

Town of Biltmore Forest Stormwater Master Plan - Phase 1 Town of Biltmore Forest, North Carolina

A. PROJECT DESCRIPTION

WithersRavenel shall prepare a Stormwater Master Plan for the Town of Biltmore Forest. The existing system will be evaluated for capacity based on a watershed analysis and also for condition based on field evaluation. The overall deliverable of the study will be a report that provides prioritized improvement recommendations with considerations for public safety, feasibility, and cost for the Town's Capital Improvement Program (CIP) while recognizing the Town's historic approach to managing stormwater and with consideration for combining stormwater management and recreational areas where feasible. In order to make this assessment, we will utilize existing GIS data as well as augment information with field verification for the identified problem areas. This Scope of Services is for providing project management and administration, watershed analysis for runoff estimation, limited GIS field verification, and condition assessment of storm drain infrastructure in order to identify and prioritize potential capital improvement projects and develop the Stormwater Master Plan for the Town of Biltmore Forest.

B. SCOPE OF SERVICES

The Stormwater Master Plan shall be completed in Phases. Phase I shall be implemented through June 30, 2018. Phase II shall be implemented for 6 months within the 2018-2019 fiscal year. Phase I shall include Task 1A, Task 2, and Tasks 3A & 3B as detailed below. Phase II shall include Task 1B, Task 4A & 4B, Task 5A & 5B, Task 6, and Task 7 under separate contract.

The *ENGINEER* referred to in this agreement shall be WithersRavenel. The *TOWN* referred to in this agreement shall be the Town of Biltmore Forest. The *PROJECT* referred to in this agreement shall be the Stormwater Master Plan described herein.

Task 1A Project Management and Coordination

The ENGINEER will conduct a kickoff meeting with TOWN staff to obtain necessary background information including flooding history, maps, and locations of known problem areas. Over the course of each phase of the project, the ENGINEER will also provide the following services as part of this task: participate in monthly conference calls with TOWN staff to discuss project progress, administer the project internally and manage project processes, communication, and resources. Task 1A shall correspond to Phase 1 and Task 1B shall correspond to Phase II.

Task 2 – Data/Information Assessment

WithersRavenel will meet with Town staff to determine flooding history, known problem areas, and areas of potential improvement. For base mapping and land use assessment, we will utilize Buncombe County GIS data and the Town's existing zoning information. WithersRavenel will also utilize the current stormwater GIS data provided by Land of Sky. This data will be used for the watershed analysis to develop estimates of stormwater runoff.

Through a thorough GIS analysis, the WithersRavenel team will assess that data in detail, showcasing the strengths in the data as well as pointing out the deficiencies. This process will include standard QA/QC procedures specific to gravity pipe systems and geometric relationship analyses of all features in the dataset. As part of this task we will provide the following:

- ▶ Watershed delineation;
- ▶ Preliminary assessment of existing GIS data within identified project areas;
- ▶ Preliminary capacity assessment.

Tasks 3A & 3B – Field Reconnaissance and Condition Assessment with Stormwater Evaluation

Areas requiring further study will be identified as part of Task 2. WithersRavenel field crews will perform the field reconnaissance focusing on these areas only. Stormwater structures will be assessed in the field by pulling lids to obtain invert measurements and general condition attributes taken from visual observation at ground level. These services do not include field crews entering into structures. In addition, the ENGINEER will verify pipe connectivity where possible and identify potential deficiencies found in the stormwater conveyance. The ENGINEER will collect attribute information for pipe diameter, pipe material, inverts, and overall structure condition and type. Conditions will be collected based on the scale of; Good, Fair, Poor and Very Poor.

If it is found during Task 2 that the location of stormwater feature do not meet the accuracy as desired, then new locations will be acquired. Field crews will utilize survey grade Global Navigation Satellite System (GNSS) equipment where it is estimated 85% of locations will be of survey quality and the remaining 15% will be of mapping grade Level B GPS quality. Any structures not meeting Class B survey standards due to GPS interference will be documented as such and the TOWN will be given the option of obtaining those structures at Class A survey as an Additional Service.

Additionally, elevation and slope data can be obtained for critical system components using survey-grade equipment where it is determined to be necessary. The presence of standing or flowing water, sediment accumulation or evidence of illicit discharges will also be recorded. Digital photographs will be taken of the system components to visually document condition, damage, deterioration, and presence of debris or sediment.

WithersRavenel will perform the following as part of these tasks:

- ▶ Stormwater evaluation of GIS findings;
- ▶ Prepare a map detailing problem statements for the identified stormwater problem areas.

C. EXPENSES

The following costs shall be paid by the TOWN or be considered reimbursable and include but are not limited to the following:

- ▶ Courier Trips;
- ▶ Prints/Mylars/copies;
- ▶ Mileage.

D. ADDITIONAL SERVICES

The ENGINEER shall undertake additional services only upon receipt of written authorization from the TOWN and agreement of additional fees. Fees for additional services may be lump sum or based on the hourly rates for project personnel as based on the WithersRavenel Fee Schedule (Exhibit II), subject to agreement between ENGINEER and TOWN. Such additional services may include (but not be limited to) any of the following which are not included in this proposal:

- ▶ Survey Mapping Services;
- ▶ Subsurface Utility Exploration services (SUE);
- ▶ Environmental surveys (such as wetland delineation, buffers, permitting);
- ▶ Closed Circuit Television Inspection (CCTV) and assessment of pipe video;

- ▶ Flood studies or coordination with FEMA (such as for CLOMRs or LOMRs);
- ▶ Additional Public Meetings or Presentations;
- ▶ Construction Plans;
- ▶ Class A survey of any structures not meeting Class B survey standards due to GPS interference.

E. CLIENT RESPONSIBILITIES

During the performance of the ENGINEER'S services under this AGREEMENT, the TOWN will:

- ▶ Provide full information as to its requirements for the PROJECT.
- ▶ Assist the ENGINEER by providing all available information pertinent to the PROJECT, including previous inspection data and reports, maps, old drawings, maintenance records and any other data relative to the analysis prior to the ENGINEER beginning work.
- ▶ Provide all public notification for field work;
- ▶ Provide full and complete comments during submittals for review.
- ▶ Examine all studies, reports, sketches, estimates, specifications, drawings, proposals, and other documents presented by the ENGINEER and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of the ENGINEER.
- ▶ Designate a person in writing authorized to act and make binding decisions on behalf of the OWNER with respect to the scope of work covered under this PROJECT.
- ▶ TOWN shall be responsive and engaging throughout the project by providing timely responses to inquiries made by the ENGINEER
- ▶ Give prompt written notice to the ENGINEER whenever the TOWN observes or otherwise becomes aware of any defect in the PROJECT.
- ▶ Coordinate with applicable project stakeholders to provide third party information on adjacent projects under the Town's purview and required for completion of the Basic Services listed above.
- ▶ Provide assistance regarding any matters relating to the PROJECT and requiring an attorney at law.

F. COMPENSATION FOR SERVICES

WithersRavenel proposes to provide the services outlined in Tasks 1 through 6 in Section B, on a fixed fee basis, plus reimbursable expenses in accordance with Attachment II with a budget as shown below.

Task Number	Task Name	Fee
<i>Phase 1</i>		
Task 1A	Project Management & Coordination	\$4,620
Task 2	Data/Information Assessment	\$14,700
Task 3A	Field Reconnaissance and Condition Assessment	\$23,500
Task 3B	Stormwater Evaluation of Field Data	\$9,900
	Total Fee for Phase I	\$52,720

Invoices will be based on the percentage of the project accomplished during the billing period. Payment is due upon receipt of invoice. Interest shall be charged at the rate of one and one-half (1.5) percent per month on all balances due over 30 days from date of invoice.

G. OTHER PAYMENT PROVISIONS

Payment shall become due and payable monthly upon receipt of the ENGINEER'S itemized invoice. For Basic Services, the Lump Sum Fees will be based on estimated percent completion of each task at time of billing.

Monthly invoices shall be cumulative and shall indicate the total charges incurred through the billing period. All invoices shall contain: (1) the Town of Biltmore Forest Project Number, and (2) a detailed breakdown of the progress made and total percent complete of each task at the closure of the billing period.

H. ATTACHMENTS

The following attachments are hereby included with and form a part of this agreement.

- Exhibit I - Standard Terms and Conditions
- Exhibit II - Fee & Expense Schedule

I. ACCEPTANCE

Submitted by ENGINEER:

WithersRavenel, Inc.
115 MacKenan Drive
Cary, NC 27511



Authorized Signature

Lars R. Hagen Jr.

Printed Name

Vice President, Director - Stormwater

Title

lhagen@withersravenel.com

Email Address

(919) 469-3340

Phone

Accepted by TOWN:

Town of Biltmore Forest
355 Vanderbilt Road
Biltmore Forest, NC 28803

Authorized Signature

Printed Name

Title

Email Address

Phone

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.

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. CONSULTANT will provide to CLIENT, at no cost to CLIENT, 5 complete copies of all reports, plans and specifications and will also provide copies of the same, in electronic format, to the CLIENT. CLIENT is authorized to use such report, plans and specifications in the operation, maintenance, repair and replacement, if necessary, of all or part of its stormwater system.

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: CLIENT and CONSULTANT agree, with respect to any claim or other dispute arising out of this agreement, that the parties will first attempt to resolve the claim or dispute through informal negotiation. Either CLIENT or CONSULTANT may initiate this process by submitting written demand on the other party. If the claim or dispute cannot be resolved through informal dispute or resolution within thirty days from the date of written demand, CLIENT and CONSULTANT agree to participate in non-binding mediation before a mediator certified to conduct Superior Court mediations in North Carolina with said mediation to be completed within 60 days. If the claim or dispute cannot

be resolved in mediation, either CLIENT or CONSULTANT may file a civil action in the Superior Court for the 28th Judicial District in North Carolina.

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.