Los Angeles World Airports

LAX Development Program Preview

Presented by:

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Loren W. Smith, Program Manager

November 19, 2008

Los Angeles World Airports

Los Angeles World Airports

I. Capital Improvement Program (CIP)

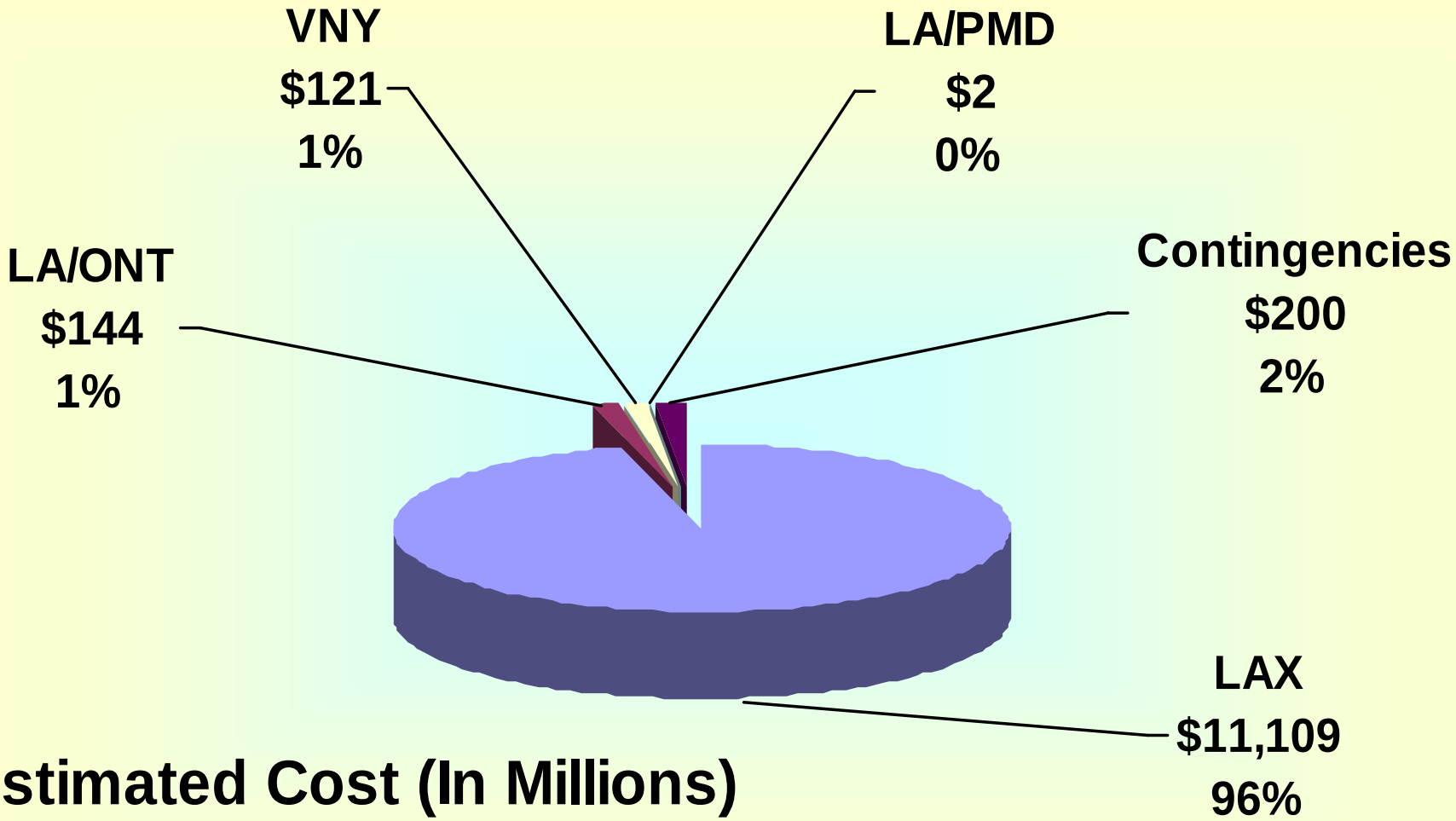
II. LAX Development Program Update

Los Angeles
World Airports

LAWA All Airports-
CIP Needs Assessment

Early Findings – By Airport

Total Program - $11,576

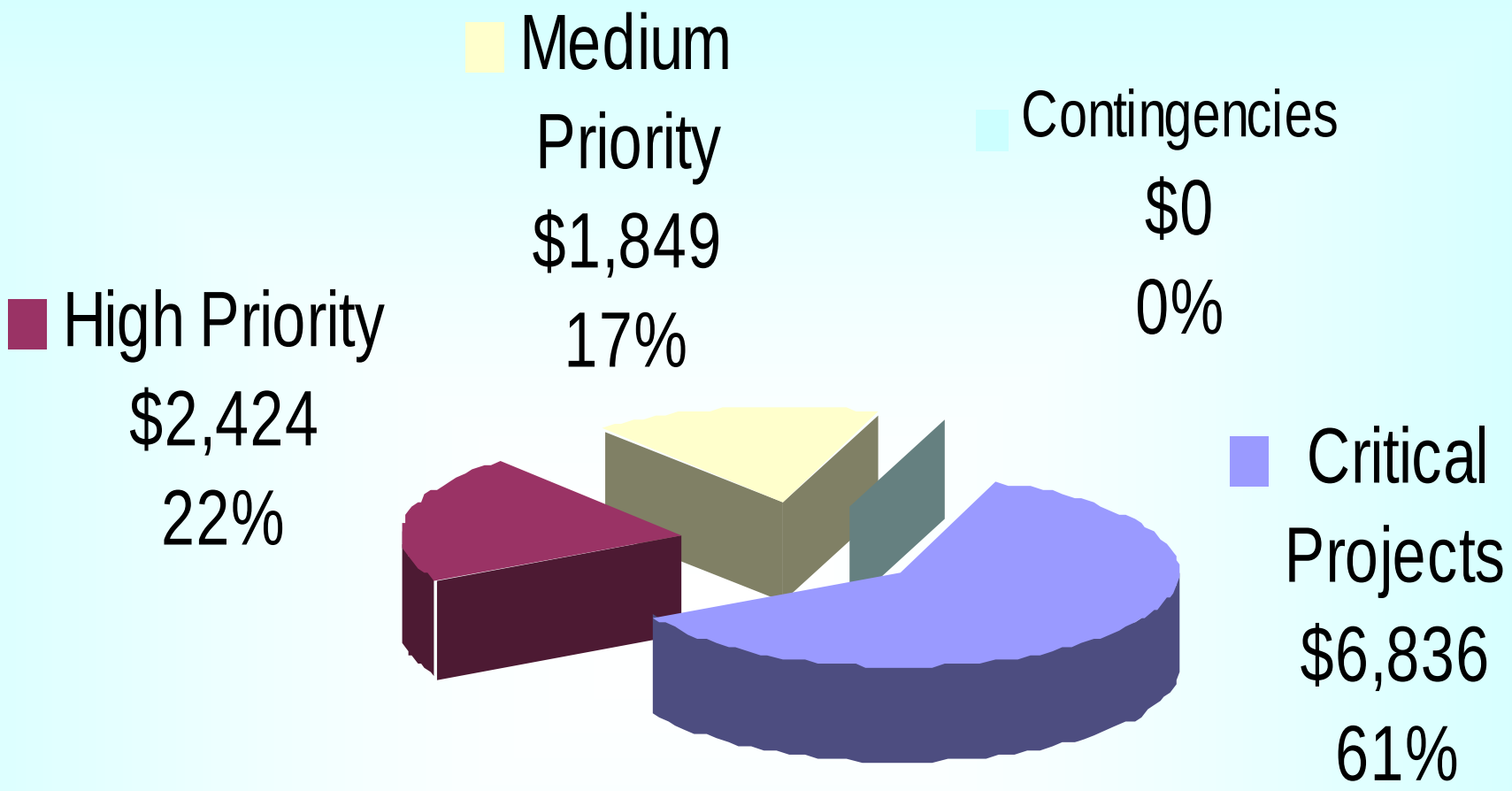


Estimated Cost (In Millions)

CIP Needs Assessment

Early Findings – By Priority

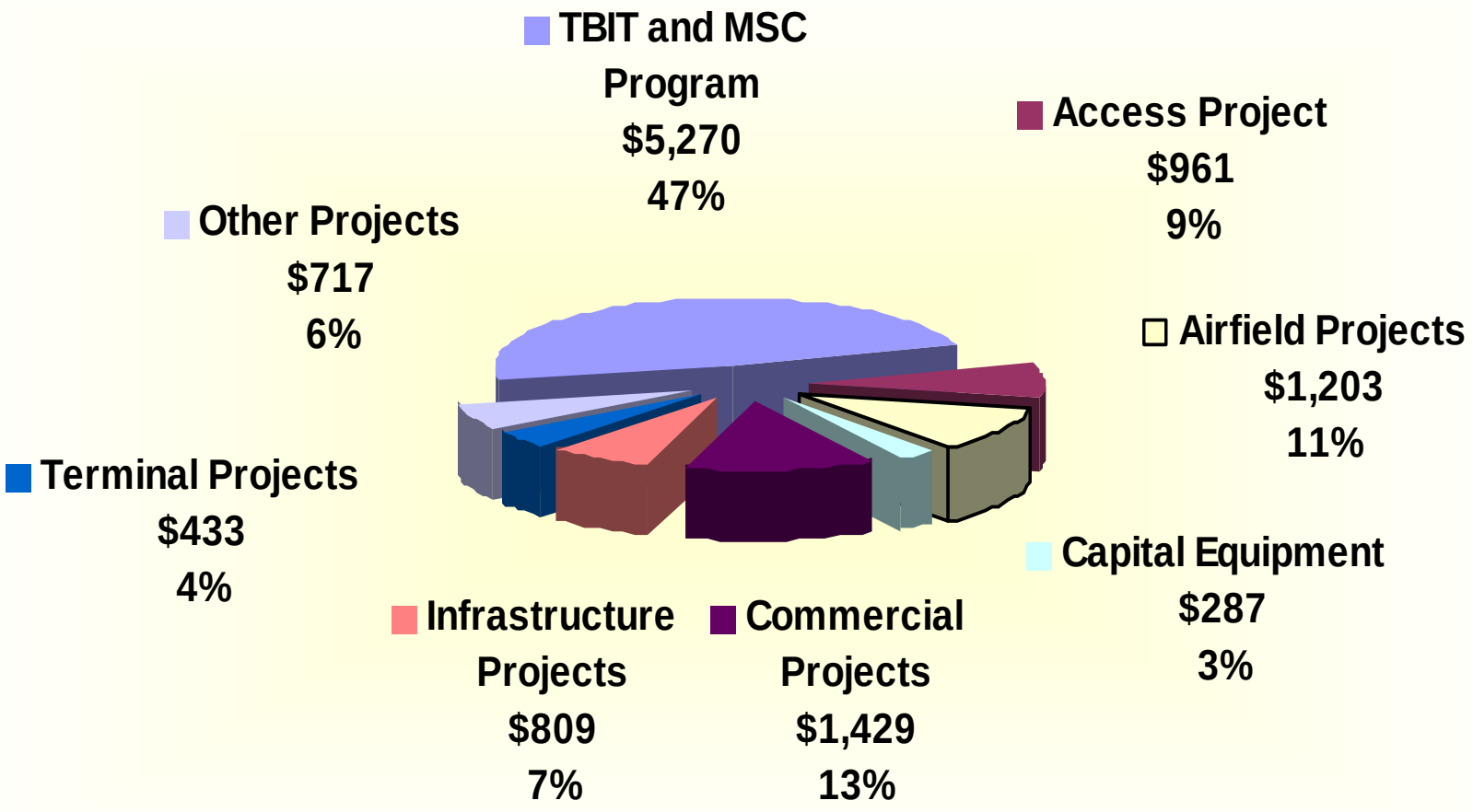
Total Program at LAX - $11,109



CIP Needs Assessment

Early Findings – By Category at LAX

Total Program at LAX - $11,109



LAX Development Program

- Crossfield Taxiway
- Tom Bradley International Terminal (TBIT) Gates
- Core Improvements at TBIT
- Midfield Satellite Concourse & Central Processor
- Central Utility Plant

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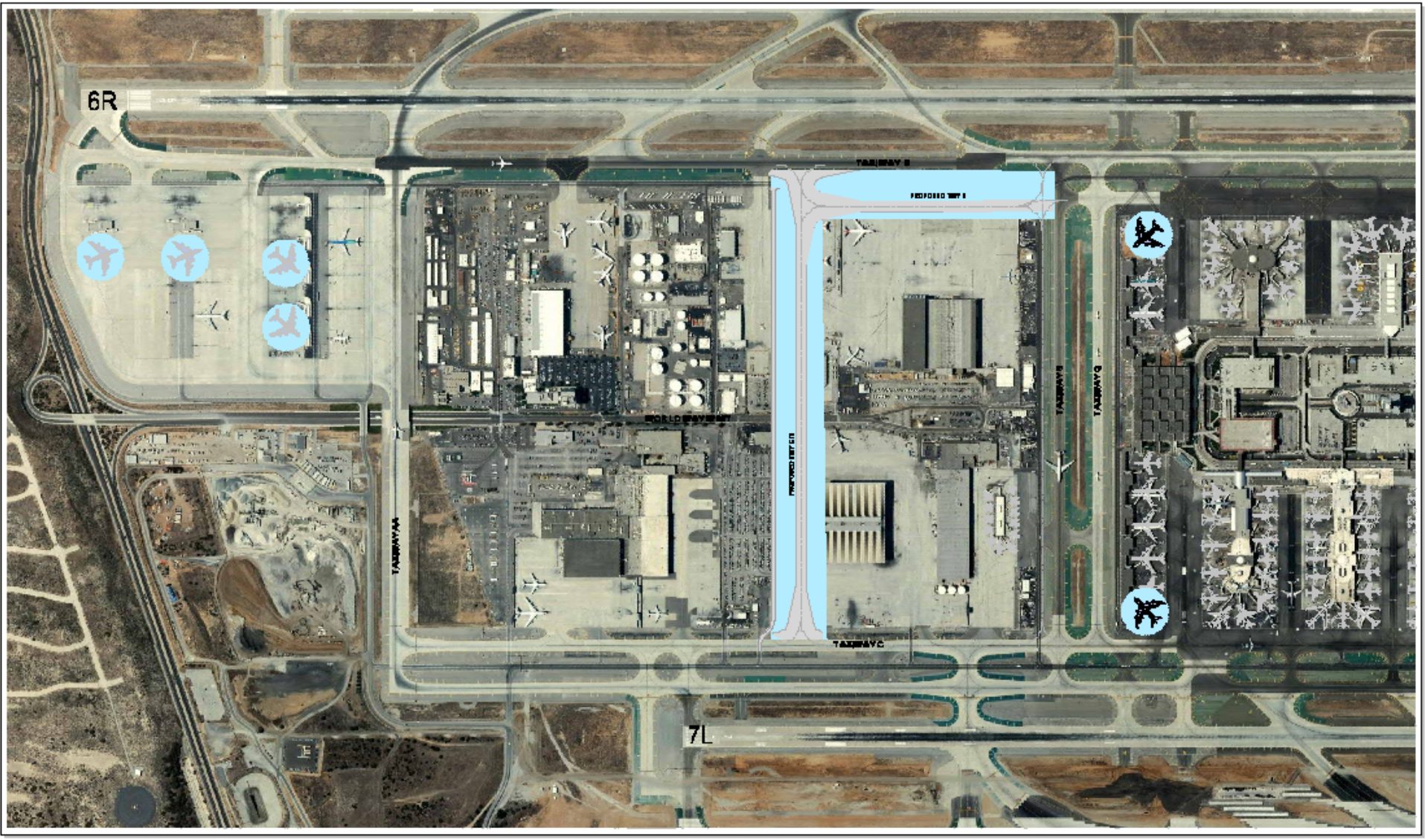
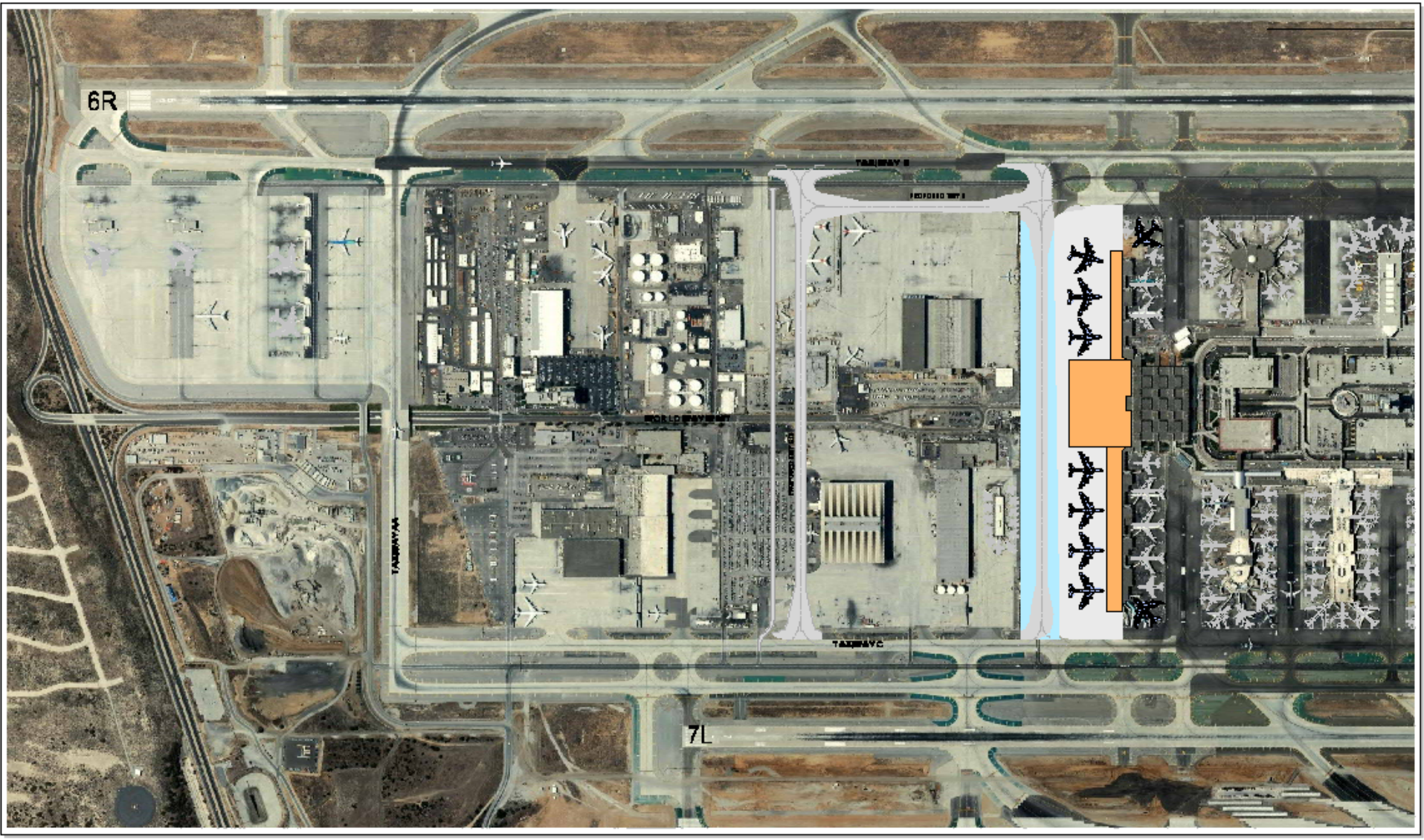
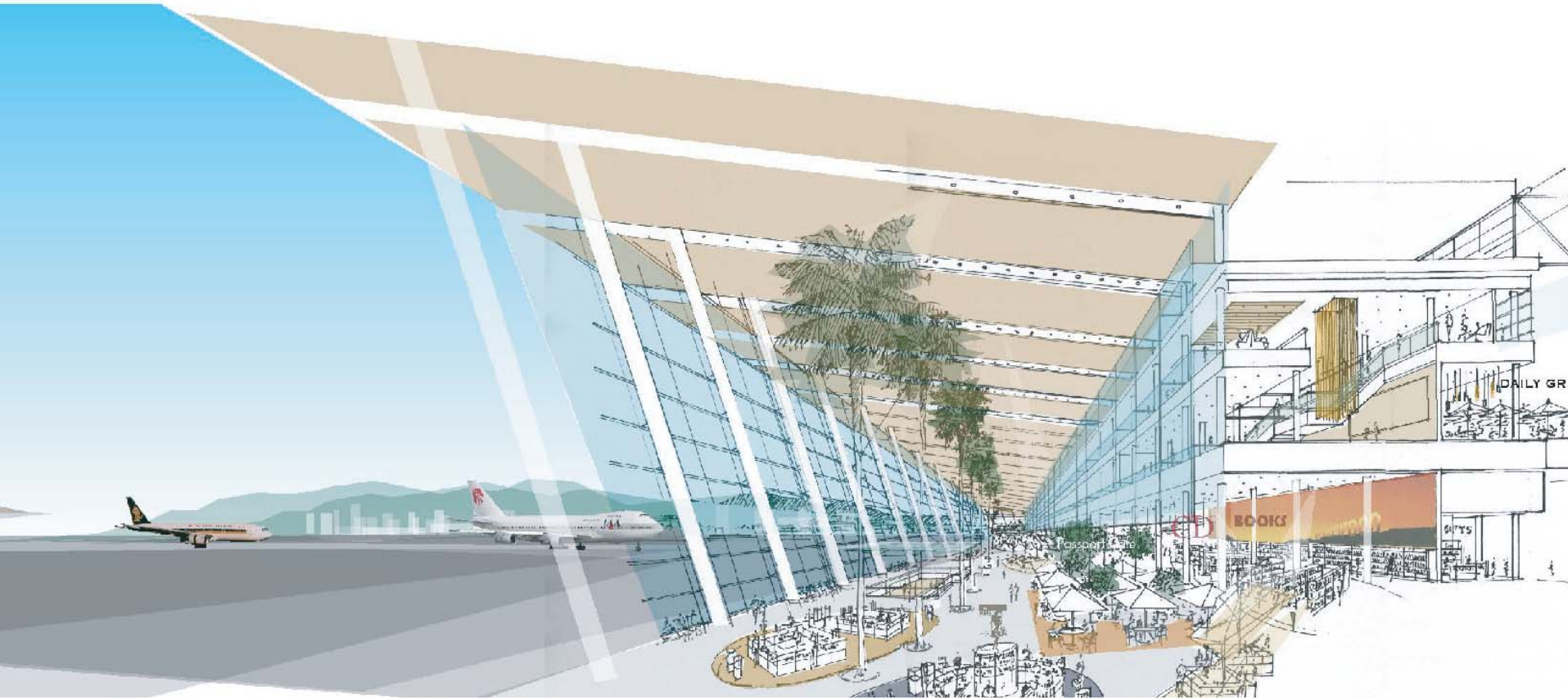
Crossfield Taxiway Project



TBIT New Large Aircraft Gates



TBIT Core Improvements



TBIT Improvements
Expanded Concessions Core Rendering

LAX DEVELOPMENT

CROSSFIELD TAXIWAY PROGRAM

Phasing Diagram

Runway 6R-24L
Taxiway E
Taxiway E13
AOA Access Gate
Taxiway E12
Taxiway E11
Taxilane D
US Airways Maintenance
AREA 2A
Relocated Airfield Electrical Vault
US Coast Guard
American Airlines Maintenance Shop
American Airlines Hangar (Formerly TWA)
AREA 1C
ARFF Station #80
Taxiway S
Taxiway Q
Terminal 3
TBIT Bus Gates
AREA 1A
AOA Access Post
Loading Dock
TBIT
Public Parking
Admin West
Taxiway AA
WORLD WAY WEST
To & From Construction Staging Areas
Antenna Array
Menzies Maintenance Shop
FAA Beacon & Tower
Tunnels 150'
TBIT Bus Gates
Training Building
LSG Sky Flight Kitchen
Gasoline Fuel Station
C.N.G. Facility
Chelsea Flight Kitchen
Natural Gas Fuel Station
Relocated ARFF Station #80
AREA 1B
American Airlines Hangar (High Bay)
American Airlines Hangar (Low Bay)
American Eagle Commuter
Terminal 4
AREA 1D
Continental Airlines Hangar
Future Parking Area
CM Area Offices and Parking Plant and Material Management
Continental Airlines Maintenance
AA Maintenance
Water Deluge
ASIG GSE
Fuel Vault
Taxiway C18
Taxiway C17
Taxiway C15
Taxiway U
Taxiway C14
Taxiway C13
Taxiway C
Taxiway C12
Taxiway T
Taxiway C11

This document is intended for **DRAFT** *purposes only*

2008				2009				2010				2011				2012				2013				2014				2015				2016				2017			
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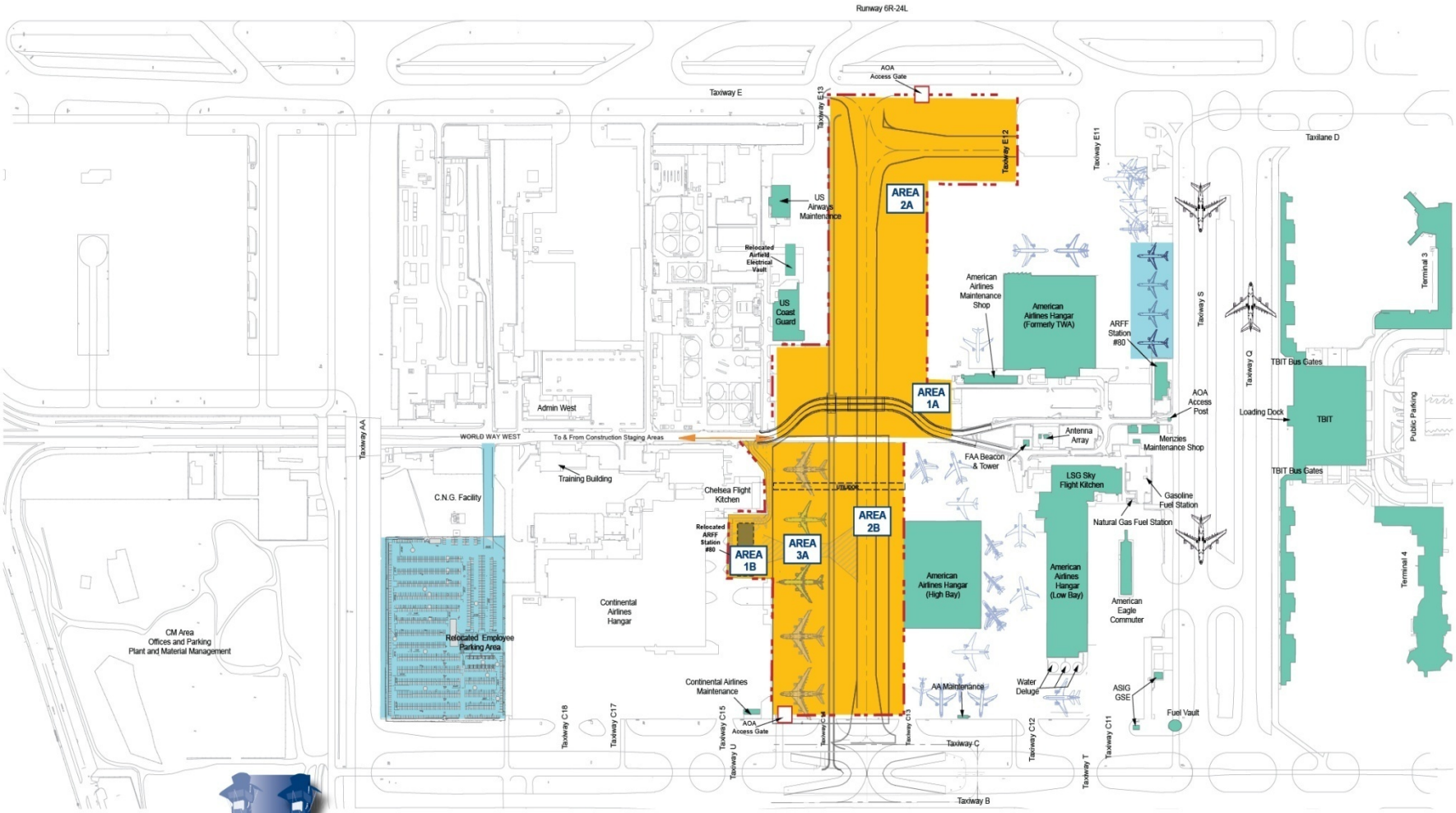
MAY - JUNE '09

LAX DEVELOPMENT

CROSSFIELD TAXIWAY PROGRAM

Phasing Diagram



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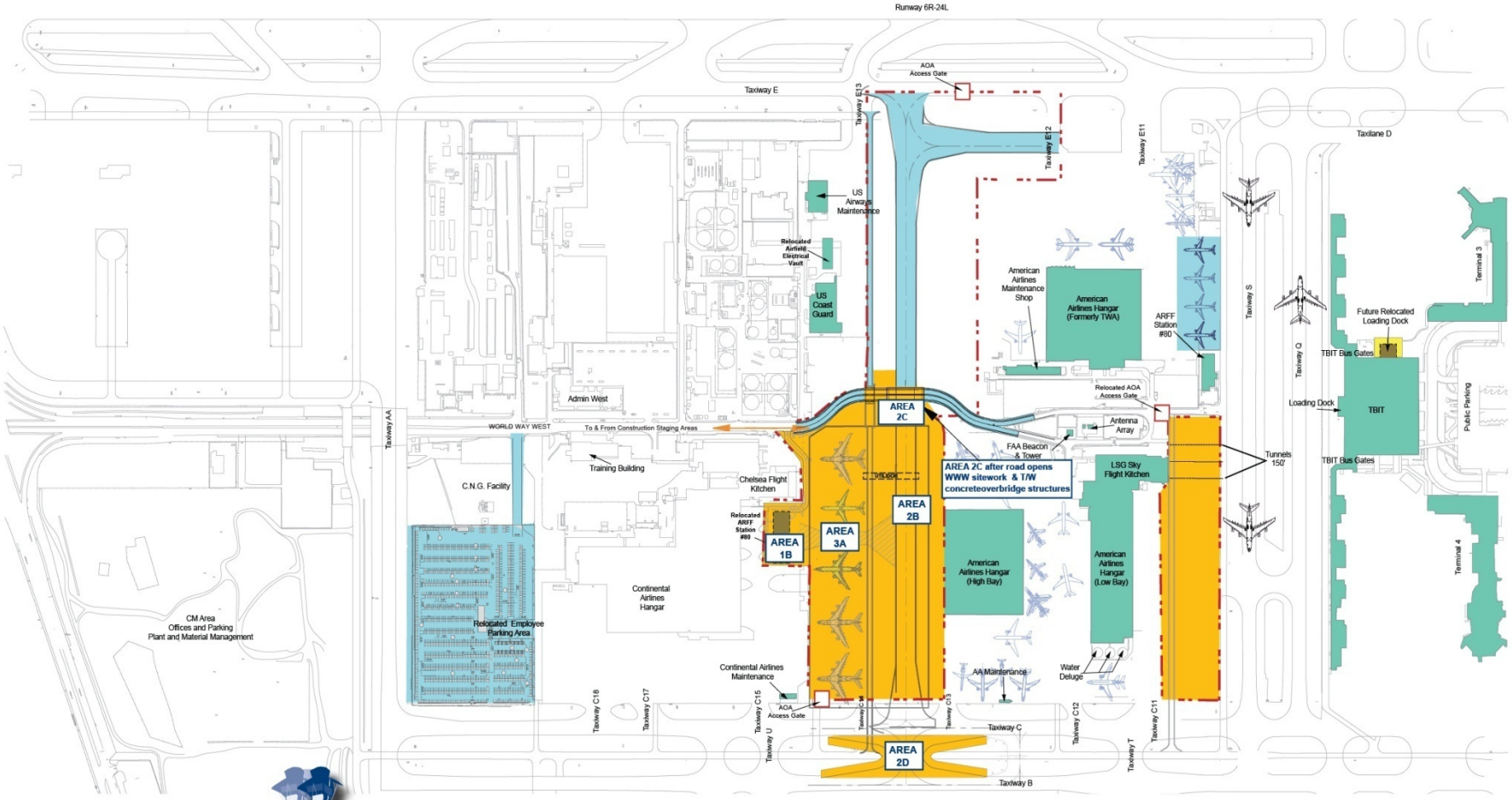
SEPTEMBER - OCTOBER '09

CROSSFIELD TAXIWAY / TBIT RECONFIGURATION PROGRAM

Phasing Diagram



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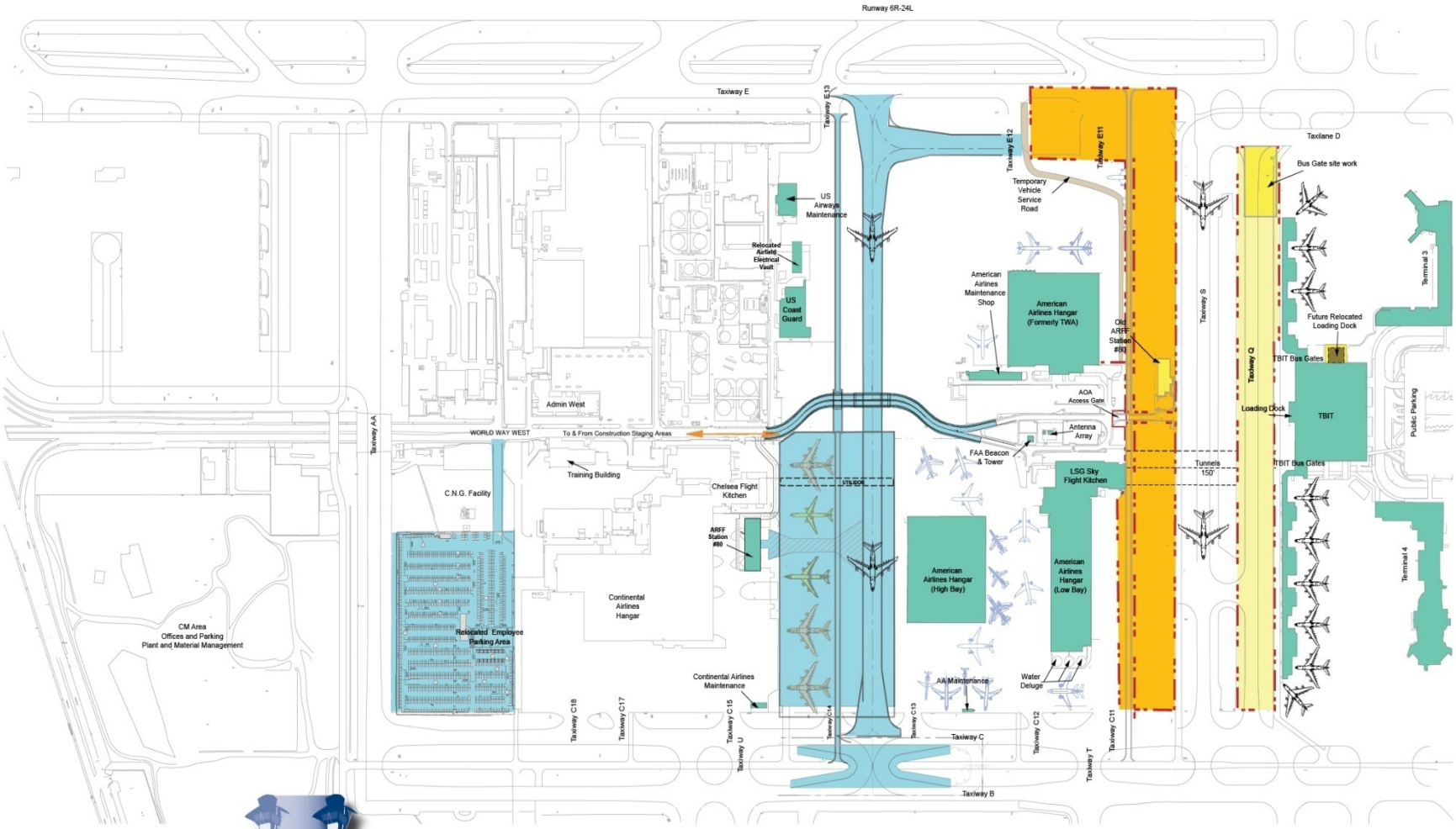
JANUARY - FEBRUARY '10

TBIT RECONFIGURATION PROGRAM

Phasing Diagram



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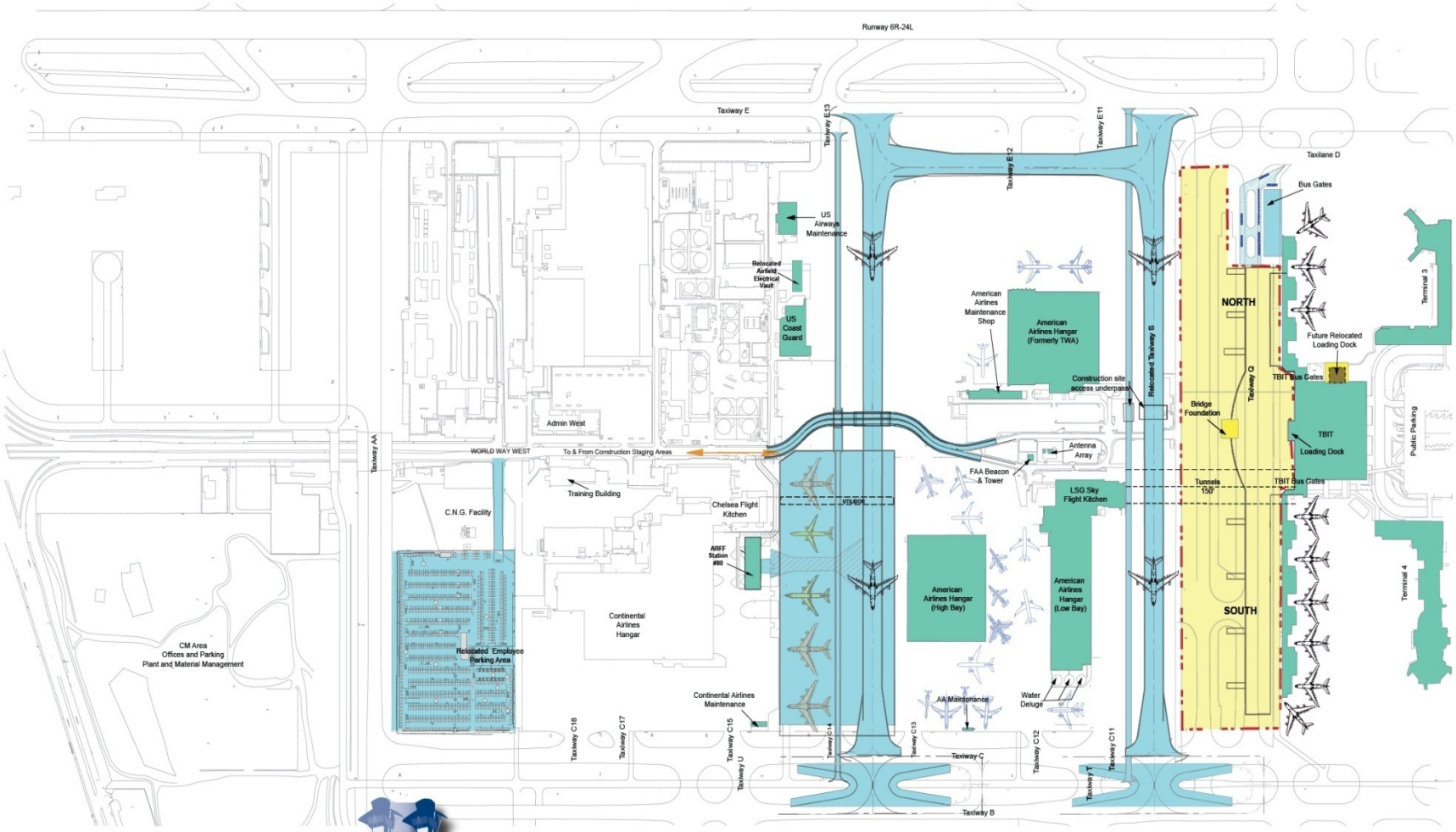
JUNE - JULY '10

TBIT RECONFIGURATION PROGRAM

Phasing Diagram



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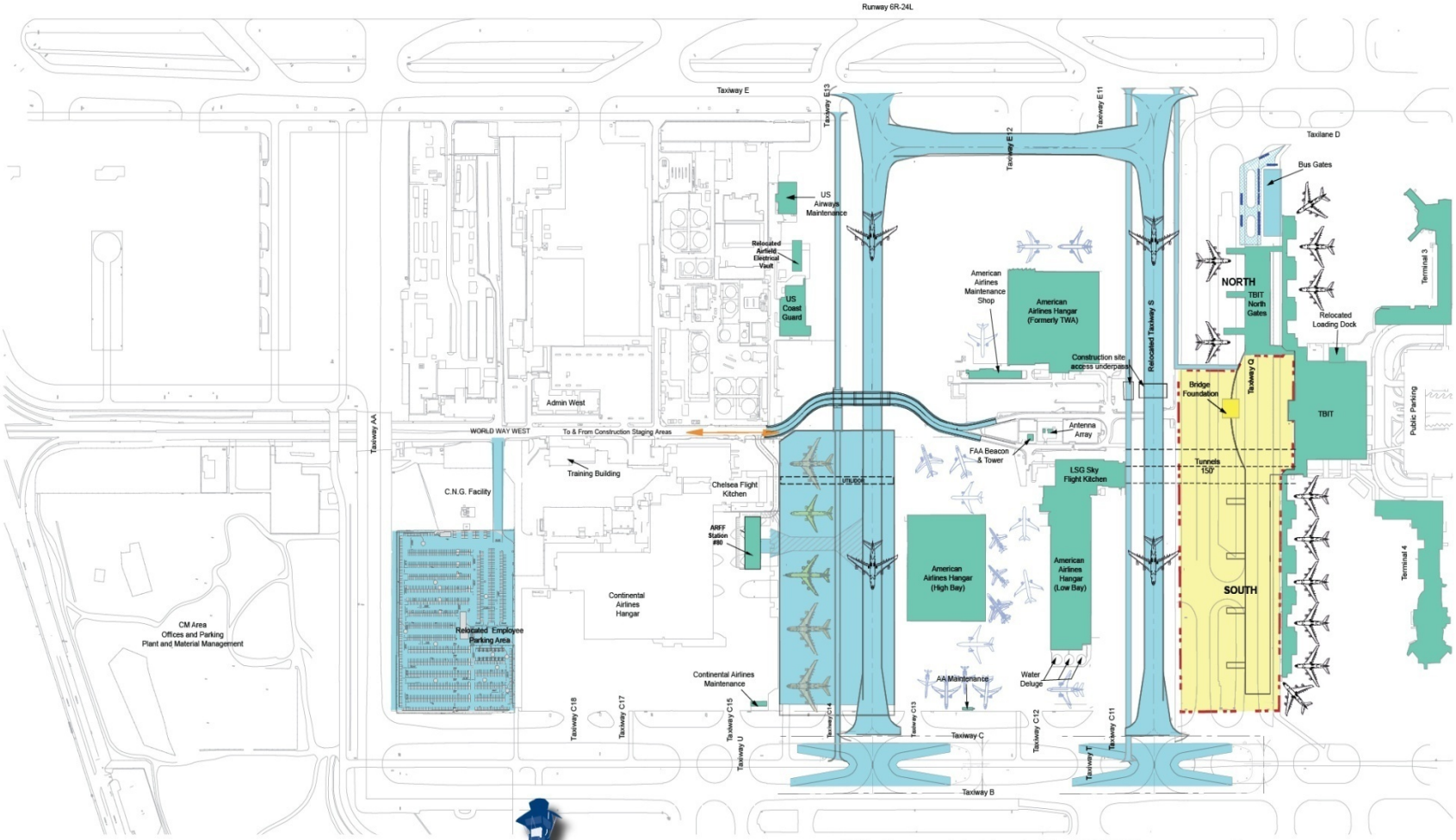
OCTOBER '10 - FEBRUARY '11

TBIT RECONFIGURATION PROGRAM

Phasing Diagram



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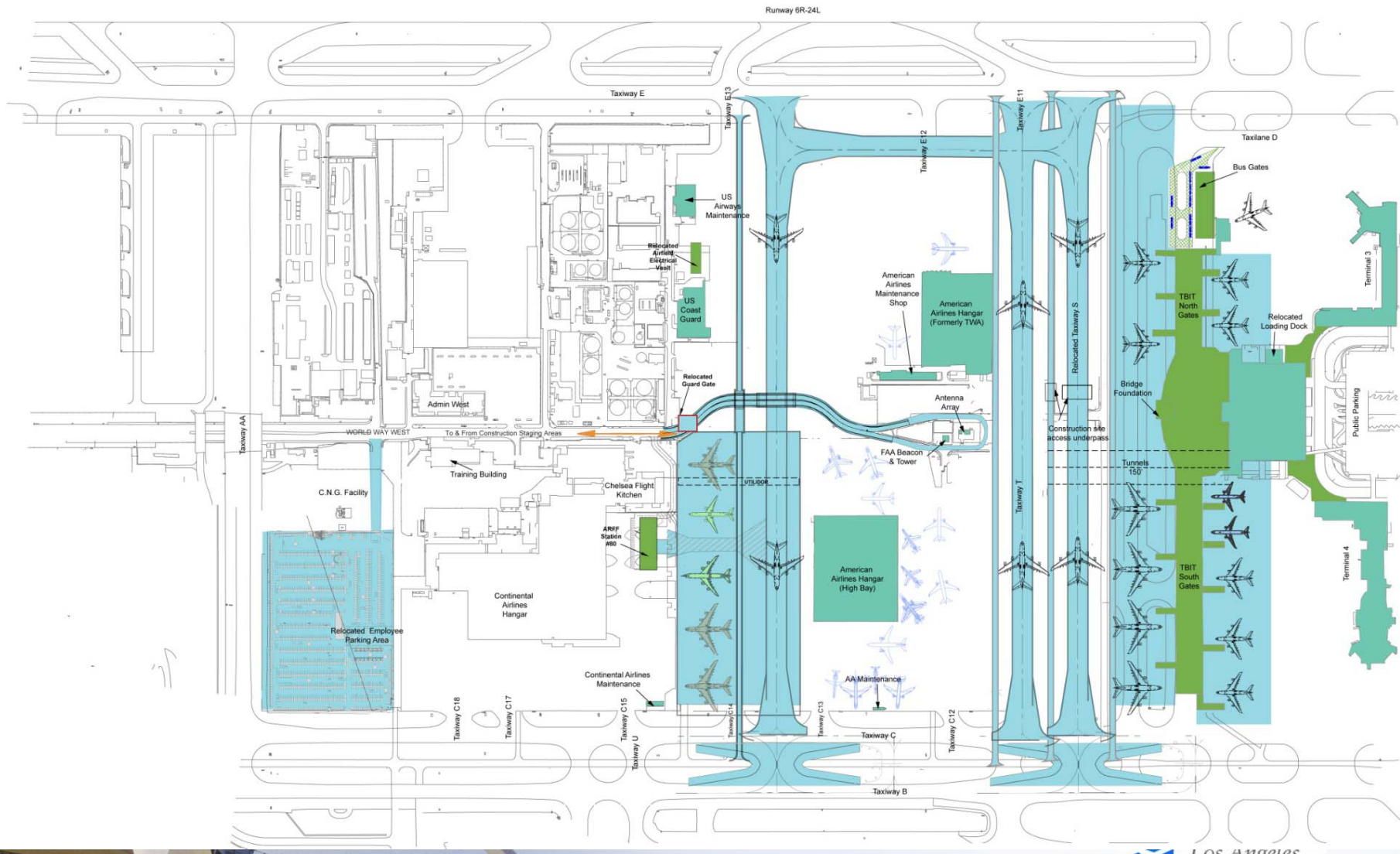
JANUARY '12

LAX DEVELOPMENT

TBIT RECONFIGURATION PROGRAM

Phasing Diagram



Replacement of Central Utility Plant

- 20 to 40 years old gas turbine, chiller, and boiler equipment
- Doesn't meet current cooling demand
  - 10,500 tons existing cooling capacity
  - 12,500 tons peak demand
- High operation and maintenance costs
- High NOx emission and high RECLAIM credit purchase annual cost

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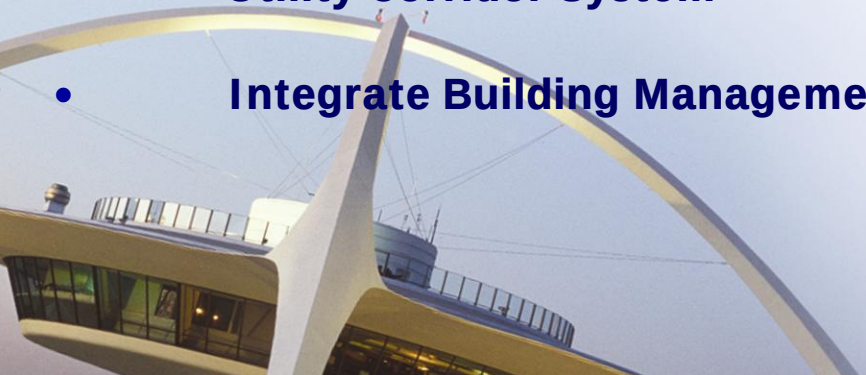
Summary of NEW CUP Program

- 20,000 ton chilled water plant
- 8 mw Cogeneration plant
- New Substation facility for all CUP Systems
- Upgrade Cooling Tower Plant - Upgrade cooling tower capacity to match selected chiller capacity
- Thermal Energy Storage (TES) - Generate chilled water at night and provide storage for daytime use
- Install new hot and chilled water line system and/or construct a CTA Utility Corridor System
- Integrate Building Management and Fire Life Safety Systems



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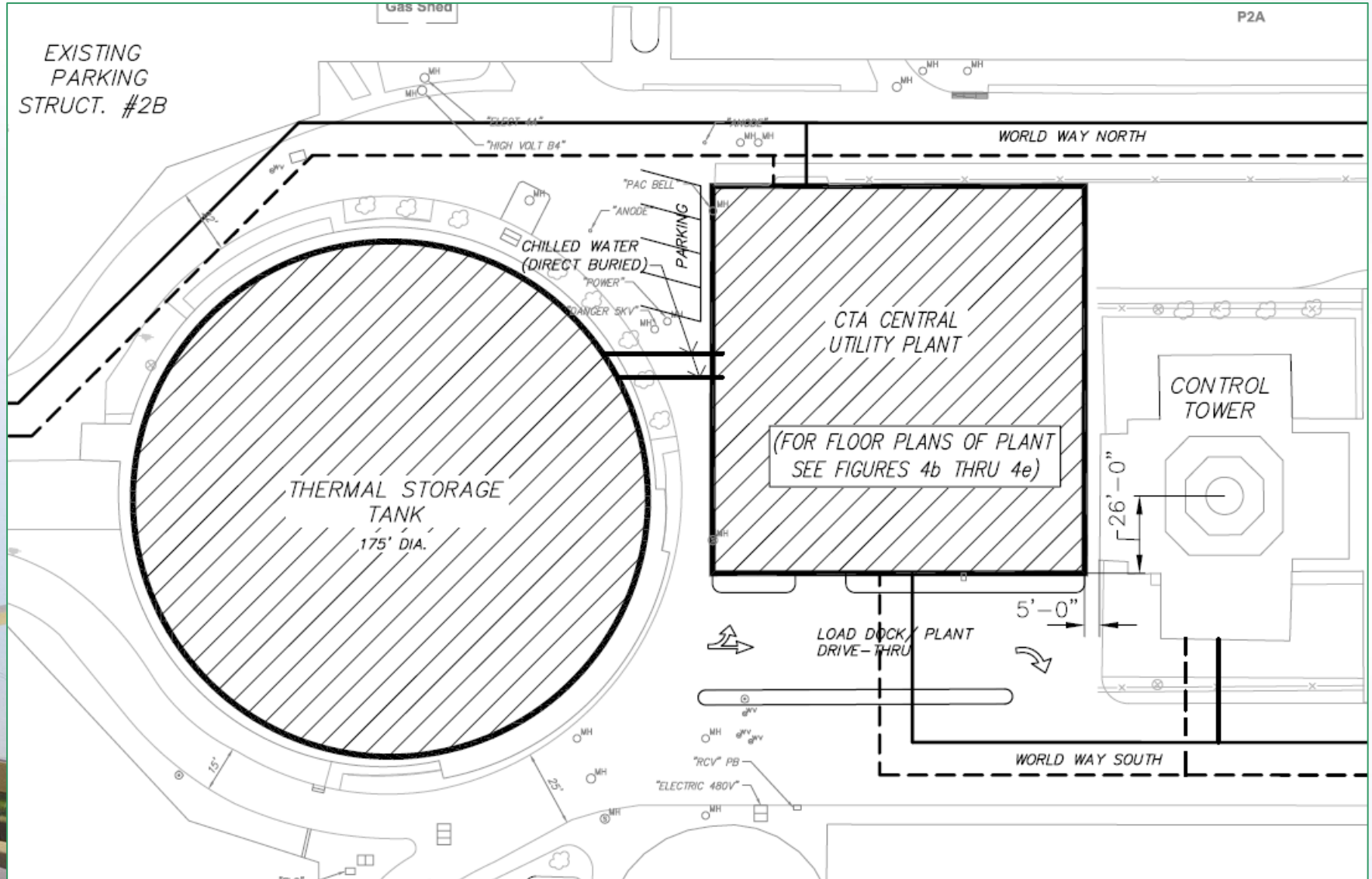
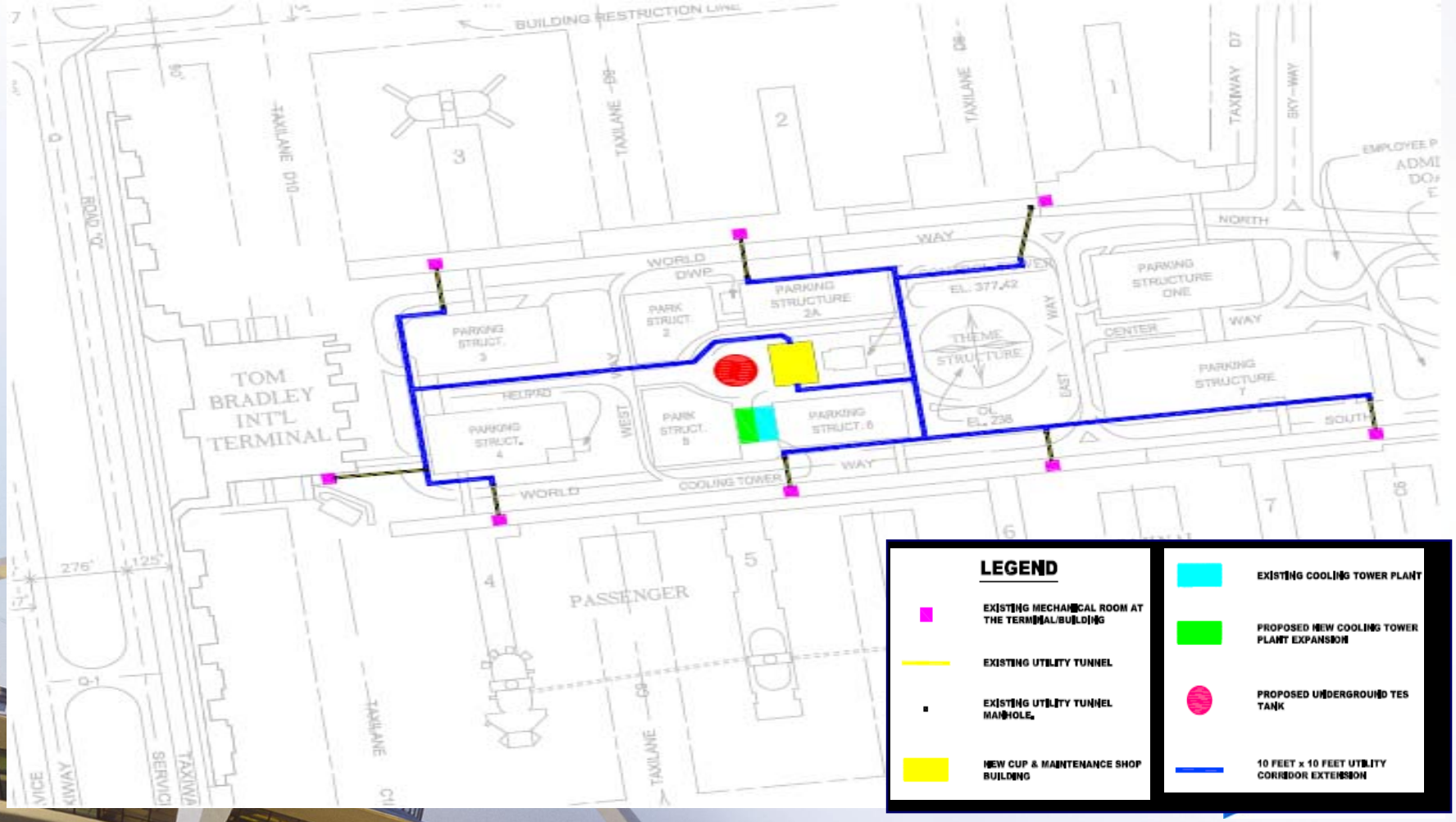
Proposed CUP Facilities

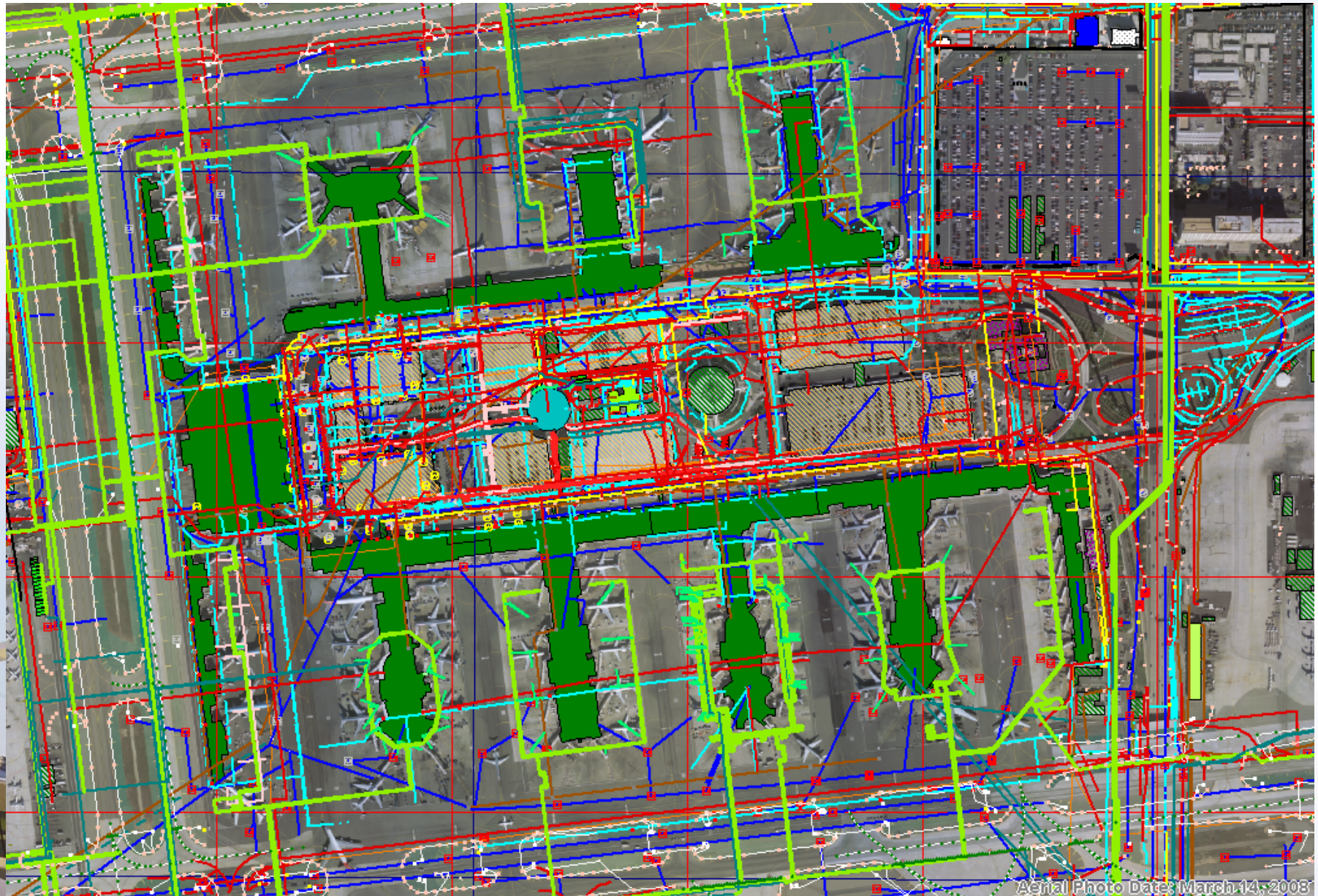


CTA CUP - Utility Corridor

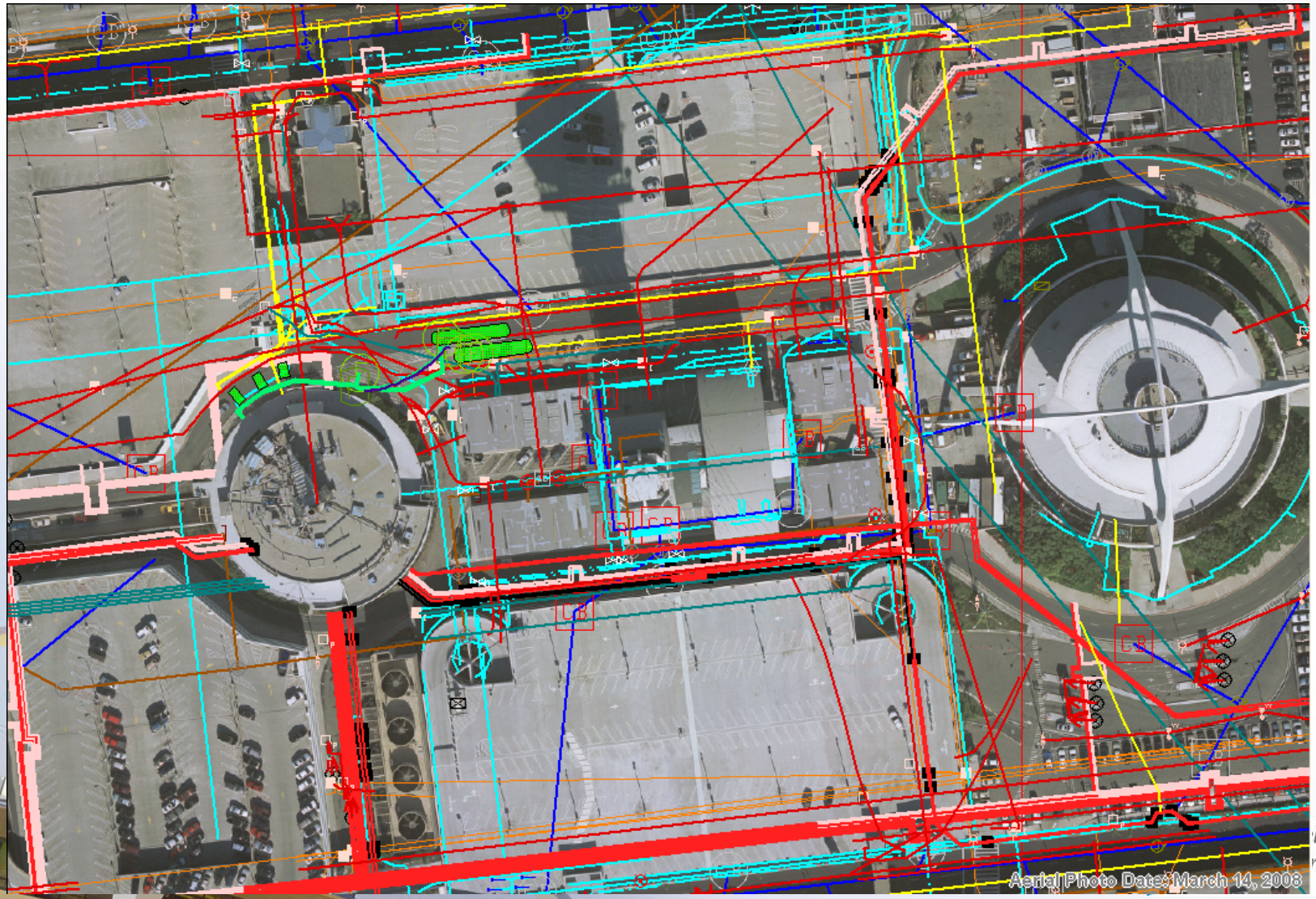
Utility Corridor Extension & Upgrade Concept



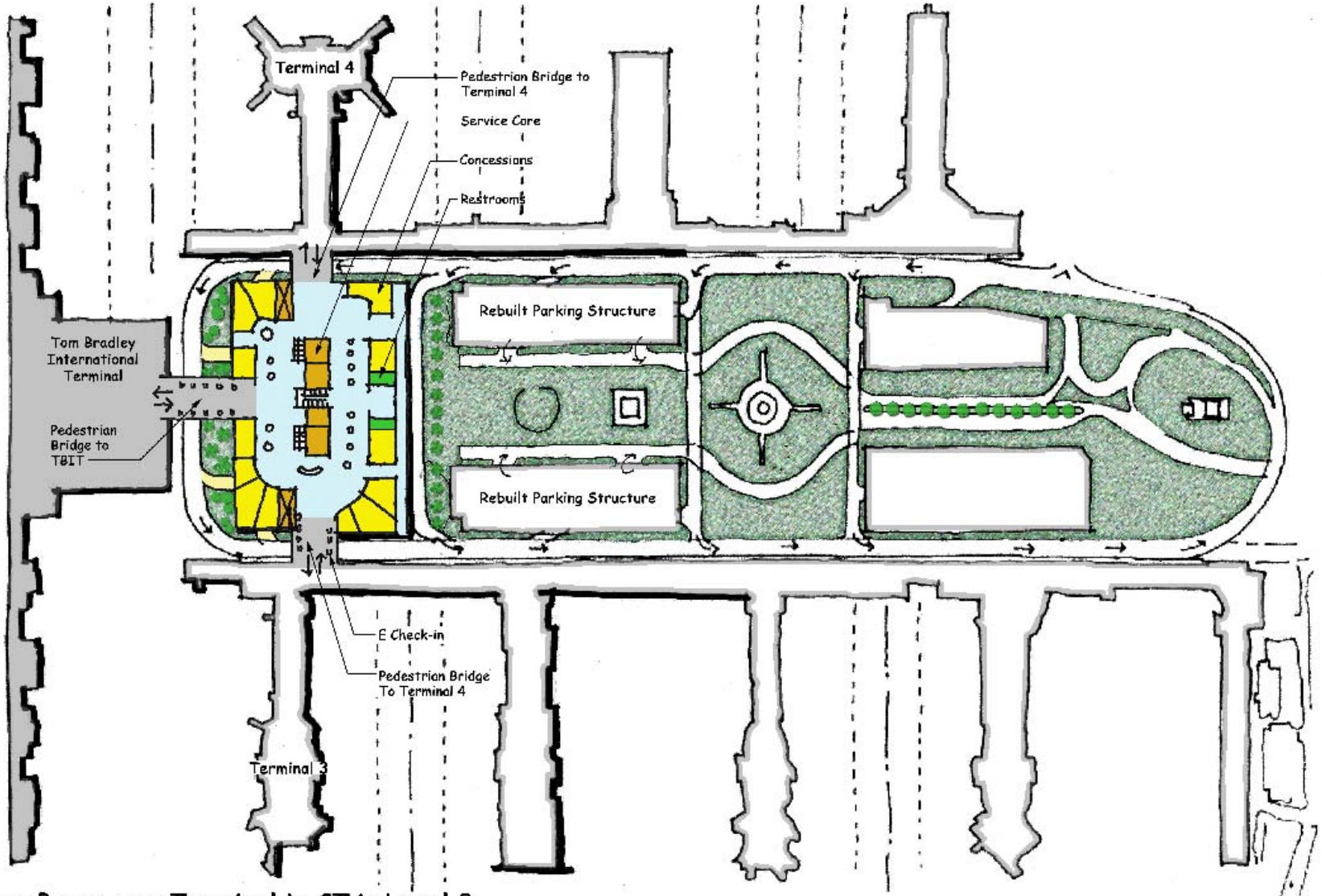
Existing CTA Utilities



Existing CUP Area Utilities



LAX Central Terminal Processor



New Passenger Terminal in CTA: Level 3

LAX Development Program Realities

- New generation aircraft gates must be operational January 2012
- Requiring overlapping development phases and expediting key aspects of the program
- The current airport operation must be maintained
- Traditional Design-Bid-Build delivery method cannot deliver on time for all projects
- “Business as Usual” will not achieve success

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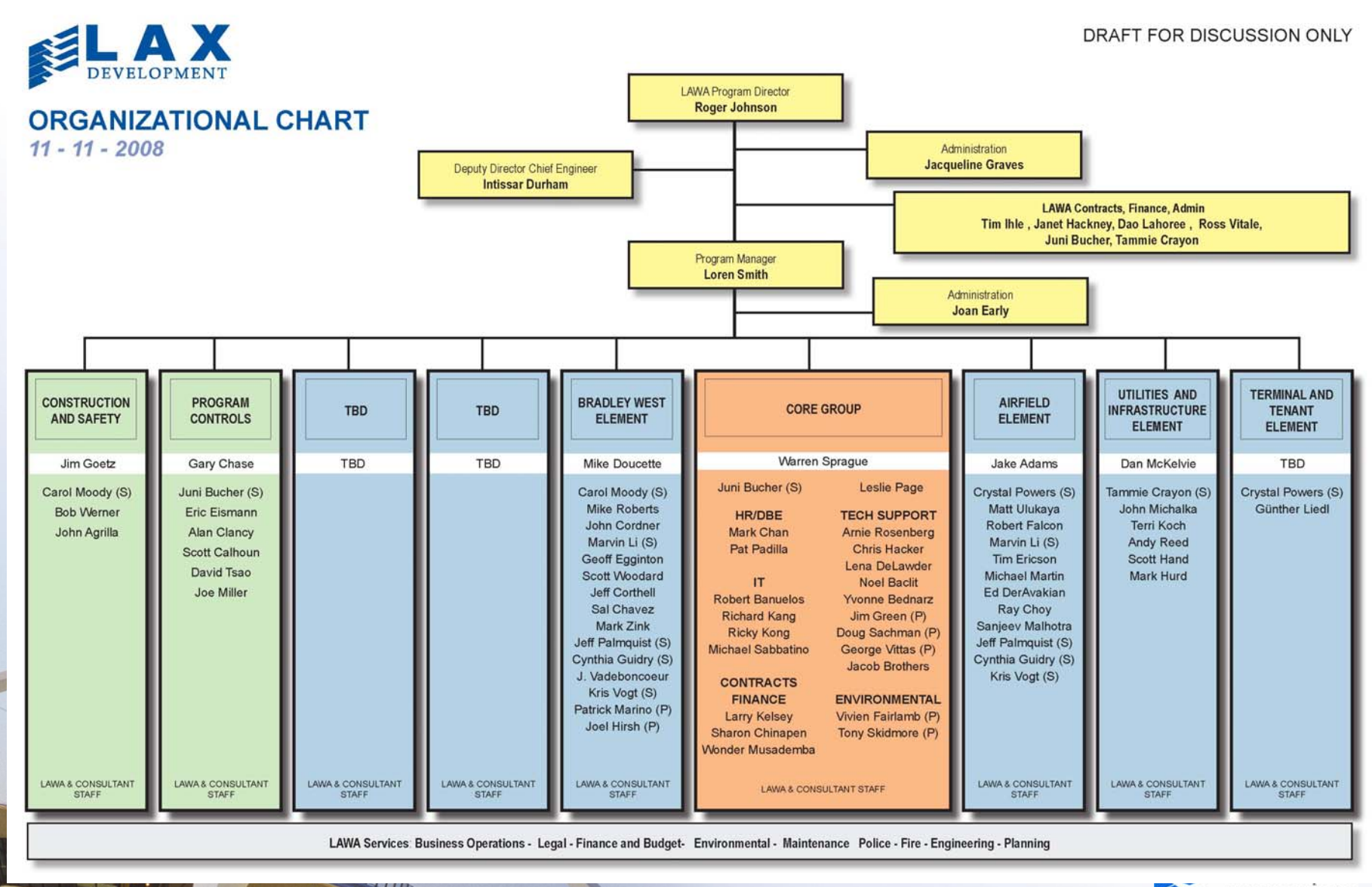
What's New- LAX Development Group



What's New- Alternate Delivery Methods

One method will not fit all

- **Different levels of complexity and size**
- **Different phasing and timing requirements**
- **Different user needs and changing requirements**

But all methods must

- **Meet schedule requirements**
- **Be managed to yield safe, efficient and cost effective results**
- **Engage local business**

CM at Risk a.k.a. CM/GC

- Owner gets benefit of Builder's early involvement
- CMAR becomes a collaborative member of the development team
- Owner maintains control of the design
- CMAR enhances "fast track" construction
- CMAR enhances flexibility

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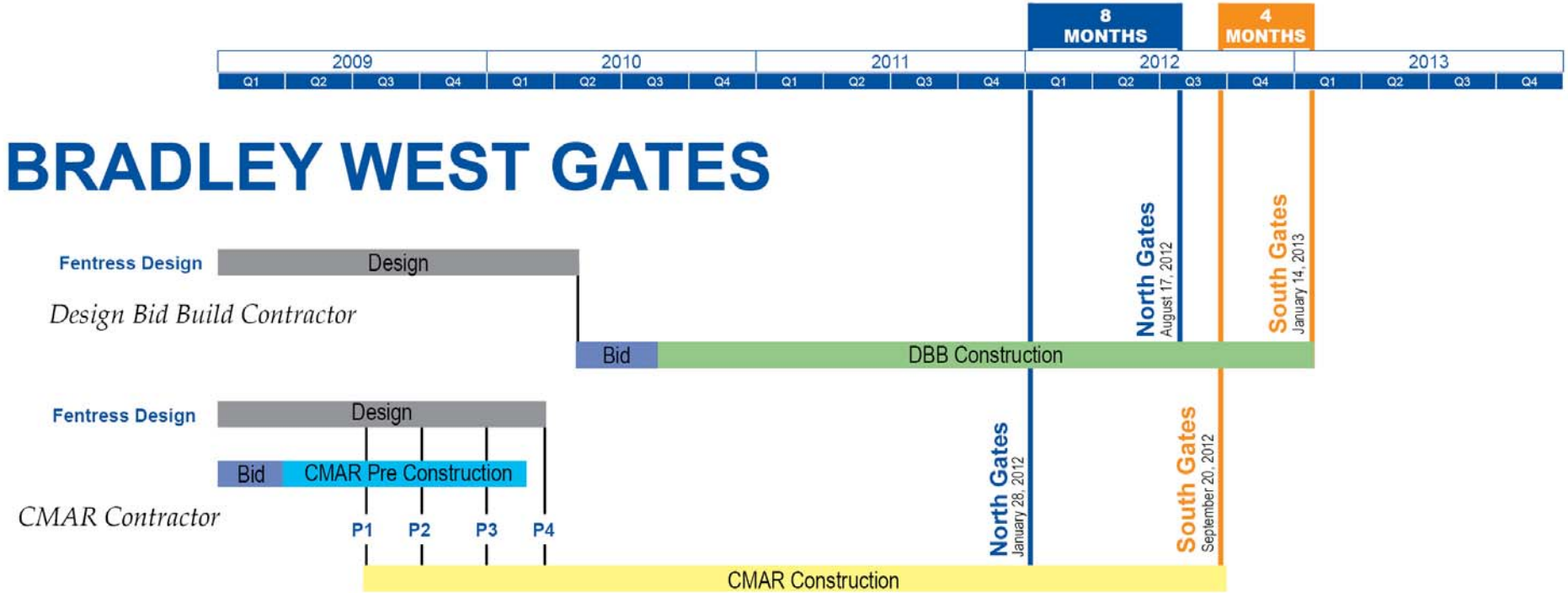
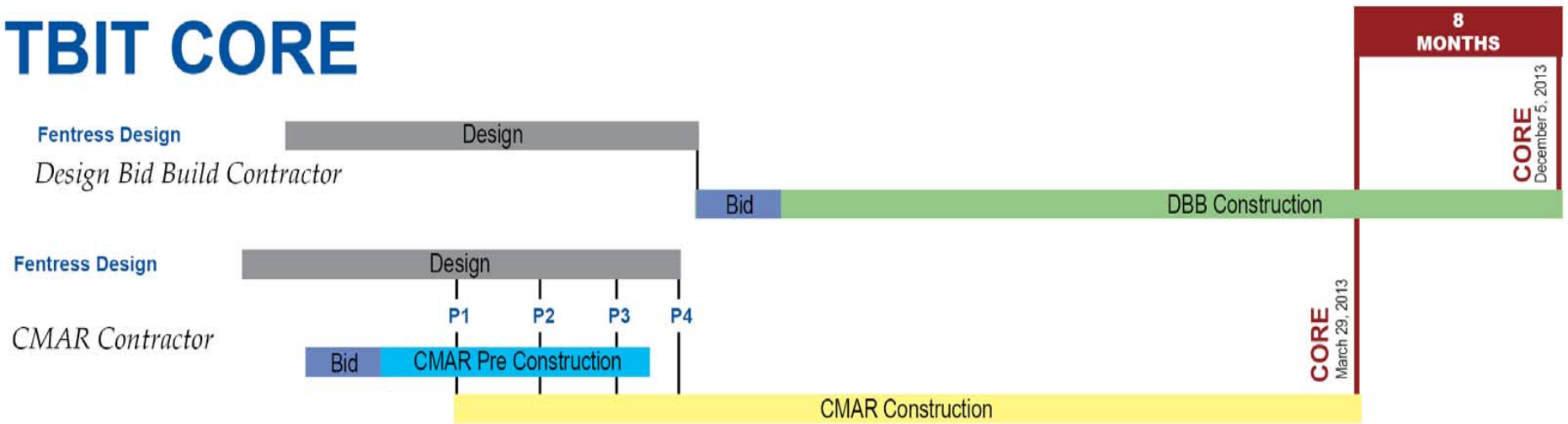
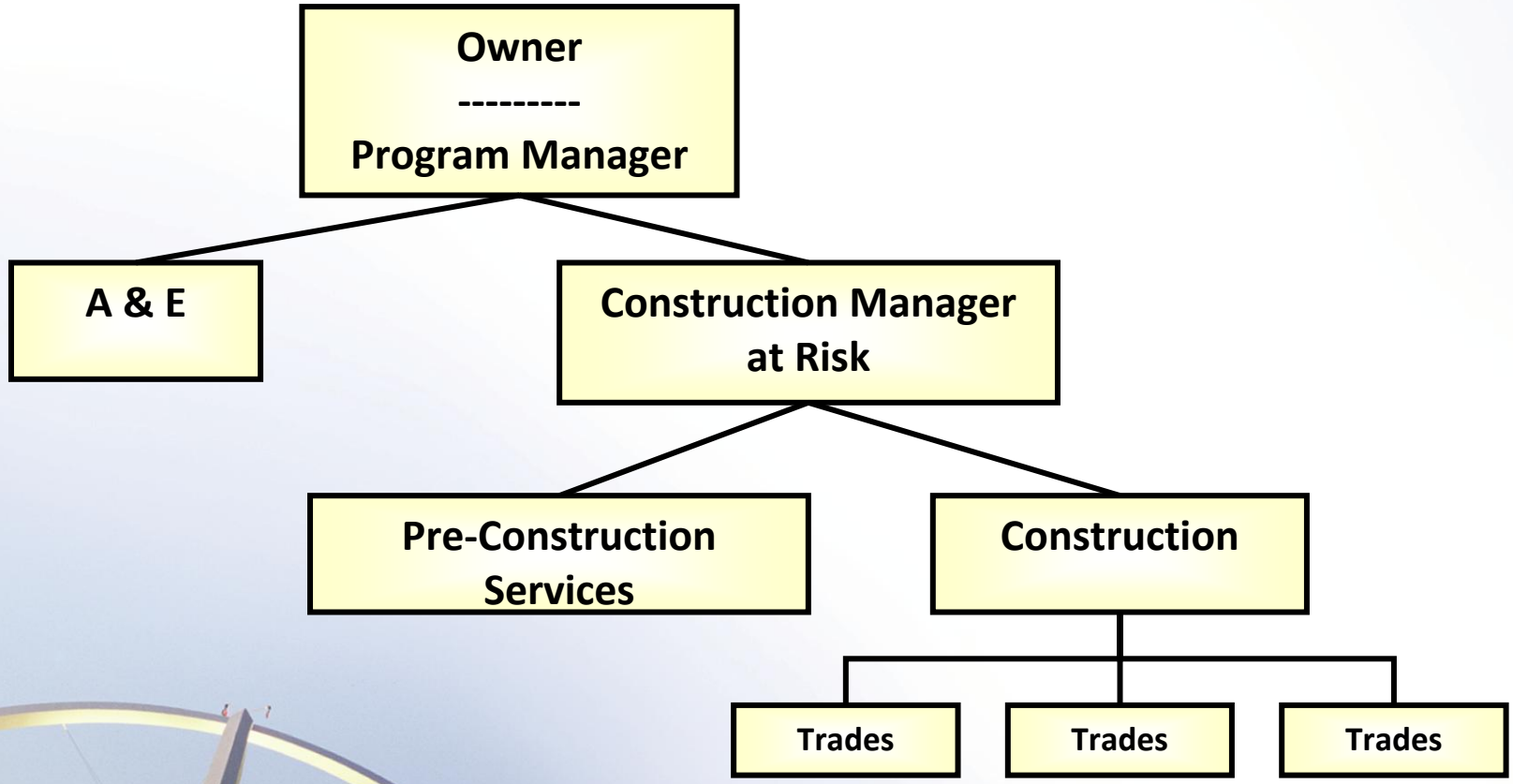
What's New- LAX Development Group





CM at Risk

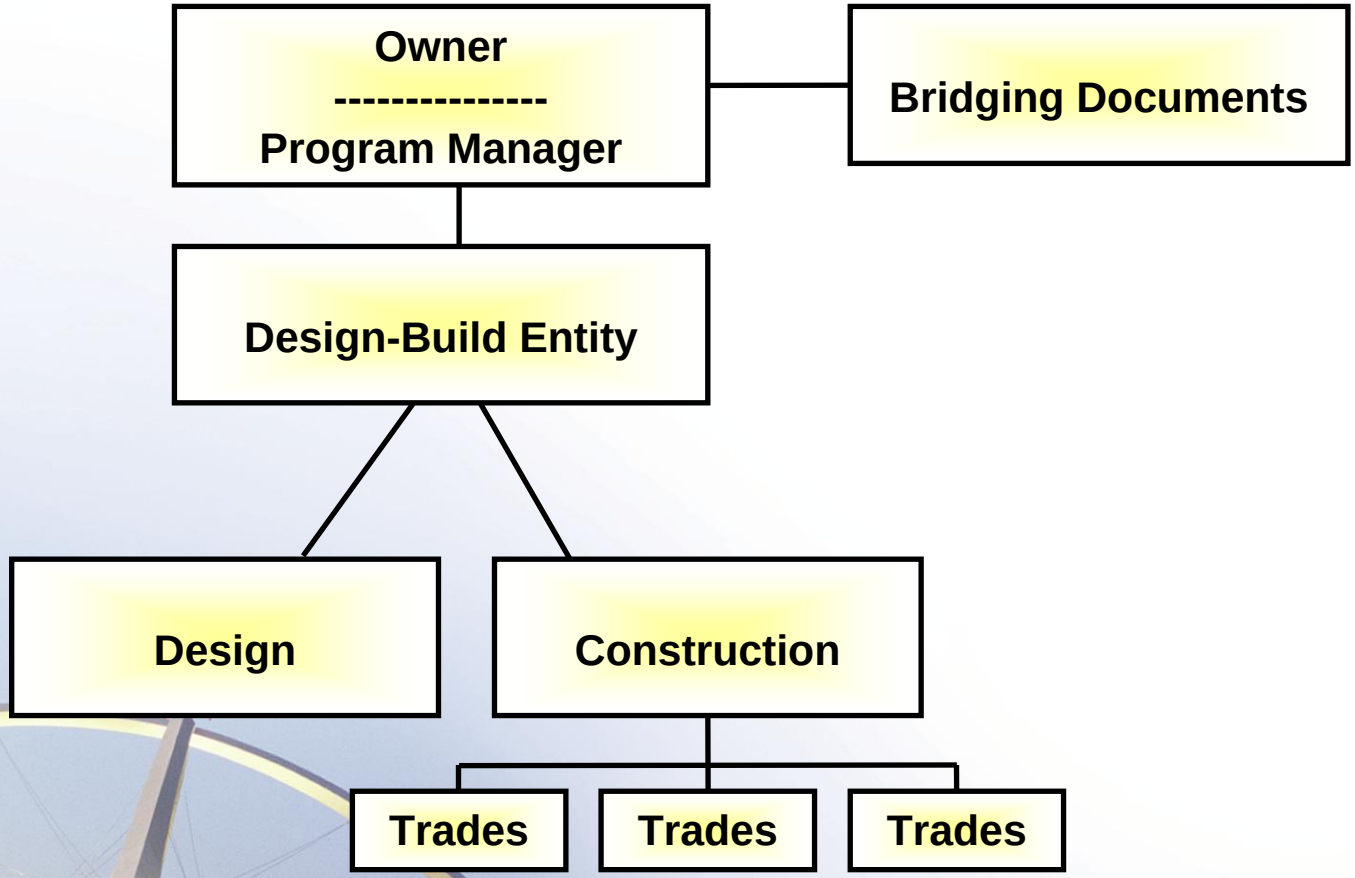

Owner

Program Manager
A & E
Construction Manager at Risk
Pre-Construction Services
Construction
Trades
Trades
Trades

Design - Build

- Single entity responsible for design and construction
- Generally the fastest project delivery method
- At some point requires owner to relinquish direct control of design
- Works well where performance expectations can be clearly defined

Design - Build



Informational Resources

For more information, please visit our website:

http://www.lawa.org

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