

Airport Layout Plan Drawing Set

As Per AC 150/5070-6B, Change 1 (5/1/07)

The following list provides general guidelines in preparing the Airport Layout Plan drawing set. The individual sheets that comprise the Airport Layout Plan drawing set will vary with each planning effort. During the project scoping activities, planners must determine which sheets will be necessary. Since these checklists are comprehensive, not all items will be applicable to a specific project.

Drawing	Yes	No	N/A	Remarks
1. AIRPORT LAYOUT DRAWING				
a. Sheet size – Minimum 24” x 36”				
b. Scale –Within a range of 1” = 200’ to 1” = 600’				
c. North Arrow				
1) True and Magnetic North				
2) Year of the magnetic declination				
3) Orientation: north is to the top or left of the sheet				
d. Wind Rose				
1) Data source and the time period covered				
2) Include individual and combined coverage for:				
a) Runways with 10.5 knots crosswind				
b) Runways with 13 knots crosswind				
c) Runways with 16 knots crosswind				
d) Runways with 20 knots crosswind				
e. Airport Reference Point (ARP) – Existing and ultimate, with latitude and longitude to the nearest second based on NAD 83				
f. Ground contours at 2’ – 10’ intervals, lightly drawn				
g. Elevations (Existing and Ultimate to 1/10 of a foot)				
1) Runway				
2) Displaced thresholds				
3) Touchdown zones				
4) Intersections				
5) Runway high and low points				
6) Roadways where they intersect the RPZ edges and extended runway centerlines				
7) Structures on Airport--If a terminal area plan is not included, show structure top elevations.				
h. Building limit lines – Show on both sides of the runways and extend to the airport prop. line or RPZ.				
i. Runway Details (Existing and Ultimate)				
1) Dimensions – length and width within the outline of the runway				
2) Orientation – Runway end numbers and true bearing to the nearest 0.01 degree				
3) Markings				

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4) Lighting – Threshold lights only				
5) Runway Safety Areas--Dimensions may be included in the Runway Data Table				
6) End Coordinates – Note near end (existing and ult.) of each runway end, to nearest 0.01 second				
7) Displaced threshold coordinates, to the nearest 0.01 second				
8) Declared Distances – For each runway direction if applicable. Identify any clearway/stopway portions in the declared distances				
j. Taxiway details (Existing and Ultimate)				
1) Taxiway widths and separations from the runway C/L, parallel taxiway, aircraft parking, and objects				
k. RPZ Details (Existing and Ultimate)				
1) Dimensions				
2) Type of property acquisition (fee or easement)				
l. Approach slope ratio (20:1; 34:1; 50:1)				
m. Airport Data Table (Existing and Ultimate)				
1) Airport elevation (MSL)				
2) Airport Reference Point data				
3) Mean maximum temperature				
4) Airport Reference Code for each runway				
5) Design A/C for each runway or airfield component				
n. Runway Data Table (Existing and Ultimate)				
1) Percent effective gradient				
2) Percent wind coverage				
3) Maximum elevation above MSL				
4) Runway length and width				
5) Runway surface type				
6) Runway strength				
7) FAR Part 77 approach category				
8) Approach type				
9) Approach slope				
10) Runway lighting (HIRL, MIRL, LIRL)				
11) Runway marking				
12) Navigational and visual aids				
13) RSA dimensions				
o. Title and Revision Blocks				
1) Name and location of the airport				

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Drawing	Yes	No	N/A	Remarks
2) Name of preparer				
3) Date of drawing				
4) Drawing title				
5) Revision block				
6) FAA disclaimer				
7) Approval block				
p. Other				
1) Standard legend				
2) Existing and Ultimate airport facility list				
3) Location map				
4) Vicinity map				
2. AIRPORT AIRSPACE DRAWING				
a. Plan view of all FAR Part 77 surfaces, based on ultimate runway lengths				
b. Small scale profile views of existing and ultimate approaches				
c. Obstruction data tables, as appropriate				
d. Sheet size – same as the airport layout drawing				
e. Scale – 1” = 2,000’ for the plan view; 1” = 1,000’ for approach profiles; and 1” = 100’ (vertical) for approach profiles				
f. Title and revision blocks - same as the airport layout drawing				
g. Approach Plan View Details				
1) USGS for base map				
2) Show runway end numbers				
3) Include 50’ elevation contours on all slopes				
4) Show the most demanding surfaces with solid lines and others with dashed lines				
5) Identify top elevations of objects that penetrate any of the surfaces. For objects in the inner approach, add note “See inner portion of the approach plan view for close-in obstructions.”				
6) For precision instrument runways, show balance of 40,000’ approach on a separate sheet.				
h. Approach Profile Details				
1) Depict the ground profile along the extended runway C/L representing the composite profile, based on the highest terrain across the width and along the length of the approach surface.				
2) Identify all significant objects (roads, rivers, etc.) and top elevations within the approach surfaces,				

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regardless of whether or not they are obstructions				
3) Show existing and ultimate runway ends and FAR Part 77 approach slopes.				
3. INNER PORTION OF THE APPROACH SURFACE DRAWING				
a. Large scale plan views of inner portions of approaches for each runway, usually limited to the RPZ areas				
b. Large scale projected profile views of inner portions of approaches for each runway, usually limited to the RPZ areas				
c. Interim stage RPZs when plans for interim runway extensions are firm and construction is expected in the near future				
d. Sheet size – Same as Airport Layout drawing				
e. Scale – Horizontal 1" = 200'; vertical 1" = 20'				
f. Title and revision blocks – Same as for Airport Layout drawing				
g. Plan View Details				
1) Aerial photos for base maps				
2) Numbering system to identify obstructions				
3) Depict property line				
4) Identify, by numbers, all traverse ways with elevations and computed vertical clearance in the approach				
5) Depict the existing and ultimate physical end of the runways. Note R/W end number and elev.				
6) Show ground contours, lightly drawn				
h. Profile View Details				
1) Depict terrain and significant items (fences, roadways, and so forth)				
2) Identify obstructions with #'s on the plan view				
3) Show roads and railroads with dashed lines at edge of the approach				
i. Obstruction Table Details				
1) Depict terrain & significant items (fences, roads)				
2) Identify obstructions with #'s on the plan view				
3) Show roads and railroads with dashed lines at edge of the approach				
4) Prepare a separate table for each RPZ				
5) Include obstruction identification number and description, the amount of the approach surface penetration, and the proposed disposition of the obstructions				

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4. TERMINAL AREA DRAWING				
The need for this drawing will be decided on a case-by-case basis. For small airports, where the Airport Layout drawing is prepared to a fairly large scale, a separate drawing for the terminal area may not be needed.				
a. Large scale plan view of the areas where aprons, buildings, hangars, and parking lots are located				
b. Sheet size – Same as Airport Layout drawing				
c. Scale – Range of 1” = 50’ to 1” = 100’				
d. Title and revision blocks – Same as for Airport Layout drawing				
e. Building Data Table – To list structures and show pertinent information about them. Include space and columns for:				
1) A numbering system to identify structures				
2) Top elevation of structures				
3) Existing and planned obstruction markings				
5. LAND USE DRAWING				
a. Include all land uses (industrial, residential, etc.) on and off the airport, to at least the 65 DNL contour				
b. Sheet size – Same as Airport Layout drawing				
c. Scale – Same as the Airport Layout drawing				
d. Title and revision blocks – Same as for Airport Layout drawing				
e. Aerial base map				
f. Legend (symbols and land use descriptions)				
g. Identify public facilities (such as schools, parks, etc.)				
h. Drawing details – Normally limited to existing and future airport features (i.e., runways, taxiways, aprons, RPZs, terminal buildings and naviads)				
6. RUNWAY DEPARTURE SURFACES DRAWING				
a. Large scale plan views of departure surfaces for each runway end that is designated primarily for instrument departures. The one-engine inoperative (OEI) obstacle identification surface (OIS) should be shown for any departure runway end supporting air carrier operations.				
b. Large scale projected profile views of departure surfaces for each runway that is designated primarily for instrument departures.				
c. Sheet size – Same as Airport Layout drawing				
d. Scale – Horizontal 1” = 1000’; vertical 1” = 100’ (runway departure surfaces); and Scale – Horizontal 1” = 2000’; vertical 1” = 100’ (OEI obstacle				

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identification surfaces)				
e. Title and revision blocks – Same as for Airport Layout drawing				
f. Plan View Details				
1) Aerial photos for base maps				
2) Numbering system to identify obstructions				
3) Depict property line, including easements				
4) Identify, by numbers, all traverse ways with elevations and computed vertical clearance in the departure surface				
5) Depict the existing and ultimate physical end of the runways. Note runway end number and elev.				
6) Show ground contours, lightly drawn				
g. Profile View Details				
1) Depict terrain and significant objects, including fences, roadways, rivers, and structures.				
2) Identify obstructions with #'s on the plan view				
3) Show roads and railroads with dashed lines at edge of the departure surface				
h. Obstruction Table Details				
1) Depict terrain and significant objects, including fences, roadways, rivers, structures and buildings				
2) Identify obstructions with #'s on the plan view				
3) Show roads and railroads with dashed lines at edge of the approach				
4) Prepare a separate table for each dep. surface				
5) Include obstruction identification number and description, the amount of the departure surface penetration, and the proposed disposition of the obstructions				
7. AIRPORT PROPERTY MAP				
a. Sheet size – Same as Airport Layout drawing				
b. Scale – Same as the Airport Layout drawing				
c. Title and revision blocks – Same as for Airport Layout drawing				
d. Legend				
e. Data Table				
1) A number/letter system to identify tracts of land				
2) The date the property was acquired				
3) The Federal aid project number under which it was acquired				
4) Type of ownership (fee, easement, federal surplus, and others)				

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f. Show existing and future airport features (i.e., runways, RPZs, navigational aids etc.) that would indicate a future aeronautical need for airport property.				