

**AGENDA ITEM EXECUTIVE SUMMARY**

Agenda Item number: 4.c

Title:

**Recommendation to Approve Professional Services Agreement with Trotter and Associates for the Construction Engineering Phase of the Phosphorus Removal and Digester Improvement Project**

Presenter:

Tim Wilson

Meeting: Government Services Committee

Date: February 27, 2017

Proposed Cost: \$ 816,000

Budgeted Amount: \$ 817,000

Not Budgeted: **Executive Summary** *(if not budgeted please explain):*

The Public Works Department recommends approval of the construction engineering services for the Phosphorus Removal and Digester Improvement project to Trotter and Associates. The contract for the construction engineering phase of the project is a firm fixed fee of \$816,000 which was negotiated with Trotter and Associates by staff.

An agreement with Trotter & Associates for the Design Engineering Services phase of this project was approved earlier in 2016 when the City decided to combine the Phosphorus and Digesters projects in an effort to gain economy of scale and escalate the proposed project schedule to meet compliance guidelines set by the EPA. The City was able to reduce the cost of the engineering design phase of both projects by \$80,000 after combining them in to a single design effort. The city is receiving additional savings in the construction engineering phase in the amount of \$107,000.

The agreement includes 18 months of construction oversight. Over these 18 months the engineer will assist the city staff with overall project management, provide a resident project representative (RPR) onsite fulltime for the duration of the construction. The primary duties of the RPR will include general construction oversight, site layout, quality control, contract documentation and code and bid compliance. They will also be responsible for holding weekly construction meetings covering topics such as project progress and work change directives.

Staff has determined that the proposed fee for construction engineering services of under 6% of the construction cost to be fair and reasonable based on several factors. For example, in comparison to IEPA interest loan project data from the past several years; the average construction engineering fee is 7.20% of total construction cost. For our project the construction engineering fees are approximately \$174,000.00 less than the average IEPA project loan for the same phase. Also Public Staff has discussed real construction engineering expenditures for similar projects with municipalities in the area and verified these fees are competitive. The Trotter standard agreement has been reviewed by legal counsel and found to be acceptable.

**Attachments** *(please list):*

\* Anticipated Project Construction Schedule

**Recommendation/Suggested Action** *(briefly explain):*

Recommendation to Approve Professional Services Agreement with Trotter and Associates for the Bidding and Construction Engineering Phase of the Phosphorus Removal and Digester Improvement Project.

ID	Task Mode	Task Name	Duration	Start	Finish	Qtr 1, 2017			Qtr 2, 2017			Qtr 3, 2017			Qtr 4, 2017			Qtr 1, 2018			Qtr 2, 2018			Qtr 3, 2018			Qtr 4, 2018			Qtr 1,
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
0		<b>2017 Phosphorus Removal and Digester Improvements</b>	<b>377 days</b>	<b>Mon 7/3/17</b>	<b>Tue 12/11/18</b>																									
1		<b>Site Work</b>	<b>175 days</b>	<b>Mon 7/3/17</b>	<b>Fri 3/2/18</b>																									
2		Mobilization	2 wks	Mon 7/3/17	Fri 7/14/17																									
3		<b>Chem-P Storage</b>	<b>150 days</b>	<b>Mon 7/17/17</b>	<b>Fri 2/9/18</b>																									
10		<b>Underground Utilities</b>	<b>145 days</b>	<b>Mon 8/14/17</b>	<b>Fri 3/2/18</b>																									
26		<b>Biological Process</b>	<b>249 days</b>	<b>Mon 7/3/17</b>	<b>Thu 6/14/18</b>																									
27		<b>Equipment</b>	<b>140 days</b>	<b>Mon 7/3/17</b>	<b>Fri 1/12/18</b>																									
31		<b>IR Pump Station</b>	<b>155 days</b>	<b>Mon 7/17/17</b>	<b>Fri 2/16/18</b>																									
45		<b>Process Control Building and Ferric Chloride Feed/Storage</b>	<b>150 days</b>	<b>Mon 7/17/17</b>	<b>Fri 2/9/18</b>																									
60		<b>Primary Sludge Fermenter</b>	<b>165 days</b>	<b>Mon 7/17/17</b>	<b>Fri 3/2/18</b>																									
72		<b>Blower Building</b>	<b>239 days</b>	<b>Mon 7/17/17</b>	<b>Thu 6/14/18</b>																									
89		<b>Lower Aeration Basins</b>	<b>146 days</b>	<b>Mon 7/17/17</b>	<b>Mon 2/5/18</b>																									
100		<b>Upper Aeration Basins</b>	<b>80 days</b>	<b>Mon 1/15/18</b>	<b>Fri 5/4/18</b>																									
167		Digester Rehabilitation	<b>357 days</b>	<b>Mon 7/3/17</b>	<b>Tue 11/13/18</b>																									
168		<b>Equipment</b>	<b>125 days</b>	<b>Mon 7/3/17</b>	<b>Fri 12/22/17</b>																									
173		<b>Digested Sludge Storage Tank</b>	<b>126 days</b>	<b>Mon 11/20/17</b>	<b>Mon 5/14/18</b>																									
189		<b>Waste Gas Burner</b>	<b>45 days</b>	<b>Mon 1/1/18</b>	<b>Fri 3/2/18</b>																									
197		<b>Digester Rehabilitation Phased</b>	<b>347 days</b>	<b>Mon 7/17/17</b>	<b>Tue 11/13/18</b>																									
198		<b>AD Control Building - Phase 1 (South)</b>	<b>80 days</b>	<b>Mon 10/23/17</b>	<b>Fri 2/9/18</b>																									
212		<b>Egg-Shaped Anaerobic Digester (ESAD) 1702</b>	<b>165 days</b>	<b>Mon 7/17/17</b>	<b>Fri 3/2/18</b>																									
248		<b>AD Control Building - Phase 2 (North)</b>	<b>182 days</b>	<b>Mon 3/5/18</b>	<b>Tue 11/13/18</b>																									
266		<b>Egg-Shaped Anaerobic Digester (ESAD) 1701</b>	<b>192 days</b>	<b>Tue 11/21/17</b>	<b>Wed 8/15/18</b>																									
310		<b>Project Closeout</b>	<b>84 days</b>	<b>Thu 8/16/18</b>	<b>Tue 12/11/18</b>																									

2017 Phosphorus Removal and Digester Improvements  
Thu 2/16/17

Task		Inactive Task		Manual Summary Rollup		External Milestone		Manual Progress	
Split		Inactive Milestone		Manual Summary		Deadline			
Milestone		Inactive Summary		Start-only		Critical			
Summary		Manual Task		Finish-only		Critical Split			
Project Summary		Duration-only		External Tasks		Progress			