

Seattle-Tacoma International Airport Tenant Improvement Design and Construction Process Manual



1 March 2019

INTRODUCTION

The design and construction of a tenant project at Seattle-Tacoma International Airport (Airport) is a collaborative process between the tenant, the tenant's design team, the tenant's contractor, and the Port of Seattle (Port), which operates the Airport. All projects located on Airport property are subject to the Port's requirements and, depending on location, may also be subject to the City of SeaTac's requirements.

The Port has developed several documents, listed below, that further explain the tenant design and construction process and the requirements that tenants must meet:

- *Tenant Improvement Design and Construction Process Manual (Process Manual)*—This Process Manual describes the requirements and process to be followed for the tenant design and construction at the Airport.
- *Rules for Airport Construction (RAC)*—This document describes the rules that apply to all design and construction projects at the Airport, not just tenant projects. It serves as a guide for contractors to better understand the environment they will be working in.
- *Port Tenant Improvement Construction General Requirements*—This document comprises the Port master specification sections referenced in the Process Manual and the RAC. These specification sections have been tailored to tenant projects.

Tenants, design teams, and tenant contractors are to use these three documents to implement tenant projects. In addition to these three documents, many technical standards and guidelines also apply to all Airport projects. These documents and Port standards and guidelines are available on the Port of Seattle website.

<https://www.portseattle.org/sea-tac/leasing-tenant-resources/tenant-construction-and-design-reference-documents>

If the reader does not have access to the internet, the assigned Port Project Manager can provide information on a compact disc or other electronic media.

The Port is implementing electronic systems for the design, permitting, and construction process. Tenants, tenant designers, tenant vendors, and tenant contractors shall use the platform(s) that the Port implements.

The Port tenant improvement design and construction process is summarized on the next page.

For questions or concerns about this document, contact Lisa Mach at mach.l@portseattle.org or Alan Olson at olson.a@portseattle.org.

Tenant Improvement Design and Construction Process

Note: Depending on the project's scope and complexity, some of the following steps may be simplified or not required.

1. CONCEPT APPROVAL <ul style="list-style-type: none"> a. Initiation of Tenant Projects – Contact Business or Property Manager b. Port Project Manager Assigned c. ADR Concept Review 	Concept approval focuses on communication with the Business or Property Manager about the project.
2. PRE-DESIGN <ul style="list-style-type: none"> a. Assemble The Design Team b. Pre-Design Meeting c. Existing Conditions- Site and Utility Surveys d. Port of Seattle Standards, Guidelines, Specifications e. Authorities Having Jurisdiction 	Pre-Design focuses on gathering information prior to designing to apprise the tenant and their design team about Port Requirements and existing conditions.
3. DESIGN <ul style="list-style-type: none"> a. Port Technical Design Review Objectives b. Port Technical Design Review Process <ul style="list-style-type: none"> i. Design Reviews ii. Applications for Connection iii. Technical Review Committees iv. Environmental Review c. Required Design Information 	Design focuses on technical integration of the new design with Port systems. The Project must complete this technical design review process prior to submitting for Building and other Permits.
4. PERMITTING <ul style="list-style-type: none"> a. Airport Building Department b. Other Permits 	Permitting focuses on obtaining all required permits for the project as outlined by County, State and National codes.
5. PRE-CONSTRUCTION <ul style="list-style-type: none"> a. Pre-Construction Submittals b. Pre-Construction Meeting 	Pre-construction focuses on documentation and training that must be completed prior to starting construction.
6. CONSTRUCTION <ul style="list-style-type: none"> a. Resolution No. 3725 Policy Directive for Construction Labor for Projects on Port Property b. Construction Management c. Construction Logistics 	Construction focuses on requirements and limitations for contractors at Seattle-Tacoma International Airport.
7. COMPLETION AND CLOSE-OUT <ul style="list-style-type: none"> a. Punch List / Final Inspections / Demobilization b. Close-out Documentation c. Certificate of Occupancy 	Completion and Close-out focuses on final inspections, occupancy, and required close-out documentation for the project.

CONTENTS

INTRODUCTION	3
Acronyms and Abbreviations	7
1. CONCEPT APPROVAL	9
A. Initiation of Tenant Projects	9
B. ADR Concept Review.....	9
2. Pre-design.....	11
A. Assemble The Design and Construction Team	11
B. Pre-Design Meeting	12
C. Existing Conditions.....	13
D. Port of Seattle Standards Web Page.....	15
E. Authorities Having Jurisdiction	20
3. Design	21
A. Port Technical Review Objectives	21
B. Port Technical Design Review Process.....	21
C. Required Design Information.....	25
4. Permitting	31
A. Airport Building Department	31
B. Electrical Permit	32
C. Food Facilities Permit.....	32
D. Airport Security Plan Changes.....	32
E. Liquor License	32
F. Other Permits.....	32
5. Pre-Construction.....	33
A. Pre-Construction Submittals	33
B. Pre-Construction Meeting	36
6. Construction	39
A. Resolution No. 3725 Policy Directive for Construction Labor for Projects on Port Property	39
B. Construction Management.....	39
C. Construction Logistics	41
7. Completion and Close-out	43
A. Punch List / Final Inspections / Demobilization	43
B. Close-out Documents.....	44
C. Certificate of Occupancy.....	46
 Figures	
Figure 1. Port Technical Design Review Process	22
Figure 2. Port Construction and Deferred Submittal Review Process	40

Appendix A Tenant Improvement Project Pre-design Worksheet

ACRONYMS AND ABBREVIATIONS

ABD	Airport Building Department
ADR	Airport Dining and Retail
Airport	Seattle-Tacoma International Airport
A/E	Architect/Engineer
AMA	Airport Movement Area
AOA	Airport Operations Area
ARC	Architectural Review Committee
AV	Aviation
CAD	computer-aided design
CMMS	computerized maintenance management system
COPS	Certification of Port Standards
DDC	direct digital control
ID	identification
ILA	Interlocal Agreement
IWS	Industrial Waste System
F&I	Facilities and Infrastructure
FAA	Federal Aviation Administration
FARM	Facility Asset Review Meeting
HVAC	heating, ventilation, and air conditioning
L&I	Washington State Department of Labor and Industries
MUST	Mechanical Utilities System Team
NTP	notice to proceed
O&M	operations and maintenance
PCS	Port Construction Services
PEST	Proactive Electrical Systems Team
PM	Project Manager
Port	Port of Seattle
Port FD	Port of Seattle Fire Department
RAC	Rules for Airport Construction
RCF	rental car facility
RFI	request for information
START	SeaTac Telecommunications Architecture Review Team
STIA	Seattle-Tacoma International Airport

TSA	Transportation Security Administration
WAVE	Wayfinding and Visual Environment Team
WISE	Water, IWS, Storm and Sanitary Sewer Team

1. CONCEPT APPROVAL

A. Initiation of Tenant Projects

New or existing tenants of Seattle-Tacoma International Airport (Airport) who wish to modify or expand their existing facilities must first contact their assigned Aviation Properties Manager or Airport Dining and Retail (ADR) Business Manager and submit to them a concept of what they would like to modify, change, or add to their lease space. The tenant's concept may range from a statement of scope intent to a completely illustrated design. As much information as possible should be provided about the scope of the proposed work for the concept review.

The sponsoring Aviation Properties Manager or ADR Business Manager coordinates with Port of Seattle (Port) stakeholders to review the project concept. The Port stakeholders then provide a "qualified" concept approval that may be subject to specific limitations or include a request for more detailed information. Changes or additions to the project scope after it has been granted initial concept approval may require that the project go through a second concept review period.

The tenant works with the Aviation Properties Manager or the ADR Business Manager to either negotiate or amend their lease agreement. After the tenant has obtained conceptual approval and all lease agreement issues are in progress, a Port Project Manager (PM) is assigned to support and assist the tenant through the design and construction process.

Project concept approval does not authorize the tenant to proceed with construction until specific pre-construction requirements have been met. These pre-construction requirements vary depending upon project location and scope. The assigned Port PM confirms the applicable pre-construction requirements and issues a construction notice to proceed (NTP) only after all necessary pre-construction reviews and approvals have been completed. Please see Section 3, Design; Section 4 Permitting; and Section 5, Pre-construction, for specific requirements.

B. Airport Dining and Retail Concept Review

ADR projects generally fall under three categories: new build-outs (tenant has a new lease); renovations (tenant modifying existing an existing lease space); and mid-term refurbishments (as required in the lease agreement). The concept review requirements are similar to those described above, but generally require more extensive documentation. Reference Section 7 of the *Dining and Retail Design Guidelines* for detailed requirements.

https://www.portseattle.org/sites/default/files/2018-03/adr_DesignStandards.pdf

Types of documentation that may be required include the following:

- Rendering of the storefront (two perspectives)
- Floor plan
- Reflected ceiling plan
- Elevations
- Material sample boards and schedules

2. PRE-DESIGN

The design team is strongly encouraged to look over activities in every phase of this manual before beginning design. The design team is responsible for ensuring that every aspect of the process has been addressed adequately as outlined within this document. Forethought and planning are imperative before actual design to reduce costs, remain on schedule, and avoid surprises.

A. Design and Construction Team

1) Design Team

All construction drawings and documents must be signed and stamped by an architect and/or engineer licensed in the state of Washington, with minor exceptions. Electrical and mechanical designs must be stamped and signed by an engineer licensed in the state of Washington in their appropriate discipline. Mechanical, electrical, or plumbing drawings stamped by an architect are not acceptable.

Language in the design contract must include compliance with Port standards, guidelines, rules, and regulations, including preparation of as-built AutoCAD record drawings.

Tenant is allowed to use any licensed designer. The Port makes no guarantee as to the ability of firms to perform work.

2) Construction Team

All contractors who perform work or who advertise for or submit bids in Washington State must be registered with the Washington State Department of Labor and Industries (L&I), post a bond and carry general liability insurance coverage (for additional information see Washington State contractor licensing). The contractor is not issued a building permit if they are not licensed in the State of Washington and the City of SeaTac. For additional information regarding how to obtain a City of SeaTac business license, see the City of SeaTac licensing website. <http://www.ci.seatac.wa.us/government/city-departments/finance-systems/business-licensing>

Tenants are encouraged to select construction contractors as early as possible because security badging, keying, and pre-construction submittals take several weeks to procure.

3) Contractual Modality for Tenant Projects

The primary contractual relationship is between the tenant and its consultant designer. The Port's PM represents the relevant Port departments in the role of owner's representative.

The contractual relationships and decision flow in the tenant improvement design and construction process is outlined as follows:

- The tenant addresses business issues with Aviation Properties or Business Development, such as provision of utilities and lease amendments.
- The tenant hires a consultant for design. The tenant's design consultant then contacts the assigned Port PM, who clarifies how best to implement the tenant's project after reviewing proposed scope of work.
- The tenant is required to design and construct the project in conformance with all applicable Port standards, guidelines, rules, and regulations, including as-built AutoCAD drawings.

- The authority of the Port PM is as the representative of the Port as landlord. The Port PM will assist the tenant in expediting the project. There is no contractual relationship between the tenant's design consultant and the Port PM.
- The Port PM is the point of interaction between the tenant and other Port entities, including other tenants, and is involved in every stage of the project. The Port PM coordinates design reviews by the various stakeholders and facilitates resolution of design or other issues. The Port PM provides all Port project technical decisions.
- Prior to construction, the tenant submits the construction documents to the Port PM for Port review for general conformance to Port standards, guidelines, rules, and regulations. The Port PM provides the final review for Certification of Port Standards (COPS). A building permit submittal and issuance is contingent on the Port PM's approval. **NOTE: The Port's review, however, is for general conformance to Port standards, guidelines, rules, and regulations. The tenant (and its designer) is ultimately responsible for ensuring compliance with Port standards, guidelines, rules, and regulations. Any discrepancies or deviations from Port standards, guidelines, rules, and regulations discovered after the Port's review (even if such discrepancies or deviations should reasonably have been identified by the Port) are the sole responsibility of the tenant, who also is solely responsible for any costs associated with correcting the discrepancies or deviations so that all work meets Port standards, guidelines, rules, and regulations.**
- The construction contract is between the tenant and its contractor. The tenant is responsible for satisfying all permit issues. The Airport Building Department (ABD) issues a permit to the tenant with the Port listed as the landlord.

4) Airport Security and Badge Process

The Airport Credential Center is responsible for issuing identification (ID) badges and keys for restricted and public areas and ramp insurance and permits and assigning access into restricted areas.

The Airport Credential Center website has more detailed information <https://www.portseattle.org/employee-services/credentials-trainings>

Further, more detailed requirements are also found in the Port's *Tenant Improvement Construction General Requirements*, Section 01 14 13, Airport Identification Access Security.

B. Pre-Design Meeting

The Port PM schedules an initial meeting with the tenant representatives to review project scope; Port design and construction requirements; Port standards, guidelines, rules, and regulations; project schedule; roles and responsibilities; project-specific information and requirements; and project close-out requirements. The Port PM provides the design team with all applicable documents indicated in the pre-design checklist (Appendix A) and discusses with the design team any potential project challenges.

Following are required attendees for the pre-design meeting:

- Port PM
- Tenant or tenant representative (if not tenant)
- Tenant design team (architect and engineers)
- Other stakeholders as needed

Following are pre-design meeting agenda items:

- Project scope

- Pre-design checklist (Appendix A)
 - Activities that apply to this project
 - Port standards, guidelines, rules, and regulations
 - Site survey and record drawings
 - Design review process and design requirements
 - Keys, badging, Federal Aviation Administration (FAA) coordination
 - Permitting
 - Pre-construction submittals
 - Construction
 - Close-out
- Schedule
- Roles and responsibilities

C. Existing Conditions

1) Base Drawings and Archive Drawings

The Port maintains base drawings or architectural backgrounds of the passenger terminal building. The Port PM will provide the architectural background drawings to the design team at the pre-design meeting, if the project location is known. Base drawings for areas outside the passenger terminal building may be available. The design team will coordinate with the Port PM for access.

The Port maintains an archive of drawings from past projects at the Airport. The Port PM will assist the design team with obtaining archived drawings, if they are available. The design team is responsible for researching the archive and identifying which archived drawings are relevant.

For the base building background drawings, other base drawings, and the archive drawings, the Port does not guarantee accuracy. All drawings and existing features are subject to field verification by the design team.

To provide archive information for future projects, tenants are required to provide as-built drawings at the completion of their projects (see Section 7 for project close-out requirements).

2) Existing Site Conditions Surveys

As noted above, the accuracy of Port archive documents is not guaranteed. The design team must verify field conditions. The Port PM assists the design team with arranging all existing site condition surveys, as well as coordinating with appropriate Port Maintenance, Port Facilities and Infrastructure (F&I), and Port Construction Services (PCS) regulated materials to familiarize the design team with the location of and how the design will be integrated into the existing building systems. To allow the Port PM time to coordinate with Port staff, the design team provides at least 2 weeks' notice for the site survey. Tenant architects and engineers must participate in the site survey. The design team is responsible for providing all tools and equipment required to access and perform the site survey.

NOTE: The design team personnel will need ID and/or access security badges. Approximately 3 to 4 weeks should be allowed to complete this process. If the design

team surveyor requires access to specific locations to verify conditions before that time, the Port PM may be able to arrange for surveyors to be escorted up to three times.

3) Regulated Material and Asbestos Surveys

The Airport has areas of asbestos and other regulated materials and requires a regulated materials survey of every new project's location. The Port is responsible for conducting regulated material abatement in Port-owned facilities. When the project boundaries are known—and no later than at 60-percent design—the Port PM requests PCS to conduct a regulated materials survey of the affected tenant space.

The Port PM forwards the survey report to the design team for inclusion in the general conditions portion of the drawings. If regulated material removal is required, then the tenant's construction schedule accounts for any additional time. See *Rules for Airport Construction* [RAC] Section 5 for more detailed information about regulated materials at the Airport.

Note: The regulated material survey is approximately a 2-week process. PCS provides the abatement design and removal schedule (if required) based on the complexity of the site condition.

4) Utility Capacity Determination

a) Air and Water Survey (Pre-Design Test and Balance (TAB) Report)

To evaluate how the tenant project will affect Airport heating, ventilation, and air conditioning (HVAC) systems and determine if sufficient capacity is available, a survey of the existing airflow and tempered water flow in the tenant project area is required to be commissioned by the tenant. Before design, the design team is required to hire a prequalified test and balance agency to perform pre-design readings of the existing mechanical systems that serve the tenant space(s).

Prequalified firms are listed in the Port's *Mechanical Systems Standards*, Section 200593, Testing and Balancing. The design team may hire other firms, but they must be preapproved by Port F&I and meet the qualification requirements.

The predesign report is submitted with the Application for Connection to Mechanical Systems, and the design team is responsible for using these data as the basis of design for their HVAC system.

b) Electrical Main Panel—7-Day and 30-Day Load Readings

The Port requires electrical meter readings of tenant and Port panels impacted by the proposed tenant project. These meter readings are also a permit requirement by Washington State L&I.

Meter readings measure the current amperage demand on a panel in 30-minute increments and help determine whether enough ampacity is available to accommodate the project. Seven-day meter readings are usually adequate for added loads that are less than 5 percent of the total rated amperage of the panel. Any greater loads will require a 30-day meter reading. Copies of the reading's summary sheet are submitted with each Application for Connection to Electrical Systems. The tenant or design team is responsible for hiring a licensed electrician to perform the panel readings.

c) Solid Waste

The Port requires estimates of the square footage and space utilization types, along with any information that would be relevant to solid waste systems capacity

(for example, a restaurant specializing in bottled beverages) to review waste system capacity and scheduling requirements.

d) Natural Gas

The Port requires estimates of the amounts of natural gas, including total amounts and peak demand, required by tenants to determine how to establish adequate delivery capacity to the new spaces.

e) Water, Sewer, and Surface Water

The Port requires estimates of the amounts of water, including total amounts and peak demand, required by tenants to determine how to establish adequate delivery capacity to the new spaces.

f) Broadband Television

The Port requires knowledge of the number and location of television outlets to be required to determine how to establish adequate delivery capacity to the new spaces.

D. Port of Seattle Standards Web Page

To ensure seamless integration of the new systems, design teams must prepare designs conforming to Port standards and guidelines. Current versions of Port standards, guidelines, applications for connections, *Tenant Improvement Construction General Requirements*, *Construction Safety Manual*, *RAC*, and other relevant documents can be found on the Port's website. <https://www.portseattle.org/sea-tac/leasing-tenant-resources/tenant-construction-and-design-reference-documents>

Lists of the Port standards, guidelines, rules and regulations are provided below.

1) Port Standards

Architecture Guidelines and Standards

http://www2.portseattle.org/csmedia/PA/ArchitecturalDesign/2018_Architectural_Design_Guidelines_Standards.pdf

Standards for architectural design, materials, and finishes selection at the Airport (148Mb PDF)

CAD Standards (43 Mb)

<https://www.portseattle.org/sites/default/files/2018-04/CAD%20Standards%202018.zip>

CAD Standards for all projects.

Civil System Standards

https://www.portseattle.org/sites/default/files/2018-07/STIA_Civil_Systems_Standards_2018.pdf

Standards for civil systems at Sea-Tac Airport, including industrial waste and storm drain systems, domestic water, and sanitary sewer system design. (12Mb PDF)

Communications Systems Standards

https://www.portseattle.org/sites/default/files/2018-05/Communication_Standards.zip

Standards for communication system design and equipment selection at the Airport, including appendices for tenant guidelines and communications labeling standards (12.8Mb)

Cooking Equipment Ventilation Standards 2018

https://www.portseattle.org/sites/default/files/2018-03/cooking_equipment_ventilation_standard.pdf

Ventilation standards for all cooking equipment within the Airport.

Electrical System Standards—

https://www.portseattle.org/sites/default/files/2018-08/Electrical_Standards_2018.zip

Standards for electrical system design and equipment selection at the Airport (12.9Mb)

Landscape Standards—

<https://www.portseattle.org/sites/default/files/2018-03/LandscapeDesignStandards.zip>

Standards for landscape design, installation, equipment selection, and plant selection at the Airport. (3.6Mb)

Low-Impact Development Guideline—

https://www.portseattle.org/sites/default/files/2018-03/POS_Aviation_LIDGuideline.pdf

Guidance for assessing the requirements, applicability, and technical feasibility of implementing low-impact development at the Airport (18.4Mb)

Mechanical Systems Standards—

https://www.portseattle.org/sites/default/files/2018-11/Mechanical_Standards_2018.zip

Standards for mechanical system design and material selection at Sea-Tac Airport (19Mb)

Radio Frequency Standards —

<https://www.portseattle.org/sites/default/files/2018-03/RadioFrequencyStandards2005.zip>

Standards for radio frequency system design and equipment selection at the Airport

Rental Car Facility (RCF) Tenant Design and Construction Standards 2012(12Mb)—

<https://www.portseattle.org/sites/default/files/2018-03/rentalcar.pdf>

Design and construction standards for tenants of the consolidated rental car facility that supplement existing design standards for the unique features of the rental car facility.

Restroom Design Standards—

https://www.portseattle.org/sites/default/files/2018-03/restroom_design_standards_2015.pdf

Standards for architectural design of public restrooms at the Airport (plumbing fixtures and fittings are included in the Mechanical Systems Standards).

Signage Standards—

<https://www.portseattle.org/sites/default/files/2018-03/SignageDesignStandards2011.zip>

Standards for signage design, layout configuration, graphics, symbols, installation, and material selection at the Airport (31Mb)

Stormwater Management Manual—

Standards for design of stormwater management (43 MB)

2) Master Specifications

Port master guide specifications for technical sections can be found on the Port's website <https://www.portseattle.org/page/master-guide-specs-2004> (please review the document location with the Port PM because links sometimes change).

The project design team uses the Port master specifications edited to suit the project and to comply with Port standards. While some standards are written in specification format, they contain information that is specifically geared to the designer and should not be included in contract documents. The specifications should be provided in track changes to facilitate more efficient reviews.

3) Design Guidelines

Dining and Retail Design Guidelines—

https://www.portseattle.org/sites/default/files/2018-03/adr_DesignStandards.pdf

Guidelines for concessions design and material selection at the Airport (18 Mb)

Landscape Design Guidelines—

https://www.portseattle.org/sites/default/files/2018-03/LandscapeDesignStandards_0.zip

Guidelines for landscape design and installations at the Airport (7.4Mb)

Port of Seattle Health & Safety Manual—

https://www.portseattle.org/sites/default/files/2018-03/Construction_Safety_Manual_0.pdf

Guide to contract safety requirements and the Port Fire Department (Port FD) as it relates to construction

Section 01 35 29 - Safety Management—

https://www.portseattle.org/sites/default/files/2018-03/Section_01860_Tenant_Safety_Management.pdf

Master specification section 01 35 29 Safety Management.

Interlocal Agreement City of SeaTac—

https://www.portseattle.org/sites/default/files/2018-03/ILACityofSeaTac-PortofSeattle_February_16_2006.pdf

Port and City of SeaTac requirements

4) Applications for Connection to Utilities

Cable Television

<https://www.portseattle.org/sites/default/files/2018-05/ApplicationConnection-CableTelevision.docx>

Application to connect to cable television

Communications Systems—

<https://www.portseattle.org/sites/default/files/2018-07/ApplicationConnection-Communications.zip>

Application to connect to all communications infrastructure other than radio frequency (excludes tenant-owned infrastructure in tenant-leased spaces that are not connected to Port-owned infrastructure or routed through Port-owned spaces)

Electrical Systems—

<https://www.portseattle.org/sites/default/files/2018-06/ApplicationConnection-ElectricalSystem.zip>

Application for connections, load additions, or modifications to the Airport electrical distribution, lighting, or emergency power systems.

Industrial Waste Systems—

<https://www.portseattle.org/sites/default/files/2018-06/ApplicationConnection-IndustrialWasteWater.zip>

Application for connections, load additions, or modifications to the industrial wastewater system at the Airport

Mechanical Systems—

<https://www.portseattle.org/sites/default/files/2018-06/ApplicationConnection-Mechanical.zip>

Application for connections, load additions, or modifications to Airport mechanical systems including HVAC, chilled water, hot water, and condenser water systems

Natural Gas System—

https://www.portseattle.org/sites/default/files/2018-06/ApplicationConnection-NaturalGas_0.zip

Application for connections, load additions (MBH, CFH), or modifications to the Airport gas distribution system to Central Terminal, Concourses A, B, C, D, or the North Satellite.

Radio Frequency Systems Application

<https://www.portseattle.org/sites/default/files/2018-06/ApplicationConnection-RadioFrequency.zip>

Application for use of radio frequency systems at the Airport.

Sanitary Waste Systems—

<https://www.portseattle.org/sites/default/files/2018-06/ApplicationConnection-SanitaryWaste.zip>

Application for connections, load additions, or modifications to the Airport sanitary waste system

Storm Drain Systems—

<https://www.portseattle.org/sites/default/files/2018-06/ApplicationConnection-StormDrainage.zip>

Application for connections, load additions, or modifications to the Airport storm drainage system

Water Systems—

<https://www.portseattle.org/sites/default/files/2018-06/ApplicationConnection-WaterSystem.zip>

Application for connections, load additions, or modifications to the Airport water distribution system, including irrigation, domestic water, and fire suppression. The link Includes instructions and water system connection procedure requirements.

5) Rules and Regulations

Tenant Design and Construction Process Manual—

https://www.portseattle.org/sites/default/files/2018-03/tenant_imprv_design_constr_manual.pdf

This manual is an electronic copy of the resources necessary for designing and constructing tenant improvement projects at the Airport

Construction Safety Manual—

https://www.portseattle.org/sites/default/files/2018-03/Construction_Safety_Manual_0.pdf

Guide to contract safety requirements and the Port Fire Department (Port FD) as it relates to construction

Rules for Airport Construction—

https://www.portseattle.org/sites/default/files/2018-03/rules_airport_constr.pdf

This document provides necessary information to successfully execute and complete construction at the Airport, as well as the various Port stakeholders interfacing with contractors during a project.

Tenant Improvement Construction General Requirements—

https://www.pub.portseattle.org/sites/default/files/2019-01/tenant_improve_gen_reqs.pdf

This compendium of procedures, rules, regulations, and standards are to be followed for all Port and tenant construction projects the Airport.

Rules and Regulations

https://www.portseattle.org/sites/default/files/2018-12/rules_regs_no_5_effective-190101.pdf

Airport rules and regulation No. 5 (effective date January 1, 2019).

Tariffs

<https://www.portseattle.org/sites/default/files/2019-01/Tariff%20010119.pdf>

Airport tariff No. 1 (effective January 1, 2019).

6) Port Computer-Aided Design Standards

All drawings shall comply with Port CAD Standards

<https://www.portseattle.org/sites/default/files/2018-04/CAD%20Standards%202018.zip> to enable the tenant's project computer-aided design (CAD) record drawings to be entered into the Port's Engineering Document Management System. The design team should start with backgrounds from the Port's base drawings for all exterior site planning, interior floor plates, and utilities work. These base drawings are furnished by the Port where available.

Orientation for the Port CAD standards is provided to the design team by Port staff to help ensure that the tenant's documents comply with the Port CAD standards. Drawings submittals are reviewed for compliance during Port design review.

All projects requiring a permit or altering infrastructure require CAD drawings. Projects that do not require CAD drawings are as follows:

- Temporary facilities (up to 6 months)

- Nonsystem-related architectural work (for example, counters, casework and finishes, etc.)
- Project-related signage (temporary construction)
- Glass replacement (exterior windows and interior relites), carpet, and replacement in kind
- Painting and lighting refits

E. Authorities Having Jurisdiction

A variety of federal, state, and local government entities have jurisdiction over design and construction projects at the Airport. The assigned Port PM assists the tenant with determining which government entities have jurisdiction. The Interlocal Agreement (ILA)

<https://www.portseattle.org/page/design-guidelines> between the City of SeaTac and the Port provides guidance on which agency has jurisdiction for life safety codes. In general, the Port FD and Port ABD have jurisdiction in the Airport activity area, defined in the ILA.

In addition to building permits, electrical, escalator, elevator, and boiler permits are administered by Washington State L&I, health permits for food-handling facilities are administered by King County, and liquor licenses are administered by the Washington Liquor and Cannabis Control Board. The FAA, coordinated through the Port, provides approval for obstacles or features that could impact aircraft operations. The Transportation Security Administration (TSA), coordinated through the Port, provides approval for changes to Airport security (see RAC for specific requirements for design and construction from the Port ABD, Port FD, and Port Environmental and Section 4 of this manual for the permitting process).

3. DESIGN

This section focuses on the Port design review process and issues that tenants and their design teams must consider in their design. All projects must comply with Port standards, guidelines, rules, and regulations and are reviewed by the Port before submittal to the ABD, City of SeaTac, or other permitting agencies. The Port review culminates with the completion of an application for COPS. This allows the tenant to submit for required permits.

A. Port of Seattle Technical Review Objectives

The goal of the Port technical design review is to ensure seamless integration of tenant improvements with Port systems, maintainability, and compliance with Port standards, guidelines, rules, and regulations. The Port reviewers have a vested interest in the continuous operation of Airport facilities with minimal impacts to the traveling public.

Following are specific objectives of the technical design review:

- Allocation of utilities and energy conservation
- Compliance with Port standards, guidelines, rules, and regulations to ensure tenant's systems are compatible with Port systems, includes both infrastructure and aesthetics
- Compliance with environmental requirements
- Maintainability of existing systems and elements and those that become Port responsibility
- Minimization of construction impacts to operations
- Fulfillment of approved design intent (concept)

1) Application for Certification of Port Standards

All tenant projects must comply with Port design standards and guidelines. The Port review process confirms, but does not guarantee, compliance with Port standards and guidelines. The design and systems review process cycles described in this section are repeated until all design issues have been resolved and all applicable applications for utility connection forms have been approved. The COPS must be completed before submitting for permit.

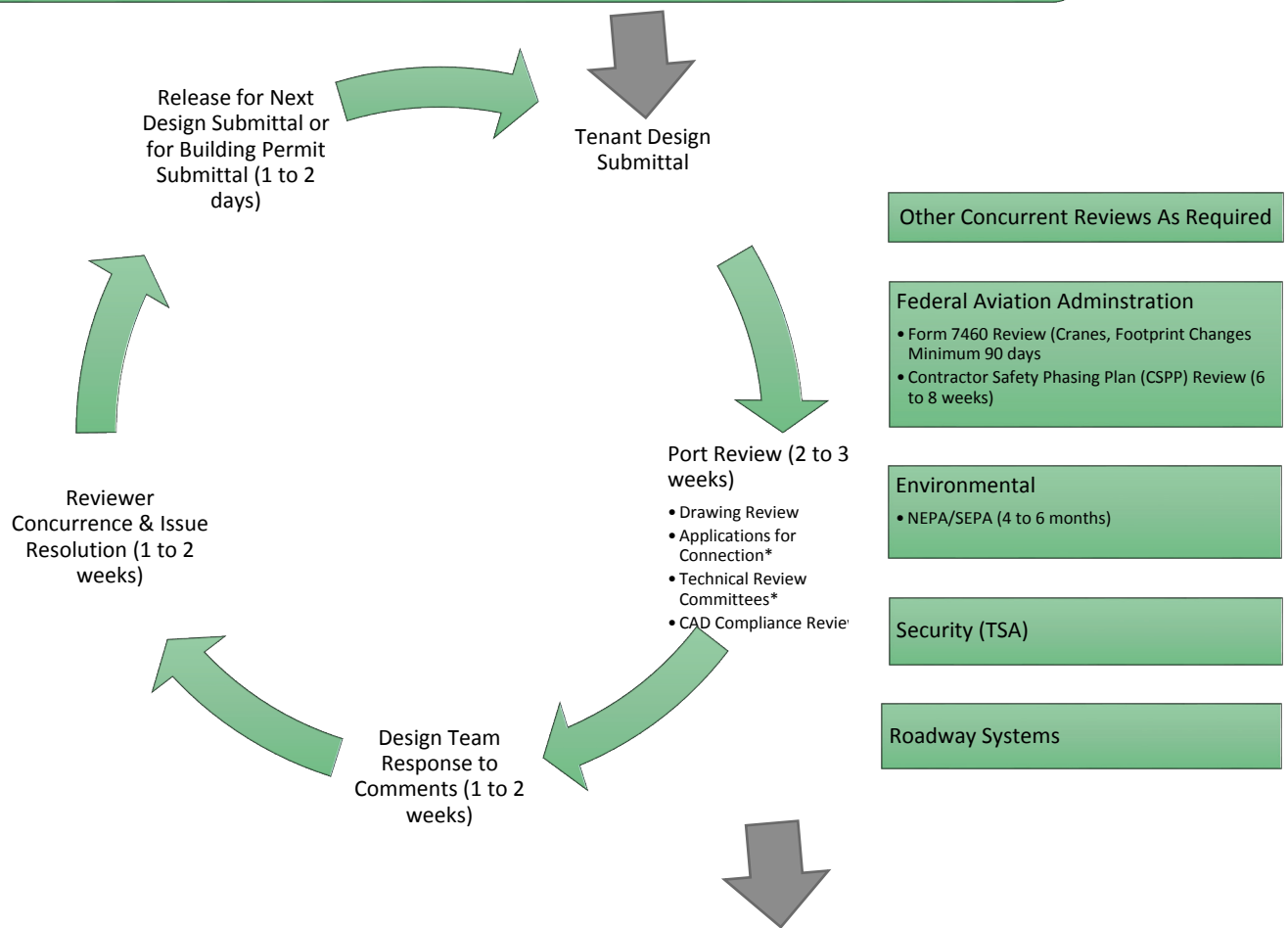
B. Port of Seattle Technical Design Review Process

Following are the three phases to the technical design review process; these are illustrated in Figure 1:

- Phase 1: Coordination with the Port PM to establish submittal requirements and schedule
- Phase 2: Design reviews
- Phase 3: COPS and release for permitting

Coordinate with Port PM and Establish Requirements

- Required design submittals (schematic, design development, pre-final, final design)
- Projected schedule
- Submittal requirements (quantity, format, checklists, submittal log, CMMS spreadsheet, applications for connection, review committees)
- Design review cycle duration (4 to 7 weeks, depending on project scope and complexity)



Compliance with Port Standards

- Release for Airport Building Department** Permit Submittal

*Only required until approved or if significant project changes after approval

**Or other permitting authority if different from Airport Building Department

Figure 1. Port Technical Design Review Process

1) Coordination with Port Project Manager and Establishing of Requirements

The Port PM is the single point of contact for all communications between Port stakeholders and the design team during the technical design review process.

a) Design Submittals

The Port PM reviews the project scope and complexity in consultation with the Port Stakeholders and the design team and determines the appropriate number of reviews. Possible reviews include schematic design, design development, pre-final construction documents, and final construction documents. Small projects typically require only one review at final construction documents, while larger projects may require two to four reviews. Other reasons that could drive more reviews include tenant reimbursement agreements, complex interaction with Port systems, and Port maintenance of the final product. During the review process, if design documents are incomplete or otherwise poor quality, then additional reviews may be required to verify that the design meets Port guidelines and standards.

The Port PM, in consultation with Port Stakeholders, will determine the required applications for connection and presentations to technical committees. Other concurrent review requirements, such as FAA, environmental, security, or others, also are established.

b) Submittal Requirements

Design submittal documentation varies by project and can include design drawings (CAD and searchable pdf), specifications (searchable pdf), checklists, construction submittal log, applications for connection, calculations, equipment cut-sheets, CMMS spreadsheet, and other documents. The Port performs most design reviews electronically but still requires some half-size hard copies of drawings for meetings or special reviews. Typically, five to seven hard copies are required.

c) Schedule

The tenant, design team, and Port PM establish a projected schedule for design, permitting, pre-construction, construction, and close-out for the project.

2) Design Reviews

The review cycle is the same for each design submittal. The Port reviews and comments on the documents, the design team responds to the comments, the responses are reviewed and any issues are resolved, and then the design team is released to submit the next submittal or released to submit for building permit if one is required.

The Port review includes four stages:

- Review documents and prepare written comments.
- Review and approve applications for connections (see Section 3.B.3)
- Meet with technical review committees (see Section 3.B.4)
- Conduct CAD compliance review

In parallel with the Port review cycle, other reviews that may be required are also coordinated. The design review cycle varies from 4 to 7 weeks to complete, but the

design team receives comments in 2 to 3 weeks. The design team may continue design throughout the cycle.

3) Applications for Connection

As noted in the design review objectives, the Port is allocating existing utilities. Applications for connection provide detailed information about the tenant utility requirements, allow the Port to determine whether capacity is available, and find a resolution if capacity is not available. Applications for connection are available for communications systems, electrical systems, industrial wastewater systems, mechanical systems, natural gas system, radio frequency systems (including wifi), sanitary waste systems, storm drain systems, and water systems. The forms along with instructions are on the Port website.

The tenant should coordinate with the Port PM to determine which applications are required and when they should be submitted. The applications are prepared by the appropriate design team member and provided to the Port PM with the design submittal. The designer is responsible for completing the application for connection and providing all required information. Incomplete applications are returned to the designer.

Applications for connection are also required for temporary needs during construction, such as electrical and water. After an application is approved, it does not have to be resubmitted with each design submittal, unless there is a significant change in the utility requirement.

4) Technical Review Committees

The following technical utility systems teams may receive progress presentations during each design phase; attendance at technical review committee meetings is determined by consultation between the Port PM and committee chair;

- ARC: Architectural Review Committee
- PEST: Proactive Electrical Systems Team
- MUST: Mechanical Utilities System Team
- START: SeaTac Telecommunications Architecture Review Team
- WISE: Water, Industrial Wastewater System (IWS), Storm and Sanitary Sewer Team
- FARM: Facility Asset Review Meeting
- WAVE: Wayfinding and Visual Environment Team

These groups help resolve design team questions and issues and discuss the Application for Connection to Utility Forms.

Following are guidelines for scheduling technical review committee meetings:

- Each committee meets twice per month on specific days.
- A typical time slot is 30 minutes, although additional time may be requested.
- Limited slots are available for each meeting. The Port PM must be notified as soon as possible to obtain a preferred day and time.

Typical meeting attendance and content are as follows:

- Appropriate members of the design team attend the meeting for their respective discipline, present their design, and answer questions.
- If design team members are from outside the Seattle area and cannot attend in person, they may join via conference call.

- Attendees should bring four to six 11x17 hard copies of the most current design for reference during the meeting.

5) Environmental Program Review

Observing environmental regulations is critical at the Airport. Depending on project scope and location, the Port PM instructs the design team to provide documents to port Environmental staff. Environmental staff ensure that the project has received adequate review under the National and State Environmental Policy Acts and the Endangered Species Act and also ensure that the project complies with all applicable environmental permits and regulations (see the Port's *Tenant Improvement Construction General Requirements*, Section 01 35 43, Environmental Regulatory Requirements).

The environmental permit that most tenant projects need to comply with is the National Pollutant Discharge Elimination System permit issued to the Airport by the Washington State Department of Ecology. This permit controls water quality impacts from construction and operation of facilities at the Airport and contains very specific measures required for compliance. The design team may be required to do any of the following:

- Provide additional data or resources.
- Arrange for additional environmental consulting as needed.
- Provide budget for Port staff to prepare and publish State Environmental Quality Act documents
- Ensure that known permitting requirements are incorporated into the project schedule and budget.
- Develop and submit a stormwater site plan for review and approval.

C. Required Design Information

This section provides information on design requirements for Airport projects. Some requirements are addressed in more detail in the Port standards and guidelines. This section also highlights issues that are frequently missed by design teams.

1) Commissioning

The ABD requires all projects to be commissioned. Some projects may require an independent commissioning agent, and in those cases, the Port PM should be consulted. The design team confers with the Port PM, F&I, and Maintenance to determine which Port commissioning activity checklists are to be included in project technical specifications and whether a specialty contractor for balancing and controls (Siemens) support should be included. Utility meters are required to be calibrated and commissioned (reference the Port's *Tenant Improvement Construction General Requirements*, Section 01 91 00.13, Commissioning Activities, for additional information).

2) Utility Meters

All tenant new construction or remodeling projects requiring connection to Port power, water (hot and cold), natural gas, or any other utility require a tenant supplied meter. The meter(s) must be connected to the direct digital control (DDC) or power monitoring system by the second week after NTP. After the tenant contractor installs, calibrates, and commissions the meter(s), they request an inspection.

Requests for inspection are coordinated through the Port Construction Inspector (Port Inspector). Failure to obtain inspection and approval of any new or existing meter, results in immediate stop work and power shutdown without prior notice.

For specification and purchasing information on Port approved meters, the Port PM should be contacted; information is also available on the Port's public website <https://www.portseattle.org/sea-tac/leasing-tenant-resources/tenant-construction-and-design-reference-documents> for design standards for utility meters. All water connections require a back-flow preventer, and all gas meters require a seismic valve and may require a pressure reducer.

3) Reservation of Electrical Breakers

To reserve space for placing electrical breakers in Port electrical panels and securing service for the project, the tenant's electrical designer contacts the Port PM and provide the panel, circuit, and physical location and requests a breaker reservation.

After the desired breaker is identified, a Port electrician places a reservation sticker on the breaker and completes the reservation form. The completed form is provided to Port F&I, who record the information in a database. The Port PM assists the design team with any questions or clarifications.

4) Equipment Identification Numbers

All equipment connected to Port systems is required to have a Port ID number. Equipment connected to Port systems that is being removed must also be labeled with a Port ID number. Obtaining existing and new ID numbers must be coordinated with the Port PM.

5) Coordination with the Direct Digital Control System

The Port has a sole-source agreement to specify Siemens Building Technologies Division for the HVAC building automation system, also known as the DDC system. The Port PM can provide Siemens contact information (see the Port Mechanical Systems Standard 200920 for more detailed information.) Additional guidelines regarding the DDC system are below:

- All water and natural gas meters must be connected to the DDC system.
- All equipment, including terminal units, kitchen hoods, and exhaust fans, must be controlled by the DDC system.
- The tenant contractor must engage Siemens to make changes to the DDC system, including providing AutoCad files of mechanical sheets with architectural backgrounds and XREF files during construction for use in the DDC graphics.
- Before walls and ceilings are demolished, Siemens must be under contract and perform site work to protect the DDC system.

6) Data, Communications, and Wi-Fi

The Port provides a backbone system for data and communications. Each tenant has a Port demarcation box located within their space. All backbone cabling and demarcation installations shall be Systimax certified (see the Port communications standards for more detailed information).

Until new systems are in place, broadband television is handled separately. Specific broadband requirements are coordinated with the Port PM.

Wi-Fi system signals are not allowed outside the tenant space or to interfere with existing Port systems. An application for radio frequency is required for installation (see the Port radio frequency standards for more detailed information).

7) Laydown Areas

If stored in areas other than a tenant's leased area, the tenant must coordinate laydown storage with the Port and identify the storage location on the tenant's construction drawings. Laydown area and equipment are identified with project and contact information. Use of off-site Port laydown areas must comply with the *Tenant Improvement Construction General Requirements*, Section 01 50 00G. Contractor employee parking is available south of the Airport for a fee. The tenant coordinates with their Business Manager or Property Manager for access and pays the fees.

8) Federal Aviation Administration Project Proposal Summary and Cranes

Refer to the RAC Section 2, Design Approvals, for detailed information.

9) Tenant Improvement Construction General Requirements

All Airport construction work is subject to the RAC and *Port Tenant Improvement Construction General Requirements*. The tenant should review the guidelines with the Port PM to confirm the sections that apply to the specific tenant project. These requirements are attached in their entirety to the tenant project documents and reviewed at the pre-construction meeting.

10) Door Hardware and Keying

Door and room numbers are assigned by the Port. Door and room numbers should be requested as early as possible from the Port PM.

The design team complies with the requirements found within the Port architectural standards for door and key hardware. The tenant's contractor is required to provide "BEST" brand lock Co. figure-8, seven-pin construction cores that will be keyed by the Port Lock Shop. After the tenant project is completed, the Port Lock Shop exchanges the construction cores with final lock cores and keys.

All new doors installed at the Airport must be free of asbestos and labeled as such. The material used in door construction must be verified through manufacturer's documentation, material safety data sheets, or sampling. All new tenant doors must be labeled so that the door can be tracked in the Port Maintenance operations and maintenance (O&M) asbestos database.

The Port PM works with the tenant to coordinate keying, either using existing key numbering series or new series of numbers. The tenant must complete a key request for the quantity of keys desired and submit it directly to the Port Credential Center.

If the tenant requires other than the Port core system, the Port Credential Center provides and installs outside the tenant space a lock box to house the tenant's entry key. The lock box is provided for life safety access by the Port FD only. Cost of the lock box and installation is paid by the tenant. If the tenant requires a key for the solid waste compactors, then the tenant contacts Port Utilities.

11) Construction Documentation and Training

As discussed in Section 3.A, the Port is concerned about items that interface with Port systems and/or become the Port's responsibility to maintain. This section addresses the types of construction submittals the Port wants to review, the construction submittal log, O&M data, and other issues. The tenant contract documents clearly address contractor responsibilities for construction submittals, O&M data requirements, computerized

maintenance management system (CMMS) data requirements, training requirements, and other construction documentation requirements.

a) Construction Submittals

Based on the complexity of the tenant's project, the Port PM and the design team analyze potential equipment and systems that require Port technical reviews. The following criteria apply:

- Systems equipment that are serviced and/or maintained by the Port (for example, HVAC)
- Systems equipment that become Port property
- Equipment or tenant operations that impact existing Port systems in and adjacent to the tenant space
- Equipment and/or material used for distribution of electrical power or wireless data transmission
- Special point loads of high power use (for example, baggage x-ray, plasma screens, electric vehicle chargers)
- All tenant utility meters for power, water, and gas
- Roofing, building envelope, and waterproofing

Typical construction and deferred submittals include the following:

- Fire suppression systems
- Fire alarm controls and electronics
- HVAC equipment
- Pre- and post-construction balance reports (air and hydraulics)
- Cable or utility routing (through non-tenant space)
- Baggage handling systems (inbound and outbound)
- Shop drawings indicating equipment layouts, plumbing and duct work
- Kitchen equipment submittals and layout drawings
- Controls equipment and layout drawings
- J-line lighting upgrades (airlines)
- 400-hertz electrical point loads
- Antenna relocations and transmittal upgrades
- Roofing and building envelope
- Waterproofing
- Final reports, redlines, and CMMS

The design team incorporates construction and deferred submittal requirements into the project's construction documents. Note: Submittals that the design team wishes to designate as deferred submittals must be approved in advance by the ABD.

b) Construction Submittal Log

The design team prepares and includes a construction submittal log using the Port submittal log template with the 90-percent design submittal. The Port PM provides

the form. The Port reviews the log for completeness and indicates which construction submittals it wants to see during construction (see Section 6.B.1 of this manual for how construction submittals will be processed). The design team includes the construction submittal log with the contract bid documents.

c) Requests for Information

Copies of requests for information (RFIs) will be submitted to the Port PM when information is required from the Port to answer an RFI. A copy of all RFIs are provided to the Port PM weekly.

d) Operations and Maintenance Information

The Port requires fully text-searchable, indexed Adobe pdf O&M data for equipment, fixtures, and systems that become the Port's responsibility to maintain. Although the Port does not maintain tenant's ceilings, the tenant furnishes product data for other than gypsum wall board for replacement should a leak of Port overhead systems occur.

Requirements for the maintenance information are identified in the project technical specifications. Detailed information on type and format of data is provided in the *Port Tenant Improvement Construction General Requirements*, Section 01 78 23.13, Operations and Maintenance Data.

e) Computerized Maintenance Management System Data Form

For equipment, including utility meters, that become the Port's responsibility to maintain and for maintained equipment removed to facilitate new construction, the design team and contractor completes a CMMS system data form. The design team includes the CMMS data form with the 90-percent design submittal. The design team includes the CMMS data form with the contract bid documents. The Port PM provides the design team with the form (see the Port's *Tenant Improvement Construction General Requirements*, Sections 01 78 23.13 and 01 78 23.13a, for additional information).

f) Training

The design team indicates requirements for operational and service training, as directed by the Port PM, for any equipment that may impact Port systems or become the Port's responsibility to maintain (see the Port's *Tenant Improvement Construction General Requirements*, Section 01 79 00, Training, for additional information).

4. PERMITTING

The City of SeaTac/Port of Seattle Interlocal Agreement (ILA) <https://www.portseattle.org/page/design-guidelines> must be reviewed to determine the agency or agencies having authority over permitting and the applicable ILA development standards for the specific project location. The Port PM can assist with this review.

After the Port has confirmed COPS, the tenant may prepare their building permit submittal and submit for building permit. The Port PM will assist with the ABD permit review process, FAA, and TSA processes. The tenant will work directly with other authorities having jurisdiction such as City of SeaTac, Washington State L&I, King County, and others.

A. Airport Building Department

The RAC Sections 3 and Section 4 provide specific code requirements and other related information.

- The ABD issues general building, mechanical, and plumbing permits.
- The ABD assesses and determines whether a building and/or electrical permit are required. If no permit is required due to the simple nature of tenant Project, then the ABD provides the COPS to the Port PM for review, thereby allowing the tenant to proceed with proposed project.
- The design team contacts the Port PM for a copy of the current ABD permit application.
- Copies of the permit plans are forwarded to the Port PM before executing any work. Requirements are as follows: (These requirements may change as the ABD implements electronic systems for plan review and payment.)
 - Two sets of half-size drawings
 - Two sets of full-size (24 inches by 36 inches) drawings and specifications with all pages of the construction documents (for example, architectural, civil, structural, mechanical, plumbing) bearing the seal and stamp of the responsible professional, at a minimum, in either a digital format or a reproduction of an original handwritten ID/validation
 - Four sets of specifications
 - One set of calculations (for example, structural, mechanical) and soils report (if applicable)
 - One permit application for building construction, including general contractor and subcontractor information if available
 - One permit application for mechanical and plumbing (if required), including general contractor and subcontractor information if available
 - Payment for plan review (electronic payment to the Port of Seattle; ABD will not begin review without payment)
 - Payment for permit fee (electronic payment to the Port of Seattle), which may be included with plan review fee
 - One completed Statement of Special Inspections/Contractors Statement of Responsibility, including signatures, if required
 - One electronic copy (CD or thumb-drive) of design drawings, specifications, and all the above documents (CAD and searchable pdf)

If the project is being permitted by the City of SeaTac, the tenant notifies the Port PM of submittal and provide the two half-size sets of drawings and specifications and one electronic copy to the Port PM.

After the submittal package is accepted as complete, the ABD initial review process is completed within 10 working days. When the review is completed, a list of comments are provided denoting conditions that need to be addressed and resolved. Plans cannot be stamped or approved, nor can the permit be issued, before all items are resolved, and plans and supporting documents are revised as needed, fees are paid when applicable, and business licenses are obtained from the City of SeaTac, where necessary.

B. Electrical Permit

Electrical permits are issued by the Washington State Department of Labor & Industries (L&I). <http://www.lni.wa.gov/TradesLicensing/Electrical/FeePermlnsp/> If City of SeaTac is the building permit authority, then they provide the electrical permit instead of Washington State L&I.

C. Food Facilities Permit

Food-handling facilities require specific plan review and approval by King County Public Health Services, Food Protection Program. The King County Health Department's website has complete information on obtaining a food service permit.

D. Airport Security Plan Changes

In accordance with the Airport Security Plan, the Port is required to notify and obtain approval from the TSA for any changes to the secured and/or Airport Operations Area (AOA) perimeter, including changes to perimeter walls inside the bagwell, concourse, roofs, or fences on the AOA; access into these areas via doors, gates, or holes in the wall; or changes affecting the TSA screening process or exit lanes. All changes must be submitted to TSA within 45 days of the effective date, and TSA has 30 days to review and approve/disapprove these changes.

The Airport is subject to civil penalty by the TSA for failure to notify or obtain approval of these changes. Airport rules and regulations include construction and alteration violations for not following proper procedures.

E. Liquor License

Liquor licenses are administered by the Washington State Liquor and Cannabis Board. <https://lcb.wa.gov/>

F. Other Permits

Following are other potentially required permits:

- Vertical transportation—See Washington State Department of L&I website for details (<http://www.lni.wa.gov/tradeslicensing/>)
- Boiler permit—See Washington State L&I website for details (<http://www.lni.wa.gov/tradeslicensing/>)
- FAA—See RAC Section 2, Design Approvals
- Environmental—See RAC Section 6, Environmental
- Water and sewer districts—See City of SeaTac utilities element for map of water and sewer districts (www.ci.seatac.wa.us/Home/ShowDocument?id=10739)

5. PRE-CONSTRUCTION

No construction work will start at the Airport without receiving NTP from the Port. The Port PM issues a NTP only after all necessary pre-construction reviews and approvals, including a pre-construction meeting, for the project have been completed. These pre-construction requirements vary depending upon project location and scope. The Port PM confirms which conditions apply to each particular project.

The tenant's lease requires them to comply with all Port procedures and processes pertaining to construction and other tenant improvements within or outside their lease footprint. Failure by the tenant or their contractor to comply with these requirements constitutes a serious violation of their lease with the Port.

Unapproved construction or other tenant improvement work completed by the tenant or their contractor before receiving the required pre-construction approvals and NTP from the Port PM is in violation of the tenant's lease. Any such work is subject to immediate removal and the affected areas are returned to their original condition solely at the tenant's own expense.

A. Pre-Construction Submittals

Pre-construction requirements apply to the general contractor and all other contractors or vendors. If a tenant chooses to hire vendors or other contractors to complete construction work who are not covered by the general contractor's liability insurance and safety plan, then those contractors or vendors performing construction must provide the same pre-construction submittals and receive a NTP letter.

1) Notice to Proceed Requirements

Before the official letter for NTP is issued from the Port PM, the tenant contractor and design team are responsible for submitting the items found here and in the Port's *Tenant Improvement Construction General Requirements*, Section 01 32 19, Preconstruction Submittals. The Port PM reviews the requirements with the design team and contractor.

Minimum requirements include the following:

- Contractor liability insurance, showing the Port as an additional insured (see Section 5.A.2, Contractor Liability Insurance, for specific requirements if not addressed in the tenant's lease)
- Construction Safety Plan per the Port's *Tenant Improvement Construction General Requirements*, Section 01 35 29, Tenant Safety Management, Site-Specific Safety Plan, and Job Hazard Analysis, approved by Port Safety (see Section 5.A.3, Construction Safety, for requirements)
- Certification that at least one crew member is Occupational Safety and Health Administration 10-Hour and first aid/cardiopulmonary resuscitation trained
- General contractor and subcontractor contact information, including 24-hour emergency contacts to be posted on exterior of construction barricade
- Contractor's construction schedule (see Section 5.A.4 Contractor Scheduling and Phasing Plan Requirements, for requirements)
- Pre-construction meeting (see Section 5.B, Pre-Construction Meeting, for additional information)

Additional potential requirements depending on project scope, location, and complexity are found below; these should be verified with the Port PM:

- Building permit and registered design professional Statement of Special Inspection/Contractor's Written Statement of Responsibility
- Copies of any permits or other regulatory or public agency approvals required within the contract documents
- Environmental submittals and Pollution Prevention Plan per the Port's *Tenant Improvements Construction General Requirement*, Section 01 57 23, Pollution Prevention, Planning, and Execution
- Temporary Power Plan (application for connection is required) per the Port's *Tenant Improvement Construction General Requirements*, Section 01 50 00, Temporary Facilities and Controls
- Copy of the executed contractual agreement between the tenant and the contractor, for ADR projects
- List of long lead items (items requiring more than four weeks to obtain), for ADR projects
- Construction submittal log

2) Contractual Liability Insurance

Contractors and tenants are required to carry a minimum of the following:

- \$2 million general commercial liability insurance
- \$10 million for large construction projects and higher-risk projects
- \$1 million for automobile liability insurance
- \$5 million for automobiles operated in the non-movement AOA
- \$10 million for automobiles operated on the aircraft movement AOA

Contractors and tenants should include the Port as an "additional insured" by endorsement on their policies while working on Port property.

Port PM will review contractual liability insurance with the tenant, who in turn will require their contractor(s) to carry liability insurance that meets Port requirements.

Contractors are required to provide a certificate of insurance, in accordance to the paragraph above and present it to the Port PM as a prerequisite to commencing construction. They must also provide proof of workers compensation coverage for their employees.

3) Construction Safety

The Port's *Construction Safety Manual* (https://www.portseattle.org/sites/default/files/2018-03/Construction_Safety_Manual.pdf) includes detailed safety requirements.

a) Contractor's Safety Plan

The contractor must submit a site-specific safety plan according to Port's *Tenant Improvement Construction General Requirements*, Section 01 35 29, Tenant Safety Management. The safety plan must include protection of the workers, adjacent tenants, and the traveling public.

Along with the site-specific safety plan, contractors must provide an outline of their scope of work in a site-specific safety plan worksheet found in Port's *Tenant Improvement Construction General Requirements*, Section 01 35 29, Appendix A.

If the contractor does not have their own safety plan, a template Sample Accident Prevention Program - Construction can be obtained from Washington State Department of Labor & Industries at:
<http://www.lni.wa.gov/Safety/Basics/Programs/Accident/default.htm>

Acceptance of the site-specific safety plan (including a job hazard analysis and other supporting documentation) is a condition that must be met before NTP and work begins. The tenant contractor is required to designate an on-site representative with responsibility to stop work and remedy unsafe working conditions. Tenants are required to make this procedure known to all bidding contractors.

b) Safety Orientation and Training

All contractor, consultant, design team, and vendor personnel (including subcontractors and subconsultants) working on construction sites on Port property are required to attend the Port construction safety orientation before working on site. Construction safety orientation is held Mondays, Wednesdays, and Fridays at 7:00 a.m. to 8:30 a.m. The Port PM can provide directions to the training.

c) Construction Safety Coordination

Operational safety on AOA:

- All contractors, subcontractors, vendors, and consultants associated with the project must comply with the Port's *Tenant Improvement Construction General Requirements*, Section 01 35 13.13, Operational Safety on Airports During Construction.
- Port Engineering Safety Inspectors conduct regular inspections.

The Port FD oversees terminal safety, including site access, fire extinguishers, and determination of dangerous situations. Contractors are required to coordinate all hot work (flame or spark producing activities) with the Port FD.

4) Contractor Scheduling and Phasing Plan Requirements

Before work begins, the contractor submits for the Port PM's acceptance, a detailed progress schedule for proposed methods and sequence of work, including estimated dates for starting and finishing each construction stage. Project schedules should be used as a plan to facilitate the work and permit maximum protection of the public. The contractor is required to follow the progress schedule unless otherwise approved by the Port PM. All changes are communicated to the Port PM and Port Inspector.

The progress schedule consists of a bar chart indicating time factors for all significant design, manufacturing, and installation activities, including the following:

- A bar chart
- Work activities
- Estimated time of each activity
- Sequence of work in sufficient detail to accurately evaluate progress at any time during performance of the contract
- Start and completion dates for each item of work

The contractor submits schedule updates for the duration of the work. Frequency of the updates is determined with the Port PM and Port Inspector at the pre-construction meeting.

5) Badging and Access

The tenant schedules and obtains all necessary badging, Airport driving privileges, and access, and keys for the general contractor and subcontractor staff, as well as access and keys (see Section 2.A.4 for more detailed information).

B. Pre-Construction Meeting

All tenant projects require a pre-construction meeting. The pre-construction meeting sets the stage for a successful project and allows the entire project team to meet each other, define lines of authority and communication, review key project administrative procedures, review the proposed schedule, and discuss the project. This meeting is scheduled by the Port PM or Port Inspector. The request for a pre-construction meeting must be made at least 10 working days before the date of the meeting.

No work may begin without a pre-construction meeting. However, at the discretion of the Port PM or Port Inspector, pre-installation conferences may be waived for minor projects when the responsible contractor has demonstrated a working knowledge and past compliance with the RAC.

All tenant construction projects require Port inspection for compliance with project plans and specifications, building permits, fire and life safety, and Port standards and guidelines. Representatives from Port departments are invited to the pre-construction meeting.

The following are typical, expected attendees:

- Port PM, Port Inspector, Port critical stakeholders
- Tenant's representative
- Designer and professional consultants for mechanical, electrical, civil, and structural disciplines, as applicable (if not, local may participate by telephone)
- Contractor's PM and superintendent
- Major subcontractors, as appropriate
- Major suppliers, as appropriate

Following are typical agenda items:

- Introductions
- Regulations and permits
- Security and badging requirements
- Contractor on-site management
- Safety management and orientation
- Regulated material management
- Haul routes, accessibility, laydown, contractor parking
- Schedule
- Quality control and quality assurance
- Temporary facilities and utility shutdowns (water hoses need back-flow preventer and an application for connection is required for temporary power and water) and other construction-related utility impacts requiring Port Maintenance support
- Demolition warning (contract with Siemens for site work before any ceiling or wall demolition to prevent damage to the DDC system)

- Deferred submittals
- Construction submittals
- RFIs
- Substitutions
- Redlines
- Correspondence and communications
- Contractor reports
- Project meetings

6. CONSTRUCTION

After the project moves from pre-construction to construction, duties and responsibilities shift from the Port Project Management Group to the Port Construction Management Group. The assigned Port Resident Engineer and Port Inspector become actively involved in the day-to-day project activities.

RAC Section 6.B, Construction Management, addresses construction management, construction logistics, and typical issues with compliance with Airport standards. The Aviation Operations, Traffic/Landside Operations, Security, and Environmental Sections all address various aspects of construction and design. The ABD, Port FD, and Environmental address construction requirements as well. The RAC contains detailed construction requirement information, and the Port's *Tenant Improvement Construction General Requirements* has detailed specifications for tenant projects. The Port's *Tenant Improvement Design and Construction Process Manual* describes processes that are specific to tenant construction projects.

A. Resolution No. 3725 Policy Directive for Construction Labor for Projects on Port Property

Resolution No. 3725 is a resolution of the Port of Seattle Commission establishing a policy directive for practices for construction labor for projects located on Port property established in 2016. <https://www.portseattle.org/sites/default/files/2018-03/Resolution%20No.%203725%2C%20as%20amended.pdf>

Tenant projects are addressed in Resolution Section II for tenant-administered construction contracts paid for entirely or in part by the Port through tenant reimbursement or other means and Section III for construction contracts performed on Port property at the full cost of tenant. Contact your Business or Property Manager for questions.

B. Construction Management

This section describes processes that are unique to tenant construction projects. Construction requirements that are common to tenant and Port capital projects are addressed in the RAC.

1) Shop Drawings, Construction Drawings, Product Data, and Sample

At the work site, the contractor maintains copies of all approved construction drawings, specifications, addenda, RFIs, change orders, change directives, redlines, approved shop drawings, product data, and samples, including the Port-approved materials sample board, if established for the project.

The tenant ensures that its contractor prepares, reviews, certifies, and submits to the Port PM with reasonable promptness and in such sequence so as to cause no delay in the work, any requested shop drawings, construction drawings, product data and samples, and equipment and material submittals.

Work may not begin until shop drawings, construction drawings, product data, or material submittals have been approved by the design team and reviewed and accepted by the Port. The contractor is responsible for building per the approved construction contract documents unless approvals are received from the design team and the Port.

2) Construction Submittals and Deferred Submittals

The construction submittal log is incorporated into the project's construction documents. The contractor reviews the submittal log and notes any additional items or changes and submits it to the Port PM. Typical construction submittals are described in Section 3.C.11.a, Construction Submittals. The Port indicates which submittals it must see for review and approval. Construction submittals are delivered to the Port via the Port's Contract Management System (CMS).

The tenant, Port PM, and Port stakeholders will pre-determine the most expeditious turnaround time for Port reviews. A typical turnaround time for Port submittal reviews is 1 to 2 weeks. The design team reviews and approves the contractor's submittal data before forwarding the data to the Port PM. The contractor provides sufficient submittal data and information to allow the Port technical reviewer(s) to determine that the proposed equipment, material, or process meets the project specifications and Port's approval.

Generally, the process for construction submittals is as follows (see Figure 2 for a graphical depiction):

- The contractor submits to design team for review and approval (if agreed to in advance, the contractor may submit to Port PM concurrently)
- The design team or the designated representative submits to Port PM via CMS
- The Port PM returns documents to design team, who returns the submittal to the contractor.

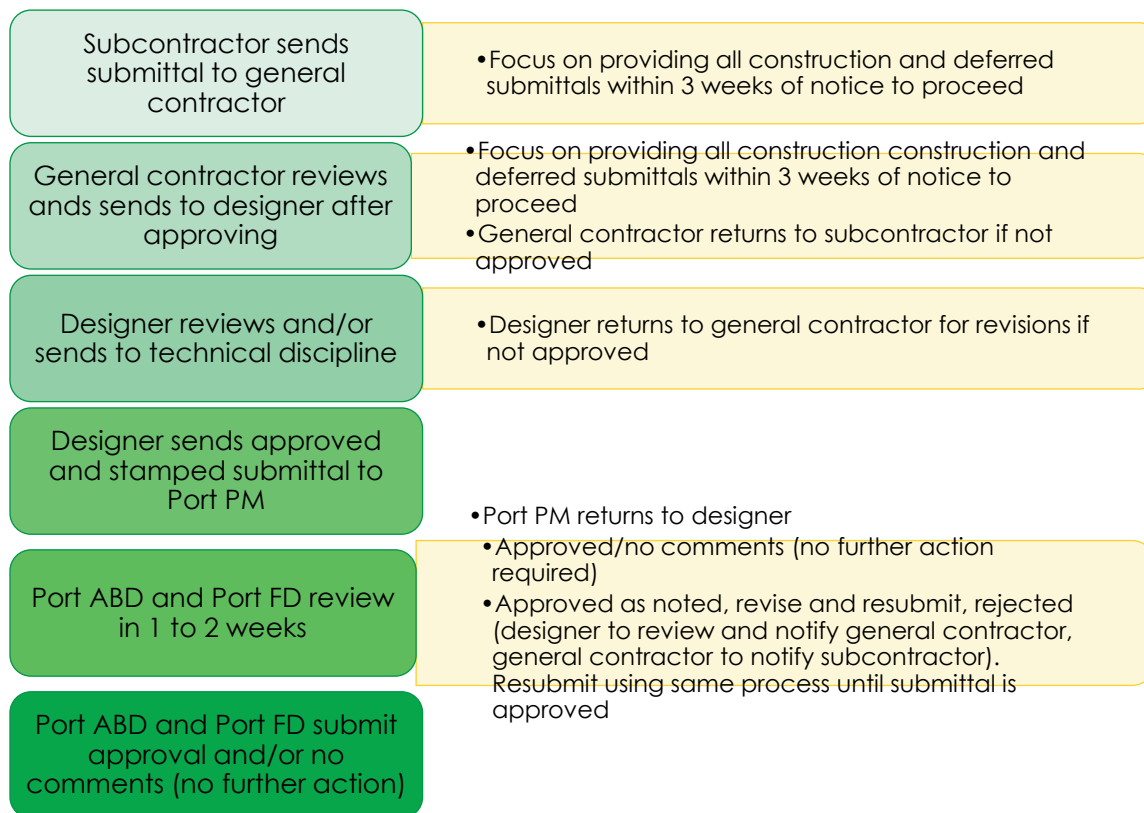


Figure 2. Port Construction and Deferred Submittal Review Process

3) Substitution of Materials and Equipment

The tenant or its contractor may ask for substitution of specified material, equipment, or furnishings with equal or equivalent items based on the following:

- The specified material and/or item is not available.
- The item has an unreasonable delivery time due to no fault of the contractor.
- The approved contract documents allow the use of equal or equivalent products.
- The substitutions comply with Port standards.

All proposed modifications to the accepted documents for the work must be submitted to the Port PM and Port Inspector for review. No change order or other contract modification that materially changes the scope of the improvements is executed without prior approval of the Port Inspector.

The contractor provides Port ABD Inspector (and/or Washington State L&I) with an updated copy of the drawings and specifications reflecting all such alterations or deletions.

4) Requests for Information

Copies of RFIs are submitted to the Port PM via CMS. Submit RFIs to the Port PM, when information is required from the Port to answer an RFI. A copy of all RFIs are provided to the Port PM weekly. RFIs requiring Port input should include the following information:

- Design team RFI form (design team should suggest a response if able)
- Clear statement of question
- Supporting documentation

Process for RFIs needing Port response is as follows:

- Design team sends RFI to Port PM via CMS
- Port PM forwards to appropriate Port staff
- Port PM returns RFI to design team
- Design team responds to contractor

C. Construction Logistics

1) Temporary Construction Barricades

The type of construction barricade required depends on work location and public interface. The design team coordinates with the Port PM for more detailed information.

Construction barricades must meet the requirements of the Port's *Tenant Improvement Construction General Requirements*, Section 01 50 00, Temporary Facilities and Controls. Construction barricade positions are approved by the Port before installation and must be indicated on the drawings. The design team is responsible for providing the necessary specifications in their construction documents so that the contractor can provide compliant barricades. If the Port provides a construction barricade, then the tenant contractor is responsible for repairs, patching, and painting after the barricade is removed.

Public facing barricades must provide the following elements: wayfinding, traveler alerts, "What's Happening," and L&I and safety signage. The tenant coordinates with

the Port PM for signage requirements. Any deviation from Port standards must be submitted and approved by Port Airport Operations.

7. COMPLETION AND CLOSE-OUT

Project completion and close-out requires close coordination with the Port Inspector, Port PM, and other stakeholders. The completion process starts with interim inspections and concludes with final inspections and close-out documentation. Accurate close-out documentation is essential to the Port. This section describes the punch list processes, final inspections, demobilization, and close-out documentation.

Please note: the following

- Any open items from the punch list inspections must be addressed by the contractor to the Port's satisfaction before the work is accepted and the final Certificate of Occupancy is issued.
- The design team must submit final project as-built CAD record drawings to the Port PM for review and approval no later than 60 days after the work has been completed.

A. Punch List, Final Inspections, and Demobilization

1) Punch List and Deficiency List

Interim inspections and punch list requirements are as follows:

- Before wall and ceiling closures and other times, the Port Inspector schedules Port technical staff to review construction for compliance with Port standards and guidelines.
- The interim inspections start the Port punch list. Subsequent inspections add items to the same punch list.
- When construction completion has been determined and before the final inspection for building code compliance, the Port Inspector and/or Port PM conduct a walk-through with Port and tenant stakeholders to identify any deviations from the project's construction documents and compile a deficiency list. The Port Inspector or Port PM transmits the list to the design team and contractor.

NOTE: A punch list inspection is not requested or granted if the work is incomplete. The contractor notifies the Port Inspector with a request to schedule the inspection no less than 5 working days before work is completed.

After the punch list of deficient items is generated, the contractor has 60 days, or other duration specified in tenant's lease, to resolve all items on the list according to the tenant's lease requirements. When punch list items are complete, the contractor notifies the Port Inspector, who conducts a final inspection to confirm remaining punch list items have been completed.

2) Final Building Permit Inspections

The contractor is responsible for obtaining all temporary and permanent Certificates of Occupancy and inspections required by the ABD, Port FD, L&I, and others, and for submitting a copy of the signed off inspection card to the Port Inspector and Port PM.

3) Compliance Tests

The intent of compliance tests is to functionally test equipment and systems to verify operation in accordance with design. This process verifies that the equipment is ready to energize and operate. Examples of compliance tests include back flow preventer test, hood functional and operational tests, test and balance on the HVAC systems and

water sanitization test. The utilities, equipment, and systems in a tenant project must fit seamlessly into the Airport's utilities and systems. All compliance tests are submitted to the Port Inspector and Port PM for distribution to Port F&I and Maintenance.

4) Commissioning

The contractor complies with the Port's *Tenant Improvement Construction General Requirements*, Section 01 91 00.13, Commissioning Activities. All project utilities, equipment, and systems must fit seamlessly into the Airport's utilities and systems. The contractor conducts a commissioning effort using checklists provided in the project specifications before receiving a Certificate of Occupancy. The intent of these checklists is to functionally test equipment and verify operation in accordance with the contract documents. The contractor notifies the Port PM and Port Inspector at least 2 weeks before beginning any commissioning activity to coordinate with Port Maintenance and F&I personnel. As a result of commissioning, a close-out report is provided by the tenant and forwarded to the Port PM for distribution to Port stakeholders.

5) Notice of Construction Completion (ADR Projects Only)

When temporary Certification of Occupancy has been received, the Port PM and Port Inspector reviews the space to confirm that construction is complete. The Port PM issues a notice of construction completion. Notice of construction completion is not permission to stock and train or begin revenue operations. The Port Business Manager issues the notice to open letter, which allows the tenant to begin operations, such as stocking and training and opening to the public.

6) Final Cleaning

The contractor complies with the Port's *Tenant Improvement Construction General Requirements*, Section 01 74 00, Cleaning. The contractor includes all project work areas, including laydown spaces and logistics yard, if applicable.

7) Demobilization

The contractor demobilizes and restores the project site, logistics storage, and project work areas.

8) Badges and Keys

The contractor and subcontractors returns all badges and keys to the Credential Office after demobilization from secure areas. Fines are assessed by the Credential Office for outstanding badges and keys.

B. Close-Out Documents

1) As-Built Computer-Aided Design Record Drawings

The contractor records all changes to the contract drawings by making adequate and proper entries on a continual basis as redlines when any changes occur. Accuracy of records is such that future searches for information regarding the as-built condition of the work may be reliable. The contractor complies with Port's *Tenant Improvement Construction General Requirements* Section 01 78 29, As-built Record Documents. After work is completed, the contractor or tenant transfers the recorded data from the redlines to the as-built CAD record drawings; this transfer includes updated panel schedules for all electrical panels where circuits have been modified by the project (see the electrical standards for the required format). Mechanical plan CAD record drawings

with architectural background and x-ref files are supplied to Siemens for DDC graphic updates, either directly or to Port F&I via the Port PM.

As-built CAD record drawings comply with Port CAD standards and are submitted in AutoCAD and PDF format to the Port PM for review by the Port CAD standards review technician. The Port PM indicates the required number of electronic and hard copies of the as-built redlines and as-built CAD record drawings. Typically, one or two hardcopies are required.

2) Final Construction Submittals, Operations and Maintenance Data, Computerized Maintenance Management System, and Warranties

The tenant contractor submits final constructional submittals such as redlines, commissioning reports, compliance testing reports, and others as required in the contract documents.

The tenant provides O&M data and completed CMMS data form on any equipment that will be serviced, maintained or become property of the Port. O&M data, completed CMMS data form, and warranties are submitted to the Port PM. The contractor complies with the Port's *Tenant Improvement Construction General Requirements*, Section 01 78 23.13, Aviation Operations and Maintenance Data.

3) Training

Operational and service training is provided, as directed by the Port PM, for any equipment that may impact Port systems or become the responsibility of the Port to maintain. The contractor complies with the Port's *Tenant Improvement Construction General Requirements*, Section 01 79 00, Training.

4) Airport Dining and Retail Project Reports

a) Lien Releases

ADR tenants have a requirement in their lease to submit contractor lien releases. The tenant forwards lien releases to Port PM within 30 days after a temporary Certificate of Occupancy has been granted, including notarized copies of lien releases for any contract exceeding \$ 2,500.

b) Certified Statement of Total Construction Cost

The tenant provides a certified statement (subject to Port verification, audit, and approval) specifying the total construction cost (including architectural, engineering, and permitting costs) in such detail as reasonably necessary to ascertain the costs of all leasehold improvements, furniture, fixtures, and equipment constructed or installed by concessionaire in the premises.

c) Certification Constructed in Compliance with Port Standards

The tenant provides a certification that the improvements have been constructed according to the approved drawings and specifications and in strict compliance with all legal requirements and Port standards.

5) Resolution 3725 Requirements

The tenant provides any closing documentation required by Resolution 3725.

C. Certificate of Occupancy

The ABD will not issue final Certificates of Occupancy for tenant projects until it has verified that the Port has received the required as-built CAD record drawings. Once all required final inspections, including fire and life safety systems, are complete and operational, ABD can issue a final Certificate of Occupancy, allowing the tenant's designer and/or contractor sufficient time to provide the Port with complete as-built CAD record drawings.

The ABD inspector is solely responsible for issuing the Certificate of Occupancy and does not issue the certificate until there are no code violations and all required inspections are complete.

Appendix A

Tenant Improvement Project

Pre-Design Worksheet

TENANT IMPROVEMENT PROJECT PRE-DESIGN WORKSHEET

PROJECT TITLE:

TENANT:

STIA No.:

WORK PROJECT No:

PORT PM CONTACT:

TENANT PM CONTACT:

PORT INSPECTOR:

PHONE:

PHONE:

PHONE:

No.	ITEM	DESCRIPTION	CONTACT	REQUIRED (Y/N)	REMARKS
	STANDARDS & REGULATIONS				
1.	RULES FOR AIRPORT CONSTRUCTION (RAC)	Provides necessary information to successfully execute and complete construction at Seattle-Tacoma International Airport as well as the various Port stakeholders interfacing with contractors during a project. It can be found at the following: link	Port PM		
2.	TENANT IMPROVEMENT CONSTRUCTION GENERAL REQUIREMENTS	Compendium of procedures, rules, regulations and standards to be followed for all Port and tenant construction projects Seattle-Tacoma International Airport. It can be found at the following: link	Port PM		
3.	PORT CAD STANDARDS- (A/E TO ATTEND CAD ORIENTATION IF NECESSARY)	The CAD design standards are available in Microsoft Word or AutoCAD files compressed in ZIP format, and range in size from 1-33Mb. It can be found at the following: link	Port AutoCAD Engineer:		
4.	ARCHITECTURAL GUIDELINES AND STANDARDS	The architectural guidelines and standards are available in Microsoft Word or AutoCAD files compressed in ZIP format, and range in size from 1-33Mb. It can be found at the following: link	Port PM		
5.	ELECTRICAL SYSTEM STANDARDS	The electrical systems design standards are available in Microsoft Word or AutoCAD files compressed in ZIP format, and range in size from 1-33Mb. It can be found at the following: link	Port PM		
6.	MECHANICAL SYSTEMS STANDARDS	The mechanical systems design standards are available in Microsoft Word or AutoCAD files compressed in ZIP format, and range in size from 1-33Mb. It can be found at the following: link	Port PM		
7.	COOKING EQUIPMENT VENTILATION STANDARDS	The cooking equipment ventilation standards are available in Microsoft Word or AutoCAD files compressed in ZIP format and range in size from 1-33Mb. It can be found at the following: link			
8.	CIVIL SYSTEMS STANDARDS	The civil system standards for domestic water, sanitary sewer systems. Industrial waste, and storm drain system design standards are available in Microsoft Word or AutoCAD files compressed in ZIP format, and range in size from 1-33Mb. It can be found at the following: link	Port PM		
9.	COMMUNICATION SYSTEM STANDARDS	The communication systems design standards are available in Microsoft Word or AutoCAD files compressed in ZIP format, and range in size from 1-33Mb. It can be found at the following: link	Port PM		
10	DINING AND RETAIL DESIGN GUIDELINES	The dining and retail design guidelines are available in Microsoft Word format. It can be found at the following: link			
	LONG LEAD ITEMS				
11.	F.A.A. REGULATION- NOTICE OF PROPOSED	The FAA requirements can be found within the Construction Safety Manual and can	Port PM		

	CONSTRUCTION ALTERATION (IF APPLICABLE)	be downloaded at the following link : The FAA regulation document provided by the Port PM will have to be completed and submitted back to the Port PM at least 90 days before the start of the project.			
12.	CREDENTIAL CENTER AND TRAINING – BADGES, ACCESS TO SECURE AREAS FOR A/E, CONTRACTORS	For all appointments related to badges, training and security, please visit the Port employee service website at: link	Port PM		
13.	F.A.A. Project Needs Assessment	Projects that access or impact the Airport Operations Area (AOA) need to go through a project needs assessment provided by Port PM at FAA Safety Management (Port accessible only)	Port PM		
14.	F.A.A. Form 7460	Projects where crane or other equipment penetrate airspace	Port PM & Operations		
	PRE-DESIGN				
15.	SITE VERIFICATIONS – UTILITY POINTS OF CONNECTION	A/E is responsible for all site verifications. Port PM will arrange for all site visits and maintenance shop support. A minimum of 10 working days advance notice is required. The A/E team will need to bring with them all necessary tools and equipment to perform the site visits. The Port PM provides only escorting.	Port PM		
16.	30 DAYS METER READINGS	Electrical engineer to identify panels that require load meter reading. If able the Port PM will provide the 30 days loads meter readings to the A/E team. If not able the tenant will hire a licensed electrician to obtain.	Port PM		
17.	THE AIR AVAILABILITY REPORT	Tenant's mechanical engineer will provide pre-test and balance report, via an approved consultant, prior to starting design and demolition.	Port PM/F & I		
18.	PORT WILL PROVIDE A DEMARCATION PANEL	Port PM will provide the communication information. Typically, the Port will bring the communication from the IT communications room to the tenant space. The Port will provide the Demarc panel and the tenant will have it installed. [In some cases, an airline tenant will install proprietary communications infrastructure to the Port backbone.]	Port PM		
19.	THE GOOD FAITH ESTIMATE /RMM REPORT	Port PM will provide the good faith estimate (asbestos) report at the request of the A/E team.	Port PM		
	DESIGN/PERMITTING	Applications can be found HERE			
20.	DESIGN REVIEW PROCESS	There typically will be 3 two-week design submittal/review phases at: 60%, 90% & 100%. Each phase of design requires that the A/E and Port PM work together to communicate the STIA-specific details of design development. They range from coordinating existing mechanical, electrical, communications conditions surveys to PEST, MUST, START, ARC, WISE, WAVE to site utility plans. Any time a tenant project or work impacts existing Port systems the A/E shall provide CAD compliant drawings. It is the A/E responsibility to fulfill these requirements. The Port PM is responsible for assisting the A/E to successfully move through the Port's design review process. NOTE: Washington State Law requires all documents issues by an engineer to be stamped; preliminary documents shall be stamped but not signed. http://apps.leg.wa.gov/WAC/default.aspx?cite=196-23&full=true	Port PM		
21.	COMMISSIONING	The intent of Commissioning is to verify systems and equipment are being delivered to the Port fully functioning in accordance with Contract Documents, and in compliance with the Washington State Energy Code (WSEC) sections 408.1.1, 408.1.2, and Fig. 408.1.2.1. Commissioning activities will be provided by the Contractor utilizing the Port's checklists. The Commissioning checklists will be provided to the tenant design team by the Port PM. Each designer is required to review the checklist table, determine what systems and equipment will be part of their project and check in the table. After determining what systems and equipment will be part of the project the designer will need to complete its part on the appropriate checklists. The checklist table along with the required checklists that apply for each project must be submitted during the 90% design review. The commissioning table and the checklists must be included within the specification sections of the design package.			
22.	ENVIRONMENTAL REVIEW	The Port environmental group will perform an environmental survey as part of the design review process. The survey will cover questions about air quality, hazardous materials, water quality, state and federal review process, contaminated management and geotechnical information. The environmental group will provide	Port PM		

		the Port PM with an environmental document custom made for each particular project.			
23.	APPLICATION FOR CONNECTION TO: - CHILLED WATER, STEAM, CONDENSATE OR AIR HANDLING UNITS - ELECTRICAL SYSTEM - COMMUNICATION SYSTEM - WATER SYSTEM - SANITARY WASTE SYSTEM - NATURAL GAS - INDUSTRIAL WASTE SYSTEM - STORM DRAIN SYSTEMS - CABLE TELEVISION	The Application for Connection forms allow the Port to assess the impacts of additional services/loads on airport systems, identify the point of connection, reserve the point of connection for approved service/loads, establish and maintain configuration control of the system, and plan for long-term system development to meet the needs of STIA. The applications can be downloaded at the link above. An approved application for connection is required before any connection or installation to a utility system is made. See the Port General Requirements, Division 01, Sections 01500(e)-Airport Facilities Water Activation Request and Section 01500(f)- Airport Facilities Application for Connection to Water System.	Port PM		
24.	PRODUCT DATA REQUIREMENTS / CONSTRUCTION SUBMITTAL LOG / CMMS	A/E to provide the specifications which include the pertinent product data and installation requirements from the Master Guide Specifications. (Mechanical, Electrical, Communication, etc.). It can be found at the following: link A/E to provide construction submittal log with 90% and 100% design. A/E to provide CMMS form with 90% and 100% design	Port PM		
25.	AIRPORT BUILDING DEPARTMENT PERMIT PACKAGE	All plans submitted must be complete (100% of the total design phase before the Airport Building Department will accept the plans for review). The airport building department requirements are provided by the Port PM.	Port PM		
26.	TEMPORARY POWER REQUIREMENTS	If required this must be coordinated during the design process and prior to the start of the project. An application for electrical connection will be required in order to meet the Port's approval.	Port PM		
	PRE-CONSTRUCTION/ CONSTRUCTION				
27.	BARRICADES AND WHAT'S GOING ON SIGN	The barricades requirements can be found within the Tenant Design and Construction Process Manual and the Construction General Requirements and can be downloaded at the following: link . The "What's Happening" sign will be provided by the Port. sign shop.	Port PM		
28.	CONTRACTOR'S SITE SPECIFIC SAFETY PLANS	The General Contractor must submit the company's safety plan. The safety plan must be approved the Port of Seattle safety group prior to starting the construction project. The GC and all its subcontractors must attend the POS safety orientation, NOTE: Vendors who are not under the contract with the GC must submit their own safety plan and attend then POS safety orientation. The Port Safety Manual and Safety Management documents can be downloaded at the following link: link	Port PM		
29.	CONTRACTOR'S CERTIFICATE OF INSURANCE	Must be provided by the General Contractor no later than at the pre-construction meeting to the Port PM NOTE: Vendors who are not under the contract with the GC must submit their own certificate of insurance.	Port PM		
30.	SUBMITTAL LOG /LONG LEAD ITEMS	Must be provided by the General Contractor no later than at the pre-construction meeting to the Port PM	Port PM		
31.	CONTRACT MANAGEMENT SYSTEM (CMS)	Tenant, Contractor and A/E to identify staff that will be submitting construction submittals, RFIs and coordinating other construction documents on CMS. Review of deferred submittals will also be coordinated on CMS.	Port PM		
32.	PRE-CONSTRUCTION MEETING	The Pre-con meeting will be organized by the Port Inspector. The Port Inspector will be the liaison between the project and the Port.	Port Inspector		
33.	PROJECT SCHEDULE AND LIST WITH 24/7 ON CALL CONTACTS (G.C.)	Must be provided by the General Contractor no later than at the pre-construction meeting to the Port PM and Inspector.	Port Inspector		
34.	CONSTRUCTION ADVISORY FORM AND UTILITIES SHUT DOWN FORM	Must be submitted by the General Contractor to the Port Inspector in advance to starting then project.	Port Inspector		

PROJECT COMPLETION AND CLOSE-OUT					
35.	FINAL PORT F&I INSPECTIONS	These inspections are scheduled by the Port Inspector at the request of the general contractor.	Port Inspector		
36.	FINAL L&I ELECTRICAL & HEALTH INSPECTIONS	These inspections are scheduled by the electrical contractor and the owner, and must be completed prior to the final building permit inspection. [Health Inspections typically for Airport Dining & Retail (ADR) projects only]	Port Inspector		
37	KEYING	Tenant must determine keying requirement at least 4 weeks before completion and submit requests to the Port Credential Office.	Port PM		
38	CMMS	Contractor will submit CMMS form prior to TCO.	Port PM		
39.	DEFICIENCY OR FINAL PUNCHLIST WALK	This inspection is performed by the Port PM, GC representative, architect, owner and Port Inspector	Port Inspector		
40.	FINAL BUILDING PERMIT OR TEMPORARY CERTIFICATION OF OCCUPANCY (T.C.O.)	This inspection is performed by the airport building department and Port fire department inspectors and is scheduled by the general contractor.	Port PM		
41.	AS BUILTS & CLOSING DOCUMENTS	The final as-builts, AutoCAD Port approved. [Certification of Cost and Lien Releases are required for ADR tenant projects only]	Port PM		
42.	FINAL CERTIFICATION OF OCCUPANCY (C.O.)	Final Certification of Occupancy will be issued by the Airport Building Department once all items in the deficiency list have been completed in accordance with the Port codes and specifications.	Port PM		

THE ABOVE ITEMS HAVE BEEN ADDRESSED AS INDICATED WITH THE TENANT’S ARCHITECT/ENGINEERING TEAM. BY SIGNING BELOW THE OWNER/OWNER’S REPRESENTATIVE(S) UNDERSTAND AND ACCEPT RESPONSIBILITY TO IMPLEMENT AND COMPLY WITH ALL REQUIRED PORT DESIGN STANDARDS, SPECIFICATIONS AND CONSTRUCTION REQUIREMENTS.

PORT PROJECT MANAGER: _____

OWNER/OWNER’S REPRESENTATIVE: _____

OWNER/OWNER’S REPRESENTATIVE: _____

DATE: _____

DATE: _____

DATE: _____