

DEVELOPMENT STANDARDS
FOR
FACILITIES & IMPROVEMENTS

The Virginia Tech/Montgomery Regional Airport Authority November 19, 2002

These Standards shall reflect all pre-existing agreements

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1.00 Development Standards for Facilities and Improvements

1.01 REVIEW PROCEDURES

All plans and designs for construction of 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 or the latest revision thereof. The Master Plan contains an approved Airport Layout Plan (ALP) indicating locations and size of all airside and landside facilities. All buildings and other improvements shall be in the locations so specified. In addition to specific design standards for the Virginia Tech/Montgomery Executive Airport (VTMEA), all facilities are subject to the applicable standards and regulations of the Federal Aviation Administration, the State of Virginia, The Town of Blacksburg and the aesthetic review process of Virginia Tech. Copies of all plans and specifications, including building elevations and finish samples shall be provided to the Authority prior to the submission to any other regulatory agencies. The Airport Authority is not responsible for site review costs. All site plans shall be designed in accordance with the Virginia Storm-Water Management Handbook, First Edition, 1999 or latest edition.

1.02 PAVED AREAS

A. Aircraft Parking and Maneuvering Areas:

1. Pavement Sections, Runway 12-30, parallel taxiways and aprons, are designed to accommodate corporate/business aircraft within FAA design Group II

Category C-45,000 pounds single wheel, or 64,000 pounds dual-wheel or less gross take-off weights (GTOW)

2. All aircraft pavements shall be constructed using FAA-approved materials and design standards,

B. Automobile Parking Lots and Service Drives:

Parking Lots and Service Drives design, materials and methods of construction shall be in accordance with the latest revision of the applicable Virginia Department of Transportation (VDOT) January 1994 Standards of Road and Bridge Specifications, and special provisions.

1.03 DRAINAGE, GRADING AND LANDSCAPING

A. Drainage:

1. Unpaved areas within and adjacent to the runway/taxiway system and other aircraft operation area shall have grades adhering to FAA recommendations.

2. All site plans shall comply with applicable federal, state, local Storm Water Management requirements.

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

4. Storm Drainage Systems shall be designed and constructed in accordance with the American Society for Testing and Materials (ASTM); Virginia Department of Transportation Officials (AASHTO). All drainage facilities shall be sized in accordance with existing, proposed and future site conditions of the Airport. Computations supporting the drainage design shall be submitted to the Authority for their advance review and approval.

B. Grading:

1. All disturbed area not designated for pavement and sidewalk replacement structural use and the like shall be stabilized. All stabilization measures and materials shall be in accordance with the specifications contained within the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992 and/or any subsequent revisions or editions.

C. Landscaping:

1. All graded areas will be fertilized, seeded and mulched in accordance with the recommended topsoil testing. Soil testing shall be done prior to

seeding. Grass seed shall consist of pure, live certified grass seed mixture, of re-cleaned seed of the latest crop, and containing weed seed less than 0.5 percent by weight of the total mixture.

2. Non-aircraft areas shall be landscaped with grass, trees and shrubs. All plantings must be approved by the Authority for compliance with Part 77 height restrictions and AC 150-5300 Wildlife Hazard.

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 comply with the Town of Blacksburg and the VPI Sanitation Authority Regulations and be provided to the Authority. A Spill prevention and countermeasures control plan must be developed to dovetail with the Authorities plan.

1.04 FENCING, SECURITY AND LIGHTING

A. Fencing shall be provided between aircraft and non-aircraft areas in order to limit pedestrian and vehicular interference from the aircraft movement area and to provide security for parked aircraft.

B. Area lighting shall be provided for safety and operational needs in accordance with the Authorities design and construction standards as specified in the February 12, 2003 VTMEA Development Standards or the most recent edition thereof . All lighting in the AOA will be browed to prevent light pollution.

C. Security will be compatible with the Airports August 12, 2002 Airport Security Plan, or the most current edition thereof.

1.05 FUEL STORAGE AND DISTRIBUTION

A. All fuel shall be stored in above ground-ground tanks approved by the Authority and located in the central fuel farm in accordance with the FAA approved 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 ALP revision as a result of a new fuel storage proposal shall be borne by the proposer.

Distribution of fuel into aircraft shall be from 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 150/5231-4) 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, except those areas that they are required to traverse in order to dispense fuel into the fuel farm or tender within the fuel storage area.

Only those leesees that have fuel storage rights specified in their lease agreements or have a special use permit shall be considered eligible for fuel storage. The Authority must approve all fuel storage on the Airport.

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 8,000 gallons and for mobile tenders 1,200 gallons.

D. Access to the 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.

E. All above ground tanks shall be installed in an individually approved 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 *from time to time*. Emergency fuel shut off stations shall be located near the fuel tanks, be accessible, well marked and lit as per FAA, 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 water separator device approved by the Authority. All drainage pipes shall be in 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 if applicable .

H. All site plans for facility development shall be subject to the Authorities 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.

J. Fuel dispensed from a stationary tank will be required to have a

containment system of a design and debt large enough to contain the amount in the tank and shall be designed to comply to State of Virginia Guidelines.

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 building may be closer to the center-line of Runway 12-30 than the minimum setback requirements specified by FAR Part 77. In addition to the minimum setback, 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 orientated and /or treated to avoid reflections, which could distract pilots landing and taking off.

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 systems as per the appropriate building code at the time of construction.

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 and water consumption shall be paid by the operator.

4. All buildings requiring sanitary waste disposal shall connect to the central sewer system. All tap fees and water consumption shall be paid for by the operator.

5. All electrical and telephone service shall be underground. The operator shall pay all tap fees, connection fees and usage billings.

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 must comply with ADA standards.

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

5. For hangar-bays larger than 2,000 square feet, a personal 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.

E: Materials and Finishes:

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

Accordingly:

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

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

3. Virginia Tech has final aesthetic approval for all new construction.

F. Signs:

Signs shall be consistent with the Town of Blacksburg regulations and ordinances, and adhere to those standards and appropriate regulation 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 (leesee) to applicant for sign.

| B. Only in non-movement areas.

C. Six (6) foot maximum in height to top of sign. (see town ordinance governing size of sign)

D. Internal lighting only?

E. Exterior Wall Signs:

Individual mounted letters shall be of Lexan-type material only.

2. Prohibited Signs:

A. Banners

B. Painted Canvas

C. Moving or moving parts

D. Projecting from walls or 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

3. 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 building structures meeting state and/or federal standards. The Authority will determine the location of on Airport storage areas. All developers were prepare a Storm Water Pollution Prevention Plan as well as a Spill Prevention Control and Countermeasures Plan.

1.08 AIRPORT SECURITY

Developers will provide an Airport Security Plan.