ADAMS COUNTY, COLORADO
AMENDMENT #1 2018.423 FOR ENGINEER'S LAKE TRAIL

THIS AMENDMENT #1 TO PROFESSIONAL/PURCHASE OF SERVICE AGREEMENT 2017.401 is entered into this 11 day of September, 2018, by and between the Board of County Commissioners of Adams County, Colorado, located at 4430 South Adams County Parkway, Brighton, Colorado 80601, hereinafter referred to as the "County," and Matrix Design Group, located at 1601 Blake Street, Suite 200, Denver, Colorado 80202 hereinafter referred to as the "Contractor." The County and the Contractor may be collectively referred to herein as the "Parties".

REQUITALS

WHEREAS, on May 22, 2017, the County entered into a Professional Service Agreement 2017.401 with Contractor; and,

WHEREAS, the County and the Contractor mutually desire to amend the Service Agreement to extend the term and add additional services.

NOW, THEREFORE, for the consideration set forth herein, the sufficiency of which is mutually acknowledged by the parties, the County and the Contractor agree as follows:

1. The Service Agreement is hereby amended to extend the term of the Agreement for one additional year through June 30, 2019.

2. Add additional services attached as Exhibit A.

3. The costs for the additional services shall be $19,700.00, bringing the total contract sum to $89,272.00.

4. The Service Agreement and this Amendment #1 contain the entire understanding of the parties hereto and neither it, nor the rights and obligations hereunder, may be changed, modified, or waived except by an instrument in writing that is signed by both parties. Except as amended by this Amendment, and any prior amendment(s), the terms and conditions of the Agreement remain in full force and effect. In the event of any conflicts between the terms, conditions, or provisions of the Service Agreement and this Amendment #1, the terms, conditions, and provisions of this Amendment #1 shall control.

5. The Recitals contained in this Amendment #1 are incorporated into the body hereof and accurately reflect the intent and agreement of the parties.

6. This Amendment #1 may be executed in multiple counterparts, each of which shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

7. Nothing expressed or implied in this Amendment #1 is intended or shall be construed to confer upon or to give to, any person other than the parties, any right, remedy, or claim
under or by reason of this Amendment #1 or any terms, conditions, or provisions hereof. All terms, conditions, and provisions in this Amendment #1 by and on behalf of the County and the Contractor shall be for the sole and exclusive benefit of the County and the Contractor.

8. If any provision of this Amendment #1 is determined to be unenforceable or invalid for any reason, the remainder of the Amendment #1 shall remain in effect, unless otherwise terminated in accordance with the terms contained in the Service Agreement.

9. Each party represents and warrants that it has the power and ability to enter into this Amendment #1, to grant the rights granted herein, and to perform the duties and obligations herein described.

IN WITNESS WHEREOF, the County and the Contractor have caused their names to be affixed.

ADAMS COUNTY, COLORADO
COUNTY MANAGER

Raymond H. Chong

9.18. 2018

Date

MATRIX DESIGN GROUP

Patrick Mulin

Vice President

Print Name

Print Title

Signature

Date

ATTEST: STAN MARTIN
CLERK AND RECORDER

Marianne

Deputy Clerk

APPROVED AS TO FORM:

County Attorney

DOC #5239424 Revised 1/4/17
2018.423 Matrix Design Group
March 7, 2018

Shannon McDowell, Open Space Program Manager
Adams County, Colorado
9755 Henderson Road
Brighton, CO 80601

RE: Proposal for Engineers Lake Trail – Environmental Clearance (CatEx)

Dear Ms. McDowell:

Matrix Design Group (Matrix) is pleased to submit this proposal to provide engineering services to assist Adams County (County) in the additional effort to attain environmental clearances from Colorado Department of Transportation’s (CDOT’s) for the Water Quality Mitigation Pool funding. The proposal is based on the information gained at the CDOT scoping meeting held January 25, 2018, and the assumption that the project impacts likely meets the requirements for a CDOT Categorical Exclusion (CatEx). To support in this aspect of the project Matrix has collected a proposal from ERO Resources Corporation.

SCOPE OF SERVICES

The additional effort necessary to support the County in the receiving the entitlements are in general defined in the following tasks:

1. Project Management and Coordination – to ensure proper coordination and collaboration additional meetings and project management are required.

2. Engineering Design – to establish the requirements necessary to meet the water quality requirements additional engineering effort is required including:
   a. enhanced drainage report,
   b. pond/swale design criteria,
   c. retaining wall design
   d. and, site geometric configuration refinement.

3. Landscape Design – enhanced landscape design effort to create planting plans and details meeting standard practices for the water quality features.

4. CatEx Clearance – Sub-consultant ERO will perform fieldwork, research and will prepare a documentation to support a CatEx. In the attached proposal, contingency items are included should the research find a need for more detailed investigation. These services are highlighted as contingency items.
FEE ESTIMATE

Matrix’s fee estimate is based on our understanding of the additional services required and is provided below. Matrix will provide services on this task on a firm, fee basis and will not exceed the total without prior approval from the County. Any additional services completed at your request will be completed at our Engineers Lake Trailhead rates. Matrix will invoice monthly on a percentage complete basis.

<table>
<thead>
<tr>
<th>Task</th>
<th>Fee</th>
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<tbody>
<tr>
<td>1. Project Management and Coordination</td>
<td>$14,440</td>
</tr>
<tr>
<td>2. Engineering Design per CDOT requirements</td>
<td>$5,400</td>
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<tr>
<td>3. Landscape Design per CDOT requirements</td>
<td>$3,600</td>
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<tr>
<td>4. CatEx Clearance (See Attached ERC Scope)</td>
<td>$9,260</td>
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<tr>
<td>5. CatEx Contingency (Additional-Task)</td>
<td>$2,990</td>
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<td></td>
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<tr>
<td>Grand Total</td>
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</tbody>
</table>

We look forward to the opportunity to work with the County to advance the long-term resiliency and sustainability of the Engineers Lake Trailhead project. If you have any questions or require additional information, please contact us at 303-572-0200 or via email at dave_kline@matrixdesigngroup.com.

Sincerely,
Matrix Design Group, Inc.

[Signatures]

Patrick Chelin, PE
Officer-In-Charge

David Kline, PE, PTOE
Project Manager
February 14, 2018

David Kline, P.E., PTOE
Matrix Design Group
1601 Blake Street, Suite 200
Denver, CO 80202

RE: Scope of Work for Environmental Services for Engineer’s Lake Trailhead Parking Lot

Dear David:

ERO appreciates the opportunity to submit this scope of work to provide environmental services for the Engineer’s Lake Trailhead Parking Lot project. If I can provide you with additional information, please contact me at (303) 830-1188 or by e-mail at nbaumann@eroresources.com.

Sincerely,

Nicole Bauman
Principal

Attachments: Scope of Work, ERO Terms and Conditions
ERO Resources Corporation
Scope of Work for Environmental Services for
Engineer's Lake Trailhead Parking Lot
Adams County, Colorado

February 14, 2018

Background

On behalf of Matrix Design Group (Client), ERO Resources Corporation (ERO) has prepared this Scope of Work (SOW) to perform the environmental services discussed below for proposed parking lot improvements and water quality control measures for the Engineer’s Lake Trailhead in Adams County, Colorado (project area). ERO will perform fieldwork and research and, as appropriate, will prepare letter reports for each of the following tasks. The Client will use the technical reports to obtain environmental clearance from various regulatory agencies.

ERO will prepare documents in accordance with current federal and state environmental regulations. Because the project is eligible for State Water Quality funding, the Colorado Department of Transportation (CDOT) has determined that the project likely meets the requirements for a CDOT Categorical Exclusion (CatEx). ERO will comply with the recordkeeping and submittal requirements associated with CDOT projects. This SOW assumes environmental technical reports are needed for a CDOT CatEx. The field studies and documentation will be at the appropriate level of detail to document existing conditions and will be summarized, along with steps required to obtain clearance, in brief reports.

Based on the scoping meeting between CDOT and the Client, the following environmental technical reports will be needed:

- Biological resources including threatened and endangered (T&E) species, wetlands and waters of the U.S., and noxious weeds
- Hazardous materials
- Paleontological resources

Because of the potential to impact wetlands, this SOW includes optional tasks for requesting authorization under a Clean Water Act (CWA) Nationwide Permit (NWP), including cultural and archaeological services, and completing a CDOT wetland finding report, if needed.

ERO assumes that studies are not needed for prime farmlands, air quality, or noise or CDOT will undertake those studies. A cultural resources file search will be included in the U.S. Army Corps of Engineers (Corps) NWP application; however, the project team assumes CDOT will also conduct internal reviews to determine potential project effects on historic properties. ERO further assumes that, except
for wetlands, no regulated resources will be present in the project area and that Section 4(f)/6(f) clearances and Senate Bill (SB) 40 Wildlife Certification are not needed.

Task 1. Biological Resources Assessment and Report

ERO will conduct a field review to assess the project area for environmental resources, including T&E species habitat, wetlands and waters of the U.S., prairie dogs, migratory birds, and noxious weeds that may occur in the project area, as described in more detail in Subtasks 1a and 3b. Based on the field review results, ERO will prepare a brief biological resources report (BRR) using the CDOT template describing the biological resources found and the regulatory requirements pertaining to these resources. The BRR will be submitted as a draft to the Client for review and comment prior to being submitted to CDOT.

Assumptions
- The Client will arrange and provide written permission to access the project area.
- A detailed noxious weed management plan will not be required.
- Changes to the project area boundary after environmental tasks have begun will require additional effort and ERO will coordinate with the Client to determine if changes in the scope or budget are necessary.
- One round of revisions for the BRR based on CDOT’s comments is included in this SOW and no other revisions will be needed.

Products
- Draft and final BRR emailed to the Client and CDOT.

Subtask 1a. T&E Species Habitat Assessment

ERO will conduct a habitat assessment for federally listed T&E species within the project area. Based on ERO’s knowledge of the area, habitat for T&E species is likely absent. ERO will also note any additional regulated natural resources that may affect the project, such as prairie dogs or raptor or other migratory bird nests protected by the Migratory Bird Treaty Act. If no potential habitat for T&E species is present, ERO will prepare a habitat assessment letter for submittal to the U.S. Fish and Wildlife Service (Service) requesting clearance from further surveys in the project area. The habitat assessment letter will be submitted as a draft to the Client for review and comment before ERO submits it to the Service.

Assumptions
- No T&E species habitat occurs in the project area.
- Presence/absence surveys for listed species will not be required by the Service. If a survey is required, ERO will provide a separate scope of work and cost estimate.

Products
- Draft habitat assessment letter emailed to the Client.
Subtask 1b. Identify and Map Wetlands, Open Water, and Channels

ERO will delineate any wetlands, open waters, and channels found within the project area. Wetlands will be delineated following the methods for routine on-site wetland determinations in areas of less than 5 acres as described in the 1987 Corps Wetlands Delineation Manual and appropriate regional supplement. Open water and channels will be determined based on the presence of an ordinary high water mark (OHWM) as defined in 33 Code of Federal Regulations Part 328. ERO will map the boundaries of wetlands, OHWMs, open waters, and streambeds to submeter accuracy using a Global Positioning System (GPS) unit or, when appropriate, boundaries will be mapped onto an aerial photograph. ERO will provide the Client with a digital file containing the boundaries of wetlands, open water, and channels for incorporation onto base mapping and copies of the routine wetland determination forms.

Assumptions

- Performing the delineation is weather dependent. The ground must be free of snow and, in most instances, the soils must be unfrozen to collect the needed soil data.
- The Client will provide topographical survey mapping data and/or aerial photography.

Products

- Electronic file with boundaries of wetlands and open water delivered to the Client via email.
- Routine wetland determination forms in PDF format delivered to the Client via email.

Task 2. Phase I Environmental Site Assessment

Site reconnaissance. ERO will conduct a visual site reconnaissance of the project area. The purpose of the inspection is to document recognized environmental conditions. Photographs will be taken as appropriate. ERO will not take any samples during the site reconnaissance. The following issues are specifically excluded from this Phase I Environmental Site Assessment (Phase I ESA): wetlands, migratory birds, radon, lead in drinking water, mold, and subsurface mineral rights, leases, or ownership.

ERO will document the general site setting, such as current use(s) of the project area and adjoining properties, and general hydrogeologic and topographic features. A general description of structures and other improvements on the project area will be provided. ERO will identify the following site conditions, if they are visually or physically observed, during the site reconnaissance:

- The quantity, type, and storage system for hazardous substances and petroleum products in connection with identified uses:
ERO Resources Corporation

Scope of Work for Environmental Services for Engineer’s Lake Trailhead Parking Lot.
Adams County, Colorado

- Tanks, containers, drums, barrels, and other systems used for storing hazardous substances and petroleum products not connected to identified uses;
- Aboveground and underground storage tanks;
- Pits, ponds, lagoons, and other features potentially used for storage and/or disposal of hazardous substances and petroleum products;
- Odors, pools of liquids, stained soils and pavement, and stressed vegetation;
- Electrical equipment potentially containing polychlorinated biphenyls (PCBs);
- Potential lead-based paint (samples may need to be taken at additional cost); and
- A cursory inspection of the project area for potential asbestos-containing materials.

Interviews. ERO will conduct interviews with private property owners, site managers, local government officials, and other persons with knowledge of the project area.

File search and regulatory agency review. ERO will conduct a search of records and files from a variety of sources, and compile existing information pertaining to current and past environmental conditions. This search may include the following information, as ERO deems appropriate—

- Topographic, land use, and environmental resource maps
- Aerial photographs
- County and city records
- State and federal databases

Vapor encroachment screening. ERO will evaluate the sites identified during the Records Review to evaluate potential vapor encroachment in accordance with 2015 ASTM International E2600-15, the "Standard Guide for Vapor Encroachment Screening on Project area Involved In Real Estate Transactions." ERO will conduct a Tier 1 Screening using Information presented in the Phase I ESA records review to whether a vapor encroachment condition exists, likely exists, or cannot be ruled out for the project area. The results of this screening will be included in the Phase I ESA report. No sampling or testing is included with the screening.

Reports and recommendations. Based on the information gathered during the above tasks, ERO will compile the Information and findings in a Phase I ESA report for the project area. The report will contain a detailed presentation of findings, including the site description, records review, site reconnaissance, and conclusions.

Assumptions and Conditions

It is important to emphasize that considerable uncertainty is inherent in conducting this type of investigation. The Phase I ESA will be completed by qualified environmental professionals using that degree of care and skill ordinarily exercised under similar circumstances by other environmental professionals practicing in this field. Unforeseen conditions may significantly affect the ability to make conclusions and recommendations based solely on the proposed investigations, which may ultimately affect the level of risk for a given level of investigative effort and cost. The following assumptions and conditions describe some of the possible limitations under this SOW.
1. ERO assumes the project area will not present conditions that may be hazardous to the health and safety of ERO personnel. The presence of visible hazards or contamination may be sufficient cause for ERO to halt work immediately and request a meeting with the Client to discuss the problem.

2. All work will be conducted according to the provisions given in this SOW and in the accompanying Terms and Conditions. No other specifications or guidelines have been agreed to, nor will any such specifications or guidelines be addressed except as will otherwise be according to this SOW.

3. Adequate and timely access to the project area to conduct the Phase I ESA is assumed. Written authorization or other arrangements as may be necessary to ensure access by ERO personnel will be provided by the Client.

4. Any conditions, known or suspected to the Client, that may have bearing on these investigations, or to the findings or recommendations made pursuant to this SOW, will be disclosed to ERO before initiation of the SOW. The Client will make available to ERO any appraisal reports, title histories, engineering reports or other technical reports or information that may pertain to this investigation.

5. All references, statements or recommendations in this SOW or in any subsequent written reports to substances being either hazardous or not hazardous are made solely in accordance with or in reference to such official designations made by government agencies or other authorities under applicable laws, regulations, or guidelines. ERO itself makes no claim, warranty, or implication as to whether any substance may or may not be hazardous.

6. This SOW does not include an assessment of the potential for any particular condition to adversely affect public health.

7. Any laboratory analytical work will be conducted by a laboratory or laboratories under separate contract or subcontract. While ERO will endeavor to select qualified laboratories for sample analysis, ERO will accept no responsibility or liability for laboratory results, quality control, or analytical turnaround time.

8. Deviations from these assumptions may result in cost increases or changes in schedule.

9. All site boundaries shown or discussed in the Phase I ESA report are approximations based on information supplied by the Client. ERO will accept no responsibility or liability for the accuracy of the site boundaries.

10. The Client will be responsible for obtaining any map/surveys or design plans of the project area, determining project area size, providing access agreements to right-of-way acquisition parcels, and forwarding these items to ERO prior to conducting the site reconnaissance.

Products

- Draft and final Phase I ESA report emailed to the Client and CDOT.

Task 3. Paleontological Survey

As a subconsultant to ERO, Rocky Mountain Paleo Solutions (RMPS) will assess the paleontological resources within the project area. RMPS will conduct a museum record search and also will search the scientific literature and other documents to determine if known fossils have been found in the vicinity of the project area and evaluate the paleontological sensitivity of the rock formations and other surficial...
deposits. RMPS will determine the paleontological sensitivity of the project area using resource assessment criteria and professional standards. A paleontological technical report will be prepared presenting the results of the study and mitigation recommendations following CDOT guidelines.

Assumptions

- No travel will be needed to complete this task.
- Once the notice to proceed has been issued, any changes to this SOW, including the project area or schedule, may result in a change order.
- No more than one round of revisions to the report will be required.
- The institutional record search fees will not exceed $100 total.

Products

- Draft and final paleontological technical report emailed to the Client and CDOT.

Task 4. Project Coordination and Management

This task includes items associated with project coordination such as project start-up documentation, health and safety plan compliance, monthly invoicing, communication through emails and phone calls, and quality assurance. ERO will coordinate with the Client on schedule, design, and other project-related matters via telephone and email. ERO will ensure all documents and figures are reviewed for technical and editorial accuracy.

Optional Task A. Request for NWP Authorization

If the project will require impacts on wetlands or waters of the U.S., ERO will prepare a preconstruction notification (PCN) as part of the request for authorization under one or more NWPs. The PCN will include a summary of the wetland delineation, T&E species information, cultural resource file and record search, and information on grading and structures provided by the Engineer.

ERO will coordinate with the Engineer on the information ERO requires for the submittal to the Corps. Typical information includes plan and profile views, cross-sections, figures showing and quantifying impacts on jurisdictional areas, quantities of fill material below the OIWM, details, background information on other approval requirements (e.g., those of the Federal Emergency Management Agency), and a discussion of the purpose of, and need for, the project. This task assumes a conceptual wetland mitigation plan will not be needed because impacts on wetlands would either be less than 0.10 acre or Adams County would purchase credits from a wetland mitigation bank.

Assumptions

- The proposed project will be authorized under a nationwide CWA Section 404 permit, if necessary. An individual permit will not be needed.
- The PCN will be based on the wetlands and other waters delineated under Task 1b, and additional surveys will not be needed.
- A request to the Corps for a jurisdictional determination is not included in this task.

**Products**

- Draft and final PCN submittal emailed to the Client and the Corps

**Optional Task B. Cultural Resource File Search**

An evaluation of potential project effects on historic properties in compliance with Section 106 of the National Historic Preservation Act and Appendix C of the CWA is required as part of a NWP authorization request. To assist the Corps with evaluating potential project effects on historic properties (i.e., cultural resources listed on or eligible for listing on the National Register of Historic Places), ERO will conduct a file search of the project area using the Colorado Office of Archaeology and Historic Preservation online Compass database to identify previously evaluated cultural resources surveys within the project area. ERO will summarize the results of the cultural resource file search in a section of the PCN (Optional Task A) for review by the Corps.

**Assumptions**

- Based on a preliminary review of the project area, ERO anticipates the Corps would not require any field investigations or additional reporting to evaluate project effects on historic properties. In the event the Corps requests a survey and report for consulting on project effects with the Colorado State Historic Preservation Office, ERO will conduct these additional tasks under a separate scope of work.
- A separate cultural resources file and records report will not be needed for submittal to CDOT. In the event CDOT requests information about the presence of cultural resources in the project area, ERO will provide a new scope of work to summarize the results of the file search and a literature review in a technical memorandum that meets CDOT-specific requirements.

**Products**

- Cultural resources file search results will be included in the PCN (Optional Task A).

**Optional Task C. Wetland Finding Report**

If the project will result in more than 500 square feet of permanent wetland impacts, a CDOT wetland finding will be required. ERO will prepare a wetland finding report according to current CDOT guidelines. The wetland finding addresses impacts on both jurisdictional and nonjurisdictional wetlands. The wetland finding will include information from the wetland delineation and the request for Section 404 authorization. The wetland finding will document existing conditions, describe any proposed unavoidable impacts on wetlands, and describe mitigation proposed for wetland impacts. ERO will also conduct a wetland functional assessment for wetlands in the project area if impacts are more than 0.10 acre, which will be included in the wetland finding report. The Functional Assessment of Colorado Wetlands Method—Version 2.0 (Johnson et al. 2010) will be used to determine the functions of wetlands in the project area. The report will include an aerial map showing the wetland boundaries.
ERÖ Resources Corporation
Scope of Work for Environmental Services for Engine’s Lake Trailhead Parking Lot
Adams County, Colorado

Assumptions

- This task includes one round of revisions based on CDOT comments.
- Wetland impacts will be mitigated for by purchasing mitigation credits from an accredited mitigation bank.

Products

- Draft and final wetland finding report emailed to the Client and CDOT.

Scope of Work Assumptions

- The Client will provide all base maps and aerial photographs required by ERÖ for mapping and field surveys.
- The Client will arrange and provide written permission to access the project area.
- Cultural resources, air quality, noise, farmland protection, SB 40, and Section 4(f) and 6(f) clearances will not be needed.
- No on-site or in-person meetings are included in this SOW. All project communication will take place through emails and phone calls.
- This SOW does not include additional work required in the event any currently unknown significant resource is located in the project area.
- One round of revisions for all reports based on CDOT comments is included in this SOW and no other revisions will be needed.

Costs

Tasks

Tasks 1 through 4 will be completed on a time-and-materials basis for a cost not to exceed $9,260 including expenses billed at cost plus 6 percent (see below for breakout).

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<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1.</td>
<td>Biological Resources Assessment and Report</td>
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<tr>
<td>Task 1a.</td>
<td>T&amp;E Species Habitat Assessment</td>
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<td>Task 1b.</td>
<td>Identify and Map Wetlands, Open Water, and Channels</td>
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<td>Task 2.</td>
<td>Phase I ESA</td>
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<td>Task 3.</td>
<td>Paleontological Survey</td>
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<td>Task 4.</td>
<td>Project Coordination and Management</td>
<td>$300</td>
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Total including expenses $9,260

Optional Tasks

If necessary, Optional Tasks A through C will be completed on a time-and-materials basis for a cost not to exceed $2,900, including expenses billed at cost plus 6 percent (see below for breakout).
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<thead>
<tr>
<th>Optional Task</th>
<th>Description</th>
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<tbody>
<tr>
<td>A</td>
<td>Request for NWP Authorization</td>
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<tr>
<td>B</td>
<td>Cultural Resource File-Search</td>
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</tr>
<tr>
<td>C</td>
<td>Wetland Finding Report</td>
<td>$1,000</td>
</tr>
<tr>
<td>Total</td>
<td>Including expenses</td>
<td>$2,900</td>
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Note: Task A not included.

PCE: 9-11-18