WORK ORDER NO. 1 – SRE Broom-Phase II
Preliminary Design and Closeout Services – 17.01971

In accordance with this Work Order No. 1, made and entered into this 4th day of January, 2018, **ULTEIG ENGINEERS, INC.**, a North Dakota corporation (hereinafter "Ulteig") agrees to perform and complete the following services (the "Services") for **CITY OF MINOT** (hereinafter "Client"), in accordance with the terms and conditions of the Master Professional Services Agreement (the "Agreement"), dated July 27, 2016, all of which terms and conditions are incorporated herein by reference:

Project Location: Minot International Airport, Minot, ND

Project Description: SRE Broom-Phase II
Preliminary Design and Closeout Services

Scope of Services: (See Attachment A)

Services Compensation and Method of Payment:

Services Description	Services Compensation	Method of Payment
Preliminary Design	$ 1,550.00	Ulteig shall receive a Flat Fee
Closeout	$ 2,600.00	Ulteig shall receive a Flat Fee
Total Engineering Fees	$ 4,150.00	

Note: Ulteig shall commence work after the Owner has given notice to proceed. Ulteig shall commence billing of services as work progresses.

Additional Services Compensation and Method of Payment:

Schedule: (Estimated Dates-Subject to Change)

Description	Date
Engineering Agreement	January 15, 2018
Engineering Design Completed	May 1, 2018
Project Bid Date	June 1, 2018
*Project Award Date	July 15, 2018
*Notice to Proceed	July 15, 2018
*Equipment Delivery	January 1, 2019
Closeout Complete	March 1, 2019

*Contingent on award of FAA Grant

Other Considerations/Requirements:

- Closeout costs assumes that all projects list in the Pre-App will move forward and will be combined in the same grant.

The Signature Page Follows

ULTEIG ENGINEERS, INC.

BY:_____

Print Name:_____

Title: _____

CITY OF MINOT

BY:_____

Print Name:_____

Title:_____

Attachment A
Detail Scope of Services
SRE Broom – Phase II
Minot International Airport
Minot, ND
AIP No 3-38-0037-55-2018
January 2018

The construction of a larger commercial aircraft apron at MOT has significantly increased the size of the snow removal areas at the airport. Without providing a coinciding augmentation of the existing SRE inventory, this increased apron size implies a diminished capacity to remove snow as quickly and efficiently. The new SRE broom will replace one of the existing brooms the airport has in its snow removal fleet. The existing broom is a 1996 Sweepster broom. This broom is over 20 years old. The broom has served the airport well but is becoming aged. The manufacturer of the existing broom no longer produces this equipment and parts are impossible to attain. The new SRE broom will aid in effectively cleaning the pavement for the safety of air traffic after a snow event. The replacement of this equipment will enable the airport to meet Part 139 requirements. For more information see the Justification for a Four Wheel Drive Snow Removal Broom document.

Task A – Preliminary Design Services

1. **Project Scoping Meeting -**The engineer will attend a project scoping meetings. The engineer will plan for one in-person meeting for discussions about the project with FAA, NDAC and the airport.

2. **Project Development and Scoping-**The engineer will complete project development services. These services include review of the CIP, review of the ALP, assist with developing 10-20 year CIP, research project and equipment cost and also constructability. The engineer will scope the project for review by FAA and the Airport. The Airport and the FAA each will be provided with one (1) Adobe PDF format copy.

3. **Budget and Work Order** – The engineer will develop a project budget and work order based on the scope of work for the project for review by FAA and the Airport. The Airport and the FAA each will be provide with one (1) Adobe PDF format copy.

4. ~~**Internal Kickoff Meeting** -The project will be coordinated in house and tasks will be assigned to those working on the project and the project schedule will be discussed.~~

5. **Preliminary Schedule –** The engineer will develop a preliminary project schedule.

6. **Environmental Documentation –** The environmental documentation was previously completed. The environmental documentation will be reviewed and resubmitted as needed.

7. **Create and Submit FAA Pre-Application –** The engineer will develop the FAA grant pre-application. The pre-application will include the FAA pre-application checklist, FAA forms SF-424,

5100-100 Part II, III, IV, project schedule, project summary of costs, project justification, and project map (as needed).

8. **Design Report –** The project design report was previously completed. The report will be reviewed and resubmitted as needed.

9. **Preliminary Opinion of Costs -**A preliminary opinion of costs will be generated and updated as the project progresses. Equipment costs will be based on historical equipment costs and communication with equipment manufacturer(s).

10. **Preliminary Specifications –** The engineer will develop preliminary specifications. The specifications will include Legal and Procedural Documents and Technical Specifications.

11. ~~**QA/QC –** The engineer will perform in-house quality control and design review utilizing experienced personnel of the engineer. The engineer will provide independent analysis of the specifications and opinion of costs to ensure clarity, accuracy and completeness. All findings will be compiled and discussed by the team and the recommendations of the review team will be incorporated into the final equipment specifications, and opinion of costs.~~

12. ~~**Project Management -**The project will be managed throughout the preliminary design phase to adhere to the schedule and scope of work.~~

13. **Coordination with FAA and NDAC –** The engineer will complete coordination with the FAA and NDAC as needed during the project and as directed by the airport. It is anticipated that the majority of the coordination will be completed with phone and emails.

14. **Meetings / Conference Calls with MOT and Funding Agencies -** It is estimated that no in-person meetings will be required for this portion of the project. All communication will be handled by phone and email.

15. **Client / Project Coordination and Discussion –** The engineer will routinely update and coordinate the progress of the project with the client. The engineer will submit questions as needed to the client. It is anticipated that this will be completed with phone and emails.

Task B – Final Design and Bidding Services

No Final Design or Bidding Services are included with this scope of work.

Task C – Construction Administrative Services

No Construction Administrative Services are included with this scope of work.

Task D – Construction Observation Services

No Construction Observation Services are included with this scope of work.

Task E – Closeout Services

1. **Closeout Report** - The engineer will prepare and submit the final project close out report for all the projects for this FAA grant as required by FAA. The engineer will include in the closeout report all the general, fiscal, miscellaneous, engineer and equipment information, and the submissions/certifications listed on the FAA project closure summary checklist. The engineer will distribute one (1) copy of the project close out report to each the FAA, NDAC and the Airport.
2. ~~**Record Drawings –** Record drawings will developed by the engineer and an Adobe PDF will be sent to the FAA and the airport. A hard copy of the plans will be printed and sent to the airport.~~
3. ~~**AGIS Update –** The FAA AGIS Update will be performed for this project by the engineer.~~
4. **Equipment Final Review** – The engineer will attend a final equipment review meeting which will take place at the airport.

Task F – Expenses

The engineer will incur project related expenses during this project which may include but not limited to: meals, lodging, mileage costs, overnight shipping, plans, photocopies, photographic materials, equipment rental, miscellaneous vendor invoices. These expenses will be included in the engineer's contract with the Airport.

ULTEIG ENGINEERS, INC.
Project Budget Worksheet
SRE Broom PH II
Minot International Airport
Minot, North Dakota
17.01971

Task No.	Preliminary Design	Senior Engineer		Lead Engineer		Engineer		Design Engineer		Graduate Engineer		Senior Survey Technician		Survey Technician		Lead Engineering Technician		Associate Project Manager		Staff Support		Total	Total Direct Salary Cost
		Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	
1	Project Scoping Meeting	1	$193	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**1**	**$193**
2	Project Development and Project Scoping	1	$193	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**1**	**$193**
3	Budget and Work Order	1	$193	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**1**	**$193**
4	Internal Kickoff Meeting	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
5	Preliminary Schedule	1	$193	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**1**	**$193**
6	Environmental Documentation	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
7	Create and submit FAA Pre-Application	1	$193	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**1**	**$193**
8	Design Report	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
9	Preliminary Opinion of Costs	0.5	$97	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**1**	**$97**
10	Preliminary Specifications	0.5	$97	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**1**	**$97**
11	QA/QC	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
12	Project Management	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
13	Coordination with FAA & NDAC	0.5	$97	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**1**	**$97**
14	Meetings / conference calls with MOT and Funding Agencies	1	$193	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**1**	**$193**
15	Client / project coordination & discussion	0.5	$97	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**1**	**$97**
DIRECT SALARY COST		**8**	**$1,544**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**8**	**$1,544**
SUBCONTRACTOR FEE (QA TESTING)																							**$0**
SUBCONTRACTOR MARKUP		**10%**																					**$0**
PROJECT DIRECT TOTALS																							**$0**
PROJECT TOTAL COST																							**$1,544**

PROJECT DIRECT COSTS

No.	Item	Units	Rate	Total
1	Survey Vehicle	0	$0.75	**$0**
2	Car/Pickup by Mile	0	$0.57	**$0**
3	Printing & Postage	0	$50	**$0**
4	Meals	0	$60	**$0**
5	Motel	0	$125	**$0**
PROJECT DIRECT TOTALS				**$0**

ULTEIG ENGINEERS, INC.
Project Budget Worksheet
SRE Broom PH II
Minot International Airport
Minot, North Dakota
17.01971

Task		Senior Engineer		Lead Engineer		Engineer		Design Engineer		Graduate Engineer		Senior Survey Technician		Survey Technician		Lead Engineering Technician		Associate Project Manager		Staff Support		Total	Total Direct
No.	Closeout	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Cost	Hrs	Salary Cost
1	Report	0	$0	0	$0	0	$0	4	$552	0	$0	0	$0	0	$0	0	$0	1	$120	3	$225	**8**	**$897**
2	Record Drawings	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
3	AGIS update	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
4	Equipment Final Review	8	$1,544	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**8**	**$1,544**
5		0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
6		0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
7		0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
8		0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
9		0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
10		0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	**0**	**$0**
DIRECT SALARY COST		**8**	**$1,544**	**0**	**$0**	**0**	**$0**	**4**	**$552**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**0**	**$0**	**1**	**$120**	**3**	**$225**	**16**	**$2,441**
PROJECT DIRECT TOTALS																							**$144**
PROJECT TOTAL COST																							**$2,585**

PROJECT DIRECT COSTS

No.	Item	Units	Rate	Total
1	Survey Vehicle	0	$0.75	**$0**
2	Car/Pickup by Mile	255	$0.57	**$144**
3	Postage & Printing	0	$125	**$0**
PROJECT DIRECT TOTALS				**$144**