

Design Submittals, Details

Overall Table of Contents (recommended)

1 Plans / Specs

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- For all LAWA issued projects, the Construction Document plans and specifications shall include all information in previous submittals plus all annotated comments from previous submittals.		x	x	x	x	
- A boundary survey and/or site topographic survey shall be made on the ground of the proposed building or construction site. All points shall be tied to the existing Airport Coordinate System. Refer to LAX Survey Control Network and LAWA Survey Standards. Ground survey verification of existing utility alignments and actual flow lines may be required.		x	x	x	x	
- All existing buildings, facilities, contours, roadways, utilities, or signs in the immediate area of the project site or relevant to the proposed work should be shown on a preliminary site plan.		x				
- Layouts of the proposed roadways, access drives, parking areas, site utilities and building locations should be shown.		x	x	x	x	
- Proposed landscaping, exterior signing, exterior lighting, fencing or other site elements.			x	x	x	
- Preliminary horizontal and vertical alignments for all roadways, drainage systems, and applicable exterior utilities tied into Airport coordinate system.			x	x	x	
- Preliminary paving and parking layouts with horizontal and vertical ties to site survey and representative cross-sections.			x	x	x	
- Perspective Rendering - May be required if the project has visual impact on the Airport development as a whole.	x	x				
- Design data and analysis.			x			
- Soil tests data and analysis.			x			
- Outline technical Specifications.			x			
- Updated Cost Estimates, Updated Construction Schedule		x	x	x	x	x
- Final Cost Estimate				x	x	x
- Final Construction Schedule, including duration for all anticipated Utility Shutdowns				x	x	x
- Construction Phasing Plans				x	x	x
- Completed Construction Coordination and Logistics Checklist				x	x	x
- Complete drawings with all plan, profile, detail, section, schedule, calculation and miscellaneous sheets included				x	x	
- Specifications complete in final typed form				x	x	
- Temporary Power Plans, Utility Plans, and cutover procedures				x	x	
- Storm Water Pollution Prevention Plan (SWPPP)				x		

Architectural Drawings

A. Sheet Index		x	x	x	x	x
- Finalize drawing list				x	x	
B. Project Description		x	x	x	x	x
- Update Code Research Information, as required		x	x	x	x	
- Finalize Code Research Information				x	x	
- Identify occupancy types		x	x	x	x	
- Provide parking area calculations, if required		x	x	x	x	
- Provide a diagrammatic building section highlighting the function of each level of the terminal			x	x	x	
- Provide a vicinity map			x	x	x	
- Provide list of deferred permits, if any				x	x	
- Indicate a list of abbreviations and the Airport Acronyms utilized at LAX			x	x	x	
- Confirm that all notes are applicable to the work indicated in the set of drawings				x	x	
C. Egress Plan			x	x	x	x
- Update Occupant load summaries			x	x	x	

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- Update egress loads			X	X	X	
- Finalize Occupant load summaries & corresponding egress loads				X	X	
- Indicate required fire separations and proposed opening protection			X	X	X	
D. Accessible Path of Travel / Existing Rest Room Plans		X	X	X		X
- Indicate path of travel from the Accessible Parking Spaces within the existing parking structure to the area of renovation.			X	X	X	
- Finalize all disabled access requirements for the project				X	X	
- Confirm compliance with Accessibility requirements for both new and existing plumbing fixtures				X	X	
E. Demolition Plan		X	X	X	X	X
- Identify all existing walls that are to be demolished		X	X	X	X	
- Finalize all demo information mentioned in the previous submittal					X	
- Identify which walls are to remain		X	X	X	X	
- Identify existing equipment that is to be removed and discarded		X	X	X	X	
- Identify existing equipment that shall remain		X	X	X	X	
- Identify items which are to be relocated, salvaged and/or returned to LAWA				X	X	
- Prepare "cut, cap & make safe" drawings		X	X	X	X	
- Perform final coordination with MEP and Structural disciplines				X	X	
- Provide photos of existing conditions to LAWA.		X	X	X	X	
F. Phasing Plan(s)				X	X	
- Include a separate narrative to LAWA that describes potential impacts to adjacent areas				X	X	
- Verify that any outdoor staging areas will not impact existing airport operations				X	X	
G. Barricade Plan(s)				X		
- Indicate a barricade plan that indicates the barrier between the area of construction and adjacent functions				X	X	
- Provide enlarged section view details of this barricade				X	X	
- Include description and diagrams of refuse removal and disposal				X	X	
- Provide details of the graphic vinyl wall treatment being proposed for the barricade				X	X	
H. Zone Plan (if required)			X	X	X	
- Indicate the sheet zones of the building			X	X	X	
I. (Overall) Site Plan		X	X	X	X	X
- Clearly identify the area of the Terminal being renovated			X	X	X	
- Identify all setbacks, easements, (utility and otherwise), overall building dimensions			X	X	X	
- Finalize all site info				X	X	
- Verify new and existing utilities that relate to the renovation project				X	X	
- Site plan with existing and proposed finished grades (where applicable)			X	X	X	
- Site civil plan showing existing and proposed utilities, including water, sewer, storm drain, electrical, etc. (where applicable)			X	X	X	
J. Floor Plans	X	X	X	X	X	X
- Major plan dimension completed			X	X	X	
- Typical wall sections		X	X	X	X	
- Designate wall types			X	X	X	
- Indicate Room names and numbers			X	X	X	
- Identify fire rated construction				X	X	
- Identify all floor mounted equipment				X	X	
- Call out all building sections			X	X	X	
- Make certain all new walls have been identified by type of assembly with the proper fire rating			X	X	X	
- Identify all existing building expansion joints with corresponding detail call out, both horizontal and vertical			X	X	X	

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- Differentiate new construction building grids from existing building grids			X	X	X	
- Call out specialty areas with enlarged plans (see Enlarged Floor Plans)			X	X	X	
- Indicate existing and proposed drinking fountains			X	X	X	
- Locate all fire extinguisher cabinets, recessed or wall mounted				X	X	
- Verify plumbing fixture count with plumbing drawings			X	X	X	
- Make certain that a north arrow is indicated on all plans			X	X	X	
- Identify all new millwork			X	X	X	
- Finalize all information mentioned in the previous submittal				X		
- Verify that all floor depression are indicated on the floor plans			X	X	X	
- Verify that all disciplines are utilizing the same background with the same match lines				X	X	
- Perform a final quality control review, verifying the accuracy of all detail call outs, references, partition tags, fire ratings, etc.,				X	X	
K. Enlarged Floor Plans			X	X	X	X
- Provide enlarged floor plans for areas such as restrooms, kitchens and various utilities rooms in order to better convey information that cannot be clearly identified and noted on a smaller drawing.			X	X	X	
- For enlarged restrooms, indicate all accessories and compartments per LAWA standards.			X	X	X	
- Finalize all information mentioned in the previous submittal				X	X	
- Verify that restroom finishes, accessories and all specialty items in the project specifications				X	X	
L. (Overall) Roof Plan		X		X		X
- Indicate all existing roof mounted equipment and roof penetrations.		X	X	X	X	
- Indicate all proposed roof mounted equipment and all propose roof penetrations.		X	X	X	X	
- Coordinate all new equipment pad locations, sizes and equipment weight(s) with MEP drawings.			X	X	X	
- Finalize all roof penetrations and equipment pads				X	X	
- Confirm ability of existing roof structure design to accommodate any new roof load with the Structural Engineer of Record.			X	X	X	
- Call out related roof details, if any.			X	X	X	
- Perform a final coordination review will related disciplines				X	X	
M. Reflected Ceiling Plan			X	X	X	X
- Indicate ceiling layout with proposed heights		X	X	X	X	
- Indicate lighting plan		X	X	X	X	
- Update lighting plan based upon approved fixtures. Provide control dimensions for each lighting plan				X	X	
- Indicate all ceiling mounted emergency lighting devices.			X	X	X	
- Locate, verify and coordinate all ceiling mounted fixtures such as but not limited to: life safety devices, security cameras, signage, ventilation grills. Coordinate with corresponding disciplines.				X	X	
- Indicate all soffits and bulkheads.		X	X	X	X	
- Detail all soffit conditions. Indicate how the soffit is attached to the roof/floor assembly above with required kickers and connection call outs.			X	X	X	
- Indicate all access panels (coordinate with mechanical drawings).				X	X	
- Clearly identify all finish materials			X	X	X	
- Indicate all ceiling heights			X	X	X	
- Identify all light coves and provide details			X	X	X	
- Identify all plenum fire stops, if required by code.				X	X	
- Consider a separate interstitial plan in order to identify various equipment and systems located between the ceiling plane and the structure above.			X	X	X	
- Perform final coordination with Mechanical, Electrical, Security and Communication drawings				X	X	
- Verify that ceiling framing can support 20 pounds of combined ceiling, mechanical, electrical, and plumbing loads				X	X	

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- In the case that ceiling loads, including light fixtures, exceed four pounds per square foot, both the vertical and lateral support systems are to be substantiated by corresponding structural calculations				X	X	
N. Door Schedule			X	X	X	X
- Indicate door number, size, fire rating, frame type and door type			X	X	X	
- Verify all door numbers are identified on the plans with the proper size, fire rating, frame and door type.			X	X	X	
- Indicate all door and frame types.			X	X	X	
- Indicate all head and jamb details			X	X	X	
- Indicate all door thresholds and note the transition between floor materials under the doors.				X	X	
- Coordinate lock and hardware standards with LAWA Lockshop			X	X	X	
- Indicate door hardware groups for all doors			X	X	X	
O. Finish Plan – w/ Proposed Material Sample Board		X		X		
- Identify all finishes on finish plans and elevations			X	X	X	
- Place all proposed finishes on sample board.		X				
- Update finish call outs based upon approved on finish materials.			X	X	X	
- Identify all material transitions				X	X	
P. Furniture Plan		X		X		X
- Show proposed furniture layout at public areas		X	X	X	X	
- Provide Furniture descriptions and outline specifications			X	X	X	
- Update furniture layout based upon approved furniture.				X	X	
- Show code acceptable horizontal clearances for egress on Furniture Plan			X	X	X	
- Verify that all Furniture finishes are indicated in the specifications				X	X	
Q. (Overall) Interior Elevations, N/E/W/S			X	X	X	X
- Define Tenant Storefront designs.		X		X	X	
- Confirm that all finish materials are clearly identified.			X	X	X	
- Locate all wall mounted equipment such as but not limited to: Electrical outlets, passenger accessories, fire extinguisher cabinets, fire hose cabinets, hose bibbs, signage, strobes, wayfinding, defibrillator cabinets, lighting, etc.			X	X	X	
- Indicate all access panels as required by MEP disciplines.			X	X	X	
- Indicate all louvers and grills required by Mechanical plans.			X	X	X	
- Indicate electrical switchgear and panels.			X	X	X	
- Indicate all pipe and duct penetrations.			X	X	X	
- Indicate vertical dimensions and where required, horizontal dimensions.			X	X	X	
- Confirm that all finish materials are clearly identified and are specified in the project manual				X	X	
R. Millwork Drawings				X	X	
- Confirm that all finish materials are called out				X	X	
- Finalize all enlarged details				X	X	
- Confirm compliance with Accessibility requirements				X	X	
S. Building Cross Sections		X	X	X	X	
- Indicate heights of proposed finish ceilings.		X	X	X	X	
- Identify adjacent spaces.		X	X	X	X	
- Identify adjacent spaces with the corresponding room number.			X	X	X	
- Identify all primary materials and note material transitions and terminations.			X	X	X	
- Confirm profiles with the section cuts indicated on the floor plans.				X	X	
- Confirm clearances for ductwork and other systems above the ceiling line.				X	X	
T. (Primary) Wall Sections		X	X	X	X	X
- Indicate top and bottom connections to existing structure.		X	X	X	X	
- Call out all material finishes.			X	X	X	

Submittal Details (General)	5%	30%	60%	90%	100%	Need for NTP
- Profile all equipment adjacent to wall.			X	X	X	
- Indicate louvers and required heights. Coordinate with Mechanical drawings.			X	X	X	
- Confirm indicated finishes with Finish Plan				X	X	
- Confirm profiles with the section cuts indicated on the floor plans				X	X	
- Confirm all material call outs and related dimensions				X	X	
- Indicate LARR numbers as required				X	X	
U. Details – (¾" = 1'-0" minimum)			X	X	X	X
- Provide ADA compliant casework and equipment details		X	X	X	X	
- Further develop ADA compliant casework and equipment details			X	X	X	
- Provide waterproofing detail(s) for any interior "wet areas" such as kitchens including drains. In addition include waterproofing details for any new roof openings or other exterior openings		X	X	X	X	
- Provide floor drains under all "wet" equipment		X	X	X	X	
- Provide typical storefront details		X	X	X	X	
- Provide typical fire stop details		X	X	X	X	
- Provide typical fire stop details for both vertical and horizontal conditions			X	X	X	
- Provide enlarged details generated from wall sections			X	X	X	
- Wall Type details			X	X	X	
- Expansion and control joint details			X	X	X	
- All material transition details – floor and wall			X	X	X	
- The use of 3D details is encouraged for clarity purposes			X	X	X	
- Details for all wall recessed equipment such as fire hose cabinets			X	X	X	
- Verify that all LARR numbers are indicated on the details, as required				X	X	
V. Wayfinding and Signage Drawings and Details				X	X	X
- Location Plans		X	X	X	X	
- Identify all sign types with corresponding signage schedule			X	X	X	
- Perform structural and electrical coordination				X	X	
- Perform final coordination between Architectural, Structural and Electrical drawings				X	X	

Food Service Drawings (if required)

A. Sheet Index		X	X	X	X	X
- Food Service Equipment Schedule with Utility Requirements				X	X	
B. Food Service Equipment Schedule with Utility Requirements		X	X	X	X	
C. Food Service Equipment Plan		X	X	X	X	X
- Hand sinks shall indicate soap and paper towel dispensers		X	X	X	X	
- Mop sink area shall show supply shelf and adjacent wall finishes.		X	X	X	X	
- Locate grease interceptor on plan, identify hours of operation / meals per hour (sizing and calculations for existing or new by Mechanical Engineer)		X	X	X	X	
- Provide menu		X	X	X	X	
- Identify if washable dishes/utensils or disposable paper plates/plastic utensils will be used for dishwasher requirements.		X	X	X	X	
- Identify trash dumpster location on property		X	X	X	X	
- Identify how many employees per shift		X	X	X	X	
- If project is change of use to Food facility – provide parking analysis		X	X	X	X	
- Incorporate all submittal requirements dictated by the Los Angeles County Health Department.				X	X	
- Locate and identify employee changing room / locker room		X	X	X	X	
- Locate bathrooms that employees / patrons will use.		X	X	X	X	

Submittal Details (General)	5%	30%	60%	90%	100%	Need for NTP
- If mop sink is located remotely, indicate path from project area.		X	X	X	X	
- Identify linear feet of dry storage capacity.		X	X	X	X	
- Identify all utility access panels.		X	X	X	X	
- Indicate wet and dry storage areas		X	X	X	X	
D. Elevations / Details		X	X	X	X	X
E. Food Service Equipment Cut Sheets		X	X	X	X	X
F. Exhaust Hood Drawing		X	X	X	X	X

Structural Drawings

A. Provide sizes, weights, and location of HVAC units - both suspended and roof mounted.			X	X	X	X
B. Indicate weights of all equipment including food service.		X	X	X	X	X
C. Indicate details for new roof penetrations, if any.		X	X	X	X	X
D. Provide preliminary structural calculations		X				
- Further develop structural calculations			X	X	X	
- Finalize structural calculations				X	X	
E. Indicate typical soffit and door support details.		X				
- Further soffit and door support details.			X	X	X	
- Finalize all details including soffit framing with connection call outs				X	X	
F. Indicate vertical and lateral support for suspended ceilings, if any.		X				
- Further develop vertical and lateral support for suspended ceilings.			X	X	X	
G. Indicate support details for any low walls.		X				
- Further develop support details for any low walls.			X	X	X	
H. Indicate framing details for openings wider than 4 feet in any interior partition.		X	X	X	X	
I. Provide typical details for signage and equipment support.				X	X	
J. Provide demolition drawings with photographs.			X	X	X	X

Mechanical Drawings

A. Sheet Index		X	X	X	X	X
B. General Notes, Symbols, Legend, Preliminary Equipment Schedules		X	X	X	X	X
C. Demolition Drawings with Photographs.		X	X	X	X	X
D. Floor Plan		X	X	X		
- Identify all exterior and interior louver openings. Coordinate with Architectural drawings.			X	X	X	
- Update location of existing mechanical rooms and equipment		X	X	X	X	
- Locate all mechanical rooms. Reference to an enlarged plan.			X	X	X	
- Locate IT Rooms, Electrical Rooms and Communication Rooms that will require air conditioning		X	X	X	X	
- Update mechanical heating/cooling loads.		X	X	X	X	
- Update primary ductwork layout.		X	X	X	X	
- Size all ductwork and coordinate layout with Architectural drawings.			X	X	X	
- Update Zoning Plans		X	X	X	X	
- Locate all fire dampers and control dampers. Coordinate locations with Architectural and Electrical drawings.			X	X	X	
- Locate new AC Units on Plans		X	X	X	X	
- Identify points of connection (poc).		X	X	X	X	
- Duct connections to all equipment including hoods that require supply or exhaust air.			X	X	X	
- Perform a final cross check with Architectural drawings.				X	X	

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- Coordinate duct routing with other disciplines and reconcile any "collisions".				X	X	
E. Enlarged Mechanical Room Floor Plan			X	X	X	
- Indicate all required clearances for maintenance and otherwise.			X	X	X	
- Dash in areas designated for future expansion.			X	X	X	
- Perform a final cross check with Architectural and Electrical drawings.				X	X	
F. Enlarged Cross Section of Mechanical Room			X	X	X	
- Indicate all ductwork and below clearances.			X	X	X	
- Confirm all minimum clearances below ductwork.				X	X	
G. Reflected Ceiling Plans		X	X	X	X	
- Update location of air distribution devices.		X	X	X	X	
- Confirm location of air distribution devices. Coordinate with Architectural Drawings.			X	X	X	
- Locate all required access panels.		X	X	X		
- Perform final coordination with Architectural Drawings.				X	X	
H. Roof Plan		X	X	X	X	X
- Locate new equipment with sizes and weights.		X	X	X	X	
- Confirm roof equipment pad sizes and weights.			X	X	X	
- Confirm all required roof penetrations.			X	X	X	
- Provide detail for vibration isolation			X	X	X	
- Confirm screen wall requirements, if any, with Architectural drawings			X	X	X	
- Perform final coordination with Architectural drawings and structural drawings, as required.				X	X	
I. Standard Details		X	X	X	X	
- Manufacture's brochures identifying air handling and refrigeration equipment.			X	X	X	
- Finalize all details. Indicate LARR numbers, as required.				X	X	
J. The final HVAC drawings shall, as a minimum, be checked for the following:				X		
- Check electrical lighting fixtures for conflict with air diffusers, ceiling grilles, sprinkler heads, ceiling type speakers, and other ceiling mounted devices.				X		
- Verify ductwork for clearance between ceiling construction and underside of beams, recessed lighting fixtures and other interferences where space is limited.				X		
- Coordinate large mechanical system piping with building structure to assure clearances and accessibility for maintenance. Piping and electrical switchgear locations are to be coordinated.				X		
- Coordinate requirements for louvers, equipment supports and other devices serving mechanical systems, but furnished under the general construction section of the project.				X		
- Coordinate special types of or Board furnished equipment for correct rough-in requirements.				X		
- Verify plans and specifications for conflicts.				X		
- Coordinate plans for size and location of all chases.				X		

Electrical Drawings

A. Sheet Index		X	X	X		
B. General Notes, Symbols, Legend, Lighting Schedule, Panel Schedules		X	X	X		
C. Demolition Drawings with Photographs		X	X	X		
- Finalize all demolition and phasing drawings.				X		
D. Single Line Diagram with Load Calculations		X	X	X		
- Confirm provisions for emergency egress lighting				X		
- Include Temporary Power connections and relocations				X		
E. Floor Plan		X	X	X		
- Finalize all information identified in previous submittal.		X				

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- Fire Alarm Plan		X				
- Locate Fire Alarm Plan and associated life safety devices. Coordinate with Architectural drawings			X			
- Identify all Points of Connection and electrical shut offs.		X				
- Indicate all switches for lighting control			X			
- Locate all receptacles			X			
- Indicate exit lights			X			
- Locate dedicated utility room.		X				
- Locate all transformers and required clearances			X			
- Locate all switchgear, switchboards and similar equipment			X			
- Locate Cable trays. Indicate size and location			X			
- Indicate service entrance and main disconnect			X			
- Perform final coordination with all other disciplines including signage and wayfinding				X		
F. Reflected Ceiling Plan		X				
- Update Lighting Layout		X				
- Identify all light fixtures			X			
- Perform final coordination with Architectural RCP and the light fixture schedule.				X		
- Confirm that all lights are readily accessible by LAWA maintenance staff.				X		
G. Standard Details		X		X		
- Coordinate Electrical Drawings with Signage Package		X				
- Identify and begin to layout all details			X			
- Finalize all details				X		
H. Coordinate Electrical Drawings with Signage Package			X			
- Check electrical lighting fixtures for conflict with air diffusers, ceiling grilles, sprinkler heads, ceiling type speakers, etc.				X		
- Coordinate large electrical system conduit and pull boxes with building construction, beams, etc., to assure clearances and accessibility. Piping and electrical switchgear locations are to be coordinated.				X		
- Check plans and specifications for conflicts.				X		
- Coordinate plans for size and location of all chases.				X		
- Check electrical rooms for appropriate size and clearances required by code for replacement and maintenance operations.				X		

Plumbing Drawings

A. Sheet Index		X	X	X		
B. General Notes, Symbols, Legend, Preliminary Equipment Schedules		X	X	X		
C. Demolition Drawings with Photographs.		X	X	X		
D. Floor Plan		X	X	X		
- Indicate all major horizontal pipe work, new and existing.		X				
- Verify all major horizontal pipe work, new and existing			X	X		
- Indicate water source information.		X				
- Indicate sewer connection information, if applicable.		X				
- Locate standpipes and risers on plans		X				
- Coordinate new standpipes and risers with architectural drawings			X	X		
- Verify that vertical pipes do not conflict with structural beams, column base plates, HVAC ducts or any other equipment of other disciplines			X	X		
- Verify clearances of all new pipe chases			X	X		
- Group vent pipes as much as possible in order to minimize penetrations			X	X		

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- All plumbing fixtures are shown.		X				
- Confirm that plumbing fixtures are shown based upon the code requirement			X	X		
- Identify Water Heater(s) – characteristics and capacity		X				
- Coordinate water heater(s) location with architectural drawings			X	X		
- Identify all floor drains and floor sinks – new and existing.		X				
- Coordinate all floor drains and floor sinks with architectural drawings			X	X		
- Provide floor drains under “wet” equipment.		X				
- Clearly identify all new floor penetrations.		X				
- Identify direct and indirect drainage.		X				
- Identify all required access panels.		X				
- Indicate all gas lines –with shut off valves and corresponding meter(s) in the dedicated utility room.		X				
- Identify all points of connections (poc).		X				
- Design pipes crossing expansion joints to accommodate movement			X	X		
E. Plumbing Riser Diagrams			X	X		
F. Standard Details		X	X	X		
- Begin to define and layout all required details			X			
- Finalize all required details.				X		
- Coordinate piping with building construction, beams, etc., to assure clearances and accessibility for maintenance. Piping and electrical switchgear locations are to be coordinated.				X		
- Check piping for clearance between ceiling construction and underside of beams, recessed lighting fixtures and other interferences where space is limited.				X		
- Verify piping, ductwork, electrical conduits, etc. for interferences that would prevent proper installation of each system.				X		
- Coordinate special types of equipment for correct rough-in requirements.				X		
- Coordinate plans for size and location of all chases.				X		

Fire Protection Drawings

A. Floor Plan		X	X	X		
- Locate Fire Control Room, identify all fire alarm panels.		X				
- Locate all fire sprinkler risers.		X				
- Coordinate fire sprinkler riser with architectural drawings			X			
- Finalize fire sprinkler risers with architectural drawings.				X		
B. Reflected Ceiling Plan		X	X	X		
- Update sprinkler layout.		X	X			
- Indicate Standpipe and Valve Locations		X				
- Finalize fire sprinkler layout.				X		
- Coordinate with Architectural Reflected Ceiling Plan along with other disciplines.				X		
- Coordinate piping with building construction, beams, etc., to assure clearances and accessibility for maintenance. Piping and electrical switchgear locations are to be coordinated.				X		
- Have minimum turns on routing of sprinkler piping to avoid building construction, etc.				X		
- Leave no areas without fire protection/detection, such as wedges in terminals and utility closets when one project is subdivided into several phases.				X		

Communication Drawings

A. Sheet Index		X	X	X		
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Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
B. Demolition Plan		X	X	X		
- With Survey Photos.		X				
- Finalize demolition and phasing plan(s).				X		
C. Single Line Diagrams		X	X	X		
D. Construction Floor Plan		X	X	X		
- Indicate conduit sizes for all routes and clearly indicate beginning and end points of the conduit.		X	X	X		
- Verify all conduit sizes for required right of ways and required radii			X			
- Finalize all IT room locations.				X		
- Verify that all Telecommunication rooms and/or closets comply with LAWA requirements.				X		
E. Enlarged IT Room				X		
- Finalize layout for IT room. Room size is 8' x 10' minimum.				X		
- Confirm that the IT room is free from electromagnetic interference.				X		
- Verify that there are no 'wet' spaces above this room.				X		
- Verify that the service elevator can accommodate cabinet and equipment loading and servicing.				X		
- Verify that the size of a LAWA IT room is designed large enough to accommodate all of the planned equipment required for existing and new technology, plus a growth factor of 50 percent				X		
- Verify that the floor finish for this room is anti-static vinyl tile.				X		
- Verify that the IT room complies with all other LAWA requirements for IT rooms.				X		
E. Typical Details		X		X		
- Connection Point Details at the MPOE and the dedicated utility room.		X	X			
- Details pertaining to any proposed roof mounted equipment.		X	X			
- Coordinate all connection details to existing structure with Structural Engineer of Record			X			
- If installing radio antennas, provide details of antenna model, dimensions, weight, position, mount specifications, and frequency in use. If 'transmission' is applicable, attach FCC license.		X	X	X		
- If installing wireless access points, provide details of access point location(s), wire connections between access points, operation frequencies, manufacturer/model, and attach wi-fi coverage map.		X	X	X		
- If installing network, provide details of router, switch, and network cabling.		X	X	X		
- Finalize all details.				X		
- Check ceiling type speakers shall be checked for conflict with light fixtures, air diffusers, ceiling grilles, sprinkler heads, etc.				X		
- Coordinate large communication system conduit and pull boxes with building construction, beams, etc., to assure clearances and accessibility.				X		

Security Drawings

A. Sheet Index		X	X	X		
B. Demolition Plan		X	X	X		
- With Survey Photos.		X				
- Finalize demo and phasing plan(s).				X		
C. Single Line Diagrams		X	X	X		
- Finalize power requirements for each type of equipment.				X		
D. Construction Floor Plan		X	X	X		
- Coordinate locations of all security equipment with Architect of Record			X			
- Finalize locations of all security devices and fields of view.				X		
- Finalize layout for telecommunications room.				X		
- Perform final Coordination with Architectural drawings and the Architect of Record.				X		
E. (Typical) Details		X	X			

Submittal Details (General)		5%	30%	60%	90%	100%	Need for NTP
-	Coordinate connection details to existing structure with the Structural Engineer of Record			x			
-	Provide a detail drawing of each device.				x		
-	Finalize connection details to existing structure with the Structural Engineer of Record.				x		
-	Provide interfacing details with existing equipment including off site systems including portals.				x		
F. Schedule					x		
-	Provide a schedule of security devices that has been coordinated with the architectural door hardware schedule using common nomenclature.				x		
G. Miscellaneous					x		
-	Installation standards and LAWA specific commissioning and testing procedures are to be included in the specifications.				x		
-	Security system components and types and locations shall be coordinated through Airport Police to properly interface with existing system.				x		
-	Coordinate design to allow for uninterrupted operation of existing security systems. Security must be maintained during construction.				x		
-	Large security system conduit and pull boxes shall be coordinated with building construction, beams, etc., to assure clearances and accessibility.				x		

Exterior Utilities

-	The final Exterior Utility drawings shall, as a minimum, be checked for the following:						
o	Coordinate electrical lighting poles, manholes, handholds and underground conduit with existing utility locations as well as installation of other new utilities.				x		
o	Check plans and specifications for conflicts.				x		

Building Projects

A.	Building Code summary sheet showing governing codes and requirements for building and site.		x				
B.	Floor Plans		x	x			
C.	Elevations		x				
-	Sections and Elevations			x			
D.	Framing Plans			x			
E.	Ceiling Plans			x			
F.	Roof Plans			x			
G.	Schedule of materials to be used.		x				
H.	Tower Line-of-Sight Studies (if required)		x				
I.	Service entrances, Trash locations		x				
J.	Design Live Loads		x				
K.	Details of typical conditions			x			
L.	Design Data - The project and any special studies with potential impact.		x				

Airfield Projects

A.	Cover Sheet		x	x	x		
-	Identify airport		x	x			
-	Provide project title		x	x			
-	Provide FAA, DOT, City project numbers		x	x			
-	Provide project vicinity map		x	x			
-	Provide project location map		x	x			

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- Provide month and year of submittal		X	X			
- Provide submittal name		X	X			
B. Summary of Contract Quantities			X	X		
- Identify pay items by number, specification item, pay item description, quantity, and unit of measurement in tabular form.			X			
C. Safety and Security Notes and Details			X	X		
- Coordinate safety and security with FAA AC 150/5370-2, current edition			X			
- Provide required safety notes			X			
- Provide required security notes			X			
- Provide safety plan narrative			X			
- Provide safety flag detail if work is within AOA			X			
- Provide barricade detail if required and work is within AOA			X			
- Provide pavement closure marking details, if required			X			
- Provide lighted runway closure marker notes and details, if required			X			
D. Contract Layout Plan		X		X		
- Identify all existing terminals, runways, taxiways, taxilanes, aprons, ground support equipment areas, emergency roads, services roads, buildings, structures, signs, FAA NAVAIDS and other objects in the immediate vicinity of the project site or relevant to the proposed work.		X	X			
- Identify limits and dimensions of all object free areas, safety areas, exclusion zones, NAVAIDS, and critical areas that affect the project site		X	X			
- Identify all proposed improvements		X				
- Identify contractor staging area, access routes, and employee parking areas						
- Identify security/access gates locations and areas requiring specific security measures						
- Provide general contract notes						
- Identify all proposed improvements						
E. Phasing Plan		X		X		
- Describe sequencing or phasing of the proposed improvements		X	X			
- Identify any closures of runways, taxiways, taxilanes, services roads, etc.		X	X			
- Identify locations of cones and/or barricades		X	X			
- Provide phasing schedule in bar chart format			X			
F. Typical Pavement Sections		X	X	X		
- Identify the materials, thicknesses and densities of proposed materials		X	X			
- Coordinate pavement sections with FAA AC 150/5320-6, current edition			X			
- Identify any typical grades		X	X			
G. Typical Pavement Details			X	X		
- Coordinate pavement details with FAA AC 150/5320-6, current edition			X			
- Provide appropriate juncture details			X			
- Provide appropriate repair details			X			
- Provide appropriate joint details			X			
- Provide joint sealing details			X			
- Provide new to existing transition details			X			
H. Demolition Plans		X		X		
- Identify existing objects or facilities to be removed		X				
- Identify existing objects or facilities to be removed including but not limited to:			X			
- Pavements			X			
- Electrical and other items			X			
- Structures or portions of structures			X			

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- Existing above and below ground utilities			X			
- Identify existing objects or facilities to remain including but not limited to:			X			
- Pavements			X			
- Electrical and other items			X			
- Structures or portions of structures			X			
- Existing above and below ground utilities			X			
- Identify runway, taxiway, and taxilane safety area limits			X			
- Include appropriate warning blocks for FAA or Airport cables or utilities			X			
- Provide dimensional or coordinate control			X			
I. Geometry Plans		X	X	X		
- Coordinate all geometry with the requirements of FAA AC 150/5300-13, current edition		X	X			
- Identify the limits of proposed objects or facilities		X	X			
- Identify proposed centerlines and edges of pavement		X	X			
- Identify all runways, taxiways, taxilanes, and aprons			X			
- Identify all runway, taxiway and taxilane safety areas			X			
- Identify all existing features to remain			X			
- Provide stationing, dimensioning, or coordinate control as appropriate including			X			
- Intersection equations			X			
- Curve radii			X			
- Curve point of curvature (PC) and point of tangency (PT)			X			
- Runway, taxiway, and taxilane safety areas			X			
- Include appropriate warning blocks for FAA or Airport cables or utilities			X			
J. Centerline Profiles			X	X		
- Coordinate all vertical geometry with the requirements of FAA AC 150/5300-13, current edition			X			
- Provide centerline profiles for airfield paving and roadways						
- Show profile stations and elevation grid			X			
- Identify pavement layers including:			X			
- Top of pavement and at centerline			X			
- Top of base/subbase courses at centerline			X			
- Bottom of compacted subgrade at centerline			X			
- Identify all underground utilities at appropriate depth			X			
- Identify grades			X			
- Identify grade changes locations and station			X			
- Identify vertical curves including:			X			
- Point of vertical curvature (PVC) station and elevation			X			
- Point of vertical tangency (PVT) station and elevation			X			
- Curve length			X			
- Curve k value			X			
- Identify pavement intersections including station equations and elevations			X			
- Identify match lines appropriately			X			
- Include appropriate warning blocks for FAA or Airport cables or utilities			X			
K. Erosion and Sedimentation Control Plans			X	X		
- Show final grading plan			X			
- Show final storm drainage system			X			
- Identify all affected drainage inlets, structures, and channels with appropriate control methods			X			
- Identify limits of control measures such as silt fence, straw bales, wattles, and temporary seeding or sodding			X			

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- Include appropriate warning blocks for FAA or Airport cables or utilities			X			
L. Erosion and Sedimentation Control Details			X	X		
- Provide details appropriate for the project for all proposed control measures			X			
- Provide general erosion control notes			X			
- Provide general seeding notes			X			
- Provide general sodding notes			X			
M. Grading and Drainage Plans			X	X		
- Coordinate grading design with the requirements of FAA AC 150/5300-13, current edition			X			
- Coordinate drainage design with the requirements of FAA AC 150/5320-5, current edition			X			
- Identify limits of grading			X			
- Identify all drainage piping with pipe type, class, length and slope			X			
- Identify all inlets, intake and discharge structures with top and invert elevations			X			
- Show existing contours at 1-foot minimum interval in all areas			X			
- Show new finish contours at 1-foot minimum interval in all areas			X			
- Show new finish contours at 0.10 foot contours on airfield pavements			X			
- Label all contours appropriately			X			
- Include appropriate warning blocks for FAA or Airport cables or utilities			X			
N. Drainage Profiles			X	X		
- Show profile stations and elevation grid for each pipe run			X			
- Identify top of existing grade at centerline			X			
- Identify top of finished grade at centerline			X			
- Show profile of pipe labeled with pipe length, pipe type, pipe class and slope			X			
- Show profile of drainage structures including stationing, structure number, top of structure, and invert elevations			X			
- Identify all pavement being crossed with pavement layers shown			X			
- Identify all underground utilities at appropriate depth			X			
- Identify and label all grade change locations with station and elevation			X			
- Include appropriate warning blocks for FAA or Airport cables or utilities			X			
O. Drainage Details			X	X		
- Provide details for all appropriate drainage inlets, structures, manholes, and connections			X			
- Provide general storm drainage notes			X			
P. Concrete Joint Layout Plans			X	X		
- Show all pavements affected by construction			X			
- Show all pavement joints			X			
- Identify and label concrete joint types			X			
- Provide dimensions for all slabs and joints, standard and irregularly shaped, with radii and appropriate stationing or coordinate control			X			
- Include appropriate warning blocks for FAA or Airport cables or utilities			X			
Q. Concrete Slab Elevation Layout Plans			X	X		
- Show all pavements affected by construction			X			
- Show all pavement joints with elevation			X			
- Include appropriate warning blocks for FAA or Airport cables or utilities			X			
R. Concrete Joint Details			X	X		
- Provide details for all appropriate joint and juncture details			X			
- Provide details for all appropriate repairs			X			
S. Pavement Marking Plans		X	X	X		
- Coordinate all pavement markings with the requirements of FAA AC 150/5340-1, current edition		X	X			

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- Identify proposed pavement markings		x				
- Show all pavements affected by construction			x			
- Provide stationing, dimensioning, or coordinate control as appropriate including:						
o Intersection equations			x			
o Curve radii			x			
o Curve point of curvature (PC) and point of tangency (PT)			x			
- Identify all runways, taxiways, and taxilanes			x			
- Include appropriate warning blocks for FAA or Airport cables or utilities			x			
T. Pavement Marking Details			x	x		
- Coordinate all pavement marking details with the requirements of FAA AC 150/5340-1, current edition			x			
- Provide details for all appropriate pavement markings including:			x			
o Dimensions			x			
o Color			x			
o Reflectivity			x			
U. Lighting/Signage Legend				x		
- Coordinate airfield electrical design with appropriate FAA Advisory Circulars in the 150/5340- and 150/5345-series, current editions						
- Provide general notes associated with airfield electrical work						
- Provide a legend including all symbols and line types used in the Lighting/Signage Layout Plans						
- Include appropriate warning blocks for FAA or Airport cables or utilities						
V. Lighting/Signage Layout Plans		x	x	x		
- Coordinate all airfield lighting and signage improvements with appropriate FAA Advisory Circulars.		x				
- Coordinate airfield electrical design with appropriate FAA Advisory Circulars in the 150/5340- and 150/5345-series, current editions			x			
- Identify all existing and proposed underground utilities, FAA NAVAIDS, duct banks, lighting, guidance signs, electrical ducts, vaults, hand holes, and circuit locations.		x				
- Identify all existing and proposed underground utilities, FAA NAVAIDS, duct banks, lighting, guidance signs, electrical ducts, vaults, hand holes, and circuit locations with dimensions and/or coordinate control			x			
- Identify all existing and proposed pavements and physical improvements			x			
- Identify all existing and proposed cable circuits			x			
- Specifically identify electrical related items to be:						
o Demolished			x			
o Removed or relocated elsewhere			x			
o Salvaged			x			
- Identify all runways, taxiways, and taxilanes			x			
- Include appropriate warning blocks for FAA or Airport cables or utilities			x			
W. Lighting Details			x	x		
- Provide details for the installation of airfield lighting in each pavement type required and in soil if necessary			x			
- Provide details for the installation of appropriate manholes, duct, and associated items with dimensions			x			
- Provide lighting schedule identifying each fixture by FAA type, filter color, and location			x			
X. Other Utilities			x	x		
- Utility Plans			x	x		
- Coordinate utilities design with the requirements of FAA ACs and City of Los Angeles requirements			x			
- Identify all utilities with pipe type, class, length and slope as appropriate			x			

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
- Identify all appurtenances including valves, hydrants, meters, drains, vents, etc.			X			
- Include appropriate warning blocks for FAA or Airport cables or utilities			X			
- Utility Profiles			X	X		
- Show profile stations and elevation grid for each utility run			X			
- Identify top of existing grade at centerline			X			
- Identify top of finished grade at centerline			X			
- Show profile of utility labeled with length, type, class and slope as appropriate			X			
- Show profile of appurtenances including stationing, structure number, top of structure, and invert elevations			X			
- Identify all pavement being crossed with pavement layers shown			X			
- Identify all underground utilities at appropriate depth			X			
- Identify and label all grade change locations with station and elevation			X			
- Include appropriate warning blocks for FAA or Airport cables or utilities			X			
- Utility Details			X	X		
- Provide details for all appropriate utility installations including valves, hydrants, vents, meters, structures, manholes, etc.			X			
- Provide general utility installation notes			X			
Y. Signage Details			X	X		
- Provide details for the installation of lighted and unlighted signs including foundations with dimensions			X			
- Provide sign schedule identifying sign by number, type, size, panel color and legend			X			
Z. Cross Sections Key Plan			X	X		
- Show the airport layout with all associated project elements labeled			X			
- Identify the location of proposed cross-sections and label			X			
AA. Cross Sections			X	X		
- Show cross sections station and elevation grid			X			
- Identify station for each cross section			X			
- Identify the cut and fill quantity for each cross section			X			
- Identify the existing ground or pavement surface at each cross section			X			
- Identify the finished ground or pavement surface at each cross section			X			
- Show the pavement structural section at each cross section			X			
BB. Contract Documents				X		
CC. List of Technical Specifications		X	X			
- Provide a list of technical specifications for the items to be incorporated into the project		X	X			
- Airfield technical specifications should conform to FAA AC 150/5370-10, current edition, as accepted and amended by LAWA		X				
- Other technical specifications should conform to CSI as accepted and amended by LAWA		X				
- Where available, LAWA standard specifications should be used			X			
- If LAWA standard specifications are not available, FAA specifications provided in FAA AC 150/5370-10, current edition, should be used			X			
- If FAA specifications are not available, LADWP, CALTRANS or other specifications may be used as applicable and approved			X			
DD. Limits and dimensions of existing and proposed object free areas, safety areas, exclusion zones, NAVAID			X			
F. Provide a Cost Loaded Schedule per LAWA standards (when required)				X		
H. Provide a separate and complete set of Discipline Coordination Drawings				X		
1 Construction refuse removal and collection strategy with trash bin locations approved by LAWA.				X	X	

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
2 Phasing and construction barricade drawings.				X	X	
3 Inter-disciplinary composite coordination drawings.				X	X	
4 Project Construction Logistics Plan showing site access, contractor staging, employee parking, construction deliveries (locations and time of day), etc.				X	X	
5 Construction Barricade Plans and Signage.				X	X	

CALM Submittals

- Current Estimated Project Cost (initially found on 5% Concept Request Form)	X	X	X	X	X	
- Current Estimated Milestones (initially found on 5% Concept Request Form)	X	X	X	X	X	

Site Logistics Plan

Prepare this document in AutoCAD DWG format, keep separate from other submittals
Must Be Approved before LAWA will issue Notice to Proceed

A. Identify point of entrance locations and traffic routes for movement of the contractor's equipment, materials and workers to the work locations						X
B. Incorporate escort provisions including conformance with LAWA and TSA regulations regarding allowable number and handling of un-badged personnel.						X
C. Define alterations to existing facilities/infrastructure						X
D. Locate on plans - construction zone accommodation of vehicular and aircraft traffic including signage, traffic stripping, flagging, temporary closures, barricades, and detours						X
E. Locate on plans - provisions and plans for worker parking and routes to and from the work						X
F. Locate on plans - staging/laydown areas for construction equipment, trash/debris receptacles, and material storage and protection						X
G. Locate on plans - temporary facilities including trailers, dumpsters, and sanitary facilities						X
H. Identify locations and related work zones for worker/material handling equipment such as cranes, and lifts.						X
I. Provide emergency vehicle access						X
J. Provide emergency evacuation routes						X
K. Provide protection of private and public properties, including leased properties on site, if applicable						X
L. Identify security provisions						X
M. Locate on plans fencing and enclosure provisions						X
N. Identify location of off-site, project-related facilities						X
O. Identify on-site parking provisions if applicable						X
P. Emergency contacts must be posted on plans						X
Q. Define work shifts and corresponding working hours						X
R. Show routing of temporary utility lines and points of tie-ins						X
S. Show provisions for reclamation of areas disturbed by the contractor, if applicable						X
T. Provide plans and actions taken to comply with environmental requirements and permits						X
U. Identify the means for dust/dirt/debris mitigation						X
V. Identify the means for construction Noise mitigation						X
W. Incorporate coordination and accommodation of stakeholders impacted by the work.						X
X. Incorporate coordination with other contractors impacted by or impacting the work.						X
Y. Identify any other unique conditions applicable to the project						X
Z. Narrative explaining each of the above line items and indicating the major challenges.						X

Submittal Details (General)

5%	30%	60%	90%	100%	Need for NTP
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Project Phasing Keep this document separate from other submittals.

1a.	Written description of the work to be accomplished within each phase					X
1b.	Breakdown the physical elements of the project in maximum thirty (30)-day increments, or less if required to accurately reflect the progression of work, sequenced in accordance with the project schedule.					X
1c.	Include dates for proposed work, daily work hours, and a written work plan for each phase.					X
1d.	The document shall be flexible in its ability to describe real-time updates and shall be updated as required to fully ensure stakeholders are fully informed of revisions as they occur.					X
1e.	The document shall be consistent with the overall Project Schedule.					X
2a.	Indicate on plans the location of barricades, partitions, covered walkways, stairs, scaffolding, work platforms, etc. which are designed to separate construction activities from ongoing operational areas and mitigate disruptions to passenger and other stakeholder traffic flows. Approval must be obtained for Barricade and Enclosure Plans, temporary signage, and Scaffold and Messaging Concept. Please see "Additional Design Standards and Criteria" for a sample presentation. Full-size mock-ups of these systems may be required and agreed to prior to installation.					X
2b.	Identify security provisions					X
2c.	Identify emergency personnel provisions					X
2d.	Identify emergency evacuation routes					X
2e.	Identify egress analysis and occupancy Load calculations for each phase of the construction					X
2f.	Identify the means for public and worker health and safety protection					X
2g.	Identify any relocation and definition of temporary facilities required to maintain ongoing operations					X
2h.	State the means for maintenance of fire/life safety systems					X
2i.	State applicable construction restrictions during special events and holidays					X
2j.	Identify locations for material stockpiling and staging					X
2k.	Identify locations and related work zones for worker/material handling equipment					X
2l.	Identify the plan for rubbish removal, including location of trash bins					X
2m.	Identify modification and maintenance of existing systems during construction					X
2n.	Identify temporary signage/way-finding devices					X
2o.	Identify stakeholder relocations					X
2p.	Show routing of temporary utilities, lines, and points of tie-in					X
2q.	Identify temporary facilities					X
2r.	Identify means of dust/dirt/debris mitigation					X
2s.	Identify means of construction Noise mitigation					X
2t.	Identify any other unique conditions applicable to the project					X

Add'l Req'd Documents

A.	Provide "Cut Sheets" for all proposed equipment		X	X		
B.	Updated LAWA submittal schedule		X			
C.	Provide a Set of Outlines Specifications in CSI format and Basis of Design Narrative.		X			
C1.	Provide a corresponding Set of Specifications in CSI format			X		
	Provide a full set of Specifications in CSI Format, including schedules for doors and hardware, equipment, furniture, finishes, etc..				X	
D.	All Architectural drawings are to be stamped and signed by a professional Architect registered in the State of California				X	

Submittal Details (General)

	5%	30%	60%	90%	100%	Need for NTP
E. All Mechanical, Electrical, Plumbing and Fire Protection Drawings are to be stamped with appropriate professionals and signed by the corresponding design engineer of record who is registered in the State of California				x		
F. All Structural drawings and calculations are to be stamped and signed by the Professional Engineer of Record that is registered in the State of California				x		
G. Provide a letter addressed to LAWA signed by the Architect of Record certifying that all elements of the design, including but not limited to, casework, equipment and signage, indicated on their drawings are ADA compliant. In many cases, these letters will also need to be signed by a Certified Access Specialist (CAS).				x		

July 2017