

JOHN WAYNE AIRPORT

ORANGE COUNTY

TENANT CRITERIA MANUAL

Issue 01 – May 2024

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Chapter 1 – Introduction

1.1 Introduction

Welcome to John Wayne Airport (JWA),

JWA is owned and operated by the County of Orange, which is the only commercial service airport in Orange County, California. The airport is situated between the cities of Costa Mesa, Irvine, Santa Ana, and Newport Beach, approximately 35 miles south of Los Angeles. In 2023, the airport served more than 11.76 million passengers.

Orange County is one of the most sought-after places to live, work, and vacation, with over 3.1 million residents in approximately 1 million households. The county's economy is home to over 160,000 employers, who provide jobs to 1.6 million residents. With over 30 higher education institutions and the fourth-largest international population in the country, Orange County draws visitors from far and wide.

Orange County's year-round beauty and ideal climate attract nearly 60% of leisure travelers for a variety of outdoor activities along its coast and open spaces, sporting events, and amusement parks. John Wayne Airport has been a cornerstone in Orange County for more than 100 years and serves as a gateway to Orange County's prosperous economy, beautiful beaches, attractions, and diversity. We recognize our responsibility to the community we serve. We work hard to develop and nurture meaningful relationships through partnerships that connect our business values with our social responsibilities and look for new ways to support our neighbors and remain a conscientious member of the community. For this reason, **our mission is to connect people, places, and opportunities**. "John Wayne Airport: Close to Home. Close to Perfect."

With various airport to choose from in Southern California, JWA values when a traveler chooses our airport. This is why we are committed to providing a superior guest experience and strive to make sure this is reflected throughout the airport. We do everything we can to make travel through JWA safe, secure, efficient, and convenient. By exceeding expectations, we aim to achieve **our vision to be the airport of choice by creating exceptional experiences.**



1.1.1 Our Culture

At JWA, we ***REACH*** for the sky! What do we mean? One reaches because they believe that with some extension and effort, it can be attained. We believe we connect people, places and opportunities by being the airport of choice through creating exceptional experiences. We will achieve this with the following set of core values:

RESPECT *(LISTEN, APPRECIATE, COURTEOUS)* – We value and hold in high regard others' feedback and input whether it is our coworker, JWA business partner, fellow County department, local, state, and federal agency, or passenger. We want to listen and embrace feedback to ensure we have a safe, secure, and exceptional experience all-around.

ENVIRONMENTAL STEWARDSHIP *(CONSERVE, PROTECT, PLAN)* – We value our ecosystem, the beautiful outdoor spaces, and future generations. We want to conserve natural resources, prevent pollution, and protect biodiversity.

ACCOUNTABILITY *(SAFETY FOCUSED, RELIABLE, LEAD)* – We value results. After setting clear and actionable expectations, we extend trust to every team member to ensure tasks are carried out in a safe, secure, and efficient manner. We do this because we want to celebrate achievements together.

COLLABORATION *(EMBRACE IDEAS, INCLUSIVE, LEARN)* – We value diversity. We want differing thoughts, perspectives, and opinions in any deliberation process because it leads to quicker and greater results.

HONESTY *(TRANSPARENCY, INTEGRITY, SPEAK UP*) We value fairness and being upfront. We want to hear challenges, frustrations, and disappointments first-hand so we can fix them.

JWA's commitment to ***REACH*** has cultivated a high-performing, high achieving organizational culture that has been consistently acknowledged by JWA's customers, with the Airport ranking #1 among large airports in 2017 and 2018 and securing the #2 position in 2020, 2022, and 2023 by J.D. Power North America Airport Satisfaction Study which focuses on overall terminal facilities, concessions offerings, and baggage services. JWA's core values play a huge role in customer satisfaction and we encourage our Tenants to take part in the REACH Award Program.

1.1.2 Purpose of this Manual

The Tenant Criteria Manual provides information for JWA Tenants as they begin the design review process in anticipation of opening a wonderful new venue or renovating an existing location. The design of Tenant's spaces shall support JWA's customer satisfaction goals through imaginative design and quality implementation standards that reflect their brand. The guidelines outlined in this handbook pertain to storefront design, materials, colors, interiors, signage, and lighting among other criteria. The guidelines have been developed to encourage high-quality design, to establish standards for all Tenants, and to ensure that the entire program reflects the best of contemporary airport retailing.



As a part of a larger initiative, Tenants are encouraged to incorporate sustainability guidelines into the Tenant fit-out while celebrating Orange County and the Southern California lifestyle. Examples of our unique look and feel include:

- Stunning beach communities, each with its own vibe.
- Legendary, world-renowned tourist attractions
- Trendy, eclectic food scene as diverse as the community it serves.
- World-class and chic retail.
- Spectacular outdoor activities within reach.
- Fitness and focus on healthy lifestyles
- Near perfect year-round weather



The Tenant and their design team should read this handbook in order to expedite design review and construction to the Tenant's leasehold. Timely submissions by the Tenant are required to ensure a timely construction schedule. A summary of the review process is outlined in the Design Review Process section of this manual. JWA is not responsible for any delay or costs associated with a Tenant's failure to submit complete information, failure to follow the Tenant Design Manual, and/or failure to submit information to the appropriate government agencies.

The drawings contained in this manual are diagrammatic and are included to help Tenants comply with the design criteria. All Tenant designs will be reviewed by the Design Review

Committee to ensure that the proposed scope and designs are compatible with the aesthetic intent of the Airport facilities and wayfinding systems. The JWA tenant coordination team may include the Tenant Development Manager (TDM), Property Agent (PA), and Tenant Coordinator(s) (TC). OCPW is responsible for maintaining the Terminal Building facilities, while JWA is the lead party responsible for airport-related operations and contracts for the County of Orange. JWA will be responsible for engaging OCPW as required and as outlined in this manual.

In case of any discrepancies or inconsistencies between this design manual and the Lease Outline Drawing (LOD), the lease outline drawing will prevail. In the case of any discrepancies or inconsistencies between the design manual and the lease requirements, the lease requirements will prevail. JWA reserves the right to modify this handbook at any time.

The following manuals are incorporated into the Tenant Criteria Manual by reference and should be reviewed and incorporated as appropriate into the Tenant submission package:

- Architect – Engineer Guide OC Public Works
- OCPW Construction Manual
- OCPW CAD Standards Manual
- John Wayne Airport Computer-Aided Design Data Standard
- John Wayne Airport Building Information Modeling Standards
- John Wayne Airport Geographic Information System Data Standard
- John Wayne Airport Green Concessions Program
- Orange County Environmentally Preferable Purchasing (EPP) Policy

The Tenant and their design team should coordinate with the Tenant Development Manager and copy the Property Agent on all correspondence.

JWA looks forward to working with you and your talented team to develop an exciting concession program. Should you have any questions, please feel free to call Commercial and Revenue Development at (949) 252-5122 or send an email to: JWAConcessions@ocair.com.

1.2 Directory

Landlord / Tenant Coordination
Commercial and Revenue Development
JWA Administration Building
3160 Airway Avenue,
Costa Mesa, CA
United States
Phone: 949.252.5155
Email: JWAConcessions@Ocair.com

Building Permit / Inspections
County Service Center
601 North Ross Street
Santa Ana, CA 92701
United States
Phone: 714.667.8888
myOCeServices (ocgov.vom)

Health Department / Inspections
Orange County Environmental Health
Plan Check Section
Phone: 714.433.6000

1.3 Definitions

The following are terms used throughout the Tenant Design Manual along with their meanings as they refer to Tenant development at John Wayne Airport.

Airside	Refers to all space post security checkpoint within the security identification display area (SIDA).
Accessibility	Refers to all applicable codes pertaining to a person's ability to use building components, including but not limited to the Americans with Disabilities Act and the California Building Code.
ADA	Refers to the Americans with Disabilities Act and the accessibility provisions within the California Building Code.
AOA	Aircraft Operations Area
A.F.F.	Above Finished Floor
AHJ	Authority Having Jurisdiction
ARFF	Aircraft Rescue Fire Fighting
Airport	John Wayne Airport Orange County (SNA)
BOH	Also referred to as Back Of House, it refers to tenant leasehold space not visible by the public. Includes offices, storage, breakrooms, kitchens, etc.
CBC	California Building Code, latest applicable version, Refer to CCR Title 24.
CBP	Customs and Border Protection
CRD	Commercial and Revenue Development
Demising	Wall between Tenants or between the Tenant and Airport common areas
DRC	Design Review Committee
FOG	Fats, oils, and grease
FOH	Also referred to as Front Of House, it refers to the tenant leasehold that is accessible and visible by the public.
GCP	JWA Green Concessions Program
JWA	John Wayne Airport Orange County (SNA)
Kiosk	An individual, freestanding, self-contained concession unit that provides preparation, display, and transaction space and/or storage.
Landside	The unsecured portion of the terminal or concourse, or non-AOA SIDA area.
LOD	Lease Outline Drawing
NFPA 13	National Fire Protection Association, Standard 13, Standard for the Installation of Sprinkler Systems, as adopted by the California Building Code.

NFPA 72	National Fire Protection Association, Standard 72, National Fire Alarm Code, as adopted by the California Building Code.
OCPW	Orange County Public Works
PA	JWA Property Agent
Ramp	Also referred to as the apron, the area of an airport where aircraft are parked, unloaded, refueled, boarded, and or maintained.
SIDA	Security Identification Display Area. The secure area of the terminal requiring display of an JWA issued identification badge.
SME	Subject Matter Expert
SSCP	Security Screening Checkpoint
TC	JWA Tenant Coordinator reports to TDM
TCM	Tenant Criteria Manual
TDM	JWA Tenant Development Manager
TSA	Transportation Security Administration.
VIF	Verify in Field

1.4 Airport Vicinity Map

John Wayne Airport, Orange County, California conveniently located between major highway arteries I-405, Rte. 73, and Rte. 55. JWA services numerous coastal and amusement park tourist destinations within a short drive while also serving as the headquarters for many Fortune 500 companies. The Terminal and parking garages are accessible from the Southeast side of the airport.



1.5 Code Compliance

The Tenant shall have responsibility for compliance with all applicable federal, state, and local building codes, ordinances and other jurisdictional regulations for the occupancy type. This manual is not intended to replace applicable code publications and does not refer to specific code provisions. Because codes are adopted and modified frequently, the Tenant shall contact Orange County Building & Safety prior to project commencement or the current code requirements.

1.6 Sustainability

Environmental stewardship is one of the key pillars in JWA's mission to be a good neighbor. Greenhouse gas emissions reduction, energy conservation, renewable energy, water efficiency, air quality, preservation of natural resources, waste reduction, employee wellness and green building facilities are sustainable attributes JWA values.

All projects are required to comply with all applicable local ordinances and requirements, including construction and Demolition Debris Management and recycling by occupants, as well as the requirements of the California Building Standards code (California code of regulations (CCR) Title 24) Part 6 (Energy) and Part 11 (Cal Green).

Tenants are required to support the Airport in its sustainability goals described in accordance with the JWA Green Concessions Program (GCP). All projects are required to comply with applicable local ordinances and requirements and to build to California Building Standards Tier I requirements (CALGreen Tier I) California Code of Regulations and targeted sustainability initiatives outlined in the GCP. Tenants outside the Terminal, such as Fix Based Operators, shall also achieve Envision Gold for all underground utilities.

Tenants are required to use green cleaning methods in conformance with the product manufacturers' recommendations and in compliance with Orange County EPP janitorial cleaners and products. In addition to cleaning, tenants are required to follow the OC EPP for paper products, disposable food service items, and office supplies.

As JWA works toward environmental goals and messaging, Tenants are encouraged to communicate their service, product, packaging and/or facility's green benefits to the customer. This should be done through graphic signage and messaging that tells the story of the Tenant's unique approach to the environment and social responsibility, beyond standard practices.

For additional information please visit: https://www.ocair.com/about/administration/sustainability/



Chapter 2 – Design Review Process

2.1 Intent of Review

The intent of the design review is to ensure that the project confirmed to the design and construction standards and requirements at the airport and that the proposed scope and design are compatible with, and do not detract from the Southern California and Orange County locally inspired aesthetic intent of the Airport facilities and wayfinding systems.

Communication between the Tenant, their architect and the JWA Property Agent is required in preparation for design review presentations. The Property Agent (PA) will coordinate and schedule a review meeting with the Design Review Committee (DRC).

All projects at JWA must go through the design and review process, including but not limited to the following:

- New Tenant Construction
- Renovation or modification of existing Tenant space
- Installation, removal, or modification of equipment
- Signage including, but not limited to, wayfinding, logo, menu boards, and regulatory.
- Art and Advertising

Should the PA and JWA design review team feel the preliminary designs lack imaginative solutions and not represent Orange County, the design will be rejected and shall be redesigned at the Tenant's expense. JWA may offer alternate design solutions for the Tenant's consideration to improve the design's compliance with the Tenant Design Criteria Manual. JWA reserves the right to be the sole judge as to whether a design is acceptable or not.

2.2 Design Approval Process

The following pages outline the requirements and procedures for approval of design and construction of retail and food service operations at JWA. In addition, Tenants must also comply with requirements enacted by any Agency Having Jurisdiction.

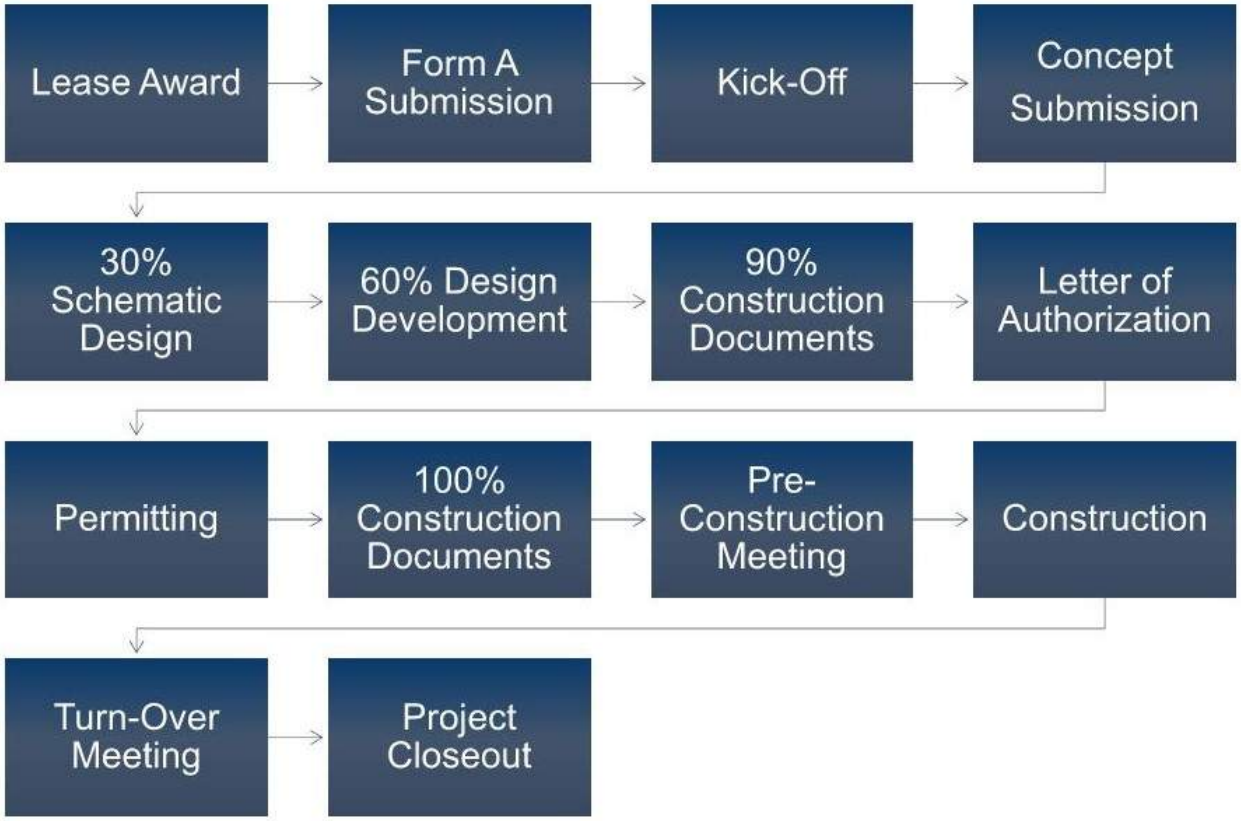
A. The Tenant Team, including the Tenant and/or Tenant's representative, Architect of Record and Engineers of record should visit the site and, where applicable, review any existing record drawings for the location. The Tenant must verify all conditions and dimensions prior to the start of work, including but not limited to design and construction.
B. The Tenant must retain the services of a licensed professional architect and engineer to design their space and prepare the required drawing submission. All design professionals must be licensed as such by the State of California. In addition, it will be beneficial for the Tenant to retain design professionals with prior and recent experience at JWA or other similar airports that have provided/performed these types of services.
C. The Tenant is responsible for permit applications and for obtaining necessary approvals. Prior to applying for a building permit, the Tenant must obtain an approval letter from the JWA authorizing the Tenant to submit for the building permit.
D. The Tenant Improvement Design Package consists of the following:
    a. Construction Schedule
    b. Lease Outline Drawing
    c. Record drawings (when available)
    d. Tenant Criteria Manual
    e. Architect – Engineer Guide OC Public Works

f. John Wayne Airport Construction Standards
g. John Wayne Airport Computer Aided Design Data Standard
h. John Wayne Airport Building Information Modeling Standards
i. John Wayne Airport Geographic Information System Data Standard
j. John Wayne Airport Green Concessions Sustainability Program

E. Upon receipt of the Design Package, Tenant team to contact the Tenant Development Manager to arrange for a kick off call and site visit.

2.3 Tenant Submission Requirements

Tenant submittals as outlined below must be submitted to the Tenant Development Manager as complete sets. Partial submittals will not be reviewed.



The JWA plan review and/or approval is for compliance with the Tenant Design package only; this approval does not relieve the Tenant of responsibility for compliance with Lease documents, field verification of existing conditions, discrepancies between final working drawings and as-builts conditions, coordination with other trades or job conditions. No responsibility for proper engineering, safety, and/or design of the Tenant space is implied or inferred on the part of JWA by this plan approval.

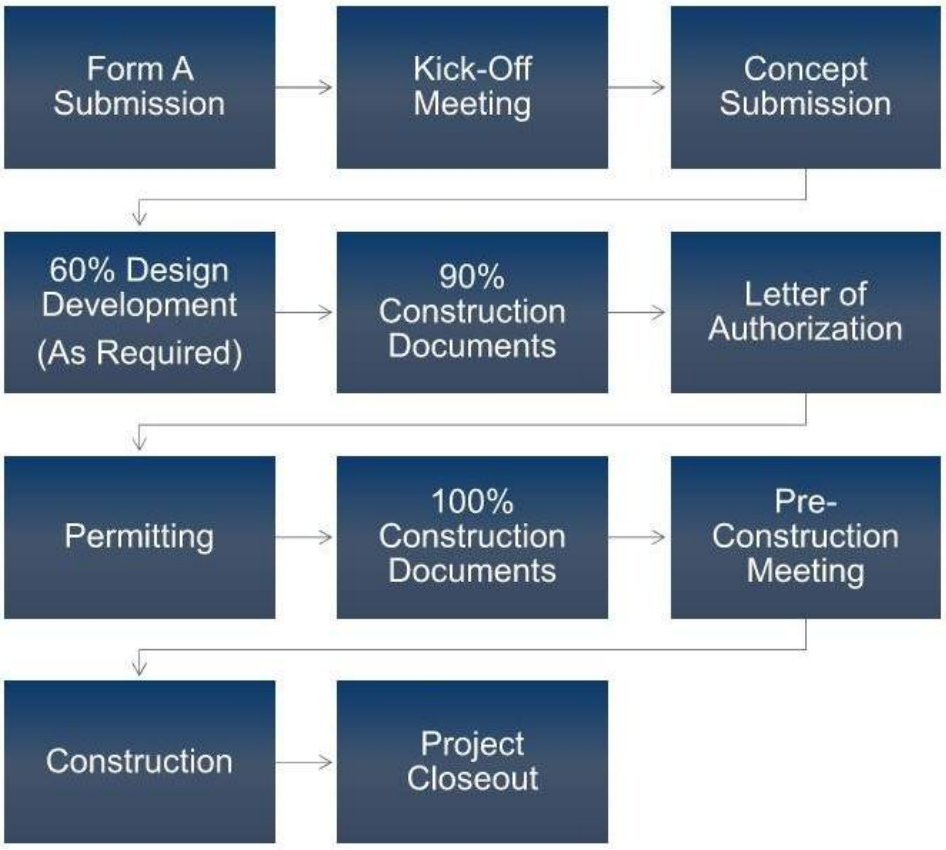
The Tenant shall have sole responsibility for compliance with applicable governing codes, statues, ordinances and other regulations for all work performed by or on behalf of the Tenant at the Tenant's leased area. Approval of Tenant's working drawings or of Tenant's work shall not constitute an implication, representation, or certification by the JWA Tenant Coordination Team

that either said working drawings or Tenant's work is in compliance with applicable governing codes, statues, ordinances or other regulations.

The Tenant Development Manager will submit plans to the Design Review Committee for approval. Allow for a minimum of 10 business days for review of each submission. Some submissions due to their complexity and/or timing may take up to 30 calendar days. The Tenant Development Manger will notify the Tenant, in writing of approval to submit plans to Orange County Public Works for code enforcement/plan check, permitting, and to schedule inspections during construction. Tenant response to comments provided throughout the process shall be in keeping with the JWA Bluebeam Revu comment and response standard which will include a redline mark-up and corresponding spreadsheet comment log. The Tenant shall update the comment log and utilize the redline mark-up for reference. All drawings should follow industry standard sheet numbering and CSI Masterformat specifications.

2.3.1 Existing Tenants with Minor Alterations

Depending on the scope of the work, some projects may be expedited from Concept to 60% or 90% Construction Documents review. In the Form A submission, request in writing along with documentation supporting a request for an expedited submission process. The TDM will confirm the DRC submission package requirements during the Kick-off meeting for those select projects.



2.3.2 Design Review

The following outline provides direction and expectations for milestone events including: design concept, design approval, construction documentation prior to OC Building and Safety plan check review. JWA review may include a courtesy review by subject matter experts of the following disciplines: mechanical, electrical, plumbing, and structural. The SME review is for base building functions and should not be confused with OC Building and Safety Plan Check. If at any step the required deliverables are not complete, the submittal will be returned back to the Tenant. If the listed deliverables are not applicable to the scope of work, the TDM or DRC Chair may waive the deliverable requirement in written response back to the request.

2.3.2.1 Submission 1 – Form A Submission

To initiate a tenant project please fill out the project request Form A. JWA will complete an Initial review within 30 days from the submission date and will schedule a Kick-Off Meeting with the Tenant. Form A can be found on the JWA website:

https://www.ocair.com/business/Tenant-information/Tenant-projects/

The Form A submission should communicate the scope of the project and shall include a computer aided sketch of the proposed work and renderings if needed to explain the project. The Form A submission is not intended to replace the concept submission, but rather notify the PA so that the appropriate documents and resources can be gathered to support the proposed project once it has been deemed acceptable to move forward.

Form A Submission Requirements:

1. 3D Rendering as required.
2. Floor Plan at minimum, Elevation(s), Interior Elevations, Reflected Ceiling Plan are encouraged.
3. Lease Exhibit.
4. Preliminary Project Schedule including Design through Construction with target opening date.
5. Brand Approval.
6. Draft Design Schedule.
7. Budget / Capital Investment estimate.

2.3.2.2 Kick-Off Meeting

Once the project is approved, the PA shall coordinate with the TDM to schedule a kick-off meeting.

The goal of the kick-off meeting is to:

1. Introduce the TDM and review process, deliverables and expectations at a high level.
2. Discuss badging process and requirements.
3. Introduce the TC(s) if applicable.
4. Review concessionaire concept package and provide JWA review comments.
5. The Tenant shall provide JWA an escalation matrix which shall be a living document throughout the design and construction. The matrix shall include contact information applicable to the project and shall include the following:

6. Tenant's Representative – Main Tenant point of contact throughout the project This can be the Tenant or a person designated by the Tenant capable of making decisions associated with these design guidelines and coordination with JWA.
7. Managing Concessionaire – Regarding leasehold contractual disputes.
8. Station Manager – On-duty manager(s) for day and evening contacts.
9. Architect/Engineer - point of contact for all design related coordination.
10. General Contractor and Superintendents. **A construction management representative is MANDATORY at the kick-off meeting for phasing coordination.**
11. Review Tenant's proposed project schedule.
12. Design schedule shall include deliverables and reflect appropriate JWA review times.
13. Construction schedule of estimated start and completion dates.
14. Establish subsequent meeting schedule and deliverables specific to the next step.
15. Remind the Tenant that their assigned TDM must be included in all communications whether it be e-mail or phone unless otherwise directed.
16. Design Approval may be provided by the TDM if appropriate. If a formal DRC review is required, Design Approval or further guidance may be provided at the time of comment review with the Tenant by the DRC Chair.
17. Answer any Tenant team questions.
18. At the conclusion of the meeting, the attendees will walk the site. (A list of all attendees requiring escort will be required prior to the meeting.)
19. The Tenant shall review the utilities listed in the Tenant Criteria Manual and confirm stub-in locations during the site walk. The Tenant will have **30 days** from the kick-off meeting to provide a list of scope that occurs outside of the Tenant's leasehold for the TDM to coordinate with OCPW.

2.3.2.3 Submission 2 – Conceptual Design

A Conceptual design package with the proper documentation relating to the approved Form A. This submittal should demonstrate the "look and feel" of the Tenant space. Depending on the project type the TC may review and approve concept submittals or seek approval from the DRC Chair. PA and TDM will coordinate and schedule a call with the Tenant team to review comments and to answer questions about the next step after the deliverables are reviewed.

Deliverables (24x36 minimum sheets):

1. Key plan with location of the tenant's space within the facility.
2. Photo(s) of existing location, including the storefront including the neighboring facilities and adjacent Tenant and airport context.
3. Preliminary floor plans indicating interior design concept.
4. Typical interior elevations to demonstrate the concept.
5. High quality renderings - A minimum of two and a recommended maximum of 4 renderings must be taken from at least two vantage points and identify at a minimum the following:
   a. Proposed storefront with materials indicated – 1 rendering.
   b. Proposed interior development with materials indicated – 1 rendering.
   c. Transition between the proposed storefront and adjacent building condition for a distance of 6ft.

d. Floor, ceiling and fixture and other store components with materials indicated.
6. A preliminary finish schedule indicating selected materials.
7. A preliminary project schedule.
8. Architects' statement of site visitation, including confirmation of existing conditions and utilities.
9. Sample boards (two copies - 11" x 17") with material and color selections of sufficient size to demonstrate all material colors, textures, and patterns.
10. Initial evaluation of the California Green Building Code CalGreen Tier 1 checklist.
11. Initial evaluation of the Green Concessions Program checklist, as applicable.

When the initial review is complete, the TDM will issue a written response of acknowledgement before work may proceed on the schematic documents. Spreadsheet comments will be provided along with an electronic mark-up.

2.3.2.3 Submission 3 – 30% Schematic Design

The Tenant shall submit a 30% Design Intent package to the TDM as prepared by the Tenants Architect/Designer for review by the DRC prior to commencing with detailed design work. If the submission is incomplete or inaccurate, the Tenant will be required to revise and resubmit the submission prior to review.

The requirements for this submission include:

- Format 24x36, minimum scale for architectural drawings is ¼" = 1foot.
- Photo(s) of existing location, including the storefront including the neighboring facilities and adjacent Tenant and airport context.
- Electronic sample board.
- Full color, realistic perspective rendering of the location as seen from the concourse.
- Additional interior rendering as the design team feels appropriate to tell the story.
- Key plan indicating project location.
- Floor plan.
- Reflected ceiling plan.
- Interior front of house elevations not already visible in renderings.
- Food service Tenants to include equipment plan and schedule, sample menu, and queuing plan at the service counter.
- Narrative to describe how customers are greeted/served during their visit..
- Updated California Green Building Code CalGreen Tier 1 checklist.
- Updated Green Concessions Program checklist as applicable.
- Response to previous submission comments.

After a preliminary review of the materials for completeness, a meeting will be held with the design team to review and discuss the submission. The Tenant/Tenant Design Team will present the design to the review committee.

2.3.2.4 Submission 4 – 60% Design Development

The Tenant shall submit an interim submission for review by the TDM as prepared by the Tenant's Architect/Designer for review by the DRC. The focus of this submission is on where the Tenant fit-out interacts with the base building.

The requirements for this submission include:

- All previous submission drawings and updates.
- Key plan.
- Storefront elevations with details of the interface between Tenant finishes and concourse finishes.
- Signage elevations and details.
- Demolition plan.
- Floor/roof penetration plan – power/low voltage/water/sewer.
    - **Any utilities outside of the Tenant's leasehold must be identified for the TDM to coordinate with OCPW. These include floor, roof, and sidewall penetrations. OCPW will manage the design and construction scope outside the Tenant's leasehold.**
- Roof plan as applicable to the specific project.
- Sanitary and water fixture unit calculations.
- Electrical load calculations.
- Structural drawings showing any structural attachments to the base building.
- Completed asbestos survey.
- Updated rendering as required.
- Samples board.
- Construction phasing plan if required.
- Updated CalGreen Tier 1 checklist.
- Updated Green Concessions Program checklist, as applicable.
- Response to previous submission comments.

The Tenant Development Manager will provide the Tenant with review comments in Bluebeam redlines and comment matrix log from the DRC for incorporation into the 90% construction documents submittal. The Tenant shall review the comments and immediately notify the TDM regarding any comments needing further resolution.

2.3.2.5 Submission 4 – 90% Construction Documents

Tenant will address the 60% submission comments and submit the 90% set to the Tenant Development Manager for review by the DRC. The focus of this submission will be on the technical aspects of the design as it relates to building systems, impacts to adjacent stakeholders, and compliance with the criteria manual. The level of design in this submission shall be "plan check ready" and contain all plans, calculations, and compliance forms required by OC Building and Safety Plan Check. The information contained in these drawings will be used by OCPW to coordinate the scope of work to extend any utilities not currently services the space to a final location inside the leasehold as per the Tenant's dimensions.

Submission requirements by discipline:

A. Architectural
    1. Complete architectural drawings, floor plans, details and specification prepared by an architect licensed in the State of California.
    2. Location Plan– indicating where the project will be located to show not only where the project will be located but also its relationship to surrounding areas.
    3. Floor Plan of Conditions – showing base architecture and immediate adjacent spaces. Include adjacent public areas, legal boundaries of the project, and dimensions. The Airport will identify any potential issues or conflicts with other

activities in the immediate area. Provide details to clarify the interface between Tenant and adjacent finishes.

4. Demolition plans.
5. Barricade plan and details including door placement and door hardware. Door to swing inward. Door to have digital key lock and a pad lock.
6. Floor Plan - Interior layout. (Minimum scale ¼" =1 foot).
7. Reflected Ceiling Plan – showing the elevations(s) or height and layout of the entire finished ceiling and, if applicable show ceiling materials, lighting layout, types of lighting fixtures, A/C registers and grilles, and signs. Indicate the elevation or distance of each element above the finished floor. All lighting must be recessed or indirect.
8. Coordinated floor penetration plan. Floor penetrations to be round unless otherwise approved by the Tenant Development Manager.
9. Interior elevations and sections include materials and colors.
10. Provide fire rated penetration details as appropriate.
11. Interior details including framing, stud repair, penetration details.
12. Fixture and furniture layout.
13. Storefront elevation indicating finish material and signage.
14. Equipment List - if equipment will be visible to the public, submit color images with clear indications of material to illustrate an accurate appearance of the final project. A more detailed equipment list may be requested later into the project to show how these equipment selections are integrated in the design and surrounding context.
15. Signage Details – showing elevations and section views, letter style and size, all colors, material and proposed lighting. This shall include all storefront signage and typical interior display graphics and menu displays. Tenant graphics layout on the primary identification, secondary branding plane, and blade signage must be reviewed by design review committee.
16. Delegated and Deferred designs are required to proceed through the design approval process. The Tenant shall submit the design intent as early as possible to avoid construction completion delays. Examples are:
    a. Signage and branding
    b. Sprinkler shop drawings.
    c. Fire Alarm shop drawings.
    d. Barricade graphics.
    e. Custom millwork and furniture.
17. On the cover of the drawing set, include a list of all special inspections that will be required as a part of the project.
18. Updated CalGreen Tier 1 checklist.
19. Updated Green Concessions Program checklist as applicable.

B. Mechanical

1. Complete HVAC drawings, floor plans, details and specification prepared by an engineer licensed in the State of California.
2. Demolition plan (if applicable).
3. Roof plan showing location of HVAC unit (if applicable) and adjacent equipment, walking pads and distance to edge of building.
4. Completed load and equipment schedules.

5. Provide fire rated penetration details as appropriate.
6. Details of the interface with JWA's HVAC system (if applicable).
7. Structural reinforcement design/calculations for new equipment.

C. Electrical
1. Complete Electrical drawings, floor plans, details and specification prepared by an engineer licensed in the State of California.
2. Demolition plan (if applicable).
3. Detail schedule and one-line riser diagram. Include accurate name of the source panel in the diagram (existing panel label).
4. To facilitate review, include an image/schedule of the source panel labeling schedule.
5. Lighting layout and lighting schedule with manufacturer's catalog numbers and cuts, lamp wattages, colors and finishes. All lighting must be UL listed. Include UL Listing number in light schedule.
6. Complete Load schedules, both estimated and demand, on each feeder/riser.
7. Title 24 calculations.
8. Equipment schedule with load requirements (if applicable).
9. Electrical panel schematic and circuit breaker details.
10. Telephone system connection and distribution.
11. Key plan identifying location of source panel/electrical closet.
12. Details of interface with JWA's electrical and telephone systems (if applicable).
13. Transformers to be floor mounted.
14. Provide fire rated penetration details as appropriate.

D. Plumbing
1. Complete Plumbing drawings, floor plans, details and specification prepared by an engineer licensed in the State of California.
2. Demolition plan (if applicable).
3. Detail connection to water service and sewer.
4. Number of plumbing fixturing units.
5. Single line plumbing riser diagrams – water and waste.
6. Gas piping diagram (if applicable).
7. Gas appliance list (if applicable).
8. Provide fire rated penetration details as appropriate.
9. Water heaters to be floor mounted.
10. Details of interface with JWA's plumbing supply, waste, gas and sprinkler systems (if applicable).

E. Fire Alarm
1. Complete Fire Alarm drawings, floor plans, details and specification prepared by an engineer licensed in the State of California.
2. Demolition plan (if applicable).
3. Indicate candela rating for each strobe.
4. Indicate duct smoke detectors (if applicable).
5. Food Service Tenants – detail of FA/Ansul system interface with make-up air and exhaust fans.
6. Fire alarm riser diagram.
7. Indication location of all smoke detectors.
8. Notes to relabel / reprogram at the head end.

9. Extents of the zone and location of the flow and tamper switch.
10. Fire alarm shop drawings to be submitted.

F. Sprinkler
    1. Complete Sprinkler drawings, floor plans, details and specification prepared by an engineer licensed in the State of California.
    2. Demolition plan (if applicable).
    3. Drawing that clarifies the extent of the sprinkler zone and location of sprinkler flow and tamper switch.
    4. Details of interface with building sprinkler system.
    5. Hanger details.
    6. Piping elevations and ceiling elevations.
    7. Hydraulic calculations.
    8. Pipe sizing.
    9. Sprinkler shop drawings to be submitted.

G. Structural
    1. Complete Structural drawings, plans, details and specification prepared by an engineer licensed in the State of California.
        a. Primary, secondary, equipment bracing, mounting, and metal framing as required.
    2. Demolition plan (if applicable).
    3. Special Inspections.

H. Low Voltage
    1. Complete set of IT, Communication, and Security Plans.
    2. Demolition plan (if applicable).
    3. Detail schedule and one-line diagram. Include accurate name of the source panel in the diagram (existing panel label) from the MPOE to Tenants IT closet.
    4. To facilitate review, include an image/schedule of the source panel labeling schedule.
    5. Layout and schedule with manufacturer's catalog numbers and cuts, lamp wattages, colors and finishes.
    6. Complete Load schedules, both estimated and demand, on each feeder/riser.
    7. Equipment schedule with load requirements (if applicable).

I. Food Service
    1. Equipment plans.
    2. Rough-in plans.
    3. Kitchen equipment line elevations.
    4. Equipment cut sheets.

Upon review completion, the TDM will issue comments for the Tenant to incorporate into the documents along with a **Letter of Authorization** with conditions, if any, granting the Tenant to proceed with OC Building and Safety Plan Check submission.

Note, it is the Tenant's responsibility to submit to OC Building Plan Check, Fire Department, Health Department and any other Authority Having Jurisdiction. JWA is not a permitting agency nor does it facilitate or submit plans on the Tenant's behalf.

Once the Tenant has submitted for Plan Check, the permit numbers relating to the work must be provided to the PA and TDM. In order for the OC Building and Safety Plan Check review to

begin, the TDM will need to communicate JWA's acknowledgement of the submission for plan review and approval. The permit number is required to be referenced for this communication.

2.3.2.6 Submission 5 – 100% Construction Documents - IFC

The 100% Construction Drawings are intended to be the complete set of Construction drawings that have incorporated all the JWA design comments prior to OC Building and Safety building permit approval. The final drawings and specifications shall be signed and sealed by the registered Architect or Engineer responsible for the design.

The Submission Requirements include:

- (1) Full size photocopy of OC Building and Safety stamped plans.
- Full sized drawings in PDF (readable and searchable files) Sheets are to be labeled by number and title.
- PDF specifications. (readable and searchable files). Pages are to be labeled by specification number and title.
- Drawing completed in AutoCAD or Revit.
- List of all deferred submittals (must be provided prior to construction start).
- List of all special inspections that will be required, and special inspector name and contact information.
- List of corrections required by the AHJ during plan check.

2.3.3 Construction

There will be a Pre-Construction meeting with Commercial and Revenue Development, the Tenant, the Contractor and any major Sub-Contractors before Construction can begin. The Tenant must submit the following to the TDM for review, once all documents have been reviewed and approved, a preconstruction meeting will be scheduled:

- Building permit.
- Certificate of insurance.
- Approved plans.
- Subcontractor list (including contact name, address, phone, cell and email).
- Performance Bond.
- Construction safety and implementation plan.
- Construction schedule with milestones, lead in times, and required night/weekend work.
- Contract between the Tenant and GC.
- Health Department approval (as required).
- Approved shop drawings.
- Contractor badging.
- Emergency Contract list of contractors and all subcontractors.
- Copy of asbestos report indicating the area to be demolished is free of asbestos.
- OCPW utilities extension coordination with contractor's demolition schedule.

Upon successful submission of the above documents to JWA and completion of the Pre-Construction meeting, the Tenant Development Manager will issue a **Notice to Proceed** for the contractor to begin work. The Tenant must install a barricade prior to performing any demolition.

Specific requirements during construction per this manual and OCPW Construction Manual will be adhered to including but not limited to scheduling of hours, compliance with required barricades, activities allowed/not allowed during airport operations hours, connections and shut down for utility connection and route of contractor access. Contractor shall provide JWA barricade code and/or key for access to the construction site.

During construction, due to field conditions or product availability, changes to the plans might be needed. Tenant team to submit proposed changes to the Tenant Development Manager along with an explanation of why the change is being requested for review and approval. All sketches and explanation letters to be signed and sealed by the appropriate design professional.

All contractors' personnel must be badged to operate at the airport. There is an extensive background check that is required including a TSA check and a seminar/course if required to review local stipulations for access and control. The Tenant should advise his contractors to give plenty of time to complete the process as they will not be allowed on site until they obtain a badge.

Weekly Construction Meetings will be held with the Tenant, the Contractor and any major Sub-Contractors to review schedule, amount of completion, challenges of construction, etc.

Prior to removal of the construction barricade, the Tenant must submit a barricade demobilization request to the TDM. The TDM will review the state of construction and issue a response indicating approvals or actions the contractor must complete prior to removal.

2.3.4 Turn-Over Meeting / Barricade Demobilization

Prior to barricade demobilization request, the Tenant shall schedule a Turn-Over meeting with Commercial and Revenue Development. The intent of this meeting is to review JWA operations standards and go over the opening day checklist for a successful grand opening. Items for discussion include:

A. Punch Walk / Site walk.
B. Staff Badging and Training.
C. Licenses and Approvals.
D. Hours of operation and peak hour planning.
E. Deliveries.
F. Leasehold care and maintenance.
G. Safety and Emergency protocols.

2.3.5 Post Construction

Upon completion of the work, the Tenant will provide the following documents to the TDM:

Compliance Review:

A. Post construction: Once construction is complete, Commercial and Revenue Development will perform a design compliance review of the premises. At their discretion, The Commercial and Revenue Development team will schedule a walkthrough of the Tenant space at the completion of work and prior to stocking and training, and again after stocking and training and prior to opening.
B. In the event that the Airport finds elements that do not conform to the final approved design, the applicant will be contacted to rectify the compliance issue. (The material

board will be reviewed with the built materials and must match the materials submitted in the design review process.)

C. Final certification will be based on verification of costs, as-built drawings and lien releases. Construction Performance Bond will not be released until certification is received.
D. The Airport reserves the right to reject any proposed design which, in the Airport's opinion, are considered to be in aesthetic conflict with the building design and/or adjacent approve Tenant designs.
E. The Airport also reserves the right to reject an incomplete package for review.

The requirements for the post construction close out are:

- Air balance report.
- Record drawings in CAD and PDF.
- Record specifications.
- Final electrical inspection.
- Final fire and sprinkler certification.
- Final Ansul test (food Tenants).
- Telephone list of all key holders.
- Certificate of substantial completion (AIA Contract Documents G704).
- Health Department approval to open (as applicable).
- Liquor license (as applicable).
- Completed JWA punch list.
- Certificate of Occupancy.

2.3.5.1 As-Builts and Record Drawings

Record Plans are defined as field verified plans shown in their final state that reflect all changes affecting the plans used for bidding, including but not limited to changes made by submittals, Requests for Information, Change Orders, field orders, general repairs and relocations, and discrepancies from the Permit Set discovered in the field. Record Plans must be accurate, show actual routing, show actual sizing, show dimensions, and other relevant details information necessary to discern where things reside, what they are, what they are connected to, sizes, and quantities. Record Plans do not show redlines/markings that indicate where conditions have changed from the plans used for bidding, but should materially be identical to the Redline/As-built Plans in terms of the final disposition of the work site.

Record Specifications are defined as specifications which reflect all changes in their final state affecting the specifications used for bidding, including but not limited to changes made by submittals, Requests for Information, Change Orders, field orders, general repairs and relocations, and discrepancies from the Permit Set discovered in the field. Record Specifications must indicate final products utilized, including but not limited to manufacturers, model numbers, and pertinent changes to submittals, warranties, operation & maintenance manuals, control sequences, and specific product requirements. Record Specifications do not show redlines/markings that indicate where conditions have changed from the specifications used for bidding, but should materially be identical to the Redline Specifications in terms of the final representation of site conditions.

Contractors are responsible for compiling subcontractor Redline/As-built Plans, Redline/As-built Specifications into merged plan sets and specification books for turnover to JWA. Architect-Engineers are responsible for creating Record Plans and Record Specifications from Redline Documents provided by the Contractor for turnover to JWA. In the case of Design-Build, the Design-Builder is responsible both Redline/As-built Documents and Record Documents.

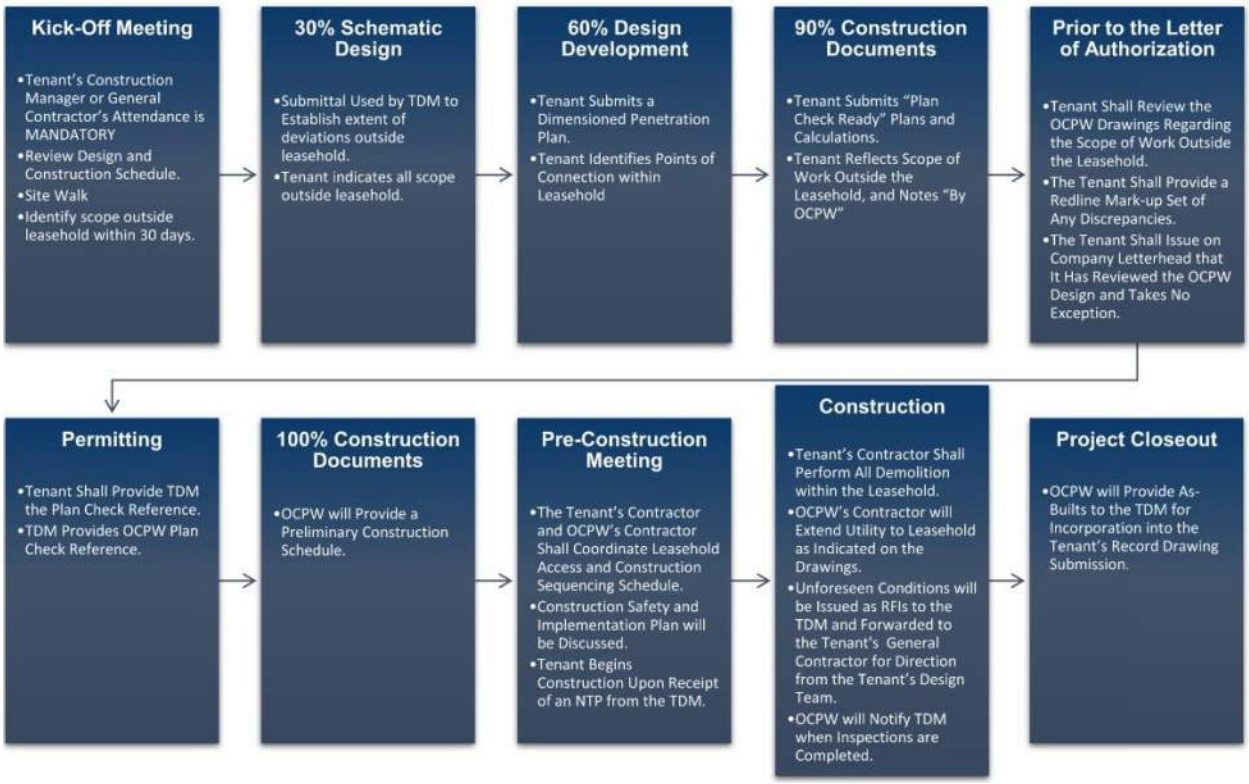
Turnover of Redline/As-built Plans and Specifications to JWA, including any fabrication drawings and other detailed plans used on this project, is required in PDF format (full scale, no compression, full color). PDF format Redline/As-built Plans and Specifications must be uploaded to Oracle Primavera Unifier and submitted through the Submittals process once inspections are completed, and provided to JWA on a USB drive at the completion of the project. Hard copies of Redline/As-built Plans and Specifications must also be turned over to JWA at the completion of the project. Turnover of redline/as-built documents is required when all field work (including change orders) is complete. Accuracy of the documents will be audited at turnover and failure to provide accurate documents will result in penalties explained below.

One (1) hard copy set of Record Plans and Record Specifications in Letter (8.5”x11”) is required at the completion of the project. In addition, two (2) USB drives containing PDF (for plans and specifications), DWG formats (for plans only), and RVT and IFC formats (for BIM, if applicable) of the Record documents and of the models is required at the completion of the project. Lastly, PDFs, DWGs, RVTs, IFCs, and any other electronic format of these documents must be uploaded to Oracle Primavera Unifier and submitted through the Submittals process.

3% of the total contract amount must be assigned to a Work Breakdown Structure (WBS) line for completion and turnover of the Redline/As-built documents, Record documents (for Architect-Engineers and Design-Builders), Operation & Maintenance Manuals, Warranties, attic stock, keys, and any other items required per the documents. Lack of compliance with the standards and turnover of Redline documents, As-built/Record documents, Operation & Maintenance Manuals, Warranties, attic stock, keys, and any other items required per the documents will result in a short pay of 3% of the requested gross invoice amount for the month where infractions have occurred. The short pay amount will continue to be withheld from payments until infractions have been resolved. If infractions are unresolved 30 calendar days after the completion of construction, Contractor, Architect-Engineer, and/or Design-Builder will forfeit 3% of the total contract amount.

2.3.6 Deviations Outside Tenant Leasehold

Many of the existing leasehold have utilities within the space ready to serve the future Tenant, however, should the Tenant's design require relocation and/or new utility service, the Tenant is required to coordinate such requirements to the TDM for completion by OCPW. The Tenant's contractor will not be permitted to perform construction outside the extents of the leasehold. To lessen the impact on neighboring Tenants, OCPW will perform all design and construction outside the Tenant's leasehold based on the information provided by the Tenant's design team. The design review process outlines the information required of the Tenant's design team and also general contractor. Any delays due to improper or missing information not identified by the Tenant shall not be the responsibility of JWA or OCPW. Below highlights key milestones below:





Chapter 3 – Building Conditions

3.1 Leasehold Measurement Standards

As a rule of thumb, JWA establishes Tenant leaseholds to the centerline of demising walls and to the outside face of public facing and/or BOH corridor walls. Tenant leaseholds that abut to the exterior shall be measured from the inside face of the glazing mullion or from the inside face of the exterior wall assembly, i.e. CMU.

3.2 Overall Conditions

The Terminal Building consists of (3) connected terminals; A, B, and C. Combined the Airport terminal is approximately 735,505 square feet serving (20) ADG III aircraft and (2) additional gates dedicated to smaller aircraft. Terminal A and B were completed in 1990 while Terminal C was completed in 2011.

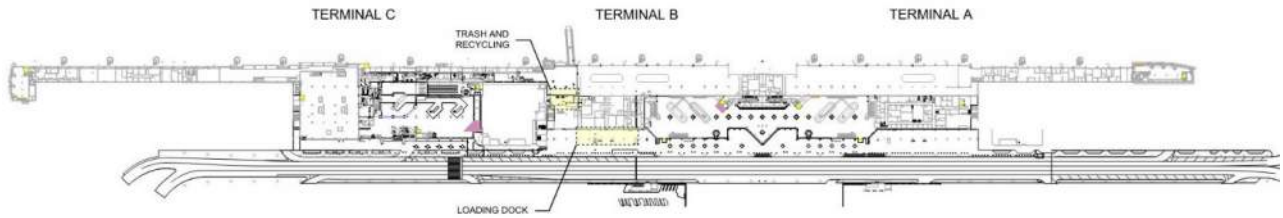
In 2018 JWA completed a major refurbishment to all (3) terminals which included numerous safety, code, comfort, and aesthetic improvements.

Each Terminal has a dedicated security check point and baggage claim. International arrivals are accommodated at gates C13 and C14. Passengers process through US Customs and Boarder Protection on the Arrivals Level and claim luggage at baggage carousel 7.

3.2.1 Departures Overall Plan

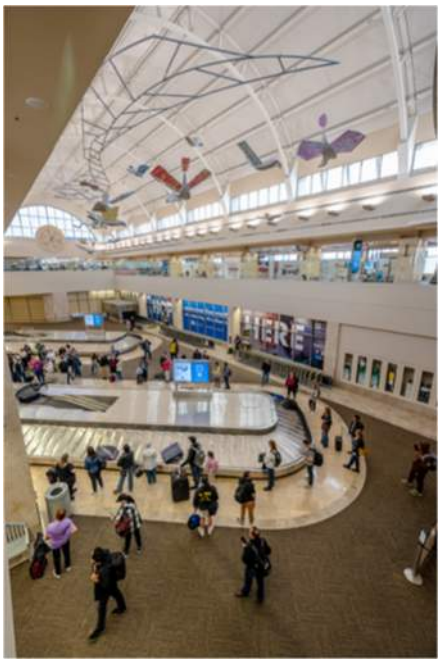


3.2.2 Arrivals Overall Plan



3.2.3 Arrivals Level

The Arrivals level is the ground floor of the terminal building and houses the baggage claim (7 carousels), rental car counters, and operations offices. The arrivals level also consists of ground support for the airport and airlines and security entities. Terminals A and B baggage claims are connected with Rental car counters centered between. Passengers must exit the Terminal building to walk to/from Terminal C.



The baggage claim areas are open visually to the departures level sharing the same vaulted ceiling. The airside areas open up to the apron and include baggage make-up. Passengers access the parking garages and curbside pick-up while covered under the departures level roadway.

This level includes a landside loading dock for concessionaire deliveries and an airside trash and recycling disposal area.

3.2.4 Departures Level

The Departures level includes airline ticket counters, (3) TSA security checkpoints, and the 20-gate concourse. Terminals A and B include a third level mezzanine currently utilized as airline clubs. Passengers may walk freely between terminals along the concourse. Centralized marketplace clusters are used as terminal separation with a mixed concessions offering.

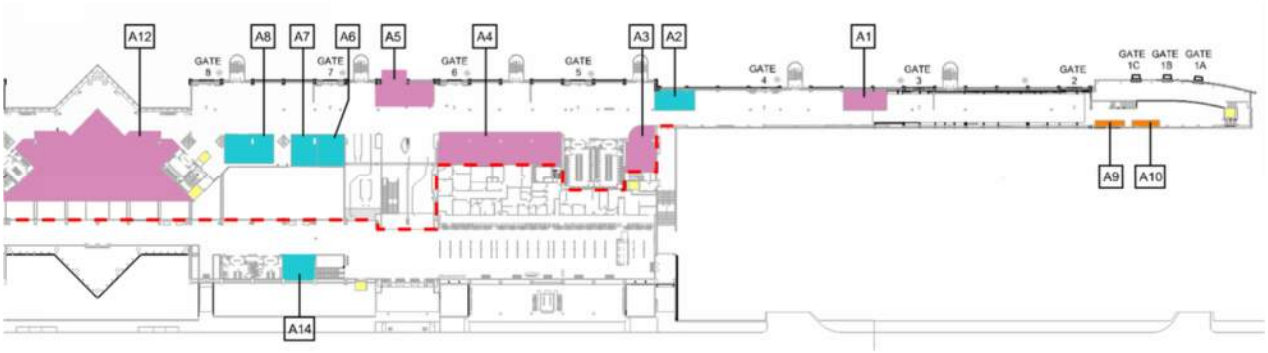


There is a continuous vaulted ceiling over the concourse circulation while a separate vaulted roof over the Terminal A and B central market place spans the ticketing area and extends to both terminal TSA checkpoints. South of the Terminal A and north of Terminal B security checkpoints is a flat roof with mechanical equipment roof well.

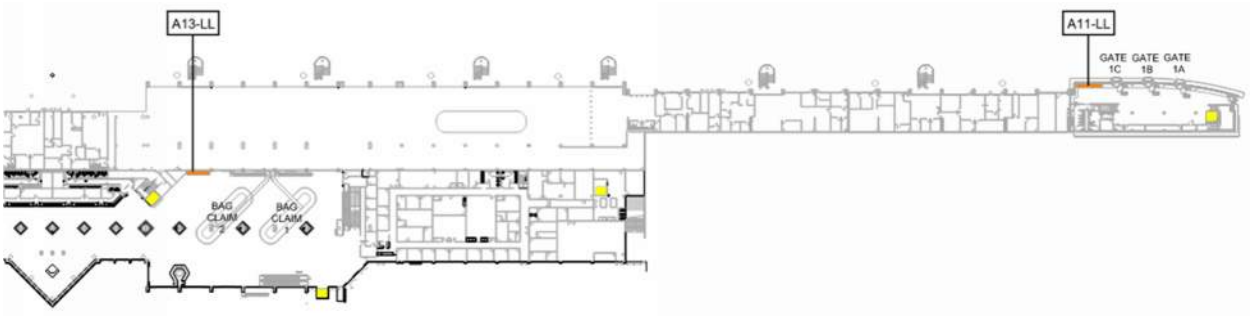
3.3 Terminal A

Terminal A is the northern terminal which houses Gates 1A through 8. It is the first terminal departing passengers arrive at from the curbside. The Arrivals level includes baggage carousels 1 and 2 and also a number of airport operations offices.

3.3.1 Departures Level Concessions Plan



3.3.2 Arrivals Level Concessions Plan



3.3.3 Concessions Mix

Leasehold	Concessions Type		Leasehold	Concessions Type
A1	Food & Beverage		A8	Retail
A2	Retail		A9	Automated Vending
A3	Food and Beverage		A10	Automated Vending
A4	Food and Beverage		A11-LL	Automated Vending
A5	Food and Beverage		A12	Food and Beverage
A6	Retail		A13-LL	Automated Vending
A7	Retail		A14	Retail

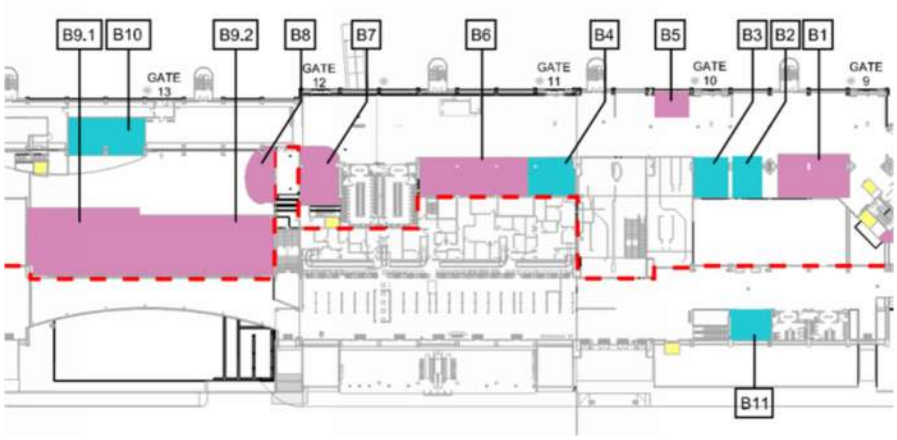
3.3.4 Restrooms

Concourse restrooms are located across from Gates 5 and 8. Gate 8 is only a women's restroom. Pre-security landside restrooms are located south of the Departures level TSA checkpoint. Arrivals level restrooms are shared with terminal B. Women's restrooms are located in the Terminal A side while men's restrooms are located in the Terminal B side. The Tenant shall review the restroom facilities they are proposing to use for their patrons and employees during the design process and notify the TDM of any code upgrades that may be required.

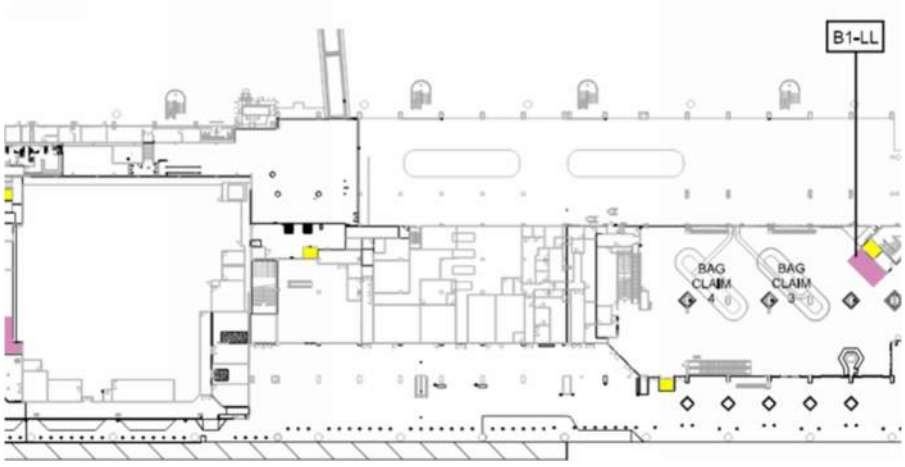
3.4 Terminal B

Terminal B is the central terminal which houses Gates 9 through 14. The Arrivals level includes baggage carousels 3 and 4.

3.4.1 Departures Level Concessions Plan



3.4.2 Arrivals Level Concessions Plan



3.4.3 Concessions Mix

Leasehold	Concessions Type		Leasehold	Concessions Type
B1	Food and Beverage		B7	Food and Beverage
B1-LL	Food and Beverage		B8	Food and Beverage
B2	Retail		B9.1	Food and Beverage
B3	Retail		B9.2	Food and Beverage
B4	Retail		B10	Retail
B5	Food and Beverage		B11	Retail
B6	Food and Beverage			

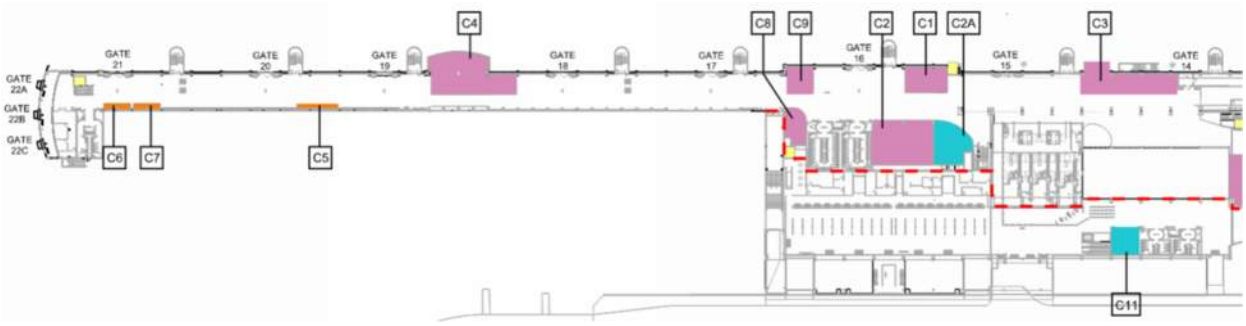
3.4.4 Restrooms

Concourse restrooms are located across from Gates 9 and 12. Gate 9 is only a men's restroom. Pre-security landside restrooms are located north of the departures level TSA checkpoint. Arrivals level restrooms are shared with Terminal A in the central node. Men's restrooms are located in the Terminal B side while the women's restrooms are located in the Terminal A side. The Tenant shall review the restroom facilities they are proposing to use for their patrons and employees during the design process and notify the TDM of any code upgrades that may be required.

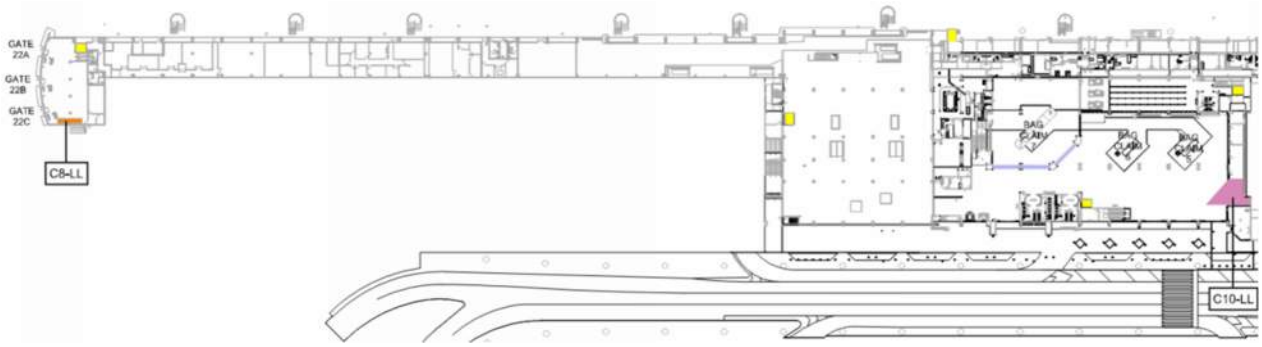
3.5 Terminal C

Terminal C is the southernmost Terminal and houses Gates 15 through 22C. The Arrivals level includes baggage carousels 5, 6, and 7. Terminal C also includes Customs and Border Protection.

3.5.1 Departures Level Concessions Plan



3.5.2 Arrivals Level Concessions Plan



3.5.3 Concessions Mix

Leasehold	Concessions Type		Leasehold	Concessions Type
C1	Food and Beverage		C6	Automated Vending
C2	Food and Beverage		C7	Automated Vending
C2A	Retail		C8	Food and Beverage
C3	Food and Beverage		C8-LL	Automated Vending
C4	Food and Beverage		C9	Food and Beverage
C5	Automated Vending		C10-LL	Food and Beverage

3.5.4 Restrooms

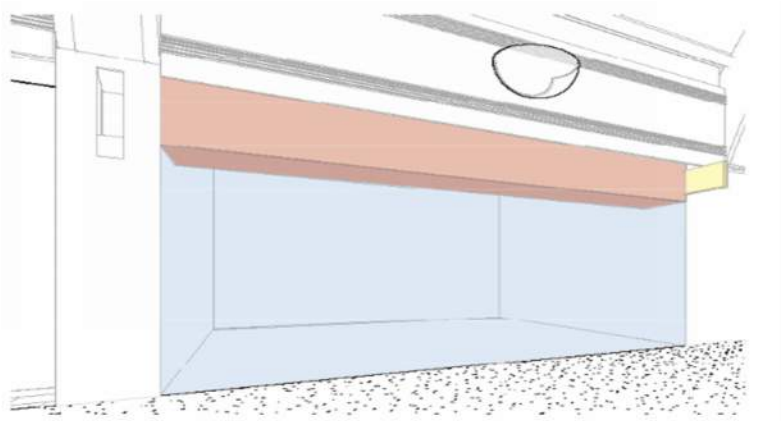
Concourse restrooms are located across from Gates 16 and 22. Pre-security landside restrooms are located north of the Departures level TSA checkpoint. Arrivals level restrooms are outside the baggage claim and inside the CBP area for International Arrivals only. The Tenant shall review the restroom facilities they are proposing to use for their patrons and employees during the design process and notify the TDM of any code upgrades that may be required.



Chapter 4 – Tenant Design Conditions

4.1 Concessions

4.1.1 In-line Storefront

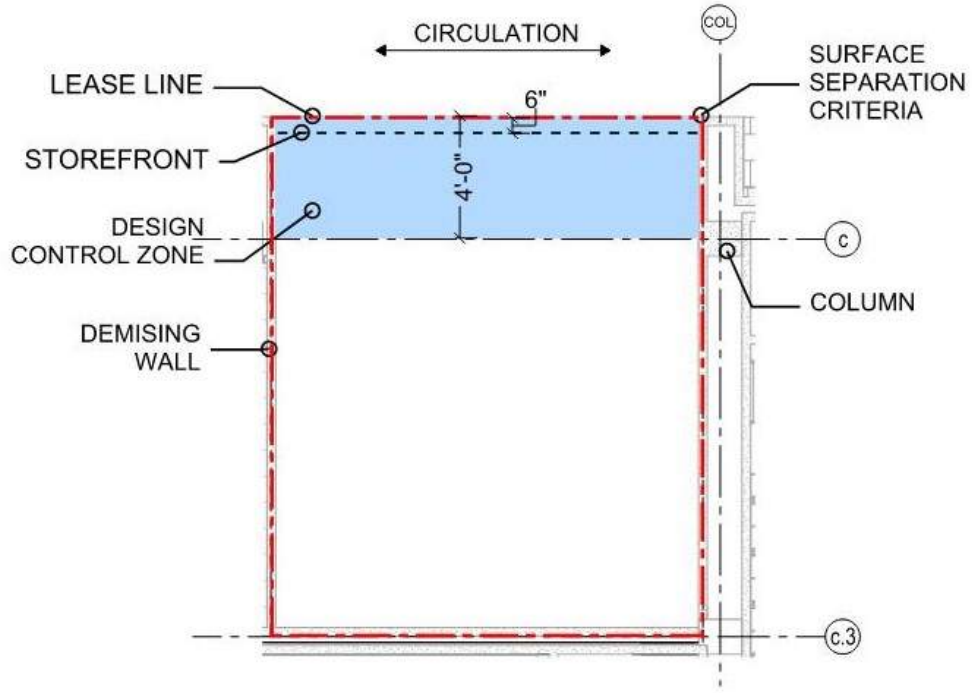


The In-line storefront design condition is identified by the presence of a single storefront occurring along the south side of the concourse. The front edge of the storefront and parallel signage are aligned along the public circulation path. The parallel signage consists of a horizontal signage zone as well as a blade sign projecting into the circulation. The architectural conditions of the terminal, including ceiling height and wall finish may vary depending on the location of the leasehold. Terminal columns cladded in limestone tile are typically aligned with the storefront lease line and must be integrated into the design adhering to separation criteria.

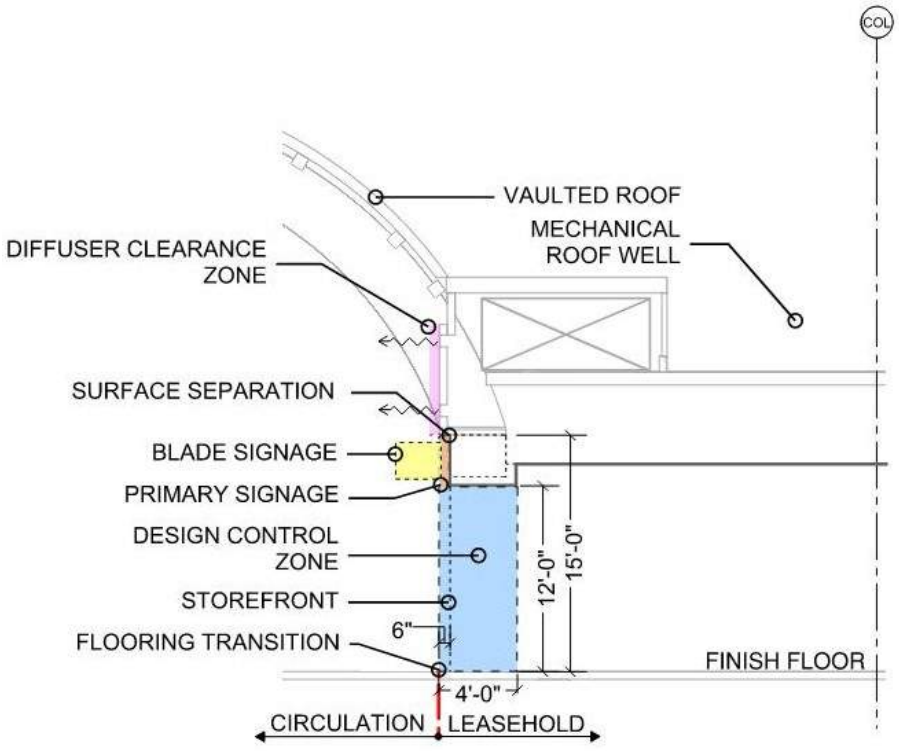
In-line leaseholds include:

Leasehold	Concessions Type
A4	Food & Beverage
A14	Retail
B4	Retail
B6	Food & Beverage
B9.1	Food & Beverage
B9.2	Food & Beverage
B10	Retail
B11	Retail
C2	Food & Beverage
C11	Retail

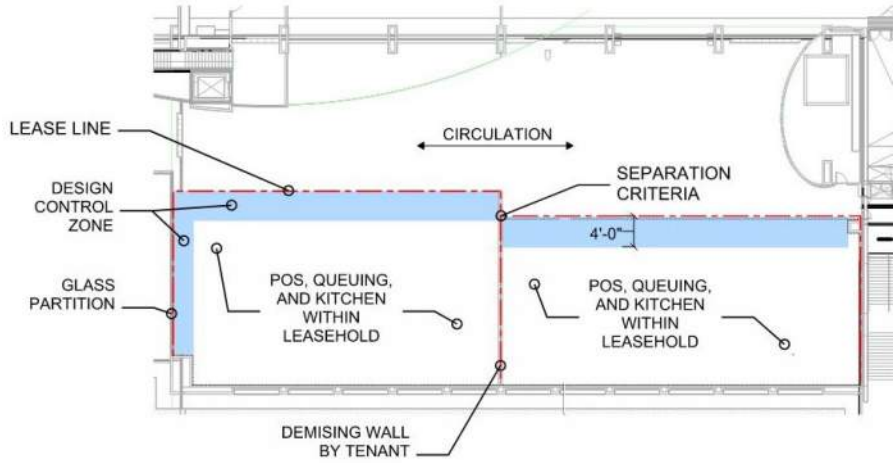
4.1.1.1 In-Line Storefront - Floor Plan



4.1.1.2 In-Line Storefront - Section



4.1.1.3 In-Line Storefront at B9 - Floor Plan



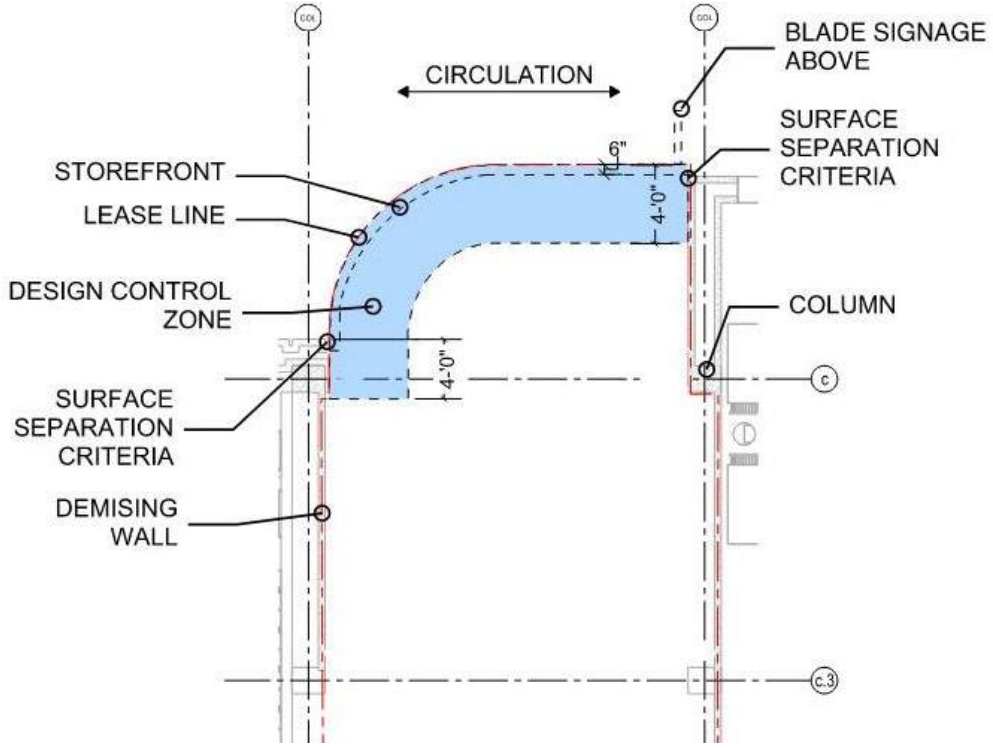
4.1.2 Corner Storefront

The corner storefront design condition occurs on the south side of the concourse is identified by the presence of two in-line storefronts. The front edge of each storefront and parallel signage are aligned along the public circulation path. The parallel signage consists of a horizontal signage zone as well as a blade sign projecting into the circulation. The corner storefront faces the outbound passenger path of travel from the security checkpoint. Blade signage is necessary perpendicular to the concourse. The architectural conditions of the terminal, including ceiling height and wall finish may vary depending on the location of the leasehold.

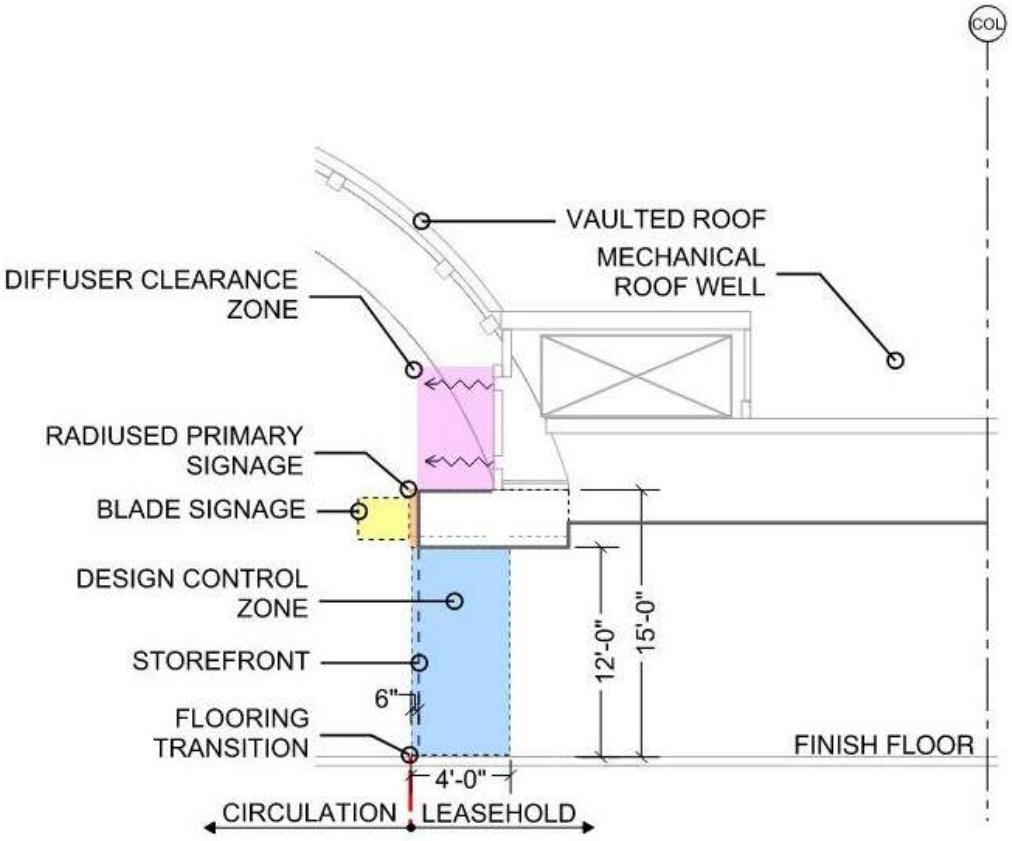
Corner leaseholds include:

Leasehold	Concessions Type
A3	Food & Beverage
B7	Food & Beverage
B8	Food & Beverage
C2A	Retail
C8	Food & Beverage

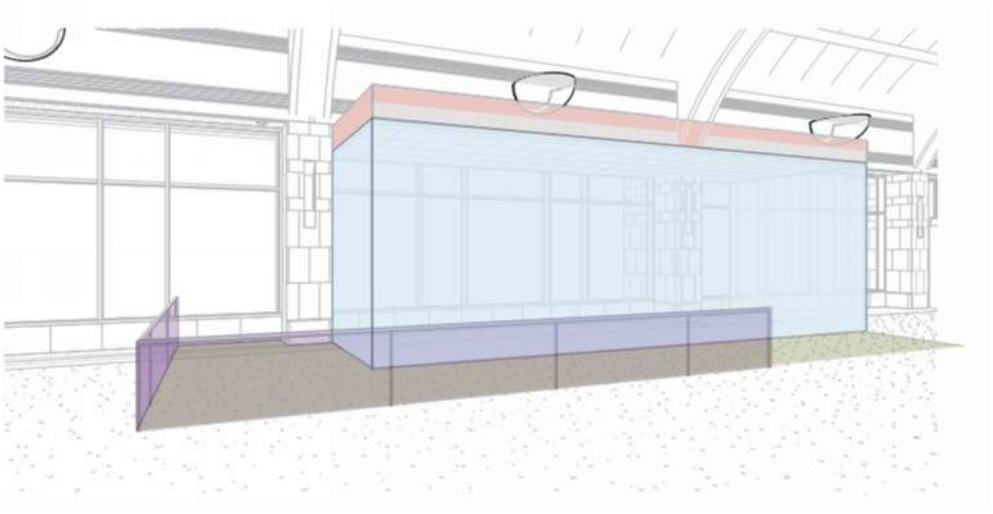
4.1.2.1 Corner Storefront - Floor Plan



4.1.2.2 Corner Storefront - Section



4.1.3 Freestanding Kiosk



The kiosk design condition is an individual, freestanding, self-contained concessions unit and is located along the northside of the concourse situated between hold rooms. Freestanding kiosk leaseholds include:

Leasehold	Concessions Type
A1	Food & Beverage
A2	Retail
A5	Food & Beverage
B1-LL	Food & Beverage
B5	Food & Beverage
C1	Food & Beverage
C3	Food & Beverage
C4	Food & Beverage
C9	Food & Beverage
C10-LL	Food & Beverage

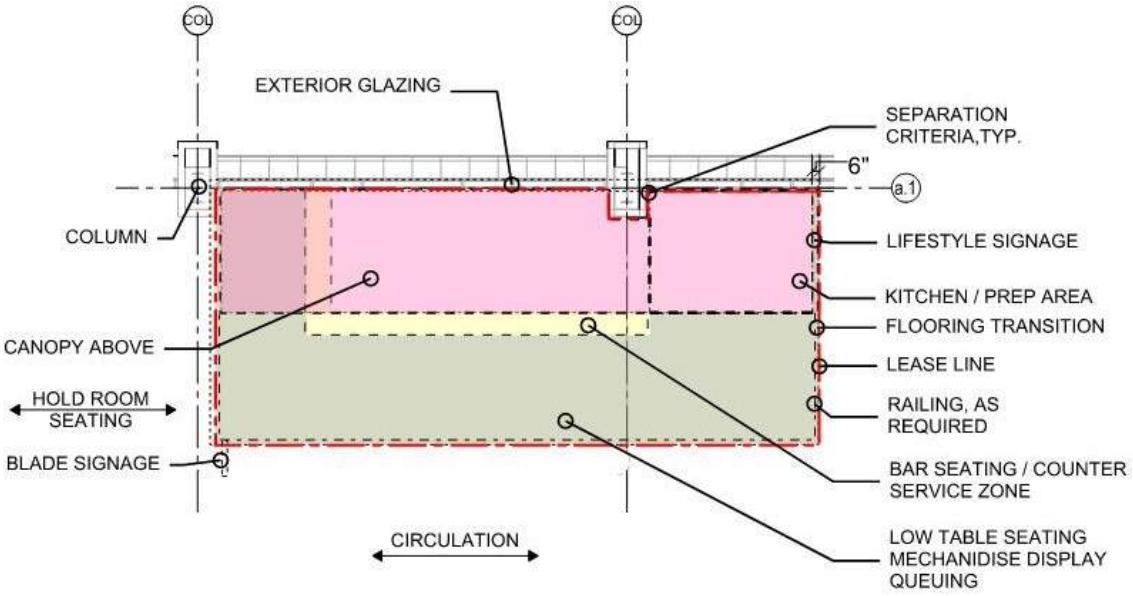
It is JWA's preference to maintain natural lighting and views out onto the airfield, however, freestanding kiosks are required to provide a commercial grade opaque window film on the inside face of the exterior glazing within their leasehold where a wall or back of house functions occurs to prevent unsightly views from the aircraft. The window film shall fully extend between mullions and horizontal rails unless otherwise approved by JWA. Mechanical fasteners of any kind will not be permitted on the glazing system. Surface separation criteria shall apply to all adjacent terminal finishes.

4.1.3.1 Food & Beverage Kiosk

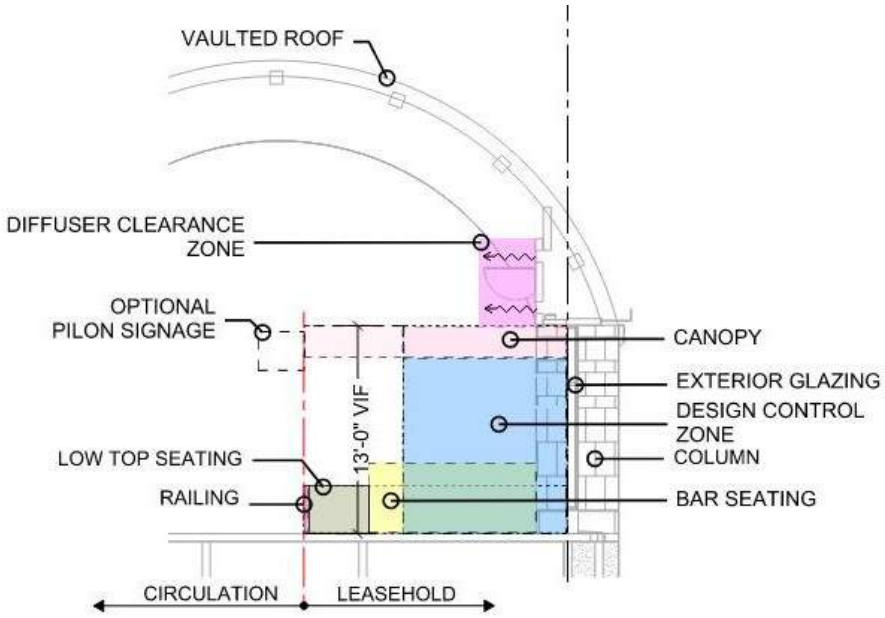
The food and beverage kiosk may consist of a counter, canopy, backwall, concealed service area, and signage.

Kitchens and prep areas in freestanding kiosks must be concealed by a partition with ceiling. Path of travel, queuing, and seating must be accounted for in the design of the leasehold.

4.1.3.2 F&B Freestanding Kiosk - Floor Plan



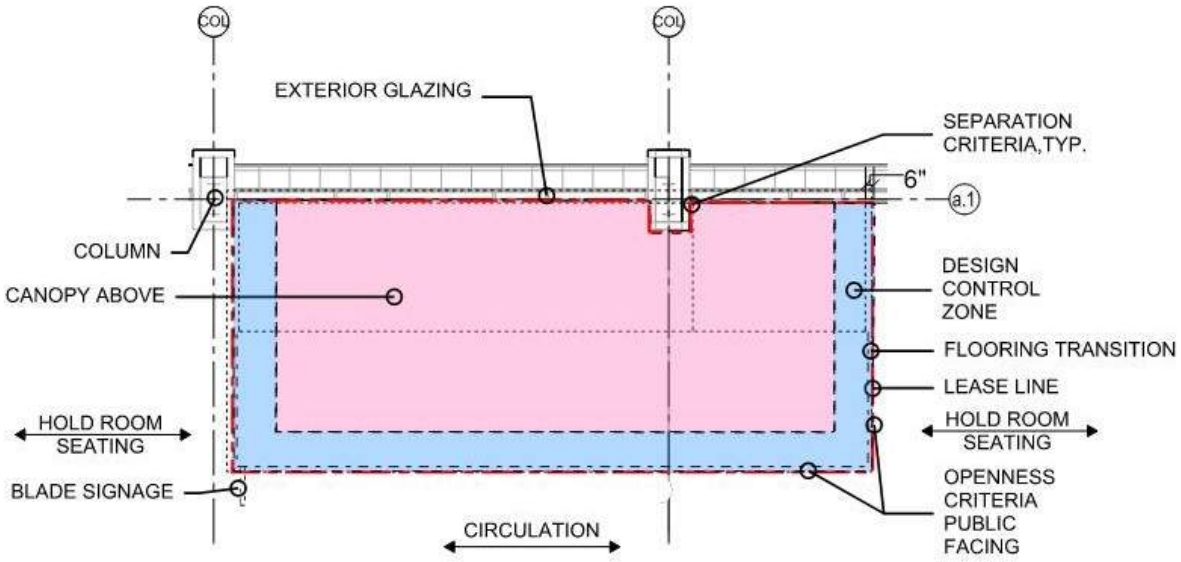
4.1.3.3 F&B Freestanding Kiosk - Section



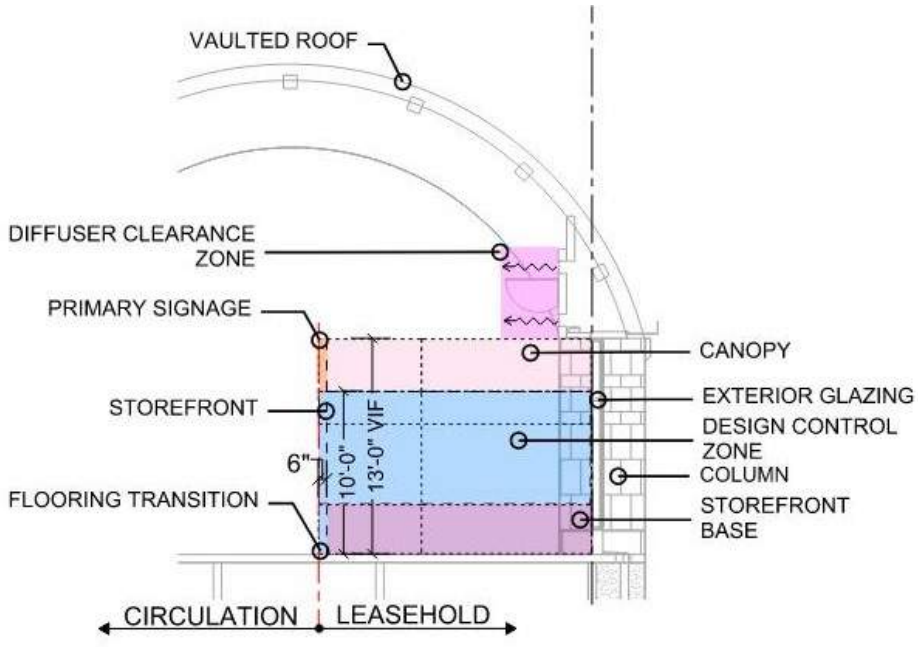
4.1.3.4 Retail Kiosk

The retail kiosk may consist of canopy, display areas, counter, and signage. The design control zone for the retail kiosk includes all public bordering walls. Views into and through the retail kiosk are required for

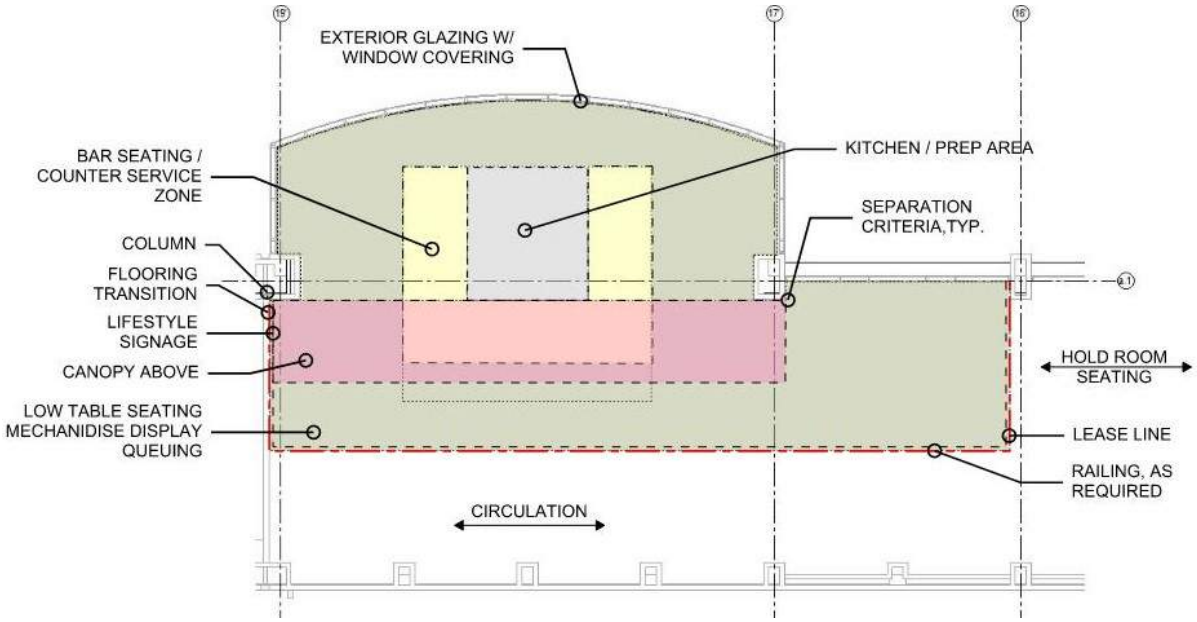
4.1.3.5 Retail Freestanding Kiosk – Floor Plan



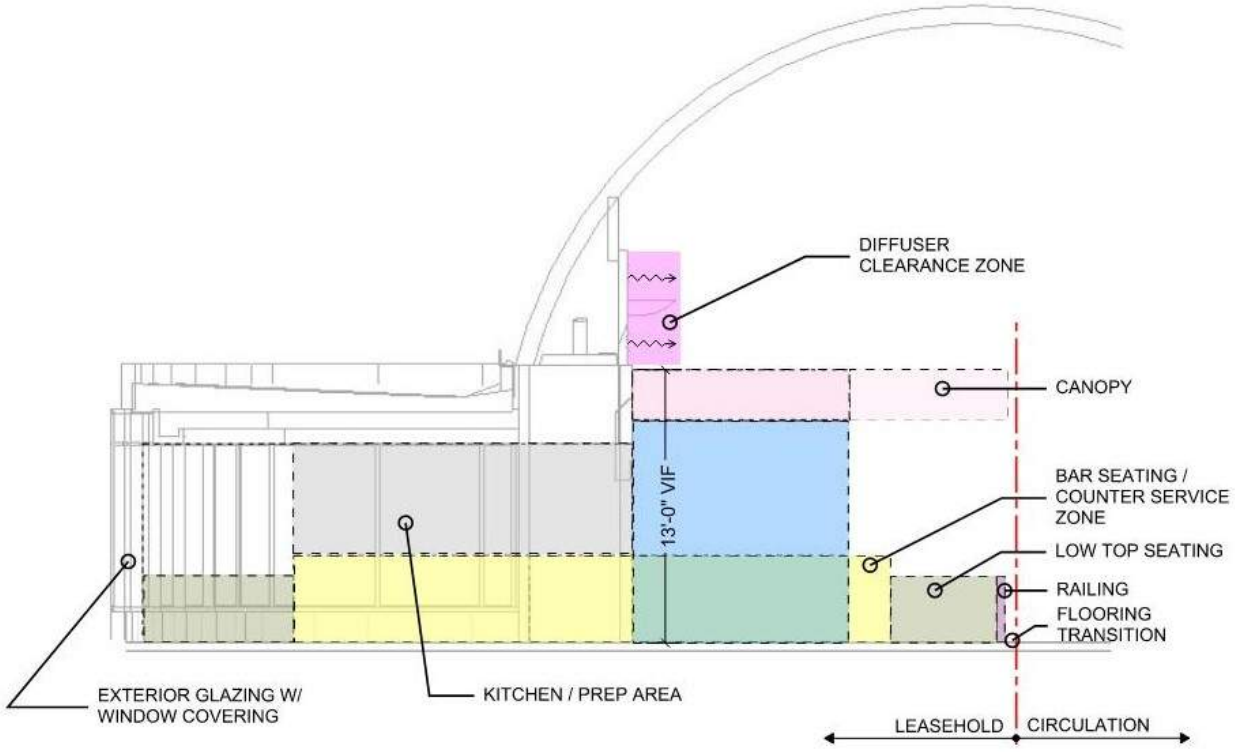
4.1.3.6 Retail Freestanding Kiosk - Section



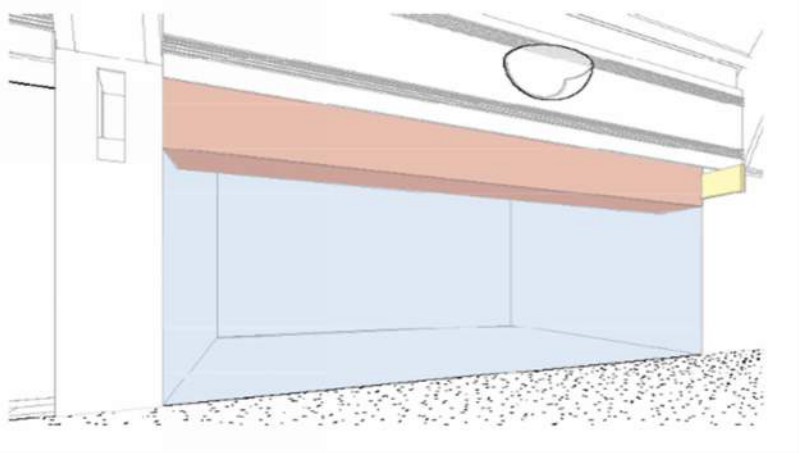
4.1.3.7 Freestanding Kiosk at C4 – Floor Plan



4.1.3.7 Freestanding Kiosk at C4 – Section



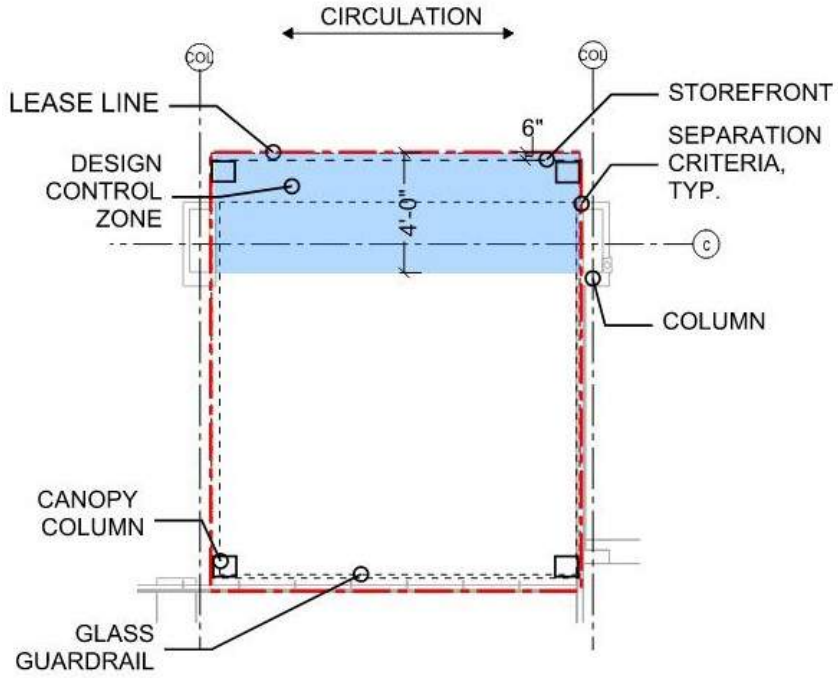
4.1.4 In-Line Kiosk



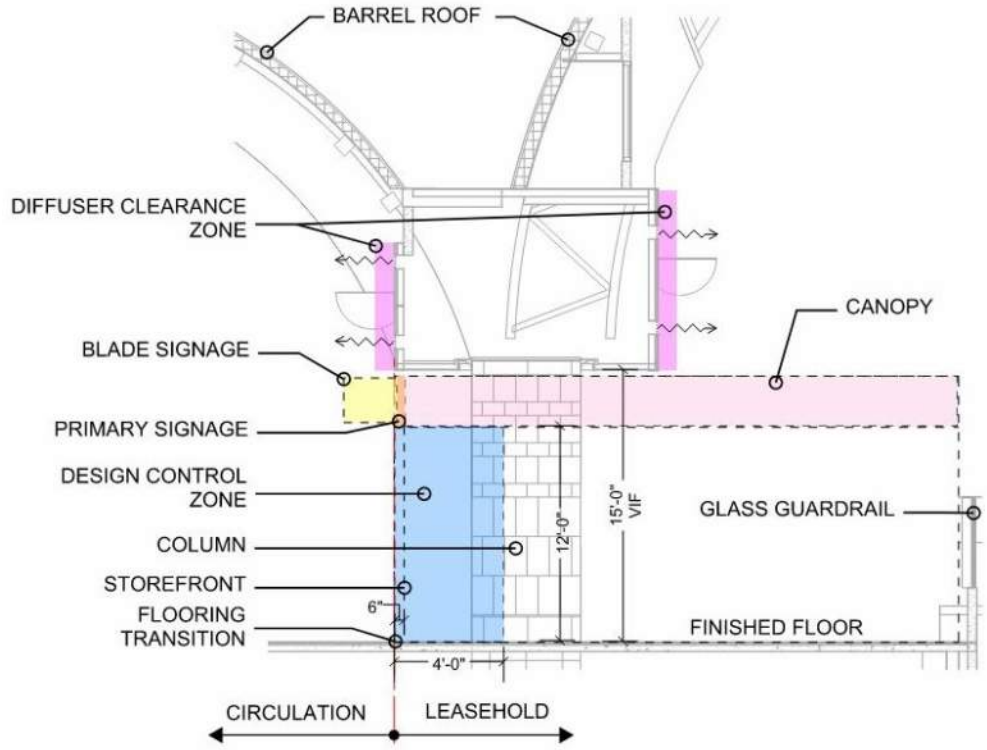
These kiosks appear as in-line storefronts, however require a structure to self-support a canopy above. In-line kiosks are located on the concourse underneath the large barrel roof that spans to the roadway curbside. Terminal columns clad in limestone tile are typically set inside the leasehold and must be integrated into the interior design. Such columns must adhere to separation criteria. Additionally, the rear of the in-line kiosks abut to the glass partition overlooking the baggage claim below as well as views toward the security checkpoint queue. Consideration of back of house functions, displays, lighting, canopy framing, and signage will be reviewed for a finished appearance as well as separation criteria from the glass and support structure.

Leasehold	Concessions Type
A6	Retail
A7	Retail
A8	Retail
B1	Food & Beverage
B2	Retail
B3	Retail

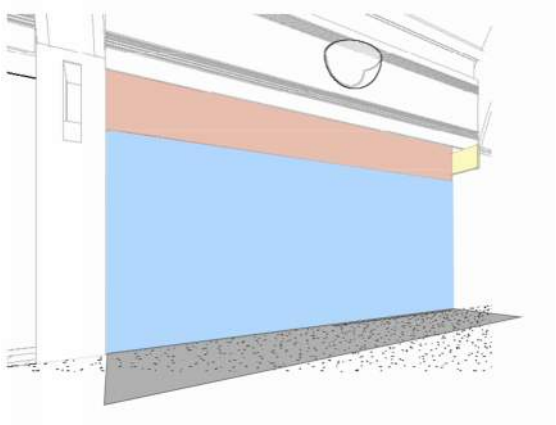
4.1.4.1 In-Line Kiosk - Floor Plan



4.1.4.2 In-Line Kiosk - Section



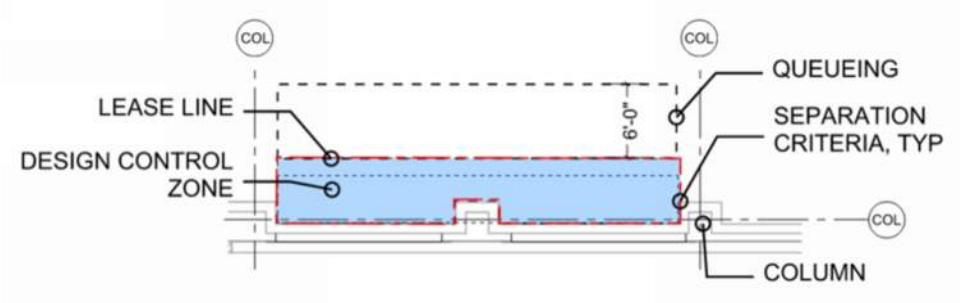
4.1.5 Automated Vending



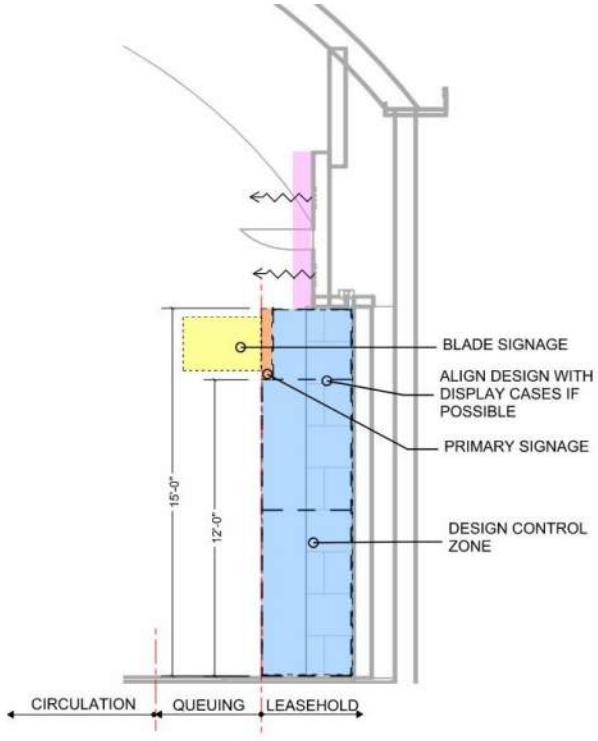
Vending design conditions include retail as well as food & beverage automated machines. Contactless technology must be contained to within the Tenant's leasehold. Multiple freestanding machines is not acceptable. All vending is to be integrated into the building following the unique Orange County design criteria. Vending leaseholds include:

Leasehold	Concessions Type
A9	Automated Vending
A10	Automated Vending
A11-LL	Automated Vending
A13-LL	Automated Vending
C5	Automated Vending
C6	Automated Vending
C7	Automated Vending
C8-LL	Automated Vending

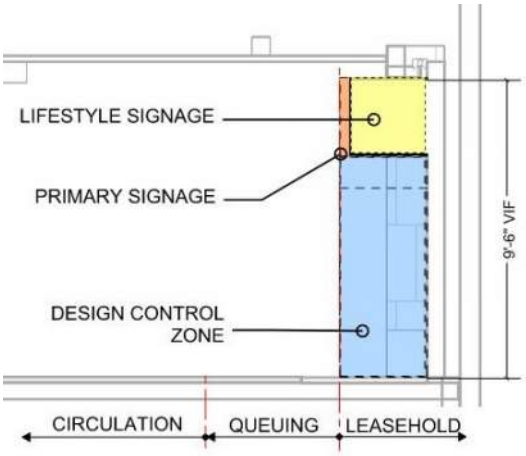
4.1.5.1 Floor Plan



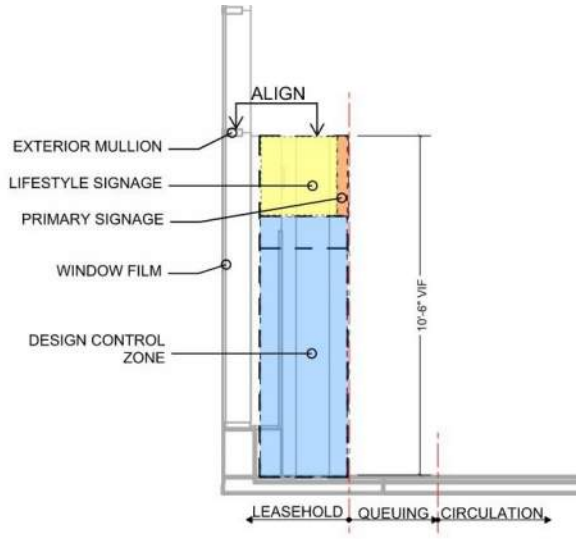
4.1.5.2 Typical Section



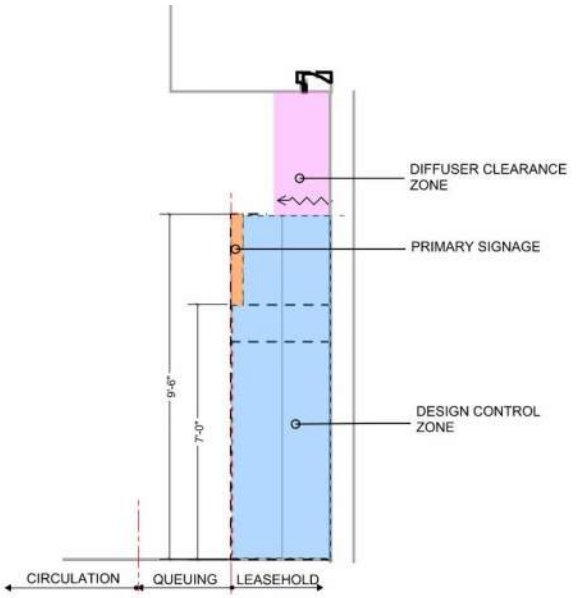
4.1.5.3 Section at A9 and A10



4.1.5.4 Section at A11-LL



4.1.5.4 Section at A13-LL



4.1.6 OC Experience

The OC Experience is a unique design condition located on the concourse between Terminals A and B and is a rotated flat-roof diamond offering a 2-story glass curtainwall view onto the airfield. Additionally, there is a glass partition at the rear of the space with views to pre-security and the curbside. Located partially above this area are airline club lounges under a barrel roof with views onto the airfield that must be maintained. This area is not used for aircraft boarding and currently resides a restaurant and take-away food and beverage tenants on a raised platform.

Leasehold	Concessions Type
A12	Food & Beverage, Retail, and Automated Vending

4.1.6.1 Design Requirements

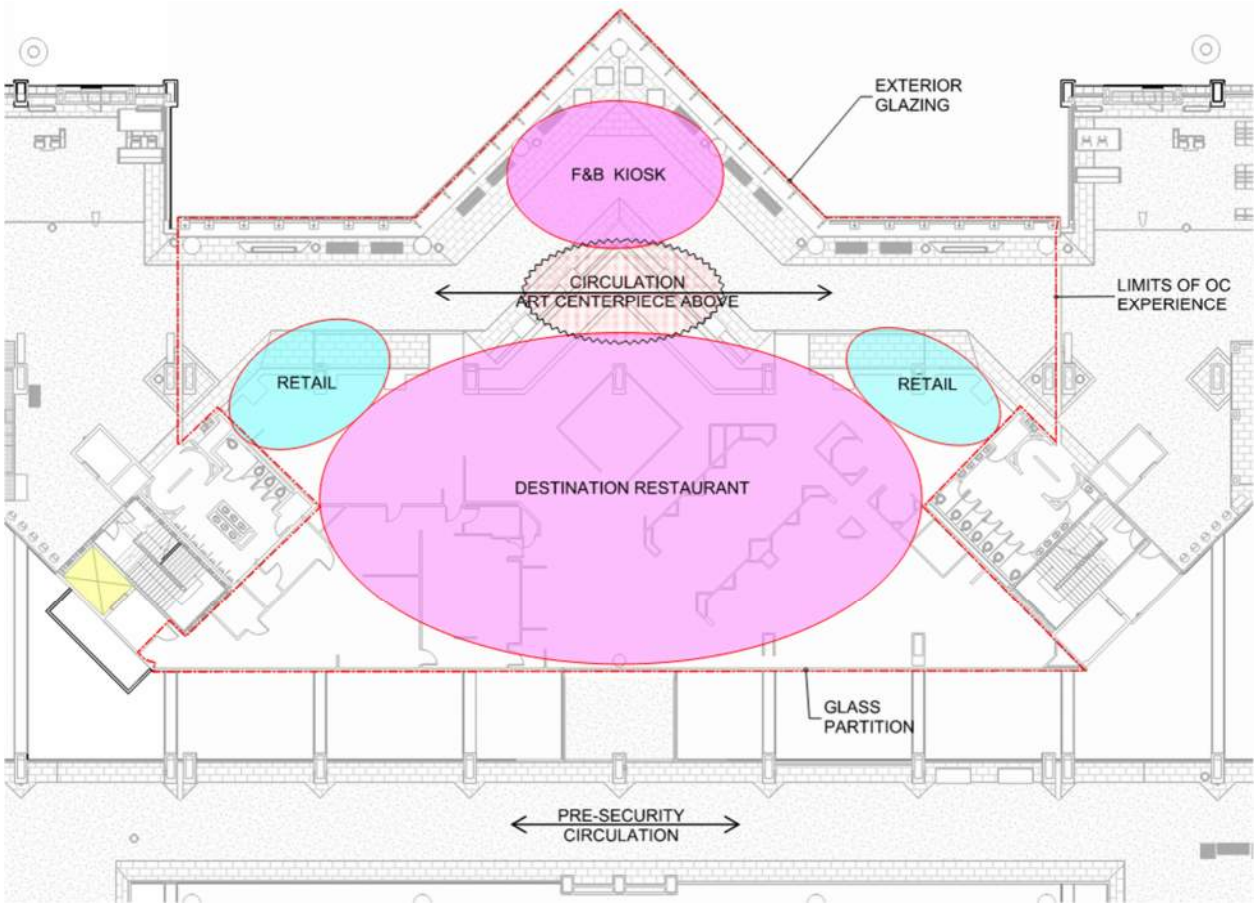
The Tenant shall develop a unique immersive customer experience within this area that celebrates Orange County and the Southern California lifestyle. The Tenant shall design a space that includes flooring, ceiling, wall, and column finishes compliant with this manual and approved by the DRC. The OC Experience shall consist of numerous concession offerings and be a cohesive design for the entirety of the OC Experience area limits. The goals of this area include:

1. Concessions mix including:
    a. Destination restaurant
    b. Bar overlooking the airfield
    c. Local retail offerings
    d. Automated vending
2. Amenities:
    a. Art
        i. Ceiling suspended centerpiece.
        ii. Wall applications of static and digital
3. Entertainment
    a. Live Performances
    b. Interactive Demonstrations
4. Furniture, Fixtures, and Equipment
        i. Mix of seating types for both patrons and non.
        ii. Integrated trash and recycling receptacles.
        iii. Vegetation in the form of planters, living walls, etc.
5. Restroom facilities
6. Circulation
    a. Improve line of sight between Terminal A and B.
    b. Improved mobility

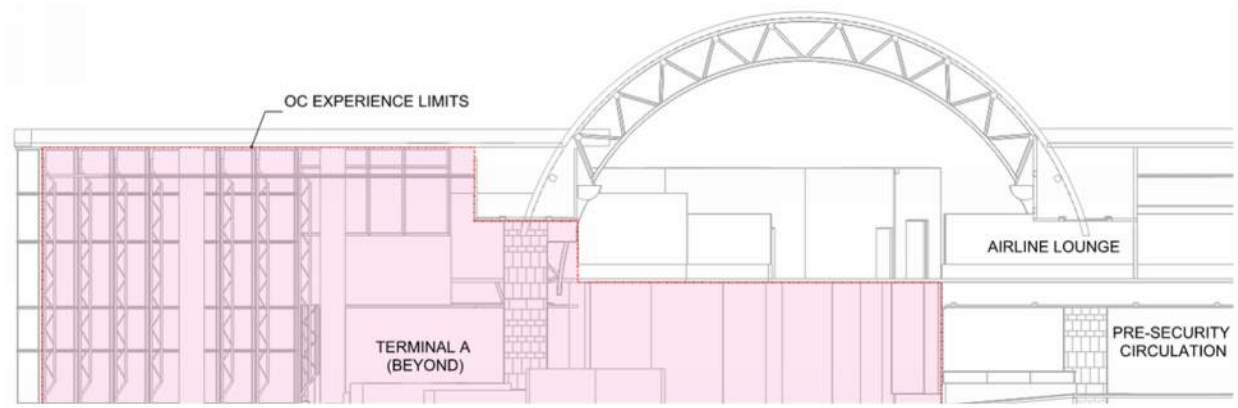
4.1.6.2 Tenant Coordination

The Tenant must consider views from the pre-security circulation, from the mezzanine level, between Terminals A and B, and maintain natural lighting as much as possible. Additionally, construction sequencing will be included in the design for TDM to coordinate with adjacent tenants.

4.1.6.2 Conceptual Floor Plan



4.1.6.3 Building Section



4.2 Airline and Rental Car Tenants

Tenants are responsible for attaining all permits, approvals, certifications, and inspections for all improvements within their ATO, BSO, and Operations Areas including offices, storage, breakrooms, and other BOH areas. Tenant improvements shall follow the Design Review Process outlined in this manual.

4.2.1 Common Use Customer Service Amenities

JWA provides the following common use customer service amenities:

A. Ticket counters and monitors to identify airlines branding and service class. Monitors are located above and on the back wall of the counters.
B. Self-service check-in kiosks inside the Ticketing Lobby.
C. Gate counters and back wall gate identification monitors.
D. Rental Car counters.

4.2.1.1 Queue Management

JWA provides stanchions for Tenant use. The Tenant may submit a Form A should the Tenant prefer to use their own branded equipment. Additionally, the Tenant is responsible for queueing in front of their customer service counters. Tenants may arrange stanchions to suit their unique level of service needs provided it meets minimum code clearance requirements and remains within the Tenant's designated area.

Permanent, relocatable, and/or freestanding branded signage is acceptable provided the Tenant receives approval through the Design Review Process stated here-in.

4.2.2 Tenant Partitions

JWA will install all Tenant separation partitions between Tenants throughout the Terminal. Tenants will be responsible for completing their respective sides of the demising walls. Any penetration which break the fire rating must be patched with 5/8" Type X fire code gypsum board.

4.2.3 Storefronts

Tenant Storefronts shall apply to all public facing entrances. Construction shall match the existing adjacent construction.

4.2.4 Flooring

Within the leasehold, Tenants may install a flooring material of their choice, typically consisting of carpet tile, vinyl composite tile, porcelain tile or other luxury flooring material. Exposed slabs must be polished and any existing abandoned holes are properly sealed. In areas such as breakrooms where sinks are present, a waterproofing membrane must be under the flooring and extend up the wall. Flooring at the leasehold entry must terminal on the centerline of the entry door and must not be visible from the outside.

4.2.5 Glass and Glazing

Interior partitions must terminal into a mullion where present. Tenants may install roller shades as approved by the DRC where BOH offices overlook the airfield. Mezzanine level glass partitions at the club space must adhere to separation criteria. Views into and from the club

space shall be considered. The Tenant may not place walls, equipment or unapproved signages in front of the glass.

4.2.6 Ceilings

Any ceiling access panels must remain in its present location and cannot be covered in a manner to prevent access. Access panels shall be provided as required by code and/or the Airport. Ceiling access panels, grills, diffusers, light tracks, and fixtures shall be recessed into or above the ceiling and shall be finished to match the ceiling. New ceiling alterations, and access panels will be provided by the Tenant at the Tenant's expense.

4.2.7 Doors

New doors in the Tenant's leased space shall be provided by and installed at the tenant's expense. New doors shall be compatible and complementary with the overall design of the space. New doors shall be hollow metal doors and frames. The use of kick plates is encouraged, and some areas will be required.

4.2.8 Work Outside of Leasehold

Tenants must follow OCPW requirements for any scope of work outside their leasehold as outlined in Chapter 2.

4.3 Fixed Base Operators

Fixed Base Operators (FBOs) are required to adhere to this Tenant Criteria Manual and develop both a shell and interior fit-out that is unique to Orange County and also expresses the Tenant's brand.

FBOs erected at JWA shall meet all applicable building codes, including fire, electrical, and plumbing, etc. The proposed hangar will be reviewed by JWA to determine compatibility with the Airport Master Plan and Airport Layout Plan. Interior office and habitable spaces shall conform to the standards set forth in this manual including the latest edition of all OCPW referenced manuals. All new FBO development shall achieve CalGreen Tier 1 and Envision Gold for underground utilities.

4.3.1 Façade Design

The façade of all FBOs will be constructed of masonry, concrete, or powder coated metal or a combination of these materials. Materials may be Concrete Masonry Units (CMU), brick or concrete as approved by the DRC. If concrete, the façade may be cast in place, precast, or tilt up panels. Pre-fabricated or pre-engineered hangars are subject to approval by the DRC. Other materials such as plaster, may be used if approved by the DRC.

4.3.2 Apron

The tenant shall provide and maintain the apron from the aircraft door of the hangar to the existing taxi lane or taxiway edge.

4.3.3 Signage

All signage must meet the requirements of Chapter 6 and are subject to review and approval by the DRC.

4.3.4 Lighting

Within the non-airside property boundaries, lighting may be used to illuminate buildings, landscaping, signs and parking provided the lighting is adequately shielded from public streets and airfield. If apron lighting is necessary, lighting fixtures must be attached to the façade of the hangar and adequately shielded from the airfield.

4.3.5 Landscaping

All landscaped areas shall conform to the existing landscape ordinances. Careful review will be placed on the plant material selection. Plant materials that attract birds and other wildlife are not permitted. The FBO landscape design shall be submitted to and reviewed by the DRC and the OC Building and Safety to ensure that all landscaping will conform to existing landscape ordinances, water conservation, and FAA height restrictions.

4.3.6 Sidewalks

If the proposed FBO borders landside airport property, or a public street, the tenant is responsible for the construction and maintenance of a sidewalk along the property line bordering the landside property or the public street unless a sidewalk is already existing.

4.3.7 Parking

Where parking is needed for employees and/or visitors, it shall be designed in accordance with OCPW requirements.

4.3.8 Miscellaneous Equipment and Facilities

Miscellaneous equipment and facilities shall include but not be limited to, outdoor storage areas, dumpsters, loading/unloading areas, at grade electrical and mechanical equipment, rooftop equipment, piping, etc. will be reviewed by the DRC. Equipment viewable by the public shall be shielded by landscaping or other vertical designed elements complementary to the building façade.



Chapter 5 – Design Requirements

5.1 Storefront Design

The Tenant's design should integrate storefront signage, interior design, and merchandising in a coherent manner. The design should be consistent with the Tenant's merchandizing and marketing while reflecting and enhancing the design quality of the entire project. The term storefront shall apply to all public facing Tenant facades. It is the intent of this manual to assist the storefront designer in utilizing highly creative and imaginative designs and materials which enhance the Tenant's identity.

5.1.1 Storefront Setback

Tenant storefronts shall be setback 6" from the lease line as indicated in the design condition diagrams. Tenants will be responsible for the maintenance of the infill material within the setback zone.

5.2 Surface Separation Criteria

The Tenant shall provide a detail clarifying the transition between the Tenant storefront and adjacent airport finishes. The Tenant is encouraged to provide a simple, clean detail that does not climb over the airport finish, damage or conceal the airport finish. Transition edges to be clean and crisp. Where tenant finishes abut to Airport finishes, the Tenant shall provide a ¾" metal reveal. Reveal shall have mitered corners, capped ends, and sharp edges ground smooth. No reveal is required when using frameless (butt joint) glazing against the airport finishes.

5.2.1 Base Building Columns Adjacent To or Within Tenant Space

The Tenant shall not fasten or affix any building materials, signage, or display of any kind to a base building column adjacent to or within the Tenants lease hold that is cladded with JWA tile. The Tenant shall identify columns that have damaged tile or have been previously modified and coordinate with the TDM whether JWA will replace the damaged tile or authorize a Tenant column enclosure.

5.2.2 Base Building Glazing

Tenant spaces that include existing exterior glass shall maintain views as much as possible. No mechanical attachment to base building frames is acceptable. Tenant walls shall be in line with a vertical mullion as the lease lines allow. Provide a ½" gap between the mullions and Tenant walls for expansion and contraction. Sealant with backer rods on both sides to match storefront design. Provide a commercial grade opaque window film on the inside face of the exterior glazing within their leasehold where a wall or back of house functions occurs to prevent unsightly views from the aircraft. The window film shall fully extend between mullions and horizontal rails unless otherwise approved by JWA. Should millwork, equipment, or walls are permitted to be placed in front of exterior glazing with window film, the cavity shall have insulation and venting to assist with heat transfer.

Where restaurant seating is adjacent to exterior glazing (Leasehold C4), the Tenant may install operable branded shades as approved by the DRC.

5.2.2.1 Interior Glass Partitions

Where the Tenant spaces abut to interior glass partitions, the Tenant shall maintain views as much as possible and consider views into and from their leasehold. Tenant finishes shall maintain separation criteria. Back of house functions shall be concealed and the Tenant shall provide finished quality design and construction along this public facing façade. Opaque or frosted film applied to the glazing or blank wall abutting against the glazing to conceal the leasehold functions is not acceptable. Lifestyle signage along the glazing may be approved by the DRC.

5.3 Design Control Zone

A design control zone has been established in all Tenant premises. This is the entrance area of a concessions that extends 4'-0" into the leasehold measured from the lease-line. This zone is to encourage visually attractive display of merchandise and branding. JWA shall have absolute right of approval over all Tenant design, signage, and materials within this area. The Design Control Zone review shall include all display windows, retail graphics, display fixtures, signs, materials, finishes, color and lighting. Lighting in this area shall remain on 7-day/24hr time clock. The schedule will be set by JWA.

View into the Tenant space through the Design Control Zone should be maintained. DRC approval is required to construct a full height wall behind the Design Control Zone as a backdrop for display. Slat wall is not permitted in the design control zone. Materials in the design control zone to be high quality, durable, visually real and easy to maintain. No Tenant displays, merchandiser, free-standing signs or other Tenant items are permitted outside the lease-line. Includes merchandising systems, register cannot be in this zone, ceiling height must not be lower than the signage band and concealed lighting that is not visible from the common area.

5.4 Storefront Materials

Tenant storefronts should be as wide and open as practical for the operations meeting the openness criteria stated in this manual. In areas where solid storefront materials are needed to carry out the design, Tenant shall use high quality, and durable materials which are appropriate to the high traffic anticipated at JWA and customarily used in Southern California construction. All finish materials to be Class A fire rated.

Acceptable storefront materials include:

A. Stone, marble, solid surface.
B. Ceramic Tile.
C. Hardwoods: oak, maple, walnut, cherrywood or mahogany. All wood shall be kiln-dried and have clear or natural finishes or quality painted finishes and shall be fire-resistant treated. The use of wood finishes should be limited to specialized area and not more than 10% of the installation.
D. Back painted glass or glazing of tempered or laminated safety glass.
E. Powder coated metal.
F. Metals: brass, copper, stainless steel, chrome, in brushed or textured finishes. All exposed framing will be of high-quality fabrications and finish.
G. Brick veneer.

H. Paint will be limited to trim, soffit, accent panels or other design elements, as opposed to applied to the entire storefront.

Unacceptable finishes include:

A. Painted drywall is an unacceptable finish except at the signage soffit. In which case the soffit may painted over Gypsum Association Level 5 finish.
B. Simulated versions of brick, stone, or wood.
C. Rough cut lumber and barn siding.
D. Vinyl tile, sheet vinyl, or vinyl fabrics.
E. Wall covering or wallpaper.
F. Stucco.
G. Cork, Cork tile or fabric.
H. Plastics, shakes, shingles.
I. Carpet.
J. Softwoods.
K. Mirrors and other similar reflective materials.

5.4.1 Storefront Wall Base

All storefronts to have a continuous base that is 8” high and material such as stone or tile that complements the Tenant storefront design and is durable within an airport environment. Base to extend into the storefront openings the full depth of the entrance.

5.4.2 Corner Protection

All storefronts which have a corner that may incur damage shall be protected by a corner guard or other resistive assembly. Corner protection shall be integrated into the storefront design and be reviewed by the DRC. Material samples, assembly mock-up, and details may be required by the DRC for unconventional applications.

5.5 Openness/Transparency

The Tenant is encouraged to design and develop a storefront opening that is as wide and unencumbered as practical for the design intent. Tenant is encouraged to maintain at 60%-80% of the storefront open or with clear glazing. This percentage applies to each side of the Tenants space where they are adjacent to public space. The Tenant is encouraged to maintain the entry portal height a minimum of 10ft high where practical. Retail existing might be less today. However, Tenant team is encouraged to increase to a minimum of 10ft. where practical.

Not more than 15% of a window shall be blocked by sale, clearance or informational signage. No signs shall be taped or suction cupped to display windows. The DRC has absolute right of approval for signage mounted or hung in the Design Control Zone.

Curtains, drapes, or other shielding devices are not permitted in the storefront area.

5.6 Flooring

5.6.1 Food and Beverage

Existing floors provided will be broom finished structural concrete that is depressed 2” below finish floor level. The tenant shall provide a concrete mortar setting bed to receive their final finish floor. A waterproofing membrane is required in all wet areas.

Flooring shall be durable, cleanable, and of high quality. Tenant flooring shall extend to the established lease line.

For all kitchen, food preparation, service, and back of bar areas, the tenant will provide a fully waterproof flooring surface with high cove base complaint with the Health Department standards. Waterproofing membrane to extend up the perimeter walls a minimum of 4". All flooring must be properly treated and sealed before any equipment is installed.

5.6.2 Flooring Transitions

The Tenant's storefront shall set back 6" from their lease line. The Tenant shall install their flooring material in the setback zone. The flooring material shall be a neutral color that is complementary to the storefront color palate and slip resistant. The Tenant shall also install a flooring divider strip at the tenant's lease line where one is not existing to separate the Tenant's flooring material from the Airports terrazzo tile and/or carpet.

The Tenant may choose to transition to an alternate flooring material outside of the design control zone subject to DRC review and approval.

The Tenant is responsible for a flush flooring transition. Should the Tenant choose to install a flooring material that is of a different height than the adjacent finish, the Tenant is responsible for providing a code-compliant transition.

5.7 Store Entrances

The Tenant is required to secure the Tenant space. Depending on the location this may be accomplished by lockable cabinets or millwork, lockable doors, overhead security grille or side pull/sliding security grille. Method of securing the Tenant space to be reviewed with JWA for confirmation proposed solution is acceptable.

If a security grille is used at the storefront, the security grille (or equal) required throughout the airport is: Overhead grilles – Cornell Visionaire ESG10 Straight Pattern Grille, vertical chains at 6" centers, clear anodized aluminum finish.

Sliding Grilles – Cornell Vision Glide ESG30 Straight Pattern Grille (or equal), horizontal chains at 6" centers, clear anodized aluminum finish. No floor track, pins only. Provide dust covers for floor pins.

If motorized, overhead grilles shall be key operated or have conceals controls and shall be equipped with emergency quick release locks. Side pull grilles shall be top and bottom locking and shall utilize floor pins (floor track is not permitted). All Grille housing jambs and supports shall be concealed from view. Include jamb member and support details in the construction drawings. Security grilles shall be self-supporting off the floor and not hung from the building structure.

Locksets on security grilles/doors to the concourse to conform to JWA keying requirements.

If swing doors are required, a setback of 36" minimum from the lease line is required to allow for door swings. No part of the door shall extend beyond the storefront lease line in the Airport's public circulation. Doors shall be framed glass, fully glass on pivots, or multi-paned.

5.8 Ceilings

The Tenant shall install all finished ceilings unless a ceiling is already provided by JWA. It is desired to have the designers explore combinations of both hard and soft surfaces or combinations of hard surfaces and voids. Single plane and single material ceiling systems are discouraged. The overall ceiling height within the Tenant's space is to be a minimum of 12'-0" as existing conditions permit.

Where a concession is located independent from any ceiling structure, such as under the large vault and kiosks, the Tenant will be required to provide a self-supporting canopy or some other structural element to act as a ceiling above the concession space.

Ceilings in all food sales areas shall meet all health department code requirements. Ceilings in back of house kitchen areas may include high quality, durable and cleanable suspended lay-in 2x2 or 2x4 acoustic ceiling tile. However, it is preferred that a smooth, acoustically treated non-absorbent hard surface ceiling be used where access above is not an issue.

Any areas of the structural deck that are left exposed shall be painted black. Areas of decking or structure sprayed with fireproofing material shall not be exposed.

5.9 Interior Partitions and Doors

All interior demising walls and partitions must be finished in a permanent lasting appearance, including walls behind fixtures/millwork.

Tenant walls adjacent to exterior glass panels shall be vented at top and bottom to provide air circulation. Tenant is to provide window film on all glazing located in storage areas or behind fixtures. Window film must be installed from mullion to mullion. Film to be applied to the interior side of the window. Exterior transitions to the window wall must be coordinated with the shell of the terminal and allow openness where needed. Window film specification to be submitted for review and approval by the Tenant Development Manager prior to installation.

At secure boundary walls, Tenant to fur out a partition adjacent to the security boundary wall for concealing utilities, hanging fixtures and equipment or similar activities. No penetration of the secure boundary is permitted.

Views to stockrooms, back of house areas, kitchens or similar areas must be concealed from view. Where a pass thru is desired to enhance operations or the guest experience all walls visible must be finished in high quality durable materials. FRP is not an acceptable material when visible to the public.

Additionally, the following materials are not permitting within the Tenant space:

1. Simulated woods, brick, or laminate.
2. Pegboard.
3. Painted gypsum board below 4'-0".
4. Window coverings.
5. Slat wall material.

Doors to back of house areas to be hollow metal doors. If the storefront is not lockable, doors to the back of house to be equipped with a lock. Stainless steel kickplates and door closers are required on doors.

5.10 Merchandise Displays

Merchandise displays consist of fixtures, raised platforms, props, furniture, mannequins, etc. These elements are to be consistent with the space in both design and materials. Merchandise display designs are critical in expressing the theme of the retailer. Display cases may compose 25% of the counter frontage when not exceeding 4 feet - 6 inches in height above the finish floor.

The fixture layout should allow for passengers with hand-held luggage, bag carts, and baby strollers, as well as persons in wheelchairs who need maneuvering room. Any equipment used in the store visible to the public must be compatible with the store design.

1. Displays providing direct customer service must be set back a minimum of 2’-0” from the lease line to provide adequate circulation and queue space.
2. Displays adjacent to walls shared with public circulation must be coordinated with the storefront openness requirements. Displays must be no greater than table height and coordinated with glazing elevations.
3. All displays visible to the public are restricted to durable, non-porous, easily cleanable materials. Display unit backing, front, shelving, and countertop materials are limited to the following:
    a. Stone or other hard surface materials.
    b. Stainless steel or other metal.
    c. Solid surface materials.
    d. Glass.
    e. Ceramic or porcelain tile.
    f. Hardwood.
4. Simulated natural products and metal and plastic laminates are not acceptable materials for display design. However, high impact laminates may be allowed but are subject to JWA approval.
5. Display recesses, angles, and other devices can be used to break up the length of the flat front.
6. All display fronts are to have a 6” high by 4” deep recessed toe space. The face of this base should be covered in the same material as the adjacent floor or other durable material such as tile, stone, and stainless steel.
7. A personnel access door in a merchandise display front is permissible where no rear entry is available. It must be concealed by matching the adjacent display front materials. Hinges and hardware must be concealed.

5.11 Food and Beverage

A fine dining approach, drawing elements from high end cafes and restaurants, is a recommended way to create inviting dining experiences throughout the Airport. The intention is to create spaces that capture an experience comparable to strolling through a vibrant Orange County neighborhood with diverse dining experiences.

5.11.1 Design Guidelines

JWA requires kitchen equipment that is visible to the public to have a decorative material enclosure or appearance. If stainless steel is consistent with the desired look and feel, the finish must be treated so that fingerprints are not visible. This is important for any exhibition cooking areas visible to the public.

- Stanchions and Queuing (Within Lease Lines Only/Not Allowed outside lease lines).
- All Stanchions to be permanently mounted/one row must be fixed.
- First row of Queuing (from serving/transaction counters) to be permanent rails. Stanchions, if used, must meet ADA requirements. Design team to be mindful of cane detection requirements.
- Quality Queue materials between other stanchions
- Placement design of kitchen hoods is to be carefully considered. Refer to JWA Construction Manual for more information.
- No drink dispensers or other free-standing equipment shall be allowed on front counters. Free standing disposal bins shall not be allowed. All integrated disposal bins shall have openings sized to conceal waste within.
    - (3) bins are required per state law and shall be labeled “Organics”, “Waste”, and “Recycling”.
- Napkins, condiments, utensils, straws, etc. must be concealed in a condiment/trash/recycle unit.
- All live and artificial plants are subject to the JWA review.
- No brand signs on top of refrigerated cases.
- The top of all ledges and half-height walls must be slanted or peaked (not flat) so that drinks and other items cannot be placed on top.
- All knives are tethered and subject to JWA aviation Security review.

If the food preparation area is an integral part of the visible service area, it must meet all storefront criteria for finishes and lighting. If the food preparation area is not intended to be part of the visible service area, a separation wall is required, and all doors must have automatic closers. Any food pass-through openings are to be of minimal size and designed to obscure the preparation area to the greatest extent possible.

5.11.2 Take-Away Counters

1. Counters must be set back a minimum of 3’-6” from the lease line to provide adequate circulation and queue space. The design should require customer queuing to be parallel to the storefront with no queuing outside the lease line in the concourse. Soft and hard type queuing can be proposed, provided the allocated space is within the Tenant’s space. However, if a Tenant can demonstrate that the requested queuing outside the lease line would not interfere with public circulation, this would be considered for approval by JWA.

2. All counters and back walls visible to the public shall be restricted to durable, non-porous, easily cleanable materials. Counter front and countertop materials are limited to the following:
    a. Stone
    b. Metal
    c. Solid Surface Materials
    d. Glass
    e. Ceramic tile
3. Simulated natural products and metal laminates and plastic laminates are not acceptable materials for countertop and counter fronts.
4. Tenants shall be responsible for controlling individual queues within or immediately adjacent to their leasehold so that customer queues do not interfere with general circulation and or interfere with public circulation through public areas. The design should require customer queuing parallel to the storefront and NOT perpendicular into public circulation.
5. If Tenant provides disposal bins at the counter for customer use, the opening must be recessed into the countertop. (3) bins are required per state law and shall be labeled “Organics”, “Waste”, and “Recycling”
6. Condiments must be set back a minimum of 6” from the front of the counter and must be dispensed from permanent holders.
7. Cup holders, utensils, and straws must be stored behind or under the Tenant’s counter. Condiments and napkins placed for customer use must be in a permanent holder and integrated into the counter or in a holder display approved by JWA.
8. It is encouraged that counter heights vary to break up the length of flat face along the front. Tenant must comply with all accessibility requirements including transaction heights.
9. The exterior face of the counter must not extend beyond the Tenant’s lease line. Tenant shall provide flooring approved by JWA between at the counter toe kick.

5.11.3 Pre-Oder and Grab & Go

If permitted for a space, Grab & go areas must be built-in as a part of the overall concept. All built-in areas must be approved by JWA.

Built-in grab & go area design guidelines are as follows:

1. A grab & go area incorporated into the overall concept must have a setback of 3’- 6’’ from the lease line; this allows for a queuing area and does not impede with the normal operations in the terminal. However, if a tenant can demonstrate that the requested queuing outside lease lines would not interfere with terminal circulation; this would be considered for approval by the Authority. Approval may be withheld at the Authority’s sole discretion.
2. Additional signage for the grab & go area will require approval from the Authority.
3. Maximum counter height is 34’’ above finished floor.
4. All units must have a 6’’ high by 4’’deep recessed toe space. The face of the base should be covered in the same materials as adjacent base or materials that are part of the overall concept.

5. All walls and surfaces visible to the public are restricted to durable, non-porous, easily cleanable materials. Materials are limited to the following:
    a. Stone
    b. Stainless steel
    c. Solid surface materials
    d. Tempered glass
    e. Ceramic or porcelain tile
6. Simulated natural products and plastic laminates are not acceptable materials for countertops.
7. High impact laminates may be used on the unit side and front if edges and corners are properly treated with corner guards or stainless steel edge trim. All materials are subject to approval by the DRC.
8. Laminates are not permitted on toe-kick areas of displays, counters, or other furniture unless formal permission is given in writing.
9. If provided, disposal receptacles for customer use must be concealed or built into countertop millwork or enclosed in furniture that blends with the design of the space and meets the design requirements for counters. (3) bins are required and shall be labeled “Organics”, “Waste”, and “Recycling”
10. Countertop displays, trays, racks, and shelving must be set back a minimum of 6’’ from the front of the counter and must remain neat, orderly, and properly stocked.
11. A personnel access door in the countertop is permissible. It must be concealed by matching the adjacent counter front and countertop materials. Hinges and hardware must be concealed.

5.11.3 Display

The following are specific requirements for display of food and beverages:

1. The use of built-in glass display cases is allowed at the front counter. Cases must be constructed of clear glass and are lighted and vented. Lighting source shall not be visible. The sides and back of the case may be mirrored.
2. Rotating displays are permitted inside fixed display millwork.
3. At back counter, storage units or pre-fabricated display cases may be installed. Any such unit shall adhere to the counter or display case specifications.
4. Sneeze guards must be set back 6” from the counter edge. Glazing must be tempered glass or safety glass.
5. Beverage stations must be incorporated behind the Tenants counter or screened from view at the front counter. No self-serve beverage station will be permitted.

5.11.4 Equipment

Tenant equipment on counters is to be set back a minimum of 6” from the front of the counter edge and recessed into the countertop so that no portion exceeds 4’-6” high above the finished floor. No used equipment, simulated wood finishes, trademark or supplier logos will be permitted on equipment with public view. Screening of equipment cords and unfinished equipment backs will be required if visible to the public side.

5.11.5 Storage

The Tenant's supplies must be stored on appropriate racks or in cabinets with the Tenant's leasehold. All paper goods used in product service (except napkins) and supplies are to be stored in areas not visible to the public. Such storage must be concealed from public view with doors or sliding panels if located in the counter area. The Tenant has an option to lease storage space from JWA within the terminal, if available.

5.11.6 Alcoholic Beverage Consumption Areas

Tenants who serve alcohol must follow local Health Department and ABC requirements. JWA requires a permanent guardrail installed around the concessions leasehold or around the designated beverage consumption area when it is adjacent to public areas. The guardrail design must not promote placement of items as a shelf for Tenant or public use. Examples of top rail design include curved, sloped, and narrow designs.

5.11.7 Remote Kitchens

Remote kitchens must follow Tenant design standards for back of house conditions. Policy and procedures for food delivery to the concourse will be reviewed by the TDM. Concessions with a remote kitchen must have a receiving area designed into the public leasehold that meets the requirements of this manual. Entry doors are required to be installed with card readers, automatic closers, and kick plates. Due to the nature of the space, walls are required to be covered in FRP floor to ceiling. Ceiling tiles must be moisture resistant. Flooring must be slip resistant tile with cove base overtop of waterproofing membrane sloped towards a floor drain.

5.12 Kiosks

Kiosks should emulate the same goals as in-line and corner Tenant leaseholds, while presenting a unique and compelling brand image. The unit should present a permanent appearance displaying the products and services in a clear and sophisticated way such that a customer interaction is intuitive. Since the units are freestanding, exposed to view on multiple sides, care should be taken to accommodate the kiosk operational needs while presenting an attractive public face.

Tenants must carefully plan their operation with respect to display and storage of merchandise, customer queuing, point of sale and food waste/trash/recycling handling. Adequate, enclosed storage for back-stock, supplies and trash must be provided either within the kiosk or in a remote location. A clean professional appearance must be maintained at all times. Security closure, if desired, should appear either decorative or hidden during hours of operation. When the kiosk is closed, the security closure should appear as an integrated and attractive part of the design composition.

Kiosks must have a freestanding structural canopy over a portion of the leasehold for a distinctive permanent appearance. The canopy, may be open or support a ceiling with integrated lighting and fire life safety systems as required by code.

Any equipment above the canopy must be concealed from public view.

Kiosks incorporating dining / seating areas within the leasehold shall provide a 42" high floor mounted railing separating the seating area from public circulation and / or hold room seating.

5.12.1 Customer Queuing and Point of Sale

Kiosk tenants shall be responsible for controlling individual queues within or immediately adjacent to their leasehold so that customer queues do not interfere with public circulation.



Chapter 6 – Signage Conditions

6.1 General Requirements

Signage is an important part of all Tenant storefront design and expression. JWA signage guidelines provide the framework for a consistent, elegant, and well-integrated Tenant identification program. Signage shall be creative and unique with high quality graphics and materials that promote a unique Tenant identity consistent with current trends. These criteria have been written for the purpose of establishing minimum standards to be utilized in creating a dynamic signage environment. The Tenant agrees to design, construct, and install signage at the leasehold at the Tenant's expense in accordance with these signage conditions, prior to opening the business in the leasehold. A consistent signage program is for the mutual benefit of all Tenants. Conformance will be strictly enforced, and any installed unapproved signs must be removed and brought into conformance at the sole expense of the Tenant.

Any signage and/or graphic that may vary from the sign criteria as defined below may be approved if the design will enhance the Tenant's leasehold, does not conflict with adjacent signage or augment the overall theme of the terminal.

All signage shall be ADA compliant. All signs, including signs of a temporary nature, must be approved by the Tenant Development Manager in writing before use. If there is a conflict between ADA compliance and the Tenant Criteria Manual, the Tenant team is to clarify the conflict and review with JWA.

The Tenant must provide illuminated signage for all signage locations fronting on public area. All illuminated signage shall be controlled by 7 day / 24hour time clock set to JWA designated hours.

Tenant signage must meet the following standards:

A. Signage shall be limited to name, logo and decorative accents. The name is defined as the "doing business as" (DBA) name outlined in the lease or lease amendments. Any text other than the business name is subject to JWA approval.
B. All attachment devices, wiring, transformers, and any other mechanisms required must be concealed. No exposed conduit, tubing or raceways, conductors, transformers, PK housings or other equipment shall be permitted. No exposed bolts, fastenings or clips. Transformers must be concealing above ceiling or within sign housings;
C. Corporate colors shall not be garish and are subject to JWA approval;
D. To maintain a high-quality retail environment, animated or flashing components are not permitted. No hand lettered signs are permitted. The Tenant is encouraged to provide a high quality, creative, three-dimensional sign;
E. No floor mounted banners or standalone signs are permitted;
F. Generally, the use of vinyl signage except as translucent graphics on storefront glass is discouraged;
G. No sign maker's labels or other identifications shall be permitted on the exposed surface of the signs, except where required by code. Required labels shall be located in an inconspicuous location. All electrified signs must be certified with a UL Listing;
H. Signage design is encouraged to use the latest technologies.
I. No neon signage is permitted.
J. Signage for credit cards may not be located on the storefront or demising pier. The DRC maintains right of approval for credit card decals, labels, vinyl, or silkscreened signs;

K. Materials shall be high quality and conform to local building codes and to state and national electric codes.
    a. Tenant signs should be visibly distinctive from wayfinding signage. Tenant's should specifically avoid green backgrounds with white lettering and stainless steel/anodized aluminum frames.
L. All signs are subject to JWA approval prior to fabrication. Sign design/details including electrical connections/wiring should be submitted as a part of the 100% submission. Tenant to submit full color signage shop drawings for review. Drawings to be to scale with all elements clearly drawn, detailed and specified, along with color and material samples with key plan illustrating location of sign within the Tenant space.
M. Primary and Blade signage backup framing, strapping, and attachment fasteners or bolts shall be designed by a structural engineer licensed in the State of California. Design/shop drawings shall bear the SEOR seal. This requirement shall apply for any and all signage types.
N. Tenant signage must not obstruct CCTV security cameras. Existing cameras adjacent to Tenant leasehold must be identified on plans for TDM coordination.
O. Tenant signage must not obstruct Terminal wayfinding signage.

6.1.1 Sign Materials and Construction

The following sign types are appropriate, and their use is permitted with JWAs approval:

1. Dimensional, non-illuminated wood, metal, plastic, glass, or other material with a permanent appearance.
2. Dimensional, illuminated, halo, or back-lit individually mounted letters.
3. Dimensional letters of not less than 1" or more than 3" in depth, which must project from the storefront with 1" spacers.
4. Etched, beveled, sandblasted, or stained glass.
5. Internally illuminated channel letters with opaque metal sides and plastic face. Internally illuminated letters must not be less than 1" nor more than 4" in depth. Raceways are not allowed.

The following sign types, sign components, and devices will not be permitted:

1. Boxed or cabinet type.
2. Formed plastic.
3. Cloth, paper, cardboard, or similar stickers or decals.
4. Noise making.
5. Odor producing.
6. Flashing.
7. Exposed labels of manufacturers, underwriters, etc.
8. Veneer or plywood products.
9. Pre-molded plastic letters with reflective coatings.
10. Hand lettered non-professional signs.
11. Free-standing pedestal/stanchion signs.

The following sign materials are appropriate, and their use is permitted with JWA's approval:

1. Wood
2. Metal

3. Plastic
4. Glass (etched, beveled, sandblasted, or stained).
5. Other material with a permanent appearance that fits within the prescribed mounting system.

Illuminated signs have the following restrictions:

1. All illuminated signs must be turned on during the terminal's retail operating hours.
2. JWA must approve any use of neon.
3. Signs must be constructed so lamps or other illumination components are easy to replace. Ballasts should be accessible from within the tenant space and must be concealed.
4. Video equipment used for illustrating products or for advertising may be restricted if located within the Storefront Control Zone. All video equipment is subject to JWAs approval.

Non-illuminated signs are viewed as decorative as well as informative and are subject to approval. Note the following:

1. Letters or logos applied or painted directly on the inside face of glass storefronts are not generally not permitted unless they are used as a safety band. Height for safety band name or logo should not exceed 4" unless required by code.
2. Hand lettered, non-professional signs and newspaper advertisements are not permitted in the Storefront Control Zone.
3. Additional signs or advertising for brand names (e.g., soft drinks) are not permitted without JWA approval. All graphics must have a non-glare, matte finish. The type must be large enough and its style simple enough to make the text clearly legible.

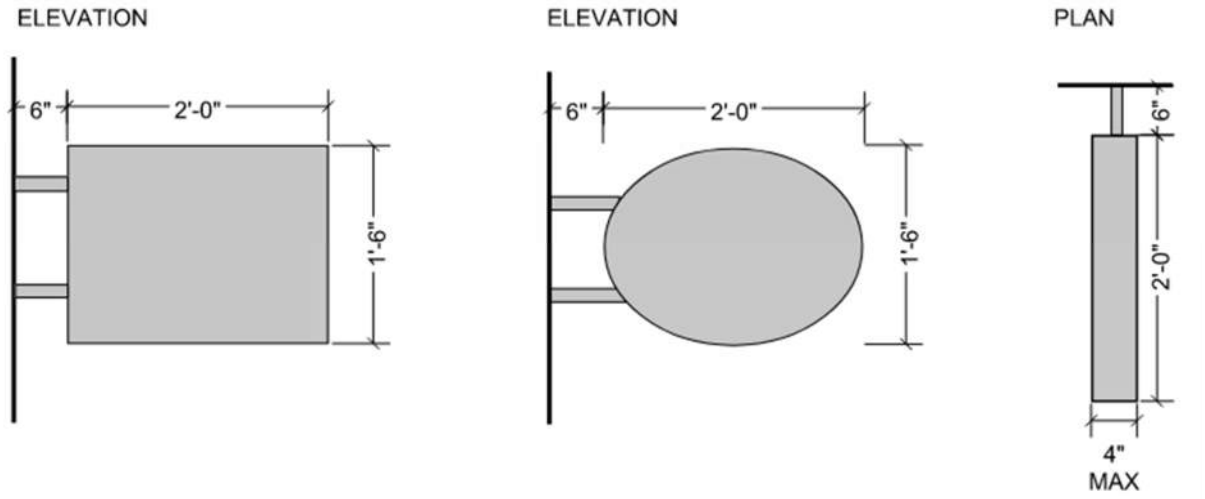
6.2 Sign Types

6.2.1 Primary Signage

The Tenant primary sign is the main sign for the Tenant space. Generally, the primary sign is located on the storefront soffit or a sign bracket located over the storefront / entry portal. The primary sign is limited to the Tenant name. The size of the sign should generally follow a maximum height of 18" height x 4" depth and should be sized to fit well and proportionally on the Tenant storefront. The Tenant is required to provide an illuminated primary sign. Tenants are limited to one primary sign per storefront, unless otherwise noted on the lease outline drawing (LOD). The signage shall be clad on all exposed sides.

6.2.2 Blade Signage

A blade sign is required at all Concessions locations with the exception of Freestanding Kiosks programmed for food and beverage (i.e. Bars). One double sided illuminated blade sign mounted to the signage zone of the Tenant's storefront. Blade signs are not to exceed 3 square feet and a maximum thickness of 4". Blade signs may be on standoff brackets or have a non-illuminated housing between the sign and the storefront soffit.



6.2.3 Glazed Storefront Sign

Tenants who construct glazed storefront may install an optional silkscreened or applied signature sign (decal) on the interior surface of the storefront. Sign is limited to Tenant's name or logo.

6.2.4 Lifestyle Design Element

Internally illuminated lifestyle transparencies may be located on the Tenant storefront or within the storefront control zone, subject to review and approval. Images must be lifestyle in nature and not advertising. Images may not include Tenant name or logo.

6.2.5 Signage within the Tenant Space

Public facing signage including self-check out, order here, pay here, pick up here, header signage, etc. shall be included in the signage submittal.

6.2.6 Mural Board

The mural board is required at all local business leaseholds to celebrate our Orange County culture. It shall include an Orange County map and identify all business locations within the county and dates they were established including the leasehold at JWA. The Tenant can install a standalone sign or integrated art or branding in the storefront design.

6.2.7 Educational Signage and Plaques

Educational and environmental signage may be provided inside the Tenant space as it is applicable to the business upon review and approval by JWA.

6.2.8 Addition Miscellaneous Signage

Regulatory signage, business hours of operations, materials sorting bins, and room identification signage shall be included in the signage submittal. The TDM will coordinate door number placard and discrete storefront location to be used for Fire Department location purposes.

6.3 Menu Boards

All Fast Food/Quick Service/Coffee Tenants are required to provide at a minimum on menu board mounted on the rear wall of the sales area or on a suspended fascia. Menu board signage may not protrude more than 2” from the back wall and are to be integrated into the overall design. Provisions should be made for changing prices or products in an undetectable manner.

Menu boards are not permitted on the storefront or in the control zone unless approved in writing by JWA. If approved for installation on the storefront, menu board must be mounted flush to the storefront finish materials.

Tenant is encouraged to use digital menu boards. “Daily Special” signs or signs for seasonal or temporary promotions may be integrated into the overall design of the menu board or the back wall but cannot be located on the storefront. Other types of menu boards will be reviewed on a case by case basis.

Menu board design/graphics to conform to ADA requirements.



Chapter 7 – Building Systems

7.1 General

OCPW commissioned an existing utilities assessment in 2022 of the concessions spaces and storage. Each space was reviewed to confirm the conditions of all existing utilities serving the various spaces. The survey included a site assessment and review of as-built drawings. The findings for the survey are included herein and should be used for planning purposes only. It is the Tenant's responsibility to field verify the existing conditions within the leasehold prior to commencing design. The Tenant may request the 2022 report for information only and shall notify the TDM of any discrepancies found.

7.2 Structural

The Terminal building is a two-story steel framed structure with a partial basement. Lateral systems include steel moment frames, CMU shear walls and buckling restrained braces. Driven pile foundations, including shared foundations with the terminal C parking garage. The structural slab is typically 8" thick while the upper level of Terminals A and B are 3-1/4" lightweight concrete (3,000 PSI) over 3" metal deck. Terminal C is 4" lightweight concrete (3,000 PSI) over 1-1/2" metal deck. Terminal C was designed per CBC 2007 Essential Facility provisions.

Gravity Loads:

1. Dead loads: Actual Weight
2. Roof Live Load: 20 PSF (reducible)
3. Roof MEP Equipment Area: 150 PSF
4. Floor Live Load: 100 PSF (reducible)
    a. When combined with partition load: 80 PSF (reducible)
    b. Interstitial space: 20 PSF (reducible)
5. Slab on grade: 200 PSF at arrival level
    a. 100 PSF at basement.
6. Partitions: 20 PSF
7. Floor live load deflection: Beam Span / 360 (maximum)

Tenant shall submit the following information:

a. Roof plan indicating location of Tenant roof top equipment and structural design for equipment support and roof penetrations
b. Location, size, and weight of any and all equipment (including compressors, exhaust hoods and fans, etc.)
c. Ceiling hung plan (example hoods)
d. Rolling grille and storefront weight and supporting details.
e. Location plan, size, and support details for floor openings.
f. Location plan, size, and support details for roof openings, all roof penetrations shall be structural reinforced unless approved otherwise.
g. Location plan, size, and weight of safes, and other heavy furniture
h. Hood hanging details including bracing

A. The Tenant must comply with the following items:
    a. Loads on demising partition shall include an analysis of both sides of the partition.
    b. Permitted loading to be verified by the Tenant structural engineer of record. Clarify in the design the load being imposed and the carrying load of the slab.

c. Floor and roof slabs or deck shall not be cut or cored without JWA written approval. Once approved, penetrations shall be made by the JWA approved vendor/contractor.
d. Tenant mounted roof top equipment shall be mounted on new metal stud framed curb/platform or galvanized steel post/frame systems. Size and weight of such units shall be submitted for review.
e. Piping, conduits, etc. shall be located under the upper level structure, where possible, and through existing beam openings where provided. No structural members, kickers, bracing or bridging member shall be cut or damaged.
f. All ceiling hung elements etc. shall be vertically and laterally supported and braced as required by code.
g. Upper cabinets, seismic strapping or bracing of vending, refrigerators, and shelving shall be specified by the SOER.

Note, all water heaters and transformers are to be floor mounted unless approved in writing by the Tenant Development Manager to be wall or ceiling mounted. If not floor mounted structural support details to be provided.

7.3 Mechanical

7.3.1 Central Plant

The chilled water central plant at JWA is composed of (2) hot water absorption chillers (ACH-1, ACH-2), (3) electrical centrifugal chillers (CCH-1, CCH-2, CCH-3), and (1) air cooled centrifugal chiller (CCH-4) in primary pumping configuration. The hot water absorption chillers are powered by waste heat and work in combination to reduce electrical load on the centrifugal chillers. The air-cooled chiller (CCH-4) is used for off peak loads. The condenser water is supplied from (4) counter flow cooling towers which also serve the engines. Schedule information on the chillers and (4) cooling towers located in the central plant are listed in Tables 1 & 2. The chilled water is supplied to the terminals through 12” chilled water supply and return pipes and is connected to all terminal air-handlers and fan coil units.

7.3.2 Boilers

There are four gas fired boilers that serve all terminals. Two are in Terminal A in the boiler room on the arrival level (B-A1, B-A2) and the other two are in Terminal C on the roof (B-C1, B-C2). The rooftop boilers are configured with primary secondary pumping and serve AHU-14,15,16,17,18,19,21 and 22, as well as VAV C-4, C-6, and C-8.

7.3.3 General Requirements

The Airport Mechanical system is divided into multiple zones served by AHU-1 through AHU-22. In general, the system provides approximately 1 CFM/SF to Tenant spaces. Clarify on the Tenant drawings which zone/which AHU serve the Tenant area.

If the existing airport provided air is insufficient for the Tenant needs Tenant to provide supplemental roof top unit. Some Tenant spaces includes gas. If gas is present, the Tenant is permitted to use it for heating within the existing capacity of the gas provided. No additional gas should be assumed to be available.

All material used in the Tenant installation (i.e. ductwork, ductwork seals, taping, etc.) must be asbestos free.

If a utility shutdown is required to complete Tenant installation, the Tenant contractor to submit a Utility Shutdown Request (USR). See URS form/procedures provided by the Tenant Development Manager for additional information.

7.3.4 Design Conditions

The following design guidelines are general.

A. HVAC systems shall be designed in accordance with ASHRAE recommended practices and the requirements of governing agencies.
B. HVAC systems shall be designed with consideration given to ease of maintenance, reliability, and efficiency.
C. Fumes from food and beverage preparation, perfumes, fragrances, and the like must be contained within the Tenant's leasehold.
D. Air Handling Equipment shall be packaged rooftop heating and air conditioning units. Units shall include an economizer section with enthalpy control, filter section with 95% cartridge disposal filters, direct expansion cooling coil, gas-fired heating section (if gas is available), and supply fan section. All equipment shall be supported on metal framing platforms/curbs (no wood). For penetrations through the roof and roof material flashing Tenant team to contract with an authorized vendor/contractor to perform the work so that the warranty of the existing roofing is not voided.
E. All Retail, Food and Beverage, and Food Court Tenants requiring roof penetrations for installation of makeup air and hood exhaust equipment must comply with the requirements of completing this type of work.

   Tenant should plan to exhaust through the roof. If a wall exhaust is existing in the Tenant space, Tenant may review reuse with JWA. Not all existing wall exhausts can be reused, and it is preferred all exhaust be through the roof. If re-use of a wall exhaust is approved, exhaust must terminate with metal grilles as specified by JWA.

   All Tenant equipment located on the roof shall be labeled. Labels shall be:

   a. 5" x 8" engraved vinyl plate fastened with stainless steel bolts and nuts; include Tenant name, space number, and unit number.
   b. Minimum text height is 1/4".
   c. Text color to contrast with plate.

   Exhaust system design including hood design, duct design, equipment mounting height requirements, and fire extinguishing equipment must conform to NFPA 96 and IBC Code requirements.
F. Food Tenants are responsible for providing their own kitchen exhaust systems, including automatic kitchen exhaust hoods, sheet metal work, fire-rated cladding, fans, cleanouts and drains for the sheet metal work, fire suppressant system and noise attenuation. These systems must be UL-rated and IRI approved.
G. Kitchen exhaust hoods shall be of the combination exhaust and make-up air type. Make up air to be tempered to meet energy codes.
H. All kitchen exhaust fans shall be supported from the structure above. Kitchen exhaust fans shall be roof mounted, belt drive, up blast centrifugal type fans complete with spun aluminum removable housing, aluminum fan wheel with backward inclined blades, motor

and drive assembly, non-fused disconnect switch, and 18” high pre-fabricated insulated roof curb. Curbs to be metal, no wood blocking.

I. All kitchen exhaust fans shall be installed so that noise and vibration shall be attenuated to the extent that the stipulated noise criteria for the adjacent occupied spaces is not exceeded.
J. Kitchen exhaust fans shall be provided with cleanout and drainage provisions. They shall be constructed and installed to meet NFPA-96 (latest edition) standards and be UL-rated, FM-approved and approved by JWA for the removal of smoke and grease-laden vapors. All fans shall be equipped with grease traps and receptacles to prevent grease residue from dripping on the roof. Contractor to perform smoke test on seals in welded duct during installation and provide written report to TDM.
K. The kitchen exhaust sheet metal work shall be welded black steel construction minimum 16 gauge, and shall be made watertight. All horizontal kitchen exhaust sheet metal work shall be sloped to the hood. Contractor must arrange for a test of the ductwork.
L. Cleanout and access doors shall be provided at all right-angle bends, and on 20’-0” centers or as required by local code or ordinance. Access doors shall be framed into the side of the exhaust duct and the size shall be 1’-2” wide by 1’-0” high except where the duct is less than 1’-1” high, in which case the door height shall be reduced correspondingly. The bottom of the access door shall be 2” above the duct invert.
M. All Type I kitchen exhaust sheet metal work shall be clad with a fire-rated enclosure as required by local code.
N. Do not provide return air to base building HVAC system from food service Tenants’ kitchens.
O. Tenants may not obstruct supply and return air grilles within the terminal.
P. Under no circumstances will the Tenant be allowed to penetrate the barrel roof.

7.3.5 Grease Containment System

If the Tenant activities are grease producing, the Tenant is required, to include a pollution control unit (PCU) into the design in order to eliminate grease and abate smoke/fumes within the air. When the incorporation of a PCU is not physically possible due to site constraints, a minimum two-stage treatment and/or filtration assembly shall be provided within the furnished hood range. Tenant to submit proposed solution for review and approval to the Tenant Development Manager. Refer to JWA FOG Minimum Requirements and Orange County Sanitary District (OCSD) ordinance 25 for unincorporated areas for additional information. The Tenant will clean and maintain the system at the Tenant’s expense. Grease exhaust equipment must be “Up-Blast” type. Additional requirements are located throughout this manual.

7.3.6 Make-Up Air Systems

A. The Tenant is responsible for providing his own make-up air systems including sheet metal work, fans, air tempering equipment and controls.
B. The make-up air system is to be interlocked with the Tenant’s exhaust systems. The exhaust systems are not to be capable of operating without the make-up air system operating.
C. To control odor migration, the Tenant’s space is to be negative pressure with respect to the terminal or concourse area.
D. All make-up air not supplied through a combination exhaust hood must be tempered as required by the Energy Code.

7.3.7 Sheet Metal Ductwork

A. Ductwork shall be fabricated from galvanized sheet metal in accordance with ASHRAE, the latest SMACNA standards, and be code complaint.
B. Supply and return must be insulated. Exterior installation must be wrapped. Supply and return air ductwork shall be lined with one (1) inch thick acoustical duct liner having a density of 1 1/2 lbs. per cu. ft. Ductwork located in plenum spaces must be plenum rated/wrapped.
C. Secure insulation with solid coat of adhesive to top and bottom section, and overlap sides; all joints must be butted with flap thoroughly coated with adhesive. Insulation shall comply with NFPA 90A and UL listed standard for safety (UL273).
D. Where rectangular ducts are greater than 2'-0" in width, the insulation shall be additionally secured to the bottom of the ducts with welded or cemented pins with washers or clips on 1'-0" centers. All gaps, seams, punctures, etc., shall be sealed over the gaps with vapor barrier mastic.

7.3.8 Flexible Insulated Ductwork

A. Lightweight duct, core of corrosion-resistant wire helix permanently bonded within fabric, insulated with 1" thick, ¾" lbs. per cubic foot density fiberglass flexible insulation and covered with a fire-retardant reinforced vapor barrier (hi-vinyl). Duct shall meet NFPA 90A requirements and be listed as Class 1 air duct material, UL listed standard 181.
B. Provide a maximum of five feet of flexible ductwork to connect from take-off fitting to air distribution devices, and be oversized to the next largest size required to carry the designed air quantity.
C. Fiberglass flexible duct insulation ¾ lbs. per cubic foot density with FSK vapor barrier facing. Blanket insulation shall be wrapped around ducts with joints tightly butted together or lapped.
D. 2" tabs or flaps of the vapor barrier facing on both the circumferential and longitudinal joints shall be securely stapled.

7.3.9 Vibration Isolation

A. Optional fan coil units and all vibrating equipment shall be mounted on neoprene rubber in shear vibration isolators.
B. Provide flexible connections to meet NFPA requirements for all of the above-mentioned equipment, fabricated from synthetic rubber or 29 oz. neoprene coated fiberglass cloth to eliminate transmission of vibration to ductwork.
C. Air distribution devices shall be ceiling or side wall mounted registers or diffusers installed as required to achieved distribution in accordance with good engineering practice. All registers and diffusers shall have integral manual volume control devices.

7.3.10 Air Balancing and Control Wiring

Tenants may not use the existing Hydronic piping for heating or cooling.

The Tenant will perform, at the Tenant's expense, a certified pre-balance and final air balance of the Tenant space and provide a certified air balance report to the TDM

Balancing of air system shall be performed by contractors that are certified by the American Air Balance Council (AABC) or the National Environmental Balancing Bureau (NEBB). Air distribution systems shall be balanced for specific design flow rates and system static pressure.

7.3.11 Pipe Insultation

Pipe insulation must be ASTM C 1136 and ASTM C 547, Type 1 with factory applied, reinforced vapor retarder facing, and thermal conductivity to meet codes. Insulate hot water, cold water and condensate piping from ice machines and similar equipment to prevent condensation.

7.3.12 Other HVAC Requirements

A. Where walls are constructed along spandrel glass sections, walls shall be vented high and low at 4'-0" on center to release heat buildup.
B. Tenant is required to provide roof walk pads for any equipment placed on the roof. Layout is subject to approval by JWA.
C. Roof conduit supports shall be rated/applicable for the existing roof type such that the warranty of the existing roof will not be voided. Screw through roofing attachments are not permitted. If elevated conduit/piping/ductwork cross the walk path, Tenant contractor to provide cross-over ship ladders. If cross-over ship ladder required, contractor to submit shop drawing for review by the Tenant Development Manager. Remove all unused conduit, piping, ductwork, etc. as a part of any Tenant equipment replacement.
D. All condensate piping shall be insulated to prevent leakage of condensate on to ceiling or other finishes.

7.3.13 Mechanical Utilities Matrix

Space No.	Tenant Mix	VAV (cfm)	Rooftop Unit (cfm)	Split System (cfm)	Exhaust (cfm)	Dishwasher Exhaust (cfm)	Grease Exhaust (cfm)
A1	Food & Bev.	na	na	na	na	na	na
A2	Retail	na	na	na	na	na	EF-1 (800)
A3	Food & Bev.	VAV-1 (1200)	AC-1 (800)				EF-1 (825)
A4	Food & Bev.	VAV-1 (1800) VAV-14Z3 (1400) VAV-14Z4 (600)	K-1 (6000)	na	na	na	KH-1 (1255) KH-2 (720) KH-3 (720)
A5	Food & Bev.	VAV-1 (600) VAV-1 (590)	MAU-1 (2295)	FC-1 (1400)	na	na	EF-1 (2869)
A6	Retail	na	na	na	na	na	na
A7	Retail	na	na	na	na	na	na
A8	Retail	na	na	na	na	na	na
A9	Automated Vending	VAV C-12 (500)	na	na	na	na	na
A10	Automated Vending	VAV-10 (500)	na	na	na	na	na
A11-LL	Automated Vending	AHU-20	na	na	na	na	na
A12	Food & Bev.	VAV-1 (1800)	na	na	na	na	na
A13-LL	Automated Vending	AHU-7	na	na	na	na	na
A14	Retail	VAV-1 (1800)	na	na	na	na	na

Space No.	Tenant Mix	VAV (cfm)	Rooftop Unit (cfm)	Split System (cfm)	Exhaust (cfm)	Dishwasher Exhaust (cfm)	Grease Exhaust (cfm)
B1	Food & Bev.	VAV-10Z8 (3240) VAV-12Z7 (3240)	na	FC-1 (624)	na	na	na
B1-LL	Food & Bev	VAV-14Z7 (1520)	na	na	na	na	na
B2	Retail	na	na	na	na	na	na
B3	Retail	na	na	na	na	na	na
B4	Retail	(1500)	na	na	na	na	na
B5	Food & Bev.	VAV-14 (2160)	na	na	na	na	na
B6	Food & Bev.	VAV-14Z4 (1400) VAV-14Z3 (600)	K-1 (6000)	na	na	na	EF-1 (1255) EF-2 (1603) EF-3 (1603)
B7	Food & Bev.	VAV-1 (2000)	AC-1 (600)	na	na	na	EF-1 (300)
B8	Food & Bev.	na	MAU-1 (1200)	FC-1 (1200)	EF-1 (1200)	na	na
B9.1	Food & Bev.	VAV-C139 (1550) VAV-C140 (1395)	MUA-1 (3374) MUA-2 (680) AC-1 (2400)	na	na	EF-3 (600)	EF-1 (4217) EF-2 (850)
B9.2	Food & Bev	na	AC-1 (2600) AC-3 (2400) MUA-3 (1186) MUA-2 (2626) MUA-1 (5054)	na	na	na	EF-1 (5454) EF-2 (1892) EF-3 (1383) EF-4 (1483) EF-5 (612)
B10	Retail	VAV-1 (1200) VAV-1-17 (825)	na	na	na	na	na
B11	Retail	na	na	na	na	na	na
C1	Food & Bev.	VAV-C116 (1600)	na	na	na	na	na
C2	Food & Bev.		RTU (5000)	FC-A (1600) FC-B (1600)			EF-1 (825) EF-2 (850) EF-3 (650)
C2A	Retail	na	na	FC-C (1800)	na	na	na
C4	Food & Bev.	na	MUA-1 (1580) AC-1 (2400)	na	na	na	EF-1 (2458)
C5	Automated Vending	VAV C-14 (1600)	na	na	na	na	na
C6	Automated Vending	VAV C-11 (1880)	na	na	na	na	na
C7	Automated Vending	VAV C-12 (1600)	na	na	na	na	na
C8	Food & Bev.	VAV-C90 (410)	na	na	EF-C31 (750)	na	na
C8-LL	Automated Vending	VAV-C1 (1100)	na	na	NA	na	na
C9	Food & Bev.	na	na	na	EF-1 (800) EF-2 (800)	na	na
C10-LL	Food & Bev.	VAV-C81 (1425)	na	na	na	na	na

7.4 Plumbing

7.4.1 Domestic Cold Water

Two separate six-inch mains provide the terminals with domestic cold water. One of the mains serves Terminals A & B and the other main serves Terminal C. A four-inch bypass line with shut-off valve connects both systems, which remains closed unless one main service becomes unavailable to serve the terminals or in case a terminal experiences low water pressure.

Water is provided to terminal C through a 6” connection to the MESA Consolidated Water District (MCWD). This routes to the terminal at the arrival level near gridline 5. Water is provided to terminal A&B through a 6” main at arrival level near gridline 17.

Historical data indicates the domestic cold-water pressure fluctuates between 35 and 85 psi with a tight grouping between 60 and 70 psi. The data also indicates that Terminals A and B receive more pressure than Terminal C.

JWA will provide access to domestic cold water and sanitary waste and grease waste. An existing sanitary vent might be available for use by the Tenant. Natural gas is available in some Tenant spaces – refer to LOD for additional information.

7.4.2 Domestic Hot Water

JWA does not provide its Tenant Domestic How Water. Hot Water must be provided by the Tenant within the leasehold.

7.4.3 Natural Gas

Terminal A and B are served by (3) 3” MPG mains. The gas mains enter the terminal near gridline 21. Two mains are regulated upon entrance to the building and the third remains medium pressure and it is regulated prior to connection to equipment or a branch-off to tenant spaces. The pressure of the medium pressure gas is set to 5 psi max.

Terminal C is served by 2” and 3” MPG mains which enter the terminal near gridline 5. These are fed from gas meter regulators located near parking structure C. The pressure of the medium pressure gas is set to 5 psi max.

7.4.4 Sanitary Sewer and Grease Waste

Terminal A and B sanitary sewer waste drains to an 18” lateral between gridlines 44 and 45. Sewer lines drain to this main from (3) 4” and (6) 6” sewer mains sloping towards the runway side of the airport.

Terminal C sanitary sewer waste drains to sewage ejector pumps which pump to an 8” building sewer lateral west of parking structure C between gridlines 31’ and 30’ as shown image 7C below. This 8” main has 2,006 DFU connected. An 8” lateral at ¼” slope can allow up to 2640 DFU. Refer to JWA FOG Minimum Requirements and Orange County Sanitary District (OCSD) ordinance 25 for unincorporated areas for additional information.

7.4.5 General Requirements

The Tenant is responsible for the following:

A. The Tenant is responsible for the design, furnishing and installation of complete plumbing systems, as required, to suit the Tenant's requirements.
B. The Tenant's contractor shall furnish and install all piping, fittings, valves, and associated components to accommodate the Tenant's plumbing design as follows:
    a. Domestic cold water;
    b. Domestic cold-water meter, to be located in an accessible location, meter or reader max 5'6" AFF;
    c. Domestic hot water including water heater. Do not locate water heaters above ceiling. Tenants are encouraged to install water heaters above mop sink;
    d. Sanitary waste and vent;
    e. Natural gas (not available in all locations);
    f. Natural gas meter, to be located in an accessible location, meter or reader max 5'6" AFF (coordinate installation with JWA);
    g. Piping insulation;
    h. Plumbing fixtures;
    i. Floor drains are limited to the minimum required by code or JWA. Floor drains to be round and waterproofed in place to prevent leaking to the floor below.
    j. Floor sinks to be round and waterproofed in place to prevent leaking to the floor below.
    k. Food service Tenants must remove existing sanitary line back to the main, and replace with a new sanitary line;
    l. Above-floor grease trap (connect to provided sanitary waste piping).
        i. Nothing fixed over grease interceptor;
        ii. Tenant must provide a clean out on discharge side at 90 degrees.;
        iii. The Tenant will be required to use a JWA approved cleaning service at Tenant's expense.;
        iv. Grease trap to be properly sized for Tenant load: refer to local Plumbing Code for minimum size requirements.; and
    m. All plumbing and other piping in areas subject to freezing must be insulated and heat-traced.
    n. No propress or megapress fittings are permitted unless specifically approved by the airport. All pipe fittings shall be welded, soldered, or brazed.
    o. Tenant to provide and install a water meter in the Tenant space. Water meter to conform to the JWA water meter specification.
C. All Food & Beverage and Food Court Tenants must submit drawings for approval to the Health Department as required for review and approval.

7.4.6 Design Conditions

Sanitary and potable water systems must comply with the Plumbing Code. Tenant design criteria shall be as follows:

A. Domestic cold and hot water piping sizing shall be based on Hunter's fixture unit method as described in the American Society of Plumbing Engineers (ASPE) Handbook.
B. Natural gas is not available at all locations, however where available, food service Tenants are encouraged to consider the use of natural gas for cooking purposes.

7.4.7 Specification Requirements

All specifications shall conform to the codes and regulations and to requirements of all authorities having jurisdiction. In general, materials shall be as follows:

A. Provide plumbing fixtures as indicated on architectural and plumbing drawings. Each fixture outlet, and piece of equipment shall be separately trapped, using type and size of trap required by the Plumbing Code. All traps shall have clean-outs. All wall-mounted devices shall have chair carriers which shall be securely bolted to floor slabs in accordance with the manufacturer's recommendations.
B. Plumbing plans shall indicate fixture units, trap sizes, pipe size and slope on all piping and equipment.
C. Above-ground hot and cold-water piping (all sizes) shall be copper piping Type L, hard temper, except exposed at fixtures and equipment where it shall be chrome-plated cast brass. Wrought copper and bronze solder joint. Joint shall be soldered using silver content lead-free solder.
D. Above-ground sanitary waste shall be stainless steel. Vent piping shall be service-weight cast iron no-hub soil piping conforming to latest standards. Type L copper tube may be used for 2" diameter piping and smaller. Cast iron, cast brass, wrought copper drainage fittings. Gasket or soldered joint using silver content lead- free solder. No hub double clamps shall be "Clamp ALL". PVC and ABS are prohibited.
E. Any underground work to be Type K copper
F. Spaces accessible to the public shall be designed as fully finished spaces. All piping shall be installed concealed behind walls or above ceilings.
G. Potable water piping shall be sized for a velocity range between four and eight feet per second.
H. Potable water piping: Water hammer arrestors shall be provided in conjunction with automatic operated quick-closing valves, flushometers, etc. Arrestors shall be constructed of stainless steel and consist of factory sealed and charged pressurized compression chamber and heavy-duty bellows. Standpipe style air chambers that consist of a capped length of pipe which do not include pressurized compression chamber and bellows are prohibited. Sizing and placement of arrestors shall be in compliance with Plumbing and Drainage Institute Standard PDI-WH201.
I. All potable water service and water distribution pipe and fittings shall conform to the National Sanitation Foundation (NSF) 61
J. Grease Interceptor: Food vending Tenants shall be responsible to provide an approved type of grease interceptor when required by the Plumbing Code and local AHJ. Interceptors shall be sized in compliance with the regulations. Interceptors shall be designed to operate at a minimum overall efficiency of 90% while draining the fixture in 2 (two) minutes. Waste piping in the house side of the interceptor shall provide a flow control fitting capable of external cleaning, fresh air inlet or vent piping, and shall have a vacuum breaker or vent and a cleanout installed on the discharge piping in compliance with the Plumbing Code. Low profile and recessed type grease interceptors are prohibited. Grease trap to be direct connect. Provide cleanout after the grease interceptor to allow for maintenance of the lines. Underground grease interceptors may be concrete, polybutylene, or stainless steel. Submit grease interceptor cut sheet with construction documents.

Grease interceptor to include remote alarm system to alarm within the kitchen where there is an issue with grease interceptor. If an ejector pump is also used, provide ejector control panel to alarm in the kitchen if there is an issue with the ejector.

K. Natural gas piping must conform to ASTM A53, Grade B specifications Schedule 40. Provide standard weight carbon steel welded fittings with flanged connections or malleable iron fittings on threaded pipe. Gas meters shall be installed by each Tenant utilizing natural gas. The reader or meter shall be located in an accessible location at max. 5'-6" aff. and within the Tenant's back of house area. All work shall be in accordance with NFPA 54. PVC and ABS are prohibited. Gas meter to conform to the JWA gas meter specification.

L. The entire plumbing installation shall be provided with valves located to permit easy operation, replacement and repair. Each type shall be the product of a single manufacturer. Water valves shall be full-port ball valves. Valves shall be provided where required by code and as shown on the drawings.

M. Pressure and temperature relief valves shall be ASME, Watts or an approved equal, sized to suit the inlet size and to exceed the ASME, AGA and the manufacturer's pressure rating of the device. Back flow preventers shall be provided per the AHJ Guidelines.

N. Gas valves shall be full-port ball valves, UL gas-approved.

O. Water heaters:
    a. Furnish and install new storage-type water heaters as indicated on drawings. Heaters shall be tested in accordance with the Plumbing code. Heaters shall be provided with (AGA rated and ASME constructed) pressure and temperature relief valves, vacuum relief valves, and drain valves as necessary. Heaters shall be complete with controls and anode rods suitable for a five-year warranty.
    b. Heaters shall have a minimum standby heat loss, in accordance with requirements of the energy code.
    c. Heaters shall be floor mounted unless otherwise approved in writing by the Tenant Development Manager.

P. Insulation:
    a. All hot and cold-water piping shall be insulated to meet code requirements with UL approved insulation.
    b. All traps and branches receiving condensate or ice discharge shall be insulated to the main. Example: J-trap under ice machine.
    c. All piping located in crawl spaces, unheated areas, and exterior overhangs shall be heat traced and insulated to prevent freezing.

Q. Pipe hangers and supports:
    a. Furnish and install hangers and supports to attach all pipes securely to the structure in correct alignment and pitch to prevent vibration and to effectively care for expansion and contraction. Parts in contact with copper piping or tubing shall be copper- plated, and chrome-plated for chrome- plated piping, etc. Furnish and install retaining straps on all piping hanger support systems in accordance with local codes.
    b. Duriron piping is not permitted at JWA. Any existing in Tenant spaces is to be removed as a part of the Tenant fit out unless approved otherwise by JWA.
    c. Piping supported from structural steel shall have beam clamps and hangers consisting of threaded rod. The sizes of supporting materials shall be suited to

the sizes and materials of the piping supported. All hangers shall be UL/FM approved.

R. Seismic protection of all piping shall comply with the requirements of NFPA 13, and current CBC seismic hazard exposure requirements.
S. Clean-outs shall be provided in all sanitary and storm drain piping at changes in direction, at the base of stacks and as required by the local authorities. Clean-outs shall be located within 50 feet of each other for piping 4” diameter and smaller and not more than 100 feet apart for larger piping sizes. Clean-outs shall be the same size as the piping installed up to 4” in diameter. For larger piping sizes, a clean-out of a minimum of 4” diameter shall be provided. Cleanouts must be located in Tenant space. Cleanout to be screw type. Rubber fittings are not permitted.
T. All equipment and fixtures requiring connections to the sanitary system shall be provided with individual traps with integral clean-outs.
U. Furnish access panels and doors for installation in walls and ceilings at locations indicated on drawings and as required to permit access for adjustment, removal or replacement and servicing of all valves and equipment.
V. Firesafing and smoke seal is required where all piping and conduits leave or enter all vertical shafts, at all floors, and through all walls above or below all class A acoustical tile ceilings and all spaces without any type of finished ceiling.
W. All floor penetrations shall be sleeved.
X. Domestic cold water will be metered and conform to JWA water meter specification.
Y. Paint label, at max 10’-0” o/c, and each side of walls all cast iron waste lines below floor with Tenant name and space number. Use a minimum of 2” letters.

7.4.8 Plumbing Utilities Matrix

Space No.	Tenant Mix	Dom. Cold Water	Natural Gas	Sanitary Sewer	Vent	Grease Waste
A1	Food & Bev.	na	na	3”	3”	na
A2	Retail	1-¼"	na	3”	3”	na
A3	Food & Bev.	1”	¾"	3”	4”	3”
A4	Food & Bev.	1”	na	3”	2-½"	3”
A5	Food & Bev.	1-½"	1-¼"	3”	4”	4”
A6	Retail	na	na	na	na	na
A7	Retail	na	na	na	na	na
A8	Retail	na	na	na	na	na
A9	Automated Vending	1-½"	na	na	3”	na
A10	Automated Vending	1-½"	na	na	na	na
A11-LL	Automated Vending	na	na	na	na	na
A12	Food & Bev.	(2) ¾”	na	(3) 2”	(2) 2”	(2) 3”
A13-LL	Automated Vending	na	na	na	na	na
A14	Retail	na	na	na	na	na
B1	Food & Bev.	1”	na	3”	2”	na
B1-LL	Food & Bev	1-¼"	na	3”	2”	na
B2	Retail	na	na	na	na	na

Space No.	Tenant Mix	Dom. Cold Water	Natural Gas	Sanitary Sewer	Vent	Grease Waste
B3	Retail	¾"	na	3"	2"	na
B4	Retail	na	na	na	na	na
B5	Food & Bev.	na	na	na	na	na
B6	Food & Bev.	1"	na	3"	2-½"	3"
B7	Food & Bev.	1-¼"	na	3"	3"	3"
B8	Food & Bev.	1-½"	(2) 2"	na	3"	4"
B9.1	Food & Bev.	1-¼"	2"	3"	2", 3", 4"	(2) 3"
B9.2	Food & Bev	¾", 1", 2"	¾", 1-¼", 2-½"	2", 3"	2", (3) 2-½"	3", (2) 4"
B10	Retail	na	na	na	na	na
B11	Retail	na	na	na	na	na
C1	Food & Bev.	na	na	na	na	na
C2	Food & Bev.	1"	3"	(4) 3"	3"	4"
C2A	Retail	na	na	na	na	na
C4	Food & Bev.	1-¼"	1-¼"	3"	4"	4"
C5	Automated Vending	na	na	na	na	na
C6	Automated Vending	na	na	na	na	na
C7	Automated Vending	na	na	na	na	na
C8	Food & Bev.	na	na	na	na	na
C8-LL	Automated Vending	na	na	na	na	na
C9	Food & Bev.	1-¼"	na	4"	3"	na
C10-LL	Food & Bev.	1"	na	4"	2"	na

7.5 Electrical

7.5.1 General Requirements

The Tenant will determine with JWA the availability of electrical conduit to the Tenant space. If suitable conduit is not available, the Tenant will coordinate with the TDM for installation of the conduit by OCPW from the Tenant space to the designated source panel.

The Tenant's responsibility includes:

A. Electric Meter to be provided in the Tenant space and conform to the JWA meter specification of Schneider Electric IEM 3455 or an approved equal. The Tenant's electrical contractor shall be responsible to install the appropriate CTs (based on the required amperage) onto the cables the Tenant's electrical contractor will be pulling from, which would generally be from the designed switchgear to their leasehold.
B. All Tenant electrical work shall be at the sole cost and responsibility of the Tenant. Tenant electrical equipment shall be installed within the leasehold, fed from JWA predesignated Tenant panelboards, and labeled per JWA labeling specifications and guidelines.
C. All storefront and interior reflected ceiling plans and specifications shall indicate all illuminating devices when submitted to the DRC approval. Copies of catalog cuts of

fixtures shall be submitted to expedite approvals. All lighting fixtures must be listed as UL approved and dimmable. Reference section 8.8 for additional lighting requirements.

D. Electrical work, such as recessed duplex outlets, is allowed in the demising partition between Tenants where no work conflicts with or damages work previously installed by adjoining Tenants and where codes and Building Department requirements do not restrict the proposed work.
E. All security system information is to be shown on the plans including the location of cameras, monitors, and conduit/cable runs. All security system cable must be run in conduit. If used, all stock control security systems must be concealed within the floor, ceiling, storefront columns, or other decorative structures. Freestanding systems are not permitted. Cameras must be positioned in discrete locations.
F. All wiring, including low voltage cable, must be installed in EMT conduit. Use of PVC conduit and MC conduit is prohibited. Conduit compression type connectors and couplings must be used for all conduit under 2” (set screw type allowed only on 2” and above.) Provide insulated throat termination fittings. The use of push wire connectors (e.g. wago or equivalent) is prohibited.
G. The Tenant will determine, with JWA, the availability of telephone conduit to the Tenant space. If conduit is not existing, then the Tenant will coordinate with the TDM for OCPW to install conduit. The Tenant must consult directly with the telephone company and arrange for individual service from the project service location to the Tenant’s demised premises. Applications must be made through the local telephone company. Telephone service will be provided by the Tenant at the Tenant’s expense. All telephone wiring must be installed in EMT conduit. Tenant to contract with JWA approved vendor for punch through to airport cub from Tenant space.
H. All temporary service and equipment are to be removed upon completion of the work and prior to store opening.
I. The Tenant shall provide all emergency and exit lighting as required by state and local codes, and obtain approval for same from the local authorities. Tenant must provide breaker lock in Tenant panel for emergency egress lights and exit signs.
J. An airport fire alarm system, exists throughout the airport. All Tenants are required to tie into this system. Tenant must use JWA authorized contractor to make the required tie-ins and test the system.
K. Tenant breakers and meter shall be labeled using an engraved vinyl plate. Plate size shall be 3/4” x 3”. Plate to include Tenant name and space number.
L. Electrical systems identification and labeling per JWA standards indicated in the appendix. Preprinted, flexible, self-adhesive labels with legend indicating voltage and service is required for all raceway and conduit per JWA identification requirements. Size: 1-1/8-inch H x 4-inch L for 1-inch diameter or less, 1-1/8-inch H x 8-inch L for over 1inch diameter raceway. Color: Black legend on orange background. All outlet box/device to include engraved labels. All wiring devices for “emergency” fed from a secondary source of power circuits shall be red. All switchboards and panelboards shall be marked with identifying 2”x3” nameplate. Provide new panelboard schedule correctly filled with descriptive ID.
M. Electrical and communication conduit that is exposed to the public view to be painted to match the adjacent color scheme. Within the Tenant space the expectation is all conduit will be concealed from view. Contractor to review with the Tenant Development Manager any specific instances where conduit will be visible to the public.

N. Floor mounted receptacles must be flush with the top of the lowest adjacent floor material. Raised floor mounted receptacles are not permitted.
O. Tenant is responsible to clean ceiling and remove unused conduit/wire, etc in, above, and over their lease space ceiling.
P. All raceways and conduits shall have a separate insulated equipment grounding conductor, color green, sized per CEC 250.122. Provide separate green equipment ground conductor in all electrical raceways to effectively ground all fixtures, panels, controls, motors, disconnect switches, exterior lighting standards, and non current-carrying metallic enclosures. Use bonding jumpers, grounding bushings, lugs, busses, etc. for this purpose. Connect the equipment ground to the building system ground. Use the same size equipment ground conductors as phase conductors, up through #10 AWG. Use NEC (or CEC where adopted) Table 250.122 for conductor size with phase conductors #8 and larger, if not shown on the drawings. Clean all contact surfaces of all ground connections prior to making connections.
Q. All boxes should be bonded regardless of size and/if terminated at a junction box. NEMA type 4X and type 3R stainless steel boxes, panelboards, disconnects, gutters etc for all exterior work.
R. Underground conduits must have a magnetic warning ribbon 12” above conduits with system specifics. For underground runs, ¾” or larger gravel is not acceptable. Base and backfill must be of sand or slurry.
S. Powder actuated fasteners are prohibited.
T. Conduits and cables to be kept a minimum of 5’-0” from any conveyor, catwalk, and access areas.
U. Systems conductor color coding for power and lighting neutrals with phase color tracer.
V. Aluminum conductors are prohibited, copper must be utilized.
W. No new multiwire branch circuits are allowed.

7.5.2 Electrical Utilities Matrix

Space No.	Tenant Mix	Power Source						Power System at Concession								
								480v Panelboard			Transformer			208v Panel Board		
		Sub-station	Room No.	ID	Volts	Amp	OCPD Avail.	ID	Volt	Amp	ID	KVA	Volt	ID	Volt	Amp
A1	Food & Bev.	NA	NA	AA-NHAB-TR	480/277	1600	100A	S14H	480/277	400	na	na	na	na	na	na
A2	Retail	NB	A.L.1.105	DBNPB	208/120	700	150A	na	na	na	na	na	na	A	208/120	125
A3	Food & Bev.	NB	A.L.2.210C	N	480/277	400	100A	HA1	480/277	100	TA1	30	480-208/120	A1	208/120	100
A4	Food & Bev.	NB	A.L.2.210C	N	480/277	400	70A	na	na	na	na	45	480-208/120	A	208/120	100
		NA	A.L.1.105	NA		2000	400A				TB	300		MDP		800
						2000	100A				TB1	75		WH		200
A5	Food & Bev.	NA	na	AA-NHAB-TR	480/277	1600	400A	AANHTRHA	480/277	300	AA-NHHA-X1	112.5	480-208/120	ADNLHALA	208/120	400
A6	Retail	NB	A.A.1.400	NPD1	208/120	200	50A	na	na	na	na	na	na	NPLS	208/120	60
A7	Retail	NB	A.A.1.400	NPD1	208/120	200	50A	na	na	na	na	na	na	NPLS	208/120	60
A8	Retail	NB	A.A.1.400	NPD1	208/120	200	100A	na	na	na	na	na	na	NPLS	208/120	60
						200	100A									60
A9	Automated Vending	NB	A.A.1.015	AA-NHAB-TR	480/277	1600	100A	na	na	na	T-A13L	75	480-208/120	A13L	208/120	225

Space No.	Tenant Mix	Power Source						Power System at Concession								
								480v Panelboard			Transformer			208v Panel Board		
		Sub-station	Room No.	ID	Volts	Amp	OCPD Avail.	ID	Volts	Amp	ID	KVA	Volts	ID	Volts	Amp
A10	Automated Vending	NB	A.A.1. 015	AA-NHAB-TR	480/277	1600	100A	na	na	na	T-A13L	75	480-208/120	A13L	208/120	225
A11-LL	Automated Vending	NB	A.A.1. 015	AA-NHAB-TR	480/277	1600	100A	na	na	na	T-A13L	75	480-208/120	A13L	208/120	225
A12	Food & Bev.	SB	na	DBR	480/277	600	600A	NARE	480/277	na	TB1 TB2 TB3	112.5 112.5 45	480-208/120	RA RB RD	208/120	400 400 150
A13-LL	Automated Vending	NB	C.A.2. 660	DBTR1	480/277	800	100A	na	na	na	T-B11L	75	480-208/120	B11L	208/120	225
A14	Retail	NB	A.L.2. 210C	N	480/277	400	70A	na	na	na	na	45	480-208/120	A	208/120	100
B1	Food & Bev.	SA	B.A.1. 465	SLP4	480/277	225	100A	S18H	480/277	400	TL	75	480-208/120	L	208/120	200
		ACA		BA-NHBC-TR		1000	100A									
B1-LL	Food & Bev	SA	B.A.1. 465	SLP4	480/277	225	100A	na	na	na	TSPD1	150	480-208/120	A	208/120	200
B2	Retail	ACA	B.L.2. 610D	SLP1 BA-NHBC-TR	480/277	225 1000	100A 100A	S10H	480/277	100	DB	75	480-208/120	L DB	208/120	100
B3	Retail	ACA	B.L.2. 610D	SLP1	480/277	225	100A	S9H	480/277	100	na	75	480-208/120	A	208/120	50
				BA-NHBC-TR		1000	100A									
B4	Retail	SB	B.L.2. 610D	S	480/277	400	50A	na	na	na	na	30	480-208/120	A	208/120	100
B5	Food & Bev.	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
B6	Food & Bev.	SB	B.L.1. 640	SB	480/277	2000	400A	na	na	na	TB	300	480-208/120	MDP	208/120	800
						2000	100A				TB1	75		WH		200
B7	Food & Bev.	SB	B.L.2. 610D	S	480/277	400	50A	HA2	480/277	100	TA1	30	480-208/120	A2	208/120	100
B8	Food & Bev.	ACB	C.A.2. 660	DBTR1	480/277	800	100A	na	na	na	na	75	480-208/120	S1	208/120	200
B9.1	Food & Bev.	ACB	C.A.2. 660	DBTR1	480/277	800	200A	HA	480/277	200	na	na	na	A1	208/120	200
B9.2	Food & Bev	ACB	C.A.2. 660	DBTR1	480/277	800	400A	HDP	480/277	300	na	225	480-208/120	DP	208/120	600
B10	Retail	ACB	C.A.2. 660	DBTR1	480/270	800	100A	na	na	na	T-CBFN	30	480-208/120	ACB FN	208/120	100
														LA		100
B11	Retail	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
C1	Food & Bev.	CPC	C.A.2. 850	H	480/277	100	40A	na	na	na	na	45	480-208/120	KIOSK	208/120	60
C2	Food & Bev.	CPC	C.A.2. 820	DBTR3	480/277	400	250A	MDP	480/277	250	T2	75	480-208/120	A/B	208/120	150
		ACB	C.A.2. 660	DBTR1		800	50A	H1		50	TL1	15		L1		50
C2A	Retail	CPC	C.A.2. 820	DBTR3	480/277	400	40A	na	na	na	na	30	480-208/120	A	208/120	100
C4	Food & Bev.	CPD	C.A.1. 1050	DBTR2	480/277	600	200A	HA1	480/277	200	TA1	45	480-208/120	A1	208/120	150
C5	Automated Vending	CPD	na	C.A.NHCC-R1	480/277	1000	100A	na	na	na	T-C2L	75	480-208/120	C2L	208/120	225

Space No.	Tenant Mix	Power Source						Power System at Concession								
								480v Panelboard			Transformer			208v Panel Board		
		Sub-station	Room No.	ID	Volts	Amp	OCPD Avail.	ID	Volts	Amp	ID	KVA	Volts	ID	Volts	Amp
C6	Automated Vending	CPD	na	C.A.NHCC-R1	480/277	1000	100A	na	na	na	T-C2L	75	480-208/120	C2L	208/120	225
C7	Automated Vending	CPD	na	CA-NHCC-R1	480/277	1000	100A	na	na	na	T-C2L	75	480-208/120	C2L	208/120	225
C8	Food & Bev.	CPD	C.A.1.900	CMNL 2A	208/120	100	na	na	na	na	na	na	na	na	na	na
C8-LL	Automated Vending	CPD	C.A.1.1065A	CA-NHCC-R1	480/277	1000	100A	na	na	na	T-C2L	75	480-208/120	C2L	208/120	225
C9	Food & Bev.	CPC	C.A.2.820	DBTR 3	480/277	400	100A	H	480/277	100	na	45	480-208/120	A	208/120	150
C10-LL	Food & Bev.	CPD	Na	CA-NHCD-R2	480/277	1000	200A	S15H	480/277	200	na	na	na	na	na	na

7.6 Fire Suppression

7.6.1 General Conditions

JWA is currently a fully- sprinklered facility. This section outlines parameters for sprinkler system design and installation for Tenants. Ensure that all policy and procedures outlined in the following section are adhered to.

The system is a wet pipe sprinkler system The Tenant spaces are not their own separate zones, but rather they are located within a larger concourse zone. During Tenant sprinkler modification the Tenant will be responsible for the notifications and fire watch necessary to provide a safe environment. Tenants to design up to Ordinary Hazard Group 1 per NFPA.

The fire sprinkler risers are provided throughout Terminal A & B in back of house areas such as Janitor's Closets, Mechanical Rooms, and Office areas. The fire sprinkler risers range from 2.5" to 3" black steel piping. Fire sprinkler risers serving Terminal C are located in near the public restrooms between Terminal B and Terminal C on both Arrival and Departure Levels. The fire sprinkler risers range from 4" to 6" black steel piping. No fire pumps are provided for the airport building.

The latest fire hydrant test report was conducted by Orange County Fire Authority (OCFA) in March 2016. The test was conducted on the south end of Terminal C. The hydrant flow test results were as follows:

Location: Southwest Tarmac
Static Pressure: 86 psi
Residual Pressure: 80 psi
Waterflow: 1,665 gpm
Available Flow @ 20 psig: 6,073 gpm
Hydrant: 6A

For the purposes of the anticipated tenant improvements, a new hydrant flow test will not be required if the project will consist of relocation, adding, or demolishing sprinklers for the project

area. It is understood that these minor changes would cause negligible changes to the existing hydraulic calculations.

The fire sprinkler risers provided for Terminal C have been sized for Ordinary Hazard - Group 2.

The fire sprinkler risers in Terminal A & B are primarily sized for Light Hazard and Ordinary Hazard – Group 1.

Individual Tenant spaces do not have Tenant specific sprinkler control valve and water flow switch. In order to complete Tenant work, the sprinkler zone will need to be brought off line. An approved fire watch will need to be coordinated and provided to conduct sprinkler tie in and/or modifications to the existing system.

Tenants are required to redesign the branch piping and head layout to suit the Tenant's ceiling and space layout and to connect to the Airport sprinkler system. Sprinkler shop drawing shall be submitted for review and approval and must include a material list and catalog cut sheets of materials being used including but not limited to pipe fittings, valves, alarm devices, etc.

Tenant to utilize a sprinkler contractor that meets the requirements for working inside JWA. The existing fire sprinkler system was installed by Johnson Controls. Other contractors will be considered, but will need JWA's credential review and written approval, prior to start of work.

The Tenant is responsible for the following:

A. Ansul system will be required for Type 1 hood and protection as deemed necessary by IBC Mechanical code and JWA. Ansul systems are required to be connected to the fire alarm system.
B. The Tenant shall provide hand fire extinguishers include Type ABC and Type K as required by code in the Tenant space. Show extinguishers and signage in the drawings.

7.6.2 Design Conditions

The Tenant's Sprinkler System design criteria shall be as follows.

A. The systems shall be designed in complete accordance with, and as defined by, NFPA and as required by the insurance underwriter and fire department. Systems shall be designed to provide for the minimum required water densities over the most hydraulically demanding rectangular area.
B. The systems shall be hydraulically designed by a licensed fire protection contractor using a water flow test provided by JWA.
C. Sprinkler shop drawings shall be stamped and signed by a professional engineer licensed in California. Sprinkler shop drawings and complete hydraulic calculations shall be provided for approval showing the proposed layout of piping based upon hydraulic calculations. For the purposes of the Tenant review and permit application, the engineer is to include the sprinkler head layout in the construction drawings.
D. Hydraulic calculations shall include a 10 (ten) psig margin of safety between the flow and pressure required for system operation and the available pressure flow. This margin of safety should include losses through water-service piping, valves, and backflow protection.

7.6.3 Specification Requirements

A. Service piping shall be standard weight Schedule 40 black steep pipe (ASTM A53, Grade B). Flex Heads, 36” max length, are permitted.
B. Vales shall be standard weight and materials, as required by NFPA, Under Underwriters Laboratory (UL) listed, FM approved.
C. Seismic protection of all sprinkler piping shall comply with the requirements of NFPA 13. The airport is considered an essential facility, ie a risk category IV structure with an importance factor of 1.5 and generally Exposure C for wind.
D. Furnish and install hangers and supports to attach all pipes securely to the structure in correct alignment and pitch, to prevent vibration, and to effectively provide for expansion and contraction per NFPA 13 & 14.
E. Piping supported from structural steel shall have beam clamps and hangers consisting of threaded rod. The sizes of supporting materials shall be suited to the sizes and materials of the piping supported. All hangers shall be UL/FM approved.
F. Sprinkler heads shall be UL listed and match the zone standard.
G. The type of sprinkler head used determines its location. The engineer is to provide sprinkler head selection according to guidelines below:
    a. Sprinkler heads in uninhabited areas without ceilings (i.e. Mechanical rooms, storage rooms, etc.) shall be of conventional design, upright style, and shall have a brass finish.
1. Sprinkler heads in unheated spaces with ceilings, including coolers and freezers, shall be dry pendant style.
2. Sprinkler heads in inhabited areas without ceilings shall be of conventional design, upright or pendant style, and shall have a polished chrome finish.
3. Sprinkler heads in inhabited areas with ceilings surfaces shall be concealed heads with covers to match ceiling finishes
    Custom paint to be approved factory finish. No field painting of sprinkler heads shall be permitted.
H. Sprinkler heads located in mechanical rooms, storage rooms, pump rooms, service areas, and where otherwise subjected to susceptible damage, shall be provided with guards.
I. All heads shall be centered, but in no case be located closer than 6” to T-bar suspension system.
J. Sprinkler head locations shall be coordinated with all surface mounted items, such as cornices, low soffits, and lighting fixtures and shall be located accordingly.

7.6.4 Fire Suppression Utilities Matrix

Space No.	Tenant Mix	Sprinkler Zone	Riser Number
A1	Food & Bev.	5	12
A2	Retail	5	12
A3	Food & Bev.	5	12
A4	Food & Bev.	4	11
		5	12
A5	Food & Bev.	4	11
A6	Retail	4	11
A7	Retail	4	11

Space No.	Tenant Mix	Sprinkler Zone	Riser Number
A8	Retail	4	11
A9	Automated Vending	15	na
A10	Automated Vending	15	na
A11-LL	Automated Vending	15	na
A12	Food & Bev.	3	10
A13-LL	Automated Vending	4	11
A14	Retail	4	11
B1	Food & Bev.	3	10
B1-LL	Food & Bev	3	3
B2	Retail	2	8
B3	Retail	2	8
B4	Retail	2	8
B5	Food & Bev.	2	8
B6	Food & Bev.	1	7
B7	Food & Bev.	1	7
B8	Food & Bev.	12	24
B9.1	Food & Bev.	12	24
B9.2	Food & Bev	12	24
B10	Retail	1	7
B11	Not Used	na	na
C1	Food & Bev.	13	25
C2	Food & Bev.	13	25
C2A	Retail	13	25
C4	Food & Bev.	14	26
C5	Automated Vending	14	26
C6	Automated Vending	14	26
C7	Automated Vending	14	26
C8	Food & Bev.	14	26
C8-LL	Automated Vending	9	15
C9	Food & Bev.	14	26
C10-LL	Food & Bev.	7	13

7.7 Fire Alarm

7.7.1 General Requirements

This section outlines the parameters for the fire alarm design and installation for Tenants. Tenants must provide a separate fire alarm plan as a part of the electrical set of contract documents and ensure that all policies and procedures outlined in the following section are adhered to.

The Tenant spaces are not their own separate zones, but rather they are located within a larger concourse zone. Tenants are required to redesign the fire alarm system to address their space layout and tie into the fire alarm zone. Fire Alarm shop drawing shall be submitted for review and approval.

The existing EST3 Fire Alarm/Mass Notification (FACP-01, Node-01) panel is located in the North Main Electrical room by Terminal A on the Arrival Level. Other subpanels for the fire alarm system are located throughout the terminal spaces in areas such as electrical rooms or back of house areas. These panels serve their programmed fire alarm zones and report back to FACP-01. Manual pull stations are located at exits and spaces throughout the Terminals.

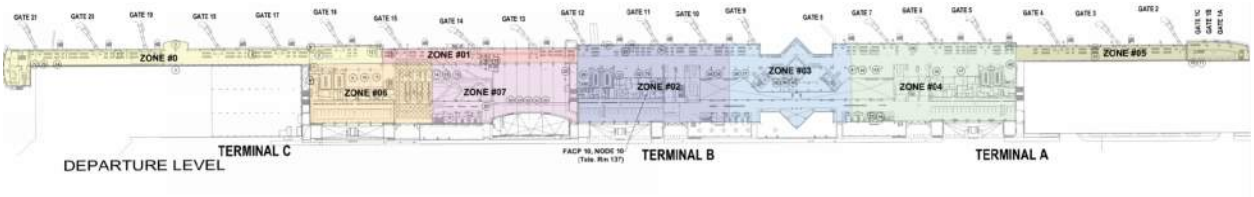
Tenant areas that are open to the concourse will be covered by the existing emergency voice/alarm communication system. Back of house area will require that the existing fire alarm/emergency voice system be modified to add additional fire alarm notification appliances for areas that cannot meet the intelligibility and visual alarm requirements. Voltage drop and battery calculations are required by the fire alarm contractor.

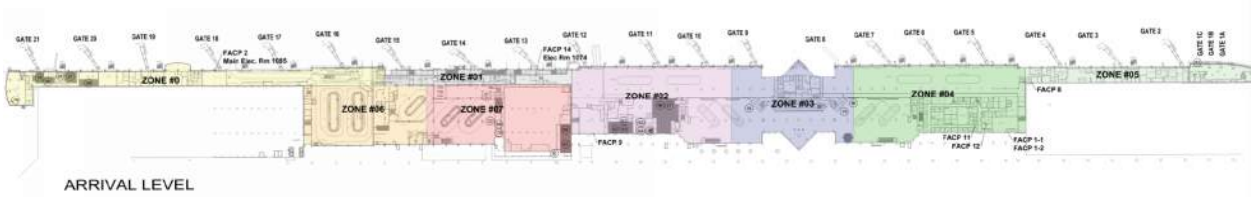
The existing Fire Alarm system was installed by Johnson Controls, other contractors will be considered, but will need JWA's credential review and written approval, prior to start of work.

Tenant to utilize a fire alarm contractor that meets the requirements for working inside JWA.

A. The Tenant shall provide all labor and materials required to interconnect the Tenant space and equipment with the airport fire alarm system.
B. Tenants are not to provide a Fire Alarm Control Panel (FACP).
C. Tenants are responsible for reprogramming as needed at the head end to recognize properly the Tenant space and associated devices.
D. Visible notification devices to be provided in Tenant spaces in conformance with CBC 907.5.2.3.
E. Any specialty fire suppression systems such a kitchen hood suppression system must be monitored and report to the main fire alarm control panel.
F. Except as otherwise noted, all cable shall be installed in EMT conduit (indoors) and GRC (outdoors).
G. All mounting heights shall conform to the requirements outlined in NFPA, and ADA.

7.7.2 Fire Alarm Zones Matrix





Space No.	Tenant Mix	Fire Alarm Zone
A1	Food & Bev.	#5
A2	Retail	#5
A3	Food & Bev.	#4
A4	Food & Bev.	#4
A5	Food & Bev.	#4
A6	Retail	#4
A7	Retail	#4
A8	Retail	#3
A9	Automated Vending	#5
A10	Automated Vending	#5
A11-LL	Automated Vending	#5
A12	Food & Bev.	#3
A13-LL	Automated Vending	#4
A14	Retail	#4
B1	Food & Bev.	#3
B1-LL	Food & Bev	#3
B2	Retail	#2
B3	Retail	#2
B4	Retail	#2
B5	Food & Bev.	#2
B6	Food & Bev.	#2
B7	Food & Bev.	#2
B8	Food & Bev.	#7
B9.1	Food & Bev.	#7
B9.2	Food & Bev	#7
B10	Retail	#1

Space No.	Tenant Mix	Fire Alarm Zone
B11	Retail	na
C1	Food & Bev.	#0
C2	Food & Bev.	#6
C2A	Retail	#6
C4	Food & Bev.	#0
C5	Automated Vending	#0
C6	Automated Vending	#0
C7	Automated Vending	#0
C8	Food & Bev.	#6
C8-LL	Automated Vending	#0
C9	Food & Bev.	#0
C10-LL	Food & Bev.	#7

7.8 Lighting

Lighting is a crucial design feature in creating a pleasant experience and should be designed to illuminate the facility and its products, without shining into the eyes of guests or causing glares or distractions. In addition to architectural lighting, Tenants must consider accent lighting to enhance visual merchandising and display of food.

Tenant storefront lighting facing the concourse shall be programmed via the networked timeclock for full brightness during normal operating hours and lower dimmed levels for evening hours.

Tenant's shall maintain proper operation, aiming, and adjustment of storefront display lighting at all times. Tenant shall ensure light fixtures are aimed to highlight merchandise and or display scenery and to minimize spill light and glare beyond the storefront.

ITEMS TO BE CONSIDERED:

- Conceal architectural lighting to prevent direct views to light source.
- Socket shadows are prohibited.
- Surface mounted fixtures are prohibited.
- Moving lights or components are prohibited.
- No lighting shall be installed outside the Tenant's lease line.
- Creative use of indirect lighting is highly encouraged.
- No bare bulb lighting shall be installed unless decorative type with JWA approval.
- Pendant lighting is allowed as a design feature.
- All Tenant lighting shall be controlled separately and illuminated only during time periods specified by JWA.
- Track type lighting must be recessed in a pocket within the Tenant's lease line.
- Display cases must integrate shielded lighting and be vented appropriately.
- Brightness levels of all light fixtures will be subject to JWA's approval.
- Tenants must select energy efficient lamping types, with color rendition subject to JWA's approval.
- All lamping to have a considered and consistent light quality color temperature.

A. JWA prefers indirect lighting to be incorporated into the design as much as possible. When indirect lighting is not possible, Tenant shall provide a diffuser to mitigate glare. No housing or bulbs exposed unless the intended fixture design warrants such as an Edison bulb.
B. Recessed downlights shall be used for storefront illumination and shall be accommodated with a specular or semi-specular alzak cone, and may be adjustable. Lamps shall not be at or below the ceiling line. Lighting to be LED, warm white with a lamp temperature of 3,000K to 3,500K. The use of decorative type lighting, such as chandeliers, pendant or wall units or clear-type glitter strips are permitted only if the location is approved by the DRC and such fixtures are specified with a lower lamp temperature of approximately 2,700K, include a diffuser and are low lumens. Strobe, spinner, or chase type lighting is not permitted. Luminous ceilings are not permitted. Recessed fixture frames must be flush and visible housing or trim must be ordered or painted to match adjacent surfaces.
C. Exposed fluorescent tube strip lighting is not allowed in sales or public areas. All lighting in food service areas shall have protective covers, globes, diffusers, or shields.
D. Track lighting is strictly prohibited. Track lighting may be used above open cell or baffle ceilings where tracks and arms are not fully concealed.
E. All continuous LED strip lighting must be fully recessed within a cove and have appropriate diffusers to avoid hot and shadow spots and to prevent visible dot patterns.
F. To retain and protect the visual environment of the area for the benefit of all Tenants, each individual Tenant shall control the brightness of the Tenant's lighting fixtures which shall be subject to the approval of the DRC.
G. All pendants shall have wires and cable system clamped together to keep a clean and unified appearance.

7.9 Acoustics

Tenants are required to minimize the transmission of sound from its space to the concourse and adjacent tenants. The Tenant must provide the following as a minimum:

1. Noise Criteria (NC) level outside the Tenant space as a result of the HVAC system should be limited to NC 40 to any adjacent space.
2. HVAC systems and equipment installed with vibration isolators.
3. Maintain a minimum STC 40 demising wall unless otherwise noted.
4. Minimum partition STC for critical noise adjacencies such as food and beverage, cleaning areas, and dishwashing shall be STC 55 with consideration for plumbing noise vibration isolation. Higher STC values may be required based on space planning.
5. Demising walls between Tenants and Public space shall maintain the following STC rating:

	Between Tenants	Public
Office	40	40
Restroom	50	50
Dining/Bar	50	50
Quick Serve	45	50
Kitchen	55	55
Retail	40	40

7.10 Information Technology / Communications

7.10.1 General Requirements

The telecommunication infrastructure pathways are located on the arrivals level and connect to the MDF and various IDF locations on this level. There are 08 existing IDF rooms that serve the concession spaces. Below is a list of locations:

Terminal C

A. IDF 1089
B. IDF 1086

Terminal B

A. IDF 1081
B. IDF 1063
C. IDF 1073
D. MPOE South

Terminal A

A. MDF
B. 1124

Additional IDF rooms are located in the Airline office spaces. The MPOE South IDF room has capacity for additional racks. Tenants to run fiber from the nearest MDF to the Tenant space for internet, phone, and television programming.

All cabling runs and pathways (i.e. data, communication, etc.) shall be supported within cable trays (first option) and/or rigid conduits (second option) that are detailed and designed per the requirements of the current adopted and governing codes. The use of J-hooks are not permitted at the airport without written approval from JWA and should only be used when cable trays and/or conduits are not physically possible. If used, J Hooks shall be lock type (top lock) seismic restraint and details of its attachment to the non-structural or structural framing must be provided.

Any cabling added and/or installed within an existing cable tray shall not exceed 50% of the cable tray's allowed capacity and shall be within the correct designated and/or assigned cable tray (i.e. existing cable trays are designed for Tenant/airline use only, for security purposes only, etc.)

All cabling shall be marked and labeled every 20'-0" to 40'-0", especially within the same room with appropriate label (wrap) (i.e., Tenant's name, etc.) and 3'-0" from a wall space penetration and at the start and ends of the run. In general, all cabling shall be clearly, accurately, and neatly identified, labeled (i.e. typewritten), and bound when installed at the airport.

All cabling within a plenum space and/or corridor shall be plenum rated and all non-plenum rated cables shall be within rigid conduits.

All cabling routes shall be clearly outlined and depicted within the construction documents with reference details identified, including details reflecting all penetration conditions (i.e. wall, floor, etc. – both non-fire rated and fire rated conditions). Any penetration created by cabling runs and

pathways (i.e. cable trays and/or rigid conduits through fire rated walls, ceilings, etc. shall be re-fire rated with a currently approved system (fire-stop).

7.10.2 Contactless Technology

Contactless technology including but not limited to, biometrics, tap to pay, crowd control metering, etc must meet all applicable code requirements and is subject to the DRC review and approval.

7.10.3 Stock Control Security Systems

All Tenant stock control systems must be approved in writing by the Tenant Development Manager Audible alarms are not permitted. Stock control security systems must be concealed with the floor, ceiling, storefront columns or other decorative structures. Freestanding systems are not permitted.

7.10.4 People Counters

People counters must be limited to applications mounted in the ceiling over the entry portal. Freestanding systems are not permitted.

7.10.5 Cable / Satellite Television and Music

Tenants using speakers for the purpose of providing quiet background music for their patrons' enjoyment must take precautions to ensure that sound vibrations are not transmitted to adjoining tenancies or public spaces. Sound systems are not permitted at kiosk locations.

- No music or audio from devices can be heard from outside the lease line and any audio is subject to approval by JWA.
- Any feed for TVs needs JWA approval.
- All TVs/Monitors to be closed caption only (no audio).
- Freestanding Tenant security devices or security systems, if any, shall not be installed or placed in operation unless the Tenant has specifically received JWA's prior written consent as to the size, location, and design of such devices.
- Tenants are required to integrate TVs within mill-work or adjacent wall finishes subject to JWA review and approval.
- Monitors within Tenant spaces DRC step approval.

7.10.6 IDF Location Matrix

Space No.	Tenant Mix	IDF Location
A1	Food & Bev.	1124
A2	Retail	MAIN DATA ALI220
A3	Food & Bev.	MAIN DATA ALI220
A4	Food & Bev.	MAIN DATA ALI220
A5	Food & Bev.	MAIN DATA ALI220
A6	Retail	MAIN DATA ALI220
A7	Retail	MAIN DATA ALI220
A8	Retail	MAIN DATA ALI220
A9	Automated Vending	1124
A10	Automated Vending	1124

Space No.	Tenant Mix	IDF Location
A11-LL	Automated Vending	1124
A12	Food & Bev.	S MPO
A13-LL	Automated Vending	1063
A14	Retail	MAIN DATA ALI220
B1	Food & Bev.	S MPO
B1-LL	Food & Bev	MAIN DATA ALI220
B2	Retail	S MPO
B3	Retail	S MPO
B4	Retail	S MPO
B5	Food & Bev.	1073
B6	Food & Bev.	S MPO
B7	Food & Bev.	1073
B8	Food & Bev.	1063
B9.1	Food & Bev.	1063
B9.2	Food & Bev	1063
B10	Retail	1063
B11	Retail	na
C1	Food & Bev.	1081
C2	Food & Bev.	1081
C2A	Retail	1081
C4	Food & Bev.	1086
C5	Automated Vending	1089
C6	Automated Vending	1089
C7	Automated Vending	1089
C8	Food & Bev.	1081
C8-LL	Automated Vending	1089
C9	Food & Bev.	1081
C10-LL	Food & Bev.	1063



Chapter 8 – Construction Rules and Regulations

8.1 Purpose

JWA strives to maintain safe and pleasant operating facilities during any development. This requires all projects to maintain clean, safe, and, when working around our guests, hidden work sites that do not attract attention from the general public, media, and staff. In addition, Contractors must meet JWA quality standards detailed in this document and must implement necessary standard practices during development to provide JWA with quality final products. This document provides direction in performing work at JWA while fulfilling the aforementioned requirements. JWA may, at any time, alter the requirements of this document based upon the requirements of each project. Requests for Exceptions from specific requirements of this document shall be formally submitted to JWA for approval.

8.2 General Standards and Prohibitions

A. Powder actuated fasteners are prohibited at JWA.
B. Elevators may not be utilized to move equipment between levels.
C. All personnel must comply with Federal, State, and Local Regulations for airport security. Tools that are transported and utilized in the sterile areas can only be left in sterile areas if secured inside locked tool boxes and chests located within secured (i.e. locked) worked areas.
D. Contractors must provide their own equipment, office furnishings, and supplies for personnel, including computers, cell phones, radios, hot spots, and other equipment necessary for work. Connectivity will not be provided by JWA. Upon completion of project, Contractor shall vacate premises and remove all furnishings, equipment, and supplies.
E. Only non-combustible material (i.e. no timber/wood) shall be used for both non-structural or structural elements, unless otherwise specifically approved by JWA. If approved by JWA, such materials shall only be for non-structural elements and must be fire retardant treated.
F. When dissimilar metals are in contact (e.g. aluminum and steel), dielectric separators/barriers along with bi-metal fasteners and connections shall be provided to avoid galvanic corrosion.
G. Vertical non-structural and structural elements within the airport facilities shall satisfy the drift or displacement requirements stipulated within the current and adopted governing codes for the State of California, but not more than L/240 or 1% of the non-structural and structural element height.
H. All equipment and components designated as seismic systems that are subject to the requirements of ASCE 7-10 13.2.2 or are specifically identified to remain operable after the design earthquake shall require special seismic certification.

8.3 General Scheduling

JWA has ongoing, separate projects that may be underway during the implementation of this project. It will be the responsibility of the Contractor to coordinate with JWA and schedule work so as not to interfere with the implementation of other projects. Any overlapping work shall be coordinated with JWA.

The Contractor shall plan for limited work during peak travel times in the Project Schedule. These include Thanksgiving, Christmas / New Year Holidays.

The Contractor is responsible for scheduling weekly construction progress meetings with all involved stakeholders.

8.4 General Work Hours within Terminal Complex

In addition to work hours contained in the GENERAL REQUIREMENTS, the following hours apply to the Terminal complex:

- Daytime working hours within the terminals for work that does not disturb guests and/or hinder airline/tenant/concession operations (e.g. work that includes loud noises, dust, disruption of use, odors, visual exposure to work, or any other nuisance) may be between 5:01 AM to 10:59 PM with JWA approval.
- Night time working hours within the terminals and for the airfield shall be between 11:00 PM and 5:00 AM, unless otherwise approved by JWA.
- Utility cutovers and interruptions shall be performed between 11:00 PM and 4:00 AM.
- Work not conforming to the above working hours requires approval by the JWA representative(s). Provide written request 14 calendar days prior to such work to allow for arrangements to be made.
- Work outside of public areas can generally occur during all hours, but is subject to the availability of staff and approval by JWA.
- Demolition and any work that is noisy, dusty or produces odor / fumes must be completed during night hours only. Other, quieter work can be done within work sites with Temporary Construction Barriers during the daytime, subject to approval by JWA.

8.5 General Disruptions

In all cases, the concessions (i.e. vendors) and tenants (i.e. airlines, JWA, TSA, CBP) must remain in operation. If work is required within tenant and concession spaces, Contractor must propose plan to keep concessions and tenants in operation via temporary relocation or rearrangement of the space, subject to approval by JWA and affected parties. Tenants will be responsible for own FF&E and merchandise, but associated costs incurred are the responsibility of the Contractor.

Restrooms and exits must remain accessible, unless they are subjects of the work required. If restrooms and exits are taken out of service by the work, Contractor must provide temporary signage to direct guest traffic to the nearest available alternative(s).

8.6 Traffic Control

Contractor shall be responsible for traffic control, including all materials and equipment necessary, and must submit a Traffic Control Plan for review and approval by JWA where work interferes with JWA roadways.

8.7 Laydown, Staging, and Parking

General laydown, staging, and parking will be made available based on current availability. The primary site for trailers, laydown (for receipt, storage, and partial assembly of bulk materials and equipment), and parking is located at the vacant surface lot south of Parking C. Access is available via Airport Way to Cargo Access. If additional parking is necessary, Contractor must request for additional Contractors will be required to submit plan(s) detailing expected usage, time periods, and approximate footprint of sites required. parking areas. Contractor shall be

responsible for busing personnel between parking and work areas. Contractors will be required to submit plan(s) detailing expected usage, time periods, and approximate footprint of sites required.

Additional, sterile side staging sites will be provided, if available, in areas between gates where space and operations will accommodate necessary short-term storage. Contractor must submit plans showing spaces and time periods required. Adjacent laydown spaces may not be utilized unless a gate exists between them and are subject to availability. Due to the limited availability of space within the sterile area, Contractors should only plan to utilize a few of the sterile side staging sites for multiple nearby work areas (e.g. one staging area for three nearby work areas).

Use of laydown/staging sites requires that the Contractor does not hinder normal airline and airport operations without approval, does not block Ground Service Equipment, chargers, panels, doors, other means of egress, and does not pose a risk to personnel, nearby equipment, and the facility.

Contractor shall furnish and install temporary fencing on k-rail with a total combined height of 8’ and with gates to enclose laydown and staging areas. Contractor shall not hold JWA liable for any theft, losses, or damages that occur in laydown and staging areas.

Materials, equipment, and trailer deliveries to sterile work areas shall occur through the Paularino Gate or Loop Gate (upon request only for large items such as trailers). Upon request and approval, the Cargo Access Gate may be utilized if security personnel are present. Delivery drivers and vehicle identification will be required for access. Only Contractor personnel who are authorized to drive in sterile areas will be allowed to transport materials, equipment, and personnel. In addition, Contractors must ensure compliance with insurance requirements for all vehicles accessing the sterile area.

All laydown, staging, and parking areas must be kept clean at all times. Production of Foreign Object Debris from these sites may result in damages to aircraft and property. Contractor will be liable for all damages that occur.

8.8 Access to Restricted Areas and Construction Sites

All personnel will be required to procure JWA Secure Identification Area (SIDA) badges in order to be on site when working in sterile areas and areas that require badge access. Personnel unable to pass background checks and/or the SIDA testing process are subject to termination from the project. While Contractor personnel will be given majority access to the JWA site, some areas require special access requests and/or JWA escort in order to enter. These areas include electrical, security, information technology (IT) infrastructure distribution, Transportation Security Agency (TSA) Explosives Detection System (EDS), security closets, and Customs and Border Protection (CBP) areas.

Some areas of JWA are accessible only by utilizing a physical key. In such cases, Contractor must submit a letter to the JWA Project Manager requesting key checkout access for specific personnel. When access to keys is granted, Contractor may check out keys from the OC Sheriff’s on-site office in the Terminal A Administration Offices area. An official picture identification card will be required as collateral when checking out keys.

Requests for access to TSA and CBP areas may include a secondary screening process that will require a Location Access/Shutdown Request (LASR) form that details the reason for access, dates and times of access, and additional information from personnel (provided in a separate, secure document). CBP will require all personnel to submit the following information for review:

- Full legal name
- Date of Birth
- Ethnicity
- Social Security Number

The required information shall be submitted in a secured password protected format (i.e. password protected Word document) to the JWA Project Manager, who will then coordinate review with CBP.

Requests for access may require up to three (3) weeks, depending on the amount of personnel requiring access and any issues that may result from the secondary screening process. Please process requests in as few requests as possible, as supplemental requests may be rejected by TSA and CBP.

JWA reserves the right to enter construction sites or storage areas at any time. Ensure that all access information is provided to the JWA PM and CM and updates are given when locks or codes are changed. All personnel visiting construction sites will be required to adhere to Personal Protective Equipment (PPE) requirements.

8.9 Utility and Location Shutdowns

Utility shutdowns require filing of a Utility Shutdown Request (USR) form (Exhibit B) at a minimum of 14 working days prior to the shutdown. Dates and times of shutdowns will require review and approval by stakeholders prior to commencement.

Location shutdowns (any area currently in use that must prohibit access due to work) require filing of a Location Access/Shutdown Request (LASR) form (Exhibit C) at a minimum of 14 working days prior to the shutdown. Dates and times of shutdowns will require review and approval by stakeholders prior to commencement.

Any utility or location shutdowns within the CBP Federal Inspection Facility (FIS) will require filing of forms at a minimum of 21 calendar days prior to the shutdowns. Dates and times of shutdowns will require review and approval by stakeholders prior to commencement. In addition, CBP will require all personnel to submit personnel information for review as mention under part 45 of this document.

The HVAC system must remain in balance if soffits are opened for work. Air handlers cannot be shut down unless they are part of the work. A Fire Watch is required whenever fire protection systems must be taken out of service for any length of time. Contractor shall provide a shutdown schedule with a USR to JWA. Following approval by JWA, JWA Maintenance will manage all shutdown procedures, with joint coordination with the Contractor.

Escalators and elevator shutdowns shall be coordinated with JWA's maintenance schedule, if feasible. Shutdowns will require a LASR that depict escalators and elevators that will be shut

down, time periods, paths to alternate means of conveyance, and a temporary signage plan to redirect guest traffic to alternate means of conveyance.

8.10 Baggage Handling System Conflicts

It will be the responsibility of Contractor to remove and replace or work around existing baggage handling conveyors.

Conveyor belts may be shut down for a time with porters to move bags to adjacent takeaway. Contractor shall be responsible for all associated costs.

Shutdowns will require a LASR highlighting sections of the belt that need to be shut down, time periods for each section, and baggage portering paths.

8.11 Hot Work & Welding

Hot work permits will be required for all hot work, including but not limited to welding, grinding, cutting, and brazing.

Hot work shall not be performed when the sprinkler system is down in the same zone.

The Contractor's Safety Officer shall submit the hot work plan with the JWA required Project Specific Safety Plan in accordance with the GENERAL REQUIREMENTS.

No work shall be started without signed-off approval by JWA.

All welding shall be done by welders qualified by American Welding Society (AWS) and certified by certified testing agencies. Welder certifications and Welding Procedure Specification (WPS) must be reviewed and approved by the Engineer of Record, and provided to JWA for conformance review. In addition, the following welding requirements must be followed:

- 100% fire watch will be required on both levels where welding is occurring and deck is open.
- Individuals on fire watch will have radio communication; at no time shall fire watch be off duty, not even on breaks.
- Smoke sensors shall be utilized for indoor welding and exterior welding in close proximity to building smoke detectors.
- Fire stopping shall be put in place on openings between levels when not working.
- Ensure access with security badge for responsible parties in emergencies.
- Report all potential safety hazards to on-site JWA Safety.
- Combustibles are prohibited in area of work.
- At the end of hot work, area shall be moistened with water and actively monitored for 30 minutes.
- Welding work shall be enclosed for the safety of guests, staff, and other nearby personnel.
- Work shall be scheduled so as not to disrupt pedestrian traffic in adjacent areas at the same time.

8.12 Coring, Trenching, and Excavations

Contractor must coordinate with JWA scope of work outside of their leasehold as outlined in the drawing package submittal procedures. All work outside the leasehold will be performed by OCPW as indicated in this document, unless approved in writing.

Prior to coring, trenching, and excavations, the Contractor is responsible for and is required to use an independent utility locating service to location all utilities within the impacted area(s). The independent utility locating service shall provide certification that it has located all utilities in the impacted area(s) and the Contractor must depict all discovered utilities accurately on Redlines/As-built plans for submission to JWA for review and approval prior to commencement of coring, trenching, or excavations. In addition, for utilities requiring external agency notification, coordination, and approvals, the Contractor must provide proof of notification, coordination, and reviews by external agencies.

Contractors must protect and maintain services for all existing utilities during the progress of the work and shall be fully responsible for any and all damages to utilities and facilities during the course of the work. Contractors shall provide sufficient available on-call specialty Contractors to repair any damages that may occur prior to the commencement of daily daytime operations. If repairs cannot be completed by this time, on-site JWA or JWA representatives must be notified immediately and the Contractor shall be fully responsible for any and all claims that are a result of the damages.

In addition, the following apply:

- No coring of any kind through existing non-structural or structural elements (e.g. slabs, beams, columns, etc.) shall occur without approval from JWA. For all cored penetrations that are approved by JWA, these coring locations must be clearly identified on the drawings with dimensions, size, etc. As-built drawings can be provided upon request for reference. Using non-destructive methods (e.g. ground penetrating radar (GPR), x-ray, etc.), locate and identify all existing reinforcing, post tensioned tendons, etc. within the structural element to avoid cutting, damaging, or chipping the existing structural elements.
- For new post installed anchorage (e.g. mechanical or chemical anchorages, etc.) into existing concrete, via non-destructive methods, locate and identify all existing reinforcing, post tensioned tendons, etc. prior to post installation of the new anchorage to ensure that the new anchorage does not cut, damage, or chip the existing structural elements.

8.13 Damage During Construction

Contractor is responsible for investigation of any surface and its associated subsurface prior to establishing penetrations, including but not limited to coring, drilling, saw cutting, and jack hammering.

Contractors will be financially responsible for and must repair, to the satisfaction of JWA and to current JWA and code standards, all damage to existing property, equipment, and materials, including but not limited to finishes, structure, pavement, roads, bridges, utilities, raceways, furniture, millwork, signage, lights, electronics, and any other projects impacted by its work. Damages that occur with utilities and systems must be reported and repaired immediately.

Contractor is responsible and liable for all injury to persons and damage to property resulting from their operation.

Reporting of damage and incidents must be made to the JWA PM and CM prior to undertaking repairs. Any associated costs incurred by JWA shall be reimbursed by the Contractor.

8.14 Other Agency Coordination

Contractor is responsible for coordinating determining, completing, and submitting required other agency forms during the course of the work, including FAA Form 7460 for penetration of imaginary surfaces by the work, FAA Form 5370 for Construction Progress and Inspections, WH-347 for Contractor's Payroll on Federally aided contracts, SF-1445 for Davis-Bacon compliance, and any other necessary forms.

8.15 Quality

Quality is a primary criterion of acceptance for all projects and must be continuously maintained during projects. Strict conformance with bid documents is required of all projects. Contractors are required to maintain a quality control program, which must be detailed in a Quality Control Plan (QCP) that is submitted to JWA for review and approval. If work is contained behind walls without interior access, the work must pass inspection prior to closing of walls. Failure to do so will require demolition of walls and finishes to complete inspections at no additional cost to JWA. Any portion of projects found to be non-compliant with code and non-conforming with the project documents will require remediation at no additional cost to JWA. In addition, Contractors will be responsible for reimbursing JWA for all costs incurred due to repeat of work and inspections.

To achieve excellence and a successful outcome on a project, it is essential that all projects at JWA meet or exceed our standards. Most unsuccessful projects attempt to only address schedule and cost without realizing that quality is what drives both schedule and cost. After all, if tasks only need to be completed once and if the owner can accept work product without issue, a Contractor has just saved both time and money that would otherwise be spent fixing problems. Below is the general flow of Quality Control and Assurance on a project:

- Evaluate the work environment to understand the level of quality JWA expects. In addition, discuss with JWA what the expectations are prior to creating the QCP.
- Create a feasible QCP that addresses JWA's requirements, but is also truly possible to complete with construction work processes.
- Establish an understanding with field personnel and continuously remind them of the quality requirements.
- Provide sufficient superintendence and quality control throughout the project. Do not allow flawed work to continue with hope that the client will not identify the flaws. JWA utilizes three layers of Quality Assurance, including field observation by third-party inspectors, field supervision by Construction Managers, and punch list creation by multiple stakeholders. Some flaws may require Contractors to demolish the entire field of work in order to remedy the root cause.
- When code inspections and repairs are complete, Contractors are allowed to request an initial Quality Assurance Inspection with the Construction Manager. This inspection will allow Contractors to identify and remedy issues in relation to the Contract Documents, scope, and other Agreement obligations prior to meeting with the Owner. When the

Construction Manager deems the Quality Assurance Inspection complete, the Contractor may request an Owner's Punch List Inspection. If there is no Construction Manager on a project, Contractors may proceed to directly to the Owner's Punch List Inspection.

- Prior to commencing an Owner's Punch List Inspection, Contractors must have already remedied any issues identified in stages prior. If the Owner identifies three or more issues, the Owner's Punch List Inspection is immediately cancelled and returned to Quality Assurance Inspection or to the Contractor for remediation. Do not confuse the Quality Assurance Inspection with the Owner's Punch List Inspection. The two inspections are not interchangeable. Any issues identified during the Owner's Punch List Inspection may override any acceptance of items from prior inspections.
- Quality Assurance (QA) is not Quality Control (QC). JWA's QA inspections are utilized to assure Contractors have complied with the documents, with codes, and with standards on a Contractor's quality of work that includes QC by the Contractor. Contractors will be subject to reimbursing JWA for additional costs incurred when work is found to be non-compliant or where repeat inspections are required.
- Owner's Punch List issues must be tracked using location information, quantities, a detailed description, and pictures of the issue and their remedies. This information must be logged and turned over to JWA at the completion of the project. Once the Owner's Punch List is completed and all issues have been found to be corrected, JWA will issue a Notice of Completion.
- Keep field Redline/As-built plans and specifications current with all RFIs, Change Orders, field orders, and any other alterations from the Bid Set on a daily basis. Redline/As-built plans and specifications may be audited at any time by JWA. Contractors are required to bring Redlines to code inspections and Owner's Punch Walks, and they must be verified to be accurate prior to enclosing spaces. Failure to do so will result in demolishing enclosures and finishes in order to field verify changes at Contractor's cost, and will also result in short pays of invoices. Failure to rectify any issues will result a total contract amount reduction of up to 3%. Keeping Redlines current will also assist with more timely completion of Record documents.
- After Notice of Completion is filed, the Contractor has 30 calendar days to complete and turnover all Redline/As-built documents, Record documents, Operations & Maintenance Manuals, Warranties, attic stock, keys, and any other items required by contract. Failure to correct issues found on these documents or failure to turnover any of the required documents will constitute a forfeiture of up to 3% of the total agreement amount by the Contractor.

8.16 Redlines & As-Builts

Redline/As-built Plans are defined as field verified plans that have been redlined/marked to reflect all changes affecting the plans used for bidding, including but not limited to changes made by submittals, Requests for Information, Change Orders, field orders, general repairs and relocations, and discrepancies from the Permit Set discovered in the field. Redline Plans must be accurate, show actual routing, show actual sizing, show dimensions, and other relevant details information necessary to discern where things reside, what they are, what they are connected to, and quantities. Redline Plans that contain only clouds and indications of what documents affect specific areas are strictly prohibited.

Redline/As-built Specifications are defined as specifications which are redlined/marked to reflect all changes affecting the specifications used for bidding, including but not limited to changes made by submittals, Requests for Information, Change Orders, field orders, general repairs and relocations, and discrepancies from the Permit Set discovered in the field. Redline Specifications must indicate final products utilized, including but not limited to manufacturers, model numbers, and pertinent changes to submittals, warranties, operation & maintenance manuals, control sequences, and specific product requirements.

Contractors are required to keep Redline/As-built Plans in ARCH E1 size (30”x42”) and Specifications in Letter size (8.5”x11”) current and accurate on a weekly basis (subject to audit by JWA, CM, and/or JWA representative), prior to closing spaces, and prior to any inspections.

Site conditions not reflected on Redline Plans and Specifications prior to enclosing areas will require demolition of the enclosed area, field verification of all work complete, revisions to the Redline Plans and Specifications, and restoration of any demolished areas in accordance with documents and/or to match existing conditions (in compliance with current JWA and code standards) at Contractor’s expense.

8.17 Keys, Equipment, and other Assets

All keys for locks installed, including but not limited to keys for access panels, lock cores, equipment, hose bibs, and devices, are required to be turned over with identification tags that identify what the keys unlock with a general description, location(s) where the keys may be utilized (including room numbers), unique identifiers differentiating similar items (e.g. different sizes of access panels, any permanent markings, brands and/or models of equipment), and any other useful information. Materials, equipment, devices, and other assets must have identifying labels or tags that identify the manufacturer, model name, model number, color/style, location(s) of use (including room numbers), sizes, corresponding tags used on plans/schedules, and any other identifying attributes.

A corresponding transmittal detailing the hand over items, including items being handed over, aforementioned attributes, quantities, date of hand over, person(s) providing the items, person(s) receiving the items, and specification section or other documentation identifying requirement (if applicable). Completed (signed) transmittals must then be sent to JWA utilizing the Transmittals to JWA business process on Oracle Primavera Unifier.

8.18 Pre-Construction Meeting

Prior to scheduling the pre-construction meeting the following minimum requirements must be met. Additional requirements may be communicated in addition to those listed below.

1. Digital copy of permit set with OC Building and Safety stamp on each sheet.
2. Updated construction schedule
3. Contact information for the awarded general contractor and superintendents.
4. Documentation of the required insurance/bonds.
5. Safety plan

No changes shall be made to the 100% Construction documents without prior acknowledgment and or approval by JWA. During the pre-construction meeting the TDM will provide a distribution list for all RFIs depending on the scope of work, plans may be required to be revised and resubmitted to OC Building and Safety Plan Check. In other cases, a sketch sheet (SK) that is

signed and stamped by the Architect or Engineer of Record will be slip sheeted into the permit set which then becomes part of the as-built records along with the contractor's redlines to reflect changes in construction implementation based on field conditions. The Tenant is responsible for keeping an RFI log and for managing/ sharing RFIs.

RFI process with JWA shall be as follows:

1. Distribute RFIs to provided distribution list along with a current RFI log
2. TDM to communicate all RFIs to appropriate reviewer.
    a. Note: JWA review requires 5 business days.
3. TDM will notify Tenant of any RFIs requiring plan revision and resubmittal or will request for copy of a stamped SK for tracking purposes.
4. Tenant is responsible for reflecting all changes to the 100% Construction Documents in the Record Drawings.

8.19 Alterations to Base Building

A. The Tenant may not alter, remove, attach to, etc. the base building in any manner or fashion with-out written approval from JWA and County.
B. All required building system shutdowns such as electrical, HVAC, plumbing, fire protection and life safety systems must be requested in writing, coordinated with and approved by the Tenant Development Manager.
C. No depressed or trenched floor areas are permitted.
D. All fire ratings shall be maintained. Tenant team to provide fire penetration details as appropriate.
    a. The contractor shall be responsible for furnishing all material, labor, equipment, and services in conjunction with the selection and installation of a complete fully functioning code compliant UL-Listed, firestop assembly/ systems as required by project conditions.
    b. Each fire stop assembly / system shall have an "F" or "T" rating as required by each condition requiring fire stopping. Each fire stop assembly / system shall have a current UL listing as indicated in the latest edition of the UL fire resistance directory. Contractor shall verify acceptability of all fire stopping methods and system selections wit the AHJ prior to installation. The contractor shall install each firestop assembly/ system in accordance with the manufacturers printed instructions.
    c. Each fire stop assembly/system shall be labeled with fire stop manufacturer-furnished label on each side of the fire stopping systems depicting UL number etc.
E. No welding to base building structure.
F. No fastening without approval.
G. No alterations to base building systems are permitted without written approval. JWA maintains the right of approval for all fire alarm, sprinkler, and HVAC contractors.
H. No core drilling without written approval from the TDM. Slab must be scanned, conduit and rebar identified prior to preforming work.

8.20 Premises Accepted

The Tenant accepts the premises “As-Is” and shall document existing conditions and make provisions to remove, relocate, and replace as required. Any discrepancies from the LOD shall be immediately brought to the PA and TDM’s attention.

8.21 Barricades

Tenant is required to provide a temporary barricade in front of the storefront while the store is being constructed. Barricade height must fully conceal the Tenant storefront from view and helps to control dust and noise during construction. Barricade to be metal stud and drywall construction. Barricade door to swing into the Tenant space. Barricade graphics to be installed within 48hours after painting the barricade. Barricade paint color to be confirmed with the Tenant Development Manager.

The construction barrier must include the JWA “Arriving Soon” image program and TDM for approval prior to installation. Design professional and contractor signage is not permitted.

Barricades are required when working in operational public areas and shall have a “permanent” appearance to include the following requirements:

- Wall Construction: Level 4 drywall finish, 5/8” Type X GWB, 6” vertical studs and 3+5/8” bracing – 20GA. Provide carpet (backing side up) at underside of wall and supports to prevent scratching floors.
- Wall Color: Dunn Edwards “Antique China” DE 5490, or equivalent with approval by JWA. Two coats.
- Wall Base: 4” Vinyl Base Johnsonite “TA3 Castaway CB”
- Wall Alternatives: JWA will consider prefabricated barrier panels such as McCain Walls
- Wall Height: Height subject to minimal existing obstruction from 6’-11” above finished floor to a maximum bottom of slab 9’-6” above finished floor. Top of TCB shall be 8’-0” in consultation with JWA Facilities according to the field conditions/specific location.
- Doors: A single oversized solid core wood door that swings into the work area. Other types and quantities of doors to be reviewed and approved by JWA.
- Door Frame: Standard hollow metal
- Door Hinges: 1+1/2 pair butts; 4+1/2” x 4” per door
- Door Passage set: Best Lock 9K37W15DS3626 9K Series
- Padlock Hasp: Sized for No. 5 Masterlock Padlock
- Padlock & Key: Provided by JWA
- Accessories: 1+1/2” metal astragal, full height of door and floor center pin.
- Interference with existing conditions: Any signage and wall mounted fixtures affected by TCBs must be relocated and/or duplicated onto TCB walls or to other appropriate locations in close proximity to the original location to retain original function and compliance with applicable codes. Ground mounted fixtures, furniture, or other items affected must be relocated outside of the TCBs to locations that allow for continued use or to areas approved by JWA.
- Lighting: The interiors of enclosed work areas shall have lighting, fire protection systems, ventilation and exhaust systems for removal of smoke/dust during work. If existing lighting is blocked by the enclosed work areas, the Contractor must provide lighting to supplement the area lacking sufficient lighting.

- Artwork, Graphics, and Logos: No artwork, graphics, nor contractor logos will be allowed except as approved by JWA.
- ADA and Life Safety Compliance: ADA requirements and egress paths shall not be impacted by these work enclosures.
- Protection of Flooring: All flooring surfaces, especially marble and carpet within work areas, as well as construction access paths, shall be protected to prevent marring and for distribution of concentrated loading from the TCB and its supports.
- Installation: Installation of TCBs must be coordinated with JWA. 10 working day advance notification is required, including submission of plans showing TCB configuration, locations, phasing, relocations of existing fixtures/signs/equipment, and any other pertinent details. All work, including material delivery and installation, must occur during night hours only.
- Removal: TCBs must be removed at the completion of construction and sites must be walked with JWA for determination of necessary repairs.

8.22 Scaffolding

Scaffolding systems must be designed and stamped by a structural engineer, and shall be erected by a licensed subcontractor and in accordance to ANSI/ASSE. OSHA and other standards in accordance with the General Requirements.

All flooring surfaces, especially marble and carpet within work areas, as well as construction access paths, shall be protected to prevent marring and for distribution of concentrated loading from hard wheeled equipment and from scaffold legs/bases.

Access to certain scaffold systems may also be required to be logged for entry and exit of each personnel.

8.23 Housekeeping

Contractor shall clean-up after each shift. Clean-up shall be an ongoing activity. Contractor will be responsible to ensure that dust and dirt does not affect all areas outside of the work area, and will protect the areas using Visqueen or other methods.

8.24 End of Lease Return Policy

Prior to end of lease, the tenant shall coordinate a vacancy schedule and punch list walk with the TDM. The Tenant is responsible for removal of all furniture, branding and signage accessories. Flooring shall be vacuumed, swept, and mopped. The TDM will schedule a site visit to review the conditions of the vacated space and coordinate lock-out & tag-out of utilities. Should the Tenant desire to remove equipment or millwork, the Tenant will be responsible for any and all permits, and shall coordinate demolition with the TDM and receive approval from the Airport Director to remove items. No such work may occur prior to installation of a construction barricade.



Chapter 9 – Appendix

9.1 Utility Shutdown Request

John Wayne Airport - Orange County (JWA) planned utility shutdown and return to operational status process applies to all intentional and scheduled shutdowns of Airport Utilities that have the potential to adversely impact multiple JWA Divisions, guests, tenants, and contractors. Utility Shutdowns are temporary, planned interruptions of service and systems for the safe maintenance, testing, repair, and replacement of equipment or for construction improvements. Utilities affected include, but are not limited to: Power, Water, Gas, Sewer/Waste, Data, Phone, Stormwater/Drainage, and Grease Interceptors.

The USR process is intended to coordinate a scheduled and safe event by notifying all impacted stakeholders, mitigating potential risks and planning for unexpected contingencies, communicating effectively throughout the event, and achieving intended utility levels. Only JWA designated personnel can shut down a utility and schedule shutdowns of Airport Utilities that have the potential to adversely impact multiple JWA Divisions, guests, tenants, and contractors.

ATTENTION: To initiate a service request for a utility deactivation/de-energization, the Requestor must contact the TDM to receive a link to Utility Shutdown Request (USR) Form.

Upon completion of Airport review, the organization requesting the utility shutdown (“Requestor”) must provide a Utility Shutdown Workplan Outline and a Communication Plan.

https://www.ocair.com/business/tenant-information/airport-construction/

9.2 Hot Work Permit

JOHN WAYNE AIRPORT
ORANGE COUNTY

JOHN WAYNE AIRPORT HOT WORK PERMIT

Location of Hot Work: _____

Date/Time of Work: _____/_____

Specific Type of Work: _____

Company/Agency: _____

THIS PERMIT IS GOOD FOR ONLY 24 HOURS.

YES	NO	BEFORE WORK BEGINS	COMMENTS
		A qualified person is in charge	
		Equipment is in good order and all persons using the equipment are trained in its use	
		Atmosphere is checked and safe with no respiratory exposure concerns	
		WITHIN 35 FEET OF WORK	
		Floors are swept clean of combustibles	
		Combustibles and flammable liquids are removed or shielded	
		All wall and floor openings are covered	
		WORK ON ENCLOSED EQUIPMENT	
		Equipment is cleared of all combustibles	
		Containers are purged of flammable vapors	
		Workers are protected from confined space hazards, either by not having to enter the confined space(s), or by complying with the County/Airport's confined space entry requirements	
		FIRE WATCH	
		Trained Fire watch onsite during hot work operations and for a minimum of 30 minutes after completion of hot work	
		Working/Serviced fire extinguisher onsite	
		Trained on how to use the fire extinguisher	

All safety precautions and applicable regulations will be observed and is inspectable by the airport. If conditions change and/or hazardous conditions are introduced, hot work will stop until it is determined by a qualified person to be safe to proceed.

Worker's Name/Signature_____ /_____ Date:_____

Fire Watch's Name/Signature_____ /_____ Date:_____

John Wayne Airport Point of Contact_____ Date:_____

NOTIFICATION PROCEDURES

The permit must be emailed prior to start of work

Email the Hot Work Permit to the Airport's Safety and Loss Control Manager jvillasenor@ocair.com & your John Wayne Airport Point of Contact (e.g., Project Manager, Sponsor, Contract Manager, etc.).

The permit must be posted at the jobsite

Emergencies: Call 949.252.5000 or 911

9.3 JWA Systems Identification

JWA SYSTEMS IDENTIFICATION

5/13/2019

All J-boxes should be painted inside, outside and cover.

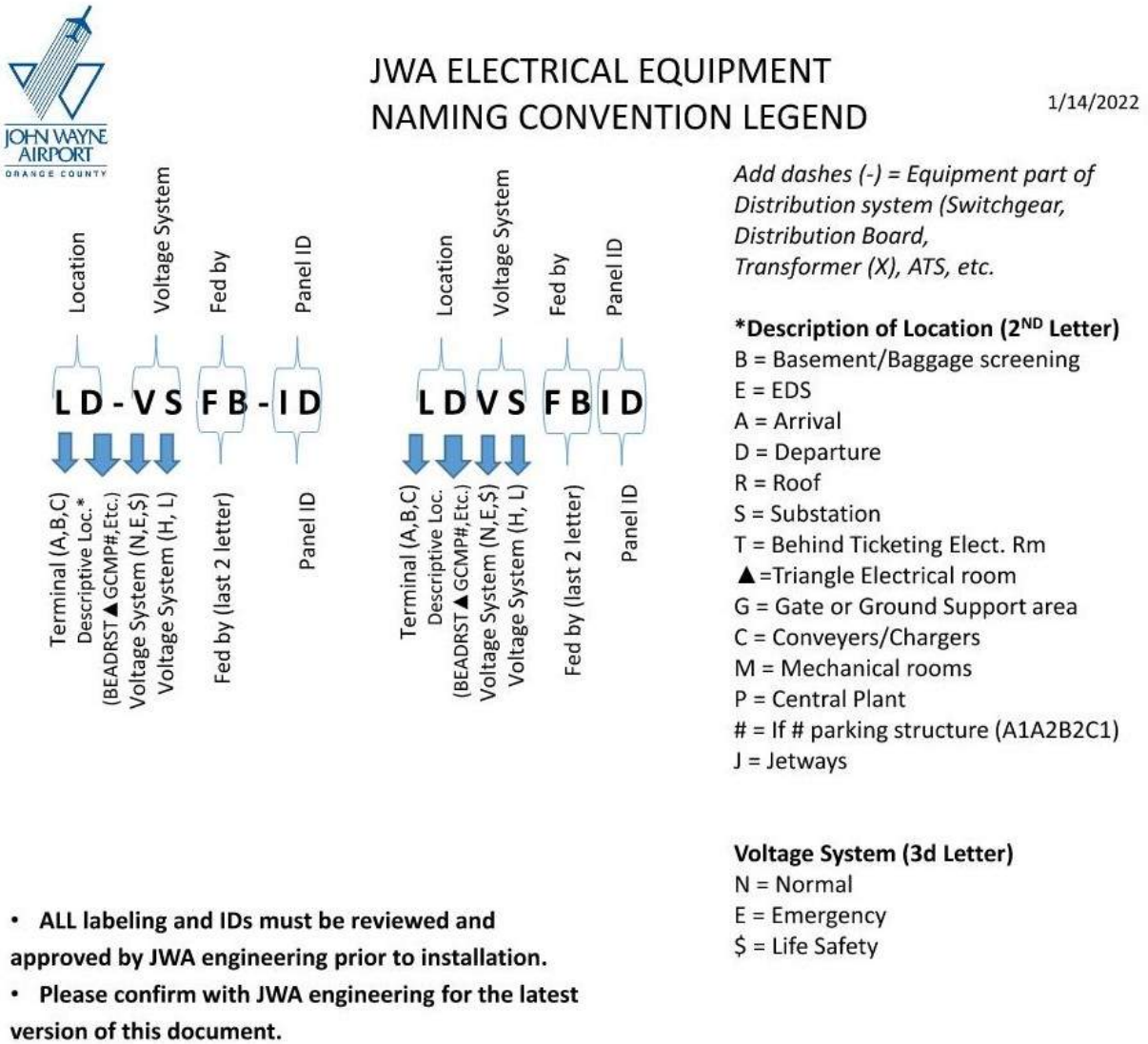
All conduits shall be identified at intervals not more than 10' and within 3' passing thru walls with 6" minimum of raceway surface painted or vinyl tape using the following chart:

	COLOR ID	SYSTEM DESCRIPTION	
1	Brown	251 - 600VAC Power Systems	
2	Black	50 - 250VAC Power Systems	
3	Red	Fire Alarm	
4	Oasis (Light) Blue	Building Automation Systems	
5	Yellow	Security, CCTV	
6	Green	Data Communication	
7	Orange	Fiber	
8	White	Public Address	
9	Purple	Control Wiring	
10	Pink	Distributed Antenna System (DAS)	
11	Royal Blue	TV satelite antenna/cable	

Boxes and conduits located outside of tenants space shall be properly identified with tenant's information.

* Please, check with JWA engineering personal for latest version of this document

9.4 JWA Electrical Equipment Labeling and Naming Convention



JWA ELECTRICAL EQUIPMENT LABELING FORMAT NOTES

Engraved permanent labels must be installed on ALL electrical equipment, following the format below:

NTS Examples

TENANT OWNED PANELS WHITE BACKGROUND AND BLACK LETTERING	**AANLP3A1 120/208V 2P 3W Fed by ASNHB1P3 TA Starbucks**
EMERGENCY POWER ON RED BACKGROUND AND WHITE LETTERING	**BSEHEBP2 277/480V 3P 4W Fed by BS-EHBB-EB**
JWA NORMAL POWER ON BLACK BACKGROUND AND WHITE LETTERING	**CTNLB1L2 120/208V 3P 4W Fed by CT-NHCC-B1**

All equipment must be labeled with an engraved plaque.
2" x 4"; 5/16 or 3/8" Lettering minimum size and 1/8" min Space between text
Permanent labels must include the following information;
1st line equipment ID
2nd line voltage system
3rd line fed by ID
4th (if applicable) Tenant ID

**** Add JWA new naming convention ID engraved label to Existing equipment that is modified but DO NOT remove existing labeling without JWA coordination.**

9.5 JWA FOG Minimum Requirements

JOHN WAYNE AIRPORT
ORANGE COUNTY

John Wayne Airport Fats, Oil, and Greases (FOG) Minimum Requirements

Grease Trap Maintenance

The following maintenance steps for in-kitchen grease traps shall be followed and documented at all concessions that generate grease:

- Grease shall be removed daily from the trap even if not full to minimize grease carry over and in accordance with Orange County Sanitation District Ordinance No. OCSD-25 (OCSD-25).
- All cooking oil shall be collected and stored properly in containers such as barrels or drums and recycled. The container should be maintained properly to ensure no leaks. No food, plastics, or other debris shall be disposed of in the sink.
- Grease trap mechanisms and mechanical components shall be cleaned and jetted at least monthly, or more frequently, if needed.
- Concessions shall follow kitchen best management practices (BMPs) for FOG. BMPs should be posted in all food preparation and dishwashing areas.

BMPs

BMPs to be maintained by Food Service Establishments include:

- Installation of drain screens on drainage pipes in food preparation areas.
- Disposal of food waste into trash or garbage receptacles and not into sinks.
- Segregation and collection of waste cooking oil and grease and containerizing the waste oil and grease for recycling.
- Employee training by ownership twice each calendar year. Training records shall be documented and employee signatures retained and made available for inspection. Training shall include the following subjects:
- Maintenance and cleaning of kitchen exhaust filters as frequently as necessary to maintain a good operating condition.
- Posting signs in the food preparation and dishwashing areas illustrating the BMPs as a reminder of proper FOG handling and to minimize discharge of FOG in wastewater.

Kitchen Staff Training

All kitchen staff shall be trained when they are first hired and then twice yearly thereafter. Training items shall include, but not be limited to, the following:

- How to dry wipe pots, pans, dishware, and work areas before washing to remove grease.
- How to properly dispose of food waste and solids
- How to dispose of grease from cooking equipment
- How to clean, operate, and maintain the grease trap.
- How to properly transfer grease containers from concession to temporary storage area.
- The location and use of absorption products to clean under fryer baskets and other locations.

Training of staff shall be documented and records kept current by each concession, including each trained staff's signature noting receipt and understanding of the BMPs, grease trap operation and maintenance, and grease transfer safety and procedure.

Record Keeping

Each concession shall keep records in compliance with OCSD-25 and make them available to JWA for review. The following documents shall be available upon request:

- Copies of records and manifests of hauled waste FOG.
- A logbook of grease trap cleaning and maintenance practices, and BMPs implementation.
- Periodic grease trap maintenance reports.
- A logbook of employee training sessions.

Prohibited Activities

The following bullets are excerpts from OCSD-25 that describe practices prohibited in Food Service Establishments:

- Use of garbage disposals.
- Introduction or use of additives including chemicals, enzymes, or other microbial substances to the grease trap and wastewater system.
- Disposal of waste cooking oil into sinks and drainpipes.
- Discharge of wastewater from any dishwasher to a grease trap/grease interceptor.
- Discharge of any wastewater with temperatures in excess of 140°F to any grease control device, grease trap, or grease interceptor.