



DEVELOPMENT STANDARDS  
FOR  
FACILITIES & IMPROVEMENTS

**Adopted by the Stafford Regional Airport Authority February 8, 2000**

## Table of Contents

<b><u>Section</u></b>		<b><u>Page</u></b>
<b>1.00</b>	Development Standards for Facilities and Improvements	<b>1</b>
<b>1.01</b>	Review Procedures	<b>1</b>
<b>1.02</b>	Paved Areas	<b>1</b>
<b>1.03</b>	Drainage, Grading and Landscaping	<b>1</b>
<b>1.04</b>	Fencing, Security and Lighting	<b>3</b>
<b>1.05</b>	Fuel Storage and Distribution	<b>3</b>
<b>1.06</b>	Hangars, Buildings, Other Structures and Signs	<b>4</b>
<b>1.07</b>	Chemicals and Hazardous Materials	<b>8</b>

## **1.00 DEVELOPMENT STANDARDS FOR FACILITIES AND IMPROVEMENTS**

### **1.01 REVIEW PROCEDURES**

All plans and construction drawings for buildings, paved areas and other facilities shall meet at least the minimum development standards set forth below and shall require prior approval of the Authority. All facilities shall be in conformance with the adopted Airport Master Plan. The Master Plan contains an Approved Airport Layout Plan indicating locations and size of all airside and landside facilities. All buildings and other improvements will be in the locations so specified. In addition to specific design standards for Stafford Regional Airport, all facilities are subject to the applicable standards and regulations of the Federal Aviation Administration, the State of Virginia, and the County of Stafford, Virginia. Copies of all plans and specifications, including building elevations and finish samples shall be provided to the Authority for their approval. Approval by the Authority shall precede submission to other regulatory agencies, and be subject to regulatory authority.

### **1.02 PAVED AREAS**

#### **A. Aircraft Parking and Maneuvering Areas:**

1. Pavement sections, Runway 15-33, parallel taxiways and aprons, are designed to accommodate corporate/business aircraft within FAA design Group II Category C - 70,000 pounds, or less gross take-off weights (GTOW).
2. All aircraft pavements shall be constructed using FAA-approved materials.

#### **B. Automobile Parking Lots and Service Drives:**

Automobile parking lots and service drives shall be designed and constructed in conformance with the Stafford Regional Airport's Development Standards.

### **1.03 DRAINAGE, GRADING AND LANDSCAPING**

#### **A. Drainage:**

1. Unpaved areas within and adjacent to the runway/taxiway system and other aircraft operating areas shall have grades adhering to FAA recommendations.
2. All site plans shall comply with applicable federal, state, local and Stafford Regional Airport storm water management requirements.

### **1.03 DRAINAGE, GRADING AND LANDSCAPING (CONT.)**

3. Grates and inlet structures shall be manufacturer-certified to support the same weight aircraft as the adjacent pavement is designed to support.

4. All drainage facilities shall be sized in accordance with FAA and other federal, state, local and Stafford Regional Airport requirements and procedures considering existing, proposed and future site conditions. Computations supporting the drainage designs shall be submitted to the Authority for their advance review and approval.

#### **B. Grading:**

1. All finished grades for paving and building floor elevations shall be above the 100-year flood plain elevation.(MSL)

2. Grading operations will meet all applicable erosion and sediment control regulations as required by the Authority and other governing agency requirements.

#### **C. Landscaping:**

1. All graded areas will be fertilized, seeded with suitable and Authority approved ground cover, and mulched.

2. Non-aircraft areas shall be landscaped with grass, trees and shrubs. All plantings must be approved by the Authority for compliance with FAR Part 77 height restrictions and the Stafford Regional Airport Wildlife Hazard Management Plan.

3. A landscape plan shall be part of every facility proposal.

#### **D. Aircraft Wash Racks:**

Aircraft wash racks shall be equipped with oil separators and oil catch tanks to prevent oil from being discharged into the storm water or sanitary sewer system. Waste disposal and sanitary system plans shall be provided to the Authority.

#### **1.04 FENCING, SECURITY AND LIGHTING**

**A.** Fencing shall be provided between aircraft and non-aircraft areas to limit pedestrian and vehicular interference with aircraft movements, and to provide security for parked aircraft.

**B.** Area lighting shall be provided for safety and operational needs in accordance with the Authority's design and construction standards.

#### **1.05 FUEL STORAGE AND DISTRIBUTION**

**A.** All fuel shall be stored in above-ground tanks approved by the Authority and located in the central fuel farm in accordance with the FAA approved Airport Layout Plan (ALP) and Master Plan development concept, with setbacks from buildings and roads as required by National Fire Protection Association (NFPA). Any proposals for fuel storage locations not shown on the FAA-approved ALP will not be approved. The cost incurred by the Authority in pursuing an Airport Layout Plan revision as a result of a new fuel storage proposal shall be borne by the proposer.

Distribution of fuel into aircraft shall be via mobile or stationary pumping equipment (fuelers). Separate storage tanks and fuelers shall be provided for each grade of fuel distributed. Tanks and mechanical equipment must be labeled and color coded per FAA requirements (AC 150/5230-4) to distinguish the different fuel grades. Deadman controls shall be provided for unloading fuel from the tanks into the tending vehicles. Over-the-road tankers are prohibited from all airside areas.

Only those tenants having fuel storage rights specified in their franchise agreement or lease or in a special use permit shall be considered eligible for fuel storage. All fuel storage on the Airport must be approved by the Authority.

**B.** Fueling equipment and procedures shall comply with all federal, state and local laws and regulations as amended.

**C.** Minimum storage tank size shall be 12,000 gallons.

**D.** Access to and circulation around the fuel storage facilities shall not impact and/or impede existing Airport roads and shall in no case require the use of dedicated airside pavements or facilities. Primary access roads to the site must be designed for heavy truck traffic.

### **1.05 FUEL STORAGE AND DISTRIBUTION (CONT.)**

**E.** All above-ground tanks shall be installed in a concrete containment basin designed to capture any accidental spill of the contents of the fuel storage facility and/or delivery vehicle in accordance with all EPA, NFPA and other federal, state and local laws and regulations as amended. Emergency fuel shut off stations shall be located near the fuel tanks, be accessible, well marked and lit as per AC 150/5230-4.

**F.** All surface drainage from the storage area and docking/loading area shall be captured in a closed drainage system and directed through a fuel spill and/or oil-water separator device approved by the Authority. All drainage pipe shall be reinforced concrete culvert-pipe to withstand potential damage from corrosion and fire.

**G.** Fuel storage equipment shall be provided with metering devices that maintain and produce accurate receipts of fuel dispensed from the facility and are calibrated and approved by the Commonwealth of Virginia Department of Agriculture, the Division of Weights and Measures. Specifications for the metering equipment shall be submitted to the Authority for review and approval.

**H.** All site plans for facility development shall be subject to the Authority's site plan review process.

**I.** Design and construction specifications shall be approved by pertinent airport engineers designated by the Authority and also approved by the Authority and EPA.

### **1.06 HANGARS, BUILDINGS, OTHER STRUCTURES, AND SIGNS**

**A. Codes:**

All hangars, buildings, and other structures shall conform to building and safety codes applicable for the intended use.

**B. Location and Height:**

1. The location of buildings shall be consistent with the adopted Airport Master Plan. No buildings may be closer to the centerline of Runway 15-33 than the minimum set-back specified by FAR Part 77. In addition to the minimum set-back, no structures may be of such a height as to penetrate the runway or approach imaginary surfaces specified by FAR Part 77.

2. Windows and large areas of glass shall be oriented and/or treated to avoid reflections which could distract pilots landing or taking off.

## **1.06 HANGARS, BUILDINGS, OTHER STRUCTURES, AND SIGNS (CONT.)**

### **C. Utilities:**

1. Hangars 12,000 square feet or greater (not including T-hangars) which are used for aircraft maintenance or aircraft storage shall be provided with electrical service, lighting, heating and sprinkler system as per the current County Building Code.

2. Hangars less than 12,000 square feet (including T-hangars) used for aircraft storage only shall be provided with electrical service, lighting, smoke detectors and fire extinguishers.

3. All buildings requiring water service shall connect to the public water system. All tap fees in connection therewith shall be paid by the operator.

4. All buildings requiring sanitary waste disposal shall connect to the central sewer system. All tap fees in connection therewith shall be paid by operator.

5. All electrical and telephone service shall be underground. All tap fees and connection fees in connection therewith shall be paid by operator.

### **D. Access:**

1. Pedestrian and vehicular access to buildings normally open to the public shall avoid crossing aircraft operating areas (Airside areas).

2. All Improvements or facilities sited on the landside/AOA interface shall have appropriate accesses to both the landside and the AOA. All aircraft and aviation related structures and buildings shall be approved by the Authority.

3. All customer facilities and accommodations for passengers and crew of transient aircraft must include ramp or other convenient access for the disabled and sanitary rest rooms equipped for use by the disabled.

4. Vehicular access to aircraft storage hangars shall minimize crossing of aircraft operating areas. Automobile parking shall be provided for aircraft storage hangars in locations which do not interfere with aircraft operations.

5. For hangar-bays larger than 2,000 square feet, a personnel door shall be provided.

6. Hangar doors may be of sliding or bifold type. However, sliding doors may not be used in hangar configurations where the open door of one hangar interferes with access to an adjacent hangar.

#### **1.06 HANGARS, BUILDINGS, OTHER STRUCTURES, AND SIGNS (CONT.)**

##### **E. Materials and Finishes:**

The objective of the Authority is to insure that all new construction is of high quality and utilizes materials and finishes which will maintain their appearance with low maintenance.

Accordingly:

1. Hangars and hangar-type buildings shall be constructed with steel, aluminum, or masonry exteriors with standing seam non-glare roof. All exterior metal surfaces shall have a durable finish applied at the point of manufacture. Office building specifications shall be approved by the Authority prior to construction.

2. Exterior colors and textures shall harmonize with other buildings and structures. The Authority reserves the right to disapprove exterior materials or finishes which it feels would detract from the overall visual impression of the Airport.

##### **F. Signs:**

Signs shall be consistent with current Stafford County sign regulations and ordinances, and adhere to the following standards and appropriate regulations of the Authority. All proposed signage shall receive prior approval of the Authority:

##### **1. Free Standing Signs:**

- a. Monument-style signs only permitted on property under franchise to applicant for sign

- b. Only in non-movement areas
- c. Six (6) foot maximum height to top of sign
- d. Internal lighting only

**2. Exterior Wall Signs:**

Individual mounted letters shall be of Lexan-type material only

**1.06 HANGARS, BUILDINGS, OTHER STRUCTURES, AND SIGNS (CONT.)**

**3. Prohibited Signs:**

- a. Banners
- b. Painted canvas
- c. Moving or moving parts
- d. Projecting from walls or a roof
- e. Directional
- f. Directional signs moved by elements
- g. Flashing or rotating
- h. Roof signs
- i. Illuminated signs placed where they may create a glare or a distraction to pilots
- j. Lighted signs that interfere with airfield lighting
- k. Temporary signs or posters

**4. Facing of Signs:**

- a. Airside - Must face runways and taxiways
- b. Landside - Must face vehicular or pedestrian traffic

**1.07 CHEMICALS AND HAZARDOUS MATERIALS**

Operators utilizing chemicals or other hazardous materials shall store these materials in tank containers and buildings meeting state and/or federal standards. The location of on-Airport storage areas will be determined by the Authority.