

February 28, 2019

Town of Lake Lure 2948 Memorial Hwy PO Box 255 Lake Lure, NC 28746

Attn: Shannon Baldwin

RE: WR Project # 08180945.00

Engineering Services Agreement

Fire Fly Cove - Chimney Rock Water System Interconnection

Town of lake Lure, NC

Dear Mr. Baldwin:

WithersRavenel is pleased to provide this Agreement for Engineering Services to Town of Lake Lure for the Fire Fly Cove – Chimney Rock Water System Interconnection. If you have any questions or concerns about the agreement please do not hesitate to call me at the number listed below.

Sincerely,

WithersRavenel

James N. Johnston, PE Sr. Project Manager

Attachments:

Agreement for Professional Services Exhibit I – Standard Terms and Conditions Exhibit II – Fee and Expense Schedule



Town of Lake Lure Fire Fly Cove – Chimney Rock Water System Inter Agreement for Professional Services

A. PROJECT DESCRIPTION

The Lake Lure water system is a composite of multiple small, well-supplied systems, connected by piping but isolated by closed valves. The various small systems operate at different hydraulic grades, complicating their interconnection. One sub-system, Fire Fly Cove, operates on a single well. If the well fails, then the system will be without water. An adjacent sub-system, Chimney Rock, has four wells but operates at a hydraulic grade approximately 300' lower than Fire Fly Cove, so simply opening the valve between the two systems will not suffice as backup. The town desires to evaluate possible solutions to this situation so that the Fire Fly Cove sub-system can be reliably served under potential failure scenarios.

The CONSULTANT will provide services for the hydraulic evaluation of connecting the Fire Fly Cove and Chimney Rock sub-systems, recommendations for infrastructure alterations to facilitate the interconnection, plans and specifications for the proposed project and permitting services to obtain the Authorization to Construct from Public Water Supply Section.

B. SCOPE OF SERVICES

Task 1 - Project Coordination and Data Collection

- A. Identify and Convene the PROJECT TEAM to establish the project goals, methods, logistics and schedules. Key members of the team include CLIENT's staff and members of the CONSULTANT's team.
- B. Collect mapping data, including record drawings, system layouts, field sketch and GIS data that may be available.
- C. Collect system information data including well pump data, well depths, storage tank sizes and elevations, recorded system pressures and flow rates, pipe sizes, valve locations, and other data pertinent to the evaluation.

Task 2 - Hydraulic Evaluation

- A. Perform spreadsheet analysis to evaluate hydraulics, configurations, and improvements needed to join the two sub-systems.
- B. Provide recommendations to CLIENT in a letter report.

Task 3 – System Modification Design

A. Cursory preliminary evaluation suggests that to join the two sub-systems will require a booster pump station to maintain tank levels at the Fire Fly Cove storage tank, along with certain valving and controls modifications. CONSULTANT will provide plans and specifications suitable for the permitting, bidding and, upon approval by NCDEQ, construction of the recommended improvements.



Task 4 - Public Water Supply Permit

A. Prepare Application for Approval of Engineering Plans and Specifications for Water Supply Systems for execution by CLIENT. Submit Application with plans and specifications to NCDEO. Remain engaged in the comments period through the issuance of an Authorization to Construct.

ADDITIONAL SERVICES C.

Services that are not included in Section B or are specifically excluded from this AGREEMENT shall be considered Additional Services. The CONSULTANT will furnish or obtain from others Additional Services if requested in writing by the CLIENT and accepted by the CONSULTANT. Additional Services shall be paid by the CLIENT in accordance with the Fee & Expense Schedule outlined in Exhibit II.

As is the nature of engineering evaluation work, certain project aspects may be currently omitted from this Scope of Services. Certain project aspects may become evident during the evaluation process. The following services are excluded from this Scope of Services:

- A. Design services for infrastructure improvements beyond that described in Section B.
- B. Permits other than Application for Approval of Engineering Plans and Specifications for Water Supply Systems.
- C. Advertising, bidding and contract administration.
- D. Construction administration.

CLIENT RESPONSIBILITIES D.

During the performance of the CONSULTANT's services under this AGREEMENT, the CLIENT will:

- Make facilities and water distribution staff members available for assistance in the execution of the scope.
- Assist the CONSULTANT by providing all available information pertinent to the PROJECT, including any reports, maps, drawings, and any other data relative to the PROJECT.
- Examine all proposals, studies, reports, sketches, estimates, specifications, drawings, and other documents presented by the CONSULTANT and render in writing decisions pertaining thereto within a reasonable time period so as not to delay the services of the CONSULTANT.

COMPENSATION FOR SERVICES E.

A. Not to Exceed

CONSULTANT proposes to provide the following Scope of Services previously outlined on a Not-to-Exceed basis as described in the table below plus expenses. Compensation shall not exceed the total estimated compensation amount unless approved in writing by CLIENT.

WR Project No. 08180945.00



Task Number	Task Name	Lump Sum
Task 1	Project Coordination and Data Collection	\$1,000
Task 2	Hydraulic Evaluation	\$1,000
Task 3	System Modification Design	\$4,000
Task 4	Public Water Supply Permit	\$850
	Total	\$6,850

- 1. CONSULTANT may alter the distribution of compensation between individual phases noted herein to be consistent with services rendered, but shall not exceed the total amount unless approved in writing by the CLIENT.
- 2. The lump sum total includes compensation for CONSULTANT's services. Appropriate amounts have been incorporated in the lump sum total to account for labor costs, overhead, profit, expenses (other than any expressly allowed Reimbursable Expenses), and consultant charges.
- 3. The portion of the lump sum total amount billed for CONSULTANT's services will be based upon CONSULTANT's estimate of the percentage of the total services completed during the billing period. If any Reimbursable Expenses are expressly allowed, CONSULTANT may also bill for any such Reimbursable Expenses incurred during the billing period.

F. TIMELINE FOR SERVICES

CONSULTANT will begin services immediately upon receipt of signed contract.



G. ACCEPTANCE

Receipt of an executed copy of this agreement will serve as the written agreement between CONSULTANT and CLIENT for the services outlined.

Submitted by CONSULTANT:	Accepted by CLIENT:
WithersRavenel, Inc.	Town of Lake Lure
115 MacKenan Drive	2948 Memorial Hwy
Cary, NC 27511	Lake Lure, NC 28746
0110 1/2	C. Shamballe
Authorized lignature	Authorized Signature
Jeffrey J. Wing, PE, LEED AP	C. SHANNON BALDWIN
Printed Name	Printed Name
Vice President, Director - Utilities	TOWN MANAGER
Title	Title
jwing@withersravenel.com	TOWNMER CTOWN OF LAKELURE, COM
Email Address	Email Address
919-469-3340	828-625-9983 , EXT. 101
Phone	Phone
	audited in the manner required by the Local Government
Budget and Fiscal Control Act (NC G.S. 159-28(a)).	A
	M
Signature of Finance Officer:	Chr. Chairs
Printed Name:	
rinted Name:	SAM A. KARK
D-1	
Date:	3-1-19

This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act



EXHIBIT I

Standard Terms and Conditions

WithersRavenel, Inc.

The proposal submitted by WithersRavenel, INC. ("CONSULTANT") is subject to the following terms and conditions (collectively referred to as the "Agreement") and, by accepting the proposal, the services, or any part thereof, the CLIENT agrees and accepts the terms and conditions outlined below:

1. Payment:

- a) The CLIENT will pay CONSULTANT for services and expenses in accordance with periodic invoices to CLIENT and a final invoice upon completion of the services. Each invoice is due and payable in full upon presentation to CLIENT. Invoices are past due after 30 days. Past due amounts are subject to interest at a rate of one and one-half percent per month (18% per annum) on the outstanding balance from the date of the invoice.
- b) If the CLIENT fails to make payment to the CONSULTANT within 45 days after the transmittal of an invoice, the CONSULTANT may, after giving 7 days written notice to the CLIENT, suspend services under this Agreement until all amounts due hereunder are paid in full. If an invoice remains unpaid after 90 days from invoice date, the CONSULTANT may terminate the Agreement and/or initiate legal proceedings to collect the fees owed, plus other reasonable expenses of collection including attorney's fees.
- 2. Notification of Breach or Default: The CLIENT shall provide prompt written notice to the CONSULTANT if CLIENT becomes aware of any breach, error, omission or inconsistency arising out of CONSULTANT's work or any other alleged breach of contract by the CONSULTANT. The failure of CLIENT to provide such written notice within ten (10) days from the time CLIENT became aware of the fault, defect, error, omission, inconsistency or breach, shall constitute a waiver by CLIENT of any and all claims against the CONSULTANT arising out of such fault, defect, error, omission, inconsistency or breach. Emails shall be considered adequate written notice for purposes of this Agreement.
- 3. Standard of Care: CONSULTANT shall perform Agreement for CLIENT in a professional manner, using that degree of care and skill ordinarily exercised by and consistent with the standards of professionals providing the same services in the same or a similar locality as the project. THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE THAT WILL OR CAN ARISE OUT OF THE SERVICES PROVIDED BY CONSULTANT OR THIS AGREEMENT.
- 4. Waiver of Consequential Damages/Limitation of Liability: CLIENT agrees that CONSULTANT's aggregate liability for any and all claims that may be asserted by CLIENT is limited to \$50,000 or to the fee paid to CONSULTANT under this Agreement, whichever is greater. Both CLIENT and CONSULTANT hereby waive any right to pursue claims for consequential damages against one another, including any claims for lost profits.
- 5. Representations of CLIENT: CLIENT warrants and covenants that sufficient funds are available or will be available upon receipt of CONSULTANT's invoice to make payment in full for the services rendered by CONSULTANT, and that such payments shall be made in a timely fashion.
- 6. Ownership of Instruments of Service: All reports, plans, specifications, field data and notes and other documents, including all documents on electronic media, prepared by the CONSULTANT as instrument of service, shall remain the property of the CONSULTANT. The CONSULTANT shall retain all common law, statutory and other rights, including the copyright thereto. In the event of termination of this Agreement and upon full payment of fees owed to CONSULTANT,

- CONSULTANT shall make available to CLIENT copies of all plans and specifications.
- 7. Change Orders: CONSULTANT will treat as a change order any written or oral order (including directions, instructions, interpretations or determinations) from CLIENT which request changes in the Agreement or CONSULTANT's scope of work. CONSULTANT will give CLIENT written notice within ten (10) days of a Change Order of any resulting increase in CONSULTANT's fees.
- 8. Opinion of Cost/Cost Estimates: Since the CONSULTANT has no control over the cost of labor, materials, equipment of services furnished by others, or over methods of determining prices, or over competitive bidding or market conditions, any and all opinions as to costs rendered hereunder, including but not limited to opinions as to the costs of construction and materials, shall be made on the basis of its experience and qualifications and represent its best judgment as an experienced and qualified professional familiar with the construction industry; but the CONSULTANT cannot and does not guarantee the proposals, bids or actual costs and will not vary significantly from opinions of probable costs prepared by it. If at any time the CLIENT wishes greater assurances as to the amount of any costs, he shall employ an independent cost estimator to make such determination.
- 9. Assignment and Third Parties: Nothing under this Agreement shall be construed to give any rights or benefits in this Agreement to anyone other than the CLIENT and CONSULTANT, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of the CLIENT and the CONSULTANT and not for the benefit of any other party. Neither the CLIENT nor the CONSULTANT shall assign, sublet, or transfer any rights under or interests in this Agreement without the written consent of the other which shall not be unreasonably withheld. However, nothing contained herein shall prevent or restrict the CONSULTANT from employing independent subconsultants as the CONSULTANT may deem appropriate to assist in the performance of services hereunder.
- 10. **Project Site:** Should CLIENT not be owner of the project site, then CLIENT agrees to notify the site owner of the possibility of unavoidable alteration and damage to the site. CLIENT further agrees to indemnify, defend and hold CONSULTANT harmless against any claims by the CLIENT or persons having possession of the site through the Owner which are related to such alteration or damage.
- 11. Access to Site: CLIENT is responsible for providing legal and unencumbered access to site, including securing all necessary site access agreements or easements, to the extent necessary for the CONSULTANT to carry out his services.
- 12. Survival: All of CLIENT's obligations and liabilities, including but not limited to, its indemnification obligations and limitations, and CONSULTANT's rights and remedies with respect thereto, shall survive completion of the expiration or termination of this Agreement.
- 13. Termination: Either party may terminate the Agreement with or without cause upon ten (10) days advance written notice, if the other party has not cured or taken reasonable steps to cure the breach giving rise to termination within the ten (10) day notice period. If CLIENT terminates without cause or if CONSULTANT terminates for cause, CLIENT will pay CONSULTANT for all costs incurred, non-cancelable commitments, and fees earned to the date of termination and through demobilization, including any cancellation charges of vendors and subcontractors, as well as demobilization costs.



- 14. Severability: If any provision of this Agreement, or application thereof to any person or circumstance, is found to be invalid then such provision shall be modified if possible, to fulfill the intent of the parties as reflected in the original provision, the remainder of this Agreement, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby, and each provision of this Agreement shall be valid and enforced to the fullest extent permitted by the law.
- 15. No Waiver: No waiver by either party of any default by the other party in the performance of any provision of this Agreement shall operate as or be construed as a waiver of any future default, whether like or difference in character.
- 16. Merger, Amendment: This Agreement constitutes the entire Agreement between the CONSULTANT and the CLIENT and all integrated negotiations, written and oral understandings between the parties are merged herein. This Agreement can be supplemented and/or amended only by a written document executed by both the CONSULTANT and the CLIENT
- 17. Unforeseen Occurrences: If, during the performance of services hereunder, any unforeseen hazardous substance, material, element of constituent or other unforeseen conditions or occurrences are encountered which, affects or may affect the services, the risk involved in providing the service, or the recommended scope of services, CONSULTANT will promptly notify CLIENT thereof. Subsequent to that notification, CONSULTANT may: (a) if practicable, in CONSULTANT's sole judgment and with approval of CLIENT, complete the original scope of services in accordance with the procedures originally intended in the Proposal; (b) Agree with CLIENT to modify the scope of services and the estimate of charges to include study of the previously unforeseen conditions or occurrences, such revision to be in writing and signed by the parties and incorporated herein; or (c) Terminate the services effective on the date of notification pursuant to the terms of the Agreement.
- 18. Force Majeure: Should completion of any portion of the Agreement be delayed for causes beyond the control of or without the fault or negligence of CONSULTANT, including force majeure, the reasonable time for performance shall be extended for a period at least equal to the delay and the parties shall mutually agree on the terms and conditions upon which Agreement may be continued. Force majeure includes but is not restricted to acts of God, acts or failures of governmental authorities, acts of CLIENT's contractors or agents, fire, floods, epidemics, riots, quarantine restrictions, strikes, civil insurrections, freight embargoes, and unusually severe weather.
- 19. Safety: CONSULTANT is not responsible for site safety or compliance with the Occupational Safety and Health Act of 1970 ("OSHA"). Job site safety remains the sole exclusive responsibility of CLIENT or CLIENT's contractors, except with respect to CONSULTANT'S own employees. Likewise, CONSULTANT shall have no right to direct or stop the work of CLIENT's contractors, agents or employees.
- 20. Dispute Resolution/Arbitration: Any claim or other dispute arising out of or related to this Agreement shall be subject to Arbitration under the Federal Arbitration Act. Such claims and disputes shall first be subject to non-binding mediation, and if mediation is unsuccessful, shall be subject to Arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect. Any demand for Arbitration shall be filed in writing with the other party and with the American Arbitration Association.
- 21. Independent Contractor: In carrying out its obligations, CONSULTANT shall be acting at all times as an independent contractor and not an employee, agent, partner or joint venturer of CLIENT. CONSULTANT's work does not include any supervision or direction of the work of other contractors, their employees or agents, and CONSULTANT's presence shall in no way create any liability on behalf of CONSULTANT for failure of other contractors, their employees or agents to properly or correctly perform their work

- 22. Hazardous Substances: CLIENT agrees to advise CONSULTANT upon execution of this Agreement of any hazardous substances or any condition existing in, on or near the Project Site presenting a potential danger to human health, the environment or equipment. By virtue of entering into the Agreement or of providing services, CONSULTANT does not assume control of, or responsibility for, the Project Site or the person in charge of the Project Site or undertake responsibility for reporting to any federal, state or local public agencies, any conditions at the project site that may present a potential danger to the public, health, safety or environment except where required of CONSULTANT by law. In the event CONSULTANT encounters hazardous or toxic substances or contamination significantly beyond that originally represented by CLIENT, CONSULTANT may suspend or terminate the Agreement. CLIENT acknowledges that CONSULTANT has no responsibility as a generator, treater, storer, or disposer of hazardous or toxic substances found or identified at a site and CLIENT agrees to defend, indemnify, and hold harmless CONSULTANT, from any claim or liability, arising out of CONSULTANT's performance of work under the Agreement and made or brought against CONSULTANT for any actual or threatened environmental pollution or contamination except to the extent that CONSULTANT has negligently caused such pollution or contamination.
- 23. Choice of Law: The validity, interpretation, and performance of this Agreement shall be governed by and construed in accordance with the law of the State of North Carolina, excluding only its conflicts of laws principles.
- 24. Construction Services: If construction administration and review services are requested by the CLIENT, CLIENT agrees that such administration, review, or interpretation of construction work or documents by CONSULTANT shall not relieve any contractor from liability in regard to its duty to comply with the engineering standards for the Project, and shall not give rise to a claim against a contractor's failure to hold in accordance with the applicable plans, specifications or standards.
- 25. Field Representative: If CONSULTANT provides field services or construction observation services, the presence of the CONSULTANT's field personnel will only be for the purpose of providing observation and field testing of specific aspects of the Project. Should a contractor be involved in the Project, the CONSULTANT's responsibility does not include the supervision or direction of the actual work of any contractor, its employees or agents. All contractors should be so advised. Contractors should also be informed that neither the presence of the CONSULTANT's field representative nor the observation and testing by the CONSULTANT shall excuse contractor in any way for defects in contractor's work. It is agreed that the CONSULTANT will not be responsible for job or site safety on the Project and that the CONSULTANT does not have the right to stop the work of any contractor.
- 26. Submittals: CONSULTANT's review of shop drawings and other submittals is to determine conformity with the design concept only. Review of shop drawings and submittals does not include means, methods, techniques or procedures of construction, including but not limited to, safety requirements.



EXHIBIT II

Fee & Expense Schedule

Description		late	
Engineering / Planning	3		
Principal	\$	200	
Senior Technical Consultant	\$	185	
Senior Project Manager	\$	170	
Project Manager	\$	155	
Assistant Project Manager	\$	135	
Project Coordinator	\$	95	
Senior Staff Professional	\$	155	
Staff Professional IV	\$	130	
Staff Professional III	\$	120	
Staff Professional II	\$	110	
Staff Professional I	\$	95	
Senior Designer	\$	135	
Designer II	\$	115	
Designer I	\$	105	
Senior CAD Technician	\$	110	
CAD Technician II	\$	95	
CAD Technician I	\$	85	
Senior Land Planner	\$	120	
Land Planner II	\$	110	
Land Planner I	\$	100	
Planning Technician	\$	90	
Senior Construction Manager	\$	150	
Construction Manager II	\$	130	
Construction Manager I	\$	120	
Senior Resident Project Representative	\$	110	
Resident Project Representative II	\$	100	
Resident Project Representative I	\$	95	
Expenses			
Bond Prints (Per Sheet)		\$1.75	
Mylar Prints (Per Sheet)		\$11.00	
Mileage			
Delivery - Project Specific (Distance & Prior	rity)	4 4 5	
Subcontractor Fees (Markup) Expenses / Reprod. / Permits (Markup)	+	1.15	

Description	Rate	
Geomatics		
Principal	\$ 195	
Senior Technical Consultant	\$ 180	
Geomatics Senior Manager	\$ 170	
Geomatics Project Manager II (SR PM)	\$ 140	
Geomatics Project Manager I	\$ 130	
Geomatics Project Professional II	\$ 135	
Geomatics Project Professional I	\$ 120	
Geomatics CAD III	\$ 105	
Geomatics CAD II	\$ 90	
Geomatics CAD I	\$ 70	
Geomatics GIS Specialist	\$ 115	
Geomatics GIS Tech III	\$ 100	
Geomatics GIS Tech II	\$ 85	
Geomatics GIS Tech I	\$ 70	
Geomatics Remote Sensing Crew (2 Man)	\$ 250	
Geomatics Remote Sensing Crew (1 Man)	\$ 175	
Geomatics Survey Crew III (3 Man)	\$ 195	
Geomatics Survey Crew II (2 Man)	\$ 155	
Geomatics Survey Crew I (1 Man)	\$ 130	
Geomatics Survey Tech IV	\$ 100	
Geomatics Survey Tech III	\$ 90	
Geomatics Survey Tech II	\$ 65	
Geomatics Survey Tech I	\$ 40	
Administrative		
Office Administrator III	\$ 95	
Office Administrator II	\$ 90	
Office Administrator I	\$ 85	
Administrative Assistant III	\$ 80	
Administrative Assistant II	\$ 70	
Administrative Assistant I	\$ 65	

Description	R	ate		
Environmental / Geology				
Principal	\$	195		
Senior Technical Consultant	\$	180		
Environmental Project Professional V	\$	165		
Environmental Project Professional IV	\$	150		
Environmental Project Professional III	\$	135		
Environmental Project Professional II	\$	125		
Environmental Project Professional I	\$	115		
Environmental Staff Professional III	\$	110		
Environmental Staff Professional II	\$	100		
Environmental Staff Professional I	\$	90		
Environmental Technician II	\$	85		
Environmental Technician I	\$	70		
Senior Biologist/Wetlands Scientist	\$	140		
Biologist/Wetlands Scientist III	\$	120		
Biologist/Wetlands Scientist II	\$	110		
Biologist/Wetlands Scientist I	\$	100		
Senior Hydrogeologist	\$	160		
Project Geologist II (Sr. Proj. Geologist)	\$	135		
Project Geologist I	\$	115		
Staff Geologist II	\$	105		
Staff Geologist I	\$	95		
WR-Martin Consulting				
WR Martin Principal Consultant	\$	160		
WR Martin Senior Project Manager II	\$	130		
WR Martin Senior Project Manager	\$	125		
WR Martin Project Manager II	\$	110		
WR Martin Project Manager	\$	100		
WR Martin Project Consultant II	\$	95		
WR Martin Project Consultant I	\$	85		

Effective January 1, 2019 – Schedule is subject to change