Table of Contents

1. Introduction .......................................................... 3
2. Organization of Airport Manuals .................................. 4
3. Land Use & Airport Master Plan .................................... 5
4. Site Planning ........................................................... 5
   4.1 Site Design ....................................................... 5
   4.2 Functionality of the Site Design .............................. 7
5. Building Design ........................................................ 10
   5.1 Building Size ................................................... 10
   5.2 Building Shape ................................................ 10
   5.3 Exterior Building Materials ................................... 10
   5.4 Overall Proportions ............................................ 11
   5.5 Building Scale ................................................ 12
   5.6 Glare ............................................................. 12
   5.7 Exterior Colors ................................................ 12
   5.8 Building Height Restrictions ................................ 12
   5.9 General Information .......................................... 12
   5.10 Antennas ....................................................... 13
6. Building Support Elements ........................................... 13
   6.1 Security Fence .................................................. 13
   6.2 MEP (Mechanical/Electrical/Plumbing) ...................... 14
   6.3 Pavement ....................................................... 14
   6.4 Landscaping ..................................................... 15
   6.5 Signage .......................................................... 16
   6.6 Lighting ........................................................ 16
   6.7 Site Fire Safety ................................................ 16
   6.8 Zoning Requirements ........................................ 16
   6.9 Fees & Permits ................................................ 17
   6.10 Site Utilities .................................................. 17
7. Sustainability .......................................................... 20
8. Environmental .......................................................... 21
9. PROJECT REQUEST PROCESS ...................................... 22
   9.1 Submittal Process Steps ....................................... 22
   9.2 PROJECT CONCEPT REQUEST .............................. 24
   9.3 CONCEPT REVIEW MEETING ................................. 24
   9.4 30% CONDITIONAL REVIEW ................................ 25
   9.5 60% PROGRESS REVIEW ...................................... 25
   9.6 90% PROGRESS REVIEW ...................................... 26
   9.7 FINAL DESIGN REVIEW ....................................... 27
   9.8 Permitting Procedures ....................................... 27
   9.9 Pre-Construction Meeting .................................... 28
   9.10 Notice To Proceed ........................................... 28
   9.11 Construction .................................................. 29
   9.12 Project Close Out .......................................... 29
10. AIRPORT CONSTRUCTION SECURITY AND SAFETY .......... 30
    10.1 Electrical Lockout/Tagout Program ......................... 30
    10.2 Confined Space & OSHA Requirements ..................... 30
    10.3 Fire Alarm systems ......................................... 30
    10.4 Security Badging ............................................ 31
    10.5 Blasting ...................................................... 31
1. Introduction

The Kenton County Airport Board (Airport), Owner and Operator of the Cincinnati/Northern Kentucky International Airport is dedicated to providing the highest level of customer service and a world class travel experience to the millions of passengers that pass through our facility annually. Each year this facility serves millions of travelers and many business concerns. It is the front door to our community. As such, the Kenton County Airport Board has the responsibility to create a positive visual environment to enhance each person’s experience at our airport. The guidelines contained herein seek to improve upon the positive visual aspects and reduce negative visual aspects at the Airport. These guidelines also provide the Leasee with other requirements that must be met in order to be granted a leasehold at the Cincinnati/Northern Kentucky International Airport. These requirements also pertain to existing Leasees that request approval for renovation or improvement projects.

The purpose of the Tenant Building Design Criteria Manual (Manual) is to provide Tenants, Designers, and contractors with the Airport Design criteria, construction requirements and permitting requirements needed to construct or renovate a Tenant space outside the Airport Terminal complex.

The following guidelines are intended to allow some flexibility of design and provide for excellent quality facilities which are Esthetically pleasing, enhance the visual aspects of the Airport, and provide functionality for the tenant/leasee. (Please note that the terms “Tenant” or “Leasee” may be used interchangeably in this document.) The Board has intentionally kept the most design requirements general in nature to allow for creativity while keeping some control on the final product. All concepts must ultimately be approved by the Planning and Engineering Department of the Kenton County Airport Board.

Additional material and installation requirements are provided to the designers in the CVG Airport’s Technical Design Criteria Manual.

The Airport has developed a multi-step process to ensure that Tenants have the information necessary to comply with the design standards stipulated in the Tenant Building Design Criteria Manual.

All sections of the Airport manuals are subject to review and modification without notice at anytime by the Airport. It is the Tenant’s responsibility to keep aware of any changes issued by the Airport, Federal, State or local authorities. Should there be any discrepancies between the Airport manuals and the Tenant’s lease with the Kenton County Airport Board, the Tenant’s lease shall govern.
2. Organization of Airport Manuals

CVG maintains comprehensive manuals covering design, construction, and operational requirements for the entire Airport. Tenants and their design consultants are urged to download the current version of the Airport manuals as required for their scope of project. All Airport Manuals, construction permit application, and related construction forms, can be downloaded in PDF format from the Airport website, www.cvgairport.com.

Current CVG Manuals include:

- Concession Design Criteria Manual
- Technical Design Criteria Manual
- Tenant Building Design Criteria Manual
- Operations Manual

The Concession Design Criteria Manual is specifically for Tenants that will be constructing or renovating interior lease spaces in the Terminal area buildings.

The Technical Design Criteria Manual contains all products, execution, installation, and quality control requirements. The Manual has been developed to follow a MasterSpec numbering format. Contractors are advised to use this format when developing construction drawings CVG Airport projects. This particular manual also defines the Airport’s and Tenant’s construction responsibilities.

The Tenant Building Design Criteria Manual defines the specific requirements for the construction or renovation of free standing buildings outside of the Terminal Complex.

The Operations Manual outlines procedures for operating as a tenant/concession/airline at the Airport. All Contractors, subcontractors, workmen, design professionals, tenants, etc. shall be required to observe, obey and abide by all applicable requirements, standards, practices, rules or procedures contained herein. This particular manual also defines the Airport’s and Tenant’s construction responsibilities.

All the Airport Manuals have been prepared to inform and assist our Tenants, Architects, Designers, Engineers, and Contractors with the Airports criteria necessary for the construction at the Cincinnati/Northern Kentucky International Airport.

All Manuals are subject to change periodically to update information as it is available. All users of these manuals should check the Airport website to verify that the most current manual is being used during the design process.
3. **Land Use & Airport Master Plan**

The Airport’s Master Plan provides guidelines for land uses within the Airport. In general, the area north of the airfield is considered the terminal development area. This area’s land use is dictated by those uses which are essential to support the terminals and air carriers. The area south of the airfield is considered for cargo/corporate/aircraft maintenance and other aviation related non-airside developments. Proposed developments by tenants may require changes to the Airport Master Plan and also may require environmental clearance by the FAA. For more information regarding the Master Plan, please contact the Airport Board’s Director of Planning and Engineering at (859) 767-3166.

4. **Site Planning**

The following guidelines will serve as a framework for your site plan and building design. Addressing each guideline will help to enhance the overall physical environment.

4.1 **Site Design**

Each facility shall be planned in a manner compatible with the Airport Master Plan and with existing surrounding uses.
The building shall be oriented on the site in such a manner to enhance the view, preferably aligned with the street or neighboring buildings, whichever is predominate. Proposed building should be sited in such a manner as to not degrade adjoining properties.

Vast unbroken parking areas should be avoided. Smaller parking areas with landscaping islands and berms should be provided. Parking areas should be screened by earthen berms and landscaping.

Service type areas such as loading docks, dumpsters, (i.e., back of house functions) should be located away from public view. Screening of these areas by architectural building elements and/or landscaping will be required.

Implementation of “Best Green Practices” in design construction and operation of the facility are highly encouraged. Green Building Practices should be incorporated into Site Design of the structure. Site Designer should strive to create the most energy efficient building footprint, carefully considering the directional orientation of the structure, keeping heat island effects to a minimum, minimize light pollution, minimize water usage and runoff, and develop an on-going sustainable management plan. LEED (Leadership in Energy and Environmental Design) certification for all construction projects is highly encouraged.
4.2 Functionality of the Site Design

4.2.1 Traffic Circulation - Pedestrian access shall be provided, which will limit mixing with vehicular traffic.

4.2.2 Utility Locations - Gas meters, sprinkler meter pits, transformers, condensing units, cooling towers, etc., shall be located away from public view and screened with dense landscaping or a screen wall of masonry or precast architectural concrete. Lighting shall be in keeping with existing fixtures in style and color of light, with efforts to keep “light pollution” to a minimum.

4.2.3 Storm Water shall be collected in such a manner to minimize erosion. Most of the Airport has detention facilities. However, some areas of the Airport do not flow to detention facilities. Drainage requirements will need to be reviewed in depth with the Airport’s Engineering staff during the initial design phase. If detention is required, it should be done in the least noticeable way possible. Oil/water separators, silt traps, and other environmental measures shall be required on all discharge lines. Requirements of the Northern Kentucky Sanitation District No. 1 for sanitary and storm water discharge must be followed. “Harvesting” of rain water for recycling for facility reuse is encouraged.

4.2.4 Sanitary Sewers – Sanitary Sewer Lines are owned by KCAB and must be designed in accordance with the requirements of the Northern Kentucky Sanitation District No. 1 specifications. Grease Traps are required in facilities where food preparation, maintenance, or any other operation of areas where grease, fats or similar types of materials can enter the sanitary lines. Discharge of environmentally sensitive materials (i.e., heavy metals) without special environmental approvals and control is prohibited.

4.2.5 Earth Slopes - Earth slopes should not exceed a 4:1 slope, if possible. Wherever slopes must exceed a slope of 3:1, the use of retaining walls is recommended. Either vertical or battered wall face is acceptable. Exposed concrete must be used with buff or earth tone colors and surface texture matching that of adjacent buildings. Variations to gravity retaining walls (i.e., earth reinforced walls) may be acceptable.

4.2.6 Berms - Berms should be used to maintain aesthetically pleasing effects, adjacent to public areas. Berming should be carefully sculpted to avoid abrupt surface changes and slopes, as well as multiple saddles, which create a “lumpy” appearance in the ground plane. The minimum design standard for grass areas should not exceed 4:1 slope. This maximum slope will facilitate safe grass mowing. The edge and crown of a berm should be sculpted to prevent scalping by large mowers. Ground covers should be used where slopes must exceed 3:1.
Sculpting the earth should not only meet the minimum standards for good engineering practice, but should simplify maintenance procedures. Site engineer should design any berms, swales, filter strip areas, or retention/detention areas at a site with using good sustainable storm water management strategies.

4.2.7 Roadway Right of Way - The Director of Planning and Engineering sets right of way dimensions for each street or roadway at the Cincinnati/Northern Kentucky International Airport. This information will be provided upon request.

4.2.8 Setbacks - The following are setback requirements from the right of way and lease lines:
- 50-foot (minimum) from right of way to building.
- 20-foot (minimum) from building to any other lease line.
- 5-foot (minimum) from parking lot to right of way.
- Landscaping or berms used for screening parking lots shall be located within the lease hold between roadway right of way and parking areas.
- 10-foot (minimum) from parking lot to any other lease line.
Fence will be located on the lease line or within the lease hold if requested. Fences may not be located inside the roadway right of way. (See Section C Building Support Elements - Item 1 Security Fencing for Airport Security [AOA] fence setbacks.)

4.2.9 Exterior Storage - Unless otherwise approved as part of the approval of the plans and specifications for the building and improvements to be constructed on any leased premises, none of the buildings in the area will be designed in such a manner as to permit exterior storage of supplies or materials. A neat and orderly appearance of all buildings is expected and the Senior Director of Planning and Development will not permit the exterior storage of crates, carts, pallets, etc. Provisions for interior storage of this type material shall be made within all buildings.

If exterior storage areas cannot be avoided then materials must be stored in an environmentally acceptable manner in enclosures designed compatible with the building. These areas should not be in public view.

Exterior refuse containers must be screened from public view.

4.2.10 Environmental Site Assessment – If the development site is one acre or larger, an environmental impact study is required. Such an assessment and approval process can be lengthy. It is advisable to start the study as soon as possible in the preliminary design process. Also, additional approvals may be required for the removal of any potential wetlands on the site or the removal of trees from the site.
5. Building Design

5.1 Building Size

The Building’s entrance shall be close to parking. Buildings constructed in the development areas, including the proposed expansion areas, shall cover no more than 50% of the size of the lot. The Airport strictly controls the construction of a facility with square footage beyond this ratio in connection with the amount of land under lease.

The building’s height shall not exceed reasonable standards, but in cases where traffic can view upper part of building (as when roadway is elevated relative to building), building height shall be increased to avoid looking at the rooftop. Rooftop equipment shall be screened by parapet walls or other screening methods approved by the Board.

5.2 Building Shape

The building’s shape should grow naturally as a composite of several factors: from the topography of the existing site; from the program requirements; and from a harmonious complement to neighboring structures. Unusually shaped buildings should be submitted in concept for review prior to design. Buildings shall be simple in shape, free of elements which appear to have been “added on” and that are not visually integral.

5.3 Exterior Building Materials

Exterior Building materials shall be durable with integral finishes. Pre-cast concrete, stone, tile, brick, and integral color architectural masonry units are acceptable. A combination of materials will be permitted if they are architecturally in good taste. A limited use of subtle profile pre-finished metal panels (such as Alucobond) are permitted given their use is appropriate and not susceptible to damage. Architectural features, which enhance the look of the building, are permitted and encouraged. Building sides, which are open to public view, should have more appeal than non-public view sides.

Synthetic plaster, stucco, wood, EIFS systems are not permitted. Plain concrete block may only be used in isolated limited areas as approved by the Airport Board.

Pre-cast walls should be prepared with architectural features such as reveals or flutes to provide appeal.

Attractive storefronts are encouraged to help define entrances. Exterior and interior materials (i.e., drywall, fixtures, bathroom facilities) shall be of first class quality to provide for attractiveness and durability.
Exterior materials, which are not susceptible to reflection of FAA navigational aides, are preferred. The FAA will have final veto power over materials, which in their determination could cause detrimental effects in their navigational aides. In general, flat surfaces should be avoided wherever possible. Discuss methods for minimizing detriments to Navigational Aids with the Director of Planning and Engineering. Tenant is responsible for modifications to their building, which are necessitated by Navigational Aid degradation caused by Tenant’s building.

5.4 Overall Proportions

The Overall Proportion of the Building shall be of pleasing proportions.

Individual building openings shall be spaced to provide pleasing opening-to-wall relationship.
5.5 Building Scale

The Building Scale or Building articulation shall have two levels of reading - large scale for distant viewing, small scale for near viewing so that buildings “read” well at a distance and have revealing details when seen up close.

5.6 Glare

It is imperative that all structures be glare controlled. Inherently high reflective materials, such as glass veneered curtain walls, shall not be used as a major building element if glare will cause a problem for aircraft. Such Design elements and their flight path orientation will need to be closely reviewed by the FAA during the initial concept design phase to determine if glare could be a potential problem. All high sheen materials must be coated or clad with light absorbing finish. Silver coatings on roof materials are discouraged. Furthermore, it should be understood that design elements such as skylights, exposed penthouses, etc., will be approved subject to a completed operational determination that allows for safe and efficient Airport operations.

5.7 Exterior Colors

Exterior Colors shall be muted, preferably warm tones compatible with earth colors. Primary colors of the building shall be limited, used for accent elements. Colors shall be compatible, but not unusually bright. Corporate colors may be used, if they do not clash. A conceptual color rendering of the facility shall be submitted with preliminary design plans for review and acceptance prior to further plan development.

5.8 Building Height Restrictions

Not surprisingly, the Airport does impose height restrictions for buildings on Airport property. Such height restrictions may be found in the FAA, FAR Part 77 requirements. Structures built in the Airport development areas must adhere to these height restrictions for Airport zoning purposes. In addition, some buildings will be required to install red obstruction lights on opposite corners, at the highest point of the structure, depending on location.

5.9 General Information

5.9.1 Airport Coordinate Grid System

The Airport has established its own coordinate system. Drawings establishing locations of Airport monuments are available in the Director of Planning and Engineering’s office. All facilities must be designed and located using the coordinate system. Corners of all building structures and all utilities (manholes, catch basins, hydrants, valves, etc.) must all be located (as-built) using this coordinate system.

5.9.2 Airport Height Restriction/Notice

Locations of proposed facilities should be consistent with the Airport’s Master Plan. The facilities’ presence should compliment the Airport’s terminal area and not overpower
it. The Airport Planning and Engineering Department will assist the Tenant in determining airfield setback requirements.

Any facility proposed for construction on Airport must be reviewed by the FAA Part 77 clearances, line of site from the tower, TERPS, airspace, and FAA facilities review. This is accomplished by submitting on FAA Form 7460 “Notice of Proposed Construction or Alteration” to the FAA District Office. This form will be filed by the Airport Board Office of Planning and Engineering.

5.9.3 Airport Lease
Leases are handled by the Manager of Commercial and Business Development. Specific lease information shall be coordinated and negotiated prior to the start of the design. Approval of leases require approval by the Airport Board of Directors.

5.9.4 Fire and Police Services
The Airport operates the Fire and Police Departments. Each is a 24 hour/seven day a week operation. The Fire Department has a full range of emergency equipment, including ambulances, paramedics and trained fire personnel. Their services are available for all Airport tenants.

The Central Dispatch service may be contacted at 859-767-3123 for both emergency and non-emergency events.

5.10 Antennas
Antennas protruding above the building height will have to be reviewed per each individual request. If an antenna is absolutely necessary, request for a variance for the installation must be made stating the reasons for the request. Antennae should be kept to a minimal height or disguised as an architectural feature. Dish antennae less than 18-inch diameter will be considered if proper architectural screening is used.

6. Building Support Elements

6.1 Security Fence
Lease areas adjoining the Air Operations Area (AOA) will require security fencing in accordance with TSA regulations for security and approval of Airport Security Coordinator. Fencing of non-airside facilities is not encouraged, as it takes away from the visual attractiveness of the facility and landscaping. If the tenant expresses the need, fencing will be reviewed and may be conditional accepted as part of the preliminary design review process. Fencing will be consistent with the Airport’s security fencing specifications and must be installed by the tenant.

Where chain link fencing is used at public areas, vinyl clad with a dark green or black finish shall be used.

A minimum four-foot setback from any object which might aid in
breaching the security fence onto the airside will be required.

Standard Highway Guardrail will be required at the security fence to protect it at locations where it could be damaged by equipment running into it. Guardrail is to be placed a minimum of four foot from face of fence.

Parking, equipment or material storage will not be permitted at the security fence. A minimum of 10 feet will be required between parking facilities or roadway/drive and the security fences. Storage on the landside of Airport security fences must be approved by the Director of Planning and Engineering. Setbacks will be determined based upon material or equipment storage heights. Guardrails will be required to protect fence.

Light poles/foundations must be a minimum of 4 feet from any AOA security fence.

Fire lanes should be established along security fences wherever possible. (See NFPA 1 - Section 3 to 5).

### 6.2 MEP (Mechanical/Electrical/Plumbing)

Designers shall determine the locations of all exterior MEP building elements for the structure early on during the design process. Locations of such items such as Gas meters, transformers, meter pits, condensing units, cooling towers, etc., shall be reviewed with the Airport during the design phase. Efforts shall be made to screen exterior MEP items from public view whether located on the roof or the ground. When on the ground such elements shall be screened by way of dense landscaping or masonry screen walls compatible with building materials. Where occurring on a roof, HVAC equipment shall be screened from public view with compatible screen walls.

### 6.3 Pavement

Pedestrian walks shall be concrete; vehicular paving shall be concrete or asphalt. Parking areas should be divided into small areas and be provided with intermediate landscaping. Parking areas shall be screened from public view by means of earth berms and landscaping. Pavement thickness shall be designed in accordance with AASHTO design. A 6-inch stabilized aggregate base with 5-inch asphalt shall be a minimum for automobile parking. Truck docks and areas used by trucks must be designed for thickness per AASHTO. Submit design calculations with plans and specifications. Construction of roads and parking facilities shall be in accordance with Kentucky Department of Highways specifications (latest addition).

Roadways and parking lot areas shall incorporate concrete curb and gutter into design. Ample drainage structures shall be constructed for discharge to approved drainage ways.
Parking - Tenant will need to meet the Kentucky Building Code parking requirements for the facility. In addition, the site designer shall verify that the following criteria are met:

- Site Design allows for one space for each three employees parking on a maximum employment schedule; or
- One space for each 1,000-square foot of building area, whichever is greater; and
- One space for each owned or maintained vehicle operated on the premises.
- Additional spaces are required for visitors, customers, etc.
- Adequate handicap accessible parking per code requirements must be met.

6.4 Landscaping

Throughout these standards, landscaping has been mentioned as a critical element in providing a pleasant environment. The Airport takes great pride in the beautifully landscaped facility at CVG. Plants selected shall be compatible with this region and be maintained to ensure their survival. Parking areas, service areas, etc., should be landscaped so as to screen from public view without detracting from architectural features of the building. The development shall be landscaped along the service drive and any visible exposures. Landscaping shall consist of dense shrubbery and trees with mature heights less than FAA Part 77 requirements. A Landscaping Plan prepared by a Landscape Architect shall be developed for review with the Airport prior to final design acceptance. Plan shall be consistent with other buildings in the area or to be constructed in the area.

Landscaped areas shall consist of a minimum of 5% of the leasehold area.

Avenue of Flags along Terminal Drive
6.5 Signage

Corporate Identity Signage is intended to only be installed on the drive side of the building and for identification purposes only. The size of signage shall be consistent with and in scale with the size of the building. Ground mounted signs must be within the leasehold and of a size in proportion to the surroundings. The height of post mounted signs shall not exceed 17 feet from ground level and shall not obscure line of sight. Ground mounted signs must not obscure drivers’ line of sight. In addition, all sign installations must meet Boone County Zoning and KDOT requirements if located on public roadways. Variations should be submitted to the Airport Planning and Engineering Department for review.

Corporate identity signage may be depicted upon the building for identification purposes only. Signage may be internally or externally lit. Signage must be in proportion to the building. Extensions above the building for signs will not be permitted. Advertising of any kind, other than corporate identity, is not permitted. Signage plans must be submitted for review prior to final design acceptance.

6.6 Lighting

As a part of the construction of the building, Designer shall provide exterior lighting for areas surrounding the building, all exterior dock areas, and loading areas. This lighting shall be of a standard variety and shall be consistent with the balance of the buildings in operation or to be constructed in the area. Lighting shall not interfere with the airfield operations and shall be adjusted to eliminate the interference as may be required. Lighting structures shall not exceed FAR Part 77 height restrictions nor cause glare, which could cause problem for pilots or drivers.

6.7 Site Fire Safety

The Airport Fire Department is the “Authority Having Jurisdiction” (AHJ), for fire safety code enforcement at CVG. The Airport Fire Department will assist designers with input on site access for fire safety trucks and equipment, location of site hydrants, Fire Department Connections (FDC’s) for the building, and proper storage of any hazardous materials on site. Designers will be required to establish a means for fire equipment access to the site and building. Fire lanes shall be signed if deemed necessary by the Airport Fire Chief. (See NFPA 1 - Section 3 to 5)

6.8 Zoning Requirements

Notices of alteration and construction (FAA Form 7460 and Kentucky Form 5650) shall be filed with and approved by the Federal Aviation Administration and the Kentucky Airport Zoning Commission before beginning construction. The Airport Office of Planning and Engineering will assist tenants with these requirements and will file the FAA Form. FAA response can require up to 120 days from date received by the FAA.
6.9 Fees & Permits

Development lessees will be required to obtain all necessary state, county, and local permits at their own expense as required by federal, state, county, and local codes and ordinances.

Photo: CVG Airport has three north-south parallel runways with separation that allows for simultaneous landings on all three runways. CVG also has a fourth crossing east-west runway.

6.10 Site Utilities

Power at the Airport may be Airport supplied and sub-metered or supplied directly by the local power company. Please see the relevant information regarding both below.

Regardless if supplied by the Airport or local power company, all utilities at the Airport must be underground. No overhead service will be permitted.

6.10.1 Power supplied by the Airport

All Electrical service to most of the Airport terminal area is furnished by the Airport. Other parts not served by the Airport are served by Duke Energy; contact Mike Billow in the Industrial and Commercial Department at (859) 534-4370. For those facilities served by the Airport, the tenant must furnish and install the following items of a make approved by the Airport: meters of the demand type; meter sockets; current transformers; any other electrical devices in the secondary side of the transformers as required; and all items for temporary construction service as required. The tenant will install underground conduit for primary or secondary service as required and as specified by the Airport.

Tenant shall advise the Director of Planning and Engineering in writing, early in the program of electrical loads so the Airport can secure a transformer.
Airport will install transformer on pad furnished by tenant. Airport will furnish the pad size. The Airport does not have an inventory of transformers. Sufficient lead time must be allowed for ordering and delivery of the transformer and extension of the electrical distribution system if required.

Contact the Commercial and Business Development at (859) 767-3268 for rates charged by the Airport for electrical energy.

6.10.2 Power supplied by Local Power Company

If power is supplied by Duke Energy, transformers will be supplied by Duke Energy. New power mains must be approved by the Airport Director of Planning and Engineering.

For electrical inspections, contact State Electrical Inspector: Steve Hellmer, 10945 Dixie Highway, Suite 2, Walton, KY 41094, (859) 746-9111.

6.10.3 Natural Gas

New natural gas service is provided by Duke Energy to most Airport locations. New utility mains must be approved by the Airport Planning and Engineering if required for a new facility.

6.10.4 Water

Water is supplied to the Airport by the Northern Kentucky Water District. The Airport owns and operates the distribution system on the Airport. There is no tap-in fee. Tap-in must be done by the tenant. Location of tap and type of device must be approved by the Airport. The water meter is to be supplied by the tenant. Airport must approve the type of meter. Notify the Airport Fire Department forty-eight (48) hours prior to making the tap. The Fire Department will operate the necessary valves upon request. Neither the tenant, nor his agents, shall operate any water valves. Tenant should be advised of high water main pressure. A pressure reduction valve may be required at the tenant’s expense.

Water systems must be designed in accordance with Northern Kentucky Water District specifications.

A backflow preventor will be required at all connections to Airport Water Supplies, including temporary connections to Airport fire hydrants.

6.10.5 Sewer

The Airport owns the sanitary and storm sewer system on the Airport. They are separate systems. Northern Kentucky Sanitation District No. 1 receives the effluent from the Airport system for treatment. The Northern Kentucky’s Sanitation District’s ability to treat special types of waste should be verified. The tenant shall advise the Airport of special treatment requirements for effluent and of estimated sanitary discharge volumes so that sewer capacities will not be exceeded. Sewer structures shall be precast type or constructed of solid masonry units if built in place. Existing structures and grating that are removed shall be returned to the Airport. There are no sewer tap fees. The tap location shall be as directed by the Airport.
Grease traps and oil/water separators must be installed to provide proper discharges to the sewer system. Design of sanitary sewers must be in accordance with Northern Kentucky Sanitation District No. 1 specifications.

6.10.6 Storm Water

The site storm water runoff will need to be reviewed with the Airport Engineers to determine the overall storm runoff for the location.

Best Management Practices for pollutant control during construction in accordance with Kentucky Cabinet provisions must be observed for the duration of the project.

Projects which will disturb an acre or greater of land are subject to Storm water Permit for Construction Site Requirements, which is administered by Kentucky Division of Water. A Notice of Intent to construct must be submitted to the Division of Water. For information contact:

Section Supervisor
Inventory and Data Management Section
KPDES Branch, Kentucky Division of Water
14 Reilly Road, Frankfort Office Park
Frankfort, Kentucky 40601

6.10.7 Fire Alarm

The Airport has a digital fire alarm system to provide the best available protection to the Airport and its tenants. If fire code and/or Building codes, (NFPA 72/KBC) require a fire alarm system that meets Airport requirements must be provided. Please refer to the Airport Technical Design Criteria Manual for detailed requirements of the fire alarm system and connectivity. There is no charge to connect to the Airport’s fire alarm monitoring system. However, it is the Tenants responsibility and cost to tie into the Airport’s central system.

The Fire Alarm system is monitored by the airport Police Dispatch 24 hours a day, 7 days a week. The system components used at the Airport are manufactured by Honeywell. All equipment must be compatible with the Airport’s existing Honeywell Front End and must provide the same identical operational characteristics as hardware typically used throughout the Airport.

A list of specific sensors, modules, interface boards, strobes, speakers, fiber optics, wire requirements, etc..., currently used by the Airport throughout our facilities can be provided to the MEP engineer for design purposes upon request.

6.10.8 Telecommunications

The Airport maintains a telecommunication backbone system in certain locations on the Airport. The Airport typically does not permit tenant’s access to the this backbone for security reasons. Use of Airport ducts is very limited and subject to special approval and availability.
6.10.9 Telephone

Telephone service on the Airport is provided by Cincinnati Bell. Contact Building Industry Consultants at (513) 397-5656. Telephone service shall be installed underground in conduit, installed by the tenant as required by Cincinnati Bell.

6.10.10 Roadways

All roads on the Airport are owned and named by the Kenton County Airport Board. In addition, the Airport Planning and Engineering Department will assign addresses for any new facilities on Airport Property.

Road sweeping and clearing of snow on the Airport’s public roadways are done by the Airport’s Operations Department. No sweeping or snow removal will be performed on the leasee’s area.

Roads within a tenant space will be designed in accordance with AASHTO design standards and approved by the Director of Planning and Engineering. Construction of roads and parking facilities will be in accordance with Kentucky Department of Highway Specifications, most current version.

7. Sustainability

CVG Airport is dedicated and striving to be a good steward to the environment by establishing good sustainability and conservation practices in construction and all facets of operation at CVG Airport. The Airport strongly encourages that Designers and Tenants to embrace sustainability practices in their construction and daily facility operations.

The Airport encourages Tenants to seriously consider pursuing having their tenant construction project obtain LEED certification. The **Leadership in Energy and Environmental Design (LEED)** certification is the internationally recognized green building certification system established by the US Green Building Council. Although, LEED certification for tenant construction is not mandatory, Designers and Tenants are expected to follow the established LEED Guidelines, making environmentally responsible design and operating decisions.

In support of CVG’s commitment to sustainability, certain sustainability requirements have been established as mandatory and are required to be included in the Tenant design. These are as follows:

- All equipment and appliances installed in the tenant facility must have an ENERGY STAR® rating. This would include but is not limited to refrigeration units, ovens, appliances, commercial food service equipment, and office equipment.
- Designers must specify products (paint, coatings, sealants, adhesives, etc…) that meet LEED guidelines for VOC (Volatile Organic Compounds) levels. VOC levels for all products used will be required to be submitted to the Airport for review and approval during the design process.
- No Construction products may contain urea-formaldehyde resin additives or asbestos.
- A construction waste management plan shall be formulated and reviewed with the Airport prior to Construction. Contractors should strive to have 50% of construction waste be diverted from landfills.
- Low flow water fixtures should be specified for use.
- Contractor must use high efficiency lighting in the facility.
- Designers shall specify rapidly renewable materials, materials with high recycled content, and are manufactured and assembled locally when possible.

The Airport encourages Tenants to operate as an environmentally responsible steward after opening the facility. Tenants should use only environmentally friendly cleaning products, paper products and trash bag liners with high volumes of recycled materials.

Tenants are encouraged to promote and advertise their sustainability efforts by introducing displays in their facility promoting the use of sustainable building practices and their efforts to promote other Green operational practices.

**8. Environmental**

Damaged and/or impacted Lead Based Paint (LBP) and/or Asbestos Containing Materials (ACM) found during renovation and/or demolition activity will require abatement by licensed contractors. Depending on location, abatement may be a tenant expense. Upon discovery of these items, the Contractor shall implement procedures to contain these materials and control disturbance, secure the site, and have the site abated prior to continuation of construction. Fluorescent light ballasts which are not labeled “No PCBs” should be disposed as PCB-containing waste prior to renovation or demolition activities that might impact these materials.

Fluorescent light tubes, which may contain mercury, must be disposed of as hazardous waste or special waste.
9. PROJECT REQUEST PROCESS

Any airport Tenant desiring to undertake improvements, modifications, or construct new structures involving leased space, Airport owned buildings, or on Airport property are required to receive written approval in advance of the project from the Planning & Development Department of the Kenton County Airport Board (KCAB). Please note the terms “Tenant” or “Lessee” may be used interchangeably in this document.

9.1 Submittal Process Steps

The Airport has developed a multi-step process to ensure Tenants comply with the design standards stipulated in the Design Criteria Manuals. This process will seek to keep the size and magnitude of the project in perspective adapting a reasonable level of effort and oversight to the scope of the project while ensuring all design and construction in the Airport Facilities are consistent with the overall design objectives and applicable codes, ordinances, rules and regulations. The level of design / progress reviews required will be determined on the magnitude and scope of the proposed project.

The steps, outlined in detail below consist of:

1. Initial Concept Request Form submitted by Tenant to P&D
2. Concept Review Meeting
3. 30% Design Conditional Review
4. 60% Design Progress Review
5. 90% Design Progress Review
6. Tenant submits final design / construction plans and specs
7. Tenant secures all required permits and submits to P&D
8. Tenant submits all applicable insurance certificates for contractors on site
9. P&D issues NTP and Construction Permit
10. Pre-Construction Meeting
11. Weekly on-site Construction Meetings
12. Close out documents

Note: Approval must be received from KCAB at each step prior to the Tenant progressing in the process.

Tenants shall be required to become familiar with the contents and intent of this Manual and all other Airport documents applicable to their lease premise. Tenants shall be required to ensure that their designers and
contractors also become familiar with these documents. Tenants shall also be required to make site inspections as necessary to ensure compliance by their designers and contractors with approved plans, specifications, etc.

The Tenant shall be provided with information describing the extent of their Assigned Premises and lease line parameters. The Tenant shall be responsible for verifying all conditions in the field. Tenant shall be required to retain the services of a professionally licensed Architect in the Commonwealth of Kentucky to sign the required drawings. All mechanical, electrical, plumbing and fire protection final plans must be stamped and signed by a Kentucky licensed engineer.

No acceptance of a plan by the Airport shall be deemed to encompass any variance from the Manual unless the variance has been so identified in the submitted plans and approved in writing. The approval or acceptance by the Airport of any plans and specifications refers only to the conformity of such plans and specifications to the general architectural and aesthetic appearance for the Facility and its conformity with the Airport Design Criteria established.
9.2 PROJECT CONCEPT REQUEST

To start a new project, a Tenant will submit a Project Concept Request Form along with appropriate attachments to KCAB at: planning&development@cvgairport.com. The Concept Review Form is to be completed by all Tenants whom wish to construct, modify or renovate any Tenant/Lessee space at CVG Airport.

The form is designed to prompt the Tenant to provide all the appropriate and pertinent information that KCAB needs up front to effectively evaluate the proposed project and provide a 5% Concept Review. Instructions accompany the form and explain each field and lists attachments to included. It is important these forms be as complete as possible and the attachments are provided so KCAB can efficiently and effectively review the proposed project. The Tenant can contact KCAB Planning & Development Department with any questions regarding completion of the Concept Request Form.

Once the completed Project Concept Request Form and its attachments are submitted, KCAB’s Planning & Development Department will lead an internal review of the submittal with input from other key KCAB divisions. The project will be evaluated for business and leasing issues, as well as planning, technical, and operational impacts. The staff recommendations and evaluation of the project will be reviewed by KCAB Executives and the project will be approved or denied. Once a decision has been rendered, KCAB will issue a response to the Tenant through either a Concept Acceptance or a Rejection Letter. The Rejectin Letter will also contain the reason why the project may not move forward in the process. The Concept Acceptance Letter will indicate that the project has been approved, articulate comments specific to the project, and will provide direction as to how the Tenant should move forward in the process. The Concept Approval Letters will focus on information specific and unique to the proposed project including, but not limited to: additional information, such as drawings and exhibits, that will need to be submitted; contact information for reviewers with whom the Tenant will need to coordinate certain items in order to get sign off; permit requirements; and an indication of all further reviews required. The Tenant can expect to receive a Concept Response within 3 weeks of submitting a complete Concept Submittal.

Please note: All projects, modifications and refurbishments must go through a Project Concept Review regardless of complexity or scope. A Project Concept Acceptance Letter does not mean that Construction may begin.

9.3 CONCEPT REVIEW MEETING

Based on the magnitude and scope of the project, a concept review meeting may be required. The purpose of a concept review meeting would be to provide an opportunity for KCAB and the Tenant to review the scope of work and discuss KCAB’s expectations, codes, and other requirements specific to the project.
9.4 30% CONDITIONAL REVIEW

This phase is the vehicle by which the Tenant/Architect design team must think through all elements from merchandising to mechanical systems before, documents proceed to development of construction documents.

If required in the Concept Acceptance Letter, the Tenant and/or Tenants AE consultant will submit a 30% Design Package to KCAB. The purpose of this phase is to develop the approved concept plans to a level ensuring compliance with KCAB requirements and standards and to review all components of the Tenant’s design. The package should address the comments and conditions outlined in the Concept Approval Letter and should include sufficient information to adequately describe the overall signage, interior design, merchandising concepts, and mechanical systems. A signed copy of the 30% Review Checklist is required with the package submission, along with drawings and material sample boards. All drawings are to be PDF formatted in 24” x 36” standard size format.

KCAB’s P&D department will lead an internal review of the submittal package with input from other KCAB departments. Within two (2) weeks of the complete design package submittal the Tenant will receive a 30% Conditional Review Response Letter. The letter will include approval to move to the next phase and/or comments requiring changes to the 30% design package.

Note: Upon review of 30% Plan, KCAB P&D will include level of environmental processing required. Tenant shall not proceed beyond this phase until written approval is received from KCAB.

9.5 60% PROGRESS REVIEW

If a 60% Design Progress Review is required, the Tenant will submit a 60% Design Package. The process and requirements for the 60% Design Package will be the same as the 30% Design Package and should address the concerns, changes and conditions identified in the Concept Acceptance Letter (and 30% Conditional Response Letter), and a signed 60% Review Checklist. Upon receipt of the 60% Design submittal KCAB’s P&D Department will review the package with input from
other KCAB Departments. After the review, within two (2) weeks from package submittal, the Tenant will receive a 60% Design Review Response Letter. The Letter will include approval to move to the next phase and any comments or concerns which must be addressed in the Final Design Package.

_The Tenant shall not proceed beyond this phase until written approval is received from KCAB_

### 9.6 90% PROGRESS REVIEW

If a 90% Design Progress Review is required, the Tenant will submit a 90% Design Package. The process and requirements for the 90% Design Package will be the same as the previous Design Package Reviews. Upon receipt of the 90% Design submittal KCAB’s P&D Department will review the package with input from other KCAB Departments. After the review, within two (2) weeks from package submittal, the Tenant will receive a 90% Design Review Response Letter. The Letter will include approval to move to the next phase and any comments or concerns which must be addressed in the Final Design Package.

_The Tenant shall not proceed beyond this phase until written approval is received from KCAB_

![Terminal 3 Parking Garage](image1)

Terminal 3 Parking Garage

![General Office Building, South Airfield](image2)

General Office Building, South Airfield
9.7 FINAL DESIGN REVIEW

Depending on the scope of the project, the next submittal after the Concept Review for some projects will be the Final Design Review. All request regardless of magnitude or scope must go through the Final Design Review. The Final Design Package should address all concerns, changes, and conditions identified in previous review phases and provide KCAB with a complete set of working drawings and specifications showing all details for construction and for the Building Department permit sets. A complete package including a signed Final Review Checklist must be submitted for approval. KCAB may require additional information upon review of submitted package and will notify Tenant within two (2) weeks of any additional information or requirements. Drawings shall be submitted electronically in both Auto CAD and PDF version. All drawings shall be signed and sealed by a registered architect or engineer, registered in the Commonwealth of Kentucky, and shall be signed as approved by the Tenant.

Once KCAB has reviewed the Final Design Package and all concerns, changes and conditions have been addressed to meet KCAB’s standards, a written approval to proceed with obtaining the necessary permits, Insurance, and Bond requirements will be sent to the Tenant.

Note: Acceptance by KCAB for plans, specifications and/or schedules does not constitute KCAB’s approval for architectural or engineering design or compliance with applicable laws or codes. The Kenton County Airport Board assumes no liability or responsibility for any defect in any structure or improvement constructed according to such drawings/plans and specifications by deeming the drawings/plans acceptable. Tenants and their architects have total responsibility for compliance with all applicable Federal, State and local codes and ordinances for their occupancy types. Tenants also have total responsibility for coordination and scheduling.

9.8 Permitting Procedures

Upon KCAB’s acceptance of the Final Review Package, Tenant shall obtain all necessary permits from all responsible parties. Obtaining all permits shall be the sole responsibility of the Tenant or their representative. Upon Tenant’s receipt of applicable permits needed to perform the proposed work, Tenant shall forward a copy of the permits to KCAB at which time a Pre-Construction meeting will be scheduled.

Photo: Pemco Maintenance Hangar, CVG

The Airport is located in Boone, County Kentucky. Code review and enforcement for the Airport is regulated by the Boone County Building Department. Permit information, requirements, and
forms are available from their website at www.boonecountyky.org. The Airport Fire Department is the “Authority Having Jurisdiction”, (AHJ), for all fire safety related items.

Kentucky follows the Kentucky Building Code (KBC), which is based on the International Building Code (IBC). A listing of currently adopted codes and a copy of the KY Building Code may be downloaded from the Kentucky Department of Housing, Buildings and Construction, Division of Building Code Enforcement at http://dhbc.ky.gov/bce/ under “Quick Links” to the right of the screen.

The Airport will also issue their own Construction Permit upon final acceptance of the plans. The Airport Construction permit shall be posted at the site along with the County Building Permit (where applicable).

No construction is permitted until there is the issuance of KCAB Construction Permit, State approval is granted and Boone County Building Permit (where applicable). In addition, no site preparation or site demolition may occur until KCAB, State and County approvals are granted.

Please note: The issuance of permits is not authorization for any work, marshaling of materials, or any related construction, repair, or renovation of any kind to occur without first completing the Pre-Construction meeting and receiving a Notice To Proceed.

9.9 Pre-Construction Meeting

Prior to starting any work on the airport property the Tenant and the Tenant’s contractor must attend a pre-construction meeting with KCAB. This meeting will cover specific information pertaining to working on the airport property, and KCAB’s: communication, safety, security and coordination requirements. A Pre-construction meeting is required for all projects on Airport property and owned or leased buildings. All documentation listed on the Pre Construction checklist must be received by KCAB a minimum of 2 days prior to meeting.

9.10 Notice To Proceed

Prior to the start of any project, a Notice to Proceed and KCAB Building Permit must be issued. Prior to issuance, Insurance Certificates, Safety Plans and any additional requirements included on the Final Approval Letter and Pre-Construction meeting must be provided by the Tenant and Tenants Contractor(s). Upon receipt, KCAB P&D will review all documentation to ensure all pre-requisite criteria have been met and satisfied. Once complete, KCAB will issue a NTP and Building Permit.

No changes or alterations shall be made to plans and specifications after the issuance of Airport’s Notice to Proceed, without the prior written approval of the KCAB. Should a change in the approved plans be required for any reason whatsoever, Tenant shall submit such request to KCAB P&D Department for acceptance. The Tenant shall also submit such request to all governmental agencies if applicable. The Airport shall review such request as if submitted as Final Construction Design Drawings.
9.11 Construction

Once the Pre-construction Meeting is held and a NTP issued, the tenant may start construction. A KCAB Project Manager and Inspector will be assigned to the project and will serve as the tenants points of contact for all construction related matters during the construction process. The PM is responsible to ensure the interests of KCAB are satisfied during construction and will serve as the liaison between the Tenant and other KCAB departments to ensure logistics are coordinated and executed in compliance with established guidelines and procedures. The PM will also coordinate between the Tenant and their contractors to facilitate utility shutdowns, to minimize impact to the traveling public, operations and other Tenants.

In addition, the Tenant can utilize the Construction checklist for a guide during the construction phase of the project. This checklist provides specific requirements which must be adhered. Additional items may be required based on the scope of the project and will be communicated by the assigned KCAB PM or Inspector.

9.12 Project Close Out

As the project approaches completion, the PM working with the Tenant and Tenants Contractor will complete the Project Close-Out checklist. This checklist provides for all items which must be completed prior to the project being officially closed. Upon successful completion of all items on the Project Close Out checklist, the Tenant will receive a Project Closeout Letter indicating the official closure of the project.
10. AIRPORT CONSTRUCTION
SECURITY AND SAFETY

The Airport Board wants to insure safe construction working conditions at the airport. Contractors working at the Cincinnati/Northern Kentucky International Airport shall adhere to all Federal and State OSHA safety standards.

10.1 Electrical Lockout/Tagout Program

The Purpose and Function of Lockout/Tagout regulations and procedures are designed to prevent injury due to unexpected energizing or start-up of machines or equipment, or the release of stored energy during servicing or maintenance. All OSHA Lockout/Tagout regulations shall be adhered to by all electrical contractors doing work at the Cincinnati/Northern Kentucky International Airport.

The Electrical Contractor Supervisor shall ensure that his personnel understand and comply with the Airport’s and OSHA’s control procedures. Copies of the Airport’s Lockout/Tagout regulations and procedures are available from the Airport Electric Department or Airport Project Manager.

10.2 Confined Space & OSHA Requirements

Contractors must adhere to confined space procedures and all OSHA requirements when working on Airport property. Airport

Confined Space requirements are available through the Airport’s Environmental and Safety Manager at 859- 767-3155. Contractors are also obligated to file out a brief safety survey covering all aspects of the type of construction that will be occurring at the Airport for each specific project. A copy of this survey may be downloaded from the Airport website at www.cvgairport.com.

10.3 Fire Alarm Systems

Deactivation/activation of fire alarms is not permitted without approval of the Airport Fire Chief. Failure to comply with this may result in charges to the contractor for initiating a false report. Accidental Fire Alarms result in costly responses by the Fire Department, evacuation of passengers and employees from the building. These result in delays or missed flights by passengers and lost working time for employees.

Leasees and/or Contractors must pay proper attention while working around fire detection equipment. Costs and charges, if any, will be determined on an individual basis based upon the fire department’s investigation for activation of a Fire Alarm System in the event of a non-emergency.

Contractors are required to notify the Airport Fire Department Inspection Bureau if they need to have smoke detectors or sprinklers taken out of service temporarily also.

Failure to comply with safety standards may result in work stoppages, revocation of the construction permit, revocation of worker’s ID badge or in extreme cases, a company being expelled from working on the airport.
10.4 Security Badging

Certain areas of the airport require Airport issued security badges. The requirements vary from project and location. Security/badging requirements will need to be reviewed by the Airport Security Manager once the scope of the project is defined.

10.5 Blasting

Blasting is prohibited on the airport without prior approval from the Vice President of Planning and Engineering. This will have to be weighed carefully from a security and safety perspective.