



February 20, 2018

Mr. Matt Griffith  
Superintendent, Wastewater Treatment Plant  
City of Charlotte  
1005 Paine Drive  
Charlotte, MI 48813

Re: Proposal for Professional Services  
Charlotte Wastewater Treatment Plant (WWTP)  
Local Limits and Sewer Use Ordinance Update

Dear Mr. Griffith:

As a follow-up to our recent meeting, Fishbeck, Thompson, Carr & Huber, Inc. (FTCH) is pleased to offer this proposal to the City of Charlotte (City) for updates to the WWTP headworks loading/local limits and sewer use ordinance (SUO).

Qualifications and Experience

As summarized in the attached Table 1, FTCH has extensive experience with IPP-related activities for a wide range of wastewater facilities. In addition to a thorough understanding of the regulatory requirement, this experience has led to development of state-of-the-art technical methods. Our IPP products have also successfully undergone numerous reviews by the Michigan Department of Environmental Quality (MDEQ).

FTCH's qualifications are demonstrated by the following communities for which we are currently completing, or have recently completed, projects involving IPP upgrades:

- |                              |   |
|------------------------------|---|
| City of Ann Arbor            | City of Lansing                             |
| City of Bay City             | City of Lapeer                              |
| City of Big Rapids           | City of Ludington                           |
| City of Coldwater            | City of Midland                             |
| City of Croswell             | City of Mount Clemens                       |
| Delta Charter Township       | Oakland County/Pontiac                      |
| City of Flint                | City of Petoskey                            |
| Genesee County/Linden        | Southern Clinton County Utilities Authority |
| Genesee County/Ragnone       | South Huron Valley Utilities Authority      |
| City of Holland              | City of Three Rivers                        |
| City of Ionia                | City of Warren                              |
| City of Ithaca               | City of Wyoming                             |
| Lakewood Utilities Authority | Ypsilanti Community Utilities Authority     |

*Specific contact information is available upon request*

The FTCH efforts for this project will be led by Ms. Corrine M. Haybarker, assisted by Mr. Jerald O. Thaler, PE.



## Scope of Services

### Task 1 Reevaluation of Local Limits

The focus of this task will be the Pollutants of Concern (POCs) listed in the attached Table 2, and include the following activities:

#### A. Data Gap Analysis

FTCH will perform an assessment of the City's monitoring database relative to quality/quantity standards of the MDEQ and the U.S. Environmental Protection Agency (USEPA).

#### B. Site-Specific Monitoring Plan

Based on the quantity/quality of existing monitoring data relative to guidelines of the MDEQ and the USEPA, FTCH will prepare a written plan for collecting additional samples that are considered to be necessary. This plan will include recommended sample collection, storage, preservation, and analytical methods for you to submit to the MDEQ for concurrence.

For purposes of this proposal, it is assumed that the City will be responsible for any sample collection and analysis.

#### C. Local Limit Development

After receipt of the additional site-specific monitoring data, FTCH will apply the latest MDEQ and USEPA guidance to determine appropriate local limits for the applicable POCs. Activities will include the following:

- *Removal Efficiencies and Background Concentrations* – As a first step, FTCH will evaluate the site-specific monitoring data to convert into removal efficiencies and background concentrations. This will include use of our MDEQ-approved statistical methods to address data points that are non-quantifiable or unrepresentative.
- *Maximum Allowable Headworks Loadings (MAHLs)* – Next, FTCH will determine appropriate MAHLs for protecting the treatment plant against design load exceedances, National Pollutant Discharge Elimination System (NPDES) permit pass-through, chronic/acute aquatic toxicity pass-through, biosolids contamination, and biological treatment inhibition, as applicable. Aquatic toxicity values will be derived from recent MDEQ Rule 57 water quality standards, as specifically applicable to the WWTP. Biosolids values will be based on quality standards for disposal by land application, while inhibition values will apply data from our experience and the scientific literature.
- *Maximum Allowable Industrial Loadings (MAILs)* – FTCH will then determine appropriate MAILs using the calculated MAHLs, less applicable background loadings and safety factors. Background loadings will include septage, where applicable, and safety factors will follow MDEQ/USEPA recommendations.
- *Collection System Limitations (CSLs)* – FTCH will also determine appropriate CSLs for protecting the sewer system against plugging, fire/explosion, and toxic fumes, as applicable. Parameter values for CSL calculations will be based on our experience and the scientific literature.
- *Recommended Local Limits* – FTCH will determine candidate local limit concentrations by applying the uniform allocation method to the calculated MAILs. These concentrations will be compared to CSLs, where applicable, to establish recommended limits that meet all the protection criteria.



D. Local Limit Documentation

FTCH will document the local limits reevaluation with site-specific monitoring data, calculation methodology, technical basis, and final results. Separate draft reports will be prepared for compatible pollutants and toxic pollutants. After review by City staff, we will finalize the reports into a single package for you to submit for MDEQ approval. We will also assist in responding to any MDEQ review comments, including revisions necessary to obtain approval.

Upon completion of this task, FTCH will furnish electronic record copies of the compatible and toxic pollutant reports.

Task 2 Sewer Use Ordinance Revisions

FTCH will perform a review of the City's existing SUO and recommend modifications associated with current MDEQ requirements and guidance, including changes that result from the reevaluated local limits. We will provide a redlined electronic version comparing the existing and proposed ordinances.

For purposes of this proposal, it is assumed that the City will be responsible for SUO implementation, including attorney fees.

Proposed Schedule of Services

FTCH understands that you wish to complete this study prior to June 30, 2018. We will strive to meet this schedule, and are prepared to begin the work immediately.

Proposed Fee

FTCH proposes a lump sum fee of Nine Thousand Five Hundred Dollars (\$9,500).

The estimated breakdown by task is as follows:

Task 1	Reevaluation of Local Limits	\$8,000
Task 2	Sewer Use Ordinance Review	\$1,500
	Total	\$9,500

Authorization

Attached is our Professional Services Agreement. If you concur with our scope of services, please sign in the space provided and return the executed contract to the attention of Ms. Nan Schoonmaker ([neschoonmaker@ftch.com](mailto:neschoonmaker@ftch.com)). This proposal is made subject to the attached Terms and Conditions for Professional Services. Invoices will be submitted every four weeks and payment is due upon receipt.

We look forward to working with the City on this important matter. If you have questions or desire to further discuss this proposal, please contact us at your convenience.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.

Corrine M. Haybarker  
nes  
Attachments  
By email

Jerald O. Thaler, PE



**Table 1 - Staff Experience – IPP**

Municipal Wastewater Treatment Plant	Design Flow (MGD)	Nondomestic User Survey	Industrial User Permitting	Categorical User Permitting	Compatible Local Limits	Inorganic Toxic Local Limits	Organic Toxic Local Limit	pH Local Limits	Sewer Use Ordinance	Manual of Procedures	Enforcement Response Plan	Surcharge Rate Reevaluation
Lagoon	0.3				•	•						
Lagoon	0.5				•	•	•					
Lagoon	0.5	•	•		•	•		•	•	•	•	
Trickling Filter	0.75		•			•			•	•	•	
Oxidation Ditch	0.75	•	•		•	•		•	•	•	•	•
Activated Sludge	1.0	•	•		•	•			•	•	•	•
RBC	1.3	•		•	•	•				•		
Lagoon	1.4	•	•	•	•	•			•	•	•	
RBC	1.8				•	•	•					
RBC	1.9				•	•			•			
Oxidation Ditch	2.3	•	•	•	•	•			•	•	•	
Activated Sludge	2.4				•	•						
Activated Sludge	2.5	•	•		•	•		•	•	•	•	
Oxidation Ditch	2.5	•	•		•	•			•	•	•	
Activated Sludge	3.0	•	•	•		•			•	•	•	
Activated Sludge	3.0				•	•						
Oxidation Ditch	3.5				•	•						
Oxidation Tower	4.0				•	•	•		•	•	•	•
RBC	5.0				•	•	•	•		•		
Activated Sludge	5.8				•	•						
Activated Sludge	6.0				•	•						•
Activated Sludge	6.0	•	•	•	•	•		•	•	•	•	
Trickling Filter	6.0				•	•						
Activated Sludge	7.0	•			•	•	•		•	•		
Activated Sludge	12				•	•	•					
Activated Sludge	16				•	•	•					
Activated Sludge	19			•	•	•						
Activated Sludge	20				•	•	•	•				•
Activated Sludge	21				•	•	•	•	•			
Activated Sludge	28				•	•	•					
Activated Sludge	29		•		•	•	•					
Activated Sludge	36				•	•						
Activated Sludge	50		•		•	•	•		•	•	•	
Activated Sludge	50	•	•		•	•	•	•	•	•	•	
Activated Sludge	51				•	•						
Activated Sludge	55			•	•	•	•					
Activated Sludge	66				•	•	•					
Activated Sludge	1,200				•	•	•					



**Table 2 - Pollutants of Concern for Local Limits Reevaluation**

Compatibles	Inorganic Toxics
5-day Biochemical Oxygen Demand	Arsenic
Total Suspended Solids	Cadmium
Phosphorus, Total	Chromium, Total
Ammonia, as Nitrogen	Copper
Total Fats, Oil & Grease	Cyanides, Available
Nonpolar Fats, Oil & Grease	Lead
	Mercury
	Molybdenum
	Nickel
	Selenium
	Silver
	Zinc
	Aluminum



# PROFESSIONAL SERVICES AGREEMENT

PROJECT NAME Charlotte WWTP Local Limits and Sewer Use Ordinance Update  
 FTCH CONTACT Corrine M. Haybarker  
 CLIENT City of Charlotte  
 CLIENT CONTACT Mr. Matt Griffith  
 ADDRESS 1005 Paine Drive, Charlotte, MI 48813

hereby requests and authorizes Fishbeck, Thompson, Carr & Huber, Inc. (FTCH) to perform the following:

**SCOPE OF SERVICES:**

As outlined in our February 20, 2018, proposal letter.

**AGREEMENT. The Agreement consists of this page and the documents that are checked:**

- Terms and Conditions for Professional Services, attached.
- Proposal dated February 20, 2018.
- Other:

**METHOD OF COMPENSATION:**

- Lump Sum for Defined Scope of Services
- Hourly Billing Rates plus Reimbursable Expenses
- Other:

**Budget for above Scope of Services:**

Nine Thousand Five Hundred Dollars (\$9,500)

**ADDITIONAL PROVISIONS (IF ANY):**

**APPROVED FOR:**

City of Charlotte

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

**ACCEPTED FOR:**

Fishbeck, Thompson, Carr & Huber, Inc.

BY: Tim Mc Namara

TITLE: Senior Vice President

DATE: February 20, 2018



## Terms and Conditions for Professional Services

1. **METHOD OF AUTHORIZATION.** CLIENT may authorize FTCH to proceed with work either by signing a Professional Services Agreement or by issuance of an acknowledgment, confirmation, purchase order, or other communication. Regardless of the method used, these Terms and Conditions shall prevail as the basis of CLIENT's authorization to FTCH. Any CLIENT document or communication in addition to or in conflict with these Terms and Conditions is rejected.
2. **CLIENT RESPONSIBILITIES.** CLIENT shall provide all criteria and full information as to requirements for the Project and designate in writing a person with authority to act on CLIENT's behalf on all matters concerning the Project. If FTCH's services under this Agreement do not include full-time construction observation or review of Contractor's performance, CLIENT shall assume responsibility for interpretation of contract documents and for construction observation, and shall waive all claims against FTCH that may be in any way connected thereto.
3. **HOURLY BILLING RATES.** Unless stipulated otherwise, CLIENT shall compensate FTCH at hourly billing rates in effect when services are provided by FTCH employees of various classifications.
4. **REIMBURSABLE EXPENSES.** Those costs incurred on or directly for CLIENT's Project. Reimbursement shall be at FTCH's current rate for mileage for service vehicles and automobiles, special equipment, and copying, printing, and binding. Reimbursement for commercial transportation, meals, lodging, special fees, licenses, permits, insurances, etc., and outside technical or professional services shall be on the basis of actual charges plus 10 percent.
5. **OPINIONS OF COST.** Any opinions of probable construction cost and/or total project cost provided by FTCH will be on a basis of experience and judgment, but since it has no control over market conditions or bidding procedures, FTCH cannot warrant that bids or ultimate construction or total project costs will not vary from such estimates.
6. **PROFESSIONAL STANDARDS; WARRANTY.** The standard of care for services performed or furnished by FTCH will be the care and skill ordinarily used by members of FTCH's profession practicing under similar circumstances at the same time and in the same locality. FTCH makes no warranties, express or implied, under this Agreement or otherwise, in connection with FTCH's services.
7. **TERMINATION.** Either CLIENT or FTCH may terminate this Agreement by giving ten days' written notice to the other party. In such event, CLIENT shall pay FTCH in full for all work previously authorized and performed prior to the effective date of termination, plus (at the discretion of FTCH) a termination charge to cover finalization work necessary to bring ongoing work to a logical conclusion. Such charge shall not exceed 30 percent of all charges previously incurred. Upon receipt of such payment, FTCH will return to CLIENT all documents and information which are the property of CLIENT.
8. **SUBCONTRACTORS.** FTCH may engage subcontractors on behalf of CLIENT to perform any portion of the services to be provided by FTCH hereunder.
9. **PAYMENT TO FTCH.** Invoices will be issued every four weeks, payable upon receipt, unless otherwise agreed. Interest of 1 percent per four-week period will be payable on all amounts not paid within 28 days from date of invoice, payment thereafter to be applied first to accrued interest and then to the principal unpaid amount. Any attorney's fees or other costs incurred in collecting any delinquent amount shall be paid by CLIENT.

CLIENT agrees to pay on a current basis, in addition to any proposal or contract fee understandings, all taxes including, but not limited to, sales taxes on services or related expenses which may be imposed on FTCH by any governmental entity.

If CLIENT directs FTCH to invoice another, FTCH will do so, but CLIENT agrees to be ultimately responsible for FTCH's compensation until CLIENT provides FTCH with that third party's written acceptance of all terms of this Agreement and until FTCH agrees to the substitution.

In addition to any other remedies FTCH may have, FTCH shall have the absolute right to cease performing any basic or additional services in the event payment has not been made on a current basis.

10. **HAZARDOUS WASTE.** FTCH has neither created nor contributed to the creation or existence of any hazardous, radioactive, toxic, irritant, pollutant, or otherwise dangerous substance or condition at any site, and its compensation hereunder is in no way commensurate with the potential risk of injury or loss that may be caused by exposure to such substances or conditions. FTCH shall not be responsible for any alleged contamination, whether such contamination occurred in the past, is occurring presently, or will occur in the future, and the performance of services hereunder does not imply risk-sharing on the part of FTCH.
11. **LIMITATION OF LIABILITY.** To the fullest extent permitted by law, FTCH's total liability to CLIENT for any cause or combination of causes, which arise out of claims based upon professional liability errors or omissions, whether based upon contract, warranty, negligence, strict liability, or otherwise is, in the aggregate, limited to the greater of \$250,000 or the amount of the fee earned under this Agreement.



## Terms and Conditions for Professional Services (continued)

To the fullest extent permitted by law, FTCH's total liability to CLIENT for any cause or combination of causes, which arise out of claims for which FTCH is covered by insurance other than professional liability errors and omissions, whether based upon contract, warranty, negligence, strict liability, or otherwise is, in the aggregate, limited to the total insurance proceeds paid on behalf of or to FTCH by FTCH's insurers in settlement or satisfaction of CLIENT's claims under the terms and conditions of FTCH's insurance policies applicable thereto.

Higher limits of liability may be considered upon CLIENT's written request, prior to commencement of services, and agreement to pay an additional fee.

12. **DELEGATED DESIGN.** CLIENT recognizes and holds FTCH harmless for the performance of certain components of the Project which are traditionally specified to be designed by the Contractor.
13. **INSURANCE.** CLIENT shall cause FTCH and FTCH's consultants, employees, and agents to be listed as additional insureds on all commercial general liability and property insurance policies carried by CLIENT which are applicable to the Project. CLIENT shall also provide workers' compensation insurance for CLIENT's employees. CLIENT agrees to have their insurers endorse these insurance policies to reflect that, in the event of payment of any loss or damages, subrogation rights under this Agreement are hereby waived by the insurer with respect to claims against FTCH.  
Upon request, CLIENT and FTCH shall each deliver to the other certificates of insurance evidencing their coverages.  
CLIENT shall require Contractor to purchase and maintain commercial general liability and other insurance as specified in the contract documents and to cause FTCH and FTCH's consultants, employees, and agents to be listed as additional insureds with respect to such liability and other insurance purchased and maintained by Contractor for the Project. Contractor must agree to have their insurers endorse these insurance policies to reflect that, in the event of payment of any loss or damages, subrogation rights under this Agreement are hereby waived by the insurer with respect to claims against FTCH.
14. **INDEMNIFICATION.** FTCH will defend, indemnify, and hold CLIENT harmless from any claim, liability, or defense cost for injury or loss sustained by any party from exposures to the extent caused by FTCH's negligence or willful misconduct. CLIENT agrees to defend, indemnify, and hold FTCH harmless from any claim, liability, or defense cost for injury or loss sustained by any party from exposures allegedly caused by FTCH's performance of services hereunder, except for injury or loss to the extent caused by the negligence or willful misconduct of FTCH. These indemnities are subject to specific limitations provided for in this Agreement.
15. **CONSEQUENTIAL DAMAGES.** CLIENT and FTCH waive consequential damages for claims, disputes, or other matters in question relating to this Agreement including, but not limited to, loss of business.
16. **LEGAL EXPENSES.** If either CLIENT or FTCH makes a claim against the other as to issues arising out of the performance of this Agreement, the prevailing party will be entitled to recover its reasonable expenses of litigation, including reasonable attorney's fees. If FTCH brings a lawsuit against CLIENT to collect invoiced fees and expenses, CLIENT agrees to pay FTCH's reasonable collection expenses including attorney fees.
17. **OWNERSHIP OF WORK PRODUCT.** FTCH shall remain the owner of all drawings, reports, and other material provided to CLIENT, whether in hard copy or electronic media form. CLIENT shall be authorized to use the copies provided by FTCH only in connection with the Project. Any other use or reuse by CLIENT or others for any purpose whatsoever shall be at CLIENT's risk and full legal responsibility, without liability to FTCH. CLIENT shall defend, indemnify, and hold harmless FTCH from all claims, damages, losses, and expenses, including attorney's fees arising out of or resulting therefrom.
18. **ELECTRONIC MEDIA.** Data, reports, drawings, specifications, and other material and deliverables may be transmitted to CLIENT in either hard copy, digital, or both formats. If transmitted electronically, and a discrepancy or conflict with the electronically transmitted version occurs, the hard copy in FTCH's files used to create the digital version shall govern. If a hard copy does not exist, the version of the material or document residing on FTCH's computer network shall govern. FTCH cannot guarantee the longevity of any material transmitted electronically nor can FTCH guarantee the ability of the CLIENT to open and use the digital versions of the documents in the future.
19. **GENERAL CONSIDERATIONS.** CLIENT and FTCH each are hereby bound and the partners, successors, executors, administrators, and legal representatives of CLIENT and FTCH are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators, and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.

Neither CLIENT nor FTCH shall assign this Agreement without the written consent of the other.

Neither CLIENT nor FTCH will have any liability for nonperformance caused in whole or in part by causes beyond FTCH's reasonable control. Such causes include, but are not limited to, Acts of God, civil unrest and war, labor unrest and strikes, acts of authorities, and events that could not be reasonably anticipated.

This Agreement shall be governed by the law of the principal place of business of FTCH.

This Agreement constitutes the entire agreement between CLIENT and FTCH and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

### End of Terms and Conditions for Professional Services