



Design and Construction Handbook

November 2012

(updated December 2013 – highlighted updated October 2014 – contact names)







TABLE OF CONTENTS

Introduction / Process Overview

- All Projects use this Handbook
- Planning
- Design
- Construction
- Project Acceptance & Closeout

LAX Campus Vision (added April 6, 2013)

QuickLinks

- General
 - Important Phone Numbers and Contact Information
 - Tenant Project Approval Process
 - Project Approval Flow Charts
- Planning
 - 5% Concept Review Checklist
- Design
 - Notes to the Design Team
 - Design Submittals Details
 - Permitting Agencies and the FAA
- Construction
 - Notes to the Construction Team
 - Pre-Construction Conference Agenda
 - CALM (LAX Only)
 - Contractor Access Requests (CAR)
 - Submittals, During Construction
 - Safety Manual
 - Hot Taps and Pipe Connections
 - Welding Cutting Permit
 - Shutdown Control Center (LAX Only)
 - To Request a Change or Exception
 - Project Acceptance Checklist



- Additional Information
 - ADA Compliance
 - CEQA NEPA Reviews
 - Sustainability, Cal Green, and LEED
 - Glossary and Acronyms
 - Summary of Changes to this Handbook
 - Procedures for Updating Handbook
 - Tenant Signage Standards
 - o LAX
 - o ONT
 - o VNY
 - Terminal Wayfinding Standards (LAX) (added August 1, 2013)
 - Van Nuys (VNY) Operations Standard Conditions
 - Palmdale (PMD)

LAWA Standards for Construction Contracts

00 00 00 Procurement and Contracting Requirements

01 00 00 General Requirements

02 00 00 Existing Conditions

Guide Specifications

Sections 03 -48

Additional References



Introduction – All Projects are required to use this Handbook.

This includes LAWA-initiated Capital Improvement Projects and Tenant-initiated projects including but not limited to:

- Buildings / Terminals
- Airside Projects (secure areas outside the terminals)
- Landside Projects (generally in areas with lower security)

Four Airports are owned and operated by **Los Angeles World Airports (LAWA)**, a proprietary department of the City of Los Angeles. This includes: Los Angeles International Airport (LAX), LA/Ontario International (ONT), Van Nuys general aviation (VNY) and the former Palmdale Airport.

Extremely Busy. LAX is one of the sixth busiest airports in the world and third busiest in the USA.

- ✓ In 2011, LAX served more than 61 million passengers,
 - ✓ Processed nearly 2 million tons of air cargo, and
 - ✓ Handled over 600,000 aircraft operations (landings and takeoffs).

In the midst of airport operations, a \$4 billion capital improvement program is underway at LAX. The program's centerpiece is the \$1.5-billion Bradley West Project with new gates for latest-generation aircraft. There are also several major airfield and facility projects, including a new Central Utility Plant, new taxiways and taxi lanes, and multi-million-dollar renovations – undertaken by both LAWA and the airlines – to our other terminals.

The purpose of the Design and Construction Handbook is to provide a roadmap for your project as you guide its way through Planning, Design, Construction, and Project Closeout / Acceptance.

We encourage you and all members of your team to become familiar with the contents of this brief introduction and process overview as we highlight major considerations for the design and construction activities.

The issues highlighted in this Handbook are **important to the Airport** and help you navigate the regulatory approvals and the inspection processes. We have written this Handbook to help you meet our expectations for:

- Passenger and employee safety
- Limiting impact to airport operations
- Adding value to the overall LAWA service environment

Please Note: As a roadmap and reference guide, we cannot anticipate all of the requirements your project may encounter. You are still responsible to check the entitlements related to your project; handle all insurance, bonding, and badging requirements; and attend to other specific needs related to your business and processes.

Codes and Regulations: Construction or improvement projects at all LAWA sites **must comply** with all applicable federal, state, and local codes and regulations such as those of the Federal Aviation Administration (FAA), Transportation Security Administration (TSA), the State of California, the County of Los Angeles, the City of Los Angeles, the City of Ontario, **and** other applicable standards.



As outlined in the Table of Contents, this Handbook provides the following:

- A brief overview of the life of a typical project
- QuickLinks to commonly requested information
- LAWA Standards or General Conditions (CSI-formatted) for working at a LAWA site
 - Please Note: **LAWA initiated projects** have a more extensive set of requirements that are found in project-specific Request for Proposals / Request for Bids.
- Technical Specifications (CSI-formatted; primarily of use during the Design phase of your project)

Following these LAWA guidelines and standards will help your project to move more easily through the planning, design, and construction approval processes. **If you find a better way** to accomplish your project's objectives, please identify those changes to your BRM or LAWA Project Manager (see *QuickLinks: To Request a Change or Exception*).

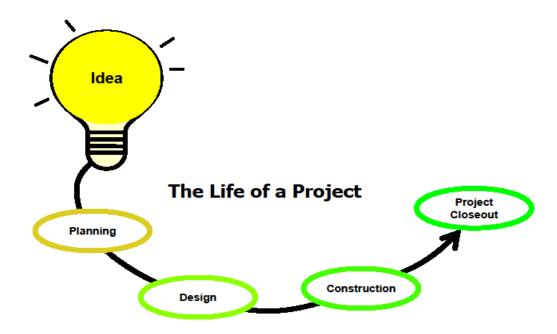
CAUTION. Do not underestimate the challenges of working in a highly complex airport environment.

- Your project may experience a complex entitlement and permitting process.
- LAWA is not a self-permitting agency.
 - Your design may be reviewed or have a "Plan Check" with the applicable jurisdictional agencies. Such agencies may include, but are not limited to: FAA, Los Angeles County Department of Health Services, City of Los Angeles and/or Ontario Permitting Agencies (Planning, Public Works, Building and Safety, Water and Power), South Coast Air Quality Management District, etc. each with separate processes and applications.
 - Entitlements may be required on a planning or environmental level.
- For a Construction Notice to Proceed (NTP) on a typical tenant project
 - Your project must be reviewed by LAWA for compliance with your Lease or other Agreement.
 - Your project must be reviewed by LAWA for compliance with this Handbook.
- Your project may require a Certified Access Specialist (CASP) to comply with Americans with Disabilities Act (ADA) Compliance in California (see QuickLinks: ADA Compliance).
- Sustainability requirements must be met. California and the City of Los Angeles have adopted the California Green Building Code. This replaces our adherence to Leadership in Energy and Environmental Design (LEED) requirements (see QuickLinks: Sustainability, Cal Green, and LEED – under development).
- FAA reviews and approvals may be required (see QuickLinks: Permitting Agencies and the FAA).
- All Retail Food Facilities are required to submit drawings to Los Angeles County, Environmental Health Department. The Permittee shall fulfill all other requirements of the: Certified Unified Program Agency (CUPA); the State Water Resources Control Board (SWRCB); the Air Quality Management District (AQMD); and the local City ordinances as cited in the City's Municipal Code.

It is important that your project is developed, constructed, and operated in the best interest of the public we mutually serve at each of LAWA's four airports. **Please recognize this may not be easy.** Protecting and safeguarding the 24x7 operations of one of the busiest commercial airports in the world (LAX) and one of the busiest general aviation airports in the world (VNY), as well as at Ontario and Palmdale, requires us to work with you as you develop your project.



PROCESS OVERVIEW



During the Planning & Design stages, LAWA requires at least two reviews of your project.

- 5% Concept Review (this is mandatory for all small, medium, and large projects)
- 30% Design Progress Review
- 60% Design Progress Review
- 90% Design Progress Review (code review)
- 100% Design (Construction Document) Review (this is mandatory for all small, medium, and large projects)

The review process works to keep the size of the project in perspective by adapting a reasonable level of effort and oversight that is appropriate for the scope of the project.

The next few pages will walk you through all phases in the Life of a Project.



1.0 PLANNING

Required Review. All potential projects must be presented to LAWA at the **5% Concept Review**. At the concept review stage, the idea is discussed with various LAWA divisions to give your project the visibility and feedback it deserves at this early stage.

During these discussions, we will be able to tell what level of detail and which reviews will likely be required for your project. Obviously, projects with a budget of roughly \$100 million or more will require review and coordination with many more people and offices than a project with a budget of around \$10,000.

If approved, your project will be placed on our construction coordination calendar.

Building Codes. When your project is in an existing facility, please recognize that your project **may** need to include upgrades to bring the affected areas up to the current relevant building codes. For additional information, see *QuickLinks: Notes to Design Team* and *Permitting Agencies and the FAA*.

Maintenance Projects. Maintenance Projects are not subject to this process. If a project requires any type of Permit before work can proceed, it is **NOT** considered a maintenance project.

Consult with your Business Relations Manager to get started on maintenance projects.

Getting Started with the Concept Request Form. We ask you to fill out the Concept Request Form to give us a basic understanding of your initiative. This is submitted along with appropriate attachments to LAWA at: projectapprovals@lawa.org. We ask you to fill this out as completely as possible to allow us to properly consider your proposal and to notify LAWA divisions about your project. Representatives from each of the divisions form the **Project Approval Team (PAT)**. This representation includes: Commercial Development; Capital Programming, Planning & Engineering; Airport Development; Engineering & Facilities Management, Maintenance Services, Information Technology, and Airport Operations.

For the 5% Concept Review Checklist, see QuickLinks: 5% Concept Review Checklist.

Environmental Reviews. Please recognize that your project may require more extensive environmental considerations. Please see *QuickLinks: CEQA – NEPA Reviews* and check with your LAWA Project Manager for more information.

Low Impact Development (LID) & Standard Urban Stormwater Mitigation Plan (SUSMP). The LID Ordinance went into effect May 2012. Project applicants will be required to incorporate stormwater mitigation measures into their design plans and submit the plans to the City for review and approval. Please see Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP) for more details and links to the City's website(s). (added December 18, 2013)

Project Approval. If the Concept Request is approved, you will receive a **Concept Approval Letter** indicating that the project has been **approved to move forward in the design and review process**. The letter will provide direction how to move forward in the process, which reviews will be required, and to whom subsequent design packages should be submitted.

Each concept approval letter will also be accompanied by a Comment Log, which articulates comments specific to the project. The Tenant should respond to each of the comments in the log with their subsequent submittal. Should the Tenant have any questions regarding the Concept Review Letter, they may contact the LAWA Project Manager (PM) designated in the letter for assistance. The Tenant can expect to receive a Concept Response within 2-3 weeks of submitting a complete Concept Submittal.



A Concept Review Letter **does not mean** that Construction may begin.

A 30%, 60% and/or 90% Design Review(s) **may also be required** in addition to the **mandatory 100% Construction Document Review**. Concept Approvals are only **valid for 180 days**. If the 100% Construction Document Review Submittal is not provided within 180 days, the project may require a resubmittal and/or supplemental reviews.

Funding. While developing projects, please note:

- None of the costs incurred on tenant projects shall be reimbursable by LAWA, through rent or by any other means, unless otherwise stipulated in the Tenant's Lease, Concession, or Tariff Agreement or under a separate construction reimbursement agreement.
- Relocation and coordination with other affected Airlines, Concessionaires, and Tenants and their proprietary equipment is the responsibility of the tenant.
- Ownership of all improvements and alterations constructed or installed by the tenant, or at the
 tenant's direction, shall become the property of and remain with the City of Los Angeles. The
 tenant understands that it may be required to remove its equipment, modifications, installations,
 and alterations from any area, at any time, upon notice from LAWA.
- In the passenger terminals, any renovation, equipment, and conduit shall be installed in a manner that will not interfere or interrupt the infrastructure of other occupants (including concessionaires) and equipment in the concourse. Any interference with other occupant's improvements caused by the proposed renovation, equipment, and/or conduit installation shall be removed and/or relocated by the tenant at no cost to LAWA.

Advertising. While developing projects, please note:

- No advertising of any kind will be permitted without explicit written approval from LAWA Commercial Development Group (CDG).
- The Permittee shall provide in detail what content will be displayed on all monitors (Self Service Kiosk, Flight Information Display System, etc.) during the passive/active mode.
- No audio of any kind is permitted from any monitors at the pylons, gates, or back screen monitors without explicit written approval from LAWA CDG.

Tenants can request assistance from their **Business Relationship Manager (BRM)** if they have any questions.

For additional information, please see the *QuickLinks: Tenant Project Approval Process* OR go to the Tenant Project Approval Website: http://www.lawa.org/welcome_LAWA.aspx?id=4162.



2.0 DESIGN

This is where your proposed project takes on 'definition'.

Expectations. While we understand that many of our LAWA facilities at the four airports are dated and several have corresponding levels of deferred maintenance, we expect that every Design will have a professional 'Wow' factor and will 'Raise the Bar' for others that follow.

Resources. This Handbook is set up in four sections. You are currently reading the Introduction / Process Overview; we also have QuickLinks that include *Notes to the Design Team* and other reference materials. The third section is LAWA Standards for Construction Contracts – you may recognize this as General Conditions – and it includes CSI Sections 00, 01 and 02. The final section is our Guide Specifications, which includes our more technical information and it is also has a CSI structure where appropriate. Please note that these documents do not, in their entirety, constitute a contract or a complete set of Specifications. "In instances where LAWA has no specific guidance/requirement, you will find the Guide Specifications silent on the topic. We recommend you provide this information or these links to your Design team members for use during the design process.

As you develop your design, please recognize that there are potentially seven (7) areas where submittals are required:

- Plans / Drawings
- Specifications
- Design Reports / Surveys
- Estimates
- Schedule
- Project-Specific Requirements
- Coordination and Logistics Management (CALM) Work Site Plan / Work Phasing Plans

Also, see QuickLinks: Design Submittals, Details.

Drawing/Specification Submittal Schedule (Required Submittal). Immediately after Concept approval, you may be required to provide LAWA with a **Drawing/Specification Submittal Schedule** with the proposed submittal dates for all of the submittal packages required in your approval letter.

Design Reviews. Some projects will require technical reviews between the 5% Concept Review and 100% Construction Document Reviews. These will be at intervals that are appropriate for the scope of the project and that correspond to standard design development milestones. If these additional design progress reviews are required, it will be decided during the Concept Review and will be outlined in the Concept Approval Letter. For example, the larger projects may impact our electrical and mechanical systems. In this case, our engineering and maintenance teams need to understand the nature and scope of the proposed work. It is possible that they will need to provide input to your project design team to allow the systems to operate in the most efficient manner possible.

This includes Fast-tracked or Multi-phased projects. Please see your PM with any questions.



2.1 30% Design Review – Design Criteria is Established

If a 30% Design Conditional Review is required by LAWA, the submittal package should address the comments and conditions outlined in the Concept Approval Letter. It must also include the applicable information from the *QuickLinks: Design Submittals, Details*.

For Airfield Projects please see QuickLinks: Design Submittals, Details.

You should submit 3 full size copies and an electronic version of this 30% package (answers/responses, plans, specifications and other submittals) for a Conditional Review to:

Cynthia Guidry, Deputy Executive Director Capital Programming, Planning and Engineering Group Los Angeles World Airports 1 World Way, Room 219 Los Angeles California 90045

Upon receiving your submittal, LAWA's Capital Programming, Planning & Engineering Group will lead an internal review with input from the **Project Approval Team**.

We will document our review comments and send you a 30% Design Conditional Review Response Letter.

2.2 60% Design Review – the Design is Developed

This is the phase when the Design is developed.

If a 60% Design Progress Review is required by LAWA, the plans and specifications package shall:

- Address the concerns and conditions outlined in the Concept Approval Letter and from the 30% Conditional Response Letter (where applicable)
- Include all information provided in previous submittal(s)
- Include annotated comments from previous submittal(s)
- Include the applicable information from the *QuickLinks: Design Submittals, Details.*

For Airfield Projects please see QuickLinks: Design Submittals, Details.

When you are ready for the 60% Progress Review, please submit 3 full size copies and an electronic version of this package to:

Matthew E. Brown, Senior Airports Engineer Airports Development Group Los Angeles World Airports 7301 World Way West, 8th Floor Los Angeles California 90045

The Airports Development Group (ADG) will lead an internal review of the submittal with input from the **Project Approval Team**.

We will document our review comments and send you a **60% Progress Response Letter**.



By now, you have probably already contacted the several appropriate **permitting agencies** to inform them of your proposed project and to learn of their permitting requirements. See *QuickLinks: Permitting Agencies and the FAA*.

2.3 90% Design Review – Permitting & Courtesy Check

This is (potentially) the Final Review before publishing the 100% Design Documents.

The Permitting Hurdle. If you submit your 90% Design Progress submittal package to applicable permitting agencies *but not to LAWA* you may be creating additional work for yourself. If we (LAWA) do not review the 90% submittal and, instead, discover a needed change at the 100% review, then you are, in effect, back at this 90% review stage. Alternatively, **when you submit a 90% Progress Review Package to LAWA**, we will be familiar with your (near) final package and your project will receive an expedited (mandatory) 100% NTP Review.

90% Design Review - Checklist

- The submittal package for the 90% Design Progress Review should address the concerns and conditions outlined in all previous correspondence from LAWA.
- This submittal shall, at a minimum, include all relevant items found in the QuickLinks: Design Submittals, Details.
- For LAX and VNY projects, all appropriate assemblies, components and equipment shall have corresponding <u>Los Angeles Research Report (LARR)</u> numbers clearly identified on the drawings. This requirement is for both new and existing elements. See http://netinfo.ladbs.org/rreports.nsf/.
- The Architect (or Engineer) of Record is to perform a quality control review of all drawings, checking and rectifying obvious errors, omissions and drawing conflicts between disciplines, and may be asked to certify the accuracy of these documents to LAWA.
- This level of plan development can also serve as your official plan check submittal to the Department of Building and Safety (Los Angeles or City of Ontario) and any other governing agencies with jurisdiction over your project.

For Airfield Projects please see QuickLinks: Design Submittals, Details.

When you are ready for the 90% Progress Review, please submit 3 full size copies and an electronic version of this package to:

Matthew E. Brown, Senior Airports Engineer Airports Development Group Los Angeles World Airports 7301 World Way West, 8th Floor Los Angeles California 90045

The Airports Development Group will lead an internal review of the submittal with input from **Project Approval Team**.

We will document our review comments and send you a 90% Progress Response Letter.

Once the permitting agencies and LAWA provide their comments to your (90%) design package, you can move to finalize the (100% design) Construction Contract Documents.



2.4 100% - Construction Contract Document Review

This is the final required review for all improvement projects. This design submittal stage provides the opportunity to coordinate your anticipated phasing and schedule with all persons, offices, airlines, and others that may be impacted by some or all of your proposed work.

This submittal package shall include the Construction Document Plans and Specifications. They should include all information in previous submittals plus all annotated comments from previous submittals – including the comments and conditions set forth by LAWA in the Concept and Conditional Review Letter (and any subsequent reviews). They shall also bear a stamp of approval from the Los Angeles or Ontario Department of Building and Safety, as appropriate; shall include any other regulatory and code approvals related to the project; and shall reflect the standards and requirements of this Design and Construction Handbook. This includes items found in *QuickLinks: Design Submittals, Details*.

Plans Issued for Construction Submittal. This submittal shall have all clouds and revision dates removed from the drawings and be stamped or signed by the governing authorities. The final approved specifications, material boards, and any other documents that are required for the construction, including every sheet of the construction documents, shall be noted as "Issued for Construction" with the corresponding date of issue. *Please contact your designated Project Manager to confirm the official date of this issue.*

Upon determining that all comments from all stakeholders have been incorporated into the drawings, LAWA will approve or authorize the project.

The documents at this point should be ready to be signed pending approval by the Project Manager.

Once these documents are approved and signed, they can be provided to contractors for bidding purposes.

A set of the approved and stamped construction drawings with corresponding specifications and material boards shall remain on the jobsite at all times during the entire duration of the project. Obtaining the Building Permit is the responsibility of the Contractor. A set of Building Permit Plans shall be kept at the job site at all times as well as a copy of the permit.

When you are ready for the 100% Construction Contract Document Review, please submit 3 full size copies and an electronic copy to:

Matthew E. Brown, Senior Airports Engineer Airports Development Group Los Angeles World Airports 7301 World Way West, 8th Floor Los Angeles California 90045

For Airfield Projects please see QuickLinks: Design Submittals, Details.

To get a **Project Approval Letter**, you will need to have your documents stamped by the code authority when such approval is needed.

ADG will lead an internal review of the submittal with input from other key LAWA divisions. The package will be evaluated to ensure all prerequisite criteria, conditions, and comments have been met and satisfied. Once the package is satisfactory, LAWA will issue a **Project Approval Letter** providing authorization to bid, select and/or finalize the agreement with the contractor(s).



3.0 CONSTRUCTION

For Contractors. If considering doing work at LAWA, become familiar with this Introduction, and please reference the **LAWA Standards for Construction Contracts** section. Corresponding to General Conditions, these standards provide the basis for our expectations before, during, and at the completion of the construction process. Also see *QuickLinks: Notes to the Construction Team.*

LAWA Expectations. All Contractors demonstrate a high regard for safety, quality of work, and a timely execution of the work:

• Safety and Health - The Airports Development Group (ADG) Construction Safety Policy Guidelines Manual has been developed by LAWA to promote safety, by assisting in minimizing the hazards and risks associated with the construction projects. As such, LAWA expects the Contractor to place the highest importance and priority on safety, health and the protection of the project site during performance of work. In addition, LAWA and its agents have the right but not the obligation, to inspect the worksite and appropriate work records in order to ascertain Contractor and subcontractor compliance with safety and health requirements. However, neither the existence nor exercise of such right shall relieve the Contractor of its responsibility for monitoring its own and its subcontractor's compliance with the safety, health and project site protection requirements of their contract and applicable laws, rules, regulations and statutes."

"Prior to commencing field construction, contractors will be required to submit a construction safety plan, for LAWA's review and approval, The LAWA approved safety plan shall be enforced strictly for the project to maintain a safe work environment. The safety plan shall include as a minimum the following items:

- A. Policy statement clearly stating the objective of the safety plan and the scope of the project
- B. Organization chart indicating the duties and responsibilities for the safety staff and the designated safety representative.
- C. Safety program shall describe the services and facilities to be available for non-recordable illnesses or injuries as well as recordable illnesses or injuries.
- D. The safety plan shall also set the procedures for all work site injury records and reports.
- E. The safety plan shall set the procedures for compliance with all applicable laws and contract requirements.

Any activities or condition found to be hazardous by LAWA shall be corrected "on the spot" and delay in the correction of a hazard to the life safety of any person may result in the closure by LAWA of the involved work site until the activity and/or condition is corrected. Should such condition cause an immediate safety threat, LAWA may close the work site immediately until the condition is corrected."



Quality — Quality must be a continuing focus throughout the design and construction process. This starts with your design goals, the selection of the Design Team and the Contractor(s), and it includes 'how' you will operate the improvements when they are complete. Quality includes your project's ability to add value to the experience of the users of the airport, the flow and experience of people through your improved area, the selection of durable materials that can be easily maintained throughout their useful life, and the necessary attention to detail that minimizes accidents and other risks to all of us in the LAWA environment.

"Prior to issuance of an NTP, contractors may be required to submit a Quality Control plan, for LAWA's review and approval. The quality plan shall include as a minimum the following:

- A. Statement of purpose and the policy for the quality control plan
- B. Organization chart designating the quality staff for the project
- C. All quality control process for the project including but not limited to:
 - a. All meetings associated with quality control including preparatory, mobilization and any other quality related meeting
 - b. All inspection processes and sign-off procedures including punch lists
 - c. Specialty inspections
 - d. Supplemental procedures to the quality plan
- D. All testing required for the project including any independent testing agencies and their processes
- E. Documentation for the process including but not limited to:
 - a. Quality control reports and project logs
 - b. Action item logs
 - c. All forms required for the quality plan
 - d. Agenda and meeting minutes for all quality related meetings."

Execution of the Work – **Efforts must include** both Safety and Quality throughout the Construction process. This includes delivering a project that provides Safety and Quality to the airport users well after the work is complete, and **a timely execution of the work** (i.e., establishing and holding to construction schedules).

The Construction Team must possess **a positive attitude and commitment** to a highly professional work product, including:

- Professional 'fit' and 'finished' work upon project completion
- A Construction Process that delivers on the 'Wow' factor developed during the Design phase



Contractor Selected. Once the Tenant and/or LAWA have a winning Contractor, they can direct their Contractor to **submit the necessary documents** to obtain a **Notice to Proceed (NTP)**.

To receive a 'Notice to Proceed,' you must, at a minimum have an approved Logistics Work Plan.

The approved Logistics Work Plan must consist of, but not be limited to, the following:

- Logistics Work Plan
 - Logistics Work Plan Checklist
 - Site Logistics Plan (how Contractor intends to manage their work area OUTSIDE the building footprint)
 - Project Phasing Documents (how Contractor intends to manage the work area INSIDE the building)
- Updated Construction Schedule
- Updated Budget
- Temporary Barricade Plan
- Temporary Signage Plan
- Haul Routes
- Construction Material Stock Piles / Stockpiles

Your Plan should explain the operational impacts of your project; identify the laydown area, path of travel, construction barriers, etc.; and indicate utility shutdowns and other planned impacts or disruptions to normal Airport / Tenant operations.

The Plan is reviewed by the CALM Team. It typically has a 7 working day review / approval process. Please allow for one draft and one final through this review process.

What is CALM? CALM stands for Coordination and Logistics Management. Because of the extensive work underway at LAX today, we have a separate team focused on coordinating and minimizing the impact of your project to the LAX operations. Two terms you will encounter:

- The Logistics Plan: How the contractor intends to manage their work area **outside** the building footprint.
- The Phasing Plan: How the contractor intends to manage the work (area) **inside** the building footprint.

Additional Requirements for NTP:

- All outstanding issues with LAWA's CDG / BRM are addressed and completed.
- California Environmental Quality Act / National Environmental Policy Act requirements are met.
- Work Plan (phasing & site logistics) is reviewed and approved.
- City issued Permits are secured, Plan Checks are complete, and documents are 'Issued for Construction'.
- A copy of the Contractor's insurance policy naming LAWA as an insured entity is with LAWA's Risk Management Division.



- A copy of your required Labor and Material Payment Bond(s) is on file.
- · Construction site safety plan.
- Select and use the correct hold-harmless clause (see QuickLinks: Notes to the Design Team).
- Please see Section 00 62 16 Certificate of Insurance Form in the LAWA Standards for Construction Contracts. The minimum coverage will be specified by LAWA's Risk Management Division - Insurance Compliance Services. Also, no contractor's vehicles or equipment shall have access to the airfield unless the proper liability insurance has been provided. It is the responsibility of the Tenant to require and verify that the Tenant's Contractor has adequate insurance coverage. Refer to http://www.lawa.org/welcome_LAWA.aspx?id=4162.
- For LAWA-issued projects, a NTP for construction will be issued only after Board approval of the construction contract.
- If a partial NTP is needed to commence off-site work prior to your work at a LAWA site, discuss this
 with your LAWA PM.
- Once the Project Approval Letter is issued, you need to confirm the date of the Pre-Construction Meeting (Pre-Con) and ensure you will have the appropriate LAWA representation.

Your Design Consultant can and should participate during the construction phase.

Depending upon contract scope requirements, the design consultant may be responsible for:

- Assisting in the review of documents (shop drawings, submittals, requests for information, change orders).
- Attending periodic or regular construction progress meetings.
- On some projects, partnering sessions may be conducted.

Getting Construction Started. The **ADG PM** will serve as the single point of contact for all construction related matters during the construction process. The ADG PM is responsible to ensure the interests of LAWA are satisfied during construction and will serve as the liaison between the project's stakeholders and the Construction and Logistics Management (CALM) office to ensure logistics (work plans) are coordinated and executed in compliance with established guidelines and procedures. The ADG PM can also facilitate Utility Shutdown Requests (see *Quick Links: Shutdown Control Center*) with the various stakeholders to help ensure they are effectively implemented with minimum impact to the airport users, operations, and other Tenants. Please note: the primary responsibility for successful utility shutdowns rests with the Contractor.

PRE-CONSTRUCTION CONFERENCE

The typical **Pre-Construction (Pre-Con) meeting agenda** can be found in *QuickLinks: Pre-Construction Conference Agenda*.

This "Pre-Con" is the construction kick-off meeting and signals the start of site construction.

Utility Shutdown Request (USR). Utility Shutdowns have become increasingly complex at LAX due to the increase in construction activity and the age of the facility. By nature, utility shutdowns affect a variety of stakeholders, including tenants, airlines, security personnel, and various divisions within LAWA (Information Technology, CDG, and Maintenance) as well as the traveling public. Impacts to life safety and



security systems are particularly critical when considering utility shutdowns. To minimize negative impacts, LAWA has developed procedures and guidelines for contractors to use when requesting a utility shutdown.

Contractor-requested utility shutdowns are discretionary on LAWA's part. Not until LAWA has been fully apprised of the potential risks and impacts, and received necessary contingency plans, will the USR be granted. It shall be the sole responsibility of the Contractor to provide the above information, in accordance with the provisions in this section.

The procedures and guidelines provided herein may be changed at any time by LAWA for security, safety, and other operational reasons.

The only utility shutdowns exempt from this process are those emergency shutdowns identified by ARCC or Engineering & Facilities Maintenance Division.

For more information, see QuickLinks: Shutdown Control Center.

Area Shutdown Request (ASR). This is a shutdown of normal facility operating space for a set period of time that does not include the shutdown of a utility or system. See *QuickLinks: Shutdown Control Center*.

Substitution / Contract Change Process. Keep LAWA in the loop. See *QuickLinks: To Request a Change or Exception.*

Badging. If your LAX or ONT project is a "landside" project only, that is, it does not require your construction team to enter a secure or controlled part of the airport, then you will not need to badge your team members. Where your project is located along the boundary separating the airside (controlled) and landside (uncontrolled) areas, it may be possible to secure your site and separate it from the controlled area(s). If so, during that stage, badging may not be required.

If your project is at VNY, special LAWA badging is not required, regardless if the project is on the airside or landside. However, if your project is on the airside, and will require some or all of your contractor's personnel to drive on the inside of the airport airfield boundary, then the personnel will require special training and a Motor Vehicle Operating Permit (MVOP), which can be processed through VNY Airfield Operations.



4.0 'Closing Out' Your Project

PROJECT ACCEPTANCE AND PROJECT CLOSEOUT

There are two steps to 'close out' or 'finish' your project.

Many of you are familiar with 'beneficial occupancy,' which is a term commonly used by the building departments. However, for projects at one of the LAWA sites, *you must complete BOTH Project Acceptance* and *Project Close Out BEFORE you can use your improvements*.

Project Acceptance. Work with your PM to close out the technical issues. This includes, but is not limited to: completing and closing out all fire/life/safety, utility, and ADA items; all building department inspection items; completing and closing out all of the LAWA inspection items; and turning over all the equipment, training manuals, as-built drawings, and other related deliverables. Again, summarizing, there will be both City and LAWA closeout issues.

Project Close Out. Work with your BRM from the CDG to close out any and all of the unfinished administrative issues. This includes all requisite lease contractual requirements leading up to and including the related financial arrangements.

As the end of the project draws near, ADG will ensure that all construction meets LAWA's expectations. When all conditions have been met (Project Acceptance), ADG will notify LAWA's CDG verifying that the project is ready for Closeout. Once all Project Closeout activities are complete, LAWA will issue a **Project Closeout Letter** to the Tenant, effectively closing the project (releasing the bonds, etc.).

Closeout Activities include, but may not be limited to:

- Confirm completion of punch list items (generally cosmetic work).
- Confirm that appropriate warranty/guarantee information and technical manuals are obtained and provided to the right LAWA offices.
- Confirm all other outstanding submittals are received.
- Obtain any outstanding Building & Safety and other Regulatory agency sign-offs.
- Confirm all Commission/Activation-related activities are complete.
- Ensure receipt of the contractor's as-built drawings and specifications.
- Obtain final record drawings from the Architect / Engineering Firm.
- Ensure contract-required Spare Parts / Special Tools are received.
- Resolve all outstanding change orders, stop notices, claims, etc.
- Complete final project cost review and consolidation when needed.
- Confirm acquisition document and back-ups review are signed off where appropriate.



Your Design Consultant can and should participate at the completion of construction.

Depending upon contract requirements, the consultant generally:

- Participates in a final project "walk-through" at the completion of construction
- Reviews the contractor's certified as-built drawings and specifications submittal
- Prepares the final record drawings

ONTARIO, VAN NUYS, AND PALMDALE. Some of this information may not apply to all LAWA sites. For additional site-related information, see the following QuickLinks:

- Ontario (LA/ONT)
- Van Nuys (VNY)
- Palmdale (PMD)

To propose changes to this document, please see the QuickLinks: Procedures for Updating Handbook.

Compliance with this Handbook. Your project must be in compliance with the LAWA Design & Construction Handbook.