TASK ORDER
{Consulting Services Agreement}

Task Order No. 2021-03  
Date October 10, 2021  
Project Name Pack Creek Bridge Widening (019038F)

This Task Order No. 2021-03 is issued pursuant to our Agreement dated May 28, 2019 and unless otherwise specified herein, the performance of services hereunder and the payment therefore shall be subject to the terms and conditions of said Agreement. The services authorized hereunder are described below.

Task Order Fee $82,000.00  
Task Order Fee Type: ☒ Fixed Price (Lump Sum) ☒ Hourly (T&M)
Task Order Estimate of Time: From 10/10/2021 to 05/30/2022

This Task Order incorporates the Exhibits noted below:
☒ Exhibit A – Description of Services  
☒ Exhibit B – Work Breakdown Structure  
☒ Exhibit C – Project Exhibits

ACCEPTANCE OF TASK ORDER:

<table>
<thead>
<tr>
<th>CIVIL SCIENCE, INC. (Consultant)</th>
<th>CITY OF MOAB (Department)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Science, Inc.</td>
<td>City of Moab</td>
</tr>
<tr>
<td>Attn: AJ Yates, PE</td>
<td>Attn: Emily S. Niehaus</td>
</tr>
<tr>
<td>405 S Main, Suite 975</td>
<td>217 E Center St.</td>
</tr>
<tr>
<td>Salt Lake City, UT 84111</td>
<td>Moab, UT 84532</td>
</tr>
<tr>
<td>(801) 560-0289</td>
<td>(435) 259-4941</td>
</tr>
<tr>
<td><a href="mailto:ayates@civilscience.com">ayates@civilscience.com</a></td>
<td><a href="mailto:emily@moabcity.org">emily@moabcity.org</a></td>
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<td></td>
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<tr>
<td>BY:</td>
<td>BY:</td>
</tr>
<tr>
<td>AJ Yates, Vice President</td>
<td>Emily S. Niehaus, Mayor</td>
</tr>
<tr>
<td></td>
<td>Attest:</td>
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<td></td>
<td>Sommar Johnson, Recorder</td>
</tr>
<tr>
<td>DATE:</td>
<td>DATE:</td>
</tr>
<tr>
<td>REPRESENTATIVE: Tyler Turner</td>
<td>REPRESENTATIVE: Chuck Williams</td>
</tr>
</tbody>
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Attest: Sommar Johnson, Recorder
PROJECT UNDERSTANDING
The City of Moab (City) intends to widen the 400 East over Pack Creek Bridge (UDOT Structure No. 019038F, formerly F-318). The east side will be widened to accommodate pedestrians (in lieu of the existing steel walkway) and provide additional roadway width to accommodate 5-ft bike lanes on each side. The additional deck width will likely require an additional girder line and a drilled shaft foundation extension. The existing structure is a precast concrete girder bridge with a single span of 96'-0" that is supported on drilled shafts with seat abutments. The existing structure is in good to fair condition with no anticipated structural rehabilitation or preservation activities anticipated.

SCOPE OF WORK
Based on the Project Understanding outlined above, Civil Science will provide the following services where tasks will include:

**Project Meetings, Management, and Coordination**
1. Provide project management including accounting, internal coordination meetings, progress reporting, active communication, informal weekly coordination via phone calls, emails, screen share etc. with the City and key staff.
2. Meet with the City once on-site during the 30% review phase and virtually (via Zoom or Microsoft Teams) during the 60%, 90%, and Final Design reviews.
3. General coordination with the City, utility owners, and property owners.

**30% Concept Development**
1. Research and collect data pertinent to the bridge structure, such as request current City and UDOT records.
2. Provide a design criteria document that considers recommendations from the following:
   a. AASHTO LRFD Bridge Design Specifications
   b. AASHTO LRFD Seismic Bridge Design Guide Specification
   c. UDOT Structures Design and Detailing Manual
   d. UDOT Geotechnical Manual of Instruction
   e. AASHTO Policy for the Geometric Design of Highways
   f. AASHTO Guide for the Development of Bicycle Facilities
3. Develop a project scope memo that includes the following:
   a. Summary of existing bridge conditions and site characteristics
   b. Brief narrative describing proposed roadway cross sectional elements (vehicular lanes, bike lanes, shoulders, sidewalk, etc.) and sizes (determined collaboratively with the City).
   c. Detailed cost estimate and Situation and Layout Sheets.
   d. Summary of girder and foundation type recommendations.
4. Provide draft plan and detail sheets for City review.
5. Develop the Engineer's Estimate with quantities and unit price assumptions – include project (non-construction) costs to provide a project level estimate.
60% Over-The-Shoulder Review
1. Provide progress prints of plan sheets (roadway sheets and bridge concrete outlines).
2. Update the Engineer’s Estimate.

90% Engineering Design
1. Design and detail the construction drawings and specifications to show the character and scope of work to be performed by contractors.
   a. Construction drawings are anticipated to include: a cover sheet, general note, survey control sheets, roadway typical sections, roadway plan and profile sheet, roadway and drainage details, Situation and Layout Sheets, bridge removal details, drilled shaft details, abutment details, precast concrete girder details, deck and approach slab details, and parapet sheets. A total of 26 sheets are estimated.
   b. Referral to UDOT standard and project specific special provision specifications are anticipated to supplement the APWA standard specifications.
   c. Prepare and provide a measurement and payment document.
   d. Update the Engineer’s Estimate.

Final Design
1. Address comments from the City and prepare final documents for signature and reproduction.
2. Prepare final construction drawings, specifications, and special provisions for reproduction.

SPECIALITY SERVICES
The following specialty services will be included:

Design Survey and Base Mapping
1. Provide design survey and terrestrial scans for the Project, set control, perform topographical GPS survey, and provide updated aerials via UAV.
2. Collect property boundaries, easement research, and tract map information.
3. Locate existing stormwater and wastewater utilities and collect inverts.
4. Prepare an existing CAD base map to include existing aerials, existing utilities, and existing topography and surface.

Geotechnical Investigation and Engineering (Subconsultant IGES)
1. Provide geotechnical engineering services and investigation of the proposed foundation work:
   a. Two hollow stem auger borings to 50 feet or auger refusal with sampling at 2.5- to 5-ft intervals
   b. Limited lab testing to characterize soil properties due to anticipated dense granular soils
   c. Full deep foundation design, anticipating drilled shafts, similar to existing plans (provided previously by UDOT)
   d. Lateral earth pressures
   e. Cement type recommendations
2. A draft version of the geotechnical report will be provided during the 30% review.


ADDITIONAL SERVICES
The City may authorize Civil Science to furnish, or obtain from others, services which are not included in the basic Scope of Work (refer to scope Assumptions). If such additional services are authorized by the City, Civil Science will negotiate a modification to the scope and fee.

Temporary Traffic Control Plans
1. Prepare temporary traffic control plans sheets to be used by the selected contractor during the construction. Plans will be consistent with the Utah MUTCD and other applicable standards.
2. Prepare and provide any technical specifications or limitations relating to traffic restrictions.
3. Prepare and provide additional bidding documents, descriptions, and cost estimate for items directly related to traffic control.

Bid Phase Services
1. Assist the City in advertisement for public bid.
2. Conduct a pre-bid meeting (in Moab), answer questions, clarify expectations of the contractor, and explain design rationale.
3. Answer bid phase questions related to the construction documents.
4. Issue addenda to clarify requirements, scope, and quality and quantity of the improvements to be completed.
5. Review bids with project requirements, issue bid tabulation and issue Notice of Intent to Award.
6. Assist the City in securing agreement, bonds, and insurance from the contractor.

ASSUMPTIONS
- All work will occur within the City’s right-of-way. Any additional property procurement, if needed, will be done by others.
- Environmental documentation services are not included. Civil Science can provide these services, which would result in a modification to the scope and fee.
- The proposed construction will result in a no net rise condition in the Special Flood Hazard Areas, and a CLOMR/LOMR will not be required. Civil Science does not anticipate performing any hydraulic modeling/analysis, scour analysis, or submitting for a stream alteration permit. Civil Science can provide these services, which would result in a modification to the scope and fee.
- Project will use a pavement section recommended by the City. A project specific pavement design will not be provided.
- Bid documents will follow Moab City’s typical bidding and documentation processes.
- Utility relocation efforts will be minimal and consist of communicating project needs with third-party utility companies. Develop utility company agreements are not anticipated to be required. Civil Science can provide these services, which would result in a modification to the scope and fee.
- Bridge aesthetics will be limited to matching the existing structure.
- Project will utilize APWA Standards
- Bid protests, rebidding, or renegotiating contracts are not assumed to be needed. Civil Science can provide these services, which would result in a modification to the scope and fee.
- Construction inspection and management services are not assumed to be needed. Civil Science can provide these services, which would result in a modification to the scope and fee.
- Providing a Storm Water Pollution Prevention Plan for construction as it is intended to be part of the construction contract.
### FEE PROPOSAL

Civil Science proposes to complete the Scope of Work outlined above as follows:

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Fee</th>
<th>Fee Type</th>
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<tbody>
<tr>
<td>Project Meetings, Management, and Coordination</td>
<td>$4,000</td>
<td>Lump Sum</td>
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<td>30% Concept Development</td>
<td>$16,000</td>
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<tr>
<td>60% Over-The-Shoulder Review</td>
<td>$10,000</td>
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<tr>
<td>90% Engineering Design</td>
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<td>Final Design</td>
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<td><strong>Total</strong></td>
<td><strong>$60,000</strong></td>
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<tr>
<th>Specialty Services</th>
<th>Fee</th>
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<tbody>
<tr>
<td>Design Survey and Base Mapping</td>
<td>$7,000</td>
<td>Lump Sum</td>
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<tr>
<td>Geotechnical Investigation and Engineering</td>
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<td><strong>Total</strong></td>
<td><strong>$22,000</strong></td>
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**Grand Total**                                         **$82,000**

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<tr>
<th>Additional Services</th>
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<tr>
<td>Temporary Traffic Control Plans</td>
<td>$4,000</td>
<td>Lump Sum</td>
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<tr>
<td>Bid Phase Services</td>
<td>$6,000</td>
<td>Hourly</td>
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<td><strong>Total (Additional)</strong></td>
<td><strong>$10,000</strong></td>
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Professional fees shown are not to exceed unless upon written authorization from the City. Additional Services will not be performed unless requested by the City. Professional services rendered for the Hourly Fee Type will be completed by Civil Science at the rates and fees given in the Agreement.
SCHEDULE
Civil Science understands the importance of maintaining a project schedule, and we are confident of our record and ability to provide these services according to the City’s desires. Upon award, we can complete the design portion of the Scope of Work within **180** calendar days.