

(for use with 1910-1, 1996 Edition)

This is **EXHIBIT A**, part of the **Agreement between Owner and Engineer for Professional Services** dated June 6, 2012.

## **Engineer's Services**

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Article 1 of the Agreement is ~~amended and~~ supplemented to include the following agreement of the parties provisions of this Exhibit. Engineer shall provide Basic and Additional Services as set forth below.

If a reasonable reading of this Agreement is that a service is to be provided as a Basic Service, the listing of a similar service in this Agreement is not intended to limit the performance of that service as a Basic Service. Without limiting the Owner's other rights and remedies, it is agreed that services that are needed because of the failure of the Engineer to comply with this Agreement or with its duties to the Owner shall be performed or provided by the Engineer without charge. Where the Agreement states that a service will be done or goods will be provided, it will be construed to require the Engineer to do the service or provide the goods, unless the context requires otherwise.

PART 1 -- BASIC SERVICES Applies:

### *Project Description:*

The City of Durham Household Hazardous Waste (HHW) drop-off facility is currently located at 1900 East Club Boulevard within a portion of the North Durham Water Reclamation Facility. The City wishes to relocate the HHW facility to the convenience center within the City's Solid Waste Recycling and Disposal Center (Center) at 2115 East Club Boulevard. This project addresses the new HHW site within the Center (the Project Site) and has the following goals:

1. Identify an area within the convenience center citizen drop-off area capable of locating the footprint of a new HHW drop-off facility. The area should consider traffic patterns, number of customers and types of materials deposited at the convenience center and current HHW facility.
2. Design/specify the necessary structures to provide for citizens to drop-off limited quantities of HHW in an area partially protected from weather, provide for the proper segregation and storage of the HHW, provide for latex paint consolidation bulk containers, and provide for a HHW collection/disposal contractor to package, label, and load out HHW for transport to proper disposal/recycling.
3. Design/specify the required spill prevention and containment devices and fire and hazard safety devices as an integral part of the HHW drop-off facility.
4. Identify training that will be required for City personnel in HHW collection and segregation that will satisfy the requirements for the HHW drop-off facility.

The HHW drop-off facility will be relocated within a single parcel of land that currently provides several uses, including the North Durham Water Reclamation Facility. Because City-County Planning requirements may raise a need to address or study other uses within the parcel, it is important to clarify that this project is intended to address permitting requirements that are required for relocating the HHW drop-off facility. The work does not address any work related to any part of the parcel of land that is outside the immediate area of the project site at the citizen convenience center.

### A1.01 *Study and Report Phase*

A. Engineer shall:

Relocation of HHW Facility

1. Consult with Owner to define and clarify Owner's requirements for the Project and available data. This will include:
    - A. Consult with Owner's Solid Waste Management and General Services staff to identify an acceptable footprint for locating the HHW drop-off facility.
    - B. Consult with Owner's Solid Waste Management staff regarding current and future material types accepted at the HHW drop-off facility, the amount of material received and number of customers each month and on special occasions, and the frequency of HHW material packaging and load-out by the HHW contractor. Evaluate and make recommendations for changes in material and frequency as applicable.
    - C. Consult with Owner's permitting staff to identify and address regulatory requirements for locating the HHW drop-off facility, including, NC DENR HHW permit amendment, City-County Planning Department Site Plan approval, and City Public Works Department approval as limited by Basic Services.
  2. Advise Owner as to the necessity of Owner's providing data or services of the types described in Exhibit B which are not part of Engineer's Basic Services, and assist Owner in obtaining such data and services.
  3. Identify, consult with, and analyze requirements of governmental authorities having jurisdiction to approve the portions of the Project designed or specified by Engineer, including but not limited to mitigating measures identified in the environmental assessment.
  4. Identify and evaluate 2 alternate solutions available to Owner and, after consultation with Owner, recommend to Owner those solutions which in Engineer's judgment meet Owner's requirements for the Project.
  5. Prepare a report (the "Report") which will, as appropriate, contain schematic layouts, sketches and conceptual design criteria with appropriate exhibits to indicate the agreed-to requirements, considerations involved, and those alternate solutions available to Owner which Engineer recommends. This Report will be accompanied by Engineer's opinion of Total Project Costs for each solution which is so recommended for the Project with each component separately itemized, including the following, which will be separately itemized: opinion of probable Construction Cost, permit costs and fees from Authorities Having Jurisdiction, allowances for contingencies and for the estimated total costs of design, professional, and related services provided by Engineer and, on the basis of information furnished by Owner, allowances for other items and services included within the definition of Total Project Costs.
  6. Perform or provide the following additional Study and Report Phase tasks or deliverables: Provide a summary of HHW collection training which Owner personnel should obtain for safe operations.
  7. Furnish electronic and 4 paper review copies of the Report to Owner within 30 days of authorization to begin services and review it with Owner.
  8. Revise the Report in response to Owner's and other parties' comments, as appropriate, and furnish electronic final copies of the revised Report to the Owner within 7 days after completion of reviewing it with Owner.
- B. Engineer's services under the Study and Report Phase will be considered complete on the date when the final copies of the revised Report have been delivered to Owner.

#### A1.02 *Preliminary Design and Permitting Phase*

A. After acceptance by Owner of the Report, selection by Owner of a recommended solution and indication of any specific modifications or changes in the scope, extent, character, or design requirements of the Project desired by Owner, and upon written authorization from Owner, Engineer shall:

1. On the basis of the above acceptance, selection, and authorization, ~~prepare Preliminary Design Phase documents consisting of final design criteria, preliminary drawings, outline specifications and written descriptions of the Project.~~ engineer will prepare for Owner's review and approval a preliminary design concept and design criteria.

Concepts and criteria will be based on results of the Study and Report Phase and will include a listing of design characteristics and specifications, final design criteria, preliminary drawings, written descriptions of the Project, and a summary of permitting requirements.

2. Provide necessary field surveys and topographic and utility mapping for design purposes. Utility mapping will be based upon information obtained from utility owners.

3. Advise Owner if additional reports, data, information, or services of the types described in Exhibit B are necessary and assist Owner in obtaining such reports, data, information, or services.

4. Based on the information contained in the Preliminary Design Phase documents, submit a revised opinion of probable Construction Cost and any adjustments to Total Project Costs known to Engineer, which will be itemized as provided in paragraph A1.01.A.5.

5. Perform or provide the following additional Preliminary Design Phase tasks or deliverables:

6. Furnish the Preliminary Design Phase documents to and review them with Owner.

7. Submit to Owner 4 half-size plus 2 full size paper copies plus electronic (both pdf and AutoCAD LT2010 format) final copies of the Preliminary Design Phase documents and revised opinion of probable Construction Cost within 30 days after authorization to proceed with this phase.

B. Engineer will prepare plans for City-County Planning Department's site plan review including:

1. *Prepare cover sheet denoting zoning and planning requirements and providing project site data information.*
2. *Attend one meeting with appropriate City staff to confirm that a rezoning is not necessary.*
3. *Compile existing site plans obtained from City to produce in CADD an overall sheet documenting existing impervious areas, existing site boundary to produce an overall project site location sheet.*
4. *Prepare overall project site sheet including flood information based from Existing FIRM maps. Engineer will not be performing flood studies for this project*
5. *Document all available parking for the project site. Engineer will conduct a site visit documenting the parking spaces and handicap spaces. No new parking spaces are anticipated.*
6. *Prepare storm water treatment calculations for the project site.*
7. *Prepare plans for modular unit, canopy and spill containment features and incorporate into the project site plan based on agreed upon location from discussions with Owner.*
8. *Prepare Project Site Plan including proposed building location, and fire truck turnaround area.*
9. *Prepare opinion of probable cost in CSI 2004 format.*
10. *Engineering staff shall attend two design meetings.*
11. *Assist in resolving value engineering, constructability, construction phasing and scheduling issues*
12. *Prepare review packages and provide all necessary electronic and paper copies for submittal to City review agencies and other authorities having jurisdiction.*
13. *Respond to City review comments.*

C. Engineer's services under the Preliminary Design Phase will be considered complete on the date when final copies of the Preliminary Design Phase documents have been delivered to Owner.

#### A1.03 *Final Design Phase*

A. After acceptance by Owner of the Preliminary Design and Permitting Phase documents and revised opinion of probable Construction Cost as determined in the Preliminary Design Phase, but subject to any Owner-directed modifications or changes in the scope, extent, character, or design requirements of or for the Project, and upon written authorization from Owner, Engineer shall:

1. On the basis of the above acceptance, direction, and authorization, prepare final Drawings indicating the scope, extent, and character of the Work to be performed and furnished by Contractor. Specifications will be prepared, where appropriate, in general conformance with the 16-division format of the Construction Specifications Institute.
2. Provide technical criteria, written descriptions, and design data for Owner's use in filing applications for permits from or approvals of governmental authorities having jurisdiction to review or approve the final design of the Project and assist Owner in consultations with appropriate authorities.
3. Advise Owner of any adjustments to the opinion of probable Construction Cost and any adjustments to Total Project Costs known to Engineer, itemized as provided in paragraph A1.01.A.5.
4. Perform or provide the following additional Final Design Phase tasks or deliverables:
5. Provide Owner with 4 half size plus 3 full size plus electronic copies (both pdf and AutoCAD LT2010 format) of drawings and all applicable specifications to be included with the Owner's bidding documents. ~~Prepare and furnish Bidding Documents for review and approval by Owner, its legal counsel, and other advisors, as appropriate~~ Assist Owner in the preparation of other related documents for the Bidding Phase.
6. ~~Submit \_\_\_\_\_ final copies of the Bidding Documents and a revised opinion of probable Construction Cost~~ Submit Construction Documentation for Durham Public Works approval and other authorities having jurisdiction within 30 days to Owner within \_\_\_\_\_ days after authorization to proceed. ~~with this phase.~~

B. In the event that the Work designed or specified by Engineer is to be performed or furnished under more than one prime contract, or if Engineer's services are to be separately sequenced with the work of one or more prime Contractors (such as in the case of fast-tracking), Owner and Engineer shall, prior to commencement of the Final Design Phase, develop a schedule for performance of Engineer's services during the Final Design, Bidding or Negotiating, Construction, and Post-Construction Phases in order to sequence and coordinate properly such services as are applicable to the work under such separate prime contracts. This schedule is to be prepared and included in or become an amendment to Exhibit A whether or not the work under such contracts is to proceed concurrently.

C. The number of prime contracts for Work designed or specified by Engineer upon which the Engineer's compensation has been established under this Agreement is one (1).

D. Engineer's services under the Final Design Phase will be considered complete on the date when the submittals required by paragraph A1.03.A.6 have been delivered to Owner.

#### A1.04 *Bidding or Negotiating Phase*

A. After acceptance by Owner of the Bidding Documents and the most recent opinion of probable Construction Cost as determined in the Final Design Phase, and upon written authorization by Owner to proceed, Engineer shall:

1. Assist Owner by attending pre-Bid conferences. ~~Assist Owner in advertising for and obtaining bids or negotiating proposals for the Work and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend pre-Bid conferences, if any, and receive and process Contractor deposits or charges for the Bidding Documents.~~
2. Assist Owner in issuing Addenda as appropriate to clarify, correct, or change the Bidding Documents.
3. Consult with Owner as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by Contractor for those portions of the Work as to which such acceptability is required by the Bidding Documents.
4. Perform or provide the following additional Bidding or Negotiating Phase tasks or deliverables: NA
5. Attend the Bid opening, ~~prepare Bid tabulation sheets,~~ and assist Owner in evaluating Bids or proposals.

As part of Basic Services, the Engineer shall perform the paragraph A1.04 services for two rounds of bids if the Owner, in its discretion, decides to bid a second round.

B. The Bidding or Negotiating Phase will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective Contractors (except as may be required if Exhibit F is a part of this Agreement).

#### A1.05 *Construction Phase*

A. Upon successful completion of the Bidding and Negotiating Phase, and upon written authorization from Owner, Engineer shall:

1. *General Administration of Construction Contract.* Consult with Owner and act as Owner's representative as provided in the General Conditions. The extent and limitations of the duties, responsibilities and authority of Engineer as assigned in said General Conditions shall not be modified, except as Engineer and Owner may otherwise agree in writing. All of Owner's instructions to Contractor will be issued through Engineer, who shall have authority to act on behalf of Owner in dealings with Contractor to the extent provided in this Agreement and said General Conditions except as otherwise provided in writing.
- ~~2. *Not Applicable Resident Project Representative (RPR).* Provide the services of an RPR at the Site to assist the Engineer and to provide more extensive observation of Contractor's work. Duties, responsibilities, and authority of the RPR are as set forth in Exhibit D. The furnishing of such RPR's services will not extend Engineer's responsibilities or authority beyond the specific limits set forth elsewhere in this Agreement.~~
- ~~3. *Not Applicable Selecting Independent Testing Laboratory.* Assist Owner in the selection of an independent testing laboratory to perform the services identified in paragraph B2.01.0~~
4. *Pre-Construction Conference.* Participate in a Pre-Construction Conference prior to commencement of Work at the Site.
5. *Baselines and Benchmarks, Construction Survey.* As appropriate, establish foundation corners, key facility features, baselines, and benchmarks for locating the Work which in Engineer's judgment are necessary to enable Contractor to proceed.
6. *Visits to Site and Observation of Construction.* In connection with observations of Contractor's work in progress while it is in progress:
  - a. Make visits to the Site at intervals appropriate to the various stages of construction, as Engineer deems necessary based on Engineer's exercise of professional judgment, in order to observe as an experienced and qualified design professional the progress and quality of the Work. However, those visits shall be made at

least every other week unless the Owner otherwise agrees. Such visits and observations by Engineer, and the Resident Project Representative, if any, are not intended to be exhaustive or to extend to every aspect of Contractor's work in progress or to involve detailed inspections of Contractor's work in progress beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on Engineer's exercise of professional judgment as assisted by the Resident Project Representative, if any. Based on information obtained during such visits and such observations, Engineer will determine in general if Contractor's work is proceeding in accordance with the Contract Documents, will determine if the Work is being performed in a manner indicating that the Work when completed will be in accordance with the Contract Documents, and will endeavor to guard the Owner against defects and deficiencies in the Work, and Engineer shall keep Owner informed in writing of the progress of the Work.

b. The purpose of Engineer's visits to, and representation by the Resident Project Representative, if any, at the Site, will be to enable Engineer to better carry out the duties and responsibilities assigned to and undertaken by Engineer during the Construction Phase, and, in addition, by the exercise of Engineer's efforts as an experienced and qualified design professional, to provide for Owner a greater degree of confidence that the completed Work will conform in general to the Contract Documents and that the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents has been implemented and preserved by Contractor. Engineer shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control over Contractor's work, nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected by Contractor, for safety precautions and programs incident to Contractor's work, or for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work. Accordingly, Engineer neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its work in accordance with the Contract Documents.

7. *Defective Work.* Recommend to Owner that Contractor's work be disapproved and rejected while it is in progress if, on the basis of such observations, Engineer believes that such work will not produce a completed Project that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.

8. *Clarifications and Interpretations; Field Orders.* Issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of Contractor's work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. Engineer may issue Field Orders authorizing minor variations from the requirements of the Contract Documents but shall promptly send all such Field Orders to the Owner's representative.

9. *Change Orders and Work Change Directives.* Recommend Change Orders and Work Change Directives to Owner, as appropriate, and prepare Change Orders and Work Change Directives as required.

10. *Shop Drawings and Samples.* Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents and for the purpose of assuring that if the Work is performed as shown by the submittals, it will be in compliance with the Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto. Engineer has an obligation to meet any Contractor's submittal schedule that has earlier been acceptable to Engineer. The Engineer shall determine what aspects of the Work shall be the subject of submittals, and shall not knowingly permit such aspects to proceed in the absence of approved submittals.

11. *Substitutes and "or-equal."* Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor, but subject to the provisions of paragraph A2.02.A.2 of this Exhibit A.

12. *Inspections and Tests.* Require such special inspections or tests of Contractor's work as deemed reasonably necessary, and receive and review all certificates of inspections, tests, and approvals required by Laws

and Regulations or the Contract Documents. Engineer's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. When it is reasonable to do so, Engineer shall be entitled to rely on the results of such tests.

13. *Disagreements between Owner and Contractor.* Render formal written decisions on all claims of Owner and Contractor relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of Contractor's work. In rendering such decisions, Engineer shall be fair and not show partiality to Owner or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.

14. *Applications for Payment.* Based on Engineer's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:

a. Determine the amounts that Engineer recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute Engineer's representation to Owner, based on such observations and review, that, to the best of Engineer's knowledge, information and belief, Contractor's work has progressed to the point indicated, the quality of such work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe Contractor's work. In the case of unit price work, Engineer's recommendations of payment will include final determinations of quantities and classifications of Contractor's work (subject to any subsequent adjustments allowed by the Contract Documents). The responsibilities of Engineer contained in paragraph A1.05.A.6.a are expressly subject to the limitations set forth in paragraph A1.05.A.6.b and other express or general limitations in this Agreement and elsewhere.

b. By recommending any payment, Engineer shall not thereby be deemed to have represented that observations made by Engineer to check the quality or quantity of Contractor's work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents. Neither Engineer's review of Contractor's work for the purposes of recommending payments nor Engineer's recommendation of any payment including final payment will impose on Engineer responsibility to supervise, direct, or control Contractor's work in progress or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on Engineer to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any portion of the work in progress, materials, or equipment has passed to Owner free and clear of any liens, claims, security interests, or encumbrances, or that there may not be other matters at issue between Owner and Contractor that might affect the amount that should be paid.

15. *Contractor's Completion Documents.*

a. Receive and review maintenance and operating instructions, schedules, and guarantees.

b. Receive bonds, certificates, or other evidence of insurance not previously submitted and required by the Contract Documents, certificates of inspection, tests and approvals, Shop Drawings, Samples and other data approved as provided under paragraph A1.05.A.10, and the annotated record documents which are to be assembled by Contractor in accordance with the Contract Documents to obtain final payment. The extent of such Engineer's review will be limited as provided in paragraph A1.05.A.10.

c. Engineer shall transmit these documents to Owner.

16. *Substantial Completion.* Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with Owner and Contractor, conduct an inspection to determine if the Work

is Substantially Complete. If after considering any objections of Owner, Engineer considers the Work Substantially Complete, Engineer shall deliver a certificate of Substantial Completion to Owner and Contractor.

17. *Additional Tasks.* Perform or provide the following additional Construction Phase tasks or deliverables: Engineer to prepare and provide Electronic copies of Record drawings in both pdf and AutoCAD LT2010 format based on information received from the construction contractor. Engineer shall provide an Accessibility Certificate as stated in Exhibit K, that is signed and sealed in order to obtain the Certificate of Compliance.

18. *Final Notice of Acceptability of the Work.* Conduct a final inspection to determine if the completed Work of Contractor is acceptable so that Engineer may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, Engineer shall also provide a notice in the form attached hereto as Exhibit E (the "Notice of Acceptability of Work") that the Work is acceptable (subject to the provisions of paragraph A1.05.A.14.b) to the best of Engineer's knowledge, information, and belief and based on the extent of the services provided by Engineer under this Agreement.

19. *Time for Performance.* The Engineer shall perform all of Engineer's tasks in the Construction Phase within a reasonable time, considering, among other relevant factors, the Contractor's Contract Time, schedules that the Engineer has indicated as acceptable, and the time that is appropriate for the tasks to be done to the level of professional skill and care that are required.

B. *Duration of Construction Phase.* The Construction Phase will commence with the execution of the first Construction Agreement for the Project or any part thereof and will terminate upon written recommendation by Engineer for final payment to Contractors. If the Project involves more than one prime contract as indicated in paragraph A1.03.C, Construction Phase services may be rendered at different times in respect to the separate contracts.

C. *Limitation of Responsibilities.* Engineer shall not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual or entity performing or furnishing any of the Work. Engineer shall not be responsible for failure of any Contractor to perform or furnish the Work in accordance with the Contract Documents.

#### A1.06 *Post-Construction Phase*

A. Upon written authorization from Owner, Engineer, during the Post-Construction Phase, shall:

1. Provide assistance in connection with the testing and adjusting of Project equipment or systems.
2. Assist Owner in training Owner's staff to operate and maintain Project, equipment, and systems.
3. Assist Owner in developing procedures for control of the operation and maintenance of, and record keeping for Project equipment and systems.
4. Together with Owner, visit the Project to observe any apparent defects in the Work, assist Owner in consultations and discussions with Contractor concerning correction of any such defects, and make recommendations as to replacement or correction of Defective Work, if present.

5. Perform or provide the following additional Post-Construction Phase tasks or deliverables: in company with Owner, provide an inspection of the Project at six months after Construction Completion date to ascertain whether any portion of the Work is subject to correction.

6. In company with Owner or Owner's representative, provide an inspection of the Project within one month before the end of the Correction Period to ascertain whether any portion of the Work is subject to correction.

B. The Post-Construction Phase services may commence during the Construction Phase and, if not otherwise modified in this Exhibit A, will terminate at the end of the Correction Period.

## PART 2 -- ADDITIONAL SERVICES

### A2.01 *Additional Services Requiring Owner's Authorization in Advance*

A. If authorized in writing by Owner, Engineer shall furnish or obtain from others Additional Services of the types listed below. These services will be paid for by Owner as indicated in Article 4 of the Agreement.

1. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.

2. Services to make measured drawings of or to investigate existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by Owner.

3. Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by Engineer or its design requirements including, but not limited to, changes in size, complexity, Owner's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date of this Agreement or are due to any other causes beyond Engineer's control.

Such changes that would result in additional Basic Services or Additional Services include but are not limited to:

- Traffic Studies, queuing plans;
- Traffic lane designs or modifications;
- Sidewalk additions;
- Public notices and public meetings;
- Extension of utilities to the project site;
- Land use studies and site/data research unrelated to on-site operation of the HHW drop-off facility.

4. Services resulting from Owner's request to evaluate additional Study and Report Phase alternative solutions beyond those identified in paragraph A1.01.A.4.

5. Services required as a result of Owner's providing incomplete or incorrect Project information with respect to Exhibit B.

6. Providing renderings or models for Owner's use.

7. Undertaking investigations and studies including, but not limited to, detailed consideration of operations, maintenance, and overhead expenses; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules, and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing, and assisting Owner in obtaining process licensing; detailed quantity surveys of materials, equipment, and labor; and audits or inventories required in connection with construction performed by Owner.

8. Furnishing services of Engineer's Consultants for other than Basic Services.

9. Services attributable to more prime construction contracts than specified in paragraph A1.03.C.

10. Services during out-of-town travel required of Engineer other than for visits to the Site or Owner's office.

11. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value

engineering, and constructability review requested by Owner; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other Bidding Documents as a result of such review processes.

12. Preparing additional Bidding Documents or Contract Documents for alternate bids or prices requested by Owner for the Work or a portion thereof.

13. Determining the acceptability of substitute materials and equipment proposed during the Bidding or Negotiating Phase when substitution prior to the award of contracts is allowed by the Bidding Documents.

14. Assistance in connection with Bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services, except when such assistance is required by Exhibit F or other provisions of this Agreement.

15. Providing construction surveys and staking to enable Contractor to perform its work other than as required under paragraph A1.05.A.5, and any type of property surveys or related engineering services needed for the transfer of interests in real property; and providing other special field surveys.

16. Providing Construction Phase services beyond the Contract Times set forth in Exhibit C.

17. Providing assistance in resolving any Hazardous Environmental Condition in compliance with current Laws and Regulations.

18. Preparing and furnishing to Owner Record Drawings showing appropriate record information based on Project annotated record documents received from Contractor.

19. Preparation of operation and maintenance manuals.

20. Preparing to serve or serving as a consultant or witness for Owner in any litigation, arbitration or other dispute resolution process related to the Project.

21. Providing more extensive services required to enable Engineer to issue notices or certifications requested by Owner under paragraph 6.01.G of the Agreement.

22. Other services performed or furnished by Engineer not otherwise provided for in this Agreement.

#### A2.02 *Required Additional Services*

A. Engineer shall perform or furnish, without requesting or receiving specific advance authorization from Owner, the Additional Services of the types listed below. Engineer shall advise Owner in writing promptly after starting any such Additional Services.

1. Services in connection with Work Change Directives and Change Orders to reflect changes requested by Owner so as to make the compensation commensurate with the extent of the Additional Services rendered.

2. Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or-equal" items; and services after the award of the Construction Agreement in evaluating and determining the acceptability of a substitution which is found to be inappropriate for the Project or an excessive number of substitutions.

3. ~~Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages.~~

4. Additional or extended services during construction made necessary by (1) emergencies or acts of God endangering the Work, (2) an occurrence of a Hazardous Environmental Condition, (3) Work damaged by fire or other cause during construction, (4) a significant amount of defective, neglected, or delayed work by Contractor, (5) acceleration of the progress schedule involving services beyond normal working hours, or (6) default by Contractor.

5. Services (other than Basic Services during the Post-Construction Phase) in connection with any partial utilization of any part of the Work by Owner prior to Substantial Completion.

6. Evaluating an unreasonable claim or an excessive number of claims submitted by Contractor or others in connection with the Work.

(for use with 1910-1, 1996 Edition)

This is **EXHIBIT B**, consisting of **3** pages, part of the **Agreement between Owner and Engineer for Professional Services** dated **June 6, 2012**

## **Owner's Responsibilities**

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Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties.

B2.01 In addition to other responsibilities of Owner as set forth in this Agreement, Owner shall:

A. Provide Engineer with all criteria and full information as to Owner's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which Owner will require to be included in the Drawings and Specifications; and furnish copies of Owner's standard forms, conditions, and related documents for Engineer to include in the Bidding Documents, when applicable.

B. Furnish to Engineer – a current Site Plan for the NDWRF site that includes the proposed new location of the HHW Facility, if available, approved by the City-County Planning Department for the work done on the Project Site by the Durham Department of Water Management as part of the improvements and renovations on the parcel, operations data that include HHW material types, throughputs and customer counts, and any other available information pertinent to the Project including reports and data relative to previous designs, or investigation at or adjacent to the Site.

C. Following Engineer's assessment of initially-available Project information and data and upon Engineer's request, furnish or otherwise make available such additional Project related information and data as is reasonably required to enable Engineer to complete its Basic and Additional Services. Such additional information or data would generally include the following:

1. Property descriptions.
2. Zoning, deed, and other land use restrictions.
3. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.
4. Explorations and tests of subsurface conditions at or contiguous to the Site, drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site, or hydrographic surveys, with appropriate professional interpretation thereof.
5. Environmental assessments, audits, investigations and impact statements, and other relevant environmental or cultural studies as to the Project, the Site, and adjacent areas.
6. Data or consultations as required for the Project but not otherwise identified in the Agreement or the Exhibits thereto.

D. Give prompt written notice to Engineer whenever Owner observes or otherwise becomes aware of a Hazardous Environmental Condition or of any other development that affects the scope or time of performance of Engineer's services, or any defect or nonconformance in Engineer's services or in the work of any Contractor.

E. Authorize Engineer to provide Additional Services as set forth in Part 2 of Exhibit A of the Agreement as required.

F. Arrange for ~~safe~~ access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services under the Agreement. Nothing in this Agreement is intended to require ENGINEER to go onto public or private property in an unsafe manner or when it is unsafe to do so.

G. Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by Engineer (including obtaining advice of an attorney, insurance counselor, and other advisors or consultants as Owner deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.

H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by Engineer and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.

I. Provide, as required for the Project:

1. Accounting, bond and financial advisory, independent cost estimating, and insurance counseling services.
2. Legal services with regard to issues pertaining to the Project as Owner requires, Contractor raises, or Engineer reasonably requests.
3. Such auditing services as Owner requires to ascertain how or for what purpose Contractor has used the moneys paid.
4. Placement and payment for advertisement for Bids in appropriate publications.

J. Advise Engineer of the identity and scope of services of any independent consultants employed by Owner to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructability review.

K. Furnish to Engineer data as to Owner's anticipated costs for services to be provided by others for Owner so that Engineer may make the necessary calculations to develop and periodically adjust Engineer's opinion of Total Project Costs.

L. If Owner designates a construction manager or an individual or entity other than, or in addition to, Engineer to represent Owner at the Site, define and set forth as an attachment to this Exhibit B the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of Engineer.

M. If more than one prime contract is to be awarded for the Work designed or specified by Engineer, designate a person or entity to have authority and responsibility for coordinating the activities among the various prime Contractors, and define and set forth the duties, responsibilities, and limitations of authority of such individual or entity and the relation thereof to the duties, responsibilities, and authority of Engineer as an attachment to this Exhibit B that is to be mutually agreed upon and made a part of this Agreement before such services begin.

N. Attend the pre-bid conferences, bid openings, pre-construction conferences, construction progress and other job related meetings, and Substantial Completion and final payment inspections.

O. Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of Samples, materials, and equipment required by the Contract Documents, or to evaluate the performance of materials, equipment, and facilities of Owner, prior to their incorporation into the Work with appropriate professional interpretation thereof.

P. Provide inspection or monitoring services by an individual or entity other than Engineer (and disclose the identity of such individual or entity to Engineer) as Owner determines necessary to verify:

1. That Contractor is complying with any Laws and Regulations applicable to Contractor's performing and furnishing the Work.
2. That Contractor is taking all necessary precautions for safety of persons or property and complying with any special provisions of the Contract Documents applicable to safety.

Q. Provide Engineer with the findings and reports generated by the entities providing services pursuant to paragraphs B2.01.O and P.

R. Perform or provide the following additional services: N/A.

(for use with 1910-1, 1996 Edition)

This is **EXHIBIT C**, consisting of **4** pages, part of the **Agreement between Owner and Engineer for Professional Services** dated **June 6, 2012**.

**Payments to Engineer for Services and Reimbursable Expenses**

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Article 4 of the Agreement is amended and supplemented to include the following agreement of the parties:

ARTICLE 4 -- PAYMENTS TO THE Engineer

C4.01 *For Basic Services Having A Determined Scope -- Lump Sum Method of Payment*

- A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer's Resident Project Representative and Post-Construction Phase services, if any, as follows:

Engineer shall perform Basic Services for the Study and Report Phase and for the Final Design Phase under a Lump Sum method of payment and shall perform Basic Services for the Preliminary Design & Permitting Phase, Bidding and Negotiating Phase, and the Construction Phase under an Hourly Rate Plus Expenses with a not-to-exceed Estimated Fee based on the written limitations of the estimated scope. For Basic Services that have an estimated scope, if Owner desires additional work effort, Engineer shall perform such additional work effort under C4.02, Hourly Rates for Basic Services or C4.03, Additional Services, as determined by the Owner.

The following table summarizes payments to Engineer for the Basic Services as defined in Exhibit A:

		Lump Sum	NTE Fee Estimate	% of Total
a.	Study and Report Phase	\$3,909.00	NA	6%
b.	Preliminary Design & Permitting Phase	NA	\$23,963.00	35%
c.	Final Design Phase	\$22,157.00	NA	32%
d.	Bidding and Negotiating Phase	NA	\$4,189.00	6%
e.	Construction Phase	NA	\$15,164.00	22%
	<b>TOTAL</b>	\$26,066.00	\$43,316.00	100%

The total compensation to Engineer for Basic Services as defined in Exhibit A is not to exceed \$69,382.

1. A Lump Sum amount of \$ 26,066.00 based on the above assumed distribution of compensation for the Study and Report Phase and the Final Design Phase.

2. Engineer may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered, but shall not exceed the total Lump Sum amount unless approved in writing by the Owner.

3. The Lump Sum includes compensation for Engineer's services and services of Engineer's Consultants, if any. Appropriate amounts have been incorporated in the Lump Sum to account for labor, overhead, profit, and Reimbursable Expenses.

4. The portion of the Lump Sum amount billed for Engineer's services will be based upon Engineer's reasonable estimate of the proportion of the total services actually completed during the billing period to the Lump Sum.

5. The Lump Sum is conditioned on Contract Times to complete the two phases of Work not exceeding 3 months. This does not include City-County-State Review and Approval times, or other Authority Having Jurisdiction approvals, which are considered part of the Preliminary Design & Permitting Phase. Should the Contract Times to complete the Work be extended beyond this period, the total compensation to Engineer shall be appropriately adjusted as the parties may agree by an amendment to this contract. Except to the extent provided in an amendment, the Owner shall not be obligated to pay any compensation greater than the Lump Sum.

6. If more prime contracts are awarded for Work designed or specified by Engineer for this Project than identified in Exhibit A, the Engineer shall be compensated an additional amount equal to \$ TBD for all Basic Services for each prime contract added.

*C4.02 For Basic Services Having An Undetermined Scope -- Standard Hourly Rates Method of Payment*

A. Owner shall pay Engineer for Basic Services having an undetermined scope as follows:

1. *(NOT APPLICABLE) Resident Project Representative Services.* For services of Engineer's Resident Project Representative, if any, under paragraph A1.05A.2.a of Exhibit A, an amount equal to the cumulative hours charged to the Project by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class for all Resident Project Representative services performed on the Project, plus Reimbursable Expenses and Engineer's Consultant's charges, if any. The total compensation under this paragraph is estimated to be \$ N/A based upon Contract Times as set forth in paragraph C4.01.

2. *Post-Construction Phase Services.* For Post-Construction Phase services under paragraph A1.06 of Exhibit A, an amount equal to the cumulative hours charged to the Project by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class for all services performed on the Project, plus Reimbursable Expenses and Engineer's Consultant's charges, if any. The total compensation under this paragraph is estimated to be \$ TBD.

3. A total not to exceed Fee of \$43,316.00 for the Preliminary Design Phase, Bidding and Negotiating Phase, and Construction Phase.

4. Engineer may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered, but shall not exceed the total amount unless approved in writing by the Owner in advance of any overrun at each phase.

5. The Estimated Fee includes compensation for Engineer's services and services of Engineer's Consultants, if any. Appropriate amounts have been incorporated in the Estimated Fee to

account for labor, overhead, profit, and Reimbursable Expenses.

6. The portion of the Estimated Fee amount billed for Engineer's services will be based upon Engineer's actual hours and expenses for work completed during the billing period.

*C4.03 For Additional Services*

A. Owner shall pay Engineer for Additional Services as follows:

1. *General.* For services of Engineer's employees engaged directly on the Project pursuant to paragraph A2.01 or A2.02 of Exhibit A, except for services as a consultant or witness under paragraph A2.01.A.20, an amount equal to the cumulative hours charged to the Project by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class for all Additional Services performed on the Project, plus Reimbursable Expenses and Engineer's Consultant's charges, if any.

2. *Serving as a Witness.* For services performed by Engineer's employees as witnesses giving testimony in any litigation, arbitration, or other legal or administrative proceeding under paragraph A2.01.A.20, at the rate of \$ 200.00 per day or any portion thereof (but compensation for time spent in preparing to testify in any such litigation, arbitration, or proceeding will be on the basis provided in paragraph C4.03.A.1). Compensation for Engineer's Consultants for such services will be on the basis provided in paragraph C4.06.

*C4.04 For Reimbursable Expenses*

A. When not included in compensation for Basic Services under paragraph C4.01, Owner shall pay Engineer for Reimbursable Expenses at the rates set forth in Appendix 1 to this Exhibit C.

B. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; subsistence and transportation of Resident Project Representative and their assistants; toll telephone calls and telegrams; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment. \_\_\_\_\_

C. The amounts payable to Engineer for Reimbursable Expenses will be the Project-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to the Project, the latter multiplied by a Factor of 1.0.

D. The Reimbursable Expenses Schedule will be adjusted annually (as of NA) to reflect equitable changes in the compensation payable to Engineer.

E. This part E X applies  does not apply. The amounts that might be charged as Reimbursable Expenses are included in compensation for Basic Services having a Determined Scope – Lump Sum – (Study and Report Phase, Final Design Phase), so there is no separate charge for Reimbursable Expenses incurred while performing Basic Services. The amounts that might be charged as Reimbursable Expenses are included in estimated compensation for Not-to-Exceed Basic Services having an undetermined scope (C4.02) – (Preliminary Design & Permitting Phase, Bidding and Negotiating Phase, Construction Phase).

#### C4.05 *Standard Hourly Rates*

A. Standard Hourly Rates are set forth in Appendix 2 to this Exhibit C and include salaries and wages paid to personnel in each billing class plus the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.

B. The Standard Hourly Rates will be adjusted annually (as of June 6, 2013) to reflect equitable changes in the compensation payable to Engineer.

#### C4.06 *For Engineer's Consultant's Charges*

A. Whenever compensation to Engineer herein is stated to include charges of Engineer's Consultants,

those charges shall be the amounts billed by Engineer's Consultants to Engineer times a Factor of 1.0.

#### C4.07 *Factors*

A. The external Reimbursable Expenses and Engineer's Consultant's Factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.

#### C4.08 *Other Provisions Concerning Payment*

A. *Progress Payments.* The portion of the amounts billed for Engineer's services which are related to the services identified in paragraphs C4.02 and C4.03, will be during the billing period based on the cumulative hours charged to the Project by each class of Engineer's employees times the Standard Hourly Rate for each class plus Reimbursable Expenses and Engineer's Consultant's charges, if any.

B. *Extended Contract Times.* Should the Contract Times to complete the Work be extended beyond the period identified in paragraph C4.01, payment for Engineer's services shall be continued based on the Standard Hourly Rates Method of Payment.

#### C. *Estimated Compensation Amounts*

1. Engineer's estimate of the amounts that will become payable for Basic Services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.

2. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that a compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof. Promptly thereafter Owner and Engineer shall review the matter of services remaining to be performed and compensation for such services. Owner shall either agree to such compensation exceeding said estimated amount or Owner and Engineer shall agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed. If Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, the Engineer shall be paid for all services rendered hereunder only if the parties execute a written agreement to that effect.

This is **Appendix 1 to EXHIBIT C**, consisting of 1 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated June 6, 2012.

### **Reimbursable Expenses Schedule**

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~~Current agreements for engineering services stipulate that the Reimbursable Expenses are subject to review and adjustment per Exhibit C. Reimbursable expenses for services performed on the date of the Agreement are:~~

All reimbursable expenses associated with the scope of work shall be included in Basic Services as performed or furnished under Exhibit A, Part 1 and Part 2.

This is **Appendix 2 to EXHIBIT C**, consisting of 1 pages, and part of the **Agreement between Owner and Engineer for Professional Services** dated June 6,2012.

### **Standard Hourly Rates Schedule**

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Current agreements for engineering services stipulate that the standard hourly rates are subject to review and adjustment per Exhibit C. Hourly rates for services performed on the date of the Agreement are, in dollars per hour:

<b>Standard Category</b>	<b>Engineer's Category</b>	<b><u>Hourly Rate</u></b>
Billing Class 9	Senior Project Manager	\$145 - \$185
Billing Class 8	Senior Engineer	\$135-\$155
Billing Class 7	Electrical Engineer	\$120 - \$145
Billing Class 6	Project Manager	\$110 - \$150
Billing Class 5	Structural Engineer	\$105 - \$135
Billing Class 4	Project Engineer	\$110 - \$135
Billing Class 3	Environmental Engineer	\$80 - \$110
Billing Class 2	Civil Engineer	\$75 - \$100
Billing Class 1	CADD Manager	\$85 - \$100
	Geologist	\$65 - \$90
	Field Technician	\$45 - \$65
	CADD Operator	\$65 - \$85
	Administrative Assistant	\$45 - \$55

DURHAM



1869  
CITY OF MEDICINE

*Exhibit K*  
*Accessibility Letter of Compliance*  
**Chapter 11, NC State Building Code, 2012**  
**ICC/ANSI A117.1-2009**



**January 1, 2012**

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***The Durham City-County Inspections Department requires independent verification of all accessible site elements and requirements, per the above referenced codes, for all projects which include site plans, within the city and county of Durham, North Carolina.***

***Chapter 2, section 201 of the 2009 ICC/ANSI A117.1 Standard and Commentary also states that . . . “compliance with the ADA should be verified independently.” This is important as the North Carolina Accessibility Code is NOT deemed compliant with the ADA standards.***

***To meet these requirements, each project must have an professional architect, surveyor, or engineer make an on site evaluation of the project when completed, and verify compliance with the approved plans and the above codes, or simply, the North Carolina Accessibility Codes, then provide a sealed letter to this department confirming such.***

***Any discrepancies noted during the professional’s evaluation would need to be addressed to the contractor/owner/builder, and corrected, prior to a return visit by that professional to confirm corrections have been adequately made to achieve full compliance.***

***This on site evaluation should include, but not be limited too, slope and cross slope on accessible routes and accessible parking areas, ramps, travel distance, intermediate landings where appropriate, and access to required entrance(s) and other site elements.***

***A detailed analysis or description of the evaluation process is not necessary. A simple statement reflecting that the site evaluation has found the “as placed” or “as built” components to be in compliance with the applicable codes and the approved site plan. Please avoid terms such as “I think”, “I believe” or “I feel”. The evaluation should reveal to project to be in compliance or not.***

***Thank you for your assistance in this matter.***

***David Coward,***  
***Chief Building Inspector***