

STATE OF TEXAS

COUNTY OF WILLIAMSON

SUPPLEMENTAL CONTRACT NO. 1 TO CONTRACT FOR ENGINEERING SERVICES

FIRM:	CP&Y, INC.	("Engineer")
ADDRESS:	13809 Research Boulevard, Suite 300, Austin, TX 78750	
PROJECT:	Southeast GST Pump Improvements & S81 Elevated Tank Put	mp Station

This Supplemental Contract No. 1 to Contract for Engineering Services is made by and between the City of Round Rock, Texas, hereinafter called the "City" and CP&Y, Inc., hereinafter called the "Engineer".

WHEREAS, the City and Engineer executed a Contract for Engineering Services, hereinafter called the "Contract", on the 12th day of November, 2015 for the Southeast GST Pump Improvements & S81 Elevated Tank Pump Station Project in the amount of \$149,833.00; and

WHEREAS, it has become necessary to amend the Contract to modify the provisions for the scope of services and to increase the compensation by \$332,629.00 to a total of \$482,462.00;

NOW THEREFORE, premises considered, the City and the Engineer agree that said Contract is amended as follows:

I.

<u>Article 1, City Services</u> and <u>Exhibit A, City Services</u> shall be amended as set forth in the attached <u>Addendum To Exhibit A</u>.

II.

<u>Article 2, Engineering Services</u> and <u>Exhibit B, Engineering Services</u> shall be amended as set forth in the attached <u>Addendum To Exhibit B</u>. <u>Exhibit C, Work Schedule</u> shall be amended as set forth in the attached <u>Addendum To Exhibit C</u>.

III.

<u>Article 4, Compensation</u> and <u>Exhibit D, Fee Schedule</u> shall be amended by increasing by \$332,629.00 the lump sum amount payable under the Contract for a total of \$482,462.00, as shown by the attached <u>Addendum to Exhibit D</u>.

IN WITNESS WHEREOF, the City and the Engineer have executed this Supplemental Contract in duplicate.

CP&Y, INC.

By:_____

Date

CITY OF ROUND ROCK

APPROVED AS TO FORM:

By: ____

Alan McGraw, Mayor

Stephan L. Sheets, City Attorney

Date

ADDENDUM TO EXHIBIT A City Services

The City will continue to furnish the following information to the Engineer and/or perform the following tasks:

- 1. Provide existing reports or data the City has on file concerning the project, if available.
- 2. Provide any available as-built plans for previous facility projects impacting the project.
- 3. Provide any available as-built plans for any water lines that are near to, tie into or might affect the design of the project.
- 4. Provide any available utility, parcel and/or topographic mapping information of the project area.
- 5. Assist the Engineer, as necessary, in obtaining any required data and information from the State, County, neighboring Cities and/or other franchise utility companies.
- 6. Assist the Engineer by requiring appropriate utility companies to expose underground utilities within the right-of-way, when required.
- 7. Give prompt written notice to the Engineer whenever the City observes or otherwise becomes aware of any development that affects the scope of the Engineer's services.
- 8. Meet on an as needed basis to answer questions, provide guidance and offer comment.
- 9. Pay all fees associated with approvals and/or permits from entities when such approvals and/or permits are necessary as determined by the City.
- 10. Assist with property owner coordination for Right-of Entry.
- 11. Secure easements (using documents prepared by Engineer) as required for construction of improvements described in Engineer's final design plans.
- 12. Obtain necessary permits, including TxDOT permits, as required for performing work and installing water lines in the state right-of-way.
- 13. Provide modeling information for hydraulic review through City staff and others.
- 14. Pay for costs associated with newspaper public notice for bid advertisement.
- 15. Secure easements (using documents prepared by Engineer) as required for construction of improvements described in Engineer's final design plans.
- 16. Provide construction inspection and construction testing services including coordination and scope of services.
- 17. Review the Application for Payment and supporting documentation submitted by the Contractor.
- 18. Provide SCADA Programming services including local and top end configuration.

ADDENDUM TO EXHIBIT B Engineering Services

GENERAL

In addition to the scope outlined in the Preliminary Engineering Scope of Services Proposal for the Southeast (SE) Ground Storage Tank (GST) and South 81 Elevated Storage Tank (EST) Pump Station Improvements project, dated November 17, 2015, the engineer shall provide design, bid and construction phase services for the improvements recommended in the final Preliminary Engineering Report. The South 81 Pump Station Improvements will be accomplished within the existing structure and will not include a new building. The scope of services and tasks are fully described below.

TASK I

I. BASIC SERVICES

B. DESIGN AND BID DOCUMENT PREPARATION

1. PROJECT MEETINGS

- (a) Attend, conduct and document up to eight project meetings. Prepare meeting minutes including action items to help maintain project schedule.
- (b) Coordinate/attend internal meetings and perform project administration.
- (c) Perform project coordination/reviews of subconsultant work.
- (d) Prepare for and attend up to two site visits.

2. PREPARATION OF CONSTRUCTION PLANS

- (a) Cover sheet, sheet index, site locations and general notes.
- (b) General abbreviations, drafting symbols and legend.
- (c) Civil, architectural, structural, mechanical, electrical, and instrumentation sheets identifying improvements per facility as generally described and approved in the Preliminary Engineering Report.
- (d) Yard piping plan and profile sheets identifying existing utilities and topographic features for proposed pipes greater than 6 inches in diameter. Scale will be 1"=50' horizontal and 1"=5' vertical.
- (e) Construction details.
- (f) Erosion and sedimentation control sheets.
- (g) Prepare project manual according to City's standard front end documents and technical specifications.
- (h) Perform internal QA/QC prior to each submittal.
- (i) Submittal to TCEQ
- (j) Prepare Design Plans, Specifications, and Engineer's Opinion of Probable Construction Cost at 60%, 90% and 100% design. Include three half size sets of plans for City's review and respond to review comments.
- (k) Issue Final Plans and Project manual for Advertisement and Bidding of the Project.

C. BID PHASE SERVICES

1. BID PHASE SERVICES

- (a) Conduct pre-bid meeting with City for interested contractors. Provide agenda and sign in sheet.
- (b) Distribute bid documents and maintain plan holders' list through Document Engine.
- (c) Address and respond to questions and interpretation of bid documents.
- (d) Prepare and issue addenda to the bid documents if necessary.
- (e) Conduct bid opening at City location, tabulate and review all bids for correctness.

- (f) Review qualifications of apparent low bidder and others as needed.
- (g) Recommend award of contract or other actions to be taken by the City.

D. CONSTRUCTION PHASE SERVICES

1. CONSTRUCTION PHASE SERVICES

- (a) Attend one (1) pre-construction conference with the Owner and the Contractor, review the Contractor's construction schedule and issue meeting notes to the Owner.
- (b) Engineer will incorporate addenda items to the bidding document and issue Conformed Set of documents after the bid opening.
- (c) Engineer will attend monthly construction progress meetings at the request of the Owner. Engineer will attend a maximum of ten (10) meetings; fee is based on this number of meetings.
- (d) The Engineer will make periodic visits (typically combined with progress meetings) to the Project sites at intervals appropriate to the various stages of construction to observe the progress and quality of the Contractor's work. Engineer will visit the sites up to once a month, two (2) hours per visit, for a total of ten (10) months. Based on the information obtained during such visits, the Engineer will endeavor to determine if the Contractor's work is proceeding in accordance with the Contract Documents. The purpose of such project site visits and such observations is to keep the Owner generally informed of the progress of the Contractor's work and to determine if the completed work of the Contractor conforms in general to the design concept indicated in the Construction Contract Documents. On the other hand, the Engineer shall not, during such visits or as a result of such observations, supervise, direct, or have control over the Contractor's work nor shall the Engineer have authority over or responsibility for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, for safety precautions and programs incident to the work of the Contractor or for any failure of the Contractor to comply with rules, regulations, ordinances, codes or orders applicable to the Contractor's performance of the work. The Contractor shall have sole authority over and responsibility for:
 - (i) the means, methods, techniques, sequences, and procedures of construction
 - (ii) safety precautions and programs incident to the construction, and
 - (iii) compliance with rules, regulations, ordinances, codes and orders applicable to the construction. The Engineer neither guarantees the performance of the Contractor nor assumes any responsibility for the Contractor's failure to furnish and perform its work in accordance with the Construction Contract Documents.
- (e) Issue necessary clarifications and interpretations of the Construction Contract Documents as appropriate to the orderly completion of the Contractor's work. Such clarifications and interpretations will be consistent with the intent and reasonably inferable from the Construction Contract Documents. Up to 14 Requests for Information (RFIs) are included.
- (f) Make recommendations to the Owner regarding change orders as appropriate and when directed by the Owner, and prepare up to 4 Change Orders as reasonably required. Preparation of Change Orders, which result from significant changes in the scope, extent, or character of the Project designed by the Engineer, is not included in this scope of services.
- (g) Review samples, catalog data, schedules, submittals, shop drawings, laboratory, shop and mill tests of material and test equipment and other data as required by the Construction Contract Documents, but only for conformance with the design concept indicated in the Construction Contract Documents. Such reviews will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto. Up to 48 submittals/O&Ms are included.

- (h) Upon notice from the Contractor that the Contractor's work is ready for its intended use, conduct, in company with the Owner's representative and the Contractor, an observation to determine if the work is substantially complete. If the Owner and the Engineer consider the work substantially complete, issue a certificate of substantial completion containing a list of required tasks for the Contractor to complete prior to issuance of certificate of final completion. Conduct a final walk through together with the Owner and the Contractor to determine if the work has reached final completion so that the Engineer may recommend final payment to the Contractor. If appropriate, make recommendations to the Owner for final payment to the Contractor.
- (i) Receive, review and transmit to the Owner maintenance and operating instructions, warranties and guarantees, marked up As-built documents received from the Contractor, which reflect field changes to the bid documents. The Engineer will review the documents to ascertain, to the best of the Engineer's knowledge and belief, that the reflected field changes are complete and correct.
- (j) Prepare Project record drawings incorporating compiled change orders and field changes that are received from the Owner and the Contractor. Three (3) sets of prints of "Record Drawings" will be submitted by the Engineer to the Owner on 11x17 paper copies.
- (k) Submit to the Owner electronic files used for the production of the Record Drawings. The Engineer shall deliver the electronic files, on CD, to the Owner. Record drawings on electronic files furnished to the Owner are for the convenience of the Owner only. The Record Drawings shall be sole documents relied upon by the Owner as a reflection of the condition of the project location after completion of the construction activities.

II. SPECIAL SERVICES

A. SURVEY SERVICES

- Surveyor will provide the professional and technical staff necessary to perform a detailed topographic survey of sites referenced above. The survey will include at a minimum topography, improvements, fences, visible utilities, identifiable appurtenances, drainage structures, etc. Surveyor will obtain flow line elevations & pipe sizes (if ascertainable) for each wastewater and storm drain manhole within the limits of the survey area. We will also submit a utility locate request to Texas811 for the segment along the roadway and survey in their markings. We will set two horizontal control points within the limits of the survey and provide one benchmark. This survey will show property lines with a best fit to found property corners and record ownership lines. Replacement of missing property corners is not proposed.
- 2. Surveyor will provide one exhibit and legal for a combined easement/temp easement at the SE GST site.

B. GEOTECHNICAL SERVICES

- 1. Perform two (2) borings to a depth of about twenty (20) feet at the South 81 EST site only. The borings will be used to investigate subsurface stratigraphy and to obtain samples for laboratory testing.
- 2. Laboratory testing will be performed to determine the soil's plasticity and strength characteristics. Testing will include:
 - (a) U.S.C.S. Soil Classification
 - (b) Atterberg Limits Tests
 - (c) Sieve Analysis
 - (d) Moisture Content
 - (e) Unconfined Compressive Strength
- 3. The Geotechnical Engineer will prepare a geotechnical report that will present recommendations for the new electrical building, pump pad, and paving improvements. The geotechnical report will include:
 - (a) General subsurface conditions, discussion of site geology

- (b) Boring logs with descriptions of strata and laboratory test results, and water levels obtained at the time of drilling
- (c) Boring location plan
- (d) Foundation design recommendations for the proposed improvements.
- 4. The Engineer will meet with the geotechnical subconsultant on a regular basis to coordinate their work on the project.

C. PUMP INSPECTION & REPAIRS

1. The pump representative will inspect Pump No. 2 and Pump No. 3 just prior to removal, inspect the rotating element at removal, and inspect element teardown/clean-up. The pump representative will remove Pump No. 2 and Pump No. 3, transport to their shop and perform pump repairs. Planned pump repairs and budget are based on recent Pump No. 1 repairs. After repairs are complete, the pumps will be re-installed and tested on site. A report of inspection, repair and testing results with color photographs, measurements, clearances and condition will be provided, along with conclusions.

ADDENDUM TO EXHIBIT C Work Schedule

Task	Duration (Days)	Completion Date
Notice to Proceed	N/A	Aug 1, 2016
60% Design	84	Oct 24, 2016
90% Design	98	Jan 30, 2017
100% Design	56	Mar 27, 2017
Bid Phase	63	May 29, 2017
Construction	305	Mar 30, 2018

ADDENDUM TO EXHIBIT D Fee Schedule

Attached Behind This Page

Southeast GST and South 81 EST Pump Station Improvements Project

Task Description	Total Labor Hours	Total Loaded Labor Cost
I. BASIC SERVICES		
A. PRELIMINARY ENGINEERING		
B. DESIGN AND BID DOCUMENT PREPARATION	954	\$ 104,782.00
C. BID PHASE SERVICES	86	\$ 9,988.00
D. CONSTRUCTION PHASE SERVICES	392	\$ 43,252.00
E. EXPENSES	NA	\$ 1,777.00
F. ELECTRICAL DESIGN, BID	732	\$ 76,850.00
G. ELECTRICAL CONSTRUCTION	266	\$ 25,250.00
SUB-TOTAL BASIC ENGINEERING SERVICES	2,430	\$ 261,899.00
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II. SPECIAL SERVICES		
		7 000 00
A. SURVEY B. GEOTECHNICAL BY HOLT		\$ 7,230.00 \$ 3,500.00
B. GEOTECHNICAL BY HOLT C. PUMP IMPROVEMENTS BY SMITH PUMP CO.		\$ 3,500.00 \$ 60,000.00
C. POMP IMPROVEMENTS BY SMITH POMP CO.		\$ 60,000.00
SUB-TOTAL SPECIAL SERVICES	-	\$ 70,730.00
TOTAL (BASIC & SPECIAL SERVICES & EXPENSES)	2,430	\$ 332,629.00
III. ADDITIONAL SERVICES		
SUB-TOTAL ADDITIONAL SERVICES		\$-
		¥
GRAND TOTAL (BASIC, SPECIAL & ADDITIONAL SERVICES,		
EXPENSES)	2,430	\$ 332,629.00

Exhibit D

Southeast GST and South 81 EST Pump Station Improvements Project

Task Description		Task Description		Task Description		Project Principal	Project Manager	Senior Engineer	Project Engineer	CADD Operator	E.I.T.	Admin / Clerical	Total Labor Hours	Total Direct Labor Costs
		\$230.00	\$165.00	\$185.00	\$135.00	\$90.00	\$86.00	\$75.00						
BASIC SERVICES														
B. DESIGN AND BID DOCUMENT PREPARATION														
1 Project Meetings														
a Attend, conduct and document 8 project meetings			8		8		24		40	\$ 4,464.00				
b Internal Meetings and Administration	-		<u> </u>		6		6	16	40	\$ 4,836.00				
c Coordination Meetings and Administration	-		14		8		8	10	42	\$ 1,768.00				
d Site visit meetings (2)	-		6		6		6		18	\$ 2.316.00				
u Site visit meetings (2)		0	28	0	28	0	44	16	116	\$ 13,384.00				
2 Preparation of Construction Plans	_	v	20	U	20	U	44	10	110	φ 13,364.00				
a Cover sheet, index, site locations, general notes	4				2	16	8		26	\$ 2,398.00				
b General Abbreviations, drafting symbols and legend	4				2	4	4		10	\$ 974.00				
c Structural and mechanical general notes	3		2		8	12	12		34	\$ 3.522.00				
d Civil details	3		2		<u> </u>	8	8		20	\$ 3,522.00				
e Standards spec, special specs, special provisions prep	na		2	8	32	0	o 80	16	144	\$ 2,008.00				
f Perform internal QA/QC prior to each submittal		2	0 12	<u> </u>	32		00	10	46	\$ 15,200.00				
g Prepare OPCC, plans, specs at 60%,90%,& final design	na na	2	6	32			6		40	\$ 1,506.00				
g Prepare OPCC, plans, specs at 60%,90%,& iniai design	na		0				0		12	1				
PHASE 1 - SOUTHEAST GST PUMP STATION										\$ -				
	-					10	40			- ¢				
a Site layout, demolition and yard piping plan b Drainage/erosion & sedimentation control (ESC) sheets	2		2		4	16	<u>16</u> 8		38	\$ 3,686.00 \$ 2.008.00				
	1		2		2	8			20					
	1		۷		2	8	6		18	\$ 1,836.00				
d Stormwater Details (SWP3 by contractor)	-								00	> -				
e Structural plans and details	2			4		8	8		20	\$ 2,148.00				
f Mechanical plans, process, elevations, details			8		20	24	24		76	\$ 8,244.00				
g SCADA architecture and loop diagrams	4			6		12	16		34	\$ 3,566.00				
h Instrumentation design and details	2			6		12	16		34	\$ 3,566.00				
i Control Narratives	na			6			8		14	\$ 1,798.00				
	_									\$ -				
PHASE 2 - SOUTH 81 EST PUMP STATION										\$-				
a Site layout, demolition, grading, paving and yard piping plan	2		2		4	16	16		38	\$ 3,686.00				
b Drainage/erosion and sedimentation control (ESC) sheets	1		2		2	8	8		20	\$ 2,008.00				
c ESC notes and details	1		2		2	8	6		18	\$ 1,836.00				
d Stormwater Details (SWP3 by contractor)	_									\$-				
e Structural plans and details	3			6		16	16		38	\$ 3,926.00				
f Mechanical plans, process, elevations, details	5		8		24	32	32		96	\$ 10,192.00				
g SCADA architecture and loop diagrams	4			6		12	16		34	\$ 3,566.00				
h Instrumentation design and details	2			6		12	16		34	\$ 3,566.00				
i Control Narratives	na			6			8		14	\$ 1,798.00				
		2	58	86	106	232	338	16	838	\$ 91,398.00				

Southeast GST and South 81 EST Pump Station Improvements Project										
City of Round Rock										
Fee Schedule/Budget for CP&Y, Inc.										
Task Description	No. of PS&E Sheets	Project Principal	Project Manager	Senior Engineer	Project Engineer	CADD Operator	E.I.T.	Admin / Clerical	Total Labor Hours	Total Direct Labor Costs
		\$230.00	\$165.00	\$185.00	\$135.00	\$90.00	\$86.00	\$75.00		
I. BASIC SERVICES										
C. BID PHASE SERVICES										
1 Bid Phase Services										
 Conduct pre-bid meeting and provide agenda/sign in sheet 			4				6		10	\$ 1,176.00
b Distribute bid documents and maintain plan holders' list							8		8	\$ 688.00
 c Address and respond to questions and interpretation of bid documents 			4		6		8		18	\$ 2,158.00
 d Prepare and issue addenda to the bid documents if necessary 			4		6		8		18	\$ 2,158.00
Conduct bid opening at City location, tabulate and review all bids for										
e correctness			4				8		12	\$ 1,348.00
f Review qualifications of low bidder and others as needed					4		8		12	\$ 1,228.00
g Recommend award of contract or other actions to be taken by City		2	2		2		2		8	\$ 1,232.00
		2	18	0	18	0	48	0	86	\$ 9,988.00

Southeast GST and South 81 EST Pump Station Improvements Project

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Fee Schedule/Budget for CP&Y, Inc.										
Task Description	No. of each	Project Principal	Project Manager	Senior Engineer	Project Engineer	CADD Operator	E.I.T.	Admin / Clerical	Total Labor Hours	Total Direct Labor Costs
		\$230.00	\$165.00	\$185.00	\$135.00	\$90.00	\$86.00	\$75.00		
I. BASIC SERVICES										
D. CONSTRUCTION PHASE SERVICES										
1 Construction Phase Services										
Attend one (1) pre-construction conference, review construction schedule and										
a issue meeting notes.	1		3				6		9	\$ 1,011.00
 b Prepare, Review Project conformed drawings; submit three (3) 11x17 sets 			2		4	16	12		34	\$ 3,342.00
c Periodic Site Visits; 1 x per month @ 10 months	10		10		10		10		30	\$ 3,860.00
d Construction Meetings Combined with Site Visits and Admin (10)	10		10		10		20	10	50	\$ 5,470.00
Issue necessary clarifications and interpretations of construction documents,										
e RFIs	4		4	3	6		8		21	\$ 2,713.00
f Make recommendations regarding change orders	3		5		5		5		15	\$ 1,930.00
g Review submittals for conformance with design concept	23		5	4	25		81		115	\$ 11,906.00
h Structural submittals, RFIs and coordination	4			4		4	12		20	\$ 2,132.00
i I&C submittals, RFIs and coordination	6			12		4	14		30	\$ 3,784.00
j Substantial Completion Walk and Punch List			4		4		8		16	\$ 1,888.00
k Receive, review and transmit to Owner bid documents with field changes					2		4		6	\$ 614.00
I Prepare, Review Project record drawings; submit three (3) 11x17 sets			2		8	24	10		44	\$ 4,430.00
m Submit electronic files used for production of Record Drawings							2		2	\$ 172.00
		0	45	23	74	48	192	10	392	\$ 43,252.00

Southeast GST and South 81 EST Pump Station Improvements Project

Expense Item	Unit Cost	Amount	Total Cost		
CADD Plotting	\$ 1.50	400	\$ 600.00		
Mylar Plots	\$ 6.00		\$ -		
Digital Ortho Plotting	\$ 2.00		\$-		
11" X 17" Mylar	\$ 1.00		\$ -		
8 1/2" X 11" B/W Paper Copies	\$ 0.10	5,000	\$ 500.00		
11" X 17" B/W Paper Copies	\$ 0.15	2,480	\$ 372.00		
8 1/2" X 11" Color Paper Copies	\$ 1.00		\$ -		
11" X 17" Color Paper Copies	\$ 1.80		\$-		
Fax Copies	\$ 0.10		\$ -		
Film and Development	\$ 8.00		\$-		
4 X 6 Digital Color Prints	\$ 0.50		\$ -		
Oversized Digital Color Prints	\$ 50.00		\$ -		
Standard Postage	\$ 0.44		\$-		
Express Mail (Standard)	\$ 15.00	2	\$ 30.00		
Express Mail (Oversized)	\$ 30.00		\$-		
Deliveries	\$ 25.00		\$ -		
Airfare	\$ 200.00		\$ -		
Rental Car	\$ 80.00		\$ -		
Lodging	\$ 85.00		\$ -		
Meals	\$ 36.00		\$ -		
Mileage	\$ 0.550	500	\$ 275.00		
GPS Rental	\$ 100.000		\$ -		
Cultural Resources Archival Research	\$ 500.000	0	\$ -		
HazMat Database Search	\$ 200.000		\$ -		
Miscellaneous Project Related Expenses	at cost	NA	\$ -		
SUBTOTAL DIRECT EXPENSES			\$ 1,777.00		