

Supplemental Letter Agreement

In accordance with the Master Agreement for Professional Services between City of Minot, North Dakota ("Client"), and Short Elliott Hendrickson Inc. ("Consultant"), effective 8/31/2021, this Supplemental Letter Agreement dated _____ authorizes and describes the scope, schedule, and payment conditions for Consultant's work on the Project described as: Taxiway C/C3 Rehabilitation and Edge Lighting - Design.

Client's Authorized Representative: Jennifer Eckman, Airport Director

Address: Minot International Airport (MOT)
305 Airport Road Suite 216, Minot ND 58703

Telephone: 701-857-4724 **email:** jennifer.eckman@minotnd.org

Project Manager: Lindsay Reidt, PE

Address: 3535 Vadnais Center Dr.
St. Paul, MN 55110-5196

Telephone: 763-370-4055 **email:** lreidt@sehinc.com

Scope: The Basic Services to be provided by Consultant are included in Attachment A.

Schedule: Services to be initiated at the direction of the City of Minot, with a service completion date no later than September 30, 2024. A schedule is included in Attachment A.

Payment: A retainer in the amount of \$0.00 will be paid in advance of Consultant starting work and will be applied to the final invoice(s). The lump sum fee is \$344,400.00 including expenses and equipment. See Attachment B reflecting the estimate of labor, fees, and expenses.

The payment method, basis, frequency, and other special conditions are set forth in attached Exhibit A-2.

Other Terms and Conditions: Other or additional terms contrary to the Master Agreement for Professional Services that apply solely to this project as specifically agreed to by signature of the Parties and set forth herein: None.

Short Elliott Hendrickson Inc.

By:



Shawn McMahon

Title: Regional Practice Center Leader

City of Minot, North Dakota

By:

Title:

ATTACHMENT A
Minot International Airport (MOT)
Minot, North Dakota
Taxiway C Rehabilitation
FAA AIP 3-38-0037-072-2024 AIP
Scope of Work - Design

General –This project includes the design and construction of a pavement rehabilitation of Taxiway C south of Runway 8/26, as well as Taxiway C3 west of Taxiway C. Dimensions and corresponding PCIs of each section are as follows:

Txy C (between Txy D & C4) – 2200' x 75', PCI 57
Txy C (between Tcy C4 & C6) – 1965' x 75', PCI 48
Txy C3 (between Txy B & C) – 920' x 75', PCI 46-48
Txy C3, (west of Txy B) – 485' x 75', PCI 39-53

This pavement is deteriorating and is in need of rehabilitation. The 2021 Pavement Condition Index (PCI) report for these sections range from 39 – 57, with the PCI projected to deteriorate to 31-52 by 2025, warranting rehabilitation. Pavement distresses noted in the last PCI inspection include alligator cracking, depressions, longitudinal and transverse cracking, raveling and weathering. The construction of the southern half of C South was completed in 2002, and the northern half of C south was last rehabilitated in 1998 (4" overlay). Last construction date for Taxiway C3 is 2002. Rehabilitation is necessary to provide adequate and safe access to and from Runway 13/31, the primary runway for the Minot International Airport.

Included in the project would be milling of the surface of the existing pavement section and installation of a new section of FAA P-401 Asphalt Surface course pavement, to re-establish the pavement crown and facilitate drainage. Additionally, the taxiway edge lights and circuitry would be replaced with state-of-the-art LED lighting. The specific number of fixtures and existing suitability will be evaluating in the Engineer's Design Report. The existing circuitry and light fixtures have exceeded their useful life and continue to pose ongoing maintenance challenges to the airport. **Per North Dakota Century Code (Section 48-01.2-06) the taxiway edge lighting portion of this project will be included as a separate bid package, including stand alone plans and specs.**

Contractor access is anticipated to be provided via a temporary haul road southwest of the project area. Alternative taxi routes can be provided during construction. See attached **Figure 1**. The phasing plan and schematics will be presented in the Engineer's Design Report.



Figure 1. Project Exhibit

Proposed project schedule:

March 18, 2024 – City of Minot consideration of Design contract

April 2024 – Submit Engineer's Design Report and CSPP to FAA

May 2024 – Final plans and specifications posted for bidding (Design contract complete)

June 2024 – Bid opening

June 2024 – City of Minot consider Construction Administration contract and Contract Award contingent upon grant reception

June 2024 – Grant application submittal

June 2024 – Start SEH Construction Administration contract

Summer 2025 – Construction

(Construction administration services, as well as completion of the grant closeout report, will be included in subsequent work orders.)

Taxiway C Rehabilitation (Design) - Project Deliverables – The project deliverables of this scope include the following:

1. Project Formulation
2. Engineer's Design Report
 - a. Including Construction Safety and Phasing Plan (CSPP) and Safety Plan Narrative
 - b. 7460/Airspace Submittal
3. Environmental determination (Categorical Exclusion)
4. Plan drawings
5. Bidding documents (separate bid sets for pavement and electrical)
6. FAA Plan and Specification review
7. Bidding and contract award recommendation
8. Project management and meetings

Work Element 1: Project Formulation

Task 1.1 – Scoping, Review, and Coordination – Short Elliott Hendrickson (SEH and/or Consultant) will coordinate with the Minot International Airport (MOT) (sponsor) to develop the appropriate scope of work approved by funding partners. Additional coordination will include task definition and establishment of project goals and objectives. The scope of work will be presented to FAA and NDAC for review and will be updated based on input received.

Task 1.2 – Project Formulation – SEH will complete the project and grant pre-application documentation, environmental review submittals, cost breakdowns, and eligibility determinations for the approved scope of work.

Work Element 2: Engineer's Design Report

Task 2.1 – Engineer's Design Report – Complete Engineer's Design Report according to FAA requirements and submit to FAA for review at 60%. The report will be completed with the following sections:

Scope of Work – SEH will develop a brief narrative of the work scope, delineation of eligible/ineligible work items, any unique or unusual situations, and historical background on the proposed project. Three meetings are estimated with sponsor and/or FAA to review the project.

Photographs – SEH will coordinate with MOT staff to capture photographs of representative areas of existing site conditions of the pavement. The photographs will be included within the report.

Applicable AIP Standards – All applicable AIP standards will be referenced in the report by FAA Advisory Circulars.

Airport Operational Safety Considerations – SEH will develop a preliminary Construction Safety and Phasing Plan (CSPP), and confirm with sponsor and FAA, to evaluate proposed phasing and sequencing, construction limits, haul routes, contractor staging areas, and anticipated impacts to airport users. All airport facilities, including approach procedures and navigational aids, will be evaluated for potential impacts due to construction. Special attention will be taken for the impacts at intersections, such as Taxiway D and Runway 8/26 and the connector from the GA apron to Taxiway B. Construction Safety and Phasing Plan and Safety Plan Narrative will be delivered to FAA for review and comment during EDR review process.

As part of the EDR completion and CSPP submittal, a list of local, airport, and FDC NOTAMS will be drafted.

Pavement Design – SEH will utilize the geotechnical information obtained during preliminary efforts, most recent PCI report date, and project as-built information to evaluate the current pavement condition and proposed design criteria. It is anticipated that varying mill depths and

overlay thicknesses may be utilized for each unique pavement section and will be analyzed throughout design. Where applicable, FAARfield analysis will be completed to validate the pavement design. Pavement thickness will be verified with FAA and the airport based on current fleet mix.

Drainage Design – Drainage away from taxiway pavement and intersections will be analyzed during design. Crowned slope improvements via profile milling or varying overlay thicknesses will be analyzed with previously obtained survey data. Initial requirements for grading will be discussed in the EDR.

Airfield Lighting and Signage – Airfield lighting and signage will be included in the design. Existing edge lighting and signage along Taxiway C and C3 will be analyzed for replacement needs. Additional impacted lights and signs will be identified for covering and/or deactivation during closures.

Navigational Aids – NAVAIDs are not anticipated to be impacted by the project, but full analysis will be included in design.

Pavement Marking – SEH will develop a preliminary pavement marking plan and details for affected work areas as part of reconstruction to be included as part of the report.

Environmental Considerations – SEH will complete a request for environmental Categorical Exclusion (CATEX) for the project. It is anticipated the a documented CATEX will be required. SEH will also identify necessary permits, including but not limited to NPDES and developing a Stormwater Pollution Prevention Plan (SWPPP) in concert with preliminary erosion control plans, if required for contractor to procure.

Existing Utilities – SEH will develop a drawing that identifies and delineates existing underground utilities in and adjacent to the project area.

Miscellaneous Work Items – SEH will provide a narrative to address other work components of the project, such as turf establishment, site access, and other related work items.

Benefit Cost Analysis – The proposed pavement will be bituminous. A detailed BCA will not be required.

Modification to AIP Design Standards – No modifications to design standards are anticipated, but this task will explore all preliminary design items to confirm that no modifications to design standards will be requested.

AIP Non-eligible Work Items – Any potential non-eligible work items will be identified. If non-eligible work items are identified, the process for separating these work components from eligible components will be addressed.

Disadvantaged Business Enterprise (DBE) – The current status of the Sponsor's DBE program and project requirements will be identified and included in the report.. SEH will assist Sponsor in determining goal and good faith effort determinations, as well as including specification language in bidding documents.

Project Schedule – SEH will develop a schedule and associated chart to identify the project schedule and milestones during the design and bidding process.

Engineer's Estimate of Probable Cost – SEH to provide an itemized summary of the engineer's estimate of probable construction costs. Any ineligible work components will be called out separately. Local, state, and federal funding sources will be shown.

Preliminary Project Budget – SEH will develop a preliminary project budget that will include anticipated engineering costs, construction costs, and administrative costs. Potential funding sources and prorations will also be included.

Work Element 3: Plan Drawings for Taxiway C and C3 Rehabilitation and Edge Lighting

Final design and plan drawings will be prepared in accordance with federal and state guidelines. FAA Advisory Circular (AC) 150/5300-13B, *Airport Design*, will be utilized in the development of the plan sets (two separate bid packages). Other applicable ACs, FAA

Orders, Regulations and Policy Memorandums will be used as needed. Specific tasks included with this work element include:

Task 3.1 – Environmental Coordination and Permits – SEH will refine the draft Stormwater Pollution Prevention Plan (SWPPP) and erosion control plans completed as part of the Engineer's Design Report. Additionally, the scope of work includes coordination of the following permits:

- North Dakota Pollution Discharge Elimination System permit application

Task 3.2 – Construction Safety and Phasing Plan Development – SEH will refine and update the preliminary Construction Safety and Phasing Plan (CSPP) that was developed as part of the Engineer's Design Report. SEH will meet with MOT staff, FAA staff (including ADO and Tech Ops), airfield tenants and users to evaluate potential risks and determine appropriate mitigation tactics. The preliminary CSPP will be enhanced to determine final phasing and sequencing, construction limits, haul routes, contractor staging areas, and anticipated impacts to airport users and airfield facilities. A review and coordination meeting will be held with MOT and FAA prior to 7460 submittal to limit closure times and impact to IFR procedures. A figure will include points of interest requested by FAA, including RSA, OFZ, and TOFA. A final CSPP will be uploaded for FAA airspace review via the 7460 OE/AAA review process.

Task 3.3 – Construction Plan Sheets – Specific plan sheets to be developed and included in the plan set are as follows:

3.3.1 - Plan Set 1 – Taxiway Rehabilitation

- Title Sheet
- Construction Safety Plan
- Construction Phasing Plan
- Terminal Access Route Plan
- Statement of Estimated Quantities
- Details and Construction Notes
- Utility Locations Plan, showing impacts to lights, sign, NAVAIDS, and markings.
- Typical Section(s)
- Removal Plan
- Erosion Control Plan and Details
- Topography/Grading Plan
- Plan/Profile drawings for new pavement
- Pavement Jointing Plan and Details
- Pavement Marking Plan and Details

3.3.2 - Plan Set 2 – Taxiway Lighting

- Title Sheet
- Construction Safety Plan
- Construction Phasing Plan
- Terminal Access Route Plan
- Statement of Estimated Quantities
- Details and Construction Notes
- Utility Locations Plan, showing impacts to lights, sign, NAVAIDS, and markings.
- Removal Plan
- Erosion Control Plan and Details
- Electrical Plan and Details

Task 3.4 – Quality Control Site Visit – SEH will conduct a quality control site visit during final design to verify base maps, utility locations, light locations, grades, and other relevant site features to ensure conformance to bidding documents, and overall impacts to airport infrastructure.

Work Element 4: Construction Bidding Documents for Taxiway C/C3 Rehabilitation and Taxiway Edge Lighting

Elements of the Construction Bidding Documents will be prepared in accordance with FAA Advisory Circulars (AC) 150/5300-13B, *Airport Design* and other applicable AC's, Orders, Regulations and Policy Memorandums. Specific tasks included with this work element include:

Task 4.1 – Construction Bidding Documents – A bid proposal project manual will be prepared for each bid package that will consist of a table of contents, advertisement for bids, proposal documents, schedule of prices, bid alternatives (if applicable), State and Federal requirements, wage rates, technical specifications, required FAA standard contracts and clauses, DBE goals and GFE, and special provisions.

Work Element 5: FAA Construction Plans and Specifications Review

Task 5.1 – FAA Coordination – SEH will coordinate with the FAA on submitting a 60% EDR, complete set of construction plans, and specifications for FAA review.

Task 5.2 – Review and Address FAA Comments – SEH will review and address all FAA comments on the plans and specifications and develop documentation to track any comments received and how those comments were addressed.

Work Element 6: Bidding and Contract Award Recommendation

Task 6.1 – Bidding and Award – Assist the Client with obtaining construction bids for proposal improvements. Assist the Client with securing a grant from the Federal Aviation Administration for this project. SEH will bid two bidding packages, and advertise the documents separately. Make a recommendation to the Client on award of construction contract for each bid package.

Work Element 7: Project Management – This task includes the overall project management of Work Elements 1 through 6 noted above. Project Management includes administration of the project, design team meetings, agency and Sponsor meetings, airfield user and tenant outreach meetings, and related project administration tasks.

Task 7.1 – Design Team Meetings and Sponsor Meetings –This task includes meetings by the design team to discuss project elements, schedule, issues, and provide coordination between team members.

Task 7.2 – Agency Meetings –This task includes meetings by the design team, North Dakota Aeronautics Commission, FAA ADO, FAA Tech Ops, FAA ATC Tower manager, MOT staff, and other individuals and agencies as needed, to discuss the project design development, schedule, and any other related items.

Task 7.3 – Overall Project Management –This task includes project coordination and administration, including Sponsor and agency communication, internal meetings, subconsultant oversight, progress reports, budget updates and monthly invoices.

Exclusions:

1. Construction inspections
2. Construction administration
3. Contractor coordination
4. Post design services
5. Project Record Drawings
6. FAA Closeout Report

Exhibit A-2
to Supplemental Letter Agreement
Between City of Minot, North Dakota (Client)
and
Short Elliott Hendrickson Inc. (Consultant)
Dated _____

Payments to Consultant for Services and Expenses
Using the Lump Sum Basis Option

The Agreement for Professional Services is amended and supplemented to include the following agreement of the parties:

A. Lump Sum Basis Option

The Client and Consultant select the Lump Sum Basis for Payment for services provided by Consultant. During the course of providing its services, Consultant shall be paid monthly based on Consultant's estimate of the percentage of the work completed. Necessary expenses and equipment are provided as a part of Consultant's services and are included in the initial Lump Sum amount for the agreed upon Scope of Work. Total payments to Consultant for work covered by the Lump Sum Agreement shall not exceed the Lump Sum amount without written authorization from the Client.

The Lump Sum amount includes compensation for Consultant's services and the services of Consultant's Consultants, if any for the agreed upon Scope of Work. Appropriate amounts have been incorporated in the initial Lump Sum to account for labor, overhead, profit, expenses and equipment charges. The Client agrees to pay for other additional services, equipment, and expenses that may become necessary by amendment to complete Consultant's services at their normal charge out rates as published by Consultant or as available commercially. Amendment to be approved by Client in advance via written authorization.

B. Expenses Not Included in the Lump Sum

The following items involve expenditures made by Consultant employees or professional consultants on behalf of the Client and shall be paid for as described in this Agreement.

1. Expense of overtime work requiring higher than regular rates, if authorized in advance by the Client.
2. Other special expenses required in connection with the Project.

The Client shall pay Consultant monthly for expenses not included in the Lump Sum amount.

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ATTACHMENT B
ESTIMATED FEES AND EXPENSES
TAXIWAY C/C3 REHABILITATION AND EDGE LIGHTING
ENGINEER'S DESIGN REPORT, FINAL DESIGN, AND PLANS AND SPECIFICATIONS, BIDDING
MINOT INTERNATIONAL AIRPORT (MOT)
MINOT, NORTH DAKOTA

Task No.	Task Description	Principal	Project Manager	Senior Engineer	Project Engineer	Project Engineer	Senior Airport Planner	Airport Planner	Senior Technician	Senior Technician	Admin Technician
Project Formulation											
1.1	Scoping, Review, and Coordination	2	10	10	10	10	12	8			
1.2	Project Formulation	2	4	6	10	10	10		5	5	2
Engineer's Design Report											
2.1	Engineer's Design Report	4	8	12	40	40	8	10	12	12	4
Including:											
Photographs											
Applicable AIP Standards											
Airport Operational Safety Considerations											
Pavement Design											
Drainage Design											
Airfield Lighting and Signage											
Navigational Aids											
Pavement Marking											
Environmental Considerations											
Existing Utilities											
Miscellaneous Work Items											
Benefit Cost Analysis											
Modification to AIP Design Standards											
AIP Non-eligible Work Items											
Disadvantaged Business Enterprise (DBE)											
Project Schedule											
Engineer's Estimate of Probable Cost											
Preliminary Project Budget											
Plan Drawings											
3.1	Environmental Coordination and Permits	2	2	2	4	4	4	8	4	4	2
3.2	Construction Safety and Phasing Plan Development		8	8	20	20	4	16	20	10	
3.3.1	Construction Plan Sheets - Taxiway Rehab.	4	10	10	60	60	4	10	100	80	4
Including:											
Title Sheet											
Construction Safety Plan											
Construction Phasing Plans											
Terminal Access Route Plan											
Statement of Estimated Quantities											
Details and Construction Notes											
Utility Locations Plan											
Removal Plan											
Erosion Control Plan											
Topography/Grading Plan											
Plan/Profile Drawings											
Pavement Jointing Plan and Details											
Pavement Marking Plans and Details											
3.3.2	Construction Plan Sheets - Taxiway Edge Lighting	4	10	10	60	60	4	10	100	80	4
Including:											
Title Sheet											
Construction Safety Plan											
Construction Phasing Plans											
Terminal Access Route Plan											
Statement of Estimated Quantities											
Details and Construction Notes											
Utility Locations Plan											
Removal Plan											
Erosion Control Plan											
Electrical Plan and Details											
3.4	Quality Control Site Visit			12	12				6		
3.5	Drawing Quality Control Reviews	8	8	8	12	12			8		
Construction Bidding Documents											
4.1.1	Construction Bidding Documents - Taxiway Rehab	2	10	10	20	20		10	4	4	12
4.1.2	Construction Bidding Documents - Taxiway Lighting	2	10	10	20	20		10	4	4	12
FAA Construction Plans and Specifications Full Review											
5.1	FAA Coordination	2	12	12	16	12	8	8	4	4	
5.2	Review and Address FAA Comments		4	6	16	12		8	10	10	
Bidding and Contract Award Recommendation											
6.1	Bidding and Award (two separate projects)		6	6	10	10	4	8	4	4	10
Project Management											
7.1	Design Team Meetings & Sponsor Meetings	8	16	20	20	20	16	24	4	4	
7.2	Agency Meetings	8	8	8			16				
7.3	Overall Project Management	2	24	20			10		5	4	5
	Total hours per labor category	50	150	170	330	310	100	130	290	225	55

ESTIMATE OF LABOR COSTS:

Labor Category	Hours	Rate	Extension
Principal	50	\$82.21	\$4,110.50
Project Manager		150	\$76.97
Senior Engineer		170	\$64.50
Project Engineer		330	\$49.11
Project Engineer		310	\$38.50
Senior Airport Planner		100	\$83.62
Airport Planner		130	\$45.99
Senior Technician		290	\$48.00
Senior Technician		225	\$48.00
Admin Technician		55	\$32.45
Total Direct Labor Costs:	1,810		\$95,607.75
Direct Salary Costs plus Overhead (90%)			\$181,654.73
Total Labor Costs			\$277,262.48

Fixed Fee on Labor Costs (15%) \$41,889.37

ESTIMATE OF EXPENSES:

Direct Expenses	Quantity	Rate	Extension
Flight	8	\$1,000.00	\$8,000.00
Per Diem	10	\$200.00	\$2,000.00
Computer Charge	1810	\$5.80	\$10,496.00
Reproductions / Miscellaneous	1	\$100.00	\$100.00
Subconsultant - Barr Engineering	1	\$5,000.00	\$5,000.00
Total Expenses			\$25,598.00

SUMMARY:

Total Labor Costs + Expenses + Fixed Fee		\$344,449.85
Estimated Total		\$344,400.00

December 15, 2023

Ms. Lindsay Reidt, PE
SHORT, ELLIOTT, HENDRICKSON, INC.
3535 Vadnais Center Drive
St. Paul, Minnesota 55110

**RE: MINOT INTERNATIONAL (MOT) AIRPORT – 2024 TAXIWAY C EDGE LIGHTING PROJECT
PROPOSAL FOR ELECTRICAL ENGINEERING SERVICES – DESIGN AND BID PHASE**

Dear Lindsay:

Thank you for contacting us regarding electrical engineering services for design of the Minot International Airport (MOT) – Taxiway C Edge Lighting project, which will involve replacement of existing MITL's for this taxiway with new LED MITL's, to include replacement of the lights themselves, the base cans, conduit, wire and constant current regulator. We are providing this letter to outline our understanding of the project, our proposed scope of services, and our proposed fees for the design and bid phase of the project.

In support of your efforts, Barr proposes to provide the following subconsultant services to Short, Elliott, Hendrickson (SEH):

1. Provide electrical design and circuiting redlines for SEH to incorporate on the AutoCAD drawing of the airfield plan, as has been our usual method on similar past projects.
2. Provide electrical design redlines for detail sheets for SEH to incorporate in their AutoCAD drawings, as has been our usual method for airfield related details.
3. Provide technical specifications for the electrical work.
4. Bid-phase assistance including addressing questions which may arise from bidders and addenda items as necessary.
5. As mentioned above construction phase services are not included in the scope of this proposal.

Barr Engineering proposes to provide the outlined scope of services to SEH on an hourly basis to a maximum budget of \$5,000.

Services are billed monthly according to the work complete. Reimbursables such as automobile mileage are included in the total above.

Thank you for the opportunity to present this proposal. We look forward to working with you on this project.

Sincerely,

BARR ENGINEERING CO.



Mark E. Ziemer, P.E.
Senior Electrical Engineer