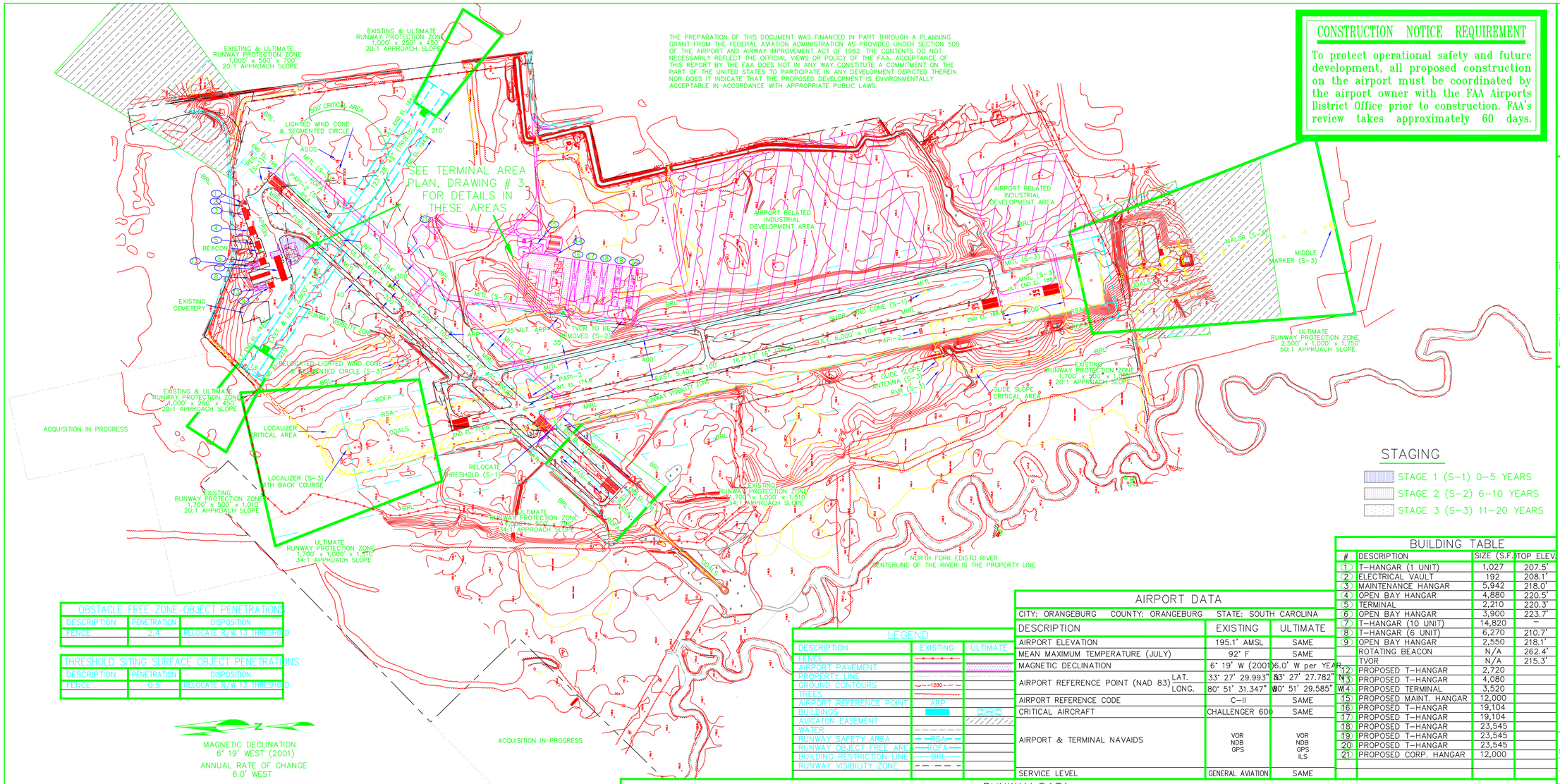


THE PREPARATION OF THIS DOCUMENT WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS REPORT BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

CONSTRUCTION NOTICE REQUIREMENT

To protect operational safety and future development, all proposed construction on the airport must be coordinated by the airport owner with the FAA Airports District Office prior to construction. FAA's review takes approximately 60 days.

STAGING

- STAGE 1 (S-1) 0-5 YEARS
- STAGE 2 (S-2) 6-10 YEARS
- STAGE 3 (S-3) 11-20 YEARS

OBSTACLE FREE ZONE OBJECT PENETRATIONS

DESCRIPTION	PENETRATION	DISPOSITION
FENCE	2.4'	RELOCATE R/W 13 THRESHOLD

THRESHOLD SITING SURFACE OBJECT PENETRATIONS

DESCRIPTION	PENETRATION	DISPOSITION
FENCE	0.5'	RELOCATE R/W 13 THRESHOLD

MAGNETIC DECLINATION
6° 19' WEST (2001)
ANNUAL RATE OF CHANGE
6.0' WEST

500 0 500 1,000 1,500
SCALE IN FEET

LEGEND

DESCRIPTION	EXISTING	ULTIMATE
FENCE		
AIRPORT PAVEMENT		
PROPERTY LINE		
GROUND CONTOURS	1280	
TREES		
AIRPORT REFERENCE POINT	ARP	
BUILDINGS		
AVIGATION EASEMENT		
WATER		
RUNWAY SAFETY AREA	RSA	
RUNWAY OBJECT FREE AREA	ROFA	
BUILDING RESTRICTION LINE	BRL	
RUNWAY VISIBILITY ZONE		

AIRPORT DATA

CITY: ORANGEBURG COUNTY: ORANGEBURG STATE: SOUTH CAROLINA

DESCRIPTION		EXISTING	ULTIMATE
AIRPORT ELEVATION		195.1' AMSL	SAME
MEAN MAXIMUM TEMPERATURE (JULY)		92° F	SAME
MAGNETIC DECLINATION		6° 19' W (2001)	6.0' W per YEAR
AIRPORT REFERENCE POINT (NAD 83)	LAT.	33° 27' 29.993" N	33° 27' 27.782" N
	LONG.	80° 51' 31.347" W	80° 51' 29.585" W
AIRPORT REFERENCE CODE		C-II	SAME
CRITICAL AIRCRAFT		CHALLENGER 600	SAME
AIRPORT & TERMINAL NAVAIDS		VOR NDB GPS	VOR NDB GPS ILS
SERVICE LEVEL		GENERAL AVIATION	SAME

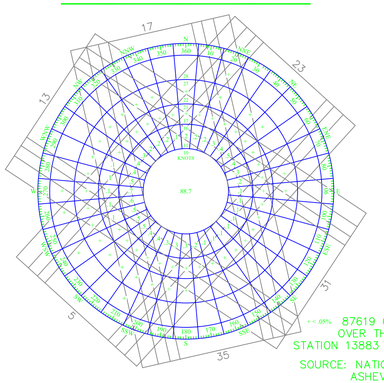
BUILDING TABLE

#	DESCRIPTION	SIZE (S.F.)	TOP ELEV.
1	T-HANGAR (1 UNIT)	1,027	207.5'
2	ELECTRICAL VAULT	192	208.1'
3	MAINTENANCE HANGAR	5,942	218.0'
4	OPEN BAY HANGAR	4,880	220.5'
5	TERMINAL	2,210	220.3'
6	OPEN BAY HANGAR	3,900	223.7'
7	T-HANGAR (10 UNIT)	14,820	–
8	T-HANGAR (6 UNIT)	6,270	210.7'
9	OPEN BAY HANGAR	2,550	218.1'
	ROTATING BEACON	N/A	262.4'
	TVOR	N/A	215.3'
12	PROPOSED T-HANGAR	2,720	
13	PROPOSED T-HANGAR	4,080	
14	PROPOSED TERMINAL	3,520	
15	PROPOSED MAINT. HANGAR	12,000	
16	PROPOSED T-HANGAR	19,104	
17	PROPOSED T-HANGAR	19,104	
18	PROPOSED T-HANGAR	23,545	
19	PROPOSED T-HANGAR	23,545	
20	PROPOSED T-HANGAR	23,545	
21	PROPOSED CORP. HANGAR	12,000	

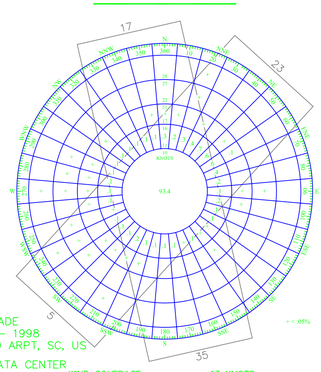
RUNWAY DATA

STAGE		EXISTING		ULTIMATE		EXISTING		ULTIMATE		EXISTING		ULTIMATE	
RUNWAY		5	23	5	23	17	35	17	35	13	31	13	31
RUNWAY LENGTH		4,500'	4,500'	3,616'	3,616'	5,400'	5,400'	6,000'	6,000'	2,800'	2,800'	SAME	SAME
TORA		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TODA		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ASDA		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LDA		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RUNWAY WIDTH		100'	100'	SAME	SAME	100'	100'	SAME	SAME	165'	165'	SAME	SAME
PAVEMENT TYPE		ASPHALT	ASPHALT	SAME	SAME	ASPHALT	ASPHALT	SAME	SAME	TURF	TURF	SAME	SAME
PAVEMENT LOADING (THOUSANDS)		S-30, D-50	S-30, D-50	SAME	SAME	S-30, D-72	S-30, D-72	SAME	SAME	N/A	N/A	SAME	SAME
RUNWAY LIGHTING		MIRL	MIRL	SAME	SAME	MIRL	MIRL	SAME	SAME	NONE	NONE	SAME	SAME
RUNWAY MARKINGS		NONPRECISION	NONPRECISION	SAME	SAME	NONPRECISION	NONPRECISION	SAME	PRECISION	N/A	N/A	SAME	SAME
APPROACH LIGHTING		ODALS	NONE	SAME	SAME	ODALS	ODALS	SAME	MALSR	NONE	NONE	SAME	SAME
TAXIWAY WIDTH		40'	40'	SAME	SAME	35'	35'	SAME	SAME	NONE	NONE	SAME	SAME
TAXIWAY LIGHTING		MITL	MITL	SAME	SAME	MITL	MITL	SAME	SAME	NONE	NONE	SAME	SAME
AIRCRAFT APPROACH CATEGORY		B	B	SAME	SAME	C	C	SAME	SAME	A	A	SAME	SAME
AIRPLANE DESIGN GROUP		II	II	SAME	SAME	II	II	SAME	SAME	I	I	SAME	SAME
CRITICAL AIRCRAFT		KING AIR B200	KING AIR B200	SAME	SAME	CHALLENGER 600	CHALLENGER 600	SAME	SAME	CESSNA 172	CESSNA 172	SAME	SAME
RUNWAY END ELEVATION		170.1' AMSL	195.1' AMSL	173.0' AMSL	SAME	174.0' AMSL	188.4' AMSL	SAME	188.4' AMSL	192.0' AMSL	194.0' AMSL	193.6' AMSL	194.0' AMSL
EFFECTIVE GRADIENT		+0.556 %	−0.556 %	+0.611%	−0.611%	+0.267%	−0.267%	+0.240%	−0.240%	+0.071%	−0.071%	+0.014%	−0.014%
APPROACH VISIBILITY MINIMUMS		3/4 MILE	VISUAL	1 MILE	SAME	VISUAL	VISUAL	3/4 MILE	1/2 MILE	VISUAL	VISUAL	SAME	SAME
NAVIGATIONAL AND VISUAL AIDS		ODALS, VASI-4, REILS, NDB, GPS	NONE	VASI-4, REILS, NDB, GPS	REILS	ODALS, PAPI-2	ODALS, PAPI-2	ODALS, PAPI-2, LOC BC, GPS	MALSR, PAPI-2, GS, LOC, RVR, MM, OM, GPS	NONE	NONE	SAME	SAME
APPROACH SLOPE		34:1	20:1	SAME	SAME	20:1	20:1	34:1	50:1	20:1	20:1	SAME	SAME
RUNWAY PROTECTION ZONE (RPZ)	LENGTH	1,700'	1,000'	1,000'	SAME	1,700'	1,700'	1,700'	2,500'	1,000'	1,000'	SAME	SAME
	WIDTH 1	1,000'	500'	500'	SAME	500'	500'	1,000'	1,000'	250'	250'	SAME	SAME
	WIDTH 2	1,510'	700'	700'	SAME	1,010'	1,010'	1,510'	1,750'	450'	450'	SAME	SAME
OBJECT FREE AREA (OFA) WIDTH		500'	500'	SAME	SAME	800'	800'	SAME	SAME	250'	250'	SAME	SAME
OFA LENGTH BEYOND RUNWAY END		300'	300'	SAME	SAME	1,000'	1,000'	SAME	SAME	0'	0'	240'	240'
RUNWAY SAFETY AREA (RSA) WIDTH		150'	150'	SAME	SAME	500'	500'	SAME	SAME	120'	120'	SAME	SAME
RSA LENGTH BEYOND RUNWAY END		300'	300'	SAME	SAME	1,000'	1,000'	SAME	SAME	0'	0'	240'	240'
OBSTACLE FREE ZONE (OFZ) WIDTH		400'	400'	SAME	SAME	400'	400'	SAME	SAME	250'	250'	SAME	SAME
OFZ LENGTH BEYOND RUNWAY END		200'	200'	SAME	SAME	200'	200'	SAME	SAME	0'	0'	200'	200'
RUNWAY END (NAD 83)	LATITUDE	33° 27' 22.972" N	33° 27' 55.903" N	33° 27' 29.442" N	SAME	33° 27' 38.756" N	33° 26' 46.891" N	SAME	33° 26' 41.127" N	33° 27' 55.555" N	33° 27' 40.255" N	33° 27' 54.409" N	33° 27' 39.109" N
	LONGITUDE	80° 51' 49.978" W	80° 51' 14.229" W	80° 51' 42.955" W	SAME	80° 51' 42.934" W	80° 51' 27.651" W	SAME	80° 51' 25.953" W	80° 51' 36.333" W	80° 51' 08.733" W	80° 51' 34.256" W	80° 51' 06.665" W

ALL WEATHER WIND ROSE



IFR WIND ROSE



87619 OBSERVATIONS MADE OVER THE PERIOD 1989 – 1998
STATION 13883 COLUMBIA METRO ARPT, SC, US
SOURCE: NATIONAL CLIMATIC DATA CENTER ASHEVILLE, NC

WIND COVERAGE	10.5 KNOTS	13 KNOTS	16 KNOTS	20 KNOTS
RUNWAY 5/23	96.31%	98.20%	99.61%	99.93%
RUNWAY 17/35	93.44%	96.47%	99.13%	99.81%
RUNWAY 13/31	94.08%	96.98%	99.49%	99.91%
RUNWAY 5/23 & 17/35	98.13%	99.39%	99.84%	99.98%
RUNWAY 5/23, 17/35 & 13/31	99.77%	99.95%	99.99%	100.00%

WIND COVERAGE	13 KNOTS
RUNWAY 5 *	91.37%
RUNWAY 23 *	74.18%
RUNWAY 17 *	81.41%
RUNWAY 35 *	91.66%
RUNWAY 5/23	99.27%
RUNWAY 17/35	98.22%
RUNWAY 5/23 & 17/35	99.76%

* BASED ON A 5 KNOT TAILWIND COMPONENT

CITY OF ORANGEBURG
INCORPORATED DEC 24 1883
SOUTH CAROLINA

ORANGEBURG MUNICIPAL AIRPORT
ORANGEBURG, SOUTH CAROLINA

THE LPA GROUP
TRANSPORTATION CONSULTANTS
ATLANTA, GA CHARLESTON, SC CHARLOTTE, NC CHICAGO, IL COLUMBIA, SC GREENSBORO, NC KNOXVILLE, TN MOBILE, AL MYRTLE BEACH, SC PHILADELPHIA, PA RALEIGH, NC TALLAHASSEE, FL TAMPA, FL

Designer: TGM
Technician: TGM
Checked by: RKH
Project Number: CP020034

NOTES

1. HOLDING POSITION MARKINGS FOR RUNWAY/ TAXIWAY INTERSECTIONS ARE 125' FROM RUNWAY 5/23 CENTERLINE AND 250' FROM RUNWAYS 17/35 AND 13/31 CENTERLINES AN PERPENDICULAR TO TAXIWAY CENTERLINE.
2. COORDINATES SHOWN HEREON ARE IN NAD83.
3. ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL (AMSL).
4. SEE EXHIBIT "A" PROPERTY MAP (DRAWING 7 FOR PROPERTY LINE METES AND BOUNDS.
5. RUNWAY 13/31 WILL BE SHIFTED 210' TO THE SOUTHEAST ALONG THE EXISTING RUNWAY ALIGNMENT TO FACILITATE THE NESSECARY RSA AND ROFA.
6. THE RUNWAY 5 ODALS ARE CURRENTLY INOPERATIVE AND WILL BE REMOVED.
7. DUE TO THE SUBSTANDARD ARC B-II SEPARA BETWEEN TAXIWAY A AND RUNWAY 5/23, SOM OPERATIONAL RESTRICTIONS WILL BE REQUIRED

2005

REVISIONS

No.	Description	Date	By

Project Name: MASTER PLAN UPDATE STUDY

Drawing Name: AIRPORT LAYOUT PLAN

FAA A.I.P. Project Number:

Autocad Drawing Reference: P:\Airport Development\Orangeburg Municipal Airport\Drawings\2005_(LALP)\kogt

Date: MARCH 2005
Division: PLANNING
Scale: 1" = 500'
Drawing Number: 2