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## **Ankeny Regional Airport – Hangar Construction Standards**

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### **Applicability**

- The provisions of these standards apply to any hangar, garage, and other structure constructed within the limits of the Ankeny Regional Airport property. The purpose of these Design Standards is to insure that development at the Airport is consistent and of a high quality to protect and enhance the investments made at the airport.
- The requirements and regulations of the City of Ankeny Planning and Building Department, including site plan requirements, zoning ordinances and building codes, apply to all building construction activities within the airport property. The City of Ankeny site plan approval process, including pre-application conference, Technical Committee approval, and Planning and Zoning Commission approval, must be followed.
- An approved long-term land lease with the Polk County Aviation Authority shall be obtained by any private individual prior to review, approval and development of a privately-owned hangar on the airport property.

### **Review Process**

- Applications for construction of a hangar or other building structure on Ankeny Regional Airport property must be approved by the City of Ankeny Planning and Building Department. A site plan must be reviewed by City staff and approved by the Ankeny Planning and Zoning Commission.
- After approval of the site plan, a building permit must be submitted and approved by the City of Ankeny Planning and Building Department according to Municipal Code Chapter 175.
- Applications for construction shall also be reviewed and approved by the Polk County Aviation Authority Board (PCAA). These Hangar Construction Standards shall be utilized in the Board's review.
- The review process for the City of Ankeny and the PCAA can run concurrently.

## FAA Adherence

All building construction on the Ankeny Regional Airport shall comply with regulations and requirements of the Federal Aviation Administration (FAA). Nothing in these standards shall overrule or exempt any FAA requirements.

## Building Design and Materials

An airport hangar shall be designed so that the finished structure is compatible with other surrounding structures on the airport property. Compatibility includes materials, colors, scale, size, dimensions and proportions.

- Hangar Locations: Hangar locations shall be determined by the PCAA based on FAA regulations, the current Airport Layout Plan, and other regulations of the PCAA and the City of Ankeny. Hangar facilities including structures, entrances, sidewalks, parking stalls, etc. must be contained within the leased land area.
- Hangar Dimensions: The dimensions of the exterior of the hangar shall be consistent in size to adjacent existing or planned structures so that sight lines along the front faces of the hangars are preserved. The proposed hangar pad site as identified on the Airport Layout Plan represents the preferred hangar footprint. Construction of a smaller-sized hangar may be approved by the PCAA at the time of application.
- Hangar Heights: The maximum height of a hangar shall comply with the maximum height regulations as set by the FAA for regulating airspace in the vicinity of the airport runways. The tallest portion of the structures shall be no higher than the building height restrictions as shown on the Airport Layout Plan and as defined in Ankeny Municipal Code Chapter 201. The maximum height of a hangar shall also meet the zoning regulations of the City of Ankeny.
- Hangar Framework: Hangar framework, including columns, beams, trusses, rafters, and braces, shall be metal or as otherwise approved. Framework must be designed to meet current building code standards. A wood-framed hangar will not be allowed. Clear-span interior construction shall be utilized.
- Adjacent Hangars: Connecting adjacent hangars together to eliminate narrow open areas between hangars is encouraged. Connections to an existing adjacent hangar must be approved by the adjacent hangar owner and must meet the requirements of the Ankeny Building Department including (but not limited to) the need for fire walls, sprinklers, and utility conveyance. The roof slope/pitch of the new hangar shall be oriented so that storm water does not drain onto the adjacent hangar, nor onto the apron area in front of the hangar.
- Doors: Hangar doors shall be overhead doors unless otherwise approved by the PCAA. They shall be metal doors that are produced by an aviation door manufacturer. Large overhead hangar doors shall not be installed on the land side walls of the hangars (facing out from the airport) without PCAA approval.
- Flatwork: Hangar floors, aprons and ramp areas must be paved with finished PCC concrete of a minimum thickness as dictated by the current FAA reference tables for airport apron and taxiway design.



- Exterior Wall Materials: The exterior walls of a hangar shall be constructed of materials approved by the PCAA. Generally, materials may include metal, masonry, prefinished aluminum, glass, concrete, steel or a combination of these materials. Wood, Masonite siding or galvanized metal will not be allowed. The architectural design, style and color scheme of a hangar shall match on all sides of the hangar.
- Roofing Materials: Wood, wood composite, or asphalt shingles are not allowed as roofing materials. Metal roofs shall be a minimum of 28 gauge steel, standing seam type (no screw-down or bolted allowed). Factory finish shall be in a color approved by the PCAA.
- Exterior Colors: Colors of hangar walls, doors and roofing shall be muted, neutral, earth tone colors compatible with surrounding features and existing or previously approved structures planned on the airport and as determined and approved by the PCAA. For the Taxiway D Hangars, the PCAA has chosen a color scheme of white walls with gray trim so that all hangars have generally the same appearance.
- Signing: Exterior signing must meet the requirements of the Ankeny Municipal Code in regard to size, style, and lighting. Signing must be approved by the PCAA.
- Parking and Access: Parking stalls may be constructed by the hangar owner on the land side of the hangar. Parking stalls are prohibited on the airside of the hangar, where aircraft movement would be compromised. If the proposed hangar is adjacent to a parking lot that is maintained by the PCAA, a sidewalk is required to be constructed between the hangar and lot. All sidewalks and sidewalk ramps shall be constructed to meet-current ADA requirements.
- Lighting: Exterior lighting shall be installed in accordance with Municipal Code Section 192.02, Para. 3.A.(8). The lighting shall be shielded to restrict light spillover onto the airfield.
- Landscaping: The planting of shrubs, ornamentals, and other vegetation shall be approved by the PCAA. Trees are prohibited. All non-paved areas disturbed by the hangar construction shall be restored with sod or permanent grass seeding.
- Airport Security: The airport is currently protected by a perimeter chain link fence. If construction of a hangar or other structure causes the removal of a section of the fence, the fence shall be promptly replaced either by a new fence or by an exterior hangar wall (the hangar can function as part of the fence line). Temporary construction fencing consisting of similar chain link materials shall be included as part of the hangar construction so that airport security is maintained at all times during hangar construction.
- Site Drainage: The grade of the finished floor of a hangar and the surrounding paved surfaces shall provide positive flow of storm water out of and away from the new hangar. The hangar roof/pitch will be sloped so that storm water does not drain directly onto the apron in front of the hangar, or onto adjacent hangars. In areas where no storm sewer exists, the hangar owner may be required to install storm sewers, intakes and other storm facilities to accommodate proper storm drainage.

- Utilities: Connections to electric, gas, sanitary sewer, water mains, and communication facilities shall be the responsibility of the hangar owner. All utility services shall be constructed underground.
- Sitework Construction Specifications: All exterior utility and pavement construction shall meet the requirements of the current version of the Iowa Statewide Urban Standard Specifications for Public Improvements as amended by the City of Ankeny's Supplemental Specifications.
- Hangar Pad Utilization: It is the intent of the PCAA to utilize as much of the available hangar land lease area on the airport as possible. All hangar construction must meet the building standards of the City of Ankeny, including adherence to the IFC and NFPA Standards in regard to the need for fire-rated barrier walls and/or interior sprinkler systems. Adjacent hangar structures shall be constructed as attached (with common walls) or with 10 feet or less of open ground between the exterior walls. This open ground can be utilized to facilitate proper storm water drainage between buildings. Leasing more than 10 feet of open ground area adjacent to a proposed hangar to avoid the requirement to construct exterior fire barrier walls and/or provide a sprinkler system will not be allowed.

#### **Submittals**

In order to facilitate the necessary approvals by the City of Ankeny and the PCAA, the following submittals are required:

- Site plan drawings according to Section 192.02 of the City of Ankeny Municipal Code.
- Structural drawings, details and specifications as required by the City of Ankeny Building Department.
- Elevation views or other graphic representations showing hangar dimensions, roof slopes, door locations, colors, building materials, etc. for review by the PCAA Board.
- A construction schedule.

The construction of the proposed hangar can commence after each of the following are completed:

- 1) The City of Ankeny approves the site plan and issues a building permit to the hangar contractor.
- 2) The PCAA exercises a land lease for the hangar property with the owner.
- 3) The PCAA issues a letter to the hangar owner signifying that these building standards have been met.
- 4) The PCAA approves a hangar construction schedule, which shall become binding upon the owner / developer.