

## **SECTION 6** **AIRPORT PLANS**

### **6.0 INTRODUCTION**

The Airport master planning process evolved through several analytic efforts in the previous sections. Each of these efforts culminated in the distribution and subsequent presentation of “draft” sections to the TAC with the airside and landside development alternatives for the Master Plan presented to the TAC in February 2005. Comments received at this meeting focused primarily on the strength of Airside Alternative 3 and Landside Alternative 2, with some minor modifications, as the best alternatives for providing long-term facility needs at DMW.

### **6.1 RECOMMENDED MASTER PLAN CONCEPT**

The recommended Master Plan concept consists of a new Runway 16-34 located 250 feet from the existing runway and constructed at a length of 6,400 feet. A new parallel taxiway would also be constructed at a runway-taxiway centerline separation of 400 feet. This configuration would accommodate aircraft within ARC C-III criteria. The existing runway and taxiway would be removed. Additionally the proposed runway would be moved approximately 600 feet to the north to avoid existing Carroll County facilities within the RPZ.

Improvements planned within the landside development area include additional T-hangars and conventional hangars, additional apron space for transient aircraft, expansion of the existing fuel farm, and construction of a new FBO facility, and Airport terminal building.

### **6.2 AIRPORT LAYOUT DRAWINGS**

The remainder of this section will present the recommended development alternatives in a series of detailed drawings. These drawings will become the official layout plans for the Airport and will be submitted to the FAA for review and approval. The drawings depict existing and future facilities within the 20-year period, property acquisition required to develop those facilities, and objects that may affect the safe navigation of aircraft near the Airport.

The drawings have been prepared on a computer-aided drafting system (AutoCAD Version 2005) for a higher degree of accuracy and manageability. The computerized plan set provides the detailed Airport information on multiple layers to permit the user to focus on any section of the Airport at a desirable scale. The plans can be used for preliminary information related to engineering design, and can be easily updated to reflect new development as it is constructed. The ALP set has been prepared on 24-inch x 36-inch reproducible sheets and includes the following drawings:

- Cover Sheet
- Existing Airport Layout Plan
- Future Airport Layout Plan



roads, auto parking areas, aircraft parking aprons, and security fencing are presented in more detail on these plans.

#### **6.2.5** *EXISTING RUNWAY 16-34 INNER APPROACH PLANS AND PROFILES*

The Existing Runway 16-34 Inner Approach Plans and Profiles depict the runway approach areas for each runway end, and each consists of a large-scale plan and profile view of the approach surfaces. These plans facilitate the identification of natural and manmade obstructions and physical features that lie within the approach to each runway end. Once identified as an obstruction to air navigation, the disposition of these obstructions is noted on the plans.

The plans also depict the existing RPZ for each end of Runway 16-34 on a large scale plan. The aerial survey noted above was used to provide the information shown on the plan and to facilitate the identification of incompatible land uses within each RPZ. The proposed disposition of these incompatible land uses are identified on the plan.

#### **6.2.6** *FUTURE RUNWAY 16-34 INNER APPROACH PLANS AND PROFILES*

The Future Runway 16-34 Inner Approach Plans and Profiles depict the runway future approach areas for each runway end, and each consists of a large-scale plan and profile view of the approach surfaces. These plans facilitate the identification of natural and manmade obstructions and physical features that lie within the approach to each runway end. Once identified as an obstruction to air navigation, the disposition of these obstructions is noted on the plans.

The plans also depict the future RPZ for each end of Runway 16-34 on a large scale plan. The aerial survey noted above was used to provide the information shown on the plan and to facilitate the identification of incompatible land uses within each RPZ. The proposed disposition of these incompatible land uses are identified on the plan.

#### **6.2.7** *FUTURE FAR PART 77 AIRSPACE PLAN*

This plan is based on criteria contained in 14 CFR Part 77. In order to protect the airspace and approaches to each runway end from hazards that could affect the safe and efficient operation of the Airport, FAR Part 77 establishes the Federal criteria for use by local planning and land use jurisdictions to control the height of objects in the vicinity of the Airport.

The Future FAR Part 77 Airspace Plans include a graphic depiction of these criteria. These plans will permit jurisdictions to determine if construction in the vicinity of the Airport will penetrate existing or ultimate airspace surfaces. Design criteria for surface heights, angles, and radii are determined by aircraft category and runway approach instrumentation. The Airspace Plans for DMW are based on the Airport accommodating ARC C-III aircraft with a precision instrument approach to Runway 16, and a non-precision instrument approach to Runway 34.

The Future FAR Part 77 Airspace Plan is also used to indicate obstructions to the imaginary surface of the runway. At airports such as DMW that have currently or ultimately will have an ILS, the most complete survey of obstructions within the imaginary surfaces is usually found on the Obstruction Chart (OC). The OC is a large-scale illustration of the Airport and the FAR Part 77 surfaces associated with each runway. Along with the large-scale illustration, an Obstruction Data Sheet is provided for detailed information on each significant object in proximity of the Airport's imaginary surfaces. Surveyed and compiled by the National Ocean Service (NOS) of the US Department of Commerce, the latest OC for DMW was surveyed in August 2003 and published in January 2004. The OC was consulted for obstruction information not included in the aerial survey.

The Future FAR Part 77 Airspace Plan provides valuable information on the potential conflicts between aircraft operations and natural and man-made objects in proximity of the airport. When overlaid on USGS quad sheets, it provides the ability to analyze the location of obstructions within each imaginary surface near the Airport.

FAR Part 77 assigns three-dimensional imaginary surfaces to the runway. These imaginary surfaces emanate from the runway centerline and are dimensioned to protect approaching and departing aircraft from the potential hazards of obstructions. The imaginary surfaces include the primary surface, approach surface, transitional surface, horizontal surface, and conical surface.

#### **6.2.8** *EXISTING OFF-AIRPORT LAND USE AND NOISE CONTOUR PLAN*

This drawing will be used by the County to promote land use compatibility in the vicinity of the Airport, including update of any zoning ordinances and evaluating existing and proposed land uses lying beneath areas of concentrated aircraft overflight. Existing and future DNL 60 dB and 65 dB noise contours are superimposed over each land use plan.

#### **6.2.9** *AIRPORT PROPERTY MAP AND DATA TABLES*

This plan shows existing and future Airport property boundaries, date of acquisition, acreage of individual parcels, the federal program and project number under which each parcel was acquired, and how each parcel was, or is, to be secured.

### **6.3** *SUMMARY*

The ALP set is designed to assist the County in making decisions relative to future development at the Airport. The plan provides for development to satisfy Airport facility requirements for the next 20 years. Flexibility will be a key to future development since activity may not occur exactly as forecast.