



TREE MANAGEMENT PROJECT:

AVIGATION EASEMENT & ENVIRONMENTAL ASSESSMENT PRESENTATION

June 7, 2018

Review
November 2, 2017
Presentation



FAA EXPECTATIONS



Federal Aviation Administration

MEMORANDUM

Date: August 18, 2015
To: Regional Airports Division Managers
610 Branch Managers
620 Branch Managers
Airports District Office Managers
From:  Director, Office of Airport Safety and Standards (AAS-1)
 Director, Office of Airport Planning and Programming (APP-1)
 Director, Office of Airport Compliance (ACO-1)
Subject: **Reminder of Responsibilities for FAA Personnel and Airport Sponsors for Protecting Approach and Departure Surfaces**

Introduction

The purpose of this memo is primarily to remind FAA Office of Airports staff about their responsibilities (as well as the responsibilities of airport sponsors) in establishing and maintaining clear approach and departure surfaces at airports. We encourage personnel in all Regions and ADOs to relay this memorandum to all Federally obligated airports and any that are certificated under 14 CFR part 139, as well as all state aeronautical agencies. This memorandum will also be available on the FAA's public website under Safety, Planning and Compliance.

The airport sponsor is ultimately responsible for ensuring clear runway approach and departure surfaces. However, ARP plays an important role in this process. This role is detailed in a separate section below.

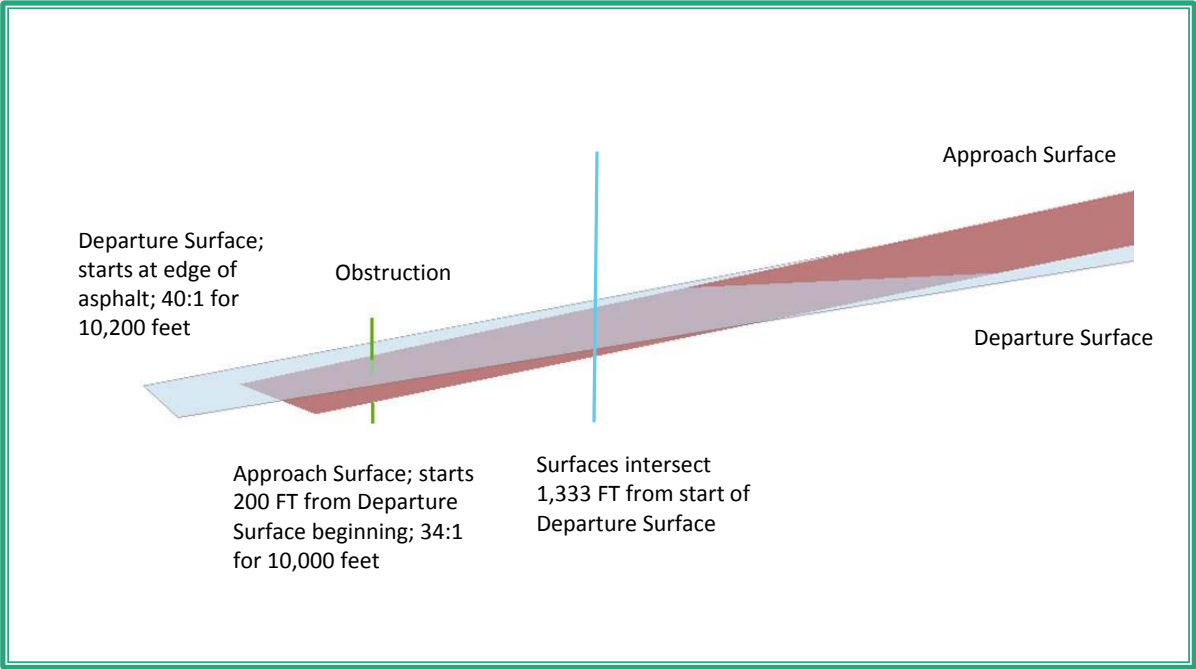
The approach and departure surfaces required to be maintained are those identified by Advisory Circular (AC) 150/5300-13A, Airport Design and FAA Order 8260.3B, The United States Standard for Terminal Instruments Procedures (TERPS). The focus of this document is on the TERPS 20:1 surface. While Part 77 civil airport imaginary surfaces are important, they are not the surfaces discussed in this document as they do not directly affect procedures.

Role of the Office of Airports (ARP)

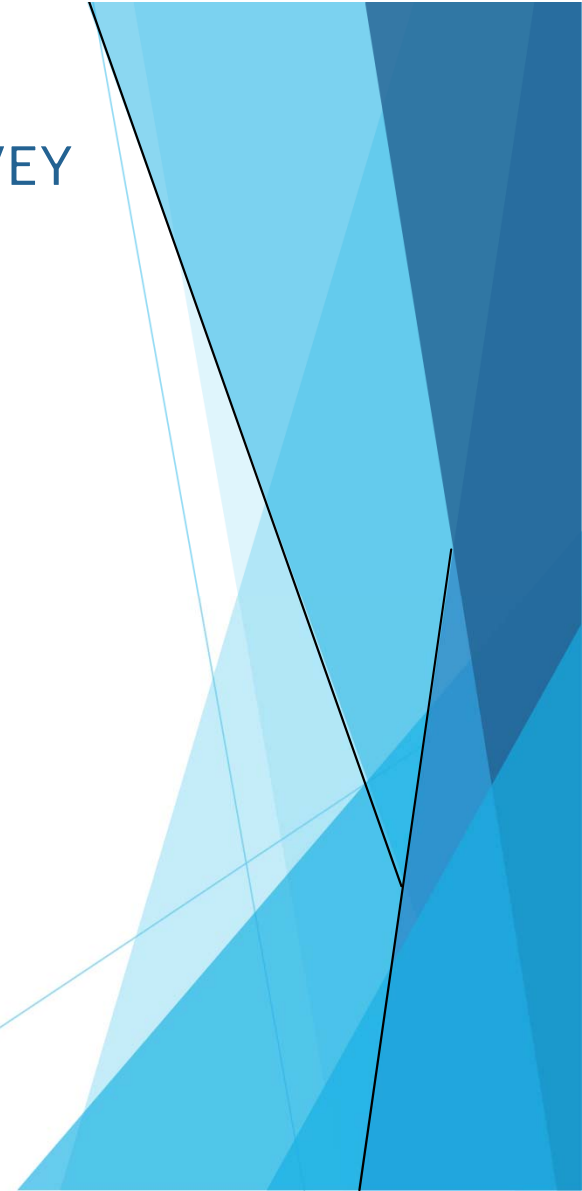
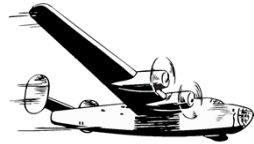
- A core part of ARP's mission is to help maintain and enhance the safety, capacity

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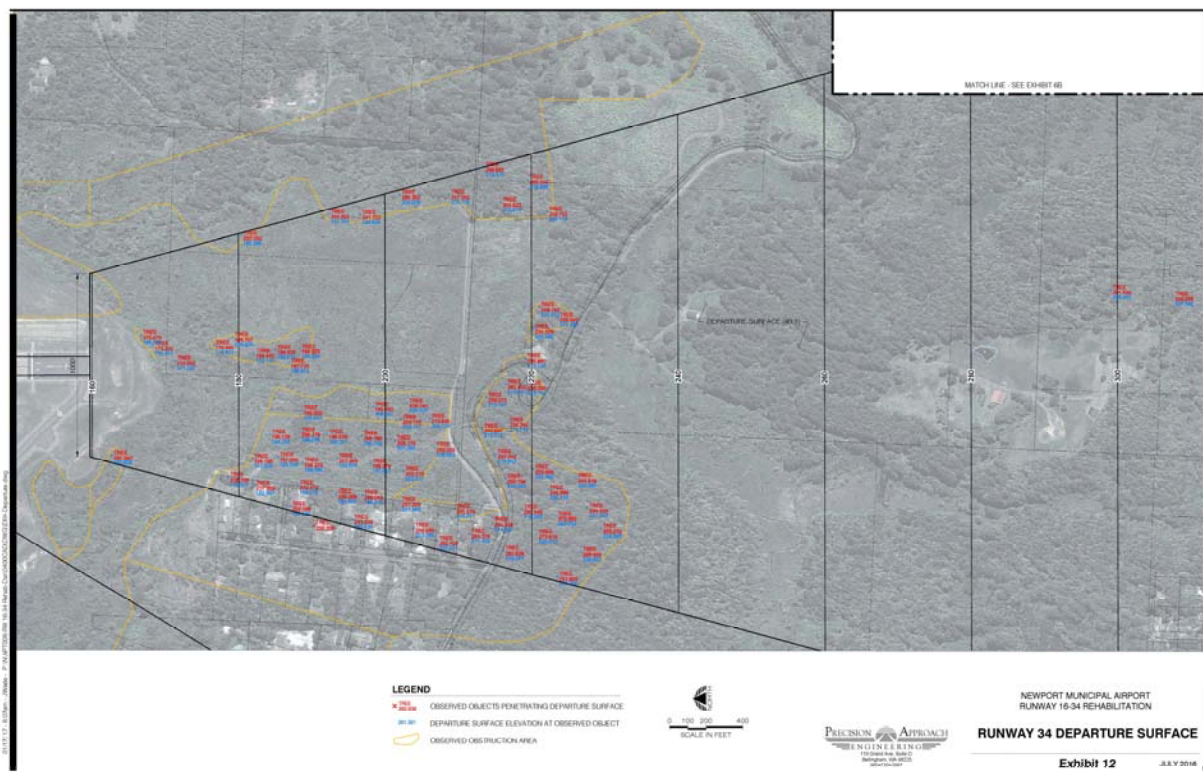
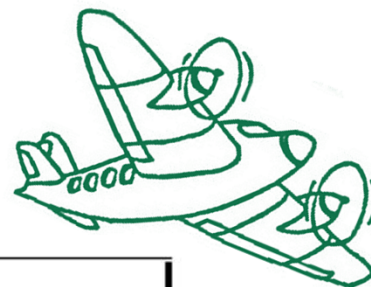
Imaginary Surfaces



AIRPORT GEOGRAPHICAL INFORMATION SYSTEM SURVEY



2015 EXHIBITS





PROJECT TIMELINE

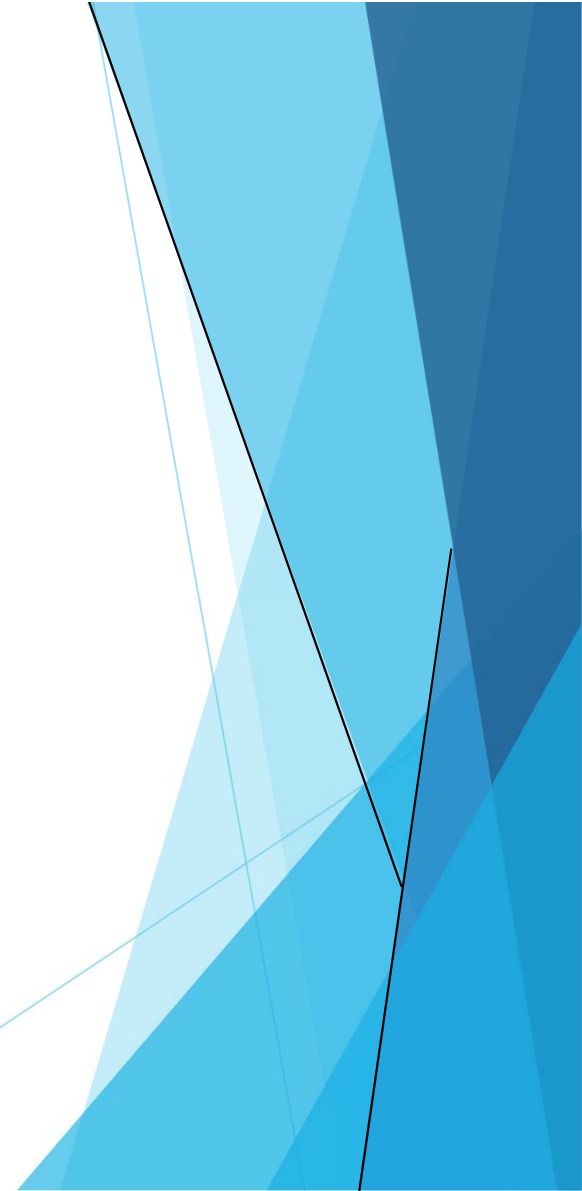
Action	Priority	Status	FAA			Notes
			Start Date	End Date	Done	
Phase #1: Project Initiation						
Draft Action Plan						
Abideop	High	Completed	8/1/2017	8/14/2017	Y	For Public Outreach.
Detailed	High	Completed	8/1/2017	8/14/2017	Y	For FAA.
Introduce Project to City Council	High	Completed	9/18/2017	9/18/2017	Y	
Introduce Project to Airport Committee	High	Completed	9/22/2017	9/22/2017	Y	Introduced 8-27.
Introduce Project to Property Owners	High	In Process	10/16/2017	11/7/2017		Initial meeting.
Get FAA involved						
Copy to Start for Review	High	Completed	8/14/2017	8/28/2017	Y	Preliminary Review.
Input Plan to DE/AAA-NRA Case for Clearing Review	High	Not Started	9/1/2017	11/7/2017		Upload to website for review.
Preliminary Project Scope & Cost - Easements	High	In Process	10/19/2017	4/2/2018		In costing phase.
Phase #2: Pre-Design						
Environmental Assessment						
AAA Environmental Review	Medium	In Process	9/8/2017	11/30/2017	Y	Sean @ JPC
Discuss Funding and Timing during JPC	Medium	Completed	10/1/2017	10/1/2017	Y	waiting for final funding approval.
Preliminary Project Scope & Cost - EA	High	In Process	3/15/2018	4/15/2018		Use for grant application.
Prepare Grant Application NPE Funding for EA	High	Not Started	4/2/2018	4/15/2018		First of two grants.
Environment Assessment (EA)	Medium	Starting	6/15/2018	6/15/2020		18 - 24 Months.
Organize Public Outreach						
County Commissioners	Medium	Completed	10/11/2017		Y	Presentation or Abridged Plan?
Public Meetings	High	Completed	9/2/2017		Y	Opening meeting
Public Meetings	High	In Process	5/15/2018			Introduce Easement & EA processes
Individual Contracts	High	Not Started				
Literature / Exhibits / Handouts	Low	In Process				
Pre-Design Task Order						
Scope of Work	High	In Process	11/1/2017	4/2/2018		Concurrent Project.
Create Topographic Maps	High	Not Started				By EA; Task Order Drafted.
Create Easement Exhibits	Medium	Not Started	11/1/2017	4/1/2020		Written easement description; Task Order Drafted.
Timber Cruiser	Low	Not Started	5/1/2018	5/30/2018		Assess timber value; Task Order Drafted.
Property Appraisals	Low	Not Started	5/1/2018	5/30/2018		Assess Avigation value; Task Order Drafted.
FAA Review	Low	Not Started	1/15/2018	2/15/2018	Y	Overall draft approved; Task will be broken out by smaller projects.
Independent Fee Estimate	Low	Not Started	2/15/2018	3/2/2018		3 to 5 weeks.
Prepare Construction Drawings to 30%	Low	Not Started	3/26/2018	7/26/2018		Needed for EA.
FAA Review	Low	Not Started	7/30/2018	8/30/2018		30 day review.
side-survey	High	In Process	10/10/2017	11/1/2017		Cancelled. Lack of funding.
Land Survey in Lieu of Easement	High	Not Started	1/2/2018			Task 5 of Overall Tree Removal Project
Phase #3: Easements						
Start Easement Negotiations						
Tap Trees	High	Not Started	1/2/2019	12/1/2021		Conduct during EA.
Remove Trees	Low	Not Started				
Condemnation of Trees	Low	Not Started				
Record Easements	Low	Not Started	4/1/2021	5/1/2021		County courthouse.
Phase #4: Design						
Design/Construction Task Order						
Scope of Work	Low	Drafted	1/15/2021	3/15/2021		Draft approved 2/14/18. Will finalize closer to start of Design.
Complete Drawings			3/15/2021	5/29/2021		
Create Bid Documents						
Service During Logging						
Close-out Reports	Low	Not Started	9/1/2021	12/1/2021		
FAA Review	Low	Drafted	2/15/2019	2/28/2019		2 weeks. Need Final Approval
Independent Fee Estimate	Low	Not Started	2/28/2021	4/15/2021		3-5 weeks.
Apply for Design/Construction Grant	Low	Not Started	2/1/2021	4/1/2021		Second of two grants.
Site Cost for PE						
Discretionary Funding	Low	Not Started	6/1/2021	7/1/2021		30 Day Bid.
Oregon Procurement Information Network & Local	Low	Not Started	4/1/2021	5/1/2021		Read base logger community, Associated Oregon Loggers Inc
Phase #5: Logging						
Initialize Logging/Construction Contract						
Logging Construction	Low	Not Started	7/1/2021	7/15/2021		Contract to Council
Personnel Mgt Outline	Low	Not Started	8/1/2021	10/1/2021		60 days. Log during summer.
ODFW Habitat Restoration	Low	Not Started				http://www.oregonloggers.com/
Project Close Out	Low	Not Started				Michelle Longo (541) 270-1161
FAA Reports	Low	Not Started	10/1/2021	12/1/2021		

Adjustments:

- Current Phase getting off to a slow start.
- Actual Tree Removal Moved back due to FAA funding obligations.

Phase Two

Avigation Easement Preparation
Environmental Assessment



Next Steps: 18 to 36 Months



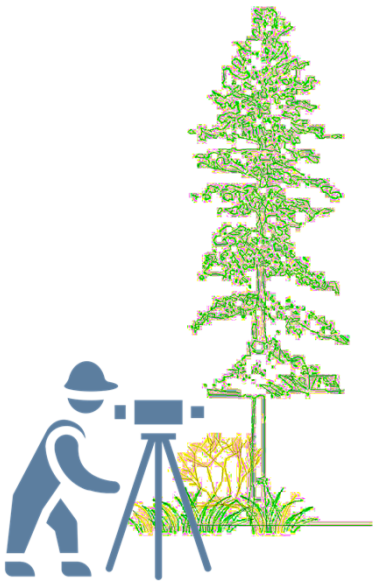
ENVIRONMENTAL
SCIENCE ASSOCIATES

- Prepare Avigation Easement Documents - PAE
- Conduct Environmental Assessment - ESA

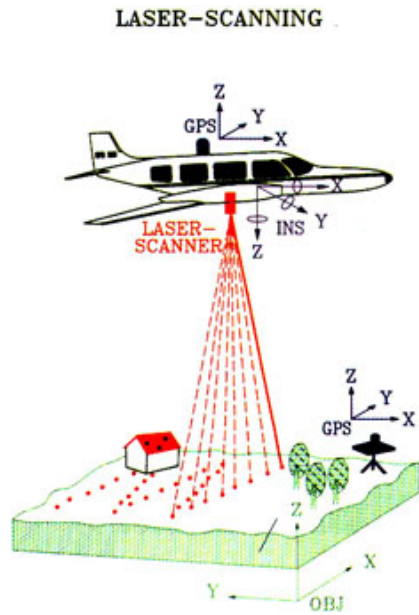
PAE SCOPE



- ▶ Research current aviation easements attached to parcels associated with off-airport removal.
- ▶ Review existing city/county airport overlay code and provide summary. [Required in conjunction with establishing value associated with additional easement impacts.]
- ▶ Support discussions coordinating how trees will be accessed, removed, and any re-planting and/or restoration measures anticipated for erosion control.
- ▶ Coordinate with review appraiser.
- ▶ Provide legal descriptions for aviation easements (includes support by Professional Land Surveyor Sub-consultant).
- ▶ Contract Appraiser to Appraise Fair Market Value (FMV) of each aviation easement. Utilize the part taken and appraisal waiver approaches as applicable - FAA AC 150/5100-17 Chg 7 pg 2-9.

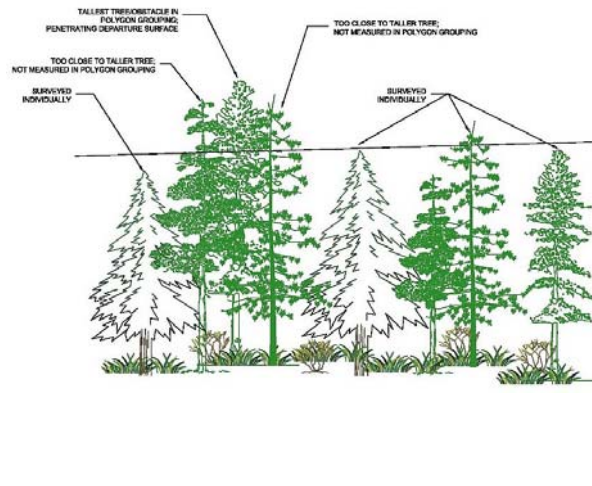


LIDAR SURVEY



More Detailed Scan; delineates every tree penetrating air surfaces.

GROUND SURVEY



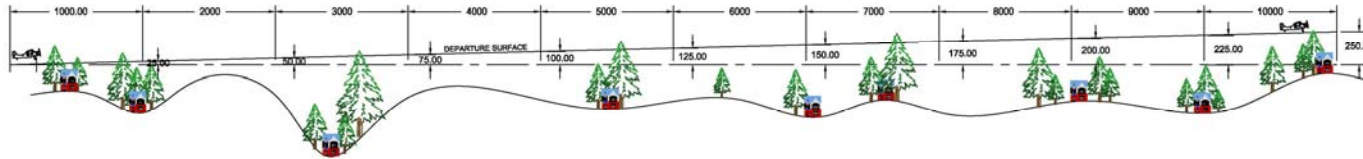
Verifies tree location marked by photogrammetry or LIDAR surveys to property lines.

CITY RESPONSIBILITIES



- ▶ Obtain review of proposed easement formats from FAA.
- ▶ Order and review preliminary title reports (PTR).
- ▶ Prepare avigation easements.
- ▶ LiDar

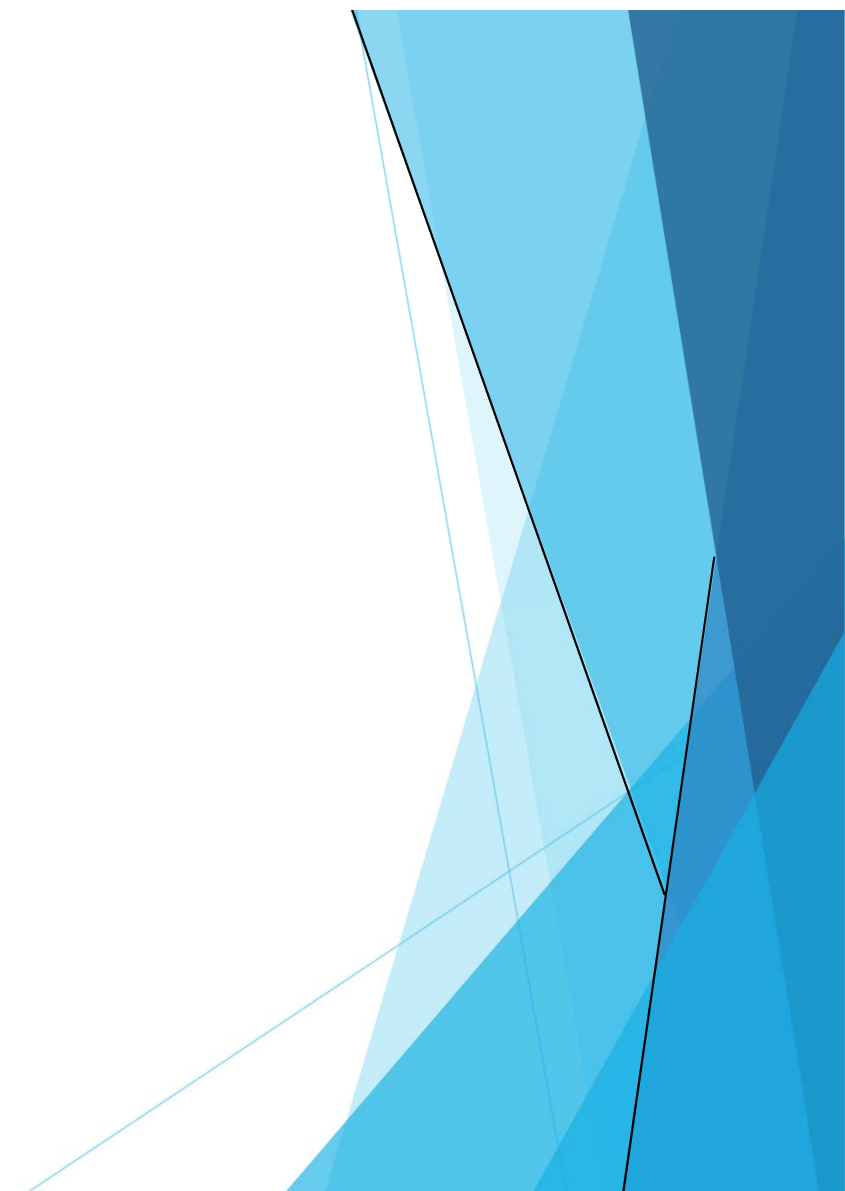
AVIGATION EASEMENTS



Three Easement Options:

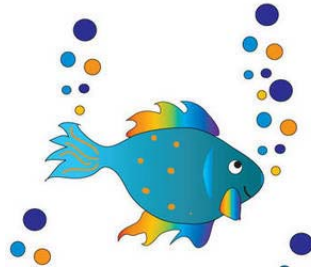
- ❖ Top Trees - City tops tree once; Owner pays for tree removal if tree dies; Owner pays to maintain / top / remove tree if it grows back into the airspace.
- ❖ Remove Entire Tree; Top Soil and Seed Removal Area
- ❖ Remove Entire Tree; No Restoration Work / Owner responsible for Top Soil and Seed.

Easement Questions?



ENVIRONMENTAL ASSESSMENT

FEDERAL
REQUIREMENT



EROSION
CONTROL

GOOD MANAGEMENT
PRACTICES

ENVIRONMENTALLY
FRIENDLY REMOVAL

ENVIRONMENTAL ASSESSMENT

- A. ORDER 1050.1F: Environmental Impacts: Policies and Procedures
- B. ORDER 5050.4B: National Environmental Policy Act (NEPA)
Implementing Instructions for Airport Actions



Elements:

- ❖ Water quality; air quality
- ❖ Wetlands
- ❖ Historic, cultural and archaeological resources
- ❖ Endangered and threatened species of flora and fauna
- ❖ Biotic communities
- ❖ Floodplains
- ❖ Farmland
- ❖ Land use compatibility
- ❖ Social impacts; induced socioeconomic impacts;
- ❖ Environmental justice
- ❖ Special land uses, dot section 4(f) lands
- ❖ Energy supply and natural resources
- ❖ Light emissions and visual effects
- ❖ Essential fish habitat
- ❖ Migratory bird act
- ❖ Cumulative impacts
- ❖ Coastal management zone program
- ❖ Wild & scenic river act
- ❖ Hazardous materials
- ❖ Solid waste impacts
- ❖ Construction impacts

RIGHT OF ENTRY AGREEMENT

- ❑ *Biological Resources* - wildlife, plants, fish and essential fish habitats
- ❑ *Cultural Resource* - historical, architectural, archeological and cultural impacts
- ❑ *Coast Resources* - costal zone management plans
- ❑ *Water Resources* - wetlands, floodplains, surface waters, groundwater, wild & scenic rivers, stormwater treatments and impervious surfaces



RIGHT OF ENTRY AGREEMENT

Right of Entry - the right of a person to go onto another's real property without committing trespass.



- ❖ *Not the Avigation Easement.*
- ❖ Surveyors, by law, are allowed entry on property without a right of entry agreement (2017 ORS 672.047¹); they are to provide first class mail notification prior to their entry.
- ❖ Access property to evaluate environmental conditions potentially impacted by future tree removal.

ENVIRONMENTAL ASSESSMENT

Phase 1: 2018

- ❖ Historic, cultural and archaeological resources
- ❖ Environmental Screening
- ❖ TBD

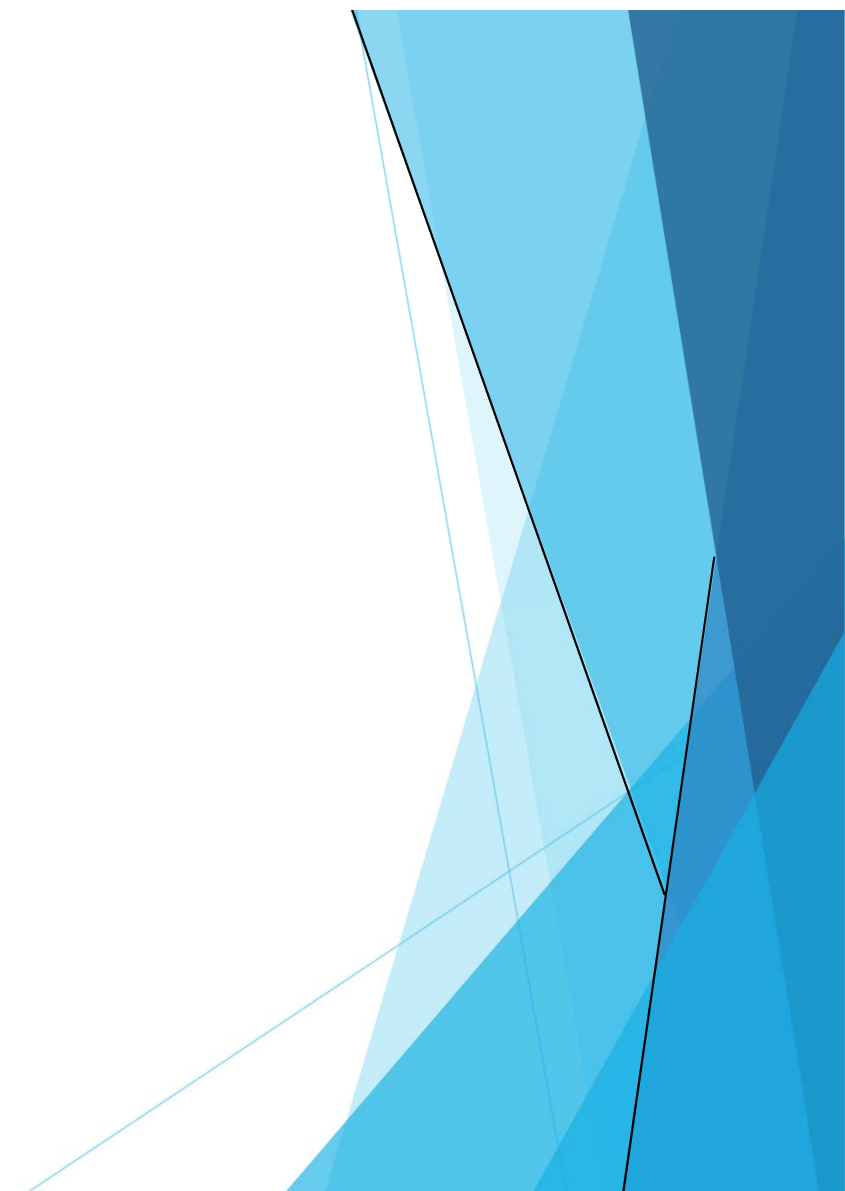


Phase 2: 2020

- ❖ TBD



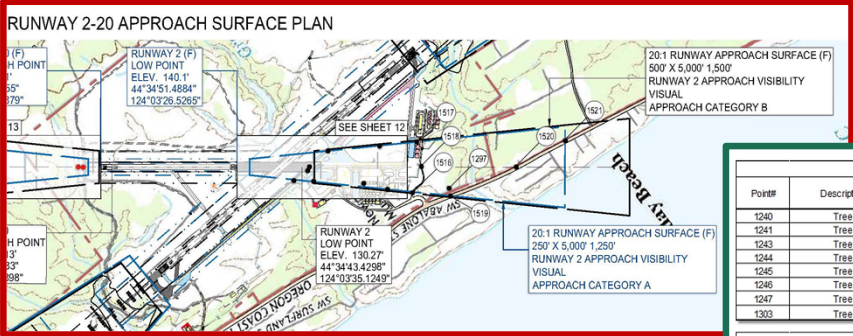
Environmental Assessment Questions?



USCGC Tree Removal



USCG Tree Removal



SHEET 11 - Runway 02 Approach Surface Obstruction Table

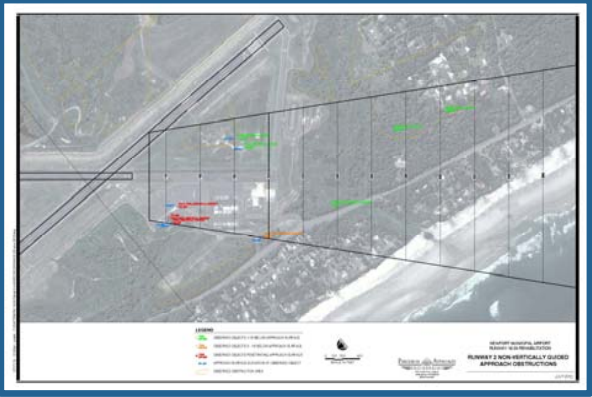
Point#	Description	Top Elev.	Approach Surface Elev.	Vertical Penetration	Surface	Disposition
1240	Tree	356.04	337	19	20.1	To Be Removed - 2018 AP Funds
1241	Tree	371.90	342	30	20.1	To Be Removed - 2018 AP Funds
1243	Tree	357.99	330	28	20.1	To Be Removed - 2018 AP Funds
1244	Tree	342.66	319	24	20.1	To Be Removed - 2018 AP Funds
1245	Tree	330.56	320	11	20.1	To Be Removed - 2018 AP Funds
1246	Tree	328.91	315	14	20.1	To Be Removed - 2018 AP Funds
1247	Tree	323.78	314	10	20.1	To Be Removed - 2018 AP Funds
1303	Tree	355.28	338	20	20.1	To Be Removed - 2018 AP Funds

SHEET 11 - Runway 20 Approach Surface Obstruction Table

Description	Top Elev.	Approach Surface Elev.	Vertical Penetration	Surface	Disposition
Tree	189.57	299	-109	20.1	To Remain
Road	109.02	266	-157	20.1	To Remain
Hangar (F)	158.00	275	-117	20.1	To Remain
Road	123.05	277	-154	20.1	To Remain
Highway 101	77.91	301	-223	20.1	To Remain
Highway 101	109.99	352	-242	20.1	To Remain
Highway 101	112.02	391	-279	20.1	To Remain

SHEET 12 - Runway 02 Inner Approach Surface Obstruction Table

Description	Top Elev.	Approach Surface Elev.	Vertical Penetration	Surface	Disposition
Sign	131.23	197	-66	20.1	To Remain
Taxiway A	142.00	175	-33	20.1	To Remain
Taxiway A	143.00	188	-45	20.1	To Remain
Group Tiedown	134.00	192	-58	20.1	To Remain
Taxiway A	145.00	204	-59	20.1	To Remain
Hangar	155.00	230	-75	20.1	To Remain
Electrical Vault	125.99	243	-117	20.1	To Remain
USCG Building	151.00	249	-98	20.1	To Remain





2018 TREE REMOVAL

FINAL QUESTIONS?