

## **Sec. 419 AIRPORT OVERLAY DISTRICT (AO)**

### **(a) Purpose**

The purpose of the **Airport Overlay District** is to regulate and restrict the height of structures, objects, or natural growth, regulate the locations of noise sensitive uses, and otherwise regulate the use of property in the vicinity of Frederick Municipal Airport (FDK) by creating the appropriate zones and establishing the boundaries thereof; providing for changes in the restrictions and boundaries of such zones; defining certain terms used herein; providing for enforcement; and establishing penalties.

### **(b) Applicability**

The regulations of this section shall apply to all areas designated on the Airport Zoning Ordinance Overlay Map within the City jurisdictional limits, as depicted on the Official Zoning Map and as further depicted in Figure 419-1. Land within the **Airport Overlay Impact District** may be used as permitted in the underlying district only if and to the extent such use is also permitted in the overlay district and subject to the additional regulations of the overlay district regulations.

### **(c) Definitions**

These are found in Article 10 of this Code.

### **(d) Development Standards**

The following criteria shall be applied within the boundaries of the AO District:

- (1) No use shall be made of any land that will cause any interference with navigational signals at the airport or with radio or with any aircraft.
- (2) No use, building or structure shall emit emissions of fly ash, dust, vapor, gases or other forms of emissions that may conflict with any planned operations of the airport.
- (3) No use shall be permitted that would attract, foster, or otherwise create an increase in wildlife hazards.

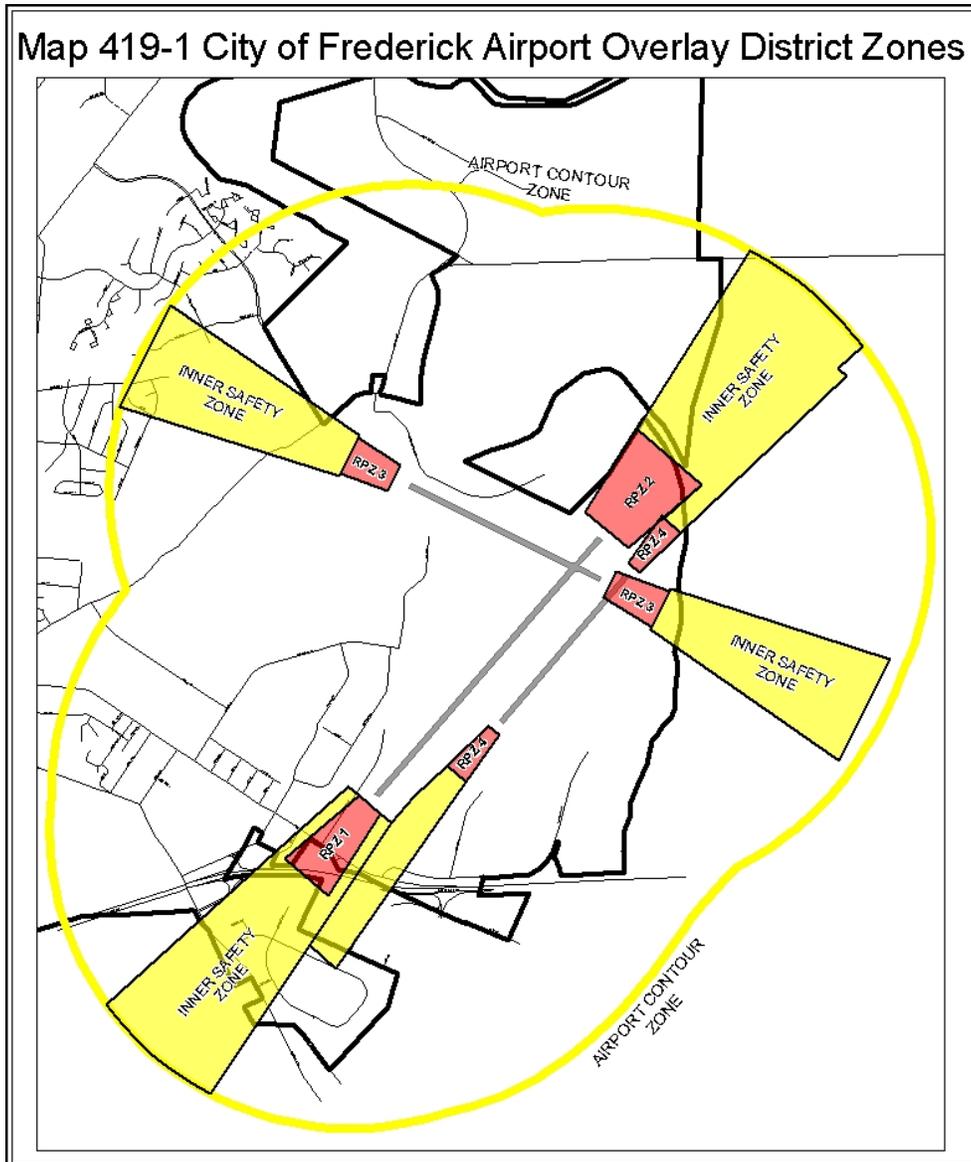


Figure 419-1 Airport Overlay Zones

- (4) No structure, device or other object shall be placed or erected that makes it difficult for pilots to distinguish between airport lights and other, results in glare to pilots, impairs visibility in the vicinity of the airport, or otherwise endangers the landing, take-off, or maneuvering of aircraft.
- (5) Except as necessary and incidental to airport operations, no building, structure or object of natural growth shall be constructed, altered, maintained, or allowed to grow so as to project or otherwise penetrate the airspace surfaces.
- (6) The public assembly of people and other uses or activities that allow concentration of people such as multi-family, hospitals, schools, churches, etc. shall be prohibited within the Runway Protection Zone 1, Runway Protection Zone 2, and Runway Protection Zone 3 at Frederick Airport.
- (7) No use, building, or structure shall be permitted or constructed within the Runway Protection Zone 1, Runway Protection Zone 2, and Runway Protection Zone 3, except accessory activities as provided by a “Modification to Standards” from the Federal Aviation Administration.
- (8) Agricultural-to-Agricultural subdivisions having a remainder less than 50 acres in size or accessory agricultural structures shall be prohibited within the Runway Protection Zone 1, Runway Protection Zone 2, Runway Protection Zone 3, and Inner Safety Zone 4 unless for conveyance to the City/ Airport.
- (9) Single family dwellings lawfully permitted and established within the AO District prior to the adoption of this chapter may be maintained, repaired, or reconstructed in accordance with the provisions of this chapter, provided the dwelling meets the applicable standards of the City of Frederick Code.
- (10) Other uses or activities determined to be incompatible with aviation and aviation safety as determined by the Planning Commission, with recommendation from the Airport Commission, shall be prohibited.

- (11) A declarative statement shall be recorded with the Frederick County Court House for each lot within a subdivision plat (as a note on the plat) and for final site plan within Airport Overlay District. Additionally, the statement shall specifically state when properties are located within the Approach surfaces of the Airport runways. The declarative statement shall read as follows:

“The subject property is located within an Airport Overlay District in which a variety of aviation activities occur on a daily basis, 24 hours per day. Such activities may include but are not limited to aircraft overflight noise, vibration, chemicals, odors, and other associated airport activities.”

**(e) General Review Procedures**

No use, building, structure, or development activity shall be established, altered or relocated by any person, firm or corporation except as otherwise authorized by this chapter and shall be processed in accordance with applicable provisions of the underlying zone, and the following:

- (1) Land use applications within any portion of the AO District shall be subject to the prescribed review of Article 3 of the City of Frederick Code.
- (2) The Planning Commission may require the applicant to submit either or both of the following:
  - A. A certificate from an engineer or land surveyor, that clearly states that no airspace obstruction will result from the proposed use.
  - B. The maximum elevation of proposed building or structures based on the established airport elevation and NAD 1983 – reference datum. Elevations shall be determined by an engineer or a land surveyor and expressed in both MSL and AGL.

**(f) Site Plan Requirements**

An application for a final site plan or amendment to a final site plan shall submit the following information in addition to application materials required as set forth in the City of Frederick Code.

- (1) The site plan shall clearly delineate the location of the project to the Runway Protection Zone 1, Runway Protection Zone 2, Runway Protection Zone 3, Inner Safety Zone 4, and /or Airport Contour Zone 5 as described in Subsection (h) below.
- (2) The location and height of all proposed buildings, structures, and natural vegetation in MSL and AGL when located within the following:
  - A. Runway Protection Zone 1, Runway Protection Zone 2, Runway Protection Zone 3, Inner Safety Zone 4, and/or Airport Contour Zone 5;
  - B. Horizontal and Conical Surfaces; and
  - C. Other *Safety Zones* or *FAR Parts 77 Imaginary Surfaces* not describe in subsection A and B.
- (3) In accordance with FAA *FAR Part 77* Regulations, FAA *Form 7460-1, Notice of Proposed Construction or Alteration*, shall be submitted whenever construction or alternation of a structure is proposed with the following characteristics:
  - A. Any construction or alternation of more than 200 feet in height above the ground level (AGL) at its site.
  - B. Any construction or alternation of greater height than the Part 77 imaginary surface detailed under the Airspace and Safety Surfaces described below.

- C. Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where over-crossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a rail system, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of (3)(a) or (b) of this section.
  - D. When requested by the FAA, any construction or alteration that would be in an instrument approach area as defined in the FAA standards governing instrument approach procedures.
  - E. Any construction or alteration on Airport property that is available for public use.
- (4) Each applicant who is required to notify the Administrator shall send one executed form set of FAA *Form 7460-1* to the appropriate FAA Office address shown on Form 7460-1), one set to the Manager, Frederick Municipal Airport, and one set to the City of Frederick Department of Planning for review. This notice must be submitted at least 30 days before the earlier of the following dates:
- A. The date the proposed construction or alteration is to begin.
  - B. The date an application for a construction permit is to be filed.

**(g) Safety Zones and Airspace Safety Surfaces**

The safety zones (*see Subsection (h)*) and airspace safety surfaces (*see Subsection (i)*) are directly tied to the latest version of the Federal Aviation Administration-accepted Frederick Municipal Airport, Airport Layout Plan and/or the Airspace Plan. This overlay and its restrictive surfaces shall always be consistent with the current version of these plans. These surfaces of the AO District as set forth herein, serve to restrict those uses that may be hazardous to the operation safety of aircraft operating within the Overlay. The following safety zone and airspace safety surfaces are hereby created and established for Runways 5-23 and 12-30 (and consideration of future parallel Runway 5R-23L):

**(h) Safety Zones**

- (1) Runway Protection Zone 1a: This zone begins 200 feet from the runway and measures 500 feet across, centered on the runway. The zone extends 1,700 feet to its widest point, which measures 1010 feet across, 505 feet on either side of the runway centerline.
- (2) Runway Protection Zone 1b: This zone begins 200 feet from the end of the runway and measures 1,000 feet across, centered on the runway. The Zone extends 1,700 feet to its widest point, which measures 1,510 feet across, 755 feet on either side of the runway centerline.
- (3) Runway Protection Zone 2: This zone begins from the outer boundaries of the primary surface, 200 feet from the end of the runways and measures 500 feet across centered on the runway. The zone extends 1,000 feet to its widest point, which measures 700 feet across, 350 feet on either side of the runway centerline.
- (4) Runway Protection Zone 3: This zone is an ultimate/ future safety zone based on Frederick Municipal Airport's Layout Plan. Once a parallel Runway 5 – 23 is constructed, this zone will be established.
- (5) Inner Safety Zone 4: This zone begins at the end of the Runway Protection Zones and extends out to the end of the approach surface. The zones mimic the angles of their respective Runway Protection Zone and extend to the approach surface.
- (6) Inner Safety Zone 4b: This zone begins 200 feet from the end of the runway and measures 1,000 feet centered on the runway. This zone parallels the Runway Protection Zone angles and extends to the end of the approach surface where it measures 3,500 feet wide.
- (7) Airport Contour Zone 5: This zone begins at the 65 DNL and extends to a contour that is offset one-mile.

**(i) Airspace Safety Surfaces - Federal Aviation Regulations (FAR) Parts 77 Imaginary Surfaces**

- (1) **Primary Surface:** The approach area is all land and space, which lies directly under an imaginary approach surface longitudinally centered on the runway, extending 200 feet in each direction of the paved threshold of the runway. Primary surface widths vary with the classification of the runway; however, the width is uniform throughout and is based on the most precise approach existing or planned for either end of that runway.
- (2) **Horizontal Surface:** A horizontal plane 150 feet above the established Airport Elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each Primary Surface of each runway. Tangents then connect the adjacent arcs.  
Arc sizes:
  - A. For all runways designed visual or utility, the radius of each arc is 5,000 feet.
  - B. For Precision Instrument and Non-Precision Instrument Runways, the radius of each arc is 10,000 feet.

The radius of the arcs specified for each end of a runway will have the same numerical value that value being the highest determined for either end of the runway. When a 5,000 feet arc is encompassing tangents connecting two adjacent 10,000 feet arcs, it shall be disregarded.

- (3) **Conical Surface:** A surface, which extends upward and outward from the outer limits of the Horizontal Surface for a horizontal distance of 4,000 feet. The slope of the conical surface is 20:1 (5 percent) measured in a vertical plane.
- (4) **Transitional Surface:** The transition surface begins on either side of the primary surface and slopes upward and outward at a 7:1 (14.3 percent) slope meeting the horizontal surface at 150 feet above the elevation of the airport. This surface is also connected to the approach surface at both ends of the runway at a slope of 7:1.

Table 419-1: FAR Part 77 Regulation for Frederick Municipal Airport

Item	Runway 5	Runway 23	Runway 12	Runway 30
Width of Primary Surface and Approach Surface Width at Inner End	1,000'	1,000'	500'	500'
Radius of Horizontal Surface	10,000'	10,000'	5,000'	5,000'
Approach Surface Width at End	3,500'	16,000'	1,500'	1,500'
Approach Surface Length	10,000'	50,000'	5,000'	5,000'
Approach Slope	34:1	50:1 for inner 10,000 feet. 40:1 for outer 40,000 feet.	20:1	20:1

**(j) Conflicting Regulations**

In the event of a conflict between the Airport Overlay District Ordinance adopted under this article and any other regulations applicable to the same area, whether the conflict is with respect to the height of structure(s) or tree(s), the use of land, or any other matter, the more stringent limitation or requirement shall govern and prevail.