

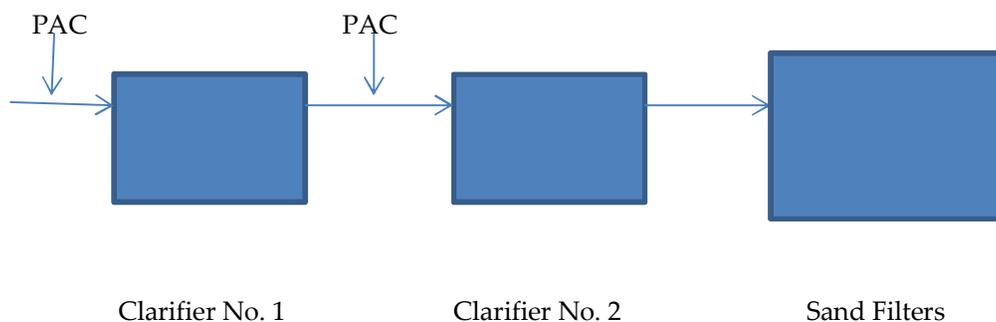
Date: April 15, 2015

Owner: City of Flowery Branch, Georgia

Project: Filter Equipment for the City of Flowery Branch WPCP Filter Improvement

ADDENDUM NUMBER ONE

1. The following Addendum hereby amends and/or modifies the Request for Proposals and any previous addenda as indicated and as issued by McKim & Creed. All Proposers are subject to the provisions of this Addendum. Proposers shall acknowledge receipt of this Addendum in their proposal.
2. On page 4 of the proposal change the proposal submittal date to Tuesday, April 21, 2015 at 3:00 P.M. Note that there will not be a formal opening on the submittal date. An equipment tabulation will be provided to all parties that turn in a proposal.
3. The City of Flowery Branch WWTP currently feeds approximately 50 gallons per day of Poly Aluminum Chloride (PAC) on a continuous daily rate. With an equalization basin in front of the facility, they are able to regulate the flow through the plant and therefore typically do not adjust the chemical fed rates to the actual flow but only adjust based on treatment results. Of the 50 gallons per day, 30 gallons is feed prior to clarifier number 1 and 20 gallons prior to clarifier number 2 as shown in the process flow diagram below. In addition, the plant feeds approximately 30 gallons per day of caustic. Note the process also includes bar screens and aeration basin ahead of the clarifiers that are not shown. It is anticipated that a new mixing box or in-line mixer will be added ahead of the new filter arrangement for an additional chemical feed point if needed in the future.



CURRENT PROCESS FLOW

4. Below is data from recent testing made prior to and after the existing sand filters for TSS and phosphorus for four (4) consecutive days.

Total Suspended Solids Worksheet Standard Methods 18th Edition, Method 254i

Time: Analyst:					Time: Analyst:				
Sample Grab	INF	Phos BEFORE	Miss AFTER	SVI	Sample Grab	INF	Phos BEFORE	Miss AFTER	SVI
Date		4/7	4.08 flow		Date		4/8	.428 flow	
Filter #		I	81		Filter #		H	B	
Sample	25	10 25	10 25		Sample	25	10 25	10 25	
Dry Wt.(B)		.1115	.1116		Dry Wt.(B)		.1091	.1084	
Ignited Wt.(C)					Ignited Wt.(C)				
Filter Wt. (A)		.1111	.1112		Filter Wt. (A)		.1088	.1080	
TSS(g) B-A		.0004	.0004		TSS(g) B-A		.0003	.0004	
TSS (mg/L)		16	16		TSS (mg/L)		12	16	
VSS (g) B-C	Phos	0.30	0.25		VSS (g) B-C	Phos	0.16	0.16	
VSS (mg/L)					VSS (mg/L)				

Time: Analyst:					Time: Analyst:				
Sample Grab	INF	Phos BEFORE	Miss AFTER	SVI	Sample Grab	INF	Phos BEFORE	Miss AFTER	SVI
Date		4/9	.415 flow		Date		4/10	.441 flow	
Filter #		H	Q		Filter #		X	V	
Sample	25	10 25	10 25		Sample	25	10 25	10 25	
Dry Wt.(B)		.1091	.1079		Dry Wt.(B)		.1088	.1096	
Ignited Wt.(C)					Ignited Wt.(C)				
Filter Wt. (A)		.1086	.1077		Filter Wt. (A)		.1086	.1086	
TSS(g) B-A		.0005	.0002		TSS(g) B-A		.0002	.0004	
TSS (mg/L)		20	8		TSS (mg/L)		8	16	
VSS (g) B-C	Phos	0.18	0.17		VSS (g) B-C	Phos	0.15	0.15	
VSS (mg/L)					VSS (mg/L)				

5. On page 5, under Section 1.0, paragraphs 4 and 5, change all the Influent TSS numbers to 20 mg/l.

6. Note that a portion of the discharge from this facility is sent to a land application system, therefore the 3 NTU requirement is critical. Each manufacturer shall guarantee their equipment can meet this requirement without the use of additional chemicals. The phosphorus limits are intended to be met with chemical addition in front of the filters assuming an influent level of 1.0 mg/l ahead of the filters. Manufactures shall guarantee their equipment will meet an effluent limit of 0.13 mg/l phosphorus at the noted loadings.

Keith Hendrix, PE
McKim & Creed

End of Addendum Number One