



**TOWN OF CASTLE ROCK
SERVICES AGREEMENT
(East Plum Creek/Sellers Gulch Confluence Project)**

DATE: _____.

PARTIES: **TOWN OF CASTLE ROCK**, a Colorado municipal corporation, 100 N. Wilcox Street, Castle Rock, Colorado 80104 (the “Town”).

OLSSON, INC, a Nebraska corporation, 1525 Raleigh Street, Suite 400, Denver, Colorado 80204 (“Contractor”).

RECITALS:

- A. Town wishes to engage Contractor to provide the services more fully described in the following Agreement and Exhibits.

TERMS:

Section 1. Scope of Services. Contractor shall provide engineering services as described in the attached ***Exhibit 1*** (“Services”).

Section 2. Payment. Contractor shall invoice Town on a monthly basis for the Services rendered in accordance with the rate and fee schedule set forth in ***Exhibit 1***. The Town shall pay such invoices within 30 days receipt of such invoice. In no event shall payment exceed \$647,754.00, unless authorized in writing by Town.

Section 3. Completion. Contractor shall commence the Services on January 18, 2023 and complete the Services by December 31, 2024. Contractor shall devote adequate resources to assure timely completion of the Services. Contractor shall perform the Services under this Agreement using a standard of care, skill and diligence ordinarily used by reputable professionals performing under circumstances similar to those required by this Agreement.

Town shall have the right to terminate this Agreement at any time with 30 days written notice to Contractor. The Town’s only obligation in the event of termination shall be payment of fees and expenses incurred up to and including the effective date of termination. Contractor shall turn over all work product produced up to the date of termination.

Section 4. Annual Appropriation. The continuance of this Agreement is contingent upon the appropriation of funds to fulfill the requirements of the Agreement by the Town. If the Town fails to appropriate sufficient monies to provide for the continuance of the Agreement, the Agreement shall terminate on the final day preceding the date of the beginning of the first fiscal year for which funds are not appropriated. The Town’s only obligation in the event of termination shall be payment of fees and expenses incurred up to and including the effective date of termination.

Section 5. Subcontractors. Contractor may utilize subcontractors to assist with specialized works as necessary to complete the Services. Contractor will submit any proposed subcontractor and the description of their services to the Town for approval.

Section 6. Assignment. This Agreement shall not be assigned by Contractor without the written consent of the Town.

Section 7. Notice. Any notice required or permitted by this Agreement shall be in writing and shall be deemed to have been sufficiently given for all purposes if sent by certified mail or registered mail, postage and fees prepaid, addressed to the party to whom such notice is to be given at the address set forth on the first page of this Agreement, or at such other address as has been previously furnished in writing to the other party or parties. Such notice shall be deemed given when deposited in the United States mail.

Section 8. Insurance. Contractor agrees to procure and maintain, at his own cost, the following policy or policies of insurance. Contractor shall not be relieved of any liability, claims, demands or other obligations assumed pursuant to this Agreement by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

A. Contractor shall procure and maintain, and shall cause each subcontractor of the Contractor to procure and maintain a policy with the minimum insurance coverage listed below. Such coverage shall be procured and maintained with forms and insurers acceptable to the Town. All coverage shall be continuously maintained from the date of commencement of services hereunder. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.

1. Workers Compensation insurance to cover obligations imposed by the Workers Compensation Act of Colorado and any other applicable laws for any employee engaged in the performance of Work under this contract, and Employer's Liability insurance with minimum limits of FIVE HUNDRED THOUSAND DOLLARS (\$500,000) each accident, FIVE HUNDRED THOUSAND DOLLARS (\$500,000) disease-policy limit, and FIVE HUNDRED THOUSAND DOLLARS (\$500,000) disease-each employee.

2. Comprehensive General Liability insurance with minimum combined single limits of ONE MILLION DOLLARS (\$1,000,000) each occurrence and ONE MILLION DOLLARS (\$1,000,000) aggregate. The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including for contractual and employee acts), blanket contractual, independent contractors, products, and completed operations. The policy shall contain a severability of interests provision.

3. Comprehensive Automobile Liability Insurance with minimum combined single limits for bodily injury and property damage of not less than ONE MILLION DOLLARS (\$1,000,000) each occurrence and ONE MILLION DOLLARS (\$1,000,000) aggregate with respect to each of Contractor's owned, hired and/or non-owned vehicles

assigned to or used in performance of the services. The policy shall contain a severability of interests provision.

B. The policies required above, except Workers' Compensation insurance, Employers' Liability insurance and Professional Liability insurance shall be endorsed to include the Town, its officers and employees, as additional insureds. Every policy required above, except Workers' Compensation shall be primary insurance, and any insurance carried by the Town, its officers, or its employees, shall be excess and not contributory insurance to that provided by Contractor. The additional insured endorsement for the Comprehensive General Liability insurance required above shall not contain any exclusion for bodily injury or property damage arising from completed operations. The Contractor shall be solely responsible for any deductible losses under each of the policies required above.

C. Certificates of insurance shall be completed by Contractor's insurance agent and submitted at the time of execution of this Agreement as ***Exhibit 2*** as evidence that policies providing the required coverage, conditions and minimum limits are in full force and effect, and shall be subject to review and approval by the Town. Each certificate shall identify the Project and shall provide that coverage afforded under the policies shall not be cancelled, terminated or materially changed until at least 30 days prior written notice has been given to the Town. If the words "endeavor to" appear in the portion of the certificate addressing cancellation, those words shall be stricken from the certificate by the agent(s) completing the certificate. The Town reserves the right to request and receive a certified copy of any policy and any endorsement thereto.

D. Failure on the part of Contractor to procure or maintain policies providing the required coverage, conditions, and minimum limits shall constitute a material breach of contract upon which at the Town's discretion may procure or renew any such policy or any extended connection therewith, and all monies so paid by the Town shall be repaid by Contractor to the Town upon demand, or the Town may offset the cost of the premiums against any monies due to Contractor from the Town.

Section 9. Colorado Governmental Immunity Act. The parties understand and agree that the Town is relying on, and does not waive or intend to waive by any provision of this contract, the monetary limitations (presently \$424,000 per person, \$1,195,000 for two or more persons, per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, §24-10-101, *et seq.*, C.R.S., as from time to time amended, or otherwise available to Town, its officers, or its employees.

Section 10. Indemnification. Contractor expressly agrees to indemnify and hold harmless Town or any of its officers or employees from any and all claims, damages, liability, or court awards including attorney's fees that are or may be awarded as a result of any loss, injury or damage sustained or claimed to have been sustained by anyone, including, but not limited to, any person, firm, partnership, or corporation, to the extent caused by the negligent acts, errors or omissions of Contractor or any of their employees or agents in performing work pursuant to this Agreement. In the event that any such suit or action is brought against Town, Town will give notice within ten (10) days thereof to Contractor.

Section 11. Delays. Any delays in or failure of performance by any party of his or its obligations under this Agreement shall be excused if such delays or failure are a result of acts of God, fires, floods, strikes, labor disputes, accidents, regulations or orders of civil or military authorities, shortages of labor or materials, or other causes, similar or dissimilar, which are beyond the control of such party.

Section 12. Additional Documents. The parties agree to execute any additional documents or take any additional action that is necessary to carry out this Agreement.

Section 13. Entire Agreement. This Agreement represents the entire agreement between the parties and there are no oral or collateral agreements or understandings. This Agreement may be amended only by an instrument in writing signed by the parties. If any other provision of this Agreement is held invalid or unenforceable, no other provision shall be affected by such holding, and all of the remaining provisions of this Agreement shall continue in full force and effect.

Section 14. Time of the Essence. Time is of the essence. If any payment or any other condition, obligation, or duty is not timely made, tendered or performed by either party, then this Agreement, at the option of the party who is not in default, may be terminated by the non-defaulting party, in which case, the non-defaulting party may recover such damages as may be proper.

Section 15. Default and Remedies. In the event either party should default in performance of its obligations under this agreement, and such default shall remain uncured for more than 10 days after notice of default is given to the defaulting party, the non-defaulting party shall be entitled to pursue any and all legal remedies and recover its reasonable attorney's fees and costs in such legal action. In addition, no Party will be entitled to lost profits, economic damages, or actual, direct, incidental, consequential, punitive or exemplary damages in the event of a default.

Section 16. Waiver. A waiver by any party to this Agreement of the breach of any term or provision of this Agreement shall not operate or be construed as a waiver of any subsequent breach by either party.

Section 17. Governing Law. This Agreement shall be governed by the laws of the State of Colorado in the Douglas County District Court.

Section 18. Independent Contractor. Contractor has completed the Affidavit of Independent Contractor Status, attached as *Exhibit 3*, and submitted same at the time of execution of this Agreement. In addition to the Affidavit, Contractor and the Town hereby represent that Contractor is an independent contractor for all purposes hereunder. Contractor represents and warrants that they are free from the Town's direction and control in the performance of their work or services and that they have an independent business doing the specific type of work or services which are the subject of this Agreement. More specifically, Contractor represents and warrants that the Town does not control what work or services they will perform or the manner in which such work or services will be performed. As such, Contractor is not covered by any worker's



compensation insurance or any other insurance maintained by Town except as would apply to members of the general public. Contractor shall not create any indebtedness on behalf of the Town.

Section 19. No Third Party Beneficiaries. It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to Town and Contractor, and nothing contained in this Agreement shall give or allow any such claim or right of action by any other third party on such Agreement. It is the express intention of the parties that any person other than Town or Contractor receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.

Section 20. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together shall be deemed to constitute one and the same instrument. Each of the Parties hereto shall be entitled to rely upon a counterpart of the instrument executed by the other Party and sent by electronic mail.

ATTEST:

TOWN OF CASTLE ROCK

Lisa Anderson, Town Clerk

Jason Gray, Mayor

Approved as to form:

Approved as to content:

Michael J. Hyman, Town Attorney

David L. Corliss, Town Manager

CONTRACTOR:

OLSSON, INC.

By: _____

Its: _____



EXHIBIT 1

SERVICES AND FEE SCHEDULE

Work Breakdown Structure/Scope of Work

The proposed scope of work and associated fees is provided for discussion. We are confident our team can negotiate a scope of services that meets your needs.

Detailed tasks and hours are provided in Attachment A. Stream Landscape Architecture & Planning will provide landscape architecture, revegetation and planting plans, and related services throughout the project. Services are detailed in Attachment B, Stream's proposal dated December 9, 2022. CORVUS Environmental Consulting, LLC will provide environmental and permitting services as detailed in Attachment C, CORVUS' proposal dated December 8, 2022. Colliers Engineering & Design will provide subsurface utility engineering services as detailed in Attachment D, Colliers' proposal dated December 8, 2022. All other services will be performed by Olsson.

1. Project Management, Coordination and Meetings

- a. Project Management Plan: Prepare Project Management Plan to communicate work assignments, project scope, budget and schedule to all team members.
- b. Kick-off Meeting and Site Visit: Attend kick-off meeting and site visit with Town of Castle Rock. Prepare and distribute meeting notes. Stream will attend the kickoff meeting.
- c. Progress Meetings: Prepare and distribute meeting notes. Ten (10) meetings are included in the fee proposal: one (1) each month when a review meeting is not occurring, nine (9) total, and one (1) additional as necessary. It is assumed four (4) meetings will be in-person and six (6) will be virtual. Stream and CORVUS are anticipated to attend all progress meetings. It is assumed that any stakeholders can attend a progress meeting.
- d. Review Meetings: Attend review meetings following the alternatives selection, 30%, and 90% submittals, three (3) total. Prepare and distribute meeting notes.
- e. Public Meetings: Prepare for and attend up to two (2) public meetings.
- f. Monthly Progress Reports: Prepare progress reports to advise the Town's project manager of work completed, work planned for the upcoming month and challenges that could affect budget or schedule.
- g. Stream: Services detailed in Stream's scope of services, Tasks 1.1 and 1.2: Project Coordination and Meetings.
- h. CORVUS: Services detailed in CORVUS' scope of services, Tasks 1 and 2: Progress Meetings (10) and Project Coordination and Management.
- i. Phase I Deliverables:
 1. Project Management Plan (PDF)
 2. Meeting notes (PDF)
 3. Monthly progress reports (PDF)

2. Phase I: Surveying, Site Investigation & Alternatives Analysis

- a. Topographic Survey and Legal Descriptions
 - i. Olsson shall perform and prepare a boundary and topographic survey of multiple properties located in the Northwest and Southwest Quarters of Section 11, Township 8 South, Range 67 West, of the 6th PM. The properties to be surveyed are known as

Douglas County Parcel Numbers 2505-112-14-014, 2505-112-14-026, 2505-112-17-005, 2505-112-99-011, 2505-112-21-001, 2505-112-99-010, 2505-112-21-002, 2505-112-99-009, 2505-112-22-001, 2505-112-22-002, 2505-112-00-024, 2505-113-00-022, 2505-113-00-003, 2505-113-04-002, 2505-113-04-009, 2505-113-04-003, & 2505-113-00-024. The Limits of the topographic survey are shown in Figure 1 and the parcels are shown on Figure 2.



Figure 1 - Suggested Survey Limits in Red

- ii. The survey shall be tied to the Colorado State Plane Coordinate System of 1983 (NAD 83) Central Zone and to the North American Vertical Datum of 1988 (NAVD88).
- iii. The topographic survey shall depict physical improvements including buildings, finished floor elevations, roads, driveways, parking, walking paths, fencing, general vegetation, outline of treed areas (individual trees not included), and visible above ground utilities. Olsson will locate and detail sanitary and storm utility structures to show pipe sizes and direction.
- iv. The boundaries of the properties within the project area shall be determined based upon field investigations and documents within client provided Title Commitments. It is assumed the client will provide title commitments for each parcel being surveyed. Additional property research to support the title commitment will be performed by Olsson and performed through the Douglas County Assessor and Recorder's Offices. Survey work shall be done under the direction and supervision of a Licensed

Professional Land Surveyor licensed in the State of Colorado.

- i. Olsson shall create legal descriptions with exhibits of the requested lands to be acquired by the client. Each legal description shall be a metes and bounds description accompanied by an exhibit that graphically depicts the description. Per Addendum 1 three (3) legal descriptions are included in this scope of work. However, it appears seven (7) separate legal descriptions may be necessary. Additional descriptions can be provided at \$1,250 per description. Legal descriptions may be moved to Phase II or III as necessary should the needed descriptions not be determined in Phase I.



Figure 2 - Parcel Map

- b. Environmental Permitting Coordination (CORVUS): CORVUS' proposed scope of services is included as Attachment C. During Phase I, CORVUS proposes to complete Tasks 3 through 6 of their scope, including jurisdictional delineation of waters of the U.S., Preble's meadow jumping mouse (PMJM) habitat mapping, a baseline habitat quality assessment, and gather existing information on historic properties (to be performed by PaleoWest Archaeology). If the Town would prefer these tasks be performed during Phase II, they will be moved.
- c. Geomorphic Assessment: Olsson will provide a geomorphic assessment of the site including:

- i. Desktop analysis including, but not limited to, an evaluation of historic and contemporary maps, ground and aerial photos, survey data, bridge plans and inspection records, utility plans for stream crossings, existing watershed plans and reports, and hydrologic and hydraulic data and information.
 - ii. Detailed site reconnaissance to document and map the existing morphology of the project channels. The site reconnaissance will be conducted based on the guidance provided in HEC-20 (Lagasse et al. 2012) and the Stream Reconnaissance Handbook by (Thorne 1998). Where possible, the evolutionary stage of stream reaches will be identified based on the Channel Evolution Models of Schumm et al. (1984), Simon and Hupp (1986), and Cluer and Thorne (2015). The site reconnaissance work will include documenting the general sediment caliber and character of the channel bed and banks where visible, delineating existing bank protection, delineating any structures in the channel including beaver dams, exposed utility crossings, sand and gravel bars, inset berms/benches, outfalls, and documenting any other man-made feature in or along the channels that could impact the channel morphology. Field notes and georeferenced ground photos will be used to document existing conditions.
 - iii. A Geomorphic Stream Evaluation Report will be developed. The evaluation report will document all findings of the geomorphic evaluation and will include recommendations for improved sediment transport, improved flood flow conveyance, channel and stream bank maintenance, and channel and streambank stabilization.
- d. Alternatives analysis: The project team will complete up to four alternatives incorporating Master Plan intentions, stakeholder input, items for federal permitting, floodplain considerations, stream dynamics, trail and recreational considerations, the natural environment, and the urban connection. The alternatives will use the detailed survey shown in Figure 1 (in Item 2.a) plus LiDAR information outside of the survey. At the beginning of the phase, a constraints and opportunities workshop will be held to identify the environmental and physical constraints, prioritize desired improvements, and gain consensus on a path forward regarding allowable improvements. It is assumed it will be one of the progress meetings identified in Project Management and Coordination.
- e. Stream: Services detailed in Stream's scope of services, Tasks 1.3-1.7: Phase I: Site Investigation & Alternative Analysis
- f. Prepare a brief memorandum documenting the alternatives.
- g. Prepare a conceptual opinion of probable cost for each alternative.
- h. Conduct an independent QA/QC review.
- i. Phase I Deliverables
- 1. Geomorphic Stream Evaluation Report
 - 2. Alternatives Memorandum including design discussion, recommendations, and selection matrix (PDF)
 - 3. Conceptual level plan and profile drawings as an appendix to the memorandum (PDF and AutoCAD)
 - 4. Conceptual level opinion of probable cost (OPC) for each alternative (PDF and Excel)
 - 5. Topographic and property boundary survey plan sheets (PDF and AutoCAD)
 - 6. Easement descriptions and exhibits, three (3) total (PDF). These may occur in later phases if they depend on improvements that haven't been determined in this phase.

3. Phase II: Preliminary Design & Environmental Permitting

- a. Site meeting to observe the locations of the preferred improvements and make adjustments to the

locations, if needed. Because the grade control is anticipated to be designed close to utility crossings, staking was not included but can be done, if needed.

- b. Stream: Services detailed in Stream's scope of services, Tasks 2.1-2.8: Phase II: Preliminary Design
- c. Geotechnical Investigation: Olsson's geotechnical team will complete borings and laboratory testing to identify sub-surface conditions and recommendations for pedestrian bridge foundation design. Boring locations will be identified based on the selected alternative. Prepare a geotechnical report summarizing findings. Six (6) geotechnical boring are included, two (2) at each bridge location. Olsson can perform additional borings if additional bridges are added to the project assuming the borings are done during the same mobilization. This service is not included in the proposed budget but could be performed for an additional \$6,500.
- d. Preliminary (30%) Design: The project team will provide a 30% progress submittal based on the selected alternative from Phase I. For the purpose of estimating, it was assumed one main pond/water quality feature is included.
 - i. 30% Construction Drawings (22"x34" printable on 11"x17"):
 - 1. Cover (1 sheet)
 - 2. General Notes, Abbreviations, Legend (1 sheet)
 - 3. Survey Control (1 sheet)
 - 4. Overall Improvements (1 sheet)
 - 5. Plan and Profile (3 sheets)
 - 6. Water Quality Pond Grading Plan (1 sheet)
 - 7. Preliminary Details (4 sheets)
 - 8. Preliminary Planting/Revegetation Plan (3 sheets)
 - 9. Pedestrian Trail/Landscape Plans (3 sheets)
 - ii. Preliminary Hydraulic Calculations: Olsson will prepare a Preliminary Floodplain Modification Study (FMS) that will contain preliminary hydraulic calculations and will be used as the basis for the CLOMR Report or No-Rise Certification, as applicable. The hours associated with the FMS are associated with some of the basic modeling and the information and narrative to be developed. The majority of the hours associated with the detailed modeling and other required submittals are included with the CLOMR. If the Town would prefer a different format, it can be developed.
 - iii. Environmental Permitting Coordination (CORVUS): CORVUS' proposed scope of services is included as Attachment C. During Phase II, CORVUS proposes to complete Tasks 7 through 13 of their scope, consisting of agency pre-application coordination, FACWet Analysis, Colorado Stream Quantification Tool (CSQT), Compensatory Mitigation Plan (CMP), individual Permit (IP) application, Water Quality Certification Request, and USFWS concurrence letter request. The fee estimate includes \$1,122 for the 401 water quality certification request fee.
 - 1. Olsson will collect and provide information on the hydraulic and geomorphic parameters associated with the CSQT. It is anticipated that the following parameters and corresponding metrics will be utilized and the breakdown of parameter responsibility is noted.
 - a. Reach Runoff: Impervious cover and concentrated flow points (CORVUS)
 - b. Floodplain Connectivity: Bank height ratio and entrenchment ratio (Olsson)

- c. Lateral migration: Greenline stability rating (CORVUS)
 - d. Bed Form Diversity: Pool spacing ratio and pool depth ratio and percent riffle (Olsson)
 - e. Riparian Vegetation: Riparian width and woody vegetation cover and herbaceous vegetation cover and percent native cover (CORVUS)
- iv. 30% Engineer's Opinion of Probable Cost
 - v. Conduct an internal, independent QA/QC review.
 - vi. Phase II Deliverables
 - 1. 30% Construction Drawings (PDF and AutoCAD)
 - 2. 30% Preliminary FMS that includes hydraulic calculations (or other format) (PDF and working files)
 - 3. 30% Floodplain workmap (PDF and AutoCAD)
 - 4. 30% OPC (PDF and working file)
 - 5. Geotechnical Report (PDF)

4. Phase III: Final Design & Floodplain Modification Approval

- a. Stream: Services detailed in Stream's scope of services, Tasks 3.1-3.14: Phase III: Final Design and Floodplain Modification Approval.
- b. Subsurface Utility Engineering: Colliers will conduct subsurface utility engineering and develop a SUE Plan and Report to meet the requirements of SB18-167. Their scope and proposal are included as Attachment D. The project design will strive to avoid utilities wherever possible. While SUE services are included in Phase III, it may be beneficial to perform Quality Level D-B (QL-D-QL-B) locates during Phase II to inform the 30% design, and then perform QL-A test holes in Phase III. Ten (10) QL-A test holes are included.
- c. Environmental Permitting Coordination (CORVUS): CORVUS' proposed scope of services is included as Attachment C. During Phase III, CORVUS proposes to complete Task 14 of their scope, consisting of post submittal coordination.
- d. 90% structural design and coordination of three (3) pedestrian bridges and approximately 200 LF of pedestrian boardwalk.
- e. Final Design: The project team will provide a 90% progress submittal and 100% Bid Set submittal in accordance with Town Criteria.
 - i. 90% Construction Drawings (22"x34" printable on 11"x17"):
 - 1. Cover (1 sheet)
 - 2. General Notes, Abbreviations, Legend (1 sheet)
 - 3. Survey Control (1 sheet)
 - 4. Horizontal Control (1 sheet)
 - 5. Traffic and/or Pedestrian Control Plan (1 sheet)
 - 6. Overall Improvements Plan (1 sheet); include river stationing, property boundaries, easements, plan improvements, floodplain and RCZ (1 sheet)
 - 7. Channel Plan and Profile (3 sheets)
 - 8. Detailed Cross Sections: (2 sheets)
 - 9. Pedestrian Trail Plan and Profiles (3 sheets)

10. Structural Plans and Details (3 prefabricated pedestrian bridges)
 - a. General Structural Notes and Quantities
 - b. GP&E
 - c. Geological Profile/Pile Layout
 - d. Abutments
 - e. Approaches
 - f. Safety Railing
 - g. Quantities
 - h. Misc. Plan Production
 - i. Structural Aesthetics
 11. Drop Structure Details: details plus cross sections through grade control structures, (6 sheets)
 12. Details (4 sheets)
 13. Planting / Revegetation Plan (2 sheets)
 14. Planting / Revegetation Plan Details (2 sheets)
- ii. Floodplain Modification Study (FMS): Olsson will update the FMS (or other format) to the 90% and 100% levels. It will serve as the basis for the CLOMR Report. Additional information will be required.
- iii. CLOMR: Olsson will prepare and submit a CLOMR application and address comments as needed to obtain approval. A discussion of the alternatives evaluation and documentation of Environmental Species Act (ESA) compliance will be included. The CLOMR will be prepared in final form for Town and Douglas County review prior to submittal to FEMA, with the 90% submittal. Acknowledgement by Douglas County will be required on the MT-2 forms. Each task of the CLOMR is listed in the fee estimate.

Build upon the design modeling and FMS to prepare a CLOMR submittal. The majority of the hours for floodplain modeling and development of required maps and forms is included with the CLOMR task. The following items will be included:

- a. Duplicate effective model
- b. Existing/corrected effective model
- c. Existing floodplain delineation, 100-yr & 500-yr
- d. Post-project floodplain model
- e. Post-project floodway model
- f. Post-project floodplain delineation, 100-yr & 500-yr
- g. Post-project floodway delineation
- h. Workmap
- i. Annotated FIRM
- j. Annotated profile
- k. Annotated floodway table
- l. Agreement table
- m. Floodplain and floodway table
- n. CLOMR narrative
- o. MT-2 forms
- p. Owner notification letters and exhibit
- q. QA/QC
- r. Address sponsor comments
- s. Address FEMA comments
- t. FEMA review fee of \$6,500 is included.

Note that the costing spreadsheet shows the CLOMR after the remaining 90% and 100% tasks, rather than in this position in the order as it is helpful to track it separately.

- iv. Temporary Erosion and Sediment Control (TESC) Plan and Report: Olsson will prepare a

TESC plan and TESC report for the project in accordance with the Town of Castle Rock TESC Manual. Submit a 90% progress set for Town review and 100% bid set.

- v. 90% Technical Specifications: The project team will prepare technical specifications, which are anticipated to be a combination of Town of Castle Rock, UDFCD, and CDOT specifications.
- vi. Technical Criteria Variance related to Water Quality Exclusion(s), if needed.
- vii. 90% OPC
- viii. Conduct an internal, independent QA/QC review.
- ix. 100% Bid Set
 - a. Address 90% review comments and prepare and submit 100% documents and a bid schedule.
 - b. Conduct an internal, independent QA/QC review.
- f. Phase III Deliverables
 - i. 90% and 100% Construction Drawings (PDF and AutoCAD)
 - ii. Certified SUE Plan and Report (PDF and AutoCAD)
 - iii. TESC Plan and Report (PDF, AutoCAD, and Word)
 - iv. Drainage calculation memorandum of FMS (PDF and working files)
 - v. CLOMR Report and Application (PDF and working files)
 - vi. 404 Permit Application (PDF)
 - vii. Memo and Exhibit(s) for USFWS Concurrence Request (PDF and working files)
 - viii. Utility Relocation Agreements, as applicable (PDF)
 - ix. Technical Specifications (PDF and Word Document)
 - x. Technical Criteria Variance (PDF and Word Document)
 - xi. Engineer's Opinion of Probable Cost (PDF and working files)
 - xii. Bid Schedule (Excel or Word Document)
 - xiii. Easement Legal Descriptions and Exhibits, if needed (PDF and AutoCAD)

5. Assumptions and Clarifications

The following services are not included. If they are requested, a proposal will be prepared for your approval:

- 1. Survey
 - a. Client responsible for coordination and site access prior to commencing survey.
 - b. Any changes to survey scope may affect the cost and schedule of the survey. All additional work shall be approved by the client prior to commencement of that additional work.
 - c. The use of UAV/UAS (drones) will be allowed on and over the site.
 - d. Individual surveys for each property are excluded from this scope.
- 2. Final design of potential recreational amenities that have not been selected such as bike challenge courses, disc golf, etc. or comprehensive urban planning-related items
- 3. Bid phase and construction phase services.
- 4. As-built survey and record drawings.
- 5. Letter of Map Revision.

-END

OLSSON
PROFESSIONAL SERVICES FEE ESTIMATE

Project Name: East Plum Creek Sellars Confluence
Project Number: Z22-06349
Project Manager: Deb Ohlinger

TASK	Estimated Hours														Total Labor Cost	Sub- consult	Reimb Expenses	Sub Total Task Cost	Total Phase Cost
	Team Leader	Senior Engineer	Project Engineer	Assistant Engineer	Geomorphologist	Team Leader Structural	Project Engineer Structural	Assistant Engineer Structural	Senior Technician	Team Leader Survey	Senior Surveyor	Surveyor	Senior Survey Tech	2-person Survey Crew					
HOURLY RATES Personnel	\$240.00 DO	\$216.00 AG/CU	\$167.00 MD/HP	\$123.00 MS	\$245.00 WS	\$240.00	\$167.00	\$123.00	\$113.00	\$240.00 NS	\$164.00	\$130.00	\$113.00	\$208.00					
Project Management, Coordination and Meetings																			
Project management plan	2		2												\$ 814	\$ -	\$ -	\$ 814	
Kick-off meeting and site visit, distribute meeting notes	4		5	5	5										\$ 3,635	\$ -	\$ 179	\$ 3,814	
Progress meetings, distribute meeting notes (10 total - 4 in person, 6 virtual)	18		26		16		10	10							\$ 15,482	\$ -	\$ 453	\$ 15,935	
Review meetings (alts, 30%, 90%), meeting notes	9		12		12										\$ 7,104	\$ -	\$ -	\$ 7,104	
Public meetings (2)	8		10												\$ 3,590	\$ -	\$ 96	\$ 3,686	
Monthly progress reports and general coordination	36		27				10								\$ 14,819	\$ -	\$ -	\$ 14,819	
Project Management, Coordination and Meetings (Stream Task 1.1-1.2)															\$ -	\$ 13,230	\$ -	\$ 13,230	
Project Management, Coordination and Meetings (CORVUS Tasks 1 and 2)															\$ -	\$ 8,319	\$ -	\$ 8,319	
	77	-	82	5	33	-	20	10	-	-	-	-	-	-	\$ 45,444	\$ 21,549	\$ 728	\$ 67,721	\$ 67,721
Phase I: Surveying, Site Investigation & Alternatives Analysis																			
Survey															\$ -	\$ -	\$ -	\$ -	
Topographic Survey										5	56	70	99	170	\$ 66,031	\$ -	\$ 500	\$ 66,531	
Easement Descriptions and Exhibits															\$ -	\$ -	\$ 3,750	\$ 3,750	
Environmental Permitting (CORVUS Tasks 3-6)															\$ -	\$ 25,659	\$ -	\$ 25,659	
Geomorphic Assessment				8	48										\$ 12,744	\$ -	\$ 179	\$ 12,923	
Constraints & opportunities workshop (time included above)															\$ -	\$ -	\$ -	\$ -	
Alternatives Analysis															\$ -	\$ -	\$ -	\$ -	
Evaluate Existing Hydraulics	1	2	4	16											\$ 3,308	\$ -	\$ -	\$ 3,308	
Develop Alternatives (up to 4)	12	12	24	64	12										\$ 20,292	\$ -	\$ -	\$ 20,292	
Evaluate Proposed Hydraulics	1	2	8	24											\$ 4,960	\$ -	\$ -	\$ 4,960	
Conceptual Plan and Profiles	4	4	8	36	2										\$ 8,078	\$ -	\$ -	\$ 8,078	
Landscape architecture (Stream Task 1.3-1.7)															\$ -	\$ 25,900	\$ -	\$ 25,900	
Alternatives Memorandum (Stream Task 1.8)															\$ -	\$ 2,520	\$ -	\$ 2,520	
Alternatives Memorandum	2	2	8	24											\$ 5,200	\$ -	\$ -	\$ 5,200	
Conceptual OPC	1	2	4	18											\$ 3,554	\$ -	\$ -	\$ 3,554	
QA/QC		8													\$ 1,728	\$ -	\$ -	\$ 1,728	
	21	32	56	190	62	-	-	-	-	5	56	70	99	170	\$ 125,895	\$ 54,079	\$ 4,429	\$ 184,403	\$ 184,403
Phase II: Preliminary Design & Environmental Permitting																			
Site meeting to review selected alternative	4		4	4	4										\$ 3,100	\$ -	\$ 179	\$ 3,279	
Landscape architecture (Stream Task 2.1-2.8)															\$ -	\$ 42,990	\$ -	\$ 42,990	
Geotechnical Investigation (Olsson)																\$ -	\$ 25,000	\$ 25,000	
30% Construction Drawings																\$ -	\$ -	\$ -	
Cover sheet (1 sheet)			1	1											\$ 290	\$ -	\$ -	\$ 290	
General notes, abbreviations, legend (1 sheet)			1	2											\$ 413	\$ -	\$ -	\$ 413	
Survey control sheet (1 sheet)				1											\$ 123	\$ -	\$ -	\$ 123	
Overall site improvements (1 sheet)		1	2	6											\$ 1,288	\$ -	\$ -	\$ 1,288	
Plan and profile (1"=50', 3 sheets)	6	6	12	36	4										\$ 10,148	\$ -	\$ -	\$ 10,148	
Water Quality Pond Grading Plan (1 sheet)	1	1	4	20											\$ 3,584	\$ -	\$ -	\$ 3,584	
Preliminary details (4 sheets)	2	1	4	16	1										\$ 3,577	\$ -	\$ -	\$ 3,577	
Planting/Revegetation plan (1"=50', 3 sheets)			1	1											\$ 290	\$ -	\$ -	\$ 290	
Pedestrian Trail/Landscape Plan (3 sheets)			1	1											\$ 290	\$ -	\$ -	\$ 290	
30% Floodplain Modification Study (FMS) w/calcs	1	2	4	32											\$ 5,276	\$ -	\$ -	\$ 5,276	
Environmental Permitting (CORVUS Tasks 7-13)															\$ -	\$ 29,156	\$ -	\$ 29,156	
Environmental Permitting (Olsson CSQT)				30	48										\$ 15,450	\$ -	\$ 179	\$ 15,629	
30% OPC	1	1	2	8											\$ 1,774	\$ -	\$ -	\$ 1,774	
QA/QC		8													\$ 1,728	\$ -	\$ -	\$ 1,728	
	15	20	36	158	57	-	-	-	-	-	-	-	-	-	\$ 47,331	\$ 72,146	\$ 25,358	\$ 144,835	\$ 144,835

OLSSON
PROFESSIONAL SERVICES FEE ESTIMATE

Project Name: East Plum Creek Sellars Confluence
Project Number: Z22-06349
Project Manager: Deb Ohlinger

TASK	Estimated Hours														Total Labor Cost	Sub- consult	Reimb Expenses	Sub Total Task Cost	Total Phase Cost
	Team Leader	Senior Engineer	Project Engineer	Assistant Engineer	Geomorphologist	Team Leader Structural	Project Engineer Structural	Assistant Engineer Structural	Senior Technician	Team Leader Survey	Senior Surveyor	Surveyor	Senior Survey Tech	2-person Survey Crew					
HOURLY RATES Personnel	\$240.00 DO	\$216.00 AG/CU	\$167.00 MD/HP	\$123.00 MS	\$245.00 WS	\$240.00	\$167.00	\$123.00	\$113.00	\$240.00 NS	\$164.00	\$130.00	\$113.00	\$208.00					
Phase III: Final Design & Floodplain Modification Approval																			
Landscape architecture (Stream Task 3.1-3.14)															\$ -	\$ 62,680	\$ -	\$ 62,680	
SUE (Colliers)															\$ -	\$ -	\$ -	\$ -	
QL-D through QL-B															\$ -	\$ 23,500	\$ -	\$ 23,500	
QL-A Test Holes (10)															\$ -	\$ 22,000	\$ -	\$ 22,000	
Environmental Permitting (CORVUS Task 14)															\$ -	\$ 1,048	\$ -	\$ 1,048	
90% Structural Design							12	16							\$ 3,972	\$ -	\$ -	\$ 3,972	
90% Construction Drawings															\$ -	\$ -	\$ -	\$ -	
Cover sheet (1 sheet)				1											\$ 123	\$ -	\$ -	\$ 123	
General notes, abbreviations, legend (1 sheet)			1	2											\$ 413	\$ -	\$ -	\$ 413	
Survey control (1 sheet)				1											\$ 123	\$ -	\$ -	\$ 123	
Horizontal control plan (1 sheet)			1	1											\$ 290	\$ -	\$ -	\$ 290	
Traffic and/or pedestrian control plan (1 sheet)		1	2	8											\$ 1,534	\$ -	\$ -	\$ 1,534	
Overall site improvements (1 sheet)			1	4											\$ 659	\$ -	\$ -	\$ 659	
Channel plan and profile (1"=50', 3 sheets)		4	12	36	4										\$ 8,276	\$ -	\$ -	\$ 8,276	
Detailed cross Sections (2 sheets)		1	6	18											\$ 3,432	\$ -	\$ -	\$ 3,432	
Pedestrian Trail Plan and Profiles (3 sheets)	1	1	1	1											\$ 746	\$ -	\$ -	\$ 746	
Structural Plans and Details (3 Pedestrian Bridges)															\$ -	\$ -	\$ -	\$ -	
General Structural Notes, Quantities								6	4						\$ 1,190	\$ -	\$ -	\$ 1,190	
GP&E							2	6	10						\$ 2,202	\$ -	\$ -	\$ 2,202	
Geological Profile / Pile Layout								4	8						\$ 1,396	\$ -	\$ -	\$ 1,396	
Abutments							8	20	20						\$ 6,056	\$ -	\$ -	\$ 6,056	
Approaches								4	4						\$ 944	\$ -	\$ -	\$ 944	
Safety Railing								4	4						\$ 944	\$ -	\$ -	\$ 944	
Quantities								8	2						\$ 1,210	\$ -	\$ -	\$ 1,210	
Misc Plan Production									30						\$ 3,390	\$ -	\$ -	\$ 3,390	
Structure Aesthetics							8	10	10						\$ 3,696	\$ -	\$ -	\$ 3,696	
Drop structure details (6 sheets)	1	2	8	72											\$ 10,864	\$ -	\$ -	\$ 10,864	
Details (4 sheets)	1	2	8	16											\$ 3,976	\$ -	\$ -	\$ 3,976	
Planting/revegetation plan (1"=50', 2 sheets)			1	1											\$ 290	\$ -	\$ -	\$ 290	
Planting plan details (2 sheets)			1	1											\$ 290	\$ -	\$ -	\$ 290	
90% FMS	1	2	4	24											\$ 4,292	\$ -	\$ -	\$ 4,292	
90% TESC Plan	1	2	8	40											\$ 6,928	\$ -	\$ -	\$ 6,928	
90% TESC Report		1	4	16											\$ 2,852	\$ -	\$ -	\$ 2,852	
90% Technical Specifications	2	16	16	2											\$ 6,854	\$ -	\$ -	\$ 6,854	
90% OPC		1	4	12											\$ 2,360	\$ -	\$ -	\$ 2,360	
QA/QC		12				10	20								\$ 8,332	\$ -	\$ -	\$ 8,332	
100% Documents															\$ -	\$ -	\$ -	\$ -	
Address 90% comments; prepare 100% bid set		4	20	60											\$ 11,584	\$ -	\$ -	\$ 11,584	
100% OPC		1	1	6											\$ 1,121	\$ -	\$ -	\$ 1,121	
100% Technical Specifications		2	4	8											\$ 2,084	\$ -	\$ -	\$ 2,084	
100% TESC Plan		1	2	8											\$ 1,534	\$ -	\$ -	\$ 1,534	
100% TESC Report		1	2	6											\$ 1,288	\$ -	\$ -	\$ 1,288	
100% FMS		1	2	4											\$ 1,042	\$ -	\$ -	\$ 1,042	
Bid Schedule		1	1	1											\$ 506	\$ -	\$ -	\$ 506	
QA/QC		8													\$ 1,728	\$ -	\$ -	\$ 1,728	
	7	64	110	349	4	10	50	78	92	-	-	-	-	-	\$ 108,521	\$ 109,228	\$ -	\$ 217,749	\$ 217,749

OLSSON

PROFESSIONAL SERVICES FEE ESTIMATE

Project Name: East Plum Creek Sellars Confluence

Project Number: Z22-06349

Project Manager: Deb Ohlinger

TASK	Estimated Hours														Total Labor Cost	Sub- consult	Reimb Expenses	Sub Total Task Cost	Total Phase Cost
	Team Leader	Senior Engineer	Project Engineer	Assistant Engineer	Geomorphologist	Team Leader Structural	Project Engineer Structural	Assistant Engineer Structural	Senior Technician	Team Leader Survey	Senior Surveyor	Surveyor	Senior Survey Tech	2-person Survey Crew					
HOURLY RATES Personnel	\$240.00 DO	\$216.00 AG/CU	\$167.00 MD/HP	\$123.00 MS	\$245.00 WS	\$240.00	\$167.00	\$123.00	\$113.00	\$240.00 NS	\$164.00	\$130.00	\$113.00	\$208.00					
CLOMR																			
Duplicate effective model				2											\$ 246	\$ -	\$ -	\$ 246	
Existing/corrected effective model		1	4	8											\$ 1,868	\$ -	\$ -	\$ 1,868	
Existing floodplain delineation, 100-yr & 500-yr				8											\$ 984	\$ -	\$ -	\$ 984	
Post-project floodplain model			2	6											\$ 1,072	\$ -	\$ -	\$ 1,072	
Post-project floodway model		1	1	2											\$ 629	\$ -	\$ -	\$ 629	
Post-project floodplain delineation, 100-yr & 500-yr				8											\$ 984	\$ -	\$ -	\$ 984	
Post-project floodway delineation				2											\$ 246	\$ -	\$ -	\$ 246	
Workmap		1	4	12											\$ 2,360	\$ -	\$ -	\$ 2,360	
Annotated FIRM				2											\$ 246	\$ -	\$ -	\$ 246	
Annotated profile				2											\$ 246	\$ -	\$ -	\$ 246	
Annotated floodway table				2											\$ 246	\$ -	\$ -	\$ 246	
Agreement table			1	4											\$ 659	\$ -	\$ -	\$ 659	
Floodplain and floodway table		1	1	4											\$ 875	\$ -	\$ -	\$ 875	
CLOMR narrative			4	16											\$ 2,636	\$ -	\$ -	\$ 2,636	
MT-2 forms			2	8											\$ 1,318	\$ -	\$ -	\$ 1,318	
Owner notification letters and exhibit			1	4											\$ 659	\$ -	\$ -	\$ 659	
QA/QC	2	8	8												\$ 3,544	\$ -	\$ -	\$ 3,544	
Address sponsor comments		2	4	12											\$ 2,576	\$ -	\$ -	\$ 2,576	
Address FEMA comments		4	8	24											\$ 5,152	\$ -	\$ -	\$ 5,152	
FEMA review fee															\$ -	\$ -	\$ 6,500	\$ 6,500	
	2	18	40	126	-	-	-	-	-	-	-	-	-	-	\$ 26,546	\$ -	\$ 6,500	\$ 33,046	\$ 33,046
Total Hours	122	134	324	828	156	10	70	88	92	5	56	70	99	170	\$ 353,737	\$ 257,002	\$ 37,015	\$ 647,754	
Total Cost	\$29,280	\$28,944	\$54,108	\$101,844	\$38,220	\$2,400	\$11,690	\$10,824	\$10,396	\$1,200	\$9,184	\$9,100	\$11,187	\$35,360	\$ 353,737	\$ 257,002	\$ 37,015	\$ 647,754	\$ 647,754
TOTAL PROJECT																			\$ 647,754

stream
landscape architecture + planning

East Plum Creek/Sellars Gulch Confluence - Town of Castle Rock

12/9/2022

Task No.	Sheet No.	Task Description	TIME (HOURS)					TOTALS			
			Jesse PRIN. \$220	PM III \$165	A.PM \$135	LA-1 \$95	Acct. \$60				
PHASE I: SURVEYING, SITE INVESTIGATION, & ALTERNATIVES ANALYSIS											\$41,650
		Coordination and Meetings									
1.1		Project Administration: project setup, budgeting & contract admin.	12		8			15	35	\$4,860	\$4,860
1.2		Progress meetings - assumes 1 per month	18		9	9	18		54	\$8,370	\$8,370
										\$13,230	
		Alternatives Analysis									
1.3		Review of existing master plans/information/reports	1		4	4			9	\$1,140	\$1,140
1.4		Site Visit (assume 1 day)	6		6	6			18	\$2,700	\$2,700
1.5		Develop 3-4 Site Design Alternatives (including stream alignments). Stream will be involved with grading, water quality integration, channel design, 4 renderings.	16		8	24	60		108	\$13,780	\$13,780
1.6		Coordination: alternatives analysis related to habitat reqs (CORVUS)	4		8	8	8		20	\$2,720	\$2,720
1.7		Update concept cost estimates	4		8	8	24		44	\$5,560	\$5,560
										\$25,900	
		Deliverables									
1.8		Alternatives Memorandum w/ Conceptual Level Cost EstimatesStream will review memo plans (prepared by Olsson) and provide memo narrative, where applicable.	2		8		8		18	\$2,520	\$2,520
										\$2,520	
PHASE II: PRELIMINARY DESIGN											\$42,990
		Coordination and Meetings									
2.1		Progress meetings - assumes one per month	18		9	9	18		54	\$8,370	\$8,370
2.2		Public Outreach Meetings (2 Assumed)	6			8	8		22	\$3,160	\$3,160
2.3		Coordination and support: habitat assessment and enhancement (CORVUS)	4		8		8		20	\$2,960	\$2,960
										\$14,490	
		Stream Stabilization Design									
2.4		Site Visits (assume 1 day)							0	\$0	\$0
2.5		Updates to layout and initial grading of proposed channel stabilization							0	\$0	\$0
2.6		Updates to site concept layouts (trails, benches, signage, etc.), plus preparation of presentation materials for 2 public meetings; includes preliminary planting plan	8		16	24	60		108	\$13,340	\$13,340
										\$13,340	
		Deliverables									
2.7		30% Construction Drawings	8		16	24	40		88	\$11,440	\$11,440
2.8		30% Engineer's Opinion of Probable Cost	4		8		16		28	\$3,720	\$3,720
										\$15,160	
PHASE III: FINAL DESIGN & FLOODPLAIN MODIFICATION APPROVAL*											\$62,680
		Coordination and Meetings									
3.1		Progress Meetings (2)	8			4	8		20	\$3,060	\$3,060
3.2		Site Visits (1 Day)	6			6	6		18	\$2,700	\$2,700
										\$5,760	
		CONSTRUCTION DRAWINGS									
3.3		Grading design & coordination with Olsson	4			12	18		34	\$4,210	\$4,210
3.4		Landscape Plans (number of sheets depending on extent of revegetation), 9-18 sheets	8		24	40	72		144	\$17,960	\$17,960
3.5		Landscape Notes, Site and Planting Details & Planting Legend (Assumes no custom detailing will be needed for site features, standard details only), 6 sheets	6		8	16	24		54	\$7,080	\$7,080
										\$29,250	
3.6		SPECIFICATIONS									
3.7		Technical Specifications	4		12		8		24	\$3,620	\$3,620
3.8		Bid Schedule and Measurement and Payment	2		8				10	\$1,760	\$1,760
										\$5,380	
		ENGINEER'S COST OPINION AND BID SCHEDULE									
3.9		Revise OPC	2		8	4	4		18	\$2,680	\$2,680
										\$2,680	
		SUBMITTALS									
3.1		Internal Senior Review	4		16				20	\$3,520	\$3,520
3.11		60% Check Set			4	8	12		24	\$2,880	\$2,880
3.12		Submittal of 90% Documents			8	16	24		48	\$5,760	\$5,760
3.13		90% Review and Revisions	2		6	12	16		36	\$4,570	\$4,570
3.14		Submittal of 100% Documents			4	8	12		24	\$2,880	\$2,880
										\$19,610	
		Total Hours	157	0	196	250	482	15	1100	-	-
		Fee, Billing Rate	\$34,540	\$0	\$32,340	\$33,750	\$45,790	\$900	-	\$147,320	-
		Total Expenses	-	-	-	-	-	-	-	-	-
		Total, Billing Rate(b+c)	-	-	-	-	-	-	-	-	\$147,320

Scope and Fee



East Plum Creek/Sellars Gulch Confluence - Town of Castle Rock

12/9/2022

Task No.	Sheet No.	Task Description	TIME (HOURS)					TOTALS
			Jesse PRIN.	PM III	A.PM	LA-1	Acct.	
			\$220	\$165	\$135	\$95	\$60	

Statement of Work for East Plum Creek/Sellars Gulch Confluence Project

December 8, 2022

Presented to:

Olsson
1525 Raleigh Street, Suite 400
Denver, CO 80204

Prepared by:



CORVUS
Environmental Consulting LLC

Project Information Summary

CORVUS Client Name	Olsson
Client Project Manager	Deb Ohlinger
Project Name	East Plum Creek/Sellars Gulch Confluence Project
Project Purpose	Stabilize the East Plum Creek channel, enhancing wildlife habitat, water quality, and increase recreation and community spaces along East Plum Creek and Sellars Gulch.
Location	The project area generally includes East Plum Creek and Sellars Gulch between 2 nd Street and Plum Creek Parkway.
CORVUS Project Role	CORVUS' role will be to implement Clean Water Act Section 404 and Endangered Species Act environmental permitting approaches for the improvements. The role includes acting as the primary point of contact for communication between the project team, the U.S. Army Corps of Engineers (USACE), the US Fish and Wildlife Service (USFWS). CORVUS will work with the design team to optimize the compatibility of project design elements with the permitting approach. CORVUS will also coordinate consultation with the State Office of Historic Preservation (SHPO) regarding potential effects to historic properties.

Description of Study Area

The study area includes the footprint of proposed improvements, including project elements that affect East Plum Creek and/or its adjacent wetlands. Revisions to the extent of the study area may require additional effort and associated changes in labor costs. CORVUS will coordinate with the Client Project Manager to determine if cost modifications are necessary prior to performing work in a revised study area.



Tasks

The following tasks address compliance with Clean Water Act Section 404 (Section 404) and the Endangered Species Act (ESA). These tasks assume the project will require a Section 404 Individual Permit and that the proposed project will result in a net benefit to Preble's meadow jumping mouse (PMJM) through habitat improvements. However, the specific type of permit sought for this project will be determined once a pre-application meeting between the project team and the US Army Corps of Engineers (USACE) has been completed. CORVUS will work closely with the Client and project team to pursue project authorization using a nationwide permit (NWP) if appropriate. The tasks have been divided into project management and three phases: Phase I – Surveying and Site Investigation, Phase II – Preliminary Design; and Phase III – Final Project Design.

Project Management, Coordination, and Meetings

Task 1. Progress Meetings (10 meetings) – CORVUS will participate in an estimated 4 in person and 6 virtual progress meetings or calls with the design team throughout the project to provide insight and strategy for environmental permitting requirements and status of permitting applications. Participation

in project meetings provides CORVUS with an opportunity to develop a well-rounded Section 404 permitting approach when drafting the Section 404 Permit application and ensures the project design meets ESA compliance needs. Additionally, participation results in the greatest predictability and efficiency for the design team when undergoing the Section 404 process.

Task 2. Project Coordination and Management – This task includes general coordination with the Client, design engineer, and time spent by CORVUS on quality control, project set up, and managing project budget, schedule, and billing.

Phase I – Site Investigations and Alternatives Analysis

CORVUS' approach to work in Phase I begins by coordinating with the Town of Castle Rock, the US Fish and Wildlife Service (USFWS), and the Colorado Department of Transportation (CDOT) to determine the availability of covered activity credits (based on the Douglas County Habitat Conservation Plan [DCHCP]) that could be used to incorporate recreational elements into the project and to determine activities allowed within the CDOT Preble's meadow jumping mouse (PMJM) mitigation bank and the Town of Castle Rock's PMJM mitigation areas. Additionally, CORVUS will identify the location, quantity, and quality of regulated resources, including wetlands and other waters of the U.S. (WOTUS), PMJM habitat, and historic properties. Regulated resource mapping and information on allowable activities will inform the design team's approach to proposed improvements.

Task 3. Initial PMJM Coordination – CORVUS will facilitate consultation between the Town of Castle Rock, USFWS, CDOT, and the design team to determine the availability of covered activity credits (based on the DCHCP) that could be used to incorporate recreational elements into the project and determine activities allowed within the CDOT PMJM mitigation bank and the Town of Castle Rock's PMJM mitigation areas. This coordination will ensure that the ESA compliance needs of all parties are addressed. This information will also inform the design team's approach to proposed improvements. This task includes preparation and participation in the design team's constraints and opportunities workshop.

Task 4. Delineation of WOTUS – CORVUS will complete a full field jurisdictional delineation of WOTUS, including adjacent wetlands at the start of the growing season (~April). The delineation will follow current USACE methods and guidance on delineating wetlands and the ordinary high water mark. CORVUS will provide the Client with an AutoCAD/SHP files of the WOTUS boundaries. Prior to the fieldwork, CORVUS will aerial delineate WOTUS for the purposes of avoiding and minimizing impacts during preliminary design.

Task 5. Pre-Project (Baseline) Habitat Quality Assessment – PMJM is known to occur on East Plum Creek and is assumed to be present in the project area. CORVUS will follow the "Interim Protocol for Habitat Improvement Activities" to field assess the project area's baseline condition of PMJM habitat at the start of the growing season (~April). CORVUS will complete the "Habitat Improvement Activity Checklist" for pre-project (baseline) conditions. While onsite, CORVUS will also assess the study area for the potential to support other species listed as threatened or endangered under ESA. Prior to the fieldwork, CORVUS will aerial assess PMJM habitat quality for the purposes of avoiding and minimizing impacts to PMJM habitat during preliminary design.

Task 6. Survey, Document, and Record Potential Historic Properties Task Management – This task is for coordination and consultation with PaleoWest Archaeology (PaleoWest), CORVUS' preferred heritage consulting firm. PaleoWest will be a sub-consultant to CORVUS, and their fee is provided as an expense. As part of the CWA Section 404 compliance process, the USACE must comply with Section 106 of the National Historic Preservation Act (NHPA). To do this, the USACE typically requires prospective permittees to submit the results of a survey for potential historic properties in the USACE permit area (also known as the area of potential effect [APE]). Potential historic properties include archaeological sites, farmsteads, irrigation ditches, transmission lines, and railroads.

The APE will be surveyed in detail for potential historic properties. The following activities are included in PaleoWest's fee:

- Request a file search of Office of Archaeology and Historic Preservation (OAHP) records for a 1-mile radius around the survey areas (permit area)
- Conduct archival research, as needed, to determine if additional cultural resources are present within the project area
- Conduct an intensive pedestrian inventory of the project area
- Record the locations of any cultural resources encountered that are 50 years old or older
- Prepare limited results survey form

This statement of work does not include a mitigation plan for adverse effects on historic properties.

Phase II – Preliminary Design and Permitting

Phase II consists of preparing and submitting the individual permit application packet, which will include a compensatory wetland mitigation plan, Colorado Stream Quantification Tool (CSQT) package, historic properties report and effects determination, and a USFWS Concurrence Letter Request.

Task 7. Section 404 Permitting Approach and USACE Pre-Application Coordination – Based on CORVUS' participation in progress meetings with the Project team, CORVUS will analyze the project background, proposed improvements, and anticipated impacts to WOTUS to develop a permitting approach for the project that will serve as the basis of the Section 404 Permit Application (Individual Permit is assumed). This includes crafting a carefully worded project purpose and need statement; identifying key design elements, site, and design constraints; avoidance and minimization measures to WOTUS; and analyzing a set of practicable alternatives that comply with Section 404(b)(1) Guidelines.

CORVUS will coordinate with the USACE to discuss project purpose and need, schedule, preliminary design concepts, potential impacts to wetlands and waters of the U.S., and mitigation strategies. The purpose of the coordination is to allow the USACE to express any concerns with the project or proposed permitting approach.

Task 8. FACWet Analysis (if required) – When permanent adverse impacts to wetlands are anticipated, the Colorado Mitigation Procedures version 2 (COMP v2) specifies that a Functional Assessment of Colorado Wetlands (FACWet) analysis should be completed and submitted to assist in determining wetland functions impacted and compensatory wetland mitigation ratios. Based on the results of the delineation and proposed impacts to WOTUS, if it is determined that FACWet is required, CORVUS will

conduct a FACWet analysis on wetlands within the property and provide FACWet data forms and mapping with the 404 application submittal.

Task 9. Colorado Stream Quantification Tool – The CSQT is a spreadsheet-based calculator approved by the USACE to determine if a proposed stream project would result in a permanent loss of Functional Feet (FF) (as opposed to linear feet) after completion of a project and therefore possibly require mitigation. Per the COMP v2, the Project team proposes Debit Option 1, which uses the CSQT to calculate the change in condition at an impact site by comparing the existing and proposed conditions. The CSQT should be used to determine if stream mitigation is required to offset stream impacts resulting from the permitted activity.

The assessment of five specific parameters (within the “Reach Hydrology and Hydraulics” and “Geomorphology” Functional Categories) is required at all project sites evaluated for CWA Section 404 purposes, including Reach Runoff, Floodplain Connectivity, Lateral Migration, Bed Form Diversity, and Riparian Vegetation. This provides consistency between impacts and compensatory mitigation and allows for a more consistent accounting of functional change.

CORVUS will work collaboratively with Olsson to complete data collection and analysis of the required metrics within each of the five required CSQT parameters. The following sub-tasks address data collection and analysis for the Existing Condition Assessment/Score and Proposed Condition Assessment/Score for the five required CSQT parameters including Reach Runoff, Floodplain Connectivity, Lateral Migration, Bed Form Diversity, and Riparian Vegetation. The specific metrics used to assess each of these five parameters will be decided as part of developing the CSQT approach with the project team. **Table 1** shows the five required CSQT parameters and associated metrics as well as the party that may be responsible for completing the work associated with each parameter and/or metric for **BOTH Existing and Proposed Conditions**:

Table 1. Proposed CSQT Parameters, Metrics and Corresponding Datasheets

Parameter	Metric(s)	Datasheet(s)	Party Responsible
Reach Runoff	Land Use Coefficient (D) AND Concentrated Flow Points (F)	Field Value Documentation Form (Hydrology & Hydraulics) AND Project Reach Form Section II(b)	CORVUS
Floodplain Connectivity*	Bank Height Ratio (F) AND Entrenchment Ratio (F)	Field Value Documentation (Hydrology & Hydraulics)	Olsson
Lateral Migration**	Dominant Bank Erosion Hazard Index/Near Bank Stress (BEHI/NBS) AND Percent Streambank Erosion (F) OR Percent Armoring Metric (F) OR Greenline Stability Rating (F)	Field Value Documentation Form (Geomorphology) AND Project Reach Form Section II(c)	Olsson or CORVUS depending on metric selection

Parameter	Metric(s)	Datasheet(s)	Party Responsible
Bed Form Diversity	Pool Spacing Ratio (F) AND Pool Depth Ratio (F) AND Percent Riffle (F)	Field Value Documentation Form (Geomorphology)	Olsson
Riparian Vegetation	Riparian Extent (D/F) AND Percent Native Cover (F) AND Woody Vegetation Cover (F) OR Herbaceous Vegetation Cover (F)	Field Value Documentation Form (Geomorphology) AND Riparian Extent Form AND Riparian Veg Form	CORVUS

(D) indicates metrics are calculated using desktop methods; (F) indicates metrics are calculated or verified using field methods.

**** If a project proposes to armor an eroding bank (as determined by BEHI/NBS), the Percent Erosion metric should be substituted for dominant BEHI/NBS in calculating the proposed condition score; the BEHI/NBS metric would not be applied to an armored bank.**

In addition, certain CSQT calculations and values are not directly associated with parameters and metrics but may require the completion of certain analyses and/or forms. Some of these items are only required for Existing Conditions. These additional items are presented in **Table 2** below:

Table 2. Proposed Additional CSQT Parameters, Metrics and Corresponding Datasheets

Additional Calculation/Value	Form	Party Responsible
Determination of Existing and Proposed Bankfull Width	Quantification Tool AND Bankfull Verification Documentation	Olsson
Valley Type and Reference Stream Type	Project Assessment	Olsson
Process Drivers Information	Project Assessment	Olsson
Site Information and Reference Selection	Quantification Tool	Olsson
Catchment Assessment	Catchment Assessment	Olsson
Bankfull Verification	Bankfull Verification Documentation	Olsson (to be conducted in the field using field-based indicators unless modelling bankfull is otherwise approved by the Corps)
Sub-Reach Survey Method (Rapid Survey OR Detailed)	Longitudinal Profile Form* / Cross Section Form* OR Rapid Survey Form*	Olsson

*Not a required form in the CSQTV1.

Subtask 9a. CSQT Coordination and Meetings (3 meetings) – This task includes up to three meetings (one field meeting) to discuss the CSQT approach for the project with the project team and/or the USACE. Once 30 percent design is reached, CORVUS will set up a CSQT approach meeting with USACE and the project team to discuss reach determination and CSQT parameter and metric selections. This coordination aims to give the USACE an opportunity to express any concerns with the CSQT approach and concur with parameter and metric selections.

Subtask 9b. Remote Desktop Analysis and Fieldwork Prep – This task includes executing the desktop portion of the method for Reach Runoff and Riparian Vegetation data collection and prepare the necessary data and materials to execute the CSQT fieldwork.

Subtask 9c. CSQT Field Data Collection – CORVUS will execute the method for collecting CSQT parameter and metric data as described in the *Colorado SQT and Debit Calculator User Manual (Version 1)*. **This task includes field sampling no more than three reaches with representative sub-reach lengths of no more than 600 linear feet (based on ~20 foot bankfull width) and no more than 20 riparian vegetation plots required in total.** Additionally, this task includes no more than 5 reaches assessed using Impact Severity Tier 0 of the CSQT Debit Calculator Tool for bioengineering treatments. This task also includes collecting data for the Greenline Stability Rating (if needed). This task includes additional mileage and GPS expense.

Subtask 9d. CSQT Data Summary, Analysis, Form Completion, and Mapping – Following the site visit, CORVUS will analyze and summarize CSQT data for Reach Runoff, Riparian Vegetation, and Lateral Migration (if needed) parameters for the existing and proposed condition and complete all applicable data forms per reach. Figures will be collaboratively prepared between CORVUS and Olsson.

Subtask 9e. CSQT Project Report – There is no formal requirement to submit a report for the CSQT effort. However, through CSQT consultations with multiple Denver Regulatory Office Project Managers, CORVUS has found that a CSQT Project Report has clarified the methods, data analysis, results, and proposed scoring of the CSQT parameters and metrics, and has demonstrated a reduction in post-submittal CORPS comments and consultation. A CSQT Project Report will be prepared according to the suggested CSQT Submittal Guidelines shown in **Table 3**. CORVUS will work collaboratively with Olsson to complete all required content.

Table 3. Suggested CSQT Submittal Guidelines, Summary of Information to include in the CSQT Project Report

CSQT Submittal Component	Summary of Required Content
CSQT Project Report	<ul style="list-style-type: none"> Project Description putting the study site and the purpose of the CSQT evaluation in context relative to physical conditions and project purpose(s) Description of all parameters and metrics chosen for the evaluation and reasons for selection A discussion of how bankfull was identified Interpretation of the results of the CSQT evaluation, including differences between existing and proposed conditions
Field Forms	<ul style="list-style-type: none"> Longitudinal Profile Form (if used) Standard Cross Section Form (if used) Rapid Survey Form (even if Longitudinal Profile method is used) Lateral Migration Form
Required Forms	<ul style="list-style-type: none"> Parameter Selection Checklist Project Reach Form Riparian Extent Form Riparian Veg Form Bankfull Verification Hydrology and Hydraulics Geomorphology
CSQT Workbook	<ul style="list-style-type: none"> Project Assessment Catchment Assessment Quantification Tool

Task 10. Compensatory Mitigation Plan (CMP) – When permanent wetland impacts greater than 0.1-acre are proposed, the USACE requires a CMP to comply with Section 404(b)(1) Guidelines to offset environmental losses resulting from unavoidable impacts to WOTUS. A CMP is typically when either onsite permittee-responsible mitigation or the purchase of credits through a wetland mitigation bank is proposed. Using the results of the delineation and proposed impacts to WOTUS, if it is determined that a CMP is required, CORVUS will draft a CMP that includes items described in 33 CFR 332.4 paragraphs (c)(2) through (c)(14). The Client will prepare mitigation design plans and specifications with input and review by CORVUS.

Task 11. Individual Permit (IP) Application – CORVUS assumes this project will be permitted with an IP. However, the specific type of permit sought for this project will be determined during the pre-application process. CORVUS will work closely with the Client and project team to pursue project authorization using a nationwide permit (NWP) if appropriate. With input from the USACE and design team, CORVUS will develop a project purpose and need statement that will guide the project design process. The purpose and need statement will be used to develop a reasonable range of practicable project alternatives for evaluation to identify the preferred alternative. Once a preferred alternative has been identified, CORVUS will prepare an Individual Permit application submittal to USACE. The submittal will include figures of project plans, impacts to WOTUS, and a compensatory mitigation plan. This task includes one round of revisions to the submittal based on Client and design team comments.

Task 12. Water Quality Certification Request – As part of the IP application process, a CWA Section 401 Water Quality Certification (WQC) must be obtained from the CDPHE. The Water Quality Division is currently following procedures established in the 2020 WQC Rule to process WQC Requests. CORVUS will request a pre-filing meeting with CDPHE, and if accepted, CORVUS will coordinate with the project

team and CDPHE to set up the meeting. CORVUS will also prepare and submit the 401 WQC memo and application. CDPHE requires a **\$1,122 fee** to process the 401 WQC request. ***CORVUS will pay this fee directly and expense the cost to the project.*** This task includes one round of revisions to the submittal based on Client and design team comments.

Task 13. USFWS Concurrence Letter Request – CORVUS will prepare a Concurrence Letter Request to USFWS that follows the DCHCP’s “Interim Implementation Plan and Proposed Minor Amendments” and includes details on methods, proposed PMJM impacts, a mitigation plan, and the final Habitat Improvement Activity Checklist.

Phase III – Final Project Design

During Phase III, CORVUS address any questions or comments from USACE and USFWS and will ensure that the final design is consistent with information in the pre-construction notification application packet.

Task 14. Post Submittal Coordination – CORVUS will coordinate with the USACE, USFWS, and CDPHE after submitting the IP, concurrence letter request, and WQC to address any questions or comments from any agency. CORVUS review the 404 Permit, concurrence letter, and WQC once issued to ensure details concur with applications submitted. CORVUS will also review 100 percent construction drawings to ensure proposed improvements are consistent with all environmental permitting applications submitted.

Deliverables

CORVUS will provide the following deliverables to the Client:

- AutoCAD/SHP files of WOTUS, including the ordinary high water mark and wetlands
- ESA Memo (for CLOMR), and section in IP
- Cultural resources limited survey form
- IP Submittal
- CSQT Package (in collaboration with the Client) for submittal to USACE
- FACWet Submittal to USACE
- CMP for submittal to USACE
- Concurrence Letter Request to USFWS
- Water Quality Certification Request for submittal to CDPHE

Assumptions

Tasks and estimated costs are based on the following assumptions:

- The Client will be responsible for preparing project plans
- The work will be authorized under an IP and a Section 401 Water Quality Certification will be needed
- If permanent impacts to wetlands exceed 1/10-acre, a CMP will be required
- If permanent impacts exceed ½-acre, FACWet Analysis will be required
- If impacts to stream bed exceed 3/100 of an acre, a CSQT assessment will be required

- PMJM is assumed to be present and a presence/absence surveys will be not be required.
- Consultation with USFWS will be done via the DCHCP process for beneficial projects and a biological assessment will not be required
- A mitigation plan for adverse effects on historic properties is not included
- Suitable habitat for other species protected by ESA is not present and presence/absence surveys will not be required
- No more than 3 reaches/representative sub-reaches and 20 riparian vegetation will be required for the CSQT
- Unless otherwise requested by the Client, all CORVUS deliverables will be provided in digital format such as Portable Document Format (PDF), Microsoft Word, or other suitable format

Change Management Process

In the event revisions to the study area and/or the Statement of Work tasks are determined necessary or desirable, either by CORVUS or the Client, CORVUS will coordinate with the Client Project Manager to determine if a formal request for contract modification is necessary. CORVUS will not perform work not described in this Statement of Work or a revised Statement of Work without written authorization from the Client.

Estimated Cost

CORVUS will perform the tasks described in the statement of work on an hourly (time and materials) basis for the estimated cost itemized below. Subconsultants and other direct expenses are billed at cost.

Estimate



Date 12-08-2022
Project 22-123 - East Plum Creek at Sellars Gulch

Client
Olsson
1525 Raleigh St, #400
Denver, CO 80204
Attn: Deb Ohlinger

Project Totals

Task	Estimate	Previous	Grand Total
1 - Progress Meetings	\$3,013.00	\$0.00	\$3,013.00
2 - Project Coordination and Management	\$5,306.00	\$0.00	\$5,306.00
3 - Initial PMJM Coordination	\$5,240.00	\$0.00	\$5,240.00
4 - Delineation of WOTUS	\$7,205.00	\$0.00	\$7,205.00
5 - PMJM habitat Assessment	\$5,240.00	\$0.00	\$5,240.00
6 - Historic Properties PM	\$524.00	\$0.00	\$524.00
7 - Permitting Approach and Pre-App	\$1,310.00	\$0.00	\$1,310.00
8 - FACWet Analysis	\$2,620.00	\$0.00	\$2,620.00
9 - CSQT	\$12,052.00	\$0.00	\$12,052.00
10 - CMP	\$2,620.00	\$0.00	\$2,620.00
11 - IP	\$3,406.00	\$0.00	\$3,406.00
12 - WQC Request	\$786.00	\$0.00	\$786.00
13 - Concurrence Letter	\$5,240.00	\$0.00	\$5,240.00
14 - Post Submittal Coordination	\$1,048.00	\$0.00	\$1,048.00
Labor Subtotal	\$55,610.00	\$0.00	\$55,610.00
Direct Expenses	\$8,572.00	\$0.00	\$8,572.00
Total	\$64,182.00	\$0.00	\$64,182.00

Direct Expenses Details

Direct Expense	Quantity	Price	Total
Mileage	2,000	\$0.62	\$1,250.00
GPS	8	\$150.00	\$1,200.00
Paleowest Archaeology	1	\$5,000.00	\$5,000.00
401 WQC Fee	1	\$1,122.00	\$1,122.00
Subtotal			\$8,572.00

Estimate



Labor Total	\$55,610.00
Direct Expenses Total	\$8,572.00
Total Estimate	\$64,182.00
Previous Contract Amount	\$0.00
Grand Total Budget	\$64,182.00

7110 West Jefferson Avenue Suite 100 Lakewood Colorado 80235
Main: 877 627 3772
colliersengineering.com



VIA E-mail
December 8, 2022

Olsson
1525 Raleigh Street,
Suite 400
Denver, CO 80204

Proposal for Professional Services
East Plum Creek/Sellars Gulch Confluence Project – SW-RFP2022-03
Castle Rock, Co
Colliers Engineering & Design Proposal No.: 22013218P

Dear Deb,

Colliers Engineering & Design, Inc. is pleased to submit this revised scope and fee to provide professional Utility Investigation services for the above-entitled project. The Subsurface Utility Engineering (SUE) scope of this project as requested by Olsson calls for a SUE QL-D through QL-A investigation. The limits of this project are in Castle Rock, CO and as pictured in Exhibit A outlined in red.

This proposal is divided into four sections as follows:

- Section I** – Scope of Services
- Section II** – Business Terms and Conditions
- Section III** – Technical Staff Hourly Rate Schedule and Reimbursable Expenses
- Section IV** – Client Contract Authorization

The order in which the following scope of services are presented generally follows the sequence in which the project will be accomplished; however, depending on the project, the various authorized services contained in this proposal may be performed in a sequence as deemed appropriate by Colliers Engineering & Design to meet project schedules.

CED proposes to provide the following professional SUE services in support of the above-named project in accordance with the project limits as indicated in Exhibit A, to the standard of care applicable in the SUE profession. The services will meet the standard guidelines of ASCE C-I 38-02 circular for "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data". The following table in Section I describes the standards for subsurface utility engineering.

We very much appreciate the opportunity of submitting this proposal and look forward to performing these services for you.

Section I – Scope of Services

Based on our conversations and information noted above, we propose to complete the following:

SERVICE	DESCRIPTION
<u>QL-D</u> <i>Utility Records Research</i>	Conduct comprehensive utility records research and collect applicable utility owner records to assist in identifying utility owners that may have facilities on or be affected by the project. Includes interfacing with utility owners/operators to ascertain the availability and completeness of record documents and to obtain verbal or historical information on existing subsurface facilities and operational status.
<u>QL-C</u> <i>Surface Feature Survey</i>	Prerequisite: Perform QL-D Tasks. Information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to quality level D information.
<u>QL-B</u> <i>Utility Designation and Survey</i>	Prerequisite: Perform QL-D & QL-C Tasks. Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. This information is surveyed to applicable tolerances defined by the project and reduced onto plan documents.
<u>QL-A</u> <i>Utility Exposure and Identification of Precision Horizontal and Vertical Position</i>	Precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point. Minimally intrusive excavation equipment is typically used to minimize the potential for utility damage. A precise horizontal and vertical location, as well as other utility attributes, is shown on plan documents. Accuracy is typically set to 15-mm vertical and to applicable horizontal survey and mapping accuracy as defined or expected by the project owner.

Phase 1.0 QL-D through QL-B

Quality Service Level D (QL-D) Research and Collection of Existing Utility Records

Initiate a design ticket through Colorado811 to ascertain contact information for identified facility owners. Research to ascertain information on existing utilities within the project limits and request applicable utility owner records for assistance in identifying utility owners that may have facilities on, within, or potentially affected by the project.

CED will attempt to contact utility providers identified through collected utility easement information, One-Call systems, and via vehicle reconnaissance and inventory of utility marker posts along the scoped area and adjacent roadways. We will attempt to ascertain the ownership, type, size, encasement, and composition of the existing utilities through coordination with owners/representatives.

The QL-D data that is collected, including a list of known utility providers in the project limits, can be provided at the request of the Client as well as utility contact information, as available.

Quality Service Level C (QL-C) – Surveying and Plotting Visible Above-Ground Utility Features

Field surveying to obtain accurate horizontal position of visible utility surface features associated with suspected underground utility systems located within the project limits.

- Identify surface features on the plan and ground surface that are surface appurtenances of existing subsurface utilities.
- Survey features and determine accuracy and completeness for applicability with the existing project and by using professional judgment in correlating this information to quality level B information.

Quality Level B (QL-B) Designating Service (Horizontal Location of Utilities)

Designating is to indicate, by marking with paint, the presence and approximate horizontal location of subsurface utilities using geophysical prospecting techniques including, electromagnetic, sonic, and acoustical techniques. CED will provide the following designating services to aid the Client:

- Provide all equipment, personnel and supplies required for performing designating services. CED shall determine which equipment, personnel and supplies are required to perform these services.
- Designate the existing underground utility facilities within the identified area as described in Exhibit A.
- Conduct appropriate investigation of site conditions.
- During the SUE investigation, CED will notify the Client of any utilities that do not meet QL-B criteria.
- Create field sketch drawings of the designated utilities.

It is our understanding that Client employs in-house Surveyor(s) and plans on utilizing the Clients in-house survey department for aspects of this project. To ensure compliance with Colorado Senate Bill 18-167, it is the understood that CED will perform the survey of the QL-C utility surface features and QL-B designating field marks.

Phase 2.0 QL-A

Quality Level A (QL-A) Locating (Test Hole) Services

Locating services is to locate the accurate horizontal and vertical position of subsurface utilities by excavating up to ten (10) test holes using vacuum excavation techniques and equipment that is non-destructive to utilities shown in Exhibit A. QL-A Services will be performed at specific points within the project where precise vertical utility information is required to determine the extent of conflict or clearance with or from a proposed design element. QL-A test hole locations have been identified by the Project Owner or Client and have been transmitted to CED for performance of field work and data collection.

- Provide all equipment, personnel and supplies required to perform locating services. CED shall determine which equipment, personnel and supplies are required to perform such services.
- Excavate test holes to expose the utility to be measured in such a manner that ensures the safety of the excavation and the integrity of the utility to be measured. In performing such excavations, CED shall comply with applicable utility damage prevention laws. Excavations will be performed using specially developed vacuum excavation equipment that is non-destructive to existing facilities.
- If contaminated soils are discovered during the excavation process, CED will so notify the Client.
- Disposal of contaminated soils can be performed by CED at an additional out-of-scope cost.
- Locate and identify the precise horizontal and vertical position of existing facilities. Positive identification includes the determination or confirmation of facility type, size, depth, and material composition.
- Backfill around the exposed facility using the number 8 pea gravel compacted in six-inch lifts.
- In grass and landscape areas, restoration shall be as reasonably possible to the condition that existed prior to excavation.
- Permitting as required by the Jurisdiction/Municipality to enable CED to perform traffic control and/or street cuts will be conducted and includes excavation, watering, standard spoils removal, mobilization, and standard surface restoration as well as traffic control and traffic control plans as required by the municipality.

Test Hole data will be captured and recorded by CED and tied to existing project survey control provided by Client. This control will be provided to CED prior to equipment mobilization to the project site.

DELIVERABLES

CED will provide CAD files detailing QL-D through QL-A information. Utilities will be surface designated, painted and surveyed. Utility Field Sketches will be performed of locate services performed. The Field Sketches will be color coded according to the American Public Works Association standards. Field sketches and QL-D records information can be provided at no additional cost and per the Clients request. The final deliverable is understood to be an AutoCAD .dwg file detailing all identified and surveyed utility information as well as a .pdf file of these findings, stamped and signed by CED's Colorado licensed Professional Engineer.

SCHEDULE

CED staff will mobilize to the site within 15 business days of written Notice to Proceed. CED preliminary schedule is as follows.

- Mobilize to the site within 15 business days of written Notice to Proceed (NTP).
- Perform field work within 30 business days of NTP.
- After the collection of all required field data, CED will submit all deliverable information within 18 business days.

Please note that the above schedule is based on preliminary documents provided by the Client. Deviations from the preliminary documents, and scope will require a revision to the schedule as provided above. Should a revision to the above schedule be requested, it is CED's understanding that we will be given the opportunity to revise the schedule and a schedule will be agreed upon between CED and the Client with the Owners/Stakeholders schedule expectations taken into consideration.

Please note that CED is aware that utility installations and removals are currently being performed within the scoped area. CED will not be responsible for updating in-progress utility installations or removals post collection of field data as described in the above schedule.

FEE SUMMARY

Phase Name	Description	Fee Type	Quantity	Rate	Fee
Phase 1.0	QL-D through QL-B	Lump Sum	1.0	\$23,500.00	\$23,500.00
Phase 2.0	QL-A	Each	10.0	\$2,200.00	\$22,000.00
PROJECT SUBTOTAL FEE					\$45,500.00

This Contract and Fee Schedule are based upon the acceptance of Colliers Engineering & Design's Business Terms and Conditions contained in Section II of this Contract. Delivery, mileage, printing and reproduction, overnight mail service and postage costs are not included in the lump sum fees and will be added to each monthly invoice. **Payment terms are NET60 of receipt of invoice.**

Proposal is an estimate only; the cost may vary plus or minus due to unknown field conditions and/or municipality or Owner requirements. The above noted cost estimate has been based on various assumptions including the current stage of the design. Deviations from these assumptions or additional out of scope work will be billed at an additional cost agreed to by CED and the Client. However, no out of scope work will be conducted without the direct consent from the Client.

Information to be provided by Client: CED shall rely on the completeness and accuracy of all information and technical data provided by the Client and Client's other consultants. The Client shall provide all necessary information required by CED to complete its work, including any updates to previously provided information and any other information reasonably requested by CED.

EXCLUSIONS AND UNDERSTANDINGS

Services relating to the following items are not anticipated for the project or cannot be quantified at this time. Therefore, any service associated with the following items is specifically excluded from the scope of professional services within this agreement. If an item listed herein, or otherwise not specifically mentioned within this agreement, is deemed necessary, CED may prepare an addendum to this agreement for your review, outlining the scope of additional services and associated professional fees with regard to the extra services.

Services not specifically outlined above:

- Survey of culverts, bridge structures, underpass or overpass structures, or pedestrian walkway structures
- QL-B of unlocatable irrigation lines
- Suggested relocation plans and/or final relocation plans and specifications
- Utility coordination and/or utility clearance letters
- Boundary and/or topographic surveying
- Access coordination to closed, fenced, gated or private property
- Easement documents
- QL-B Permitting
- Platting
- Right of way determination
- Any other services not specifically included within the Scopes of Work contained herein
- Construction administration, construction specifications, construction stake-out and/or additional field surveying information
- Exploratory trenching, testing work, interpretations or conclusions related to determination of potential chemical, toxic, radioactive, or other type of contaminants on the site
- It is assumed that our staff will have access to the project site for 10 hours a day 7 days a week

ACOUSTIC (APL) / CLARIFICATIONS

Acoustic Pipe Locating (APL) effectiveness is dependent on soil conditions within the investigation area and burial depth of target facility. APL's resolution of subsurface anomalies may vary significantly across the investigation area. While APL can be a very effective tool in locating or identifying subsurface objects or facilities (anomalies), the results are interpretive and subject to

possible misinterpretation or error. SUE Provider personnel will make every reasonable effort to properly identify and interpret APL signals in accordance with the performance limitations of the technology and provide recognizable markings for the Client.

SUE PROVIDER CERTIFICATIONS

The SUE Provider shall not be required to sign any documents, no matter by whom they may be requested, that would result in the SUE Provider having to certify, guarantee or warrant the existence of conditions which the SUE Provider cannot ascertain. The Client also agrees that it has no right to make the resolution of any dispute with the SUE Provider or the payment of any amounts due to the SUE Provider in any way contingent upon the SUE Provider signing any such certification.

Section II – Business Terms and Conditions

The Business Terms and Conditions of the Sub-Consultant Master Service Agreement for Professional Services Contract signed January 8, 2021, shall apply.

Section III – Rate Schedule

Technical Staff Rates 2023	
Billing Titles	Hourly Rates
Executive Principal	310.00
Senior Principal	265.00
Principal	245.00
Senior Technical Director	225.00
Senior Project Manager	215.00
Technical Director	200.00
Project Manager	190.00
Senior Project Specialist	190.00
Project Specialist	180.00
Technical Professional	170.00
Technical Specialist	160.00
Specialist	150.00
Senior Data Technician	140.00
Senior Technical Assistant	130.00
Technical Assistant	115.00
Field Technician	105.00
Data Technician	105.00
Survey Crew – 1 Person w/Robotic Equipment	165.00
Additional Survey Crew Member	50.00
SUE Crew (designating) – 1 Person	135.00
Additional (designating) Member	50.00
SUE Crew (locating) – 2 Person	185.00
Additional (locating) Member	45.00
Expert Witness	375.00

Reimbursable Expenses	
General Expenses	Cost + 15%
Travel (Hotel, Airfare, Meals)	Cost + 15%
Sub-Consultants/Sub-Contractors	Cost + 20%
Plotting	4.25 / Each
Computer Mylars / Color Plots	100.00 / Each
Photocopies	0.19 / Each
Color Photocopies	2.00 / Each
Document Binding	4.00 / Each
Portable Media	100.00 / Each
Exhibit Lamination (24" x 36" or larger)	85.00 / Each
Initial Digital Signature	300.00
Additional Digital Signatures	75.00 / Each
Mileage Reimbursement*	0.625 / Per Mile
	Field Vehicle 0.70 / Per Mile

*Mileage reimbursement subject to change based upon IRS standard mileage rate.

Section IV – Client Contract Authorization

I hereby declare that I am duly authorized to sign binding contractual documents. I also declare that I have read, understand, and accept this contract.

Signature

Date

Printed Name

Title

If you find this proposal acceptable, please sign where indicated above in Section IV, and return one signed copy to this office. **Payment terms are NET60 of receipt of invoice.** This proposal is valid until (60 days per business terms).

We very much appreciate the opportunity of submitting this proposal and look forward to performing these services for you. If there are any questions, please contact the undersigned.

Sincerely,

Colliers Engineering & Design, Inc.

Jeremy Garcia-Glasscock, PE
Geographic Discipline Leader
jeremy.garciaglasscock@collierseng.com
817-841-9358 (cell)

cc: Doug Ort, PLS, Colliers Engineering & Design (via email)

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EXHIBIT A

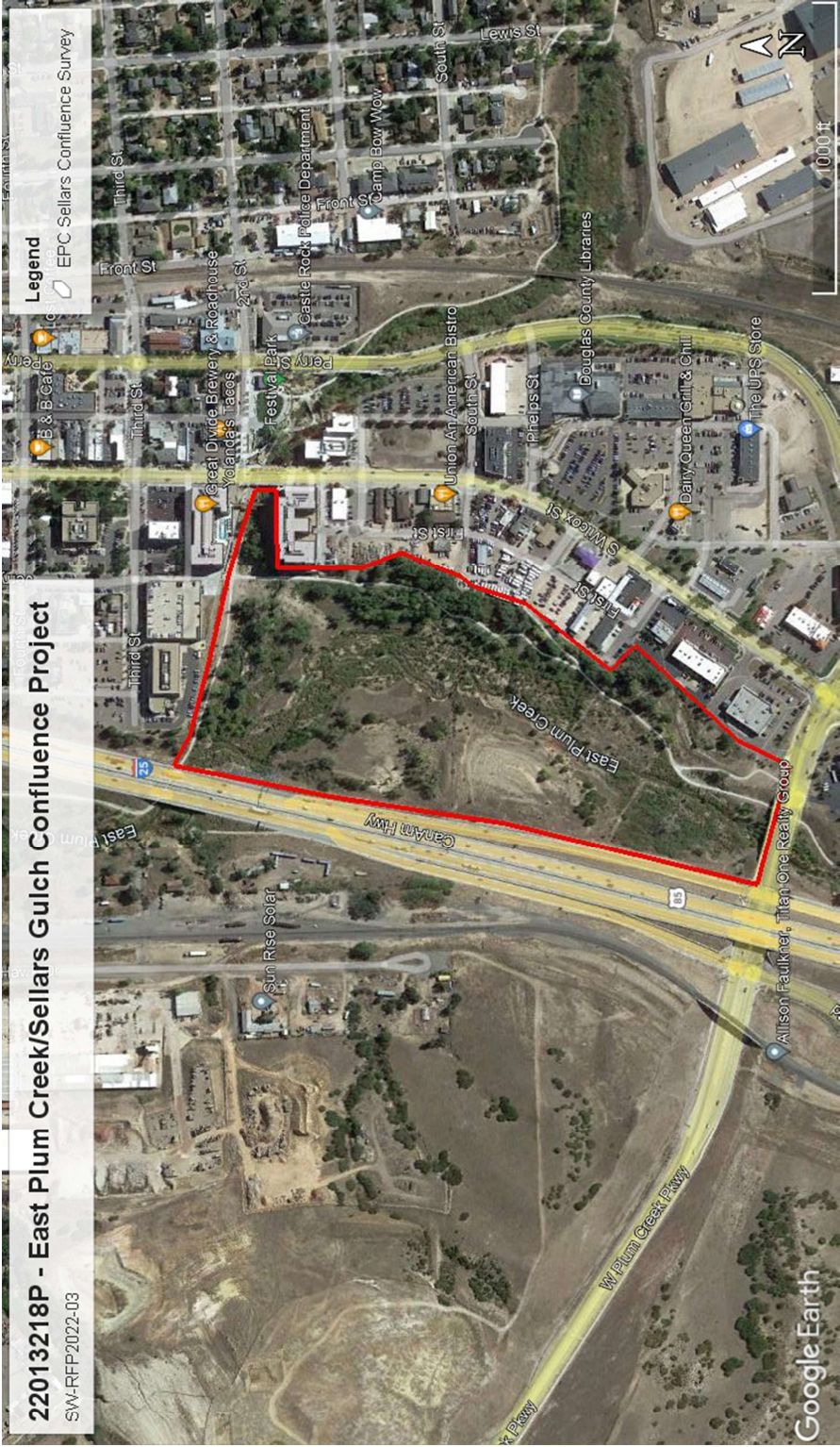




EXHIBIT 2

CONTRACTOR'S CERTIFICATION OF INSURANCE

EXHIBIT 3

TOWN OF CASTLE ROCK AFFIDAVIT OF INDEPENDENT CONTRACTOR STATUS

I, _____, an authorized representative of **Olsson, Inc.**, holding legal authority to sign this Affidavit declare under oath that I am 18 years or older and have the capacity to sign this Affidavit.

In accordance with Section 8-70-115, C.R.S., I certify the following:

- With respect to the Agreement, I represent and warrant that it is my express intention to be employed as an independent contractor of the Town of Castle Rock (the “Town”) for purposes of performing the work or services which are the subject of the Agreement. I understand and confirm that the Town reasonably relied on this intention in entering into the Agreement.
- The Town does not require I work exclusively for the Town, except that I may choose to work exclusively for the Town for a finite period of time specified in the document.
- The Town does not establish a quality standard for the work or services performed pursuant to the Agreement, except that the Town may provide plans and specifications regarding the work but cannot oversee the actual work or provide instruction as to how the work is performed.
- The Town does not pay a salary or hourly rate but rather a fixed or contract rate, as noted in the terms and conditions of the Agreement, and any Exhibits made part of the Agreement.
- The Town cannot terminate the work or services performed during the contract period unless otherwise agreed to in the terms and conditions of the Agreement.
- I am not provided with anything, if at all, more than minimal training from the Town.
- The Town does not provide me with tools or benefits for the performance of the work or services which are the subject of the Agreement, except materials and equipment may be supplied.
- The Town does not dictate the time of performance, except that a completion schedule and a range of mutually agreeable work hours may be established in the Agreement.



- The Town does not pay me personally but rather makes checks payable to the trade or business name of the entirety for which I am employed and who is a party to the Agreement; and the Town does not combine their business operations in any way with the entity's business, but instead maintains such operations as separate and distinct.
- I understand that if a professional license to practice a particular occupation under the laws of the State of Colorado requires the exercise of a supervisory function with regard to the work of services performed under this Agreement, such supervisory role shall not affect the independent contractor relationship with the Town.
- **I UNDERSTAND THAT I AM NOT ENTITLED TO UNEMPLOYMENT INSURANCE BENEFITS UNLESS UNEMPLOYMENT COMPENSATION COVERAGE IS PROVIDED BY ME OR THE ENTITY FOR WHICH I AM EMPLOYED.**
- **I UNDERSTAND THAT I AM OBLIGATED TO PAY FEDERAL AND STATE INCOME TAX ON MONEYS PAID PURSUANT TO THE AGREEMENT.**

CONTRACTOR:

OLSSON, INC.

By: _____

Name

STATE OF COLORADO)

) ss.

COUNTY OF _____)

The foregoing instrument as acknowledged before me this ____ day of _____,
20__ by _____ as _____ of the above mentioned Contractor.

Witness my official hand and seal.

My commission expires:

Notary Public