

Birchwood Airport Master Plan Update

Project No. CFAPT00354/AIP 3-02-0034-008-2018

Public Workshop #3

Prepared for Alaska Department of Transportation &
Public Facilities

*Presented and facilitated by HDL Engineering Consultants &
Agnew::Beck Consulting*

November 12, 2022; 10:00 AM – 2:00 PM



Welcome & Introductions

About Our Team

The Alaska Department of Transportation and Public Facilities is leading the process with assistance from a consulting team:



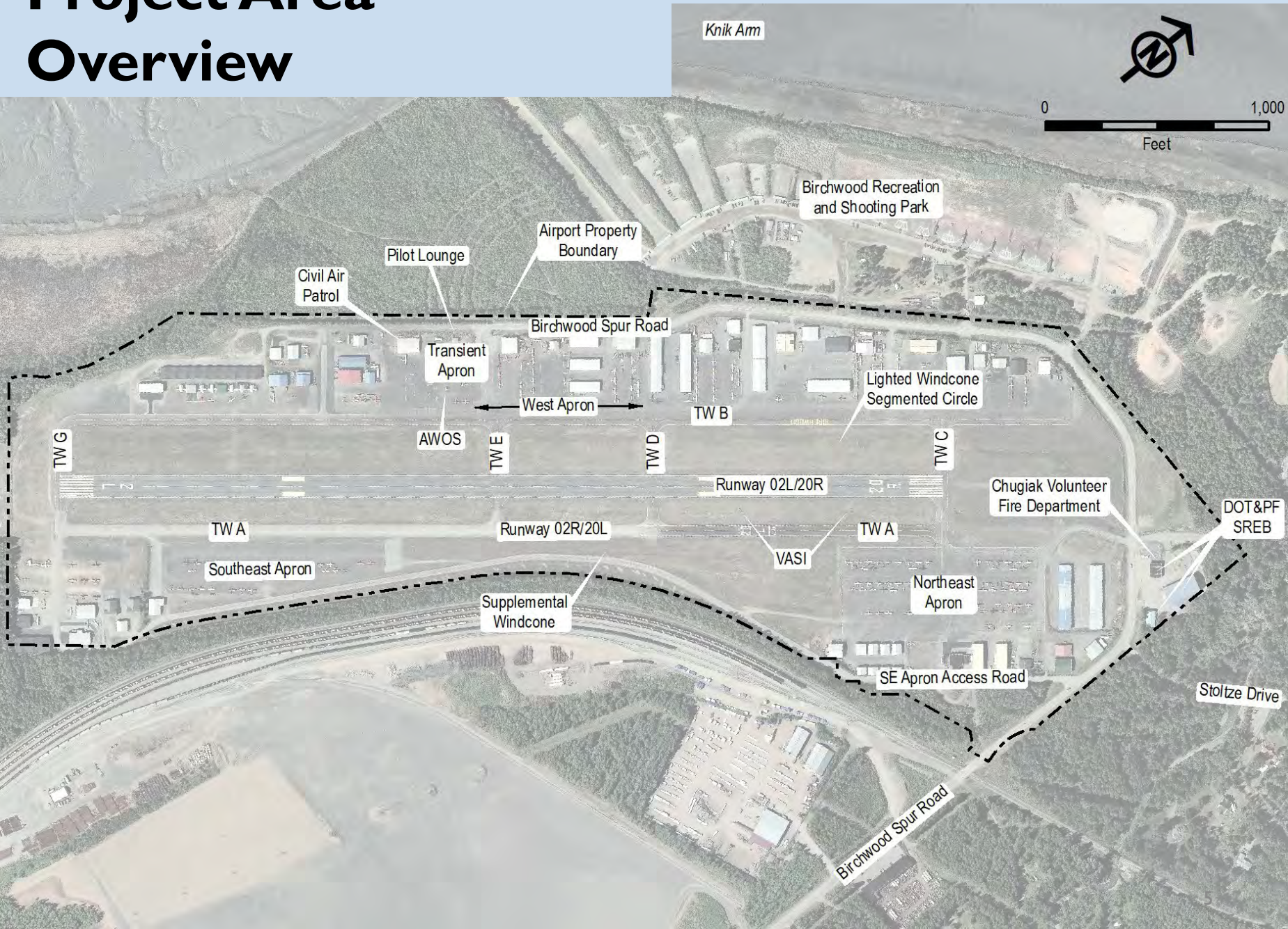
Land Acknowledgement

*Dena'inaq ełnen'aq'
gheshtnu ch'q'u yeshdu. (Dena'ina)*

Translation by J. Isaak and S. Shaginoff-Stuart

*I live and work on the
land of the Dena'ina. (English)*

Project Area Overview



Land Ownership



Project Purpose

To determine how the airport can best serve the future interests and needs of the flying public, aviation community, Alaska Department of Transportation & Public Facilities (DOT&PF), and other stakeholders.



Project Schedule



Community involvement

occurs throughout, including interviews, stakeholder working group meetings, and **three public meetings.**



Stakeholder Advisory Group (SAG)

The SAG is providing feedback on the planning process and draft deliverables:

DOT&PF

Aircraft Owners
& Pilots
Association

Alaska Railroad

Birchwood
Airport
Association

Birchwood Civil
Air Patrol

Birchwood
Community
Council

Birchwood
Recreation &
Shooting Park

Eklutna, Inc.

NOTE: The SAG is not a voting or decision-making body.

Native Village of
Eklutna

Talon Hangar
Condominium
Association, Inc.

Progress Since October 2021

- Second Stakeholder Advisory Group and Public Meetings (Fall 2021)
- Airport Stakeholder Survey (Spring 2022)
- Project Received Additional Funding Based on Public Involvement (Summer 2022)
- DOT Decision to Plan for Existing Runway Length & Width (Summer 2022)
- Public-Private Partnership Summary

Meeting Purpose

- Confirm project purpose, schedule, progress, and next steps.
- **Share and get public input on the revised airport layout alternatives.**
 - **What do you like** about the alternatives and why?
What do you dislike and why?
 - What **other ideas** do **you have** that can meet the needs of airport stakeholders today and 10 to 20 years from now?
 - What **other comments or questions** do **you have** about the master planning process?

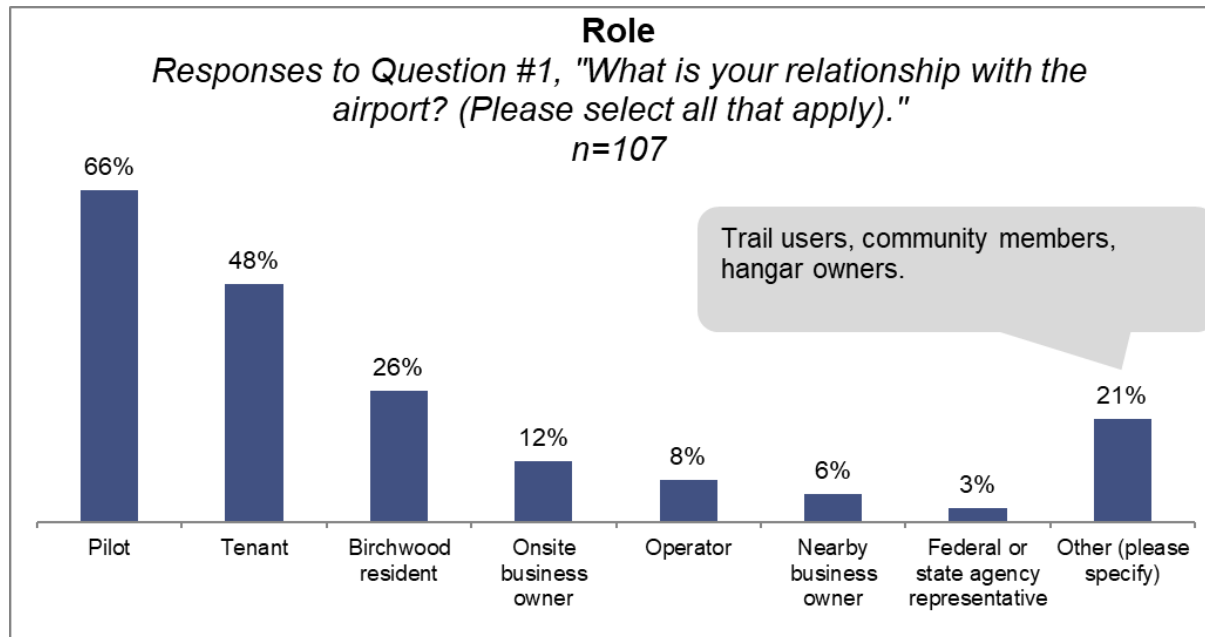
Public-Private Partnership Summary

Emerging Recommendation – Based on research and stakeholder engagement:

- The Birchwood Airport does not have many of the characteristics that make an airport an ideal candidate for a P3.
 - The airport is almost entirely general aviation from hobbyist pilots, and operations are simple enough that they do not require air traffic control or an on-site manager.
 - The Birchwood Airport is one of the few profitable Alaska DOT&PF airports in the state, so there is no financial incentive to privatize.
 - During stakeholder outreach, many airport users said they oppose a P3. They are concerned a private operator would increase fees and commercial activity. Low costs and the casual, uncontrolled nature of the airport are its most beloved attributes.
- For these reasons, **recommendation is to not pursue a P3 arrangement**, unless a specific need is identified.

Stakeholder Survey – Process & Participation

- **Goal** of the survey was to **get additional input on the layout alternatives (as of Fall 2021)** and set the stage for this in-person public workshop.
- Survey window was **December 18, 2021 through February 4, 2022**.
- Fall 2021 Alternatives 2, 3, and 4 **showed shortening and narrowing of the runway (02L/20R)**.
- **Over 100 stakeholders responded.**



Note: Likely some overlap with pilots and tenants as participants given option to “select all that apply”.

Stakeholder Survey – Key Takeaways

- **Alternative One (no change) had the highest level of support**, followed by Alternative Two, Alternative Three, and Alternative Four.
- **Alternative Two had more support and less opposition**, although many participants advocated for Alternative Four in the short answer response questions.
- A combination of quantitative and qualitative responses indicated that **participants were divided on wanting no or minimal growth versus more robust/extensive growth**. There was little support for moderate growth.
- **Biggest issues:** Runway length/width and positioning of gravel airstrip. Most agree shortening/narrowing a barrier to stakeholder vision.

Leave well enough alone. **Alternative one has worked for many years**, safely and successfully. Plans 2,3,4 are way too complicated, unnecessary, and costly.

“1 AND 2 preserve all winter use of ski strip/parking for straight ski aircraft. **2 Will also expand much needed hanger/tiedown space.**”

“**Planning for some future expansion may be desirable for younger pilots** or those wanting access to more space for hangar construction.”

“**Alt 4 solves a lot of issues and provides for the greatest expansion.**”

Development of Alternatives

Four potential Alternatives have been developed.

Alternatives are based on:

- Critical aircraft.
- Facility requirements identified during interviews and inventory.
- Future gravel/ski strip location.
- Forecasted need for more tie-down permits and lease lots.

What's Changed with the Alternatives

Alternative 1:

- No changes

Alternative 2:

- Changed ultimate configuration of Runway 02L/20R to match existing dimensions (4010' x100')
- Show ultimate acquisition of land within Runway 20R Runway Protection Zone (RPZ) that is currently outside of the airport property limits
- Moved proposed Northeast Apron vehicle parking area/portable restroom facilities outside of Runway 20R RPZ
- Keep Taxiway C in current configuration (Runway 20R threshold does not move so no need to construct new taxiway to intersect new threshold location)

What's Changed with the Alternatives

Alternative 3:

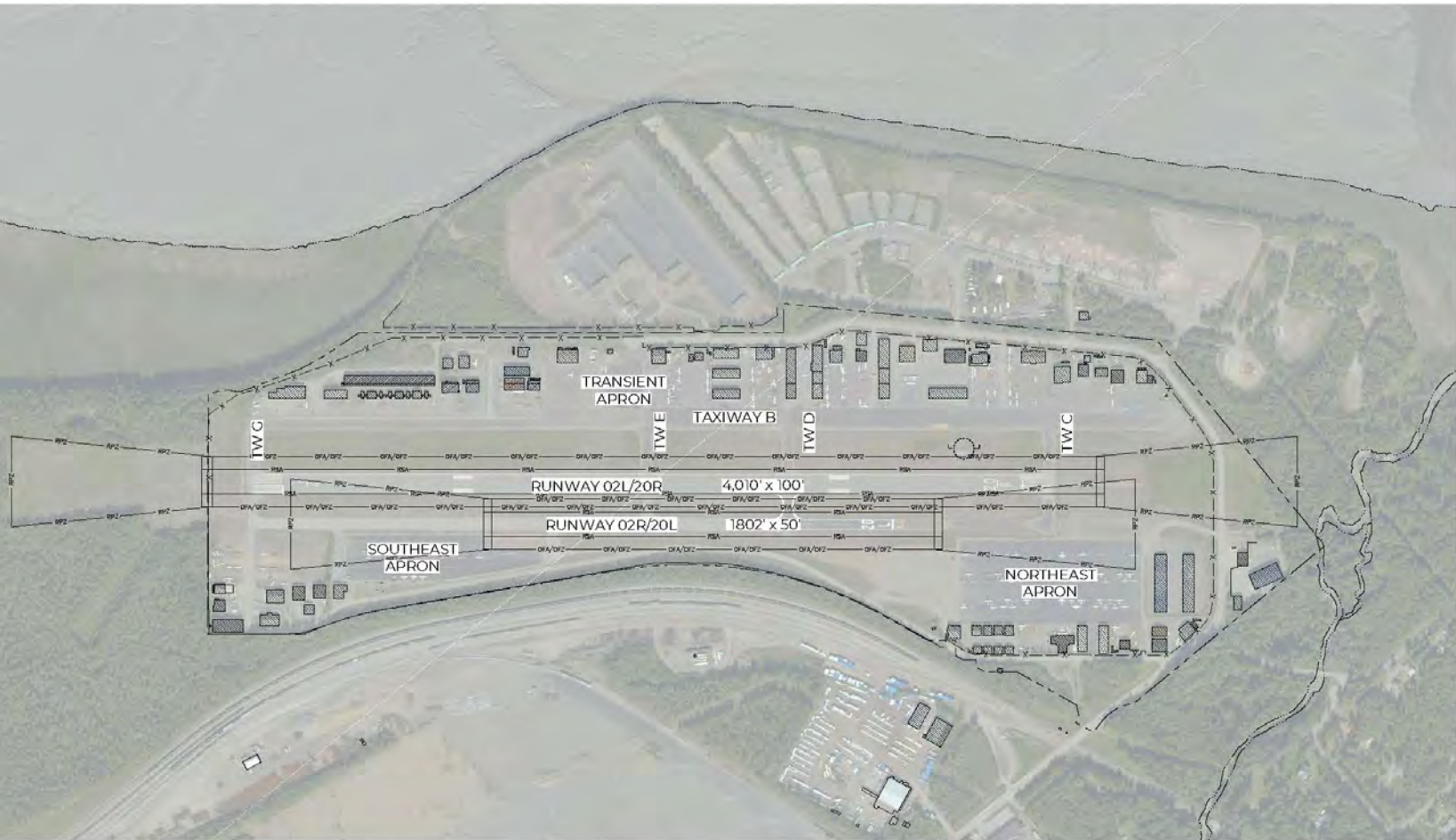
- Changed ultimate configuration of Runway 02L/20R to match existing dimensions (4010' x100')
- Show ultimate acquisition of land within Runway 20R Runway Protection Zone (RPZ) that is currently outside of the airport property limits
- Moved proposed Northeast Apron vehicle parking area/portable restroom facilities outside of Runway 20R RPZ
- Keep Taxiway C in current configuration
- Keep Taxiway D (west) in current configuration

Alternative 4:

- Changed ultimate configuration of Runway 02L/20R to match existing dimensions (4010' x100')
- Show ultimate acquisition of land within Runway 20R Runway Protection Zone (RPZ) that is currently outside of the airport property limits
- Moved proposed Northeast Apron vehicle parking area/portable restroom facilities outside of Runway 20R RPZ
- Keep Taxiway C in current configuration
- Keep Taxiway D (both sides) in current configuration

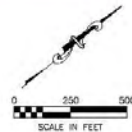
Proposed Alternative One – Nov2022

ALTERNATIVE 1 - NO BUILD



LEGEND

- RUNWAY SAFETY AREA
- OBJECT FREE AREA/ZONE
- RUNWAY PROTECTION ZONE

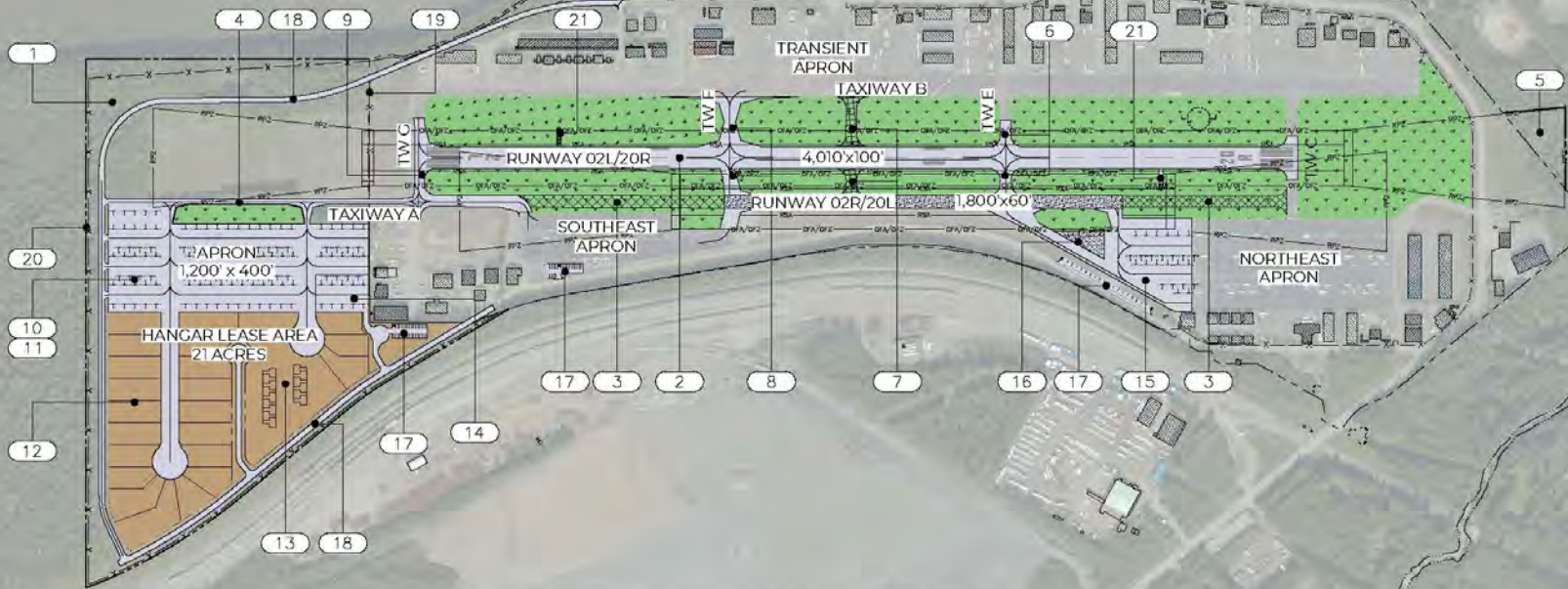


BIRCHWOOD AIRPORT MASTER PLAN EXHIBIT - ALTERNATIVE 1 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES/CR BIRCHWOOD, ALASKA		
DATE: 11-7-2022	DRAWN BY: TA/TC	SHEET: 1
SCALE: 1" = 250'	CHECKED BY: MS	JOB NO.: 20-014

Proposed Alternative Two – Nov 2022

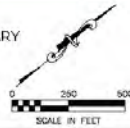
ALTERNATIVE 2

- | | | |
|---|---|--|
| 1 ACQUIRE AIRPORT PROPERTY (APPROX. 61 ACRES) | 9 RECONSTRUCT EXISTING TAXIWAY G | 17 DEVELOP NEW VEHICLE PARKING AREA WITH PORTABLE PUBLIC RESTROOM FACILITIES |
| 2 RECONSTRUCT RUNWAY 02L/20R | 10 CONSTRUCT NEW APRON (122 TIE-DOWNS) | 18 CONSTRUCT ACCESS ROADS |
| 3 REMOVE TAXIWAY A SEGMENTS | 11 INSTALL ELECTRICAL OUTLETS AT NEW TIE-DOWN SPACES | 19 REMOVE EXISTING FENCING |
| 4 CONSTRUCT TAXIWAY A EXTENSION | 12 NEW HANGAR LEASE LOT AREA | 20 CONSTRUCT NEW PERIMETER FENCING |
| 5 ACQUIRE AIRPORT PROPERTY (APPROX. 12 ACRES) | 13 NEW T-HANGAR LEASE LOT AREA | 21 CONSTRUCT NEW SEPTIC SYSTEM AT PILOT BRIEFING SHELTER |
| 6 RECONSTRUCT EXISTING TAXIWAY D | 14 CONSTRUCT NEW TRANSIENT AIRCRAFT PARKING APRON (10 TIE-DOWNS) | 22 CONSTRUCT NEW PAPI |
| 7 REMOVE EXISTING TAXIWAY E | 15 EXPAND NORTHEAST APRON (25 TIE-DOWNS) | |
| 8 CONSTRUCT NEW TAXIWAY F | 16 CONSTRUCT SUMMER AIRCRAFT TIE-DOWN AREA/WINTER SNOW STORAGE AREA (4 TIE-DOWNS) | |



LEGEND

- | | |
|-------------------------------------|------------------------------------|
| HANGAR DEVELOPMENT AREAS | PROPOSED AIRPORT PROPERTY BOUNDARY |
| NEW GRASS AREA | NEW FENCE |
| NEW PAVEMENT | RUNWAY SAFETY AREA |
| NEW GRAVEL SURFACE | OBJECT FREE AREA/ZONE |
| PARKING & PORTABLE PUBLIC RESTROOMS | RUNWAY PROTECTION ZONE |
| AIRCRAFT TIE-DOWN | |

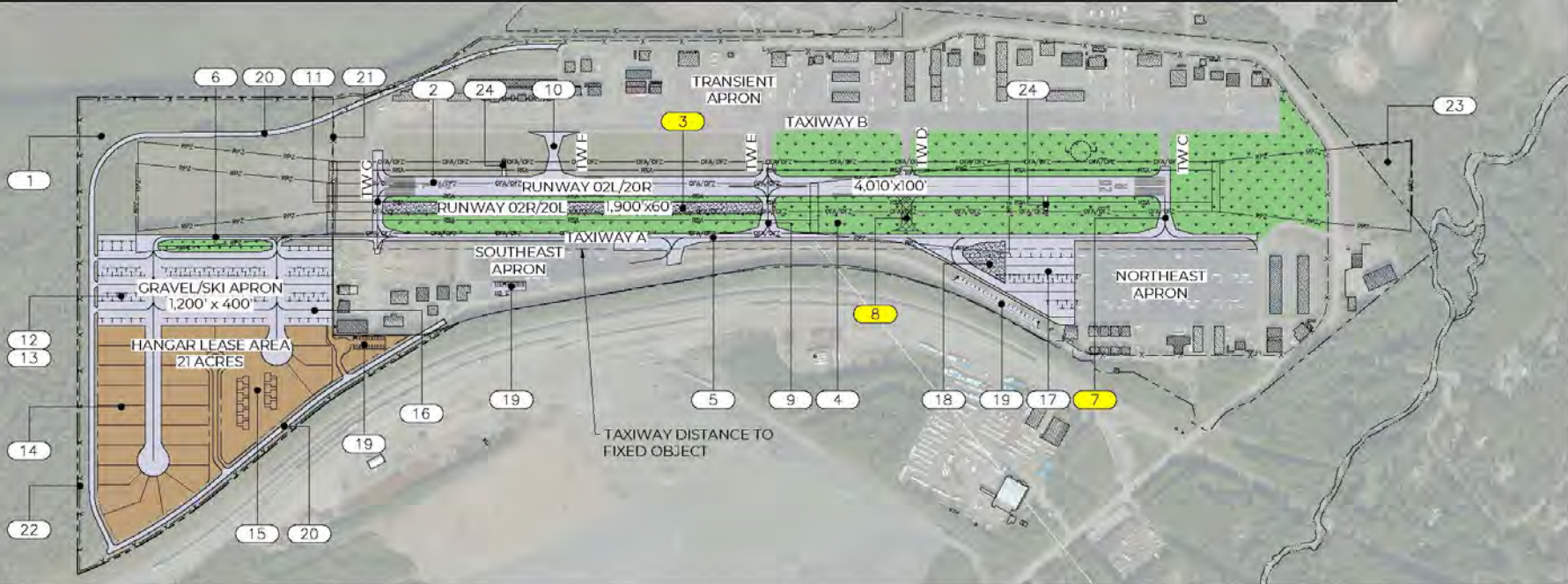


BIRCHWOOD AIRPORT MASTER PLAN		
EXHIBIT - ALTERNATIVE 2		
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES/CR		
BIRCHWOOD, ALASKA		
DATE: 11-7-2022	DRAWN BY: TA/TC	SHEET: 2
SCALE: 1" = 250'	CHECKED BY: MS	JOB NO.: 20-014

Proposed Alternative Three – Nov 2022

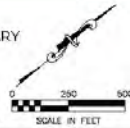
ALTERNATIVE 3

- | | | |
|--|--|---|
| 1 ACQUIRE AIRPORT PROPERTY (APPROX. 61 ACRES) | 9 EXTEND EXISTING TAXIWAY E | 18 CONSTRUCT SUMMER AIRCRAFT TIE-DOWN AREA/WINTER SNOW STORAGE AREA (5 TIE-DOWNS) |
| 2 RECONSTRUCT RUNWAY 02L/20R | 10 CONSTRUCT NEW TAXIWAY F | 19 DEVELOP NEW VEHICLE PARKING AREA WITH PORTABLE PUBLIC RESTROOM FACILITIES |
| 3 CONSTRUCT NEW "SHOULDER" GRAVEL/SKI RUNWAY 02R/20L | 11 RECONSTRUCT EXISTING TAXIWAY G | 20 CONSTRUCT ACCESS ROADS |
| 4 REMOVE EXISTING RUNWAY 02R/20L | 12 CONSTRUCT NEW APRON (104 TIE-DOWNS) | 21 REMOVE EXISTING FENCE |
| 5 RELOCATE AND RECONSTRUCT TAXIWAY A TO PROVIDE REQUIRED RUNWAY SEPARATION | 13 INSTALL ELECTRICAL OUTLETS AT TIE-DOWN SPACES | 22 CONSTRUCT NEW PERIMETER FENCING |
| 6 CONSTRUCT TAXIWAY A EXTENSION | 14 CONSTRUCT NEW HANGAR LEASE AREA | 23 ACQUIRE AIRPORT PROPERTY (APPROX. 12 ACRES) |
| 7 RECONSTRUCT TAXIWAY C | 15 CONSTRUCT NEW T-HANGAR LEASE AREA | 24 CONSTRUCT NEW PAPI |
| 8 REMOVE A PORTION OF EXISTING TAXIWAY D | 16 CONSTRUCT NEW TRANSIENT AIRCRAFT PARKING APRON (10 TIE-DOWNS) | |
| | 17 EXPAND NORTHEAST APRON (28 TIE-DOWNS) | |



LEGEND

- | | |
|-------------------------------------|------------------------------------|
| HANGAR DEVELOPMENT AREAS | PROPOSED AIRPORT PROPERTY BOUNDARY |
| NEW GRASS AREA | NEW FENCE |
| NEW PAVEMENT | RUNWAY SAFETY AREA |
| NEW GRAVEL SURFACE | OBJECT FREE AREA/ZONE |
| PARKING & PORTABLE PUBLIC RESTROOMS | RUNWAY PROTECTION ZONE |
| AIRCRAFT TIE-DOWN | CHANGES COMPARED TO ALTERNATIVE 2 |

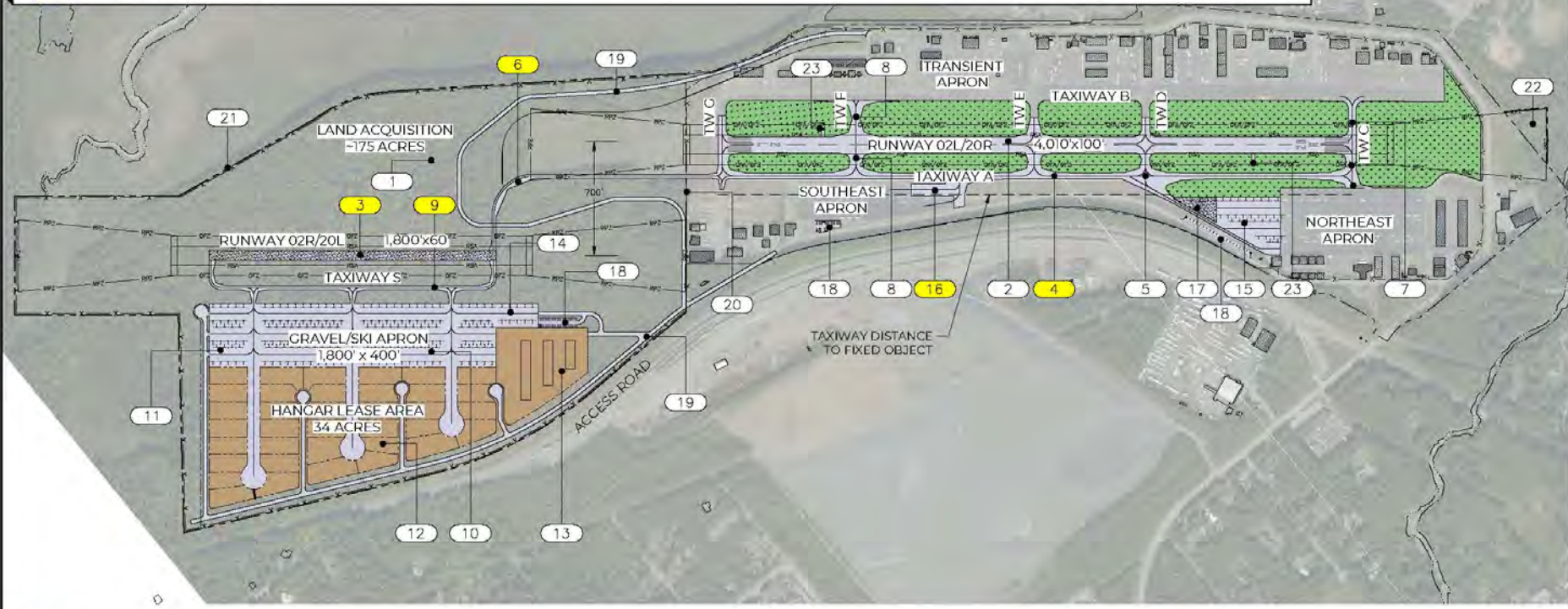


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Proposed Alternative Four – Nov 2022

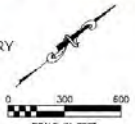
ALTERNATIVE 4

- | | | |
|--|--|---|
| 1 ACQUIRE AIRPORT PROPERTY (APPROX. 175 ACRES) | 10 CONSTRUCT NEW GRAVEL/SKI APRON (184 TIE-DOWNS) | 17 CONSTRUCT SUMMER AIRCRAFT TIE-DOWN AREA/WINTER SNOW STORAGE AREA (4 TIE-DOWNS) |
| 2 RECONSTRUCT RUNWAY 02L/20R | 11 INSTALL ELECTRIC OUTLETS AT NEW TIE-DOWNS | 18 DEVELOP NEW VEHICLE PARKING AREA WITH PORTABLE PUBLIC RESTROOM FACILITIES |
| 3 CONSTRUCT NEW GRAVEL/SKI RUNWAY 02R/20L | 12 NEW HANGAR LEASE LOT AREA | 19 CONSTRUCT ACCESS ROADS |
| 4 CONVERT EXISTING RUNWAY 02R/20L TO TAXIWAY A | 13 NEW T-HANGAR LEASE AREA | 20 REMOVE EXISTING FENCE |
| 5 RECONSTRUCT TAXIWAY A | 14 CONSTRUCT NEW TRANSIENT AIRCRAFT PARKING APRON (10 TIE-DOWNS) | 21 CONSTRUCT NEW PERIMETER FENCING |
| 6 CONSTRUCT TAXIWAY A EXTENSION | 15 EXPAND NORTHEAST APRON (30 TIE-DOWNS) | 22 ACQUIRE AIRPORT PROPERTY (APPROX. 12 ACRES) |
| 7 RECONSTRUCT TAXIWAY C | 16 EXPAND SOUTHEAST APRON | 23 CONSTRUCT NEW PAPI |
| 8 CONSTRUCT NEW TAXIWAY F | | |
| 9 CONSTRUCT NEW TAXIWAYS S | | |



LEGEND

- | | |
|-------------------------------------|------------------------------------|
| HANGAR DEVELOPMENT AREAS | PROPOSED AIRPORT PROPERTY BOUNDARY |
| NEW GRASS AREA | NEW FENCE |
| NEW PAVEMENT | RUNWAY SAFETY AREA |
| NEW GRAVEL SURFACE | OBJECT FREE AREA/ZONE |
| PARKING & PORTABLE PUBLIC RESTROOMS | RUNWAY PROTECTION ZONE |
| AIRCRAFT TIE-DOWN | CHANGES COMPARED TO ALTERNATIVE 3 |



BIRCHWOOD AIRPORT MASTER PLAN EXHIBIT - ALTERNATIVE 4 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES/CR BIRCHWOOD, ALASKA		
DATE: 11-7-2022	DRAWN BY: TA/TC	SHEET: 4
SCALE: 1" = 300'	CHECKED BY: MS	JOB NO.: 20-014

Alternatives Comparison

	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Meets FAA parallel runway separation requirements for runways with simultaneous operations	No	No	No	Yes
Does not require a Modification of Standards (MOS) for runway separation	No	No	No	Yes
Future runway improvements are Airport Improvement Program eligible if MOS is attained	No	Yes	Yes	Yes
Removes in-line taxiways and improves airport safety	No	Yes	Yes	Yes
Provides leasable land and apron space to accommodate growth	No	Yes	Yes	Yes
Apron areas are located outside of Runway Protection Zones (RPZs)	No	No	Yes	Yes
Does not require FAA HQ approval for development justification for ski/gravel runway development	N/A	No	No	No
Maintains current runway operations	Yes	Yes	Yes	No
Establishes a parallel taxiway on the east side of the airport	No	No	Yes	Yes
Separation between the runways makes it clear to pilots that simultaneous operations are or are not allowed	No	No	Yes	Yes

Next Steps and Wrap Up

Project Schedule



Community involvement

occurs throughout, including interviews, stakeholder working group meetings, and **three public meetings.**



Immediate Next Steps

November 2022

- Compile public feedback from today's workshop.
- Complete and post the Public-Private Partnership Summary.

December 14, 2022

- Conduct Stakeholder Advisory Group meeting to review workshop feedback and discuss potential preferred layout alternative.

December 2022 – Spring 2023

- Conduct additional stakeholder outreach to ensure representative input as we develop the Public Review Draft.
- Release Public Review Draft w/*minimum 30-day comment period.*

Learn More & Contact Us

For the Birchwood Airport Master Plan Update

<http://www.dot.state.ak.us/creg/birchwoodamp/>

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