

# **Chapter 6 – Airport Layout Plan Narrative Report**

#### Introduction

A set of Airport Layout Plan (ALP) drawings has been prepared for Abilene Regional Airport (ABI) that graphically depict the existing and proposed facilities through the 20-year planning program as recommended and approved by the City of Abilene. The set includes: Title Sheet, Airport Layout Drawing (ALD), Airport Airspace Drawing, Inner Portion of the Approach Surface Drawings, Departure Surface Drawings, Terminal Area Drawing, Land Use Drawing, and Exhibit A Airport Property Map.

# **Airport Layout Drawing**

The Airport Layout Drawing (ALD) is a scaled single-page drawing depicting existing and ultimate airport development based on proposed land, facilities and features recommended for the short and long-term operation and development of the Airport. In addition, the ALD displays separation and clearance distances for future unrestricted development of the Airport and navigational aid (NAVAID) facilities. The layout is the result of a series of analyses and discussions with the Planning Advisory Committee to determine the optimum plan to yield a safe and cost-effective facility. The proposed improvements include projects needed to meet the projected aviation demands of the airport service area throughout the next 20-years.

# **Airport Airspace Drawing**

The airport airspace drawing is a graphical depiction showing the land use area covered by Federal Aviation Regulations (FAR) Part 77 imaginary airspace surface criteria, which is used as a federal guideline to determine whether existing or proposed structures represent obstructions to air navigation (penetrate any of the FAR Part 77 imaginary airspace surfaces). Once approved by the FAA, the FAR Part 77 airspace is reserved for aeronautical purposes. Therefore, it is recommended that the City of Abilene review and update their Height and Hazard zoning as necessary to reflect the updated Airspace Drawing, and to the extent reasonable, restrict and enforce the height of structures and objects of natural growth, as appropriate, within the FAR Part 77 airspace structure. The new airspace map associated with this project should be adopted and put in place as soon as possible to protect the airport.

## Inner Portion of the Runway Approach Surface Drawings

This is a large-scale drawing showing the plan and profile views of the inner portions of the approach surfaces. The plans are designed to identify current and potential structures (roadways, powerlines, trees, etc.) in relation to the existing and ultimate runway threshold. This drawing aids in determining the clearance or violation of close-in objects based on top elevations as they are encountered along the extended runway centerline and within the





approach surfaces. Each violation and/or obstruction is identified, with appropriate future mitigation recommendations.

# **Departure Surface Drawings**

The departure surface drawing is a large-scale drawing showing the plan and profile views of the departure surfaces. The plans are designed to identify current and potential structures (roadways, powerlines, trees, etc.) in relation to the existing and ultimate runway threshold. This drawing aids in determining the clearance or violation of close-in objects based on top elevations as they are encountered along the extended runway centerline and within the departure surfaces. Each violation and/or obstruction is identified, with appropriate future mitigation recommendations.

# **Terminal Area Drawing**

This is a large-scale drawing of the terminal area showing the ultimate construction of facilities to meet future terminal area requirements. The primary features of this plan include improvements to and new development of facilities and equipment. The ultimate design for the terminal area provides an adequate and functional layout for aircraft parking and maneuvering, hangar and terminal development, airport access and parking, maintenance facility development, and other types of airport-related development planned for the Airport. Additionally, the plan will provide adequate separation and clearances for future unrestricted development of all terminal facilities and equipment.

### **Land Use Drawing**

The land use drawing is a single-page drawing, at the same scale as the ALD, showing all on-airport land uses to include: aeronautical purposes (runways/taxiways/safety areas), non-aeronautical use (revenue generation areas), terminal use, agricultural use, and light/heavy industrial use. Also depicted beyond the airport boundary are the land uses in the airport vicinity generally based on established zoning patterns.

# **Airport Exhibit A Property Map Drawing**

This is a three-page drawing, Exhibit A - Property Map, showing an overlay of all relevant tracts of existing airport fee-simple property and aviation/avigation easement interests including the size (acres), date (grant agreement) and proposed airport property acquisition. Properties recommended for the ultimate build-out based on the recommendations of the master plan will be included along with existing ownership, type of ultimate ownership by the Airport, total acreage in the parcel, and ultimate acreage needed for airport development and safety, as available.

