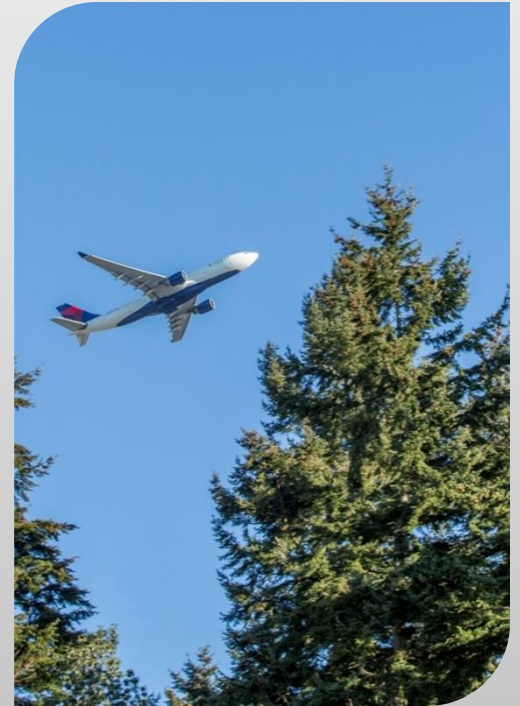


Flight Corridor Safety Program

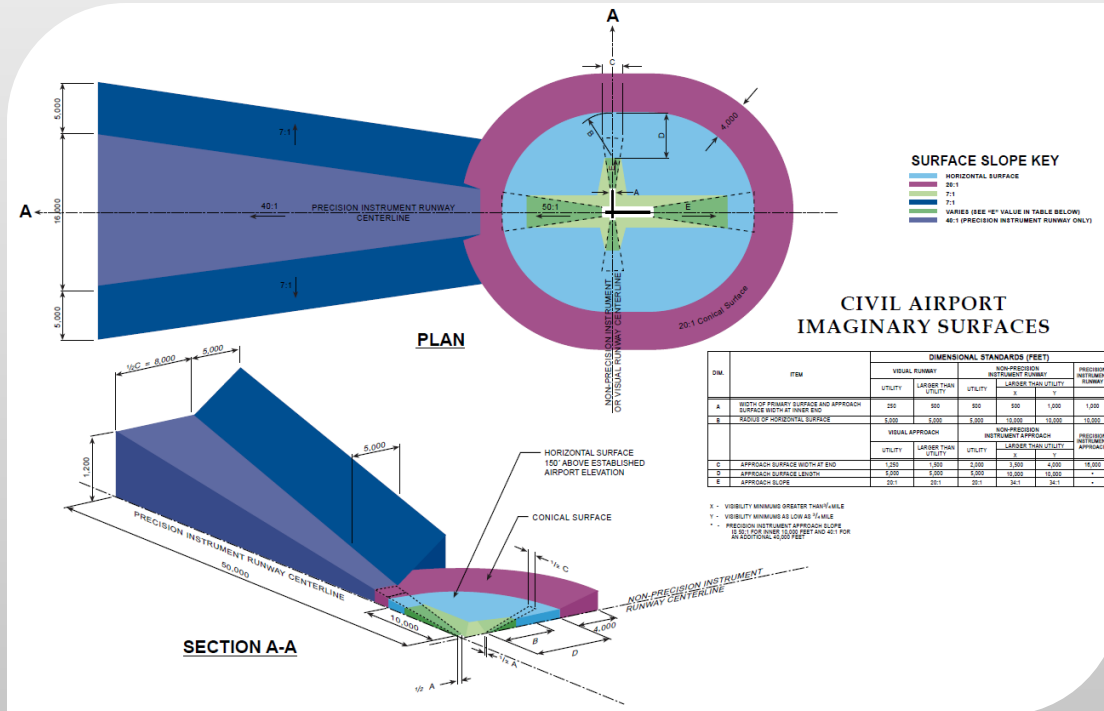
Sites P-4 and P-5 Briefing

Why Obstruction Removal?

- FAA regulations and WA State law require airports to identify and remove obstructions to navigable airspace
- Obstruction removal ensures safe operation of aircraft
- Airports around the country manage similar programs to protect the safety of the flying public



Example of Flight Corridor Surfaces



Protect Flight Corridor

How the Program Ensures Safe Operation of Aircraft

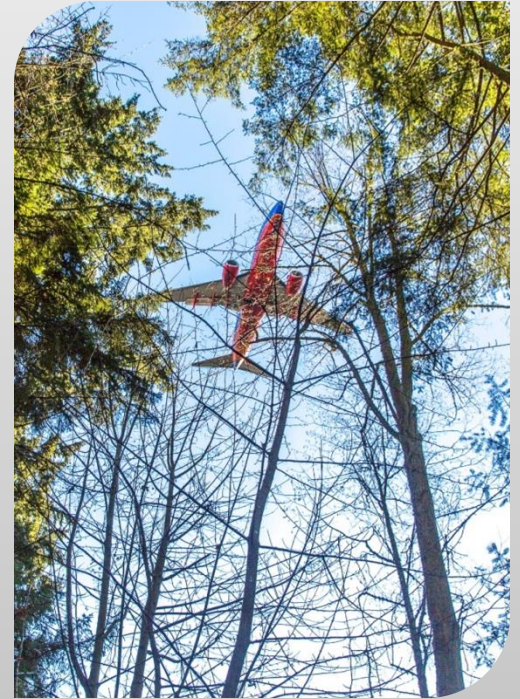
- Equipment Failure
- Weather
- Pilot Error
- Certification Compliance
- FAA Safety Regulations
- Vegetation Management



Safety of Flight

What are Obstructions?

- At Sea-Tac Airport – Primarily trees
- Existing Obstruction – Obstructions currently penetrating flight surfaces
- Potential Obstruction – Obstructions that are within 0-6' of penetrating flight surfaces
- Understory Vegetation – Non-obstruction vegetation consisting of smaller trees and shrubs growing beneath large trees (obstructions)



Multi-year Program

- **2016 – 2017:** Port-Owned Property
- **2017 – 2018 :** Publicly-Owned Property
 - Includes WSDOT, Seattle Public Utilities, Highline Public School District and possible City right-of-way in the cities of Burien, Des Moines, and SeaTac
- **2018 – 2019:** Residential & Commercial Property
 - 66 known residential properties
 - 9 known commercial properties

On-going Vegetation Management

Community Engagement

2016:

- Open House (April)
- Open House and Community Meeting (November)

2017:

- Open House (February)
- Open House and Community Meeting on sites P4-5 (June)

June 1 Open House for Sites P4 and P5

Overview of Port Sites



PORT PROPERTY BOUNDARY

SITE P-5

SITE P-6

SITE P-3A

SITE P-3B

SITE P-4

RUNWAY 16R-34L

SITE P-2

PACIFIC ROAD

RUNWAY 16C-34C

SITE P-1

RUNWAY 16L-34R

S 154TH ST
HIGHWAY 518

28TH AVE S

PACIFIC HIGHWAY

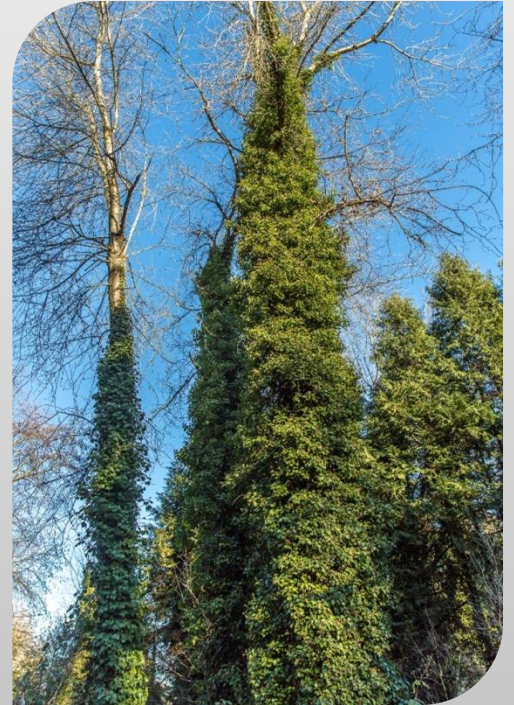
LEGEND:

— PHASE 1 CONSTRUCTION SITES

— PORT SITES P-4 AND P-5

Port Property Update

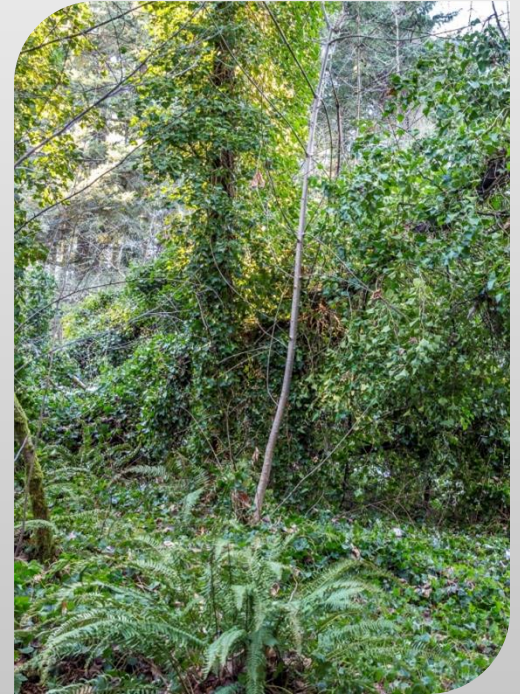
- All obstructions have been removed from approved Port Property (except P-4 & P-5)
- Replanting trees has occurred on Port property (except P-1, P-4 & P-5)
- On-going irrigation throughout the summer as-needed to increase plant survivability/establishment
- On-going maintenance of invasive species to increase plant survivability/establishment
- Additional shrubs to be planted in October, 2017



Current status

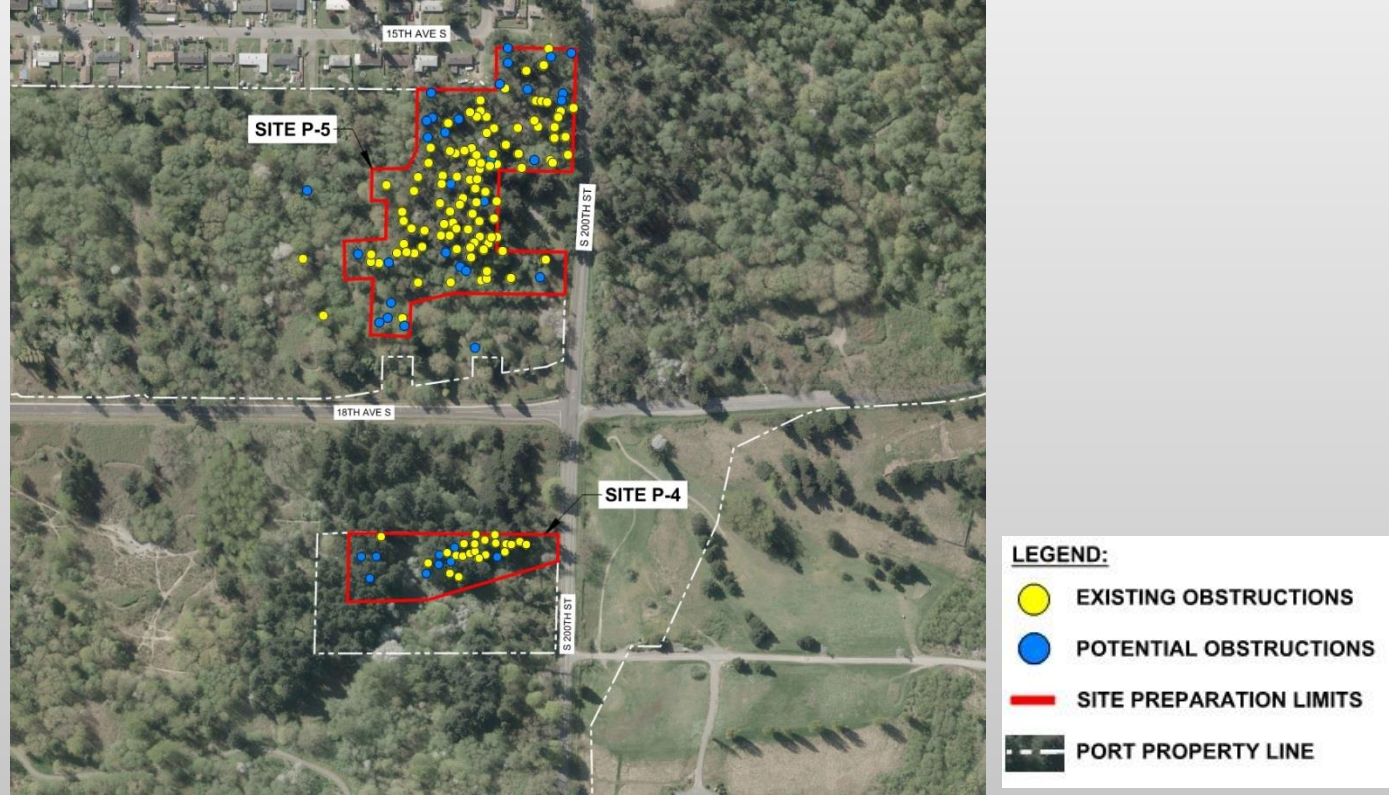
Sites P-4 and P-5 Update

- As directed by the Port Commission, Port staff undertook additional community engagement before determining the removal and replanting approach on Sites P-4 and P-5
 - Both sites contain a high number of large conifers
 - Both sites nearby to residential properties



Re-assess the removal and replanting approach for P-4 and P-5

Sites P-4 and P-5 Update



Sites P-4 and P-5

Sites P-4 and P-5 Update

Port Removal and Replanting Objectives

- Eliminate obstructions
- Minimize environmental impacts
- Restore a diverse native forest community
- Maintain a barrier between sites & adjacent neighborhoods

What We Heard from the Public

- Stagger the tree removal to allow younger trees to mature
- Protect and prioritize conifers
- Remove invasive species
- Maintain a barrier between sites & adjacent neighborhoods

Removal Alternatives for P-4 & P-5

Alternative 1

Removal of Existing Obstructions, Potential Obstructions and Understory

Alternative 2

Removal of Existing Obstructions and Potential Obstructions

Alternative 3 (Public favored)

Removal of Existing Obstructions Only
(Protect Potential Obstructions and Understory)

Alternative 4

Phased Removal of Existing Obstructions, Potential Obstructions and Understory

Four Removal Alternatives

Recommended Removal Approach

Alternative 3: Removal of Existing Obstructions (Public favored)

- Protect Potential Obstructions and Understory

Advantages

- Sites are obstruction-free for 5 years
- 30 to 40 tall conifers preserved for 5 years
- Phased plant reestablishment
- Preserves saplings, shrubs and vegetation to the extent feasible.

Disadvantages

- Site reentered every 5 years after to remove obstructions as they occur
- Repeated disturbance to the site may reduce success of replanting
- Limited removal of invasive species

Recommend Removing Existing Obstructions

Replanting Options P-4 & P-5

Option 1

Re-establish a Low-Growing Forest Onsite

Option 2

Re-establish a Low-Growing Forest Onsite with a Vegetation Barrier

Option 3

Replace Trees Onsite and Create a Tall-growing Forest Nearby with Vegetation Barrier

Option 4 (Community proposed)

Combine Options 2 and 3

Four Replanting Alternatives

Recommended Replanting Approach

Replace Trees Onsite, Create a Tall-growing Forest Nearby and Provide a Vegetation Barrier adjacent to residential properties



LEGEND:

-  SITE PREPARATION LIMITS
-  OFFSITE PLANTING LIMITS
-  REMOVAL AND PLANTING AREA
-  OFFSITE PLANTING AREA

Recommended Replanting Approach

Option 4: Replace Trees Onsite and Create a Tall-growing Forest Nearby with Vegetation Barrier (Public favored)

- Replant on-site over time as-needed to establish a low-growing forest
- Replant in off-site location with tall conifers
- Provide vegetation barrier adjacent to residential properties and road frontage

Advantages

- Large containers allow trees to mature faster
- Prioritizes replanting of conifers
- Removes invasive vegetation
- Vegetation barrier for adjacent residences
- Tall-growing trees

Disadvantages

- Longer Period to Re-establish a Low-Growing Forest Onsite

Recommend Replanting On-site, Off-site and Provide a Vegetation Barrier

Next Steps

Phase 1

- Develop Removal and Replanting Design Documents
- Negotiate Change Order with the Contractor
- Begin Removal and Replanting Q3 – 2017

Phase 2 and 3

- Initiate Environmental Evaluation Fall 2017



Phase 1 Existing Obstructions and Phase 2 and 3 Planning



Questions?



Recommended Replanting Approach

Replace Trees Onsite and Create a Tall-growing Forest Nearby



LEGEND

- LARGE CONTAINER TREE
- SMALL CONTAINER TREE
- SITE PREPARATION LIMITS
- OFFSITE PLANTING AREA
- PLANTING AREA



SITE P-4

SITE P-5