

**CONTRACT AGREEMENT
BETWEEN
LEBANON VALLEY CONSERVANCY
AND
CLEAR CREEKS CONSULTING**

THIS AGREEMENT made this 10th day of May in the year of 2019 by and between Clear Creeks Consulting, hereafter referred to as Contractor, and the Lebanon Valley Conservancy, a non-profit organization incorporated in Pennsylvania, hereafter referred to as Conservancy.

WHEREAS, Quittapahilla Watershed Association is not party to this agreement, the organization has entered into an agreement with the Conservancy that allows it to represent their interests in this project.

WHEREAS, In representing the interests of the Quittapahilla Watershed Association, the Conservancy has appointed Clear Creeks Consulting as Contractor to furnish the professional services outlined in Exhibit A - Clear Creeks Consulting Scope of Work to conduct field studies and hydrologic and hydraulic studies, develop a restoration design, and obtain state and federal permits for the restoration of approximately 2,300 linear feet of stream along Snitz Creek in Cornwall Township, Pennsylvania, hereinafter referred to as Project.

WHEREAS, funding for Project shall be provided through a Water Quality Improvement Projects grant (Grant Document # – C990000639, Application ID# - 201806207885) from the Pennsylvania Department of Environmental Protection, which is not party to this agreement. The Conservancy will ensure that funds sufficient to cover the professional services associated with the Project shall be deposited by the Pennsylvania Department of Environmental Protection in an account established by the Conservancy prior to a written notice to proceed being given to the Contractor.

WHEREAS, the landowners along the reaches of Snitz Creek to be affected by implementation of the Project are not parties to this agreement, the Conservancy will ensure that the Quittapahilla Watershed Association has coordinated with the landowners to obtain all agreements necessary for the Project to proceed.

WITNESSETH

The Conservancy and the Contractor, in consideration of the performance on their respective parts of the several provisions herein contained, and intending to be legally bound, agree as follows:

ARTICLE 1 - GENERAL

The Contractor shall hold harmless the Conservancy for any personal injuries sustained by the Contractor's personnel or for the loss of or damage to Contractor's equipment, materials, and supplies resulting from the execution of this Project.

ARTICLE 2 - RESPONSIBILITY OF THE CONTRACTOR

2.1 The Contractor shall be responsible for the professional quality, technical accuracy, timely completion, and coordination of the base maps, hydrologic and hydraulic analysis, field data collection, design plans, design report furnished by the Contractor under this agreement. The Contractor shall, without additional compensation, correct or revise any errors or deficiencies in his data, base maps, report, designs, drawings, or final plans.

2.2 The rights and remedies of the Conservancy provided for under this agreement are in addition to any other rights and remedies provided by law.

ARTICLE 3 - SCOPE OF WORK

3.1 The Contractor's Scope of Work dated April 18, 2019 attached as Exhibit A is hereby made part of this agreement. The generalized tasks for the project are:

1. Existing Conditions Survey and Base Map Preparation
2. Hydrologic and Hydraulic Analysis
3. Field Studies and Design Criteria
4. Preliminary Design
5. Final Design and Final Design Report
6. Erosion and Sediment Control Plans and Construction Documents
7. Local, State and Federal Permit Applications

ARTICLE 4 - RESPONSIBILITY OF CONSERVANCY AND WATERSHED ASSOCIATION

4.1 The Conservancy shall be responsible for ensuring that the Watershed Association has obtained Landowner Commitment and Agreement Letters from the participating landowners along the project area.

4.2 The Conservancy shall be responsible for ensuring that the Watershed Association has confirmed that the participating landowners along the project area have granted the Contractor access for purposes of conducting the topographic survey, collecting field data and conducting pre-application site visits with the permitting agencies.

ARTICLE 5 - TERMINATION

Should the project be abandoned or terminated prior to completion, the Conservancy shall pay the Contractor the proportionate share of the fee earned at the time of termination. No amount of fee shall be allowed for anticipated profit for work not performed.

ARTICLE 6 - PAYMENT

- 6.1 The Conservancy covenants and agrees in consideration of the Contractor's professional services called for by Article 3 to pay the Contractor for such services as detailed herein and in the attached Scope of Work.
- 6.2 Costs for the Contractor's professional services are indicated in the Contractor's Scope of Work and shall include: professional fees only. Travel (including mileage) and miscellaneous reimbursable expenses are not included.
- 6.3 Unless agreed to by the Conservancy, the total Professional Fee payable to the Contractor under this agreement shall not exceed One Hundred Fifty One Thousand One Hundred Thirty Nine Dollars and No Cents (\$151,139.00) for the Project.
- 6.4 The Contractor shall invoice the Conservancy on a monthly basis as the work proceeds. Costs by subtask as outlined in the Scope of Work include: professional fees only. The monthly invoice will include the professional fee from the Scope of Work applicable to that portion of the work completed during the preceding month. The Conservancy shall remit payment within sixty (60) days of receipt of an invoice.
- 6.5 Final payment of the Contractor shall be made upon completion and acceptance of the professional services specified under the terms of this agreement.
- 6.6 No additional work shall be performed without written authorization from the Conservancy.

ARTICLE 7 - NOTICES

It is agreed that all notices that are required to be given by either party to the other may be either personally delivered or sent by registered or certified mail, return receipt requested, properly addressed and postage prepaid to the addresses for the parties herein given unless another address shall have been substituted for such by notice in writing. Such notice shall be addressed or delivered to:

Contractor: Clear Creeks Consulting
1317 Knopp Road
Jarrettsville, Maryland 21084

Conservancy: Lebanon Valley Conservancy
752 Willow Street, Suite E
Lebanon, PA 17046

ARTICLE 8 - VOIDABLE PROVISIONS

It is agreed that if any provisions of this Agreement shall be determined to be void by any court or competent jurisdiction, then such determination shall not affect any other provision of this Agreement, all of which other provisions shall remain in full force and effect; and it is the intention of the parties hereto that if any provision of this Agreement is capable of two (2)

constructions, one (1) of which would render the provision valid, then the provision shall have the meaning which renders it valid.

ARTICLE 9 - INTEGRATION

This Agreement, including any Exhibits that may be attached hereto, shall constitute the entire agreement between the parties and any prior understanding or representation of any kind preceding the date of this Agreement shall not be binding upon either party except to the extent incorporated in this Agreement. Any modification of this Agreement or additional obligation assumed by either party in connection with this Agreement shall be binding only if evidenced in writing signed by each party.

ARTICLE 10 - NONASSIGNMENT

The Contractor is not to assign any work specified in this agreement to any other person, partnership, corporation, or other entity without the expressed written permission from the Conservancy.

ARTICLE 11 – HOLD HARMLESS/INDEMNIFICATION

11.1 The Contractor shall hold harmless and indemnify the Conservancy from any and all losses and/or claims, which may result, directly or indirectly, from the project, the execution of this agreement and/or any act of omission of the Contractor. The Contractor further agrees that he shall hold harmless and indemnify any and all officers, directors, employees, and/or members, jointly or separately, of the Conservancy from any and all losses and claims which may result, directly or indirectly, from the project the execution of this agreement and/or any act of omission of the Contractor.

11.2 The Commonwealth of Pennsylvania through the Department of Environmental Protection shall not be responsible for any loss of life, personal injury, or property damage of any kind in performing and completing the work of the project. Contractor shall be responsible for and agrees to indemnify and hold harmless the Commonwealth from and against any damages to property or injuries (including death) to any persons and other losses, damages, expenses, claims, demands, suits and actions by any party against the Commonwealth in connection with the work performed by Contractor.

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|------------------------|------------------|--------------|
| TOTAL AGREEMENT | Professional Fee | \$151,139.00 |
|------------------------|------------------|--------------|

IN WITNESS, the parties have executed this Agreement by causing the same to be signed on the day and year above written.

FOR CLEAR CREEKS CONSULTING

ATTEST:

_____/_____
Date Date

FOR LEBANON VALLEY CONSERVANCY

ATTEST:

By: _____/_____
Date Date

FOR QUITTAPAHILLA WATERSHED ASSOCIATION

ATTEST:

By: _____/_____
Date Date

EXHIBIT A
Clear Creeks Consulting Scope of Work for
Snitz Creek 2 Restoration Project
(04/18/19)

Phase 1 – Survey and Preliminary Design

Task 1.0 – Existing Conditions Survey and Base Map Preparation

1. Set up a GPS ground control network.
2. Field-run survey will be conducted to provide detailed channel topography and floodplain topography along 2,310 feet of Snitz Creek from upstream of the culvert section at Lebanon Valley Rail Trail and downstream through the culvert section at Culvert Road. This will include:
 - a) The floodplain survey will extend 50 feet from the top of bank on the left side of stream and 100 feet from the top of bank on the right side of the stream.
 - b) The longitudinal profile will be surveyed along the project reach. The profile survey will follow the thalweg and include channel bed, water surface, and top of bank profiles at key points (e.g., top and bottom of riffles, bottom of run, Dmax of pools, and top of glide, etc.);
 - c) A baseline will be established along the right floodplain/terrace for the entire length of the project reach.
 - d) Cross-sections shall be established off the baseline, extending 25 feet on either side of the channel, and surveyed at 100 foot intervals and at key points along the channel (Apex of bends, mid-riffle, max depth of pools). Minimum points along a cross-section shall include start and end of cross-section, top of bank, toe of bank/edge of water, thalweg, centerline, and several points either side of center line).
 - e) Significant in channel features (e.g. point bars) will be identified.
 - f) Identification and survey of any public or private utilities, such as sanitary sewer manholes, storm drain outfalls, phone and power poles, etc.
 - g) Survey upstream, downstream and through the stream sections at the culverts at the Rail Trail and Culvert Road with sufficient detail to allow hydraulic analysis of these structures.
 - h) Vertical and horizontal controls will be set.
3. Develop the following base maps of the project area from field run survey for use in developing restoration designs.
 - a) The plan view will be prepared at 1 in. = 20 ft. Cross-sections will be prepared at 1 in. = 5 ft. vertical and 1 in. = 5 ft. horizontal. Longitudinal Profile will be prepared at 1 in. = 5 ft. vertical and 1 in. = 20 ft. horizontal.
 - b) The plan view will include topography at one-foot contour intervals in the channel and across the floodplain/terraces and adjacent hill slopes to either side of the channel. It will show existing structures, such as buildings, retaining walls, fences, roads, drainage pipes, culverts and bridges; Major stream features (e.g., point bars, depositional areas, rock outcrops, etc.) will be shown.

\$27,111.00

Task 2.0 - Hydrologic and Hydraulic Analysis

1. Utilizing standard hydrologic modeling methods (TR-20) develop the peak discharge rate for the 1-, 2-, 10-, 50- and 100-year 24-hour storms under existing conditions for the project reach. The model will be calibrated to regional regressions and/or the FEMA 100-year published flow data so as to serve as the basis for analyzing in the following flood plain modeling effort.
2. Utilizing the 1-, 2-, 10-, 50 and 100-year flows developed from the hydrologic analysis and regional regressions, conduct existing and proposed hydraulic analyses for the project reach. Traditional methods including HEC-RAS will be used to approximate and model existing and proposed water surfaces and hydraulic parameters associated with these flow events.
3. The HEC-RAS model will also import the HEC-2 data from the detailed FEMA modeling used for the Flood Insurance Rate Mapping of the project area. This cost estimate assumes that we will be able to develop a model that reflects less than 0.01 foot flood water surface elevation change to remain consistent with PADEP regulations.
4. If, however this cannot be achieved, it will become necessary to proceed through the process to obtain a Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) process with FEMA. This effort is estimated to require an additional \$0.00 of effort to complete this procedure. \$27,600.00

Task 3.0 – Field Studies and Design Criteria

1. Conduct Level II and Level III Geomorphic Assessment
2. Collect and analyze bulk sediment to verify sediment transport capacity
3. Determine design bankfull channel dimensions. \$3,500.00

Task 4.0 – Preliminary Design

1. Utilizing the field-run topography and base maps, prepare Preliminary Design Plans that include: plan view sheets, representative cross-section sheets, structure typical details, and preliminary landscape plans for the Snitz Creek corridor. \$12,150.00

Task 5.0 – Final Design and Construction Documents

1. Prepare Final Design Plans that include: grading plans, cross-section sheets, profile sheets, and grading typical details, and final landscape plans for the Snitz Creek corridor.
2. Prepare a Final Design Report that summarizes the results of the field studies, existing/proposed conditions hydrologic and hydraulic analysis, sediment transport analysis, and supporting engineering computations for the restoration/stabilization of Snitz Creek project reach.
3. Prepare Erosion and Sediment Control Plans including sequence of construction; stockpile and staging areas, clean water diversion, sediment and erosion control measures.
4. Prepare Construction Specifications and a Bid Package that includes: project description, general and special provisions; an itemized bid tab for all work items - earthwork cut and fill quantity estimates, quantity estimates for construction materials, and final engineer's cost estimates for materials and construction.
5. A Professional Engineer licensed in the state of Pennsylvania will review, sign and seal the final design plans. \$57,000.00

Task 6.0 – Local, State and Federal Permit Applications

1. Conduct environmental assessments required for permitting including wetland delineation, archeological, historical, RET, etc.
2. Conduct a pre-application field meeting with the local, state and federal permitting agencies to present the concept design plans, discuss overall project goals and objectives and site specific constraints.
3. Prepare Erosion and Sediment Control Submittal Package.
4. Prepare Joint Permit Application packages for submission to the Quittapahilla Watershed Association.
5. Prepare written responses (with accompanying plan revisions) to agency comments and or questions. \$23,778.00

Phase 1 – Design and Permitting Professional Fees \$151,139.00