CHAPTER 6 AIRPORT LAYOUT PLAN

This chapter presents the Airport Layout Plan (ALP) drawings, which have been updated as part of this Airport Master Plan Update process. The components of this chapter include the purpose of the ALP drawings, compliance with FAA design standards, revisions to the ALP since the previous ALP, and reduced-sized inserts of the preliminary ALP drawing set approved by Southwest Oregon Regional Airport.

6.1 INTRODUCTION

The ALP drawing set serves several needs for the Airport, the City of North Bend, Coos County, and the FAA. As presented in the FAA Advisory Circular 150/5070-6B, *Airport Master Plans*, there are five primary functions of the Airport Layout Plan (ALP) that define its purpose:

- FAA-approved ALPs are necessary in order to receive financial assistance under the terms of the Airport and Airway Improvement Act of 1982 (AIP), as amended, and specific passenger facility charge actions. The maintenance of a current plan and conformity to the plan are grant assurance requirements at an airport on which Federal funds have been expended under the AIP and the previous airport development programs, including the 1970 Airport Development Aid Program (ADAP) and Federal Aid Airports Program (FAAP) of 1946, as amended. While ALPs are not required for airports that have not received funding from the aforementioned Federal programs, this guidance can be applied to all airports.
- The plans create a blueprint for airport development by depicting proposed facility improvements that are consistent with the strategic vision of the airport sponsor. The plans provide a guideline by which the airport sponsor can assure that development maintains airport design standards and safety requirements, and is consistent with airport and community land use plans.
- The ALP serves as a public document that is a record of aeronautical requirements, both present and future, and as a reference for community deliberations on land use proposals and budget resource planning.
- The approved ALP provides the FAA with a plan for airport development. This will allow compatible planning for FAA-owned facility improvements at the airport. It also allows the FAA to anticipate budgetary and procedural needs. The approved ALP will also give the FAA the information it needs to ensure airspace is protected for planned facility or approach procedure improvements.
- The plans can be a working tool for use by the airport sponsor, including development and maintenance staff.

Development of the ALP is a direct result of the master plan processes presented in the previous chapters. The ALP reflects: 1) how the Airport plans to execute the master plan facility requirements and 2) the strategic vision for the Airport as defined by the Coos County Airport District.



The ALP requires FAA approval independent of the Master Plan. As such, review of the ALP drawing set is accomplished through several intermediate steps, including reviews by the Airport, the FAA Airports District Office (ADO), and several other FAA offices involved in the associated airspace review. A current ALP that has airport sponsor approval and FAA approval from the standpoint of safety, utility, and efficiency of the Airport is required by United States Code, Title 49, 47107(a) (16).

The Southwest Oregon Regional Airport Layout Plan drawing set was prepared using several applicable guidelines and checklists. These sources include:

- FAA Advisory Circular 150/5300-13A, Airport Design
- FAA Advisory Circular 150/5070-6B, Airport Master Plans
- FAA Northwest Mountain Region Airport Layout Plan (ALP) Checklist, (revised May 2007)

6.2 MODIFICATION TO FAA STANDARDS

The ALP shows three (3) existing modifications to FAA standards. These modifications are due to proximity of geographical obstructions to the airport property and runways. The following are the modifications to standards as noted on the previous ALP set:

- Runway 13-31 Object Free Area (OFA): The existing and ultimate OFA for Runway 13-31 is not
 available due to property restrictions adjacent to Airport property, such as the perimeter fence
 and bodies of water.
- Runway 4-22 Ultimate OFA: The ultimate OFA for Runway 4-22 is not available due to bodies
 of water adjacent to Airport property.
- Runway 13-31 Pavement Width Waiver: Runway 13-31, with a width of 150 feet, exceeds the FAA design standard of 100 feet; the Seattle ADO in 2003 approved the Airport's request to leave the runway at 150 feet wide.

6.3 AIRPORT LAYOUT PLAN DRAWING SET

The ALP drawing set graphically illustrates the development of the Airport over the 20-year planning period. An ALP set is required by the FAA to be considered for future funding and to be compliant with the Airport's Federal Grant Assurances. The complete set for the Southwest Oregon Regional Airport consists of the following drawings:

- Sheet 1 Title Sheet
- Sheet 2 Technical Data Sheet
- Sheet 3 Airport Layout Plan
- Sheet 4 Terminal Area Plan
- Sheet 5 Airport Airspace Drawing (FAR Part 77) Plan View
- Sheet 6 Airport Airspace Drawing (FAR Part 77) Profile Runway 4-22
- Sheet 7 Airport Airspace Drawing (FAR Part 77) Profile Runway 13-31
- Sheet 8 Runway 4-22 Inner Approach Plan and Profile Existing/Future
- Sheet 9 Runway 13-31 Inner Approach Plan and Profile Existing/Future
- Sheet 10 Airport Property Map

The purpose of each sheet is presented in this section.



6.3.1 Title Sheet

This sheet denotes the Airport name and an index chronicling the ALP drawing sheets contained in the ALP set. This sheet also provides an Airport location and vicinity map, as well as a revised title block.

6.3.2 Technical Data Sheet

This sheet provides detailed information in tabular form about the Airport with its existing and anticipated conditions. This sheet also provides critical information about the Airport's runways and safety area dimensions. Major components on this sheet include:

- Basic Airport Data Table
- Runway Data Table
- Declared Distance Table
- Wind Rose Data

6.3.3 Airport Layout Plan Drawing

The Airport Layout Plan Drawing is a graphic representation of existing, future, and ultimate Airport facilities, as applicable. The future Airport facilities are those that are scheduled to be completed during the planning period. The ultimate Airport facilities are projects scheduled beyond the planning period and not included in the scope of this master plan. The Layout Plan Drawing is the key document, which reflects changes to physical features on and in the vicinity of the Airport that may affect navigable airspace or the ability of the Airport to operate. The ALP includes the dimensional information in order for the recommended development to be in accordance with FAA planning and design criteria as outlined in FAA Advisory Circular 150/5300-13A Airport Design and 150/5070-6B Airport Master Plans. Development shown on the ALP corresponds to the Airport's Capital Improvement Program (CIP) for the 20-year period. Specifically, the sheet depicts the limits of the Airport property interests, land uses, and configuration of facilities in compliance with geometric design separation and clearance standards. It also includes airspace and navigational aid (NAVAID) facilities. This sheet provides a location to chronicle the ALP reviewer and approval stamps/letter(s).

6.3.4 Terminal Area Plan

The Terminal Area Plan depicts existing and future features adjacent to the passenger terminal building. The drawing also shows the airside dimensions and facility and roadway features anticipated for development. Key existing and future facilities shown on the Terminal Area Drawing include:

- Apron Configuration and Aircraft Parking Positions
- Airport Terminal Building Location
- Terminal Roadway Circulation and Auto Parking
- Aircraft Hangars and Airport Buildings

6.3.5 Airport Airspace Drawings (Plan and Profile)

These scaled drawings identify the limits of recommended land use control for the height of objects surrounding the Airport. Airspace features correspond with the ultimate runway dimensions as depicted on the ALP Drawing. A digital USGS base map at a scale of 1 inch = 3,000 feet is used



as the base map, in which each of the Federal Aviation Regulations (FAR) Part 77, Subpart C imaginary surfaces (primary, horizontal, conical, approach, and transitional) are depicted in plan and profile view.

The approach surfaces are also depicted in a separate full-length profile view along the runway centerline using 50-foot contour intervals. An obstruction data table provides structure disposition per existing and future FAR Part 77 surfaces. Isometric cut-away view of airspace features, general notes, data sources, legend for key drawing symbols, and ALP runway elevation points are also shown on the drawing.

6.3.6 Approach Plan and Profile Runway 4-22 and 13-31

These two-scaled drawings depict the plan and profile approach features beyond each runway end under the existing and future conditions. The drawings identify obstructions and non-compatible land uses under the airspace surfaces within the Runway Protection Zone (RPZ) extending beyond the runway centerline. Airspace surfaces, including applicable surfaces as defined in FAA AC 150/5300-13A, Chapter 3, are depicted for disposition of obstructions to navigable airspace. Obstructions are indexed in plan and profile view, with an obstruction table used to denote existing and future obstructions to FAR Part 77 surfaces. The recommended mitigation of obstructions is noted, to correspond with the Airport's development plan.

6.3.7 Airport Property Map

The Airport Property Map is a scaled drawing depicting Airport property interest as consistent with the existing and future Airport Layout Drawing. It is important to note that the property line shown has not been recently surveyed, but is shown based on the information provided from the 1973 Exhibit A. As stated in Chapter 5, The Identification and Evaluation of Alternatives, the recommended course of action is to conduct a full boundary survey to verify the actual property line as it varies from multiple sources. This drawing (where data is available) documents past Airport land acquisitions and summarizes how these properties may have been acquired and inventories the relevant parcel information.



6.4 AIRPORT LAYOUT PLAN HIGHLIGHTS AND MODIFICATIONS

This section highlights the key elements and modifications that have been made since the previous Southwest Oregon Regional ALP update.

- <u>Commercial Passenger Terminal</u> The 2005 ALP set shows the Commercial Passenger Terminal located on the southern end of the main apron, just west of Taxiway A2. This ALP shows the newly constructed Commercial Passenger Terminal located south of Taxiway C and west of the Main Apron.
- <u>Air Traffic Control Tower</u> The location of the existing Air Traffic Control tower, built in 2009, is on the west side of Runway 13, approximately 200 feet south of the centerline of Taxiway C.
- Runway 22 RSA improvements During a previous project to upgrade Runway 4-22 and Taxiway C to C-III design criteria, a small portion of the Runway 22's Runway Safety Area (RSA) did not meet the standards required for the upgrade. Therefore, this small portion of the RSA will be filled in to complete the upgrade to these airfield facilities.
- <u>Future Runway 4-22 Extension of 400 Feet</u> As cited in Chapter 4, Facility Requirements, a 400-foot extension of Runway 4-22 is justified during the planning period. This extension will increase the takeoff runway available to 6,400 feet and increase the landing distance available to 5,721 feet.
- <u>Ultimate Runway 4-22 Extension of 600 Feet</u> While the 400-foot extension of Runway 4-22 is justified based on anticipated usage, an additional 600 feet extension is not yet warranted. However, consideration of a 600-foot extension for future planning is prudent. The 600-foot extension has been included in the ALP as an ultimate build out plan for the long-term optimal development of Runway 4-22. This ultimate Runway 4-22 plan is currently shown beyond the 20-year planning period.
- <u>Shipping Channel Expansion</u> The Coos Bay Shipping Channel curves around Runway 4-22, 3,520 feet west of Runway 4 and 1,000 feet northeast of Runway 22. Vessels in this channel can have heights up to 140 feet. The Coos Bay Port Authority is expected to expand the width of the channel from 400 to 600 feet and 200 feet easterly within this planning period.
- <u>Taxiway Improvements</u> Several taxiway improvements have been identified in the Master Plan:
 - Taxiway lighting Taxiway K will have the edge reflectors replaced with Medium Intensity Taxiway Lights (MITL) to allow for both day and nighttime operations.
 - Taxiway to ramp access improvements Taxiways A1 and A2 access to the ramp will be modified to prevent direct access between the runway and the main apron.
 - Taxiway shoulders Taxiway shoulders will be added to Taxiways A, B, C, D, F, and G.
 - Taxiway B width Taxiway B has a non-standard width of 42 feet, which will be corrected to 50 feet to meet the required FAA standard.



- <u>Demolition of Facilities</u> Multiple structures around the Airport are scheduled to be demolished during the planning period. This will both remove unnecessary buildings no longer used as they are functionally and economically obsolete, and clear up space to allow for future development. The buildings to be demolished are:
 - Cement Storage Bunker
 - Wood Storage Building
 - St. Johns Entertainment Building
 - Apartments
 - ARFF Facility (Once new ARFF is built)
 - American Legion Building

- Coos Aviation Building
- Warehouse
- FedEx Building
- Airport Maintenance Shop (Once new Maintenance Shop is built)
- <u>ARFF Facility</u> The existing ARFF building was built in 1960 and is currently in poor condition. It has exceeded its useful life. The ARFF building will be replaced in the 20-year planning period.
- <u>Airport Maintenance Facility</u> The existing maintenance building was constructed in 1941; it is undersized and in poor condition. The maintenance facility has exceeded its useful life and will be replaced in the 20-year planning period.
- Main General Aviation Area The main General Aviation facilities at the Airport consist of an FBO, tenant development, aircraft parking aprons, and aircraft hangar storage. The main General Aviation parking apron is located west of Taxiway A, adjacent to the northern one-third of Runway 13-31. The following modifications are identified on the ALP.
 - Apron Expansion This expansion will included multiple phases of apron expansion needed to meet the demand of the General Aviation traffic. The Main Apron will be expanded to allow for executive/corporate hanger space to meet the short-term facility needs. Additionally, the complete airside build-out to the west will provide additional space for the long-term facility need. With the additional apron space available, up to 33 jets will be able to park on the ramp simultaneously, which will exceed the facility requirements for apron and aircraft parking.
 - Vehicle Access and Parking Improvements Vehicle access improvement will be made to accommodate the existing and future tenants as the Main Apron is expanded.
 - Hangar Development Approximately 57,000 square feet of additional space will be made available as demand warrants.
- South General Aviation Area Apart from the main General Aviation areas, two smaller aprons are located at the southern end of the Airport adjacent to Runway 31. There is potential, during the planning period, to expand the south General Aviation area within the current Airport property line. The following are modifications identified on the ALP in this area:
 - Aircraft Wash Area
 - Hangar Development



- Estuary Viewing Boardwalk The Estuary Viewing Boardwalk is a locally supported initiative that will provide the public access to the Pony Slough Tidelands of Coos Bay. This area is the largest estuary in the state of Oregon. The Pony Slough provides extensive mudflats for migratory shorebirds and waterfowl, making this area one of the best scenic and wildlife viewing areas in the state. A half-mile elevated pedestrian boardwalk will restore public access to this area, which was discontinued in the mid-1970s due to the Airport development requirements. No Federal AIP Funding is anticipated for this potential project.
- <u>Future Land Uses</u> Several areas on the Airport have been identified for future uses.
 These areas are identified for development when demand warrants, which may occur outside this 20-year planning period.
 - O Ultimate General Aviation Beyond the planning period, demand is anticipated to surpass the capacity of current and planned facilities. Future development will be needed to increase capacity and meet demand. The land for the ultimate build out has been identified and can be developed after the planning period. This land is located on the east side of the airfield near Runway 22 and Runway 31.
 - Future Landside Development In order to meet the demand of growing aviation traffic, the land needed for the future build out has been identified. These areas have been included on the ALP. The development of this land is anticipated beyond the 20-year planning period. The development could include a business park and other facilities to promote the Airport's goals for the future.



Final 2013

6.5 AIRPORT LAYOUT PLAN DRAWING SET

The Airport Layout Plan drawing set inserted as part of this report is a reduced-size version of the 24-inch by 36-inch drawings pending final review, approval, and signature by the FAA and the Oregon Department of Aviation. Although the ALP drawings must be officially approved by the Coos County Airport District, the inserted ALP drawings are subject to revision until formally accepted by the agencies, and may vary from the final ALP drawing set on file with the FAA and the Oregon Department of Aviation.



AIRPORT LAYOUT PLAN FOR



JUNE 2013

SOUTHWEST OREGON REGIONAL AIRPORT (OTH) -



LOCATION MAP SCALE: NTS - SOUTHWEST OREGON REGIONAL AIRPORT (OTH)



VICINITY MAP

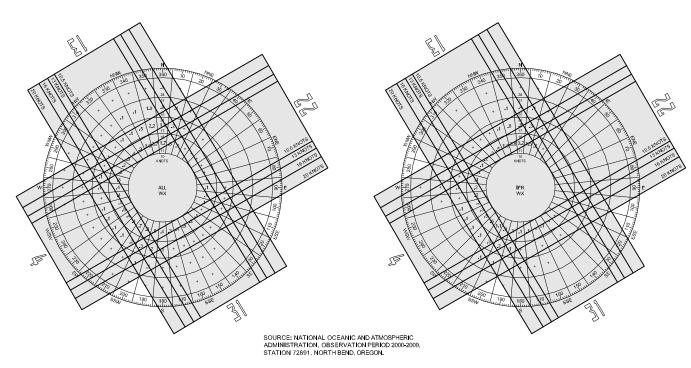
PLANS PREPARED BY:

Reynolds, Smith and Hills, Inc. 4700 S. Syracuse Street, Suite 300 Denver, CO 80237 (303) 409-9700 FAX (303) 409-9701

APPROVED

MICHAEL BECKER

R



ALL WEATHER WIND ROSE

ALL WEATHER WIND ROSE						
ALLOWABLE CROSSWIND COMPONENT	R/W 4-22 (Percent Coverage)	R/W 13-31 (Percent Coverage)	R/W 4-22 AND R/W 13-31 COMBINED (Percent Coverage)			
10.5 KNOTS	82.50%	92.79%	97.14%			
13 KNOTS	87.72%	96.40%	98.99%			
16 KNOTS	93.53%	98.98%	99.79%			
20 KNOTS	97.55%	99.76%	99.98%			

IFR WIND ROSE

IFR WIND ROSE						
ALLOWABLE CROSSWIND COMPONENT	R/W 4-22 (Percent Coverage)	R/W 13-31 (Percent Coverage)	R/W 4-22 AND R/W 13-31 COMBINED (Percent Coverage)			
10.5 KNOTS	88.15%	94.15%	98.02%			
13 KNOTS	93.15%	97.04%	99.36%			
16 KNOTS	97.55%	99.00%	99.86%			
20 KNOTS	99.31%	99.75%	99.97%			

AIRPORT DATA						
		EXISTING	FUTURE			
AIRPORT ELEVATION		17'	17'			
AIRPORT REFERENCE POINT	LAT. (1983 NAD)	43° 25' 01.00"	43° 24' 59.85"			
(ARP COORDINATES)	LONG. (1983 NAD)	124° 14' 49.30"	124° 14' 53 25"			
ANNUAL AVERAGE HIGH TEMPERATURE-HOTTEST MONTH		66°F - JULY	_			
AIRPORT AND TERMINAL NAVIGATIONAL AIDS		ILS / GPS / MALSR / VOR	ILS / GPS / MALSR / VOR			
NPIAS SERVICE LEVEL		PRIMARY NON-HUB	PRIMARY NON-HUB			
AIRCRAFT RESCUE AND FIRE FIGHTING INDEX		A	В			
AIRPORT REFERENCE CODE (SEE RUNWAY DATA TABLE)		C-III	C-III			
MAGNETIC VARIATION DATE		JULY, 2012	_			
TAXIWAY LIGHTING/MARKED		MITL	MITL			

THE EXISTING/ULTIMATE OFA FOR RUNWAY 13-31 IS NOT AVAILABLE DUE TO PROPERTY RESTRICTIONS, PERIMETER FENCE AND BODIES OF WATER

NGS MONUMENT DATA							
IDENTIFIER	SURVEY STATION NAME	PACS OR SACS	LATITUDE	LONGITUDE	ELEVATION		
"RAMP"	NGS PID-AA5127	PAC	43° 25' 20.047"	124° 14' 21.770"	11.7		
"AP 1964 STA B2"	NGS PID-AC7346	SAC	43° 25' 16.982"	124° 14' 48.928"	11.8		
"OTH D"	NGS PID-AA7990	SAC	43° 25' 02.273"	124° 14' 32.693"	9.9		

SOURCE: NATIONAL GEODETIC SURVEY, NAD 83 (2011), NAVD 88

DECLARED DISTANCES					
RUNWAY END	TORA	TODA	ASDA	LDA	
RUNWAY 4 (E)	5,320'	5,320'	5,320'	5,320	
RUNWAY 22 (E)	5,980'	5,980'	5,980'	5,320	
RUNWAY 4 (F)	6,380'	6,380'	5,720'	5,720	
RUNWAY 22 (F)	6,380'	6,380'	6,380'	5,720	
RUNWAY 4 (U)	6,980'	6,980'	6,320'	6,320	
RUNWAY 22 (U)	6,980'	6,980'	6,980'	6,320	
RUNWAY 13 (E / F / U)	4,470'	4,470'	4,470'	4,470	
RUNWAY 31 (E / F / U)	4,470'	4,470'	4,470'	4,470	

TORA - TAKEOFF RUN AVAILABLE

TODA - TAKEOFF DISTANCE AVAILABLE
ASDA - ACCELERATE STOP DISTANCE AVAILABLE
LDA - LANDING DISTANCE AVAILABLE

ABBREVIATIONS:

ABBREVIATIONS:

(E) - EXISTING CONDITIONS
(F) - FUTURE CONDITIONS (1-20 YEARS)
(U) - ULTIMATE CONDITIONS (20+ YEARS)
(S) SURVEYED _ (C) - CALCULATE
(SWG) - SINGLE WHEEL GEAR ARCRAFT
(DWG) - DUAL WHEEL GEAR ARCRAFT
(DWG) - DUAL TANDEM WHEEL GEAR ARCRAFT
(MSL - MEAN SEA LEVEL _ AGL - ABOVE GROUND LEVEL
REIL - RUINWAY END IDENTIFIER LIGHTS
PAPI - PRECISION APPROACH PATH INDICATOR LIGHTS
WASI - VISUAL APPROACH SLOPE INDICATOR LIGHTS
WASI - VISUAL APPROACH SLOPE INDICATOR LIGHTS
MIRL - HIGH INTENSITY RUNWAY LIGHTS
MIRL - HIGH INTENSITY RUNWAY LIGHTS
C/L - CENTERLINE
TSS - THRESHOLD SITING SURFACE
ARP - AIRPORT REFERENCE POINT
AWOS - AUTOMATED WEATHER OBSERVING SYSTEM
IFR - INSTRUMENT FLIGHT RULES
NPI - NON-PRECISION INSTRUMENT
PI - PRECISION INSTRUMENT
PI - COCALIZER
LOM - LOCATOR OUTER MARKER
NDB - NON-DIRECTIONAL BEACON
MM - MIDDLE MARKER
NDB - NON-DIRECTIONAL BEACON
MM - MIDDLE MARKER
NDR - NON-DIRECTIONAL BEACON
RNAY - AREA NAVIGATION
NGS - NATIONAL GEODETIC SURVEY
PACS - PERMARY AIRPORT CONTROL STATION
SACS - SECONDARY AIRPORT CONTROL STATION

	RUNWAY DATA TABLE							
	RUN	NAY4	RUNW	VAY 22	RUNV	VAY 13	RUNV	VAY 31
RUNWAY DATA	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE
RUNWAY REFERENCE CODE	C / III / 2400	C / III / 2400	C / III / VIS	C / III / VIS	B / III / VIS			
RUNWAY LENGTH	5,980'	6,980'	5,980'	6,980'	4,470'	4,470'	4,470'	4,470'
RUNWAY WIDTH	150'	150'	150'	150'	150'*	100'	150'*	100'
RUNWAY ELEVATION	16.1	16.1	13.4	13.4	13.1	13.1	17.4	17.4
TOUCHDOWN ZONE ELEVATION	16.1	16.1	13.6	13.6	13.6	13.6	17.4	17.4
DISPLACED THRESHOLD ELEVATION	N/A	N/A	13.3	13.3	N/A	N/A	N/A	N/A
HIGH POINT	16.1	16.1	16.1	16.1	17.4	17.4	17.4	17.4
LOW POINT	13.3	13.3	13.3	13.3	13.1	13.1	13.1	13.1
DISPLACED THRESHOLD	NONE	NONE	660'	660'	NONE	NONE	NONE	NONE
APPROACH VISIBILITY MINIMUMS (LOWEST)	1/2 MILE	1/2 MILE	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
FAA PART 77 APPROACH SLOPE	50:1	50:1	20:1	20:1	20:1	20:1	20:1	20:1
APPROACH TYPE	PRECISION	PRECISION	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
SINGLE WHEEL GEAR (POUNDS)	106,000	106,000	106,000	106,000	90,000	90,000	90,000	90,000
DUAL WHEEL GEAR (POUNDS)	113,000	113,000	113,000	113,000	100,000	100,000	100,000	100,000
DUAL WHEEL TANDEM GEAR (POUNDS)	190,000	190,000	190,000	190,000	100,000	100,000	100,000	100,000
PAVEMENT TYPE	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT
RUNWAY LIGHTING	HIRL	HIRL	HIRL	HIRL	MIRL	MIRL	MIRL	MIRL
RUNWAY MARKINGS	PRECISION	PRECISION	PRECISION	PRECISION	VISUAL	VISUAL	VISUAL	VISUAL
PERCENT GRADIENT	0.0507	0.0386	0.0507	0.0386	0.0939	0.0939	0.0939	0.0939
MAX, GRADE WITH RUNWAY LENGTH	0.1693	0.1693	0.1693	0.1693	0.0939	0.0939	0.0939	0.0939
RUNWAY LINE OF SIGHT	MEETS STANDARD	MEETS STANDARD	MEETS STANDARD	MEETS STANDARD	MEETS STANDARD	MEETS STANDARD	MEETS STANDARD	MEETS STANDARD
VISUAL APPROACH AIDS	REILS, VASI, MALSR	REILS, PAPI, MALSR	NONE	REILS, PAPI	REILS	REILS	PAPI, REILS	PAPI, REILS
RUNWAY CRITICAL AIRCRAFT	DASH 8-200	CRJ-200	DASH 8-200	CRJ-200	DASH 8-200	DASH 8-200	DASH 8-200	DASH 8-200
WING SPAN (FEET)	85'-0"	69'-7"	85'-0"	69'-7"	90'-0"	90'-0"	90'-0"	90'-0"
APPROACH SPEED (KNOTS)	91	151	91	151	91	91	91	91
HEIGHT (FEET)	24'-7"	20'-5"	24'-7"	20'-5"	24'-7"	24'-7"	24'-7"	24'-7"
WEIGHT (POUNDS)	36,300	53,000	36,300	53,000	41,100	41,100	41,100	41,100
LENGTH OF HAUL IF >60,000 POUNDS (MILES)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RUNWAY SAFETY AREA WIDTH	500'	500'	500'	500'	300'	300'	300'	300'
RUNWAY SAFETY AREA LENGTH BEYOND END	1,000'	1,000'	1,000'	1,000'	600'	600'	600'	600'
RUNWAY OBJECT FREE AREA WIDTH	800'	800'	800'	800'	800'	800'	800'	800'
RUNWAY OBJECT FREE AREA LENGTH BEYOND END	1,000'	1,000'	1,000'	1,000'	600'	600'	220' **	220' **
RUNWAY OBSTACLE FREE ZONE WIDTH	400'	400'	400'	400'	400'	400'	400'	400'
RUNWAY OBSTACLE FREE ZONE LENGTH BEYOND END	200'	200'	200'	200'	200'	200'	200'	200'
PRECISION OBSTACLE FREE ZONE WIDTH	800'	800'	NONE	NONE	NONE	NONE	NONE	NONE
PRECISION OBSTACLE FREE ZONE LENGTH BEYOND END	200'	200'	NONE	NONE	NONE	NONE	NONE	NONE

^{*} RUNWAY 13-31 PAVEMENT WIDTH OF 150 FEET CURRENTLY EXCEEDS THE FAA DESIGN STANDARDS OF 100 FEET. THE FAA WILL ONLY FUND THE DESIGN WIDTH OF 100 FEET AT THE TIME THAT THIS RUNWAY IS DUE FOR REHABILITATION.
**APPROXIMATELY 380 FEET OF THE RUNWAY OBJECT FREE AREA LENGTH BEYOND THE RUNWAY 31 END EXTEND BEYOND THE EXISTING AIRPORT PROPERTY LINE.



Reynolds, Smith and Hills, Inc.

4700 S. Syracuse Street, Suite 300 Denver, CO 80237 303-409-9700 FAX 303-409-9701 www.rsandh.com



SOUTHWEST OREGON **REGIONAL AIRPORT**

AIRPORT LAYOUT PLAN

CONSULTANTS

NO.	DESCRIPTION	DAT
140.	DESCRIPTION	DAI
DATE	ISSUED: JUNE 2013	
REVIE	WED BY:	

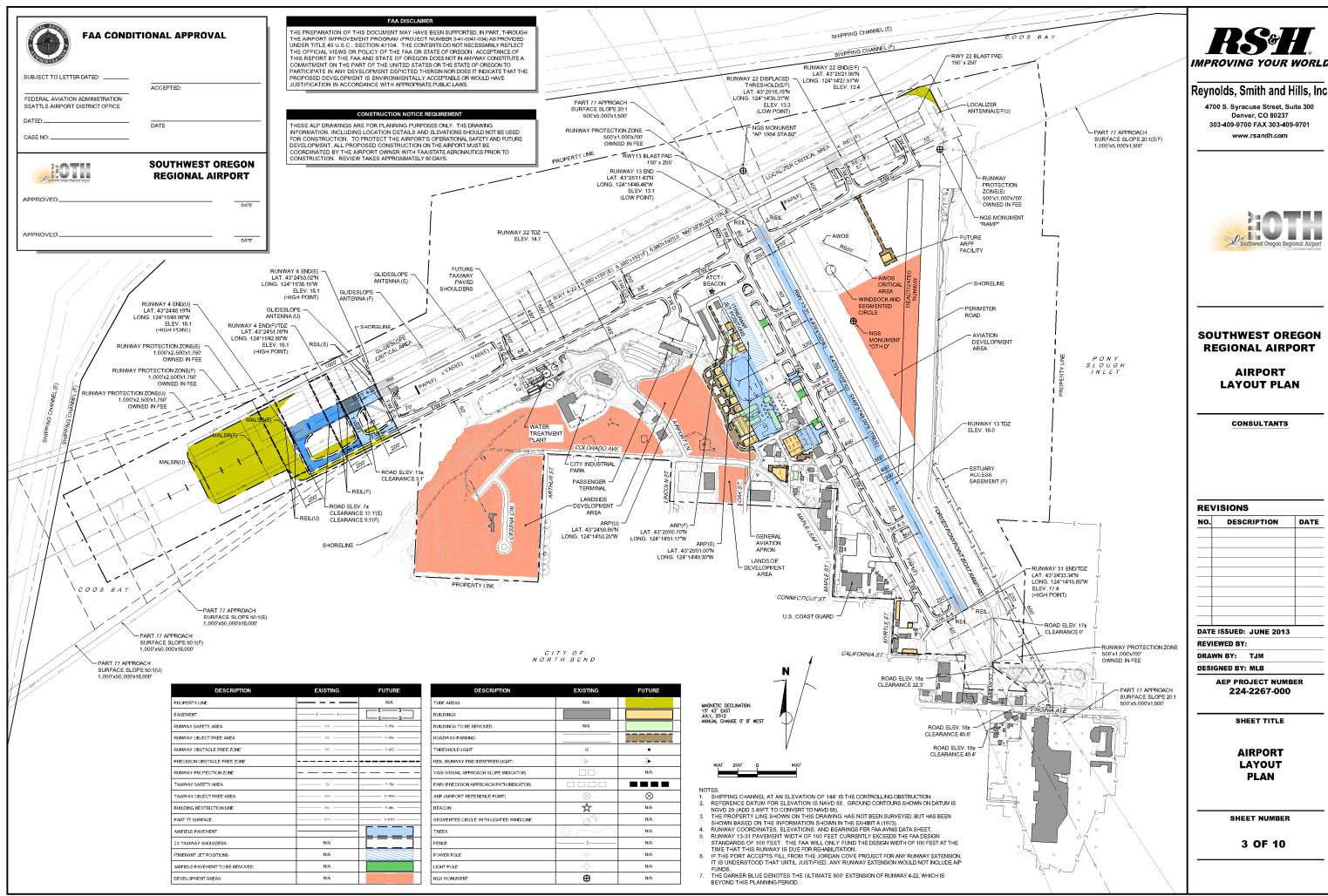
AEP PROJECT NUMBER 224-2267-000

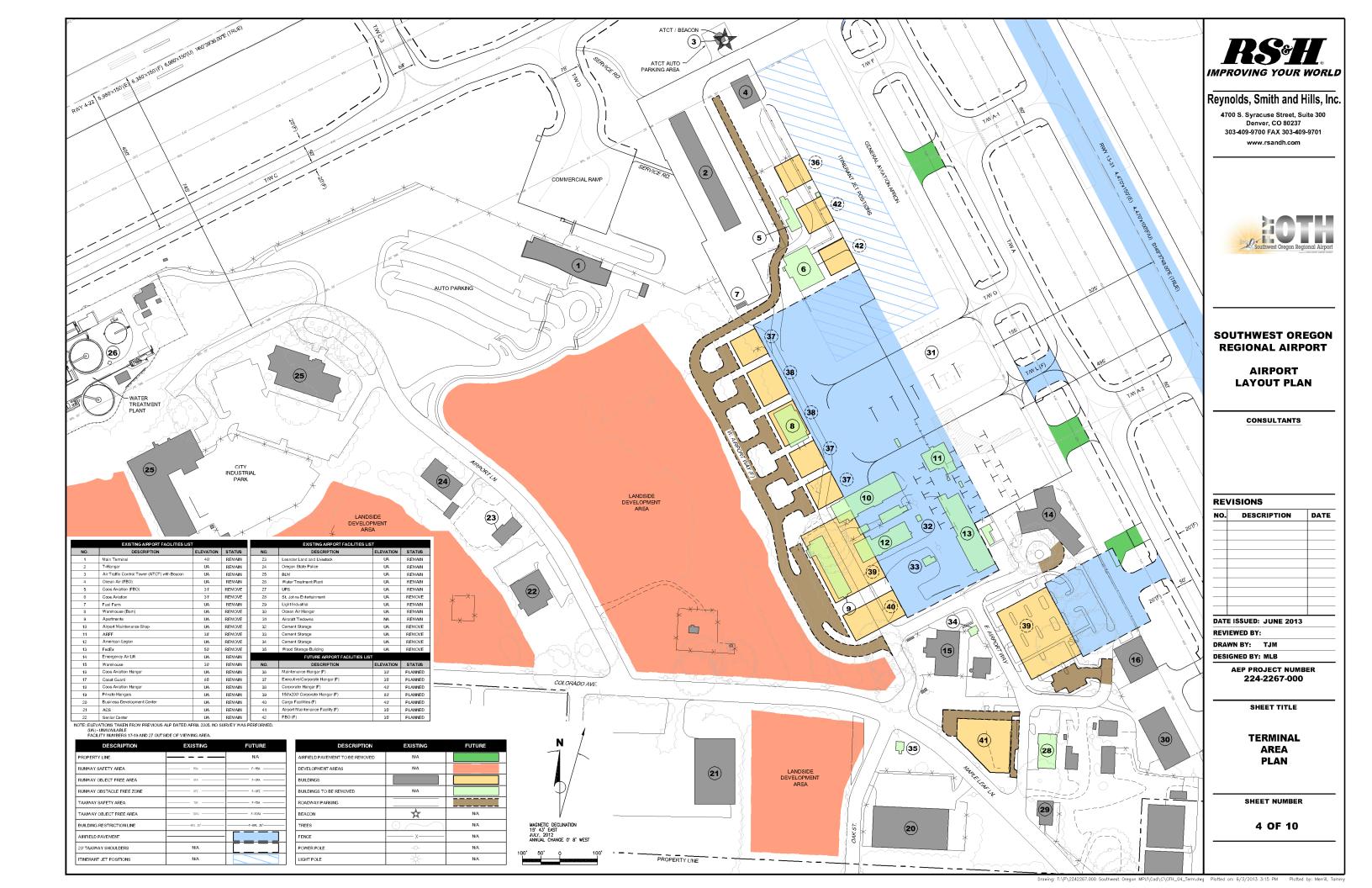
DESIGNED BY: MLB

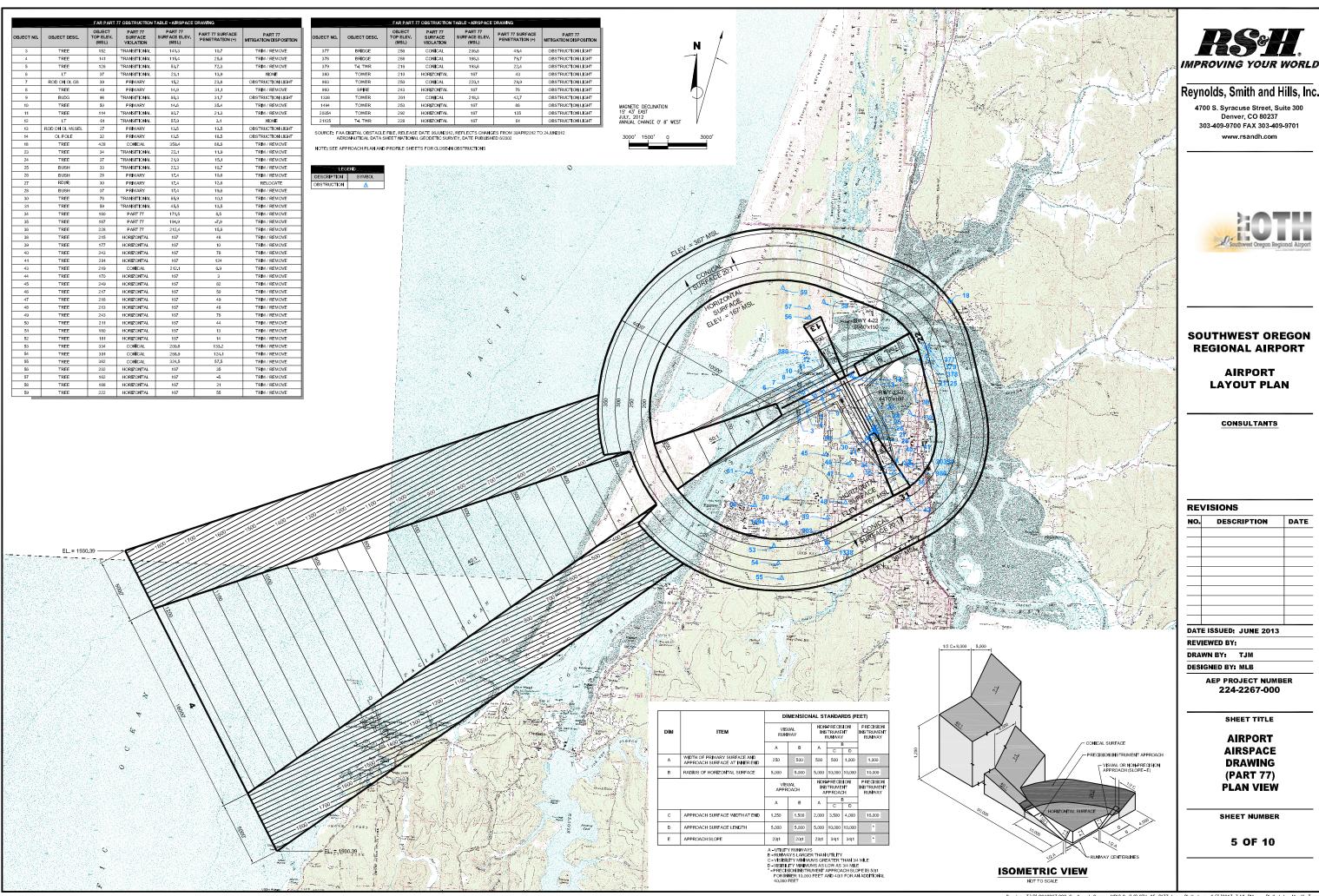
SHEET TITLE

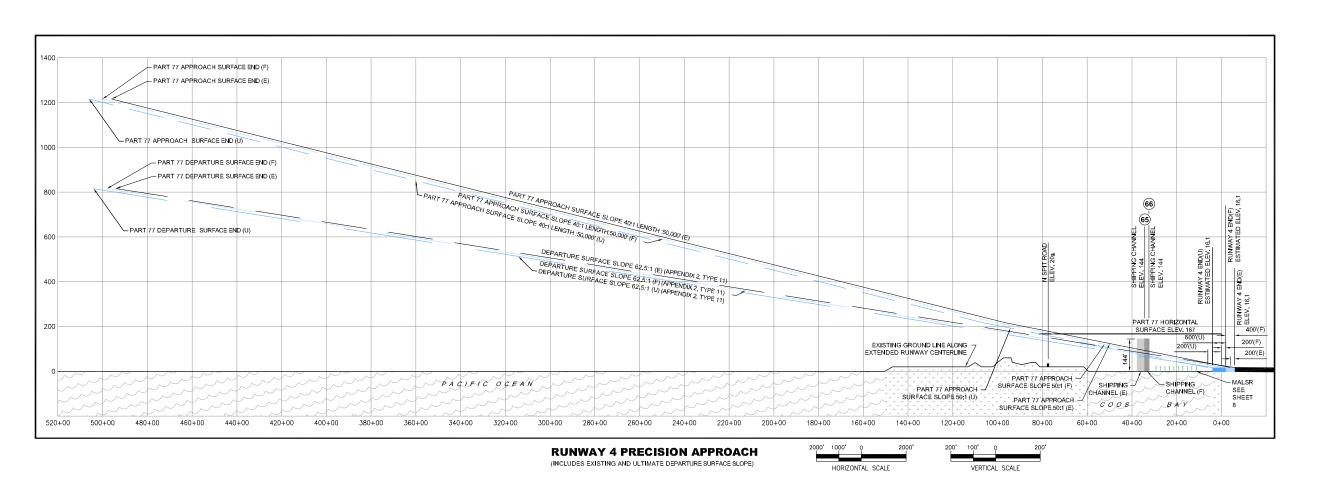
TECHNICAL DATA SHEET

SHEET NUMBER







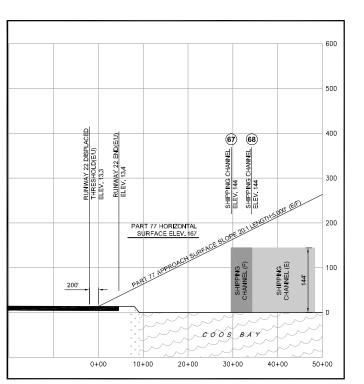


	OBSTRUCTION TABLE - RUNWAY 4-22								
OBJECT NO.	OBJECT DESC.	OBJECT TOP ELEV. (MSL)	PART 77 SURFACE ELEV. (MSL) (E)	PART 77 SURFACE PENETRATION (+) (E)	PART 77 SURFACE ELEV. (MSL) (F)	PART 77 SURFACE PENETRATION (+) (F)	PART 77 SURFACE ELEV. (MSL) (U)	PART 77 SURFACE PENETRATION (+) (U)	PART 77 MITIGATION/DISPOSITION
65	SHIPPING CHANNEL(E)	144	92.5	51.5	84.5	59.5	72.5	71.5	NONE
66	SHIPPING CHANNEL(F)	144	88.6	55.4	80.6	63.4	68.6	75.4	NONE
67	SHIPPING CHANNEL(E)	144	161.7	-17.7	N/A	N/A	N/A	N/A	NONE
68	SHIPPING CHANNEL(F)	144	184.1	-40.1	N/A	N/A	N/A	N/A	NONE

SOURCE: AERONAUTICAL DATA SHEET NATIONAL GEODETIC SURVEY, DATE PUBLISHED 8/2002

RECOMMENDED CLEARANCES: 23' RAILROADS | 17' HIGHWAYS | 15' PUBLIC ROADS | 10' PRIVATE ROADS.

NOTE: THE SHIPPING CHANNEL ELEVATION OF 144 WAS OBTAINED FROM PREVIOUS ALP, UPDATED APRIL 2005.



RUNWAY 22 VISUAL APPROACH





SOUTHWEST OREGON REGIONAL AIRPORT

AIRPORT LAYOUT PLAN

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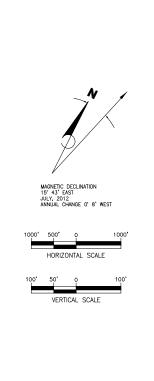
NO.	DESCRIPTION	DATE
		_
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DATE	ISSUED: JUNE 2013	3
REVIE	WED BY:	
DRAW	N BY: TJM	

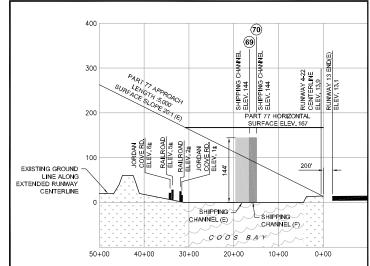
AEP PROJECT NUMBER
224-2267-000

SHEET TITLE

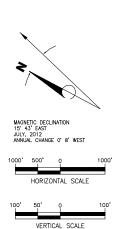
AIRPORT AIRSPACE DRAWING (PART 77) PROFILE RWY 4-22

SHEET NUMBER

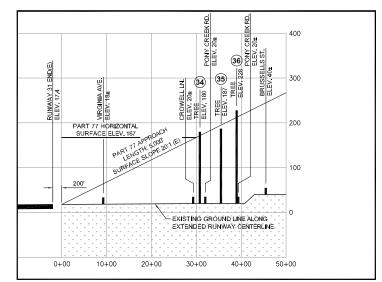




RUNWAY 13 VISUAL APPROACH



0+00 0+00 VERTICAL SCALE



RUNWAY 31 VISUAL APPROACH

OBSTRUCTION TABLE - RUNWAY 13-31								
OBJECT NO.	OBJECT DESC.	OBJECT TOP ELEV. (MSL)	PART 77 SURFACE ELEV. (MSL)	PART 77 SURFACE PENETRATION (+)	PART 77 MITIGATION/DISPOSITION			
34	TREE	180	171.5	8.5	TRIM / REMOVE			
35	TREE	187	194.9	7.9	TRIM / REMOVE			
36	TREE	228	212.4	15.6	TRIM / REMOVE			
69	SHIPPING CHANNEL(E)	144	95.6	48.4	NONE			
70	SHIPPING CHANNEL(F)	144	87.7	56.3	NONE			

SOURCE: AERONAUTICAL DATA SHEET NATIONAL GEODETIC SURVEY, DATE PUBLISHED 6/2002

RECOMMENDED CLEARANCES: 23' RAILROADS | 17' HIGHWAYS | 15' PUBLIC ROADS | 10' PRIVATE ROADS.

NOTE: THE SHIPPING CHANNEL ELEVATION OF 1441 WAS OBTAINED FROM PREVIOUS ALP, UPDATED APRIL 2005.



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SOUTHWEST OREGON REGIONAL AIRPORT

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RE	VISIONS
NO.	DESCR

DESCRIPTION	DATI
	DESCRIPTION

DATE ISSUED: JUNE 2013

REVIEWED BY:

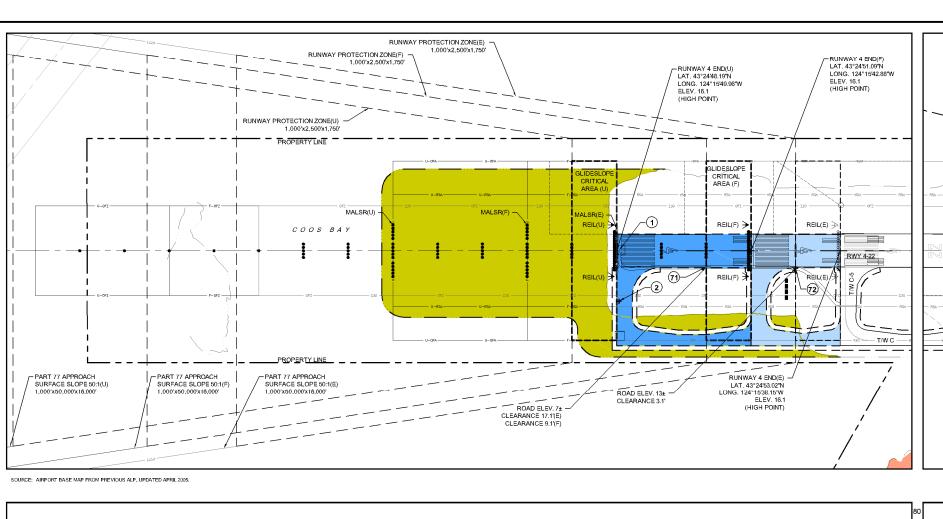
DRAWN BY: TJM
DESIGNED BY: MLB

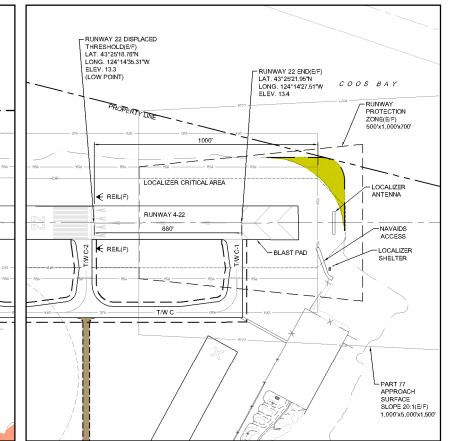
AEP PROJECT NUMBER 224-2267-000

SHEET TITLE

AIRPORT AIRSPACE DRAWING (PART 77) PROFILE RWY 13-31

SHEET NUMBER





OBJECT PART 77
TOP ELEV. SUBFACE ELEV. (MSL) (E) PART 77 SURFACE (MSL) (MSL) (E) PART 77 SURFACE (MSL) (E) (MSL) (F) PART 77 SURFACE (MSL) (F) (MSL) (F) PENETRATION (+) (F)

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AIRPORT LAYOUT PLAN

CONSULTANTS

NO.	DESCRIPTION	DA
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DRAWN BY: TJM
DESIGNED BY: MLB

AEP PROJECT NUMBER 224-2267-000

SHEET TITLE

RUNWAY 4-22 INNER APPROACH PLAN AND PROFILE EXISTING/FUTURE

SHEET NUMBER

8 OF 10

	180
80 PART 77 APPROACH SURFACE SLOPE 50.1 (E) PART 77 APPROACH SURFACE SLOPE 50.1 (E)	09 CEEPV. 13.3 EEEV. 1
40 LAST MALSR(U) T T T T T T T T T T T T T T T T T T T	5' LINE OF SIGHT(E) 200' 5' LINE OF SIGHT(E) 200' 200' 40 40 40 40 Figure 1 Figure 2 Figure 2 Figure 2 Figure 3 Figure 4 Figure 3 Figure 3 Figure 4 Figure 3 Figure 3 Figure 3 Figure 3 Figure 3 Figure 4 Figure 3 Figure 4 Figure 3 Figure 4 Figure 4 Figure 3 Figure 4
MALSR(U) (TYP.) MALSR(E) 2007(U) 6007(U) 4007(F)	ALONG EXTENDED EXTENDED RUNWAY CENTERLINE
EXISTING GROUND LINE ALONG EXTENDED RUNWAY CENTERLINE	
36+00 34+00 32+00 30+00 28+00 26+00 24+00 22+00 20+00 18+00 16+00 14+00 12+00 10+00 8+00 6+00 4+00 2+00 0+00	0+00 2+00 4+00 6+00 8+00 10+00 12+00 14+00

	OBSTRUCTION TABLE - INNER APPROACH (RUNWAY 4 END)								
BJECT NO.	OBJECT DESC.	OBJECT TOP ELEV. (MSL)	PART 77 SURFACE ELEV. (MSL) (E)	PART 77 SURFACE PENETRATION (+) (E)	PART 77 SURFACE ELEV. (MSL) (F)	PART 77 SURFACE PENETRATION (+) (F)	PART 77 SURFACE ELEV. (MSL) (U)	PART 77 SURFACE PENETRATION (+) (U)	PART 77 MITIGATION/DISPOSITION
1	ROD ON OL BLDG AT MALSAZ	28	31.9	-3.9	23.9	4.1	16.1	11.9	OBSTRUCTION LIGHT
2	OL ON DME	32	31.9	0.1	23.9	8.1	16.1	15.9	OBSTRUCTION LIGHT
71	SERVICE ROAD	17*	24.1	-7.1	16.1	0.9	16.1	0.9	RELOCATE
72	SERVICE ROAD	23*	16.1	6.9	16.1	6.9	16.1	6.9	RELOCATE

SOURCE: AERONAUTICAL DATA SHEET NATIONAL GEODETIC SURVEY, DATE PUBLISHED 8/2002

* RECOMMENDED CLEARANCES: 23' RAILROADS | 17' HIGHWAYS | 15' PUBLIC ROADS | 10' PRIVATE ROADS. ELEVATIONS IN TABLE REFLECT THE RECOMMENDED AIRSPACE CLEARANCES

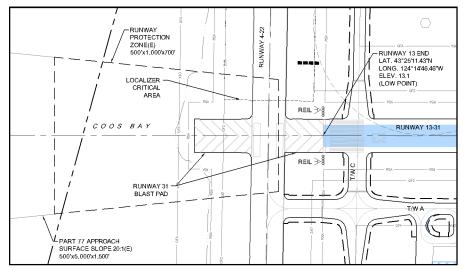
DESCRIPTION	EXISTING	FUTURE
PROPERTY LINE		N/A
RUNWAY SAFETY AREA	RSA	F-RSA
RUNWAY OBJECT FREE AREA	OFA -	F-0FA
RUNWAY OBSTACLE FREE ZONE	OFZ	F=0FZ
PRECISION OBSTACLE FREE ZONE		
RUNWAY PROTECTION ZONE		
TAXIWAY SAFETY AREA	TSA	F=TSA
TAXIWAY OBJECT FREE AREA	TOPA -	F=TOFA
DISLIDENC DESTRICTION LINE	poi	C-004

DESCRIPTION	EXISTING	FUTURE
PART 77 SURFACE	PT77	F-PT77
AIRFIELD PAVEMENT	-	
20' TAXIWAY SHOULDERS	N/A	
ITINERANT JET POSITIONS	N/A	
AIRFIELD PAVEMENT TO BE REMOVED	N/A	
DEVELOPMENT AREAS	N/A	
TURF AREAS	N/A	
BUILDINGS		
BUILDINGS TO BE REMOVED	N/A	

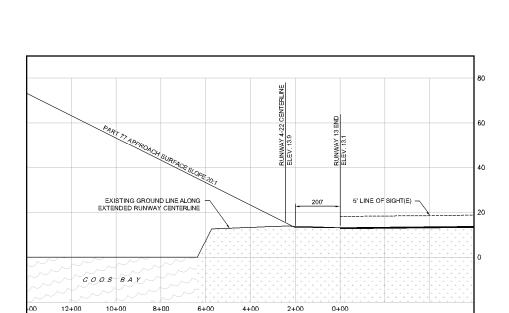
DESCRIPTION	EXISTING	FUTURE
ROADWAY/PARKING		
THRESHOLD LIGHT	θ	•
REIL (RUNWAY END IDENTIFIER LIGHT)	∌	→
VASI (VISUAL APPROACH SLOPE INDICATOR)		N/A
PAPI (PRECISION APPROACH PATH INDICATOR)		
TREES	0 /	N/A
FENCE	X	N/A
POWER POLE	-0-	N/A
LIGHT POLE	*	N/A

SOURCE: AERONAUTICAL DATA SHEET NATIONAL GEODETIC SURVEY, DATE PUBLISHED 8/2002

VERTICAL SCALE

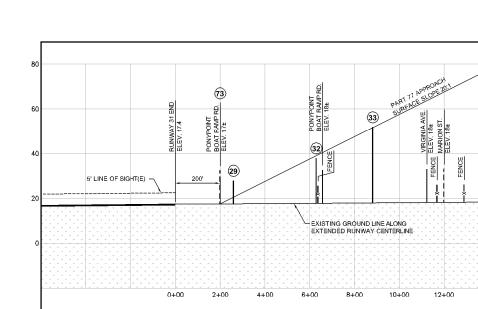


SOURCE: AIRPORT BASE MAP FROM PREVIOUS ALP, UPDATED APRIL 2005.



	OBSTF	UCTION TABL	_E - INNER APPROA	CH (RUNWAY 13 END)	
OBJECT NO.	OBJECT DESC.	OBJECT TOP ELEV. (MSL)	PART 77 SURFACE ELEV. (MSL)	PART 77 SURFACE PENETRATION (+)	PART 77 MITIGATION/DISPOSITION
	N O	0 B	STRUC	TIONS	

SOURCE: AERONAUTICAL DATA SHEET NATIONAL GEODETIC SURVEY, DATE PUBLISHED 8/2002



ESTUARY ACCESS -EASEMENT(F)

€ REIL

I REIL

E RUNWAY 31 END LAT. 43°24'33.34"N LONG. 124°14'16.85"W ELEV. 17.4 (HIGH POINT)

FORMER PONYPOINT BOAT RAMP RD

RUNWAY 13-31

T/W A

RUNWAY PROTECTION ZONE(E) 500'x1,000'x700'

ROAD ELEV. 18± CLEARANCE 45.6

PART 77 APPROACH SURFACE SLOPE 20:1(E) 500'x5,000'x1,500'

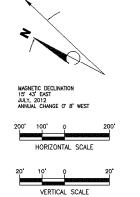
-73 -ROAD ELEV. 17± CLEARANCE 0'

ROAD ELEV. 18± CLEARANCE 22.3'

OBSTRUCTION TABLE - INNER APPROACH (RUNWAY 22 END)					
OBJECT NO.	OBJECT DESC.	OBJECT TOP ELEV. (MSL)	PART 77 SURFACE ELEV. (MSL)	PART 77 SURFACE PENETRATION (+)	PART 77 MITIGATION/DISPOSITION
29	BUSH	28	20.4	7.6	TRIM / REMOVE
32	TREE	38	38.9	-0.9	TRIM / REMOVE
33	POLE	52	51.5	0.5	OBSTRUCTION LIGHT
73	PONYPOINT BOAT RAMP RD.	32*	17.4	14.6	RELOCATE

SOURCE: AERONAUTICAL DATA SHEET NATIONAL GEODETIC SURVEY, DATE PUBLISHED 6/2002

* RECOMMENDED CLEARANCES: 23' RAILROADS | 17' HIGHWAYS | 15' PUBLIC ROADS | 10' PRIVATE ROADS. ELEVATIONS IN TABLE REFLECT THE RECOMMENDED AIRSPACE CLEARANCES



DESCRIPTION	EXISTING	FUTURE
PROPERTY LINE		N/A
RUNWAY SAFETY AREA	RSA	F-RSA
RUNWAY OBJECT FREE AREA	OFA	F-0FA
RUNWAY OBSTACLE FREE ZONE	OFZ	F=0FZ
PRECISION OBSTACLE FREE ZONE		
RUNWAY PROTECTION ZONE		
TAXIWAY SAFETY AREA	TSA	F-TSA
TAXIWAY OBJECT FREE AREA	TOPA -	F=TOFA
BUILDING RESTRICTION LINE		F-BRL

DESCRIPTION	EXISTING	FUTURE
PART 77 SURFACE	PT77	F-PT77
AIRFIELD PAVEMENT		
20' TAXIWAY SHOULDERS	N/A	
ITINERANT JET POSITIONS	N/A	
AIRFIELD PAVEMENT TO BE REMOVED	N/A	
DEVELOPMENT AREAS	N/A	
TURF AREAS	N/A	
BUILDINGS		
BUILDINGS TO BE REMOVED	N/A	

DESCRIPTION	EXISTING	FUTURE
ROADWAY/PARKING		
THRESHOLD LIGHT	θ	•
REIL (RUNWAY END IDENTIFIER LIGHT)	⇒	>
VASI (VISUAL APPROACH SLOPE INDICATOR)		N/A
PAPI (PRECISION APPROACH PATH INDICATOR)		
TREES	0 /~~~	N/A
FENCE	x	N/A
POWER POLE	-0-	N/A
LIGHT POLE	*	N/A



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SOUTHWEST OREGON REGIONAL AIRPORT

AIRPORT LAYOUT PLAN

CONSULTANTS

DESCRIPTION	DATE	
	DESCRIPTION	

REVIEWED BY:

DRAWN BY: TJM

DESIGNED BY: MLB AEP PROJECT NUMBER 224-2267-000

SHEET TITLE

RUNWAY 13-31 INNER APPROACH **PLAN AND PROFILE EXISTING/FUTURE**

SHEET NUMBER

