

February 7, 2024

Ms. Neepaporn Bounjaktha  
Executive Director of  
Economic Development  
Snohomish County  
3000 Rockefeller Avenue,  
M/S 607  
Everett, Washington 98201

**Snohomish County  
Applied Sustainable Aviation Evaluation  
HLP-MAWA(012)  
2023 Move Ahead Washington**

Dear Ms. Bounjaktha:

The above project has received fund authorization, effective February 1, 2024, as follows:

<b>PHASE</b>	<b>TOTAL</b>	<b>STATE SHARE</b>
Planning/Design	\$6,500,000	\$6,500,000

Enclosed for your information and file is a fully executed copy of Local Programs State Funding Agreement LA10798 between WSDOT and your agency. All costs exceeding those shown on this agreement are the sole responsibility of your agency.

All future correspondence relating to the project is to be submitted to your Region Local Programs Engineer, Mehrdad Moini.

Sincerely,

*Stephanie Tax*

Stephanie Tax  
Manager, Program Management  
Local Programs

ST:jg:ml  
Enclosures

cc: Mehrdad Moini, Northwest Region Local Programs Engineer, MS NB82-121  
Simreet Dhaliwal, Snohomish County



**Washington State  
Department of Transportation**

<b>Local Programs State Funding Agreement</b>		Agency and Address
Work by Public Agencies		Snohomish County  3000 Rockefeller Ave, Everett, WA 98201
Agreement Number <b>LA 10798</b>	Maximum Amount Authorized \$6,500,000.00	Location and Description of Work (See also Exhibit "A")  Snohomish County Airport (that is, Paine Field [PAE]) The R&D Center will consist of a fuel repository capable of holding large volumes of experimental fuels and a combustion testing facility.
Participating Percentage <b>100%</b>	Project Number <b>HLP-MAWA(012)</b>	

This AGREEMENT is made and entered into between the STATE OF WASHINGTON, Department of Transportation, acting by and through the Secretary of Transportation, hereinafter called the "STATE," and the above named organization, hereinafter call the "AGENCY."  
 WHEREAS, the AGENCY is planning the work shown above, and in connection therewith, the AGENCY has requested financial assistance for the project or program, and  
 WHEREAS, the AGENCY has requested funds for the above shown project or program, which has been selected by the STATE for funding assistance.  
 NOW THEREFORE, in consideration of the terms, conditions, covenants, and performances contained herein, or attached and incorporated and made a part hereof, IT IS MUTUALLY AGREE AS FOLLOWS:

Type of Work		Estimate of Funding		
		(1) Estimated Total Project Funds	(2) Estimated Agency Funds	(3) Estimated State Funds
PE	a. Agency	\$ 2,041,692.00		\$ 2,041,692.00
	b. Other Consultants	\$ 4,458,308.00		\$ 4,458,308.00
	c. Other			
	d. State Services			
	e. Total PE Cost Estimate (a+b+c+d)	\$ 6,500,000.00	\$ 0.00	\$ 6,500,000.00
Right of Way	f. Agency			
	g. Other			
	h. Other			
	i. State Services			
	J. Total R/W Cost Estimate (f+g+h+i)	\$ 0.00	\$ 0.00	\$ 0.00
Construction	k. Contract			
	l. Other			
	m. Other			
	n. Other			
	o. Agency			
	p. State Services			
	q. Total CN Cost Estimate (k+l+m+n+o+p)	\$ 0.00	\$ 0.00	\$ 0.00
	r. Total Project Cost Estimate (e+j+q)	\$6,500,000.00	\$ 0.00	\$ 6,500,000.00

**I  
General**

The AGENCY agrees to perform the above described work in accordance with the Project Application attached hereto as "Exhibit A" and made a part of this AGREEMENT.

Plans, specifications, and cost estimates shall be prepared by the AGENCY in accordance with the current State of Washington Standard Specifications for Road, Bridge, and Municipal Construction and adopted design standards, unless otherwise noted. The AGENCY will incorporate the plans and specifications into the AGENCY's project and thereafter advertise the resulting project for bid and, assuming bids are received and a contract is awarded, administer the contract, or if the project is of a size which the AGENCY is authorized to perform with its own forces under the laws of the State of Washington, the AGENCY may proceed with its own forces.

All work performed under this AGREEMENT shall comply with the applicable provisions of state law.

**II  
Payment**

The STATE, in consideration of the faithful performance of the work to be performed by the AGENCY, agrees to reimburse the AGENCY for the percentage of the actual direct and related indirect cost of the work shown above, up to the "MAXIMUM AMOUNT AUTHORIZED". The agency will comply with Governmental Accounting Auditing and Financial Reporting Standards and applicable state law and local regulations, policies and procedures. No payment will be made for work done prior to execution of this AGREEMENT.

Partial payments shall be made by the STATE, upon request of the AGENCY, to cover costs incurred. These payments are not to be more frequent than one (1) per month. It is agreed that any such partial payment will not constitute agreement as to the appropriateness of any item and that, at the time of the final audit, all required adjustments will be made and reflected in a final payment. The AGENCY agrees to submit a final bill to the STATE within forty-five (45) days after the AGENCY has completed work.

The AGENCY agrees that all costs in excess of the amount authorized and the AGENCY's matching funds shall be the responsibility of the AGENCY.

**III  
Audit**

The AGENCY agrees that an audit may be conducted by the STATE. During the progress of the work and for a period not less than three (3) years from the date of final payment to the AGENCY, the records and accounts pertaining to the work and accounting thereof are to be kept available for inspection and audit by the STATE and copies of all records, accounts, documents, or other data pertaining to the project will be furnished upon request. If any litigation, claim, or audit is commenced, the records and accounts along with supporting documentation shall be retained until all litigation, claim, or audit finding has been resolved even though such litigation, claim, or audit continues past the three-year retention period.

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT on the day and year last written below.

**AGENCY** **Boungjaktha,**  
By: Neepaporn  
Digitally signed by Boungjaktha, Neepaporn  
Date: 2024.01.25 15:02:49 -08'00'

Title:

Agency Date: \_\_\_\_\_

**IV  
Legal Relations**

No liability shall attach to the AGENCY or the STATE by reason of entering into this AGREEMENT except as expressly provided herein.

**V  
Nondiscrimination**

The AGENCY agrees to comply with all applicable state and federal laws, rules, and regulations pertaining to nondiscrimination and agrees to require the same of all subcontractors providing services or performing any work using funds provided under this AGREEMENT.

**VI  
Venue**

For the convenience of the parties to this AGREEMENT, it is agreed that any claims and/or causes of action which the AGENCY has against the STATE, growing out of this AGREEMENT or the project or program with which it is concerned, shall be brought only in the Superior Court for Thurston County.

**VII  
Termination**

The Secretary of the Department of Transportation may terminate this AGREEMENT if the funding becomes unavailable or if the Secretary determines that it is in the best interest of the STATE.

**VIII  
Final Report and Final Inspection**

Within ninety (90) days following the completion of the project and submission of the final billing for the project, a final report and/or final inspection shall be submitted to the Director, Highways & Local Programs containing the following information:

Non-Capital Projects

1. A description of the project or program.
2. A summary of actual costs of the project or program.
3. An evaluation of the project or program. This should address aspects such as transportation and/or other benefits to the public.

Capital Projects

1. A final inspection is required.

**IX  
Supplement**

This agreement may be modified or supplemented only in writing by Parties. II Payment – is supplemented as detailed in attached Exhibit B.

**STATE**  
By: Stephanie Tax  
Digitally signed by Stephanie Tax  
Date: 2024.02.01 14:28:41 -08'00'

Director, Local Programs

Date: \_\_\_\_\_



Agency <b>Snohomish County</b>		Federal Aid Project Number <b>NA</b>	
Project Title <b>Sustainable Aviation Fuel Research &amp; Development Center at Paine Field Airport</b>			
Federal Funding Program <b>NA</b>		Amount <b>NA</b>	
Matching Funds <b>NA</b>		Total Amount <b>\$6,500,000.00</b>	
Project Area  <p>The R&amp;D Center will be constructed at the Snohomish County Airport (that is, Paine Field [PAE]) (approximate coordinates: 47°54'02.1"N 122°17'15.2"W). Snohomish County Airport PAE is a publicly owned airport located 6 miles southwest of the central business district of Everett, Washington and 30 miles north of downtown Seattle. PAE supports 158,227 jobs and has a total economic impact and business revenue of \$59.9 billion annually. The airport is most notably home to over 500 aircraft, including small single-engine recreational aircrafts, corporate jets, and vintage warbirds. Notably, PAE is the Boeing Company's primary production facility for 747-, widebody 7867-, 777-, and 787-series aircrafts and will begin producing 737 series aircraft by 2025. The airport offers high-quality aviation facilities, including an FAA tower, Category 1 2 Instrument Landing System (Cat 2 ILS), Part 139 certification, FBO services, and goods access to Seattle, Bellevue, and Redmond. In 2019, Paine Field began offering scheduled commercial service to destinations around the country. The airport is also home to the Boeing Future of Flight Aviation Center.</p>			
Background  <p>For nearly 50 years, Snohomish County has been home to commercial aerospace manufacturing and assembly. The industry employs more than 30,000 workers and develops cutting-edge innovations in aerospace and advanced manufacturing technology. The continued success of commercial aviation depends on addressing the industry's carbon emissions that contribute to global climate change. To ensure the long-term sustainability of the aerospace industry, and high-quality careers and opportunities for generations to come, Snohomish County and its partners are launching an applied research and development center focused on developing sustainable aviation fuels that hold the promise of a low-carbon future for aerospace.</p> <p>The Sustainable Aviation Fuels Research &amp; Development (SAF R&amp;D) Center is a partnership between Snohomish County and Washington State University (WSU) and leverages the presence of campuses in Everett, Tri-Cities, and Pullman. WSU has researchers from eight programs in three university colleges across its six-campus system working on SAF-related research. Together, with the Pacific Northwest National Laboratory (PNNL) in Richland, WSU co-leads the WSU-PNNL Bioproducts Institute. WSU and the Massachusetts Institute of Technology (MIT) also co-lead ASCENT, a national consortium of research universities, government agencies, national labs, and private entities convened by the Federal Aviation Administration (FAA). Snohomish County is confident that WSU's partnership will allow the R&amp;D Center to be launched successfully and efficiently.</p> <p>The R&amp;D Center at Paine Field will consist of a fuel repository capable of holding large volumes of experimental fuels and a combustion testing facility to test those fuels at jet engine scale. The fuel repository, combined with data stored remotely, would comprise the world's only sustainable aviation fuel repository to serve the global need for reference samples to support research. In effect, the repository will do for SAF development what seedbanks do for agricultural research. Samples will then be indexed, analyzed, and distributed worldwide, making the repository the world's unrivaled hub for primary information on properties, feedstock sources, pathway fuel batches and more.</p> <p>In addition, a new combustion test facility at Paine Field will be used to research and qualify new fuels to decarbonize locally produced aircraft worldwide. Experimental fuels will be tested there for safe aircraft operability at relevant conditions and scales. Novel fuel processing techniques will be pursued to maximize the amount of renewable carbon that can be put into SAF. Testing activities will facilitate commercialization, quality assurance, and support the distribution of samples with reference data retained by the repository.</p>			
Type of Study (check all that apply) <input type="checkbox"/> Region <input type="checkbox"/> Area <input type="checkbox"/> Corridor <input type="checkbox"/> Intersection <input checked="" type="checkbox"/> Design <input checked="" type="checkbox"/> Feasibility <input type="checkbox"/> Modeling <input type="checkbox"/> Other			

## Scope of Work

The SAF R&D Center project has been broken out into a series of tasks that represent different phases of the project.

### Task 1: Preliminary Project Planning & Construction of the Temporary Research Site

Snohomish County will retain a consultant to support the initial phases of developing an applied research and development center at the Snohomish County Airport to effectuate FAA's goals of SAF and FAST to develop a Sustainable Aviation Fuel Research Center (SAF R&D). While it is envisioned the development and establishment of the center will unfold over several phases, the process of knowledge gathering and facilitation of discussions between key partners is critical to understanding the potential viability of the R&D center and to support decision making by Snohomish County. Services performed under this task may include, but not be limited to:

- Initial fact finding and level setting with principal stakeholders.
- Facilities review to determine the viability of the proposed R&D center at Snohomish County Airport, Paine Field.
- Discussions around Technology focus, potential stakeholders, funding streams, facilities requirements, equipment requirements etc.
- Additional support for project as needed in contract time frame.

Task 1 also include the construction of the temporary SAF R&D Center structure located on a site at Paine Field (see figure 1).

Project scope includes a concrete slab for the structure, multiple storage and blending tanks with a total additive capacity of up to 60,000 gallons housed within a secure, fenced area with the required electrical service for power and lighting. Contractor will engage the services of specialists familiar with fuel processing and the required fire protection regulations.

Costs associated with Task 1 include:

- Purchase of SAF Storage Tanks and Equipment for the repository (to be utilized at both the temporary and permanent sites)
- Engineering for Temp Site - Jacobs Engineering has already been selected through a competitive RFP process

### Task 2: Permanent Site Design and Feasibility

Through a competitive bid process, Snohomish County select a firm to fully executive the design of the permanent SAF facility. All environmental review and permitting will be completed before the start of construction of the SAF facility and will occur concurrently with design.

Costs associated with Task 2 include:

- Design of the Permanent Facility
- Preliminary permitting
- Environmental study

### Task 3: Preliminary Construction of Facility

Snohomish County and partners will need to secure additional funding for the construction of the permanent SAF facility at Paine Field.

Costs associated with Task 3 include:

- Fund set aside for Federal Grants match, including but not limited to FAST SAF, ASCENT, and others

### Task 4: Operating & Administrative Costs

Snohomish County will have portions of staff from the Executive Office and Airport dedicated to this project.

Costs associated with benchmarking trips have also been included in Task 4.

## Public Involvement Plan

The project is built upon a well-tested model of collaboration, bringing together industry, academia and government. The Center will deliver advanced tools, techniques and technologies to industry partners; a world-class learning and R&D environment to academic partners; and economic prosperity and job growth to government. With support from a consultant, Snohomish County will build a business plan to demonstrate to the public the feasibility and long-term benefit of a collaborative SAF R&D Center. The project is supported by significant local and regional expertise in SAF, including County personnel and project partners at WSU.

Both the project budget and the project schedule have some contingency built in to ensure the project is constructed within the performance period to support public involvement. The County personnel already have the experience implementing a project of this type with the on-site temporary facility and will communicate this out to the public. Any concerns for public safety will be mitigated through extensive community input and risk analysis.

Environmental Considerations

Environmental review and permitting will be required for this project due to the proposed construction activities. The environmental review process has not yet begun and is a proposed task to be funded through the WSDOT grant award. To comply with all state and federal environmental requirements, the project will undergo NEPA and SEPA review before any ground-breaking activities. During the environmental review phase, all required permitting and approvals will be acquired.

TDM/TSM and Transit alternatives to be considered

NA

Land Use Implications

Site locations for both the Temporary and Permanent R&D Centers have been strategically selected at Snohomish County's Airport, Paine Field (PAE). This project fits within the scope of pertinent use of airport property and land. The proposed R&D Center is at the nexus point of ongoing commercial aerospace manufacturing and assembly, which provides the potential for future expansion. As a commercial service airport, fuelers at PAE currently dispense over 8,000,000 gallons of Jet A annually, primarily to airlines, Boeing and corporate jet operators. An ancillary benefit of this project exists to transition portions of the on-airport existing Jet A demand to SAF rapidly.

Any additional land use implications will be further identified in the environmental study, permitting and design phase of this project.

Project Schedule

Project Agreement End Date \_\_\_\_\_

FY 2024

Q1

NA

Q2

Task 4: Ongoing Operations & Administrative Costs

Q3

Task 1: Business Plan Support | Engineering of Temp Site | SAF Storage Tanks & Equipment for Temp Site

Task 2: RFP to Select Design Firm for Permanent Site | Preliminary Environmental Study

Task 4: Ongoing Operations & Administrative Costs

Q4

Task 1: Business Plan Support | SAF Storage Tanks & Equipment for Temp Site

Task 2: Design of Permanent Site | Environmental Study

Task 4: Ongoing Operations & Administrative Costs

FY 2025

Q1

Task 1: Business Plan Support

Task 2: Design of Permanent Site

Task 4: Ongoing Operations & Administrative Costs

Q2

Task 1: Business Plan Support

Task 2: Design of Permanent Site

Task 3: Apply / cost match for additional grants for facility construction

Task 4: Ongoing Operations & Administrative Costs

Q3

Task 1: Business Plan Support

Task 2: Design of Permanent Site

Task 3: Apply / cost match for additional grants for facility construction

Task 4: Ongoing Operations & Administrative Costs

Q4

Task 1: Business Plan Support

Task 2: Design of Permanent Site

Task 3: Apply / cost match for additional grants for facility construction

Task 4: Ongoing Operations & Administrative Costs

Cost Breakdown By Task

Task 1: Preliminary Project Planning & Construction of Temporary Site

\$68,000 - SAF R&D Center Framework & Business Plan

\$409,438 - SAF Storage Tanks & Equipment

\$141,261 - Engineering for Temporary Site

TOTAL: \$618,699

Task2

\$3,999,046 - Design / permitting of Permanent Facility

\$250,000 - Environmental Study

TOTAL: \$4,249,047

Task 3

\$1,000,000 - Federal Grants Match

TOTAL: \$1,000,000

Task 4

\$632,254 - Operating & Administrative Costs

TOTAL: \$632,254

PROJECT TOTAL: \$6,500,000

Deliverable Final Products

Business Plan

Temporary Site

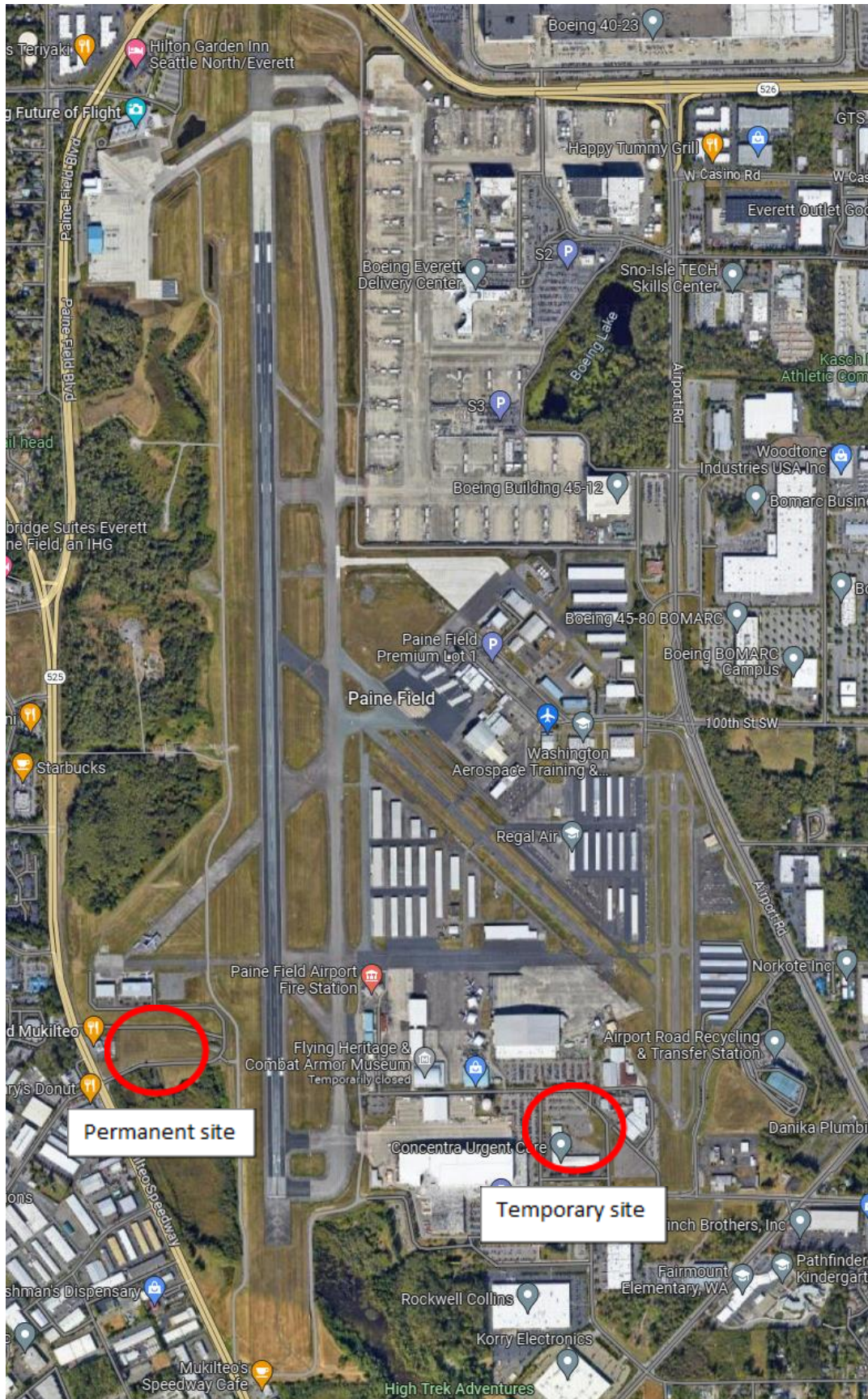
Permitting for Permanent Site

Design for Permanent Site

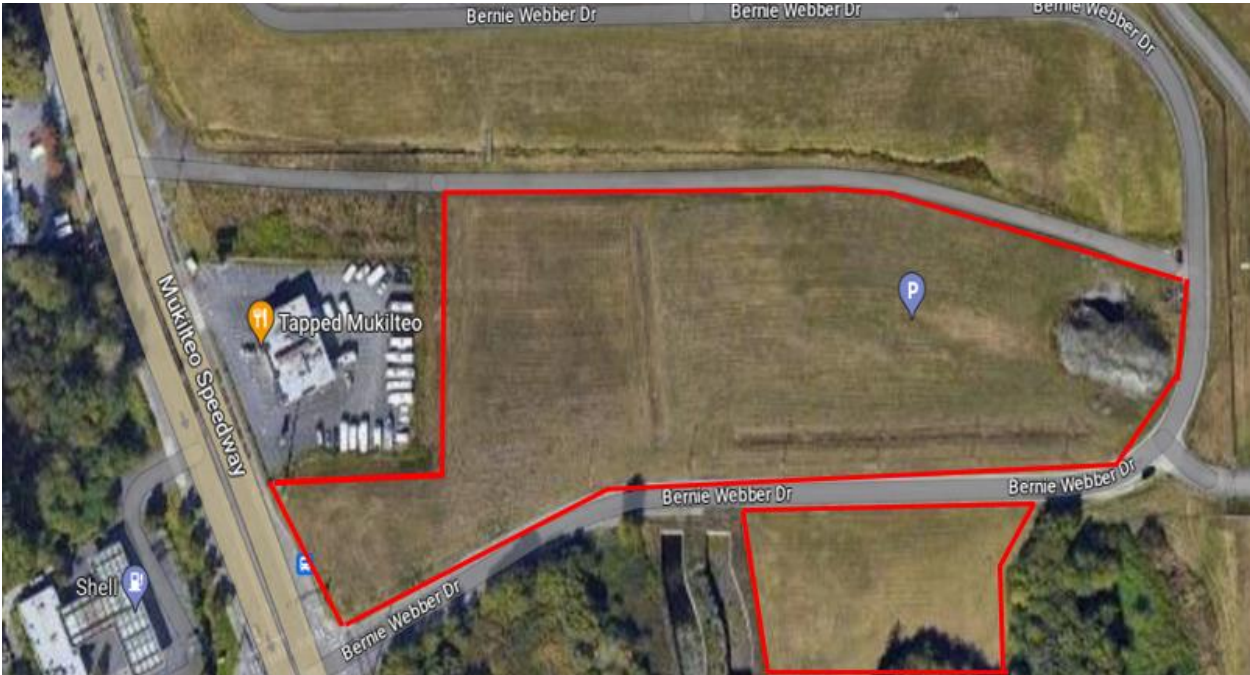
Environmental Study on Site Location



# Snohomish County Sustainable Aviation Fuel R&D Center Vicinity Map



Permanent Sustainable Aviation Fuel R&D Center Cite



**Snohomish County**  
**Applied Sustainable Aviation Evaluation**  
**HLP-MAWA(012)**

Exhibit B - Project Budget Estimate		FY 2024		FY 2025				TOTAL
		Q3	Q4	Q1	Q2	Q3	Q4	
<b>REVENUES:</b>								
Washington State Local Prgrms	Grant Reimbursement	\$ 888,356	\$ 847,095	\$ 1,167,376	\$ 867,376	\$ 1,416,376	\$ 1,313,422	
<b>TOTAL REVENUES:</b>		<b>\$ 888,356</b>	<b>\$ 847,095</b>	<b>\$ 1,167,376</b>	<b>\$ 867,376</b>	<b>\$ 1,416,376</b>	<b>\$ 1,313,422</b>	
<b>EXPENDITURES:</b>								
Task 1: Business Plan & Preliminary Work	SAF R&D Center Framework & Business Plan	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 11,000	\$ 9,000	\$ 68,000
	SAF Storage Tanks and Equipment	\$ 204,719	\$ 204,719	\$ -	\$ -	\$ -	\$ -	\$ 409,438
	Engineering for temp site	\$ 141,261	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 141,261
	<b>Subtotal</b>	<b>\$ 357,980</b>	<b>\$ 216,719</b>	<b>\$ 12,000</b>	<b>\$ 12,000</b>	<b>\$ 11,000</b>	<b>\$ 9,000</b>	<b>\$ 618,699</b>
Task 2: Permanent Site Design and Feasibility	Design of facility / permitting	\$ 300,000	\$ 400,000	\$ 650,000	\$ 750,000	\$ 900,000	\$ 999,047	\$ 3,999,047
	Environmental Study	\$ 125,000	\$ 125,000	\$ -	\$ -	\$ -	\$ -	\$ 250,000
	<b>Subtotal</b>	<b>\$ 425,000</b>	<b>\$ 525,000</b>	<b>\$ 650,000</b>	<b>\$ 750,000</b>	<b>\$ 900,000</b>	<b>\$ 999,047</b>	<b>\$ 4,249,047</b>
Task 3: Preliminary Construction of Facility	Federal Grants Match	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>Subtotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 400,000</b>	<b>\$ -</b>	<b>\$ 400,000</b>	<b>\$ 200,000</b>	<b>\$ 1,000,000</b>
Task 4: Operating & Administrative Costs	Administrative Costs	\$ 105,376	\$ 105,376	\$ 105,376	\$ 105,376	\$ 105,376	\$ 105,376	\$ 632,254
	<b>Subtotal</b>	<b>\$ 105,376</b>	<b>\$ 105,376</b>	<b>\$ 105,376</b>	<b>\$ 105,376</b>	<b>\$ 105,376</b>	<b>\$ 105,376</b>	<b>\$ 632,254</b>
<b>TOTAL EXPENDITURES:</b>		<b>\$ 888,356</b>	<b>\$ 847,095</b>	<b>\$ 1,167,376</b>	<b>\$ 867,376</b>	<b>\$ 1,416,376</b>	<b>\$ 1,313,422</b>	<b>\$ 6,500,000</b>

Ending Grant Balance \$ 6,500,000.00

- Consultant A
- Consultant B
- Consultant C
- Agency

\*Travel reimbursement will follow WSDOT and County requirements requirements  
 \*\*Any design elements provided are required to meet Washington State standard building code

\*Estimated Costs

**TASK 1: Business Plan & Temporary Facility**

<b>SAF R&amp;D Center Framework &amp; Business Plan</b>	
Business plan support will be required through the life of the project.	<b>\$ 68,000.00</b>

<b>SAF Storage Tanks and Equipment</b>					
<p>Construction of a temporary Sustainable Aviation Fuel (SAF) structure located on a site at Paine Field.</p> <p>Scope will include concrete slab for the structure, multiple storage and blending tanks with a total additive capacity of up to 60,000 gallons housed within a secure, fenced area with the required electrical service for power and lighting. Contractor will engage the services of specialists familiar with fuel processing and the required fire protection regulations.</p>					
	<b>Cost Estimates</b>			<b>Model # or Brand</b>	
20,000 gallon tank	57,713 ea	57,713		Base model, db wall, not including containment or electrical	
five fuel tanks 5,000 gallons ea.	26,454.45	132,272.25	Tankand barrel.com	Model # NB06000DWS096250	
Fork lift	40,000 ea	40,000.00	Used	Used/Veries	
Recirculation pump	1785.54 ea	1,785.54	Diesel-fuels.com	GP-602AC, 230V/50 Hz (AA0484)	
Blending tank, 10,000 gallons	36,521.46 ea	36,521.46	tankandbarrel.com	Model: NB10000DWB096250 (subject to review by WSU)	
2 Pallet jacks	752.63 ea	1,505.26	Grainger	DAYTON 2TUR3	
5 Fuel hand pumps	254.51 ea	1,272.55	Grainger	FILL-RITE Item # 48YA13 Model # FR150	
55 gallon drum dollies	104.58 ea	1,568.70	Grainger	Center Cap Item# 48J133 Model # 48J133	
55 gallon drum store racks	1045.07 ea	6,270.42	Grainger	Dayton drum rack	
200 - 55 gallon drums	207.47 ea	41,494	Grainger	Unlined transport drum Item # 476H49 Model # DRTU55-999	
3 - 95 gallon overpack salvage drum spill kit	977.00 ea	2,931	New Pig	95 gallon overpack, Item # UN1H2/Y345/S	
4 - Storm water drain spill covers	923.00 ea	3,692	New Pig	36" Drain blocker drain cover, Item # PLR404	
4 - quick response spill kits	655.00 ea	2,620	New Pig	Quick Response spill kit, Item # KIT2401	
10 - 4 drum containment pallets	461.00 ea	4,610	New Pig	4 drum poly spill containment pallet, Item # PAK210	
4 - 2 drum containment pallets	252.00 ea	1,008	New Pig	2 drum poly spill containment pallet, Item #PAK565	
Fork lift drum carrier	1223.60 ea	1223.6	Grainger	Item# 9WTR6 Mfr Model # 285A	
Temp storage site fencing, 750 feet	91.40 Per LF	72,950	All City Fence	7' chain link, W/ 3 strand barbed, plus swing gates	
<b>Sub total</b>				<b>409,438</b>	

<b>Engineering for temp site</b>	
Snohomish County will identifying and contract with a qualified third party consultant to conduct engineering for the temporary SAF R& D site.	<b>\$ 141,261</b>
Upon execution, contract will be sent to WSDOT.	

**TASK 2: Permanent Site Design & Feasibility**

<p><b>Design of facility / permitting</b></p> <p>Snohomish County will be seeking a design qualified consultant (A/E) firm to provide professional services to prepare specifications for a design/bid build stratagem for the construction under a design/ bid/build process of the Sustainable Aviation Fuel (SAF) Research &amp; Development Center at Paine Field.</p> <p>Construction costs for the permanent research &amp; development center are estimated to be between ~\$1000 to \$1500 per square foot. At least a portion of it will be specialized construction (engine test cells) and therefore more expensive than more typical industrial construction. So, a rough initial estimate of ~\$20-\$30M for a 20K sqft facility.</p> <p>Based on past projects, design of the facility is estimated to be about 10-15% of the construction cost of the facility. As a result, \$3 million has been reserved for the design phase and \$1 million has been reserved for preliminary permitting.</p>	<p><b>\$ 3,999,047</b></p>
<p><b>Environmental Study</b></p> <p>Holding dollars for preliminary site studies, including an environmental study.</p>	<p><b>\$ 250,000</b></p>

**Task 3: Preliminary Construction of Facility**

<p><b>Federal Grants Match</b></p> <p>Dollars have been set aside for a cash match for additional grants to support construction of the permanent SAF R&amp; D facility</p>	<p><b>\$ 1,000,000</b></p>
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**Task 4: Operating & Administrative Costs**

<p><b>Administrative Costs</b></p> <p>Below is an outline of the anticipated staff allocations of Snohomish County Executive Office and Airport staff to the SAF R&amp;D project.</p> <p>Admin costs also include information gathering benchmarking trips</p>																	
<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">PERSONNEL</th> <th style="text-align: right;">FTE</th> </tr> </thead> <tbody> <tr> <td>Program Manager - Vacant</td> <td style="text-align: right;">1</td> </tr> <tr> <td>Economic Development Specialist - Simreet Dhaliwal</td> <td style="text-align: right;">0.4</td> </tr> <tr> <td>Senior Fiscal Analyst - Trudy Soriano</td> <td style="text-align: right;">0.2</td> </tr> <tr> <td>Airport Grants Specialist - Vacant</td> <td style="text-align: right;">0.5</td> </tr> <tr> <td>Airport Business Manager - Nick Landgraff</td> <td style="text-align: right;">0.1</td> </tr> <tr> <td>Benchmarking trips</td> <td></td> </tr> <tr> <td style="border-top: 1px solid black;"><b>\$ 632,254</b></td> <td style="text-align: right; border-top: 1px solid black;"><b>2.2</b></td> </tr> </tbody> </table>	PERSONNEL	FTE	Program Manager - Vacant	1	Economic Development Specialist - Simreet Dhaliwal	0.4	Senior Fiscal Analyst - Trudy Soriano	0.2	Airport Grants Specialist - Vacant	0.5	Airport Business Manager - Nick Landgraff	0.1	Benchmarking trips		<b>\$ 632,254</b>	<b>2.2</b>	<p><b>\$ 632,254</b></p>
PERSONNEL	FTE																
Program Manager - Vacant	1																
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<b>\$ 632,254</b>	<b>2.2</b>																

Agency: Snohomish County

Project Title: **Applied Sustainable Aviation Evaluation**

**HLP-MAWA(012)**

Agreement Number:

### IX SUPPLEMENT

This agreement may be modified or supplemented only in writing by parties.

**II Payment** – is supplemented as detailed in attached Exhibit B.

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT on the day and year last written below.

**AGENCY**

**STATE**

**Boungjaktha,**

Digitally signed by Boungjaktha,  
Neepaporn  
Date: 2024.01.25 15:01:56 -08'00'

By: Neepaporn

By: *Stephanie Tax*

Director, Local Programs

Title:

Agency Date: \_\_\_\_\_

Date: 2/1/2024