



# Lehigh Valley International Airport

Allentown, Pennsylvania

## Airport Master Plan Update Section 9 – Airport Layout Plan Drawing Set

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## Section 9 – Airport Layout Plan Drawing Set

### 9.1 Introduction

The LVIA’s Airport Layout Plan set (ALP) was developed in accordance with FAA guidelines outlined in AC 150/5070-6B, *Airport Master Plans* and consistent with the checklist provided in FAA Standard Operating Procedure (SOP) 2.00, *Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs)*. The ALP illustrates the overall development plan for the Airport through 2040. Section 9.2 summarizes the full ALP drawing set with explanations of each sheet. The ALP drawing set is included in **Appendix L**.

### 9.2 Airport Layout Plan Drawing Descriptions

The ALP set is derived from the base mapping collected in the Airport GIS/Airspace Analysis effort and includes the following sheets (Sheet 1 through Sheet 20):

#### Sheet 1 – Title Sheet

The Title Sheet includes the Pennsylvania state map, and the location and vicinity maps depicting the Airport’s location. Each sheet included in the ALP set is listed by title with a designated sheet number and a box for a revision date. The signature block for submission, date, and FAA approval is also included on the Title Sheet.

#### Sheet 2 – Airport Data Sheet

The Airport Data Sheet includes data tables with runway data, taxiway data, general airport data, existing modification of design standards, declared distances, general notes, and wind rose diagrams and tables. The remaining ALP sheets utilize this data sheet to correspond to the full drawing set.

#### Sheet 3 – Existing Facilities

The Existing Facilities Sheet depicts the existing facilities and topography, safety and critical areas, and basic airport and runway data. The existing facilities table is included with top elevations and obstruction marking/lighting noted for each facility. The existing property line as well as survey monuments are included. Latitude and longitude coordinates are shown for runway ends, runway intersections, as well as the airport reference point. Departure and Part 77 approach surfaces for each runway end are illustrated. TSS OCS surfaces, PAPI surfaces, TERPS, and GQS surfaces are all represented where applicable for runway ends. Navigational aids and lighting are depicted with a symbol corresponding to each. A legend is provided to illustrate line and symbol types for each attribute.

#### Sheet 4 – Future Airport Layout Plan

The Future Airport Layout Plan includes the existing and ultimate facilities with topography, safety and critical areas, and basic airport and runway data tables just as the Existing Facilities sheet details. The Future ALP sheet adds proposed projects with a table showing all phases of development (Phase 1 through Phase 4, spanning zero to 23 years). Any change in location of navigation aids, lighting, etc. are depicted on the



Future ALP sheet. A box for the FAA approval stamp is provided on this sheet, as well.

## Sheets 5 – 8 – Area Development Plans

Sheets 5 through 8 are all larger scale drawings of the existing and proposed terminal area development and include the existing facilities table, buildings, gates, security fencing/gates and other key features. The four phased proposed projects are also listed in a table on these plans.

## Sheet 9 – Airport Airspace Drawing

The Airspace Plan depicts 14 CFR Part 77, *Objects Affecting Navigable Airspace* surfaces including the ultimate plan view. All surfaces are illustrated with dimensions at each runway end, and obstructions are listed in an obstruction table as well as marked per their proximity to the airport.

## Sheet 10 – Airport Airspace Drawing Runway 6-24

The Airport Airspace Drawing Runway 6-24 depicts 14 CFR Part 77, *Objects Affecting Navigable Airspace* surfaces at each end of Runway 6-24. This larger scale drawing of each runway end shows dimensions for the surfaces. Standard diagrams are included on this plan that illustrate all pertinent surfaces, as well as a table with dimensional standards.

## Sheet 11 – Airport Airspace Drawing Runway 13 End

The Airport Airspace Drawing Runway 13 End depicts 14 CFR Part 77, *Objects Affecting Navigable Airspace* surfaces included on Runway 13. This larger scale drawing of the runway end shows dimensions for the surfaces. Standard diagrams are included on this plan that illustrate all pertinent surfaces, as well as a table with dimensional standards.

## Sheets 12 – 15 – Runway End Plans and Profiles

Sheets 12 through 15 are Runway End Plan and Profile drawings that depict 14 CFR Part 77, *Objects Affecting Navigable Airspace* surfaces for each runway end with an existing and future view in both plan and profile format. All appropriate obstructions are shown in both views.

## Sheets 16 – 17 – Obstruction Tables

Sheets 16 and 17 are Obstruction Tables sheets that lists all obstructions to Runways 6, 24, 13, and 31, and include the following details (where applicable for each obstruction):

- Point ID
- Description of obstructions
- Obstruction elevation (MSL)
- Ground elevation (MSL)
- Height of obstruction
- Part 77 surface height
- Part 77 penetration
- Threshold Siting Surface height
- Threshold Siting penetration
- Proposed disposition of obstruction



### **Sheet 18 – On-Airport Land Use Drawing**

The On-Airport Land Use Drawing illustrates on-airport land uses by category, safety areas/zones, property line, and jurisdiction boundaries. This drawing coordinates with the Land use element of this project.

### **Sheet 19 – Off-Airport Land Use Drawing**

The Off-Airport Land Use Drawing illustrates off-airport land uses to at least the 65 DNL contour based on the previously approved Part 150 Noise Study, safety areas/zones, property line and jurisdiction boundaries. This drawing coordinates with the Land Use element drawing (sheet 18).

### **Sheet 20 – Exhibit “A” Property Map**

The Exhibit “A” Property Map was developed in accordance with the requirements listed in the FAA Standard Operating Procedure (ARP SOP 3.00) for FAA Review of Exhibit “A” Airport Property Inventory Maps. The prior Exhibit “A” Property Map approved by LNAA and the FAA Harrisburg ADO, dated June 2014, has been updated and incorporates subsequent property transfers, and newly planned property transfers.

The following items were addressed, with regard to property transfers and newly-planned property transfers since the last approved Exhibit “A”:

- Each airport parcel has a unique designation. Future acquisition is identified with a separate, unique prefix.
- Parcel boundaries of new or newly planned property transfers are described.
- All property that was once airport property is shown. Dates of release and disposal is identified.
- Detailed parcel information; grantor, type of interest acquired, acreage, type of conveyance, book and page of recording. Copies of deeds are provided as an archive and available to LNAA for future reference.
- Each parcel is shown with FAA grant number, PFC number (if applicable), government transfer, type of easement, date or property disposal.
- Purpose of acquisition
- Existing and future configurations of runways, critical/safety areas, roads and highways, and bearing and distance of airport property lines are shown.