

Town of Windsor

Memorandum

July 10, 2018

TO: The Honorable Mayor and Town Council
FROM: Michael Stallings, Town Manager MS
SUBJECT: Drainage Study

As you are aware, the Town’s Drainage Committee spent some time creating a priority list of drainage concerns in the Town of Windsor.

I met with Bowman Consulting to discuss how to move forward with identifying what the issues are in these areas as well as how to fix them.

Bowman Consulting has provided the attached proposal laying out how they recommend we move forward. The first phase of their proposal would be to do some base mapping to establish the current conditions in the Town. They will then use that data to proceed with the identified priority areas in Town.

As you can see, the total proposed price for the preliminary mapping and evaluation of each of the 6 identified problem areas is \$14,100. In the 2016-17, 2017-18, and the current 2018-19 budgets, we have set aside \$5,000 each year for piping and storm drainage. Therefore, we have \$15,000 we can allocate to this project if Council desires to move forward. Council would need to appropriate the \$10,000 from the previous two fiscal years to go with the \$5,000 in this year’s budget to complete the work.

I have attached a copy of the proposal, list of drainage priorities from the Drainage Committee, and a resolution that would appropriate the funds if Council desires to move forward.

Recommended Motion

Move that Town Council adopt the enclosed resolution entitled:

A Resolution Appropriating The Sum Of \$10,000 From The Unappropriated Fund Balance Of The General Fund To The General Fund Operating Budget For Fiscal Year 2018-2019

PRIORITIZED LIST OF PROBLEM DRAINAGE AREAS IN WINDSOR VIRGINIA

1. Priority 1 Problem Drainage Area This area network has four components:

A. The ditch behind the commercial area on Windsor Boulevard (includes Hardy's Towing and the Farmer's Daughter) and also in the rear of several properties on Church Street is overgrown and does not function correctly.

B. There also is the major outlet line from the storm-water pond for the High School property and also drains some of the properties on Randolph Street and some of Virginia Avenue, which crosses Church Street and through underground piping connects to the aforementioned ditch. The underground piping is collapsing in places causing ponding in the rear of properties. These collapses are exacerbated by the malfunctioning ditch.

C. Stemming off from this ditch (Item A), the water flows down the new ditches that were installed on Holland Drive, then the system flows into the ditch that leads under Windsor Boulevard and into the pond on Mr. Alphin's property.

D. Also as a part of this system are the other "new" ditches along Holland Drive that have standing water problems. This is caused by the underground piping leading to Windsor Boulevard on the edge of the Town's property is either stopped up, collapsed or inadequate in size to carry the water to the ditches on Windsor Boulevard which lead back to the aforementioned pond. A related component is along Roberts Avenue where the connection from Holland Avenue and along Roberts Avenue, the ditch is sometimes clogged and was put in incorrectly (VDOT has attempted to remedy some of these situations). However, this location has caused some of the flooding problems on some of the businesses on Windsor Boulevard (NAPA).

2. Priority 2 Problem Drainage Area This area is made up of two components.

A. The first of these is at the intersection itself. Windsor Boulevard at its junction with Church, Court and Bank Streets does not appear to carry the water well within its ditch system. The channels may be inadequate. The study area was discussed to be 50 feet on all of the intersection streets

B. A similar situation is found further east of the intersection on Windsor Boulevard where the storm-water from Windsor Boulevard has come over the rather short curb and sidewalk area and flooded businesses. There also is a second sidewalk in these areas on private property that are sloped slightly towards the buildings.

3. Priority 3 Problem Drainage Area. This drainage problem area is the one of the few areas not affected directly by U.S. Route 460. It is affected somewhat by its proximity to the Norfolk Southern Railroad. It encompasses much of Bank Street, Maple Lane, Griffin Street and where Griffin Street becomes Old Suffolk Road. It has two primary trouble-spots.

A. The houses along Bank and to a lesser degree on Griffin Street have had the very shallow ditches in front of their homes be overwhelmed and their driveways and front-yards have had some flooding. VDOT this past spring repaved the area and found that a drop inlet on Bank Street had been paved over. It still appears that the ditches are inadequate channels or that the piped or now overgrown ditches that are to remove the water on private property perpendicular to Bank Street to the "wet" areas or vacant fields are not effective or efficient in the removal of the storm-water.

B. The houses along Griffin Street have had less of the problem described in Item A. However where Griffin Street becomes Old Suffolk Road, after the sharp turn there is a major ditch perpendicular to Old Suffolk Road that drains the farm lands on the south of Old Suffolk across a resident's property to the Norfolk Southern Railway ditches. On the resident's property, the piped ditch has developed some sink holes and it has caved in causing some flooding. Some of the problem has been ameliorated by Norfolk Southern and VDOT cleaning their respective ditches and in-falls and outfalls.

4. Priority 4 Problem Drainage Area. This drainage problem is caused by storm-water on the north side of U.S. Route 460 that is channeled by largely underground pipelines from either Watson Street or across Community Electric Cooperative's property.

A. There has been some sink-holes and ponding along the properties on Watson Street and CEC's land. The water tends to flow off the adjacent properties to the north from a ditch on the mobile home park's property whose connection to VDOT's ditches does not mesh well. This causes some ponding at the rear of Watson Street.

B. The storm-water from the aforementioned ditches flow under U.S. Route 460 and actually are intended to flow across the commercial properties there and then flow parallel to the Norfolk Southern Railroad to the west past U.S. Route 258 to the edge of Town there it goes under the railroad. There has been a major clog in this system somewhere in the line parallel to the railroad which has caused problems along its length. Staff has gotten VDOT and Norfolk Southern to look into the matter and correct it. Because of the machinery required for the repair this has not been completed as of this writing.

5. Priority 5 Problem Drainage Area. This drainage problem area is not a part of either the U.S. Route 460 or the Norfolk Southern Railroad. These are on North Court Street and the north edge of the properties on Virginia Avenue with lateral leading across Virginia Avenue guiding the flow to both the north and the south.

A. There is a piped ditch with several drop inlets at the rear of the properties running parallel to the north side of Virginia Avenue. Apparently, a portion of it takes storm-water from the field and subdivision to the “wet” school properties running at the end of Virginia Avenue, with the other portion taking the water to North Court Street. In places the pipes have deteriorated causing small sink holes in yards and some small ponding mainly in the areas leading to North Court and some of the underground piping from North Court. There also are underground pipes and drop inlets that remove flow into the High School properties’ storm-water system. Some of these also have had sink-holes develop. At the piped ditches outfall on North Court Street, some recent work that was done may have corrected some of the problems in this area.

B. Along North Court Street, there has been problems with the underground pipes under the street collapsing and backing up water on the residential properties. There also are underground pipes on private properties that are collapsing causing numerous small sink holes and minor ponding. These connect into the Street’s system. Many of these problems were exacerbated by the repaving work that was performed last year that utilized the “milling process” which causes more vibration. VDOT has been notified numerous times and has done some repair work on this street several times recently.

6. Priority 6 Problem Drainage Area. There is a ditch running parallel to Sarahnell Lane on the west side. It carries much of the storm-water flow from the High School’s property towards and under Shiloh Road towards U.S. Route 460. There have been some minor sink-holes develop along the properties (in the subdivision) with the inevitable ponding and sinkholes and scouring at the outfall and within the ditch along Shiloh. However, VDOT has largely remedied the problem on their right of way. However, the problems remain on the private properties

June 14, 2018

Mr. Michael Stallings
Town of Windsor
8 East Windsor Boulevard
P.O. Box 307
Windsor, Virginia 23487

**Re: Town of Windsor Drainage (the "Project")
 Proposal to provide Engineering services (the "Proposal")**

Dear Mr. Stallings

We are pleased to submit this Proposal to provide Engineering services for the above referenced Project. Upon verbal or written direction to proceed with performance of the services described herein, this Proposal, along with all attachments thereto will constitute a binding agreement (the "Agreement") between Bowman Consulting Group, Ltd. ("BCG") and Town of Windsor (the "Client").

Bowman Consulting has the resources and experience to make your project a success. In addition to Engineering, Bowman also provides Environmental, Planning, Civil Engineering, Landscape Architectural, Land Surveying and Transportation services to clients across the nation.

It is our understanding that the project consists of a drainage assessment. Bowman Consulting will conduct several field visits and prepare a memo of findings and recommendations

J.J.

Initials: BCG _____ / Client _____

SCOPE OF SERVICES AND FEES

The scope of services (the "Scope") and associated fees shall be as follows:

1. Base Mappings & Preliminary Engineering

Using available GIS data, BCG will create a base map with aerial imagery to establish project limits. BCG will gather and review all information pertaining to Town of Windsor stormwater management facilities, drains, floodplains, etc. BCG will determine the critical natural channels based on GIS topography.

FEE: Lump Sum of \$1,600.00

2. Problem Area 1 Assessment

BCG will conduct a site visit to the Town of Windsor to assess drainage problems as outlined in the provided document *Prioritized List of Problem Drainage Areas in Windsor Virginia* (attached). This site visit will address problem area 1 (subareas A, B, C, and D). BCG will inspect this area for failures and document field findings. These findings will be summarized these in an engineering memorandum. The memorandum will include recommendations as to how to repair or resolve observed drainage problems.

FEE: Lump Sum of \$4,000.00

3. Problem Areas 2, 3, and 4 Assessment

BCG will conduct a site visit to the Town of Windsor to assess drainage problems as outlined in the provided document *Prioritized List of Problem Drainage Areas in Windsor Virginia* (attached). This site visit will address problem areas 2 (A and B), 3, and 4 (A and B). BCG will inspect this area for failures and document field findings. These findings will be summarized these in an engineering memorandum. The memorandum will include recommendations as to how to repair or resolve observed drainage problems.

FEE: Lump Sum of \$3,000.00

4. Problem Areas 5 and 6 Assessment

BCG will conduct a site visit to the Town of Windsor to assess drainage problems as outlined in the provided document *Prioritized List of Problem Drainage Areas in Windsor Virginia* (attached). This site visit will address problem areas 5 (A and B) and 6. BCG will inspect this area for failures and document field findings. These findings will be summarized these in an engineering memorandum. The memorandum will include recommendations as to how to repair or resolve observed drainage problems.

FEE: Lump Sum of \$3,000.00

5. Engineering Consultation

This task includes BCG preparing for and attending meetings and providing support as requested by the client, such as preparing exhibits, responding to questions and requests for information, and the submittal of supplemental data. All services under this task will be invoiced on an hourly basis.

FEE: Hourly Not to Exceed \$2,500.00 (only upon client request)

Note: The above tasks are intended for a preliminary drainage study only and does not include preparation of survey and engineering design plans. Upon site visit and investigation, additional issues may be discovered.

Summary Matrix

Task	Description	Fee	Fee Type	Subtotal
1	Base Mapping & Preliminary Engineering	\$1,600.00	Lump Sum	\$1,600.00
2	Problem Area 1 Assessment	\$4,000.00	Lump Sum	\$4,000.00
3	Problem Area 2, 3, & 4 Assessment	\$3,000.00	Lump Sum	\$3,000.00
4	Problem Areas 5 & 6 Assessment	\$3,000.00	Lump Sum	\$3,000.00
5	Engineering Consultation	\$2,500.00	Hourly NTE	\$2,500.00
			Subtotal	\$14,100.00
			Total	\$14,100.00

Services that are not part of this contract are as follows:

- Permit, Specs
- Geotech Studies, Test Pits, Dry Utility Design
- Offsite Improvements, Signalization
- Survey
- Engineering Design
- Construction Plans

REIMBURSABLE EXPENSES

Reimbursable expenses shall include actual expenditures made by BCG in the interest of the Project and will be invoiced at the actual cost to BCG plus fifteen percent (15%) for handling and indirect costs. Reimbursable expenses shall include but not be limited to costs of the following:

- Mailing, shipping, and out source delivery (i.e. DHL, FedEx) costs
- Fees and expenses of special consultants as authorized by the Client
- Mileage

REPROGRAPHIC, COURIER AND OTHER CHARGES

Reprographic, plotting, in-house courier, and archive retrieval services will be invoiced in accordance with Schedule A attached hereto.

CLIENT RESPONSIBILITIES

The Client shall be responsible for obtaining permission for BCG, its employees, agents and subcontractors to enter onto the subject property and any properties in the vicinity as reasonably necessary for BCG to perform the services described herein. By either countersigning this Proposal or verbally authorizing BCG to proceed, the Client warrants and represents that it has obtained such permission. The Client shall provide the following items upon request of BCG in a timely manner and at no expense to BCG:

- Electronic Copy of Boundary and Topo (GIS)
- Secure authorization to enter on private property for field visits

OTHER TERMS

This proposal is based on the scope of services indicated herein and the information available at the time of the proposal preparation. If any additional services are required due to unforeseen circumstances and/or conditions, client or regulatory requested revisions, additional meetings, regulatory changes, etc., Bowman will notify the client that additional scope of work and fees are required and will obtain the client's written approval prior to proceeding with any additional work.

BCG's Standard Terms and Conditions and Hourly Rate Schedule are attached hereto and incorporated into this Proposal by reference. You should read these standard terms and conditions and assure yourself that you understand them prior to accepting this proposal or authorizing BCG to proceed with the performance of the services described herein.

In the event you wish to accept this proposal, please execute both originals, initial all pages and return one executed original to this office. The individual executing this proposal represents and warrants that he has the authority to sign on behalf of Town of Windsor. In accordance with Section 8 of the BCG Terms and Conditions, the retainer will remain in place during the course of the project and will be credited against the final invoice for the project.

Sincerely,

BOWMAN CONSULTING GROUP, LTD.

Jonathan Jackson

Jonathan Jackson
Director of Engineering

Town of Windsor hereby accepts all terms and conditions of this Proposal (including the Standard Terms and Conditions) and authorizes BCG to proceed with the Project.

Town of Windsor

By: _____

Printed Name: _____

Title: _____

Date: _____

BOWMAN CONSULTING

TERMS AND CONDITIONS

These Terms and Conditions are incorporated by reference into the Proposal and its exhibits (the "Proposal") from Bowman Consulting Group, Ltd. ("BCG") to Town of Windsor ("Client") for performance of services described in the Proposal and associated with the project described in the Proposal (the "Project"), and in any subsequent approved Change Order related to the Project. These Terms and Conditions, the accepted Proposal, and any Change Orders or other amendments thereto, shall constitute a final, complete, and binding agreement (the "Agreement") between BCG and Client, and supersede any previous agreement or understanding.

1. Scope of Services. BCG will provide the services expressly described in and limited by the Proposal (the "Scope"). If in BCG's professional judgment the Scope must be expanded or revised, BCG will forward a change order agreement to Client that describes the revision to the Scope (the "Change Order") and the adjusted fee associated therewith.

2. Standard of Care. The standard of care for all services performed by BCG for Client shall be the care and skill ordinarily used by members of the applicable profession practicing under similar circumstances at the same time and locality of the Project. Client shall not rely upon the correctness or completeness of any design or document prepared by BCG unless such design or document has been properly signed and sealed by a licensed professional on behalf of BCG.

3. Payment Terms. BCG will invoice Client monthly or more frequently based on a percentage of the work completed for lump sum tasks, number of units completed for unit tasks, and actual hours spent for hourly tasks. Invoices are due and payable in full upon receipt without offset of any kind or for any reason. BCG shall have the discretion to apply payments made by Client to an invoice or retainer account of Client in accordance with its business practices. Client agrees to pay a finance charge of one and one-half percent (1.5%) per month from the invoice date on any unpaid balance not received by BCG within thirty (30) days of the invoice date. Payment of invoices is subject to the following further terms and conditions:

(a) If any invoice is not paid in full within forty-five (45) days of the invoice date, and Client has not timely and in good faith disputed the invoice as provided below, BCG shall have the right at its election by giving notice to Client to either: (i) suspend the performance of further services under this Agreement and, at its sole discretion, suspend the performance of further services on other projects which are being performed by BCG on behalf of Client or any related Client entities, until all invoices are paid in full and BCG has received a retainer in such amount as BCG deems appropriate to be held as described below; or (ii) deem Client to be in material breach of this Agreement and proceed pursuant to Section 17 below. Client agrees to pay any and all charges, costs or fees incurred in collection of unpaid invoices, including reasonable attorneys' fees and costs. Following BCG's election above, BCG shall bear no liability to Client or any other person or entity for any loss, liability or damage resulting from any resulting delay, and any schedule for the performance of services hereunder prepared previously shall be deemed void with any future schedule for the performance of services requiring the approval of both Client and BCG.

(b) If Client disputes any submitted invoice, Client shall give written notice to BCG within thirty (30) days of the invoice date detailing the dispute. If no written notice of a dispute is provided to BCG within that time period, the invoice shall then be conclusively deemed good and correct. If part of an invoice is disputed, Client shall remain liable to timely pay the undisputed portion of the invoice in accordance with the terms of this Agreement. Client and BCG shall promptly negotiate in good faith to resolve any disputed portion of an invoice.

4. Retainer and Other Payments. BCG reserves the right to require that Client make a payment to be held

by BCG as an advance against future billings (the "Retainer"). The Retainer is not intended as the regular source of payment for invoices issued to Client under this Agreement or otherwise, and the parties intend that the Retainer be applied to the final invoice for the services described in the Agreement, or against any other unpaid amounts owed to BCG should Client (or any affiliate of Client) fail to timely pay invoices due BCG. The Retainer account may consist in part of payments applied by BCG pursuant to the authority granted it under Paragraph 3 above. If the Retainer is applied during the course of the Agreement, Client agrees to promptly replenish the Retainer upon request of BCG. Upon the conclusion of this Agreement, or its earlier termination, BCG shall (a) apply the Retainer to any unpaid amount owed BCG by Client (or its affiliates), and (b) return any unapplied portion to Client. The Retainer shall not be required to be held in a separate account nor shall it bear interest, and the Retainer may include other amounts paid to BCG by Client with respect to the Project or other projects.

5. Client Duties and Responsibilities. Client shall inform BCG of any special criteria or requirements related to the Project or Scope, and shall timely and at its cost furnish any and all information in its possession relating to the Project, including reports, plans, drawings, surveys, deeds, topographical information and/or title reports. BCG shall bear no responsibility for errors, omissions, inaccuracies or incompleteness in third-party information or additional costs arising out of its reliance upon such third-party information supplied by Client. Client warrants and represents that: (a) Client has obtained the full and unconditioned prior written consent from any third-party for BCG to use such third-party information; (b) such consent shall be provided to BCG upon request; and (c) such consent shall be in a form that, in BCG's reasonable discretion, does not violate any applicable law, regulation, or code of ethics. If the Scope requires a current title report, Client shall timely and at its cost provide such title report to BCG. If the Scope includes preparation of plats to be recorded in the land records of the Project jurisdiction, Client shall timely prepare, submit, and record necessary deeds and pay all recording fees associated with deeds and plats. All off-site easements are the responsibility of Client. Client shall indemnify and hold harmless BCG from and against any and all claims, demands, losses, costs, and liabilities, including without limitation reasonable attorney fees and expenses incurred by BCG and arising out of (a) Client's breach of this Agreement or (b) an action by Client or a third-party with respect to any matter not included in the Scope or that is excluded from the responsibility of BCG pursuant to this Agreement.

6. Insurance. BCG and its employees are protected by workman's compensation, commercial general liability, automobile liability, and professional liability insurance policies. Upon request of Client, BCG shall provide a certificate of insurance to Client evidencing such coverage and shall attempt to include Client as an additional insured on those coverages that permit additional insured status. Client acknowledges it has been offered the opportunity to review the current limits of such coverage and finds them satisfactory, and further agrees that in no event shall BCG's liability to Client or any party claiming through Client be greater than the limits of such insurance. From time to time BCG may, without notice to Client, amend the carriers, conditions, exclusions, deductibles or limits of any such insurance; provided that prior to any decrease in any insurance limit becoming effective BCG shall give notice thereof to Client.

7. Potential Liability of BCG. The following provisions shall operate with respect to any potential liability of BCG arising under the Agreement:

(a) Client may not assert that there is a breach, defect, error, omission or negligence in the services performed by BCG that Client believes creates liability on the part of BCG unless Client gave written notice to BCG not later than the first to occur of (i) the beginning of any corrective work, or (ii) thirty (30) days after Client had knowledge of the existence of the breach, defect, error, omission or negligence. BCG shall have the opportunity to participate in decisions regarding the corrective work, and Client shall ensure that corrective action is taken at the lowest reasonable expense under the circumstances.

(b) Notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of BCG and

BCG's officers, directors, partners, employees, agents, and consultants to Client and anyone claiming through Client, shall not in any manner whatsoever exceed the direct losses incurred by Client (to the extent of and in proportion to BCG's comparative degree of fault) that resulted from the error, omission or negligent act of BCG in the performance of services under this Agreement.

(c) To the fullest extent permitted by law, BCG and BCG's officers, directors, partners, employees, agents, and sub-consultants shall not be liable to Client or anyone claiming through Client for any special, incidental, indirect, or consequential damages whatsoever arising out of, resulting from, or in any way related to the Project or this Agreement, regardless of whether such damages are alleged to be caused by the negligence, professional errors or omissions, strict liability, breach of contract, or breach of express or implied warranty.

(d) Client agrees that BCG's shareholders, principals, partners, members, agents, directors, officers and/or employees shall have no personal liability whatsoever arising out of or in connection with this Agreement or the performance of services hereunder.

8. Certificate of Merit. In addition to the requirement of notice under section 7(a) above, Client shall make no claim (whether directly or in the form of a third-party claim) against BCG unless Client shall have first provided BCG with a written certification executed by an independent professional licensed in the state in which the Project is located and licensed in the profession to which the claim relates. Such certificate shall: (a) contain the name and license number of the certifier; (b) specify each and every act or omission which the certifier contends constitutes a violation of the standard of care expected of a professional performing professional services under similar circumstances; (c) state in complete detail the basis for the certifier's opinion that each such act or omission constitutes such a violation; and (d) be provided to BCG thirty (30) days prior to the presentation of and as a precondition to any such claim, or the institution of any mediation, arbitration, judicial or other dispute resolution proceeding.

9. Conflict Resolution and Applicable Law. Any dispute, controversy or claim arising out of or relating to this Agreement, or the breach thereof, that cannot be resolved by the parties and for which the amount in controversy is less than One Hundred Thousand Dollars (\$100,000.00) shall be settled by arbitration administered in Fairfax County, Virginia by the American Arbitration Association in accordance with its Commercial Arbitration Rules and Expedited Procedures, and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction over the parties. For any other dispute, controversy or claim arising out of or relating to this Agreement, or the breach thereof, the parties agree to first submit such dispute, controversy or claim to non-binding mediation, with each party to bear its own costs of such mediation and to equally share the costs of any mediator. If such mediation does not successfully resolve all issues, then the unresolved issues shall be settled in the state or Federal courts where the project is located. This Agreement shall be governed and interpreted in accordance with the laws of the state in which the Project is located, without giving effect to conflicts of laws principles thereof.

10. Ownership of Documents and Other Rights of BCG.

(a) All reports, plans, specifications, computer files, field data, notes, and other documents and instruments prepared by BCG as instruments of service ("Work Product") shall remain the property of BCG up until such time as all monies due to BCG have been paid in full, at which time (i) Client may take possession of the Work Product, and (ii) BCG shall be deemed to have granted Client a fully paid, non-exclusive license to use the same solely for the Project. Subject to such license BCG shall retain all common law, statutory, and other reserved rights, including the copyright to all Work Product. If Client or a party acting on Client's behalf modifies any part of the Work Product or reuses them on a different project, Client agrees to indemnify and hold BCG harmless from any claim, liability or cost (including reasonable attorneys' fees and defense costs) arising therefrom. Client acknowledges that if BCG provides Client with

Work Product in an electronic or digital format ("Electronic Data"), Client is responsible for cross checking the Electronic Data with the applicable paper document for full conformance and consistency between such paper document and the Electronic Data.

(b) BCG reserves the right to include photographs and descriptions of the Project in its promotional, marketing, and professional materials. Client grants its consent to BCG for BCG to install reasonable signage at the Project equivalent to that which is or could be installed by other vendors to the Project.

11. Modification. From time to time BCG may either in writing or by electronic mail submit a Change Order to Client and Client shall be deemed to have approved such Change Order if: (a) Client signs the Change Order; (b) Client signifies its consent to the Change Order by electronic mail; or (c) a representative of Client with actual or apparent authority to approve the Change Order orally approves it and BCG subsequently confirms such approval in writing or by email and begins work associated therewith without receiving written or electronic mail objection thereto. Except for Change Orders authorized by Client as provided immediately above, this Agreement may be amended, modified, or supplemented only in writing signed by all parties hereto. Any signature required or permitted hereunder may be either by hand or by electronic signature.

12. Exclusions from Scope. By way of illustration and not limitation, unless specifically included in the Scope, BCG has no obligation or responsibility for: (a) favorable or timely comment or action by any governmental entity; (b) taking into account off-site conditions or circumstances that are not clearly visible or reasonably ascertainable by the performance of on-site services; (c) the accurate location or characteristics of any subsurface utility or feature that is not clearly and entirely visible from the surface; or (d) structural design (including, but not limited, to structural design of retaining wall(s) or of special drainage structure(s)).

13. Limits of Scope.

(a) Early Bid Documents. Client agrees that if it requests submission of Work Product documents to contractors for bid purposes either prior to full completion thereof by BCG or prior to final governmental approval, the potential exists for additional design and construction costs arising from required subsequent revisions and additions to BCG design documents so as to conform to those of other design disciplines and/or governmental agencies, and any such costs shall be Client's responsibility.

(b) Estimates. Any cost, timing or quantity estimates provided as a part of the Scope are estimates only and reflect BCG's judgment as a design professional familiar with the construction industry, but expressly do not represent a guarantee of quantities or construction costs. Client agrees that BCG has no control over contractors as to cost, timing, or quantity matters, and further agrees that if Client desires greater accuracy as to construction costs it should engage an independent cost estimator.

(c) Construction Means and Methods. Client agrees that BCG does not control and is not responsible for construction means, methods, techniques, sequences, or procedures, or for any safety precautions in connection with the Project or for the acts or omissions of any contractor, subcontractor, or any other person or entity performing work for the Project.

(d) Shop Drawing Review. If specifically included in the Scope, BCG shall review and check the contractor's shop drawings, product data, and samples, but only for the limited purpose of checking for general conformance with the intent of such contract documents. Client acknowledges that such review is not for the purpose of determining or substantiating the accuracy and completeness of other details, such as dimensions or quantities, or for substantiating instructions for installation or performance of equipment or systems designed by the contractor. BCG's review shall not constitute approval of safety precautions, construction means, methods, techniques, schedules, sequences or procedures, or of structural features.

(e) Plan and Permit Processing. If the Scope includes preparation of plans and/or plats for review and approval by public agencies, submission and processing of such plans and plats in a manner consistent with a normal course of business is included within the Scope. If Client requests BCG to either expedite the plan review process by attending meetings, hand carrying plans and documents from agency to agency, or performing similar services, or to prepare and process permit applications of any type, then, unless specifically included in the Scope, those services will be performed by BCG as hourly rate services under Section 14 below.

(f) Building Plan Coordination. If the Scope includes preparation of site plans, site grading plans, subdivision plans, or similar plans that involve coordination with building plans (including architectural, mechanical, structural, or plumbing plans) to be prepared by others, Client shall provide such building plans to BCG by such date and in such state as BCG reasonably deems necessary to timely perform its services. If Client fails to so provide building plans to BCG, BCG may make reasonable assumptions regarding building characteristics in order to timely perform its services and any later revisions to BCG plans required to properly coordinate them with building plans will require a Change Order, subject to an additional fee.

14. Fees by Hourly Rate Schedule. If Client requests BCG to perform services not included in the Proposal or an approved Change Order (including, without limitation, attending meetings and conferences on an as-needed basis with public agencies), Client shall compensate BCG for such services in accordance with the Hourly Rate Schedule attached to and made a part of the Agreement. Expert witness testimony or participation at legal discussions, hearings or depositions, including necessary preparation time, will be charged at 150% of the quoted rates. If the Project extends beyond the calendar year in which the Proposal is dated, BCG may, by giving notice to Client, revise its Hourly Rate Schedule once each calendar year, but no sooner than twelve (12) months after the date of the Proposal.

15. Covenants Benefiting Third-Parties. BCG and Client acknowledge that from time to time third-parties may request BCG to execute documents which benefit that third-party. These documents may include certifications, consent of assignment, and/or waiver of certain of BCG's rights under this Agreement ("Requested Covenant"). Client acknowledges that execution of Requested Covenants is beyond the Scope, is at BCG's discretion, and, if BCG decides to so execute a Requested Covenant, the language, terms, and conditions of such Requested Covenant must be acceptable to BCG, at BCG's discretion.

16. Assignment. This Agreement may not be assigned by one party without the express written consent of the other party. Notwithstanding the foregoing, BCG may employ consultants, sub-consultants, or subcontractors as it deems necessary to perform the services described in the scope. Also, BCG may assign its right to receive payments under this Agreement.

17. Termination. Either party may terminate the provision of further services by BCG under this Agreement for convenience with thirty (30) days advance notice to the other party. In addition, following a material breach by the other party, the non-breaching party may terminate the provision of further services by BCG under this Agreement by giving ten (10) days prior notice and an opportunity to cure to the reasonable satisfaction of the non-breaching party. Client acknowledges that its failure to timely pay undisputed invoices is a material breach and that full payment of all undisputed invoices is required to cure such breach. Following any termination of services: (a) Client shall immediately pay BCG for all services performed through the termination date, including reasonable costs of transitioning the Project to a new design professional designated by Client, if applicable; (b) BCG shall have the right to withhold from Client the use or possession of Work Product prepared by BCG for Client under this or any other agreement with Client, until all outstanding invoices are paid in full; (c) if the termination by BCG resulted from a material breach by Client, BCG shall have the right to withdraw any Work Product or other documents filed with any governmental agency by BCG in its name on behalf of Client; and (d) if Client selects a new design professional then, as a

condition of transferring any files or documents, Client and Client's new design professional shall execute BCG's standard Electronic File Transfer Agreement or such other similar agreement as the parties shall in good faith negotiate.

18. Miscellaneous. If any provision of this Agreement shall be held invalid, illegal or unenforceable, the other provisions of this Agreement shall remain in full force and effect. The failure of a party to enforce any provision hereof shall not affect its right at a later time to enforce same. A waiver by a party of any condition or breach hereunder must be in writing to be effective and, unless that writing provides otherwise, shall waive only one instance of that condition or breach. This Agreement is solely for the benefit of the parties hereto and, to the extent provided herein, their respective affiliates, directors, officers, employees, agents and representatives, and no provision of this Agreement shall be to confer upon third-parties any remedy, claim, liability, reimbursement, cause of action, or other right. The headings in this Agreement are for convenience and identification purposes only, are not an integral part of this Agreement, and are not to be considered in the interpretation of any part hereof. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. References in this Agreement to any gender shall include references to all genders. Unless the context otherwise requires, references in the singular include references in the plural and vice versa. The words "include," "including," or "includes" shall be deemed to be followed by the phrase "without limitation." The individual who signs this Agreement warrants that he has the authority to sign as, or on behalf of, Client, and to bind Client to all of the terms and conditions of this Agreement. To the extent that they are inconsistent or contradictory, the terms of the Proposal or an authorized Change Order shall supersede these Terms and Conditions.

19. Notices. Any notice, request, instruction, or other document to be given hereunder by a party hereto shall be in writing and shall be deemed to have been given: (a) when received when given in person or by a courier or a courier service; (b) on the date of transmission (or the next business day if the date of transmission is not a business day) if sent by facsimile; or (c) five business days after being deposited in the mail, certified or registered postage prepaid.

If to Client, notice shall be addressed to the individual signing this Agreement at the address, facsimile number, or e-mail address noted on the Proposal.

If to BCG, notice shall be sent to the address set forth in the proposal, with a copy sent to:

Bowman Consulting Group, Ltd.
3863 Centerview Drive, Suite 300
Chantilly, Virginia 20151
Attn: Robert A. Hickey
Facsimile number: (703) 481-1490
Email: rhipkey@bowmanconsulting.com

or to such other individual or address as a party hereto may designate for itself by notice given as herein provided.

J.J.

Initials: BCG _____ / Client _____

BOWMAN CONSULTING
Fees for Reprographic, Delivery, Travel, and Other Services
Schedule "A"
January 2018

Reprographic Services

B&W Photo Copies	\$0.35/sf, or \$0.23 for 8-1/2" x 11" sheet
Color Photo Copies	\$0.50/sf, or \$0.32 for 8-1/2" x 11" sheet
Printing (bond)	\$0.35/sf, or \$2.10 for 24" x 36" sheet
Printing (mylar)	\$3.00/sf, or \$18.00 for 24" x 36" Sheet

Binding, Mounting and Folding of plan sets, reports, or drawings will be invoiced at our standard hourly rates. Copying of Plans that have been archived in storage is subject to a minimum archive retrieval fee of \$50 plus applicable reprographic fees above.

Delivery Services

In-house delivery services are invoiced at \$2.00 per mile (one way) and subject to a minimum \$20.00 charge for standard delivery during normal business hours. Rush services and times outside normal business hours are subject to a minimum \$20.00 surcharge.

Outsourced courier services (i.e. Federal Express, DHL, etc.) are invoiced at cost plus 15%.

Travel

Mileage for employee travel by car to facilitate the project, including travel to the project site and for meetings with the client, project team, contractors, or governmental agencies, will be invoiced at the current IRS standard mileage rate.

Airfare and/or lodging to facilitate the project will be coordinated with the client in advance and will be invoiced at cost plus 15%.

Miscellaneous

Other costs associated with sub-consultants, specialty equipment, laboratory testing, field testing, tolls, parking or other miscellaneous items will be invoiced at cost plus 15%.

J.J.

Initials: BCG _____ / Client _____



**BOWMAN CONSULTING
SCHEDULE B - HOURLY RATE
January 2018**

<u>CLASSIFICATION</u>	<u>HOURLY RATE</u>
Deposition & Testimony	\$285.00/HR
Principal	\$250.00/HR
Department Executive	\$210.00/HR
Senior Project Manager	\$195.00/HR
Project Manager	\$150.00/HR
Senior Surveyor	\$153.00/HR
Engineer I	\$100.00/HR
Engineer II	\$120.00/HR
Engineer III	\$135.00/HR
Designer I	\$ 90.00/HR
Designer II	\$115.00/HR
Designer III	\$130.00/HR
Project Coordinator	\$150.00/HR
Construction Inspector	\$ 75.00/HR
Landscape Architect I	\$ 90.00/HR
Landscape Architect II	\$100.00/HR
Landscape Architect III	\$110.00/HR
Certified Arborist	\$135.00/HR
Planner I	\$ 95.00/HR
Planner II	\$110.00/HR
Planner III	\$120.00/HR
CADD Drafter I	\$ 80.00/HR
CADD Drafter II	\$105.00/HR
CADD Drafter III	\$120.00/HR
Senior Environmental Scientist	\$140.00/HR
Environmental Scientist I	\$105.00/HR
Environmental Scientist II	\$115.00/HR
Environmental Scientist III	\$125.00/HR
Right of Way Specialist I	\$ 80.00/HR
Right of Way Specialist II	\$ 95.00/HR
Right of Way Specialist III	\$115.00/HR
Project Surveyor	\$138.00/HR
Survey Technician 1	\$ 87.00/HR
Survey Technician II	\$102.00/HR
Survey Technician III	\$122.00/HR
Survey Field Crew-1Man	\$107.00/HR
Survey Field Crew- 2 Man	\$153.00/HR
Survey Field Crew-3 Man	\$179.00/HR
UAV Operation	\$179.00/HR
3D Scanning Crew	\$230.00/HR
3D Modeling Technician	\$122.00/HR
Machine Control Technician	\$128.00/HR
Survey Field Technician	\$ 61.00/HR
Administrative Professional	\$ 66.00/HR

Table 342 – DEFAULT 2018 Southern VA

Initials: BCG JJ / Client

**BOWMAN CONSULTING
SCHEDULE C - REQUEST FOR INFORMATION**

Accounts Payable Contact

Point of Contact:

Phone:

Fax:

E-Mail:

Billing Information

Billing Entity:

Billing Address: Same as Proposal

If Different, Please Provide:

Billing Requirements

Invoice Due Date:

Requirements/Attachments

Transmit Invoices Via: Mail Hardcopies to the Billing Address Above

Transmit Electronic Copies to:

Offer ACH Direct Deposit: Yes, Contact

Not Sure, Contact our Office

Not at this Time