# This is **EXHIBIT A**, consisting of <u>3</u> pages, referred to in the **Agreement between GCDC-WWS and ENGINEER** for Professional Services, dated <u>12013</u>

Initials:
GCDC-WWS Offor
ENGINEER

#### FURTHER DESCRIPTION OF BASIC ENGINEERING SERVICES AND RELATED MATTERS

Paragraphs 2, 3, 4, and 5 of the Agreement are amended and supplemented, and the time periods for the performance of the Basic Services as set forth in Paragraph 5 of the Agreement are established, all as set forth below.

#### PRIME CONTRACT 1

				Time Frame
A.	Study and Report Phase		months	
B.	Preliminary Design Phase	16	weeks	06/24/13 to 10/11/13
C.	Final Design Stage	23	weeks	10/11/13 to 03/21/14
D.	Bidding Phase	12	weeks	03/21/14 to 06/19/14
E.	Construction Phase		months	
F.	Operational Phase		months	

#### PARAGRAPH A2 - BASIC SERVICES OF ENGINEER

#### 2.2 Preliminary Design Phase

The preliminary design phase establishes the general size and scope of the Project and its basic location on the Site. The preliminary design phase services of Engineer are supplemented as follows.

- 1. Preparation of preliminary design documents consisting of final design criteria, preliminary Drawings, Specifications, and a written description of the Project. These documents shall be submitted for review and approval by GCDC-WWS for the submission to the Michigan Department of Environmental Quality ("MDEQ").
- 2. Conduct a conference with GCDC-WWS to review design requirements, and conduct a Site inspection to determine design parameters.
- 3. Advise GCDC-WWS if additional reports, data, or other information or services are necessary for final design, and provide to GCDC-WWS the costs for the Engineer to acquire needed data. These reports shall include, but not be limited to the following: (A) exploration and tests of subsurface conditions (soil borings), including appropriate professional interpretations of tests and soil boring logs; (B) wetlands survey/determination; and (C) preparation of environmental assessments and impact statements.
- 4. Obtain any additional field surveys necessary for design purposes. The route for S 4007 has been changed to delete Genesee Road from Coldwater Road to Crosby Road and Crosby Road from Genesee Road to Center Road. The revised route will be Coldwater Road from Genesee Road to Center Road and Center Road from Coldwater Road to Crosby Road.
- 5. Preparation of preliminary opinions of probable Construction Cost for the Project.
- 6. Five (5) sets of Engineer's preliminary design documents shall be submitted to GCDC-WWS.
- 7. The preliminary design documents shall be submitted to GCDC-WWS within sixty (60) days following written authorization from GCDC-WWS to Engineer to proceed with the preliminary design phase services.

#### 2.3 Final Design Phase

The final design phase establishes the services required to complete the design of improvements to the Project. The final design services of Engineer are supplemented as follows.

- 1. Detailed conferences with GCDC-WWS. Engineer shall meet periodically to review progress and to receive input from GCDC-WWS and the regulatory agencies.
- 2. Review existing Shop Drawings, and conduct a Site survey to determine existing conditions.
- 3. Prepare a preliminary schematic and layout Drawings for the Project.
- 4. Review and revise the "basis of design" to accommodate anticipated daily flow and peak flow projections. The basis of design is to be developed to meet anticipated P. A. 399 permit requirements and soil erosion permit requirements.

- 5. Review acceptability of Major Equipment components with GCDC-WWS.
- 6. Prepare final design documents including Contract Documents, final Specifications, and final Drawings. Engineer shall supply a complete set of 2' x 3' Mylar Drawings and final Specifications in Biddable condition. Engineer shall also provide Drawings and Specifications on electronic format (AUTACAD and Word, respectively). Final design shall include all general/civil, architectural, structural, mechanical, electrical, and instrumentation and control for a complete Project.
- 7. Furnish engineering data and an application for an MDEQ P.A. 399 construction permit.
- 8. Preparation of a final opinion of probable Construction Cost.
- 9. Furnish GCDC-WWS with five (5) copies of the Construction Drawings and Specifications for final review by GCDC-WWS and MDEQ.
- 10. Meet with GCDC-WWS's staff to review the final draft of Contract Documents. Revise the Bidding Documents to include GCDC-WWS's comments.
- 11. Prepare applications for permits required to initiate and complete the Project. GCDC-WWS shall pay for all application and permit issuance fees.
- 12. Submit five (5) sets of Contract Documents to GCDC-WWS for review.
- 13. The number of Contracts for Work designed or specified by Engineer, upon which Engineer's compensation has been established under the Agreement, is two (2).

#### 2.4 <u>Bidding or Negotiating Phase</u>

The bidding or negotiating phase services of Engineer are supplemented as follows.

- 1. Prepare the Bid advertisement, and assist GCDC-WWS in the preparation of a list of prospective Bidders. The cost of publication shall be paid for by GCDC-WWS.
- 2. Arrange a pre-Bid conference with the GCDC-WWS, MDEQ, and plan holders. This conference shall be held at least ten (10) days prior to the Bid date. Engineer shall answer questions from plan holders, and issue any Addenda required to clarify discrepancies in the Bidding Documents.
- 3. Attend the Bid opening, and prepare a tabulation of the Bids
- 4. Review the qualifications and acceptability of low Bidder, named Subcontractors, and equipment Suppliers.
- 5. Provide a recommendation for the award of the Bid for GCDC-WWS's use.
- 6. Prepare conformed Contract Documents for signature by GCDC-WWS and the successful Bidder.

#### 2.5 Construction Phase

Engineer shall provide a Resident Project Representative for the Project. The construction phase services of Engineer are supplemented as follows:

- 1. Consultation and advice during the Work.
- 2. Conduct progress meetings at the Site on a weekly, bi-weekly, or monthly basis, as deemed necessary by GCDC-WWS and Engineer. Prepare meeting agenda, and prepare and distribute meeting minutes.
- 3. Preparation of elementary sketches required to resolve actual field conditions encountered.
- 4. Review material data sheets, equipment Shop Drawings, and detailed installation drawings for compliance with the Specifications and design concepts.
- 5. Review laboratory and shop test reports of Materials and equipment.
- 6. Issue bulletins and Change Orders which are required. Assist GCDC-WWS in negotiating Change Order prices. Provide independent opinions of cost for Change Order work.
- 7. Prepare record Drawings for the Project. Provide GCDC-WWS with a Mylar copy of the record Drawings.
- 8. The construction phase services shall commence within ninety (90) to one hundred thirty (130) days following completion of the final design phase.

#### PARAGRAPH 2 – BASIC SERVICES OF ENGINEER

	1.	Paragraph 2 and shall be performed or furn	of the Agreement are hereby specifically removed from ished by Engineer as part of Additional Services under			
	2.	Paragraph 2 and shall be performed or	of the Agreement are hereby specifically deleted from furnished by GCDC-WWS as part of GCDC-WWS's			
PARAGI	RA	PH 3 – ADDITIONAL SERVICES OF ENGINE	ER			
	<ol> <li>The Additional Services of Engineer listed in Paragraph 3.1.1, Paragraph 3.1.2, Paragraph 3.1.14         Paragraph 3.1.15 of the Agreement are hereby specifically removed as Additional Services, and Additional Services, set forth in the aforementioned Paragraphs, shall be performed or furnished Engineer as part of Basic Services under Paragraph 2 of the Agreement.     </li> </ol>					
	2.	Paragraph 3 of the Agreement is hereby amended to provide that the following services shall be performed or furnished by Engineer as part of Additional Services under Paragraph 3.1 or Paragraph 3.2:				
3	3.	The following services listed in Paragraph 3, "Additional Services," are hereby specifically deleted from Paragraph 3 and shall be performed or furnished by GCDC-WWS as part of GCDC-WWS's responsibilities under Paragraph 4:				
( ·	4.	ependent consultants listed below to perform or furnish ective scope of services listed below for each. Payments of are based on the participation in the Project of GCDC-d herein.				
		Consultant	Scope of Service			
		PSI	Geotechnical/Engineering			
		TBD	Dozer Rental			

## This is **EXHIBIT B**, consisting of 2 pages, referred to in the Agreement between GCDC-WWS and ENGINEER for Professional Services, dated 4/1/2013

Initials: GCDC-WWS ENGINEER

Paragraph 6 of the Agreement is amended and supplemented to include the following agreement of the Parties:

#### PARAGRAPH 6 - PAYMENTS TO ENGINEER FOR SERVICES AND REIMBURSABLE EXPENSES

#### Salary Cost Times a Factor Method of Payment

(with additional payments on a Salary Cost basis for Resident Project Representative ("RPR") services and Additional Services and additional payments for Reimbursable Expenses)

- 6. Methods of Payment for Services and Reimbursable Expenses of Engineer
- 6.1 For Basic Services. GCDC-WWS shall pay to Engineer as Basic Services an amount equal to Engineer's Salary Costs (as hereinafter defined) multiplied by a factor 3.0 for all Basic Services performed by Engineer's employees engaged directly on the Project, except for services of the RPR performed or furnished under Paragraph 2.5.2.1 of the Agreement. The authorized monetary limit for compensation payable for Basic Services pursuant to this Paragraph B6.1.1 is \$ 1,310,443.00.
- **6.1.1.1** In addition to the compensation set forth in Paragraph B6.1.1 above, for field surveys and for service of the Engineer's Consultants, Engineer shall receive the following compensation as set forth in 6.1.2:
- **6.1.1.2** RPR Services. GCDC-WWS shall pay to Engineer for services of the RPR performed or furnished under Paragraph 2.5.2.1 of the Agreement, an amount equal to Engineer's Salary Costs multiplied by a factor of \_\_\_\_\_ for all RPR services performed or furnished by Engineer's employees engaged directly in RPR services. The authorized limit for compensation payable for RPR services is \$\_\_\_\_\_.
- **6.1.1.3** Total Compensation for Basic Services. Engineer's total compensation for Basic Services rendered pursuant to Paragraphs B6.1.1 through B6.1.3, inclusive, is \$ 1,310,443.00.
- 6.1.2 For Additional Services. GCDC-WWS shall pay to Engineer as Additional Services for the services of Engineer's employees engaged directly on the Project performed or furnished pursuant to Paragraph 3.1 or Paragraph 3.2 of the Agreement (except for services as a consultant or witness under Paragraph 3.1.17 of the Agreement), an amount equal to the allowances listed below as authorized in writing by GCDC-WWS and for Administrative expenses multiplied by a factor of 1.05 plus Reimbursable Expenses. The allowances are listed below:

 Dozer rental
 \$4,200.00

 Soil Borings
 \$148,050.00

 Wetlands Surveys
 \$

- 6.1.2.1 The authorized fee of the Engineer for participation in the value engineering process is \$20,640.00.
- **6.1.2.2** The authorized fee of the Engineer for services related to providing input to update the operation and maintenance manual is \$\_\_\_\_\_\_.
- 6.1.3 For Reimbursable Expenses. GCDC-WWS shall pay to Engineer the mileage expenses to and from the Site by the RPR in an amount equal to the then existing mileage expenses paid by GCDC-WWS to its employees and all pre-approved (by GCDC-WWS) out of pocket expenses.
- **6.1.4** Salary Costs. "Salary Costs" means salaries and wages (basic, premium and incentive) paid to personnel plus the cost of customary and statutory benefits including, but not limited to, social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, sick leave, vacation and holiday pay applicable thereto.
- 6.1.5 Adjustment of Salary Costs. The current hourly Salary Costs of the Engineer's employees are summarized by classification on the attached table. The Salary Costs shall be adjusted annually and equitably to reflect changes in the various elements that comprise such Salary Costs. All such adjustments shall be consistent with Salary Cost increases by other similar engineering firms throughout the geographic area.
- 6.2 Other Provisions Concerning Payments

Payments Upon Termination. In the event of termination of the Agreement during any phase of Basic Services or Additional Services, Engineer shall be paid for the Basic Services or Additional Services (as applicable) performed or furnished in accordance with this Agreement during that phase on the basis of Engineer's Salary Costs times a factor of 3.0 for services performed or furnished during the applicable phase to the date of termination of the Agreement.

### THIS PAGE RESERVED FOR BILLABLE SALARY COST TABLE