

The purpose of this chapter is to present the graphic representation of the items addressed and recommended in Chapter Three – Demand Capacity Analysis and Facility Requirements (page 3-1). The Airport Layout Plan components consist of the following drawings:

- Cover Sheet
- Existing Conditions Plan
- Airport Layout Plan (ALP)
- Terminal Area Plan (TAP)
- Land Use
- Airport Airspace Drawing Part 77 Surface Plan
- Airport Airspace Drawing Part 77 Surface Profile
- Runway 2-20 Inner Approach Surface Plan and Profile (2 sheets)
- Runway 2-20 Inner Part 77 Surface Plan and Profile (2 sheets)
- Runway 2-20 Part 77 Obstruction Data
- Exhibit A (3 sheets)

4.1 COVER SHEET

The cover sheet is included as the first drawing of the Airport Layout Plan (ALP) drawing set. The cover sheet includes the following information:

- Project Title
- Airport Name
- Location
- Sponsor
- Funding Agency Project Identification Numbers
- Preparer's Project Identification Number
- Date
- Sheet Index

- Preparer
- Vicinity Map
- Location Map

4.2 EXISTING CONDITIONS PLAN

The existing conditions plan is a graphic representation, to scale, of existing airport facilities, location, and pertinent dimensional information. Due to the nature of the proposed development for Rock Hill/York County Airport (Bryant Field), this drawing is included to reduce the amount of information shown on the ALP. The existing conditions are shown on Drawing No. 2 of 15.

4.3 AIRPORT LAYOUT PLAN

The ALP is a graphic representation, to scale, of ultimate airport facilities, location, and pertinent clearance and dimensional information required to show relationships with applicable standards. The ALP is a key document, which should be kept current, reflecting changes in physical features on the Airport and critical land use changes in the vicinity, which may affect the navigable airspace or the ability of the Airport to expand.

The ALP serves as a public document, which is a record of aeronautical requirements, both present and future, and as a reference for community deliberations on land use, proposals, budgets, and resource planning. As a record of aeronautical requirements, the FAA and SCDOA refer to it in their review and findings on proposals involving the development of other nearby airports and objects, which may affect the navigable airspace. The ALP is shown on Drawing No. 3 of 15.

The ALP is presented at a scale of 1" = 400' and a contour interval of 2', provided by the City of Rock Hill GIS Department.

4.4 TERMINAL AREA PLAN

The TAP is a larger-scaled representation of the ALP focusing on development around the terminal building. The TAP includes such features as existing and proposed aprons, buildings, hangars, parking lots, etc., and their location. The various phases for each improvement project are also shown on this plan. The TAP is presented at a scale of 1" = 100' and is shown on Drawing No. 4 of 15.

4.5 LAND USE PLAN

The land use plan is a graphic representation, to scale, of Airport facilities overlaid on the current land use as reported in the City of Rock Hill and York County Comprehensive Plans. The land uses are depicted by general land use categories (i.e., agricultural, recreational, industrial, commercial, etc.). This drawing has been developed to show both existing and recommended land use conditions (Drawing No. 5 of 15).

4.6 AIRPORT AIRSPACE DRAWING

The Airport airspace surface drawing depicts the proposed FAR Part 77 imaginary surfaces for the Airport. The drawing includes topography, which underlies the FAR Part 77 surfaces, and a graphical and tabular representation of the surfaces. The surrounding topography was taken from USGS quadrangle sheets and encompasses the area within the proposed FAR Part 77 imaginary surfaces. Therefore, beyond 3,500' from the runway ends, the search for possible surface penetrations were centered around manmade structures, such as, towers, buildings, power lines, etc. (Drawing No. 6 and 7 of 15)

4.7 INNER APPROACH SURFACE DRAWING

The inner approach surface drawing depicts the "close-in" approach surfaces and runway protection zones. The surfaces are imposed over the existing terrain to determine the number and magnitude of any penetrations to the surfaces. The drawing includes the proposed conditions (Drawing No. 8, 9, 10, 11, and 12 of 15).

4.8 EXHIBIT A – AIRPORT PROPERTY MAP

The Airport property map (Exhibit “A”) illustrates ownership or interest in each tract within the Airport boundaries. How and when the Airport property was obtained is noted by parcel number and described separately in tabular form. Exhibit “A” is prepared at a scale of 1” = 200’ on Drawing No. 13, 14, and 15 of 15.

4.9 CHECKLIST

In order to ensure that complete and appropriate information is included in the ALP drawing set, the following checklist provided by the FAA was utilized to construct and check the drawings included in this document.



U.S. Department of Transportation
Federal Aviation Administration
Southern Region – Airports Division
Effective Date: October 2001

Airport Layout Plan Drawing Set Checklist

Name of Airport: Rock Hill/York County Airport (Bryant Field)
Location of Airport: City of Rock Hill, York County, South Carolina
Date of Review: Reviewed by:

Significant Development Changes Since Previous ALP Approval/or Narrative

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.

Existing and Proposed Modification of Standards (MOS)

Existing Deviation of Standard/FAA Approved MOS FAA Approval Date (if any) Expiration Date (if any)

- 1.
- 2.
- 3.
- 4.
- 5.

Proposed Deviation of Standard/FAA Modification of Standards

- 1.
- 2.
- 3.
- 4.
- 5.

Runway Safety Area Re-Evaluations

- (X) Concur with Runway Safety Area Determination currently on file with FAA.
- () Re-evaluation of Runway Safety Area Determination completed as part of planning document and shown on this ALP set.

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
Narrative Report			
Report Provided	(X)	()	
<i>Aeronautical Forecasts</i>			
- 0-5 yrs., 6-10 yrs., 10-20 yrs.	(X)	()	
- Total annual operations	(X)	()	
- Annual itinerant operations	(X)	()	
- Based aircraft	(X)	()	
- Annual instrument approaches (if applicable)	(X)	()	
- Annual itinerant operations by critical aircraft	(X)	()	
- Annual itinerant operations by more demanding aircraft	(X)	()	
Proposed Development Justification	(X)	()	
Special Issues (MOS, etc.)	()	(X)	
Development Schedule and Graphics	(X)	()	
Proper Agency Coordination (sponsor, local, state)	(X)	()	
Airport Layout Drawing			
Proper Agency Approval (sponsor, local, state)	(X)	()	
Sheet Size - 24" x 36"/22" x 34"	(X)	()	
Scale 1" = 200' - 600'	(X)	()	
2' - 10' Labeled Contours	(X)	()	
<i>North Arrow</i>			
- True & magnetic	(X)	()	
- Declination w/annual rate of change	(X)	()	
<i>Wind Rose</i>			
- Source & time period	(X)	()	
- MPH & knots	(X)	()	Knots only
- 12 MPH individual & combined coverage	(X)	()	
- 15 MPH individual & combined coverage	(X)	()	

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
<i>Airport Reference Point (ARP)</i>			
- Existing w/Lat./Long. (NAD 83)	(X)	()	
- Ultimate w/Lat./Long/ (NAD 83)	(X)	()	
<i>Elevations (Existing & Ultimate)</i>			
- Existing runway ends	(X)	()	
- Displaced thresholds	()	(X)	Not Applicable
- Ultimate runway ends	(X)	()	
- Runway intersections	()	(X)	Not Applicable
- Runway high & low points	()	(X)	Not Applicable
- Touchdown zone elevation (highest RWY elevation in first 3,000' of any RWY having published or planned straight-in instrument approach)	()	(X)	No runway elevation points
<i>Drawing Lines</i>			
- Existing property boundary	(X)	()	
- Ultimate property boundary	(X)	()	
- Building restriction line (both sides)	(X)	()	
- Existing development shown as solid	(X)	()	
- Future development shown as dashed/shaded	(X)	()	
<i>Runway Drawing Details (Existing & Ultimate)</i>			
- Runway(s) depiction	(X)	()	
- Length & width	(X)	()	
- End numbers	(X)	()	
- True bearing (nearest sec.)	(X)	()	
- Markings (basic, NPI, PIR)	(X)	()	
- Lighting (thresholds only)	(X)	()	
- Threshold lat/long & elevations	(X)	()	
- Displaced threshold lat/long & elevations	()	(X)	Not Applicable
- Runway safety areas & dimensions	(X)	()	
- Runway object free areas & dimensions	(X)	()	
- Runway obstacle free zones	(X)	()	
- Centerline w/true bearing	(X)	()	
- Approach aids indicated (ILS, REILS, etc.)	(X)	()	
- Lat/long & elevation for non-federal on-airport NAVAIDS (used for instrument approach procedure)	()	(X)	Not Applicable
<i>Taxiway Details (Existing & Ultimate)</i>			
- Taxiway widths	(X)	()	
- Designations	(X)	()	
- Separation Dimensions:			
Runway centerline(s)	(X)	()	
Parallel taxiway(s)	(X)	()	
Aircraft parking area(s)	(X)	()	
<i>Aircraft Parking Aprons</i>			
- Existing & ultimate aprons shown	(X)	()	

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
- Dimensions	(X)	()	Separation dimensions only
- Tie-down layout/locations	(X)	()	
<i>Runway protection Zones (RPZs)</i>			
- Existing & ultimate RPZs shown	(X)	()	Existing only
- Dimensions	(X)	()	
- Approach slope (20:1, 34:1, 50:1)	(X)	()	
<i>Title & Revision Blocks</i>			
- Name and location of airport	(X)	()	
- Name of preparer	(X)	()	
- Date of drawing	(X)	()	
- Drawing title	(X)	()	
- Revision block	(X)	()	
- FAA disclaimer	()	(X)	
- Sponsor approval block	(X)	()	
<i>Airport Data Block (Existing & Ultimate)</i>			
- Airport elevation (MSL)	(X)	()	
- Airport reference point (ARP) data	(X)	()	
- Airport & terminal NAVAIDS (beacon, ILS)	(X)	()	
- Mean maximum temperature	(X)	()	
- Airport reference code (ARC) for each runway	(X)	()	
- Design aircraft for each runway	(X)	()	
- Identify GPS at airport	()	(X)	
<i>Runway Data Block (Existing & Ultimate)</i>			
- % effective gradient	(X)	()	
- % wind coverage (MPH & knots)	(X)	()	
- Maximum elevation above MSL	(X)	()	
- Runway length	(X)	()	
- Runway width	(X)	()	
- Runway surface type (turf asphalt...)	(X)	()	
- Runway strength (SWG, DWG...)	(X)	()	
- Part 77 approach category (visual, NPI, PIR)	()	(X)	
- Type instrument approach (ILS, GPS...)	(X)	()	
- Approach slope (20:1, 34:1, 50:1)	()	(X)	In plans
- Runway lighting (HIRL, MIRL, LIRL)	(X)	()	
- Runway marking (PIR, NPI, BCS)	(X)	()	
- NAVAIDS & visual aids	(X)	()	
- Runway safety area dimensions (standard and non-standard)	()	(X)	In plans
<i>Miscellaneous</i>			
- Airport facility/building list (existing & future)	()	(X)	On Terminal Area Plan
- Standard legend	(X)	()	
- Location map	()	(X)	On Cover Sheet
- Vicinity map	()	(X)	On Cover Sheet
- Roadways, traverse ways identified	(X)	()	

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
<i>Additional Comments:</i>			
Airport Airspace Drawing			
Ultimate Runway Length Plan View of Surfaces	(X)	()	
Profile View of Ultimate Runway Lengths	(X)	()	
Obstruction Data Tables	()	(X)	Only one obstruction
Sheet Size Same as ALP	(X)	()	
Plan View Scale 1" = 2,000'	()	(X)	Different elevation
Profile View Scale 1" = 1,000' Horizontal, 1" = 100' Vertical	()	(X)	Different elevation
<i>Approach Plan View Details</i>			
- USGS base map	(X)	()	
- Runway end numbers shown	(X)	()	
- Elevation contours of 50' on all slopes	(X)	()	
- Show most demanding surface lines as solid and others as dashed	(X)	()	
- Identify penetrating objects & top elevations (for those in inner approach add note, "Refer to the inner portion of the approach surface plan view details for close-in obstructions.")	(X)	()	
- Show PIR approach of 50,000 on separate sheet as necessary	()	(X)	
- Note any height restriction zoning/ordinances/statutes in place	(X)	()	In Master Plan document
<i>Approach Profile View Details</i>			
- Ground profile along extended centerline (highest profile elevations of width & length of approach)	(X)	()	
- Identify significant objects (roads, rivers, etc.) w/elevations	()	(X)	
- Existing & ultimate runway ends and approach slopes	(X)	()	
<i>Additional Comments:</i>			
Inner Portion of the Approach Surface Drawing			
Large-Scale Plan View for Each Runway End (up to 100' height above runway end)	()	(X)	
Large-Scale Profile View for Each Runway End (up to 100' height above runway end)	()	(X)	
Sheet Size Scale 1" = 200' Horizontal, 1" = 20' Vertical	()	()	
Title & Revision Block	(X)	()	
<i>Separate Approach Tables with Obstruction Data</i>			
- Type of Approach (NPI, etc.)	()	(X)	Shows Part 77 Surface
- Approach slope (20:1, etc.)	()	(X)	Shows Part 77 Surface
- Obstruction number	(X)	()	
- Obstruction description	(X)	()	

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
- Approach penetration (in feet)	(X)	()	
- Proposed mitigation (including "none")	(X)	()	
<i>Inner Approach Plan View Details</i>			
- Aerial photo base map	()	(X)	
- Obstructions numbered	(X)	()	
- Property line depicted	(X)	()	
- Identify by numbers all traverse ways w/elevations & vertical clearances in approach	()	(X)	
- Depict existing & ultimate runway ends	()	(X)	
- Ground contours shown	(X)	()	
<i>Inner Approach Profile View Details</i>			
- Identify significant terrain/items in RSA	(X)	()	
- Identify obstructions with numbers on plan view	(X)	()	
- Depict rods and railroads at edge of approach as dashed	()	(X)	
<i>Additional Comments:</i>			
Terminal Area Drawing			
Large-Scale Plan View of Terminal/GA Area(s) as Needed	(X)	()	
Show Existing & Future Buildings	(X)	()	
Sheet Size Same as ALP	(X)	()	
Scale 1" = 50' - 100'	(X)	()	
Title & Revision Blocks	(X)	()	
Legend	(X)	()	
<i>Building Data Table (Existing & Ultimate)</i>			
- Number of facilities	(X)	()	
- Include top elevations	()	(X)	Building heights
- Identify obstruction marking	()	(X)	Not applicable
<i>Additional Comments:</i>			
Land Use Drawing (Existing & Ultimate)			
- Basic airport features/surfaces	(X)	()	
- Property lines	(X)	()	
- Include all land uses (industrial, residential, etc.) on & off airport (including non-aeronautical) to minimum 65 LDN	(X)	()	
- Line of sight or runway visibility zones shown	()	(X)	Not Applicable
- Note any existing land use ordinances/statutes in place	(X)	()	In Master Plan document
- Noise contours as required in scope of work (60, 65 & 70 LDN)	(X)	()	65 Ldn
- Sheet size same as ALP	(X)	()	
- Scale same as ALP	(X)	()	
- Title & revision block	(X)	()	

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
- Aerial base map	()	(X)	
- Legend (symbols and land use descriptions)	(X)	()	
- Identify recommended land use changes	()	(X)	
- Identify public facilities (schools, parks, etc.)	()	(X)	

Additional Comments:

Airport Property Map (Existing & Ultimate)

Property Lines (Clear & Bold)	(X)	()	
RPZs Shown	(X)	()	
Tracts of Land on and off Airport	(X)	()	
Sheet Size Same as ALP	(X)	()	
Scale Same as ALP	(X)	()	
Title & Revision Block	(X)	()	
Legend	(X)	()	
Airport Features (expansion, etc.)/Critical Surfaces (RSAs, etc.) Shown (to aid in determining eligible land needs)	(X)	()	

Data Table

- Numbering system for parcels	(X)	()	
- date of acquisition	(X)	()	
- Federal aid project number	()	(X)	
- Type of ownership (fee, easement, federal surplus, etc.)	()	(X)	
- Parcel acreage	()	(X)	

Additional Comments:

4.10 REDUCED DRAWING SET

The drawings bound within this document represent approximately half the scale noted.