PARKS & RECREATION ADVISORY COMMITTEE AGENDA

January 07, 2025 at 5:30 PM

Assembly Chambers/Zoom Webinar

https://juneau.zoom.us/j/94184441385 or +1 669 444 9171 US Webinar ID: 941 8444 1385

A. CALL TO ORDER

B. ROLL CALL

C. APPROVAL OF AGENDA

D. APPROVAL OF MINUTES

1. Minutes from December 3, 2024

E. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

F. DIRECTOR'S REPORT

2. January 7 Agenda Overview

G. NEW BUSINESS

3. Proposed FY2025-26 Fee Schedule
4. Proposed FY2026 Operating Budget
5. Proposed FY2026 Commercial Use Fee Revenue Allocation
6. Proposed 2025 General Obligation Bond for Parks & Recreation

H. UNFINISHED BUSINESS

7. PRAC Facility Tour

I. STAFF REPORTS

J. COMMITTEE MEMBER / LIAISON COMMENTS AND QUESTIONS

K. NEXT MEETING DATE - February 4, 2025

L. ADJOURNMENT

ADA accommodations available upon request: Please contact the Clerk's office 36 hours prior to any meeting so arrangements can be made for closed captioning or sign language interpreter services depending on the meeting format. The Clerk's office telephone number is 586-5278, TDD 586-5351, e-mail: city.clerk@juneau.gov.

PARKS & RECREATION ADVISORY COMMITTEE DRAFT MINUTES

December 03, 2024 at 5:30 PM

Assembly Chambers/Zoom Webinar

https://juneau.zoom.us/j/94184441385 or +1 669 444 9171 US Webinar ID: 941 8444 1385

A. CALL TO ORDER

PRAC Chair Ryan O'Shaughnessy called the meeting to order at 5:30 p.m.

B. ROLL CALL

Present: Ryan O'Shaughnessy, Josh Anderson, Ren Scott, Ḵaasáank' Andrew Williams, Danika Swanson, Emma Van Nes, Portland Sarantopoulos, & Paulette Schirmer

Absent: None

Staff Present: George Schaaf, Parks & Recreation Director; Lauren Verrelli, Parks & Recreation Deputy Director; Neil Steininger, Assembly Liaison; & Annie Carroll, Parks & Recreation Staff Liaison

C. APPROVAL OF AGENDA

MOTION by Ms. Scott to approve the agenda. *No objections were heard, and the agenda was approved*.

D. APPROVAL OF MINUTES

1. Minutes from November 5, 2024

MOTION by Ms. Scott to approve the minutes. *No objections were heard, and the minutes were approved*.

E. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS - None

F. DIRECTOR'S REPORT

2. December 3 Agenda Overview

G. NEW BUSINESS

3. Lands, Housing, & Economic Development Committee PRAC Liaison Election

Mr. O'Shaughnessy informs the PRAC that this committee has previously provided a liaison to the Lands, Housing, & Economic Development (LHED) Committee, and asks if anyone would be interested in fulfilling that duty. Ms. Schirmer asks when the LHED committee meets, to which Mr. O'Shaughnessy and Mr. Steininger answer that it is usually the first Monday of the month at 5:00 p.m. She shares that she would be interested in serving as liaison.

MOTION by Ms. Van Nes to nominate Ms. Schirmer as the LHED committee PRAC liaison. *No objections were heard, and the motion passed*.

4. Capital Improvement Plan (CIP) - FY2026-31 - *Presented by G. Schaaf*

Mr. Schaaf explains that the memo included with the agenda packet shares an overview of the department's 6-year CIP. Parks & Rec will be requesting appropriation from the Assembly in FY26, and the 5 years presented past that telegraph to the public where the department would like to make their capital investments. He asks for the PRAC's feedback and recommendations on the plan so that it can be provided to the Engineering and Public Works Department by December 16.

Ms. Scott asks if the removal of the Lemon Creek Community Center from the FY26 CIP is because of the department's acquisition of several school buildings. Mr. Schaaf answers that she is correct, as the Floyd Dryden and Marie Drake gyms are now managed by Parks & Rec there will be enough existing gym space to fit the requirements of their master plan for indoor programs and programming. Ms. Scott thanks him for the explanation and notes that there is a lack of recreational opportunities in Lemon Creek and hopes that they will see something in that area in the future.

Mr. O'Shaughnessy comments that he is happy to see so many projects with grant funding and is happy the department is making efforts to secure that funding to maximize the value of facilities.

Ms. Swanson asks about the funding sources for the 35 Mile ORV Park, and if they can explain the RTP grant in further detail. Mr. Schaaf explains that the project had some initial funding through temporary 1% sales tax as well as some appropriations through general sales tax from the Assembly over the years that were broadly dedicated to identifying an ORV park and beginning construction. Last summer permitting and the conditional use permit allowed them to begin construction by building a new parking lot and driveway, installing fencing and park furnishings, and starting initial construction of about 3,000 feet of trail. Work is going to continue going into next summer as well, with a goal of completing the initial lower loop trail, which will be about 5,000 feet. The grant funding is a second Recreational Trails Program (RTP) Grant that was submitted on October 31, meaning it will be several more months before it is known if it was successful. He shares that there is very little competition for motorized recreation in the State so he feels confident this this project will compete as it's been popular with the Outdoor Recreation Transportation Advisory Board. He acknowledges that this will be a multi-million-dollar project and the funding and the ability to complete that much trail construction very quickly is not possible, so they're taking a gradual approach and planning to construct $350,000 to $400,000 worth of work each year. Ms. Swanson asks when the project is projected to be complete. Mr. Schaaf answers that the lower loop train will likely be completed next year, and they will be partnering with the Juneau Off-road Association to begin construction on the second loop. He estimates it will be available for use in 1-2 years, with the project entirely completed in 5-10 years.

MOTION by Mr. Ḵaasáank' for the Parks & Recreation Advisory Committee to recommend that the Assembly approve $7,050,000 for the FY2026 Parks & Recreation Capital Improvement Program. *No objections were heard, and the motion passed*.

5. Commercial Recreation Use Analysis - *Presented by G. Schaaf & L. Pringle*

Mr. Schaaf began by expressing his thanks to Corvus Design and the hundreds of members of the public who attended public meetings held over the last few months to provide thoughtful comments throughout this process. He hopes that the analysis they have pulled together reflects the comments received, and is something that the community can support. He then introduces Linda Pringle from Corvus Design to share information about the draft analysis presented to PRAC.

Ms. Pringle discusses the process of developing this draft and provides a summary of the proposed guidelines. They began by reviewing the existing policies, plans, and regulations that are in place relating to commercial use for Parks & Rec including the 2004 Trails Working Group recommendations, and the Juneau Tourism Best Management Practices to provide a foundation for what to develop in their guidelines. The draft then maps the history of commercial use with the Parks & Rec Department, as well as the steps that have been taken by the City and Borough of Juneau (CBJ) over the years to manage tourism and commercial use in Juneau. They then held 5 public meetings to collect feedback from the community in several different areas of town, and opened an online comment collector for those who couldn't attend. Once collecting this feedback, the first draft was created and once again presented to the public at an open house on October 30, with an additional comment collection period. Recommendations were refined after reviewing feedback and the final draft was created and

subsequently provided to PRAC to review at this meeting. She concludes by summarizing the recommendations and sharing that a major component of this plan is a recommendation that it be updated every 3 years, and that CBJ should conduct more frequent monitoring controls.

Ms. Scott asked what new locations would be open to commercial use to which Ms. Pringle answered Telephone Hill Park, Under Thunder Trail, and Evergreen Cemetery.

Ms. Van Nes notes that commercial use of Brotherhood Bridge is limited to the parking lot and asks how CBJ will enforce that rule. Mr. Schaaf answers that if individuals encounter commercially guided tour groups on the trail, the department would like to hear about it. He adds that there have been occurrences where tour bus passengers who stop for photos are reported to be walking down the trail. The department has provided explicit directions to the permitted operators in that area that as a condition of their permit they are to discourage guests from doing so. However, there is no way to legally prevent an unguided individual from walking the trail of their own volition.

Mr. Anderson asked if there were any CBJ ordinances, or anything that would mitigating the presence of those loitering in the parks since companies are paying to operate their commercial enterprises there, and tourist are paying to come here. Mr. Schaaf answered that the department relies on the JPD to enforce the criminal code as they would anywhere else, but that a commercial permit does not grant exclusive use of the area, and the permit conditions focus mainly on what the permit holder is allowed and not allowed to do. He adds that activating a space through different types of use is a great way to make it a more welcoming space for everybody, for example in the summer when food vendors, visitors, and those enjoying the complementary Wi-Fi all congregate the park.

The PRAC members began discussing their position on the issue and how to best communicate their concerns before returning to the topic of commercial use with more questions, and an opportunity for public comments.

Ms. Scott asks if the commercial use of Telephone Hill will be affected by the proposed development. Mr. Schaaf answered that if the park was to be absorbed by potential development it would have to be removed from the parks and the open space system by the Assembly before it could be used for something else.

Public Comment

James McCants, a Douglas resident, shares that his main concern with the draft is the cell phone data collection proposed on page 44. He says that as a member of the public it makes him uneasy, and even though it is legal, the idea of CBJ tracking citizens on public lands in any capacity using cell phone data does not sit well with him. He says one thing to mitigate this if it's not going to change is to make people aware of it. Tell them what day CBJ is tracking your cell phone, and how and when CBJ will disclose information about where people went. He feels it is ridiculous to use taxpayer money to track people's cell phones on public land.

Kathy Coghill, a North Douglas resident, thanks everyone for the update and the progress being made to keep people informed, but she has concerns as a trail runner here in Juneau for the last 40 years. She notes that the Rainforest Trail is getting into quite a state of disrepair, and she is concerned about the adaptive management plan not being adequate. She feels the Assembly should allocate some resources to assess trail status. She is disappointed with the draft not giving an inventory of the status of the trails, and which are in disrepair with the current levels of use, and which might be vulnerable to increased use because of the environment with high rain and water content. She believes we should assess the status and make sure trails are healthy before thinking about increasing the volume of visitors.

Dan Kirkwood, a downtown resident, states that he appreciates the comments from Mr. McCants about the role of anonymous cell phone data. He asks if the PRAC can explain how the data is used and where it comes from because he thinks it might be much less sinister than it sounds. Mr. Schaaf explains that cell phone data is commercially available through several different companies, and CBJ is not going to be collecting any of this data itself. These companies aggregate anonymized cell phone data across millions of users around the country with no personally identifiable data points associated. They can tell you that an individual from Wyoming cane to Juneau on June 25th and went from the downtown dock to perseverance trail for example. It provides information about how many thousands of people are using parks and trails independently. He explains that this is important information to know because they received comments during this public process saying that the trails feel busy, and it didn't mesh with the data that we had from our commercial permittees. It is important for them to understand what the impact of independent travelers is when deciding whether to allow commercial use in an area, and if so, how much.

MOTION by Ms. Van Nes for the Parks & Recreation Advisory Committee to recommend that the Assembly approve the Commercial Use Analysis. *No objections were heard, and the motion passed*.

H. UNFINISHED BUSINESS - None

I. STAFF REPORTS - *Presented by G. Schaaf*

Mr. Schaaf updated the PRAC on current programs at the Dimond Park Field house, and progress towards preparing the recently acquired gyms for indoor recreation programs and partnerships.

Ms. Scott asked if there was an update on scheduling a tour for PRAC members. Ms. Verrelli answered that there have been discussions and due to limited time, something would be scheduled for January and presented at the next meeting.

J. PUBLIC LETTERS TO PRAC

6. Letter from Christina Choquette

Mr. Schaaf explained that this letter was received by the department, and he felt it was important to pass it along to the Committee, so they remain aware of the public's requests.

K. COMMITTEE MEMBER / LIAISON COMMENTS AND QUESTIONS

Mr. Steininger shared that the Assembly will be having their annual retreat soon with one of the objectives being to discuss the budget for the upcoming year.

Ms. Swanson shared that the Trail Mix Dinner was a great success, and she was happy and appreciative to see many familiar faces there.

Mr. Ḵaasáank' shared a Tlingit word for the month with the committee. ***"Ayawditee"*** meaning it's stormy, or it was stormy outside. He then asks if his grandson can present a word for the committee each month to which Mr. O'Shaughnessy asked that staff reach out to the City Clerks office to see if this would be allowed, and when best to include it in the meeting.

Mr. O'Shaughnessy noted that he will be out of town for the upcoming meeting and that Mr. Anderson will fill in as chair his absence.

L. NEXT MEETING DATE - January 7, 2025

M. ADJOURNMENT With no further business to discuss the committee meeting adjourned at 6:26 p.m.

Respectfully submitted by Annie Carroll on 1/03/2025.

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
PARKS & RECREATION

TO: Parks & Recreation Advisory Committee

FROM: George Schaaf, Parks & Recreation Director

DATE: January 3, 2025

RE: January 7, 2024 Meeting

DIRECTOR'S REPORT

Please find enclosed the information supporting your agenda topics for this meeting. The meeting is anticipated to last 60 minutes and will take place virtually via **Zoom Webinar**. To join the Zoom Webinar, go to https://juneau.zoom.us/j/94184441385 or call 1-253-205-0468. **Webinar ID:** 87003674124.

NEW BUSINESS

Proposed FY2025-26 Fee Schedule

As part of the FY26 budget process, the Parks & Recreation Department is proposing several changes to its schedule of fees and charges. These changes are detailed in the memo included in the packet for tonight's meeting.

> *Recommended Motion:* I move that the Parks & Recreation Advisory Committee recommend that the City Manager approve changes to the Parks & Recreation Fee Schedule, as presented.

Proposed FY2026 Operating Budget

The Parks & Recreation Department is finalizing its FY2026 operating budget, which includes expenditures of approximately $18 million and over $5 million in revenues. The memo and summary budget included in tonight's packet detail significant changes to core programs and services that are under the purview of the PRAC (excluding Facilities Maintenance, Centennial Hall, and Downtown Parking).

> *Recommended Motion:* I move that the Parks & Recreation Advisory Committee recommend that the Assembly approve the Parks & Recreation FY26 Operating Budget, as presented.

Proposed FY2026 Commercial Use Fee Revenue Allocation

Revenue from commercial use of parks and trails increased significantly in FY2025, primarily due to improved management of sightseeing tours using Overstreet Park, Homestead Park, and Brotherhood Bridge wayside. Revenue is projected to increase again in FY2026 and beyond as commercial use fees are adjusted to match those charged by the U.S. Forest Service and Alaska Department of Natural Resources. This increased revenue presents a unique opportunity to leverage revenue generated by visitors to benefit Juneau residents, especially underserved communities. The memo in tonight's packet proposes allocating these commercial use fees to improve neighborhood parks and trails, expand scholarships for youth who cannot otherwise afford to participate in our programs, increase funding for Youth Activities Grants, and increase capacity to maintain and improve parks used by visitors and residents alike.

> *Recommended Motion:* I move that the Parks & Recreation Advisory Committee recommend that the Assembly approve the proposed increments to be funded with Commercial Use Fee revenues.

Proposed 2025 General Obligation Bond for Parks & Recreation

The Parks & Recreation Department is proposing a $15 million general obligation bond be included in the 2025 Municipal Election. Proceeds would fund critical repairs at Dimond Park Aquatic Center as it approaches its 15th anniversary. Bond funds also would be used to complete construction of a new Community Park at Jackie Renninger Memorial Park, including a new skate park, pickleball courts, covered playground, dog park, and more.

> *Recommended Motion:* I move that the Parks & Recreation Advisory Committee recommend that the Assembly propose a general obligation bond in the amount of $15 million for the 2025 Municipal Election, to complete major repairs at Dimond Park Aquatic Center and develop Jackie Renninger Memorial Park.

UNFINISHED BUSINESS

PRAC Facility Tour

A tour of Parks & Recreation facilities is scheduled for January 18th from 9 a.m. to 12 p.m. The tour will begin at the Dimond Park Field House and include the following locations:

- Dimond Park Field House
- Dimond Park Aquatic Center
- Floyd Dryden Gymnasium
- Adair-Kennedy Memorial Park (weather permitting)

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
PARKS & RECREATION

TO: Parks & Recreation Advisory Committee

FROM: George Schaaf, Parks & Recreation Director

DATE: January 3, 2025

RE: Parks & Recreation Department Fee Schedule – Proposed Update

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CBJ 67.01.045 authorizes the City Manager to establish fees and charges for programs and services where the Assembly does not establish such fees. The Parks & Recreation Department is proposing the following changes to its fee schedule. We are seeking a recommendation from the Parks & Recreation Advisory Committee because these fees will affect the public. If approved by the City Manager, the updated fee schedule will be effective immediately unless noted otherwise. All fees are listed pretax.

Administration

- Increase the Homestead Cabin one time cleaning fee to $350 per rental from $100. The cost to clean the cabin has ranged from $600 to $1200 per rental to recoup some of that cost the fee needs to be increased.

Arboretum

- Increase vehicle-based tour fee to $3.50/person from $2.00/person to align with fees charged for use of other P&R-managed lands and facilities.
- Add a commercial filming and photography fee of $30/hr. This fee will only apply for activities involving models, sets, or other situations that could affect the public's use of the area.

Areawide Recreation

Add the following new fees:

- Merchandise sales
  - T-shirt - $20
  - Crewneck Sweatshirt - $35
  - Hooded Sweatshirt - $45

- Floyd Dryden Gym (new facility)
  - Hourly rental - $75/hr
  - Hourly Bulk Rate Renter - $60/hr
  - Pickleball -single visit - $4.76
  - Pickleball – 10 visit pass (Adult) - $42
  - Pickleball – 10 visit pass (Senior) – $25

- Marie Drake Gym Rental (new facility)
    - Hourly Rental - $45/hr
    - Hourly Bulk Rate Renter - $40/hr

Dimond Park Field House

- Increase Summer Camp fee (5 full days) to $171 from $170 to align with ZGYC Camp rates.
- Increase Summer Camp fee (4 full days) to $152 from $136 to align with ZGYC Camp rates.
- Add a new Turf Rental Bulk Rate of $100/hr for a single user/group renting 20+ hours per year.
- Add a new Miscellaneous Cleaning Fee ($55) for renters who fail to follow cleaning policies
- Add a new Cancellation Fee ($25/hr) for cancellations with less than three days' notice.

Parks and Landscape

- Increase the Commercial Use Permit Fee from $3.50 per person to $5.00 per person effective April 2026. The current fee was established in 2019 and has not increased since then. The rate will be increased 50 cents per year until it is aligned with similar fees charged by the U.S. Forest Service and Alaska State Parks (currently $6.50 per person).

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
PARKS & RECREATION

TO: Parks & Recreation Advisory Committee

FROM: George Schaaf, Parks & Recreation Director

DATE: January 3, 2025

RE: Parks & Recreation Department FY26 Operating Budget

As the Parks & Recreation Department finalizes its FY2026 operating budget, it is important for the Parks & Recreation Advisory Committee to understand significant changes in funding and services for the coming year. This review also provides the Committee with an opportunity to make recommendations to the Department and the Assembly regarding the operating budget.

While the total FY26 operating budget for Parks & Recreation is over $18 million, core services within the PRAC's mandate (excluding Facilities Maintenance, Downtown Parking Program, and Centennial Hall) total $12.7 million. Salaries and benefits represent about 67% of total expenditures. The General Fund supports about two-thirds of these operations, while grants and earned revenue will generate over $4.2 million in FY26.

Significant changes for FY26 include:

- Increased Facilities Maintenance costs for the former JSD Administration Building ($22,600) and Floyd Dryden Middle School Gymnasium ($63,350), both of which were acquired in 2024.
- A one-time expenditure to conduct a market study and explore the feasibility of adding a second sheet of ice at Treadwell Arena ($50,000).
- Expanded after-school programs at Cedar Park ($271,000), fully grant-funded.
- Consolidation of all printing and advertising costs under Areawide Recreation.
- Significant overtime costs ($98,700) due to ongoing vacancies, especially among part-time positions in the Aquatics Division.

The FY26 budget does not include proposed increments funded through Commercial Use Fee revenue, which will be discussed separately. If approved by the City Manager and Assembly, these increments will be added to the budget later in the process. Attached to this memo is a complete breakdown of revenues and expenditures by division, with expenses further divided into personnel services and commodities and services.

Parks and Recreation FY26 Proposed Budget - Revenue

Division	Sum of FY23 Actuals	Sum of FY24 Actuals	Sum of FY25 Amended	Sum of FY25 Proj Actuals	Sum of FY26 Revised
P&R Administration	**$ 12,812.19**	**$ 8,599.52**	**$ 12,000.00**	**$ 6,800.00**	**$ 9,000.00**
P&R Administration	$ 12,812.19	$ 8,599.52	$ 12,000.00	$ 6,800.00	$ 9,000.00
P&R Arboretum	**$ 261,638.16**	**$ 353,512.95**	**$ 74,600.00**	**$ 110,350.00**	**$ 97,550.00**
P&R Arboretum Endowment	$ 250,048.95	$ 341,752.97	$ 63,100.00	$ 98,000.00	$ 85,200.00
P&R Arboretum Operations	$ 11,589.21	$ 11,759.98	$ 11,500.00	$ 12,350.00	$ 12,350.00
P&R Parks & Landscape	**$ 241,546.08**	**$ 331,796.13**	**$ 523,400.00**	**$ 643,600.00**	**$ 700,000.00**
P&R Parks & Landscape	$ 241,546.08	$ 331,796.13	$ 523,400.00	$ 643,600.00	$ 700,000.00
P&R Recreation	**$ 1,441,264.09**	**$ 1,421,953.86**	**$ 1,425,800.00**	**$ 1,428,175.00**	**$ 1,468,100.00**
P&R Aquatics	$ 688,834.81	$ 646,842.74	$ 692,500.00	$ 686,300.00	$ 713,600.00
P&R Areawide Recreation	$ 93,418.00	$ 108,191.34	$ 103,400.00	$ 109,400.00	$ 118,400.00
P&R Field House	$ 198,183.80	$ 208,925.91	$ 199,500.00	$ 196,375.00	$ 200,000.00
P&R Ice Rink	$ 460,827.48	$ 457,993.87	$ 430,400.00	$ 436,100.00	$ 436,100.00
P&R Youth Services	**$ 570,491.36**	**$ 676,033.69**	**$ 801,300.00**	**$ 736,900.00**	**$ 747,513.00**
P&R Youth Activities	$ 15,204.95	$ 3,923.14	$ -	$ -	$ -
P&R Youth Center	$ 468,469.40	$ 525,301.36	$ 190,300.00	$ 201,900.00	$ 212,513.00
P&R Youth Scholarships	$ 23,613.24	$ 14,871.84	$ 20,000.00	$ 20,000.00	$ 20,000.00
P&R Youth Shelter	$ -	$ 58,329.62	$ 535,000.00	$ 460,000.00	$ 460,000.00
P&R Youth Sports	$ 63,203.77	$ 73,607.73	$ 56,000.00	$ 55,000.00	$ 55,000.00
Grand Total	**$ 2,527,751.88**	**$ 2,791,896.15**	**$ 2,837,100.00**	**$ 2,925,825.00**	**$ 3,022,163.00**

Parks and Recreation FY26 Proposed Budget - Expenditures

Division	Sum of FY23 Actuals	Sum of FY24 Actuals	Sum of FY25 Amended	Sum of FY25 Proj Actuals	Sum of FY26 Revised
P&R Administration	**$ 549,439.20**	**$ 666,780.83**	**$ 654,000.00**	**$ 570,552.00**	**$ 705,417.34**
P&R Administration	**$ 549,439.20**	**$ 666,780.83**	**$ 654,000.00**	**$ 570,552.00**	**$ 705,417.34**
Personnel Services	$ 405,674.48	$ 527,583.77	$ 476,000.00	$ 388,820.00	$ 488,590.34
Materials and Commodities	$ 143,764.72	$ 139,197.06	$ 178,000.00	$ 181,732.00	$ 216,827.00
P&R Arboretum	**$ 357,479.41**	**$ 362,738.60**	**$ 384,800.00**	**$ 424,429.00**	**$ 377,184.47**
P&R Arboretum Endowment	**$ 113,200.00**	**$ 107,300.00**	**$ 109,200.00**	**$ 109,200.00**	**$ 112,100.00**
Materials and Commodities	$ 113,200.00	$ 107,300.00	$ 109,200.00	$ 109,200.00	$ 112,100.00
P&R Arboretum Operations	**$ 244,279.41**	**$ 255,438.60**	**$ 275,600.00**	**$ 315,229.00**	**$ 265,084.47**
Personnel Services	$ 161,129.52	$ 166,402.93	$ 183,700.00	$ 175,400.00	$ 184,191.47
Materials and Commodities	$ 83,149.89	$ 89,035.67	$ 91,900.00	$ 139,829.00	$ 80,893.00
P&R Parks & Landscape	**$ 2,495,386.61**	**$ 2,563,085.00**	**$ 3,172,700.00**	**$ 2,818,012.27**	**$ 3,053,237.96**
P&R Parks & Landscape	**$ 2,495,386.61**	**$ 2,563,085.00**	**$ 3,172,700.00**	**$ 2,818,012.27**	**$ 3,053,237.96**
Personnel Services	$ 1,558,788.20	$ 1,565,695.83	$ 1,848,800.00	$ 1,554,400.00	$ 1,810,057.96
Materials and Commodities	$ 936,598.41	$ 997,389.17	$ 1,323,900.00	$ 1,263,612.27	$ 1,243,180.00
P&R Recreation	**$ 4,223,648.18**	**$ 4,456,947.99**	**$ 4,964,400.00**	**$ 4,708,484.88**	**$ 5,215,698.05**
P&R Aquatics	**$ 2,477,046.18**	**$ 2,602,391.97**	**$ 2,975,100.00**	**$ 2,842,024.00**	**$ 3,067,984.26**
Personnel Services	$ 1,383,090.00	$ 1,486,018.66	$ 1,715,000.00	$ 1,592,100.00	$ 1,810,219.26
Materials and Commodities	$ 1,093,956.18	$ 1,116,373.31	$ 1,260,100.00	$ 1,249,924.00	$ 1,257,765.00
P&R Areawide Recreation	**$ 566,842.06**	**$ 533,233.86**	**$ 531,400.00**	**$ 518,662.00**	**$ 604,172.38**
Personnel Services	$ 472,203.34	$ 429,603.40	$ 410,800.00	$ 398,900.00	$ 392,936.38
Materials and Commodities	$ 94,638.72	$ 103,630.46	$ 120,600.00	$ 119,762.00	$ 211,236.00
P&R Field House	**$ 272,674.63**	**$ 368,046.83**	**$ 478,300.00**	**$ 456,374.00**	**$ 514,977.78**
Personnel Services	$ 96,483.77	$ 186,308.36	$ 283,700.00	$ 258,300.00	$ 303,554.78
Materials and Commodities	$ 176,190.86	$ 181,738.47	$ 194,600.00	$ 198,074.00	$ 211,423.00
P&R Ice Rink	**$ 907,085.31**	**$ 953,275.33**	**$ 979,600.00**	**$ 891,424.88**	**$ 1,028,563.62**
Personnel Services	$ 536,407.37	$ 560,396.55	$ 573,200.00	$ 480,400.00	$ 568,618.62
Materials and Commodities	$ 370,677.94	$ 392,878.78	$ 406,400.00	$ 411,024.88	$ 459,945.00

P&R Youth Services	**$ 1,843,264.62**	**$ 2,096,416.19**	**$ 2,814,400.00**	**$ 2,360,080.98**	**$ 3,331,190.56**
P&R Youth Activities	**$ 316,875.00**	**$ 332,500.00**	**$ 332,500.00**	**$ 332,500.00**	**$ 344,500.00**
Materials and Commodities	$ 316,875.00	$ 332,500.00	$ 332,500.00	$ 332,500.00	$ 344,500.00
P&R Youth Center	**$ 1,361,597.52**	**$ 1,534,060.48**	**$ 1,319,600.00**	**$ 1,147,945.98**	**$ 1,701,378.72**
Personnel Services	$ 1,143,135.10	$ 1,254,800.27	$ 1,133,700.00	$ 962,100.00	$ 1,498,868.72
Materials and Commodities	$ 218,462.42	$ 279,260.21	$ 185,900.00	$ 185,845.98	$ 202,510.00
P&R Youth Scholarships	**$ 23,613.24**	**$ 24,317.82**	**$ 23,000.00**	**$ 12,000.00**	**$ 12,000.00**
Materials and Commodities	$ 23,613.24	$ 24,317.82	$ 23,000.00	$ 12,000.00	$ 12,000.00
P&R Youth Shelter	**$ -**	**$ -**	**$ 945,300.00**	**$ 634,660.00**	**$ 881,261.47**
Personnel Services	$ -	$ -	$ 848,700.00	$ 549,480.00	$ 777,281.47
Materials and Commodities	$ -	$ -	$ 96,600.00	$ 85,180.00	$ 103,980.00
P&R Youth Sports	**$ 141,178.86**	**$ 205,537.89**	**$ 194,000.00**	**$ 232,975.00**	**$ 392,050.37**
Personnel Services	$ 114,063.56	$ 175,015.57	$ 160,500.00	$ 201,600.00	$ 264,425.37
Materials and Commodities	$ 27,115.30	$ 30,522.32	$ 33,500.00	$ 31,375.00	$ 127,625.00
Grand Total	**$ 9,469,218.02**	**$ 10,145,968.61**	**$ 11,990,300.00**	**$ 10,881,559.13**	**$ 12,682,728.38**

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
PARKS & RECREATION

TO: Parks & Recreation Advisory Committee

FROM: George Schaaf, Parks & Recreation Director

DATE: January 3, 2025

RE: FY2026 Commercial Use Fee Revenue Allocation

The Parks & Recreation Department proposes to use commercial use fee revenue to maintain and enhance service levels amidst an expanded summer tourist season and flat funding for core services, such as playground replacement and park maintenance. Additionally, we propose leveraging this growing revenue stream to counteract inflation's impact on Youth Scholarships and Youth Activity Grants, ensuring equitable access to programs and services for underserved communities in Juneau.

Projected revenue from commercial use fees in FY26 is approximately $525,000, an increase of more than 800% since 2022. This significant growth results from improved management and permitting of sightseeing tours at Overstreet Park, Brotherhood Bridge Wayside, and Homestead Park. Revenue is projected to continue increasing over the next few years as the current fee of $3.50 per person, per day is increased to align with fees for similar activities charged by the U.S. Forest Service and the Alaska Department of Natural Resources.

This increased revenue offers a unique opportunity to address persistent flat funding of programs and services, particularly those for underserved communities. Key highlights of this proposal include:

- **Youth Activities Grants:** The first net funding increase for this high-demand program since 2013.
- **Youth Scholarships:** Doubling annual scholarship amounts for children eligible for the National School Lunch Program, from $300 to $600.
- **Project Management Capacity:** Establishing a dedicated project manager in the Engineering & Public Works Department to oversee Parks & Recreation initiatives, including the $56 million Capital Improvement Program.

These proposals strategically reinvest tourism-generated revenue to enhance Parks & Recreation facilities, services, and programs for the benefit of local residents.

FY2026 P&R Commercial Use Fee Revenue
Proposed Allocation

Previously Funded (FY25)	$125,000	Additional funding for Parks & Playgrounds Major Maintenance CIP
	$40,000	50% Park Ranger (Downtown Parking & Enforcement)
	$70,000	50% Recreation Manager (Commercial Use Management)
	$15,000	Additional funding to Trail Mix for areawide trail maintenance
	$20,000	Eight-hour workday for Lead Park Ranger & Grounds Crew Leaders
New (FY26)	$130,000	Parks & Recreation Capital Project Manager
	$50,000	Increase funding for Youth Activities Grants
	$15,000	Increase funding for Youth Scholarship Awards from $300 to $600
	$6,000	Extend one (1) Seasonal Groundskeeper Assistant from 6 months to 7 months
	$12,000	Grant Management Software for Youth Activities Grants & other programs
	$40,000	Increase 0.5 FTE Seasonal Park Ranger to year-round position
TOTAL	**$523,000**	

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
PARKS & RECREATION

TO: Parks & Recreation Advisory Committee
FROM: George Schaaf, Parks & Recreation Director
DATE: January 3, 2025
RE: Proposed 2025 General Obligation Bond Proposition

The Parks & Recreation Department is proposing a general obligation bond in the amount of $15 million be included in the 2025 Municipal Election. Funding would be used to complete major repairs affecting continued operation of the Dimond Park Aquatic Center, as well as construction of Jackie Renninger Memorial Park.

Dimond Park Aquatic Center Repairs – $7.3 million

The HVAC system at the Dimond Park Aquatic Center is failing due to corrosion of one of the large air handling units. Emergency repairs were completed several years ago, including installation of a new epoxy floor and additional drains inside the air handler. Despite these efforts, excessive moisture and the corrosive environment have caused the air handler to deteriorate beyond the point of repair. Replacing the air handler will require opening an exterior wall of the building, resulting in significantly increased cost. This project would also replace obsolete building control systems. **Estimated cost: $4.7 million.**

In addition to the HVAC system, this project will replaster the leisure pool, including the zero-entry area, therapeutic resistance channel, spray features, and short-course swim lanes. The existing plaster in this area is failing due corrosion of the underlying steel rebar. Additionally, the plaster is discolored because of corrosion in pumps and related systems shortly after construction. **Estimated cost: $2 million.**

Finally, this project will replace failed lighting systems, natatorium doors, domestic hot water heaters, and replace tile/grout in the hot tub. **Estimated cost: $600,000**

Jackie Renninger Park Construction - $7.7 million

Jackie Renninger Park is located near the intersection of Egan Dr. and Glacier Hwy., in a neighborhood that currently has no nearby access to parks, playgrounds, courts, or other recreational facilities. The Pipeline Skate Park is located in the park, but is in poor condition and experiences significant vandalism and other behavioral issues. The Assembly previously funded a project to engage the community to design a new Community Park for this four-acre parcel. This process was completed in 2024, and included multiple public meetings attended by over 100 residents. The preferred design incorporates many of the features requested by the public, including:

- A new skate park, including covered and uncovered areas with a variety of park and plaza skating experiences.
- Eight pickleball courts to meet growing demand for this sport.
- Juneau's first covered playground, as well as additional play equipment for children ages 2-12.
- A multicourt for a variety of activities, including basketball, volleyball, and more.
- A fenced dog park.
- A walking path with stations for outdoor fitness equipment.
- New restrooms.
- Improved lighting throughout the park.

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Juneau, Alaska 99801 jim@alaskaenergy.us

Technical Memorandum

December 13, 2022

To: **Rusty Shivers, Project Manager**

Subject: **HVAC and DDC Controls Assessment Report - Draft**

Project: **Dimond Park Aquatic Center**

INTRODUCTION

The Dimond Park Aquatic Center (DPAC) has been in operation since 2012. The facility is experiencing significant issues with the ventilation and the direct digital control (DDC) systems. This report provides a condition assessment and recommendations for restoring proper operation.

Background

A natatorium is a challenging indoor environment. It is essential that the ventilation and control systems are in good working order to maintain a healthy indoor environment, protect the building from the corrosive, salt and chlorine-laden air and minimize energy consumption. The ventilation and control systems must operate dynamically to maintain pressure relationships, humidity levels, temperature setpoints, and indoor air quality in a dynamic indoor environment that is influenced by variations in use and outside temperatures.

Our investigation revealed that the ventilation and DDC control systems are not operating optimally and are experiencing numerous issues.

ASSESSMENT

Natatorium Air Handling Unit AHU-1

Description

The natatorium environment is controlled by AHU-1, which provides critical ventilation, dehumidification, pressure control and heating functions. Its major components are supply and return fans, an air-to-air heat exchanger that recovers heat from the exhaust air to preheat ventilation air, mixing dampers that modulate outdoor and return airflows, and a heating coil. A DDC control system operates the AHU components to ventilate the natatorium, maintain humidity at a desired level, keep the natatorium at a negative pressure to preclude the migration of corrosive air into the structure, and supply heat.

Air Leakage

AHU-1 experienced air leakage soon after it was initially commissioned. The leakage occurs between the supply and exhaust airstreams because the various compartments are at different pressures and are not adequately sealed which causes air and water to flow between the compartments. The leakage affects the humidity and pressure control that is essential in a natatorium system. The leakage also exposes hidden areas within the AHU to the corrosive airstream. Several attempts have been made to seal the seams between the compartments but leakage issues continue to plague the AHU.

The AHU materials are deteriorating due to the corrosive air streams. The following repairs have been enacted to extend the life of the system. These include:

- Sealing of compartment walls and seams
- Installation of drain pans and pumps to remove standing water
- Installation of coatings on the interior surfaces to reduce corrosion
- Replacement of failing fan and motor bearings
- Sealing of light fixtures and conduits inside the unit to preclude the drawing of water vapor into the conduits and accumulating water

Water is currently leaking from the unit onto the fan room floor. The leak is occurring under the unit and cannot be determined and repaired without dismantling the unit, a process that is likely to do more harm than good.

Heat Exchanger

The AHU has an air-to-air heat exchanger that transfers heat from the exhaust air to the outside air stream. The heat exchanger is an essential part of the energy performance of the system and is the interface between the humid air leaving the facility and outside air that provides dehumidification. The heat exchanger is experiencing the following issues:

- Ice formation on the exhaust air surfaces of the heat exchanger during cold weather
- Air and water leakage between the air streams

Construction

The long-standing issues with the AHU indicate that its construction is incapable of withstanding the differential pressure relationships between the cabinets and the corrosive properties of the natatorium airstream. Its failures have resulted in a disproportionate demand on resources to repair and maintain it. The corrosion issues that have been present from early in its life are an indication that the unit construction has not been sufficiently resistant to the corrosive natatorium environment. Yet, despite the many issues, there is no clear indication of the remaining life of the system. Natatorium air is highly corrosive and persistent leakage makes it highly likely that enclosed surfaces and components of the AHU are corroding.

Failure Risk

The largest failure risk is that internal corrosion leads to a structural failure that renders the AHU inoperable. This would result in a shutdown of the building and draining of the pools to minimize humidity and corrosive air. The resulting disruption could vary from a quick repair to restore operation until a permanent fix can be procured to a long unplanned shutdown to replace the AHU. Either way, considerable resources will be expended to drain the pools, keep the natatorium heated and manage humidity levels.

Natatorium air handlers have an expected service life of 20-years. Given the AHUs deteriorating condition and corrosion history, it is likely that its service life will be shorter. The AHU is 10-years old and likely has 5-years of remaining life. It is recommended that a planned replacement within 5-years occur to mitigate the risk of AHU failure.

Locker/Common Air Handling Unit AHU-2

Description

AHU-2 supplies ventilation air to the locker rooms and common areas. Its major components are supply and return fans, an air-to-air heat exchanger that recovers heat from exhaust air to preheat ventilation air, and a heating coil. The components are controlled by the DDC control system to provide ventilation to the spaces.

Assessment

The AHU is in good condition. It has an estimated 25-year service life and appears to be capable of operating another 15 years. The only reported issue is that moisture in the outside airstream, which travels a relatively long and circuitous path, occasionally wets the filters.

A systemic issue with the system is that it supplies the same temperature air to both the common areas and the locker rooms. The supply air temperature is controlled to keep the common areas from overheating, which causes the locker rooms to be underheated. This issue can be resolved by adding a heating coil to the locker supply air duct so the lockers can be controlled to a higher temperature.

DDC Control System

Description

The DPAC mechanical systems are controlled by a Siemens direct digital control (DDC) system. The system provides control and monitoring and alarm functions and has been in operation since 2012.

Assessment

The DDC system was commissioned and fully operational when it was installed. The programming has been altered over time to improve operation and to accommodate equipment changes. In 2019, a power event damaged some of the control equipment, causing a loss of programming. The effort to restore the system included controller replacements and restoring the programming from a backup. This work resulted in a loss of essential control functions.

Issues that were observed include:

- Inconsistency between actual and expected values
- Operators having trouble navigating and making changes to the graphic screens
- Loss of AHU-1 return fan control
- Loss of communication with the ground source and water source heat pumps
- Loss of radiant floor control
- Slow response to setpoint changes
- Airflow monitoring stations that are not reporting or are inaccurate
- Natatorium pressure control is not working

The lack of optimal control function is a serious issue that renders the natatorium system incapable of the dynamic response that is essential to control indoor air quality, maintain natatorium pressure and humidity and operate the facility at peak energy efficiency. It is essential that full control be restored.

Bret Burnett of Inside Passage Integrated Control Systems performed an assessment of the DDC system and observed the following:

- Inconsistent data values persist in the DDC system.
- The graphic screens are not properly displaying the data.
- The reason for the loss of return fan control remains unknown.
- The reason for the loss of radiant floor control remains unknown.
- The reason for the slow response to setpoint changes remains unknown.
- A defrost cycle would be useful to preclude frosting of the heat recovery cell.

John Roscovius of Siemens, was hired to investigate why the DDC system is failing to perform properly. He determined the following:

- The stand-alone control modules are functioning properly and are not experiencing failures. System tests were performed to observe control system responses and no issues were observed.
- Control devices are working but there is some concern that pressure and flow transducers are not calibrated.
- There is a polling issue with interfaced equipment which is causing data from the heat pumps (BACnet points) to be dropped/missed and the displayed values are not very useful to an operator trying to investigate the heat pumps.
- The host or main operator interface is basically a read only device and cannot be used to troubleshoot beyond looking at values.

These finding are encouraging because they indicate that the DDC control system can be restored to full functionality. The following steps are recommended to restore DDC control function:

- Perform a point-to-point checkout of the sensors, transducers and control devices such as actuators for dampers and valves.
- Calibrate all devices
- Troubleshoot the communications with the systems that are integrated via BACnet protocols.

CBJ maintenance has recently reinstalled Siemens Insight, a DDC front-end software with a more user-friendly interface to the DDC system. This will make it easier for CBJ staff to interface with the DDC system.

The Siemens system uses code programming that is proprietary and is not as user-friendly as other manufacturer’s products. This has hindered CBJ staff in troubleshooting and correcting control issues. The control system would benefit from a more user-friendly front end that uses block programming technics that are familiar to CBJ staff.

RECOMMENDATIONS

HVAC Systems

Initial Repairs

The following are recommended to improve the performance of the existing HVAC systems.

- Natatorium AHU-1: The return air damper blades should be repaired so the damper operates properly.
- Lockers/Public Spaces AHU-2: Install heating coils in the supply air ducts to the locker rooms to improve thermal comfort.

AHU-1 Replacement

A budget and schedule should be developed for initiating a planned replacement of AHU-1. Replacing the AHU in its current location will be a complex project which will require demolishing the fan room walls and potentially the roof to replace the AHU. The contractor will require road access to the end of the building that is furthest from roads and parking areas to bring in equipment and materials to construct the work. The project costs should include construction access.

The schedule should seek to minimize the disruption that will occur during AHU replacement. Our preliminary estimate is 4-6 months of downtime.

The cost estimate will first require a conceptual design of the new AHU so that its size and installation requirements can be determined since they directly affect the extent of demolition and access that will be required. A conceptual design will also afford an opportunity to configure the system to correct several issues with the existing AHU including:

- Protecting the heat exchanger from frost formation
- Minimizing pressure differences between cabinets to preclude leakage
- Using materials that are resistant to chlorine corrosion
- Decoupling and simplifying ventilation, humidity, and pressure controls
- Increasing energy efficiency
- Shipping the unit in sections that ease installation and minimize risk of leakage

The conceptual design will allow for development of a comprehensive cost estimate for removing and replacing the AHU.

DDC System Repairs

Phase I

It is imperative that proper control be reestablished in a timely manner to protect occupant health and the building. This will require a Siemens control technician to perform point-to-point and calibration tests. Concurrent with the repairs should be modifications to the sequence of control to improve performance and enact solutions for devices that are not functioning well, such as airflow monitoring stations. The updated sequence would include:

- Natatorium pressure control sequence that does not rely on the air flow monitoring stations
- Stabilizing the humidity control
- Implementing a heat recovery core defrost cycle that precludes frosting of the heat exchanger

The DDC system also lacks a modern web-based interface with block programming for remote control and monitoring of the systems. A cost estimate for converting from code language to block programming should be obtained to weigh the cost/benefit of switching to block programming.

Upon completion of the repairs and establishing proper control, the operation should be verified through a commissioning process.

Phase II

The DDC control system will likely be 15 years old when AHU-1 is replaced. By then, the DDC system will have only a 25% of its remaining expected service life. Replacing the DDC system at the same time will lead to a more successful result than adding new AHU-1 controls to an aging DDC system.

It is recommended that the DDC system be upgraded when the AHU is replaced. This work can be performed while the natatorium is shut down so that it does not disrupt facility use. A cost estimate for DDC system replacement should be developed along with the AHU-1 replacement estimate.

by: 

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Technical Memorandum

April 19, 2024

To: **Rusty Shivers, Project Manager**

Subject: **Conceptual Design and Cost Estimate**

Project: **Dimond Park Aquatic Center Natatorium AHU Replacement**

Summary

Introduction

The natatorium air handling unit (AHU) at the Dimond Park Aquatic Center has an estimated remaining service life of 3-8 years. It is recommended that replacement occur within five years to minimize the risk that a component failure could render the AHU inoperable and cause an unplanned shutdown of the facility.

This memo provides a conceptual design for replacement of the AHU and a replacement cost estimate.

AHU Replacement

The AHU provides critical temperature, pressure, humidity and indoor air quality functions for the natatorium environment. Replacing the AHU will negate these controls and can only be accomplished through a planned shutdown of the facility.

An AHU replacement will require the following major work elements:

- Multi-discipline design of the AHU removal and replacement
- Disassembly of the existing AHU, connecting ductwork, outside air plenum and the end wall of the mechanical penthouse
- Two cranes to remove the items and install the new ductwork and AHU
- Connecting the AHU to the distribution ductwork
- Reconstruction of the end wall with a removeable wall section for future equipment replacement

A shutdown period of 4-6 months is estimated for this work, which should occur in the summer so the natatorium is not subject to cool or freezing temperatures.

Timeline and Cost Estimate

A timeline of five years is recommended for AHU replacement. This will allow sufficient time to secure funding, design the replacement AHU, award a construction contract and perform the work. The proposed AHU manufacturer estimates a 1-year period from submittal approval to delivery of the AHU.

The estimated cost to replace the AHU in 2028 is $3,300,000.

Natatorium Air Handling Unit

Improved Performance

The AHU will be replaced with a custom natatorium-specific AHU that has capacity equal to the existing air handling unit. The proposed AHU will improve the natatorium environment through improved equipment design and optimal control sequences.

The proposed AHU will feature several significant improvements over the existing AHU that will increase its service life and operation. The AHU will be constructed of materials that are resistant to the corrosive natatorium environment and be supplied by a manufacturer that routinely designs and constructs equipment for natatoriums.

- Materials: All surfaces and components in the natatorium airstream will be constructed of corrosion-resistant materials or be epoxy coated. The AHU walls and supports will be constructed of 5052-H32 aluminum which is the industry standard for natatorium equipment.
- Weight: The proposed AHU will weigh 21,000 lbs. which is considerably less than the existing AHU at 37,000 lbs. The decreased weight is due to the aluminum construction. Since the AHU has a similar footprint, the load density is lower and no reinforcement of the building structure is required.
- Orientation: The proposed AHU has the supply and return/exhaust airstreams vertically aligned with each other. This allows exhaust air condensation within the heat exchanger to gravity drain in the direction of airflow to drain pans. In the existing AHU, the airstreams are horizontally aligned and condensation often accumulates in the heat exchanger.
- Pressures: The existing AHU has a return fan that pressurizes the heat exchanger, which has pushed condensation into other compartments within the AHU. The proposed AHU has a relief fan which draws air through the heat exchanger, keeping it at a negative relative pressure and negating condensation migration issues.
- Fan Horsepower: The proposed AHU will have lower filter, heat exchanger and heating coil pressure drop. Total fan horsepower decreases from 89 HP to 62 HP and the installed motor horsepower decreases from 150 HP to 70 HP.
- Service Life: The proposed natatorium AHU is constructed of corrosion-resistant materials and has an estimated service life of 20-25 years. The existing AHU is expected to last 15-20 years due to persistent corrosion issues.

A schematic of the existing and proposed AHU is provided on the following page.

Replacing a natatorium AHU is expensive and disruptive. In the interest of limiting AHU replacements over the life of the facility, material options were sought to further increase the AHU service life. There are no regularly-manufactured material options available.

Heat Exchanger Performance

The heat exchanger is critical to the energy performance of the system. The proposed AHU has the largest and most efficient heat exchanger that can be utilized while allowing the AHU to fit in the building. It is 75% effective during the coldest weather.

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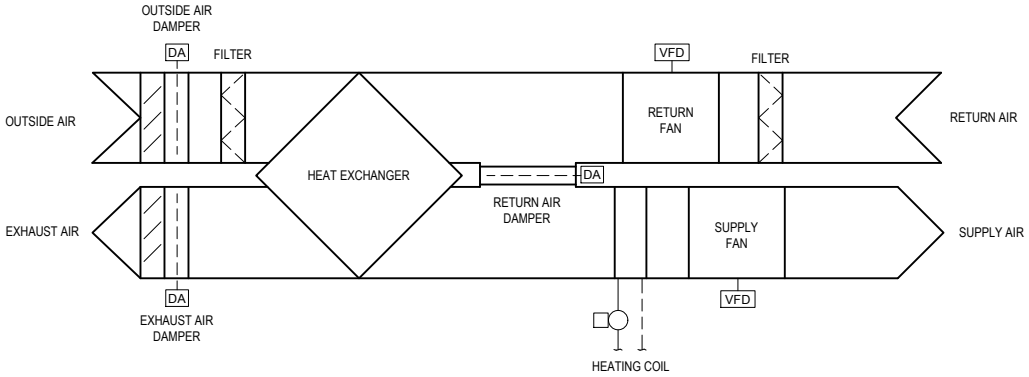
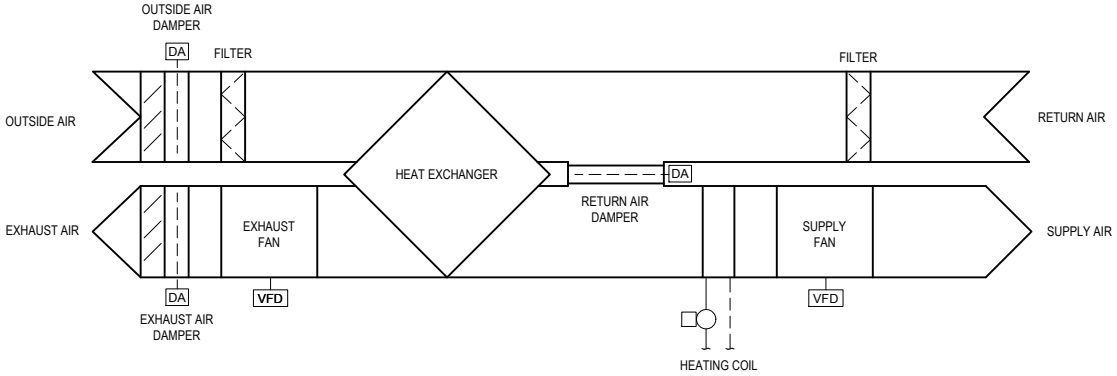


EXISTING AIR HANDLING UNIT AHU-1 SCHEMATIC

A. Supply Fan: Fan speed set during TAB for occupied operation at minimum outside air.
B. Return Fan: Fan speed modulates to maintain 1.1" pressure in the return air plenum.
C. Natatorium Ventilation and Humidity Control: OAD and RAD modulate to maintain minimum outside air flow during occupied periods and maintain Natatorium relative humidity setpoint.
D. Natatorium Temperature Control: Heating coil valve modulates to maintain Natatorium temperature setpoint.
E. Natatorium Pressure Control: EAD modulates to maintain negative natatorium pressure.



PROPOSED AIR HANDLING UNIT AHU-1 SCHEMATIC

A. Supply Fan: Fan speed set during TAB for occupied operation at minimum outside air.
B. Exhaust Fan: Fan speed modulates to maintain negative Natatorium pressure.
C. Natatorium Ventilation and Humidity Control: OAD and RAD modulate to maintain minimum outside air flow during occupied periods and maintain Natatorium relative humidity setpoint.
D. Natatorium Temperature Control: Heating coil valve modulates to maintain Natatorium temperature setpoint.

Control Improvements

The proposed AHU will have optimal DDC controls for maintaining temperature, humidity, pressure and indoor air quality. The control devices and program can be provided by the equipment manufacturer or be installed by the building DDC control contractor. The proposed control sequence decouples the AHU's various control functions so they independently respond as needed:

- Supply Fan: Maintains constant airflow to the natatorium to meet code air circulation requirements.
- Exhaust Fan: Modulates as needed to remove contaminants and discharge the air to the outdoors while maintaining a negative natatorium pressure so chlorine-laden air does not flow to other spaces or into the structure.
- Mixing Dampers (outside air and return air): Position to maintain minimum ventilation requirements and modulate as needed to increase outside air and maintain humidity control.
- Heating Coil: Modulates the coil output to maintain the natatorium room temperature.

This is a standard control natatorium sequence and is much simpler than the existing AHU control sequence. The biggest challenge is the pressure control which relies on a sufficiently tight enclosure and accurate pressure sensors in the natatorium.

Heat Pump Heat Recovery Option

A natatorium AHU exhausts significant amounts of warm, humid air that contains valuable heat. The proposed AHU has a heat exchanger that is capable of recovering 65% of the total exhaust heat by transferring it to the ventilation air.

An option was considered to use a heat pump to recover the exhaust air heat. The heat pump is capable of recovering more heat than the heat exchanger and also has the benefit of separating the cold outside air flow from the warm, humid exhaust air, eliminating detrimental frost and ice formation on the heat exchanger.

A preliminary heat analysis determined that a heat pump has the potential to recover 400% more heat from the exhaust air than the heat exchanger. The recovered heat would be used to supply heat to the natatorium and the rest of the building. However, the heat pump option is not recommended for the following reasons:

- The heat pump would add $1.5M to $2.0 to the cost of replacing the AHU.
- Additional mechanical space would be needed for the heat pump.
- There would be minimal energy savings because the heat recovered by the heat pump would be minimally less-expensive than the heat that is currently supplied by DPAC's ground source heat pump system.

The heat recovery heat pump would reduce the load on the geothermal loopfield. It was reported that the loopfield temperature dropped too low this winter and the heat pump was shut down for a period. If low temperatures reoccur annually, it would be beneficial to consider the heat recovery heat pump since it would improve energy efficiency and extend the life of the loopfield. This option may warrant reconsideration as part of the AHU replacement design process.

Scope of Work

Replacing the AHU will be a complex process requiring an estimated construction period of 4-6 months. The natatorium will need to be closed with the pools drained or covered during construction. The replacement scope is addressed below. Equipment submittals and floor plans that further illustrate the scope of work are appended to this report.

Site Access

Two cranes will be utilized to remove the existing AHU and install the new AHU. Trucano Construction has determined that the cranes will need closer access to the mechanical room than the existing back parking lot. A 100' long by 12' wide access road with D-1 top will be permanently constructed for crane support.

Demolition

Exterior Wall: The end of the mechanical room wall and associated structural braces will be removed to facilitate AHU replacement.

AHU Demolition: A crane will be used to remove the AHU and ductwork from the mechanical room:

- The outside air louvers will be removed and stored for reuse.
- The outside air plenum will be removed.
- The connecting supply, return and exhaust ductwork will be removed as needed.
- The heating coil piping will be disconnected and removed as needed.
- The outdoor air plenum will be removed.
- The DDC controls will be removed.
- The electrical service including two VFDs, conduits and conductors will be removed between the AHU and the control panel.
- The AHU will be disassembled and removed.

New Work

The new AHU is slightly smaller than the existing unit and will be mounted to the existing concrete pad.

- New connecting ductwork will be moved into the mechanical room and installed prior to installation of the AHU.
- The new AHU will be craned into the building in sections, assembled on-site and secured to the existing concrete pad. The assembly will be seal tested per the manufacturer's instructions prior to operation.
- The end wall will be replaced with a removeable wall section that allows for future equipment replacement.
- An outside air plenum will be constructed and connected to the louvers and AHU.
- The return air ducts will be connected to the AHU.
- The supply air ducts will be connected to the AHU. One supply duct will be rerouted in the natatorium ceiling to accommodate the new AHU arrangement.
- The exhaust air duct will be connected to the AHU.
- DDC controls will be installed.
- A single point power supply will be connected to the AHU. The AHU will be supplied with integral VFDs for each fan.

The AHU will be assembled, tested and started by factory-trained technicians and commissioned and fine-tuned for optimal ventilation, heating, humidity control and pressure control of the natatorium.

Cost Estimate

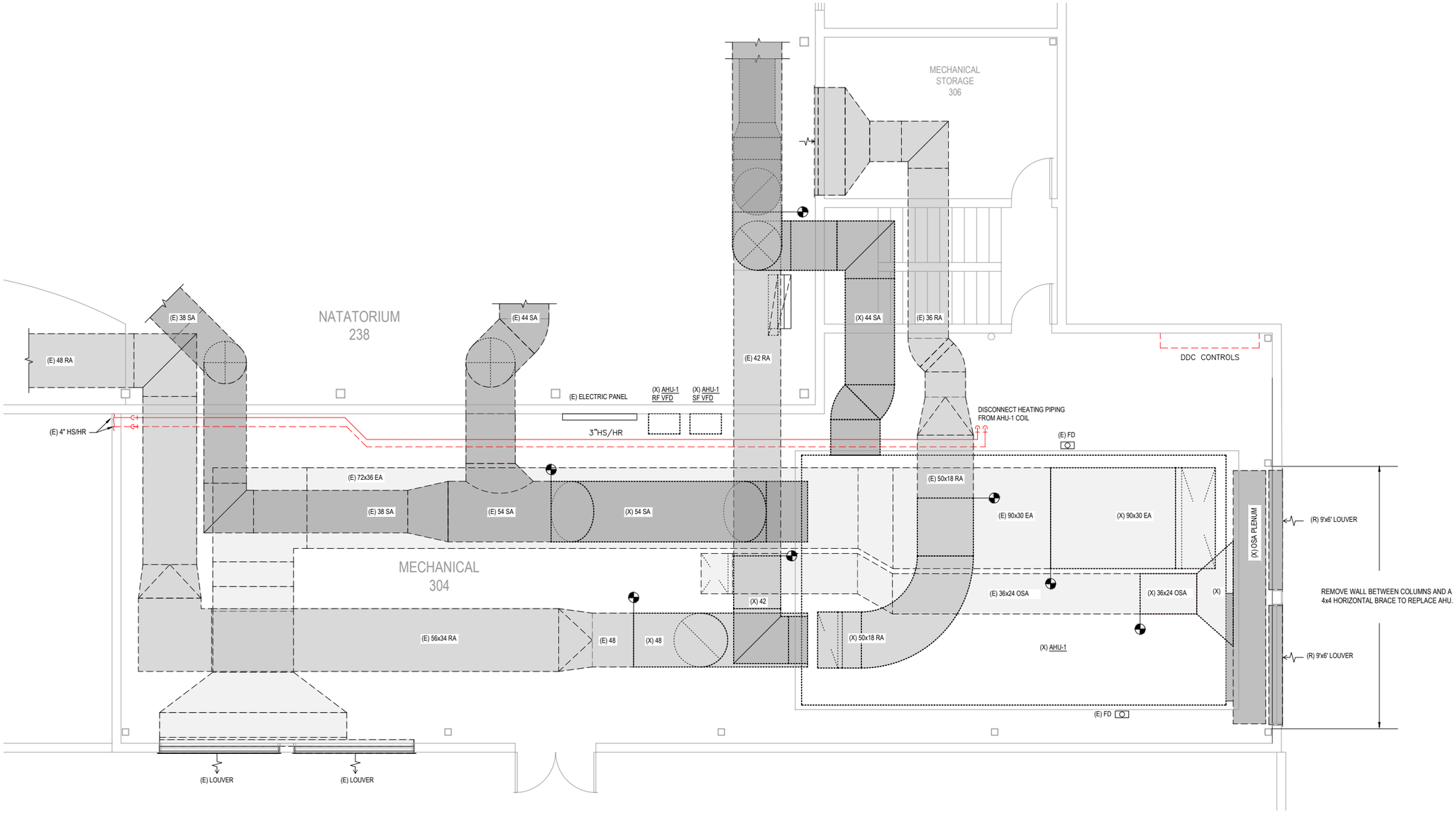
The AHU replacement requires a timeline of 3-5 years to secure funding, design, procure and construct the replacement. It is recommended that replacement occur in 5-years to maximize the life of the existing AHU while minimizing the risk of AHU failure that will result in an unplanned shutdown of the facility.

Estimations Inc. has estimated the cost to replace the AHU at $2.2M in 2024 dollars. The estimate does not include escalation to the construction period, design fees, construction contingency or construction administration costs. The following table shows that when these factors are applied, including 4% inflation per year to 2028, the estimate cost increases to $3,300,000.

Cost Item	Factor	Amount	Estimate
Cost Estimate, 2024 dollars			$2,200,000
Escalation to 2028, 4% per year	17%	$380,000	$2,580,000
Design Fees	6%	$160,000	$2,740,000
Construction Contingency	10%	$280,000	$3,020,000
Construction Administration	8%	$250,000	**$3,300,000**

by: _____

Jim Rehfeldt, P.E.



1 / M-1 **MECHANICAL 304 DEMO PLAN**

SCALE: 0 2' 4' 8'

N

CONCEPTUAL DESIGN

AlaskaEnergy ENGINEERING LLC
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Juneau, Alaska 99801
Phone: 907-789-1226
jim@alaskaenergy.us

Air Handling Unit Replacement
Dimond Park Aquatic Center

City and Borough of Juneau
Juneau, Alaska

No.	Description	Date

SHEET TITLE:

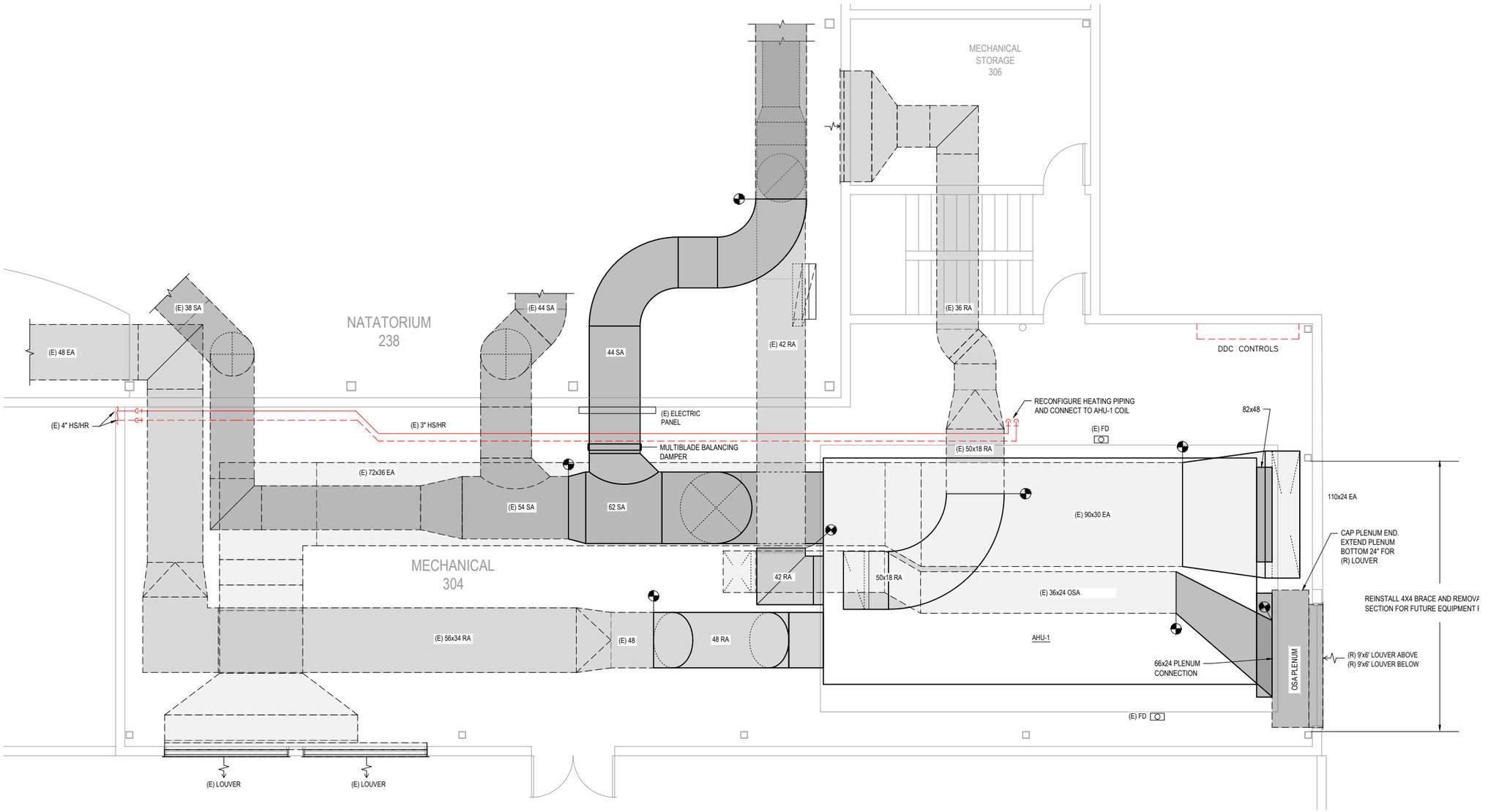
MECHANICAL 304
DEMO PLAN

DATE: 4/18/2024
SCALE:
DRAWN: KB/JR
CHECKED: JR

SHEET NO.

M-1 30

SHEET 1 OF 2



1 M-2 **MECHANICAL 304 FLOOR PLAN**

SCALE: 0 2' 4' 8'

N

CONCEPTUAL DESIGN

AlaskaEnergy ENGINEERING LLC
25200 Amalga Harbor
Juneau, Alaska 99801
Phone: 907-789-1226
jim@alaskaenergy.us

Air Handling Unit Replacement
Dimond Park Aquatic Center

City and Borough of Juneau
Juneau, Alaska

No.	Description	Date

SHEET TITLE:

MECHANICAL 304
FLOOR PLAN

DATE: 4/18/2024
SCALE:
DRAWN: KB/JR
CHECKED: JR

SHEET NO.

M-2

PDU-1

CONSTRUCTION

CASING

- SMACNA leakage class rating of 5.0
- Maximum panel deflection shall not exceed L/250 at design total static pressure
- Minimum R-13 insulation value for walls, ceilings, and flooring
- 2" thick double wall thermal-break panels, 22 gauge galvanized steel outer wall, 0.040" aluminum inner wall
- 2 lb/ft3 polyurethane foam injected insulation in the walls and ceiling
- Designed for indoor installation
- Unit shall be shipped in 4 sections. Sections shall be reassembled by others in the field. All silicone, gasketing, flashing and fasteners required to reassemble the unit sections shall be provided and shipped loose inside the unit sections.

FLOOR

- Floor shall be 2" thick paneled construction with 0.063" flat aluminum walk-on surface and 22 gauge galvanized steel underside of paneled floor (not exposed to air stream)
    - Shelf floor in top air tunnel shall be 0.063" flat aluminum
- 2 lb/ft3 polyurethane foam injected insulation

FRAME & STRUCTURAL BASE

- Frame and panel construction provided with aluminum structural tube framing members
- 10 ga coated welded steel structural base
- Lifting lugs mounted on unit base

ACCESS

- Double wall insulated access doors with stainless steel hinges, corrosion resistant compression latches
- Doors shall be tool lockable
- Doors shall have pressure relief safety latches (doors that open with pressure)

UNIT INLETS/OUTLETS

- Outside air inlet with duct connection
- Return air inlet with duct connection
- Supply air outlet with duct connection
- Exhaust air outlet with duct connection

COMPONENTS

PLATE HEAT EXCHANGER

- Aluminum sensible cross flow flat plate heat exchanger
- Smooth aluminum plates separated by formed ribs
- Aluminum frame and end plates
- Aluminum drain pan
- Accessories:
    - Magnehelic pressure gauge (2)

HOT WATER COIL

- AHRI rated hot water coil with galvanized steel casing, 0.02 thick copper tubes, and 0.006 thick aluminum fins
- A baked epoxy corrosion resistant coating is provided
- Supply and return connections supplied with grooved steel connection
- Water control valve is provided by others and field mounted by others (valves must accept 0-10 VDC control signal, 24 VAC power supply)

SUPPLY FAN

- Aluminum wheel, aluminum inlet cone with galvanneal drive frame that is coated with an acrylic urethane
- AMCA certified ratings for sound and performance
- Direct drive assembly
- 1" spring isolated unitary fan/motor base, flex connectors provided at fan inlet
- Fan airflow probes provided, (see controls section of specification)
- TEFC premium efficiency motors
    - VFD-rated with class F insulation

Scope Of Supply

Inn
Air Handling Equipment

EXHAUST FAN

- Aluminum wheel, aluminum inlet cone with galvanneal drive frame that is coated with an acrylic urethane
- AMCA certified ratings for sound and performance
- Direct drive assembly
- 1" spring isolated unitary fan/motor base, flex connectors provided at fan inlet
- Fan airflow probes provided, (see controls section of specification)
- TEFC premium efficiency motors
    - VFD-rated with class F insulation

OUTSIDE FILTER

- 2" pleated MERV 8 filter
- Side access filter rack construction to be aluminum

RETURN FILTER

- 2" aluminum filter
- Side access filter rack construction to be aluminum

DAMPERS

- Recirculation: aluminum airfoil blade, aluminum frame, modulating actuator
- Supply fan isolation: aluminum extruded blade, aluminum frame gravity
- Exhaust fan isolation: aluminum extruded blade, aluminum frame gravity
- Outside air inlet: galvanized steel formed blade, galvanized steel frame airflow monitoring, modulating actuator
- Exhaust air outlet: aluminum airfoil blade, aluminum frame, two-position actuator
- Plate heat exchanger face and bypass: galvanized steel formed blade, galvanized steel frame, modulating actuator
- Motorized dampers:
    - AMCA certified performance
    - Leakage rating of 3 CFM/ft2 at 1" wg
    - Synthetic bearings
- Airflow monitoring dampers:
    - AMCA certified performance
    - Integral airflow straightener
    - Leakage rating of 3 CFM/ft2 at 1" wg
    - Synthetic bearings
- Gravity Dampers:
    - Tested in accordance with AMCA standard 500-D
    - 0.125" aluminum blade

ELECTRICAL

- Unit ETL listed as a complete package, unit factory wired to unit mounted NEMA 3R control panel
- Major electrical components UL listed (non-fused disconnect switch, control circuit fusing, control circuit transformer, fan motor starters, and overloads as applicable)
- Power wiring enclosed in conduit
- Single point power connection
- Unit shall have a short circuit current rating (SCCR) of 5 kA
- IP67 rated LED light strips provided as shown on unit drawing are wired to a single light switch, separate 120V power by others must be provided to the circuit
- A VFD per supply fan is provided by Innovent and factory installed by Innovent
    - No manual bypass included
    - Variable frequency drive shall be mounted on the exterior of the unit
- A VFD per exhaust fan is provided by Innovent and factory installed by Innovent
    - No manual bypass included
    - Variable frequency drive shall be mounted on the exterior of the unit
- All power wiring shall be coiled into the section with its respective electrical component. Field extension of wire through air handler tunnel and termination of wires at control panel shall be by others.
- Unit shall be fully factory wired for testing purposes with labeled quick connections at section splits. After testing, all control wiring will be disconnected at section splits and placed inside a junction box. Field reconnection of wires shall be by others after the unit is set.

CONTROLS

- A fully-programmed Carel DDC controller is provided.
    - A standard Innovent sequence of operation will be provided. Any customization of the standard sequence will require factory approval, revised pricing and a revised PO.
- This pricing does not include any controls start-up or commissioning services (those can be added for additional cost if required - consult factory for pricing).
- Type of BMS interface to be specified to Innovent at or before the release of the job. If the type of interface has not been specified by the time of release, no BMS interface card will be provided.
- Pressure transducer provided by Innovent and wired directly to main unit DDC controller (CFM readout viewable at DDC controller)
- Sensors/transducers/switches are provided and installed by Innovent.

ADDITIONAL UNIT DETAILS

EQUIPMENT MOUNTING

- Unit to be mounted on a solid non-curb surface that supports the entire perimeter of the unit

ETL Listing

- ANSI/U.L. 1995: Heating and Cooling Equipment

WARRANTIES

- All Innovent warranties begin at equipment start up or 6 months from shipment, whichever occurs first. If the warranties need to be extended from what is shown, please contact the factory for pricing.
- 1 year PARTS ONLY unit warranty is provided per Innovent's standard warranty terms

FACTORY TESTING/REPORTS

- Standard run testing done (consult factory for more details)

START UP

- Start up by others

OWNER TRAINING SERVICES

- Owner training by others

MISCELLANEOUS

- Unit shall be shrink-wrapped prior to shipment

Performance Data Summary

Inn
Air Handling Equipment

PDU-1

MODEL	ALTITUDE (Ft)
NDHU-OU-PL-46800-HW-460	0.00

OUTSIDE FILTER — **OUTSIDE**

CFM	TYPE	DEPTH (in)	FACE VEL. (FPM)	MERV	QTY	WIDTH (in)	HEIGHT (in)	CLEAN PD	TOTAL PD
30400	Pleated	2	475	8	16	24	24	0.24	0.24

PLATE HEAT EXCHANGER — **SUPPLY & RETURN**

	OUTSIDE AIR DATA				RETURN AIR DATA			
MODE	CFM	EAT (DB/WB)(°F)	LAT (DB/WB)(°F)	PD	CFM	EAT (DB/RH)(°F/%)	LAT (DB/RH)(°F/%)	PD
Cooling	30400	71.9/61.3	80.0/64.1	0.85	35080	84.0/60.0	76.9/75.4	1.10
Heating	23400	-4.0/-6.0	62.7/40.1	0.53	28080	84.0/43.0	45.8/100.0	0.82
Purge Heating	30400	-4.0/-6.0	58.6/37.9	0.72	35080	84.0/37.5	43.1/100.0	1.04
MODEL: H-1-80C-2700								

SUPPLY FAN — **SUPPLY**

QTY	CFM	CLASS	SIZE (mm)	TYPE	TSP ("WC)	BHP	MHP	RPM	MOTOR RPM	VFD Hz	MOTOR TYPE
4	11700	N/A	630	Plenum	3.19	9.0	10.0	1713	1800	58.7	TEFC
TOTAL:	46800	-	-	-	3.19	35.8	40.0	-	-	-	-

TSP CALCULATION

RA ESP ("WC)	1.15	Casing Loss ("WC)	0.30	Hot Water Coil ("WC)	0.50
SA ESP ("WC)	1.10	Return Filter Clean PD ("WC)	0.14	TSP:	3.19 "WC

The recirculation path (return to supply) leads to a greater TSP than the outside air path, so its components are listed above.

HOT WATER COIL — **SUPPLY**

CFM	FPM	EAT (°F)	LAT (°F)	MBH	GPM	GLYCOL %	EWT (°F)	LWT (°F)	WPD (ft)	ROWS	FPI	PD
46800	623	67.6	96.2	1452	366.4	0%	118.0	110.0	5.7	3	10	0.50

RETURN FILTER — **RETURN**

CFM	TYPE	DEPTH (in)	FACE VEL. (FPM)	MERV	QTY	WIDTH (in)	HEIGHT (in)	CLEAN PD	TOTAL PD
51480	Aluminum	2	537	N/A	24	24	24	0.14	0.57

EXHAUST FAN — **EXHAUST**

QTY	CFM	CLASS	SIZE (mm)	TYPE	TSP ("WC)	BHP	MHP	RPM	MOTOR RPM	VFD Hz	MOTOR TYPE
3	11694	N/A	630	Plenum	3.12	8.8	10.0	1705	1800	58.5	TEFC
TOTAL:	35080	-	-	-	3.12	26.4	30.0	-	-	-	-

TSP CALCULATION

RA ESP ("WC)	1.15	Return Filter Clean PD ("WC)	0.14	Plate Heat Exchanger ("WC)	1.10
Casing Loss ("WC)	0.30	Return Filter Loading PD ("WC)	0.43	TSP:	3.12 "WC

ELECTRICAL INFORMATION — **UNIT POWER**

COMPONENT	VOLTS	PHASE	FREQ. (Hz)	MOP	MCA
Electrical Enclosure	460	3	60	100	92.1
LIGHTS, GFCI*	120	1	60	N/A	N/A

AMP SUMMARY

Exhaust Fan	12.3 x 3	Supply Fan	12.3 x 4	Total:	86.1

*Note: Power source for lights/GFCI is by others

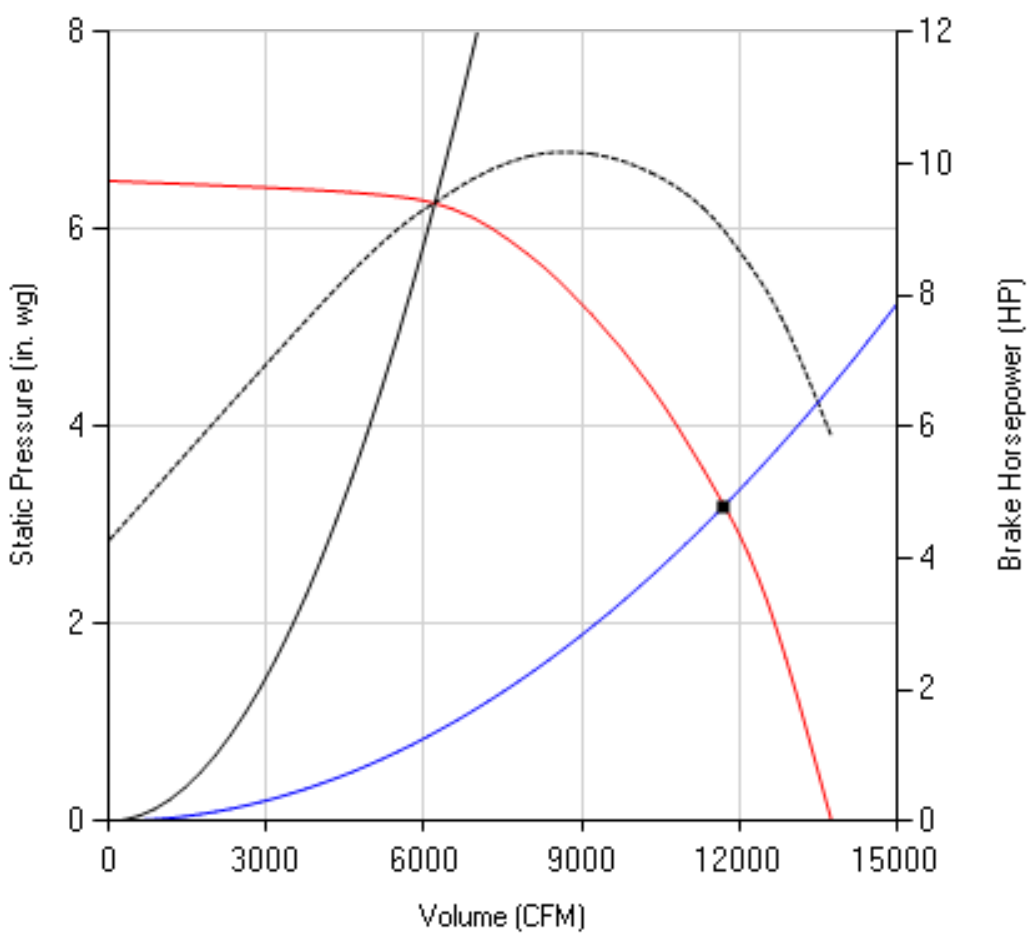
Fan Curve

Air Handling Equipment

PDU-1 Supply Fan

APD-630

Volume Per Fan (CFM)	11,700	Total Volume (CFM)	46,800	Drive Loss (%)	-
External SP (In. wg)	2.25	Total SP (In. wg)	3.19	Static Efficiency (%)	65.56
Elevation (ft.)	0	Brake Horsepower (bhp)	35.84	Fan Manufacturer	Greenheck
Airstream Temp. (F)	68.0	Fan RPM	1713	Fan Size (mm)	630
Motor Horsepower (hp)	40.0	Max Fan Speed (RPM)	1780		



Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA
Inlet	86	91	102	95	91	90	89	81	99	93
Outlet	93	94	103	105	101	100	98	86	107	101

Fan arrays display sound data for the a

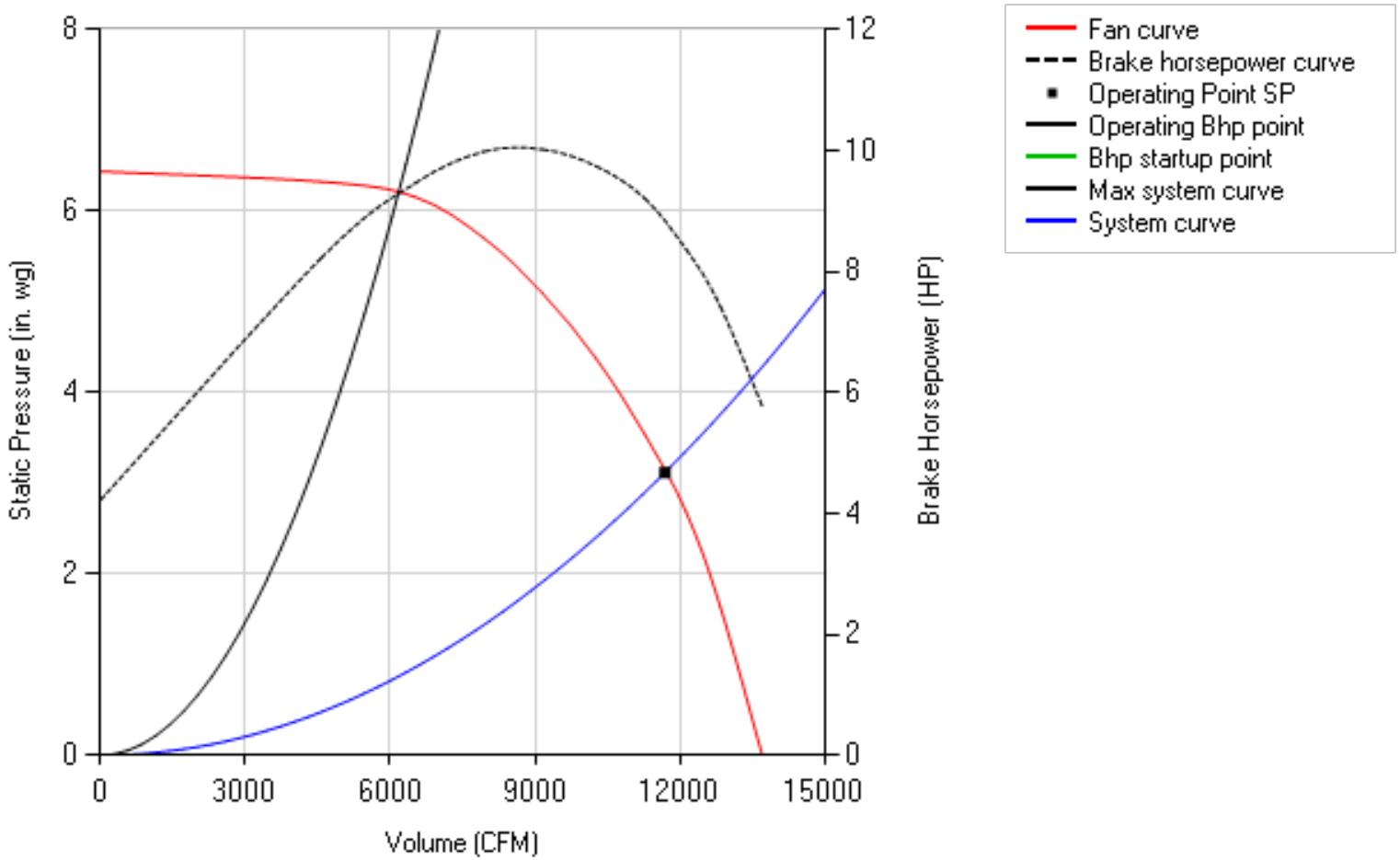
Fan Curve

Air Handling Equipment

PDU-1 Exhaust Fan

APD-630

Volume Per Fan (CFM)	11,693	Total Volume (CFM)	35,080	Drive Loss (%)	-
External SP (In. wg)	1.15	Total SP (In. wg)	3.12	Static Efficiency (%)	65.22
Elevation (ft.)	0	Brake Horsepower (bhp)	26.40	Fan Manufacturer	Greenheck
Airstream Temp. (F)	68.0	Fan RPM	1705	Fan Size (mm)	630
Motor Horsepower (hp)	30.0	Max Fan Speed (RPM)	1780		



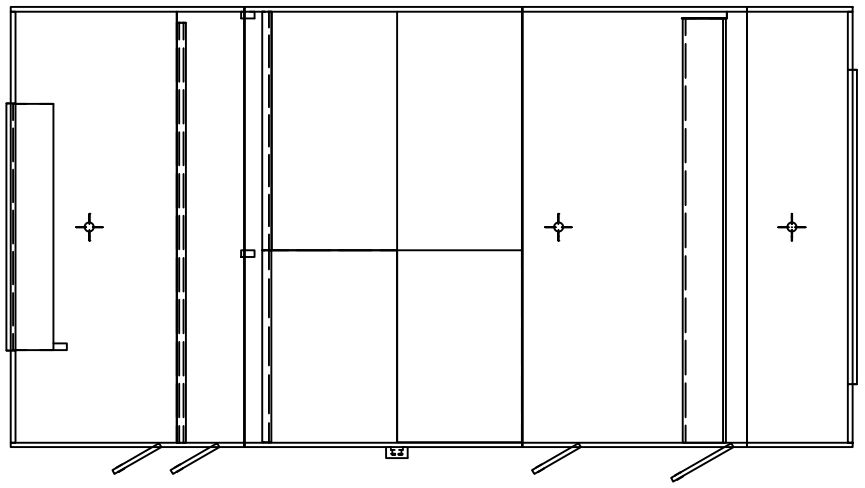
Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA
Inlet	85	90	101	94	90	89	88	80	98	91
Outlet	91	93	101	103	99	98	96	85	105	99

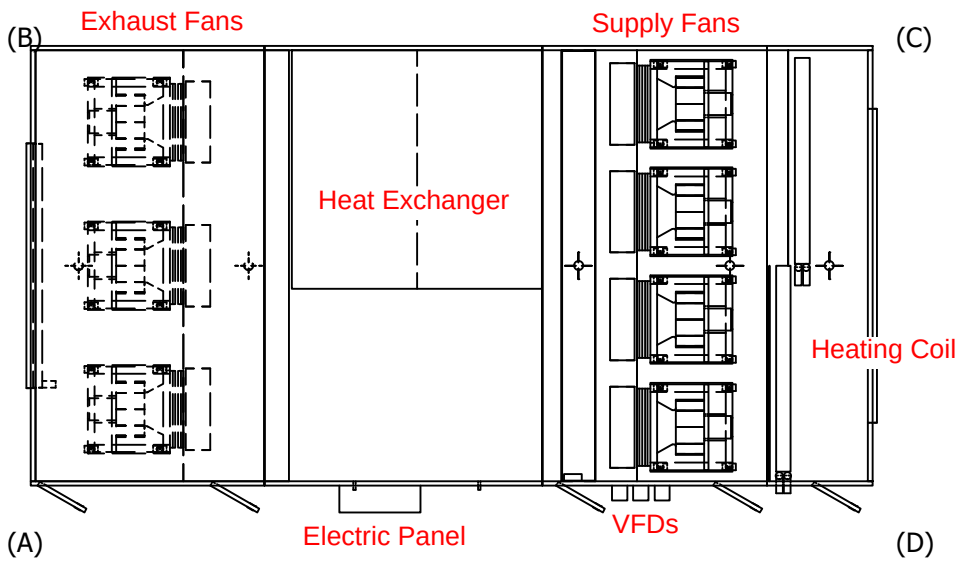
Fan arrays display sound data for the a

COMPONENTS:

1) OUTSIDE AIR INLET W/ D
   (33.00" X 110.00")
2) 2" MERV 8 FILTERS
3) ELECTRICAL ENCLOSURE
4) PLATE HEAT EXCHANGER (1.00" MPT DRAIN)
5) MAGNEHELIC GAUGE
6) RECIRCULATION
7) RECIRCULATIONDAMPER
8) 2" ALUMINUM FILTERS
9) RETURN AIR INLET
   (57.00" X 140.00")
10) EXHAUST AIR OUTLET W/ DAMPER
    (39.00" X 109.00")
11) EXHAUST FAN, TYP. OF 3
12) VARIABLE FREQUENCY DRIVES
13) SUPPLY FAN, TYP. OF 4
14) HOT WATER COIL, TYP. OF 2
15) SUPPLY AIR OUTLET
    (67.00" X 140.00")

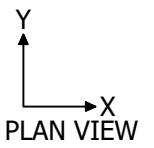


PLAN VIEW (UPPER)

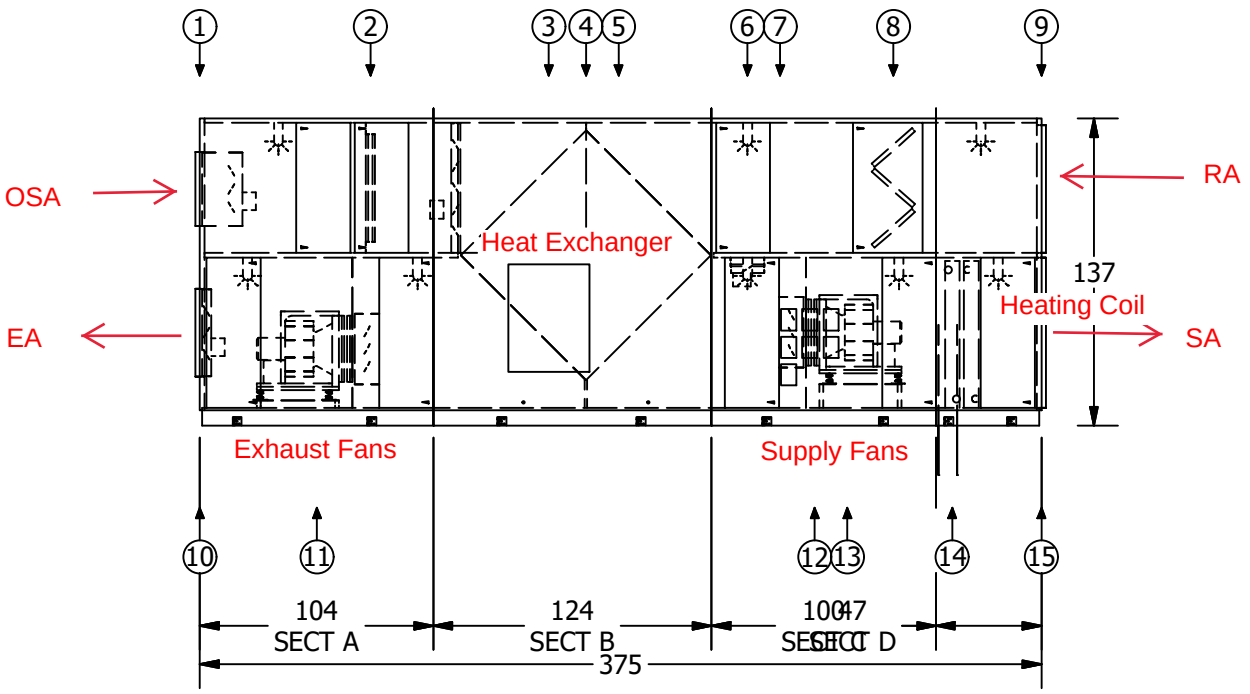


PLAN VIEW (LOWER)

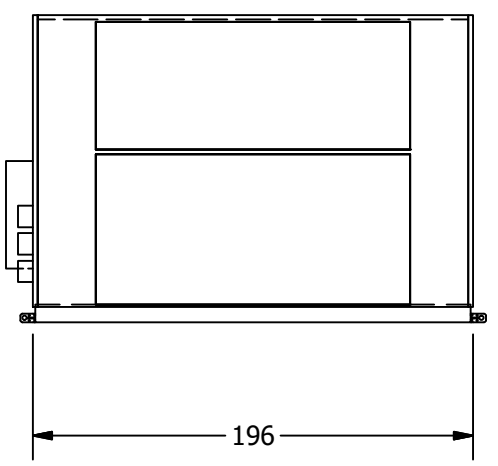
		Center of Gravity		Corner Weights			
Section	Weight	CGx	CGy	a	b	c	d
A	5100	45	98	1452	1452	1098	1098
B	7800	65	98	1860	1860	2040	2040
C	4900	54	98	1124	1124	1326	1326
D	2900	19	98	855	855	595	595
Total	20700						



PLAN VIEW



ELEVATION VIEW



RIGHT END VIEW

RECOMMENDED CLEARANCES

- MINIMUM 40" IN FRONT OF ALL SERVICE ACCESS LOCATIONS.
- MINIMUM 36", OR AS LOCAL CODES DICTATE, IN FRONT OF ALL ELECTRICAL PANELS. EXTERNALLY MOUNTED PANEL DEPTH CAN VARY FROM 8" - 16". 52" OF CLEAR SPACE IS RECOMMENDED AT EVERY ELECTRICAL PANEL LOCATION SHOWN.
- COMPONENT REMOVAL MAY REQUIRE MORE SPACE THAN LISTED RECOMMENDED CLEARANCES.

Innovent
Air Handling Equipment

DESCRIPTION: UNIT DRAWING	MODEL #: NDHU-OU-PL-46800-HW-460
TAG # PDU-1	
PROJECT: Juneau Dimond Park Aquatic Center	PROJECT # 23[illegible]10
DATE: 9/22/2023	ENGINEER: M. KAHLE
	REV: 3

Air Handling Unit Replacement
CBJ Dimond Park Aquatic Center
Juneau, Alaska

Construction Cost Estimate
Concept Design Submittal
October 25, 2023

ESTIMATIONS
1225 E. International Airport Road, Suite 235
Anchorage, Alaska 99518
907.561.0790

Prepared for:
Alaska Energy Engineering, LLC
25200 Amalga Harbor
Juneau, Alaska 99801
907.789.1226

Air Handling Unit Replacement
CBJ Dimond Park Aquatic Center
Prepared for Alaska Energy Engineering, LLC by Estimations

Construction Cost Estimate
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Documents

AHU-1 Innovent Submittal.pdf
Dimond Park Aqautic Center Drawings.pdf
DPAC AHU-1 Replacement Scope of Work.pdf
DPAC Drawings.pdf

Notes and Assumptions

1 Based on 2024 procurement/2024 construction.
2 Labor rates based on Davis Bacon, 50 hours/week.
3 Assumes open competitive bid procurement.
4 Materials storage area will be designated near the building.
5 Local contractor.

Air Handling Unit Replacement

CBJ Dimond Park Aquatic Center

Prepared for Alaska Energy Engineering, LLC by Estimations

Construction Cost Estimate

Concept Design Submittal

October 25, 2023

Description	Estimated Cost	Estimated Cost Plus Contingency & Escalation	Div.
Basic Bid			
01 - GENERAL REQUIREMENTS	$412,767	$505,536	1
02 - EXISTING CONDITIONS	$4,690	$5,744	2
05 - METALS	$5,349	$6,551	5
07 - THERMAL & MOISTURE PROTECTION	$11,179	$13,691	7
09 - FINISHES	$3,621	$4,435	9
21 - FIRE SUPPRESSION	$8,750	$10,717	21
23 - HVAC	$1,303,432	$1,596,378	23
26 - ELECTRICAL	$14,662	$17,957	26
31 - EARTHWORK	$10,943	$13,402	31
Total Estimated Cost - Basic Bid:	**$1,775,393**	**$2,174,413**	**<<<<<**

Estimating Contingency:			15.0%	
Escalation For Inflation:	12 Mths	@	6.5%	6.5%

Air Handling Unit Replacement

CBJ Dimond Park Aquatic Center

Prepared for Alaska Energy Engineering, LLC by Estimations

Construction Cost Estimate

Concept Design Submittal

October 25, 2023

Line No.	Description	Qty	UNITS	Material Costs Unit	Material Costs Total	Labor Hours Units	Labor Hours Totals	Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
1	**01 - GENERAL REQUIREMENTS**										
2											
3	**Project Management**										
4	Project Manager, 16 Hour/Week	15	WEEKS			16.000	240.0	$19,488		$19,488	$19,488
5	Supervisor, 50 Hour/Week	13	WEEKS			50.000	650.0	$52,780		$52,780	$52,780
6	Time Keeper/Cost Control, 8 Hour/Week	13	WEEKS			8.000	104.0	$5,429		$5,429	$5,429
7											
8	**Small Tools & Consumables**										
9	Consumables	1	LS	$3,200.00	$3,200					$3,200	$3,200
10	Small Tools	1	LS	$3,550.00	$3,550					$3,550	$3,550
11											
12	**Mobilization**										
13	Mobilization/Demobilization	1	LS	$1,000.00	$1,000	60.000	60.0	$6,340	$1,500	$8,840	$8,840
14											
15	**Equipment**										
16	Pickup (2 Ea)	13	WEEKS						$4,875	$4,875	$4,875
17	Forklift (1 Ea)	13	WEEKS						$11,050	$11,050	$11,050
18	Flatbed (1 Ea)	13	WEEKS						$19,500	$19,500	$19,500
19	High Lift Manlift (1 Ea)	13	WEEKS						$19,500	$19,500	$19,500
20	Craning Included In Division 23										
21											
22	**Other Requirements**										
23	Shop Drawings	100	HRS			1.000	100.0	$10,567		$10,567	$10,567
24	Quality Control	1	LS	$1,000.00	$1,000	40.000	40.0	$2,320		$3,320	$3,320
25	Temporary Facilities	3	MTHS								
26	Project Office Trailer	3	MTHS						$4,500	$4,500	$4,500
27	Office Equipment/Supplies	3	MTHS	$500.00	$1,500					$1,500	$1,500
28	Project Tool Sheds	3	MTHS						$600	$600	$600
29	Project Safety Equipment	1	LS	$1,780.00	$1,780					$1,780	$1,780
30											
31											
32											

Air Handling Unit Replacement
CBJ Dimond Park Aquatic Center
Prepared for Alaska Energy Engineering, LLC by Estimations

Construction Cost Estimate
Concept Design Submittal
October 25, 2023

Line No.	Description	Qty	UNITS	Material Costs Unit	Material Costs Total	Labor Hours Units	Labor Hours Totals	Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
33											
34	Temporary Services										
35	Chemical Toilets	3	MTHS	$690.00	$2,070					$2,070	$2,070
36	Electrical - Connection	1	EA	$2,500.00	$2,500					$2,500	$2,500
37	Electrical	3	MTHS	$350.00	$1,050					$1,050	$1,050
38											
39	Cleaning										
40	Progressive	13	WK	$4.00	$52	4.000	52.0	$5,495		$5,547	$5,547
41	Final	1	MSF	$800.00	$800					$800	$800
42											
43	Dumpsters (1 Ea)	3	MTHS	$1,400.00	$4,200					$4,200	$4,200
44											
45	Survey For Access Road	1	LS	$5,000.00	$5,000					$5,000	$5,000
46											
47	Construction Fence	400	LF	$15.00	$6,000					$6,000	$6,000
48											
49	Record Documents	1	LS	$4,000.00	$4,000					$4,000	$4,000
50	Operations and Maintenance Manuals	1	LS	$3,500.00	$3,500	24.000	24.0	$1,392		$4,892	$4,892
51	Contract Closeout and Training	1	LS	$2,500.00	$2,500					$2,500	$2,500
52	Certified Payroll Fee	1	LS	$2,964.34	$2,964					$2,964	$2,964
53											
54											
55											
56											
57											
58											
59	**General Contractor Profit (Fee)**	10.0%									$157,463
60	**General Contractor Bond & Insurance**	2.5%									$43,302
61											
62	**Subtotal: 01 - GENERAL REQUIREMENTS**				$46,666		1,270.0	$103,811	$61,525	$212,002	**$412,767**
63											
64											

Air Handling Unit Replacement | **Construction Cost Estimate**

CBJ Dimond Park Aquatic Center | **Concept Design Submittal**

Prepared for Alaska Energy Engineering, LLC by Estimations | **October 25, 2023**

Line No.	Description	Qty	UNITS	Material Costs Unit	Material Costs Total	Labor Hours Units	Labor Hours Totals	Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
65											
66	**02 - EXISTING CONDITIONS**										
67											
68	**02 41 00 Demolition**										
69	Demo Exterior Wall For Access To Remove/Place New AHU - 20X18	360	SF								
70	Metal Siding - Salvage	360	SF			0.057	20.5	$2,166		$2,166	$2,166
71	GWB	360	SF			0.014	5.0	$528		$528	$528
72	Metal Stud Framing	360	SF			0.021	7.6	$803		$803	$803
73	Insulation	360	SF			0.010	3.6	$380		$380	$380
74											
75	Debris Handling & Disposal	1	TONS			4.000	4.0	$418		$418	$481
76	Hauling and Dump Fees	1	TONS	$150.00	$150	1.000	1.0	$104	$35	$289	$332
77											
78											
79											
80											
81	**Subtotal: 02 - EXISTING CONDITIONS**				$150		41.7	$4,399	$35	$4,584	**$4,690**
82											
83											
84											
85	**05 - METALS**										
86											
87	**05 40 00 Cold-Formed Metal Framing**										
88	Wall Framing	360	SF	$2.50	$900	0.060	21.6	$2,615		$3,515	$4,042
89	Wall Framing at Louver Reinstall	1	LS	$250.00	$250	10.000	10.0	$1,057		$1,307	$1,307
90											
91											
92											
93											
94	**Subtotal: 05 - METALS**				$1,150		31.6	$3,672		$4,822	**$5,349**
95											
96											

Air Handling Unit Replacement | **Construction Cost Estimate**

CBJ Dimond Park Aquatic Center | **Concept Design Submittal**

Prepared for Alaska Energy Engineering, LLC by Estimations | **October 25, 2023**

Line No.	Description	Qty	UNITS	Material Costs Unit	Material Costs Total	Labor Hours Units	Labor Hours Totals	Labor Cost	Equip Cost	Total Cost	Total Cost w/ OH & P
97											
98	**07 - THERMAL & MOISTURE PROTECTION**										
99											
100	**07 21 13 Building Insulation**										
101	Wall Insulation	360	SF	$3.00	$1,080	0.021	7.6	$684		$1,764	$2,029
102											
103	**07 26 13 Vapor Retarders**										
104	Raven Industries Rocco 450	360	SF	$0.65	$234	0.006	2.2	$232		$466	$466
105											
106	**07 27 13 Air Retarders**										
107	Air Barrier - Vaproshield, WrapShield Self-Adhered Water-Resistive	360	SF	$1.80	$648	0.004	1.4	$148		$796	$796
108											
109	**07 42 13 Metal Wall Panels**										
110	Reinstall Metal Panels	360	SF	$1.00	$360	0.086	31.0	$3,590		$3,950	$4,543
111											
112	**07 62 00 Sheet Metal Flashing and Trim**										
113	Flash at Louvers	60	LF	$7.20	$432	0.100	6.0	$595		$1,027	$1,181
114	Misc Flashings	76	LF	$7.20	$547	0.057	4.3	$426		$973	$1,119
115											
116	**07 92 00 Joint Sealants**	**1**	**LS**	$200.00	$200	8.000	8.0	$845		$1,045	$1,045
117											
118											
119											
120											
121											
122											
123											
124											
125											
126	**Subtotal: 07 - THERMAL & MOISTURE PROTECTION**				$3,501		60.5	$6,520		$10,021	**$11,179**
127											
128											

Air Handling Unit Replacement
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129											
130	**09 - FINISHES**										
131											
132	**09 29 13 Gypsum Board**										
133	GWB 5/8" Walls	360	SF	$0.55	$198	0.034	12.2	$1,305		$1,503	$1,728
134											
135	**09 91 00 Painting**										
136	Paint	360	SF	$0.35	$126	0.043	15.5	$1,520		$1,646	$1,893
137											
138											
139											
140											
141											
142											
143	**Subtotal: 09 - FINISHES**				$324		27.7	$2,825		$3,149	**$3,621**
144											
145											
146											
147	**21 - FIRE SUPPRESSION**										
148											
149	**21 13 00 Fire-Suppression Sprinkler Systems**										
150	Allow For Reconfigure Of Sprinkler Head To Assure Coverage With New Equipment and Duct Locations	1	EA	$7,000.00	$7,000					$7,000	$8,750
151											
152											
153											
154											
155											
156											
157	**Subtotal: 21 - FIRE SUPPRESSION**				$7,000					$7,000	**$8,750**
158											
159											

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160											
161	**23 - HVAC**										
162											
163	**23 05 05 HVAC Demolition**										
164	Demo Duct RA 50/18	23	LF			0.696	16.0	$1,716		$1,716	$2,231
165	Demo Duct EA 90/30	12	LF			2.000	24.0	$2,574		$2,574	$3,346
166	Demo Duct OA 36/24	7	LF			1.143	8.0	$858		$858	$1,115
167	Demo Duct SA 44" Dia	36	LF			1.111	40.0	$4,291		$4,291	$5,578
168	Demo Duct SA 54" Dia	20	LF			0.800	16.0	$1,716		$1,716	$2,231
169	Demo RA 48" Dia	14	LF			0.800	11.2	$1,201		$1,201	$1,561
170	Demo Plenum Osa 9'X6'	1	EA			16.000	16.0	$1,716		$1,716	$2,231
171	Disc Connect Controls	30	EA			1.000	30.0	$3,218		$3,218	$4,183
172	Remove Louvers 9'x6' - Salvage	2	EA			25.714	51.4	$5,513		$5,513	$7,167
173	Disc Connect Misc Ductwork	6	EA			4.000	24.0	$2,574		$2,574	$3,346
174	Remove Ahu, Craning Included With New Installation See 23 73 00	240	HRS			1.000	240.0	$25,743		$25,743	$33,466
175											
176	**23 05 48 Seismic Control**	**1**	**EA**	$2,000.00	$2,000	16.000	16.0	$1,716		$3,716	$4,831
177											
178	**23 05 53 Identification**	**1**	**EA**	$200.00	$200	16.000	16.0	$1,716		$1,916	$2,491
179											
180	**23 05 93 Testing Adjusting and Balancing**	**1**	**EA**	$52,500.00	$52,500					$52,500	$76,125
181											
182	**23 07 00 HVAC Insulation**										
183	**Pipe Insulation, Minimal**	**1**	**LS**	$200.00	$200	8.000	8.0	$862		$1,062	$1,540
184											
185	**Ductwork Insulation**										
186	2" Thick (Typical For O/A Ducts)	337	SF	$4.00	$1,348	0.080	27.0	$2,910		$4,258	$6,174
187	1" Thick (Typical For S/A Ducts)	692	SF	$2.00	$1,384	0.075	51.9	$5,593		$6,977	$10,117
188											
189	**23 09 00 Instrumentation & Control for HVAC**										
190	Building Controls	30	PT	$1,600.00	$48,000					$48,000	$48,000

Air Handling Unit Replacement | **Construction Cost Estimate**

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191											
192	**23 21 13 Hydronic Piping**										
193	Reconnect To Heating Coil 3"	1	EA	$3,500.00	$3,500	40.000	40.0	$4,185		$7,685	$9,606
194											
195	**23 31 13 Ducts**										
196	Round Spiral, Galvanized	2,351	LBS	$5.14	$12,084	0.077	181.0	$19,415		$31,499	$40,949
197	Rectangular, Galvanized	1,127	LBS	$7.71	$8,688	0.116	130.7	$14,019		$22,707	$29,519
198											
199	**23 33 00 Duct Accessories**										
200	Reinstall Louvers, Modify Exterior Wall Will Be Required	2	EA	$500.00	$1,000	30.857	61.7	$6,618		$7,618	$9,903
201											
202	**23 73 00 Air Handlers**										
203	AHU-1 Inovent Units With Plat Heating and Cooling Exchangers, Supply Return Fans, Coils, Filters. Price Includes Shipping and Startup. Labor For Setting and Assembly Onsite. Unit Will Be Installed In Sections.	1	EA	$560,000.00	$560,000	500.000	500.0	$53,632		$613,632	$797,722
204	Lifting With 2 Crane, Budget Number From Crane Contractor	1	EA	$200,000.00	$200,000					$200,000	$200,000
205											
206											
207											
208											
209											
210											
211											
212											
213	**Subtotal: 23 - HVAC**				$890,904		1,508.9	$161,786		$1,052,690	**$1,303,432**
214											
215											

Air Handling Unit Replacement | **Construction Cost Estimate**

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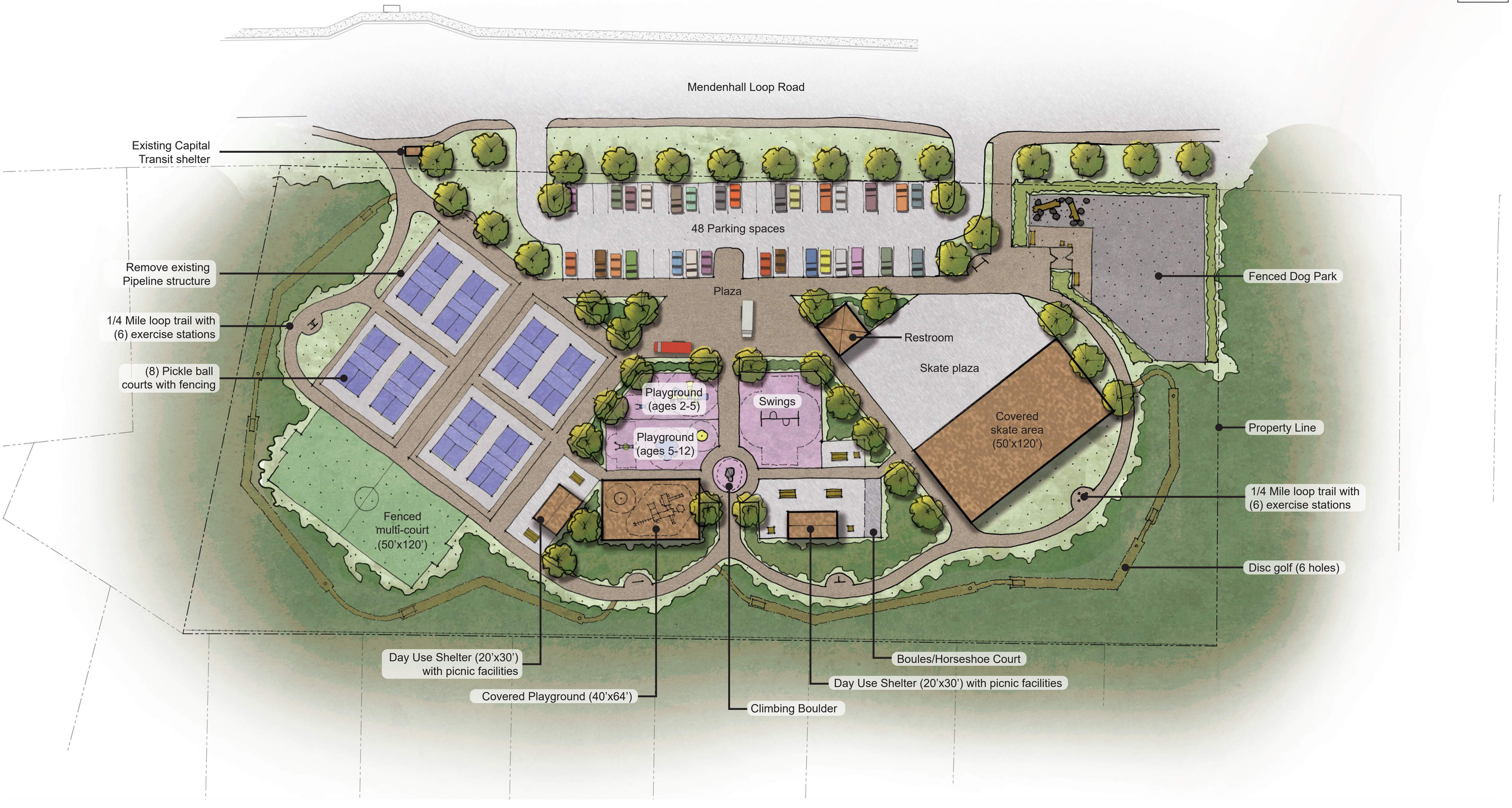
216											
217	**26 - ELECTRICAL**										
218											
219	**26 05 05 Electrical Demolition**										
220	Demo VFD for AHU-1	2	EA			8.000	16.0	$1,718		$1,718	$2,233
221	Demo Feed to VFD	2	EA			8.000	16.0	$1,718		$1,718	$2,233
222	Demo Feed VFD to AHU	2	EA			4.000	8.0	$859		$859	$1,117
223											
224	**26 05 09 Conductors**										
225	**Feeders & Subfeeds**										
226	100 Amp: 1-1/4" EMT, 4#2, 1#8	100	LF	$19.10	$1,910	0.150	15.0	$1,585		$3,495	$3,495
227											
228	**26 29 23 Variable Frequency Drives**										
229	Install Cost, VFD Included With Inovent Package	2	EA			20.000	40.0	$4,295		$4,295	$5,584
230											
231	**Subtotal: 26 - ELECTRICAL**				$1,910		95.0	$10,175		$12,085	**$14,662**
232											
233											
234											
235	**31 - EARTHWORK**										
236											
237	**31 23 00 Excavation and Fill**										
238	**Access Road**	**1,500**	**SF**								
239	Excavation, 2 Ft	133	CY			0.014	1.9	$198	$274	$472	$543
240	Haul Exc To Waste	133	CY	$10.00	$1,333	0.029	3.9	$407	$480	$2,220	$2,553
241	Classified Fill, 2 Ft	222	TONS	$10.00	$2,222	0.091	20.2	$2,109	$1,013	$5,344	$6,146
242	D-1 6"	56	TONS	$12.50	$694	0.091	5.1	$532	$253	$1,479	$1,701
243											
244											
245	**Subtotal: 31 - EARTHWORK**				$4,249		31.1	$3,246	$2,021	$9,516	**$10,943**
246											
247											



CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
PARKS & RECREATION

JACKIE RENNINGER PARK
Preferred Master Plan

0 30 60 120'

REV: 12/13/2024

Corvus Design
Landscape Architecture • Planning • Industrial Design