SUPPLEMENT TO
MASTER SERVICES AGREEMENT

CITY OF GRIFFIN, GEORGIA
AND
PARAGON CONSULTING GROUP, INC.

THIS SUPPLEMENTAL AGREEMENT is made as of _____
Between City of Griffin, GA, Owner, and Paragon Consulting Group, Inc., Engineer (PCG).

OWNER AND ENGINEER have previously executed a Master Services Agreement dated April 3, 2003 ("Original Agreement") that defines general terms under which ENGINEER will furnish General Consulting Services and Project Engineering Services to OWNER. OWNER now wishes to engage ENGINEER to provide services in connection with a Project known as:

2014 WATER SYSTEM ASSETS CONDITION ASSESSMENT AND ANALYSIS

This project will encompass the following projects:

- Project 1 – J. Harry Simmons WTP Condition Assessment and Alternatives Analysis
- Project 2 – Raw Waterlines Alternatives Analysis
- Project 3 – Heads Creek Pump Station Condition Assessment

ENGINEER has prepared a Scope of Work for each project, attached herein as EXHIBIT A, and Basis of Compensation, attached herein as EXHIBIT B, to provide the services contemplated in this Supplemental Agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

OWNER:

CITY OF GRIFFIN

_____

Attest:

_____

Manager

ENGINEER:

PARAGON CONSULTING GROUP, INC.

_____

Brian K. Upson, P.E., President

Attest:

_____

Jolene Northrop, P. E., Water / Wastewater Sector

PROJECT 1 - J. HARRY SIMMONS WTP CONDITION ASSESSMENT AND ALTERNATIVES ANALYSIS

EXHIBIT A – SCOPE OF SERVICES

This project will include a condition analysis and alternatives analysis for the J. Harry Simmons Water Treatment Plant (WTP). Equipment and infrastructure will be evaluated through on-site inspection and through data and design analysis by licensed structural, electrical, and civil engineers. Based on the Condition Assessment results, three alternatives will be developed to a conceptual level and compared with one another to determine the best alternative for upgrading the 13.2 mgd WTP. The Alternative Analysis will include constructability, cost, and life cycle comparisons. The work consists of the following major components:

- Process Hydraulic, Equipment, Structural, Control, and Electrical Evaluations
- Regulatory Review
- Alternatives Development
- Concept Level Design Development
- Probable Construction Cost and Life Cycle Comparison
- Alternative Selection

Phase 1 – Condition/Assessment

PCG will complete a written assessment of the condition of the J. Harry Simmons Water Treatment Plant (WTP) based on record drawings, operational plant data, site visits, and equipment manuals. The assessment will consist of the following typical tasks:

Task 1.1 – Process Hydraulic Evaluation

PCG will perform a hydraulic evaluation of the process units including the influent flow meter, rapid mix, coagulation, flocculation, sedimentation, filtration, disinfection, clear well, finished water pumpage and metering, and backwash water system. The evaluation will examine hydraulic loading and capacity for these processes as well as the carrier pipeage between processes. The results will be summarized in a Technical Memorandum.

Task 1.2 – Equipment evaluation

PCG will evaluate the current condition of the existing process equipment used to treat the raw water to the existing drinking water permit limits. Equipment manuals, run time data, and maintenance data will be provided to PCG by OWNER in order to complete this evaluation. PCG will perform on-site evaluations of the equipment. Some equipment may require inspection off-line; such evaluations will be coordinated in advance with the OWNER as not to interfere with normal operation. The results will be summarized in a Technical Memorandum.

Task 1.3 – Structural Evaluation

PCG will coordinate with a subconsultant (licensed structural engineer) to perform a structural evaluation of the existing WTP process structures including basins, chemical storage and containment, laboratory, and plant building. Core sampling may be necessary; PCG will coordinate such sampling with the OWNER as not to interfere with normal operation. The results will be summarized in a Technical Memorandum.

Task 1.4 – Electrical Evaluation

PCG will coordinate with a subconsultant (licensed electrical engineer) to perform an electrical evaluation of the existing WTP electrical equipment. The subconsultant will provide an "As-Built" Electrical On-Line Diagram of the existing electrical system with notes on the condition of the components. The results will be summarized in a Technical Memorandum.

Task 1.5 – Process Data Gathering and Analysis

PCG will gather, organize, and analyze operational data provided to PCG by OWNER. The data will be used to determined operational parameters and trending. The results will be summarized in a Technical Memorandum.

Task 1.6 – Controls Evaluation

PCG will evaluate existing plant controls including controls on equipment and valves, chemical dosing, and flowmeters. The results will be summarized in a Technical Memorandum.

Task 1.7 – Testing

PCG will plan, schedule, and oversee testing on an as needed basis. Possible testing may include bench scale testing of raw water and chemicals, concrete core sampling, and basin flow patterns such as short circuiting. Prior to any testing, PCG will develop a Testing Plan for approval by OWNER. All testing will be coordinated with OWNER as not to interfere with normal operation. Testing will require OWNER staff assistance which will be defined in the Testing Plan. The results will be summarized in a Technical Memorandum.

Task 1.8 – Regulatory Review

PCG will conduct a review of regulations and permit requirements including recommended safe operating procedures. This review will be in conjunction with information gleaned from Task 5. The results will be summarized in a Technical Memorandum and used to aid in establishing design criteria for the concept level alternatives.

Task 1.9 – Condition Assessment Report and Presentation

PCG will assemble the individual Technical Memorandums into one report describing the findings of the condition assessment. The Report will be presented to OWNER in an open workshop format. Input during the workshop will be incorporated into the final Condition Assessment Report.

Phase 2 – Alternatives Comparison:
PCG will work through the decision process with the OWNER to determine the best alternative for updating the J. Harry Simmons WTP. The process will include the following Tasks:

Task 2.1 – Alternative Development and Workshop
PCG will prepare and conduct a workshop with the OWNER in order to develop a list of alternatives to be evaluated and to define criteria for comparing alternatives.

Task 2.2 – Three Alternatives Comparison
PCG will develop three alternatives to a concept design level which meet treatment criterion developed in previous tasks. The alternatives will be compared through the following sub-Tasks:

Sub-Task 2.2.1 – Concept Design
PCG will complete a concept level design for each of the three alternatives. The concept-level design will include general equipment and site layout necessary for treatment as well as a description of the design.

Sub-Task 2.2.2 – Concept Construction Cost Estimate
PCG will complete a concept-level probable construction cost estimate for each of the three alternatives. The estimate will be used to aid in selecting a best option from the three alternatives.

Sub-Task 2.2.3 – Concept Life Cycle Estimate
PCG will complete a concept-level life cycle estimate for each of the three alternatives. The life cycle estimate will be used to aid in selecting a best option from the three alternatives.

Phase 3 – Alternative Selection:
PCG will present each of the three alternatives developed in Phase 2 to the OWNER in a workshop setting. PCG will lead a discussion on each of the alternatives and a ranking process for the selection of the best alternative for updating the J. Harry Simmons WTP.

Phase 4 – Final Documentation:
PCG will prepare final documentation including concept level drawings, tables, and a Word document describing the alternative selection process, concept level alternatives with construction and life cycle cost estimates, and the best alternative selection. The final documentation will include quality assurance and quality control prior to submittal.

Bi-weekly progress updates will be provided to OWNER by PCG electronically.

Deliverables will be provided in digital format including Word, Excel, PDF and any other electronic formats. These include all calculations, processes and engineering documents which become the property of the OWNER for use on this project. Reuse of these documents on other projects is solely at the risk of the OWNER.

PROJECT 1 - J. HARRY SIMMONS WTP CONDITION ASSESSMENT AND ALTERNATIVES ANALYSIS

EXHIBIT B – BASIS OF COMPENSATION

The compensation limits are based on the scope of services described in EXHIBIT A and include a Water Treatment Plant (WTP) Condition and Assessment, an Alternatives Analysis for upgrading the WTP, and coordination of electrical and structural evaluations.

Phase 1 Condition/Assessment
Professional Services Fee: Phase Sub-total not to Exceed: *$73,775* as described in Task breakdown (reference attached man-hour and budget worksheet)

Task 1.1 – Process Hydraulic Evaluation:
Professional Services Fee: Not to Exceed *$9,375* (reference attached man-hour and budget worksheet)

Task 1.2 – Equipment evaluation:
Professional Services Fee: Not to Exceed *$6,995* (reference attached man-hour and budget worksheet)

Task 1.3 – Structural Evaluation:
Professional Services Fee: Not to Exceed *$7,185* (reference attached man-hour and budget worksheet)

Task 1.4 – Electrical Evaluation:
Professional Services Fee: Not to Exceed *$5,025* (reference attached man-hour and budget worksheet)

Task 1.5 – Process Data Gathering and Analysis:
Professional Services Fee: Not to Exceed *$7,005* (reference attached man-hour and budget worksheet)

Task 1.6 – Controls Evaluation:
Professional Services Fee: Not to Exceed *$8,485* (reference attached man-hour and budget worksheet)

Task 1.7 – Testing:
Professional Services Fee: Not to Exceed *$15,645* (reference attached man-hour and budget worksheet)

Task 1.8 – Regulatory Review:
Professional Services Fee: Not to Exceed *$3,645* (reference attached man-hour and budget worksheet)

Task 1.9 – Condition Assessment Report and Presentation:
Professional Services Fee: Not to Exceed *$10,415* (reference attached man-hour and budget worksheet)

Phase 2 – Alternatives Comparison
Professional Services Fee: Phase Sub-total not to Exceed: *$97,595* as described in Task breakdown (reference attached man-hour and budget worksheet)

Task 2.1 – Alternative Development and Workshop:
Professional Services Fee: Not to Exceed *$6,210* (reference attached man-hour and budget worksheet)

Task 2.2 – Three Alternatives Comparison:
Professional Services Fee: Task Sub-total not to Exceed *$91,385* as described in Sub-Task breakdown (reference attached man-hour and budget worksheet)

Sub-Task 2.2.1 – Concept Design:
Professional Services Fee: Not to Exceed *$53,925* (reference attached man-hour and budget worksheet) Time Schedule: As Needed, Scope of Work: Included in EXHIBIT A

Sub-Task 2.2.2 – Concept Construction Cost Estimate:
Professional Services Fee: Not to Exceed *$18,730* (reference attached man-hour and budget worksheet) Scope of Work: Included in EXHIBIT A

Sub-Task 2.2.3 – Concept Life Cycle Estimate:
Professional Services Fee: Not to Exceed *$18,730* (reference attached man-hour and budget worksheet) Scope of Work: Included in EXHIBIT A

Phase 3 – Alternative Selection Workshop:
Professional Services Fee: Not to Exceed *$8,040* (reference attached man-hour and budget worksheet) Scope of Work: Included in EXHIBIT A

Phase 4 – Final Documentation:
Professional Services Fee: Not to Exceed *$13,400* (reference attached man-hour and budget worksheet) Scope of Work: Included in EXHIBIT A

Sub-Total of the estimated fees from Phases 1 through 4 is $192,810.

MAN-HOUR AND BUDGET WORKSHEET

PROJECT 1 - J.HARRY SIMMONS WTP CONDITION ASSESSMENT AND ALTERNATIVES ANALYSIS

City of Griffin 2014 January 28

DESCRIPTION	MANHOURS AND COSTS										
	MANHOURS									COST	
	PR	SE	WWSM	SLA/P LAN	INSP/ ENG TECH	AA	DRAFT	SUB	TOTAL HOURS	DIRECT LABOR COST	TOTAL LABOR COST
	135	135	135	125	75	50	75	135			
Condition/Assessment	**24**	**9**	**312**	**0**	**96**	**40**	**24**	**120**	**625**	**73,775**	**73,775**
Process Hydraulic Evaluation	4	1	60		8				73	9,375	
Equipment Evaluation	4	1	32		16	16			69	6,995	
Structure Evaluation	2	1	8		4			40	55	7,185	
Electrical Evaluation	2	1	8		4			24	39	5,025	
Process Data Gathering and Analysis	2	1	40		16				59	7,005	
Controls	2	1	24		16	8		24	75	8,485	
Testing	2	1	72		16			32	123	15,645	
Regulatory Review	2	1	24						27	3,645	
Condition Assessment Report and Presentation	4	1	44		16	16	24		105	10,415	
Alternatives Comparison	**56**	**26**	**375**	**24**	**48**	**88**	**80**	**140**	**837**	**97,595**	**97,595**
Alternative Development and Workshop	8	2	36						46	6,210	
Three Alternatives Comparison											
Concept Design	16	8	211	24	16	24	80	80	459	53,925	
Concept Construction Cost Estimate	16	8	64		16	32		30	166	18,730	
Concept Life Cycle Estimate	16	8	64		16	32		30	166	18,730	
Alternative Selection	**8**	**4**	**16**	**4**	**0**	**8**	**16**	**16**	**72**	**8,040**	**8,040**
Alternative Selection Workshop	8	4	16	4		8	16	16		8,040	
Final Documentation	**12**	**12**	**32**	**8**	**8**	**20**	**0**	**24**	**116**	**13,400**	**13,400**
Final Report	4	4	24	4	8	16		16	76	8,380	
QAQC	8	8	8	4		4		8	40	5,020	

Project Cost Estimate **192,810**

PROJECT 2 - RAW WATERLINES ALTERNATIVES ANALYSIS

EXHIBIT A – SCOPE OF SERVICES

This project will include the typical alternatives analysis services, which in general include data gathering and analysis, alternatives development and comparison, and identification of the optimum solution. The work consists of the replacement and/or rehabilitation of the two 20-inch raw waterlines from Flint River Pump Station to J. Harry Simmons Water Treatment Plant and will consist of the following major components:

- Data Gathering and Analysis
- Concept level alternatives development
- Concept level probable cost estimates for each alternative
- Alternatives selection workshop
- Alternatives analysis report

Phase 1 – Alternatives Analysis:
PCG will determine three to four alternatives for the upgrading of the parallel 20-inch raw waterlines from the Flint River Pump Station (FRPS) to the J. Harry Simmons Water Treatment Plant (WTP). PCG will identify construction phasing of the most cost effective solution. The analysis will include the following Tasks:

Task 1.1 – Data Gathering and Analysis
PCG will utilize topographical, GIS, and other drawings provided by the OWNER to analyze the raw waterline location in both plan and profile, to identify valves and other appurtenances, and to identify potential routing changes to the pipeline. PCG, with OWNER input, will identify the best location of the pipeline replacement. It may be necessary for the OWNER to pothole areas identified as not having sufficient data for a thorough analysis.

Task 1.2 – Alternatives Comparison
PCG will develop three to four alternatives for comparison purposes. The alternatives will be discussed with the OWNER and a consensus will be agreed upon that these alternatives shall be used for comparison purposes prior to further evaluation of each alternatives. PCG will then develop each alternative to a concept level for cost comparison and ease of construction and permitting comparison. PCG will determine if the alternative has negative hydraulic implications and will report those findings to the OWNER.

Task 1.3 – Concept Construction Cost Estimate
PCG will complete a concept-level probable construction cost estimate for each of the three to four alternatives. The estimate will be used to aid in selecting a best option from the identified alternatives.

Phase 2 – Alternative Selection:
PCG will present each of the three to four alternatives developed in Phase 1 to the OWNER in a workshop setting. PCG will lead a discussion on each of the alternatives and the associated estimated costs for rehabilitating the 20-inch raw water lines.

Phase 3 – Final Documentation:
PCG will prepare final documentation of an alternative analysis report which identifies the alternatives examined and their potential routes, estimated construction cost, and potential construction phasing in a Word document. The document will include concept level drawings in pdf format and any necessary tables. Comments and considerations identified in the Alternatives Selection Workshop will be incorporated in the final documentation. The final documentation will include quality assurance and quality control prior to submittal.

Bi-weekly progress updates will be provided to OWNER by PCG electronically.

Deliverables will be provided in digital format including Word, Excel, PDF and any other electronic formats. These include all calculations, processes and engineering documents which become the property of the OWNER for use on this project. Reuse of these documents on other projects is solely at the risk of the OWNER.

PROJECT 2 – RAW WATERLINES ALTERNATIVES ANALYSIS
EXHIBIT B – BASIS OF COMPENSATION

The compensation limits are based on the scope of services described in EXHIBIT A and include the alternatives analysis for the 20-inch raw waterlines from Flint River Pump Station to J. Harry Simmons Water Treatment Plant. Because the raw waterlines were constructed in 1929 and 1954, it is assumed that the three to four alternatives PCG will develop will include replacement and/or reconditioning of the raw waterlines through both trench and trenchless technologies and that a detailed assessment of the raw waterlines will not be conducted. Services will include report, conceptual level pdf plans, conceptual level Engineer's construction cost estimate, and a phasing plan for the most cost effective solution.

Schedule will be based on start date and will be determined closer to the anticipated start date.

Phase 1 – Alternatives Analysis:

Task 1.1 – Data Gathering and Analysis:
Professional Services Fee: Not to Exceed *$8,910* (reference attached man-hour and budget worksheet) Scope of Work: Included in EXHIBIT A

Task 1.2 – Alternatives Comparison:
Professional Services Fee: Not to Exceed *$18,650* (reference attached man-hour and budget worksheet) Scope of Work: Included in EXHIBIT A

Task 1.3 – Concept Construction Cost Estimate:
Professional Services Fee: Not to Exceed *$5,910* (reference attached man-hour and budget worksheet) Scope of Work: Included in EXHIBIT A

Phase 2 – Alternative Selection:
Professional Services Fee: Not to Exceed *$3,140* (reference attached man-hour and budget worksheet) Scope of Work: Included in EXHIBIT A

Phase 3 – Final Documentation:
Professional Services Fee: Not to Exceed *$6,690* (reference attached man-hour and budget worksheet) Scope of Work: Included in EXHIBIT A

Sub-Total of the estimated fees from Phases 1 through 3 is $43,300.

MAN-HOUR AND BUDGE WORKSHEET

PROJECT 2 - RAW WATERLINE ALTERNATIVES ANALYSIS

City of Griffin 2014 January 28

DESCRIPTION	MANHOURS AND COSTS										
	MANHOURS									COST	
	PR	SE	WWSM	SLA/PLAN	INSP/ ENG TECH	AA	DRAFT	SUB	TOTAL HOURS	DIRECT LABOR COST	TOTAL LABOR COST
	135	135	135	125	75	50	75	135			
Alternatives Analysis	**6**	**32**	**64**	**60**	**64**	**10**	**56**	**20**	**312**	**$33,470**	**$33,470**
Data Gathering and Analysis	2	8	16	24	8		24		82	$8,910	
Alternatives Comparison	2	16	32	32	32	8	32	20	174	$18,650	
Concept Construction Cost Estimate	2	8	16	4	24	2			56	$5,910	
Alternative Selection	**4**	**2**	**8**	**2**	**8**	**2**	**4**	**0**	**30**	**$3,140**	**$3,140**
Alternative Selection Workshop	4	2	8	2	8	2	4			$3,140	
Final Documentation	**4**	**6**	**24**	**8**	**8**	**10**	**0**	**0**	**60**	**$6,690**	**$6,690**
Final Report	2	2	16	4	8	8			40	$4,200	
QAQC	2	4	8	4		2			20	$2,490	

Project Cost Estimate **$43,300**

PROJECT 3 - HEADS CREEK PUMP STATION CONDITION ASSESSMENT

EXHIBIT A – SCOPE OF WORK

This project will include the typical services for a condition assessment of the Heads Creek Pump Station. Equipment and infrastructure will be evaluated through on-site inspection and through data and design analysis by licensed structural, electrical, and civil engineers. The results of the condition assessment will be summarized in a report which will include the following major components:

- Hydraulic and Surge Evaluation
- Equipment Evaluation
- Structural Evaluation
- Electrical and controls evaluation
- Regulatory Review

Phase 1 – Condition/Assessment:

PCG will complete a written assessment of the condition of the Heads Creek Pump Station (HCPS) based on record drawings, operational data, site visits, and equipment manuals. The assessment will consist of the following typical tasks:

Task 1.1 – Hydraulic and Surge Evaluation:

PCG will perform a hydraulic and surge evaluation of the pump station including the travelling water screen, pumps, valves, surge tank, piping, and wet well. The evaluation will examine hydraulic loading and capacity for the pump station. The results will be summarized in a Technical Memorandum.

Task 1.2 – Equipment evaluation:

PCG will evaluate the current condition of the existing equipment used to pump water from Heads Creek Reservoir to J. Harry Simmons Water Treatment Plant. Equipment manuals, run time data, and maintenance data will be provided to PCG by OWNER in order to complete this evaluation. PCG will perform on-site evaluations of the equipment. Some equipment may require inspection off-line; such evaluations will be coordinated in advance with the OWNER as not to interfere with normal operation. The results will be summarized in a Technical Memorandum.

Task 1.3 – Structural Evaluation:

PCG will coordinate with a subconsultant (licensed structural engineer) to perform a structural evaluation of the existing HCPS including pump house, wet well, and out buildings. Core sampling may be necessary; PCG will coordinate such sampling with the OWNER as not to interfere with normal operation. The results will be summarized in a Technical Memorandum.

Task 1.4 – Electrical Evaluation:
PCG will coordinate with a subconsultant (licensed electrical engineer) to perform an electrical evaluation of the existing HCPS electrical equipment. The subconsultant will provide an "As-Built" Electrical On-Line Diagram of the existing electrical system with notes on the condition of the components. The results will be summarized in a Technical Memorandum.

Task 1.5 – Process Data Gathering and Analysis:
PCG will gather, organize, and analyze operational data provided to PCG by OWNER. The data will be used to determine operational parameters and trending. The results will be summarized in a Technical Memorandum.

Task 1.6 – Controls Evaluation:
PCG will evaluate existing pump station controls, and/or lack thereof, including controls on pumps, valves, and appurtenances. The results will be summarized in a Technical Memorandum.

Task 1.7 – Testing:
PCG will plan, schedule, and oversee testing on an as needed basis. Possible testing may include pump tests and concrete core sampling. Prior to any testing, PCG will develop a Testing Plan for approval by OWNER. All testing will be coordinated with OWNER as not to interfere with normal operation. Testing will require OWNER staff assistance which will be defined in the Testing Plan. The results will be summarized in a Technical Memorandum.

Task 1.8 – Regulatory Review:
PCG will conduct a review of regulations and permit requirements including recommended safe operating procedures. This review will be in conjunction with information gleaned from Task 5. The results will be summarized in a Technical Memorandum and used to aid in establishing design criteria for the concept design.

Task 1.9 – Condition Assessment Report and Presentation:
PCG will assemble the individual Technical Memorandums into one report describing the findings of the condition assessment. The Report will be presented to OWNER in an open workshop format. Input during the workshop will be incorporated into the final Condition Assessment Report.

Phase 2 – Final Documentation:
PCG will prepare final documentation including concept level drawings, tables, and a Word document describing the selection process and concept level design, construction cost estimate, and life cycle cost estimate. The final documentation will include quality assurance and quality control prior to submittal.

Bi-weekly progress updates will be provided to OWNER by PCG electronically.

Deliverables will be provided in digital format including Word, Excel, PDF and any other electronic formats. These include all calculations, processes and engineering documents which become the property of the OWNER for use on this project. Reuse of these documents on other projects is solely at the risk of the OWNER.

PROJECT 3 - HEADS CREEK PUMP STATION CONDITION ASSESSMENT

EXHIBIT B – BASIS OF COMPENSATION

The compensation limits are based on the scope of services described in EXHIBIT A and includes a Condition/Assessment, coordination of electrical and structural evaluations, and a concept-level design for the upgrading of the Heads Creek Pump Station.

Phase 1 – Condition/Assessment:
Professional Services Fee: Phase Sub-Total not to Exceed *$42,305* as described in Task breakdown (reference attached man-hour and budget worksheet)

Task 1.1 – Hydraulic and Surge Evaluation:
Professional Services Fee: Not to Exceed *$9,310* (reference attached man-hour and budget worksheet)

Task 1.2 – Equipment evaluation:
Professional Services Fee: Not to Exceed *$4,045* (reference attached man-hour and budget worksheet)

Task 1.3 – Structural Evaluation:
Professional Services Fee: Not to Exceed *$6,745* (reference attached man-hour and budget worksheet)

Task 1.4 – Electrical Evaluation:
Professional Services Fee: Not to Exceed *$6,475* (reference attached man-hour and budget worksheet)

Task 1.5 – Process Data Gathering and Analysis:
Professional Services Fee: Not to Exceed *$3,025* (reference attached man-hour and budget worksheet)

Task 1.6 – Controls Evaluation:
Professional Services Fee: Not to Exceed *$2,275* (reference attached man-hour and budget worksheet)

Task 1.7 – Testing:
Professional Services Fee: Not to Exceed *$4,445* (reference attached man-hour and budget worksheet)

Task 1.8 – Regulatory Review:
Professional Services Fee: Not to Exceed *$1,450* (reference attached man-hour and budget worksheet)

Task 1.9 – Condition Assessment Report and Presentation:
Professional Services Fee: Not to Exceed *$4,535* (reference attached man-hour and budget worksheet)

Phase 2 – Final Documentation/QAQC:
Professional Services Fee: Not to Exceed *$6,595* (reference attached man-hour and budget worksheet) Scope of Work: Included in EXHIBIT A

Sub-Total of the estimated fees from Phases 1 and 2 is $48,900.

MAN-HOUR AND BUDGET WORKSHEET

PROJECT 3 - HEADS CREEK PUMP STATION CONDITION ASSESSMENT AND CONCEPT DESIGN

City of Griffin 2014 January 28

DESCRIPTION	MANHOURS AND COSTS										
	MANHOURS									COST	
	PR	SE	WWSM	SLA/PLAN	INSP/ENG TECH	AA	DRAFT	SUB	TOTAL HOURS	DIRECT LABOR COST	TOTAL LABOR COST
	135	135	135	125	75	50	75	135			
Condition/Assessment	**19**	**9**	**116**	**0**	**42**	**22**	**16**	**129**	**353**	**42,305**	**42,305**
Hydraulic and Surge Evaluation	2	1	20		4	2		43	72	9,310	
Equipment Evaluation	2	1	24		4	2			33	4,045	
Structure Evaluation	2	1	12		4	2		32	53	6,745	
Electrical Evaluation	2	1	12		4	2		30	51	6,475	
Process Data	2	1	12		12	2			29	3,025	
Controls	2	1	4		2	2		8	19	2,275	
Testing	2	1	8		8	4		16	39	4,445	
Regulatory Review	1	1	8			2			12	1,450	
Condition Assessment Report and Presentation	4	1	16		4	4	16		45	4,535	
Final Documentation	**4**	**3**	**16**	**4**	**4**	**4**	**8**	**14**	**57**	**6,595**	**6,595**
Final Report	2	1	12	2	4	2	8	8	39	4,355	
QAQC	2	2	4	2		2		6	18	2,240	

Subtotal **$48,900**