NORTHERN COLORADO
REGIONAL AIRPORT COMMISSION
4900 EARHART ROAD • LOVELAND, CO 80538

MEETING AGENDA
THURSDAY OCTOBER 19, 2023
3:30PM – 5:00PM

CALL TO ORDER
ROLL CALL
INTRODUCTION OF NEW COMMISSIONER
PUBLIC COMMENT
CONSENT AGENDA

1. SEPTEMBER 21 MEETING MINUTES – P. 2
2. SEPTEMBER FINANCIAL STATEMENT – P. 6
3. SEPTEMBER DIRECTOR'S REPORT – P. 8
   - REMOTE TOWER PROJECT UPDATE FROM DAVE ULANE, CDOT AERONAUTICS DIRECTOR
4. LEASE EXTENSION REQUEST 5235 STEARMAN – P. 34
5. DIBBLE CONTRACT CHANGE RUNWAY 15-33 WIDENING – P.37

APPROVAL OF CONSENT AGENDA
AIRPORT DIRECTOR'S REPORT HIGHLIGHTS
REGULAR AGENDA

6. 5-YEAR AIRPORT CAPITAL IMPROVEMENT PLAN (ACIP) DRAFT REVIEW– P. 56
7. PLANNING & DEVELOPMENT SUBCOMMITTEE (PDSC) CHARTER UPDATE – P. 77
8. BUSINESS FROM MEMBERS

PULLED CONSENT AGENDA ITEMS
ADJOURN

Meeting Planning Calendar

November 16	December 21	January 18
•Remote Tower Project Update •2024 Rates & Fees Adoption	•Draft Land Use/Development Review Plan •Legal: Commission Roles and Responsibilities Training •Election of Officers for 2024 •Meeting Schedule for 2024	•2023-2024 Strategic Plan Update

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APPROVAL OF CONSENT AGENDA
AIRPORT DIRECTOR'S REPORT HIGHLIGHTS
REGULAR AGENDA

6. 5-YEAR AIRPORT CAPITAL IMPROVEMENT PLAN (ACIP) DRAFT REVIEW– P. 51
7. PLANNING & DEVELOPMENT SUBCOMMITTEE (PDSC) CHARTER UPDATE – P. 72
8. BUSINESS FROM MEMBERS

PULLED CONSENT AGENDA ITEMS
ADJOURN

Meeting Planning Calendar

November 16	December 21	January 18
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NORTHERN COLORADO
REGIONAL AIRPORT COMMISSION

Meeting Minutes for September 21, 2023

CALL TO ORDER Chair Overcash called the meeting to order at 3:31 p.m.

ROLL CALL Chair Overcash, Commissioners Adams, Arndt, Stooksbury, and Williams were present. Commissioners DiMartino and Burgener were absent.

Commissioner Adams moved to switch the order of agenda items so that item #9 would be presented before item #8. The motion, seconded by Commissioner Stooksbury, carried with all Commissioners present voting in favor thereof.

PUBLIC COMMENT Rick Turley, Hangar C tenant, requested more clarification on the runway 6-24 closure and process for landing during high crosswinds or other conditions as needed. More information regarding the estimated cost, timeline, and process for development of Site C was also requested with the Staff Report.

CONSENT AGENDA

Commissioner Adams moved to approve Consent Agenda. The motion, seconded by Commissioner Williams, carried with all Commissioners present voting in favor thereof.

Pulled Items: None
Consent Follow up: None
Public Comments: None

MONTHLY REPORT Staff is preparing the RFP for repairs to the C hangars.

- City of Loveland engineers reviewed the RFP to include specific requirements in the scope of work.
- The bid package for C hangar maintenance will be released in the coming week with construction expected to begin in November.

The request to re-open runway 6-24 is still under review by the FAA.

- The Safety Risk Panel is still reviewing site-line concerns along with the NOTAM that has been issued for the runway.
- Air Traffic Control must follow the process for landing on runway 6-24 at the pilot's discretion as determined by the FAA.

Terminal construction continues on-track with the drilling of piers for the foundation in September.

REGULAR AGENDA

5. Airport Commission Secretary Appointment Kate Morgan, Airport Executive Assistant, presented this item in accordance with the staff report.

Commissioner Williams moved to appoint Kate Morgan as the Commission Secretary. The motion, seconded by Commissioner Adams, carried with all Commissioners present voting in favor thereof.

6. Airport Commission Vice Chair Appointment Kate Morgan, Airport Executive Assistant, presented this item in accordance with the staff report.

Commissioner Williams nominated Commissioner Arndt to serve as the Vice Chair. The motion, seconded by Commissioner Stooksbury, carried with all Commissioners present voting in favor thereof.

7. Fort Collins-Loveland Water District Easement Aaron Ehle, Airport Planning and Development Specialist, presented this item in accordance with the staff report.

The Fort Collins-Loveland Water District (FCLWD) began collaborating with the Airport in 2021 for a 24-inch waterline easement along a portion of the Airport boundary. It was determined that the benefit of the water line and service connection points would outweigh the value of the 6.1 acres encumbered by the easement with a net value of $740,374 for the Airport. The proposal has been vetted by staff of Fort Collins and Loveland, and the PDSC voted unanimously to recommend approval to the Airport Commission and both City Councils. If passed, construction would be expected to begin in February or March. Some operational impacts of the construction are expected to last approximately three days and will be coordinated by Airport staff with schools and businesses.

Diane Jones, member of the public, suggested attaching the estimated value of the improvements as an exhibit in the agreement. Chair Overcash requested that the valuation information be included.

Commissioner Adams moved to recommend approval of this easement. The motion, seconded by Commissioner Ardnt, carried with all Commissioners present voting in favor thereof.

9. Airport Financial Overview Aaron Ehle, Airport Planning and Development Specialist, presented this item for discussion:

Data from 2021 revenues, expenses, and other economic impacts was evaluated to provide a broad overview of costs and benefits with the current Airport ownership model. Commissioner Stooksbury suggested including the property tax benefit to

Larimer County and noted that Colorado does not tax aviation sales, so there is not much sales tax revenue from on-Airport businesses.

8. 2024 Budget Presentation and Recommendations

Francis Robbins, Airport Operations and Maintenance Manager, presented this item in accordance with the staff report.

The total proposed budget for 2024 is approximately $27 million, which includes an operating budget of approximately $3 million and a capital budget of approximately $24 million.

Commissioner Stooksbury moved to recommend approval of the 2024 budget. The motion, seconded by Commissioner Williams, carried with all Commissioners present voting in favor thereof.

10. Business from Members

None.

ADJOURNMENT

Commissioner Adams adjourned the meeting at 5:06 p.m.

Respectfully Submitted,

_____

Commission Chair, Don Overcash

SEPTEMBER 21, 2023 REGULAR MEETING SIGN IN SHEET

Please Print Your:

NAME	ORGANIZATION
Pat Ferrier	Coloradoan
Kim Overholt	City of Loveland
Jacki Marsh	City of Loveland
Danny McGinn	jetCenter
Diane Jones	PDSC
Nicole Hahn	City of Loveland
Rick Turley	C Hangar Tenant
Dallas Hellyer	Biz West
Cameron Singh	Discovery Air
Andrew Koprowski	EAA
Robert Carmosino	LFRA
Kelly Freeland	TFS

NORTHERN COLORADO
REGIONAL AIRPORT
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ITEM NUMBER: 2

MEETING DATE: October 19, 2023

PREPARED BY: Francis Robbins, Operations & Maintenance Manager

TITLE
Monthly Financial Statement

RECOMMENDED AIRPORT COMMISSION ACTION
Staff recommend acceptance of the preliminary financial statement as presented.

BUDGET IMPACT
Neutral

SUMMARY
Financial highlights for the month of September include:

- The monthly statement indicates just over $7.68 million within the net position available for use. This amount includes $6 million as approved by the Airport Commission and City Councils to be applied toward the terminal project. Within this amount $2 million is from the CARES Act operations and maintenance grant, which has been fully drawn down and input in the account, $2 million for the local matching contribution, and $2 million in City Contributions.
    - An accurate net position available for use is $1.68 million which is planned for future federal funding grant matches, specifically $1 million for the $14 million runway widening project in 2025, and the remainder maintaining the operational financial reserve.

ATTACHMENT
Preliminary monthly financial statement for September.

NORTHERN COLORADO REGIONAL AIRPORT

Airport Statement of Revenues and Expenses
From 01/01/2023 - 9/30/2023
PRELIMINARY

	Y-T-D 2023 Actual	Y-T-D 2022 Actual	Y-T-D 2023 Budget	2023 Total Budget	% of Total Budget
OPERATING REVENUES					
Hangar Rental	159,703	179,332	191,250	255,000	63%
FBO Rent	70,629	70,629	70,603	94,134	75%
Gas and Oil Commissions	194,927	253,767	142,497	190,000	103%
Aviation Fuel Tax Reimbursement	161,446	145,392	124,875	166,500	97%
State Aircraft Fuel Tax	110,859	113,832	101,250	135,000	82%
County Aircraft Fuel Tax	50,587	31,560	23,625	31,500	161%
Land Lease	572,606	399,077	375,003	500,000	115%
Land Lease PD Training Ctr	206,086	285,114	293,706	391,600	53%
Terminal Lease and Landing Fees	28,803	8,999	9,306	12,400	232%
Terminal Lease and Landing Fees	4,287	4,190	4,284	5,700	75%
Concessions	24,516	4,809	5,022	6,700	366%
Parking	0	0	0	0	0%
Miscellaneous	42,475	84,803	108,675	144,900	29%
TOTAL OPERATING REVENUES	**1,436,674**	**1,427,112**	**1,315,915**	**1,754,534**	**82%**
OPERATING EXPENSES					
Personal Services	609,722	539,793.28	817,155.00	1,089,540	56%
Supplies	66,050	77,495.20	96,062.00	124,900	53%
Purchased Services	431,119	345,667.46	1,120,267.03	1,496,860	29%
TOTAL OPERATING EXPENSES	**1,106,891**	**962,956**	**2,033,484**	**2,711,300**	**41%**
OPERATING GAIN (LOSS)	**329,783**	**464,156**	**(717,569)**	**(956,766)**	
NONOPERATING REVENUES (EXPENSES)					
City Contributions	2,000,000	0	2,000,000	2,000,000	100%
Passenger Facility Charge	0	0	0	0	
Interest Income	51,086	18,040	38,250	51,000	100%
Capital Expenditures	(1,649,005)	(831,319)	(23,168,754)	(30,891,667)	5%
TOTAL NONOPERATING REVENUES (EXPENSES)	**402,081**	**(813,279)**	**(21,130,504)**	**(28,840,667)**	
NET INCOME (LOSS) BEFORE CAPITAL CONTRIBUTIONS	**731,864**	**(349,122)**	**(21,848,073)**	**(29,797,433)**	
Capital Contributions	1,155,730	637,740	23,436,000	31,248,000	4%
CHANGE IN NET POSITION	**1,887,595**	**288,618**	**1,587,927**	**1,450,567**	
NET POSITION, Beginning	21,237,480	19,864,422			
NET POSITION, Ending	23,125,075	20,153,040			
Investment in Capital Assets	15,440,026	15,805,175			
Net Position Available for use	7,685,049	4,347,865			

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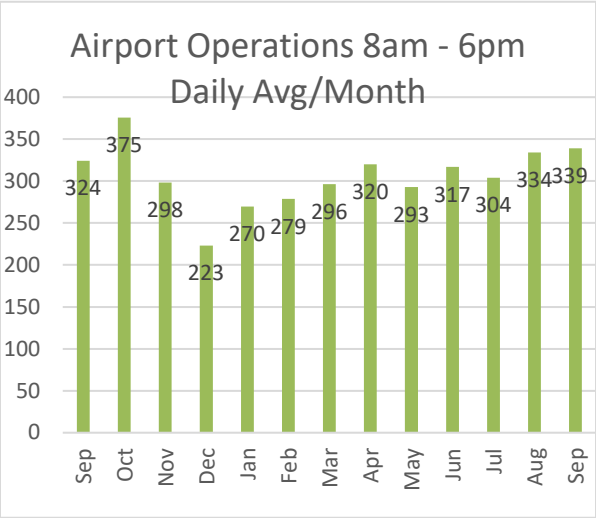
Date: October 21, 2023
To: Northern Colorado Regional Airport Commission
From: David Ruppel, Airport Director
Re: August Airport Report

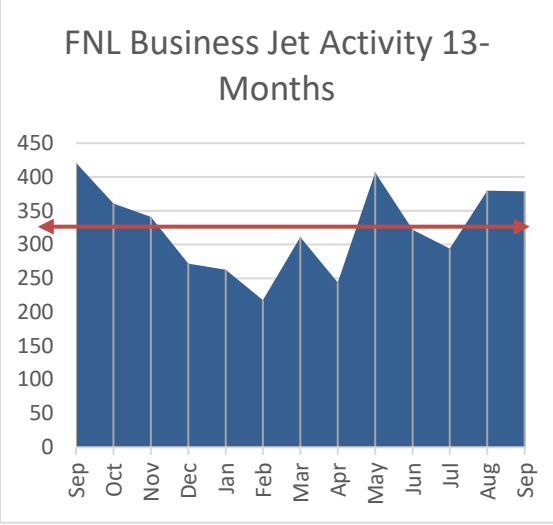
Report Highlights

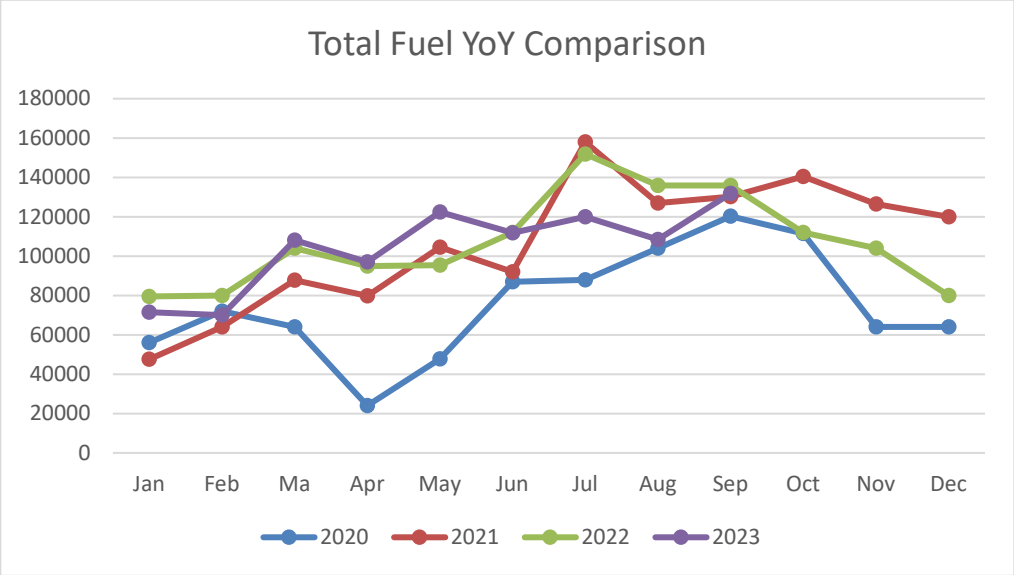
- Airport Hangar proposals for the C-Hangars are due October 26th and 5 contractors attended the mandatory pre-bid meeting last Monday. A and B Demolition bids are due November 16th.
- The FAA confirmed that Searidge Technologies is leaving the Remote Tower project in a meeting with the FAA on October 16th and discussed the path forward.
- Hensel Phelps is on track with grade beam installation and expects to complete slab installation in November and begin steel framing in early December.
- Operations updates.

Airport Activity Dashboard

- Flight operations for the month of September averaged 339 per day, and the twelve-month rolling average is 306.
- Wholesale fuel ordered by the jetCenter FBO was 131,840 gallons for the month of September, a decrease of 28% compared to the previous September at 182,894 gallons, likely attributable to high fuel prices this year.
    - Total year to date fuel for jetCenter is down 15% year over year.
    - Total fuel flowage through September is 980,525 gal compared to 1,155,182 gal in 2022.
- Business jet activity for September compared to the same month in 2022 was down 10%, going from 421 to 379 operations.







Airport Owned T-Hangars Update

A mandatory pre-bid meeting was held on October 9th with 5 contractors in attendance, McCauley Constructors, Happel & Associates, Iron Fly Steel Fabricators, Growling Bear, and PCL. All were able to see the inside of several hangars to help them understand the complexities of the project. We have sent them additional pictures and have invited them to bid on the A and B Hangar Demolition as well. Proposals for the C-Hangar Repair are due on October 26th, pre-proposal meeting for the A and B Hangar Demolition will be on October 27th, and proposals for the demolition work are due on November 16th.

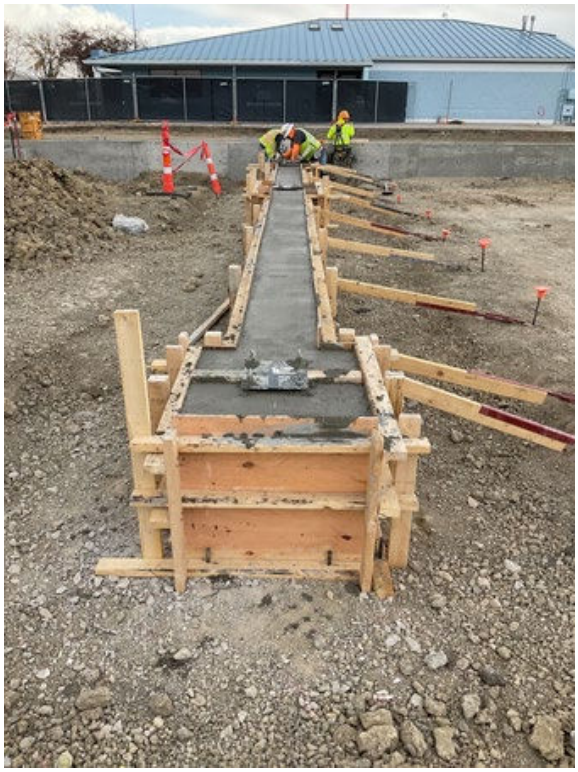
Remote Tower

The Remote Tower Project Team met with FAA project leadership on October 16th to discuss the project and expects to be able to provide additional information at the Commission meeting.

Terminal

Foundation work continues with installation of Grade beams to support the slab installation in November. Grade beams, concrete placement and formwork removal are complete on about half of the required installations. Under slab utility trenching is underway. Construction is on schedule to begin steel installation in early December.

10/11/2023 Under slab utility trenching.



10/11/2023 Grade beam and pier-cap concrete placement. (Grade Beam 3)

10/12/2023 Form work removal
(Grade Beam 3)

Mobile Tower Line-of-Sight

We are expecting a response from the FAA on the final determination by the ATO on whether FNL will need to continue to NOTAM Runway 6/24 closed during Tower operation hours. In the interim, FNL

emailed local pilots the script recommended by ATC in Joint Order 7110.65AA, Section 3-3-2 for landing on a closed runway. The FNL Pilot's Association sent out a similar guide to its membership. The Pilot Communication Guide for landing on Runway 6-24 during Tower hours is attached to this report. As noted previously, a pilot who is unable to land on Runway 15-33 due to crosswind conditions, can always declare an emergency and request Runway 6-24.

FNL is still working with the FAA to get approval for a STARS repeater display in the Mobile ATCT. Installation of a STARS display in a Mobile ATCT is considered a non-standard configuration and must be approved by ATO. The controllers and Air Traffic are in favor of this proposal since it will support better situational awareness and a safer operating environment at FNL.

Governance Study

The internal support team is working with both Cities to determine the best format for evaluating the Governance options presented by DSR LLC. Once the two Cities agree on the best structure for evaluation of the options, DSR LLC and the City legal staffs will facilitate those discussions to determine the best path forward for Airport Governance.

Operations/Maintenance Manager Updates

Snow and Ice Control Plan and Winter Operation Stakeholder meeting.

Since the last commission meeting, FNL staff have conducted our Annual training on the Snow and Ice Control plan for the upcoming winter season. We also completed the 2023 Winter Operations stakeholder meeting to included outside entities in the safety and planning for this expected hazard. Winter operations have inherent risks to aircraft and snow operators which we mitigate through training, ongoing planning and coordination, and timely condition reporting. The maintenance team are in progress configuring all equipment for winter operations. This is part of our commitment to operational readiness. The addition of the new rotary broom from Sun Valley and the additional loader and box plow purchased through the CDOT Aeronautics equipment Surplus program, will help with snow and ice clearing operations this winter season.

Pavements

Taxi lane Northrop, located east of the Taxiway Bravo, experienced a weather and weak pavement related pavement failure in September. Airport staff immediately implemented a temporary patch and have contracted with Goltz Asphalt using and existing contract with the City of Loveland for on call asphalt services. This work is expected to be completed before the end of asphalt paving season.

The terminal parking lot has seen strong wear as expected with the LandLine operation relocated to a new portion of the parking lot. Staff have used recycled asphalt to mitigate trip and pothole hazards in the drive lane and passenger walkway of the terminal facility. The airport has contracted with Goltz Asphalt to replace the failing asphalt in the bus lane with compacted asphalt millings that can be repaired more easily than the existing asphalt. The overflow lot signage improvements have been deployed to direct passengers to the additional parking displaced by terminal construction. This will help to improve the passenger experience during the holiday season.

Airport Scheduled Events

- Numerous Charter Flights for Local Football Teams
- October 6-7 Colorado State University's "Colorado Drone Airshow 2023"

Attachments

1. Loveland Fire and Rescue Authority ARFF monthly report
2. Runway 6-24 Pilot Communications
3. CDOT Press Release / News articles.

a. Our Transition to Flourine-Free Foam
b. Flourine-Free Firefighting Foam
c. Virtual Ramp System at Kansas City Int'l

Happy September!

Hi All! Sending this a few days early because of this week's flights…

Airport:

- Get connected to Denver flights through Landline! You can search your favorite travel site (ie. ***Priceline, Expedia***) and enter Fort Collins (FNL) as your departure airport.
  - Kids ride free and parking at NoCo Regional is free! There are over 8 trips a day to Denver International!
  - ***https://landline.com/***
- Airport Commission meeting will be held on **September 21st, 3:30-5:00pm** at the Fire Station conference room
- Please see the ***www.flynoco.com*** website for all airport commission updates involving the terminal construction!

ARFF:

- So far in 2023, we've had
  - **6 Alert incidents**
  - **9 Diversion flights from DIA due to weather**
  - **15 Scheduled air-carrier flights**
  - **And football season starts next month with all football flights for both CSU and UNC teams and visiting teams**

***Scheduled Air-Carrier Flights for September:

****Squad 46** will be assigned to scheduled air-carrier flights unless otherwise assigned by the LFRA Shift BC.

Day	Date	Airline	Arrival Time	Departure Time	Aircraft	Team/Notes
Wed	Aug. 30	Allegiant	1130	1330	A320/19	UNC Football OUT
Thurs	Aug. 31	United	1940	2042	B737-800	Texas Tech FB IN
Fri	Sep. 1	Allegiant	0121	0211	A320/19	UNC Football IN
Fri	Sep. 1	Alaska	1515	1555	B737-800	WSU Football IN, Ferry OUT
Sat	Sep. 2	Alaska	2030	2230	B737-800	Ferry IN, WSU Football OUT
Mon	Sep. 11	Charter Training	0930		B737	40 passengers IN/ Ferry out
Fri	Sep. 15	Charter Training	0830	0900-0930	B737	Ferry IN/ 40 passengers OUT
Fri	Sep. 15	Allegiant	1129	1330	A320/19	UNC Football OUT
Sat	Sep. 16	Allegiant	2224	2314	A320/19	UNC Football IN

Fri	Sep. 22	Sun Country	TBD	1140	B737-800	CSU Football OUT
Fri	Sep. 22	Allegiant	1229	1430	A320/19	UNC Football OUT
Fri	Sep. 22	Allegiant	1521	1611	A320/19	Appalachian State Football IN, Ferry OUT
Sat	Sep. 23	Allegiant	2249	2339	A320/19	UNC Football IN
Sun	Sep. 24	Sun Country	TBD (Early AM)	TBD	B737-800	CSU Football IN
Fri	Sep. 29	Allegiant	1429	RON	A320/19	Utah Tech Football IN, RON
Fri	Sep. 29	Sun Country	1800	1845	B737-800	Casino Charter OUT
Sat	Sep. 30	Allegiant	RON	2230	A320/19	Utah Tech Football OUT, JC Crew here TBD

Color Codes

ARFF Standby
Casino/Other
UNC Football
CSU Football
CSU/UNC/ Wyo Opp.

RON = Remain Overnight

Have a great month!!!

Gina Gonzales
ARFF Lead Engineer
Loveland Fire Rescue Authority
LFRA Fire Station 4, Northern Colorado Regional Airport

970-568-6026 – business cell – for messages as well
gina.gonzales@lfra.org - email
www.lfra.org

NORTHERN COLORADO REGIONAL AIRPORT

www.flynoco.com

***Like the flight attendant says, "First put the oxygen mask on yourself… only then can you help someone else with theirs"*

David Ruppel

From: Northern Colorado Regional Airport <airport@cityofloveland.org>
Sent: Tuesday, September 26, 2023 1:32 PM
To: David Ruppel
Subject: [External] Landing on Runway 6-24

NORTHERN COLORADO
REGIONAL AIRPORT

FNL Pilots,

Runway 6-24 has been closed as the result of an Air Traffic Control Line of Sight issue. Airport staff inspect the runway as part of our airfield inspection to ensure it is safe for use. There is nothing physically wrong with Runway 6-24 and the loss of visibility for controllers only effects the Tower's ability to provide a landing clearance, not suitability of the surface for landing. In person outreach has been in progress to notify pilots about the issue. We are now putting the information in writing to try and broaden the outreach. There are 3 ways you can still use Runway 6-24 with the closed runway NOTAM in effect.

1- Use before or after tower hours.
The "Closed except for taxi" NOTAM is only effective during tower hours so the first option for using Runway 6-24 is to do so outside of tower hours. Use before or after tower hours is at your discretion and avoiding airspace conflicts.

2- Declare an emergency.
In a declared emergency, Part 91.3 (b) states "In an in-flight emergency requiring immediate action, the pilot in command may deviate from any rule of this part to the extent required to meet that emergency." A significant weather event with an inability to divert is an example of an appropriate use of this regulation. This will result in simple report with the air traffic controllers after landing.

3- Request the runway for landing until ATC says "Landing will be at your own risk."
To avoid pilots declaring an emergency unnecessarily, ATC and Airport staff jointly determined it would be useful to leverage the Air Traffic Controller process for landing on a closed runway outlined in Joint Order 7110.65AA Section 3-3-2. The link will show you the specific regulation, but in short you must ask 3 times to land on the runway. ATC will deny the request 2 times and may remind you of the NOTAM. Only if you persist with a 3rd request to land using a direct statement, like "Request to land Runway 24," the controller is able to say "Landing will be at your own risk" if it does not create an airspace conflict. You will now be able to land on Runway 6-24 and responsibility to see

that the runway is clear of aircraft and vehicles is up to the pilot. For polite pilots who always comply with ATC instructions this may feel scary or wrong. Just know that the FNL Air Traffic Manager came to the airport with this as a solution so pilots can utilize the runway. We want you to land safely and this is one tool to get you there.

Regards,

Airport Management
Northern Colorado Regional Airport
www.flynoco.com
970-962-2853

4900 Earhart Road
Loveland, CO 80538

See what's happening on our social sites

News From:

COLORADO
Department of Transportation
Division of Aeronautics

NORTHERN COLORADO
REGIONAL AIRPORT

www.codot.gov
www.facebook.com/Colorado Aeronautics
@COAeroDiv

October 18, 2023

Contacts: David Ulane, Aeronautics Division Director
303.512.5254 | David.Ulane@state.co.us

Dave Ruppel, Interim Airport Manager
Northern CO Regional Airport
970.962.2850 | david.ruppel@cityofloveland.org

Northern Colorado Regional Airport Remote Tower Project Paused Controlled Air Space to Continue

LOVELAND – Since 2015, the Colorado Department of Transportation's (CDOT) Division of Aeronautics (State), the Northern Colorado Regional Airport (FNL), and the Federal Aviation Administration (FAA) have been collaborating on an innovative effort to bring remote air traffic control tower technology to FNL and Colorado. This technology uses video cameras and other sensing technologies to emulate the operational safety and efficiency benefits of a traditional air traffic control tower but with additional flexibility and capabilities at a much lower capital and operational cost than a traditional air traffic control tower.

In 2018, the FAA selected Searidge Technologies of Ottawa, Canada to be the remote tower technology provider at FNL, and in March 2020, a mobile air traffic control tower was installed in advance of a structured testing and evaluation program to eventually certify and operate a permanent remote tower at FNL. Unfortunately, a number of circumstances have occurred that have impacted the program, including the COVID-19 pandemic and related multi-year FAA travel restrictions, as well as continually changing FAA standards for remote tower certification. As a result, Searidge Technologies has advised the FAA that they will terminate work on the FNL remote tower program.

As this transition occurs over the next several weeks, the state, FNL, and the FAA will collaborate on a new path forward that preserves existing air traffic control services at FNL for the foreseeable future. During this time, future options will be evaluated for continued development of the remote tower facility at FNL as well as potential options for a traditional air traffic control tower. Significant interest exists from other remote tower technology providers to continue development at FNL, and the state and FNL will be working closely with the FAA to explore this option as the preferred alternative.

"While we are disappointed to see Searidge leave the remote tower program, we remain optimistic that the cost-effective benefits of remote tower technology will have tremendous value to Colorado's future aviation system, and we intend to vigorously support future development of the technology" said CDOT's Aeronautics Director David Ulane.

"Taking Care To Get You There"

"FNL has a well-deserved reputation for innovation, safety, and development and the Remote Tower is a great example of that focus. The Remote Tower has already provided an exceptional, innovative pathway to meet the operational demands of our growing airport in a safe, cost effective, and timely way," said David Ruppel, Northern Colorado Regional Airport interim director. "While this news is unfortunate, we are confident that with the FAA's ongoing support, CDOT's commitment to this project and our airport, as well as interest from other highly qualified vendors, we will be able to carry this effort forward."

Under the Direction of the Colorado Aeronautical Board, the Colorado Department of Transportation's Division of Aeronautics supports Colorado's multi-modal transportation system by advancing a safe, efficient, and effective statewide air and space system through collaboration, investment and advocacy. In partnership with the Federal Aviation Administration, 76 public-use airports and a diverse group of aviation system users, the Division also works to promote aviation safety and education through the efficient administration of the Colorado Aviation Fund. For more information, check us out on YouTube, like us on Facebook and follow us on Twitter.

FNL is a commercially certified regional airport supporting over 110,000 annual flight operations, with over 200 hangars and over 300 based aircraft. It is one of 14 commercial airports in Colorado and has not only supported numerous commercial airlines in the past but with the addition of a new Terminal, wider runways, and the future certification of the Remote Tower system will continue to be the transportation hub for Northern Colorado. FNL supports over 1,072 jobs, $51,914,000 in annual payroll, and $160,874,000 in Business revenue.

# # #

Our Transition to Fluorine-Free Foam

The Port of Seattle Fire Department continues on a five-year journey to find the safest, most efficient aircraft firefighting foam (AFFF) replacement and make Seattle-Tacoma International (SEA) one of the first U.S. airports to complete the steps for the transition after federal approval.

In 2018, it was obvious the FAA would be identifying a new fluorine-free foam formulation to replace MIL-Spec Fluorine based AFFF. Immediately, our airport leadership was supportive and together we engaged the FAA, Department of Defense, foam manufacturers, environmental entities and elected officials to make sure we were on top of any developments. That outreach allowed us to understand that this was going to be a complex and time-consuming endeavor.

There have been a lot of great people and many successes along the way that have allowed the industry to make progress on this challenging issue. Where are we? Today, we as an industry are expecting that U.S. airports will soon have the opportunity to select from a list of approved fluorine-free foam products—possibly in September. What I want to share is not the details of our five-year journey, but what airport fire chiefs, aviation executives and airport environmental teams should be thinking about and preparing for as the day nears for fluorine-free products to be available.

The fire department leadership and the airport environmental team need to be in shoulder-to-shoulder partnership to set your airport up for a successful transition. As a fire chief, I could not do this without my environmental team. It is not just as simple as draining out the old foam and putting in the new foam. I am going to specifically address the ARFF truck transition, but you all must realize that hangars, fuel farms and other locations will also need to be converted for a complete transition.

ARFF truck cleaning has been a topic of discussion within the industry. I have concluded that once we drain trucks of the AFFF product, it will take more than rinsing the tanks and piping to remove as much residual AFFF as possible. From the beginning, we have been interested in a technology that can clean the trucks better than just a water rinse, but at the same time help reduce the amount of waste we will have to dispose of off-site.

As an airport, you will have many options. But deciding what to do with the drained raw product and waste must be the highest of priorities. We plan to store our raw AFFF product and work with the Washington State Department of Ecology on disposal at some point in the future.

After identifying a cleaning methodology and devising a strategy to manage waste, the next step will be to identify a fluorine-free foam product that is currently undergoing testing for FAA approval. Once a cleaning technology, waste handling strategy and new fluorine-free foam product are identified, you can then assess costs for the eventual transition.

***Randy Krause**, is fire chief of the Port of Seattle Fire Department.*

The next step along the way is to secure funding for the transition. The fire department and the environmental team at SEA made a presentation to our aviation executive and secured funds to allow us to transition at the first opportunity.

After funds are secured, identify with your procurement team. At the Port of Seattle, we must use a competitive process for our purchases and have recently put out two requests for proposals—one for cleaning and one for new fluorine-free products.

Of course, this is a simplified version of the overall work and process. Each airport is sure to experience a unique set of circumstances. If you have any questions, we here at SEA would be more than happy to assist in any way to help you with your planning and preparation for the transition to new fluorine-free foam products.

Toronto City Airport Leads the Move to Fluorine-Free Firefighting Foam

BY RONNIE WENDT

FACTS&FIGURES

Project: Transition to Fluorine-Free Firefighting Foam

Location: Billy Bishop Toronto City Airport

Distinction: 1st commercial airport in North America to make the switch

Timeline: Trucks modified & cleaned Sept. & Oct. 2019; final testing Oct. 2019

Product Used: SOLBERG® RE-HEALING RF3

Manufacturer: Perimeter Solutions

ARFF Vehicles: 2 Oshkosh 1500 Striker® trucks (2009 & 2011)

Manufacturer: Oshkosh Airport Products

Waste Disposal: GFL Environmental

Water Testing: SGS Analytical

Key Benefit: Fluorine-free foam poses less risk to the environment & human health

Billy Bishop Toronto City Airport (YTZ) has wrestled an issue to the ground that other airports throughout the world are still grappling with—the use of fire suppressant foam that contains per- and polyfluoroalkyl substances (PFAS), which are linked to harmful effects for humans and the environment. YTZ was the first commercial airport in Canada, and all of North America, to complete the transition to fluorine-free firefighting foam. Other Canadian airports have since completed the transition to fluorine-free foam.


MARK SMITH

Mark Smith, former fire chief and Emergency Response and Planning manager for Ports Toronto and YTZ, launched a search for an alternative early on and quickly discovered that many fluorine-free fire suppressant foams did not meet federal standards for aviation use. All that changed in July 2019, when Transport Canada issued an exemption to a section of the Aircraft Fire Fighting at Airport and Aerodrome Standards that allows airports to use fluorine-free aircraft rescue and firefighting (ARFF) products under specific circumstances.

In order for an airport to qualify, its chosen foam must:

- pass performance testing performed by third party,
- meet applicable ICAO Level B and C certification requirements,
- not contain any fluorinated compounds,
- be compatible with vehicles' onboard foam portioning system,

- be compatible with vehicles' secondary agent, and
- undergo testing on the airport's specific ARFF equipment to ensure proper proportioning at each discharge port.

The 2019 exemption opened the door for Chief Smith, and he promptly assembled a team to research products that would take YTZ into more environmentally friendly territory.

"We had to meet all requirements to take advantage of the exemption," he specifies. "We finally found a product [SOLBERG® RE-HEALING RF3] that met our needs and moved forward."

The regional airport that traditionally serves 2.8 million passengers began using fluorine-free ARFF foam in 2019, blazing a trail for other airports to potentially follow.

Smith, who has since moved to a new position at another Canadian airport, jokes that the foam transition at YTZ has become his "claim to fame." But in all seriousness, he stresses, it was definitely the prudent course of action.

"PFAS is carcinogenic and harmful to human health. It was basically a no-brainer to make that transition," he says. "It wasn't about being first in North America. It was about making the right choice for our firefighters, the public and the environment."

Finding an Alternative

PFAS are often referred to as "forever chemicals" because they are indestructible man-made compounds that build up in the environment. Compounding the issue, they are common in many consumer goods (food containers and wrappers, clothing, solvents, non-stick cookware, etc.) as well as aqueous film-forming foam (AFFF) used to fight fires.

Exposure to PFAS is linked to certain cancers, thyroid and liver disease, asthma and other serious health conditions, prompting governments throughout the world to limit their use.

Chief Smith's search for viable, more environmentally benign firefighting foam was an uphill battle because there were not

The foam manufacturer, truck manufacturer and internal staff were all key to the airport's transition.

other common disposal methods for airports are incineration and deep well injection.

Smith verified PFAS levels in the rinse water were at acceptable levels by overnighting a frozen sample to SGS Analytical for analysis.

Siem notes that the ridges, pockets and crannies inside ARFF trucks make it inherently difficult to remove all traces of PFAS. The entire system needs to be rinsed many times to achieve the levels the government considers safe, he adds.

In 2022, the Environmental Protection Agency updated its lifetime health advisory levels for PFAS chemicals in AFFF. For perfluorooctanoic acid (PFOA), the recommendation is now 0.004 parts per trillion; for perfluorooctanesulfonic acid (PFOS), it is 0.02 parts per trillion. Although the Environmental Protection Agency is a U.S. agency, it implements environmental agreements and cooperative frameworks with Canada and Mexico.

"There are a lot of different processes and cleansing chemicals you could use to cleanse your vehicle today than were available when I did this," Smith advises. "Whatever process is used, it's vital to use personal protective equipment. I made sure our firefighters were wearing gloves, masks, eye protection, and Tyvek suits because PFAS poses a great risk to personal health."

Another important objective was continuing to meet airport category requirements during foam transition and testing.

Training Needs

Switching to fluorine-free foam requires firefighters to adjust their application methods, notes Siem.

When using AFFF, firefighters often build up a blanket of foam next to a fire, then push it into the fire. Another common method is to push foam at the aircraft and let it bounce off and land on the burning fuel underneath. Sometimes, foam is shot into the air so it can land on a burning surface.

Fluorine-free foams should not be applied directly and/or forcefully onto a surface, Siem advises. He recommends the DFW Fire Training Research Center's preferred method: building up foam in front of the fire, then changing the nozzle pattern to spread the foam out.

"You also may have to reapply [fluorine-free foam] more often than you would with AFFF," adds Smith. "We had to train our firefighters in application. Training can be difficult because there is always an environmental concern, even with fluorine-free products; and there is always a cost. But we need to ensure firefighters understand the process of foam application."

Recommendations for Success

With the switch to fluorine-free complete at YTZ, Smith has one key suggestion for other airports: Build a transition team that includes the foam manufacturer, vehicle manufacturer and internal resources.

"YTZ mechanics and technical staff from Oshkosh Airport Products and Perimeter Solutions were all part of my technical support team, and they were a huge asset throughout the transition," says Smith, noting that the group worked together for over five months.

"You will need documentation from the supplier…and you will need support from the truck manufacturer for all physical testing," he elaborates. "The testing we did with Oshkosh Airport Products made me feel confident that the product was going to work for Billy Bishop Airport [YTZ]."

Bermingham notes that Oshkosh Airport Products does not make specific recommendations for processes or agents to ensure a vehicle is clean, but its internal experts and network of local service providers are available to help modify ARFF trucks and assist with fluorine-free foam selection.

Smith emphasizes that YTZ could not have made the switch successfully without a great team of mechanics on staff. "We had to modify the trucks and make sure we were compliant with all Transport Canada regulations," he explains. "We had to make sure we had a third vehicle and were ready for service. Our mechanics played a tremendous role in that process."

In short, the transition to more environmentally friendly firefighting foam required the right partnerships, products and people.

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many options back in 2019 when he began looking. Eventually, his quest led to Perimeter Solutions, a company with ICAO Level B and C certified fluorine-free foam concentrates.


MARK SIEM

"Initially there was a big gap in performance between legacy PFAS-containing formulations and new fluorine-free formulations," explains Mark Siem, head of business development and a chemist for Perimeter Solutions. "There was a gap in extinguishment, burn back and sealability times. But over the last few years, fluorine-free foams have gotten a lot better, especially for jet fuel fires."

Smith is in agreement about the improved performance, and notes that more brands of fluorine-free options are now available, including BIOEX and National Foam. "But at the time, Perimeter Solutions had the only product that provided the documentation and technical support I needed to make the transition happen," he recalls.

Smith explains that SOLBERG® RE-HEALING RF3 was selected for use at YTZ because the environmentally sustainable fluorosurfactant- and fluoropolymer-free foam concentrate effectively extinguishes Class B hydrocarbon fuel fires. In addition, it proportions at a ratio of 3% foam to 97% water, which worked with the airport's existing Oshkosh Striker® firefighting vehicles.

The product has a 30- to 40-minute drain time, so it suppresses vapors; but it's still better for the environment, adds Siem. "The foam degrades and breaks down in less than 90 days, so there is no long-term effect of the product when it's discharged," he explains. "There are short-term issues because the environment has to deal with any kind of discharge, but its biodegradability ensures it doesn't have any longer-term issues. Compare that to PFAS, which doesn't break down for thousands of years."

Tap Manufacturers for Help

Siem and Smith both stress the importance of involving ARFF truck manufacturers when selecting foam.

"Whether it's fluorine-free foam or AFFF, you always want to make sure that the proportioning equipment works correctly on the trucks," says Siem. "That's what puts the foam concentrate into the water stream to make the foam solution. You want to make sure that's accurate, or the foam won't be as effective."

Jack Bermingham, business unit director for Oshkosh Airport Products, emphasizes that this is especially acute when using fluorine-free products, because they are generally more viscous than legacy foams, which are thin like water.


JACK BERMINGHAM

"Fluorine-free foams have a variety of different viscosities depending on the recipe used by the manufacturer," he adds. "Airports need to engage Oshkosh Airport Products or one of our local service providers to ensure a proper conversion to fluorine-free foam for their specific trucks and their specific fluorine-free foam."

That's exactly what Chief Smith did. As expected, technicians needed to modify the poppet-style proportioning system on YTZ's 2009 and 2011 Striker® trucks to accommodate the thicker fluorine-free foam. That process included upfront analysis by Oshkosh engineers using computational fluid dynamics to estimate the new orifice sizes. Physical testing of foam production was then performed with airport staff to validate the baseline analysis.

Modifications took about two weeks per vehicle.

Bermingham notes that Oshkosh's newer electronic proportioning system does not require manual adjustments for most fluorine-free foams.

Cleaning Day

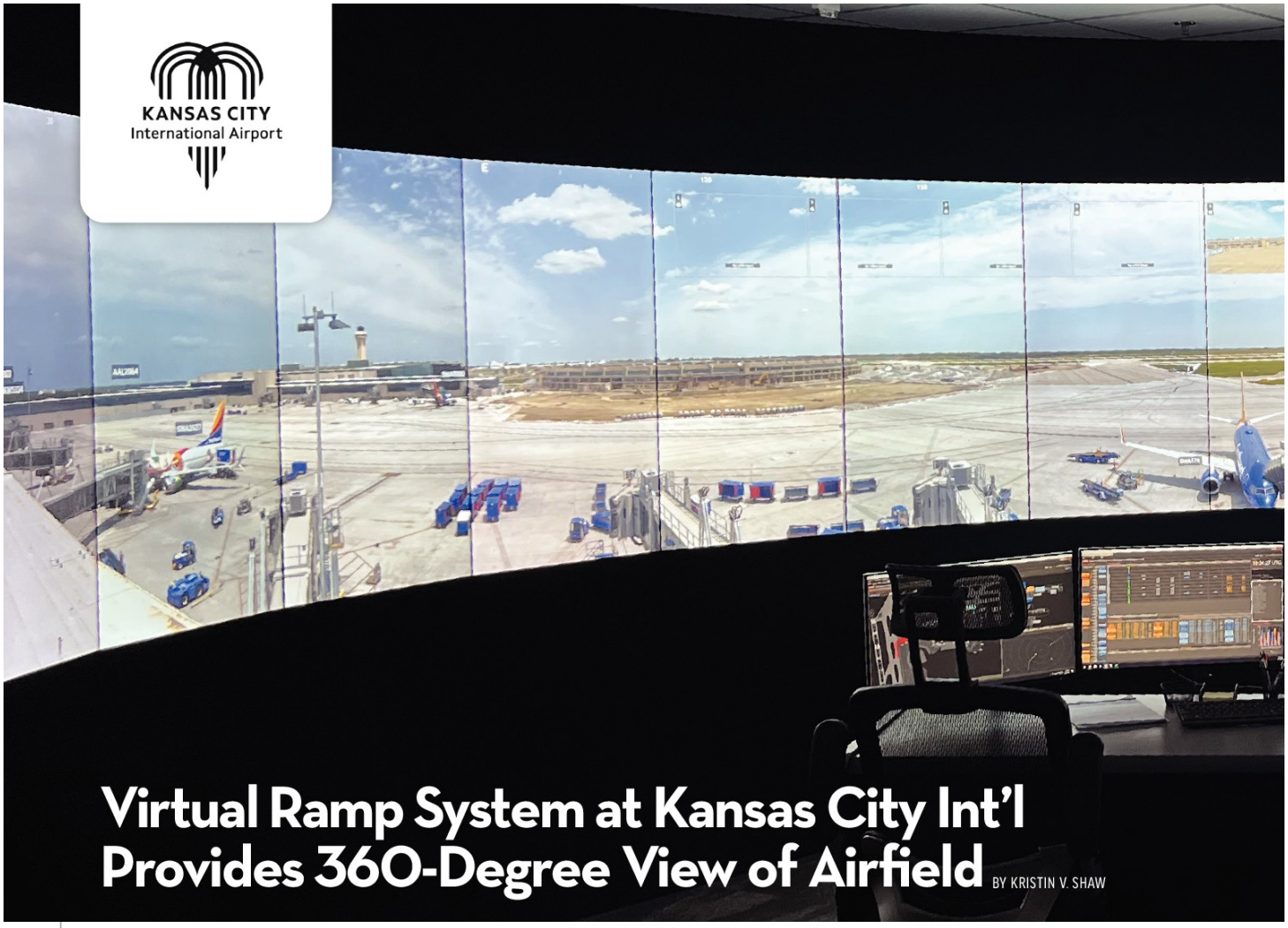
Before loading new fluorine-free foam into its trucks, YTZ first cleaned out the existing product.

As a pioneer in making the switch, the airport had little information about the best way to proceed. "There was no formal process in place when Canada issued the exemption," Smith recalls. "All they said was [that] airports can use non-fluorinated products, but there was no formal direction on how to get AFFF and PFAS out of the vehicles."

The airport's Oshkosh Striker® trucks held about 210 gallons of AFFF each. Knowing this, Smith ordered eight 264-gallon hazardous waste totes from GFL Environmental, a waste management service provider. Airport workers filled the first tote with 100% AFFF from the trucks. Next, they refilled the empty trucks with water, drove them around to mix the water throughout the tanks, and then emptied the AFFF/water mix into the remaining waste totes. The rinse process was repeated three times, until all the totes were full.

"On our fifth round, we noticed there was no greasy residue on top of the tank," Smith reports. "We started discharging at that point, beginning with the roof turret, then the bumper turret, then moving to the handlines and under-truck nozzles. All we had coming out of the truck at that point was pure water."

GFL Environmental hauled away the totes of AFFF and rinse water for disposal at a hazardous waste landfill in Canada. Two



Virtual Ramp System at Kansas City Int'l Provides 360-Degree View of Airfield

BY KRISTIN V. SHAW

FACTS&FIGURES

Project: Virtual Ramp Control

Location: Kansas City (KS) Int'l Airport

Key Components: 2 digital tower camera houses, each with 14 cameras; 8 supplemental cameras

Cost: $7.6 million

Funding: Bonds (as part of new terminal project)

Timeline: Bid issued Sept. 2021; contract award finalized Dec. 2021; construction & activation prep Jan. 2022- Feb. 2023

Go-Live Date: Feb. 28, 2023

Contract Terms: 3-phase implementation; 5 years of ramp control services

Software, Contract Lead: Saab Inc.

Staffing Support: Robinson Aviation Inc.

Construction Drawings & Construction Management: Garver

Key Benefits: 360-degree visibility of ramp area & entire airfield; expanded line-of-sight for ramp controllers

After four years of construction and many more years of planning, Kansas City International Airport (MCI) opened its new $1.5 billion terminal this February. With 39 gates, 1 million square feet of terminal space and 6,200 parking spots, the new facility represents the largest single infrastructure project in Kansas City's history.

Behind all that new infrastructure is the technology that makes MCI hum. One of those crucial pieces is a new $7.6 million virtual ramp control system (VRCS) from Saab. And it's not a whiz-bang frill. Because of the shape of the new terminal, the system is critical for safe ramp operations. The two digital tower camera houses and eight supplemental cameras give ramp controllers a 360-degree view of FAA-controlled movement areas and non-movement areas that are overseen by the airport.

The old MCI had a "horseshoe" configuration with three terminals (A, B and C). Picture the head of a certain iconic cartoon mouse, but with an extra ear. The new terminal is shaped like a capital H. Passengers enter through one side and funnel through the TSA checkpoints. All the A gates are immediately adjacent to the new Arrivals Hall, along with amenities like restaurants, shops and a quiet room. Travelers with flights departing from the B concourse connect through the crossbar of the H and head to the gate on the other side of the terminal.

For both operational and budgetary reasons, MCI opted to keep the original air traffic control tower, which sits east of the new terminal. As the team ran computer simulations to determine how traffic would move across the taxiways, it identified the need for extra "eyes" and determined a VRCS was the best solution.

On the west side of the B terminal, there is only a single Group III taxi lane; and the semicircular end caps feature dual Group III taxi lanes. Once an aircraft leaves the taxiway and segues onto the ramp area, control of the aircraft transfers from the FAA to non-controlled portions of the airport ramp. As

the new airport was being reimagined, planners foresaw certain situations in which the ramp might be locked up. In addition, they also had to create a path to and from the deicing pad.

"We recognized a line-of-sight issue on the back side of the terminal, and we knew that controllers in the tower could not see the aircraft cleanly," explains Ian Redhead, MCI's deputy director of Operations and Maintenance. "We don't want aircraft pushing off into blind turns."


IAN REDHEAD

Enter virtual ramp control.

Going Virtual

Marcel Trommel, senior program manager for Saab,


MARCEL TROMMEL

says that VRCS technology has been evolving over the last decade or so. It started out as a remote air traffic control system for small airports in northern Sweden, Saab's home country. After testing the technology locally, the company deployed it internationally as an air traffic and ramp control solution for airports that didn't warrant a control tower or have the necessary personnel.

The VRCS works in tandem with Saab's Aerobahn surface management tool, which collects data from various software tools and allows staff to monitor operations on one integrated platform. Combining that information into one interface offers more collaboration and improves options for safety, environmental impact and efficiency.

Redhead had been keeping tabs on Saab technologies for several years, speaking with representatives at the aerospace company at different conferences to review its latest products,

and he was intrigued by virtual ramp control. During the design process, he and his technology team visited Fort Lauderdale-Hollywood International Airport (FLL), which has been using a VRCS since 2017. Its system is an integration of many components.

The team then saw the Saab system in action at George Bush International Airport (IAH) in Houston, and was impressed. Here, United Airlines is responsible for staffing the ramp control positions. At FLL, however, the airport partners with Robinson Aviation Inc. for operating staff. After seeing both approaches and reviewing the proposals, Redhead felt a collaboration with Robinson would work at MCI, too.

"One of the reasons I was impressed with Saab is because they offered a turnkey contract," Redhead says. "I got a good feeling meeting with the individuals at Robinson Aviation, and I liked that I could have one contract."

MCI released a competitive request for proposals in summer 2021 for the technology, equipment installation, infrastructure work and equipment support, and Saab won the contract over several other bidders. In December of the same year, MCI awarded the contract to Saab, with Robinson Aviation as a subcontractor to operate the system. The project kicked off promptly in January 2022 for a Feb. 28, 2023, go-live date.

"The schedule was critical, and there was no room for error," Trommel says. "Between the contract award and having the system ready was about 13 months, which is pretty quick."

Staffing Up


NATHAN BOURGEOIS

Nathan Bourgeois, division manager of Aviation Services for Robinson, brought a host of experience to MCI. Bourgeois has been with the company for 18 years—10 as a traffic controller and six years managing an air traffic control tower; then he became an area manager for 42 towers.

Currently, Robinson Aviation provides air traffic controllers and operates more than 100 air traffic control towers for the FAA.

"Essentially, we are an air traffic control staffing agency," Bourgeois explains. "The expertise we have allows us to reach past air traffic control, and ramp control is a great place for that. The ramp environment is the last part of the air and space system that is uncontrolled; we provide order."

At MCI, Robinson stations one ramp controller at the north position, another ramp controller at the south position, and a supervisor that oversees both locations. The supervisor also rotates in for operational duties when each of the controllers needs a break.

Bourgeois took the helm of ramp staffing activities in July 2022, about seven months before the new terminal was scheduled to begin operating. In that time, he had to hire a full staff, develop a training program, create letters of agreement and create documentation for operation of the new VRCS.

His first hire was a "good human manager who treats people with respect and works with all the stakeholders." The manager, Chris Thigpen, started 60 days before the new control system went operational; 30 days later, they selected the rest of the staff together.

By the time they completed the hiring cycle, Bourgeois had established and documented the operating procedures. Despite his own years of tower experience, he did not require incoming staff to have air traffic control experience.

"I look for good humans," Bourgeois says. "I can teach anyone how to do ramp control, but I can't always teach them how to be good people. They need to work well together."

New team members were trained with a giant diagram of the airport, using toy planes to simulate movement around the ramp. They practiced deconflict strategies and learned how various movements affect other actions. It might sound quaint that Robinson uses paper maps and toy planes for high-tech training, but Bourgeois says it's very common and effective.

"It's easy to move planes from place to place in three dimensions," he explains. "We train staff in the classroom and then do on-the-job training until controllers are good enough to do it on their own. We observe them and monitor their grades on training sheets, and the manager makes the decision when they're ready."

Getting Ready

With a tight timeline and a lot of chess pieces for MCI to move around before opening its new terminal, strong communication and collaboration were important. Countless projects were happening at the same time, and the

The new virtual system provides controllers with comprehensive views of the ramp and airfield.


Robinson Aviation provides controllers for the virtual ramp control system.

VRCS had to be shoehorned into the master plan. Integrating the technology as the terminal was being built wasn't easy, and the Feb. 28 go-live date was set in concrete.

"We were able to achieve our goals because were very integrated and coordinated with the Kansas City Aviation team and construction teams," Trommel says. "We all knew at what point, for example, the roof would be done enough for us to install the camera housing, and when the VRCS room would be ready to get our consoles assembled. That way, we knew when debris and dust would not be raining down on our technical equipment. The communication to get operational resolutions was happening seamlessly, and when the time came to go live, everyone was ready to go."

Bourgeois emphasizes the importance of building trust with the FAA air traffic control staff and working closely with individual airlines to ensure safe and efficient operations.

"In Kansas City, with Aerobahn and the camera system that is in place, we can see the planes and can move them around without conflict because the software sees a problem before it happens," he explains. "I think this is a great example of how successful you can be when you get experience, good people and technology merged together."

Given his experience, Redhead knew the construction project would include typical challenges such as routing the power, cooling the systems and coordinating timelines. But he felt confident in his vendor choices.

"When you're doing design build, elements of the project are all happening at the same time," he says. "I knew Saab's timeline was responsible and that they would get everything in on time."

Going Live

The night before the official opening, incoming aircraft landed at the old terminal and taxied in or were towed to the new terminal. The virtual ramp controllers went to business right away as if they had been working there for 10 years, says Trommel.

"What is amazing about this is that we started in an environment that had never seen planes before, at the new terminal," Bourgeois marvels. "Up until opening day it was only a concept. To see that come to life was very rewarding. We knew how planes would move, but until you actually see it, you hold your breath."

Currently, MCI is among a small group of airports embracing new ramp control technologies and features, but Redhead predicts more will do so in the not-so-distant future. A number of airport representatives from around the country have already visited MCI to see its VRCS in action, and some are considering the technology for their own terminal projects.

Both Saab and Robinson are effusive about the new terminal and the possibilities to come.

"We believe that in Kansas City, if you build it, they will come," Bourgeois says. "We hope traffic numbers will double there because we have the room for it. There is lots of capacity for growth."

Coloradoan.

REAL-ESTATE

U.S. Customs Office expected to open in Loveland by end of year

Pat Ferrier
Fort Collins Coloradoan

Published 5:55 a.m. MT Sept. 27, 2023 | **Updated 5:55 a.m. MT Sept. 27, 2023**

LOVELAND — A year after getting the go-ahead from the federal government, a U.S. Customs Office should be open by the end of the year next to Northern Colorado Regional Airport in Loveland.

An office at Discovery Air was included in the U.S. Customs and Border Protection office's reimbursable agreement program last year, which allows Discovery Air to be reimbursed for the cost of hiring Customs officers to staff an office in Loveland.

Under the program, Customs can only reimburse salaries and overtime for up to five full-time officers. Discovery Air expects to hire one full-time agent, said Windsor developer Martin Lind, who is developing the 30-acre Discovery Air campus.

Lind had sought $200,000 annually for five years from the commission that oversees airport operations, but commissioners balked last September. While commissioners supported the idea for a Customs office, they couldn't see a way to provide the funds given the airport's financial commitment to build a new terminal.

The city of Loveland, which owns the airport with the city of Fort Collins, is contributing $50,000 annually for three years through its economic development office. Lind said the cost of building and equipping the office has amounted to more than $500,000 so far. "All the construction is done, all the furniture is in, signs will go up this week," Lind said. "We've fulfilled all of our obligations."

Companies will pay Discovery Air an undetermined amount per flight to use the Customs office. Fees will be based on the size of the aircraft: The smaller the aircraft, the smaller the fee; the larger the aircraft, the larger the fee.

The Customs office will largely benefit some of the region's largest and wealthiest businesses that fly internationally from Northern Colorado Regional Airport, but it would be open to the public for limited immigration services, I-94 arrival/departure record verification, gun registration and global entry registration.

Nutrien, a Canadian agricultural business with offices in Loveland, hangars its planes at Discovery Air and routinely flies internationally, particularly to its headquarters in Saskatoon, Saskatchewan. "It's Nutrien that really needs the service and has needed it for a decade," Lind said.

Having to take off and land at another airport to clear Customs is a large expense of time and money, pilots have told the Coloradoan and the airport commission.

When flights leave Loveland for any international destination, they need to clear Customs in the country they are flying to. So, when flying to Canada, for instance, they have to clear Canadian Customs when they arrive.

When flying back to the U.S., they must land at an airport that offers U.S. Customs and Border Patrol, including in Billings or Great Falls, Montana; Casper, Wyoming; Rocky Mountain Regional Airport in Broomfield; Centennial Airport in south metro Denver; or Denver International Airport.

Once a Customs office opens in Loveland, international flights can take a direct route here. "Anyone with a home base (in Loveland): Bohemian Cos., Otter Products, Woodward, Journey Homes ... all have international flights." Coming back home to Loveland will be a direct flight once the Customs office opens. "It will be a huge savings for them."

International flights can't land in the U.S. without going through a U.S. Customs Office. "So, say a flight is coming from the East coast of Canada to Los Angeles and doesn't have enough fuel to get directly to L.A. They can stop here now and refuel," Lind said. "Basically, it opens up an opportunity."

The Customs office will also benefit flights coming to the U.S. that need to stop and refuel, once Discovery Air builds its fixed-base operator, basically a gas station for aircraft. "It opens up the entire globe to Loveland for all those flights," Lind said. The FBO is about two years behind schedule as it awaits approval of its site design from the airport.

Airport Commission Chairman Don Overcash said a Customs office has been part of the airport's strategic plan for several years as a regional economic contributor. "By having an

office here, it will (help) primary employers that fly in and out of the airport and they will not have to spend time and money landing at other airports like Casper. It's part of a very large puzzle put in place to ensure Northern Colorado's airport truly does become a regional airport."

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ITEM NUMBER: 4

MEETING DATE: October 19, 2023

PREPARED BY: Kate Morgan, Airport Executive Assistant

TITLE
Lease Option Extension Request, 5235 Stearman

RECOMMENDED AIRPORT COMMISSION ACTION
Approve the lease extension request.

BUDGET IMPACT
None, the lease rates will remain unchanged

SUMMARY
This is an administrative item. The Airport's standard land lease terms are an initial twenty-five-year lease with three five-year extension options for a total of forty years. The initial lease will end on October 29, 1998. This is the first of three five-year extensions. The Airport was notified (as required by the lease agreement) that the lessee desires to exercise their option to extend the land lease agreement for their second five-year extension period. This extension request requires the approval of the Airport Commission as authorized by the Intergovernmental Agreement between the Cities of Fort Collins and Loveland. Staff have reviewed the request and found the associated account to be in good standing.

ATTACHMENT
Lease Option Request: Jeff Moser, 5235 Stearman

From: Jeff Moser
To: Katherine Morgan
Subject: [External] Re: 5235 Stearman Street Lease
Date: Monday, October 9, 2023 12:06:18 PM

Yes, I would like to do a 5 year extension to my lease for 5235 Stearman St. I am working to get my certificate of insurance updated from my local insurance agent.

Jeff Moser
5440 Peak View Ct.
Windsor CO 80550

Sent from my iPhone

> On Oct 9, 2023, at 10:32 AM, Katherine Morgan <Katherine.Morgan@cityofloveland.org> wrote:
>
> Hi Jeff,
>
> To follow up on your invoice questions last week, here is the breakdown of your account for 5235 Stearman Street:
>
> Previous monthly lease rate: $42.52
> New monthly rate escalated in September: $50.76
>
> Since you paid $510.26 in January to cover all of 2023 at the previous rate, I credited $170.08 back to your account for September, October, November, and December. Those four months at the new rate will total $203.04. So, the amount owed to cover the remainder of the year is $32.96.
>
> If your wish to continue paying for the year in advance, the annual lease fee will be $609.12 until the next escalation in September of 2028.
>
> That being said, your current lease agreement for 5235 Stearman is set to expire on October 29, 2023. **If you would like to take the option of extending the terms of this lease agreement for another 5 years, then please notify me in writing as soon as possible.**
>
> Thank you for bringing this issue to our attention, and please do not hesitate to reach out if you have any additional questions.
>
> Thank you,
>
> *Kate Morgan*

Airport Executive Assistant
Katherine.Morgan@cityofloveland.org
O: 970.962.2851
C: 970.593.2826

4900 Earhart Road Loveland, CO 80538
Website | Facebook | Twitter | Instagram | YouTube Channel

<Moser_ASMP and Lease 5-01-10.pdf>

NORTHERN COLORADO
REGIONAL AIRPORT
4900 Earhart Rd • Loveland, Colorado 80538
(970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER: 5

MEETING DATE: October 19, 2023

PREPARED BY: Francis Robbins, Airport Operations & Maintenance Manager

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TITLE

Contract Amendment with Dibble Engineering for Change Order 1 Design and Bid Services for the Runway 15-33 Widening Project

RECOMMENDED AIRPORT COMMISSION ACTION

Make a motion to recommend approval of a contract amendment with Dibble Engineering for Change Order 1 Design and Bid Services for the Runway 15-33 Widening Project to the Loveland City Council

BUDGET IMPACT

Negative, the Change order amount is $83,774.01.
$83,774.01 will come from Airport reserves. The $75,396.60 will be reimbursable under the construction grant funding.

SUMMARY

This is an administrative item requesting the approval of change order and contract amendment to the contract with Dibble Engineering for professional services totaling $83,774.01. The Airport currently has an on-call contract with Dibble Engineering as its consultant on record through 2024. The contract was awarded after a thorough qualification-based selection process that included staff from both Cities serving on the selection committee.

Dibble was contracted with July of 2023 to design and bid services for the Runway 15-33 Widening project. This important project will enhance safety and help to attract commercial air service. Construction of the runway improvements is scheduled for 2025. The project is also included in the adopted Airport Master Plan and Capital Improvement Plan. In October, the FAA determined the Airport Geospatial Information System in the Airport Data Information Portal required an update to survey and imagery data before design as well as post construction. This action was initially included as post construction per FAA determination at that time.

The Federal Aviation Administration (FAA) will provide the Airport with a grant funding amount of $75,396.60 during the construction phase of this project. This grant requires a local funding match of $4,188.70 and state match of $4,188.70 to pay for the additional costs for construction administration and management. These funds have been budgeted for and appropriated through the two City Councils within the adopted 2023 Airport Budget.

ATTACHMENTS

Runway 15-33 Widening Project Change Order 1

City of Loveland

Contract Change Order

Change Order No.: 1 Purchase Order No.: 23-1102

Contractor: Dibble Project Name: Runway 15-33 Widening

Architect/Engineer: Dibble Project No.: APFAA43

DESCRIPTION

Description of Change:

Change of scope identified by FAA as required. Perform the AGIS/ADIP submittal of Aeronautical Obstruction Survey data and coordination with the FAA and Airport for the relocation of the existing Runway 15-33 PAPI equipment.

Attachments:

Dibble Proposal Change order request No.1

Original Contract Cost: $499,375.00

Total Approved Change Orders: $3,163,630.32

Total This Change Order: $83,774.01

Adjusted Contract Cost w/This Change Order: $3,746,779.33

(assuming all changed orders are approved) % of increase to contract 650.29%%

Change in Contract Time: None Adjusted Date for Completion: None

---

Submitted By: Francis Robbins Date: 10/17/2023

Reviewed By: _____ Date: _____

Approved By: _____ Date: _____

This change order is accepted and the contract is amended to conform thereto, this _____day of _____.

City of Loveland Accepted:	Contractor Accepted:	Recommended by Architect/ Engineer (if required):
By: _____	By: _____	By: _____
Title: _____	Title: _____	Title: _____

p 303.872.5756 | 2696 South Colorado Blvd, Suite 330
f 303.353.4068 | Denver, CO 80222
dibblecorp.com

October 16, 2023 (*rev. 1)*

Northern Colorado Regional Airport
4900 Earhart Road
Loveland, CO 80538

Attention: Mr. David Ruppel
Interim Airport Director

RE: ENGINEERING SERVICES PROPOSAL
City Project Number: TBD
FAA AIP No. 3-08-0023-043-2023
Change Order Request No. 1
Runway 15-33 Widening – Aeronautical Obstruction Survey/AGIS and FAA Reimbursable Agreement Coordination

We appreciate the opportunity to provide additional design phase services for the *Runway 15-33 Widening* project at the Northern CO Regional Airport (FNL). This proposal has been prepared in accordance with the communication and coordination with the FAA and FNL over the past few weeks regarding the additional work that needs to be performed for the AGIS/ADIP submittal of Aeronautical Obstruction Survey data and coordination with the FAA and Airport for the relocation of the existing Runway 15-33 PAPI equipment.

Dibble, as the prime consultant, is proposing to complete the Scope of Work as included in this proposal as follows:

A. <u>COR No. 1 Services</u>:

1.	Dibble (Civil).....	$11,404.28
2.	CR Engineers (Electrical - DBE).....	$5,950.73
3.	NV5 Geospatial (Aeronautical Survey).....	$66,419.00
	Subtotal.....	**$83,774.01**

Transmitted herewith is our proposed Scope of Work, Fee Summary, Derivation of Fee Proposal, Estimated Manhours matrix, Estimated Direct Costs worksheet, and full subconsultant proposals for your review.

We are very grateful for the opportunity to work with FNL on this exciting important project. If you need additional information or have questions, please do not hesitate to contact us.

Sincerely,

Jared Bass, P.E.
Vice President - Sr. Project Manager

DIBBLE

NORTHERN COLORADO REGIONAL AIRPORT

DIBBLE

SCOPE OF WORK
Northern CO Regional Airport
Runway 15-33 Widening
COR No. 1 - Aeronautical Obstruction Survey/ AGIS and FAA Reimbursable Agreement Coordination
FAA AIP No. 3-08-0023-043-2023
October 12, 2023

Introduction

Dibble (Engineer) has been requested by the Northern Colorado Regional Airport (FNL or Airport) and FAA to provide additional minor design phase services that were outside the original scope of work for the *Runway 15-33 Widening* project. This additional effort includes the following items:

- Perform a full aeronautical survey meeting the requirements identified in the new *AGIS Survey Project Planning Guide*. This document has been included to this scope of work for reference.
- Review the existing Obstacle Authoritative Source (OAS) obstacle data, (327 existing objects in OAS within 18B surfaces), and potentially removing obstacles as a part of this project. Any obstacle removals will be completed by NV5 Geospatial using the FAA's Runway Airspace Management tool. This item was not included in the original scope of work.
- Additional design and coordination related to the relocation of the existing airport-owned PAPI's to meet the standard separation distance from new edge of pavement. This additional effort includes further evaluation of the existing airport circuitry that was unforeseen prior to the project start.
- Coordinate with the FAA and FNL on the Reimbursable Agreement for the FAA ATO to provide design for the FAA owned PAPI's. This additional coordination for the FAA Reimbursable Agreement and coordination with their design was not anticipated in the original scope of work.

During the 2023 FAA/CDOT/FNL CIP meeting held in October 2023, the FAA stated that the project should plan for construction in 2025. The Bid Phase can occur in the 4th quarter of 2024. The following identifies the anticipated Aeronautical Obstruction Survey schedule (pending the timing of the proposal approvals):

- Imagery Acquisition - 10/23 – 10/27
- Field Survey - 11/1 - 11/30
- Compilation - 1/15 - 2/23
- Edit - 2/26 - 3/15
- Ortho production - 3/1 - 3/15
- Obstruction analysis (Existing ends) - 3/15 - 4/15
- ADIP upload - 4/15 (pending AGIS/NGS/FAA approvals)

The following subconsultants are anticipated on this additional effort (their respective proposals are attached):

- Electrical Engineering Design: CR Engineers (DBE)
- Aeronautical Obstruction Survey: NV5 Geospatial

Design Phase Services (Lump Sum)

1) General Project Management and Pre-Design Tasks:

a) Project Management and Administration**:** provide and direct all project management and coordination of the design team and provide coordination between design team members, the Airport, and other interested stakeholders, including the FAA. Administration tasks such as file coordination and miscellaneous project communications throughout the course of the design phase and project printing and packaging at each submittal level will also be included under this task.

b) Project Meetings: The following are anticipated meetings throughout the design phase:
   i. FAA Reimbursable Meeting: this meeting will be held at the beginning of the project task to coordinate the FAA's scope of work and the coordination items needed between the FAA and FNL/Dibble.
   ii. FAA ATO Design Coordination Meetings: these meetings will be held with FNL, FAA, and the Dibble Team members to coordinate the FAA and Dibble designs (i.e. electrical infrastructure, etc.).

2) Design Phase:

a) Aeronautical Obstruction Survey: this item includes the effort to coordinate the Aeronautical Obstruction Survey with FNL. The Dibble team will coordinate with NV5 Geospatial to utilize recent ground survey data that can supplement the complete survey needed. Dibble will also coordinate with NV5 Geospatial and provide escorts for the survey. It is estimated that a minimum of four days of escort will be needed. Dibble will further coordinate with NV5 Geospatial to assure the survey data is prepared and submitted to the FAA ADIP system in accordance with:

- FAA AC 150/5300-16B *General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey*
- FAA AC 150/5300-17C, Change 1 *Standards for Using Remote Sensing Technologies in Airport Surveys*
- FAA AC 150/5300-18B, Change 1 *General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards*

See also full proposal from NV5 Geospatial for their effort.

b) Additional PAPI Relocation Analysis: during the initial site visit it was determined that the existing electrical infrastructure as-built files are not fully complete or accurate. The design team (Dibble and CR) will need to further evaluate the existing infrastructure to accommodate the need for relocating the existing PAPI's. This additional effort was not anticipated in the original scope of work.

The following key Federal Aviation Administration (FAA) Advisory Circulars (AC) will be used for design:

- FAA AC No. 150/5300-13B – *Airport Design*
- FAA AC No. 150/5300-18B – *General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards*
- FAA AC No. 150/5340-30J – *Design and Installation Details for Airport Visual Aids*
- FAA AC No. 150/5345-28H – *Precision Approach Path Indicator (PAPI) Systems*
- FAA AC No. 150/5345-53D – *Airport Lighting Equipment Certification Program*
- FAA AC No. 150/5370-2G – *Operational Safety on Airports During Construction*
- FAA Engineering Brief No. 95 – *Additional Siting and Survey* Considerations for Precision Approach Path Indicator (PAPI) and Other Visual Glide Slope Indicators (VGSI)
- FAA Order 6850.2B – *Visual Guidance Lighting Systems*

See also the full proposal from CR Engineers for their effort.

c) FAA-Owned PAPI Relocation Coordination: coordinate the Dibble design plans with the FAA ATO PAPI design. This effort will include the infrastructure necessary for the FAA to install their new equipment on.

3) Miscellaneous and Assumptions:

a) The following number of additional trips are anticipated by the Project Manager during the Design Phase to cover all the on-site meetings identified in this change order scope of work:

1. Design Phase – 1 Trip (one staff member – 4 days):
   i. Aeronautical Obstruction Survey (escorting)

4) Exclusions To This Scope of Work:

a) Construction Phase Services.

b) Landscape, Irrigation, and Environmental Design Services.

c) Structural Engineering, Mechanical, or Architectural Design Services.

d) Revisions to the most current offsite watershed hydrology model(s).

e) FEMA Letters of Map Revision.

f) Permit-Ready Storm Water Pollution Prevention Plans (SWPPP) (Contractor's Responsibility).

g) The following design elements:

   i. Blast Pad rehabilitation and expansion to meet FAA standards.

   ii. Runway shoulder design to meet FAA standards.

   iii. Full connector taxiway rehabilitation or re-design to meet current FAA geometric standards.

h) Running the Safety Risk Management Meeting (SRM) or developing the SRM report.

AGIS SURVEY PROJECT PLANNING GUIDE

PLEASE NOTE:
- This guide does not cover all situations and should be considered a "General Reference Only" for airport construction scoping/planning projects that require an AGIS Survey compliant submittal.
- Always verify AGIS Survey project requirements using the most current version of AC's 150/5300-16, -17, and-18.
- Review the 2022 AGIS Survey Policy Guidance Letter (PGL) for required AGIS project types and Safety Critical Data tolerances and required AGIS Survey project types.
- The Office of Airports is the only source for direction, clarification, or advice on airport survey data requirements for construction projects.

PRIMARY PROJECT PURPOSE	Has Existing AAA < 3-Yrs Old?	AGIS REQUIRED PROJECT TYPE		New AAA Required?	Design Phase Imagery Type		Required As-Built Phase Imagery (For Verification of SCD)	Reason/Direction
		DAB	AB Only		Previous < Imagery 3-Yrs Old	New Imagery		
RUNWAY CONSTRUCTION PROJECTS (SAFETY CRITICAL DATA SUBMITTAL)								
Include Any New or Reconstructed Taxiways In the Project Scope/AGIS Survey Submittal (Submit the Entire Length of the Taxiway. For AMDB, Consider Including/Updating Attached Taxiways and Markings)								
New Runway	---	YES	---	YES	---	YES - Full AAA OIS	YES - RWY + Construction Area(s)	IFP Dev & New OIS Sfcs
PROJECT NOTE(S): None								
VFR to IFR Runway (No RWY Construction)	---	---	YES	YES	---	---	YES - Full AAA OIS	IFP Dev & New OIS Sfcs
PROJECT NOTE(S): None								
VFR to IFR Runway (With RWY Construction)	---	YES	---	YES	---	YES - Full AAA OIS	YES - RWY + Construction Area(s)	IFP Dev & New OIS Sfcs
PROJECT NOTE(S): None								
Physical RWY End Change/Relocation	YES	YES	---	YES	(1)	(2)	(1)	IFP Dev & New OIS Sfcs
(RWY Shift, Extension, Reduction, Relocation, etc.)	NO				---	(2)	(2)	
PROJECT NOTE(S): None								
Add New or Alter Existing Displaced (Landing) Thld	YES	YES	---	# SITUATION SPECIFIC	(1)	(2)	(1)	IFP Dev & Changes to DDs
(No "Planned" RWY End Feature Changes)	NO	YES	---	YES	---	(2)	(2)	IFP Dev & Changes to DDs
PROJECT NOTE(S): The term "***Alter***" includes addition, relocation and/or removal of a feature. # To ensure Safety of Flight, and to ensure that all publised IAPs have the best minima available, a new/updated AC-18 AAA may be required for this project type. The age of a previously completed AAA (if any) and size of the airport should be key determining factors in the decision to require/not require a new AAA survey.								
LINEAR Runway Widening/Narrowing	YES	YES	---	** POSSIBLE	(1)	(2)	(1)	IFP Dev (VGS Surface)
(No "Planned" Changes to RWY End/CL)	NO			** YES	---	(2)	(2)	
PROJECT NOTE(S): ** If more pavement is added/removed on one side of the runway centerline than the other (see OFFSET RWY Widening/Narrowing project type below), this will result in the movement of the Physical RWY End points and RWY CL. If this move is more than the 2022 AGIS Survey PGL requirements, this project will require a new AC-18 AAA to be performed in a DAB AGIS Survey project. Also, a new AAA will be required if the runway is other than a VFR only utility RWY (i.e., circling is NA's to that runway on IAP charts) and does not have a current AAA in AGIS Survey.								
OFFSET Runway Widening/Narrowing	YES	YES	---	YES	(1)	(2)	(1)	IFP Dev & Req New OIS Sfcs
(Changes Expected to RWY End/CL Locations)	NO				---	(2)	(2)	
PROJECT NOTE(S): None								
Runway Rehab/Reconditioning (Mill & Overlay)	YES	---	# YES	# POSSIBLE	---	---	# REQUIRED	Grant Component
(No Expected Changes to Safety Critical Data)	NO			YES	---	---		
PROJECT NOTE(S): # If the As-Built survey finds that Safety Critical Data features (i.e., RWY Ends, RWY CL, Airport Control Points, etc.) were moved by amounts exceeding the 2022 AGIS Survey PGL requirements, a new AGIS Design/As-Built project with an AC-18 AAA survey may be required (See project type "***Physical Runway End Change/Relocation***" above). Imagery is required for verification. Quality Control is key to ensuring this process does not modify any current published Safety Critical RWY feature data.								
Runway Decommissioning	---	---	---	---	---	---	---	---
PROJECT NOTE(S): The decommissioning of a runway does not require an AGIS Survey or RAM obstacle mitigations. For Federally Obligated airports, this can be coordinated using the ALP Update process. Non-Obligated airports can use the ADIP Digital 7480-1 submitted through ADIP.								

PRIMARY PROJECT PURPOSE	Has Existing AAA < 3-Yrs Old?	AGIS REQUIRED PROJECT TYPE		New AAA Required?	Design Phase Imagery Type		Required As-Built Phase Imagery (For Verification of SCD)	Reason/Direction
		DAB	AB Only		Previous < Imagery 3-Yrs Old	New Imagery		
CIRCLING AUTHORIZED RUNWAY - OBSTACLE SURVEY REQUIREMENTS								
Circling Authorized Runways - AAA Surveys (Includes Circling Sector Restricted Runways)	YES	---	YES	POSSIBLE	(1)	(2)	(1)	Minimum - NVG-AAA
	NO			YES	---	(2)	(2)	
PROJECT NOTE(S): A circling approach is an IFR maneuver completed in VM (Visual Meteorological) Conditions. If "***Circling NA to Rwys ##-##***" is listed in the remarks section of current Instrument Flight Procedure Charts, an AC-18 AAA survey is not required for that runway. If circling is authorized to a runway (including runways with circling restricted areas - i.e., "***Circling NA W of Rwys ##-##***"), at a minimum, an AC-18 NVG-AAA is required in order to identify obstacles within the circling approach areas and to establish the lowest possible Circling Minimum Descent Altitudes (MDA) for each Aircraft Category authorized to execute the IAP/circling maneuver.								
STAND-ALONE TAXIWAY CONSTRUCTION PROJECTS (SAFETY CRITICAL DATA SUBMITTAL)								
Taxiway Construction (Includes new, redesign, repair, or removal)	---	---	YES	NO	---	---	YES - Required for Verification	SCD
PROJECT NOTE(S): None								
ALP/MASTER PLAN UPDATE PROJECT								
ALP/Master Plan Update	---	---	YES	NO	---	---	YES - Airport Boundary	---
PROJECT NOTE(S): *Submit As-Built Data Only to this project* . Do not include any changed, or planned changes, to existing airport features with the survey data submittal. AC-17 compliant imagery is required to verify all safety critical data submitted to this project.								
STAND-ALONE VISUAL NAVAID PROJECTS								
Stand-Alone Visual NAVAID Installation/Relocation	---	---	---	NO	---	---	---	Submit FAA VGSI Form
PROJECT NOTE(S): https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/7900.2D-VGLS/								
SUPPLEMENTAL REFERENCE GUIDE INFORMATION								
IMAGERY FOOTNOTES: **(1)** If the project will utilize previous collected AGIS Survey project imagery in the Design Phase (i.e., AAA imagery that is less than 3-years old from the Date of Imagery Acquisition), new AC-17 compliant AAA area imagery is required to be gathered/delivered in the As-Built phase. Ensure project plans for the collection/submittal of AC-17 compliant imagery for both AGIS Survey project Phases is described thoroughly in the SOW and the Imagery Plan documents. **(2)** If full AC-17 compliant AAA imagery is gathered/submitted in the AGIS Survey project Design Phase, an "***Imagery Update*** " flight is required in the As-Built Phase that encompasses the entire construction area and all project associated runways.								
ACRONYMS: **AAA** - Airport Airspace Analysis, **AB** - As-Built Project Type (i.e., *Safety Critical Data Collection, Not Including Design Data*), **AC** - Advisory Circular, **AC-17** - AC 150/5300-17 (Current Version), **AC-18** - AC 150/5300-18 (Current Version), ADIP - Airport Data and Information Portal, **CL** - (Runway) Centerline, **AGIS** - Airports GIS (see also ADIP), **ALP** - Airport Layout Plan, **AMDB** - Airport Mapping Database, **DAB** - Design/As-Built Project Type (i.e., *Safety Critical Data Collection, Including Design Data*), **DD** - Declared Distances, **DEV** - Development, **IAP** - Instrument Approach Procedure, **IFP** - Instrument Flight Procedure, **NAVAID** - Navigational Aid, **NVG-AAA** - AC-18 Non-Vertically Guided Airport Airspace Analysis, **OIS** - Obstruction Identification Surface (see AC-18), **PGL** - Program Guidance Letter, **RAM** - Runway Airspace Mitigation (see also ADIP), **REQ** - Required, **RWY** - Runway, **SCD** - Safety Critical Data (see AC 150/5300-18B, Para 4.1.3), **SFC/SFCS** - Surface/Surfaces, **THLD** - Threshold, **SOW** - Statement of Work, **VGLS** - Visual Guidance Lighting System, **VGS** - Vertical Guidance Surface (TERPS Visual Evaluation Surface - Previously GQS)								

Ver. 1.0 - 6/28/2023

Firm:	Dibble Engineering		Contract Number: TBD
	On-Call Engineering		Project Number: TBD
Project:	**Runway 15-33 Widening**		Task Number: 6
	COR No. 1 - Aeronautical Survey		Amendment Number: N/A
	Northern Colorado Regional Airport		FAA Number: 3-08-0023-043-2023
Date:	10/16/2023		CDOT Number: TBD

NORTHERN COLORADO REGIONAL AIRPORT

DIBBLE

Summary			Dibble	Subs
A. COR No. 1 Services:				
	Fee	**Type**		
1 Dibble (Civil)	$11,404.28	Lump Sum	$11,404.28	
2 CR Engineers (Electrical - DBE)	$5,950.73	Lump Sum		$5,950.73
3 NV5 Geospatial (Aeronautical Survey)	$66,419.00	Lump Sum		$66,419.00

	TOTAL	**Dibble**	**Subconsultants**
Total	***$83,774.01***	***$11,404.28***	***$72,369.73***
		DBE % Participation	*7.1%*

Firm:	Dibble Engineering	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**Runway 15-33 Widening**	Task Number:	6
	COR No. 1 - Aeronautical Survey	Amendment Number:	N/A
	Northern Colorado Regional Airport	FAA Number:	3-08-0023-043-2023
Date:	10/16/2023	CDOT Number:	TBD

COR No. 1 SERVICES SUMMARY

	Classification	Total Hours	Billing Rates	Total Costs
1	Principal	0	$295.00	$0.00
2	Senior Project Manager	28	$225.01	$6,300.28
3	Project Manager	0	$205.02	$0.00
4	Senior Engineer	0	$205.02	$0.00
5	QA/QC Manager	0	$205.02	$0.00
6	Project Engineer	16	$172.01	$2,752.16
7	Senior Designer	16	$146.99	$2,351.84
8	Admin Assistant	0	$85.01	$0.00
	Totals:	**60**		**$11,404.28**

COR No. 1 DIRECT COSTS

	Item	Cost	Type of Compensation
1	Submittal Printing (Dibble).....	$0.00	Direct Cost
2	Travel (Dibble).....	$0.00	Direct Cost
3	Meals (Dibble).....	$0.00	Direct Cost

Sub-Total for Direct Costs..... **$0.00**

COR No. 1 SUBCONSULTANTS

	Firm	Cost	Type of Compensation
1	CR Engineers (Electrical - DBE).....	$5,950.73	Lump Sum
2	NV5 Geospatial (Aeronautical Survey).....	$66,419.00	Lump Sum

Sub-Total for Subconsultants: **$72,369.73**

COR No. 1 TOTAL FEE

TOTAL FEE..... $83,774.01

Firm:	Dibble Engineering	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**Runway 15-33 Widening**	Task Number:	6
	COR No. 1 - Aeronautical Survey	Amendment Number:	N/A
	Northern Colorado Regional Airport	FAA Number:	3-08-0023-043-2023
Date:	10/16/2023	CDOT Number:	TBD

COR No. 1 - ESTIMATED MANHOURS

TASK	PRINCIPAL	SENIOR PROJECT MANAGER	PROJECT MANAGER	SENIOR ENGINEER	QA/QC MANAGER	PROJECT ENGINEER	SENIOR DESIGNER	ADMIN ASSISTANT	TOTAL HOURS BY TASK
1 General Project Management and Pre-Design Tasks									
1a Project Management & Administration		12							12
1b Project Meetings		4				4			8
2 Design Phase									
2a Aeronautical Obstruction Survey		8				8	12		28
2b Additional PAPI Relocation Analysis		2					4		6
2c FAA-Owned PAPI Relocation Coordination		2				4			6
TOTAL HOURS BY CLASSIFICATION	0	28	0	0	0	16	16	0	60

Firm:	Dibble Engineering	Contract Number:	TBD
	On-Call Engineering	Project Number:	TBD
Project:	**Runway 15-33 Widening**	Task Number:	6
	COR No. 1 - Aeronautical Survey	Amendment Number:	N/A
	Northern Colorado Regional Airport	FAA Number:	3-08-0023-043-2023
Date:	10/16/2023	CDOT Number:	TBD

COR No. 1 DIRECT COSTS

1. PRINTING (30%, 60%, 90% and 100% 'Bid Set' Submittals)

a.	0	Submittals of (2 Copies Full-Size Bond Plans)	0 sheets =	0 Sheets @	$2.50 /sheet	$0
b.	0	Submittals (4 Copies Scaled 1/2-Size Plans)	0 sheets =	0 Sheets @	$0.30 /sheet	$0
c.	0	Plotting	0 sheets =	0 Sheets @	$1.50 /sheet	$0
d.	0	Submittals for Spec Book (2 copies @ 650 pages each)	@	700 Sheets @ (double-sided)	$0.10 /sheet	$0
e.	0	Submittals for Eng. Report (2 copies @ 300 pages each)	@	300 Sheets @ (single-sided)	$0.60 /sheet	$0

2. Lodging

a.	0 Nights		1 Staff	$113.00 /Day (2023 Federal Per Diem)	$0

3. Travel

a.	0 Trips		130 miles	$0.655 /mile (2023 Federal Per Diem)	$0

4. Meals

a.	0 Days		1 Staff	$69.00 /Day (2023 Federal Per Diem)	$0

DESIGN AND BID PHASE TOTAL **$0**

October 9, 2023

Dibble Engineering
2696 South Colorado Blvd., Suite 330
Denver, Colorado 80222

Attn.: Mr. Jared Bass, P.E.

Re: Northern Colorado Regional Airport RWY-15-33 Widening: PAPI Relocation
Proposal for Additional Electrical Design Services
CRE Project No. 22042

Dear Mr. Bass,

We thank you for choosing our firm to work as your engineer for the above project. We are pleased to present our proposal for this project in the listed attachments below.

Scope of Work: The scope of work is to provide electrical design services to relocate the PAPI box closet to the Runway 15 to the furthest position and push the PAPI PCU further out to meet FAA AC requirements and accommodate the Runway 15-33 widening.

Fee Proposal: See attached Exhibit B.

This proposal will be valid for the next ninety (90) days, and we reserve the right to renegotiate it if it has not been accepted within that period. Should conditions of the work change so as to materially affect the level of effort or the time required, then equitable adjustments to fee and schedule will be made. Consultant will notify Client when a changed condition becomes apparent. Failure of Client to provide a timely and equitable adjustment is cause for termination by Consultant.

We will bill you for services rendered to date. Payment will be due within thirty (30) days of billing date.

Please do not hesitate to call if you have any questions.

Sincerely yours,

CR ENGINEERS, INC.

Catherine Alcorn, P.E.
President

CR Engineers, Inc.
1.0 Design Fee Proposal Worksheet

Project Name: Northern CO Regional Airport - Runway 15-33 Widening - PAPI Relocation
Date: 10/09/23
CRE Proposal No.: 22042

	Task Description	Quantity	Senior Electrical Engineer	Senior Designer	Senior CADD Designer	Senior Inspector	Project Administrator	Total Hours
1.1	**Meetings & Site Visits**							
1.1.3	FAA NAVAID Coordination/Meeting		1.0					1.0
1.3	**Contract Documents**							
1.3.1	Electrical Drawing(s)		2.0	10.0	10.0	2.0		24.0
1.3.2	Specifications			2.0			1.0	3.0
1.3.3	Engineers Report			1.0				1.0
1.3.4	Cost Estimate					3.0		3.0
1.3.5	30% Submittal		1.0	1.0	1.0			3.0
1.3.6	60% Submittal		1.0	1.0	1.0			3.0
1.3.6	90% Submittal		1.0	1.0	1.0			3.0
1.3.7	100% Submittal		1.0	1.0	1.0			3.0
1.3.8	Client Coordination		1.0	1.0	1.0			3.0
1.0	**Totals**		**8.0**	**18.0**	**15.0**	**5.0**	**1.0**	**47.0**
	Overhead Rate	150 %						
	Profit Margin	10 %						
	Labor Rates Per Hour:		$74.50	$43.75	$35.40	$44.80	$25.40	
	Direct Labor:		$596.00	$787.50	$531.00	$224.00	$25.40	
	Overhead:		$894.00	$1,181.25	$796.50	$336.00	$38.10	
	Overhead + Direct Lab:		$1,490.00	$1,968.75	$1,327.50	$560.00	$63.50	
	(OH + Direct) x Profit:		$149.00	$196.88	$132.75	$56.00	$6.35	
1.0	**Total Fees**		**$1,639.00**	**$2,165.63**	**$1,460.25**	**$616.00**	**$69.85**	**$5,950.73**

October 10, 2023

Mr. Jared Bass, P.E.
Dibble Engineering
2696 South Colorado Blvd, Suite 585
Denver, CO 80222

Project: 043628 | Aeronautical Obstruction Survey – Northern Colorado Regional Airport (FNL) – Runway 15/33 Design

Dear Mr. Bass,

This summary of work describes our understanding of the scope of work and services required to complete an aeronautical obstruction survey at the Northern Colorado Regional Airport (FNL) located in Fort Collins, CO. The project will be done in compliance with Airports GIS Program policies and will include an airport airspace analysis for vertically guided operations for future Runway 15/33 in support of a runway widening. The Advisory Circulars identified below detail the data collection requirements and accuracies for the project and the verification process by the Federal Aviation Administration (FAA) and the National Geodetic Survey (NGS).

- AC 150/5300-16B "General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey"
- AC 150/5300-17C, Change 1 "Standards for Using Remote Sensing Technologies in Airport Surveys"
- AC 150/5300-18B, Change 1 "General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards"

Summary of Work

The purpose of this project is to accomplish an FAA Airport Airspace Analysis Survey for all surfaces defined in FAA Advisory Circular 150/5300 - 18B: Section 2.7.1.1 Runways with Vertical Guidance in support of a runway widening.

In addition, and per FAA Policy Guidance issued 9/22/22, we will be reviewing the existing Obstacle Authoritative Source (OAS) obstacle data (327 existing objects in OAS within 18B surfaces) and potentially removing obstacles as a part of this project. Any obstacle removals will be completed by NV5 Geospatial using the FAA's Runway Airspace Management tool.

For this project, we will acquire new vertical stereo digital imagery at a physical image scale of 1"=2,500' of the obstruction surface areas and 1"=1,250' of the runway centerline. The aerial imagery will cover all of the VG Airspace Analysis surfaces using an UltraCam Falcon prime (UCFp) camera during leaf-on conditions.

From the 1"=2,500' imagery, we will produce the following:

- Limited landmark feature planimetric mapping
- Color digital orthophotos with a 1.0' pixel resolution
- Identification and mapping of obstruction obstacles for all of the VG surfaces

From the 1"=1,250' imagery, we will produce the following:

- Identification and mapping of obstruction obstacles for the VGRPS, VGPCS, & VGPS surfaces

The online SOW will be prepared during project initiation with input from the airport, Dibble Engineering, and NV5 Geospatial. NV5 Geospatial will be responsible for preparation and submittal of the Survey and Quality Control Plan, Imagery Acquisition Plan, Imagery Acquisition Report, Final Project Report and all associated data files as required for submission to the FAA Airport Data and Information Portal (ADIP).

Quality Standards

The project has been designed to conform to the National Map Accuracy Standards for limited landmark planimetric feature collection and twelve-inch orthophoto production. In addition, we ensure that the photogrammetric mapping will meet all FAA and NGS standards. We will exercise reasonable care and will conform to the standards of practice ordinarily used by the photogrammetric profession.

Project Area

The project area encompasses all of Northern Colorado Regional Airport (FNL) inclusive of the obstruction surfaces as defined in AC 150/5300-18B.

Control Surveying

The aerial photography will be completed with ABGPS control which will be used for the base control for the geo-referencing of the aerial imagery. NV5 Geospatial will process the ABGPS data using COR stations and reference it to the project control datums:

Horizontal: North American Datum of 1983/2011 (NAD 83(2011)), in the CO State Plane Coordinate System, North zone in US survey feet.
Vertical: North American Vertical Datum of 1988 (NAVD 88)

NV5 Geospatial will complete all of the remaining on-site ground control surveys, including:

- Geodetic control validation of the existing airport PACS and SACS stations or establish temporary airport control according to the guidelines established in AC 150/5300-16B
- Establishing all necessary photo-identifiable ground control and FAA mandated check-points required to validate the ABGPS and IMU control.
- Collection of all the airport runway end positions
- Collection of vertical profiles for all runways
- Collection of the position, elevation, and where required the appropriate navigational aid perpendicular point of all electronic and visual navigational aids (NAVAIDS) located on the airport and associated with any current instrument approach servicing the airport
- All other tasks, not specifically listed above, as outlined in FAA AC-18B, Table 2-1 "Survey Requirements Matrix for Instrument Procedure Development."

Orthophoto Mapping

We will use the control solution and imagery to generate a Digital Elevation Model (DEM) of the VG surfaces. For this project, the imagery will be processed into color digital orthophotos using the aforementioned DEM to rectify the images. Orthophotos for the entire project area will be developed with a 1.0' pixel resolution. Orthos will be delivered in a GeoTIFF file format.

18B Obstruction Surveys

The Obstructions Surfaces to be uploaded to ADIP will satisfy the requirements of AC 150/5300-18B:

- 2.7.1.1 Analysis of future Runway 15/33 with Vertically Guided Operations
  (Surfaces include the VGRPS, VGPCS, VGAS, VGPS, VGATS, VGHS and VGCS)

The specific types and quantities of obstructions for each surface are outlined and clearly defined for the particular surface in each circular section. Any obstructions that meet the requirement of the circular, but are of a nature that elevations at the highest point of the obstruction are virtually impossible to read through

photogrammetric methods (cell tower, electrical tower, etc.), will be identified and relayed to the surveyor to initiate field surveyed elevations for the obstruction.

The obstruction delivery will include the limited landmark planimetric feature collection.

The final data will be uploaded to ADIP in ESRI Shapefile format.

Production Schedule

We will work with you to finalize a mutually agreeable schedule for the project after FAA Control Plan approvals. We will make a reasonable effort to maintain the agreed-upon schedule. However, should the project be interrupted by technical problems beyond our control, including control deficiencies or map file re-deliveries rescheduling may become necessary.

Deliverables

NV5 Geospatial will submit all data collected and associated required deliverable in the formats specified in the appropriate advisory circulars to the FAA Office of Airports, Airports Surveying-GIS Program. All data submissions to the FAA will be through the program's web site at https://adip.faa.gov/agis/portal.

The AC 150/5300-17C project data deliveries that will not be submitted through the web site will be delivered on external hard drives or DVDs. The 18B deliverables that will be uploaded to ADIP include:

- Imagery Plan and Survey and Quality Control Plan
- Image Delivery (sent to FAA)
- Color digital orthophotos (sent to FAA)
- Digital limited landmark detail outside the airport
- Obstruction survey data for future Runway 15/33
- Photogrammetrically derived attributes in defined format
- Surveyed ends and profile for each runway
- NAVAID data
- FGDC compliant metadata
- Final Report

We will deliver the following items to Dibble Engineering:

- Color digital orthophotos with a 1.0' pixel resolution in GeoTIFF (project area)
- OAS obstacle data spreadsheet containing changes (XLS format)

All digital files will be delivered on external hard drive, FTP or CD/DVD.

Cost and Payment Terms

Compensation for the above services will be provided as a lump sum cost of U.S. $66,419.00.

Client Responsibilities

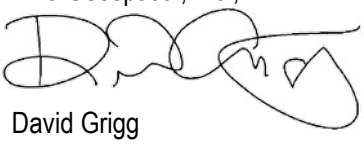
The successful and timely completion of this project is dependent upon a number of elements and work tasks, some of which involve participation by Dibble Engineering. You will be responsible for designating a representative for the project who will have the authority to transmit instructions, receive information, and make timely decisions with respect to the services provided by NV5 Geospatial.

NV5 Geospatial Representative

Jill Mahoney, Project Manager and Marlin Zook, Technical Manager, will represent us during the performance of the services to be provided under this agreement. Each has the authority to transmit and receive instructions and make decisions with respect to the services. Each is authorized to commit the necessary resources towards completing the services described herein.

We look forward to working with you and your staff to complete this project in a timely and cost effective manner. Should you have any questions, please call our office at 803-351-3136 or email me at the address shown below.

Sincerely,
NV5 Geospatial, Inc.,



David Grigg
Aviation Program Director
David.Grigg@NV5.com

NORTHERN COLORADO
REGIONAL AIRPORT
4900 Earhart Rd • Loveland, Colorado 80538
(970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER: 6

MEETING DATE: October 19, 2023

PREPARED BY: Aaron Ehle, Airport Planning & Development Specialist

TITLE

Proposed 5-Year Airport Capital Improvement Plan

RECOMMENDED AIRPORT COMMISSION ACTION

Adopt Resolution R-06-2022 approving the 2023-2027 Airport Capital Improvement Plan as presented

BUDGET IMPACT

None – but will highly influence future budgets

SUMMARY

The Capital Improvement Plan (CIP) is a critical planning tool that is used to identify and prioritize the Airport's projects for the next five (5) years. It is updated annually to keep current with project costs and the status of available resources.

In 2020, the Airport Commission and the City Councils approved an updated Airport Master Plan, which included the recommended capital projects and a 20-year financial plan for implementation.

The projects in this updated Capital Improvement Plan are primarily those that are listed in the 2020 Master Plan that are predominantly eligible for aviation related federal (FAA) and state funds. The CIP does not include all of the capital projects and equipment necessary for continued operations and maintenance of the Airport—particularly those that are not eligible for federal and state funding. This updated Capital Improvement Plan has been discussed with and affirmed by FAA and state officials in meetings held on October 10th.

Due to the number of enplanements from Avelo Airlines' operations in 2022, we will receive approximately $2 million of additional guaranteed FAA funding in 2024.

While all of the projects on our updated CIP list are important to the vision and operation of the Airport, two are particularly significant to mention over the next two years.

Construction began on the new $22 million terminal facility in July and is anticipated to be complete in the fall of 2024. Due to funding constraints, some of the needed landside pavement improvements were removed from the scope of the project. Airport staff recently applied for a discretionary Bipartisan Infrastructure Law (BIL) grant of $3.75 million to support these needs. If partially or fully awarded, the grant would be applied to parking lot reconstruction and expansion, additional electric vehicle charging stations, and entrance road improvements.

The other large scale federally funded project is the Runway Widening Project. This is scheduled for construction in 2025 for a total cost of $14.9 million. This is an FAA supported project to satisfy related airfield design requirements for the Airport's type of critical design aircraft—the Airbus A320 and Boeing 737 series aircraft.

The attached "2024-2028 Proposed Airport Capital Improvement Plan" spreadsheet provides information about funding resources—both available and sought—for each project listed.

The purpose of this agenda item is to request adoption by the Airport Commission of this updated 2024-2028 Airport Capital Improvement Plan. Per the Intergovernmental Agreement, this annual update does not need to be approved by the City Councils.

ATTACHMENTS

ACIP Presentation
2024-2028 Proposed Airport Capital Improvement Plan
Resolution R-09-2023

NORTHERN COLORADO
REGIONAL AIRPORT COMMISSION

Regularly Scheduled Meeting

October 19, 2023

City of Fort Collins

City of Loveland

NORTHERN COLORADO REGIONAL AIRPORT

AIRPORT CAPITAL IMPROVEMENT PLAN

FIVE-YEAR UPDATE

2024-2028

Airport Capital Improvement Plan (ACIP)

NORTHERN COLORADO REGIONAL AIRPORT

- Updated capital plan derived from:
  - Airport Master Plan
  - FAA safety standards
  - Projected capacity demands for future aeronautical use
  - Existing conditions of airport assets including runways, taxiways, aprons, navigational aids, lighting, etc.
  - Aircraft demand
  - Engineering cost estimates
  - Current understanding of future FAA & CDOT funding
  - Regular meetings with FAA Airport District Office & CDOT Aeronautics Grant Managers

Pandemic Impacts to Grant Funding

NORTHERN COLORADO REGIONAL AIRPORT

- Airport grant funding derived from federal and state sources
  - Federal Aviation Administration (NPIAS)
    - Airport and Airway Trust Fund
      - Funded through aviation related excise taxes on passengers, cargo, and fuel
    - Airport Improvement Program (AIP)
      - Traditional airport funding source and has been funded at a static $3.35 billion level for 23 years
    - Bipartisan Infrastructure Law (BIL)
      - Provides $20 billion over 5 years to airports for high priority projects
  - Colorado
    - Department of Transportation Division of Aeronautics Aviation Grant Program
      - Funded through aviation fuel tax revenues and disbursement (2.9%sales tax on fuel)
      - Recent fuel pricing has significantly driven the fuel tax

FAA NPIAS

NORTHERN COLORADO REGIONAL AIRPORT

- National Plan of Integrated Airport Systems
  - Released September 30, 2022
  - Shares funding needs for federally eligible projects over next 5 years
    - Approximately 3,300 airports included in the plan
    - Focus is safety & capacity planning
    - Updated every other year
  - Report shows $27,491,229 in estimated funding need for FNL
    - Increase of $10 million from previous NPIAS
    - Ranked 9th in Colorado
    - Updated Airport Role: Regional to National

https://www.faa.gov/sites/faa.gov/files/npias-2023-2027-narrative.pdf

NPIAS Federal Funding Development Estimate 2024-2028

NORTHERN COLORADO REGIONAL AIRPORT

State	City	Airport	LocID	Owner-ship	Svc Lvl (FY23)	Hub (FY23)	Role (FY23)	Enplaned (CY21)	Based Aircraft (CY21)	Development Estimate 2023-2027
CO	Denver	Denver International	DEN	PU	P	L		28,645,527	1	$1,011,007,241
CO	Colorado Springs	City of Colorado Springs Municipal	COS	PU	P	S		941,917	227	$120,785,546
CO	Grand Junction	Grand Junction Regional	GJT	PU	P	N		252,290	126	$88,560,620
CO	Denver	Centennial	APA	PU	R		National	496	747	$44,816,668
CO	Durango	Durango-La Plata County	DRO	PU	P	N		200,245	68	$44,815,268
CO	Eagle	Eagle County Regional	EGE	PU	P	N		201,752	89	$43,154,413
CO	Montrose	Montrose Regional	MTJ	PU	P	N		188,355	81	$28,484,708
CO	Aspen	Aspen-Pitkin County/Sardy Field	ASE	PU	P	N		248,781	95	$27,626,405
CO	Fort Collins/Loveland	Northern Colorado Regional	FNL	PU	CS		National	5,248	244	$27,491,229
CO	Pueblo	Pueblo Memorial	PUB	PU	CS		Regional	9,624	120	$26,031,580
CO	Hayden	Yampa Valley	HDN	PU	P	N		150,142	9	$18,756,112
CO	Pagosa Springs	Stevens Field	PSO	PU	GA		Local	2	37	$10,222,222
CO	Greeley	Greeley-Weld County	GXY	PU	GA		Regional	0	146	$9,695,693
CO	Akron	Colorado Plains Regional	AKO	PU	GA		Basic	0	7	$9,061,111
CO	Gunnison	Gunnison-Crested Butte Regional	GUC	PU	P	N		38,783	30	$8,688,889
CO	Denver	Rocky Mountain Metro	BJC	PU	R		National	670	471	$7,957,000
CO	Denver	Colorado Air and Space Port	CFO	PU	R		Regional	0	282	$7,730,410

Proposed 2024-2028 ACIP Highlights

NORTHERN COLORADO REGIONAL AIRPORT

- Aligned with recommended ACIP in Airport Master Plan
  - Updated cost figures using financial analysis from Master Plan and estimates from Consultant Dibble Engineering
  - Total five-year capital investment - $34.9 million
    - $23.7 million federal eligible funding
      - $15.9 million AIP
      - $7.8 million of federal special funding (BIL)
    - $9.1 million local funding
    - $2 million state funding
  - Two major projects - new terminal building and runway widening and rehabilitation
    - Terminal Project 2022-2024: $22 million ($25 million including 2021 Apron)
      - Additional funding for roadway/parking improvements being sought from BIL
    - Runway Widening Project 2023-2025: $14.9 million
      - New high efficiency LED lighting system

Airport Capital Improvement Plan Summary (2024-2028)

NORTHERN COLORADO REGIONAL AIRPORT

	FY 24	FY 25	FY 26	FY 27	FY 28	Total Five-Year Cost Estimate
Federal	$6,256,000	$13,448,475	$2,045,050	$1,000,000	$1,000,000	$23,749,525
State	$139,721	$406,945	$938,612	$250,000	$250,000	$1,985,278
Local	$739,721	$1,553,898	$638,613	$621,210	$5,571,000	$9,124,442
Total	**$7,144,442**	**$15,409,318**	**$3,622,275**	**$1,871,210**	**$6,821,000**	**$34,868,245**

2024-2028 ACIP Detail

NORTHERN COLORADO REGIONAL AIRPORT

2024-2028 Proposed Airport Capital Improvement Plan

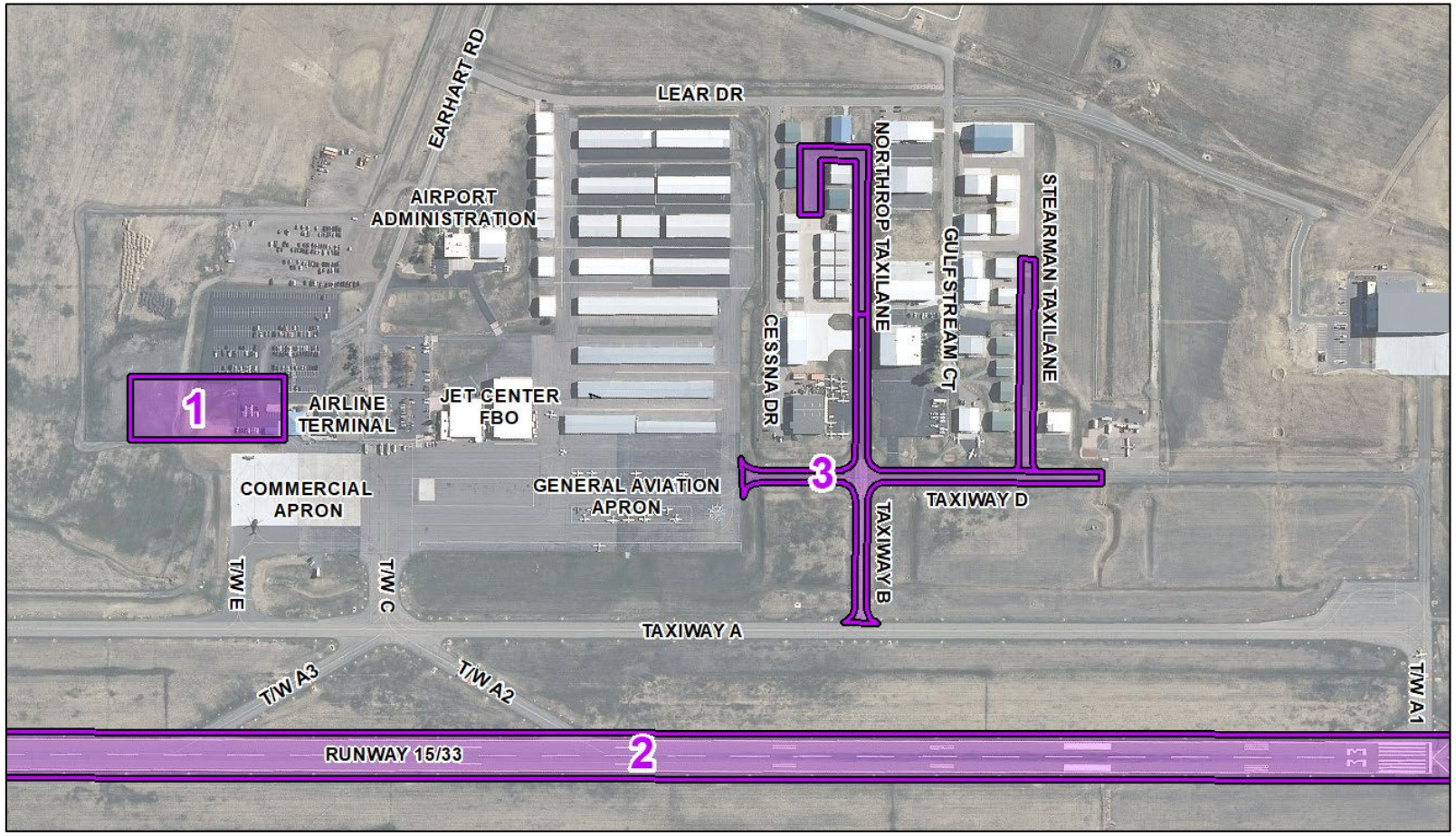
Funding Source	FAA Airport Imp. Program AIP		FAA Managed Federal Special Funding			State	Local		Other	
Financial Resource Program	FAA Entitlement	FAA Discretionary	Cares Act	BIL Airport Improvement Grants	BIL Airport Terminals Program	Colorado Division of Aeronautics	Grant Match	Additional Funding	Airport Master Plan Capital Project Description Reference	Total Project Costs
Funding Programming Method	Formulary $150K - $1M <10K - >10K Enplanements	Discretionary	Formulary	Formulary	Discretionary	Formulary for FAA Grant Matches & Remainder Discretionary	Formulary	Discretionary		
Grant Match Requirement	90/10	90/10	N/A	90/10	95/5	80/20	N/A	N/A	N/A	
Current Year 2023										
New Terminal (Construction - AIP 039, 041, 044)			$ 16,373,136							$ 20,373,136
Runway 15-33 Widening (Design - BIL 22 & 23) - includes COR No. 1				$ 327,950		$ 468,219	$ 68,220	$ 4,000,000	A1/A2/A6	$ 864,389
GA Taxilanes Rehabilitation (Design)								$ 100,000	A11	$ 100,000
Totals 2023			**$ 16,373,136**	**$ 327,950**		**$ 468,219**	**$ 68,220**	**$ 4,100,000**		**$ 21,337,525**
PFC Revenues										
Funding Balance Remaining	$ 150,000			$ 811,050						
2024										
New Terminal (Construction - BIL 24)				$ 1,590,000		$ 88,333	$ 88,333		A6	$ 1,766,666
GA Taxilanes Rehabilitation (Construction)								$ 600,000	A4	$ 600,000
Taxiway B & D Rehabilitation (Environmental, Design, Construction)	$ 925,000					$ 51,388	$ 51,388		A8/B5	$ 1,027,776
Totals 2024	**$ 925,000**			**$ 1,590,000**		**$ 139,721**	**$ 139,721**	**$ 600,000**		**$ 3,394,442**
PFC Revenues										
Funding Balance Remaining	$ -			$ 811,050						
2025										
Runway 15-33 Widening (Construction - Ent & Disc)	$ 150,000	$ 12,469,475				$ 250,000	$ 1,152,164		A13	$ 14,021,639
New Terminal Automobile Parking Improvements				$ 604,000	$ 2,500,000	$ 31,945	$ 31,945	$ 244,789	B6	$ 2,500,000
GA Hangar Site Development (Environmental, Design, and Construction - BIL 23)	$ 225,000					$ 125,000	$ 125,000		B3	$ 1,137,679
New Fuel Farm Site (Environmental and Design)									B1	$ 250,000
Totals 2025	**$ 375,000**	**$ 12,469,475**		**$ 604,000**	**$ 2,500,000**	**$ 406,945**	**$ 1,309,109**	**$ 244,789**		**$ 17,909,318**
PFC Revenues										
Funding Balance Remaining	$ -			$ 1,051,050						
2026										
Taxiway A Rehab, Lighting & Signage (Design)	$ 150,000			$ 844,000		$ 33,333	$ 33,333		A11	$ 216,666
SRE Pavement Expansion (Environmental, Design & Construct - BIL 25)						$ 46,888	$ 46,888		N/A	$ 937,776
New Fuel Farm Site (Construction)				$ 1,051,050		$ 400,000	$ 400,000		B1	$ 800,000
Taxiway D & A1 Realignment (Environmental, Design, and Construction - BIL 23 & 26)						$ 58,391	$ 58,392		A8	$ 1,167,833
GA Apron & Taxiways Sealcoat and Restripe						$ 400,000	$ 100,000		A10	$ 500,000
Totals 2026	**$ 150,000**			**$ 1,895,050**		**$ 938,612**	**$ 638,613**	**$ -**		**$ 3,622,275**
PFC Revenues										
Funding Balance Remaining	$ -			$ -						
2027										
Taxiway A Rehab, Lighting & Signage (Construction)	$ 1,000,000					$ 250,000	$ 621,210		A13	$ 1,871,210
Totals 2027	**$ 1,000,000**					**$ 250,000**	**$ 621,210**	**$ -**		**$ 1,871,210**
PFC Revenues										
Funding Balance Remaining	$ -									
2028										
Construct Deice Pad for Commercial Ramp	$ 1,000,000					$ 250,000	$ 71,000		B7	$ 1,321,000
Remove T-hangars & Construct Business Facilities (C-Hangars)								$ 5,500,000	B13	$ 5,500,000
Totals 2028	**$ 1,000,000**					**$ 250,000**	**$ 71,000**	**$ 5,500,000**		**$ 6,821,000**
PFC Revenues										
Funding Balance Remaining	$ -									
Totals 2024-2028	**$ 3,450,000**	**$ 12,469,475**	**$ -**	**$ 4,089,050**	**$ 2,500,000**	**$ 1,985,278**	**$ 2,779,653**	**$ 6,344,789**		**$ 33,618,245**

66

The ACIP spreadsheet is included separately as part of the meeting packet

2023 ACIP Projects

NORTHERN COLORADO REGIONAL AIRPORT



2023

1 New Terminal Construction

- Cost: $20,373,136
- Funding Sources: FAA CARES, Local

2 Runway 15-33 Widening Design

- Cost: $864,389
- Funding Sources: FAA BIL, State, Local

3 GA Taxilane Rehabilitation Design

- Cost: $100,000
- Funding Sources: Local

2024 ACIP Projects

NORTHERN COLORADO REGIONAL AIRPORT

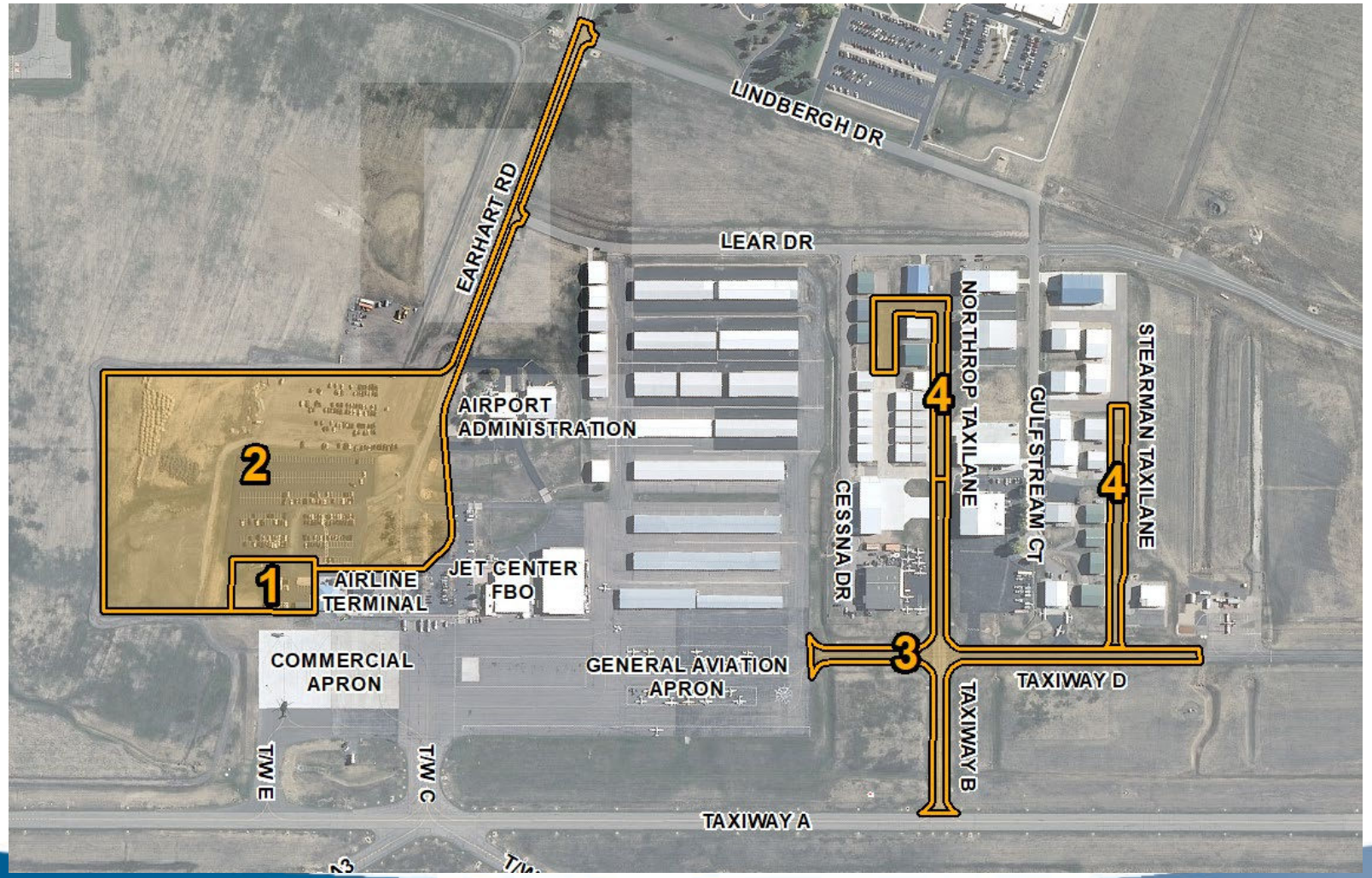
2024

1 New Terminal Construction
- Cost: $1,766,666
- Funding Sources: FAA BIL, CDOT, Local

2 New Terminal Automobile Parking Improvements
- Cost: $3,750,000
- Funding Sources: FAA BIL

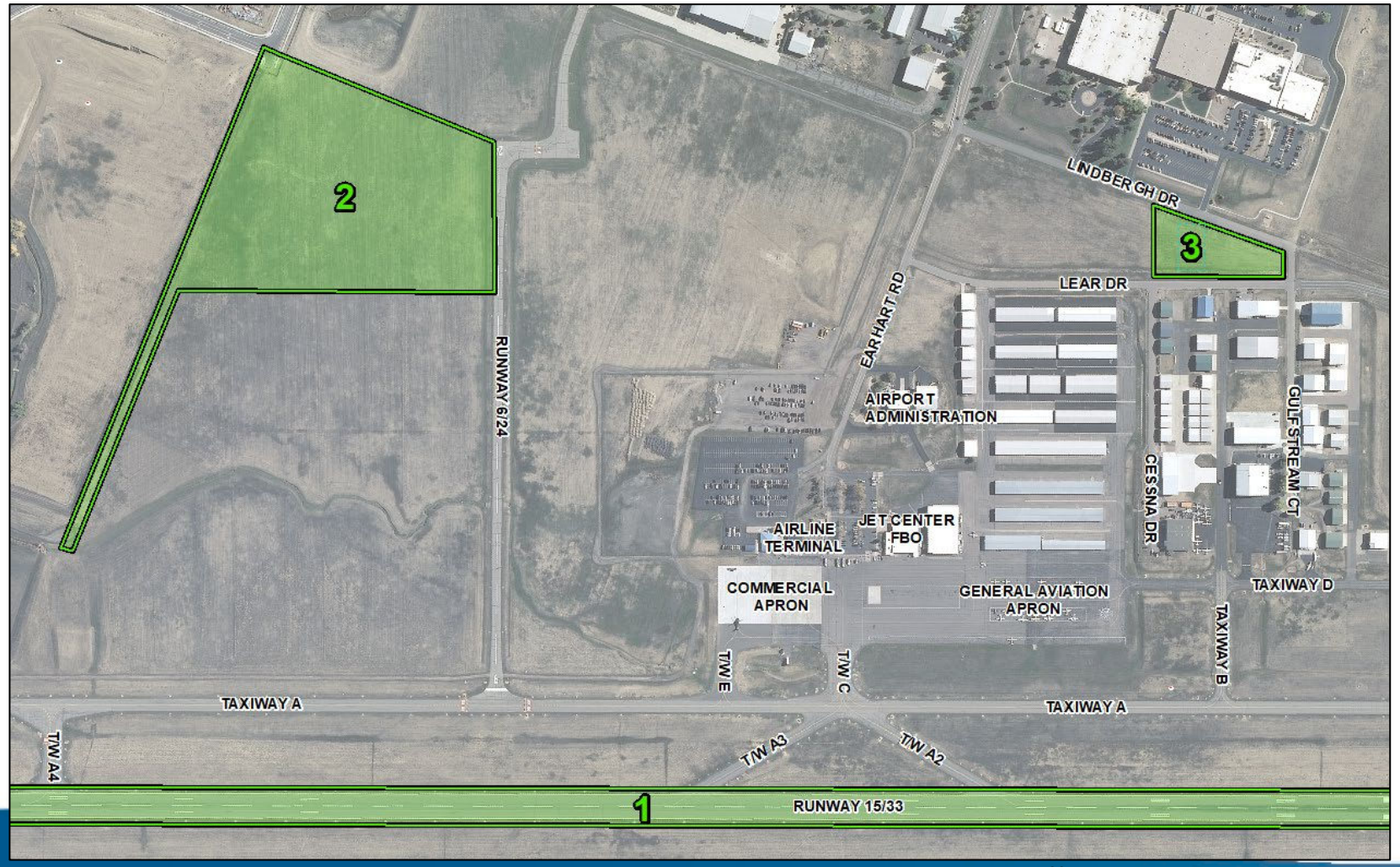
3 GA Taxilane Rehabilitation Construction
- Cost: $600,000
- Funding Sources: Local

4 Taxiway B&D Rehabilitation
Cost: $1,027,776
- Funding Sources: FAA AIP, CDOT, Local



2025 ACIP Projects

NORTHERN COLORADO REGIONAL AIRPORT



2025

1 Runway 15-33 Widening Construction

- Cost: $14,021,639
- Funding Sources: FAA AIP, CDOT, Local

2 GA Hangar Site Development

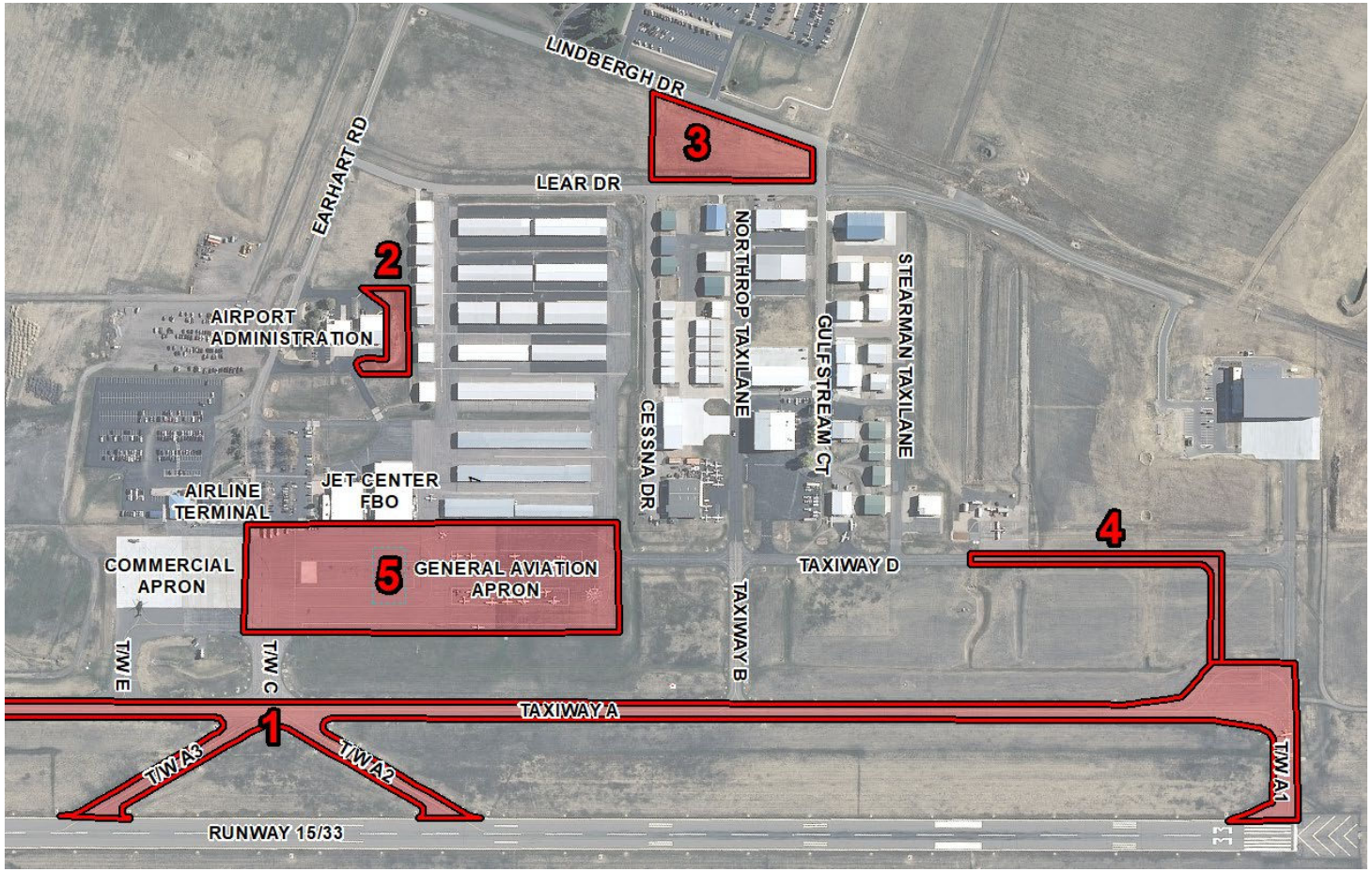
- Cost: $1,137,679
- Funding Sources: FAA AIP, FAA BIL, CDOT, Local

3 New Fuel Farm Environmental & Design

- Cost: $250,000
- Funding Sources: CDOT, Local

2026 ACIP Projects

NORTHERN COLORADO REGIONAL AIRPORT



2026

1 Taxiway A Rehab, Lighting, & Signage Design
- Cost: $216,666
- Funding Sources: FAA AIP, CDOT, Local

2 SRE Building Pavement Expansion
- Cost: $937,776
- Funding Sources: FAA BIL, CDOT, Local

3 New Fuel Farm Construction
- Cost: $800,000
- Funding Sources: CDOT, Local

4 Taxiway D & A1 Realignment
- Cost: $1,167,833
- Funding Sources: FAA BIL, CDOT, Local

5 GA Apron & Taxiways Sealcoat & Restripe
- Cost: $500,000
- Funding Sources: CDOT, Local

2027 ACIP Projects

NORTHERN COLORADO REGIONAL AIRPORT

2027

1 **Taxiway A Rehab, Lighting, & Signage Construction**

- Cost: $1,871,210
- Funding Sources: FAA AIP, CDOT, Local

2028 ACIP Projects

NORTHERN COLORADO REGIONAL AIRPORT

2028

1 Construct Deice Pad for Commercial Ramp

- Cost: $1,321,000
- Funding Sources: FAA AIP, CDOT Local

2 Remove T-hangars & Construct Business Facilities

- Cost: $5,500,00
- Funding Sources: Local

Recommendation & Next Steps

NORTHERN COLORADO REGIONAL AIRPORT

- Staff recommends adoption of the updated ACIP
  - Staff will request project funding from FAA & State resources
- Recently passed Federal Infrastructure Bill will be providing additional funding opportunities for project funding:
  - 5-year program ~$20 Billion, or an additional $4 Billion each year (just over twice the typical FAA AIP amounts)
  - Obtained the needed 10,000 enplanements in 2022 unlocking an estimated $2 million in 2024
- ACIP is due to be uploaded into the CDOT systems by October 31

2024-2028 Proposed Airport Capital Improvement Plan

NORTHERN COLORADO REGIONAL AIRPORT

Funding Source	FAA Airport Imp. Program AIP		FAA Managed Federal Special Funding			State	Local		Other	
Financial Resource Program	FAA Entitlement	FAA Discretionary	Cares Act	BIL Airport Improvement Grants	BIL Airport Terminals Program	Colorado Division of Aeronautics	Grant Match	Additional Funding	Airport Master Plan Capital Project Description Reference	Total Project Costs
Funding Programming Method	Formulary $150K - $1M <10K - >10K Enplanements	Discretionary	Formulary	Formulary	Discretionary	Formulary for FAA Grant Matches & Remainder Discretionary	Formulary	Discretionary		
Grant Match Requirement	90/10	90/10	N/A	90/10	95/5	80/20	N/A	N/A	N/A	
Current Year 2023										
New Terminal (Construction - AIP 039, 041, 044)			$ 16,373,136					$ 4,000,000	A1/A2/A6	$ 20,373,136
Runway 15-33 Widening (Design - BIL 22 & 23) - includes COR No. 1				$ 327,950		$ 468,219	$ 68,220		A11	$ 864,389
GA Taxilanes Rehabilitation (Design)								$ 100,000		$ 100,000
Totals 2023			**$ 16,373,136**	**$ 327,950**		**$ 468,219**	**$ 68,220**	**$ 4,100,000**		**$ 21,337,525**
PFC Revenues										
Funding Balance Reminaing	$ 150,000			$ 811,050						
2024										
New Terminal (Construction - BIL 24)				$ 1,590,000		$ 88,333	$ 88,333		A6	$ 1,766,666
New Terminal Automobile Parking Improvements					$ 3,750,000				B6	$ 3,750,000
GA Taxilanes Rehabilitation (Construction)								$ 600,000	A4	$ 600,000
Taxiway B & D Rehabilitation (Environmental, Design, Construction)	$ 925,000					$ 51,388	$ 51,388		A8/B5	$ 1,027,776
Totals 2024	**$ 925,000**			**$ 1,590,000**	**$ 3,750,000**	**$ 139,721**	**$ 139,721**	**$ 600,000**		**$ 7,144,442**
PFC Revenues										
Funding Balance Reminaing	$ 225,000			$ 811,050						
2025										
Runway 15-33 Widening (Construction - Ent & Disc)	$ 150,000	$ 12,469,475				$ 250,000	$ 1,152,164		A13	$ 14,021,639
GA Hangar Site Development (Environmental, Design, and Construction - BIL 23)	$ 225,000			$ 604,000		$ 31,945	$ 31,945	$ 244,789	B3	$ 1,137,679
New Fuel Farm Site (Environmental and Design)						$ 125,000	$ 125,000		B1	$ 250,000
Totals 2025	**$ 375,000**	**$ 12,469,475**		**$ 604,000**		**$ 406,945**	**$ 1,309,109**	**$ 244,789**		**$ 15,409,318**
PFC Revenues										
Funding Balance Reminaing	$ -			$ 1,051,050						
2026										
Taxiway A Rehab, Lighting & Signage (Design)	$ 150,000					$ 33,333	$ 33,333		A11	$ 216,666
SRE Pavement Expansion (Environmental, Design & Construct - BIL 25)				$ 844,000		$ 46,888	$ 46,888		N/A	$ 937,776
New Fuel Farm Site (Construction)						$ 400,000	$ 400,000		B1	$ 800,000
Taxiway D & A1 Realignment (Environmental, Design, and Construction - BIL 23 & 26)				$ 1,051,050		$ 58,391	$ 58,392		A8	$ 1,167,833
GA Apron & Taxiways Sealcoat and Restripe						$ 400,000	$ 100,000		A10	$ 500,000
Totals 2026	**$ 150,000**			**$ 1,895,050**		**$ 938,612**	**$ 638,613**	**$ -**		**$ 3,622,275**
PFC Revenues										
Funding Balance Reminaing				$ -						
2027										
Taxiway A Rehab, Lighting & Signage (Construction)	$ 1,000,000					$ 250,000	$ 621,210		A13	$ 1,871,210
Totals 2027	**$ 1,000,000**					**$ 250,000**	**$ 621,210**	**$ -**		**$ 1,871,210**
PFC Revenues										
Funding Balance Reminaing	$ -									
2028										
Construct Deice Pad for Commercial Ramp	$ 1,000,000					$ 250,000	$ 71,000		B7	$ 1,321,000
Remove T-hangars & Construct Business Facilities (C-Hangars)								$ 5,500,000	B13	$ 5,500,000
Totals 2028	**$ 1,000,000**					**$ 250,000**	**$ 71,000**	**$ 5,500,000**		**$ 6,821,000**
PFC Revenues										
Funding Balance Reminaing	$ -									
Totals 2024-2028	**$ 3,450,000**	**$ 12,469,475**	**$ -**	**$ 4,089,050**	**$ 3,750,000**	**$ 1,985,278**	**$ 2,779,653**	**$ 6,344,789**		**$ 34,868,245**

RESOLUTION #R-09-2023

A RESOLUTION APPROVING THE 2024-2028 CAPITAL IMPROVEMENT PLAN OF THE NORTHERN COLORADO REGIONAL AIRPORT

WHEREAS, the Northern Colorado Regional Airport Commission ("Commission") was established by the City of Loveland ("Loveland") and the City of Fort Collins ("Fort Collins") pursuant to that certain Amended and Restated Intergovernmental Agreement for the Joint Operation of the Fort Collins-Loveland Municipal Airport dated January 22, 2015 ("2015 IGA"), to effectuate changes to the governance structure and pursue development of the Fort Collins-Loveland Airport (now known as the Northern Colorado Regional Airport) as a regional airport. The IGA was amended in 2016 and 2019; and

WHEREAS, pursuant to the 2015 IGA, as amended, the Cities granted certain authority to the Commission, including the authority to "develop budgets, establish capital and operations reserve policies and propose capital projects consistent with Approved Airport Budget;" and

WHEREAS, the Federal Aviation Administration ("FAA") requires the Airport to prepare a five-year capital improvement plan on an annual basis; and

WHEREAS, Airport staff has prepared the 2024-2028 Capital Improvement Plan ("CIP"), attached hereto as "Exhibit A." The CIP is based upon the Airport's anticipated budget for such future years, subject to approval and appropriations by the two Cities; and

WHEREAS, the Commission has reviewed the CIP and desires to approve the CIP as the Airport's required five-year capital improvement plan.

NOW, THEREFORE, BE IT RESOLVED BY THE NORTHERN COLORADO REGIONAL AIRPORT COMMISSION:

Section 1. That the 2024-2028 Capital Improvement Plan, attached hereto as "Exhibit A," is hereby approved, subject to annual appropriations by the City of Fort Collins and City of Loveland.

Section 2. That this Resolution shall be effective as of the date and time of its adoption.

ADOPTED this 19th day of October, 2023.

_____

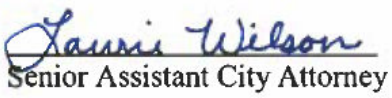
Don Overcash, Chair of the
Northern Colorado Regional Airport Commission

ATTEST:

_____

Secretary

APPROVED AS TO FORM:



Senior Assistant City Attorney

NORTHERN COLORADO
REGIONAL AIRPORT
4900 Earhart Rd • Loveland, Colorado 80538
(970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER: 7

MEETING DATE: October 19, 2023

PREPARED BY: Aaron Ehle, Airport Planning & Development Specialist

TITLE

Planning & Development Subcommittee Charter Update

RECOMMENDED AIRPORT COMMISSION ACTION

Make a motion to adopt the updated charter as presented.
Make a motion to appoint Rick Turley as the FNL Pilot Association's PDSC representative.

BUDGET IMPACT

Neutral

SUMMARY

The Planning & Development Subcommittee (PDSC) serves in an advisory role to the Airport Commission. The group consists of Airport staff, staff from both Cities, citizen members, and a representative of the FNL Pilots Association.

At the July and August Airport Commission Meetings, changes to the PDSC charter were discussed. Based on feedback from those meetings and recommendations from the PDSC, the charter has been updated.

James Hays, the former president of the FNL Pilots Association submitted his resignation from the PDSC on in September. The current president of the Pilots Association, Bill Snodgrass, has requested that Rick Turley be appointed to the PDSC.

ATTACHMENT

Updated PDSC Charter

NORTHERN COLORADO
REGIONAL AIRPORT

Northern Colorado Regional Airport
Planning and Development Subcommittee
Sub-committee Charter *Amended 10/11/2023*

I. Purpose

The Planning and Development Subcommittee ("PDSC") was formed by the Northern Colorado Regional Airport Commission ("Airport Commission") as a subcommittee pursuant to Section 12 of the Commission Bylaws to facilitate strategic planning for the Airport and its immediate surroundings. It includes the following major objectives:

i. To support the development of an updated Strategic Plan and the 2020 Airport Master Plan;
ii. to provide ongoing support and input on specific plans and proposals for the development of Airport land; and
iii. to provide input on other business development efforts as appropriate.

II. Authority and Limitations

The PDSC serves only in an advisory role to the Airport Commission with respect to the objectives listed above and may provide recommendations to the Airport Commission as the PDSC deems appropriate or as requested by the Airport Commission. The PDSC has no authority to take any final action or to direct the expenditure of funds or resources.

III. Membership

Membership of the PDSC will consist of the following City of Loveland and City of Fort Collins representatives ("City Members") and non-City representatives ("Citizen Members"). The Airport will select an Airport staff member to participate as staff liaison to the PDSC:

City Members

- Airport Director (PDSC Chair)
- Representative from the City of Loveland Economic Development Department
- Representative from the City of Fort Collins Department of Economic Health
- Representative from the City of Loveland Current Planning Division

Citizen Members

- Representative of FNL Pilots Association
- Tom Fleming, Former Airport Commission Vice-Chair
- Diane Jones, The Formation Group

Membership may change over time, subject to approval by the Airport Commission as described in this Charter. Other individuals may be asked to take part in the PDSC from time to time in an ad-hoc, advisory role as needed, but shall not have any authority vote on any matter being considered by the PDSC.

Because of the breadth of the PDSC's charter, it may be necessary or appropriate to form other subcommittees from time to time to address related topics. If directly related to the purpose of the PDSC, then the PDSC may form the subcommittee and advise the Commission. If the scope is unrelated to or exceeds the PDSC's charter, then the PDSC will submit the proposal to the Commission for consideration and approval as appropriate.

IV. Member Terms

The length of a Citizen Member's term shall be four (4) years effective as of the date of Airport Commission's approval of such Citizen Member's appointment. For the Citizen Members listed in this Charter, the start date of their terms shall begin on the effective date of this Charter amendment. There shall be no term limits for either City Members or Citizen Members.

V. Changes in Membership

Airport Commission approval by motion or resolution to amend this Charter with respect to membership shall be required for the following membership changes:

- Removal of any City Member position or Citizen Member listed in this Charter;
- Addition of a City Member or Citizen Member to the PDSC membership; and
- Replacement of a Citizen Member who is removed or vacates their membership.

A new or replacement Citizen Member may be nominated and presented to the Airport Commission for consideration by any member of the PDSC or Airport Commissioner. The Airport Commission may, in its discretion, hold interviews by an interview committee of its choosing with no more than two Airport Commissioners.

VI. Meetings

In accordance with the Airport Commission Bylaws, PDSC meetings shall be held in accordance with the Colorado Open Meetings Law. The PDSC shall meet monthly on the first Wednesday of each month beginning at 3:30PM at the Airport Conference Room. A majority of the members of the PDSC constitutes a quorum. PDSC members may attend meetings either in-person or virtually.

VI. Duration

The duration of the PDSC will be determined by need for support on current and future Airport planning and development projects. However, the Airport Commission, at its sole direction, may dissolve or alter the focus of the PDSC to best serve the Airport's interests.