

RENTON MUNICIPAL · AIRPORT

RNT

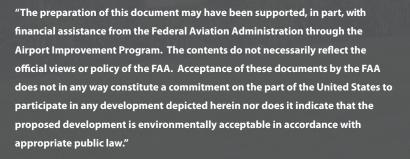
ALP Update Renton Municipal Airport/ Clayton Scott Field







RENTON MUNICIPAL · AIRPORT



RNT

ALP Update Renton Municipal Airport/ Clayton Scott Field







DENVER 999 18th Street, Suite 2300S Denver, Colorado 80202 303-825-8844

Contents

Contents	i
Figures	iii
Tables	iv

A. Inventory of Existing Conditions

Introduction	A.1
Airport Role and Facilities	A.1
Renton Airport Advisory Committee	A.2
Airfield	A.5
Airspace System and NAVAIDS	A.7
General Aviation and Seaplane Facilities	A.8
Support Facilities	A.9
Boeing Facilities	A.9
Access, Circulation and Parking	A.10
Zoning and Land Use	A.10
Airport Environs Overlay Zoning	A.11
Environmental Overview	A.11

B. Facility Requirements

B.1
B.1
B.2
B.2
B.8

C. Landside Alternatives Analysis

Introduction	C.1
Assumptions	C.1
Landside Development	C.2
Landside Area 1 Concept	C.3
Landside Area 2 Concept	C.5
Landside Area 3 Concept	C.7
Landside Area 4 Concept	C.9
Landside Area 5 (Seaplane Base) Development Alternatives	C.11
Conceptual Development Plan	C.19

D. Airport Development Program

D.1
D.1
D.1
D.1
D.4
D.4
D.5
D.5
D.6
D.6

E. Airport Plans

Introduction	D.1
Cover	D.1
Airport Data	D.1
Airport Layout Plan	D.1
Airport Airspace Plan	D.1
Inner Approach Plan and Profile	D.1
Departure Surfaces	D.2
Terminal Area Plans	D.2
Airport Land Use Plan	D.2
Airport Property Map	D.2

ii

Figures

Figure A1 Airport Location Map	A.3
Figure A2 Airport Vicinity Map	A.4
Figure A3 Existing Airport Layout	A.6
Figure B1 Existing RDC B-II Design Standards	B.4
Figure B2 Existing RDC B-II Design Standards (North)	B.5
Figure B3 Existing RDC B-II Design Standards (South)	B.6
Figure C1 Landside Area 1 Concept	C.4
Figure C2 Landside Area 2 Concept	C.6
Figure C3 Landside Area 3 Concept	C.8
Figure C4 Landside Area 4 Concept	C.10
Figure C5 Seaplane Base Alternative 1 – Reconstruct Facilities in Place	C.12
Figure C6 Seaplane Base Alternative 2 – Relocate Ramp and Flip N/S Dock	C.14
Figure C7 Seaplane Base Alternative 3 – Reconstruct in Place and Improve Facilities	C.16
Figure C8 Seaplane Base Alternative 4 – Reconstruct Seaplane Base for RDC C/D-III	C.18
Figure C9 Conceptual Development Plan (CDP)	C.20
Figure D1 Phasing Plan	D.7
Figure E1 Cover Sheet	E.3
Figure E2 Airport Data	E.4
Figure E3 Airport Layout Plan	E.5
Figure E4 Airport Airspace Plan & Profile	E.6
Figure E5 Runway 16 Inner Approach	E.7
Figure E6 Runway 34 Inner Approach	E.8
Figure E7 Departure Surfaces Plan & Profile	E.9
Figure E8 Terminal Area Plan	E.10
Figure E9 South Area Plan	E.11
Figure E10 North Area Plan	E.12
Figure E12 Airport Land Use Plan	E.13
Figure E12 Airport Property Map	E.14



Tables

Table A1 AIRPORT PAVEMENT INVENTORY SUMMARY		
Table B1 RNT HISTORIC TFMSC DATA ANALYSIS –		
LARGE C/D BUSINESS JET OPERATIONS AND BOEING OPERATIONS	B.1	
Table B2 RUNWAY 16/34 DESIGN STANDARDS MATRIX –		
RDC B-II > 1-MILE VISIBILITY MINIMUMS	B.3	
Table D1 PHASE I (0-5 Years) DEVELOPMENT PLAN PROJECT COSTS	D.2	
Table D2 PHASE II (6-10 Years) DEVELOPMENT PLAN PROJECT COSTS	D.2	
Table D3 AIRPORT FUNDING PROGRAMS AND PARTICIPATION	D.4	

Final Report. ALP Update



Inventory of Existing Conditions

CHAPTER A Inventory of Existing Conditions

Introduction.

The City of Renton is located on the south shore of Lake Washington, in King County, Washington. It is the fifth largest city in King County, and the 11th largest city in the State of Washington. The City of Renton is centrally located in the greater Puget Sound Region, approximately 11 miles southeast of downtown Seattle.

In the 1920s, Renton Municipal Airport existed as a short turf runway called Bryn Mawr Airport. The first aircraft manufactured in Renton was the Boeing XPBB-1 Sea Ranger, built for the U.S. Navy, in 1941. By 1943 the U.S. Navy traded the Renton manufacturing site to the U.S. Army, where Boeing workers produced over 1,100 B-29 Superfortress aircraft. In 1947, through the Surplus Property Act of 1944, the United States of America deeded the rights and assets of the Defense Plant Corporation to the City of Renton. Renton Municipal Airport has since evolved into a busy General Aviation (GA) airport with seaplane facilities as well as Boeing 737 manufacturing facilities.

As the Airport was transferred to the City of Renton, The Boeing Company maintained the Airplane Programs manufacturing site adjacent to the Airport. In 1952, Boeing developed the Boeing 367-80 prototype, from which the Boeing 707 was developed. During the 1960s, Boeing developed the 727 and 737 with production occurring at Renton. In 2005, the Airport was renamed Clayton Scott Field to celebrate the 100th birthday of Clayton Scott, a local aviation pioneer whose flying career dates back to the Airport's very early days.

The purpose of this Airport Layout Plan (ALP) Update with Narrative Report is to provide a physical development plan for the next seven to ten years that will identify space for potentially needed facilities, provide an on-airport land use plan and be compatible with the environment, land uses adjacent to the Airport, other modes of transportation and other airports in the region. The focus will be on the total aviation facility and its environs, with the overall planning goal being the development of an aviation facility that can accommodate future demand, is not significantly constrained by its environs, and does not adversely impact its surroundings.

Airport Role and Facilities

Renton Municipal Airport (RNT) is owned by the City of Renton and managed by the City of Renton Public Works Department. The Airport consists of one single runway, a full-length parallel taxiway, a partial parallel taxiway, exit taxiways, aprons, hangars, and various aviation related facilities.

RNT is part of the National Plan of Integrated Airport Systems (NPIAS), a national airport system plan developed by the Federal Aviation Administration (FAA), which identifies nearly 3,400 existing and proposed airports that are significant to national air transportation and thus eligible to receive Federal grants from the Airport Improvement Program (AIP). The NPIAS also includes estimates of the amount of AIP money needed to fund infrastructure development projects that will bring airports up to current design standards. The current NPIAS report, *National Plan of Integrated Airport Systems (NPIAS) 2021-2025*, identifies RNT as a reliever airport. Reliever airports must have 100 or more based aircraft or have 25,000 annual itinerant operations.



RNT is also part of the Washington Aviation System and is classified as a Regional Service Airport. In the 2017 Washington Aviation System Plan, a Regional Service Airport is defined as an airport that serves large or multiple communities, defined as a Reliever Airport in NPIAS, has 40 or more based aircraft, and at least a 4,000-foot-long runway.

RNT's location and vicinity maps are shown in Figure A1 and Figure A2.

Renton Airport Advisory Committee

In 2001, City of Renton Resolution 3495 established the 15-voting member and four non-voting member Renton Airport Advisory Committee (RAAC). As of September 2021, there are 16 RAAC members (both voting and non-voting), including Neighborhood Representatives, Airport Representatives, Pilot Association Representatives, and Tenant Representatives. The RAAC members are to be appointed by the Mayor and confirmed by a majority of the members of the City Council. The RAAC convenes on a quarterly basis and will serve as the Study Committee for this planning process.

A.2



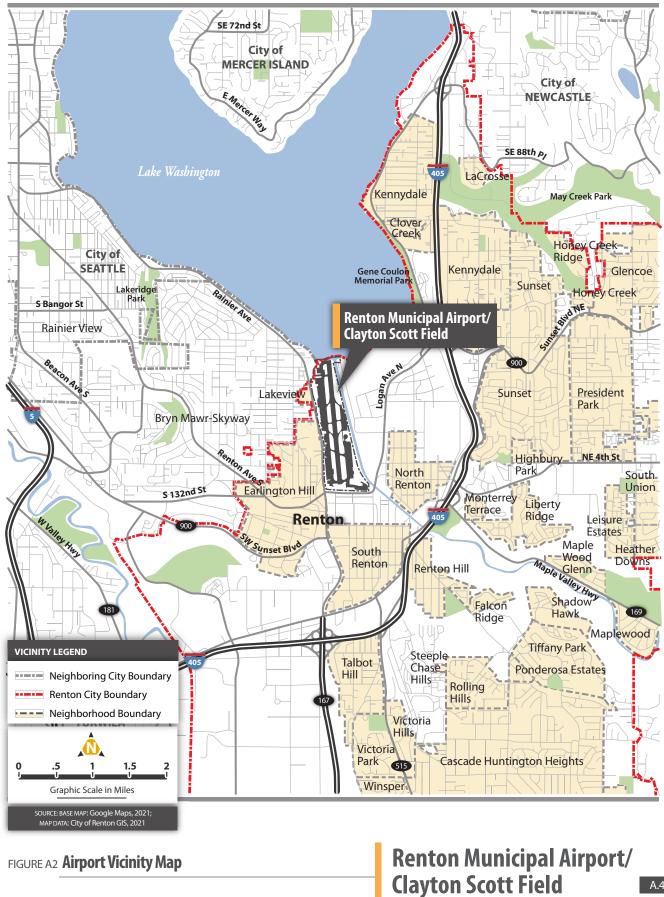




FIGURE A1 Airport Location Map



Mead



Airfield

Table A1 defines the functional use and geometry of runways, taxiways, and aprons at RNT. **Figure A3** shows the existing airfield layout.

Table A1 AIRPORT PAVEMENT INVENTORY SUMMARY

Item	Description		
Runway 16/34	 5,382 feet x 200 feet Asphalt – Concrete – In good condition Published Strength: 100,000 pounds Single Wheel (SW), 130,000 pounds Dual Wheel Gear (DW), and 340,000 pounds Double Tandem Wheel 		
Taxiway A	 Full parallel Taxiway (west side of Runway 16/34) 50 feet wide Connector Taxiways A1 through A7 		
Taxiway B	 Partial parallel Taxiway (east side of Runway 16/34) 50 feet wide Connector Taxiways B3 through B7 		
APRONS			
Apron A	 East side of RNT near Taxiway B6 and the South Bridge 388,458 square feet Used by Boeing as a staging area during the manufacturing process and has sufficient parking space for seven 737s 		
Apron B	 West side of RNT near Taxiway A7 and Run Up Area 191,403 square feet Also used for manufacturing 737s and has hard stands for five 737s 		
Apron C	 West side of RNT between Taxiways A3 and A4 319,680 square feet Used for General Aviation parking and storage 		
Transient Parking Apron	 West side of RNT adjacent to Boeing Employees Flying Association and Rainer Flight Service 97,290 square feet Provides overnight tiedown parking of up to five aircraft 		

SOURCE: Mead & Hunt.

Mead &Hunt

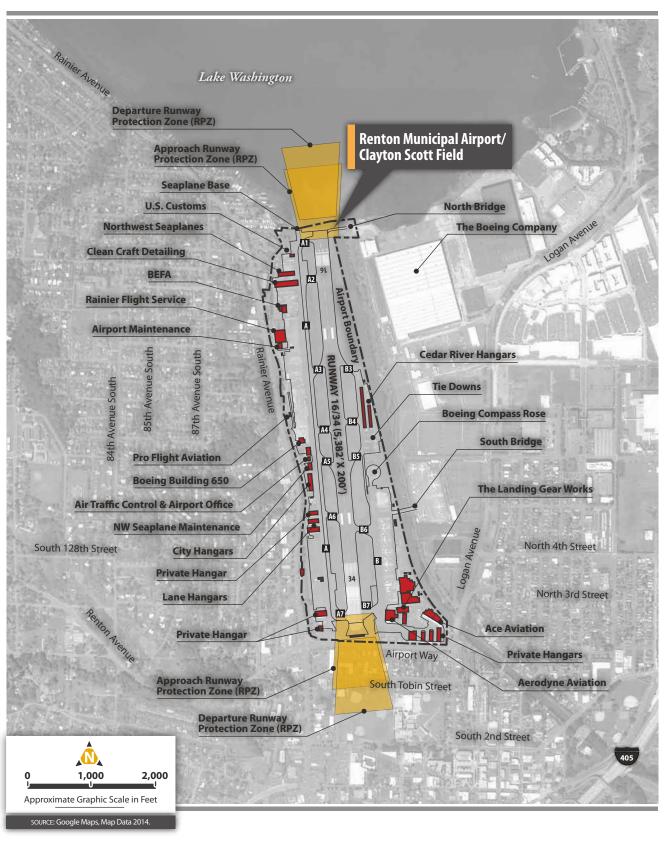


FIGURE A3 Existing Airport Layout



Airspace System and NAVAIDS

RNT, as with all airports, functions within a local, regional, and national system of airports and airspace. **Table A2** summarizes the airspace system facilities at RNT.

Item		Description
NavigationalNon-DirectionalAidsradio Beacon (NDB)(NAVAIDS)Tactical AircraftControl Navigation(TACAN)		 Waton (AW) – 382.0 MHz, 35.1 nm at 184.1° Skagit/Bay View (BVS) – 240.0 MHz, 59.1 nm at 172.0° McCord (TCM) – 109.6 MHz, 23.3 nm at 26.9° Whidbey Island (NUM) – 113.8 MHz, 54.8 nm at 160.7°
	Very-high frequency Omnidirectional Range (VOR)	 Seattle (BFI) – 180.6 MHz, 4.2 nm at 121.1° Seattle-Tacoma (SEA) – 117.5 MHz, 4.2 nm at 57.0° Seattle (BFI) – 116.8 MHz, 5.2 nm at 47.1° Paine (PAE) – 110.6 MHz, 25.7 nm at 174.4° Olympia (OLM) – 113.4 MHz, 42.0 nm at 41.5° Penn Cove (CVV) – 117.2 MHz, 49.6 nm at 155.4°
Facility Commu	unications	 Flight Service Station (FSS) – Seattle (SEA) Universal Communications (UNICOM) – 122.95 MHz Common Traffic Advisory Frequency (CTAF) – 124.7 MHz Automated Terminal Information Service (ATIS) – 126.95 MHz Renton Ground – 121.6 and 256.9 MHz Renton Tower – 124.7 and 256.9 MHz
Visual Aids Lighting		 Precision Approach Path Indicator (PAPI) – Runway 16/34 Runway End Identifier Lights (REILs) – Runway 16/34 Medium Intensity Runway Lights (MIRLs) – Runway 16/34 MIRL – Taxiway
	Markings	 Non-precision runway markings – Runway 16/34
	Misc. Aids	 Airport Rotating Beacon (clear and green) Wind Indicator (lighted)

Table A2 AIRSPACE FACILITIES INVENTORY SUMMARY

SOURCE: Mead & Hunt and Airport Master Record 5010-1 (2021).

Presently, there are three straight-in instrument approach procedures published for RNT. These are listed in Table A3.

Table A3 INSTRUMENT APPROACH PROCEDURES

Approach	Designated Runway(s)	Ceiling Minimums (AGL)	Visibility Minimums
RNAV (GPS)	Runway 34	860' AGL	1 mile ¹ , 1 ¼ miles ² , 2 ½
			miles ⁴ , N/A ⁵
RNAV (GPS) – Y	Runway 16	780' AGL	1 mile ¹ , 1 ¼ mile ² , 2 miles ⁶
RNAV (GPS) – Z	Runway 16	526' AGL	1 3/8 mile ³ , N/A ⁶

SOURCE: U.S. Terminal Procedures August 12, 2021 through September 9, 2021.

² Authorized for use by Category B aircraft

³ Authorized for use by Category A and B aircraft ⁵ Authorized for use by Category D aircraft

NOTE: ¹ Authorized for use by Category A aircraft

⁴Authorized for use by Category C aircraft

⁶ Authorized for use by Category C and D aircraft

Airspace. RNT is a controlled airport with an airport traffic control tower (ATCT). The immediate area surrounding the Airport is classified as Class D airspace. RNT airspace is unique in that it lies under the Terminal Control Area Class B Airspace of Sea-Tac International Airport (SEA). RNT Class D airspace has a ceiling of 2,500 feet Mean Sea Level (MSL) and is semi-circular in shape. The western boundary, as shown in the following illustration, is only a few hundred feet from the western airport property line to restrict operations into Sea-Tac airspace.

The airspace between 2,000 - 2,500 Feet is administered by Seattle Approach/Departure Control by a letter of agreement (LOA) with Renton Tower. An operation requesting permission to transit the Class D surface area of RNT could contact Seattle Approach/Departure Control on the appropriate frequency, and not ask Renton Control Tower for this permission.

Weather Monitoring Equipment. The RNT has an Automated Surface Observing System (ASOS), which can be monitored on the ATIS frequency of 126.95 MHz or by calling the station at (425) 255-6080. The ASOS tower is located on the east side of the Airport.

General Aviation and Seaplane Facilities

RNT not only supports aircraft manufacturing but primarily supports numerous general aviation related business and facilities. Airport tenants that offer Fixed Based Operator (FBO) services include, Ace Aviation, Aerodyne Aviation, Boeing Employee Flying Association, Clean Craft Detailing, Ellison Fluid Systems (Kaynan Inc.), Landing Gear Works, Northwest Seaplanes, Inc., Pro-Flight Aviation, and Rainier Flight Support.

Businesses currently located on the west side of the Airport include:

- Northwest Seaplanes: Provides scheduled and charter seaplane flights throughout the region.
- Boeing Employee Flying Association (BEFA): Provides use of small aircraft for personal flying and flight training to all current Boeing Employees and retirees.
- Rainer Flight Service: Provides flight training.
- **Pro-Flight Aviation:** Provides multiple services that include flight training and rental, Aviation Fuel (100LL and Jet A), aircraft maintenance, and car rental.
- Puget Sound Energy: Serves as energy provider for local area.
- 540 Renton Hangar LLC: Provide private hangars offering storage of aircraft.
- Lane Hangars Condo Association: Provide private hangars offering storage of aircraft.

Businesses currently located on the east side of the Airport include:

- Aerodyne Aviation: Provides technical expertise in aeronautical engineering, aviation safety, unmanned aircraft systems, and flight operations.
- The Landing Gear Works: Provides manufacturing and improvement services of landing gear for general aviation aircraft.
- Bosair (Ace Aviation): Provides aircraft maintenance and repair.

Hangar Facilities. RNT has conventional and T-hangars on both the east and west sides of the field. In 2005, RNT created a policy for T-hangar leasing and a hangar waiting list, which sets guidelines for leasing T-hangars and guidance for the hangar waiting list. A one-time, non-refundable fee of \$100 is collected by the Airport Office from individuals applying for the hangar waiting list. Private hangars are also located on RNT, offering private aircraft storage with direct access to the taxiways.

Support Facilities

The quantity and type of support facilities at the RNT that encompass a broad set of functions that ensure smooth and efficient airport operation, include airport administrative offices, airport maintenance facilities, aircraft fuel storage, U.S. Customs, pilot control lighting, and the Airport Traffic Control Tower.

Airport Administration Office. The Airport Administration Office is located at 616 West Perimeter Rd in the ground floor of the control tower with an airside and landside door. Office hours are 8:00 am to 5:00 pm Monday through Friday.

Airport Maintenance Facility. The RNT Maintenance Facility is located on west side of the Airport, adjacent to Apron C and Rainier Flight Service. As the Maintenance Facility is a small building at approximately 550 square feet, the majority of the maintenance equipment is stored outside.

US Customs Service. Federal Inspection Service (FIS) is provided by the US Customs Service. U.S. Customs control the entry and clearance of aircraft arriving into the United States and inspect the crew, passengers, baggage, stores, and cargo carried. All inspections regardless of type of aircraft, must be conducted at the inspection facility, located in a portable building at the north end of the Airport. Aircraft inspections are to taxi to the inspection station and proceed inside the building. Commercial carriers must request landing rights in advance in writing, post an international carrier's bond in an amount established by Customs, and transmit the crew and passenger data electronically to Customs. As a Landing Rights Airport, Customs will respond within one hour with prior notification.

Pilot Controlled Lighting. RNT utilizes Pilot Controlled Lighting, which provides air-to-ground radio control of the airport lighting system. The pilot selects the intensity by selecting the proper frequency on the communication radio, then keying the microphone a prescribed number of times with a five second interval. The lights will remain at the selected intensity for 15 minutes if no subsequent pluses are received to change the intensity. The Pilot Controlled Lighting is available at RNT, when the ATCT is closed.

Airport Traffic Control Tower (ATCT). The FAA ATCT is located on the west side of Runway 16/34 at approximately mid-field, adjacent to Taxiway A5, and is 55 feet tall. The Control Tower is operated daily from October 1st through April 30th from 7:00 AM until 8:00 PM, and from May 1st through September 30th, from 7:00 AM until 9:00 PM.

Boeing Facilities

Aircraft Manufacturing Facilities. The *Boeing Commercial Airplane Group* assembles all lines of the Boeing 737 aircraft adjacent to RNT. Boeing is the major lease holder at the Airport. Boeing accesses the Airport through a through-the-fence agreement and two taxilane bridges over the Cedar River. The taxilane bridges are labeled as the North Bridge and the South Bridge. It is estimated that once a 737 departs the Boeing Renton manufacturing facility, it will remain on RNT property for seven days and then depart, via air, for additional manufacturing improvements.



Every Boeing 737, upon exiting the factory, is towed across the North Bridge to access the Airport. Towed aircraft cross the runway to Taxiway A1 and then proceed down Taxiway A to Boeing aircraft stalls on either the southwest or southeast side of the approach end of Runway 34. For aircraft parked on the east side of the runway, the aircraft tow will cross the runway again at Taxiway B7 and proceed via Taxiway B. Some aircraft are towed, in lieu of being parked on airport property, across the South Bridge to aircraft parking positions east of the Cedar River.

Boeing 737 aircraft ready for first flight will enter the runway at Taxiway B6 or Taxiway B7 if they originate from the east side of the runway, or Taxiway A7 if they originate from the west of the runway. Once on the runway, the aircraft crew will perform aircraft checks while taxiing to the runway end not in use (downwind taxi). At the runway end not in use, the crew apply full power, proceed down the runway a short distance, then perform a preplanned aborted takeoff. The aircraft decelerates to normal taxi speed at the conclusion of the aborted takeoff and continues to the runway end in use. Once reaching the end of the runway in use, the aircraft will turn 180 degrees on the runway, requiring full use of the 200-foot-wide runway width. The aircraft then await instructions from the ATCT for departure. Total time on the runway for each first flight is approximately 10 minutes.

Boeing 737 aircraft occasionally return to RNT, although these operations are infrequent. Usually, an aircraft will return for a mechanical issue that cannot be addressed at either Paine Field, Moses Lake, or Boeing Field. In the last five years RNT has averaged 10 annual landing operations by 737 aircraft, with the most retuning in 2020 with 44, and the least in 2019 with zero returning.

Boeing Compass Rose. The Boeing Compass Rose is located on the east side of RNT and is utilized just for the Boeing manufacturing process. The Compass Rose consists of approximately 3,332 square yards of pavement.

Access, Circulation and Parking

This section defines the quantity and type of ground access systems that serve RNT, or are served by it, such as on-airport access roads, circulation and service roads, and parking.

Vehicular Access and Parking. RNT has two main access points, one on the south side of the Airport from Airport Way, and one from the west side of the Airport from Rainer Avenue. Interior vehicular access of the Airport is conducted via Perimeter Road. Perimeter Road provides access to the aircraft manufacturing facilities as well as the general aviation facilities throughout the Airport. There are multiple vehicular parking areas spread throughout the Airport, providing parking for Boeing Employees as well as general aviation users. Prior to gaining access to RNT, a user must read the *Renton Airport Ground Vehicle Operations Rules* booklet, fill out forms, and complete the *Airport Ground Vehicle Test*. The purpose of the ground vehicle training program is to promote safe airfield driving through education. This program applies to Airport employees, tenants, and any other ground vehicle operators.

Zoning and Land Use

RNT is located less than a mile from downtown Renton and is surrounded on three sides by urban development. Planning for land use compatibility with airport development and operations requires knowledge of what land uses are proposed and what, if any, changes need to be made.

Existing Zoning. Airport property is zoned Medium Industrial in the September 2021 City of Renton GIS online database. Areas directly to the east are zoned Urban Center, a zoning type incorporating mixed use development, and Light Industrial. Additional higher-density Residential development is located adjacent to the Cedar River running parallel to Logan Avenue. To the south, Commercial Arterial, Residential, and Center Downtown are the primary zones. Zoning west of RNT includes additional Commercial Arterial, Residential, and Commercial Office. Lake Washington is located directly north of RNT.

Existing Land Use. Existing land use patterns in the area follow closely to what is portrayed on the zoning map. Land uses east of RNT include Urban Center, Industrial, and Residential uses. Urban Center land use continues to the south, as does Commercial development. Land uses to the west largely comprises of Residential, with some Commercial development along Reiner Avenue.

Future Land Use. Future land use patterns are illustrated in the 2018 Amendment to the City of Renton Comprehensive Plan, where future land uses are largely not expected to change. This map lists airport property as an Employment Area, which includes Light, Medium, and Heavy Industrial land developments. Areas east and south of RNT are to remain a combination of Commercial, Residential, and Mixed-Use designations, while areas to the west will remain mostly residential in nature. The density of zoning in each of these areas is expected to increase to accommodate increased growth and demand in the periphery of RNT.

Airport Environs Overlay Zoning

According to the Revised Code of Washington Title 36, Chapter 70, Section 547, entitled *General Aviation Airports – Siting of Incompatible Uses*, every county, city, and town in which there is located a general aviation airport that is operated for the benefit of the general public, whether publicly or privately owned, shall, through its comprehensive plan and development regulations discourage the siting of incompatible uses adjacent to such general aviation airports.

To meet this mandate the City of Renton has developed set of objectives and policies to address land use compatibility between RNT and an area of the City known as the Airport Influence Area. Under Title IV Development Regulations, Chapter 3 Environmental Regulations and Overlay Districts, Section 020 Airport Related Height and Use Regulations; the Renton Municipal Code states, in order to regulate the use of property in the vicinity of the airport, all of the land within Safety Zones 1 through 6 of shall be known as the Airport Influence Area.

Section 020 includes height restrictions and airport overlay zones based primarily on Federal Aviation Regulations (FAR) Part 77 imaginary surfaces. The overlay zones consist of Runway Protection Zone, Inner Approach/Departure Zone, Inner Turning Zone, Outer Approach/Departure Zone, Sideline Approach/Departure Zone, and Traffic Pattern Zone. As part of this ALP Update planning process, the FAR Part 77 map will be updated and consideration should be given by the City of Renton to adopting the update map for the purposed of airport height restriction and land use overlay zoning.

Environmental Overview

Environmental considerations and factors are important to review during the airport planning process when analyzing development alternatives and identifying preferred alternatives. The following sections provide brief descriptions of environmental impact categories that are pertinent to airport planning at RNT, as well as Airport-specific environmental information.

Air Quality. The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six criteria air pollutants: carbon monoxide (CO), ozone (O_3), particulate matter (PM_{10}), sulfur dioxide (SO_2), oxides of nitrogen (NO_x), and lead (Pb). According to the EPA, King County is currently designated as being "in attainment" for all criteria pollutants under the NAAQS. An attainment area is one in which air pollution levels do not exceed the NAAQS.

Future projects at airports in non-attainment areas may need to be accounted for in the State Implementation Plan and/or be shown not to exceed the applicable *de minimis* levels as defined by General Conformity. The Puget Sound Clean Air Agency has jurisdiction over the Puget Sound Basin and has established local ambient air quality standards to ensure compliance with the Clean Air Act.

Short-term air quality impacts may be expected from heavy equipment pollutant emissions, fugitive dust resulting from the movement of earth for cut and fill, any open burning that may occur on the Airport, and the operation of concrete batch plants. Contractors would be required to comply with all local, state, and federal air quality regulations, especially the procedures contained in the Federal Aviation Administration's Advisory Circular (AC) 150/5370-10A, *Standards for Specifying Construction of Airports*, which is the FAA guidance to airport sponsors concerning protection of the environment during construction projects.

Floodplains. Executive Order 11988 directs federal agencies to take action to reduce the risk of flood loss, minimize the impacts of floods on human safety, health, and welfare, and restore and preserve the natural and beneficial values served by floodplains.

According to Federal Emergency Management Association (FEMA) published floodplain maps, the majority of airport property is within a FEMA flood zone (either Zone X or Zone AE). Zone X indicates areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot and areas protected by levees from 100-year flood. Zone AE, which is primarily the southeast area of the Airport includes areas of 100-year flood that have base flood elevations determined. Also, the Cedar River is subject to frequent flooding and designated by FEMA as a regulatory floodway.

Historical, Architectural, Archeological, and Cultural. Section 106 of the National Historic Preservation Act requires federal agencies, or their designated representatives, to take into account the effects of their undertakings on historic properties, which include archeological sites, buildings, structures, objects, and districts. According to the Washington State Department of Archeology and Historic Preservation, Washington Information Systems for Architectural and Archaeological Records Data, there are no potentially eligible historic buildings on airport property.

It is not known whether archaeological sites are present on the airport property, as no surveys have been conducted. However, the area has high potential for such resources. The Black River once drained Lake Washington (just above the river's confluence with the Cedar River) in the Airport vicinity, prior to the Montlake Cut in 1916. There are at least five recorded Duwamish Place names in the area, including a reported village site possibly located to the northwest of the Airport property. Several sites are located just south of the airport property, including two pre-contact sites on the grounds of Renton High School, a pre-contact fishing station, and a homestead site. Despite historic and modern disturbance (including construction of the Cedar River channel, and the airport itself), archaeological materials may still be present. Given this history, an airport wide archeological survey should be considered.

Renton Municipal Airport/ Clayton Scott Field

A.12



The Native American Consultation Database (NACD), maintained by the National Park Service, lists three federally recognized tribes for King County including the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Colville Reservation, and the Muckleshoot Indian Tribe of the Muckleshoot Reservation. There are no known cultural resources on Airport property. However, it is important to note that the Muckleshoot Tribe has historical ties to the Lake Washington watershed. It is also important to note that Executive Order 13175 requires government to government consultation on potential cultural resource impacts.

Treaty Rights. The Muckleshoot Indian Tribe and Yakama Nation have adjudicated tribal treaty rights to usual and accustomed fishing areas in the vicinity of the Airport.

Noise. Noise is generally defined as unwanted sound and, as such, the determination of acceptable levels is subjective. The day-night sound level (DNL) methodology is used to determine both the noise levels resulting from existing conditions and the potential noise levels that could be expected to occur with proposed airport improvement projects. Very simply, a DNL level for a specified area over a given time is approximately equal to the average dB(A) level that has the same sound level as the intermittent noise events. Thus, a DNL 65 level describes an area as having an average noise level of 65 dB(A), which is the approximate average of single noise events.

RNT has implemented voluntary noise abatement procedures, a set of voluntary measures for use by pilots to "fly friendly" and be good neighbors to the citizens who live under aircraft flight paths. These procedures generally encourage pilots to fly over Lake Washington for approaches and departures, or to fly above the more commercial and industrial areas around RNT to the east and south. Pilots should deviate from these procedures only when necessary to comply with any Air Traffic Control requests or in the interest of safety. Pilots of large or turbine-powered aircraft must comply with the provisions of FAR 91.129(e), rather than these procedures.

Threatened and Endangered Species. The Endangered Species Act (ESA), as amended, requires each federal agency to ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species. **Table A4** details ESA-listed species and or critical habitats identified by the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) as potentially occurring in the vicinity of the Airport.

Common Name (Scientific Name)	ESA Status	Critical Habitat
Gray Wolf (Canis lupus)	Proposed Endangered	None designated in project area
Marbled murrelet (Brachyramphus marmoratus)	Threatened	None designated in project area
Streaked Horned Lark (Eremophila alpestris strigata)	Threatened	None designated in project area
Yellow-billed Cuckoo (Coccyzus americanus)	Threatened	None designated in project area
Bull trout (Salvelinus confluentus)	Threatened	Designated – Final
Monarch Butterfly (Danaus plexippus)	Candidate	None designated in project area

Table A4 SPECIES AND CRITICAL HABITAT WITH FEDERAL ESA STATUS

SOURCE: United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC).

Suitable habitat for terrestrial species is not present within or within several miles of the Airport. Listed plant species identified by USFWS to be present in King County included the golden paintbrush (*Castilleja levisecta*).



Suitable habitat for this species is also not present within and adjacent to the Airport. NMFS identifies several aquatic species that occur in the marine environment of Puget Sound. Marine species are not applicable because the Airport is located adjacent to the freshwater environment of Lake Washington. Also, initial conversation with USFWS indicated that the Primary Constituent Elements are not present of the Streaked Horned Lark (SHL). However, further coordination may be required.

Review of the Washington State Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) Database online identified the following priority species as occurring in the vicinity of the Airport. **Table A5** also identifies the state and federal status of the protected species and the occurrence and location of the species.

Common Name (Scientific Name)	Federal Status	State Status	Occurrence and Location
Chinook salmon	NA	NA	Occurs in Lake Washington and Cedar River
Coho salmon (Oncorhynchus kisutch)	NA	NA	Occurs in Lake Washington and Cedar River
Coastal cutthroat trout (resident) (Oncorhynchus clarki)	NA	NA	Occurs in Lake Washington and Cedar River
Dolly varden trout (Salvelinus malma)	NA	NA	Occurs in Lake Washington and Cedar River
Bull trout (Salvelinus confluentus)	Threatened	Candidate	Occurs in Lake Washington and Cedar River
Kokanee (Oncorhynchus nerka)	NA	NA	Occurs in Lake Washington and Cedar River
Sockeye salmon (Oncorhynchus nerka)	Not Warranted	NA	Occurs in Lake Washington and Cedar River
Steelhead (Oncorhynchus mykiss)	Threatened	NA	Occurs in Lake Washington and Cedar River

Table A5 SPECIES DOCUMENTED ON THE WDFW PHS DATABASE

SOURCE: Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) Database.

Essential Fish Habitat. Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) and the 1996 Sustainable Fisheries Act (SFA), an Essential Fish Habitat (EFH) evaluation of impacts is necessary for activities that may adversely affect EFH. EFH is defined by the MSFCMA in 50 CFR 600.905-930 as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." Federal agencies are required to consult with NMFS on all activities, or proposed activities, authorized, funded, or undertaken by the agency that may adversely affect EFH. In the vicinity of the Airport, the Pacific Fishery Management Council (PFMC) has designated EFH for the EFH composite group of Pacific salmon. The Pacific salmon composite includes Chinook salmon, coho salmon, and pink salmon (*O. gorbuscha*). EFH for Pacific salmon includes all those streams, lakes, ponds, wetlands, other currently viable waterbodies, and most of the habitat historically accessible to salmon in Washington. The freshwater environment of Lake Washington does not include the two EFH composite groups of the marine species groundfish and coastal pelagic fish.

Renton Municipal Airport/ Clayton Scott Field

A.14



Other anadromous salmonids, such as chum salmon and steelhead trout, are rarely captured in the Pacific Fishery Management Council's ocean fisheries and are therefore not addressed with regard to EFH. However, the EFH evaluation for Pacific salmon species considers similar habitat needs and uses to those of additional anadromous salmonids.

DOT Section 4(f). According to Section 4(f) of the Department of Transportation Act (recodified as 49 USC, Subtitle I, Section 303), no publicly owned park, recreation area, wildlife or waterfowl refuge, or land of historic site that is of national, state or local significance shall be used, acquired, or affected by programs or projects requiring federal assistance for implementation unless there is no feasible or prudent alternative.

Several recreational areas are located in the vicinity of the Airport. RNT property is bound on the north by Lake Washington and to the west by the Cedar River. Several parks and recreational facilities ae located adjacent to the Airport in association with these water bodies.

On Lake Washington adjacent to the Airport's northeast property corner, the City of Renton owns the Cedar River Boathouse, which is built on pilings over Lake Washington, located at the north end of the Cedar River Trail. The Cedar River Trail Park, owned by the City of Renton, is located adjacent to the Airport along the eastern boundary on the east side of the Cedar River, stretches for 4.5 miles within the city limits, and connects eastward to Maple Valley. The Cedar River Trail Park includes a bike path, picnic areas, play equipment, a non-motorized boar launch, and bird viewing opportunities, including blue herons and bald eagles. The City-owned Kiwanis Bicentennial Air Park is located along the Airport's western boundary, near the southwest corner of the site, and is largely open space with park benches providing a scenic view, as well as a location to view airplanes.

As development alternatives are considered in this planning process, consideration should be given to the potential for impacts to these recreational resources.

Final Report. ALP Update









снартек в Facility Requirements

Introduction.

A key step in the master planning process is determining airport facilities required to accommodate airside and landside needs throughout the planning period. Facility requirements are developed to determine the facilities needed to meet existing and forecasted demand related to the existing and forecasted aircraft fleet. Evaluation procedures analyze runway length, dimensional criteria, aprons, hangars, and vehicular access.

Aviation Activity

The City of Renton recently analyzed data from Fiscal Year (FY)2015 to FY2020 and identified a declining trend of C/D business jet operations. When considering this declining trend and the decline in aircraft manufacturing-related operations from the Federal Aviation Administration (FAA) Traffic Flow Management System (TFMSC), it was decided that the need to upgrade the Runway Design Code (RDC) to C/D is not currently warranted, as Category C/D operations in CY2020 did not exceed the required 500 annual threshold. Consequently, the City and Federal Aviation Administration (FAA) Seattle Airports District Office (ADO) elected to undertake a simple ALP Update for the Airport with an RDC of B, without a change in RDC, and with the inclusion of operational restrictions for C/D aircraft expected to be implemented by the Airport Traffic Control Tower (ATCT). Data from the TFMSC database is shown in **Table B1**.

Fiscal Year	Large C/D Business Jet Operations	Boeing Operations	Total Large Aircraft Operations
2006	799	179	978
2007	465	211	676
2008	499	267	766
2009	316	300	616
2010	334	425	759
2011	358	474	832
2012	303	400	703
2013	281	433	714
2014	345	480	825
2015	248	501	749
2016	144	512	656
2017	144	513	657
2018	114	581	695
2019	140	574	714
2020	131	251	382

Table B1 RNT HISTORIC TFMSC DATA ANALYSIS – LARGE C/D BUSINESS JET OPERATIONS AND BOEING OPERATIONS

SOURCE: FAA Traffic Flow Management System Counts (TFMSC).

In contrast with trends from the previous 14 years, the total large aircraft operations for FY 2020 remained below 500. Whether this level of C/D aircraft operations will continue into the future is unknown. Boeing has publicly stated its plans for aircraft manufacturing rate increases, but it is uncertain when or if production will return to its pre-2019 levels. The data also shows that large C/D business jet operations have been in decline since 2006, with little to indicate a reverse in the trend. These two factors of reduced Boeing production and declining business jet operations indicate RNT could remain below 500 C/D operations for the foreseeable future.

Airfield Facility Requirements

To identify facility needs, it is necessary to translate the forecast aviation activity into specific types and quantities. This section addresses the actual physical facilities and/or improvements to existing facilities needed to safely and efficiently accommodate the projected demand that will be placed on the Airport. This section consists of two separate analyses: those requirements dealing with *airfield* facilities, and those dealing with *landside* facilities. The analysis of airfield requirements focuses on the determination of needed facilities and spatial considerations related to the actual operation of aircraft on the Airport. This evaluation includes the analysis of airfield dimensional criteria according to the updated FAA Advisory Circular 150/5300-13A, Change 1, *Airport Design*, the establishment of design parameters for the runway and taxiway system, and an identification of airfield instrumentation and lighting needs.

Airfield Design Standards

The types of aircraft that currently operate at RNT, and those projected to utilize the facility in the future have an impact on the planning and design of airport facilities. This knowledge assists in the selection of FAA specified design standards for the Airport, which include runway and taxiway dimensional requirements, runway length, and pavement strength. These standards are based on the "design aircraft" that currently utilize the Airport, or that are projected to utilize the Airport in the future. According to the AC 150/5300-13A, Change 1, *Airport Design*; the first step in defining a runway's design geometry is to determine the Runway Design Code (RDC). The design aircraft can take the form of one particular aircraft, or a composite aircraft representing a collection of aircraft classified by three parameters: Aircraft Approach Category (AAC), Airplane Design Group (ADG), and Taxiway Design Group (TDG).

The critical aircraft for Runway 16/34 is the King Air 200 (Aircraft Approach Category B and Airplane Design Group II, based on approach speed and wingspan), along with approach visibility minimums of 1-mile, or a Runway Visual Range (RVR), of 5,000 feet. Therefore, the appropriate Runway Design Code (RDC) is B-II-5000.

The critical aircraft for the seaplane base is a combination of the de Havilland Canada DHC-2 Beaver and the DHC-6 Twin Otter/Viking. Both aircraft fall under Aircraft Approach Category A and Airplane Design Group I, based on approach speed and wingspan.

Runway 16/34 Design Standards. RNT meets most dimensional standards for classification under a B-II airport. Existing dimensions and the corresponding existing FAA design standards applicable to Runway 16/34 are presented in **Table B2** and **Figure B1** through **Figure B3**.

Table B2 RUNWAY 16/34 DESIGN STANDARDS MATRIX – RDC B-II > 1-MILE VISIBILITY MINIMUMS

Item	Existing Dimension	FAA Criteria	Standard Met
RUNWAY DESIGN			
Runway Width	200 FT	75 FT	Yes (+125 FT)
Shoulder Width	0 FT	10 FT	No (-10 FT) ¹
Crosswind Component	13 Knots	13 Knots	Yes
RUNWAY PROTECTION			
Runway Safety Area (RSA) Runway 16			
Length beyond departure end	340 FT ²	300 FT	Yes (+40 FT)
Length prior to threshold	300 FT ²	300 FT	Yes
Width	150 FT	150 FT	Yes
Runway Safety Area (RSA) Runway 34			
Length beyond departure end	300 FT ²	300 FT	Yes
Length prior to threshold	340 FT ²	300 FT	Yes (+40 FT)
Width	150 FT	150 FT	Yes
Runway Object Free Area (ROFA) Runway	16		
Length beyond departure end	340 FT ²	300 FT	Yes (+40 FT)
Length prior to threshold	300 FT ²	300 FT	Yes
Width	500 FT ³	500 FT	No ⁴
Runway Object Free Area (ROFA) Runway	34		
Length beyond departure end	300 FT ²	300 FT	Yes
Length prior to threshold	340 FT ²	300 FT	Yes (+40 FT)
Width	500 FT	500 FT	Yes
Runway Obstacle Free Zone (ROFZ)			
Length beyond Runway 16 end	340 FT	200 FT	Yes (+140 FT)
Length beyond Runway 34 end	300 FT	200 FT	Yes (+100 FT)
Width	250 FT	250 FT	Yes
RUNWAY SEPARATION			
Runway centerline to:			
Holding position	200 FT	200 FT	Yes
Parallel taxiway/taxilane centerline	300/350 FT ⁵	240 FT	Yes
Aircraft parking area	350 FT	250 FT	Yes

SOURCE: FAA Advisory Circular 150/5300-13A, Change 1, Airport Design (February 2014).

NOTE: ¹ Though non-standard, the much larger than standard runway width compensates for a lack of shoulder.

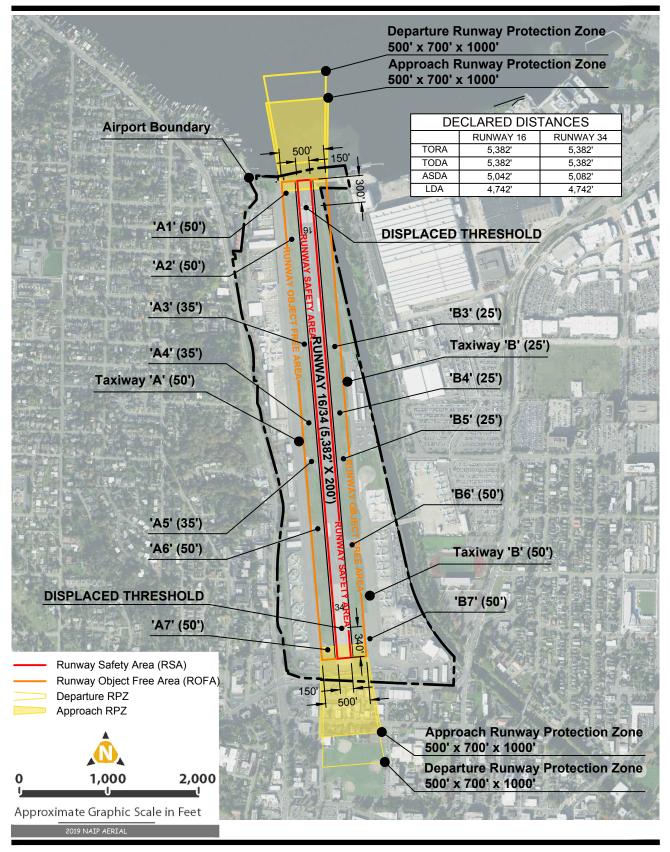
² Standards are met using the existing Runway 16/34 Declared Distances, including displaced thresholds. FAA criteria would not be met if they were not applied.

³ The ROFA on Runway End 16 is not fully contained within the Airport property boundary.

⁴ The ROFA is partially deficient due to the Cedar River running at an angle parallel to Runway 16/34 to the east.

⁵ Varies.

Mead & lunt



Mead

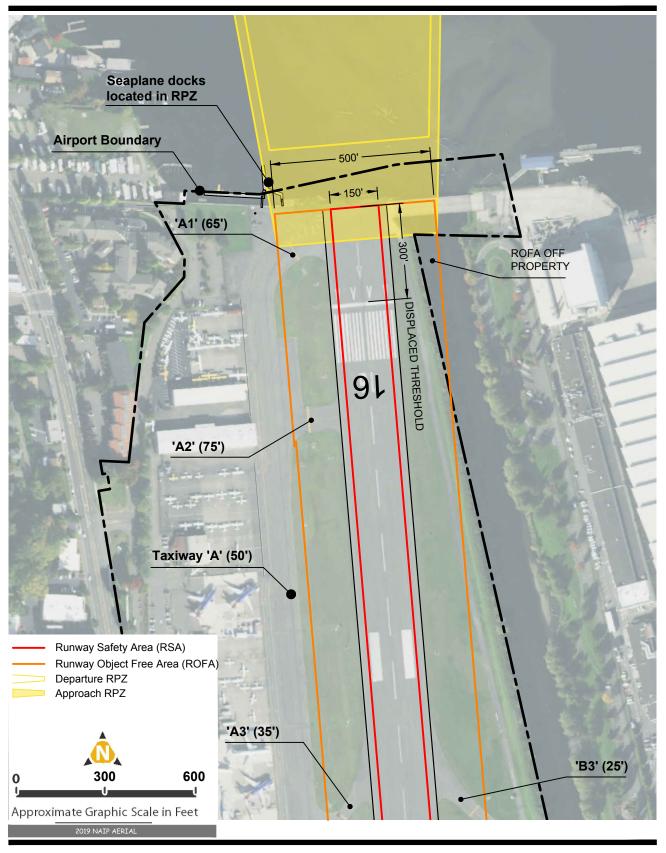


FIGURE B2 Existing RDC B-II Design Standards (North)

Mead

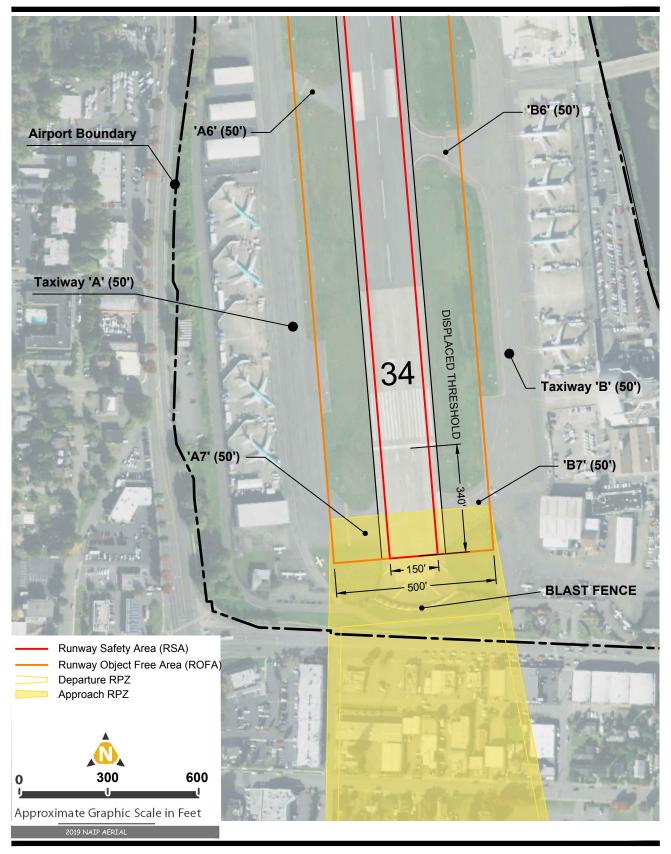


FIGURE B3 Existing RDC B-II Design Standards (South)

Renton Municipal Airport/ Clayton Scott Field

B.6



Runway Object Free Area (ROFA). The Runway Object Free Area (ROFA) is centered about the runway centerline and requires clearing the ROFA of above-ground objects protruding above the nearest point of the RSA. Objects non-essential for air navigation or aircraft ground maneuvering purposes must not be placed in the ROFA, including parked aircraft. On the east side of the runway, the ROFA is penetrated by the Cedar River. This penetration may require an FAA Modification of Standards, as the alternative would require either the infill of a portion of the river or the relocation of a portion of the river, both of which are not feasible or prudent alternatives.

Another ROFA consideration is the current configuration and location of the seaplane ramp, located roughly 185 feet west of runway centerline, seaplanes are towed through the ROFA to parking areas. While technically not a nonstandard condition, relocation of the ramp should be considered such that towing seaplanes through the ROFA is not required. Should this relocation require reconfiguration of the seaplane docks, consideration should be given to parcel, easement, and other property lines adjacent to and within the lake.

Runway Protection Zones. The function of a Runway Protection Zone (RPZ) is to enhance the protection of people and property on the ground beyond the runway ends. This is achieved through airport control of the RPZ areas, and control is preferably exercised through the acquisition of sufficient property interest within the RPZ. It is desirable to clear all about ground objects from with RPZs; where this is impractical, airport owners, at minimum, should maintain the RPZ clear of all facilities supporting non-compatible activities. RPZs are trapezoidal in shape, are centered about the runway centerline, and begin 200 feet beyond the end of the area usable for takeoff or landing. The RPZ dimensions are functions of the type of aircraft using the runway and the approach visibility minimums associated with each runway end. Of note, the current configuration of the seaplane base, both the ramp and one of the seaplane docks are located within the approach RPZ to Runway 16 and according to the FAA AC 150/5300-13A, Change 1, *Airport Design*, it is desirable to clear these seaplane facilities from the RPZ.

Declared Distance Application. FAA AC 150/5300-13A, Change 1, describes declared distances as the maximum distances available and suitable for meeting takeoff, rejected takeoff, and landing distance performance requirements for turbine powered aircraft. The declared distances include Takeoff Run Available (TORA), Takeoff Distance Available (TODA) which apply to takeoff; Accelerate Stop Distance Available (ASDA), which applies to a rejected takeoff; and Landing Distance Available (LDA), which applies to landing. By treating these distances independently, declared distance is a design methodology that results in declaring and reporting the TORA, TODA, ASDA, and LDA for each operation direction. RNT's existing declared distances were shown previously in **Figure B1**. No changes to the existing declared distances are recommended.

Taxiway Design Standards. Similar to the runway design standards in the previous section, taxiway design standards are based on the most demanding aircraft (critical aircraft) operating on the taxiway on a regular basis (more than 500 annual operations). Taxiway and taxilane standards will be illustrated on the on the ALP as required by the FAA Standard Operating Procedure ALP checklist.

Summary

The information presented in this chapter provides the basis for understanding what facility improvements are necessary at RNT to meet current standards for Airport Reference Code B-II design standards. The following facility requirements were noted based upon existing conditions at RNT:

- Runway Design Standards: Runway 16/34 meets most dimensional standards for Airport Reference Code B-II.
- ROFA: East of Runway End 16, the ROFA is penetrated by a portion of the Cedar River. Either a design solution or a potential Modification of Standards (MOS) may be required to address this nonstandard condition.
- RPZs: The RPZs on either end of Runway 16/34 extend beyond the Airport property line. The RPZ's off the approach end of Runway 16 extend over Lake Washington which is technically compatible land use. The RPZ's at the approach end of Runway 34 extends over several noncompatible land uses to the south, and additional consideration should be given to obtaining City/Airport control over these RPZs.
- **Taxiway Design Standards:** RNT's taxiway appears sufficient to accommodate existing and future aviation activity and will be appropriately illustrated on the Airport Layout Plan.

The facility requirements identified in this chapter are used to direct the development of the alternatives presented in the following chapter which will consider alternatives related to seaplane base configuration and general aviation related development (aprons and hangars) primarily in the southwest corner of the Airport.

B.8

Final Report. ALP Update



Landside Alternatives Analysis



CHAPTER C Landside Alternatives Analysis

Introduction.

This chapter presents and evaluates planning considerations, alternatives, and concepts associated with the future landside configuration of Renton Municipal Airport (RNT or Airport). The alternatives development process considers the facility requirements as determined in Chapter B, and input received from the Renton Airport Advisory Committee (RAAC), Airport staff, the Seaplane Pilots Association, the public, and the Federal Aviation Administration (FAA) throughout the planning process. The chapter concludes with preferred concepts illustrated on the conceptual development plan (CDP). The CDP will later be utilized in the development of the official Airport Layout Plan (ALP) set of drawings, which requires FAA approval. Given that the Runway Design Code (RDC) will remain B-II at RNT, no airfield alternatives will be developed because only minor changes to the airfield are warranted.

Assumptions

There are several fundamental reasoning assumptions that are driving this planning process and influence the basis for the recommended development program for the Airport. Consideration factors associated with these assumptions are the roles of RNT, the RAAC, and stakeholders providing input during the planning process. Development alternatives for the RNT seaplane base were a primary consideration in this ALP Update, as the ramp and docks need to be replaced or reconstructed in the near term. Seven assumptions have been established to direct the alternatives analysis the landside concepts.

Assumption One: The aircraft fleet mix is not expected to change. RNT will continue to serve as a reliever airport accommodating primarily general aviation (GA) activity, in addition to military activity, Boeing 737 manufacturing-related activity (primarily 737 departures) and seaplane aircraft operations.

Assumption Two: Recommended improvements must comply with local, state, and federal regulations. RNT will be developed and operated consistent with local ordinances and codes, federal and state statutes, federal grant assurances, and Federal Aviation Administration (FAA) regulations.

Assumption Three: The critical design aircraft for the airfield is the King Air 200. The King Air 200 is RNT's critical design aircraft for Runway 16/34. This aircraft is Aircraft Approach Category B and Airplane Design Group II, making B-II the RDC for Runway 16/34.

Assumption Four: The critical design aircraft for the seaplane base are the DHC-2 Beaver and DHC-6 Twin Otter/Viking. The de Havilland Canada DHC-2 Beaver and DHC-6 Twin Otter/Viking are seaplanes that are based at RNT and use the seaplane base on a regular basis. In considering improvements to the ramp and docks the DHC-2 and 6 requirements will be used.

Assumption Five: Runway 16/34 and its associated taxiway meet B-II standards and will remain classified as B-II. The King Air 200's B-II classification for Runway 16/34 applies to all airport facilities. As previously stated in Chapter B – Facility Requirements, RNT meets most dimensional standards for Airport Reference Code (ARC) B-II and the Airport will remain under B-II classification.

Assumption Six: Landside developable property is limited, and the Airport should make the highest and best use of existing and reconfigured landside developable property. RNT is land-constrained, so each alternative should focus on making the best use of existing landside developable property.

Assumption Seven: Any reconfigured facility will be replaced on a one for one basis. With any proposed landside reconfiguration, existing facilities will either be reconstructed in place or replaced on a one for one basis including vehicle access, hangars, aircraft parking space, vehicle parking spaces, etc.

Landside Development

RNT is located on the south shore of Lake Washington approximately 11 miles from downtown Seattle, and it serves an important role in the regional transportation system for ground, rail, and waterway access. This makes RNT a prime location for aviation industrial, GA, and seaplane facilities. The Airport is site-constrained, with much of its 168 acres currently reserved for airfield development such as runways, taxiways, aprons, and/or safety-object setbacks. Limited property is available for new or expanded landside development, and effective planning is crucial to optimize RNT's limited footprint.

The landside alternatives are divided into five development areas in this chapter as follows:

- Area 1: West of the runway
- Area 2: Southwest of the runway
- Area 3: Southeast of the runway
- Area 4: East of the runway
- Area 5: Seaplane development area north and west of the runway.

Existing landside development at RNT includes areas for GA facilities, aviation industrial (including aircraft manufacturing apron areas), aircraft parking aprons, Fixed Based Operator (FBO) facilities, fuel storage facilities, the seaplane base, park/open space, and access roadways.



Landside Area 1 Concept

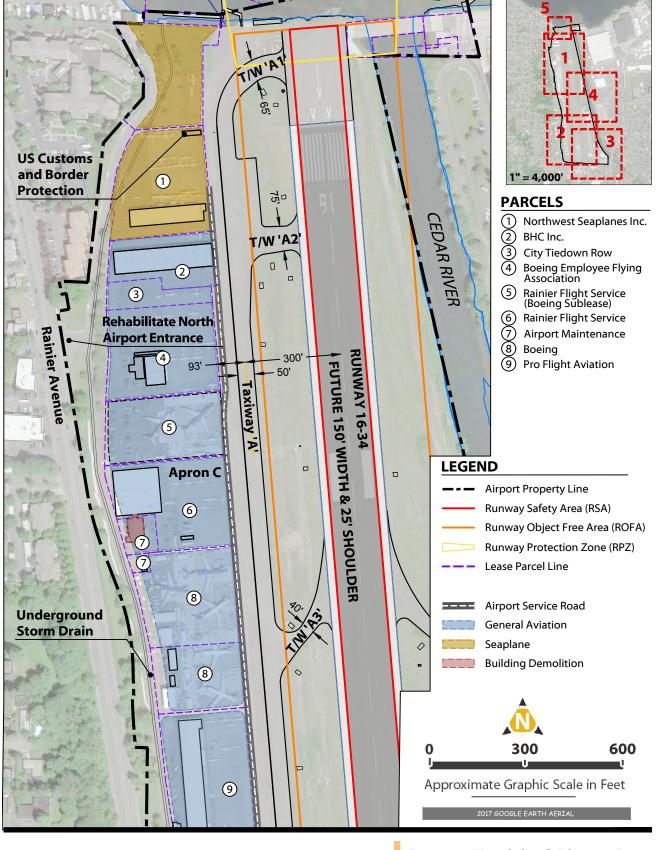
As shown in **Figure C1**, the Area 1 Concept includes GA and seaplane uses. All facilities shown are compliant with B-II standards and setbacks, and no additional action is required to meet design standards. Existing structures and other facilities will be rebuilt in place on an as-needed basis based upon reaching the end of their useful life or at the end of the leases. A portion of this area, commonly referred to as Apron C, is subleased for aviation industrial use; however, the area will likely revert to GA use at the end of the sublease. The existing airport maintenance Quonset hut is to be removed and replaced by a new structure, and the northern airport entrance off Rainier Avenue will be rehabilitated to aesthetically match the south entrance.

Concept Features:

- Reconstructs existing facilities where necessary in their present location.
- Returns Apron C back to GA related use at the end of the aviation industrial sublease.
- Maintains apron vehicle service road in its existing location.
- Maintains Taxiway A in its existing location with a recommendation for reconstruction in the shortterm planning period.



Mead &Hunt





Landside Area 2 Concept

In this concept, the existing land uses primarily remain in their existing configuration. Parcels 1 and 2 are maintained for GA use while Parcel 3 is maintained as aviation industrial. Apron B is maintained as aviation industrial. The layout of Apron B would be able to accommodate the Boeing Max 10 aircraft, which at 116 feet 8 inches is the longest aircraft expected to be produced during the planning period. As with Landside Area 1, all B-II standards and setbacks are met. The existing chamber building will be demolished. Landside Area 2 Concept is illustrated in **Figure C2**.

Concept Features:

- Reconstructs existing facilities where necessary in their present location.
- Maintains Parcel 3/Apron B as aviation industrial use with two hard stands.
- Maintains Taxiway A in its existing location with a recommendation for reconstruction in the shortterm planning period.



Mead & lunt

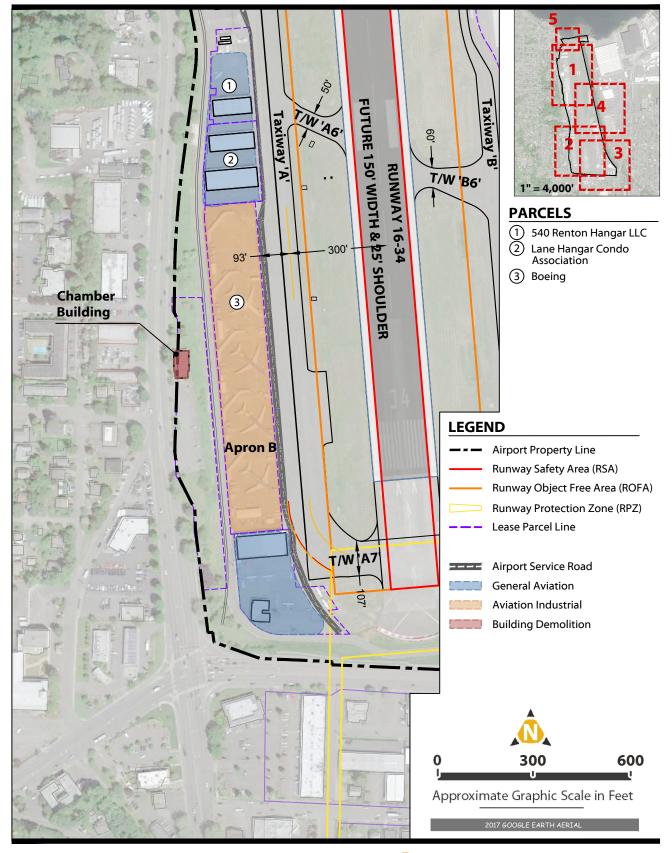


FIGURE C2 Landside Area 2 Concept



Landside Area 3 Concept

Landside Area 3 examines the southeast corner of the Airport. Many of the facilities in this area have reached the end of their useful life necessitating a reexamination of the layout and configuration of Landside Area 3. This conceptual layout recommends removal of older hangars and facilities and includes the conversion of much of the area for GA aircraft parking. The taxilane accessing this area has also historically not met Airport Design Group (ADG) II/Taxiway Design Group (TDG) 2, Taxilane Object Free Area (TOFA) clearance and this concept recommends a standard 115-foot wide TOFA be protected for the future layout. There is also a small amount of land acquisition recommended for the parcel located at the corner of Airport Way and Logan Avenue North. One additional component of this concept is the aviation industrial areas shown as Parcel 4 which are recommended to remain in their existing condition. The components of this concept are illustrated in **Figure C3**.

Concept Features:

- Replaces existing box hangars and T-hangars in this area and recommends replacement with Clearspan hangars that open in only one direction.
- Reserves adjacent areas for additional GA aircraft parking with a standard Group II taxilane to accommodate Group I and Group II aircraft.
- Extends The property boundary to include the 0.22-acre parcel at the southeast corner of the airport property line (at the intersection of Airport Way and Logan Ave North).





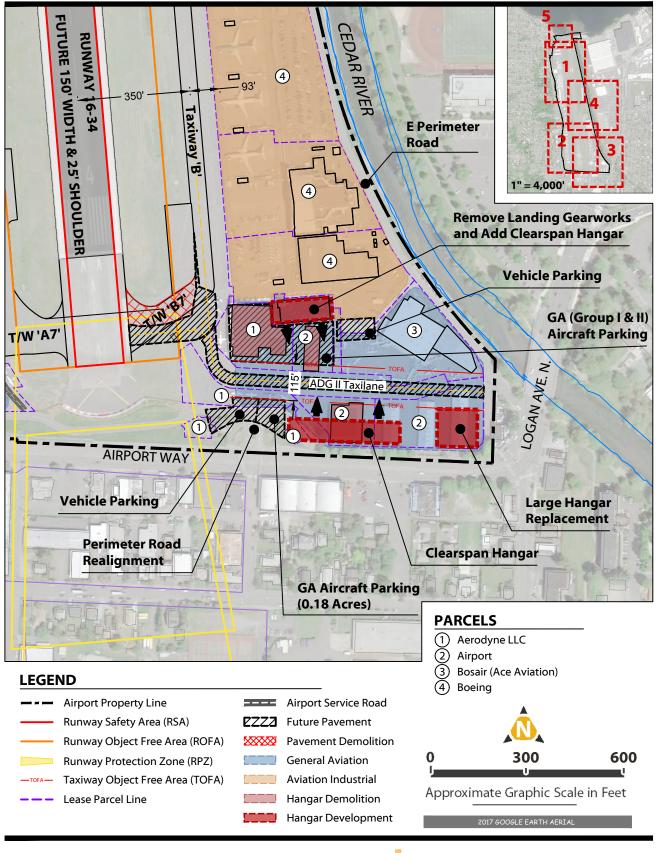


FIGURE C3 Landside Area 3 Concept

Renton Municipal Airport/ Clayton Scott Field

C.8



Landside Area 4 Concept

This concept recommends existing uses in Landside Area 4 be maintained in their current configuration. Parcel 3 will remain aviation industrial while Parcels 1 and 2 will remain GA. No reconfiguration is necessary to meet B-II standards or setbacks. The concept is illustrated in **Figure C4**.

Alternative Features:

- Retains Parcels 1 and 2 as GA.
- Reconstructs existing facilities where necessary in their present location.
- Maintains the RNT compass rose in its existing location for future use.
- Retains Parcel 3 as aviation industrial for use by Boeing and in support of Boeing's off airport through the fence access.

ALP Update



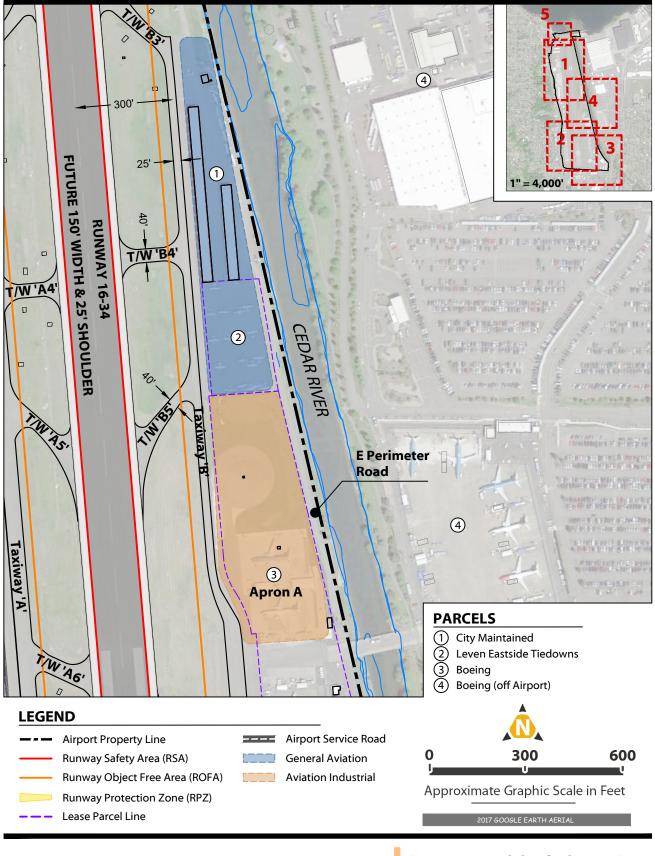


FIGURE C4 Landside Area 4 Concept

Renton Municipal Airport/ Clayton Scott Field

C.10



Landside Area 5 (Seaplane Base) Development Alternatives

Landside Area 5 development alternatives focus on the seaplane base in the northwest corner of the Airport. The key consideration in the seaplane base development alternatives is meeting FAA standards to the greatest extent practicable. Many options exist to meet these standards, several of which do not necessitate the relocation of the existing docks or pullout ramp. Each alternative introduces a new perimeter fence installation along the west side of Parcels 1 and 2, maintaining residential access from outside the perimeter fence and converting the existing Parcel 1 viewing area into future vehicle or aircraft parking. Existing GA uses in Area 5 would remain for use by the seaplane base.

Additional operational considerations relevant to the development of these alternatives include:

- Most seaplane operations at RNT occur during the summer when prevailing winds come from the north.
- Most seaplanes operating at RNT have a left pilot seat.
- Seaplane launch operations are primarily performed by a single pilot (without a line crew) and require direct left seat access or the ability to maneuver the seaplane to provide left seat access after launch.
- Seaplanes are launched tail first, after which the bow is held while the aircraft rotates counterclockwise into north prevailing winds. The plane is then walked forward with the left side against the dock.
- The existing box culvert, southwest of the east-west (E/W) dock along the seawall, has a utility
 easement and conveys stormwater from a large area outside of Airport property; therefore, it must
 remain in place.

Seaplane Base Alternative 1 – Reconstruct Facilities in Place. The first seaplane base alternative would reconstruct the existing facilities in their current location. Seaplane Base Alternative 1 is illustrated in Figure C5.

Alternative Features:

- Reconstructs existing facilities where necessary in their present location.
- Maintains the practice of towing seaplanes through the ROFA with Airport Traffic Control Tower (ATCT) clearance during launch and recovery.
- Reserves space to convert the existing vehicle parking and viewing area for aviation related development.

Advantages:

- Minimizes costs through reconstruction of facilities in place.
- Maintains existing configuration of seaplane docks and ramp, meeting the operational requirements
 of seaplane operators with prevailing winds from the north (summer operations).
- Allows for aviation related development in Parcels 1 and 2.

Disadvantages:

- Does not add additional width to the pull-out ramp, which is needed for the design aircraft.
- Does not add additional seaplane parking or access capacity.



Mead &Hunt

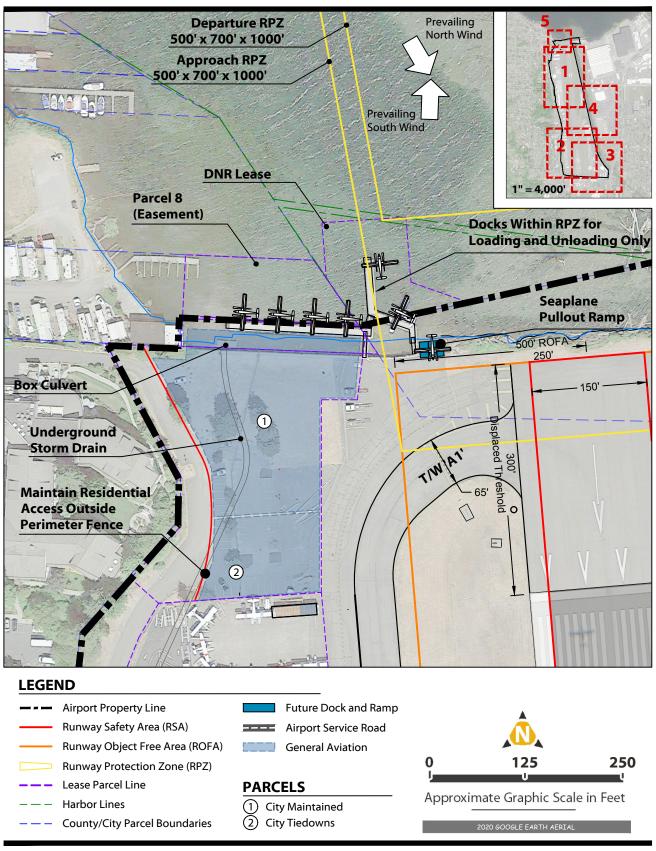


FIGURE C5 Seaplane Base Alternative 1 - Reconstruct Facilities in Place

Renton Municipal Airport/ Clayton Scott Field

C.12

ALP Update

Seaplane Base Alternative 2 – Relocate Ramp and Flip N/S Dock. Alternative 2 removes much of the existing dock in favor of repositioning the north-south (N/S) dock and relocating the ramp. Like Seaplane Base Alternative 1, this alternative reserves the N/S dock for loading and unloading only. The relocation of the ramp would allow seaplanes to be towed to and from the ramp without having to be towed through the ROFA and without having to request ATCT clearance. Seaplane Base Alternative 2 is illustrated in Figure C6.

Alternative Features:

- Flips the N/S dock.
- Slightly reconfigures the E/W dock.
- Creates a new, physically separate N/S ramp clear of the ROFA.
- Reconstructs the walkway connecting the E/W dock to the shore in a new location further away from the new seaplane pullout ramp and N/S dock.
- Reconstructs the remaining existing facilities where necessary in their present location.

Advantages:

- Allows seaplanes to be towed clear of the ROFA.
- Provides a one for one replacement of the N/S dock.
- Allows for aviation related development in Parcels 1 and 2.

Disadvantages

- Dock configuration would not meet the left seat access requirements of seaplane operators with prevailing winds from the north (summer operations).
- Requires additional costs relative to Alternative 1 to reconfigure docks and widen the ramp.
- Potentially reduces the overall capacity for parked aircraft at the E/W dock.
- Locates the loading/unloading N/S dock closer to extended runway centerline.



Mead & lunt

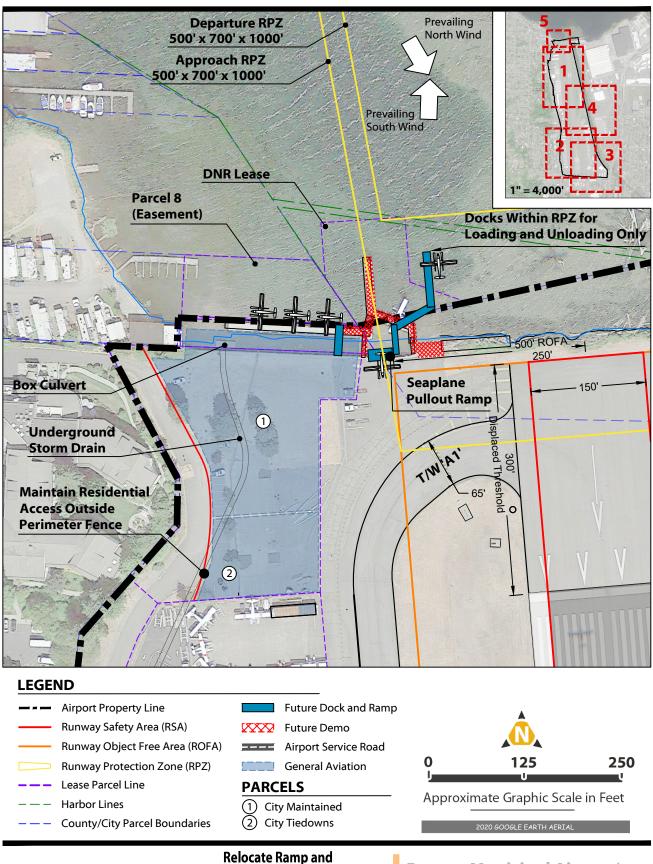


FIGURE C6 Seaplane Base Alternative 2 - Flip N/S Dock

Renton Municipal Airport/ Clayton Scott Field

C.14

ALP Update

Seaplane Base Alternative 3 – Reconstruct in Place and Improve Facilities. Alternative 3 reconstructs the docks and the pull-out ramp in their existing location, but also includes some additional improvements including an extension of the N/S dock and the provision of additional walkways to the E/W dock. Seaplane Base Alternative 3 is illustrated in **Figure C7**.

Alternative Features

- Reconstructs existing facilities with some expanded facilities.
- Installs two additional walkways to the E/W ramp. The box culvert will not be affected.
- Extends the N/S ramp 100 feet.
- Reconstructs and widens the existing ramp for use in seaplane pullout operations.
- Converts Parcels 1 and 2 into a future aeronautical development area.

Advantages:

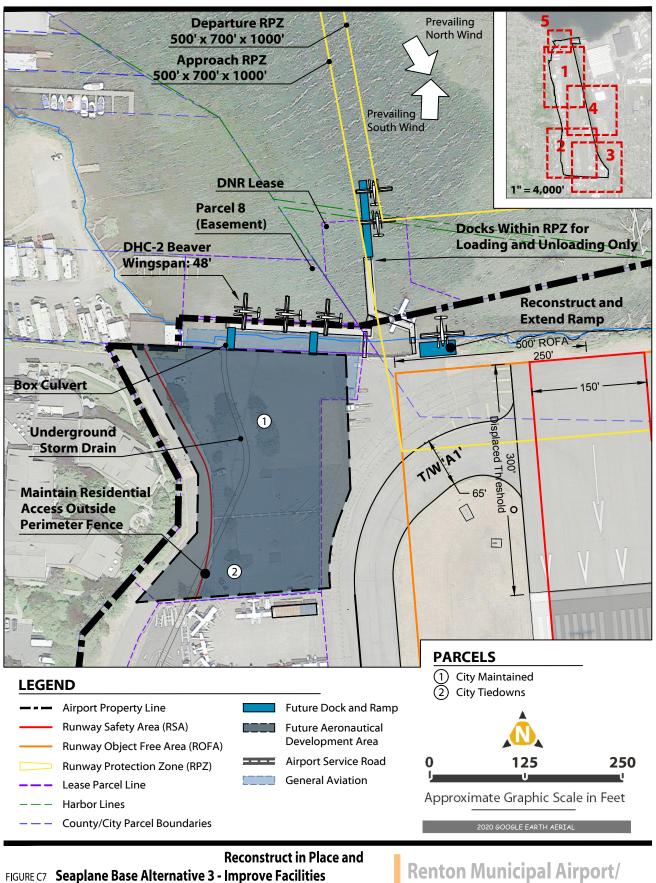
- Provides adequate ramp width for design aircraft.
- Maintains the existing configuration of seaplane docks and ramp, meeting the operational requirements of seaplane operators with prevailing winds from the north (summer operations).
- Allows for aviation-related development in Parcels 1 and 2.
- Enhances existing seaplane facilities.

Disadvantages:

- Requires extension of DNR lease boundary to accommodate dock extension.
- Additional improvements require third-party funding.
- Requires continuation of the practice of towing seaplanes through the ROFA with Airport Traffic Control Tower (ATCT) clearance during launch and recovery.



Mead &Hunt



Clayton Scott Field

C.16

ALP Update

Seaplane Base Alternative 4 – Reconstruct Seaplane Base for RDC C/D-III. Should a change in aircraft operational activity in the future occur that necessitates a change in RDC to C/D-III, the seaplane base facilities would have to be significantly reconfigured. Alternative 4 illustrates the limited space available for relocating facilities outside the ROFA in this scenario. There is simply not enough space available to replace the ramp and docks on a one-for-one basis. Consequently, unless land acquisition were contemplated, the change in RDC would be devastating to the Renton Seaplane Base. Base Alternative 4 is illustrated in Figure C8.

Alternative Features:

- Completely removes all existing docks and reconstructs them outside of the C/D-III ROFA.
- Removes the seaplane pullout ramp and reconstructs it outside of the ROFA.

Advantages:

- Relocates the docks and ramp outside of the C/D-III ROFA.
- Allows for aviation related development in Parcels 1 and 2.

Disadvantages:

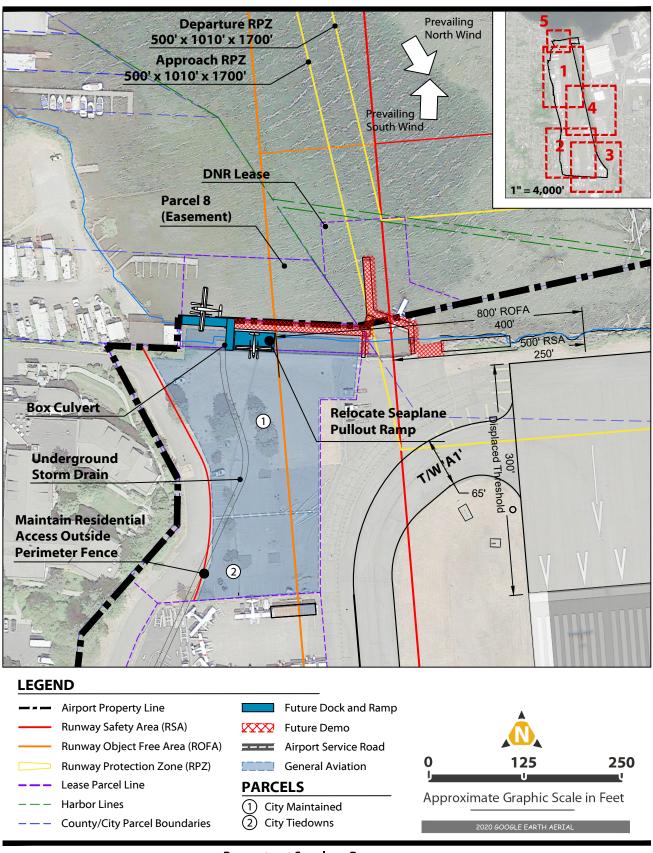
- Does not meet the requirements of the seaplane base due to the reduction in dock space.
- Requires reconfiguration of the underground storm drain and culvert outlet to accommodate the relocated ramp.
- Requires the complete demolition and reconstruction of all seaplane base facilities.

Recommended Seaplane Base Alternative. Alternative 3, Reconstruct in Place and Improve Facilities, is recommended as the preferred alternative for the seaplane base and Landside Area 5 for several reasons. This concept best meets the needs and requirements of the seaplane users and minimizes changes to the facility. Alternative 3 also provides the following benefits:

- Preserves the entirety of the existing seaplane base, reconstructing in place as necessary.
- Reserves space for a N/S dock extension in the future; however, this extension would require revisions to the DNR lease.
- Reconstructs and widens the seaplane pullout ramp to meet design aircraft requirements.
- Reserves space for Parcels 1 and 2 to be redeveloped for aeronautical use that could include additional seaplane facilities.



Mead &Hunt



Reconstruct Seaplane Base



Conceptual Development Plan

Utilizing the recommended components of RNT's landside development areas presented in this chapter, and following input from Airport Staff and the RAAC, a CDP for RNT was developed and is presented in **Figure C9**. The CDP incorporates the alternatives and development proposals best suited to accommodating the needs of RNT's users.

Landside Areas 1 through 4 primarily preserve existing airport parcels for continued development of existing designated land uses. Landside Areas 1, 2, and 4 remain largely unchanged, preserving all existing facilities and rebuilding facilities like hangars and aprons in place, as needed. Building demolition will occur in Areas 1 and 2, where the existing airport maintenance Quonset hut and chamber buildings will be demolished. Significant redevelopment is planned in the southeast corner of the Airport designated as Landside Area 3, where the general aviation facilities will be reconfigured. Existing hangars that have reached the end of their useful life have been and will continue to be demolished in this area. This will free up space for the construction of a more standard, Design Group II taxilane connecting to Taxiway B. This plan corrects the existing historically non-standard taxilane layout while providing a standard object free area for the taxilane. New Clearspan hangars will be constructed as replacements for the existing box and T-hangars, as well as a combination of general aviation and vehicular parking areas throughout the southeast development area.

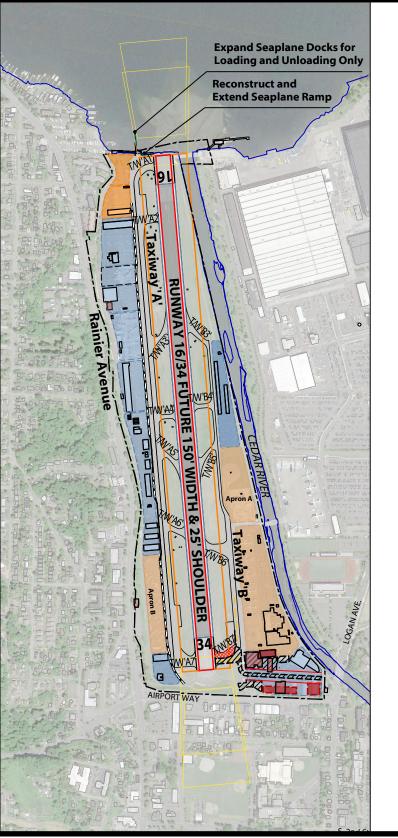
Seaplane Base Alternative 3, the preferred seaplane base alternative for Landside Area 5 to the northwest, best meets the needs of RNT's based and transient seaplane users while providing the fewest disadvantages. The seaplane base is to be expanded as illustrated, including rebuilding and widening the seaplane pullout ramp in place and extending the north/south dock in future. The remaining area adjacent to the seaplane ramp and docks will be redeveloped for future seaplane related uses including additional seaplane parking.

As with any airport planning decision, the ultimate build-out of the various aviation and aviation-compatible development areas will be demand driven, and the depicted development far exceeds that which is projected during the planning period. The CDP will ultimately be used to develop the official set of ALP drawings representing the ultimate long-term airport configuration, which will be sent for submission and approval by the FAA.

Renton Municipal Airport/ Clayton Scott Field

C.19





Runway 16/34 to be narrowed to 150' width with 25' shoulders. Runway edge lights to be relocated.

•

Mead Hunt

 Taxiway B7 to be realigned to 90 degree exit from Runway 16/34.

LEGE	LEGEND							
	Airport Property Line							
	Runway Safety Area (RSA)							
	Runway Object Free Area (ROFA)							
	Runway Protection Zone (RPZ)							
	Airport Service Road							
ezza	Future Pavement							
×××××	Pavement Demolition							
	General Aviation							
	Seaplane Redevelopment Area							
	Aviation Industrial							
	Building/Hangar Demolition							
	Hangar Development							
0								
0 1000 2000								
Approxi	Approximate Graphic Scale in Feet							
2017 GOOGLE EARTH AERIAL								

Final Report. ALP Update



Airport Development Program



CHAPTER D Airport Development Program

Introduction.

The Development Program chapter focuses on funding available for projects at Renton Municipal Airport (RNT or the Airport), so the City of Renton may continue to plan for development needed to accommodate future demand, meet Federal Aviation Administration (FAA) B-II design standards, and receive FAA and state financial support for improvements. Like most airports, the primary source of funding is the Airport Improvement Program (AIP) by the FAA. As part of the AIP, the FAA asks airports to annually submit a Capital Improvement Program (CIP), which lists short- and medium-term development projects by priority need. It is important to understand that the FAA is not obligated to allocate funding simply because an airport's projects are listed in the CIP.

Implementation Schedule and Project List

A list of capital improvement projects has been assembled from the documentation previously presented, utilizing the Airport's existing CIP as a starting point. The improvements necessary to accommodate the current and future needs of RNT have been placed into two phases: Phase I and Phase II. The projects for Phase I (years 0-5) are listed in priority order by year. In Phase II (years 6-10), the projects are listed without year designators, as priorities may change. RNT's proposed phased CIP is presented in **Table D1** and **Table D2** in this chapter. It is anticipated that the project phasing will invariably be altered as local and federal priorities evolve over the coming years.

Cost Estimates

Planning level cost estimates have been prepared for the proposed projects in Phase I and Phase II. These estimates should only be used as a planning tool due to costs reflecting 2022 dollars. Additionally, they should not be construed as construction cost estimates, which can only be compiled following the preparation of detailed engineering design documents.

Financial Plan and Implementation Strategy

Like most airports, there are three main funding sources for airports: the FAA AIP, the state's department of transportation aeronautics division, and lastly the airport sponsor. Funding depends on availability of funds, project eligibility, and the priority of the project within the CIP. Its authority encompasses programming, planning, design, and construction of all airport development projects. For planning purposes, assumptions were made related to the funding source of each proposed capital improvement project. The estimated project costs and likely funding sources are provided in **Table D1** through **Table D3**.



Table D1 PHASE I (0-5 Years) DEVELOPMENT PLAN PROJECT COSTS

Droject #	Project Description	Total Costs	Recomme	ended Financi	ng Method
Project #	Project Description		Local	State	Federal
YEAR 1 (20	22)			h	
l.1	Reconstruct exterior fence line for improved security standards; install security cameras and key card gate locks (Design - Construction)	\$140,700	\$12,800	-	\$127,900
	Year 1 Totals	\$140,700	\$12,800	-	\$127,900
YEAR 2 (20	23)			•	
1.2	Reconstruct and widen seaplane pullout ramp	\$417,200	\$20,900	\$20,900	\$375,400
1.3	Reconstruct Taxiway A (Design)	\$2,548,300	\$127,400	\$127,400	\$2,293,500
	Year 2 Totals	\$2,965,500	\$148,300	\$148,300	\$2,668,900
YEAR 3 (20	24)				
1.4	Demolish large hangars in the southeast development area (Phase I)	\$2,170,100	\$108,505	\$108,505	\$1,953,090
1.5	Reconstruct Taxiway A and narrow runway to 150', including runway edge lights (Construction Phase I)	\$11,467,600	\$573,400	\$573,400	\$10,320,800
	Year 3 Totals	\$13,637,700	\$681,905	\$681,905	\$12,273,890
YEAR 4 (20)	25)				
1.6	Construct two additional walkways on the east-west seaplane ramp	\$17,100	\$4,500	\$4,500	\$8,100
1.7	Extend North/South seaplane dock 50 feet to the north	\$28,100	\$7,400	\$7,400	\$13,300
1.8	Reconstruct Taxiway A and narrow runway to 150', including runway edge lights (Construction Phase II)	\$11,467,600	\$573,400	\$573,400	\$10,320,800
	Year 4 Totals	\$11,512,800	\$585,300	\$585,300	\$10,342,200
YEAR 5 (20	26)				
1.9	ATCT Renovation (Construction)	\$5,000,000	\$500,000	-	\$4,500,000
I.10	Design/Construct seaplane aircraft parking	\$1,129,964	\$56,498	\$56,498	\$1,016,968
	Year 5 Totals	\$6,129,964	\$556,498	-	\$5,516,968
SUB-TOTAL	PHASE I	\$34,386,664	\$1,984,803	\$1,415,505	\$30,929,858



Table D2 PHASE II (6-10 Years) DEVELOPMENT PLAN PROJECT COSTS

PROJECT		TOTAL	RECC	OMMENDED F	INANCING MET	THOD		
#	PROJECT DESCRIPTION	COSTS	LOCAL	STATE	FEDERAL	OTHER		
YEARS 6-1	YEARS 6-10 (2027-2032)							
II.1	Rehabilitate aprons, including windsock and tiedown apron	\$4,598,700	\$229,935	\$229,935	\$4,138,830	-		
11.2	Construct additional clearspan hangars in the southeast development area (Phase II)	\$4,433,800	-	-	-	\$4,433,800		
11.3	Realign and rehabilitate southeast development area taxilane and apron; reconfigure Exit Taxiway B7	\$3,076,500	\$153,825	\$153,825	\$2,768,850	-		
11.4	Rehabilitate Runway 16/34	\$21,775,800	\$1,088,790	\$1,088,790	\$19,598,220	-		
II.5	Demolish existing Chamber Building	\$313,800	\$313,800			-		
II.6	Acquire Property Easements for Parcels Intersecting the Runway 16/34 Runway Protection Zone (Phase I)	\$4,470,700	\$223,535	\$223,535	\$4,023,630	-		
11.7	Construct two new vehicle parking lots in the southeast development area	\$1,185,800	\$59,290	\$59,290	\$1,067,220	-		
11.8	Construct reconfigured GA aircraft parking apron in the southeast development area	\$3,434,400	\$171,720	\$171,720	\$3,090,960	-		
11.9	Rehabilitate North Entrance to Airport off Rainier Ave	\$310,800	\$310,800	-	-	-		
II.10	Demolish existing maintenance facility and reconstruct new facility	\$596,800	\$596,800	-	-	-		
II.11	Airport Master Plan Update	\$750,000	\$37,500	\$37,500	\$675,000	-		
II.12	Acquire Property Easements for Parcels Intersecting the Runway 16/34 Runway Protection Zone (Phase II)	\$4,470,700	\$223,535	\$223,535	\$4,023,630	-		
	Year 6-10 Totals	\$49,417,800	\$3,409,530	\$2,188,130	\$39,386,340	\$4,433,800		
SUB-TOTA	AL PHASE II	\$49,417,800	\$3,409,530	\$2,188,130	\$39,386,340	\$4,433,800		



Airport Grant-In-Aid Funding Programs

The following section describes the traditional federal and state airport-in-aid funding programs administered by the FAA and Washington State Department of Transportation (WSDOT). **Table D3** lists the funding categories and typical participation available to the Airport as a FAA Non-Hub Primary airport funding classification. Most projects in the previous tables are FAA-eligible and will be funded from federal grant-inaid programs (FAA entitlement and discretionary), with the airport matching participation typically at five to 10 percent.

Table D3 AIRPORT FUNDING PROGRAMS AND PARTICIPATION

Grant Program/Funding Category	Federal (FAA) Participation	State (WSDOT) Participation	Airport (RNT) Participation
Federal Funding Programs (FAA)			
FAA Cargo Entitlement	\$475K (FY 2020)	-	-
FAA 'Pure' Discretionary	90%	5% (See Note)	5% to 10%
FAA State Apportionment	90%	5% (See Note)	5% to 10%
FAA Small Airport Fund	90%	5% (See Note)	5% to 10%
State of Washington Airport Funding Programs (WSDOT)			
WSDOT Airport Aid Program (Pavement Projects)	-	95%	5%
WSDOT Airport Aid Grant Program (Safety Projects)	-	95%	5%
WSDOT Airport Aid Program (Security and Planning Projects)	-	95%	5%
WSDOT Airport Aid Program	100% Airport Lo	w Interest Loan Throu	ugh State of WA

SOURCE: FAA and WSDOT program analysis.

NOTES: Funding programs and participation levels subject to FAA/WSDOT budget reauthorization. WSDOT funding participation and levels per SWDOT program and project discretion.

FAA Funding Programs and Guidance

The federal government has funded civilian airport development since 1946. The FAA currently funds airport improvements through a dedicated Aviation Trust Fund, collected from user-generated fees and taxes (airline passenger tax, aircraft parts, and fuel). The Trust funds are reinvested at FAA-eligible airports through the Airport Improvement Program (AIP); the current FAA Airport Improvement Program is authorized under the Airport and Airway Improvement Act of 1982, administered in accordance with FAA Order 5100.38, "Airport Improvement Program Handbook". Although subject to congressional authorizations, the FAA AIP program and funding levels are not anticipated to change significantly throughout the 10-year RNT CIP period.

The FAA funding sources available to support airport capital improvements are:

FAA Entitlement. Commercial service airports enplaning more than 10,000 annual passengers are classified as primary and receive FAA entitlement funds. Per FAA formula, the Airport is allocated \$1.0 million annually in passenger entitlement funds. These funds can be committed to AIP-eligible projects with FAA approval and can be accumulated up to four years. Projects funded with entitlement grants typically receive 90 percent FAA participation and 10 percent Airport (local) participation.

ALP Update

FAA Discretionary. FAA discretionary dollars are the remaining funds not assigned to FAA entitlements or mandated by FAA set-asides. Typical projects funded with discretionary money are:

- Airport capacity
- Safety and security
- Noise related
- Those identified as FAA national priority projects.

Subject to FAA formula, discretionary balances and available funds are uncertain from year-to-year. Discretionary funds commonly provide grants for large capital projects (airfield pavement rehabilitation and land acquisition), and support 80 to 95 percent of the total eligible project cost. Discretionary funding levels are typically identified in the FAA ACIP three to five years in advance of the project, in which the Airport must commence the project within six months of the fiscal-year grant agreement.

FAA Apportionment. FAA apportionment funds are distributed amongst individual states based on an area/population formula and national funding considerations. The use of apportionments for funding individual airport project grants is at the discretion of the FAA and varies based on funding formula and balances.

State of Washington (WSDOT) Funding Programs and Guidance

The WSDOT administers an Airport Aid Grant Program for airports within the State of Washington. The program is funded by a per-gallon aviation fuel fee and aircraft registrations. Projects are required to be identified in the WSDOT Aviation's five-year Statewide Capital Improvement Program (SCIP), including projects not funded or eligible under the FAA.

The program distributes funds to three major project categories:

- 1. Pavement projects
- 2. Safety projects
- **3.** Maintenance, security, and planning projects, in which projects must be accessible by the public and depicted on the Airport Layout Plan (ALP).

The maximum WSDOT grant amount is \$750,000 per project, in which WSDOT may fund up to 95 percent, with a minimum of five percent local Airport participation. In addition, WSDOT may participate in matching the local share of FAA AIP projects, where WSDOT contributes up to half of the 10 percent match of the total FAA funded project.

Private-Third Party Funding

Many airports use private third-party financing when the planned improvements will be primarily used by a private business or for other "non-public" uses. Such projects are typically not eligible for federal funding. Projects of this kind typically include corporate hangars, FBO facilities, cargo facilities, exclusive aircraft parking aprons, and various other projects that are private use facilities.



Capital Improvement Program

The Airport Capital Improvement Program (ACIP) is a document prepared by the FAA under the AIP. This document serves as the primary planning tool for identifying and prioritizing critical airport development for airports within the National Plan of Integrated Airport Systems (NPIAS). The CIP is also the basis for distribution of grant funds to airports. For smaller airports, grant funds from the FAA range from 90-95 percent per project.

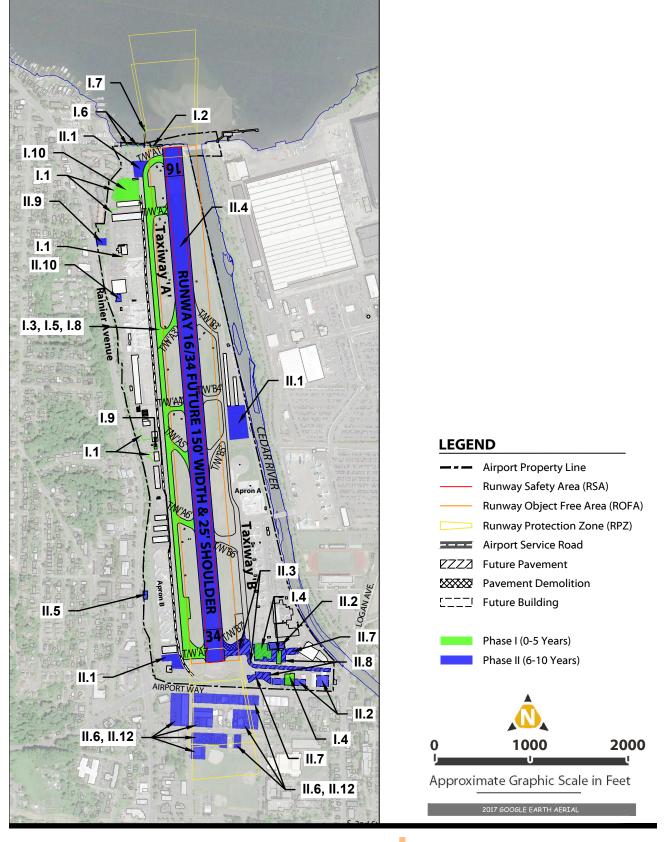
Phasing Plan

To supplement the information provided by the project list and project cost estimates, a phasing illustration was prepared. **Figure D1** indicates the suggested phasing for the proposed improvement projects throughout the 10-year planning period.

The plans represent a suggested schedule, but variance from it may be necessary, especially during the latter time periods. Attention has been given to the first five years because the projects outlined in this time frame include many critical improvements including the reconstruction of Taxiway A. The demand for certain facilities, especially in the latter time frame, and the economic feasibility of their development, are to be the prime factors influencing the timing of individual project construction. Care must be taken to provide for adequate lead-time for detailed planning and construction of facilities to meet aviation demands. It is also important to minimize disruptive scheduling, where a portion of the facility may become inoperative due to construction, and to prevent extra costs resulting from improper project scheduling.

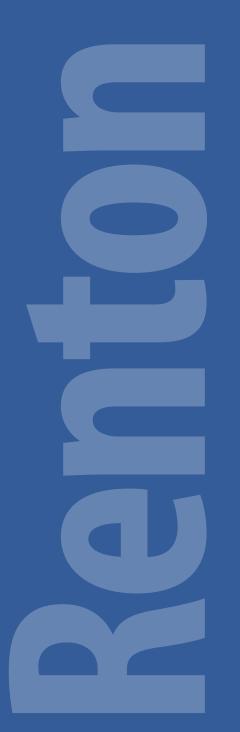






Final Report. ALP Update









CHAPTER E Airport Plans

Introduction.

This chapter presents the Airport Layout Plan (ALP) for Renton Municipal Airport (RNT) along with brief descriptions detailing the individual elements of the drawing set. This ALP is a compilation of all considerations addressed in previous chapters and has been created in accordance with the FAA Standard Operating Procedure 2.0 checklist. The RNT ALP Drawing Set includes the Airport Layout Plan, Airport Airspace Plan and Profile, Inner Approach Plans and Profiles, Terminal Area Plans, Airport Land Use Plan, and Airport Property Map.

Cover

The Cover Sheet, depicted in **Figure E1**, provides required airport location information, an index of drawings included in the ALP drawing set prior to FAA conditional approval and signature of an ALP. The drawing set is circulated throughout various lines of FAA business for review and comment.

Airport Data

The Airport Data Sheet, shown in **Figure E2**, provides detailed airport and runway design criteria information as well as wind data. Data on this sheet informs the size, type, dimensions, and design criteria relative to existing facilities RNT maintains as well as future facilities the Airport intends to construct to accommodate anticipated demand.

Airport Layout Plan

The ALP is a graphic depiction of existing and ultimate airport facilities that will be required to enable RNT to properly accommodate the forecast future demand. In addition, the ALP also provides detailed information on both airport and runway design criteria, which is necessary to define relationships with applicable standards. **Figure E3** illustrates the major components of the future Airport Plan.

Airport Airspace Plan

The airport airspace drawing is based upon Federal Aviation Regulations (FAR) Part 77, *Objects Affecting Navigable Airspace*. Part 77 outlines standards used to determine obstructions to air navigation and navigational and communication facilities. Part 77 also outlines imaginary surfaces known as the horizontal surface, conical surface, primary surface, and approach surface. The penetration of any of the imaginary surfaces (primarily by terrain) are considered obstructions, which are all depicted in **Figure E4**.

Inner Approach Plan and Profile

The inner approach plans and profiles provide a more detailed view of the inner portions of the Part 77 imaginary approach surfaces, the Threshold Siting Surfaces (TSS) and the Runway Protection Zone (RPZ) areas. An RPZ is trapezoidal in shape, centered about the extended runway centerline and typically begins 200 feet beyond the end of the runway. The RPZs are safety zones within which it is desirable to clear all objects

ALP Update

(although some uses are normally acceptable). The size of the RPZ is a function of the design aircraft and the visibility minimums associated with the runway's instrument approach capabilities.

The inner portion of the approach surface drawings, which are shown in **Figures E5** and **E6**, provides a largescale drawing with both plan and profile delineations. They are intended to facilitate identification of the roadways, utility lines, railroads, structures, and other possible obstructions (including trees) that may lie within the confines of the inner approach surface area associated with each runway end. As with the airport airspace drawings, the inner portion of the approach surface drawings are based upon the ultimate planned runway length, along with the ultimate planned approaches to each runway.

Departure Surfaces

The Departure Surface Drawing, shown in **Figure E7**, presents a detailed view of the runway departure ends. Departure surfaces begin at the point identified as the end of the takeoff distance available and extend along the extended runway centerline at a slope of 40 to 1. When clear, departure surfaces allow pilots to follow standard departure procedures. Obstacle penetrations of the departure surfaces may require non-standard climb rates, higher departure minimums, or possibly a reduction in the takeoff distance available. The applicability of the departure surface is dependent on the designation of primary runway(s) for instrument departures.

Terminal Area Plans

Figures E8 through **E10** present a detailed view of the more intensely developed landside use areas on the Airport. This includes the terminal area and the based aircraft parking areas and hangars, as well as the seaplane base.

Airport Land Use Plan

Figure E11 depicts existing and recommended use of all land within the ultimate airport property line and in the vicinity of RNT. The purpose of the on-airport portions of the land use drawing is to provide the City of Renton and King County with a guide for leasing potential revenue-producing areas on the Airport. The drawing also included off-airport land uses. The off-airport portions of the drawing provides guidance to local authorities for establishing appropriate land use zoning in the vicinity of RNT.

Airport Property Map

The airport property map, which is shown in **Figure E12**, indicates how various tracts of land within the airport boundaries were acquired (e.g., federal funds, surplus property, local funds, etc.). The purpose of the airport property map is to provide information for analyzing the current and future aeronautical use of land acquired with federal funds and to illustrate potential land and easement acquisition parcels.

RENTON MUNICIPAL AIRPORT AIRPORT LAYOUT PLAN UPDATE

616 W PERIMETER ROAD

RENTON, WA 98057 3089600-130659.06

JUNE 2022



AIRPORT LAYOUT PLAN SHEET LIST						
Sheet Number Sheet Title Revised						
1	COVER SHEET	JUNE 2022				
2	AIRPORT DATA	JUNE 2022				
3	AIRPORT LAYOUT PLAN	JUNE 2022				
4	AIRPORT AIRSPACE PLAN & PROFILE	JUNE 2022				
5	INNER APPROACH SURFACE RUNWAY 16	JUNE 2022				
6	INNER APPROACH SURFACE RUNWAY 34	JUNE 2022				
7	DEPARTURE SURFACES - PLAN & PROFILE	JUNE 2022				
8	TERMINAL AREA PLAN	JUNE 2022				
9	SOUTH AREA PLAN	JUNE 2022				
10	NORTH AREA PLAN	JUNE 2022				
11	AIRPORT LAND USE PLAN	JUNE 2022				
12	AIRPORT PROPERTY MAP	JUNE 2022				



ALP Major changes in this June 2022 ALP from the previous version include:

Total Sheets

ground.

ALP APPROVAL

September 27, 2022

Background

The 2009 ALP includes only 7 total sheets. The 2022 ALP set includes 12 total sheets. The added sheets include Sheet 2, Airport Data, Sheets 5 and 6 Inner Approach Surface, Sheet 7 Departure Surface, and Sheets 8-10, Terminal Area Plans.

Sheet 3 - Airport Layout Plan

• Future Runway 16/34 width recommendation of 150 feet. · Wind roses and data tables have been included on a separate sheet (Sheet 2) from the ALP

The updated Airport Layout Plan (ALP) for the Renton Municipal Airport represents changes

since the previously completed ALP Update in 2009. This change was developed based on the

conclusions of a master planning update study completed over the course of 2021 and 2022. An aeronautical study (no. 2022-ANM-3058-NRA) was conducted on the proposed development.

This determination does not constitute FAA approval or disapproval of the physical development

involved in the proposal. It is a determination with respect to the safe and efficient use of

navigable airspace by aircraft and with respect to the safety of persons and property on the

- (Sheet 3)
- Revised Seaplane Base layout.
- Revised landside development area layouts.
 Recommended RPZ easement acquisition to the south.

Renton Municipal Airport | Renton, Washington

 Added Runway 16/34 centerline profile. Updated Airport Facilities table.

Sheet 4 - Airport Airspace Plan

- Updated Topographic contour information based on 2014 AGIS Survey
- Sheets 5 and 6 Inner Approach
- · Separated into two sheets and added new obstruction data to plan and profile views per 2014 AGIS Survey.

Sheets 8-10 - Terminal Area Plans

- Updated area plans with new proposed layouts
- Sheet 12 Airport Property Map
- · Updated with new property and easement information.

Page 1 of 2

This ALP approval is conditioned on acknowledgement that any development on airport property requiring Federal environmental approval must receive such written approval from FAA prior to commencement of the subject development. This ALP approval is also conditioned on acceptance of the plan under local land use laws. We encourage appropriate agencies to adopt land use and height restrictive zoning based on the plan.

Approval of the plan does not indicate that the United States will participate in the cost of any development proposed. AIP funding requires evidence of eligibility and justification at the time a funding request is ripe for consideration. When construction of any proposed structure or development indicated on the plan is undertaken, such construction requires normal 45-day advance notification to FAA for review in accordance with applicable Federal Aviation Regulations (i.e., Parts 77, 157, 152, etc.). More notice is generally beneficial to ensure that all statutory, regulatory, technical and operational issues can be addressed in a timely manner

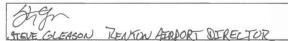
Signature Blocks

The FAA signature below acknowledges approval of the ALP.

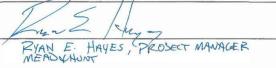
FAA: Community Planner, SEA ADO

AGNES O. FISHER Date: 2022.09.28 15:06:33 - 07'00'

Airport Sponsor



Consultant





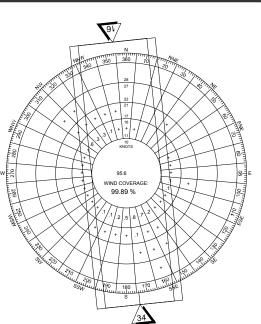
Mead and Hunt, Inc 1743 Wazee Street Suite 400 Denver, CO 80202 phone: 303-825-8844 meadhunt.com



		REVISIONS	
NO.	DESCRIPTION		DATE

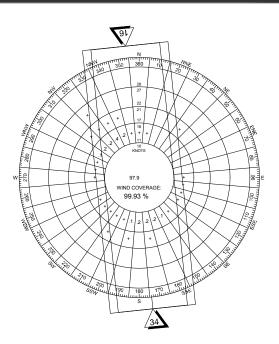
	RUNWAY INFORMATION	EXISTING	VAY 16 FUTURE	RUNWA	FUTURE		NO. DESC	RT FACILITIES	HEIGH
		BEECH KING AIR	SAME	BEECH KING AIR	SAME				
									12'
	RUNWAY PAVEMENT STRENGTH (IN 1000 LBS.)			100 S, 130 D, 340 DT					2.5
						DOM STRENCTH VARIES APROSS SECTIONS OF THE BUNNARY	7 REM	OVED	
						PUN STRENGTH VARIES AUROSS SECTIONS OF THE RONWAT			
									26'
									14'
							13 BOEI	NG FUEL FARM	
	RSA LENGTH BEYOND STOP END	300'	SAME	300'	SAME				
				500'					20
	ROFA LENGTH BEYOND STOP END						24 BUIL		
							25 BUIL	DING 250	27'
									/
	INNER TRANSITIONAL OFZ (IAOFZ) LENGTH	N/A	SAME	N/A	SAME				18
Displace							30 REM		
							31 REM	OVED	
Control Contro Control Control Control Control Control Control Control Control Co		26.1'		30.4'					
	RUNWAY CENTERLINE TO HOLD LINE	200'	SAME	200'	SAME				
	RUNWAY FND DATA						36 BUIL	DING 295	40'
Number Johnson Duration Number Johnson Source Johnso									
		47' 30' 01.70" N 122' 13' 00.67" W	47' 29' 08.86" M 122' 12' 52.67"	"					
									///
		0.1112					41 BOEI		
		47 29 58.73 N 122 13 00.22 W	47 29 12.20 122 12 53.18	w			42 BOEI	NG 5-43	
	IN SOME SOME 2010								
		0.1112							13
TAKE OFF BERKA ANALABLE (100k) 5,382' SAME <	DECLARED DISTANCES		NAY 16	RU	INWAY 34				RNAV/GPS VOR/DME
ACCELEMENT-STOP DISTANCE ANALABLE (ASDA) 5,042' SAME 5,082' SAME 5,012' SAME SAME 5,012' SAME 5,012'<	TAKE OFF DISTANCE AVAILABLE (TODA)	5,382' 5,382'	SAME SAME	5,382' 5,382'	SAM SAM		AIRPORT R		47°29'35.30"N
LADBURG DETMOLE ANDREX (LDS) 4.742 SAME 4.742 SAME CARDING DETMOLES ANDREXTOR TAXIWAY DATA TAXIWAY DATA Image: Control of the co	ACCELERATE-STOP DISTANCE AVAILABLE (ASDA) 5,042'		5,082'			TAXIWAY LI		
TAXIWAY DATA TAXIMAY DATA TAXIMAY DATA WINCEPARA Centroll, andreart elect kink an TAXIMAY Second Total and the control total		4,/42	SAME	4,/42	SAM				
TAXIWAY DATA I/w 'A'							CRITICAL A		
And Links Link	TAXIWAY DATA								
CRITICAL ARCRAFT BECH KING AR EXISTING FUTURE EXISTING FUTURE EXISTING FUTURE EXISTING FUTURE MAINE TO SAME MAINE TO SAME </td <td></td> <td>T/W 'A'</td> <td>T/W 'A1'</td> <td>T/W 'A2'</td> <td>T/W 'A3-A9</td> <td>' T/W '46-47'</td> <td></td> <td></td> <td></td>		T/W 'A'	T/W 'A1'	T/W 'A2'	T/W 'A3-A9	' T/W '46-47'			
WOTH IN TEET (STANDARD) Sor (35) SAME Top: Same <t< td=""><td></td><td></td><td></td><td>E EXISTING FUTURE</td><td>EXISTING FU</td><td>URE EXISTING FUTURE</td><td></td><td></td><td></td></t<>				E EXISTING FUTURE	EXISTING FU	URE EXISTING FUTURE			
SAFETY AREA WORTH (N FÉET) 79' SAME 7									
CARLECT PREE AREA WORH (IN FEET) 131' SAME 131' <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>COMBINED W</td> <td>IND OUVERAGE 99</td> <td>3.03% (I3 KNUI)</td>							COMBINED W	IND OUVERAGE 99	3.03% (I3 KNUI)
SEPARATION (N FEET) T/W TO 17/W 105" SAME									
LOHTING 1/W 10 OBJECT OLD SAME OLD	SEPARATION (IN FEET) T/W TO T/W						REVIS	IONS & NOTES	
TAXIWAY EDGE SAFETY MARGIN 10' SAME 1									
TAXIWAY SHOULDER WIDTH 0 SAME 0 <th< td=""><td>TAXIWAY EDGE SAFETY MARGIN</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	TAXIWAY EDGE SAFETY MARGIN								
T/W 'B' (B3-B6) T/W 'B' (B6-B7) T/W 'B3' SAME Z SAM	TAXIWAY SHOULDER WIDTH	0 SAME	0 SAME	0 SAME	0 S/	ME 0 SAME			
T/W 'B' (B3-B6) T/W 'B' (B6-B7) T/W 'B3' SAME Z SAM					l				
T/W 'B' (B3-B6) T/W 'B' (B6-B7) T/W 'B3' SAME Z SAM							.		
CRITICAL ARCRAFT BEECH KING AR EXISTING FUTURE EXISTING			/w 'B' (B6-B7) T/W 'B3-B4'	T/W 'B5	T/W 'B6' T/W 'B7'			
TAXIWAY DESIGN GROUP (TDG) 2 SAME 3		/W 'B' (B3-B6) T		/ / / / / / / / /			NOTES:		
SAFETY AREA WIDTH (IN FÉET) 79' SAME 79' SAM	T, CRITICAL AIRCRAFT BEECH KING AIR	ISTING FUTURE EX	ISTING FUTUR						
OBJECT FREE AREA WIDTH (IN FÉET) 131' SAME 131' <td>T, CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG)</td> <td>ISTING FUTURE EX 2 SAME</td> <td>1STING FUTUR 2 SAME</td> <td>2 SAME</td> <td>2 S/</td> <td>ME 2 SAME 2 SAME</td> <td></td> <td></td> <td></td>	T, CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG)	ISTING FUTURE EX 2 SAME	1STING FUTUR 2 SAME	2 SAME	2 S/	ME 2 SAME 2 SAME			
ADG V. STANDARD T/W TO ÓBJECT 65.5' SAME 65.5' SAME 65.5' SAME 65.5' SAME III SAME MITL SAME	T, CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25	ISTING FUTURE EX 2 SAME (35') SAME 60	ISTING FUTURI 2 SAME (35') SAME	2 SAME 40' (35') SAME	2 SA 35' (35') SA	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME			
LIGHTING MITL SAME	T, CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET)	ISTING FUTURE EX 2 SAME (35') SAME 60 79' SAME 131' SAME	ISTING FUTUR 2 SAME 3 (35') SAME 79' SAME 131' SAME	2 SAME 40' (35') SAME 79' SAME 131' SAME	2 S/ 35' (35') S/ 79' S/ 131' S/	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME	2. TOPOGR	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE	2016.
TAXIWAY EDGE SAFETY MARGIN 10' SAME	CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W	ISTING FUTURE EX 2 SAME ' (35') SAME 60 79' SAME 131' SAME 105' SAME	ISTING FUTUR 2 SAME 7(35') SAME 79' SAME 131' SAME 105' SAME	2 SAME 40' (35') SAME 79' SAME 131' SAME 105' SAME	2 S/ 35' (35') S/ 79' S/ 131' S/ 105' S/	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME	2. TOPOGR 3. MAGNETI 4. ALL LAT	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPHY . LONG. COORDINATE INFORMATION (NADB3) & RU	2016. YSICAL DATA CENT
TAXIWAY SHOULDER WIDTH 0 SAME 20' SAME	T, CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT	ISTING FUTURE EX 2 SAME ' (35') SAME 60 79' SAME 131' SAME 105' SAME 55.5' SAME	ISTING FUTUR 2 SAME '(35') SAME 79' SAME 131' SAME 105' SAME 55.5' SAME	2 SAME 40' (35') SAME 79' SAME 131' SAME 105' SAME 65.5' SAME	2 S/ 35' (35') S/ 79' S/ 131' S/ 105' S/ 65.5' S/	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 105' SAME 65.5' SAME	2. TOPOGR 3. MAGNETI 4. ALL LAT (NAVD88	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPHY LONG. COORDINATE INFORMATION (NADB3) & RU) PER NGS	2016. YSICAL DATA CENT
MODIFICATION OF STANDARDS ITEM STANDARD EXISTING FUTURE APPROVAL AIRSPACE DATE CASE NO. NONE REQUIRED DATE AIRPORT DESIGN. AT THE TIME THE SCOPE WAS DEVELOPED. A DRAFT VE AIRPORT DESIGN. AT THE TIME THE SCOPE WAS DEVELOPED. A DRAFT VE NONE REQUIRED DATE CASE NO. DATE COMPACT DATE COMPACT <t< td=""><td>T, CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT OL LIGHTING TAXIWAY EDGE SAFETY MARGIN</td><td>ISTING FUTURE EX 2 SAME 60 79' SAME 61 131' SAME 61 135' SAME 61 135' SAME 61 136' SAME 61 137' SAME 61 136' SAME 61 137' SAME 61 138' SAME 61 139' SAME 61 131' SAME 61 131' SAME 61 135.5' SAME 61 141' SAME 61</td><td>ISTING FUTUR 2 SAME 7(35') SAME 79' SAME 131' SAME 105' SAME 55.5' SAME MITL SAME 10' SAME</td><td>2 SAME 40' (35') SAME 79' SAME 131' SAME 105' SAME 65.5' SAME MITL SAME 10' SAME</td><td>2 SA 35' (35') SA 79' SA 131' SA 105' SA 65.5' SA MITL SA 10' SA</td><td>ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME</td><td>2. TOPOGR 3. MAGNETI 4. ALL LAT (NAVD88 5. CRITICAL</td><td>APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPHY LONG. COORDINATE INFORMATION (NADB3) & RL) PER NGS AIRCRAFT BEECH KING AIR (ADG II, TDG 2)</td><td>2016. YSICAL DATA CENT JNWAY ELEVATION</td></t<>	T, CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT OL LIGHTING TAXIWAY EDGE SAFETY MARGIN	ISTING FUTURE EX 2 SAME 60 79' SAME 61 131' SAME 61 135' SAME 61 135' SAME 61 136' SAME 61 137' SAME 61 136' SAME 61 137' SAME 61 138' SAME 61 139' SAME 61 131' SAME 61 131' SAME 61 135.5' SAME 61 141' SAME 61	ISTING FUTUR 2 SAME 7(35') SAME 79' SAME 131' SAME 105' SAME 55.5' SAME MITL SAME 10' SAME	2 SAME 40' (35') SAME 79' SAME 131' SAME 105' SAME 65.5' SAME MITL SAME 10' SAME	2 SA 35' (35') SA 79' SA 131' SA 105' SA 65.5' SA MITL SA 10' SA	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPOGR 3. MAGNETI 4. ALL LAT (NAVD88 5. CRITICAL	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPHY LONG. COORDINATE INFORMATION (NADB3) & RL) PER NGS AIRCRAFT BEECH KING AIR (ADG II, TDG 2)	2016. YSICAL DATA CENT JNWAY ELEVATION
MODIFICATION OF STANDARDS ITEM STANDARD EXISTING FUTURE APPROVAL AIRSPACE DATE CASE NO. DATE CASE NO. NONE REQUIRED NONE REQUIRED NONE REQUIRED NONE REQUIRED AIR PORTION OF TAXIWAY BLOCATED ADJACENT TO AND FROM THE VARIOUS AIRSPACE XINDE X	T, CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT OL LIGHTING TAXIWAY EDGE SAFETY MARGIN	ISTING FUTURE EX 2 SAME 60 79' SAME 61 131' SAME 61 135' SAME 61 135' SAME 61 136' SAME 61 137' SAME 61 136' SAME 61 137' SAME 61 138' SAME 61 139' SAME 61 131' SAME 61 131' SAME 61 135.5' SAME 61 141' SAME 61	ISTING FUTUR 2 SAME 7(35') SAME 79' SAME 131' SAME 105' SAME 55.5' SAME MITL SAME 10' SAME	2 SAME 40' (35') SAME 79' SAME 131' SAME 105' SAME 65.5' SAME MITL SAME 10' SAME	2 SA 35' (35') SA 79' SA 131' SA 105' SA 65.5' SA MITL SA 10' SA	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPOGR 3. MAGNETI 4. ALL LAT (NAVD88 5. CRITICAL 6. THIS AL DEVELOF	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPH- LONG. COORDINATE INFORMATION (NADB3) & RL) PER NGS AIRCRAFT BEECH KING AIR (ADG II, TDG 2) > JUPDATE PROJECT SCOPE FOR THE RENTOM NU ED IN MAY OF 2021 WITH THE UNDERSTANDING	2016. YSICAL DATA CENT JNWAY ELEVATION INICIPAL AIRPORT THAT THE ALP WC
MODIFICATION OF STANDARDS ITEM STANDARD EXISTING FUTURE APPROVAL AIRSPACE DATE CASE NO. NONE REQUIRED DATE INONE REQUIRED INCOMENTATION OF TAXIMARY BLOCATED ADJACENT TO AND FROM THE VARIOUS AIRCRATT ITEM INCOMENTATION OF STANDARD AND NOT HE DEVELOPED TO FAA (DISCOMENTATION OF TAXIMARY BLOCATED ADJACENT TO FAR (DISCOMENTATION OF TAXIMARY BLOCATED ADJACENT TO APROVE AND THE VARIOUS AIRCRATT NONE REQUIRED INCOMENTATION OF TAXIMARY BLOCATED ADJACENT TO APROVE AND THE VARIOUS AIRCRATT INCOMENTATION OF THE VARIOUS AIRCRATT INCOMENTATION OF TAXIMARY BLOCATED ADJACENT TO APROVE AND THE VARIOUS AIRCRATT INCOMENTATION OF THE VARIOUS AIRCRATT INCOMENTATION OF TAXIMARY BLOCATED ADJACENT TO APROVE AND THE VARIOUS AIRCRATT	T, CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT OL LIGHTING TAXIWAY EDGE SAFETY MARGIN	ISTING FUTURE EX 2 SAME 60 79' SAME 61 131' SAME 61 135' SAME 61 135' SAME 61 136' SAME 61 137' SAME 61 136' SAME 61 137' SAME 61 138' SAME 61 139' SAME 61 131' SAME 61 131' SAME 61 135.5' SAME 61 141' SAME 61	ISTING FUTUR 2 SAME 7(35') SAME 79' SAME 131' SAME 105' SAME 55.5' SAME MITL SAME 10' SAME	2 SAME 40' (35') SAME 79' SAME 131' SAME 105' SAME 65.5' SAME MITL SAME 10' SAME	2 SA 35' (35') SA 79' SA 131' SA 105' SA 65.5' SA MITL SA 10' SA	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPOGR 3. MAGNETI 4. ALL LAT (NAVD88 5. CRITICAL 6. THIS AL DEVELOF DESIGNE	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPHI , LONG, COORDINATE INFORMATION (NADB3) & RL) PER NGS AIRCRAFT BEECH KING AIR (ADG II, TDG 2) > UPDATE PROJECT SCOPE FOR THE RENTON MU JED IN MAY OF 2021 WITH THE UNDERSTANDING D IN ACCORDANCE WITH FAA ADVISORY CIRCULAR	2016. YSICAL DATA CENT JNWAY ELEVATION INICIPAL AIRPORT THAT THE ALP WC (AC) 150/5300-
Image: mark the set of the	CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT TO LIGHTING TAXIWAY EDGE SAFETY MARGIN TAXIWAY SHOULDER WIDTH	ISTING FUTURE EX 2 SAME 60 (35') SAME 10 79' SAME 101 131' SAME 105' 55.5' SAME 10' 10' SAME 10' 0 SAME 0	ISTING FUTUR 2 SAME 7(35') SAME 79' SAME 131' SAME 105' SAME 55.5' SAME MITL SAME 10' SAME	2 SAME 40' (35') SAME 79' SAME 131' SAME 105' SAME 65.5' SAME MITL SAME 10' SAME	2 SA 35' (35') SA 79' SA 131' SA 105' SA 65.5' SA MITL SA 10' SA	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPOGR 3. MAGNETI 4. ALL LAT (NAVD88 5. CRITICAL 6. THIS AL DEVELOP DESIGNE AIRPORT	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPH LONG. COORDINATE INFORMATION (NADB3) & RL) PER NGS AIRCRAFT BEECH KING AIR (ADG II, TDG 2) > JUPDATE PROJECT SCOPE FOR THE RENTON MU FED IN MAY OF 2021 WITH THE UNDERSTANDING D IN ACCORDANCE WITH FAA ADVISORY CIRCULAR DESIGN. AT THE TIME THE SCOPE WAS DEVELO	2016. YSICAL DATA CENT JNWAY ELEVATION INICIPAL AIRPORT THAT THE ALP WG (AC) 150/5300- DPED, A DRAFT VE
NONE REQUIRED NONE REQUIRED 150/5300-13A STANDARD AND NOT BE DEVELOPED TO FAA AC 150/5300 STANDARDS. HOWEVER, ANY SUBSEQUENT AIRFIELD DESIGN OF IMPROVEN SHOWN ON THIS ALP SHOULD BE DEVELOPED IN ACCORDANCE WITH FAA AC 150/5300-13B. 7. TAXIWAY A AND THE PORTION OF TAXIWAY B LOCATED ADJACENT TO APPORT ACCOMMODATE 737 SIZE AIRCRAFT TO AND FROM THE VARIOUS AIRCRAFT MANUFACTURING APRONS AND PARKING AREAS. AS SUCH, THE PAVEMENT I FOR THESE TAXIWAYS BEEN DESIGNED TO ACCOMMODATE AND	CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT TO LIGHTING TAXIWAY EDGE SAFETY MARGIN TAXIWAY SHOULDER WIDTH	ISTING FUTURE EX 2 SAME 60 79' SAME 60 79' SAME 131' SAME 135' SAME 105' SAME 10' SAME 0 SAME 0 SAME	ISTING FUTUR 2 SAME '(35') SAME '(35') SAME 131' SAME 135' SAME 55.5' SAME 10' SAME 10' SAME 20' SAME	2 SAME 40' (35') SAME 79' SAME 131' SAME 105' SAME 65.5' SAME 10' SAME 0 SAME 0 SAME	2 S/ 35' (35') S/ 79' S/ 131' S/ 105' S/ 65.5' S/ MITL S/ 0 S/	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPOGR. 3. MAGNETI 4. ALL LAT (NAVDBE 5. CRITCAL 6. THIS AL DEVELOF DESIGNE AIRPORT AN UPD CIRCULA	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPHI , LONG, COORDINATE INFORMATION (NADB3) & RL) PER NGS ARCRAFT BEECH KING AIR (ADG II, TDG 2) P UPDATE PROJECT SCOPE FOR THE RENTON MU JED IN MAY OF 2021 WITH THE UNDERSTANDING D IN ACCORDANCE WITH TAA ADVISORY CIRCULAR DESIGN. AT THE TIME THE SCOPE WAS DEVELO ATE TO THIS ADVISORY CIRCULAR LABELED AS FA TEE TO THIS ADVISORY CIRCULAR LABELED AS FA	2016. YSICAL DATA CENT INWAY ELEVATION INICIPAL AIRPORT THAT THE ALP WC (AC) 150/5300- PPED, A DRAFT VE A AC 5300-138 AL FOR RELEASE (
STANDARDS. HOWEVER, ANY SUBSEQUENT AIRFIELD DESIGN OF IMPROVEM SHOWN ON THIS ALP SHOULD BE DEVELOPED IN ACCORDANCE WITH FAA A 150/5300-138. 7. TAXIWAY A AND THE PORTION OF TAXIWAY B LOCATED ADJACENT TO APROI ACCOMMODATE 737 SIZE AIRCRAFT TO AND FROM THE VARIOUS AIRCRAFT MANUFACTURING APRONS AND PARKING AREAS, AS SUCH, THE PAREMENT S FOR THESE TAXIWAYS HAS ALWAYS BEEN DESIGNED TO ACCOMMODATE AND	CRITICAL AIRCRAFT BEECH KING AIR EX TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT TO LIGHTING TAXIWAY EDGE SAFETY MARGIN TAXIWAY SHOULDER WIDTH	ISTING FUTURE EX 2 SAME 60 79' SAME 60 79' SAME 131' SAME 135' SAME 105' SAME 10' SAME 0 SAME 0 SAME	ISTING FUTUR 2 SAME '(35') SAME '(35') SAME 131' SAME 135' SAME 55.5' SAME 10' SAME 10' SAME 20' SAME	2 SAME 40' (35') SAME 79' SAME 105' SAME 65.5' SAME 10' SAME 0 SAME	2 S/ 35' (35') S/ 79' S/ 131' S/ 105' S/ 65.5' S/ MITL S/ 10' S/ 0 S/ DACE	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPOGR. 3. MAGNETI 4. ALL LAT (NAVD88 5. CRITICAL 6. THIS AL DEVELOF DESIGNE AIRPORT AN UPD CIRCULA NEW AC	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPH LONG. COORDINATE INFORMATION (NADB3) & RL) PER NGS AIRCRAFT BEECH KING AIR (ADG II, TDG 2) > JUPDATE PROJECT SCOPE FOR THE RENTON MU IED IN MAY OF 2021 WITH THE UNDERSTANDING D IN ACCORDANCE WITH FAA ADVISORY CIRCULAR DESIGN. AT THE TIME THE SCOPE WAS DEVELD ATE TO THIS ADVISORY CIRCULAR LABELED AS FA TEED FOR INDUSTRY COMMENT WITH THE POTENTIA DURING THE PROJECT SCHEDULE TIMEFRAME. T	2016. YSICAL DATA CENT JNWAY ELEVATION INICIPAL AIRPORT THAT THE ALP WC (AC) 150/5300- IPED, A DRAFT VE A AC 5300-13B L FOR RELEASE (HE SCOPE OF SE
150/5300-138. 7. TAXIWAY A AND THE PORTION OF TAXIWAY B LOCATED ADJACENT TO APRON ACCOMMODATE 737 SIZE AIRCRAFT TO AND FROM THE VARIOUS AIRCRAFT MANUFACTURING APRONS AND PARKING AREAS. AS SUCH, THE PAVEMENT S FOR THESE TAXIWAYS HAS ALWAYS BEEN DESIGNED TO ACCOMMODATE AND	CRITICAL AIRCRAFT BEECH KING AIR TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT OF LIGHTING TAXIWAY EDGE SAFETY MARGIN TAXIWAY SHOULDER WIDTH MODIFICATION OF STANDAR	ISTING FUTURE EX 2 SAME 60 79' SAME 60 79' SAME 131' SAME 135' SAME 105' SAME 10' SAME 0 SAME 0 SAME	ISTING FUTUR 2 SAME '(35') SAME '(35') SAME 131' SAME 135' SAME 55.5' SAME 10' SAME 10' SAME 20' SAME	2 SAME 40' (35') SAME 79' SAME 105' SAME 65.5' SAME 10' SAME 0 SAME	2 S/ 35' (35') S/ 79' S/ 131' S/ 105' S/ 65.5' S/ MITL S/ 10' S/ 0 S/ DACE	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPOGR 3. MAGNETI 4. ALL LAT (NAVD88 5. CRITCAL 6. THIS AL DEVELOF DESIGNE AIRPORT AN UPD CIRCULA NEW AC WAS VEI	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPH- LONG. COORDINATE INFORMATION (NADB3) & RL) PER NGS JUEDATE ROJECT SCOPE FOR THE RENTOM MU ED IN MAY OF 2021 WITH THE UNDERSTANDING D IN ACCORDANCE WITH FAA ADVISORY CIRCULAR DESIGN. AT THE TIME THE SCOPE WAS DEVELD ATE TO THIS ADVISORY CIRCULAR LABELED AS FA TED FOR INDUSTRY COMMENT WITH THE POTENTIA DURING THE PROJECT SCHEDULE TIMEFRAME. T RY CLEAR THAT THIS ALP UPDATE WOULD BE DEV	2016. SICAL DATA CENT SICAL DATA CENT INICIPAL AIRPORT THAT THE ALP WC (AC) 150/5300- SID A DRAFT VE A AC 5300-138 AL FOR RELASE C HE SCOPE OF SE VELOPED TO FAA A
7. TAXIWAY A AND THE PORTION OF TAXIWAY B LOCATED ADJACENT TO APPRO ACCOMMODATE 737 SIZE AIRCRAFT TO AND FROM THE VARIOUS AIRCRAFT MANUFACTURING APROS AND PARKING AREAS. AS SUCH, THE VARIOUS AND FOR THESE TAXIWAYS HAS ALWAYS BEEN DESIGNED TO ACCOMMODATE AND	CRITICAL AIRCRAFT BEECH KING AIR TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT OF LIGHTING TAXIWAY EDGE SAFETY MARGIN TAXIWAY SHOULDER WIDTH MODIFICATION OF STANDAR	ISTING FUTURE EX 2 SAME 60 79' SAME 60 79' SAME 131' SAME 135' SAME 105' SAME 10' SAME 0 SAME 0 SAME	ISTING FUTUR 2 SAME '(35') SAME '(35') SAME 131' SAME 135' SAME 55.5' SAME 10' SAME 10' SAME 20' SAME	2 SAME 40' (35') SAME 79' SAME 105' SAME 65.5' SAME 10' SAME 0 SAME	2 S/ 35' (35') S/ 79' S/ 131' S/ 105' S/ 65.5' S/ MITL S/ 10' S/ 0 S/ DACE	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPCOR 3. MAGNETI 4. ALL LAT (NAVD82 5. CRITCAL 6. THIS AL DEVELOF DESIGNE AIRPORT AN UPD CIRCULA NEW AC WAS VEI 150/533 STANDAF	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPH LONG. COORDINATE INFORMATION (NADB3) & RL) PER NGS AIRCRAFT BEECH KING AIR (ADG II, TDG 2) > UPDATE FROJECT SCOPE FOR THE RENTON MU ED IN MAY OF 2021 WITH THE UNDERSTANDING D IN ACCORDANCE WITH FAA ADVISORY CIRCULAR DESIGN. AT THE TIME THE SCOPE WAS DEVELO THE THE TIME THE SCOPE WAS DEVELO ATE TO THIS ADVISORY CIRCULAR LABELED AS FA TEED FOR INDUSTRY COMMENT WITH THE POTENTIA DURING THE PROJECT SCHEDULE TIMEFRAME. T TY CLEAR THAT THIS ALP UPDATE WOULD BE DEV 200-13A STANDARD AND NOT BE DEVELOPED TO F DS. HOWEVER, ANY SUBSEQUENT AIRFIELD DES	2016. YSICAL DATA CENT YSICAL DATA CENT INICIPAL ARPORT THAT THE ALP WC (AC) 150/5300- PED, A DRAFT VE A AC 5300-138 AL FOR RELASE C VELOPED TO FAA FGA AC 150/5300 SIGN OF IMPROVEN
ACCOMMODATE 737 SIZE AIRCRAFT TO AND FROM THE VARIOUS AIRCRAFT MANUFACTURING APRONS AND PARKING AREAS. AS SUCH, THE PAVEMENT S FOR THESE TAXIMAYS HAS ALWAYS BEEN DESIGNED TO ACCOMMODATE AND	CRITICAL AIRCRAFT BEECH KING AIR TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT OF LIGHTING TAXIWAY EDGE SAFETY MARGIN TAXIWAY SHOULDER WIDTH MODIFICATION OF STANDAR	ISTING FUTURE EX 2 SAME 60 79' SAME 60 79' SAME 131' SAME 135' SAME 105' SAME 10' SAME 0 SAME 0 SAME	ISTING FUTUR 2 SAME '(35') SAME '(35') SAME 131' SAME 135' SAME 55.5' SAME 10' SAME 10' SAME 20' SAME	2 SAME 40' (35') SAME 79' SAME 105' SAME 65.5' SAME 10' SAME 0 SAME	2 S/ 35' (35') S/ 79' S/ 131' S/ 105' S/ 65.5' S/ MITL S/ 10' S/ 0 S/ DACE	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPOGR 3. MAGNET 4. ALL LAT (NAVD82 5. CRITCAL 6. THIS AL DEVELOF DESIGNE AIRPORT AN UPD CIRCULA NEW AC WAS VEI 150/533 STANDAF SHOWN	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPH- LONG. COORDINATE INFORMATION (NADB3) & RL) PER NGS JUEDATE ROJECT SCOPE FOR THE RENTOM MU ED IN MAY OF 2021 WITH THE UNDERSTANDING D IN ACCORDANCE WITH FAA ADVISORY CIRCULAR DESIGN. AT THE TIME THE SCOPE WAS DEVELO ATE TO THIS ADVISORY CIRCULAR LABELED AS FA TED FOR INDUSTRY COMMENT WITH THE POTENTIA DURING THE PROJECT SCOPEDULE TIMEFRAME. T RY CLEAR THAT THIS ALP UPDATE WOULD BE DEV DO-13A STANDARD AND NOT BE DEVELOPED TO F DS. HOWEVER, ANY SUBSEQUENT AIRFIELD DES ON THIS ALP SHOULD BE DEVELOPED IN ACCORD	2016. YSICAL DATA CENT YSICAL DATA CENT INICIPAL ARPORT THAT THE ALP WC (AC) 150/5300- PED, A DRAFT VE A AC 5300-138 AL FOR RELASE C VELOPED TO FAA FGA AC 150/5300 SIGN OF IMPROVEN
FOR THESE TAXIMAYS HAS ALWAYS BEEN DESIGNED TO ACCOMMODATE AND	CRITICAL AIRCRAFT BEECH KING AIR TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT OF LIGHTING TAXIWAY EDGE SAFETY MARGIN TAXIWAY SHOULDER WIDTH MODIFICATION OF STANDAR	ISTING FUTURE EX 2 SAME 60 79' SAME 60 79' SAME 131' SAME 135' SAME 105' SAME 10' SAME 0 SAME 0 SAME	ISTING FUTUR 2 SAME '(35') SAME '(35') SAME 131' SAME 135' SAME 55.5' SAME 10' SAME 10' SAME 20' SAME	2 SAME 40' (35') SAME 79' SAME 105' SAME 65.5' SAME 10' SAME 0 SAME	2 S/ 35' (35') S/ 79' S/ 131' S/ 105' S/ 65.5' S/ MITL S/ 10' S/ 0 S/ DACE	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPOGR 3. MAGNETI 4. ALL LAT (NAVD88 5. CRITCAL 6. THIS AL DEVELOF DESIGNE AIRPORT AN UPD CIRCULA NEW AC WAS VEI 150/530 STANDAF SHOWN 150/530	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPH- L.ONG. COORDINATE INFORMATION (NAD83) & RL) PER NGS AIRCRAFT BEECH KING AIR (ADG II, TDG 2) PUPDATE PROJECT SCOPE FOR THE RENTON MU PED IN MAY OF 2021 WITH THE UNDERSTANDING D IN ACCORDANCE WITH FAA ADVISORY CIRCULAR DESIGN. AT THE TIME THE SCOPE WAS DEVELO THE TO THIS ADVISORY CIRCULAR LABELED AS FA TED FOR INDUSTRY COMMENT WITH THE POTENTIA DURING THE PROJECT SCHEDULE TIMEFRAME. T Y CLEAR THAT THIS ALP UPDATE WOULD BE DEV DO-13A STANDARD AND NOT BE DEVELOPED TO F FDS. HOWEVER, ANY SUBSEQUENT AIRFIELD DES ION THIS ALP SHOULD BE DEVELOPED IN ACCORD 100-138.	2016. SICAL DATA CENT INICIPAL AIRPORT THAT THE ALP WC (AC) 150/5300- IPED, A DRAFT VC AC 3300-138 AL FOR RELEASE (HE SCOPE OF SE ELOPED TO FAA / FAA AC 150/5300 SIGN OF IMPROVEN JANCE WITH FAA A
	CRITICAL AIRCRAFT BEECH KING AIR TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT OF LIGHTING TAXIWAY EDGE SAFETY MARGIN TAXIWAY SHOULDER WIDTH MODIFICATION OF STANDAR	ISTING FUTURE EX 2 SAME 60 79' SAME 60 79' SAME 131' SAME 135' SAME 105' SAME 10' SAME 0 SAME 0 SAME	ISTING FUTUR 2 SAME '(35') SAME '(35') SAME 131' SAME 135' SAME 55.5' SAME 10' SAME 10' SAME 20' SAME	2 SAME 40' (35') SAME 79' SAME 105' SAME 65.5' SAME 10' SAME 0 SAME	2 S/ 35' (35') S/ 79' S/ 131' S/ 105' S/ 65.5' S/ MITL S/ 10' S/ 0 S/ DACE	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPOGR 3. MAGNETI 4. ALL LAT (NAVD8E 5. CRITCAL 6. THIS AL DEVELOF DESIGNE AIRPORT AN UPD CIRCULA NEW AC WAS VEI 150/533 STANDAF SHOWN 150/533 7. TAXIWAY ACCOMM	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPH- LONG. COORDINATE INFORMATION (NADB3) & RL) PER NGS JUDATE PROJECT SCOPE FOR THE RENTOM MU ED IN MAY OF 2021 WITH THE UNDERSTANDING D IN ACCORDANCE WITH FAA ADVISORY CIRCULAR DESIGN. AT THE TIME THE SCOPE WAS DEVELO DATE TO THIS ADVISORY CIRCULAR LABELED AS FA TED FOR INDUSTRY COMMENT WITH THE POTENTIA DURING THE PROJECT SCHEDULE TIMEFRAME. T YY CLEAR THAT THIS ALP UPDATE WOULD BE DEV DO-138, STANDARD AND NOT BE DEVELOPED TO FIDS. HOWEVER, ANY SUBSEQUENT AIRFIELD DES ON THIS ALP SHOULD BE DEVELOPED IN ACCORD DO-138. A AND THE PORTION OF TAXIWAY B LOCATED AD	2016. SIGLA DATA CENT SIGLA DATA CENT SIGLA AIRPORT THAT THE ALP WC (AC) 150/5300 PED, A DRAFT VE A AC 5300-138 L FOR RELEASE HE SCOPE 0 TO FAA AC 5300-138 L FOR RELEASE SIGN OF IMPROVEM JANCE WITH FAA A JACENT TO APROI RRIOUS AIRCRAFT
I I I I I I I I I I I I I I I I I I I	CRITICAL AIRCRAFT BEECH KING AIR TAXIWAY DESIGN GROUP (TDG) WIDTH IN FEET (STANDARD) 25 SAFETY AREA WIDTH (IN FEET) OBJECT FREE AREA WIDTH (IN FEET) SEPARATION (IN FEET) T/W TO T/W ADG IV STANDARD T/W TO OBJECT OF LIGHTING TAXIWAY EDGE SAFETY MARGIN TAXIWAY SHOULDER WIDTH MODIFICATION OF STANDAR	ISTING FUTURE EX 2 SAME 60 79' SAME 60 79' SAME 131' SAME 135' SAME 105' SAME 10' SAME 0 SAME 0 SAME	ISTING FUTUR 2 SAME '(35') SAME '(35') SAME 131' SAME 135' SAME 55.5' SAME 10' SAME 10' SAME 20' SAME	2 SAME 40' (35') SAME 79' SAME 105' SAME 65.5' SAME 10' SAME 0 SAME	2 S/ 35' (35') S/ 79' S/ 131' S/ 105' S/ 65.5' S/ MITL S/ 10' S/ 0 S/ DACE	ME 2 SAME 2 SAME ME 60' (35') SAME 50' (35') SAME ME 79' SAME 79' SAME ME 131' SAME 131' SAME ME 105' SAME 105' SAME ME 65.5' SAME 65.5' SAME ME MITL SAME MITL SAME ME 10' SAME 10' SAME	2. TOPOOR 3. MAGNETI 4. ALL LAT (NAVD88 5. CRITCAL 6. THIS AL DEVELOO DESIGNE AIRPORT AN UPD CIRCULA NEW AC WAS VEI 150/533 STANDAF SHOWN 150/533 7. TAXIWAY ACCOMM	APHICAL INFORMATION BY QUANTUMSPATIAL, JUNE C DECLINATION CALCULATED BY NATIONAL GEOPH LONG. COORDINATE INFORMATION (NADB3) & RL) PER NGS AIRCRAFT BEECH KING AIR (ADG II, TDG 2)) UPDATE PROJECT SCOPE FOR THE RENTON MU IED IN MAY OF 2021 WITH THE UNDERSTANDING D IN ACCORDANCE WITH THE UNDERSTANDING DESIGN. AT THE TIME THE SCOPE WAS DEVELO THE TO HIS ADVISORY CIRCULAR LABELED AS FA DURING THE PROJECT SCHOULE TIMEFRAME. T TY CLEAR THAT THIS ALP UPDATE WOULD BE DEVE DO -13A STANDARD AND NOT BE DEVELOPED TO F IDD. SALP SHOULD BE DEVELOPED TO IN ACCORD DO -13B. STANDARD AND NOT BE DEVELOPED TO F DO -13B. STANDARD AND NOT BE DEVELOPED TO F DO -13B. ALP SHOULD BE DEVELOPED TO F A AND THE PORTION OF TAXIMAY B LOCATED AD ODATE 737 SIZE AIRCRAFT TO AND FROM THE VA ZURING APRONS AND PARKING AREAS. AS SUCH,	2016. YSICAL DATA CENT YSICAL DATA CENT INICIPAL AIRPORT THAT THE ALP WC (AC) 150/5300- PED, A DRAFT VE A AC 3500-138 U, FOR RELASE HE SCOPE OF SE RELOPED TO FAA. JACENT TO APPOOL SIGN OF IMPROVEM JANCE WITH FAA A JACENT TO APPOOL AIRCLASS AIRCRAFT THE PAVEMENT 5

ALL WEATHER WINDROSE

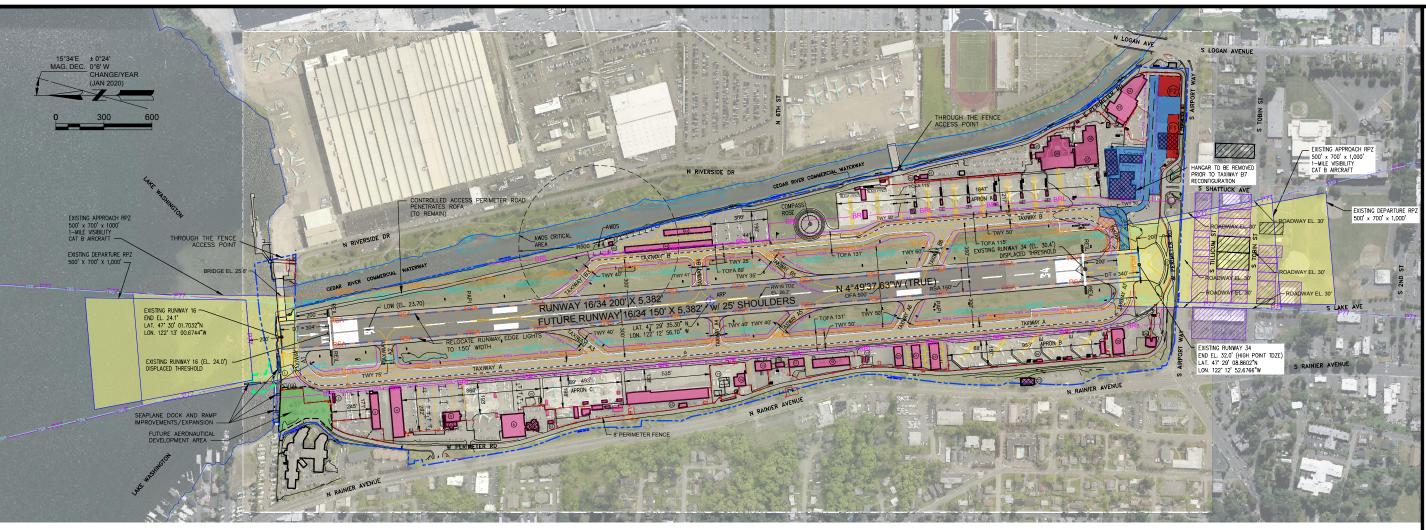


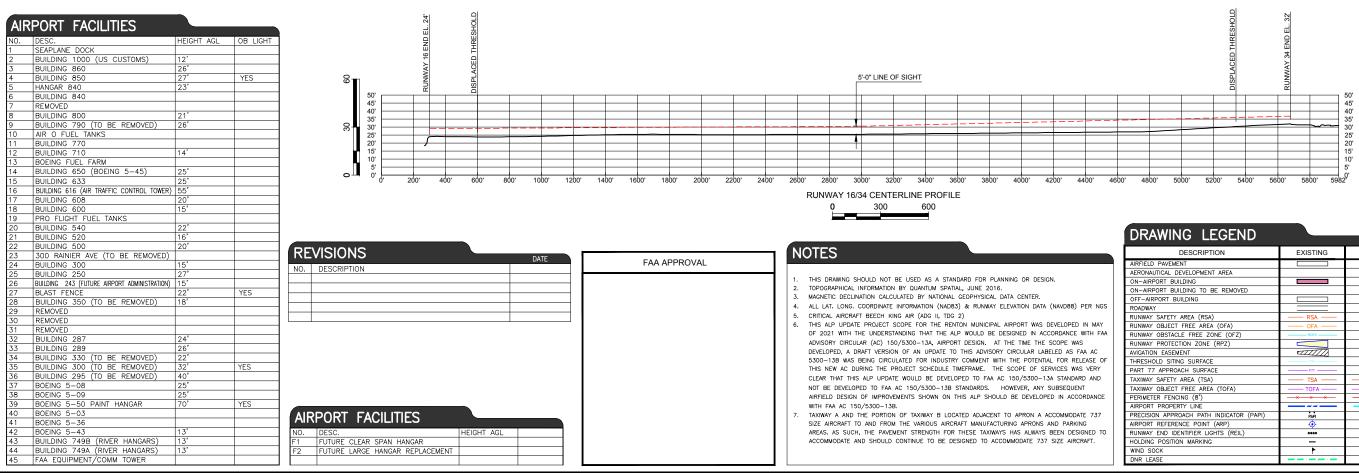
ALL-WEATHER WIND COVERAGE SUMMARY						
RUNWAY 10.5-Knot 13-Knot						
RUNWAY 16	88.85%					
RUNWAY 34	AY 34 81.22% 81.48%					
RUNWAY 16/34	RUNWAY 16/34 99.58% 99.89%					
AIRPORT DESIGN TOOLS, WINE STATION 727934, RENTON. PER	LIATION PROVIDED BY MEAD & H D ANALYSIS. WIND DATA OBTAINE 10D OF RECORD 2011-2020. NOT THE INDIVIDUAL RUNWAY END AN	ED FROM NOAA, NCDC, E: A 5-KNOT TAILWIND				

IFR WINDROSE



IFR WIND COVERAGE SUMMARY							
RUNWAY 10.5-Knot 13-Knot							
RUNWAY 16 92.14% 92.21							
RUNWAY 34 88.32% 88.44%							
RUNWAY 16/34 99.77% 99.93%							
SOURCE: WIND ANALYSIS TABULATION PROVIDED BY MEAD & HUNT UTILIZING THE FAA AIRPORT DESIGN TOOLS, WIND ANALYSIS WIND DATA OBTAINED FROM NOAA, NCDC, SYATION 72759A, RENTCN, PERIOD OF RECORD 2011-2020, NOTE: A S-HNOT TAULININD COMPONENT WAS USED FOR THE NONDUCIUM. RUNNAVY FROM ANALYSIS.							





DESCRIPTION	EXISTING	FUTURE
RFIELD PAVEMENT		
RONAUTICAL DEVELOPMENT AREA		
I-AIRPORT BUILDING		
-AIRPORT BUILDING TO BE REMOVED		XXXXXXX
F-AIRPORT BUILDING		N/A
ADWAY		====
NWAY SAFETY AREA (RSA)	RSA	N/A
NWAY OBJECT FREE AREA (OFA)	OFA	N/A
NWAY OBSTACLE FREE ZONE (OFZ)		N/A
NWAY PROTECTION ZONE (RPZ)		N/A
IGATION EASEMENT		
RESHOLD SITING SURFACE	TSS	N/A
RT 77 APPROACH SURFACE	P77	N/A
XIWAY SAFETY AREA (TSA)	TSA	— TSA
XIWAY OBJECT FREE AREA (TOFA)	TOFA	
RIMETER FENCING (8')	— ×—× —×—	××
RPORT PROPERTY LINE		
ECISION APPROACH PATH INDICATOR (PAPI)	PAPI	N/A
PORT REFERENCE POINT (ARP)	٩	N/A
NWAY END IDENTIFIER LIGHTS (REIL)	****	4989
LDING POSITION MARKING	-	-
ND SOCK	1	►
IR LEASE		N/A



Mead and Hunt, Inc. 1743 Wazee Street, Suite 400 Denver, CO 80202 phone: 303-825-8844 meadhunt.com

ied by the c om all claim

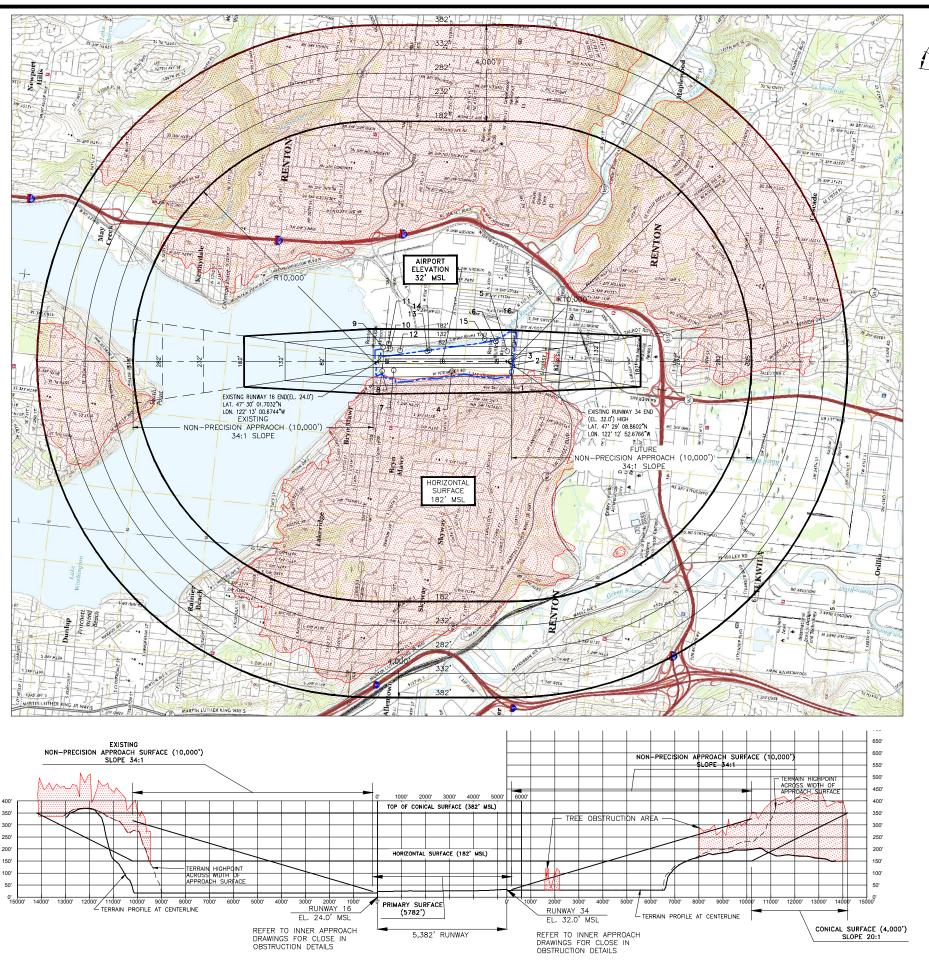


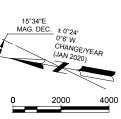
616 W PERIMETER RENTON, WA 98057

NOT FOR CONSTRUCTION

3089600-130659.06 DATE: JUNE 2022 DESIGNED BY: M&H DRAWN BY: JWB CHECKED BY: CAL DO NOT SCALE

Figure E3 Airport Layout Plan





)R	BSTRUCTIONS							
).	DESCRIPTION	ELEV.	SURFACE	PEN.	DISPOSITION			
	LIGHT STANDARD	72.9	TRANS.	14.4	TBS			
	LIGHT STANDARD	47.0	PRIMARY	14.4	TBS			
	BLASE FENCE (OL)	43.3	PRIMARY	21.0	TBS			
	ANTENNA OR CONTROL TOWER (OL)	96.9	TRANS.	46.8	TBS			
	BOEING HANGAR (OL)	58.6	TRANS.	3.1	TBS			
	BOEING PAINT HANGAR (OL)	114.4	TRANS.	1.2	TBS			
	HANGAR (OL)	50.9	TRANS.	8.8	TBS			
	POLE	48.9	TRANS.	2.1	TBS			
	BUILDING	108.7	TRANS.	34.6	TBS			
	TREE	84.3	TRANS.	21.4	TBS			
	BOEING HANGAR (OL)	104.6	TRANS.	10.2	TBS			
	TREE	83.0	TRANS.	29.7	TBS			
	TOWER	64.0	TRANS.	15.7	TBS			
	TREE	58.4	TRANS.	2.3	TBS			
	TREE	130.2	TRANS.	2.8	TBS			
	TREE	96.0	TRANS.	1.8	TBS			
	(OL) OBSTRUCTION LIGHTED	AGL						

Mead

& lunt

Mead and Hunt, Inc. 1743 Wazee Street,

Suite 400

Denver, CO 80202

phone: 303-825-8844 meadhunt.com

fied by the clis rom all claims

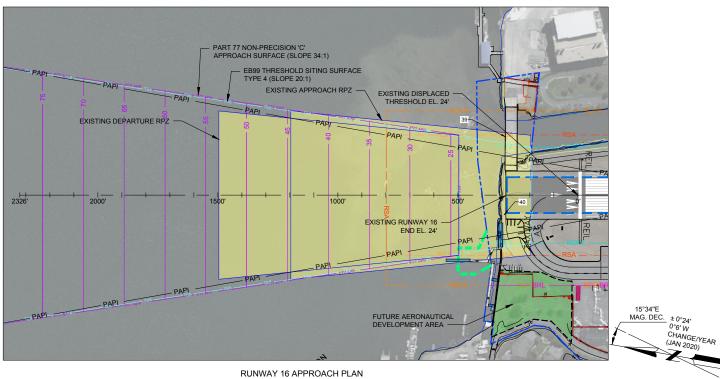
AL AIRPORT PLAN UPDATE

I MUNICIPAL T LAYOUT PL

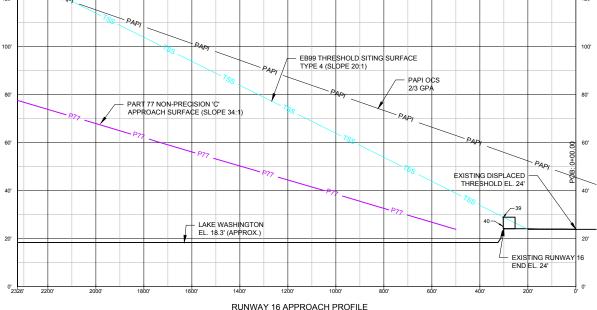
TBS = TO BE FURTHER STUDIED IN FUTURE AIRSPACE REVIEW

REFER TO INNER APPROACH DRAWINGS FOR CLOSE IN OBSTRUCTION DETAILS.

			RENTON MUNIC AIRPORT LAYO	616 W PERIMETER ROAD RENTON, WA 98057
RE	VISIONS & NOTES	DATE		ЮĽ
NO.	DESCRIPTION		ISSUED	
			1330ED	
		I		
NOTE				
1.	THIS DRAWING SHOULD NOT BE USED AS PLANNING OR DESIGN.	A STANDARD FOR		
2.	TOPOGRAPHICAL INFORMATION BY QUANTU	IMSPATIAL, JUNE 2016.		
3.	MAGNETIC DECLINATION CALCULATED BY N		NOT FOR CON	STRUCTION
	DATA CENTER.			
4.	ALL LAT. LONG. COORDINATE INFORMATION ELEVATION DATA (NAVD88) PER NGS	N (NAD&S) & RUNWAY		00-130659.06
5.	. ,	T (0-1 5000	DATE: JUNE DESIGNED BY: M&H	2022
5.	HEIGHT RESTRICTION ZONING FOR AIRPOR 11-24-03; Ord. 5100, 11-1-04)	a (ora. 5029,	DRAWN BY: JWB	
			CHECKED BY: CAL DO NOT SCALE D	RAWINGS
6.	OBSTRUCTIONS FROM 2015 AGIS BY QUA	INTUM SPATIAL.		
				- 1
	RAWING LEGEND		Figure E	:4
יוט	AWING LEGEND		Airport	
		EXISTING	Airspac	e
AIRPOR RUNW	RT PROPERTY LINE		Plan &	
PART	77 CONTROLLING SURFACE			
	77 NON-CONTROLLING SURFACE N PENETRATION TO PART 77 SURFACE		Profile	
				E.6







UNVVA	T I	6 APPROACH PROFILE
1"	=	200' HORIZONTALLY
1"	=	20' VERTICALLY

NO.	DESCRIPTION	TOP ELEVATION	GROUND ELEVATION	PENETRATION	DISPOSITION
39	BRIDGE	28.85	24.00	4.85	TBS
40	RUNWAY LIGHT	25.18	24.00	1.18	TBS
		RESHOLD SIT	ING OBSTRUCTION	S	
RL		RESHOLD SIT	ING OBSTRUCTION	S	DISPOSITION
	JNWAY 16 TH				DISPOSITION TBS

TBS = TO BE FURTHER STUDIED IN FUTURE AIRSPACE REVIEW.

NOTES:

- ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL) AT TOP OF OBJECT. THIS VALUE INCLUDES 15 FEET ADDED TO NON-INTERSTATE ROADWAYS, 71 FEET ADDED TO INTERSTATE HIGHWAYS, AND 23 FEET ADDED TO RAILROADS.
 AIPPORT GEOCRAPHIC INFORMATION SURVEY (AGIS) BY QUANTUM SPATIAL, OCTOBER 21, 2015.
 A SUBSET OF SIGNIFICATION OBSTRUCTIONS FROM THE AGIS IS SHOWN.

REVISIONS & NOTES NO. DESCRIPTION NOTES: 1. THIS DRAWING SHOULD NOT BE USED AS A STANDARD FOR PLANNING OR DESIGN. TOPOGRAPHICAL INFORMATION BY QUANTUMSPATIAL, JUNE 2016. 2. MAGNETIC DECLINATION CALCULATED BY NATIONAL GEOPHYSICAL 3. DATA CENTER. 4. ALL LAT. LONG. COORDINATE INFORMATION (NAD83) & RUNWAY ELEVATION DATA (NAVD88) PER NGS



DRAWING LEGEND

DESCRIPTION	EXISTING	FUTURE
AIRFIELD PAVEMENT		
AERONAUTICAL DEVELOPMENT AREA		
ON-AIRPORT BUILDING		-0-0-0-0-
ON-AIRPORT BUILDING TO BE REMOVED		*****
OFF-AIRPORT BUILDING		N/A
ROADWAY		====
RUNWAY SAFETY AREA (RSA)	RSA	N/A
RUNWAY OBJECT FREE AREA (OFA)	OFA	N/A
RUNWAY OBSTACLE FREE ZONE (OFZ)		N/A
RUNWAY PROTECTION ZONE (RPZ)		N/A
AVIGATION EASEMENT		
THRESHOLD SITING SURFACE		N/A
PART 77 APPROACH SURFACE		N/A
PAPI OBSTACLE CLEARANCE SURFACE	PAPI	N/A
TAXIWAY SAFETY AREA (TSA)	TSA	— TSA
TAXIWAY OBJECT FREE AREA (TOFA)	TOFA	
PERIMETER FENCING (8')	— * * *	×
AIRPORT PROPERTY LINE		
PRECISION APPROACH PATH INDICATOR (PAPI)	PAPI	N/A
AIRPORT REFERENCE POINT (ARP)	•	N/A
RUNWAY END IDENTIFIER LIGHTS (REIL)		
HOLDING POSITION MARKING		
WIND SOCK		
DNR LEASE	the second second second second	N/A

NOT FOR CONSTRUCTION

M&H NO.: DATE: 3089600-130659.06 JUNE 2022 DESIGNED BY: M&H DRAWN BY: JWB CHECKED BY: CAL DO NOT SCALE D

Figure E5 Runway 16 Inner Approach

E.7

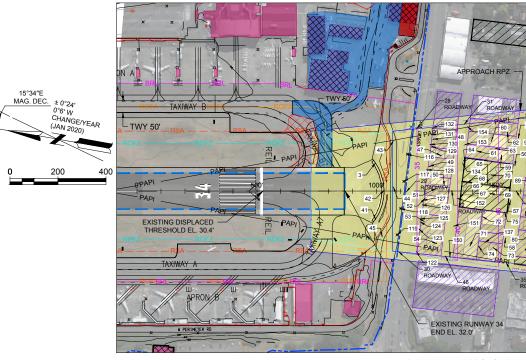
	r	1	1		-
NO.	DESCRIPTION	TOP ELEVATION	GROUND ELEVATION	PENETRATION	DISPOSITION
3	BLAST FENCE	42.64	32.00	10.64	TBS
28	ROADWAY	46.99	31.99	11.99	TBS
29	ROADWAY	45.84	30.84	12.01	TBS
30	ROADWAY	45.79	30.79	13.01	TBS
31	ROADWAY	46.60	31.60	5.81	TBS
32	ROADWAY	44.74	29.74	5.46	TBS
33	ROADWAY	43.99	28.99	-3.24	TBS
34	ROADWAY	44.81	29.81	-3.62	TBS
35	ROADWAY	45.00	30.00	-0.95	TBS
36 37	ROADWAY	45.00	30.00	-27.83	TBS
-	-				
38 41	ROADWAY BLAST FENCE	45.00	30.00	-31.76	TBS
41 42	BLAST FENCE BLAST FENCE	44.83	32.00	12.83	TBS
43	ACCESS ROAD	41.60	31.60	9.60	TBS
44 45	ACCESS ROAD	41.13 41.11	31.13 31.11	9.13	TBS
46 47	ROADWAY	29.28 46.79	29.28	-9.26 8.80	TBS
47	BUILDING	48.18	30.00	11.07	TBS
48	BUILDING	46.90	30.00		TBS
49 50	BUILDING	46.90	30.00	10.29 12.51	TBS
50	POLE	45.33	30.00	7.97	TBS
52	BUILDING	47.76	30.00	11.79	TBS
53	SIGN	41.70	30.00	5.80	TBS
54	BUILDING	45.04	30.00	7.58	TBS
55	POLE	64.55	30.00	17.03	TBS
56	POLE	64.18	30.00	17.08	TBS
57	POLE	63.35	30.00	16.82	TBS
58	POLE	64.88	30.00	18.96	TBS
59	BUILDING	58.59	30.00	13.15	TBS
60	BUILDING	51.33	30.00	7.12	TBS
61	BUILDING	45.68	30.00	3.23	TBS
62	BUILDING	50.54	30.00	4.35	TBS
63	POLE	54.93	30.00	10.18	TBS
64	BUSH	43.42	30.00	2.49	TBS
65	BUSH	43.51	30.00	-0.25	TBS
66	BUSH	43.60	30.00	3.25	TBS
67	BUILDING	47.63	30.00	6.20	TBS
68	BUILDING	46.65	30.00	5.46	TBS
69	BUILDING	44.48	30.00	0.43	TBS
70	BUILDING	51.88	30.00	7.69	TBS
71	BUILDING	49.43	30.00	5.24	TBS
72	BUILDING	49.38	30.00	6.27	TBS
73	BUILDING	45.88	30.00	1.44	TBS
74	TREE	52.30	30.00	9.65	TBS
75	BUSH	47.76	30.00	1.92	TBS
76	TREE	67.37	30.00	16.13	TBS
77	TREE	65.43	30.00	15.08	TBS
78	TREE	53.68	30.00	2.84	TBS
79	TREE	54.79	30.00	6.44	TBS
80	BUILDING	53.36	30.00	4.46	TBS
81	BUILDING	49.94	30.00	1.55	TBS
82	BUILDING	51.82	30.00	0.48	TBS
83	TREE	62.10	30.00	13.06	TBS
84	TREE	63.21	30.00	12.48	TBS
85	TREE	60.44	30.00	7.55	TBS
86	TREE	67.74	30.00	16.86	TBS
87	TREE	58.77	30.00	6.61	TBS
0.0		1 00 50		17.05	TDC

RU	NWAY 34 PAI	RT 77 OBSTR	RUCTIONS		
NO.	DESCRIPTION	TOP ELEVATION	GROUND ELEVATION	PENETRATION	DISPOSITION
89	TREE	64.41	30.00	15.68	TBS
90	TREE	65.06	30.00	14.54	TBS
91	BUILDING	56.69	30.00	7.70	TBS
92	BUILDING	59.65	30.00	9.42	TBS
93	TREE	108.26	30.00	32.38	TBS
94	TREE	100.77	30.00	25.06	TBS
95	TREE	88.74	30.00	14.05	TBS
96	TREE	92.44	30.00	18.06	TBS
97	TREE	81.06	30.00	6.86	TBS
98	TREE	81.71	30.00	7.78	TBS
99	TREE	82.17	30.00	8.43	TBS
100	TREE	77.18	30.00	1.85	TBS
101	TREE	109.37	30.00	32.96	TBS
102	TREE	107.43	30.00	30.85	TBS
103	TREE	119.91	30.00	43.22	TBS
104	TREE	98.18	30.00	23.08	TBS
105	TREE	74.96	30.00	2.27	TBS
106	TREE	75.14	30.00	2.24	TBS
107	TREE	119.45	30.00	45.16	TBS
116	LIGHTPOLE	47.72	30.00	13.84	TBS
117	LIGHTPOLE	47.58	30.00	14.13	TBS
118	LIGHTPOLE	47.21	30.00	14.17	TBS
119	LIGHTPOLE	47.02	30.00	14.40	TBS
122	LIGHTPOLE	51.93	30.00	16.62	TBS
123	TREE	59.05	30.00	23.71	TO BE TRIMMED OR REMOVED
124	LIGHTPOLE	55.81	30.00	20.67	TO BE LOWERED OR OB LIGHTED
125	TREE	55.35	30.00	19.80	TO BE TRIMMED OR REMOVED
126	TREE	51.40	30.00	15.44	TBS
127	LIGHTPOLE	56.00	30.00	20.52	TO BE LOWERED OR OB LIGHTED
128	LIGHTPOLE	56.55	30.00	20.59	TO BE LOWERED OR OB LIGHTED
129	SIGN	45.61	30.00	8.81	TBS
130	LIGHTPOLE	56.46	30.00	20.11	TO BE LOWERED OR OB LIGHTED
131	TREE	55.72	30.00	18.62	TBS
132	TREE	56.65	30.00	19.49	TBS
134	UTILITY	63.86	30.00	23.22	TO BE LOWERED OR OB LIGHTED
137	TREE	100.95	30.00	57.62	TO BE TRIMMED OR REMOVED
150	UTILITY	57.95	30.00	18.69	TBS
151	UTILITY	60.35	30.00	20.75	TBS
152	UTILITY	65.20	30.00	25.18	TO BE LOWERED OR OB LIGHTED
153	UTILITY	54.61	30.00	13.87	TBS
154	UTILITY	60.13	30.00	18.76	TBS

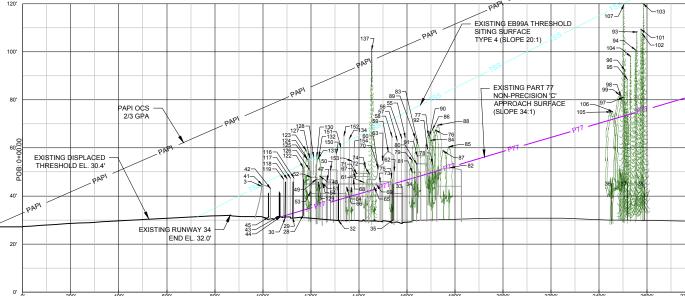
TBS = TO BE FURTHER STUDIED IN FUTURE AIRSPACE REVIEW.

RL	INWAY 34 PA	PI OBSTACLE	CLEARANCE	SURFACE OBS	TRUCTIONS
NO.	DESCRIPTION	TOP ELEVATION	GROUND ELEVATION	PENETRATION	DISPOSITION
137	TREE	100.95	30.00		TO BE TRIMMED OR REMOVED

NOTES:

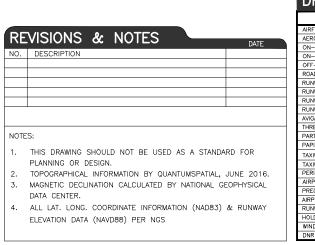








1" = 200' HORIZONTALLY 1" = 20' VERTICALLY



88	TREE	69.50	30.00		17.95		TBS
RU	NWAY 34 TH	RESHOLD SIT	ING OBSTR	UCTIONS	;		
NO.	DESCRIPTION	TOP ELEVATION	GROUND ELEVATION	PENETR	ATION	DISPO	SITION
123	TREE	59.05	30.00	5.00		TO BE T REMOV	RIMMED OR ED
124	LIGHTPOLE	55.81	30.00	1.50		TO BE L	OWERED OR OB
125	TREE	55.35	30.00	1.10		TO BE T REMOV	RIMMED OR ED
127	LIGHTPOLE	56.00	30.00	1.20		TO BE L	OWERED OR OB
128	LIGHTPOLE	56.55	30.00	0.90		TO BE L	OWERED OR OB
130	LIGHTPOLE	56.46	30.00	0.20		TO BE L	OWERED OR OB
134	UTILITY	63.86	30.00	0.80		TO BE L	OWERED OR OB
137	TREE	100.95	30.00	33.20		TO BE T REMOV	RIMMED OR ED
152	UTILITY	65.20	30.00	3.20		TO BE L	OWERED OR OB

	TREE	69.50	30.00		17.95		TBS
SU	NWAY 34 TH	reshold sit	ING OBSTRI	UCTIONS	\$		
).	DESCRIPTION		GROUND ELEVATION	PENETR	ATION	DISPO	SITION
	TREE	59.05	30.00	5.00		TO BE T REMOV	RIMMED OR ED
ŀ	LIGHTPOLE	55.81	30.00	1.50		TO BE LIGHTED	OWERED OR OB
	TREE	55.35	30.00	1.10		TO BE T REMOV	RIMMED OR ED
,	LIGHTPOLE	56.00	30.00	1.20		TO BE LIGHTED	OWERED OR OB
5	LIGHTPOLE	56.55	30.00	0.90		TO BE LIGHTED	OWERED OR OB
)	LIGHTPOLE	56.46	30.00	0.20		TO BE LIGHTED	OWERED OR OB
Ļ	UTILITY	63.86	30.00	0.80		TO BE LIGHTED	OWERED OR OB
,	TREE	100.95	20.00	22.20		TO BE T	RIMMED OR

1	RL	INWAY 34 PA	PI OBSTACLE	CLEARANCE	SURFACE OBS	TRUCTIONS
	NO.	DESCRIPTION	TOP ELEVATION	GROUND ELEVATION	PENETRATION	DISPOSITION
	137	TREE	100.95	30.00		TO BE TRIMMED OR REMOVED

- NUTES:
 LEEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL) AT TOP OF OBJECT. THIS VALUE INCLUDES 15 FEET ADDED TO NON-INTERSTATE ROADWAYS, 17 FEET ADDED TO INTERSTATE HIGHWAYS, AND 23 FEET ADDED TO RAILROADS.
 AIRPORT GEOGRAPHIC INFORMATION SURVEY (AGIS) BY QUANTUM SPATIAL, OCTOBER 21, 2015.
 A SUBSET OF SIGNIFICATION OBSTRUCTIONS FROM THE AGIS IS SHOWN.
 TBS = TO BE FURTHER STUDEID IN FUTURE AIRSPACE REVIEW.



DRAWING LEGEND

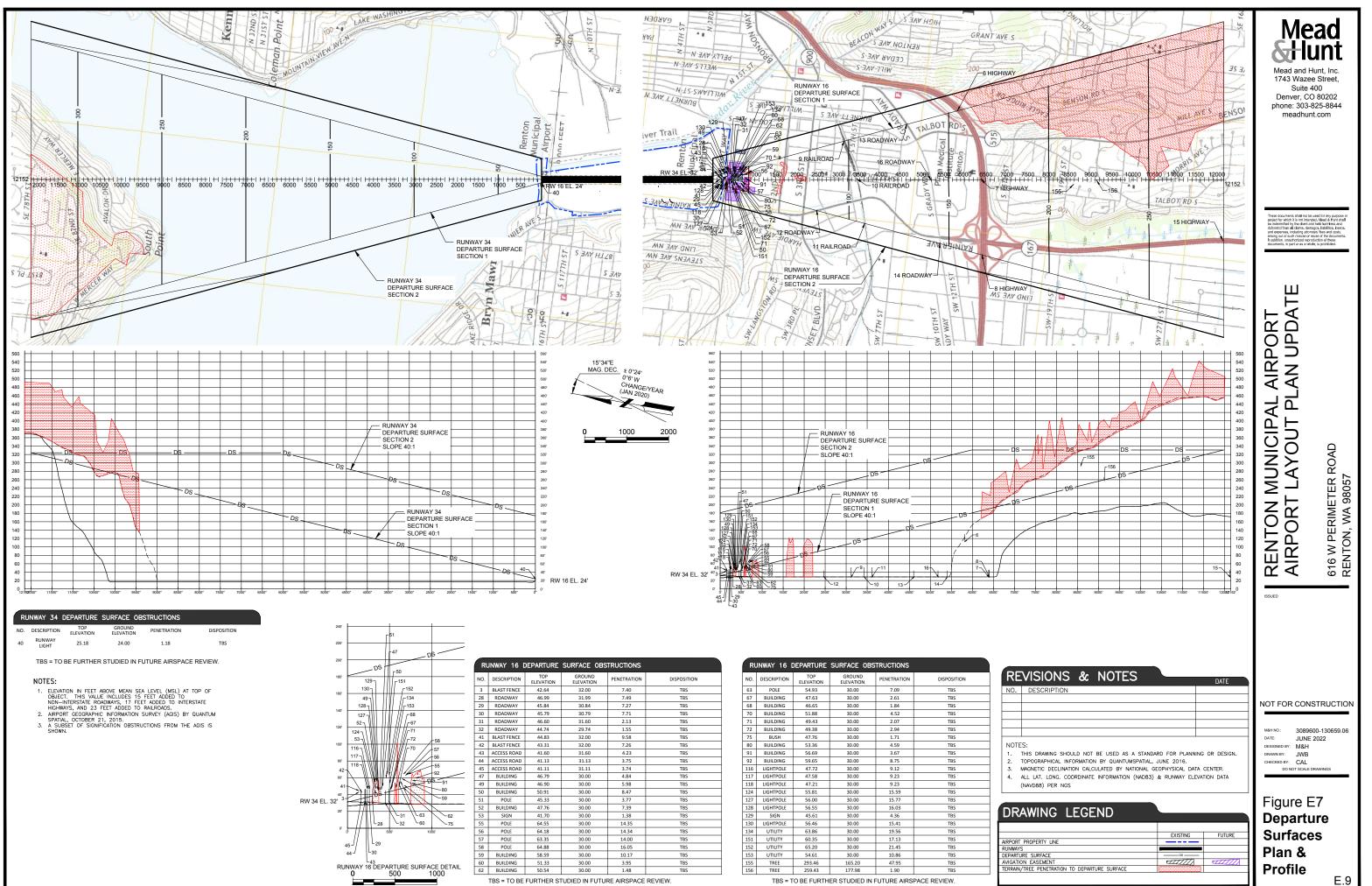
DESCRIPTION	EXISTING	FUTURE
RFIELD PAVEMENT		
RONAUTICAL DEVELOPMENT AREA		
I-AIRPORT BUILDING		
-AIRPORT BUILDING TO BE REMOVED		*****
F-AIRPORT BUILDING		N/A
ADWAY		====
NWAY SAFETY AREA (RSA)	RSA	N/A
NWAY OBJECT FREE AREA (OFA)	OFA	N/A
NWAY OBSTACLE FREE ZONE (OFZ)		N/A
NWAY PROTECTION ZONE (RPZ)		N/A
GATION EASEMENT		
RESHOLD SITING SURFACE	TSS	N/A
RT 77 APPROACH SURFACE	P77	N/A
PI OBSTACLE CLEARANCE SURFACE	PAPI	N/A
XIWAY SAFETY AREA (TSA)	TSA	TSA
XIWAY OBJECT FREE AREA (TOFA)	TOFA	
RIMETER FENCING (8')	— ×—× —×—	~~~~~~~~
RPORT PROPERTY LINE		
ECISION APPROACH PATH INDICATOR (PAPI)	PAPI	N/A
PORT REFERENCE POINT (ARP)	•	N/A
NWAY END IDENTIFIER LIGHTS (REIL)	6966	6866
LDING POSITION MARKING	44444	-
ND SOCK		•
IR LEASE	and the second second second	N/A

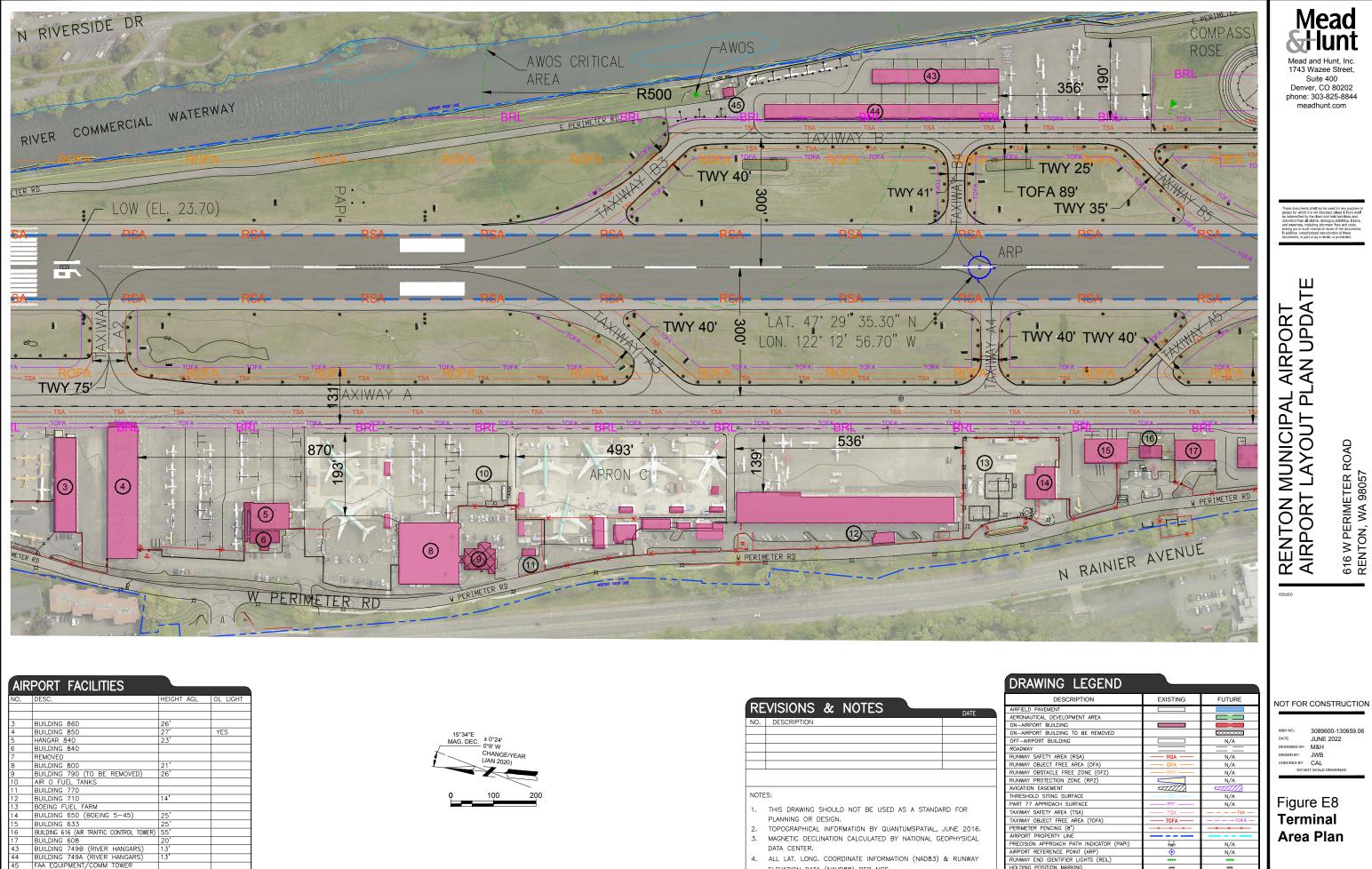


E.8

Inner

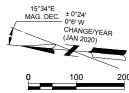
Approach



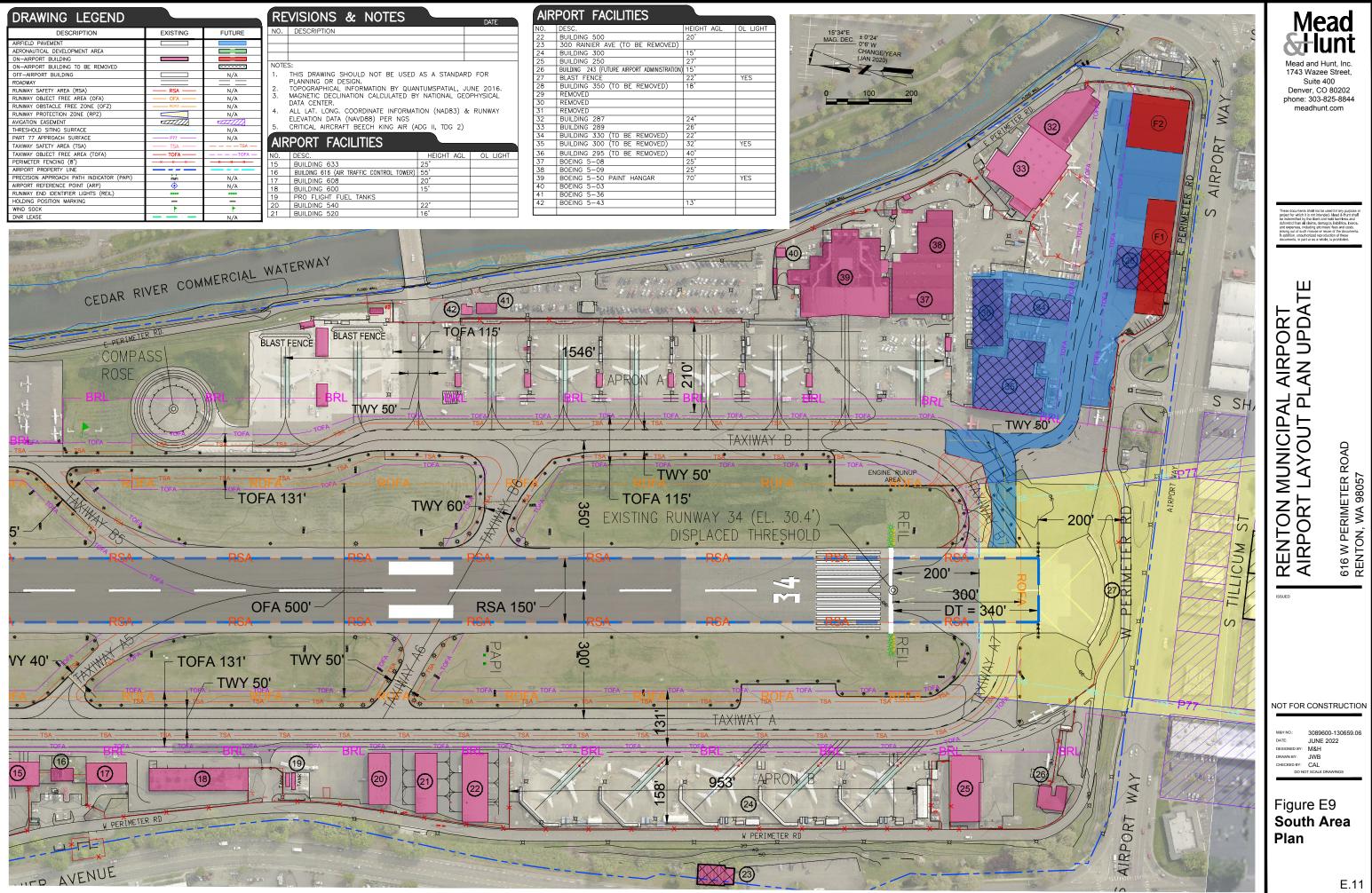


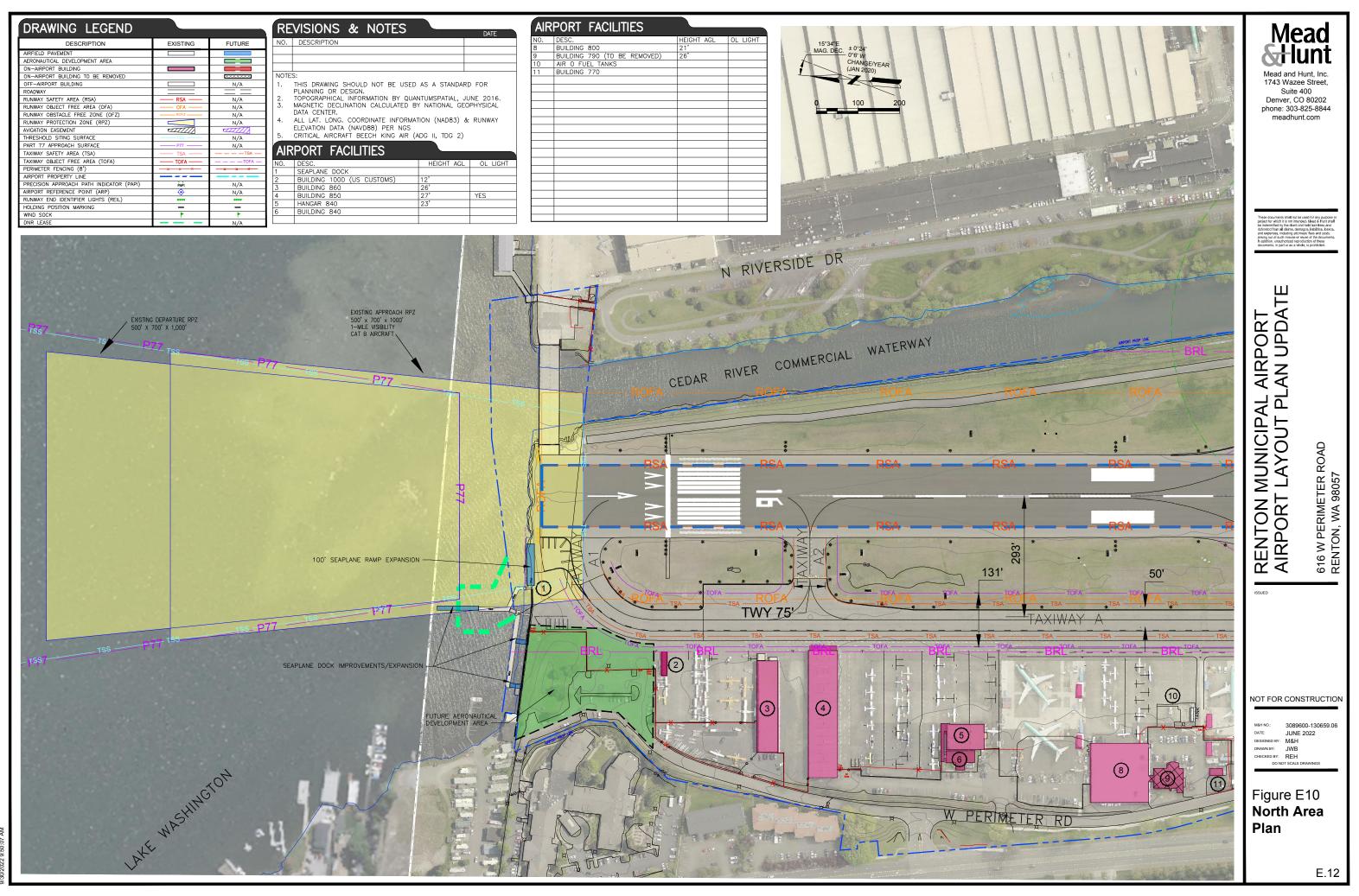
FACILITIES	

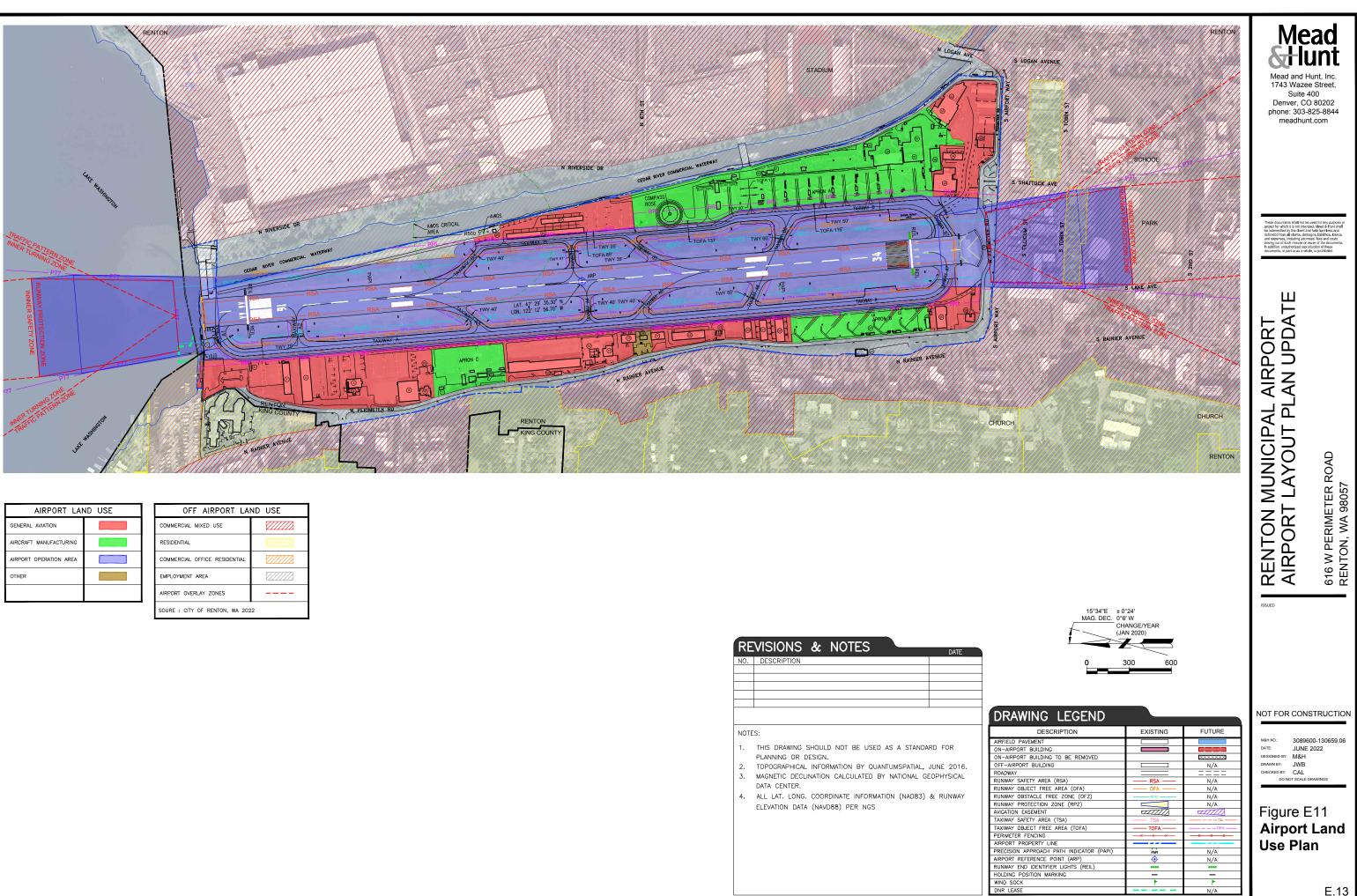
NO.	DESC.	HEIGHT AGL	OL LIGHT
3	BUILDING 860	26'	
4	BUILDING 850	27'	YES
5	HANGAR 840	23'	
6	BUILDING 840		
7	REMOVED		
8	BUILDING 800	21'	
9	BUILDING 790 (TO BE REMOVED)	26'	
10	AIR O FUEL TANKS		
11	BUILDING 770		
12	BUILDING 710	14'	
13	BOEING FUEL FARM		
14	BUILDING 650 (BOEING 5-45)	25'	
15	BUILDING 633	25'	
16	BUILDING 616 (AIR TRAFFIC CONTROL TOWER)	55'	
17	BUILDING 608	20'	
43	BUILDING 749B (RIVER HANGARS)	13'	
44	BUILDING 749A (RIVER HANGARS)	13'	
45	FAA EQUIPMENT/COMM TOWER		



Π	EVISIONS & NOTES	AIRF
NO.	DESCRIPTION	ON-
		ON-
		OFF-
		ROAL
		RUN
		AVIG/
NOT		
NOT	ES:	THRE
		THRE
NOT 1.	THIS DRAWING SHOULD NOT BE USED AS A STANDARD FOR	THRE PART TAXI
1.	THIS DRAWING SHOULD NOT BE USED AS A STANDARD FOR PLANNING OR DESIGN.	THRE PART TAXIN TAXIN
	THIS DRAWING SHOULD NOT BE USED AS A STANDARD FOR	THRE PART TAXI TAXI PERI
1.	THIS DRAWING SHOULD NOT BE USED AS A STANDARD FOR PLANNING OR DESIGN.	THRE PART TAXIN TAXIN PERI AIRP
1. 2.	THIS DRAWING SHOULD NOT BE USED AS A STANDARD FOR PLANNING OR DESIGN. TOPOGRAPHICAL INFORMATION BY QUANTUMSPATIAL, JUNE 2016.	THRE PART TAXIN TAXIN PERI AIRP PREC
1. 2. 3.	THIS DRAWING SHOULD NOT BE USED AS A STANDARD FOR PLANNING OR DESIGN. TOPOGRAPHICAL INFORMATION BY QUANTUMSPATIAL, JUNE 2016. MAGNETIC DECLINATION CALCULATED BY NATIONAL GEOPHYSICAL DATA CENTER.	THRE PARI TAXII TAXII PERI AIRP PREC AIRP
1. 2.	THIS DRAWING SHOULD NOT BE USED AS A STANDARD FOR PLANNING OR DESIGN. TOPOGRAPHICAL INFORMATION BY QUANTUMSPATIAL, JUNE 2016. MAGNETIC DECLINATION CALCULATED BY NATIONAL GEOPHYSICAL	THRE PART TAXIN TAXIN PERI AIRP PREC

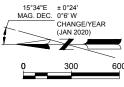




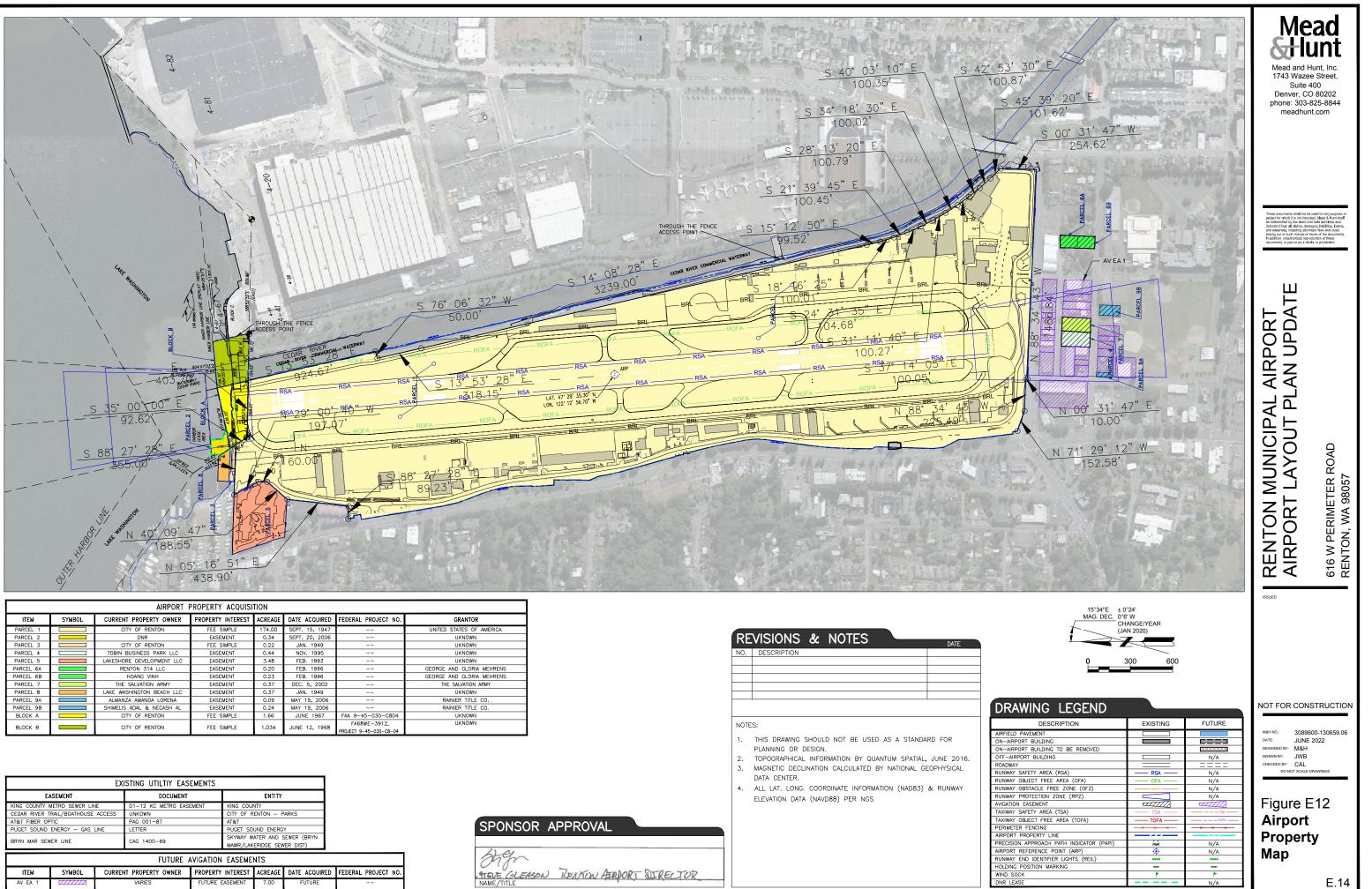


AIRPORT LAND USE					
GENERAL AVIATION					
AIRCRAFT MANUFACTURING					
AIRPORT OPERATION AREA					
OTHER					

-						
	OFF AIRPORT LAND USE					
	COMMERCIAL MIXED USE					
	RESIDENTIAL					
	COMMERCIAL OFFICE RESIDENTIAL					
	EMPLOYMENT AREA					
	AIRPORT OVERLAY ZONES					
•	SOURE : CITY OF RENTON, WA 2022					



DESCRIPTION	EXISTING	FUTURE
RFIELD PAVEMENT		
I-AIRPORT BUILDING		
-AIRPORT BUILDING TO BE REMOVED		*****
F-AIRPORT BUILDING		N/A
ADWAY		====
NWAY SAFETY AREA (RSA)	RSA	N/A
NWAY OBJECT FREE AREA (OFA)	OFA	N/A
NWAY OBSTACLE FREE ZONE (OFZ)		N/A
NWAY PROTECTION ZONE (RPZ)		N/A
IGATION EASEMENT		
XIWAY SAFETY AREA (TSA)	TSA	— TSA
XIWAY OBJECT FREE AREA (TOFA)	TOFA	
RIMETER FENCING	— ×—× —×—	
RPORT PROPERTY LINE		
ECISION APPROACH PATH INDICATOR (PAPI)	PAPI	N/A
PORT REFERENCE POINT (ARP)	٩	N/A
NWAY END IDENTIFIER LIGHTS (REIL)	****	8989
LDING POSITION MARKING	-	-
ND SOCK		
IR LEASE		N/A



AIRPORT PROPERTY ACQUISITION							
ITEM	SYMBOL	CURRENT PROPERTY OWNER	PROPERTY INTEREST	ACREAGE	DATE ACQUIRED	FEDERAL PROJECT NO.	GRANTOR
PARCEL 1		CITY OF RENTON	FEE SIMPLE	174.00	SEPT. 15, 1947		UNITED STATES OF AMERICA
PARCEL 2		DNR	EASEMENT	0.34	SEPT. 20, 2006		UKNOWN
PARCEL 3		CITY OF RENTON	FEE SIMPLE	0.22	JAN. 1949		UKNOWN
PARCEL 4		TOBIN BUSINESS PARK LLC	EASEMENT	0.44	NOV. 1995		UKNOWN
PARCEL 5		LAKESHORE DEVELOPMENT LLC	EASEMENT	3.48	FEB. 1993		UKNOWN
PARCEL 6A		RENTON 314 LLC	EASEMENT	0.20	FEB. 1996		GEORGE AND GLORIA MEHRENS
PARCEL 6B		HOANG VINH	EASEMENT	0.23	FEB. 1996		GEORGE AND GLORIA MEHRENS
PARCEL 7		THE SALVATION ARMY	EASEMENT	0.37	DEC. 5, 2002		THE SALVATION ARMY
PARCEL 8		LAKE WASHINGTON BEACH LLC	EASEMENT	0.37	JAN. 1949		UKNOWN
PARCEL 9A		ALMANZA AMANDA LORENA	EASEMENT	0.09	MAY 19, 2006		RAINIER TITLE CO.
PARCEL 9B		SHIMELIS ADAL & NEGASH AL	EASEMENT	0.24	MAY 19, 2006		RAINIER TITLE CO.
BLOCK A		CITY OF RENTON	FEE SIMPLE	1.66	JUNE 1967	FAA 9-45-030-C804	UKNOWN
BLOCK B		CITY OF RENTON	FEE SIMPLE	1.034	JUNE 12, 1968	FA68WE-3912, PROJECT 9-45-030-C8-04	UKNOWN

EXISTING UTILTIY EASEMENTS					
EASEMENT DOCUMENT ENTITY					
KING COUNTY METRO SEWER LINE	01-12 KC METRO EASEMENT	KING COUNTY			
CEDAR RIVER TRAIL/BOATHOUSE ACCESS	UNKOWN	CITY OF RENTON - PARKS			
AT&T FIBER OPTIC	PAG 001-87	AT&T			
PUGET SOUND ENERGY - GAS LINE	LETTER	PUGET SOUND ENERGY			
BRYN MAR SEWER LINE	CAG 1400-69	SKYWAY WATER AND SEWER (BRYN MAWR/LAKERIDGE SEWER DIST)			

FUTURE AVIGATION EASEMENTS							
ITEM	SYMBOL	CURRENT PROPERTY OWNER	PROPERTY INTEREST	ACREAGE	DATE ACQUIRED	FEDERAL PROJECT NO.	
VEA 1		VARIES	FUTURE EASEMENT	7.00	FUTURE		



