DRAFT ENVIRONMENTAL ASSESSMENT

Newport Municipal Airport Obstruction Removal

City of Newport, Oregon

April 2022

Contents

CHAPTER 1

Purpose and Need

1.1 Introduction

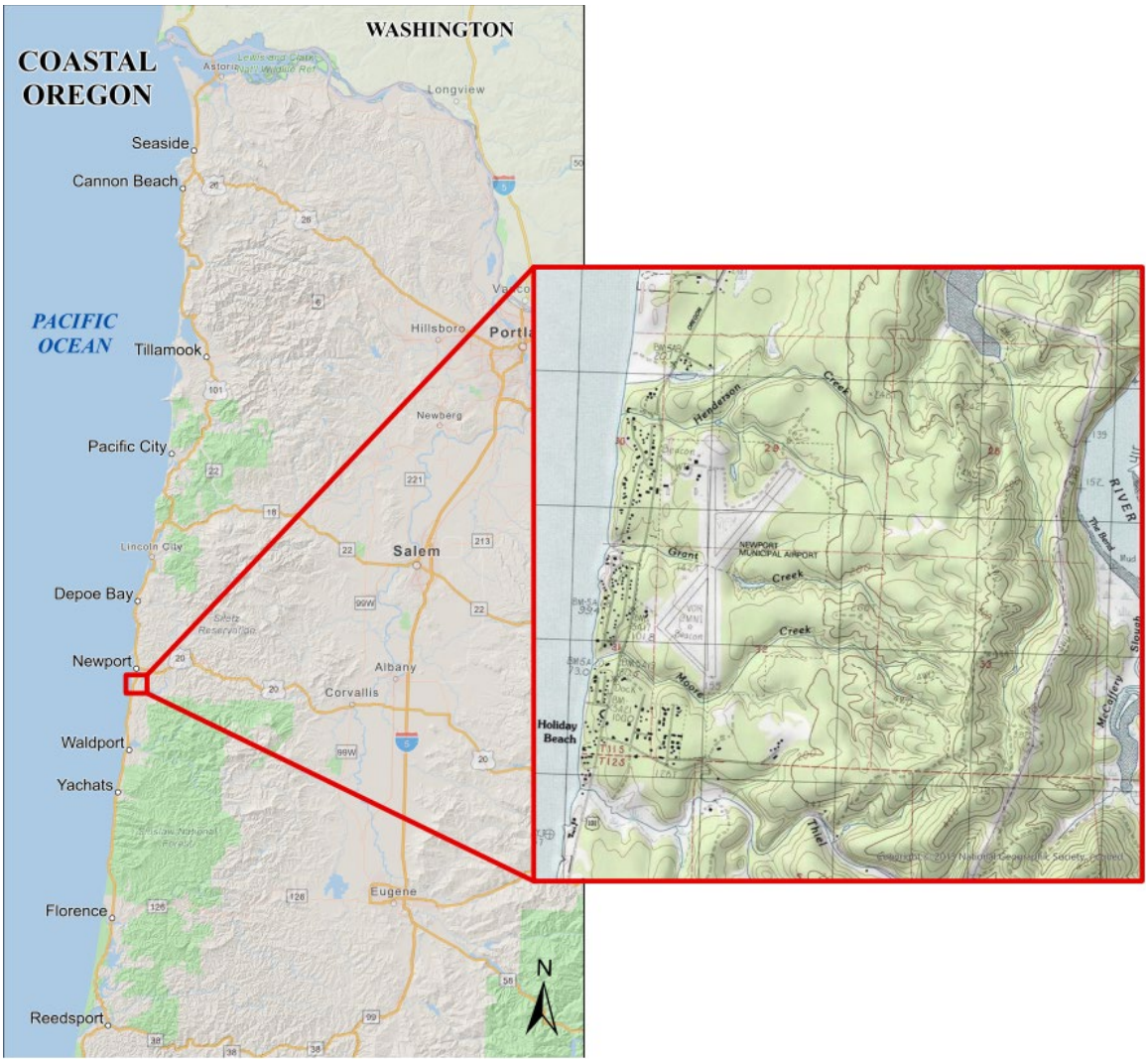
The Federal Aviation Administration (FAA) requested that an Environmental Assessment (EA) be prepared to evaluate the potential impacts of the proposed airport improvements for the Newport Municipal Airport (Airport). The City of Newport (City), owner and operator of the Airport, proposes to remove approximately 60 acres of vegetation and trees that are obstructions to the approach of Runways 16, 20, and 34. Removing these trees and vegetation will allow for a clear approach surface that is described as a slope for a certain distance. For example, a 20:1 slope rises one unit vertically for every 20 units horizontally. The project would provide a clear 50:1 approach surface for Runway 16 for the first 10,000 feet (40:1 for an additional 40,000 feet), 34:1 approach surface for Runway 34, and 20:1 approach surface for Runway 20. The approach surface is critical in allowing aircraft to execute landings in a manner that is safe to the aircraft, nearby environmental resources, residences, and the general public.

This EA was prepared to identify the potential environmental effects associated with the Proposed Action, as well as how any identified impacts can be avoided, minimized, or mitigated. The EA was prepared pursuant to Section 102(2)(c) of the National Environmental Policy Act (NEPA) and the President's Council on Environmental Quality (CEQ) Regulations Title 40 Code of Federal Regulations (CFR) §§ 1500–1508, the implementing regulations for NEPA, as well as in accordance with FAA Order 1050.1F *Environmental Impacts: Policies and Procedures* (FAA 2015) and FAA Order 5050.4B *National Environmental Policy Act Implementing Instructions for Airport Actions* (FAA 2006). This EA is an informational document intended for use by decision-makers and the public. As such, it represents a disclosure of relevant environmental information regarding the Proposed Action for the Newport Municipal Airport Obstruction Removal Project.

The Airport is classified as a General Aviation facility in the National Plan of Integrated Airport Systems (NPIAS) defined by FAA. Since the Airport is part of the NPIAS, the Airport is eligible to receive federal grants under the Airport Improvement Program (AIP). As a condition of receiving AIP grants, the City must accept all conditions and obligations stipulated under the FAA grant assurances.

1.2 Location and Setting

The Airport is located within the Newport city limits, in the South Beach Urban Renewal District, Lincoln County, Oregon. The Airport is bounded by the SW Coast Highway (U.S. Highway 101) on the west, and by undeveloped lands on the north, south, and east. A location and vicinity map for the Airport is provided in **Figure 1**.



Newport Municipal Airport Obstruction Removal

FIGURE 1
VICINITY MAP

The EA study area includes areas where trees are proposed to be removed. This includes trees in the approach areas of Runway 16 and 20 located north of the Airport and the approach area of Runway 34 located south of the Airport.

Henderson Creek flows east to west through the approach areas of both Runway 16 and 20 north of Airport. Tree removal areas are either owned by the City or one private property owner. Access to the area is limited and controlled for airport operations and topography obstructs views of these areas from properties owned by others.

South of Runway 34 is the steeply banked Moore Creek valley that separates the active Airport property from the residential and forested parcels to the south. The topography south of Moore Creek and north of

S.E. 98th Street is predominantly flat. The Pruner subdivision is south of Moore Creek and west of the city owned parcel 11-11-32-00-00200. Thiel Creek parallels S.E.98th Street on the south side of the road. The area south of S.E. 98th Street and east of the City-owned property is either zoned by the County as Timber Conservation or owned by timber companies, and logging the properties is an economic source of revenue. Therefore, the proposed tree removal is not a contrast with the existing land use and associated visual resources or visual character in the surrounding area.

1.3 Airport Existing Conditions and Facilities

The Airport is at an elevation of 160 feet above mean sea level and approximately 700 acres in size. The Airport has an Airport Reference Code of B-II, Runway Design Code (RDC) of B-II, and a critical design aircraft of the Cessna Citation Ultra (CU560) (WHPacific 2018, Airport Layout Plan Datasheet). There are two paved runways at the Airport: Runway 16-34 and Runway 2-20. For Runway 16-34, the RDC has a Runway Visual Range of 4,000 feet to reflect the Instrument Landing System approach with visibility minimums greater than ¾ statute mile. Runway 34 has a non-precision approach with a visibility minimum of greater than 1 statute mile. Runway 2 and 20 have a visual approach. FAA Runway Protection Design Standards for RDC B-II are shown in **Table 1.**

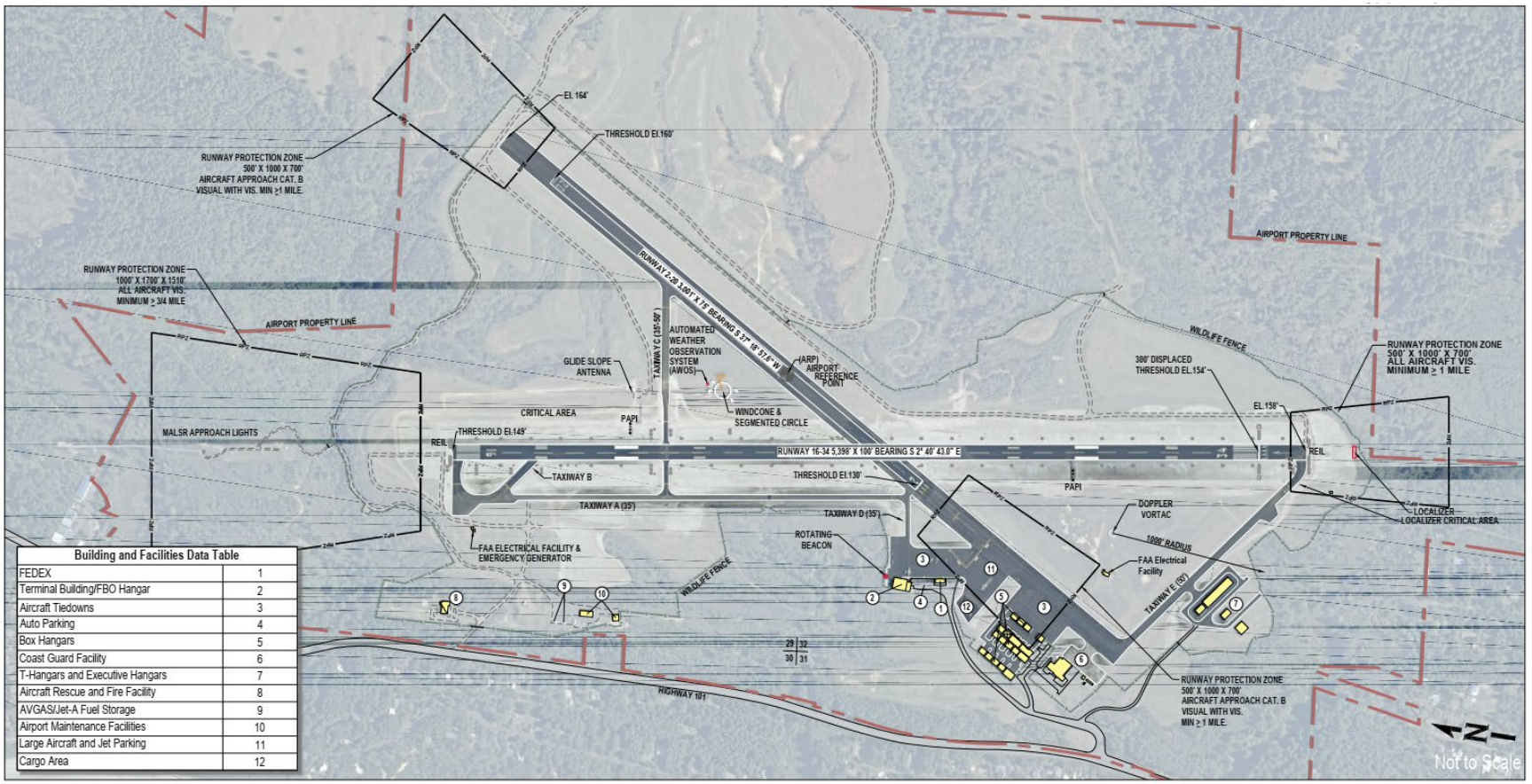
Figure 2 provides an overview of the Airport facilities. Runway 16-34 has a north-south alignment and is 5,398 feet long by 100 feet wide. It supports general aviation aircraft, which includes private and business operators as well as U.S. Coast Guard (USCG) aircraft. It is marked for precision instrument approach, and both runway ends (16 and 34) have four-light Precision Approach Path Indicator lighting. The entire runway is equipped with high-intensity runway edge lighting. Runway 34 has Runway End Identifier Lights. Runway 16 has a Precision Instrument Landing System with a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights, a localizer, and a glide slope antenna with visibility minimums for approach procedures as low as ¾ statute mile.

TABLE 1
FAA RUNWAY PROTECTION DESIGN STANDARDS (RDC B-II)

	Standards		Existing Conditions [a]	
	Visual Approach	**Not Lower than ¾ mile**	**Runway 2-20**	**Runway 16-34**
Runway Safety Area				
Length beyond departure end	300 ft	300 ft	300 ft	300 ft
Length prior to threshold	300 ft	300 ft		
Width	150 ft	150 ft	150 ft	150 ft
Runway Object Free Area				
Length beyond runway end	300 ft	300 ft	300 ft	300 ft
Length prior to threshold	300 ft	300 ft		
Width	500 ft	500 ft	500 ft	800 ft
Runway Obstacle Free Zone				
Length	-	-	200 ft	200 ft
Width	-	-	250 ft	250 ft
Approach Runway Protection Zone				
Length	1,000 ft	1,700 ft	1,000 ft	1,000 ft
Inner width	500 ft	1,000 ft	500 ft	1,510 ft
Outer width	700 ft	1,510 ft	700 ft	1,700 ft
Acres	13.770	48.978	-	-
Departure Runway Protection Zone				
Length	1,000 ft	1,000 ft	1,000 ft	1,000 ft
Inner width	500 ft	500 ft	500 ft	500 ft
Outer width	700 ft	700 ft	700 ft	700 ft

NOTES:
[a] Airport Layout Plan Datasheet (WHPacific 2018)

SOURCE: FAA Advisory Circular (AC) 150/5300-13A *Airport Design* (FAA 2014)



Building and Facilities Data Table	
FEDEX	1
Terminal Building/FBO Hangar	2
Aircraft Tiedowns	3
Auto Parking	4
Box Hangars	5
Coast Guard Facility	6
T-Hangars and Executive Hangars	7
Aircraft Rescue and Fire Facility	8
AVGAS/Jet-A Fuel Storage	9
Airport Maintenance Facilities	10
Large Aircraft and Jet Parking	11
Cargo Area	12

SOURCE: WHPACIFIC 2018

Newport Municipal Airport Obstruction Removal

FIGURE 2
AIRPORT FACILITIES

Runway 2-20 has a northeast-southwest alignment and is 3,001 feet long by 75 feet wide. It is equipped with medium intensity runway edge lighting. Both Runways 2 and 20 are marked for visual approach.

There are five taxiways at the Airport:

- **Taxiway A** provides access to Runway 16, Taxiway B, Taxiway C, and Taxiway D; and runs parallel to Runway 16-34 from Runway 16 to the intersection of the runways and is located on the west side of Runway 16-34.
- **Taxiway B** provides access to Runway 16-34 and Taxiway A, and it intersects Runway 16-34 approximately 500 feet from the Runway 16 threshold.
- **Taxiway C** provides access between Runway 2-20 and Taxiway A, and to the aircraft tie-down areas.
- **Taxiway D** provides access from the apron/tie-down area and Fixed Base Operator to Taxiway A.
- **Taxiway E** provides access to Runway 2 and Runway 34, as well as the USCG building and hangar/tie-down areas.

The Airport also includes an aircraft apron area with 13 tie-downs, several hangars, an Automated Weather Observing System (AWOS), office buildings, Fixed Base Operator, Aircraft Rescue and Fire Facility, and buildings and hangar/tie-down areas for the USCG.

1.4 Airspace

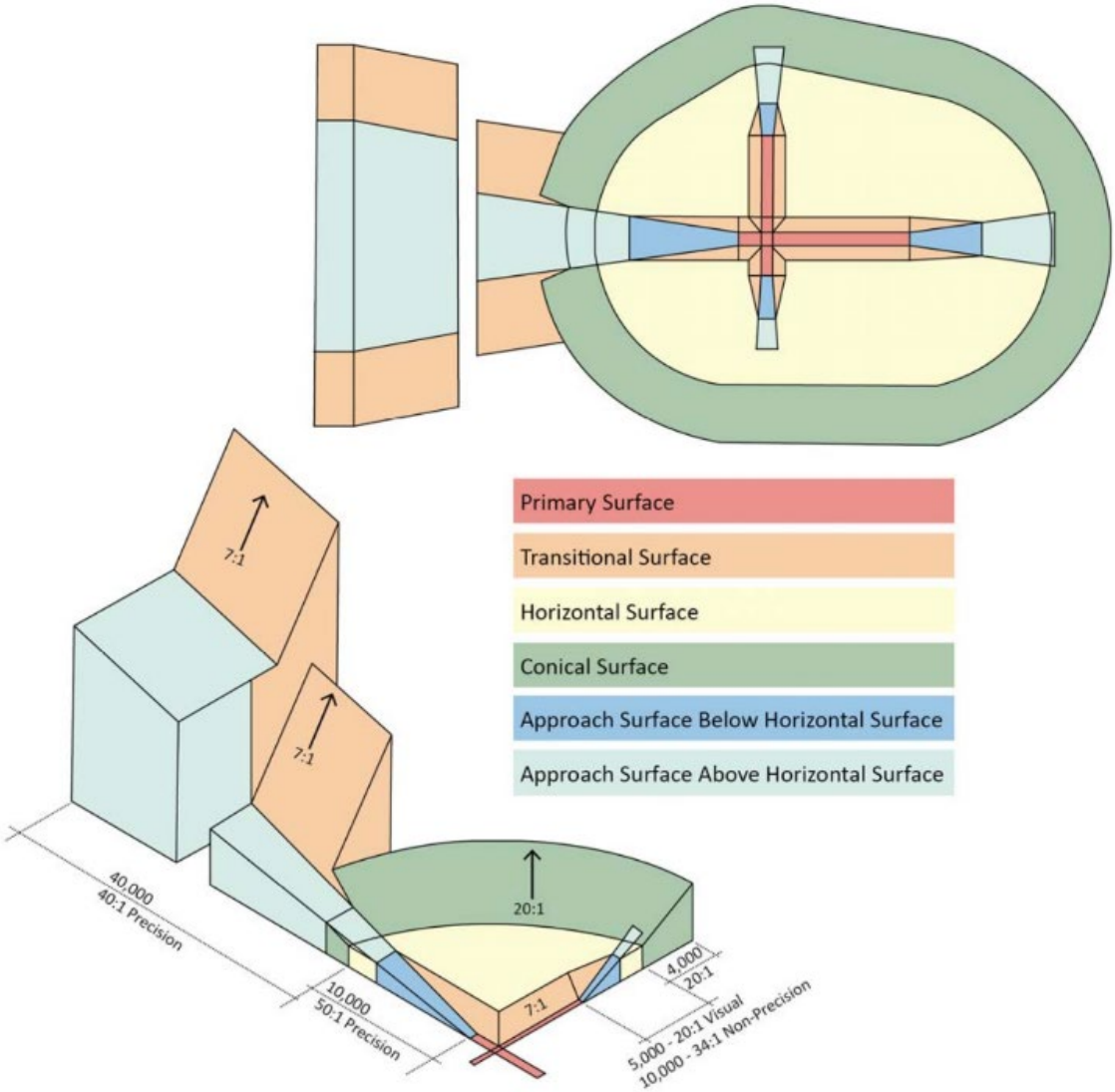
An Airport Geographic Information System (AGIS) survey was conducted as part of the Airport Master Plan Update in 2018 (WHPacific 2018), and the data were used to identify obstructions in the protected airspace around the Airport. A subsequent Light Detection and Ranging (LiDAR) survey confirmed numerous obstructions (trees) penetrating into the protected airspace (Quantum Spatial, Inc. 2019). The obstruction analysis used criteria defined in 14 CFR Part 77 *Safe, Efficient Use, and Preservation of the Navigable Airspace* to identify obstructions.

Federal Air Regulation (FAR) Part 77 defines a complex structure of airport imaginary surfaces, which are established to protect the airspace immediately surrounding airports, associated runways, and designated helicopter landing areas (FAA 2010). The imaginary surfaces are geometric shapes that surround the runways and vary in size and slope depending on the category of the runway. The airspace and ground areas within these imaginary surfaces should be free of obstructions (i.e., structures, parked aircraft, trees, etc.) to the greatest extent possible to provide a safe operating environment for aircraft.

There are five imaginary surfaces: primary, approach, horizontal, conical, and transitional, as graphically depicted in **Figure 3.** Any object that penetrates these surfaces is considered an obstruction and a potential hazard to navigable airspace. A summary of the FAR Part 77 airspace surfaces relevant to this project and the surrounding Newport Municipal Airport (i.e., primary, transitional, and approach surfaces) is described in the following sections.

1.4.1 Primary Surface

The primary surface is a rectangular, flat plane of airspace longitudinally centered on the runway, with the same elevation as the nearest point on the runway centerline. The primary surface at the Airport for Runway 16-34 is 1,000 feet wide and extends 200 feet beyond each runway end, where it connects to the inner portion of the runway approach surfaces. The primary surface for Runway 2-20 is 250 feet wide and extends 200 feet beyond each runway end. The primary surface should be free of any penetrations, except items with locations fixed by function, in which case they shall be mounted on frangible couplings. Based on the AGIS survey data, the primary surfaces for both runways are clear of obstructions; therefore, the Airport currently meets the requirements of FAR Part 77.



SOURCE: WHPacific 2018

Newport Municipal Airport Obstruction Removal

FIGURE 3
FAR PART 77 IMAGINARY SURFACES

1.4.2 Transitional Surface

The transitional surface is located at the outer edge of the primary surface and is represented by a plane rising perpendicularly at a slope of 7:1 to an elevation 150 feet above the airport elevation. The transitional surface connects to the sides of the runway approach surfaces at common elevations. For Runway 16-34, the transitional surface begins 500 feet from the runway centerline, in both directions. For Runway 2-20, the transitional surface begins 125 feet from the runway centerline, in both directions. Based on the AGIS survey data, the transitional surfaces for both runways are clear of obstructions; therefore, the Airport currently meets the requirements of FAR Part 77.

1.4.3 Approach Surface

Approach surfaces are designed to protect the use of the runway in both visual and instrument meteorological conditions near the airport. The approach surface typically has a trapezoidal shape that extends away from the runway along the centerline at a specific slope, expressed in horizontal feet by vertical feet, with a starting point at the runway threshold elevation. The specific size, slope, and starting point of the trapezoid depend on the visibility minimums and the type of procedure associated with the runway end.

The approach surface for Runway 16 is a precision instrument approach surface that rises at a slope of 50:1 for the initial 10,000 feet, then 40:1 for an additional 40,000 feet. The approach surface width beings at 1,000 feet and flares to a width of 16,000 feet at a distance of 50,000 feet. The approach surface for Runway 34 is a non-precision instrument approach surface that rises at a slope of 34:1 and is 1,000 feet wide at the beginning and flares to a width of 3,500 feet at a distance of 10,000 feet. The approach surfaces of both Runways 2 and 20 are visual approach surfaces that rise at a slope of 20:1, are 250 feet wide at the beginning and flares to a width of 1,250 feet at a distance of 5,000 feet. As identified by the AGIS survey data, the approach surfaces of Runways 16, 20, and 34 above have obstructions (trees). These obstructions are proposed to be removed as part of the Newport Municipal Airport Obstruction Removal Project.

The approach surfaces for the Airport are summarized in **Table 2** and shown in **Figure 4.**

TABLE 2
FAR PART 77 APPROACH SURFACES FOR NEWPORT MUNICIPAL AIRPORT

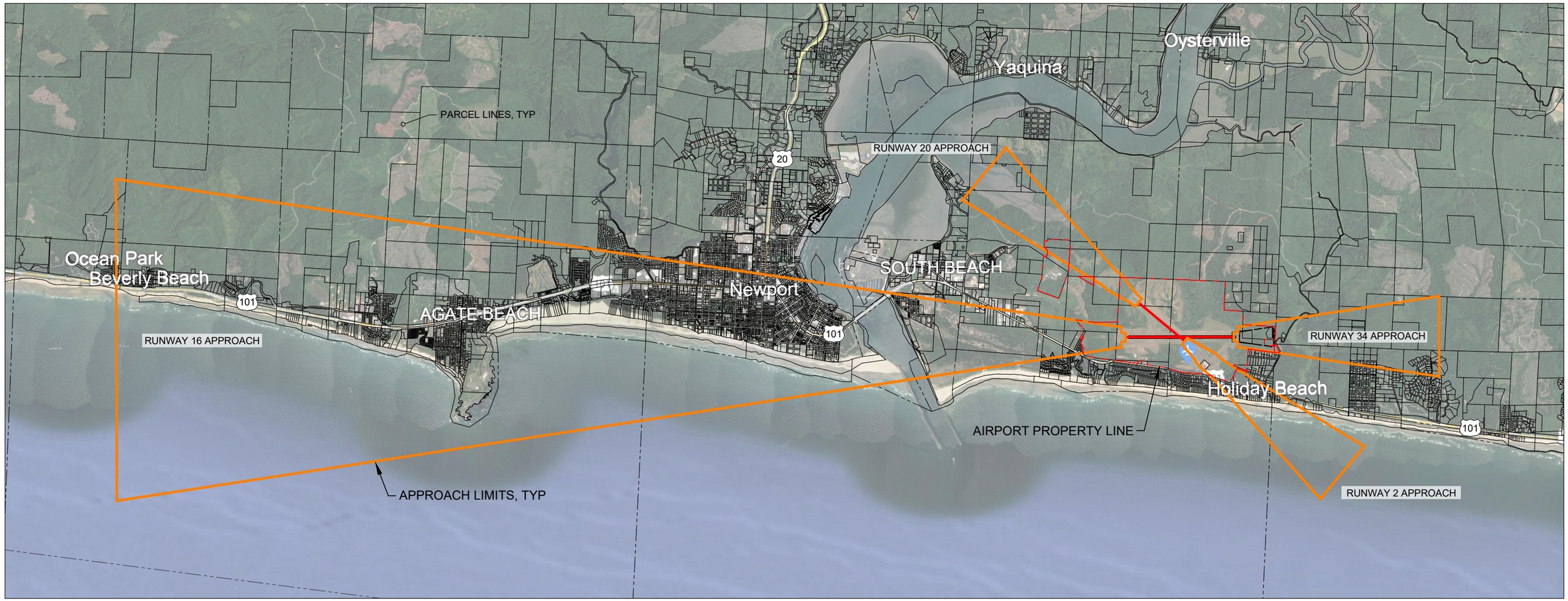
Runway End	Approach Surface Area and Distance
Runway 2 and 20 (visual)	20:1 slope starts 250 feet wide, flares out to 1,250 feet wide at a distance of 5,000 feet.
Runway 34 (non-precision instrument)	34:1 slope starts 1,000 feet wide, flares out to 3,500 feet at a distance of 10,000 feet.
Runway 16 (precision instrument)	50:1 slope for first 10,000 feet then 40:1 for an additional 40,000 feet. Starts 1,000 feet wide, flares to 16,000 feet wide at a distance of 50,000 feet.

SOURCE: FAA AC 150/5300-13A *Airport Design (FAA 2014)*

NORTH

0 2500 5000

SCALE IN FEET



PRELIMINARY
NOT FOR CONSTRUCTION
03/31/2022

PRECISION APPROACH ENGINEERING
5125 Southwest Hout Street
Corvallis, OR 97333
541•754•0043

NEWPORT MUNICIPAL AIRPORT
OBSTRUCTION REMOVAL

APPROACH AREAS

Figure 4 MARCH 2022

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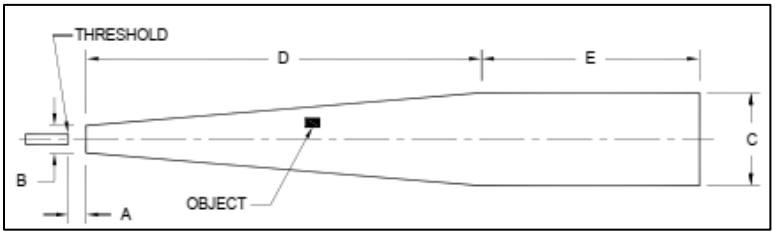
1.5 Threshold Siting Surfaces

Runway thresholds are the markings across the runway that denote the beginning of the runway available for landing. The threshold siting surface defines the approach visibility slope minimums for the runway. A range of threshold siting surfaces have been defined that vary in size and slope depending on the type of instrument approach, approach minimums, and the size of the critical aircraft defined in FAA AC 150/5300-13A *Airport Design* (FAA 2014). These threshold siting surfaces need to be maintained clear of obstructions or the runway threshold may have to be displaced (moved).

The following are the threshold siting surfaces for the runways at Newport Municipal Airport (see **Table 3**):

- Runway 34 – types 3, 5, 6, and 8.
- Runway 16 – types 3, 5, 7 and 8.
- Runway 20 – type 3.

TABLE 3
APPROACH/DEPARTURE STANDARDS TABLE



Runway Type		Dimensional Standards[a] (feet)					Slope/ Obstacle Clearance Surface
		A	B	C	D	E	
3	Approach end of runways expected to serve small airplanes with approach speeds of 50 knots or more. Visual runways only, day/night.	0	400	1,000	1,500	8,500	20:1
5	Approach end of runways expected to support instrument night operations serving greater than approach Category B aircraft.[b]	200	800	3,800	10,000[c]	0	20:1
6	Approach end of runway expected to accommodate instrument approaches having visibility minimums ≥ ¾ but < 1 statute mile, day or night.	200	800	3,800	10,000[c]	0	20:1
7	Approach end of runways expected to accommodate instrument approaches having visibility minimums < ¾ statute mile.	200	800	3,800	10,000[c]	0	34:1

NOTES:

a The letters are keyed to those shown in drawing above.

b Marking and lighting of obstacle penetrations to this surface or the use of a Visual Guidance Slope Indicator may avoid displacing the threshold.

c The actual length of these areas is dependent on the visual descent point position for 20:1 and 34:1 slopes, and Decision Altitude point for the 30:1 slope.

SOURCE: FAA AC 150/5300-13A *Airport Design* (FAA 2014)

1.6 Description of Proposed Action

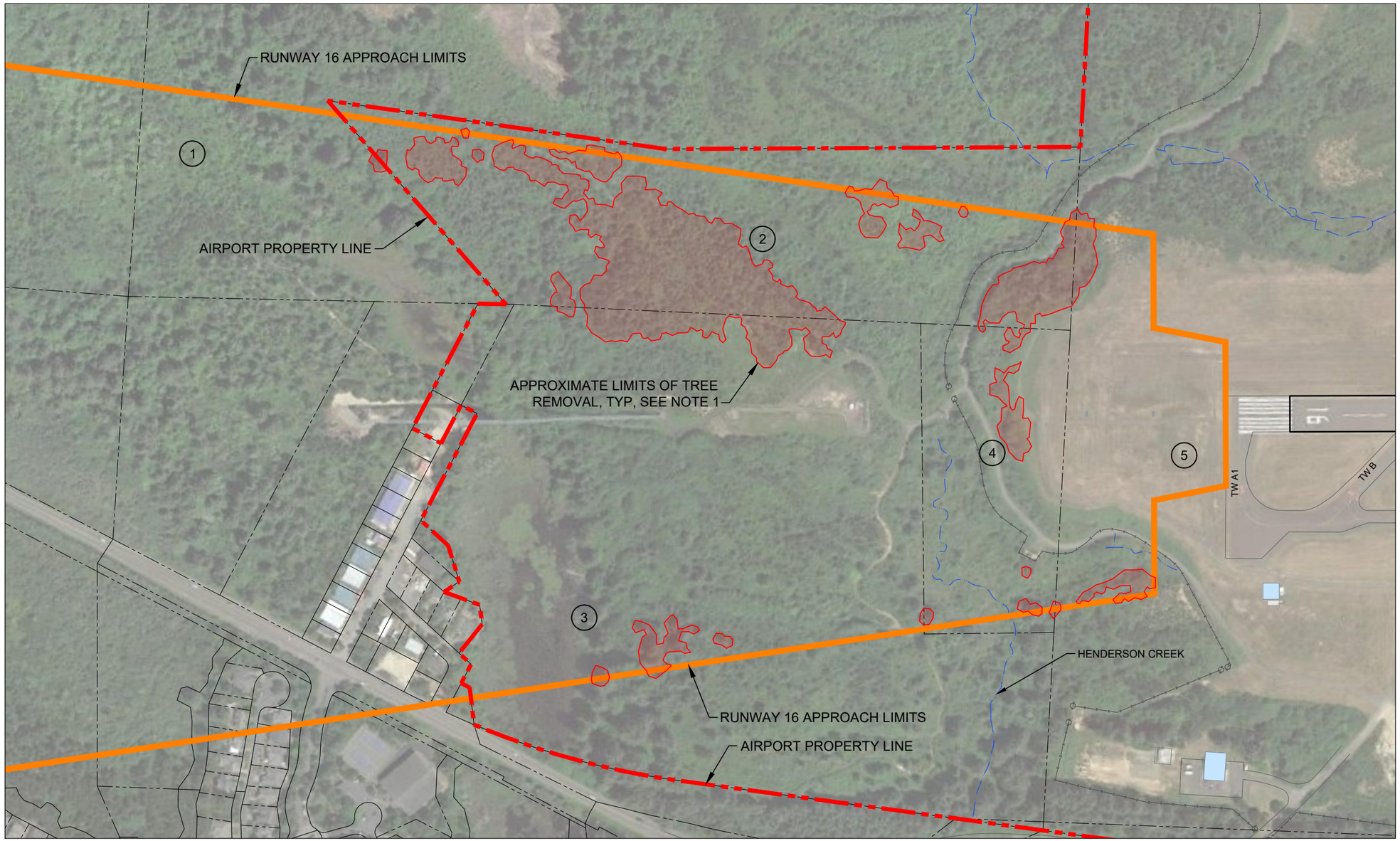
The City of Newport, the owner and operator of the Airport, proposes to remove obstructions (trees) for three runways with varying approach surfaces:

- Visual approach of Runway 20.
- Non-precision instrument approach and threshold siting surfaces of Runway 34.
- Precision instrument approach and threshold siting surfaces of Runway 16.

Areas of trees identified as penetrating the approach and threshold siting surfaces and proposed to be removed are shown on **Figures 5** through **8**.

1.7 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to maintain a safe operating environment for current and future users of the Airport by removing existing approach surface obstructions (trees), thereby improving the safety of aircraft operations, and bringing the Airport into compliance with FAR Part 77 requirements. The Proposed Action is needed because an obstruction analysis produced from the AGIS survey identified multiple airspace penetrations in varying approach surfaces at the Airport. To maintain its status as General Aviation facility in the NPIAS, the Airport needs to meet all conditions and obligations stipulated under the FAA grant assurances. In general, such assurances require the City to operate and maintain the Airport in a safe and serviceable condition, including mitigating hazards to airspace.



NORTH

0 150 300

SCALE IN FEET

TAG	PARCEL ID	OWNER	TREE REMOVAL
1	11-11-29-00-00300-00	LANDWAVES INC	0.04 AC
2	11-11-29-00-00400-00	CITY OF NEWPORT	5.81 AC
3	11-11-29-00-01402-00	CITY OF NEWPORT	1.70 AC
4	11-11-29-00-01401-00	CITY OF NEWPORT	0.50 AC
5	11-11-29-00-01100-00	CITY OF NEWPORT	0.45 AC

NOTES:

1. LIMITS OF TREE REMOVAL SHOWN OUTSIDE OF STUDY AREA REPRESENT CANOPIES OF TREES TO BE REMOVED.

PRELIMINARY
NOT FOR CONSTRUCTION
03/31/2022

PRECISION APPROACH ENGINEERING
5125 Southwest Hout Street
Corvallis, OR 97333
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NEWPORT MUNICIPAL AIRPORT
OBSTRUCTION REMOVAL

RUNWAY 16 OBSTRUCTION REMOVAL AREAS

Figure 5 MARCH 2022

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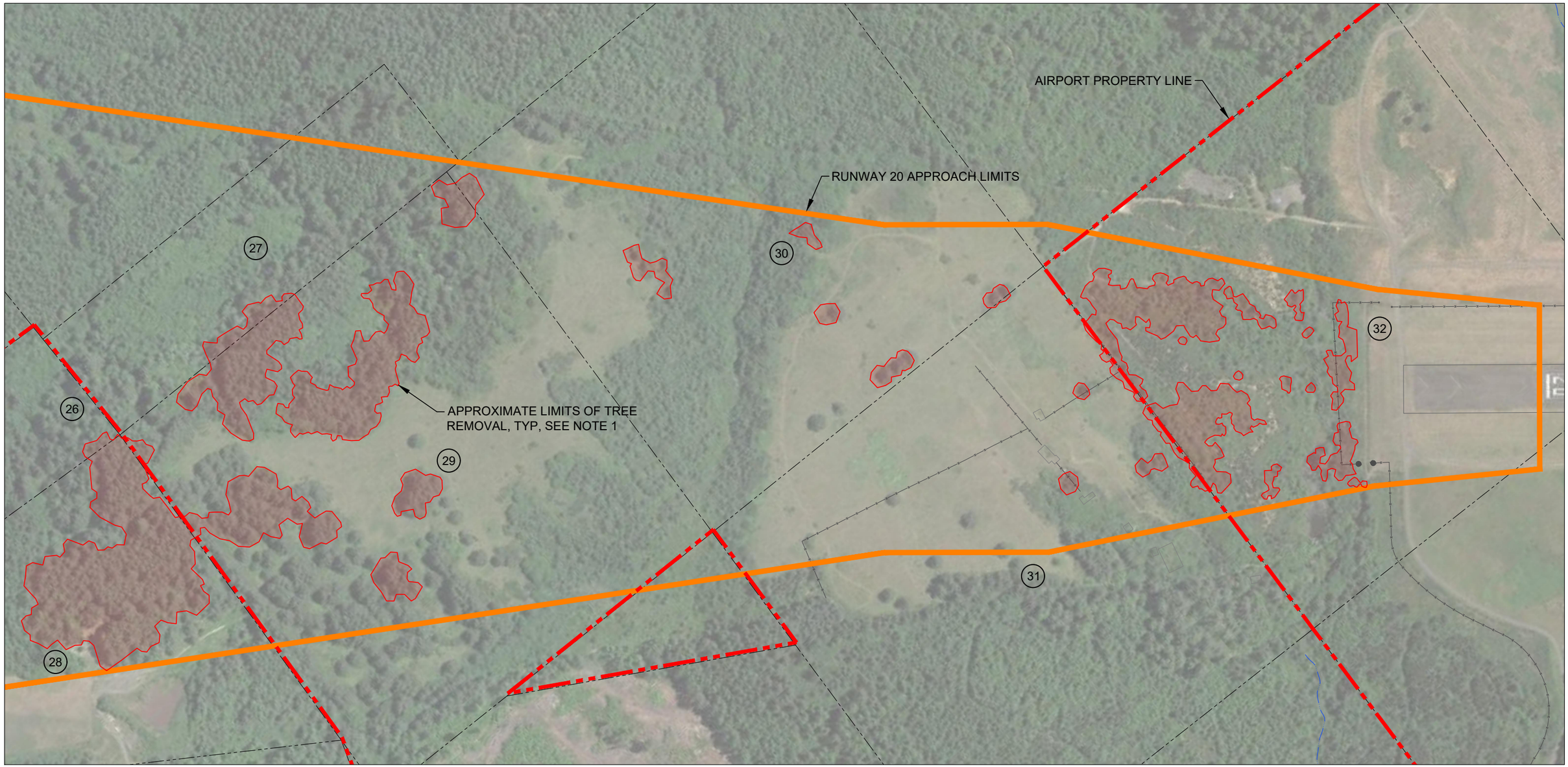

TAG	PARCEL ID	OWNER	TREE REMOVAL
26	11-11-21-00-01600-00	CITY OF NEWPORT	0.06 AC
27	11-11-28-00-00700-00	HALL	0.25 AC
28	11-11-20-00-02700-00	CITY OF NEWPORT	4.80 AC
29	11-11-29-00-00100-00	HALL	5.90 AC
30	11-11-29-00-00600-00	HALL	0.72 AC
31	11-11-29-00-00500-00	HALL	0.54 AC
32	11-11-29-00-01000-00	CITY OF NEWPORT	3.70 AC

NOTES:

1. LIMITS OF TREE REMOVAL SHOWN OUTSIDE OF STUDY AREA REPRESENT CANOPIES OF TREES TO BE REMOVED.

PRELIMINARY
NOT FOR CONSTRUCTION
03/31/2022

NORTH

0 150 300
SCALE IN FEET

PRECISION APPROACH ENGINEERING
5125 Southwest Hout Street
Corvallis, OR 97333
541•754•0043

NEWPORT MUNICIPAL AIRPORT
OBSTRUCTION REMOVAL

RUNWAY 20 OBSTRUCTION REMOVAL AREAS

Figure 6 MARCH 2022

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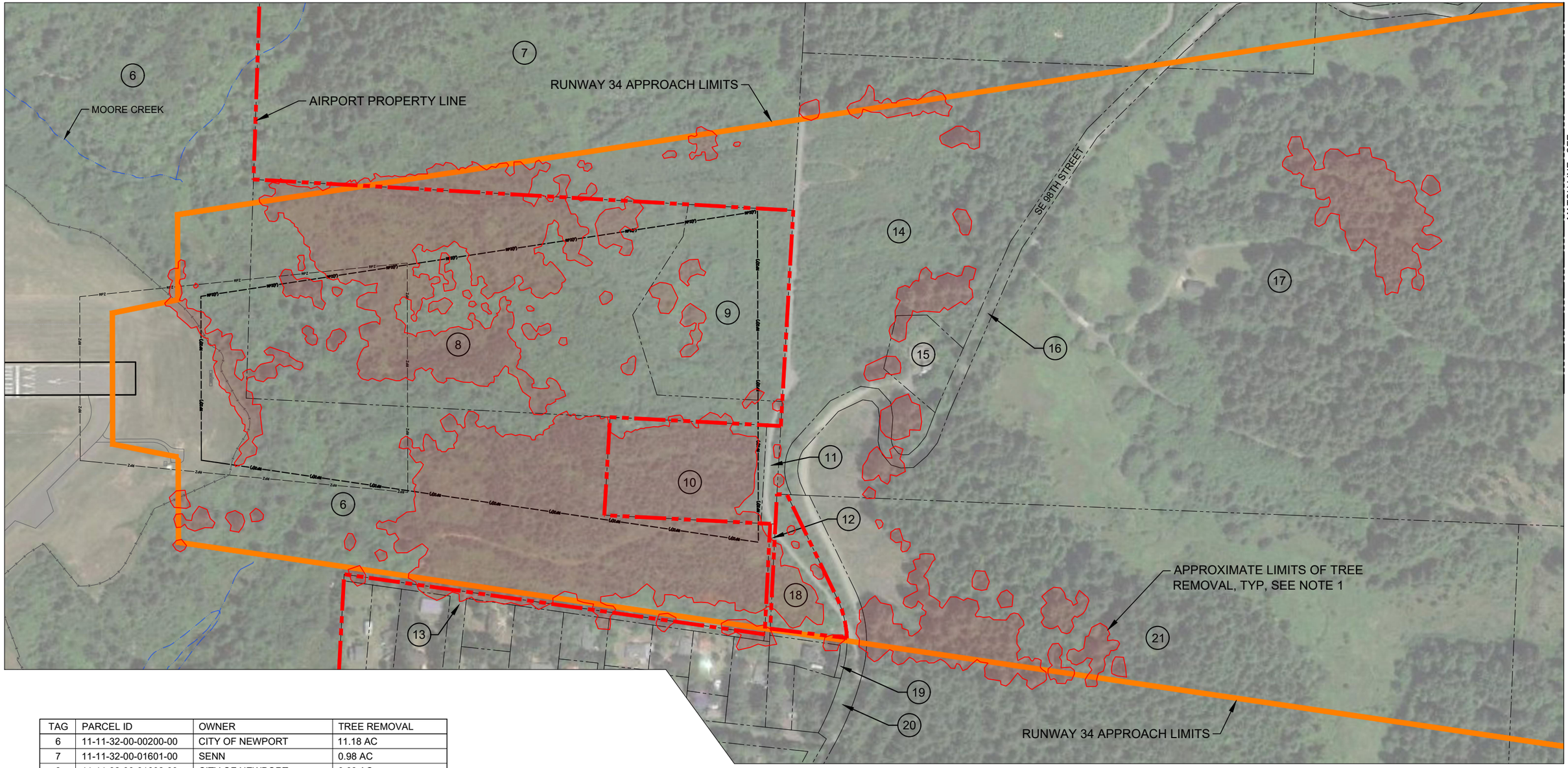

TAG	PARCEL ID	OWNER	TREE REMOVAL
6	11-11-32-00-00200-00	CITY OF NEWPORT	11.18 AC
7	11-11-32-00-01601-00	SENN	0.98 AC
8	11-11-32-00-01602-00	CITY OF NEWPORT	8.68 AC
9	11-11-32-00-01604-00	CITY OF NEWPORT	0.38 AC
10	11-11-32-00-00201-00	STATE OF OREGON	2.80 AC
11	11-11-32-00-01603-00	FERRIS	0.03 AC
12	11-11-32-00-01600-00	LINCOLN COUNTY	0.09 AC
13	11-11-32-CC-0ROAD-00	ROW	0.50 AC
14	12-11-05-00-00800-00	STEEL STRING INC	1.50 AC
15	12-11-05-00-00600-00	STEEL STRING INC	0.11 AC
16	12-11-05-00-0ROAD-00	ROW	0.10 AC
17	12-11-05-00-00803-00	STEEL STRING INC	2.55 AC
18	12-11-06-00-00100-00	CITY OF NEWPORT	0.53 AC
19	12-11-06-00-00200-00	WATTS	0.06 AC
20	12-11-06-00-0ROAD-01	ROW	0.08 AC
21	12-11-06-00-00600-00	STEEL STRING INC	3.03 AC

NOTES:

1. LIMITS OF TREE REMOVAL SHOWN OUTSIDE OF STUDY AREA REPRESENT CANOPIES OF TREES TO BE REMOVED.

PRELIMINARY
NOT FOR CONSTRUCTION
03/31/2022

NORTH

0 150 300
SCALE IN FEET

NEWPORT MUNICIPAL AIRPORT
OBSTRUCTION REMOVAL

RUNWAY 34 OBSTRUCTION REMOVAL AREAS (North)

Figure 7 MARCH 2022

PRECISION APPROACH ENGINEERING
5125 Southwest Hout Street
Corvallis, OR 97333
541•754•0043

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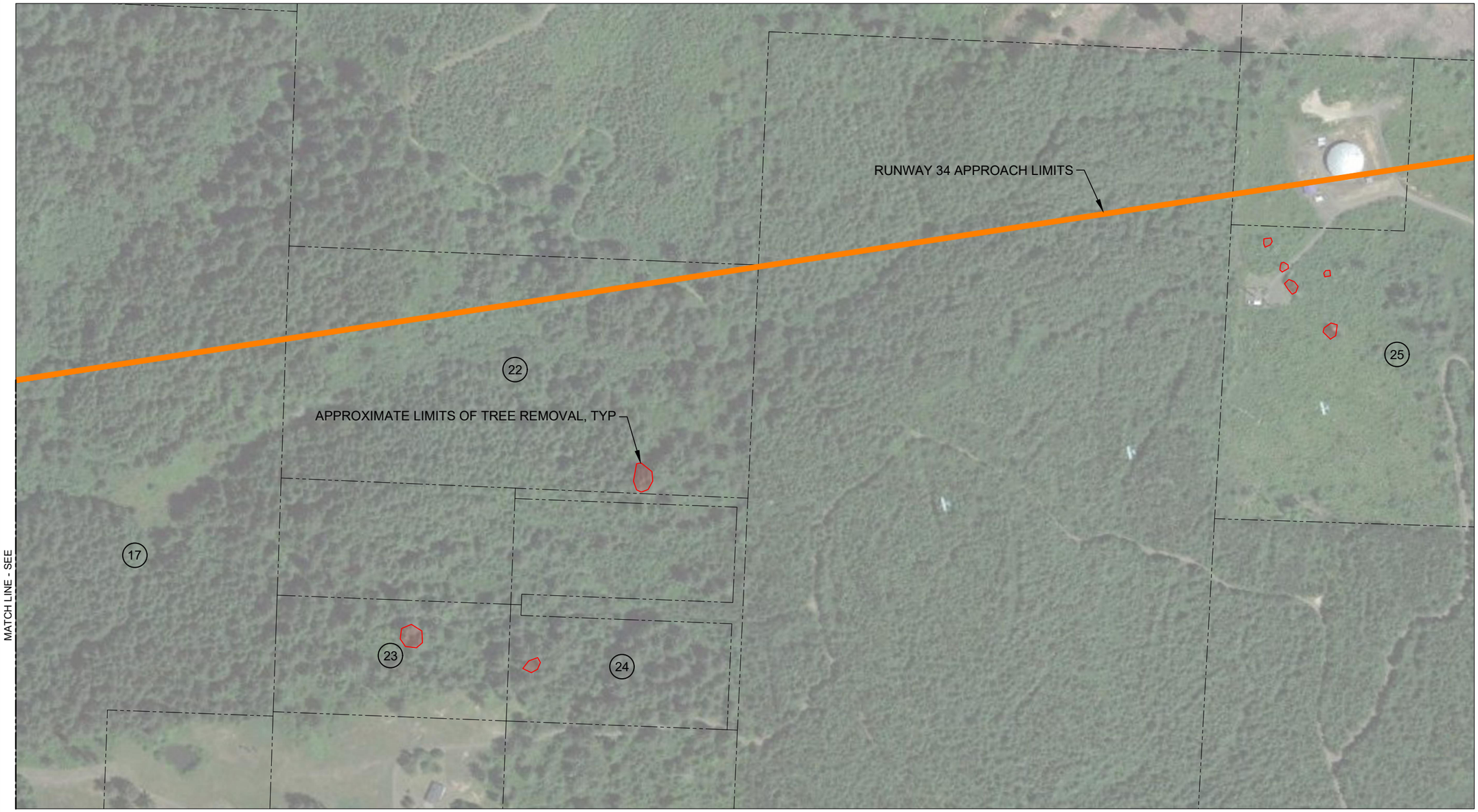

TAG	PARCEL ID	OWNER	TREE REMOVAL
17	12-11-05-00-00803-00	STEEL STRING INC	2.55 AC
22	12-11-05-00-00802-00	WEYERHAEUSER CO	0.08 AC
23	12-11-05-CB-00200-00	STEEL STRING INC	0.08 AC
24	12-11-05-CB-00700-00	STEEL STRING INC	0.03 AC
25	12-11-00-00-03400-00	EMERY INVESTMENTS INC	0.08 AC

PRELIMINARY
NOT FOR CONSTRUCTION
03/31/2022

NORTH

0 150 300
SCALE IN FEET

PRECISION APPROACH ENGINEERING
5125 Southwest Hout Street
Corvallis, OR 97333
541•754•0043

NEWPORT MUNICIPAL AIRPORT
OBSTRUCTION REMOVAL

RUNWAY 34 OBSTRUCTION REMOVAL AREAS (South)

Figure 8 MARCH 2022

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CHAPTER 2

Alternatives

NEPA and FAA Orders 5050.4B and 1050.1F require the consideration of alternatives commensurate with the purpose and need statement. The intent is to evaluate various options that address the recognized need so that potential environmental impacts can be analyzed and compared. This chapter describes the alternatives considered for the Newport Municipal Airport Obstruction Removal Project. It includes a discussion of alternatives that were eliminated because they were determined to be infeasible or not reasonable based on cost, constructability considerations, or impacts on private property owners.

2.1 Alternative Screening Criteria

As part of the alternatives evaluation, an initial screening process was conducted to determine if the alternative satisfies the purpose and need, if the alternative is feasible both in terms of cost and constructability, and if the alternative is prudent or rational when considering impacts on private properties.

Purpose and Need – For an alternative to meet the purpose and need criteria, it must provide improved safety for aircraft during the approach phase of flight and achieve compliance within: (1) the FAR Part 77 approach surface requirements; and (2) AC 150/5300-13A design requirements of threshold siting surfaces.

Cost and Constructability – If an alternative meets the purpose and need, it is evaluated on overall cost and constructability. Several of the obstructions identified in the obstruction analysis are located on private property where the City does not have an avigation easement or right to remove the obstruction.

Private Property Impacts – Impacts on private property, such as how obstruction removal would change or alter landscaping and vegetation, visual conditions, and noise were taken into consideration.

Avigation Easements

Avigation easements refer to a permanent conveyance of airspace, from a property owner to the Airport, granting the Airport the right to remove obstructions from a defined airspace surface and the right to restrict the height of structures, objects, or natural growth and other obstructions. These easements involve appraisals, negotiation with the individual property owner, and acquisition of the perpetual rights to remove existing tree obstructions and prevent future obstructions.

2.2 Alternative 1: No Action Alternative

The No Action Alternative would retain all tree obstructions, with the Airport taking no action to address airspace hazards. The existing trees would continue to remain as penetrations to the FAR Part 77 approach surfaces of Runways 16, 20, and 34 and the AC 150/5300-13A threshold siting surfaces of

Runways 16, 20, and 34. The existing airfield conditions would remain unchanged from the present conditions.

Obstructions (vegetation) in the approach surfaces would remain. Additionally, some vegetation that is currently below the regulated surfaces would continue to grow and likely become future obstructions. The vegetation within the approach surface would continue to pose a hazard to aircraft operations. This would lead to a reduction of the usable runway length in order to maintain a clear approach for aircraft operations and negatively impact the ability of certain aircraft to continue safe operation at the Airport. Future aviation activity could be constrained by the operational limits of the existing Airport facilities and obstructions, and may result in having to make a change in approach procedures based on avoiding object penetrations.

As this alternative would not remove tree obstructions to provide clear airspace, it is not desirable from an aircraft approach and presents hazards in the airspace to the flying public. Additionally, addressing obstructions to the airspace is required by the FAA as part of its grant assurances.

The No Action Alternative has the least potential impact on the environment and effect on property owners. This alternative also has no implementation costs. Airports developed or improved with federal funds are obligated to prevent the growth or establishment of obstructions in the approaches to the airport and take reasonable actions to remove existing obstructions. This requirement is identified and described in the FAA Airport Compliance Manual (FAA Order 5190.6B), which establishes policies and procedures to be followed by public airports (FAA 2009). This requirement is also listed in federal grant assurance *No. 20, Hazard Removal and Mitigation of the Airport Improvement Program*, per Federal Statute 49 United States Code (U.S.C.), Section 47101, that states:

> *"[Airport Sponsors] will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.*"

Although the No Action Alternative fails to meet the purpose and need for the Proposed Action, it must be carried forward for analysis pursuant to CEQ regulations and serves as the baseline for comparison to other reasonable alternatives.

2.3 Alternative 2: Remove Approach and Threshold Siting Surface Obstructions Alternative (Proposed Action)

The Remove Approach and Threshold Siting Surface Obstructions Alternative is intended to eliminate the most critical obstructions while substantially reducing the number of affected properties. The approach surface is critical in allowing aircraft to execute landings in a manner that is safe to the aircraft, nearby environmental resources, residences, and the general public. Under this alternative, obstructions (trees) would be removed from:

- Visual approach and threshold siting surface of Runway 20.

- Non-precision instrument approach and threshold siting surfaces of Runway 34.
- Precision instrument approach and threshold siting surfaces of Runway 16.

Removing these trees and vegetation would allow for a clear 50:1 approach surface for Runway 16 for the first 10,000 feet (40:1 for an additional 40,000 feet), 34:1 approach surface for Runway 34, and 20:1 approach surface for Runway 20, as needed per AC 150/5300-13A to maintain the approach paths for the runways.

The obstructions are located on Airport property as well as other City-owned property, County right-of-way, and private property. As part of this alternative, the City would try and obtain avigation easements on private property. If an aviation easement is not secured on private property, the City would obtain private property owner permission to remove the obstruction(s).

This alternative would remove obstructions on the following private properties:

- **Runway 20:** One tree would be removed from private property. Approximately 7.41 acres of trees would be removed for a property that is zoned Industrial and owned by one owner on four parcels (tax lots 11-11-28-00-700, 11-11-29-00-100, 11-11-29-00-600, and 11-11-29-00-500).
- **Runway 16:** One tree would be removed from a private property (tax lot 11-11-29-00-300), at its south property line. It is possible that this tree is actually on City-owned property and only the canopy of the tree overhangs the property line.
- **Runway 34:**
  - Approximately 0.98 acre of trees would be removed from tax lot 11-11-32-00-1601.
  - Approximately 0.03 acre of trees would be removed from tax lot 11-11-32-00-1603.
  - Approximately 7.3 acres of trees would be removed from property owned by Steel String Inc. (tax lots 12-11-05-00-800, 12-11-05-00-600, 12-11-05-00-803, 12-11-06-00-600, 12-11-05-CB-200, and 12-11-05-CB-700).
  - Approximately 0.06 acre would be removed from tax lot 12-11-06-00-200.
  - Approximately 0.08 acre would be removed from tax lot 12-11-00-00-3400.
  - Approximately 0.08 acre would be removed from tax lot 12-11-05-00-802.
  - Additionally, canopy or limbs of trees to be removed on City property overhang the property line of five properties on SE Cedar Street: tax lots 11-11-32-CC-901, 11-11-32-CC-800, 11-11-32-CC-1600, 11-11-32-CC-1400, and 12-11-06-00-300.

This alternative would remove a total of about 60 acres of trees. The obstruction removal would involve cutting woody vegetation within the identified obstruction areas at ground level and leaving stumps in place. There would be no root removal or grading. Outside of riparian areas (areas within 50 feet of a creek), trees would be felled and hauled off-site using existing roads. No new facilities, roads, or impervious surfaces are proposed as part of the project. Construction access and staging areas would be located on existing disturbed areas, including paved and unpaved airport access roads, private roads, as well as old logging roads and paths (see **Figures 9** and **10**). Some portions of roads may need to be improved to allow logging equipment access.

Alternative 2 meets the purpose and need of the project as it removes all of the current and potential future airspace penetrations in three separate FAR Part 77 approach surfaces at the Airport. It also meets the cost and constructability criteria.

2.4 Alternatives Considered but Eliminated

Data gathered from evaluating the AGIS Survey as part of the Airport Master Plan Update conducted in 2018 (WHPacific) identified obstructions in the protected airspace of both the approach and departure surfaces. The subsequent *KONP Obstruction Analysis Report* (Quantum Spatial, Inc. 2019) identified substantial areas of tree obstructions to the approach and departure surfaces to Runways 16-34 and 2-20 at the Airport. The ideal alternative from an aeronautical standpoint would be to remove all tree penetrations to the protected airspace defined by CFR Title 14, Part 77 *Safe, Efficient Use, and Preservation of the Navigable Airspace*. However, as part of the scoping process, several of the identified obstructions were located on private property where the City does not have an avigation easement or right to remove the obstruction. Further consultation with the FAA determined that removal of all surface penetrations would be cost prohibitive. The FAA instructed the Airport to remove obstructions on surfaces where it is required to maintain existing flight procedures. With this guidance, the most critical surfaces were identified.

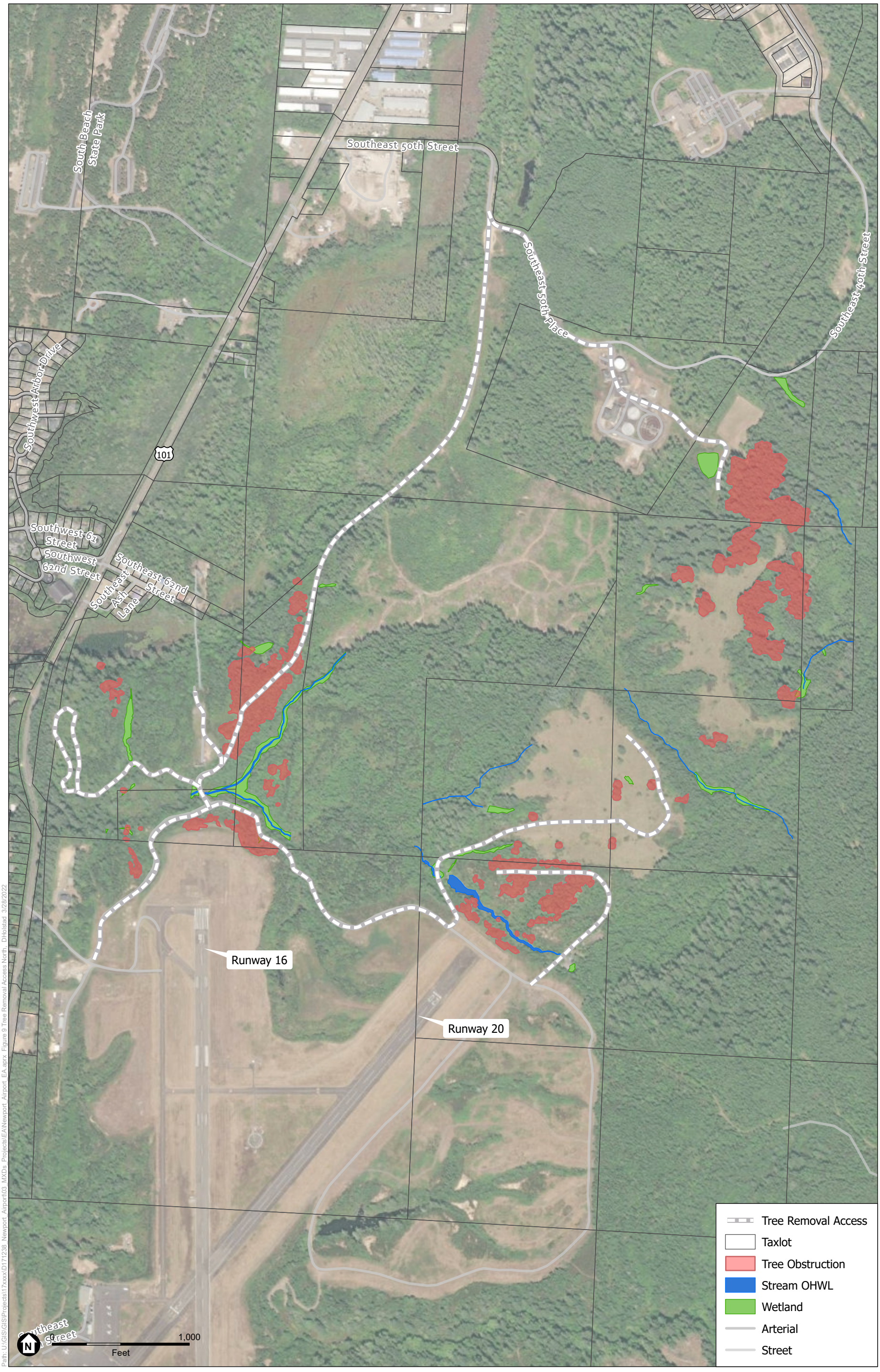
This alternative does not meet the screening criteria and therefore is not carried forward in the EA analysis.

2.5 Proposed Action

Based on the evaluation identified in this chapter, and review by the Airport and FAA, the **Remove Approach and Threshold Siting Surface Obstructions Alternative** has been chosen as the Preferred Alternative for the Airport and is the Proposed Action. This alternative has been identified by the Airport as the most practical solution that balances the Airport's needs and safety while taking into account environmental considerations, minimizing both cost and private property disturbance, and meeting the purpose and need to provide clear airspace and improve compliance with FAA design standards and regulations. The review considered access, ownership, wetlands, and federally listed species and habitat protected under the Endangered Species Act.

2.6 Proposed Action and Estimated Timeframe

The timing for the removal of obstructions is dependent upon securing avigation easements or property owner permission and funding availability. At this time, it is anticipated that obstruction removal would occur in phases, as shown on **Figure 11**. The phasing was based on the following priorities: (1) Precision instrument approach and threshold siting surfaces of Runway 16; (2) Non-precision instrument approach and threshold siting surfaces of Runway 34; and (3) Visual approach of Runway 20. The initial phase could start in late 2022 or 2023.

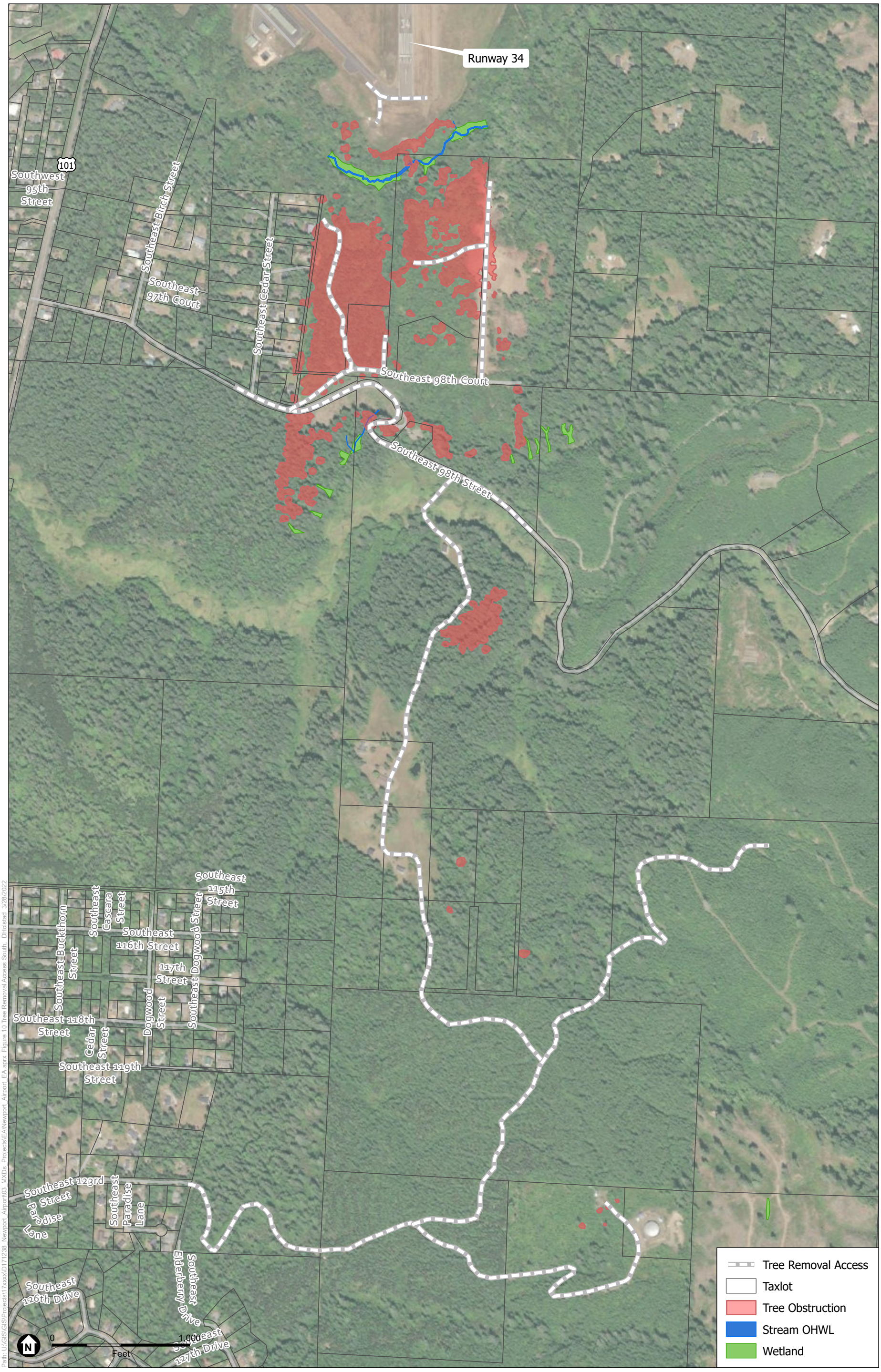


SOURCE: Maxar, 2021; Lincoln County, 2017; Precision Approach, 2021; ESA, 2021.

D171238.00 Newport Airport EA

Figure 9
Tree Removal Access - North
Lincoln County, OR

ESA



SOURCE: Maxar, 2021; Lincoln County, 2017; Precision Approach, 2021; ESA, 2021.

D171238.00 Newport Airport EA

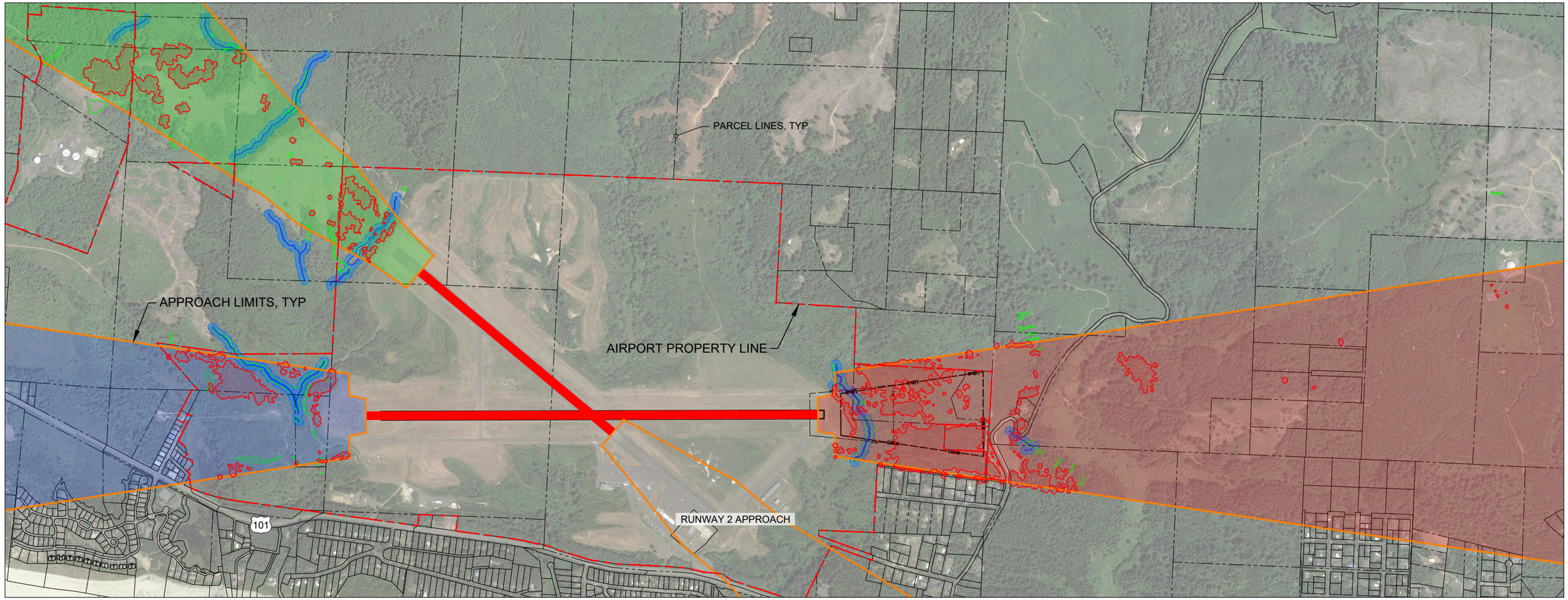
Figure 10
Tree Removal Access - South
Lincoln County, OR

ESA

NORTH

0 600 1200

SCALE IN FEET



PHASING

- PRIORITY 1
- PRIORITY 2
- PRIORITY 3

PRELIMINARY
NOT FOR CONSTRUCTION
03/31/2022

PRECISION APPROACH ENGINEERING
5125 Southwest Hout Street
Corvallis, OR 97333
541•754•0043

NEWPORT MUNICIPAL AIRPORT
OBSTRUCTION REMOVAL

OBSTRUCTION REMOVAL PHASING

Figure 11 MARCH 2022

03/31/22 - 8:27am - BFortenberry - P:\Nnpt011-obstruction removal\0400CADDWG\Sheets\EXH-Site.dwg

CHAPTER 3.

Affected Environment & Environmental Consequences

This chapter analyzes the environmental impacts of the Proposed Action and the No Action Alternative. Each environmental impact category[1] is analyzed by its affected environment, environmental consequences, and mitigation measures, if applicable, to determine if the No Action Alternative or Preferred Alternative would cause any significant impacts.

Baseline data used to determine the affected environment were collected by reviewing existing documentation and databases, consulting with various individuals and agencies, and conducting field investigations. In accordance with FAA Order 1050.1F, each resource was evaluated for direct, indirect, and cumulative impacts. Determination of significant impacts was conducted according to the thresholds of significance identified in FAA Order 1050.1F and companion Desk Reference for Airport Actions, Version 2 (2020).

Environmental impacts are described in terms of direct, indirect, and cumulative impacts. Direct impacts are caused by the proposed project during the time of implementation and at the location of the project. Indirect impacts are reasonably foreseeable and occur as a result of a project but later in time or at a different location. Cumulative impacts result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions.

For comparison purposes, the No Action Alternative is evaluated alongside of the Proposed Action. Although the No Action Alternative does not address any of the existing issues or meet the purpose and need as explained in Chapter 2, CEQ and NEPA regulations require the evaluation of a No Action Alternative. When compared with the Proposed Action, the No Action Alternative serves as a reference point.

3.1 Resources Not Affected

The No Action Alternative and Proposed Action would not affect the resources listed below:

> **Air Quality** – The Airport is in an attainment area for air quality. The project does not include the installation of any emissions sources and would not cause permanent increases in air or local traffic. Removal of the obstructions would not increase the capacity of the Airport or change its operational environment. The construction activities required for the obstruction removal are presumed to conform because these activities would not generate emissions that exceed *de minimis* levels. Emissions generated by construction equipment are negligible considering the

[1] Chapter 4 of FAA Order 1050.F identifies environmental impact categories that may be relevant to FAA actions.

temporary nature of construction activities and the type of equipment (i.e., forestry activities and log transport).

Department of Transportation Act Section 4(f) Resources – There are no publicly owned parks, recreation areas, wildlife refuges, or historic sites where tree removal is proposed.

Farmlands – The Proposed Action does not involve land acquisition or the conversion of agricultural land to Airport use. The areas where trees are proposed to be removed do not contain any soils designated by the Natural Resources Conservation Service (2021) as prime, unique, state, or locally important farmland where trees are proposed to be removed.

Hazardous Materials, Solid Waste, and Pollution Prevention – According to the Oregon Department of Environmental Quality, there are no Leaking Underground Storage Tanks within 1 mile of the proposed tree removal areas; and according to the U.S. Environmental Protection Agency's (EPA) Resource Conservation and Recovery Act (RCRA) Information Database, there are no RCRA Corrective Actions Sites within 1 mile of the proposed tree removal areas (EPA 2022).

Light Emissions – No new or change in light emissions are proposed as part of the project.

Natural Resources and Energy Supply – Construction of the project would require the short-term and minor use of consumable natural resources (e.g., fuels for construction equipment). Removal of the obstructions would not change the consumption of natural gas, electricity, or fuel in the long term.

Socioeconomics, Environmental Justice, and Children's Health and Safety Ricks – The removal of obstructions (trees) would not result in changes in population patterns or growth, disrupt the existing communities or neighborhoods, displace any existing or planned residences or businesses, nor cause any disproportionately high and adverse impacts on minority or low-income populations. The project does not present any risks specific to children's health and safety.

Floodplains – Although there are Federal Emergency Management Agency (2009) mapped floodplains in the study area, no tree removal is proposed in floodplains.

Groundwater –The Proposed Action would not involve grading, the addition of impervious surfaces, or other activities that may affect precipitation infiltration and groundwater recharge.

Public Drinking Water Supplies – Drinking water for the City of Newport is from the Big Creek Reservoir and the Siletz River. Water is used from the Siletz River to supplement supply in the summer. These drinking water sources are outside of the project area. No groundwater wells are located where trees are proposed to be removed.

Wild and Scenic Rivers – There are no rivers on the Nationwide Rivers Inventory or State Scenic Waterways near the study area (National Park Service 2019; Oregon Parks and Recreation Department 2021). The nearest designated Wild and Scenic River is the Elk River located near Port Orford, more than 150 miles from where trees are proposed to be removed.

As the project would not affect these resources, they are not addressed further in this EA. The following sections describe the potential project impacts on the following environmental impact categories: Biological Resources; Climate; Coastal Resources; Historic, Archaeological, and Cultural Resources; Land Use; Noise and Compatible Land Use; Visual Resources; Water Resources; and Cumulative Impacts.

3.2 Biological Resources

Section 7 of the Endangered Species Act of 1973 (16 USC Section 1531, et. seq.) requires federal agencies to examine projects for adverse impacts on federally listed endangered or threatened species. The Migratory Bird Treaty Act (MBTA) of 1918 prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests except as authorized under a valid permit (50 CFR 21.11). The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), prohibits anyone from "taking" bald or golden eagles, including their parts, nests, or eggs. Essential Fish Habitat (EFH) is designated under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1976, which regulates marine fisheries in the U.S. and its territorial seas. The Magnuson-Stevens Act mandates that the National Marine Fisheries Service (NMFS) must identify EFH for federally managed marine fish.

3.2.1 Affected Environment

Land Cover, Habitat Types, and Wildlife

Obstruction removal areas are situated on steep terrain in the foothills and headlands of the Central Oregon Coast Range. The steep and diverse topography of the study areas is influenced by the drainages of four streams (Henderson, Grant, Moore, and Theil creeks) that flow west through these areas and into the Pacific Ocean. As a result, the topography is characterized by ridgelines and steep drainages. Elevations in the areas range from 16 feet to 380 feet above mean sea level. The lowest elevations in these study areas are located at the bottom of drainages that flow into one of the four streams.

The temperate rainforest of the area has been significantly altered over the last 25 years. Alterations in and adjacent to obstruction removal areas have influenced the presence, location, and boundaries of habitat types include logging, grading, leveling, building and road construction, and drainage to control naturally occurring hydrology. In areas that have been historically disturbed, the second-growth forests and shrub layers have very dense vegetation.

The habitat north of Runway 16 consists of shrubland, forested terraces and hillslopes, and riparian habitat. The forests in this area consist of mid-seral / mid-structural, thinned stands of western hemlock and Sitka spruce. The understory is dense and consists of salal, evergreen huckleberry, and sword fern. Significant development occurred in the area north of Runway 16 between 2003 and 2005 where extensive vegetation was cleared from an area roughly 150 feet wide by approximately 2,000 feet long north from the edge of pavement of Runway 16 to install a series of towers, lights, and flight navigational aids (**Photo 1)**. As part of the construction, access roads and staging areas were developed that altered and fragmented habitat.

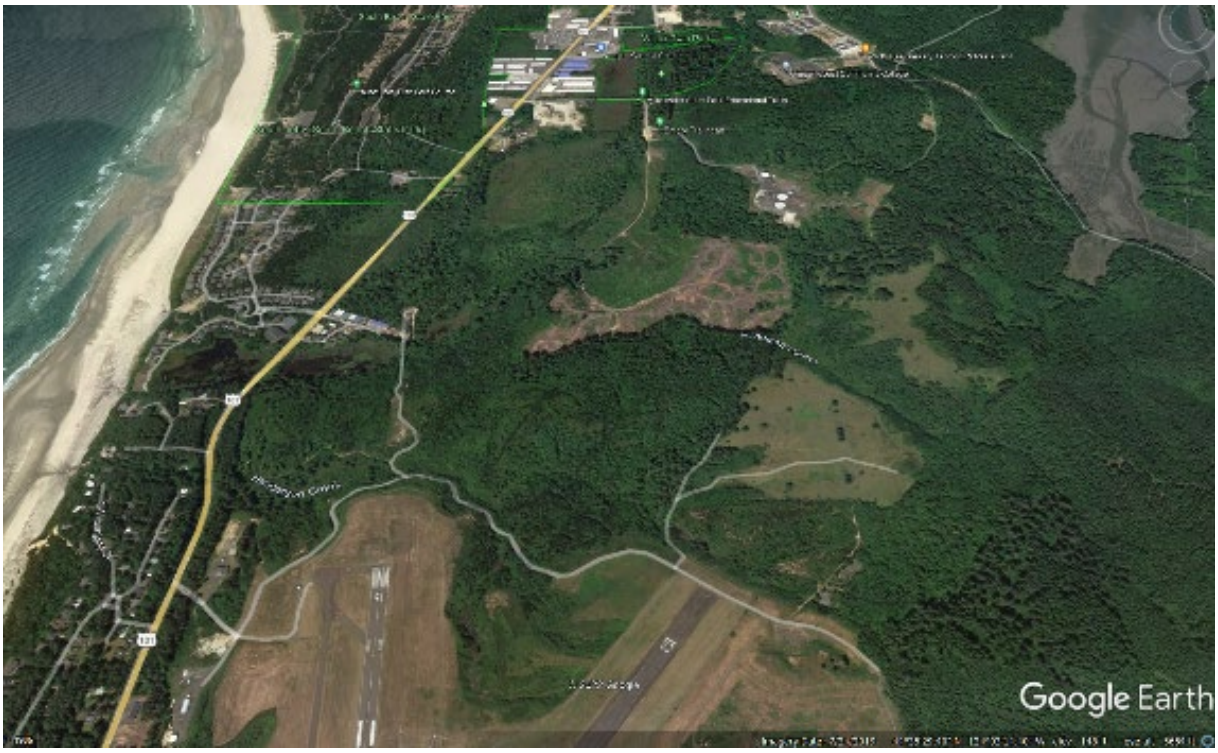


Photo 1
Overview of habitats north of Runway 16 and Runway 20

The area north of Runway 20 was clearcut between 1994 and 2000 and subsequently managed as pasture for livestock (**Photo 1**). There is also a large area for surface application of treated wastewater effluent from City of Newport Public Works wastewater treatment facility. These changes have substantially altered the habitat types and wildlife usage in this location.

Residential development and logging have altered the habitat south of Runway 34. Between 1994 and 2000, most of tax lot parcels 11-11-32-00-01601 and 1602 were clearcut to clear the Runway Protection Zone. Several access roads and staging areas were also constructed in this area during this time. Clearcutting has also occurred on tax lot parcel 12-11-05-00-00600. The clearcutting activity removed most of the area's vegetated cover and caused erosion in some places. Scotch broom quickly colonized this area after harvest. Today, this area consists of young Douglas fir trees with some alders and willows as well as Scotch broom (**Photo 2**). Trees range in height from 20 to 50 feet, with most of the trees between 35 and 45 feet high (Quantum Spatial, Inc. 2019). Adjacent wooded areas on City property are young mixed deciduous/coniferous trees that are generally 40 to 50 feet high. A couple of the trees in this area are 90 feet high but are isolated.

Photo 2
Young Douglas fir trees on City property, south of Moore Creek and north of SE 98th Street

The habitat south of S.E. 98th Street on private lands consists of conifers that exceed 100 feet in height (Quantum Spatial, Inc. 2019) and are generally larger than 15 inches in diameter at breast height (dbh) with some exceeding 25 inches dbh. The forest in this area south of Thiel Creek is characterized by mid-successional to late-successional with varying densities of undergrowth. Trees on the approximate 2.5-acre patch of trees proposed for removal on Steel String property (tax lot parcel 12-11-05-00-00803-00) range in height from 113 to 189 feet (Quantum Spatial, Inc. 2019). The forest on this parcel has some late-successional characteristics, but has a sparse shrub and subcanopy layer with few snags and pieces of large downed wood (**Photo 3**).

Photo 3
Typical mature conifer forest in the area south of SE 98th Street

The forest on Weyerhaeuser property (tax lot parcel 12-11-05-00-00802-00) is typified by large Sitka spruce trees with a dense shrub layer (**Photo 4**). The trees proposed for removal on Emery Investments Inc. property (tax lot parcel 12-11-00-00-03400-00) property adjacent to the Seal Rock water tower **(Photo 5)** are isolated.

Photo 4
Typical large spruce on Weyerhaeuser property

Photo 5
Isolated tall trees proposed for removal adjacent to the Seal Rock water tower

As habitats have been altered over the years, wildlife species that occupy them have also changed. On the north end of the Airport, wildlife most likely to occupy these areas are those tolerate human disturbance or growing urban areas, such as songbirds, woodpeckers, mule deer, coyote, fox, porcupine, raccoons, weasels, and rodents. South of the Airport (south of S.E. 98th Street), habitats would support species that are not as tolerant of humans and inhabit forested habitats such as bald eagle, elk, black bear, bobcat, mountain lion, and others.

Species and Critical Habitat Protected Under the Endangered Species Act

Table 4 shows species listed under the Endangered Species Act by the U.S. Fish and Wildlife Service (USFWS) and NMFS that may occur within the vicinity of the obstruction removal areas or be impacted by construction activities.

Listed Birds and Mammals

Listed birds with the potential to occur in the study area and vicinity include the marbled murrelet and northern spotted owl. Habitat requirements for marbled murrelets and northern spotted owls include a multi-layered, multi-species canopy with moderate to high canopy closure. Occupied marbled murrelet breeding behavior

Occupied vs Contiguous Habitat

Occupied marbled murrelet habitat is defined as habitat that has been surveyed to protocol and breeding behavior has been observed. The current protocol was developed by the Pacific Seabird Group (Evans Mack et al. 2003) and relies on a series of standardized audio-visual surveys. A revised survey protocol is under development (Oregon Department of Fish and Wildlife [ODFW] 2021).

Contiguous habitat is habitat adjacent to occupied habitat that is similar in structure. Contiguous habitat is considered to be occupied by breeding murrelets. even when it has not been surveyed to protocol or breeding behavior has been observed.

TABLE 4
SPECIES AND CRITICAL HABITAT THAT COULD OCCUR IN THE VICINITY OF THE PROPOSED ACTION

Species Name (Scientific Name)	Federal Status	Critical Habitat	Suitable Habitat?
Birds			
Marbled murrelet (*Brachyramphus marmoratus*)	Threatened	Critical habitat areas were originally **Designated** in 1996, revised in 2011, and finalized in 2016 (81 Federal Register [FR] 51348). The study area is not within designated critical habitat. The nearest designated critical habitat is located approximately 0.5 mile east of the southern part of the study area.	Yes, on Weyerhaeuser land, tax lot parcel 12-11-05-00-00802-00.
Northern spotted owl (*Strix occidentalis caurina)*	Threatened	Critical habitat areas were **Designated** in 1992, revised in 2008, and again in 2012 (77 FR 71876). The study area is not within designated critical habitat. The nearest proposed critical habitat is located approximately 2 miles east of the southern part of the study area.	Potential suitable habitat presumed present south of Thiel Creek based on murrelet survey (Weyerhaeuser 2021).
Mammals			
Pacific marten *(Martes caurina)*	Proposed Threatened	Critical habitat areas were **Proposed** on October 25, 2021 (86 FR 58831). The study area is not within designated critical habitat. The nearest proposed critical habitat is the same area designated as critical habitat for the northern spotted owl, located approximately 2 miles east of the southern part of the study area.	Potential suitable habitat presumed present south of Thiel Creek based on murrelet survey (Weyerhaeuser 2021).
Fish			
Oregon Coast Coho Salmon Evolutionarily Significant Unit (*Oncorhynchus kisutch)*	Threatened	Critical Habitat was **Designated** on February 16, 2000 (65 FR 7764). Thiel Creek is designated as critical habitat.	Yes, Thiel Creek.

SOURCE: Oregon Biodiversity Information Center (ORBIC) 2019; USFWS 2021; NMFS 2021

(flight at canopy height) was observed on Weyerhaeuser land south of S.E. 98th Street on tax lot parcel 12-11-05-00-00802-00 during 2021 protocol surveys (Weyerhaeuser 2021). Based on guidance from the USFWS, adjacent or contiguous habitat that is similar in structure is also considered occupied habitat. Consequently, adjacent forested habitat on the Steel String property (tax lot parcels 12-11-05-00-00803-00; 12-11-05-CB-00200-00, and 12-11-05-CB-00700-00) is considered contiguous habitat. There are no documented occurrences of northern spotted owl in or near where trees are proposed to be removed (ORBIC 2019). Weyerhaeuser surveyed for northern spotted owls according to protocol in the spring and summer of 2021 on tax lot parcel12-11-05-00-00802-00 (the same parcel where marbled murrelets were detected), but no northern spotted owls were seen or heard (Hane, pers. comm, 2021).

While the study area contains mature trees, it is primarily a second-growth forest, which is not a preferred habitat for northern spotted owls or marbled murrelets. The occurrence of northern spotted owls and

marbled murrelets is likely limited to transient birds flying over the area to suitable habitats. There are no documented occurrences of either northern spotted owls or marbled murrelets in the area where trees are proposed to be removed (ORBIC 2019).

There are no documented occurrences of Pacific marten in the vicinity of where trees are proposed to be removed (ORBIC 2019). The nearest population of Pacific marten is expected to occur in the Siuslaw National Forest over 2 miles east of the southern portion of the study area. The Siuslaw National Forest is proposed critical habitat for the Pacific marten and is considered the northernmost distribution of coastal martens in Oregon (86 FR 58831).

The Section 7 consultation process under the Endangered Species Act is underway for marbled murrelet, northern spotted owl, and Pacific marten. Consultation will be finalized prior to the FAA's environmental decision and publishing of the Final EA. The USFWS review and effects determination for all three of the terrestrial listed species will be included in their Biological Opinion.

Listed Fish

Several small tributaries of the Pacific Ocean flow across the study area and vicinity: Henderson Creek, Grant Creek, Thiel Creek, and Moore Creek. Thiel Creek is the only stream mapped as critical habitat for federally listed Oregon Coast Coho salmon. Coho salmon are present in Thiel Creek and at low numbers in Henderson Creek, but have not been observed in Moore Creek or Grant Creek (Spangler, pers. comm. 2021).

Essential Fish Habitat

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. The Pacific Fishery Management Council has designated EFH for the Pacific salmon fishery, federally managed ground fishes, and coastal pelagic fisheries (2014). Both Henderson Creek and Thiel Creek are considered EFH for coho salmon. EFH for Pacific Coast groundfish and Coastal Pelagic species is not present in the study area.

Migratory Birds

The USFWS IPaC tool (i.e., Information for Planning and Consultation; USFWS 2021) identified the following list of Birds of Conservation Concern protected under the MBTA that potentially occur in the vicinity of the Proposed Action:

- Black oystercatcher
- Black turnstone
- Clark's grebe
- Evening grosbeak
- Lesser yellowlegs
- Marbled godwit
- Olive-sided flycatcher
- Rufous hummingbird
- Short-billed dowitcher
- Wrentit

There is no suitable habitat where trees will be removed for the black oystercatcher, black turnstone, lesser yellowlegs, marbled godwit, and short-billed dowitcher, as these are all shorebirds.

Clark's grebe is a transient species in the study area. In winter, Clark's grebes are found mostly on saltwater bays. During the breeding season, they prefer freshwater wetlands with a mix of open water and emergent vegetation. According to IPaC, the probability of presence in the study area is from mid-April through early May.

Evening grosbeak breed in coniferous and mixed forests, and are often associated with spruce and fir. Their probability of presence in the study area is May/early June. They breed from May through August.

Olive-sided flycatchers are generally associated with open forests, often near water and with tall, prominent trees or snags. They may use open, mature coniferous forest, forested riparian areas, forest openings (e.g., burns, harvested forest), and forest edges. They prefer hemlocks or true firs for nesting and require abundant insects for prey.

Rufous hummingbird breeds in open or shrubby areas. According to IPaC, their probability of presence where trees will be removed is February through July.

Wrentit is a year-round resident in coastal scrub habitats.

Bald and Golden Eagles

Eagles and eagle nests were surveyed for during the wetland delineation and upon subsequent field visits. No eagles or nests were seen. Eagle nest locations were discussed at agency meetings, and none were known to occur in the vicinity of the Airport. Additionally, there are no recorded eagle nests in the area (ORBIC 2019).

3.2.2 Environmental Consequences

Significance Threshold

Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance threshold for biological resources (including fish, wildlife, and plants). A significant impact on biological resources would occur when:

> *The USFWS or the NMFS determines that the action would be likely to jeopardize the continued existence of a Federally-listed threatened or endangered species, or would result in the destruction or adverse modification of federally-designated critical habitat.*

The FAA has not established a significance threshold for non-listed species.

In addition to the above threshold, FAA Order 1050.1F outlines additional factors to consider in evaluating the context and intensity of potential environmental impacts for biological resources, including situations in which a proposed action would have the potential for:

- A long-term permanent loss of unlisted plant or wildlife species, i.e., extirpation of the species from a large project area (e.g., a new commercial service airport).
- Adverse impacts on special status species (e.g., state species of concern, species proposed for listing, migratory birds, bald and golden eagles) or their habitats.

- Substantial loss, reduction, degradation, disturbance, or fragmentation of native species' habitats or their populations.

- Adverse impacts on species' reproductive success rates, natural mortality rates, non-natural mortality (e.g., road kills and hunting), or ability to sustain the minimum population levels required for population maintenance.

Alternative 1 – No Action

No tree obstruction removal would occur with this alternative; therefore, there would be no impacts on land cover, habitats, wildlife; federally listed species, designated critical habitat, or EFH; MBTA protected species; or bald and golden eagles.

Alternative 2 – Proposed Action

Land Cover, Habitat Types, and Wildlife

The proposed obstruction removal would clear approximately 60 acres (8.5 acres from the approach area of Runway 16, 16 acres from the approach area of Runway 20, and 32.5 acres from the approach area of Runway 34). A summary of tree removal by habitat is provided in **Table 5**.

TABLE 5
HABITAT IMPACTS

Runway End	Mid- to Late-Successional Forest	Young Forest	Riparian Habitat [a]	TOTAL
	ac	ac	ac	ac
Runway 16	0.0	8.4	0.0	8.5
Runway 20	0.0	15.4	0.5	16
Runway 34	9.2	22.9	0.4	32.5
TOTAL	**9.2**	**46.7**	**0.9**	**57.0**

NOTES:
[a] Riparian habitat is defined as habitat within 50 feet of the ordinary high water line (OHWL).

The areas surrounding the project would be subject to increase noise from construction equipment and activities during tree removal. Wildlife would be disturbed by this increase in noise and human activity and would most likely avoid these areas until construction is completed. This could disrupt breeding activities for some individuals. Habitat modification could cause a change in the species that currently use the habitat and how it is used (indirect effect).

Tree removal has the potential to disturb soils (direct impact) and provide the opportunity for nonnative species (such as Scotch broom) to colonize and outcompete native species (indirect impact). After tree removal, soils would be stabilized with an appropriate seed mix (which may include sterile grass or a native upland forest herbaceous mix) immediately and inter-planted by the next growing season with native shrubs or short-statured trees such as vine maple, red-osier dogwood, cascara, and Douglas hawthorn (i.e., if trees are removed in the late summer/early fall, soil stabilization would occur that same fall, and inter-planting would be accomplished the following spring). This would minimize the

opportunity for nonnative species to become established and prevent erosion. With implementation of erosion control Best Management Practices (BMPs) and the proposed revegetation plan, there would be no significant direct or indirect impacts on land cover, habitat types, or wildlife.

Protected Habitat and Species

A Biological Assessment was completed for the project (ESA 2022a) that analyzed potential impacts on listed terrestrial species under the jurisdiction of USFWS, including marbled murrelets, northern spotted owls, and Pacific marten. No direct effects are anticipated to occur to either marbled murrelets, northern spotted owls, or Pacific martens because trees are proposed to be removed from occupied/contiguous habitat after September 14 and before February 1 when no breeding birds or denning Pacific martens would be present. See **Appendix A.** Biological Assessment for additional details.

Although there would be no direct impacts to listed species, tree removal will modify habitat of approximately 3 acres of occupied and contiguous marbled murrelet habitat, which is also considered potential suitable northern spotted owl and Pacific marten habitat. Tree removal in occupied/contiguous habitat would affect 2% of the surrounding suitable forest (approximately 140 acres) and is not expected to adversely impair the ability of marbled murrelets, northern spotted owls or Pacific marten to reproduce in the area (indirect impact). Several mature trees with large limbs and sufficient canopy cover will remain in the Thiel Creek riparian zone and in areas outside of the FAA-regulated airspace that could provide suitable habitat for these species that depend on late successional forests.

Noise generated from the project would likely be from chainsaws, backhoes, dozers, or logging trucks. However, the nearest logging truck activity that may occur in the vicinity of occupied/contiguous marbled murrelet habitat and potential northern spotted owl and Pacific marten habitat during the breeding season would be over 1,000 feet away along SE 98th Street or near the Seal Rock water tower. No logging or tree removal is proposed to occur near potential nesting/denning habitat during the combined marbled murrelet, northern spotted owl and Pacific marten breeding/denning season (February 1 – September 15).

The project was determined to have no effect on designated critical habitat for marbled murrelet and northern spotted owl since no trees would be removed from critical habitat.

An evaluation was completed for the obstruction removal project that analyzed potential impacts on listed fish species under the jurisdiction of NMFS, including Oregon Coast Coho salmon and associated critical habitat. Tree removal, stream crossings, and road construction can cause erosion. Siltation of instream habitat is identified as a major impediment to the recovery of Oregon Coast Coho salmon (NMFS 2016). Construction access will use existing roads (see **Figures 9** and **10**). No new roads or impervious surfaces are proposed and there would be no temporary stream crossings. Additional, the obstruction removal would not require work below the OHWL of any fish-bearing streams or in tributaries to fish-bearing streams. Robust erosion and sedimentation control BMPs are proposed around riparian buffers to control or prevent siltation of streams. ODFW has reviewed the proposed conservation and minimization measures for water resources and fisheries and agree the proposed project would have no significant effect (Spangler, pers. Comm.).

Based on the implementation of erosion control measures and these conservation measures, it was determined the Proposed Action would have no direct or indirect significant impacts on Oregon Coast Coho salmon and critical habitat (See **Appendix B.** No Effect Letter).

Essential Fish Habitat

The project is located within mapped EFH for Coho salmon, but is not within a habitat area of particular concern (NMFS 2022). There would be no disturbance to the streambed of any fish-bearing streams or tributaries, and no tree removal would occur within the 50-foot riparian buffer of Thiel Creek (EFH) or Henderson Creek (EFH). A few trees are proposed for removal within the 50-foot buffer of Moore Creek, but this stream does not meet the definition of EFH because it is not known to support Coho salmon per ODFW. Additionally, Moore Creek is not considered Essential Salmon Habitat by the Oregon Department of State Lands (DSL 2022). Robust erosion and sedimentation control BMPs are proposed near and within riparian buffers to prevent siltation of instream habitat (see *Mitigation Measures,* described below). The loss of riparian habitat is not expected not expected to adversely impair water quality functions (indirect impact). The Proposed Action would have no direct or indirect significant impacts on EFH.

Migratory Birds

Of the ten species of migratory birds listed as Birds of Conservation Concern, no suitable habitat is present in the study area for the black oystercatcher, black turnstone, lesser yellowlegs, marbled godwit, and short-billed dowitcher, as these are all shore birds. Clark's grebe is a transient species in the study area and does not breed in the study area. Although rufous hummingbirds and wrentit may be present in the study area, they nest in open or scrub-shrub habitats that would not be directly impacted by tree removal. Construction activities and noise may cause individuals of these species to avoid adjacent areas, and potentially abandon nests (indirect effect).

Evening grosbeak breed in coniferous and mixed forests, and are often associated with spruce and fir. Their probability of presence in the study area is May/early June. They breed from May through August. Avoiding impacts on breeding birds and avoiding nest destruction is an effective minimization measure (USFWS 2021). Suitable breeding habitat for evening grosbeaks in the study area is similar to the occupied or contiguous habitat identified for marbled murrelets. Tree removal in this area would occur outside of the breeding period of March 1 to September 15 to minimize the risk of take.

Olive-sided flycatchers are generally associated with open forests, often near water and with tall, prominent trees or snags. They may use open, mature coniferous forest, forested riparian areas, forest openings (e.g., burns, harvested forest), and forest edges. They prefer hemlocks or true firs for nesting and require abundant insects for prey. Potential nesting habitat for olive-sided flycatchers occurs along Thiel and Henderson creeks. No tree removal is proposed in the 50-foot riparian buffer of Thiel Creek or Henderson Creek, so there would be no impact on olive-sided flycatchers. Construction activities and noise may cause these species to avoid adjacent areas, and potentially abandon nests (indirect effect).

To avoid MBTA protected species from potentially abandoning nests, tree removal would occur outside of the breeding period of March 1 to September 15 or a pre-construction survey will be done to look for active nests. The USFWS recommends this conservation measure is to avoid MBTA impacts (USFWS 2021). There is suitable habitat for rufous hummingbirds, wrentit, evening grosbeak, and olive-sided flycatchers outside of the FAA regulated airspace that could provide suitable habitat for these species. There would be no significant direct or indirect impacts on MBTA protected species.

Bald and Golden Eagles

The Proposed Action would have no impact on bald or golden eagles since there are no known nests and none have been seen where trees are proposed to be removed.

Mitigation Measures

The Proposed Action incorporates a number of avoidance, conservation, and minimization measures that would reduce and mitigation impacts on fish and wildlife and associated habitats. These include:

- Soils would be stabilized with an appropriate seed mix (which may include sterile grass or a native upland forest herbaceous mix) immediately after tree removal and inter-planted by the next growing season with native shrubs or short-statured trees such as vine maple, red-osier dogwood, cascara, and Douglas hawthorn (i.e., if trees are removed in the late summer/early fall, soil stabilization would occur that same fall, and inter-planting would be accomplished the following spring). This would minimize the opportunity for nonnative species to become established and prevent erosion.

- Tree removal in occupied/contiguous habitat would occur outside of the combined marbled murrelet, northern spotted owl and Pacific marten breeding/denning season (February 1 to September 15) to avoid the potential for take.

- Tree removal in occupied/contiguous marbled murrelet habitat would occur during daylight hours (i.e., not at dawn or dusk).

- Tree removal would occur outside of the MBTA breeding period of March 1 to September 15 or a pre-construction survey will be done to look for active MBTA protected species nests.

- No tree removal would occur within the 50-foot riparian buffer of Thiel Creek or Henderson Creek.

- No removal of trees would occur that provide streamside shading in critical habitat (Thiel Creek).

- Tree removal within the 50 riparian buffer of seeps/streams would occur during the dry season (late July to mid-September) to eliminate the chance of erosion and sedimentation below the OHWL.

- Trees within 50 feet of a stream or within a delineated wetland will be left where they fall rather than hauled off-site. In these areas, obstructions will be removed using hand tools and low-impact equipment. Heavy equipment such as track rigs will not be used. The contractor will be required to access the site and perform the work on foot or using wetland mats to protect sensitive vegetation.

- Riparian setbacks will be flagged prior to construction to prevent inadvertent or unnecessary encroachment.

- Erosion and sedimentation control BMPs will be inspected twice-weekly to prevent soil from mobilizing outside of work areas and into fish-bearing streams.

- Emergency spill response and clean-up equipment will be available on-site during all construction activities.

- Construction access and staging areas will be located on existing paved or disturbed surfaces in upland areas. No staging will occur within delineated wetlands or riparian buffers.

With the implementation of these conservation and minimization measures, the project would have no significant impacts on biological resources, including fish, wildlife, and their habitats.

3.3 Climate

Research has shown that there is a direct link between fuel combustion and greenhouse gas (GHG) emissions. Therefore, all equipment that requires fuel or power at an Airport is a primary source of GHG generation. Aircraft are probably the most often cited air pollutant source, but they produce the same types of emissions as automobiles. Aircraft engines, like many other vehicle engines, produce carbon dioxide (CO2), nitrogen oxides (NO2), and sulfur oxides (SO2), water vapor, unburned or partially combusted hydrocarbons (also known as volatile organic compounds), particulates, and other trace compounds.

3.3.1 Affected Environment

The largest source of GHG emissions from human activities in the United States is from burning fossil fuels for electricity, heat, and transportation (EPA 2021). The Intergovernmental Panel on Climate Change estimates that aviation accounted for 4.1 percent of global transportation GHG emissions (IPPCC 2019). GHG emissions associated with the Airport are produced by planes, helicopters, other on-airport equipment, and associated vehicle traffic, and include CO2, NO2, carbon monoxide (CO), and SO2.

Mature forests absorb CO2 from the atmosphere while growing. When forests are removed, that carbon storage capacity is lost.

3.3.2 Environmental Consequences

Significance Threshold

The FAA has not established a significance threshold for climate.

Alternative 1 – No Action

Under the No Action Alternative, there would be no impacts on climate since no trees would be removed.

Alternative 2 – Proposed Action

During construction, there would be a temporary increase of GHG emission from diesel- and gasoline-powered construction equipment and additional vehicular traffic. These activities would not generate GHG emissions that exceed *de minimis* levels.

The Proposed Action will remove about 60 acres of trees. Removal of these trees will result in a reduction in the current CO2 storage capacity in the areas around the Airport and a slight increase in the Airport's contribution of CO2 to the atmosphere. the project would have no significant direct or indirect impacts on climate.

3.4 Coastal Resources

The Coastal Zone Management Act (CZMA) of 1972, provides the basis for protecting, restoring, and responsibly developing our nation's diverse coastal communities and resources. These include coastal barrier resource systems, coral reefs, and the coastal environment.

3.4.1 Affected Environment

The Airport is inland and there are no coastal barrier resource systems or coral reefs where obstructions are proposed for removal.

In Oregon, the coastal zone includes the state's coastal watersheds and extends seaward 3 nautical miles and inland to the crest of the Central Oregon Coast Range. The Airport is within the designated coastal zone. The Oregon Coastal Management Program (OCMP) is the State of Oregon's implementation of the CZMA. It protects coastal resources, which are defined as coastal ecosystem, estuary and shoreline, marine mammals, threatened and endangered species, wetlands and waters of the US/State, recreation, land use, and economics. The Oregon Department of Land Conservation and Development (DLCD) is the lead agency for the OCMP. For a project to be consistent with the CZMA, an analysis of effects to coastal resources is required and the project must also be consistent with the OCMP's Enforceable Policies. These policies are contained within three OCMP components:

1. The applicable local government comprehensive plan and land use regulations;
2. The statewide planning goals; and
3. Specific state agency authorities (i.e., those governing removal-fill, water quality, and fish & wildlife protections).

3.4.2 Environmental Consequences

Significance Threshold

The FAA has not established a significance threshold for coastal resources, but factors to consider include if the project would have the potential to:

- Be inconsistent with the relevant state coastal zone management plan(s).
- Impact a coastal barrier resources system unit (and the degree to which the resource would be impacted).
- Pose an impact on a coral reef ecosystem (and the degree to which the ecosystem would be affected).
- Cause an unacceptable risk to human safety or property.
- Cause adverse impacts on the coastal environment that cannot be satisfactorily mitigated.

Alternative 1 – No Action

Coastal Effects Analysis

Under the No Action Alternative, there would be no impacts on coastal natural resources.

The No Action Alternative would maintain the existing facilities and capabilities at the Airport, without investing in facility improvements to address safety concerns related to obstructions in the approach and threshold siting surfaces. The existing airfield conditions would remain unchanged from the present conditions. The vegetation within the approach surface would continue to pose a hazard to aircraft operations, and future aviation activity could be constrained by the operational limits of the existing Airport facilities and obstructions, and may result in having to make a change in approach procedures based on avoiding object penetrations.

Oregon Enforceable Policies Analysis

Under the No Action Alterative, no trees would be removed. This would be consistent with the OCMP Enforceable Policies.

Alternative 2 – Proposed Action

Coastal Effects Analysis

Natural Resources – As described under Section 3.2, *Biological Resources*, the areas for the obstruction removal project are situated on steep terrain in the foothills and headlands of the Central Oregon Coast Range. About 60 acres of trees will be removed by the Proposed Action. The project area is not within the designated estuary or shoreline as defined by the Newport Comprehensive Plan (2019); therefore, the Proposed Action would have no effect on estuary and shoreline resources. As described in Section 3.2, *Biological Resources,* with the implementation of conservation and minimization measures, the obstruction removal project would have no significant effect to:

- Marble murrelet and associated critical habitat;
- Northern spotted owl and associated critical habitat;
- Pacific marten; and
- Oregon Coast Coho salmon and associated critical habitat.

A Wetland Delineation was completed for the project (**Appendix C**). Several conservation and minimization measures have been developed to minimize potential impacts on wetlands and waters of the U.S./State (see Section 3.9 *Water Resources*). Implementation of these measures will allow wetlands and riparian areas to maintain functions and values, and therefore there would be no significant impacts on wetlands or waters of the U.S./State.

With implementation of mitigation measures listed in Sections 32. And 3.9, there would be no significant impact on coastal natural resources.

Recreation Resources – The Airport provides recreational uses to pilots and tourists that fly in to visit the area. The Proposed Action would clear the approach for certain aircraft types that currently use the airport for recreational uses. Providing a cleared airspace would benefit current and future recreational

users. There are no other public or formalized recreational opportunities in the area. The proposed project would have beneficial effects on coastal recreation resources.

Economic Resources – Newport Municipal Airport provides many benefits to the city and the county overall, including providing services to recreational and corporate pilots, accommodating air ambulance flights that provide a critical link to trauma facilities in more distant cities, and serving as a critical coastal resource for emergency response in the event of a major earthquake and tsunami event. To serve as an emergency response resource and to be self-sustaining, the Airport needs to maintain its airspace in accordance to FAR Part 77 for current critical aircraft. The Proposed Action would remove all the current and potential future airspace penetrations in three separate FAR Part 77 approach surfaces at the airport.

Coastal Users and Uses – The Airport is located inland from the ocean shore. Several local business and recreational pilots use the Airport. Other users include the US Coast Guard who bases a helicopter rescue team at the Airport, with crews coming from North Bend on rotation. Aircraft rescue and firefighting is available through the City of Newport Fire Department. The station is not normally staffed and emergency response is by an alarm call out. The City will send out fire fighters on standby for the arrival of aircraft seating more than 30 passengers. The Proposed Action will have a beneficial effect to coastal users of the Airport by removing all the current and potential future airspace penetrations in three separate FAR Part 77 approach surfaces at the airport. This would benefit all of the current uses at the Airport.

Secondary Impacts – Tree removal will modify existing habitats and could cause a change in the wildlife species that use the habitat and how it is used. Disturbed soils provide the opportunity of nonnative species to colonize the disturbed area and outcompete native species. With implementation of mitigation measures listed in Sections 32. And 3.9, there would be no significant secondary impacts on coastal natural resources.

Cumulative Impacts – There would be no cumulative impacts of the Proposed Action based on the geographic location of the Airport and the understanding of other uses where trees are proposed to be removed.

Oregon Enforceable Policies Analysis

A summary of applicable enforceable policies is summarized in **Table 6**.

The Proposed Action would have no significant impacts to coastal resources and would be consistent with the OCMP and, therefore, consistent with the CZMA.

TABLE 6.
COMPLIANCE WITH APPLICABLE OREGON ENFORCEABLE POLICIES

Authority	Enforceable Policy(ies)	Coastal Resource	How Proposed Action Complies
Local Regulations			
City of Newport	State Planning Goal 2, Land Use Planning	Land use	The City has adopted the Airport Restricted Area and Airport Development Zone overlay, which encourages and supports the continued operation and vitality of the Newport Municipal Airport by establishing compatibility and safety standards to promote air navigational safety and to reduce potential safety hazards for persons living, working, or recreating near the Airport. The Airport is zoned Public, north of the Airport is zoned Industrial, and south of the Airport is zoned High Density Multi-Family by the City Removal of trees is allowed in these zones.
City of Newport	State Planning Goal 5, Wetlands	Wetland and Waters of the State	Implementation of BMPs would allow wetlands and riparian areas to maintain functions and values as required by the Comprehensive Plan.
Lincoln County	State Planning Goal 2, Land Use Planning	Land use	Some trees proposed to be removed in the approach of Runway 34 are in an area zoned Rural Residential or Timber Conservation. Removal of trees is allowed in these zones.
State Regulations			
Oregon Department of State Lands	Removal-Fill Law (ORS Chapter 196)	Wetlands and Waters of the State	Removal of trees from within wetlands is allowed under the Removal-Fill Law provided that no more than 50 cubic yards of material is placed within or removed from wetlands.
Oregon Department of Fish and Wildlife	Fish and Wildlife Habitat Mitigation Policy (ORS 635)	Ecosystem	Thiel Creek and Henderson Creek are designated as EFH. ODFW has reviewed the proposed conservation and minimization measures for water resources and fisheries agree the proposed project would have no significant effect (Spangler, personal communications).
Oregon Department of Environmental Quality	OAR Chapter 340 Division 41, 468B, 340-048-0050 and 340-048-0020(2)(ii).	Water quality standards	BMPs have been developed to control erosion and be consistent with water quality standards.

OAR = Oregon Administrative Rules; ORS = Oregon Revised Statutes.

SOURCE: Prepared by ESA

3.5 Historic, Archaeological, and Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of this undertaking upon eligible resources (36 CFR800.4(d)(1)).

3.5.1 Affected Environment

A Cultural Resources Assessment was conducted for the project in 2018 (ESA 2019a). The Area of Potential Effects (APE) for the Cultural Resources Assessment included the area that contains all of the obstructions identified in the *KONP Obstruction Analysis Report* (Quantum Spatial, Inc. 2019). It also included a built environment survey, which identified 8 historic-aged (older than 50 years) properties. All are previously undocumented, privately owned homes. No cultural resources were found in the study area. See **Appendix D.** Cultural Resources Assessment.

3.5.2 Environmental Consequences

Significance Threshold

The FAA has not established a significance threshold for Historical, Architectural, Archaeological and Cultural Resources.

Alternative 1 – No Action

The No Action Alternative would have no effect on historic or cultural resources.

Alternative 2 – Proposed Action

The APE for the Proposed Action has been reduced since the Cultural Resources Assessment was conducted. The APE now includes those areas where trees will be removed for the visual approach of Runway 20, non-precision instrument approach and threshold siting surfaces of Runway 34, and precision instrument approach and threshold siting surfaces of Runway 16. The 8 historic-aged (older than 50 years) properties identified in the Cultural Resources Assessment are no longer in the APE. There are no historic or cultural resources in the APE, and the Proposed Action would have no effect on historic or cultural resources.

On July 8, 2019, the FAA initiated Section 106 consultation with the Oregon State Historic Preservation Office (SHPO) and the following Tribes: Confederated Tribes of the Warm Springs Reservation, Confederated Tribes of the Grand Ronde, and Confederated Tribes of the Siletz Indians by providing them a project description, survey methodology, and map of the APE. FAA received concurrence on the APE from SHPO on August 5, 2019.

On December 9, 2019, the FAA submitted the Cultural Resources Assessment along with its finding of *No Historic Properties Affected*. SHPO concurred with FAA's finding for above-ground historic resources on January 2, 2020 (Schwartz 2020) (SHPO Case Number 19-1125). The SHPO provided a separate letter regarding below ground archaeological resources on January 10, 2020, that requested additional information. FAA submitted a response to SHPO's comments on February 3, 2022. No comments were received by March 5, 2022. Therefore, under 36 CFR 800.3(c)(4) and 36 CFR 800.4(d)(1)(i), the FAA's responsibilities under Section 106 have been fulfilled (see **Appendix D**).

3.6 Land Use

Land use within the Newport Urban Growth Boundary (UGB) is regulated by the City of Newport's Comprehensive Plan and the Newport Municipal Code Title XIV Zoning (City of Newport 2019). Outside of the UGB, land use is regulated by Lincoln County Code (2018).

3.6.1 Affected Environment

The tree removal areas are located mostly within the City of Newport's UGB. The City has adopted the Airport Restricted Area and Airport Development Zone to encourage and support the continued operation and vitality of the Newport Municipal Airport by establishing compatibility and safety standards to promote air navigational safety and to reduce potential safety hazards for persons living, working, or recreating near the Airport. The area north of the Airport is zoned Light Industrial or Public Structures. South of the Airport is zoned High Density Multi-Family Housing.

South of the Airport, outside of the UGB, the County has zoned the property where trees will be removed as either Rural Residential or Timber Conservation.

3.6.2 Environmental Consequences

Significance Threshold

The FAA has not established a significance threshold for land use.

Alternative 1 – No Action

The No Action Alternative would have no effect on land use.

Alternative 2 – Proposed Action

Tree removal is allowed in the Light Industrial, Public Structures, and High Density Multi-Family Housing zoning of the City.

Tree removal is an allowed in the Timber Conservation and Rural Residential zone of Lincoln County.

3.7 Noise and Noise Compatible Land Use

FAA Order 1050.1F, FAA Order 5050.4B, and 14 CFR Part 150 specify the methods required for evaluation of the airport noise environment. The FAA requires an analysis of noise exposure when development actions may change the cumulative noise exposure of individuals to aircraft noise in areas surrounding the airport. Common development actions that may change the cumulative noise environment include: runway reconfiguration, changes in aircraft operations or movements, introduction of new aircraft types using the airport, or changes in aircraft tracks and profiles.

Construction noise is regulated by the City's Noise Ordinance (Ordinance No. 1251).

3.7.1 Affected Environment

The FAA defines Day-Night Average Sound Level[2] (DNL) 65 decibels (dB) as the threshold of noise compatibility for residential and other noise-sensitive land uses, such as schools, libraries, and religious facilities. A noise analysis was prepared for the 2018 Master Plan Update and noise contours were developed showing that the areas of 65+ dB DNL are all confined to existing Airport property (WHPacific 2018). Portions of three residential properties (noise-sensitive uses) are within the 55 – 65 dB DNL zone, which are in the Pruner subdivision, located approximately 990 feet southwest of the end of Runway 34 along S.E. Cedar Street. Residential properties are also located to the west of U.S. Highway 101, opposite the Airport. The closest school (Oregon Coast Community College), library (Guin Library at the Hatfield Marine Science Center), or religious facility (South Beach Church) are all located more than 3 miles north of the Airport, well beyond the 65+ dB DNL zone.

Chapter 14.22 of Newport Municipal Code (Code) is the Airport Restricted Area. The purpose of the Airport Restricted Area and Airport Development Zone overlays is to encourage and support the continued operation and vitality of the Newport Municipal Airport by establishing compatibility and safety standards to promote air navigational safety and to reduce potential safety hazards for persons living, working, or recreating near the Airport. The Code defines Airport Noise Impact Boundary as, "*areas within established noise contour boundaries exceeding 55 Average Day-Night Sound Level (DNL), as shown on the "Off-Airport Land Use Map" identified as Sheet No. 15.1 of the Newport Municipal Airport Master Plan, prepared by WHPacific (dated February 2018).*" All lands, water and airspace, or portions thereof, which are located within these boundaries or surfaces shall be subject to the requirements of the Airport Restricted Area Zoning Overlay.

3.7.2 Environmental Consequences

Significance Threshold

Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance threshold for Noise and Noise-Compatible Land Use as:

> *The action would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe. For example, an increase from DNL 65.5 dB to 67 dB is considered a significant impact, as is an increase from DNL 63.5 dB to 65 dB.*

Alternative 1 – No Action

The No Action Alternative would not result in an increase in aircraft operations, a change in fleet mix, changes in runway use or airfield configuration, or a change in flight tracks that could result in a change in Airport operations-related noise. No tree obstruction removal would occur with this alternative; therefore, there would be no impacts associated with noise.

[2] The day-night average sound level (DNL) noise metric used by the FAA to reflect a person's cumulative exposure over a 24-hour period, expressed as the noise level for the average day or the year on the basis of annual aircraft operations.

Alternative 2 – Proposed Action

The DNL noise metric provides a mechanism to describe the effects of aircraft noise exposure in a simple and uniform way and is the FAA's primary metric for determining the significance of noise impacts. The Proposed Action would not result in an increase in aircraft operations (i.e., activity levels or capacity), a change in fleet mix, changes in runway use or airfield configuration, or a change in flight tracks that could result in a change in airport operations-related noise. As such, a change in the size or location of the existing DNL noise contours is not associated with the Proposed Action.

Trees and vegetation can absorb and attenuate sound as it travels provided it is dense and located directly between the noise source and the receiver. Trees can provide a buffer to noise from aircraft taxiing on the ground or performing engine run-up activities. Once an aircraft leaves the ground and the trees or vegetation are not between the source and receiver, the noise associated with that aircraft is no longer buffered. There are no residential properties or other noise-sensitive land uses near the tree removal areas in either of the Runway 16 or Runway 20 approaches. There are residential properties (Pruner subdivision) located approximately 1,000 feet southwest of the end of Runway 34 and immediately adjacent to tree removal areas in the Runway 34 approach. The removal of trees will likely lead to an increase in noise and vibrations to these residential properties, as the trees will no longer act as a buffer to noise from aircraft on the ground. However, the trees identified as obstructions lie outside the DNL 65 dB noise contour; and therefore, removal of trees will not change the DNL 65 dB noise contour. The natural surface that would remain is considered a soft acoustical surface and provides sound absorption even without the vegetation. The shrubs and short-statured trees proposed for planting after tree removal will provide some sound absorption once established.

Temporary increases in noise are expected from equipment used to remove the trees. The residents along N.E. Cedar Street will experience short-term noise impacts during project construction. The noise from construction would be temporary and is anticipated to take 8 to 10 weeks. To minimize construction impacts to residents, the following measures will be employed:

- Tree removal would be limited to Monday through Friday from the hours of 7:00 AM to 5:00 PM. Work would not take place on Saturdays, Sundays, state and federal holidays, or from 5:00 PM to 7:00 AM.
- The City will provide residents along N.E. Cedar Street and adjacent to lots 11-11-32-00-00200, 11-11-32-00-00201, 12-11-06-00100, and12-11-06-00-00600, 14 days-notice before tree removal will begin off of the end of Runway 34.
- Additionally, all construction equipment and vehicles would be properly maintained, equipped with functional mufflers, and tuned to minimize the potential for noise.
- The contractor will be required to obtain a Construction Permit form the City and comply with the City's Noise Ordinance (Ordinance No. 1251).

Upon project completion, ambient noise levels would return to pre-existing conditions and the DNL 65 dB noise contours are expected to remain the same. No significant noise impacts would occur as a result of the Proposed Action.

Minimization Measures

While no specific mitigation is required, the Proposed Action incorporates minimization measures that would reduce noise impacts. These include:

- Adjacent to the residential properties, tree removal will be limited to Monday through Friday from the hours of 7:00 Am to 5:00 PM.
- Work will not take place on Saturdays, Sundays, state and federal holidays, or from 5:00 PM to 7:00 AM.
- The City will provide residents along N.E. Cedar Street and adjacent to lots 11-11-32-00-00200, 11-11-32-00-00201, 12-11-06-00100, and12-11-06-00-00600, 14 days-notice before tree removal will begin off of the end of Runway 34 14 days-notice before tree removal will begin on adjacent property.

3.8 Visual Resources

Although there are no special purpose laws or requirements specific to light emissions or visual effects, some visual resources are protected under federal, state, or local regulations. Some of these protected visual resources include, but are not limited to: scenic roadways, Wild and Scenic Rivers, National Scenic Areas, scenic easements, trails protected under the National Trails System Act, and biological resources (impacts to sensitive wildlife species). Additional laws protecting resources that may be affected by visual effects include Section 106 of the NHPA, Section 4(f) of the Department of Transportation Act of 1966, and the CZMA.

Broadly defined, visual effects are the extent to which the alternative would either: (1) produce light emissions that create annoyance or interfere with activities; or (2) contrast with, or detract from, the visual resources or the visual character of the existing environment.

3.8.1 Affected Environment

There are no scenic roadways, Wild and Scenic Rivers, National Scenic Areas, scenic easements, or trails protected under the National Trails System Act in the vicinity where trees are proposed to be removed. Additionally, there are no designated visual resources in the City's Comprehensive Plan in the vicinity of the Airport. The closest visual resource is Yaquina Bay Bridge, which is more than 3 miles north of the Airport and not visible from the Airport.

The area north of Runway 16 consists of steep ridgelines and valleys. An established network of access roads and Airport support facilities, such as lighting, are found throughout the area (**Photo 6**). Views of this area consist of forested ridges and semi-cleared open fields and runway lighting.

Photo 6
View from end of Runway 16 looking north

The area north of Runway 20 consists of mixed open grasslands on flat areas and forested areas with established canopy forest along the ridgelines. The area is bisected by the incised channel of Henderson Creek. An established network of access roads is found throughout the area. Views of this area consist of forested ridges and cleared open fields (**Photo 7**).

Photo 7
View of open meadows and forested patches off Runway 20 looking north

Photo 8
View looking south from the end of Runway 34

South of Runway 34 is the steeply banked Moore Creek valley that that separates the active Airport property from the residential and forested parcels to the south (**Photo 8**). The topography south of Moore Creek and north of S.E. 98th Street is predominantly flat. The Pruner subdivision is south of Moore Creek and west of the City-owned parcel 11-11-32-00-00200. A row of tall mature Douglas fir trees grow either along the property line of residence on the east side of S.E. Cedar Street or within the deeded right-of-way.

Views to the south of S.E. 98th Street mostly consist of mature forest and the riparian habitat and floodplain of Thiel Creek, along with recently harvested parcels.

3.8.2 Environmental Consequences

Threshold of Significance

The FAA has not established a significance threshold for Visual Resources / Visual Character. FAA Order 1050.1F includes factors that consider the extent the action would have the potential to:

- Affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources;
- Contrast with the visual resources and/or visual character in the study area; and
- Block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations.

Alternative 1 – No Action

No trees would be removed under the No Action Alternative and existing views would mostly be maintained. Over time, trees would grow taller and vegetative communities would continue to mature.

Alternative 2 – Proposed Action

There are no designated visual resources in the City's Comprehensive Plan in the vicinity of the Airport, so the Proposed Action would have no effect on designated visual resources.

The Proposed Action would remove vegetation in the area directly in-line with the approaches of Runways 16, 20, and 34. Tree removal north of the Airport (off Runway 16 and Runway 20) would not be noticeably visible or seen by the general public. The property where trees will be removed in the approach of Runway 16 is owned by the City and access is limited and controlled for Airport operations. Topography obstructs views from properties owned by others to this area. Trees proposed for removal in the approach of Runway 20 are in an area also either owned by the City or by a private property owner where views to these properties would not been seen by the general public.

Trees proposed for removal in the approach of Runway 34 would be visible to residents who live along the east side of S.E. Cedar Street. The views from their property looking east will change from a dense second-growth forest to a harvested area with stumps. After tree removal, slash piles will be removed or chipped and spread over the site. Soils would be stabilized with an appropriate seed mix (which may include sterile grass or a native upland forest herbaceous mix) and inter-planted by the next growing season with native shrubs or short-statured trees such as vine maple, red-osier dogwood, cascara, and Douglas hawthorn. Over time, these species will grow and have a mixed forested appearance. These species have been selected because they are native and will not grow tall enough to penetrate into the 20:1 approach surface. Therefore, they would not need to be removed in the future.

Photo 9

View looking southeast from S.E. 98th Street at trees proposed to be removed

As shown in **Photo 9**, areas cleared will also be visible to drivers along S.E. 98th Street. These trees will be removed and the view would be of a cleared area, like in the foreground of **Photo 9**. Stumps will be visible until the area is replanted and the newly planted vegetation starts to grow.

The area south of S.E. 98th Street and east of the City-owned property is either zoned by the County as Timber Conservation or owned by timber companies, and logging the properties is an economic source of revenue. Therefore, the proposed tree removal is not a contrast with the existing land use and associated visual resources or visual character in the surrounding area.

Minimization Measures

The Proposed Action incorporates minimization measures that would reduce visual impacts. These include:

- On tax lots 11-11-32-00-00200, 11-11-32-00-01604, and 11-11-32-00-00201, slash piles will be chipped or removed.
- After tree removal, soils would be stabilized with an appropriate seed mix (which may include sterile grass or a native upland forest herbaceous mix) and inter-planted by the next growing season with native shrubs or short-statured trees such as vine maple, red-osier dogwood, cascara, and Douglas hawthorn.

With the implementation of these measures, there would be no significant direct or indirect impact on visual resources.

3.9 Water Resources

Due to the interrelationship between surface water, groundwater, floodplains, and wetlands, these resource categories and their analysis is conducted under the all-encompassing impact category of "water resources." Impacts to any part of the system can have negative consequences to the functioning of the entire system.

3.9.1 Wetlands

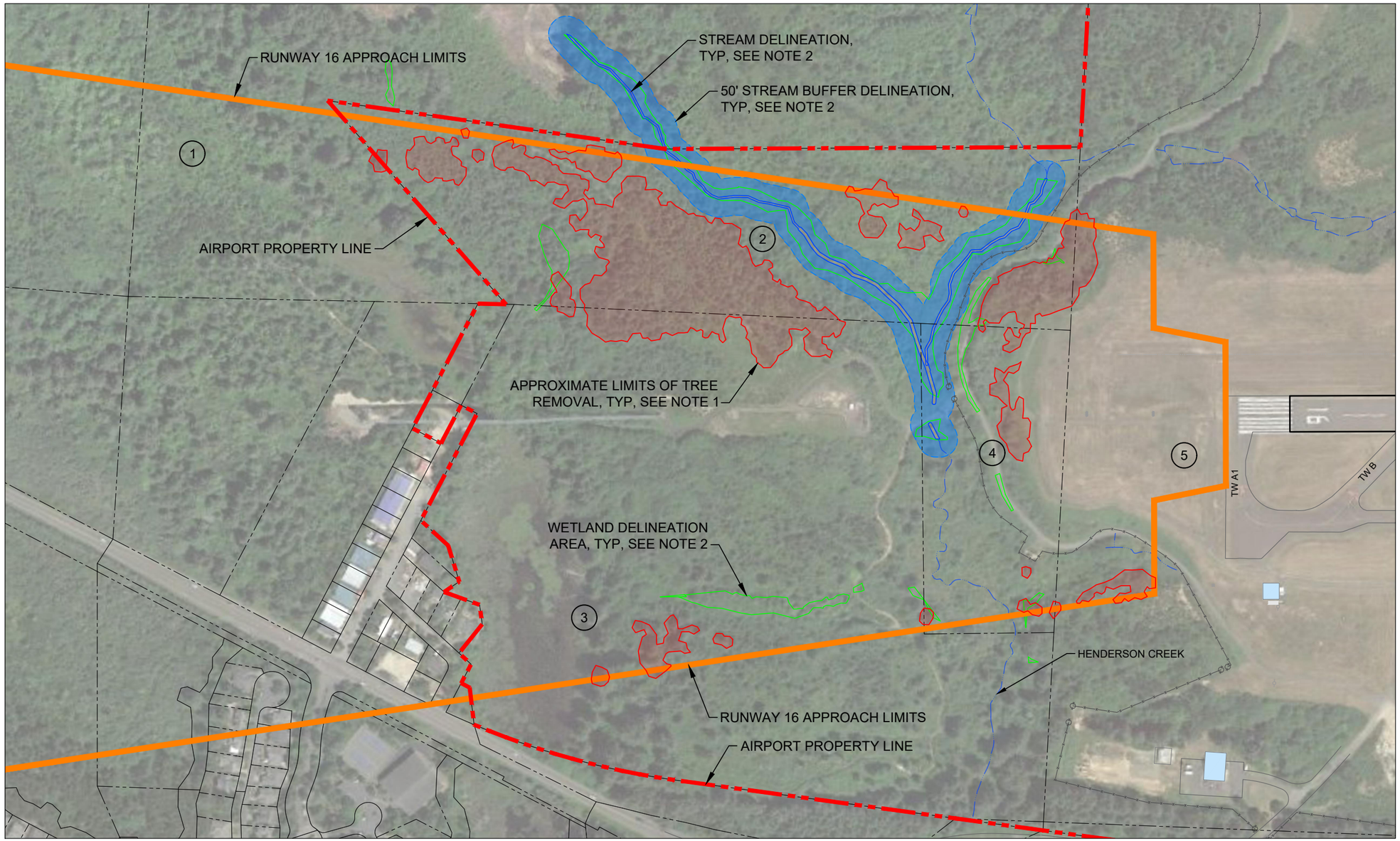
Wetlands are regulated by the Oregon Removal-Fill Law and Section 404 of the Clean Water Act.

Affected Environment

A wetland delineation was conducted for the project (ESA 2019b). Delineated wetlands are shown on **Figures 12** through **14**. The wetlands were either associated with creeks, roadside ditches, floodplains or tributary headwaters seeps. For more detailed information see **Appendix C** Water Resources Delineation. Wetlands are described below for the three runway approach areas where tree removal is proposed.

Runway 16 – The wetlands in this area are associated with Henderson Creek or roadside ditches. The previous construction of the flight navigational aids created access roads and associated side ditches has altered the hydrology in this area. The access road that crosses Henderson Creek and its tributaries has likely impounded streamflows at the culvert crossings, which has expanded wetland boundaries. In other areas, access roads have crossed Henderson Creek and separated previously contiguous wetlands.

Runway 20 – Wetlands in this area are either associated with Henderson Creek or are steep headwaters of tributaries of Yaquina Bay. An access road and the City of Newport Police Department shooting range were developed within a wetland complex and tributary channel of Henderson Creek. This development likely displaced historic hydrology and wetlands in this area. Alterations such as roads and gravel pads have also likely impounded previous stream flows, which has converted a small stream into a wetland.



NORTH

0 150 300

SCALE IN FEET

TAG	PARCEL ID	OWNER	TREE REMOVAL
1	11-11-29-00-00300-00	LANDWAVES INC	0.04 AC
2	11-11-29-00-00400-00	CITY OF NEWPORT	5.81 AC
3	11-11-29-00-01402-00	CITY OF NEWPORT	1.70 AC
4	11-11-29-00-01401-00	CITY OF NEWPORT	0.50 AC
5	11-11-29-00-01100-00	CITY OF NEWPORT	0.45 AC

NOTES:

1. LIMITS OF TREE REMOVAL SHOWN OUTSIDE OF STUDY AREA REPRESENT CANOPIES OF TREES TO BE REMOVED.
2. STREAM, BUFFERS AND WETLAND AREAS PROVIDED BY ESA, DATED OCT 19, 2021.

PRELIMINARY
NOT FOR CONSTRUCTION
03/31/2022

PRECISION APPROACH ENGINEERING
5125 Southwest Hout Street
Corvallis, OR 97333
541•754•0043

NEWPORT MUNICIPAL AIRPORT
OBSTRUCTION REMOVAL

RUNWAY 16 WETLAND AND WATER RESOURCES

Figure 12 MARCH 2022

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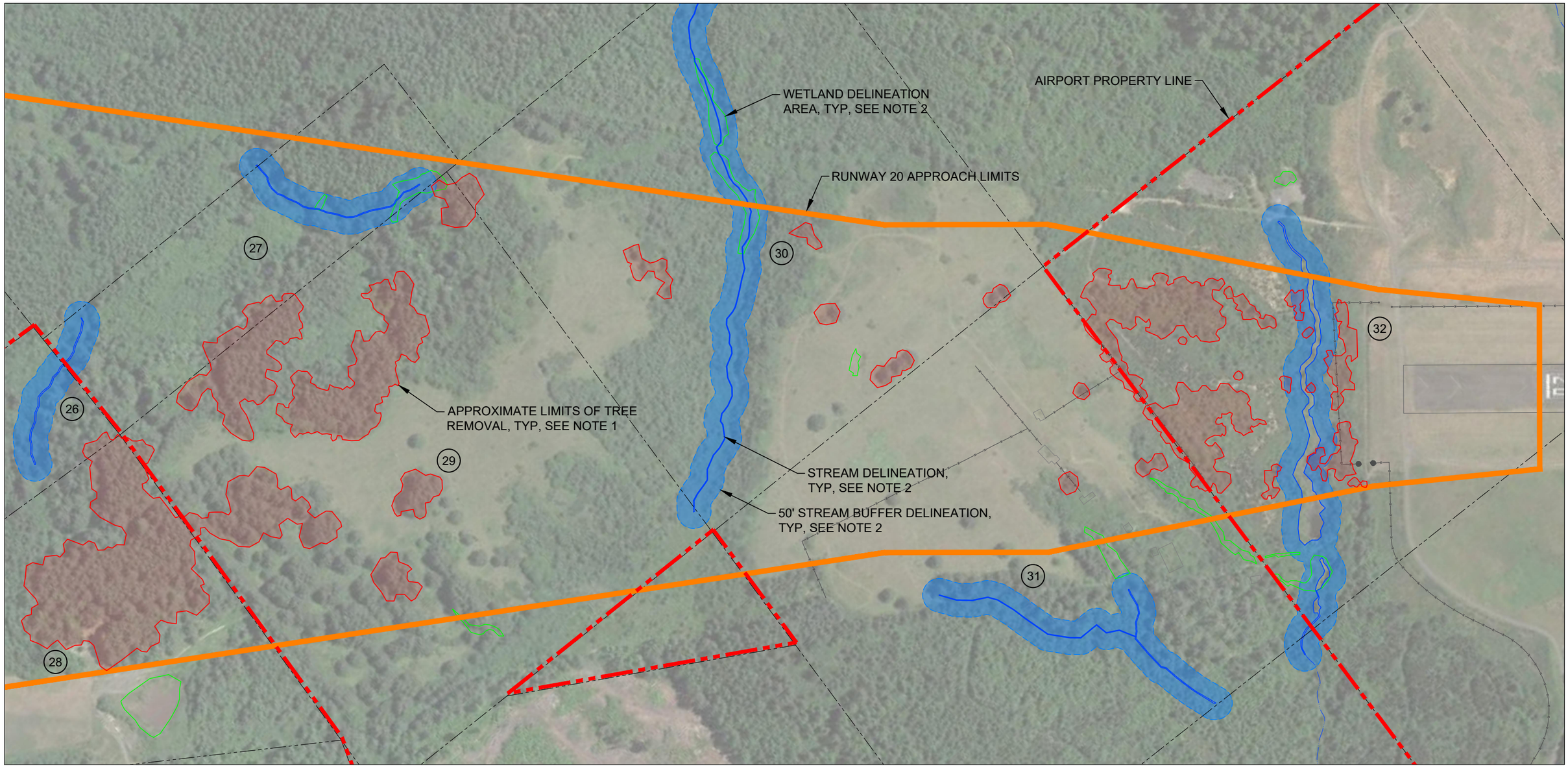

TAG	PARCEL ID	OWNER	TREE REMOVAL
26	11-11-21-00-01600-00	CITY OF NEWPORT	0.06 AC
27	11-11-28-00-00700-00	HALL	0.25 AC
28	11-11-20-00-02700-00	CITY OF NEWPORT	4.80 AC
29	11-11-29-00-00100-00	HALL	5.90 AC
30	11-11-29-00-00600-00	HALL	0.72 AC
31	11-11-29-00-00500-00	HALL	0.54 AC
32	11-11-29-00-01000-00	CITY OF NEWPORT	3.70 AC

NOTES:

1. LIMITS OF TREE REMOVAL SHOWN OUTSIDE OF STUDY AREA REPRESENT CANOPIES OF TREES TO BE REMOVED.
2. STREAM, BUFFERS AND WETLAND AREAS PROVIDED BY ESA, DATED OCT 19, 2021.

PRELIMINARY
NOT FOR CONSTRUCTION
03/31/2022

NORTH

0 150 300
SCALE IN FEET

PRECISION APPROACH ENGINEERING
5125 Southwest Hout Street
Corvallis, OR 97333
541•754•0043

NEWPORT MUNICIPAL AIRPORT
OBSTRUCTION REMOVAL

RUNWAY 20 WETLAND AND WATER RESOURCES

Figure 13 MARCH 2022

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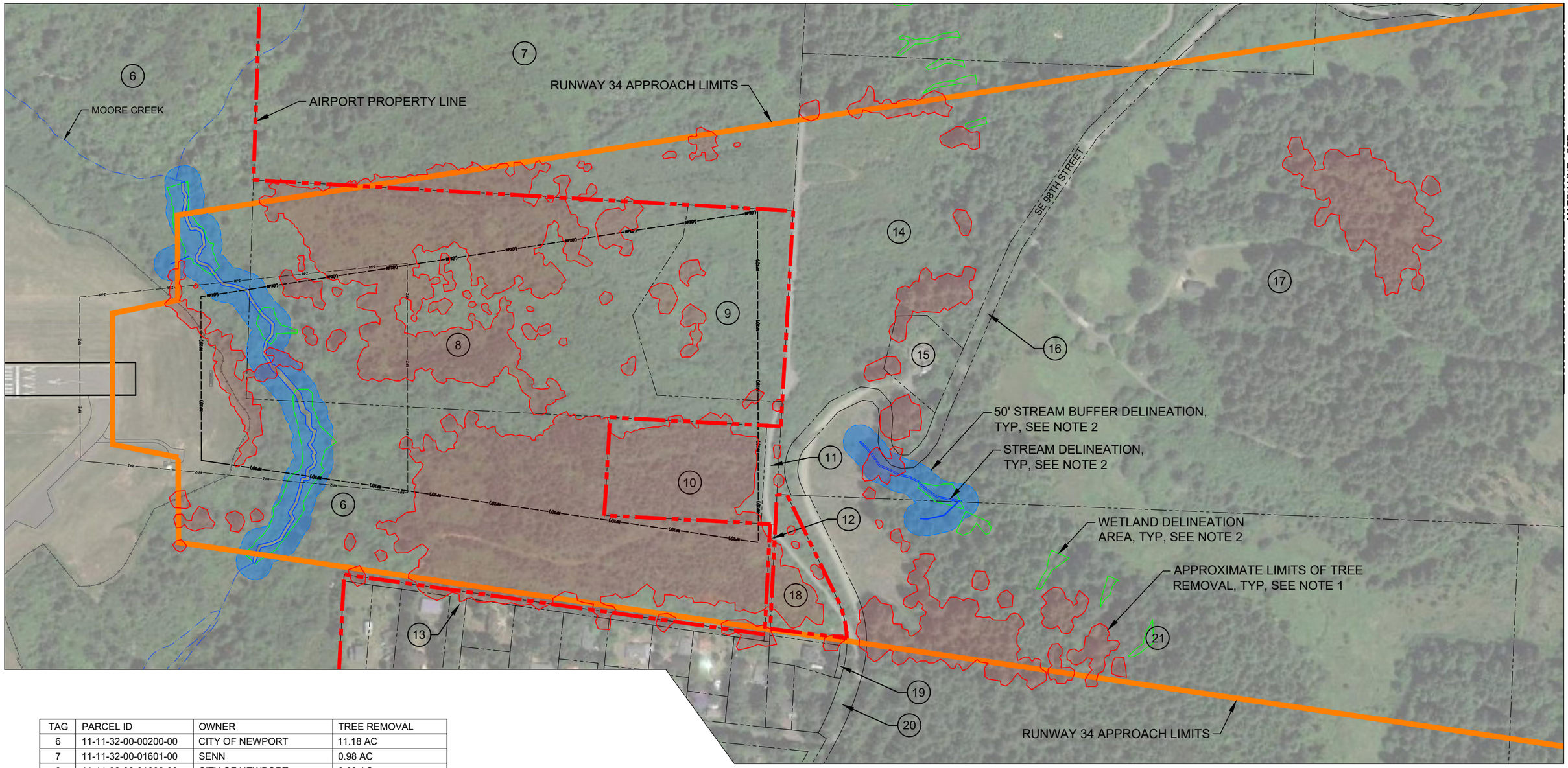

TAG	PARCEL ID	OWNER	TREE REMOVAL
6	11-11-32-00-00200-00	CITY OF NEWPORT	11.18 AC
7	11-11-32-00-01601-00	SENN	0.98 AC
8	11-11-32-00-01602-00	CITY OF NEWPORT	8.68 AC
9	11-11-32-00-01604-00	CITY OF NEWPORT	0.38 AC
10	11-11-32-00-00201-00	STATE OF OREGON	2.80 AC
11	11-11-32-00-01603-00	FERRIS	0.03 AC
12	11-11-32-00-01600-00	LINCOLN COUNTY	0.09 AC
13	11-11-32-CC-0ROAD-00	ROW	0.50 AC
14	12-11-05-00-00800-00	STEEL STRING INC	1.50 AC
15	12-11-05-00-00600-00	STEEL STRING INC	0.11 AC
16	12-11-05-00-0ROAD-00	ROW	0.10 AC
17	12-11-05-00-00803-00	STEEL STRING INC	2.55 AC
18	12-11-06-00-00100-00	CITY OF NEWPORT	0.53 AC
19	12-11-06-00-00200-00	WATTS	0.06 AC
20	12-11-06-00-0ROAD-01	ROW	0.08 AC
21	12-11-06-00-00600-00	STEEL STRING INC	3.03 AC

NOTES:

1. LIMITS OF TREE REMOVAL SHOWN OUTSIDE OF STUDY AREA REPRESENT CANOPIES OF TREES TO BE REMOVED.
2. STREAM, BUFFERS AND WETLAND AREAS PROVIDED BY ESA, DATED OCT 19, 2021.

PRELIMINARY
NOT FOR CONSTRUCTION
03/31/2022

NORTH

0 150 300
SCALE IN FEET

PRECISION APPROACH ENGINEERING
5125 Southwest Hout Street
Corvallis, OR 97333
541•754•0043

NEWPORT MUNICIPAL AIRPORT
OBSTRUCTION REMOVAL

RUNWAY 34 WETLAND AND WATER RESOURCES

Figure 14 MARCH 2022

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Runway 34 – Wetlands in the area north of S.E. 98th Street and south of Runway 34 are similar in vegetation structure, topography, and condition, as they are all either within the floodplain of Moore Creek or spring-fed seeps situated along the same hillslope. South of S.E. 98th Street, wetlands are associated with steep drainages that are tributaries to Thiel Creek.

Environmental Consequences

Significance Threshold

Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance thresholds for wetlands. A significant impact would occur when the action would:

1. *Adversely affect a wetland's function to protect the quality or quantity of municipal water supplies, including surface waters and sole source and other aquifers;*

2. *Substantially alter the hydrology needed to sustain the affected wetland system's values and functions or those of a wetland to which it is connected;*

3. *Substantially reduce the affected wetland's ability to retain floodwaters or stormwater runoff, thereby threatening public health, safety or welfare;*

4. *Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important timber, food, or fiber resources of the affected or surrounding wetlands;*

5. *Promote development of secondary activities that would cause the circumstances listed above to occur; or*

6. *Be inconsistent with applicable state wetland strategies.*

Alternative 1 – No Action

Under the No Action Alternative, no tree removal would occur; therefore, there would be no impacts on wetlands.

Alternative 2 – Proposed Action

A limited amount of tree removal will occur within and adjacent to delineated wetlands as shown in **Figures 12** through **14**. In the area north of Runway 20, trees would be removed from one wetland. This will convert 0.01 acres of forested wetland to emergent wetland. Four wetlands north of Runway 16 and five wetlands south of Runway 34 will have trees removed within 50 feet of the wetland boundary. Tree removal in these areas will be done with hand tools and access would be on foot.

Although the function to provide shade and shelter will be temporarily impacted, other wetland functions such as water quality, storage, habitat, and food will be maintained. Overtime, these functions will be replaced. Wetlands are anticipated to continue to provide water quality functions and capacity as currently exists.

Tree removal has the potential to disturb soils (direct impact) and provide the opportunity siltation into wetlands and for nonnative species (such as reed canarygrass) to colonize and outcompete native species (indirect impact). After tree removal, soils would be stabilized with an appropriate seed mix and inter-planted by the next growing season with native shrubs or short-statured trees such as willows. This would

minimize the opportunity for nonnative species to become established and prevent erosion. With the implementation of these mitigation measures, there would be no significant direct or indirect impacts on wetlands.

Tree removal is an allowed activity in wetlands under the Oregon Removal-Fill Law and Section 404 of the Clean Water Act, provided that no material is placed or removed from wetlands.

Mitigation Measures

The Proposed Action incorporates a number of avoidance, conservation, and minimization measures that would reduce impacts on wetlands. These include:

- Trees within 50 feet of a wetland will be removed using hand tools and low impact equipment. Heavy equipment such as track rigs will not be used. The contractor will be required to access the site and perform the work on foot or using wetland mats to protect sensitive vegetation.
- Wetlands will be flagged prior to construction to prevent inadvertent or unnecessary encroachment.
- After tree removal, soils would be stabilized with an appropriate seed mix and inter-planted by the next growing season with native shrubs or short-statured trees.

With implementation of these conservation and minimization measures, the project would have no significant direct or indirect impacts to wetlands.

3.9.2 Surface Waters and Water Quality

Surface waters and water quality are regulated under the Oregon Removal-Fill Law and Sections 401 and 404 of the Clean Water Act.

Affected Environment

Four streams flow westerly through the study area and into the Pacific Ocean (from north to south): Henderson Creek, Grant Creek, Moore Creek, and Thiel Creek. With the exception of Moore Creek, these drainages are typified by steep slopes and narrow valley bottoms. A field investigation of the ordinary high water line of streams was conducted for the study area (ESA 2019b). Delineated streams are shown on **Figures 12** through **14**. For more detailed information see Appendix C Water Resources Delineation.

Henderson Creek

Henderson Creek flows northeast to southwest on the north side of the Airport. An unnamed tributary to Henderson Creek also flows from southeast to northwest. The confluence is north of Runway 16. The channel and hydrology of the stream have been significantly altered by roads, culverts, riprap, and impoundments. The riparian habitat of Henderson Creek varies from a mixed second-growth forest with dense understory to scrub-shrub with some patches of ground cover vegetation **(Photo 10**).

Photo 10
Typical riparian habitat along Henderson Creek includes young red alder and dense undergrowth

Yaquina Bay Tributaries

Two small streams are located in the approach of Runway 20 that discharge to Yaquina Bay. Both streams have steep channels clogged with large woody debris (**Photo 11**).

Photo 11
Unnamed tributary of Yaquina Bay.

Moore Creek

Moore Creek flows from east to west south of Runway 34. The stream is confined by steep and densely vegetated valley walls on each bank and a flat floodplain **(Photo 12)**.

Photo 12
Floodplain of Moore Creek

Thiel Creek

Thiel Creek is designated critical habitat for Coastal Coho salmon and is EFH for Coho salmon. Thiel Creek runs east to west through a mature riparian forest (**Photo 13**).

Photo 13
Tributary of Thiel Creek

Environmental Consequences

Significance Threshold

Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance thresholds for surface waters. A significant impact exists if the action would:

1. *Exceed water quality standards established by federal, state, local, and tribal regulatory agencies; or*

2. *Contaminate public drinking water supply such that public health may be adversely affected.*

In addition to the above thresholds, FAA Order 1050.1F provides additional factors to consider when evaluating the context and intensity of potential environmental impacts for surface waters. These factors include situations in which the proposed action or alternative(s) would have the potential to:

- Adversely affect natural and beneficial water resource values to a degree that substantially diminishes or destroys such values;

- Adversely affect surface waters such that the beneficial uses and values of such waters are appreciably diminished or can no longer be maintained and such impairment cannot be avoided or satisfactorily mitigated; or

- Present difficulties based on water quality impacts when obtaining a permit or authorization.

Alternative 1 – No Action

Under the No Action Alternative, no construction would occur and therefore, there would be no impacts to surface waters.

Alternative 2 – Proposed Action

There would be no direct impacts on the stream channel of Henderson, Moore, or Theil Creek or any associated tributaries. Tree removal within 50 feet of OHWL of streams are shown on **Figures 12** through **14** and includes:

- Unnamed tributary of Henderson Creek – Approximately 0.2 acres of trees will be removed from the riparian area of an unnamed tributary of Henderson Creek.

- Unnamed tributary of Yaquina Bay – Tree removal will affect approximately 0.01 acres in the headwaters of a tributary of the Yaquina Bay. Several mature trees with sufficient canopy cover will remain in the riparian zone and in areas outside of the FAA regulated airspace that could provide shade and other habitat functions lost with the removal of the trees. This habitat modification is not expected to adversely impair water quality functions (indirect impact).

- Moore Creek – Approximately 0.2 acres of riparian habitat will be removed from Moore Creek. Several mature trees with sufficient canopy cover will remain in the riparian zone that can provide shade and other habitat functions lost with the removal of the trees.

- Unnamed tributary of Theil Creek – Approximately 0.15 acres of trees in the headwaters of a tributary of Thiel Creek will be removed. Several mature trees with sufficient canopy cover will

remain in the riparian zone that can provide shade and other habitat functions lost with the removal of the trees. This habitat modification is not expected to adversely impair water quality functions (indirect impact).

The Proposed Action does not include constructing any new roads or increasing the amount of impervious surface. Construction access will be from existing paved and unpaved roads, including Airport access roads, private roads, as well as old logging roads and paths. Construction access and staging areas will be located on existing paved or disturbed surfaces in upland areas. No staging will occur within riparian buffers. Trees will be cut off at ground level and stumps will be left in place to prevent erosion and sedimentation. Trees within 50 feet of a creek will be left where they fall rather than hauled off-site. In these areas, obstructions will be removed using hand tools and low-impact equipment. Heavy equipment such as track rigs will not be used. The contractor will be required to access the site and perform the work on foot or using wetland mats to protect sensitive vegetation.

Additional erosion and sedimentation control BMPs are proposed within riparian buffers to control siltation. The proposed tree removal would not cause water quality to exceed federal, state, local, or tribal standards. No permits are required to remove the trees within the riparian zones of the creeks. The contractor will be required to develop a Stormwater Pollution Prevention Plan (SWPP) prior to construction. The SWPP will include a soil and erosion control plan that incorporates the BMPs identified in this EA. No significant impacts on surface waters or water quality would occur as a result of the Proposed Action.

Mitigation Measures

The Proposed Action incorporates a number of avoidance, conservation, and minimization measures that would reduce impacts on surface waters. These include:

- Tree removal within 50 feet of streams will occur during the dry season (late July to mid-September) to eliminate the chance of erosion and sedimentation below the OHWL.
- Trees within 50 feet of a creek will be left where they fall rather than hauled off-site. In these areas, obstructions will be removed using hand tools and low impact equipment. Heavy equipment such as track rigs will not be used. The contractor will be required to access the site and perform the work on foot or using wetland mats to protect sensitive vegetation.
- Riparian setbacks will be flagged prior to construction to prevent inadvertent or unnecessary encroachment.
- Erosion and sedimentation control BMPs will be inspected twice-weekly to prevent soil from mobilizing outside of work areas and into fish-bearing streams.
- Emergency spill response and clean-up equipment will be available on-site during all construction activities.
- Soils will be stabilized with an appropriate seed mix immediately after tree removal and inter-planted by the next growing season with native shrubs or short-statured trees.

With implementation of these conservation and minimization measures, the project would have no significant impacts to surface waters.

3.10 Cumulative Impacts

To adequately understand the potential environmental effects related to cumulative impacts, the past, present, and reasonably foreseeable projects must be identified. The cumulative impact analysis focuses on those resources with direct or indirect impacts by the project. If the Proposed Action would not cause a direct or indirect impact on a resource, no cumulative impact for that resource would occur. As outlined early in this document, Air Quality; Climate; Department of Transportation Act Section 4(f) Resources; Farmlands; Hazardous Materials, Solid Waste, and Pollution Prevention; Historic, Archaeological, and Cultural Resources; Land Use; Light Emissions; Natural Resources and Energy Supply; Socioeconomics, Environmental Justice, and Children's Health and Safety Ricks; Floodplains; Groundwater; Public Drinking Water Supplies; and Wild and Scenic Rivers were determined to have no effect or do not occur in the study area; therefore, they are not considered in this cumulative impacts analysis.

Past projects are those that occurred within the past 5 years; present projects are those that are occurring in the same general time frame as the Proposed Action; and future projects are those projects that are reasonably foreseeable (occurring within the next 3- to 5-year timeframe). These include projects on the Airport's Capital Improvement Plan (WHPacific 2018) and other projects being planned and likely to be implemented in the vicinity of the Airport in that timeframe.

The following past projects were approved by the FAA with a Documented Categorical Exclusion because they were found to be consistent with activities that do not normally have the potential for individual or cumulative significant impacts on the human environment:

1. Storm Pipe Rehabilitation and Outfall F Erosion and Slope Repair, Categorical Exclusion signed December 2019. The project included fish passage mitigation as required by ODFW in compensation for the inability to restore fish passage in the Grant Creek culverts. Fish passage mitigation project (Lake Creek Mitigation Culvert) was constructed in Summer 2021.

2. South Hangar Development (2021), Categorical Exclusion signed July 2021. No quantifiable resource impacts were identified for this project.

Current projects include construction of the Storm Pipe Rehabilitation and Outfall F Erosion and Slope Repair construction.

Reasonable and future projects that could occur at the Airport in the next 5 years include those on the Airport's Capital Improvement Plan (City of Newport 2021):

- Storm Pipe Rehabilitation and Outfall F Erosion and Slope Repair continued construction in 2023.

- Obstruction removal construction (impacts assessed in this EA).

- Automated Weather Observation Station (AWOS) (2025). The current AWOS is old and needs to be replaced. The AWOS will be replaced in the same location. This project would qualify as a Categorical Exclusion under FAA Order 1050.1F, Paragraph 5-6.3c. No quantifiable resource impacts are anticipated for this project.

Biological Resources

Two 48-inch concrete pipes were installed in 1943 to capture and reroute Grant Creek to allow for construction of the Newport Municipal Airport. The concrete pipes collect water from the east side of the Airport and convey the creek to outlets on the west side of the Airport. The pipes are approximately 70-90 feet below ground surface and run underneath the Runway 16-34 and Runway 2-20 intersection. Removal and replacement of the pipes were not a viable option due to the depth and location of the pipes. Rehabilitation of the two 48-inch concrete pipes was intended to be achieved by in-place lining of the existing pipes using geopolymer. In compensation for the inability to restore fish passage in the Grant Creek culverts, ODFW required fish passage mitigation. LThe ake Creek Mitigation Culvert Project was constructed in 2021.

Since the AWOS will be replaced in the same location, no quantifiable biological resource impacts are anticipated for the AWOS.

Impacts associated with the obstruction removal are quantified in this EA. There are no significant impacts on biological resources.

Based on the analysis done for past, present, and reasonable foreseeable future projects, implementation of the Proposed Action is not expected to have significant cumulative impacts on biological resources.

Climate

No climate impacts were identified for past and current projects.

Since the AWOS will be replaced in the same location, no quantifiable climate impacts are anticipated for future projects.

The Proposed Action would have a slight loss of carbon sequestration capacity from removal of trees.

Based on the analysis done for past, present, and reasonable foreseeable future projects, implementation of the Proposed Action is not expected to have significant cumulative impacts on the climate.

Coastal Resources

Federal agencies are required to make a consistency determination in their NEPA documents. Since the FAA signed the Storm Pipe Rehabilitation and Outfall F Erosion and Slope Repair Categorical Exclusion in December 2019, they determined the project was consistent with the CZMA.

Since the AWOS will be replaced in the same location, no quantifiable coastal resource impacts are anticipated for future projects.

The Proposed Action would have no significant impacts on coastal resources and was found to be consistent with the CZMA.

Based on the analysis of the past, current, and reasonable foreseeable future projects, implementation of the Proposed Action is not expected to have significant cumulative impacts on coastal resources.

Historic, Architecture, Archaeologic, and Cultural Resources

No impacts on historic or cultural resources were identified for past and current projects.

Since the AWOS will be replaced in the same location, no quantifiable historic or cultural resource impacts are anticipated for future projects.

The Proposed Action would have no impacts on historic or cultural resources.

Based on the analysis of the past, current, and reasonable foreseeable future projects, implementation of the Proposed Action is not expected to have significant cumulative impacts on historic, architecture, archaeological and cultural resources.

Land Use

No land use impacts were identified for past and current projects.

Since the AWOS will be replaced in the same location, no land use impacts are anticipated for future projects.

The Proposed Action would have no land use impacts.

Based on the analysis of the past, current, and reasonable foreseeable future projects, implementation of the Proposed Action is not expected to have any cumulative land use impacts.

Noise and Compatible Land Use

No noise or compatible land use impacts were identified for past and current projects.

Since the AWOS will be replaced in the same location, no noise and compatible land use impacts are anticipated for future projects.

The Proposed Action would have no significant impacts on noise and compatible land use.

Based on the analysis of the past, current, and reasonable foreseeable future projects, implementation of the Proposed Action is not expected to have significant cumulative impacts on noise and compatible land uses.

Visual Resources

No visual impacts were identified for past and current projects.

Since the AWOS will be replaced in the same location, no visual impacts are anticipated for future projects.

The Proposed Action would have no significant impacts on visual resources.

Based on the analysis of the past, current, and reasonable foreseeable future projects, implementation of the Proposed Action is not expected to have significant cumulative impacts on visual resources.

Water Resources

In compensation for the inability to restore fish passage in the Grant Creek culverts, ODFW required fish passage mitigation. The Lake Creek Mitigation Culvert Project was constructed in 2021.

Since the AWOS will be replaced in the same location, no water resource impacts are anticipated for future projects.

The Proposed Action would have no significant impacts on water resources.

Based on the analysis done of the past, current, and reasonable foreseeable future projects, implementation of the Proposed Action is not expected to have significant cumulative impacts on water resources.

3.11 Summary of Impacts

A summary of the potential environmental impacts is provided in **Table 7**.

TABLE 7
SUMMARY OF IMPACTS

	No Action	Proposed Action
Air Quality		
Short term/Construction	No impacts	The construction activities required for the obstruction removal are presumed to conform because these activities would not generate emissions that exceed *de minimis* levels. Emissions generated by construction equipment are negligible considering the temporary nature of construction activities.
Direct Impacts		No impacts
Indirect Impacts		
Cumulative Impacts		
Biological Resources		
Short term/Construction	No impacts	- Wildlife would avoid the areas of active tree removal. - Tree removal could disturb soils and cause siltation.
Direct Impacts		- Would remove about 60 acres of trees.
Indirect Impacts		- Tree removal will modify existing habitats and could cause a change in the wildlife species that use the habitat and how it is used. - Disturbed soils provide the opportunity for nonnative species to colonize the disturbed area and outcompete native species.
Cumulative Impacts		No impacts
Climate		
Short term/Construction	No impacts	- Temporary increase of GHG emissions from diesel- and gasoline-powered construction equipment and additional vehicular traffic.
Direct Impacts		- Reduction in the current CO2 storage capacity around the Airport.
Indirect Impacts		- A slight increase in the Airport's contribution of CO2 to the atmosphere.

	No Action	Proposed Action
Cumulative Impacts		No impact
Coastal Resources		
Short term/Construction	No impacts	No impacts
Direct Impacts	The vegetation within the approach surface would continue to pose a hazard to aircraft operations, and future aviation activity could be constrained by the operational limits of the existing Airport facilities and obstructions.	- Clearing the airspace of obstructions benefits current and future recreational users. - Clearing the airspace of obstructions a cleared airspace ensures readiness as a critical coastal resource for emergency response in the event of a major earthquake and tsunami event.
Indirect Impacts	No impacts	- Tree removal will modify existing habitats and could cause a change in the wildlife species that use the habitat and how it is used. Disturbed soils provide the opportunity of nonnative species to colonize the disturbed area and outcompete native species.
Cumulative Impacts	No impacts	No impacts
Department of Transportation Section 4(f) Resources		
Short term/Construction	No impacts	No impacts
Direct Impacts		
Indirect Impacts		
Cumulative Impacts		
Farmland		
Short term/Construction	No impacts	No impacts
Direct Impacts		
Indirect Impacts		
Cumulative Impacts		
Hazardous Materials, Solid Waste, Pollution Prevention		
Short term/Construction	No impacts	No impacts
Direct Impacts		
Indirect Impacts		
Cumulative Impacts		
Historic, Architecture, Archaeologic, Cultural Resources		
Short term/Construction	No impacts	No impacts
Direct Impacts		
Indirect Impacts		
Cumulative Impacts		
Land Use		
Short term/Construction	No impacts	No impacts
Direct Impacts		

	No Action	Proposed Action
Indirect Impacts		
Cumulative Impacts		
Natural Resources and Energy Supply		
Short term/Construction	No impacts	Construction of the project would require the short-term and minor use of consumable natural resources (e.g., fuels for construction equipment).
Direct Impacts		No impacts
Indirect Impacts		
Cumulative Impacts		
Noise and Compatible Land Use		
Short term/Construction	No impacts	Residences in the vicinity of tree removal areas will experience increased noise for a total of 8-10 weeks associated with construction
Direct Impacts		No impacts
Indirect Impacts		No impacts
Cumulative Impacts		No impacts
Socioeconomics, Environmental Justice, Children's Environmental Health and Safety Risks		
Short term/Construction	No impacts	No impacts
Direct Impacts		
Indirect Impacts		
Cumulative Impacts		
Visual Effects		
Short term/Construction	No impacts	- Short-term visual impacts from tree removal.
Direct Impacts		- Residents who live adjacent to tree removal areas will have a change of view from a dense second-growth forest to a harvested area with stumps. - Removal of trees would alter rural forested visual character of the area.
Indirect Impacts		No impacts
Cumulative Impacts		No impacts
Water Resources		
Short term/Construction	No impacts	- Tree removal could disturb soils and cause siltation.
Direct Impacts		- Would convert 0.1 acres of forested wetlands to emergent wetlands. - Loss of 0.1 acres of shade and shelter wetland function. - Loss of 0.56 acres of riparian habitat.
Indirect Impacts		- Habitat modification could cause a change in the wildlife species that use the habitat and how it is used. - Disturbed soils provide the opportunity of nonnative species to colonize the disturbed area and outcompete native species.
Cumulative Impacts		No impacts

3.12 Mitigation Measures

The Proposed Action incorporates a number of avoidance, conservation, and minimization measures that would reduce and mitigation impacts. These include:

- After tree removal, soils would be stabilized with an appropriate seed mix (which may include sterile grass or a native upland forest herbaceous mix) immediately after tree removal and inter-planted by the next growing season with native shrubs or short-statured trees such as vine maple, red-osier dogwood, cascara, and Douglas hawthorn (i.e., if trees are removed in the late summer/early fall, soil stabilization would occur that same fall, and inter-planting would be accomplished the following spring).

- Tree removal in occupied/contiguous habitat would occur outside of the combined marbled murrelet, northern spotted owl and Pacific marten breeding/denning season (February 1 to September 15) to avoid the potential for take.

- Tree removal in occupied/contiguous marbled murrelet habitat would occur during daylight hours (i.e., not at dawn or dusk).

- Tree removal would occur outside of the breeding period of February 1 to September 15 or a pre-construction survey will be done to look for active MBTA protected species nests.

- Tree removal within 50 feet of streams will occur during the dry season (late July to mid-September) to eliminate the chance of erosion and sedimentation below the OHWL.

- Trees within 50 feet of a creek or within a delineated wetland will be left where they fall rather than hauled off-site. In these areas, obstructions will be removed using hand tools and low-impact equipment. Heavy equipment such as track rigs will not be used. The contractor will be required to access the site and perform the work on foot or using wetland mats to protect sensitive vegetation.

- Riparian setbacks and wetlands will be flagged prior to construction.

- Erosion and sedimentation control BMPs will be inspected twice-weekly to prevent soil from mobilizing outside of work areas and into fish-bearing streams.

- Emergency spill response and clean-up equipment will be available on-site during all construction activities.

- Adjacent to the residential properties, tree removal will be limited to Monday through Friday from the hours of 7:00 AM to 5:00 PM.

- Work will not take place on Saturdays, Sundays, state and federal holidays, or from 5:00 PM to 7:00 AM.

- The City will provide residents 14 days-notice before tree removal will begin on adjacent property.

- On tax lots 11-11-32-00-00200, 11-11-32-00-01604, and 11-11-32-00-00201, slash piles will be chipped or removed.
- Construction access and staging areas will be located on existing paved or disturbed surfaces in upland areas. No staging will occur within delineated wetlands or riparian buffers.

3.13 Permits or Other Approvals Required

The following permits are required prior to construction of the Proposed Action:

- City of Newport Construction Permit – Noise
- Oregon Department of Forestry
    - Notification for an Operation (ORS 527.670)
    - Permit to Use Fire or Power-driven Machinery (ORS 477.625)
    - Intent to Harvest Timber (ORS 321.550)

CHAPTER 4

Agency Coordination, Tribal Consultation and Public Outreach

4.1 Introduction

Agency coordination was conducted during the preparation of this EA to obtain information from interested agencies and to meet the consultation requirements of special purpose environmental laws (e.g., NHPA). A public outreach program was also implemented to ensure information regarding the Proposed Action, alternatives, and its potential environmental impacts was made available to the public and that comments from the public were considered during the preparation of the EA. A summary of this coordination on the EA is provided below.

4.2 Agency Coordination

4.2.1 State Historic Preservation Office

On July 8, 2019, the FAA initiated Section 106 of the National Historic Preservation Act consultation with the SHPO by providing them a project description, survey methodology, and map of the APE. The FAA received concurrence on the APE from SHPO on August 5, 2019 (French 2019).

On December 9, 2019, the FAA submitted the Cultural Resources Assessment (ESA 2019a) along with its finding of *No Historic Properties Affected*. SHPO concurred with FAA's finding for above-ground historic resources on January 2, 2020 (Schwartz 2020) (SHPO Case Number 19-1125). The SHPO provided a separate letter regarding below ground archaeological resources on January 10, 2020, that requested additional information. FAA submitted a response to SHPO's comments on February 3, 2022. No comments were received back from SHPO by March 5, 2022. Therefore, under 36 CFR 800.3(c)(4) and 36 CFR 800.4(d)(1)(i), the FAA's responsibilities under Section 106 have been fulfilled (see **Appendix D**).

4.2.2 Government-to-Government Consultation

The FAA initiated Government-to-Government consultation on July 8, 2019 with the following Tribes: Confederated Tribes of the Warm Springs Reservation, Confederated Tribes of the Grand Ronde, and Confederated Tribes of the Siletz Indians. The consultation letters provided a project description and a graphic depiction of the APE.

On December 9, 2019, the FAA submitted the Cultural Resources Assessment to the consulting Tribes. On December 16, 2019, the FAA received an email from the Confederated Tribes of the Grand Ronde deferring any further comments to primary tribes of the area (Pouley 2019). No other comments were received back. Therefore, under 36 CFR 800.3(c)(4) and 36 CFR 800.4(d)(1)(i), the FAA's responsibilities under Section 106 have been fulfilled (see **Appendix D**).

4.2.3 U.S. Army Corps of Engineers

Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Activities in waters of the United States regulated under this program include fill for development, water resource projects, infrastructure development, and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States. The U.S. Army Corps of Engineers (Corps) administers the program and issues permit decisions.

The first agency meeting was held on October 11, 2018. Brian Zabel from the Corps called into the meeting. The meeting discussed the Proposed Action, surveys and technical studies to be conducted, and schedule. The agencies were asked if they knew of any resources in the areas that required special attention in regards to the obstruction removal or studies that needed to be conducted. The Corps advised that they should be brought into the Section 106 process early to make sure that Tribal coordination is adequately addressed. Tribes to be consulted should include Grand Ronde and Siletz. If trees are cut at the base and roots are left in the ground, and no temporary roads are needed then a permit would not be required. But if tree removal involves mechanized equipment and grading/excavation in wetlands then a permit may be needed. The Corps requested a copy of the wetland delineation report in advance in order to make a preliminary jurisdictional determination of the wetlands/waters.

A second agency meeting was held on November 21, 2019, to provide the agencies an update on the project and the results of the field surveys. Carrie Bond with the Corps called into the meeting. The Corps requested that the wetland delineation report be submitted to the Corps as well as Oregon Department of State Lands (DSL) for concurrence.

A third agency meeting was held on September 29, 2021, to provide the agency an update on the proposed project and that the scope of the project had been reduced to removing obstructions in the visual approach of Runway 20, the non-precision instrument approach and threshold siting surfaces of Runway 34, and the precision instrument approach and threshold siting surfaces of Runway 16. Katharine Mott from the Corps called into the meeting. The need for a permit will depend on tree removal methods. If clearing by hand, then no permit would likely be needed. If tree removal will require heavy equipment in wetlands/streams, the project may need a permit and could be covered under Nationwide 33 permit, Temporary Construction, Access, and Dewatering; or if several trees will be felled and left in wetlands/streams/riparian zones, the project may require a Nationwide 27 permit for Aquatic Habitat Restoration. Logs left in wetlands could be viewed as fill depending on the effects the down wood would have on the wetland (e.g. impounding water). If logs are left in wetlands and the applicant wants to claim aquatic habitat enhancement, then scientific justification and/or examples of similar beneficial projects would be needed as part of the permitting process.

4.2.4 U.S. Fish and Wildlife Service

The Endangered Species Act provides for the conservation of species that the federal government lists as endangered or threatened and the conservation of ecosystems on which those species depend. USFWS has jurisdiction over terrestrial species and freshwater species and designated Critical Habitat listed under Endangered Species Act. Section 7 consultation is required if the FAA determines that an action may affect a federally-listed threatened or endangered species. Consultation with USFWS (for terrestrial and freshwater species) or NMFS (for marine and anadromous species) is needed to ensure that any action the FAA authorizes, funds, or carries out is not likely to jeopardize the continued existence of any federally-

listed threatened or endangered species, or result in the destruction or adverse modification of critical habitat.

The first agency meeting was held on October 11, 2018. Craig Rowland from USFWS called into the meeting. The meeting discussed the Proposed Action, surveys and technical studies to be conducted, and schedule. The agencies were asked if they knew of any resources in the areas that required special attention in regards to the obstruction removal or studies that needed to be conducted.

A second agency meeting was held on November 21, 2019, to provide the agencies an update on the project and the results of the field surveys. David Leal from USFWS called into the meeting. USFWS recommended doing reconnaissance-level surveys for bald eagle nests. It was reported that during field surveys completed in spring and fall of 2019, no large stick nests near riparian areas have been observed. USFWS inquired about the presence of old-growth trees and mentioned surveys for marbled murrelet may be needed given the proximity of critical habitat mapped in the National Forest located south and east of the study area.

A third agency meeting was held on September 29, 2021, to provide the agency an update on the proposed project and that the scope of the project had been reduced to removing obstructions in the visual approach of Runway 20, the non-precision instrument approach and threshold siting surfaces of Runway 34, and the precision instrument approach and threshold siting surfaces of Runway 16. Michele Zwartjes from USFWS called into the meeting. USFWS inquired about the potential for bald eagle nests in the vicinity. It was reported that during field surveys completed in spring and fall of 2019, no large stick nests near riparian areas have been observed. ODFW and Oregon Department of Forestry (ODF) concurred there were no known nests. USFWS would like FAA to consider measures for minimizing the colonization of invasive plants after tree removal. USFWS inquired if it would be possible to leave some snags for habitat. It was explained that snags are considered a wildlife attractant and are incompatible with the approach and departure surfaces, even at the proposed distances from the runway ends. USFWS is not concerned about impacts on marbled murrelet and spotted owl critical habitat due to the distance from the project (~ 0.6 mile away). They requested discussion of preliminary effect determinations for Section 7 consultation on the marbled murrelet and spotted owl.

Additional coordination occurred with USFWS in the development of conservation measures that were included in the BA. The FAA initiated informal consultation with USFWS on January 7, 2022. A field visit was conducted with USFWS on February 10, 2022, to look at potential murrelet habitat. Based on the field visit, USFWS determined that there are trees in the area that hav been determined to be occupied that provide suitable nesting platforms for marbled murrelet, and some of these trees have been slated for removal, thus there would be negative effects to the species from removing nesting habitat. In addition, removing the 2.7 acres of continuous forested area will create a new opening and edge in the forest that will provide easier entry for predators such as corvids. As a result, formal consultation was initiated on February 24, 2022, for the marbled murrelet. USFWS indicted in an email that the project already incorporated significant conservation measures into the project (avoiding tree removal during nesting season, etc.), and does not anticipate any changes needed to the project. The results of the formal consultation will be provision of authorization for incidental take of a listed species under Section 7 of the Endangered Species Act in the form of an incidental take statement, which is part of the Biological Opinion.

On March 4, 2022, USFWS conducted a second field visit to Steel String and Weyerhaeuser properties to assess habitat for the northern spotted owl. In an email on March 15, 2022, USFWS confirmed that the

area in question is potentially suitable northern spotted owl habitat. They indicated that there may not be a large enough contiguous area of suitable habitat to support a pair of nesting owls. They will be doing a GIS exercise and some additional analyses to make a final determination with regard to the effect determination for the northern spotted owl. Their assessment will be included in the Biological Opinion they will be issuing, which is anticipated in May 2022. FAA orders require that Section 7 consultation be completed prior to or at the same time the Final EA is issued.

4.2.5 National Marine Fisheries Service

The Endangered Species Act provides for the conservation of species that the federal government lists as endangered or threatened and the conservation of ecosystems on which those species depend. NMFS has jurisdiction over marine species, including anadromous fish and designated Critical Habitat listed under Endangered Species Act.

The first agency meeting was held on October 11, 2018. Jennie Franks from NMFS called into the meeting. The meeting discussed the Proposed Action, surveys and technical studies to be conducted, and schedule. The agencies were asked if they knew of any resources in the areas that required special attention in regards to the obstruction removal or studies that needed to be conducted. NMFS stated that the streams in the area are not listed as critical habitat for fish and that some of the streams (Henderson Creek, Moore Creek) were historical habitat for Oregon Coast Coho, but there are no current data to show that Coho currently use the streams presently, and added that ODFW might have more information about fish use of the streams. NMFS stated that FAA would need to make the determination about potential project impacts on listed fish and EFH per the Magnuson-Stevens Fisheries Conservation & Management Act.

A second agency meeting was held on November 21, 2019, to provide the agencies an update on the project and the results of the field surveys. Michelle McMullan from NMFS called into the meeting. NMFS did not have substantive input into the project.

4.2.6 Oregon Department of State Lands

Oregon's Removal-Fill Law requires people who plan to remove or fill material in wetlands or waterways to obtain a permit from the Department of State Lands. The law applies to all landowners, whether private individuals or public agencies.

The first agency meeting was held on October 11, 2018. Lauren Brown from DSL called into the meeting. The meeting discussed the Proposed Action, surveys and technical studies to be conducted, and schedule. The agencies were asked if they knew of any resources in the areas that required special attention in regards to the obstruction removal or studies that needed to be conducted. DSL does not regulate vegetation removal, unless it is in a wetland, below the OHWL of a stream, or within a tidal water. ODFW indicated that no tidal waters are east of U.S Highway 101. DSL recommended coordination with Carrie Landrum from DSL regarding project timing and delineation methods to collaborate on a strategy for addressing the issue of not being able to investigate all affected tax lots early on, but then having access later in the project. Coordination would help streamline DSL's review.

The wetland delineation was submitted to DSL on January 24, 2020. DSL issued concurrence on the delineation on September 27, 2021 (WD # 2020-0008) (**Appendix C**).

A third agency meeting was held on September 29, 2021, to provide the agency an update on the proposed project and that the scope of the project had been reduced to removing obstructions in the visual approach of Runway 20, the non-precision instrument approach and threshold siting surfaces of Runway 34, and the precision instrument approach and threshold siting surfaces of Runway 16. Carrie Landrum from DSL called into the meeting. She confirmed that DSL had concurred with the wetland delineation.

4.2.7 Oregon Department of Fish and Wildlife

The first agency meeting was held on October 11, 2018. Paul Olmsted and Derek Wilson from ODFW attended the meeting. The meeting discussed the Proposed Action, surveys and technical studies to be conducted, and schedule. The agencies were asked if they knew of any resources in the areas that required special attention in regards to the obstruction removal or studies that needed to be conducted. ODFW stated that the area surrounding the Airport has several large, mature conifers that provide habitat, including potential nesting sites, for marbled murrelet, owls, bald eagles, etc. ODFW inquired if topping of trees to create snags was an option. It was explained that snags are a wildlife attractant that can be hazardous to aviation and thus the practice is discouraged near airports. ODFW inquired about what would happen to the trees once they were cut and would be interested in them for creek restoration projects. ODFW said that mitigation should factor in habitat quality as well as the acreage or footprint of impact. There is no specific mitigation ratio to achieve, but consider conservation along Big Creek (for example) where there are large spruces and other conifers.

A second agency meeting was held on November 21, 2019, to provide the agencies an update on the project and the results of the field surveys. Paul Olmsted from ODFW attended the meeting. ODFW recommended retaining riparian trees to the greatest extent possible, especially trees within 50 feet of streams. They would like the tree trunks and root wads for various restoration projects if available. Tipping the trees and leaving them in the riparian zone with portions of the tree in wetlands/streams would be beneficial and considered mitigation. The Airport is agreeable to letting ODFW have the trees as long as they are able to haul them away.

A third agency meeting was held on September 29, 2021, to provide the agency an update on the proposed project and that the scope of the project had been reduced to removing obstructions in the visual approach of Runway 20, the non-precision instrument approach and threshold siting surfaces of Runway 34, and the precision instrument approach and threshold siting surfaces of Runway 16. John Spangler from ODFW called into the meeting. ODFW would prefer to have trees tipped over and leave woody material in wetlands and the 50-foot riparian setback to the extent possible and also leave woody material or log piles in uplands beyond the 50-foot riparian setback if possible because ODFW is very interested in using the removed timber for other restoration projects. Coho have been seen in Thiel Creek in small numbers, but not in Henderson Creek or Moore Creek, which are much smaller streams.

On February 16, 2022, the proposed conservation measures for fish and creeks were submitted to ODFW (John Spangler) to provide feedback. In an email dated February 18, 2022, ODFW concurred with the proposed conservation measures and the determination that there would be no effect to Oregon Coast Coho salmon.

4.2.7 Oregon Department of Forestry

The first agency meeting was held on October 11, 2018. Joe Koch and Matt Thomas from the ODF attended the meeting. The meeting discussed the Proposed Action, surveys and technical studies to be conducted, and schedule. The agencies were asked if they knew of any resources in the areas that required

special attention in regards to the obstruction removal or studies that needed to be conducted. ODF stated that all tree removal for the project would require notification to ODF, which involves filling out an on-line application form. The process is straightforward and requires identifying polygons of trees or general areas of impact (not tree-by-tree data).

A second agency meeting was held on November 21, 2019, to provide the agencies an update on the project and the results of the field surveys. Matt Thomas from ODF attended the meeting. They provided similar input as they did in the first meeting.

A third agency meeting was held on September 29, 2021, to provide the agency an update on the proposed project and that the scope of the project had been reduced to removing obstructions in the visual approach of Runway 20, the non-precision instrument approach and threshold siting surfaces of Runway 34, and the precision instrument approach and threshold siting surfaces of Runway 16. ODF attended the meeting and provided similar input as they did the last two meetings.

4.3 Public Outreach

The first open house for the project was held on October 11, 2018, at City Hall. Notification of the open house was published in the local newspaper and mailed to property owners within 500 feet of the Airport property. The purpose of the meeting was to notify the public of the proposed project. Figures of the obstructions identified in the *KONP Obstruction Analysis Report* (Quantum Spatial, Inc. 2019) were on display for the public to review. City representatives explained that obstructs in the regulated airspace were identified and the City was going to prepare an EA to assess the potential impacts of removing the obstructions. Comments raised by the public included the concern that removing vegetation would cause an increase in noise for departing and arriving aircraft; visual impacts, impact to personal property from tree removal; erosion; and colonization of invasive species. Approximately 20 people attended the meeting.

A second public meeting was held on September 28, 2021, via zoom. There were technical difficulties with the meeting so another meeting was held November 11, 2021. Notification of the public meeting was published in the local newspaper and mailed to property owners on Birch and Cedar streets. The meeting was also recorded and put on the Airport's webpage. https://www.newportoregon.gov/dept/onp/projects.asp. The purpose of the meeting was to give the public an update on the proposed project and that the scope of the project had been reduced since the last meeting in October 2018. The project moving forward includes removing obstructions in the visual approach of Runway 20, the non-precision instrument approach and threshold siting surfaces of Runway 34, and the precision instrument approach and threshold siting surfaces of Runway 16. Several comments were received regarding the technical difficulties and concerns about removal of trees on personal property.

CHAPTER 5

List of Preparers

The following individuals were involved in the preparation of this EA. Information provided includes the organization for which each individual works, a brief synopsis of their experience and qualifications, and their responsibilities in preparing the EA document.

5.1 Environmental Science Associates

Susan Cunningham, Project Manager. B.S. Biology. Over 30 years of experience in environmental planning, with expertise in biological resources, wetlands, land use, and preparation of NEPA documents. Responsible for project management, project approach, technical writing, and technical compliance.

Sarah Hartung, PWS, Ecologist. Over 20 years of experience with expertise in wetland and riparian ecology and threatened and endangered species. Responsible for biological field surveys; preparing the Biological Assessment, Wetland Delineation Report, No Effect Letter, and technical writing on the EA; and agency coordination.

Luke Johnson, Ecologist. Ten years of experience with expertise in wetland and riparian ecology and threatened and endangered species. Responsible for biological field surveys.

Thomas Ostrander, Archeologist. Ten years of experience as a physical anthropologist and archaeologist. Responsible for leading the cultural resources field investigation and preparing the Cultural and Historic Resources Report and analysis for the EA.

Chris Lockwood, Ph.D., Archaeologist. Over 20 years of experience in archaeology and cultural resources in a broad range of environments including coastal, fluvial, lacustrine, and urban settings. Provided technical compliance review for Cultural and Historical Resources investigation.

Peter Carr, Technical Editor. Over 20 years of experience in technical editing of NEPA documents and supporting technical studies.

5.2 Precision Approach Engineering

Geoff Vaughn, P.E., Design Engineer. Over 15 years of the experience specializing in aviation design and construction services. Responsible for preliminary engineering of Proposed Action.

CHAPTER 6

Acronyms, Abbreviations, and References

6.1 Acronyms and Abbreviations

The following is a list of abbreviations and acronyms used throughout the document:

AC	Advisory Circular
AEDT	Aviation Environmental Design Tool, Vestion 3d
AGIS	Airport Geographic Information System
AIP	Airport Improvement Program
Airport	Newport Municipal Airport
APE	Area of Potential Effect
AWOS	Automated Weather Observing Station
BMPs	best management practices
CU560	Cessna Citation Ultra aircraft
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
City	City of Newport, Oregon
CO	carbon monoxide
CO2	carbon dioxide
Corps	U.S. Army Corps of Engineers
CZMA	Coastal Zone Management Act of 1972
dB	decibels
dbh	diameter at breast height
DLCD	Oregon Department of Land Conservation and Development
DNL	Day-Night Average Sound Level
DSL	Oregon Department of State Lands
EA	Environmental Assessment
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
ESU	Evolutionarily Significant Unit
FAA	Federal Aviation Administration
FAR	Federal Air Regulation
FBO	Fixed Base Operator
FEMA	Federal Emergency Management Agency
FR	Federal Register
GHG	Greenhouse gas
IPaC	Information for Planning and Consultation
KONP	Newport Municipal Airport
LiDAR	Light Detection and Ranging
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MBTA	Migratory Bird Treaty Act of 1918
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act

NMFS	National Marine Fisheries Service
NO2	nitrogen dioxide
NPIAS	National Plan of Integrated Airport Systems
OAR	Oregon Administrative Rules
OCMP	Oregon Coastal Management Program
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
OHWL	ordinary high water line
ORBIC	Oregon Biodiversity Information Center
ORS	Oregon Revised Statutes
PFMC	Pacific Fisheries Management Council
RCRA	Resource Conservation and Recovery Act
RDC	Runway Design Code
SHPO	Oregon State Historic Preservation Office
SO2	sulfur dioxide
SWPP	Stormwater Pollution Prevention Plan (
U.S.	United States
UGB	Urban Growth Boundary
U.S.C.	United States Code
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service

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