LAX Specific Plan Amendment Study Draft EIR	**Alternative 9**	Figure **2-9**

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Table 2-2

Summary of SPAS Alternatives

	Baseline Conditions	Applicable SPAS Alternative								
		Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9
Airfield Elements - Key Components										
Runways										
Relocate Runway 6L/24R to north		260'	--	--	--	350'	100'	--	NA	NA
Extend Runway 6L/24R to west		604'	--	1,495'	--	604'	604'	--	NA	NA
Relocate Runway 6R/24L to south		--	--	340'	--	--	--	100'	NA	NA
Extend Runway 6R/24L to east		1,250'	1,250'	1,280'	835'	1,250'	1,250'	1,250'	NA	NA
Extend Runway 6R/24L to west		--	--	135'	--	--	--	--	NA	NA
Taxiways										
Centerfield Taxiway	N	Y	N	Y	N	Y	Y	Y	NA	NA
Relocate Taxiway E to south										
Between D7 and Q (TBIT and Terminals 1, 2, and 3)		--	--	340'	--	100'	--	200'	NA	NA
Between Q and E13 (MSC)		--	--	290'	--	50'	--	150'	NA	NA
Between E13 and AA		--	--	290'	--	50'	--	150'	NA	NA
Between AA and E17		0'-64'	0'-64'	290'-354'	--	50'-114'	0'-64'	150'-214'	NA	NA
Extend Taxiway E to east		950'	950'	980'	535'	950'	950'	950'	NA	NA
Relocate Taxilane D to north										
Between D7 and Q (TBIT and Terminals 1, 2, and 3)		15'	15'	--	--	--	15'	--	NA	NA
Between Q and E13 (MSC)		19'	19'	--	--	--	19'	--	NA	NA
Relocate Taxilane D to south										
Between D7 and Q (TBIT and Terminals 1, 2, and 3)		--	--	409'	--	124'	--	185'	NA	NA
Between Q and E13 (MSC)		--	--	355'	--	70'	--	119'	NA	NA
Extend Taxilane D to east		745'	745'	90'	--	675'	745'	650'	NA	NA
Extend Taxilane D to west		5,145'	5,145'	5,145'	--	5,145'	5,145'	5,145'	NA	NA
Service Road										
Construct New Service Road (South of Taxilane D)		Y	Y	Y	--	Y	Y	Y	NA	NA
Construct New Service Road (Between Taxiway E and Taxilane D)		--	--	Y	--	--	--	--	NA	NA
Terminal Elements - Key Components										
Central Terminal Area (CTA)										
Terminal 0 Concourse and Passenger Processing									NA	NA
Proposed New		330,000	330,000	--	--	330,000	330,000	325,000	NA	NA
Terminal 1 Concourse	138,000								NA	NA
Demolition		(24,000)	(24,000)	See Below	--	(24,000)	(24,000)	(24,000)	NA	NA
Proposed Remaining		114,000	114,000		138,000	114,000	114,000	114,000	NA	NA

Table 2-2

Summary of SPAS Alternatives

	Baseline Conditions	Applicable SPAS Alternative								
		Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9
Terminal 2 Concourse	306,000								NA	NA
Demolition		(0)	(0)	See Below	(0)	(0)	(0)	(0)	NA	NA
Proposed Remaining		306,000	306,000		306,000	306,000	306,000	306,000	NA	NA
Terminal 3 Concourse	279,000								NA	NA
Demolition		(242,000)	(242,000)	See Below	(0)	(242,000)	(242,000)	(242,000)	NA	NA
Proposed Reconfigured		223,000	223,000		279,000	223,000	223,000	205,000	NA	NA
Terminals 1 through 3 Concourses & Passenger Processing		See Above	See Above		See Above	See Above	See Above	See Above	NA	NA
Concourses Demolition/Reconfiguration				(723,000)					NA	NA
Passenger Processing Demolition/Reconfiguration				(522,000)					NA	NA
Total Demolition				(1,245,000)					NA	NA
New Linear Concourse				1,400,000					NA	NA
Bradley West - North Concourse Extension									NA	NA
North Extension		113,800	113,800	--	--	73,300	113,800	64,400	NA	NA
Midfield Satellite Concourse (MSC) - North Concourse Extension									NA	NA
North Extension		249,400	249,400	--	--	204,800	249,400	190,700	NA	NA
New Processing Facilities 1-4 within CTA									NA	NA
Demolition of Existing Parking Structures				(2,980,000)					NA	NA
New Passenger Processing Facilities				2,151,000					NA	NA
									NA	NA
Ground Access Elements - Key Components										
Transportation Facilities										
Intermodal Transportation Facility (ITF)		X	X	--	--	NA	NA	NA	X	X
Ground Transportation Center (GTC)		--	--	X	--	NA	NA	NA	--	--
Intermodal Transportation Center (ITC)		--	--	X	--	NA	NA	NA	--	--
CONRAC - Parking Lot C		--	--	X	X	NA	NA	NA	--	--
CONRAC - Manchester Square		--	--	--	--	NA	NA	NA	X	X
Circulation System Improvements										
Sky Way Realignment		X	X	--	--	NA	NA	NA	X	X
Busway Between Manchester Square and CTA		X	X	--	--	NA	NA	NA	X	--
APM - Between Manchester Square and CTA		--	--	--	--	NA	NA	NA	--	X
APM - Dual Systems/Routes		--	--	X	--	NA	NA	NA	--	--
East On-Airport Access Roads		--	--	X	--	NA	NA	NA	--	--

Table 2-2

Summary of SPAS Alternatives

	Baseline Conditions	Applicable SPAS Alternative								
		Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9
Parking										
CTA[1,2]										
Public	8,577	7,041	7,041	0	7,041	NA	NA	NA	7,041	7,041
Employee	420	420	420	0	420	NA	NA	NA	420	460
Subtotal	8,997	7,461	7,461	0	7,461	NA	NA	NA	7,461	7,461
Parking Lot C[3]										
Public	7,300	7,300	7,300	0	0	NA	NA	NA	7,300	7,300
Employee	0	0	0	0	0	NA	NA	NA	0	0
Subtotal	7,300	7,300	7,300	0	0	NA	NA	NA	7,300	7,300
Parking Lot D[4] and Jenny Lot										
Public	0	0	0	0	0	NA	NA	NA	0	0
Employee	0	4,344	4,344	0	0	NA	NA	NA	4,344	4,344
Subtotal	0	4,344	4,344	0	0	NA	NA	NA	4,344	4,344
Park One										
Public	2,728	0	0	0	2,728	NA	NA	NA	0	0
Employee	0	0	0	0	0	NA	NA	NA	0	0
Subtotal	2,728	0	0	0	2,728	NA	NA	NA	0	0
Manchester Square										
Public	0	4,200	4,200	See GTC below	0	NA	NA	NA	4,200	4,200
Employee	0	3,500	3,500	See GTC below	0	NA	NA	NA	0	0
Subtotal	0	7,700	7,700	See GTC below	0	NA	NA	NA	4,200	4,200
Avis Rental Car Lot										
Public	0	0	0	0	0	NA	NA	NA	0	0
Employee	0	0	0	0	0	NA	NA	NA	2,750	2,750
Subtotal	0	0	0	0	0	NA	NA	NA	2,750	2,750
Proposed Parking Structure at ITF										
Public	0	4,900	4,900	-	-	NA	NA	NA	4,900	4,900
Employee	0	0	0	-	-	NA	NA	NA	0	0
Subtotal	0	4,900	4,900	-	-	NA	NA	NA	4,900	4,900
Proposed West Employee Parking (Structure)										
Public		-	-	0	-	NA	NA	NA	-	-
Employee		-	-	12,400	-	NA	NA	NA	-	-
Subtotal		-	-	12,400	-	NA	NA	NA	-	-
Parking Lot F (Parking Structure at the SE corner of Avion Dr. & Century Blvd.)[5]										
Public	0	0	0	0	0	NA	NA	NA	0	0
Employee	1,200	1,200	1,200	1,200	1,200	NA	NA	NA	1,200	1,200
Subtotal	1,200	1,200	1,200	1,200	1,200	NA	NA	NA	1,200	1,200

Table 2-2

Summary of SPAS Alternatives

	Baseline Conditions	Applicable SPAS Alternative								
		Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9
Proposed Parking Structures at GTC										
Public		-	-	7,515	-	NA	NA	NA	-	-
Employee		-	-	0	-	NA	NA	NA	-	-
Subtotal		-	-	7,515	-	NA	NA	NA	-	-
Southeast Surface Parking[6]										
Public	0	-	-	5,470	0	NA	NA	NA	-	-
Employee	5,470	-	-	0	5,470	NA	NA	NA	-	-
Subtotal	5,470	-	-	5,470	5,470	NA	NA	NA	-	-
Proposed Parking Structure at ITC										
Public		-	-	9,127	9,127	NA	NA	NA	-	-
Employee		-	-	0	0	NA	NA	NA	-	-
Subtotal		-	-	9,127	9,127	NA	NA	NA	-	-
Total	**25,695**	**32,905**	**32,905**	**35,712**	**25,986**				**32,155**	**32,155**

[1] Some of the public parking in the CTA is currently used by government employees.
[2] Assumes that the MSC Passenger Processor building (not a SPAS-related project) would require the removal of parking structures 2B and 5 (1,536 total spaces). Any parking spaces that may be included as a component of the Passenger Processor project is not included in these parking totals.
[3] An area of Parking Lot C comprising approximately 850 spaces is currently being used as a limousine and charter bus holding lot. The 7,300 spaces represents the number of potential spaces if this commercial holding lot were relocated.
[4] Parking Lot D opened to employee parking in November 2011 with 1,944 parking spaces. However, there was no parking in this lot in 2010 (baseline year).
[5] This parking structure is currently used primarily by airport tenants; however, LAWA does sell some monthly parking passes to the public who likely work in nearby offices. For purposes of this summary, this structure is considered as employee parking.
[6] For baseline conditions and Alternative 4, this is Parking Lot E located north of 111th Street. For Alternative 3, this is a proposed new parking lot located north and east of Parking Lot E.

Source: LAWA, CDM Smith, Ricondo & Associates, AECOM, 2011.

2.3.1.10 Existing Facilities Affected by SPAS Improvements

Implementation of the SPAS alternatives would require the relocation and/or removal of several existing facilities both within LAX property, and outside of LAX property. These facilities are listed below. **Table 2-3** provides an overview of the existing facilities that would be affected by the various alternatives, including the name, size, current use, and disposition of each facility. Additional discussion of the facilities is provided in the text that follows the table. **Figure 2-10** delineates the existing and proposed locations of the affected facilities. Because the planning and analysis for the SPAS alternatives are at a programmatic level, specific improvements to these facilities have yet to be designed and would not be implemented for several years. The disposition of each facility described below is based on 4th quarter 2011 conditions and currently available information, and is subject to change as local conditions change and more detailed plans are formulated.

Table 2-3

Summary of Existing Facilities Affected by SPAS Improvements

Facility	Approximate Size	Current Use	Disposition of Facility/Use
Navigational Aids		Navigational aids	Under Alternatives 1 through 7, the navigational aids located at the ends of the north airfield runways would be relocated. Under Alternatives 1, 5, and 6, FAA's existing Airport Surveillance Radar (ASR) would be relocated north of Westchester Parkway.
North Maintenance Road	Various lengths	Road	The eastern portion of the road would be relocated independent of the LAX Master Plan or SPAS. Alternatives 1, 5, and 6 would require relocation of the entire road to the north with operational restrictions on the eastern end.
Argo Drainage Channel	9,857 feet long	Drainage channel	Independent of SPAS, the easternmost portion of the channel is required to be structurally covered to comply with requirements governing RSAs. Under Alternatives 1, 5, and 6, additional portions of the channel would be structurally covered (i.e., converted to a concrete box culvert) to different degrees, depending on the alternative.
North Airfield (Abandoned) Tunnel Segment	720 feet long	Unused	Under Alternatives 1, 5, and 6, the tunnel would be filled.
Airport Operations Area (AOA) Access Guard Post #3	155 square feet	Guard post	Building and appurtenant structures would be demolished. There are no plans to replace the guard post in this area.
Lincoln Boulevard and Adjoining Streets		Road	Alternatives 1, 5, and 6 would require the realignment of Lincoln Boulevard and adjoining streets. These alternatives would require the tunneling of approximately 540, 765, and 252 linear feet of Lincoln Boulevard, respectively.

Table 2-3

Summary of Existing Facilities Affected by SPAS Improvements

Facility	Approximate Size	Current Use	Disposition of Facility/Use
96th Street Bridge/Sky Way		Bridge	Under Alternatives 1, 2, and 5 through 9, the bridge and roadway would be reconfigured, allowing the eastern extension of Runway 6R/24L and Taxiway E, additional CTA curbside, and the accommodation of Terminal 0. Under Alternative 3, the bridge and roadway would be removed and not replaced.
Taxi Holding Lot	100 vehicles (2.5 acres)	Vehicle parking/staging area	Independent of the LAX Master Plan or SPAS, the taxi holding lot must be relocated. Under Alternatives 1, 2, and 5 through 9, the lot would move to the eastern portion of the Park One facility. Under Alternative 3, the lot would be relocated within the GTC. Under Alternative 4, the lot would likely be relocated to Park One or Parking Lot C.
Urgent (Medical) Care Facility	Approx. 21,500 square feet	Medical office building	Under all alternatives except Alternative 4, the building would be demolished due to the realignment of 96th Street Bridge/Sky Way. This building could potentially be relocated elsewhere in the vicinity.
LAWA Police Station/Facilities	33,300 square feet	Police station and related facilities	Under all alternatives except Alternative 4, facilities would be removed and relocated. The facilities could be relocated to the future LAX Public Safety Building and Supporting Facilities currently being planned by LAWA, separate from SPAS.
Park One Parking Facility and Billboards	2,728 spaces and 8 billboards	Privately-operated airport parking lot and outdoor advertising	Under all alternatives except Alternative 4, parking lot use would be eliminated, along with eight billboards. No relocation of the parking is anticipated.
West Remote Aircraft Gates/Parking Positions	18 gates to facilitate scheduled passenger service	Aircraft gates and parking spaces	With the extension of Taxilane D, various west remote gate structures and parking positions would be removed, depending on the alternative. These gates and parking positions would be replaced in the buildout gating plan. (It should be noted that all West Remote gates/parking positions are to be removed under LAX Master Plan buildout.)
LAWA Construction and Maintenance (C&M) Division Facilities	135,000 square feet	C&M facilities	With the extension and/or relocation of Taxilane D under Alternatives 1 through 3 and 5 through 7, the C&M recycling yard and equipment yard (northern portion of the facility), as well as separately located structures used for storage, would be removed and consolidated/reconfigured at the current site or moved elsewhere on the AOA or to the area referred to as Continental City. The portion of the facility affected would vary by alternative.

Table 2-3

Summary of Existing Facilities Affected by SPAS Improvements

Facility	Approximate Size	Current Use	Disposition of Facility/Use
FedEx Aircraft Maintenance Facility	164,000 square feet	Maintenance facilities	The extension and/or relocation of Taxilane D under Alternatives 1 through 3 and 5 through 7 would require the removal of the FedEx Maintenance employee parking area, an apron and run-up area, and miscellaneous storage areas within the northern portion of the facility. The facilities on the leasehold would be reconfigured and consolidated on the existing site or relocated elsewhere on the AOA.
On-Airfield Fuel Truck Filling Station		Fueling facility	With the extension of Taxilane D under Alternatives 1, 2, and 6, the fueling station would need to be reconfigured or relocated within the AOA. Under Alternatives 3, 5, and 7, the entire facility would be removed and relocated within the AOA.
Southwest Airlines Ground Support Equipment(GSE) Facility	7,972 square feet	GSE and vehicle maintenance facility	With the extension and/or relocation of Taxilane D under Alternatives 1 through 3 and 5 through 7, the Southwest Airlines GSE facility would be removed and relocated elsewhere on, or adjacent to, the AOA.
Airfield Bus Parking Area and Operations Building	44 parking spaces, 3,876-square-foot-building	Bus parking	With the extension of Taxilane D under Alternatives 1 through 3 and 5 through 7, 44 bus parking spaces and an airfield bus operations building would be removed. These uses would be relocated within the AOA or the area referred to as Continental City.
LAXFUEL Fuel Farm	662,000 square feet	Aircraft fuel storage	Under Alternatives 3, 5, and 7, the fuel farm facilities would be consolidated on the existing site.
US Airways Maintenance Building	18,611 square feet	Aircraft maintenance	This facility would be removed under Alternatives 3, 5, and 7. The LAX Master Plan includes construction of a new aircraft maintenance building; however, this building would not replace all square footage lost under the LAX Master Plan.
Avis Rental Car Facility	24 acres	Rental car operation	Under Alternatives 8 and 9, this facility would be replaced with parking. The primary rental car function would be relocated to the CONRAC in Manchester Square. Heavy maintenance and supporting functions would require relocation elsewhere, but could potentially occur on LAWA property on 111th Street west of La Cienega Boulevard.
Burger King Restaurant	3,551 square feet	Restaurant	Under Alternatives 1 through 4, 8, and 9, an existing Burger King restaurant located on the northwest corner of Airport Boulevard and 96th Place would be eliminated. Relocation would be a business decision. This business could potentially relocate to elsewhere in the vicinity.

Table 2-3

Summary of Existing Facilities Affected by SPAS Improvements

Facility	Approximate Size	Current Use	Disposition of Facility/Use
Travelodge Hotel and Denny's Restaurant	154 rooms (Travelodge) 7,347 square feet (Denny's)	Hotel and restaurant	Under all of the alternatives except Alternative 4, an existing Travelodge hotel and Denny's restaurant located in the southwestern portion of Manchester Square would be eliminated. Relocation would be a business decision. These businesses could potentially relocate to elsewhere in the vicinity.

Source: LAWA and CDM Smith, 2011.

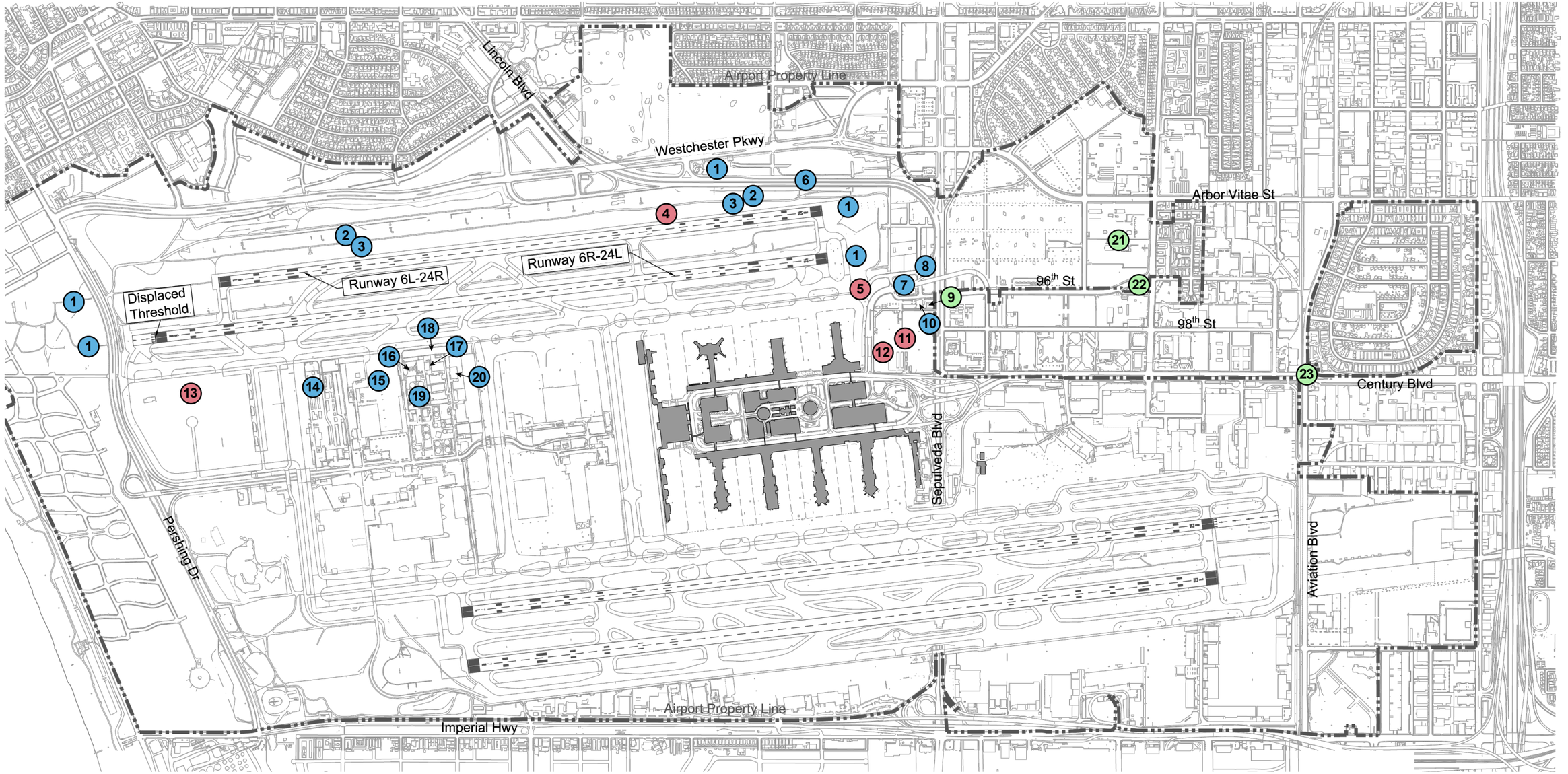
Navigational Aids - Under Alternatives 1 through 7, the navigational aids located at both ends of one or both of the north airfield runways would be relocated due to runway relocation, extension, and/or modifications in landing thresholds or declared distances. Such runway modifications particular to each alternative are described above in Section 2.3.1, which would be the basis for determining which navigational aids must be relocated. The modifications associated with Alternative 4 are due to compliance with RSA requirements and are independent of the LAX Master Plan or SPAS. Under Alternatives 1, 5, and 6, FAA's existing ASR, which is located north of Runway 6L/24R and south of Westchester Boulevard, would be relocated to a site between the Westchester Golf Course eastern holes and Westchester Parkway.

North Maintenance Road - The maintenance road is located at the northern edge of the north airfield. Under current regulatory requirements, and independent of the LAX Master Plan or SPAS, approximately 500 feet of the eastern portion of the road requires relocation outside of the existing Runway 6L/24R RSA. Under all of the alternatives that involve relocation of Runway 6L/24R to the north (i.e., Alternatives 1, 5, and 6), the entire road would be moved north, outside of the RSA for the relocated runway, and operational restrictions would be imposed on the eastern end of the road, restricting its use during certain aircraft operations.

Argo Drainage Channel - The Argo Drainage Channel is a 9,857-foot-long drainage channel that lies to the north of, and approximately parallel to, Runway 6L/24R. It is unlined and uncovered across most of the north airfield, becoming a subsurface box culvert at the west end of the airfield before emptying into Santa Monica Bay. Under existing regulatory requirements, and independent of the LAX Master Plan or SPAS, approximately 750 linear feet of the eastern portion of the channel that lies within the Runway 6L/24R RSA are required to be structurally covered (i.e., converted to a concrete box culvert) to support the weight of a truck on the relocated service road. Under Alternatives 1 and 5, the entire length of the channel would be structurally covered (converted to a concrete box culvert) to support the weight of an aircraft. Under Alternative 6, 1,400 feet would be structurally covered (converted to a concrete box culvert) to support the weight of an aircraft.

North Airfield (Abandoned) Tunnel Segment - When Runway 6L/24R was constructed, a 720-foot-long tunnel segment was constructed under a portion of the runway to facilitate the potential future extension of Lincoln Boulevard under the runway. The tunnel has never been used. Under Alternatives 1, 5, and 6, the lid would be removed and the tunnel would be filled and compacted (possibly with cut from the center taxiway construction) to enable the relocation of the runway and/or taxiways.

Airfield Operations Area (AOA) Access Guard Post #3 - Guard Post #3 is located northwest of 96th Street/Sky Way, just east of the eastern terminus of Taxiway E, and provides access to the north airfield. In conjunction with the extension of Runway 6R/24L, this access post would be removed. There are no plans to establish a replacement access point in this area of the airport.



1. Navigational Aids
2. North Maintenance Road
3. Argo Drainage Channel
4. North Airfield Tunnel Segment (Abandoned)
5. AOA Access Post #3
6. Lincoln Boulevard
7. 96th Street Bridge/Sky Way
8. Commercial Vehicle Holding Lot
9. Urgent Care Facility
10. LAWA Police Station
11. Park One Parking Facility
12. Park One Billboards
13. West Remote Gates
14. LAWA Construction & Maintenance Facilities
15. FedEx Maintenance Facility
16. Fuel Truck Filling Station
17. Southwest Airlines GSE Facility
18. Airfield Bus Parking/Operations Building
19. LAX Fuel Farm
20. US Airways Maintenance Building
21. Avis Rental Car Facility
22. Burger King
23. Travelodge Hotel/Denny's Restaurant

Note: Not all facilities are affected by every alternative.

Legend

- Facility to be Removed
- Facility to be Relocated, Reconfigured, and/or Modified
- Facility Relocation Subject to Business Decision by Tenant

0 1,500 ft
Scale north

Source: Los Angeles World Airports, CDM, 2011.
Prepared by: CDM Smith, 2012.

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Existing Facilities Affected by SPAS Improvemments

Figure **2-10**

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Lincoln Boulevard and Adjoining Streets - Alternatives 1, 5, and 6 would require the realignment of Lincoln Boulevard between Sepulveda Boulevard and the Lincoln Boulevard/Westchester Parkway interchange. As part of the realignment, approximately 540 feet of the roadway would be covered and below grade under Alternative 1, approximately 765 feet under Alternative 5, and approximately 252 feet under Alternative 6. Adjoining streets would also require realignment, including Northside Parkway, Georgetown Avenue and McLean Way.

96th Street Bridge/Sky Way - The 96th Street Bridge is located southeast of Runway 6R/24L. Under Alternatives 1, 2, and 5 through 9, the bridge and Sky Way would be reconfigured to allow for the eastern extension of Runway 6R/24L and Taxiway E, while at the same time adding more curbside within the CTA and accommodating the development of Terminal 0. Under Alternative 3, the bridge and Sky Way would be removed completely and not replaced.

Commercial Vehicle Holding Lots - The existing taxi holding lot is located between Sepulveda Boulevard and Alverstone Avenue and north of West 96th Street, beneath the 96th Street Bridge. The existing shared ride van holding lot is located on Avion Drive south of Century Boulevard and the charter bus/limousine holding lot is located in the southwest corner of Jenny Street and Westchester Parkway. Under current regulatory requirements, and independent of the LAX Master Plan or SPAS, the taxi holding lot will be relocated to remove the facility from the Runway 6R/24L RSA. Under Alternatives 1, 2, and 5 through 9, the taxi and commercial holding lots for the shared-ride vans and charter buses/limousines would be relocated to the easternmost portion of the area currently occupied by the Park One parking facility. Under Alternative 3, the commercial vehicle holding lot would be relocated within the GTC. Under Alternative 4, the taxi holding lot would likely be relocated to Park One or Parking Lot C and other commercial vehicle holding lots would remain in their current locations.

Urgent (Medical) Care Facility - The urgent care medical facility is a 3-story medical office building located at 9601 S. Sepulveda Boulevard. Under Alternatives 1 through 3 and 5 through 9, the building would be removed due to the realignment or, in the case of Alternative 3, removal of the 96th Street Bridge/Sky Way. This facility could potentially be relocated elsewhere in the vicinity.

LAWA Police Station/Facilities - The LAWA Police Station is located on West 96th Street at the southern terminus of Alverstone Avenue. SWAT/emergency trailers and other associated facilities are located to the northwest. Under all of the alternatives except Alternative 4, facilities would be removed due to the realignment or, in the case of Alternative 3, removal of the 96th Street Bridge/Sky Way. The facilities could be relocated to the future LAX Public Safety Building and Supporting Facilities currently being planned by LAWA, separate from SPAS. The location of that future facility is currently under study by LAWA. Some of the policing functions would be relocated to a site within the CTA.

Park One Parking Facility and Billboards - The Park One parking facility is a privately-operated parking facility located at the entrance to the CTA and bound by 96th Street, Sepulveda Boulevard, Century Boulevard and Sky Way. Under Alternatives 1 through 3 and 5 through 9, the existing Park One facility, a privately-operated but LAWA-owned parking lot, would be eliminated due to the realignment or, in the case of Alternative 3, removal of the 96th Street Bridge/Sky Way, as well as the construction of Terminal 0 (under Alternatives 1, 2, and 5 through 9). Along with elimination of the parking facility, eight billboards would be removed. No relocation of the parking facility is anticipated.

West Remote Aircraft Gates/Parking Positions - With the extension of Taxilane D, various west remote gates located south of Service Road E and west of Taxiway AA would be affected. Under Alternatives 1, 2, and 6, three remote gate structures (associated with Gates 206/208, 207/209, and 218) would be removed as would six parking positions (Gates 208, 209, 216, 218, and two additional positions). Under Alternatives 5 and 7, in addition to these impacts, the parking positions associated with Gates 206 and 207 would also be eliminated. All of the eliminated gates would be replaced with gates at the MSC. Under all of the alternatives, with full implementation of the LAX Master Plan, all West Remote gates and parking positions would be removed and replaced in the buildout gating plan.

LAWA Construction and Maintenance (C&M) Division Facilities - LAWA's C&M facilities are located on the airfield, north of World Way West, south of Service Road E, and east of Taxiway AA. The

extension of Taxilane D under Alternatives 1, 2, and 6 would affect the C&M Recycling Yard and Equipment Yard, which are located in the northern portion of the site. Under Alternatives 3, 5, and 7, these facilities, as well as one or two separately located C&M buildings, would be affected by the taxilane extension and/or runway/taxiway relocation. The LAX Master Plan assumed these uses would be consolidated and/or reconfigured within the remaining portion of the site. Alternately, LAWA is considering relocating these uses to another area within the AOA or to the area referred to as Continental City.

FedEx Aircraft Maintenance Facility - The FedEx Aircraft Maintenance facility is located between Service Road E and the LAWA Administration West building on World Way West. The extension and/or relocation of Taxilane D under Alternatives 1 through 3 and 5 through 7 would affect this facility, specifically the employee parking area, apron and run-up area (including the blast fence), and miscellaneous storage areas. The facilities on the leasehold would be consolidated and reconfigured on the existing site or relocated elsewhere on the AOA.

On-Airfield Fuel Truck Filling Station - This 3-island fueling station for aircraft fuel trucks is located at the north end of the LAXFUEL Fuel Farm and is operated by LAXFUEL. The northern half of the facility would be affected under Alternatives 1, 2, and 6, requiring reconfiguration of the facility at its current location or relocation to another site within the AOA. Under Alternatives 3, 5, and 7, the entire fueling facility would be removed and relocated within the AOA.

Southwest Airlines Ground Support Equipment (GSE) Facility - Southwest Airlines houses and maintains GSE and other vehicles at a facility located north of the LAXFUEL Fuel Farm and south of the airfield bus parking area. Under Alternatives 1 through 3 and 5 through 7, this facility would be removed and relocated elsewhere within, or adjacent to, the AOA.

Airfield Bus Parking Area and Operations Building - The area immediately north of the fuel truck filling station and Southwest Airlines GSE facility provides 44 parking spaces for airport buses and a building housing the airfield bus operations center. Under Alternatives 1 through 3 and 5 through 7, all 44 spaces and the operations center would be removed. These uses would be relocated within the AOA or in the area referred to as Continental City.

LAXFUEL Fuel Farm - The LAXFUEL Fuel Farm is located between the FedEx Maintenance Facility and Coast Guard Road, north of World Way West. Under Alternative 3, the overall footprint of the fuel farm would be reduced to 591,000 square feet to accommodate north airfield modifications, but the fuel farm would retain its existing capacity and remain at its existing location. Some tanks would require relocation on the fuel farm site. Alternatives 5 and 7 may similarly require the relocation of tanks within the fuel farm site or other protective measures.

US Airways Maintenance Building - The US Airways maintenance building is located north of the Coast Guard facility and east of Coast Guard Road and is used primarily for aircraft overnight checks. This facility would be removed under Alternatives 3, 5, and 7. The LAX Master Plan includes construction of a new aircraft maintenance building on the west side of the airport. This building would not replace all square footage lost under the LAX Master Plan.

Avis Rental Car Facility - Avis currently operates a rental facility on 24 acres located east of Parking Lot C between 96th Street and Westchester Parkway. Under Alternatives 8 and 9, this facility would be redeveloped for employee parking and the rental car function would be relocated to the CONRAC in Manchester Square. The heavy maintenance and other support activities would require relocation elsewhere at a site to be determined by Avis. These uses could potentially be relocated to LAWA property on 111th Street west of La Cienega Boulevard (LAWA's current Parking Lot E).

Burger King - LAWA currently owns an irregularly-shaped parcel bound by West 96th Street, 96th Place, and Airport Boulevard, which contains a Burger King restaurant. Under Alternatives 1 through 4, 8, and 9, this business would be eliminated and replaced with airport facilities. No relocation of this facility is planned by LAWA; rather, relocation would be a business decision. This business could potentially relocate elsewhere in the vicinity.

Travelodge Hotel and Denny's Restaurant - LAWA currently owns two properties in Manchester Square near the corner of Century and Aviation Boulevards which contain commercial enterprises, a Travelodge hotel and a Denny's restaurant. Under all of the alternatives except Alternative 4, these businesses would be eliminated and replaced with airport facilities. No relocation of these facilities is planned by LAWA; rather, relocation would be a business decision. These businesses could potentially relocate elsewhere in the vicinity.

2.3.1.11 Acquisition

The alternatives would require the acquisition of properties located east of the airport. The parcels to be acquired vary with the different alternatives. **Table 2-4** lists the properties that may be affected and provides information pertaining to each parcel. A composite map of all of the acquisition properties is provided in **Figure 2-11**. The parcels that would be acquired under each alternative are identified in **Table 2-5** and illustrated in **Figures 2-12** through **2-14**. Following acquisition, the uses would be demolished and replaced with SPAS-related improvements.

2.3.1.12 Construction Staging Areas

Figure 2-15 depicts the locations of potential construction staging areas that could be utilized in some combination during development of any of the SPAS alternatives. As indicated in Section 2.3.1, the nine SPAS alternatives were formulated at a conceptual level only and there are no specific planning, design, or engineering studies or construction plans for any of the alternatives. The potential construction staging areas shown in **Figure 2-15** represent areas that are, or will be, generally vacant, are located outside of aircraft operations, and are generally suitable for the placement of construction trailers/offices, storage of construction materials, and staging of construction activities. They are considered to be equally available to all of the alternatives. Seven potential construction staging areas have been identified as follows:

- Construction Staging Area A: South of Westchester Parkway west of Lincoln Boulevard. These two parcels are undeveloped and have been used for several years as construction staging areas for various improvement projects at LAX. Such use includes placement of temporary construction offices/trailers, storage of construction materials and equipment, staging/assembly of building components, stockpiling of excavated soils, and other construction-related activities.
- Construction Staging Area B: Between Westchester Parkway and Lincoln Boulevard, west of Sepulveda Westway. This area is undeveloped and vacant.
- Construction Staging Area C: Between Westchester Parkway and West 88th Street, west of La Tijera Boulevard and east of Emerson Avenue beyond the existing fire station and Los Angeles Unified School District Emerson Community Adult School. This area is undeveloped and vacant.
- Construction Staging Area D: Between La Tijera Boulevard, Westchester Parkway, and Sepulveda Westway. This area is undeveloped and has been used for several years as a construction staging and storage area for various improvement projects at LAX and off-airport soundproofing.
- Construction Staging Area E: East of Airport Boulevard and south of Arbor Vitae Street. This area, known as Belford, was formerly occupied by residential development that is a part of the voluntary acquisition program under the Aircraft Noise Mitigation Program (ANMP). The vast majority of the former residential development has been removed, leaving the site largely vacant at this time. While it is anticipated that the subject area will be redeveloped in the future with airport-compatible uses, there are currently no specific development plans or schedule. As such, all or portions of the subject site could be available for construction staging in the development of SPAS-related improvements, depending on the location and timing of any future redevelopment of the area.

Table 2-4

Acquisition Properties

Map Ref. Number	Address	Primary Business	Property Owner (Per City GIS)	Bldg. Sq. Ft.			Parking Stalls	Employees	Number of Billboards		APN	
				Light Ind.	Office	Retail			Single Format	Double Format		
Area B												
3	9800 So. Sepulveda Blvd.	Vacant Office Building	LAX Ent.		112,285			0			4124-026	-002
4	9700 So. Sepulveda Blvd.	Hollywood CPR/ Valet Air Park	LA City Community College District		30,000			10			4124-026	-900
5	9600 So. Sepulveda Blvd.	Valet Air Park	M & A Webber		1,296		475	3		3	4124-025	-049
12	No site address/ W. 96th St.	Power Station/Valet Air Park	LADWP				110	2			4124-027	900 -901
13	6200 W. 96th St.	Sunrise Valet & Self-Parking	United Savings & Loan Assoc.				200	2			4124-027	-008
14	6150 W. 98th St.	CLS Limo Service	Arden Realty					20		1	4124-027	-030
15	6101 W. 98th St.	Ampco Exp. Parking	Arden Realty				1,700	10	1	2	4124-028	-041
16	5965 W. 98th St.	Budget Rental Car	Bird Management Co.					0			4124-029	-028
17	5945 W. 96th St.	Budget Rental Car/Purdy's Liquor Store	Bird Management Co.			16,650		2			4124-029	-030
18	9775 Airport Blvd.	Budget Rental Car	Bird Management Co.		2,000			30		1	4124-029	-031
19	5928 W. 96th St.	Budget Rental Car	Bird Management Co.						1	1	4124-029	-009
Area C												
11[1]	9225 Aviation Blvd.	Hertz Rental Car Storage	Hertz Realty					5		2	4128-001	-008
Area D												
2	9200 Aviation Blvd.	Arco gas station/AM/PM	Haha Inc.			3,309		5	1		4128-002	-015
7	5551 W. Century Blvd.	Texaco gas station	D. and J. Loh	1,722				2	1	1	4128-024	-002
9	5307 W. Century Blvd.	Taco Bell	Century Investments Inc.			2,529		9	2		4128-024	-011
14[2]	No site address/ W. Century Blvd.	Public service	LAWA						2		4128-024	-900
15	5431 W. 98th St.	Charter Schools (2)	LAUSD								4128-024	-900

Table 2-4

Acquisition Properties

Map Ref. Number	Address	Primary Business	Property Owner (Per City GIS)	Bldg. Sq. Ft.			Parking Stalls	Employees	Number of Billboards		APN	
				Light Ind.	Office	Retail			Single Format	Double Format		
Area E												
1	5552 W. Century Blvd.	76 gas station/Circle K Minimart	Kayo Oil Co.	3,143				3	1		4129-029	-022
2	10100 Aviation Blvd.	Pilot Airfreight	Kayo Oil Co.	35,100				50	1		4129-029	-023
3	No site address	Empty industrial building	IAC Aviation LLC					0	1		4129-029	-024
	5540 W. Century Blvd.	"	IAC Aviation LLC	39,000								-015
	No site address	"	IAC Aviation LLC	36,000								-014
4	5440 W. Century Blvd.	Thrifty Car Rental	5440 & 5500 Century Blvd. LLC	75,000	75,000			30	1	1	4129-029	-011
	No site address	Empty industrial building		24,900								
	5500 W. Century Blvd.	Fox Airport Parking					200	2				
5	5425 W. 102nd St.	Concourse Airport Parking	MBGF Properties	288			75	2			4129-029	-018
	No site address	"	MBGF Properties				220					-021
14	5510 102nd St.	Danzas	MTP &Associates	13,360				150			4129-033	-013
28	5515 104th St.	Sea Dwelling Creatures	Perry Street Properties	23,407				50			4129-033	-006
29	10400 Aviation Blvd.	Clean Energy	D. Berman					0		1	4129-034	-001
30	5540 104th St.	Mayesh Wholesale Florist	IAC Aviation LLC					15			4129-034	-011
	"	"	IAC Aviation LLC	20,026								-002
47[1]	10311 La Cienega Blvd.	World Wide Security	IAC Aviation LLC					50		1	4129-031	-004
48[1]	10300 Glasgow Pl.	Exotic City	M. Marker					20			4129-031	-011
	10302 Glasgow Pl.	World Wide Security	IAC Aviation LLC								4129-031	-003
49[1]	10201 La Cienega Blvd.	Fox Rent-A-Car	B. Leis					20			4129-031	-017
	"	Fox Parking	IAC Aviation LLC								4129-031	-013
	"	Fox AutoBody	IAC Aviation LLC								4129-031	-012
99	No site address	Utilities	AT&SF Railroad Co.								4129-033	-803
Area F												
9	No site address/ Imperial Hwy.	Elec. Sub-station	LADWP	16,748				0			4129-037	-902

[1] Property to be acquired is easement only.
[2] Only a portion of the parcel is to be acquired under Alternatives 1, 2, 8, and 9.

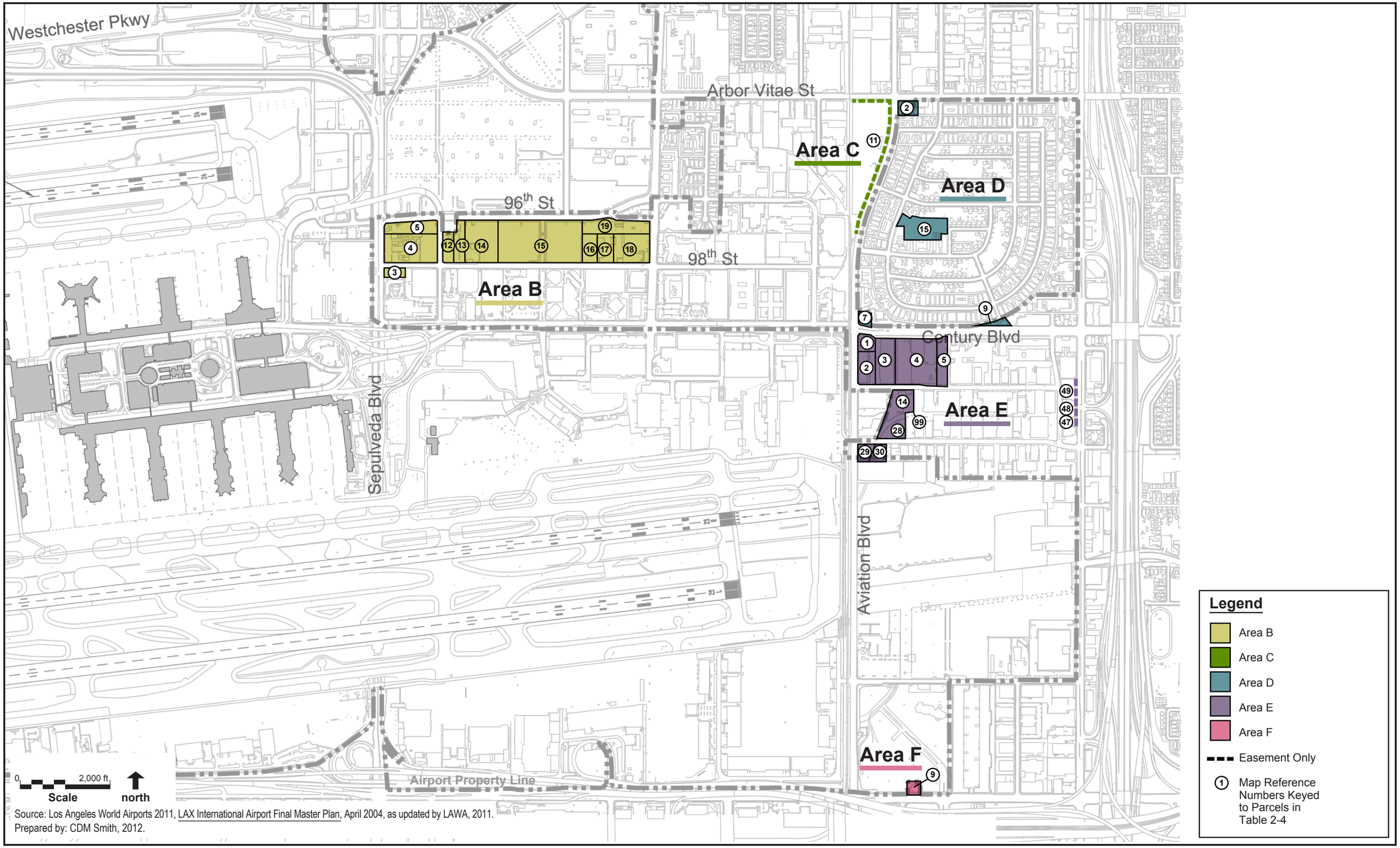
Source: City of Los Angeles, Los Angeles World Airports, LAX Master Plan Program Draft Relocation Plan, April 2004, with property ownership updated by LAWA in August 2011.

Table 2-5

LAX SPAS Acquisition by Alternative

MP Area/ Ref #	Alts. 1,2,8,9	Alt. 3	Alt. 4
Area B			
3		x	
4		x	x
5		x	x
12		x	x
13		x	x
14	x - partial	x	x
15	x	x	x
16	x	x	x
17	x	x	x
18	x	x	x
19	x	x	x
Area C			
11		x	
Area D			
2		x	
7		x	
9		x	
15	x	x	
Area E			
1		x	
2		x	
3		x	
4		x	
5		x	
14		x	
28		x	
29		x	
30		x	
47		x	
48		x	
49		x	
99		x	
Area F			
9		x	

Source: LAWA, CDM Smith, 2012.



Source: Los Angeles World Airports 2011, LAX International Airport Final Master Plan, April 2004, as updated by LAWA, 2011.
Prepared by: CDM Smith, 2012.

LAX Specific Plan Amendment Study Draft EIR	Property Acquisition	Figure 2-11

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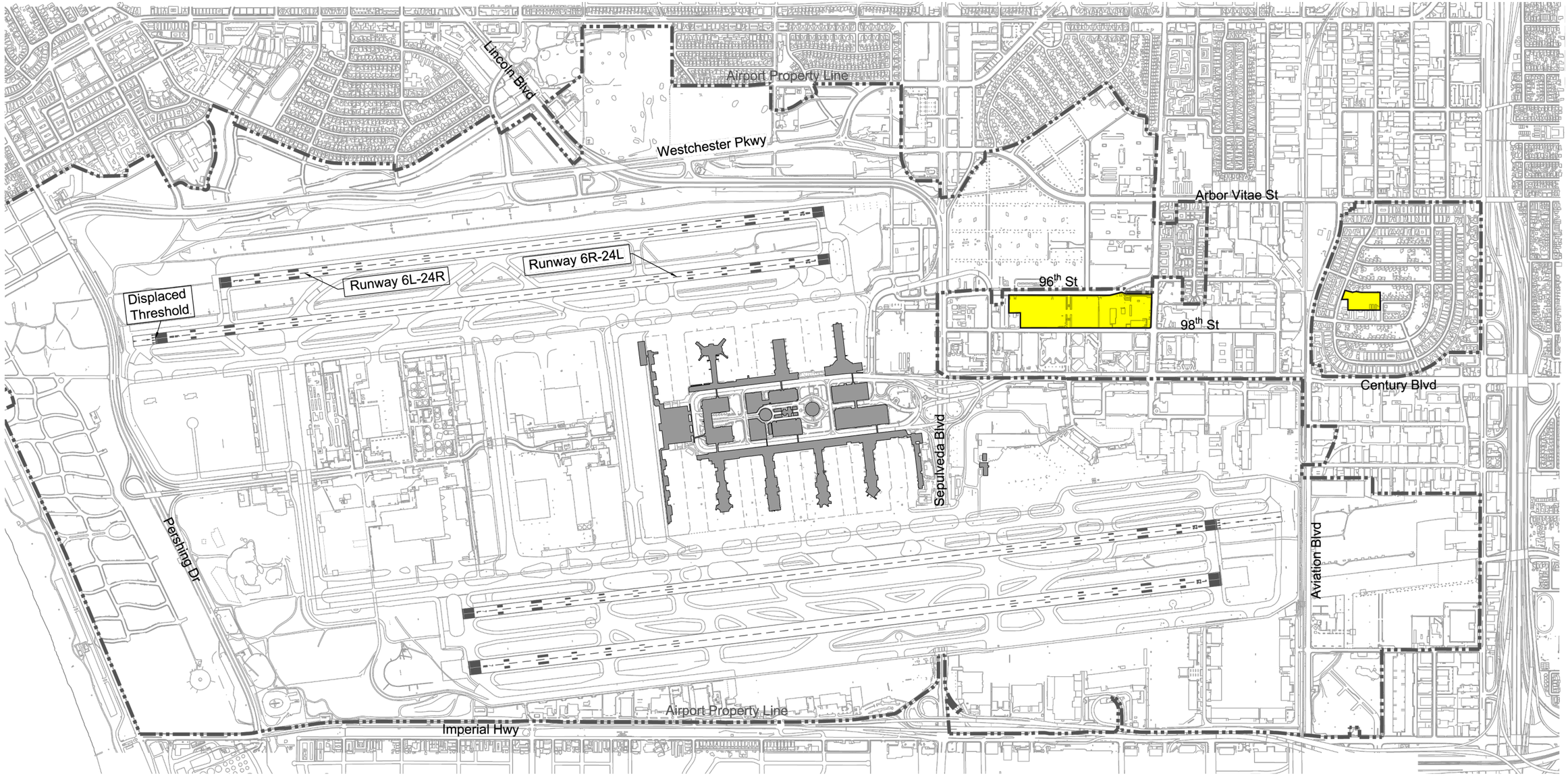

0 1,500 ft

Scale north

Source: Los Angeles World Airports, Airports Development Group, August 2011.
Prepared by: CDM Smith, 2012.

Legend

Proposed Property Acquisition

LAX Specific Plan Amendment Study Draft EIR	**Alternatives 1, 2, 8 and 9** **Proposed Property Acquisition**	Figure **2-12**

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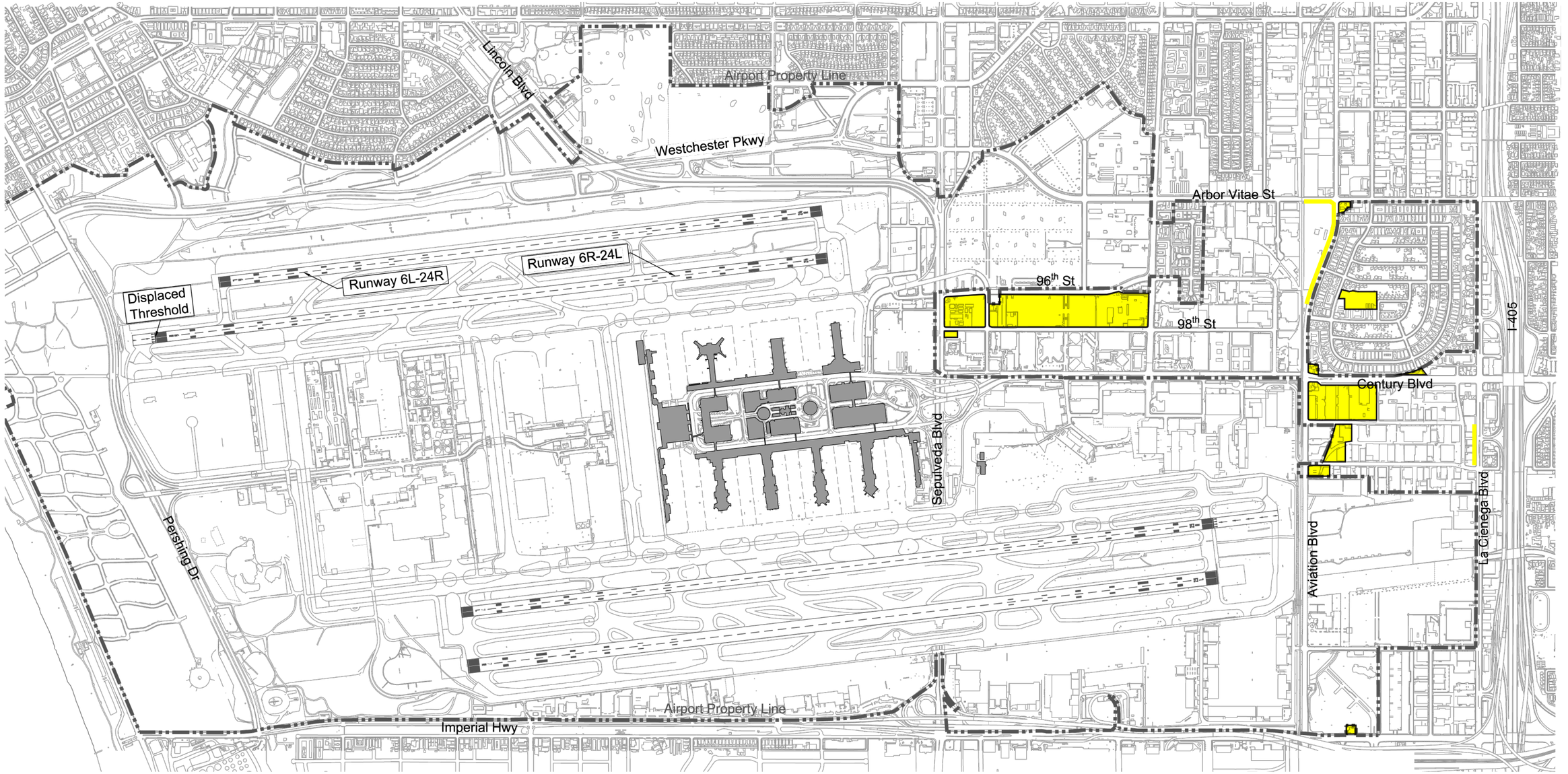

0 1,500 ft

Scale north

Source: Los Angeles World Airports, Airports Development Group, August 2011.
Prepared by: CDM Smith, 2012.

Legend

Proposed Property Acquisition

LAX Specific Plan Amendment Study Draft EIR	Alternative 3 Proposed Property Acquisition	Figure 2-13

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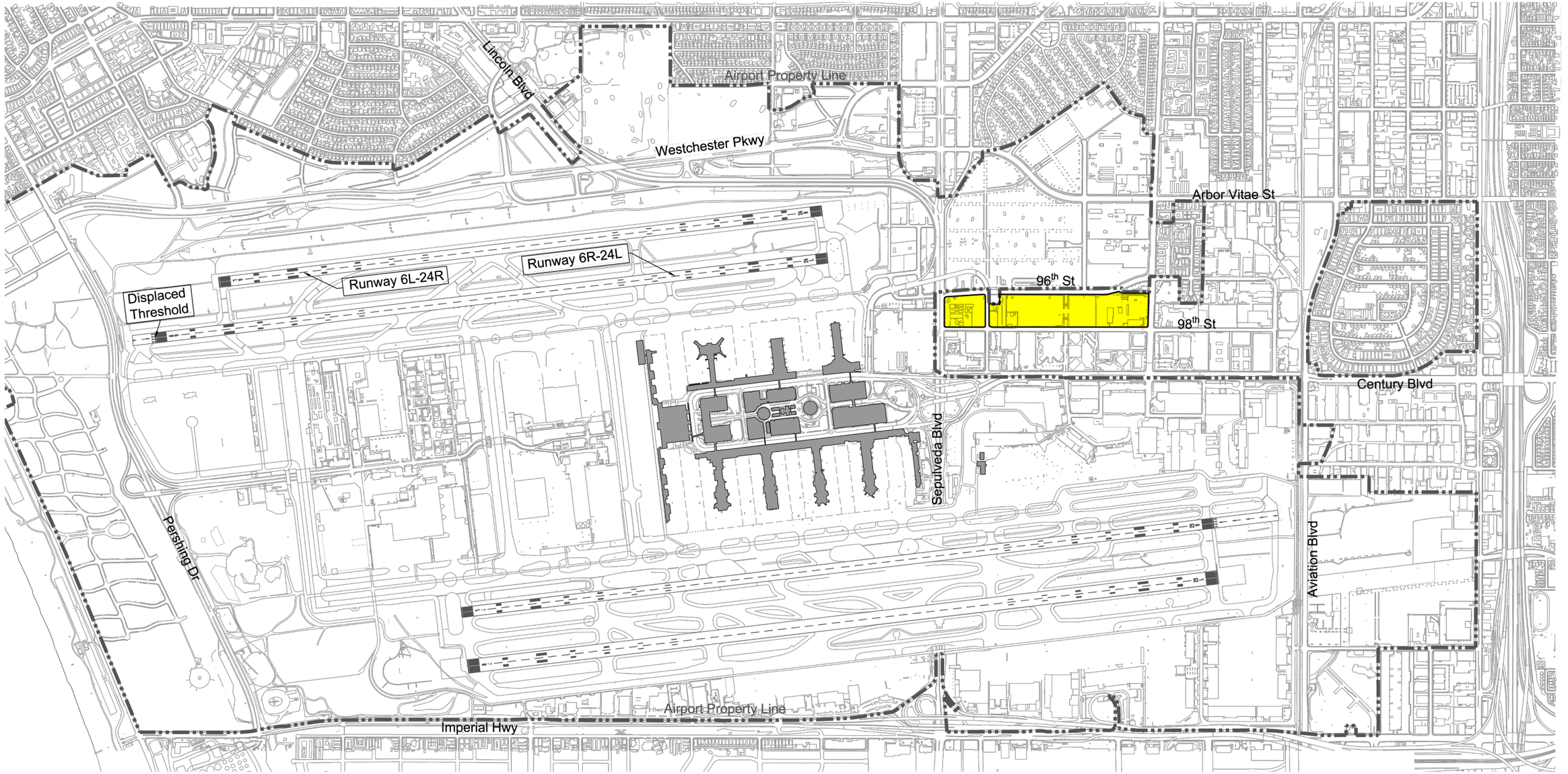

Source: Los Angeles World Airports, Airports Development Group, August 2011.
Prepared by: CDM Smith, 2012.

Legend

Proposed Property Acquisition

LAX Specific Plan Amendment Study Draft EIR	**Alternative 4** **Proposed Property Acquisition**	Figure **2-14**

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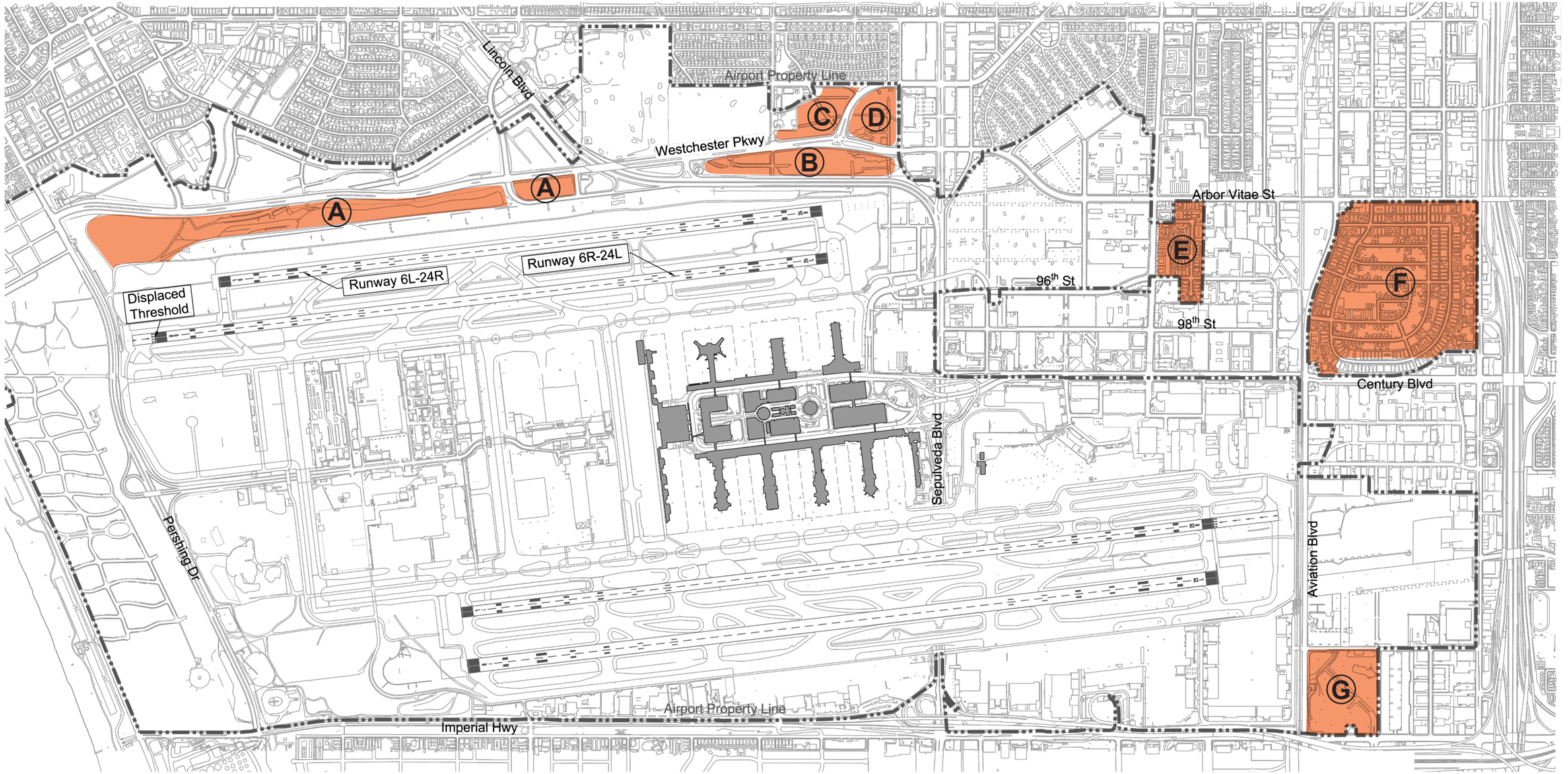

0 1,500 ft

Scale north

Source: Los Angeles World Airports, Airports Development Group, August 2011.
Prepared by: CDM Smith, 2012.

Legend

Potential Construction Staging Area

LAX Specific Plan Amendment Study Draft EIR	**Potential Construction Staging Areas**	Figure **2-15**

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- Construction Staging Area F: East of Aviation Boulevard, south of Arbor Vitae Street, west of La Cienega Boulevard, and north of Century Boulevard. Similar to the Belford area described above, this site, known as Manchester Square, was formerly developed with residential uses that were included in the ANMP voluntary acquisition program. The majority of residential development has been removed and the site is largely vacant. Several of the SPAS alternatives propose the development of transportation-related uses within Manchester Square, such as a GTC, CONRAC, and/or airport parking. Given the size of Manchester Square (128 acres), it is likely that vacant portions of the site could be used for construction staging during the development of SPAS-related improvements.
- Construction Staging Area G: East of Aviation Boulevard and north of Imperial Highway. This area is undeveloped and vacant.

Construction Staging Areas A though D are located within the LAX Northside planning area, which is planned for future development independent from SPAS. Depending on the nature and timing of such future development, use of Construction Staging Areas A through D for SPAS-related construction staging may be limited.

In addition to the potential construction staging areas described above, there are numerous existing surface parking lots in the vicinity of Arbor Vitae Street, and Airport and Aviation Boulevards that could serve as potential short-term and temporary construction staging areas.

2.3.2 Alternatives Considered But Rejected

2.3.2.1 Alternative Location

Implementation of any of the SPAS alternatives would not be feasible at any location other than LAX. Pursuant to the Stipulated Settlement, the SPAS will plan for the modernization and improvement of LAX. Implementing the SPAS alternatives at any other location would not accomplish this fundamental goal. The existing facilities at LAX cannot accommodate the existing demand and forecasted increase in the numbers of aircraft, cargo, and passengers without significant delays and a very poor level of service. As the existing facilities are used beyond their design capacity, the level of service provided to the user degrades. This lowering of the level of service may be demonstrated by increased congestion within the passenger terminals, the various surface roads on and around the airport, and on the airfield itself. The consequences of taking no action to solve this problem will result in a loss of air service and declining economic benefits (jobs) for the Los Angeles region. Air service and economic benefits would likely relocate to other regions both within the state of California and to other states. Therefore, any comprehensive solution to meeting the regional demand for transportation must include improvements at LAX.

2.3.2.2 Alternative Designs

Several alternative concepts were formulated and considered during development of the nine SPAS alternatives addressed in this EIR. Chapter 5 of the SPAS Report describes the basis, nature, and characteristics of those early concepts. The SPAS Report is available for review at LAWA's Facilities Planning Division, One World Way (LAX), Los Angeles or online at www.laxspas.org. Three of the airfield improvement concepts initially considered for inclusion in this Draft EIR were subsequently refined or consolidated. Specifically, an airfield improvement concept proposing to relocate Runway 6L/24R 400 feet north, which would meet all FAA standards for ADG VI aircraft, was subsequently refined to meet the basic requirements with only a 350-foot northward move. That refined alternative is Alternative 5 in this Draft EIR. Two other airfield improvement concepts, one proposing to move Runway 6L/24R 200 feet north and the other to move the subject runway 300 feet to the north were consolidated into the 260-foot north move, which is Alternative 1 in this Draft EIR.

2.3.2.3 Three-Runway Airfield

This concept involves removing one of the two runways within the north airfield and operating LAX with a three-runway system (i.e., one runway in the north airfield along with the two existing runways in the south airfield). This concept would provide sufficient runway and/or taxiway/taxilane separation distances for ADG V and VI aircraft on the north airfield and would eliminate the existing safety hazards associated with crossing an active runway within that airfield. However, the removal of a runway in the north airfield would have adverse impacts on and around the south airfield because of the associated shift in daily aircraft activity from the north airfield to the south airfield. This shift in activity would create unbalanced and inefficient operations for arriving and departing aircraft both in the air and on the ground. Under a three-runway system, a number of aircraft gated on the north side of the CTA, that would otherwise taxi to and from the north airfield, would instead have to taxi to and from the south airfield. While this type of three-runway configuration could reduce aircraft noise exposure levels in developed areas north of the airport, it would essentially just shift aircraft noise exposure impacts to the highly populated areas south and southeast of the airport. Similarly, this geographic shift in aircraft activity would be accompanied by a southward shift in emissions of airfield-related air pollutants; moreover, there would be a net increase in overall airfield emissions because of the increased taxiing times, distances, and congestion associated with more aircraft operations being concentrated in the south airfield. To the extent that such congestion and delays associated with aircraft movements on the ground hamper the ability of air traffic control to clear runways for arriving flights, any resultant need to have inbound aircraft divert from the approach path and go into a hold pattern would increase regional air pollutant emissions, including emissions of greenhouse gases. The imbalance in aircraft operations between the north airfield and the south airfield would adversely affect the overall operational performance of the entire LAX airfield system. In light of the above, a three-runway airfield is not considered a viable concept (i.e., a SPAS alternative) and was therefore eliminated from further evaluation.

2.3.2.4 Next Generation Technology

The Next Generation Air Transportation System, or NextGen, is currently being developed to provide a transformative change in the management and operation of how aircraft operate. The primary components of NextGen are related to technologically-advanced electronic navigational and communication systems associated with air traffic control, on-board aircraft systems, and airline operations. NextGen is designed to integrate all modes of aircraft operations including gate push-back, taxi operations, takeoffs, enroute flight, landings, and gate arrival. Once fully developed and implemented on a large scale, airports and aircraft in the National Airspace System (NAS) will be connected to NextGen's advanced infrastructure and will continually share real-time information to provide a better travel experience.

The application of NextGen to the SPAS effort was considered by LAWA to determine if any component of NextGen could provide for a viable concept. Although NextGen systems could provide for better ground situational awareness for air traffic controllers and pilots, and it could make airfield operations more efficient, it would not increase safety-related physical separation distances on the ground to meet ADG V and VI runway and/or taxiway/taxilane separation standards and obstacle free zone requirements. Based on this evaluation, LAWA determined that no component of NextGen technology can provide a viable concept (i.e., a SPAS alternative) and, therefore, NextGen was eliminated from further consideration.

2.3.2.5 Offset Runways and Simultaneous Offset Instrument Approaches

A Simultaneous Offset Instrument Approach (SOIA) is a procedure typically used to enhance airfield operational capacity by allowing simultaneous instrument approaches to closely-spaced parallel runways or to closely-spaced runways that are not parallel. This concept was considered by LAWA during the formulation of SPAS airfield improvement options for increasing the separation between the runways in the north airfield in order to meet FAA separation standards for runway and/or taxiway operations,

specifically as related to ADG V and VI aircraft. Offsetting one of the runways in the north airfield could provide the required separation distance between the runways that would allow construction of a centerfield taxiway; however, any new approach to the offset runway would have adverse impacts to off-airport areas, by shifting aircraft noise impacts to newly exposed areas. Also, the use of SOIA operations inherently reduces overall airfield operational performance. Based on the above, LAWA determined that offset runways and associated SOIAs do not provide a viable concept (i.e., a SPAS alternative) and, therefore, they were eliminated from further consideration.

2.3.2.6 Dual Runway Relocations

Under this concept, increased separation between runways, as necessary to allow the development of a center parallel taxiway and achieve FAA runway and taxiway separation design standards for ADG V and VI aircraft, would be accomplished by moving both runways. Specifically, Runway 6L/24R would be relocated northward from its current location by, for example, 175 feet and Runway 6R/24L would be relocated southward from its current location by 175 feet, and a center taxiway would be included, to achieve a total of 350 feet of increased separation within the intervening area. There could be any number of variations to this, such as moving Runway 6L/24R northward by a lesser amount (e.g., 100 feet), and Runway 6R/24L a greater amount (e.g., 250 feet), or vice versa, in order to achieve a total of 350 feet of increased separation, but the basic idea of this concept is to split the difference in achieving an increased runway separation distance by moving both runways. Under this concept, any southward relocation of Runway 6R/24L would necessitate a corresponding southward relocation of existing Taxiway E and existing Taxilane D in order to meet the required runway and taxiway/taxilane separation distance requirements. This concept would provide a means of achieving the same design standards as other alternatives, but in a different manner. For example, Alternative 5 would provide a runway configuration that meets ADG VI design standards under both good and poor weather conditions by moving Runway 6L/24R northward by 350 feet and adding a center parallel taxiway.

Development of this alternative is considered infeasible and impractical and likely to result in environmental impacts comparable to or greater than those of the other alternatives addressed in detail within this Draft EIR. Under this concept, the southward relocations of the runway and associated taxiway and taxilane would result in the loss of aircraft gates on the ends of concourses for Terminals 1, 2, and 3, the extent of which would depend on the distance of the southward relocations. To the extent that there is a substantial loss of gates on the north side of the CTA and more gate usage would have to occur on the south side of the CTA, there would be an imbalance in aircraft taxiing and operations between the north and south airfields. Given the extent of airfield construction activities required to relocate both runways, add a center parallel taxiway, relocate Taxiway E and Taxilane D, and modify the north ends of the concourse for Terminals 1, 2, and 3, the construction duration, costs, and construction-related impacts associated with this concept, particularly as related to air quality, would be substantial, and would be comparatively greater than the other alternatives addressed in detail within this Draft EIR that yield the same airfield safety and operational benefits. In other words, the alternatives analyzed in this Draft EIR that move just one runway, instead of both, would achieve the same safety and operational benefits as the dual runway relocation concept but would be less costly, could be completed in a shorter amount of time, and would require less construction equipment activity.

Similarly, completion of dual runway and taxiway improvements would necessitate either more incremental phasing of airfield construction activities (to keep at least one of the north airfield runways operational at all time), more nighttime construction activities (to take advantage of low airfield activity levels), or complete closure of one or both runways in the north airfield for an extended period (to expedite the overall airfield improvement program).

Further, runway construction activities required for dual runway relocations are more likely to be constrained by the FAA airfield construction safety requirement that construction activities be at least 250 feet away from an active runway. For example, FAA is more likely to allow one runway to remain operational during construction while the other runway is relocated 250 feet or more than it is if the runway were moved half that distance - 125 feet. To the extent that runway closures in the north airfield

are required during construction of the airfield improvements associated with this dual runway relocation concept, the demands on the other remaining runways at LAX would increase, resulting in an imbalance in operations between the north and south airfields and/or increased potential for airfield congestion and delays that would have impacts both locally and at other airports within the national airspace system.

Additionally, this alternative is within the range of alternatives already analyzed in the EIR as it would provide a means of achieving the same design standards as other alternatives, but in a different manner.

Based on the above, LAWA determined that the dual runway relocations concept was not feasible as a SPAS alternative and, therefore, it was eliminated from further consideration.

2.4 Intended Use of this EIR

This EIR will be used by LAWA, the Board of Airport Commissioners, and the Los Angeles City Council to evaluate and consider the potential environmental impacts of each of the SPAS alternatives and to take action relative to amendments to the LAX Specific Plan. Certification of the SPAS EIR would complete the program-level CEQA compliance review for the SPAS process. Depending on the outcome of the SPAS process, additional project-level CEQA review may be required for implementation of the improvements associated with the selected SPAS alternative.

In addition to use of this EIR by the City of Los Angeles, implementation of the selected SPAS alternative may require various federal, state, and local approvals, for which the approving agencies may use this EIR in their respective environmental reviews and decision-making and approval processes. Provided below is an overview of the actions and permits anticipated to be required for the project.

2.4.1 Federal Actions

U.S. Department of Transportation Federal Aviation Administration (FAA). Key actions by the FAA may include:

- A determination under 14 CFR Part 157 (49 USC 40113(a)) as to whether or not the FAA agrees with the airport development proposal from an airspace perspective, based on aeronautical studies;
- Decisions under the authority of 49 USC 40103(b) to develop or modify air traffic control and airspace management procedures to effect the safe and efficient movement of air traffic to and from the proposed runways, including the development of a system for the routing of arriving and departing traffic and the design, establishment, and publication of standardized flight operating procedures, including instrument approach procedures, and standard instrument departure procedures;
- A determination, through the aeronautical study process, under 14 CFR 77 regarding obstructions to navigable airspace;
- Decisions regarding project eligibility for federal grant-in aid funds or PFC funds for land acquisition, site preparation, runway and taxiway construction, environmental activities, and mitigation;
- Approval of a revised Airport Layout Plan;
- Determinations of conformity with FAA design criteria, federal regulations, and grant agreements (14 C.F.R. Parts 77, 139, 150, 152, 157, and 169);
- Approval of any required amendments to the airport certification manual pursuant to 14 CFR Part 139;
- Certification of air quality conformity of the proposed facility with applicable air quality limitations under Section 176(c)(1) of the Clean Air Act as amended and state ambient air quality standards;
- Approval for navigational aids (including modifications or additions to existing navigational aids, including completion of a Coastal Zone Management Act Consistency Determination- see also California Coastal Commission below regarding additional state approvals related to this federal action);

- Certification that the proposed facility is reasonably necessary for use in air commerce or for the national defense; and
- Completion of National Environmental Policy Act (NEPA) review related to the above actions and issuance of a Record of Decision.

Transportation Security Administration (TSA). Key action by the TSA may include:

- Amendment of the airport security program, if needed, pursuant to 49 CFR Part 1542.

U.S. Army Corps of Engineers (USACOE). Key action by the USACOE may include:

- Issuance of a Clean Water Act Section 404 permit if/as needed for impacts to jurisdictional wetlands (i.e., should jurisdictional wetlands be determined to exist within the Argo Drainage Channel).

2.4.2 State and Regional Actions

- **California Air Resources Board (CARB):** CARB is the state agency empowered to regulate air pollutant emissions from mobile sources in the state and is the state agency responsible for preparation of the State Implementation Plan for meeting federal air quality requirements. Future FAA review and action on the project would require that the project be shown to conform to the State Implementation Plan, as would be assessed during the NEPA review process. It would be expected that CARB would participate in the discussions concerning conformity.
- **California Department of Transportation (Caltrans):** The California Public Utilities Code notes that Caltrans must "encourage, foster, and assist in the development of aeronautics in this state and encourage the establishment of airports and air navigation facilities." The California Public Utilities Code also places responsibility for several permits and approvals of airport projects with Caltrans. Such requirements of the utilities code are:
  - Plan of Expansion - Before acquisition of land for airport expansion, Section 21661.6(a) requires that the "acquiring entity shall submit a plan of such expansion or enlargement to the board of supervisors of the county, or the city council of the city, in which the property is located." Acquisition cannot proceed until the jurisdiction approves the plan. As indicated above in Section 2.3.1.11, implementation of SPAS alternatives would involve property acquisition.
  - Airport Permit - Section 21664 requires an airport sponsor to request a permit from Caltrans for "every expansion of an existing airport." The permit can be granted as long as five conditions are met: 1) the site meets or exceeds airport standards; 2) safe air traffic patterns have been established; 3) the approach zones meet airport standards; 4) appropriate conditions have been met to "effectuate the purposes of this article."; and 5) the advantages to the public of the proposed airport expansion outweigh the disadvantages to the environment.

    In addition to these airport-related approvals, Caltrans review and approvals would be needed for the realignment of Lincoln Boulevard (Alternatives 1, 5, and 6) and improvements to the I-405 southbound ramps north of Century Boulevard (Alternatives 8 and 9).
- **California Coastal Commission:** The California Coastal Act of 1976 grants the authority to regulate development and related resource-depleting activities within the coastal zone boundary. For those SPAS alternatives involving runway modifications that would require relocation of navigational aids located west of Pershing Drive, certain actions and approvals would be required from the California Coastal Commission, including concurrence on a Coastal Zone Management Act Consistency Determination, a Consistency Certification required in conjunction with federal actions related to the project, and approval of a Coastal Development Permit.
- **California State Historic Preservation Officer:** The State Historic Preservation Officer (SHPO) is a member of the California State Parks Department, Office of Historic Preservation. It is anticipated that, in conjunction with future NEPA review of the project, SHPO will participate in the Section 106 consultation process concerning historical resources at or near the project site.

- **State Water Resources Control Board:** The Porter-Cologne Act is the primary statute covering the quality of water in California. It is administered by the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards. The SWRCB is responsible for several programs:
  - National Pollutant Discharge Elimination System (NPDES) - Industrial Activities Storm Water Permit (i.e., if modification of the existing permit for LAX is required as a result of the project)
  - General Construction Activity NPDES Storm Water Permit (2009-0009-DWQ) for construction activities
  - The Los Angeles Regional Water Quality Control Board, acting under the SWRCB, will continue to supervise clean up of contaminated soil and groundwater at LAX over the course of, and after implementation, of the project, primarily through issuance of Cleanup and Abatement Orders under the Porter-Cologne Act.
  - Issuance of a Section 401 Permit (Water Quality Certification or Waiver) in conjunction with approval of a federal Clean Water Act Section 404 Permit for impacts to jurisdictional wetlands within the Argo Drainage Channel
- **South Coast Air Quality Management District:** The South Coast Air Quality Management District (SCAQMD) is the regional agency empowered to regulate air pollutant emissions from stationary sources in the South Coast Air Basin. Regulatory oversight occurs through issuance of permits for stationary sources as well as through participation in the planning and review activities associated with major new development. As noted above, future FAA review and action on the project would require that the project be shown to conform to the State Implementation Plan, as would be assessed during the NEPA review process. It would be expected that SCAQMD would participate in the discussions concerning conformity.

2.4.3 Local Actions

Implementation of the selected SPAS alternative would be subject to a series of actions by various City of Los Angeles departments as part of the review and approval process. Actions that would be taken by the City may include, but are not limited to, the following:

- Certification of the SPAS Final EIR. This action by the Board of Airport Commissioners and the City Council would include the adoption of appropriate CEQA Findings, a Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Program to ensure project mitigation is carried out as the project is implemented.
- Approval of amendments to the LAX Plan and LAX Specific Plan
- Los Angeles City General Plan Amendment and modifications to other city plans and programs, as approved by the City Planning Commission and the City Council, including updates or replacements to:
  - City of Los Angeles Transportation Element of the General Plan. This includes classification of the surface transportation facilities developed as part of the selected SPAS alternative.
  - City of Los Angeles Noise Element of the General Plan to update new noise contours and other related information
  - City of Los Angeles Bicycle Plan
  - Los Angeles Coastal Transportation Corridor Specific Plan
  - LAWA Aircraft Noise Mitigation Program
  - Approval of Tentative Tract Maps

In addition to the above local actions by the City of Los Angeles, the County of Los Angeles Airport Land Use Commission will review the proposed project and make a determination as to whether the recommended alternative is consistent with the County's Airport Land Use Plan.

2.4.4 Other Actions

Other permits and approvals of specified types, but as yet unknown, may be issued to implement various aspects of the selected SPAS alternative.

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