

THE STATE OF TEXAS §

THE COUNTY OF FORT BEND §

**FIRST AMENDMENT TO INTERLOCAL AGREEMENT
FOR THE PROCUREMENT OF ENGINEERING SERVICES**

THIS FIRST AMENDMENT TO INTERLOCAL AGREEMENT FOR THE PROCUREMENT OF ENGINEERING SERVICES ("First Amendment") is entered into on _____, _____, by Fort Bend Drainage District ("Drainage District") and the City of Sugar Land, Texas ("City").

RECITALS

WHEREAS, the Drainage District and the City entered into the Interlocal Agreement for the Procurement of Engineering Services, effective June 18, 2006 ("Original Agreement" and together with this First Amendment, the "Agreement"), to obtain engineering services for the purpose of designing plans and specifications for the Ditch "H" Channel Extension to Oyster Creek, and

WHEREAS, due to design changes necessary to coordinate with Union Pacific Railroad, the parties wish to amend the Original Agreement as follows:

SECTION 1. Article 3 of the Original Agreement is deleted in its entirety and replaced with the following:

**Article 3
Cost to Each Party and Payment of Invoices**

Brown & Gay has quoted a price not to exceed \$339,000 for the completion of the Ditch "H" Engineering Services as shown in Exhibits B and C, attached to and incorporated in this Agreement by reference. Each party to this Agreement shall be responsible for paying one-half of the cost of the Ditch "H" Engineering Services. Services performed in addition to the scope listed in Exhibit A and all costs associated with the additional services shall be approved by the City and Drainage District prior to the commencement of the additional services.

The Drainage District and the City shall review and approve all invoices submitted for the Ditch "H" Engineering Services. As invoices for the Ditch "H" Engineering Services are received, the Drainage District shall bill the City for one-half (1/2) of the cost of each invoice. The City shall pay to the Drainage District amounts due under each bill within 45 days of the receipt of the bill from the Drainage District.

7-22-09 2 orig. ret. to Rose Ann
at Drainage

SECTION 2. Exhibit A to the Original Agreement is deleted in its entirety in its entirety and replaced with Exhibit A, attached to this First Amendment and incorporated in the Agreement by reference.

SECTION 3. Except as provided by this First Amendment, the terms of the Original Agreement remain in effect.

IN WITNESS WHEREOF, the parties have executed this First Amendment in multiple copies, each of which is deemed to be an original of the same Agreement. This First Amendment is effective on the latest date of the dates signed by both parties.

FORT BEND DRAINAGE DISTRICT


Robert E. Hebert

Drainage District Board Chairman

July 21, 2009
(Date)

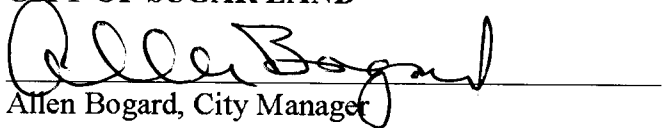
ATTEST:



Diane Wilson, County Clerk

DIANNE

CITY OF SUGAR LAND



Allen Bogard, City Manager

7-14-09
(Date)

ATTEST:



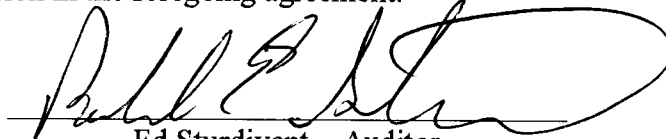
Glenda Gundermann, City Secretary

Reviewed for Legal Compliance:

Arrow Boles

Auditor's Certificate

I hereby certify that funds are available in the amount of \$ 339,000.⁰⁰ to pay the Drainage District's obligation in the foregoing agreement.



Ed Sturdivant, Auditor

ATTACHMENT A

General

From the recommendations in the October 2002 "Upper Oyster Creek and Ditch H Drainage Study and Improvement Plan" (the Study) prepared for Fort Bend County, the City of Sugar Land and Levee Improvement District No. 2; this project proposes a construction plan for the extension of Ditch H from its existing terminus downstream of US 90A up to Oyster Creek. All documents generated as part of this project will be the property of the project participants, and will be furnished to the participants when required.

Final Design Tasks

100 – Surveying and Environmental Services

1. Obtain an environmental permit for the project under nationwide authority.
2. Prepare archaeological report for cultural resource investigation of the site.
3. Prepare legal description/s and exhibits for any additional easements or right-of-way necessary for this project. This will be in a form that can be attached to the easement document for recording. Estimate is based on four tracts (Const access (2 places), fill placement, and storm sewer)
4. Obtain supplemental topography at upstream end of box culverts and along SH 6 where highway construction has altered the area.
5. Stake boundaries of the proposed right-of-way and the project baseline in the field. Place iron rods, if necessary.

150 – Union Pacific Railroad (UPRR) Coordination

1. Provide UPRR design consultant with surveying data.
2. Coordinate the Ditch "H" Extension design requirements with UPRR bridge design.
3. Evaluate the HEC-RAS hydraulic model with the proposed bridge in place.
4. Attend meetings and provide technical support to Fort Bend County for UPRR contract negotiations.
5. Prepare TXDOT driveway permit for UPRR access road.

200 – HEC-RAS Model Evaluation and Reporting

1. Develop unsteady flow HEC-RAS model (using FEMA model data) to evaluate preliminary engineering design layout.
2. Develop design refinements/modifications to accommodate revised hydraulic model results.
3. Hydraulic evaluation of design refinements/modifications to accommodate revised hydraulic model results.
4. Prepare H&H Report in accordance with UPRR guidelines for 60% design submittal.

300 – Final Engineering and Contract Document Preparation

1. Prepare cover sheet, general notes, control survey and standard detail drawings (4 sheets) in accordance with Fort Bend County and City of Sugar Land Design Standards.
2. Prepare plan and profile drawings including , baffled chute, channel modifications, culvert installation, and storm sewer (6 sheets).

ATTACHMENT A

3. Prepare cross-sections for weir structure, baffled chute, channel modifications, culvert installation, and storm sewer (4 sheets).
4. Prepare details for channel modifications, culvert installation, and storm sewer.
5. Prepare structural details for weir structure, baffled chute, channel modifications, culvert installation, and storm sewer (8 sheets).
6. Prepare plan and details for stormwater pollution prevention (2 sheets).
7. Prepare 60% design submittal for review and comment including 60% plans, specifications list, and cost estimates.
8. Incorporate 60% design comments and complete drawings.
9. Prepare 90% design submittal for review and comment including 90% plans, specifications, and cost estimates.
10. Incorporate 90% design comments and complete drawings.
11. Prepare bid document submittal for review and concurrence including plans, specifications, and cost estimates.
12. Obtain private utility approval for design documents.
13. Obtain public agency approval for design documents.
14. Submit approved design documents for bids.
15. Provide bidding assistance including pre-bid meeting, preparation of addenda (as required), bid tabulation, bid evaluation, and recommendation.
16. Incorporate Brazos River stop log structure into spillway design at 90% submittal. See attached additional services request (updated to current rate schedule).

400 – Construction Phase Services

1. Meetings
 - a. Engineer shall attend the construction kickoff meeting, respond to questions and prepare minutes of the meeting for submittal to the District within three (3) days after the meeting.
 - b. Engineer shall attend monthly project status meetings at the project site conducted by the District. Engineer shall report on the status of submittals and responses to design-related questions and requests for information (RFI). The Engineer shall prepare progress meetings minutes.
2. Submittals
 - a. Engineer will review contractor's submittals for general conformance with the Contract required by the technical specifications. Submittals to be reviewed by Engineer include samples, catalog data, schedules, shop drawings, laboratory data, shop and mill test reports, material test reports, and any other data required by the Contract Documents. Engineer shall document review comments, review action and maintain a log of the contractor submittals.
 - b. The Engineer shall prepare written responses to written RFIs from the Contractor, the City, or the District. Engineer shall prepare written responses, supplemented with elementary sketches, as required. Engineer shall maintain a log of receipt, review action taken, and the transmittal of requests for information received.

ATTACHMENT A

- c. Engineer shall assist the District with review of proposals and change order requests that may originate from Contractor, City, or District. Potential change orders shall be reviewed for conformance with original design intent. Engineer shall maintain a log of the receipt, review action taken, and the transmittal of forms received from the District.
3. Observation
 - a. Engineer shall perform periodic observation (a minimum of one site visit per month in addition to monthly project status meetings) of the progress and quality of executed work. Engineer shall provide his opinion to the District regarding progress of the work and its conformance with Contract Documents.
 - b. Engineer shall assist the District to determine if substantial completion requirements have been satisfied. Engineer's services shall be limited to job site visits for the purpose of preparing one punch list for substantial completion review and one punch list for final acceptance review. Engineer shall prepare and submit a letter stating that the project has been constructed substantially in accordance with the Contract Documents.
4. Final Project Documentation
 - a. Upon written authorization of the District, Engineer shall perform calculations to determine final excavation and material quantities for the project and assist the District in determining other final payment quantities.
 - b. Update H&H models and supporting spreadsheets to reflect the performance of the as-built project.
5. Provide as-built drawings to participants upon construction completion to show changes from original design that were constructed in the completed project (based on 24 sheets).



Project: Ditch H Channel Extension to Oyster Creek - Final Design
 Client: Fort Bend County & City of Sugar Land
 Date: 03/31/2009
 By: ow/rl
 Filename: M:\Projects\FBC\15-02\Admin\Contract\Proposal\20090331\20090401-Revised Proposal Fee-Ditch H Examtion.xls\Proposal 090331

ATTACHMENT B

Scope of Work and Estimated Engineering Fee for Ditch H Channel Extension to Oyster Creek (Updated)

Task No.	Description	Engineering Hours					Surveying Hours			Sub-Consultant	Cost
		Pin	PM	Eng	BT/Des	CAD/Clerk	RPLS	LS Tech	LS Crew		
100 - Surveying and Environmental Services											
1	Obtain Environmental Permit for constructing the project		8			4				\$ 9,680	\$ 11,200
2	Prepare archaeological investigation report for the site	2	8			4				\$ 10,995	\$ 12,915
3	Prepare legal descriptions and exhibits for any additional easements or rights-of-way necessary for this project. Estimate is based on four tracts (Coast access (2 plots), fill placement, and storm sewer)		4				8	32	32		\$ 8,400
4	Obtain supplemental topography at upstream end of box culverts and along SH 6 where highway construction has altered the area.		4	16	4		2	4	24		\$ 6,800
5	Stake boundaries of the proposed right-of-way and the project baseline in the field. Place iron rods, if necessary.						4	6	24		\$ 4,250
Subtotal Surveying and Environmental Services		2	24	16	4	8	14	42	80	\$	\$ 43,565
150 - Union Pacific Railroad (UPRR) Coordinates											
1	Provide UPRR design consultant with surveying data	2	20								\$ 3,600
2	Coordinate the Ditch "H" Extension design requirements with UPRR bridge	2	60								\$ 10,000
3	Evaluate the HEC-RAS hydraulic model with the proposed bridge in place	2	20	16	16	20					\$ 8,160
4	Attend meetings and provide technical support to Fort Bend County for UPRR contract negotiations	6	40								\$ 7,600
5	Prepare TXDOT driveway permit for UPRR access road	2	10	16	16	40					\$ 7,760
Less - Original Contract Task C.12 - Union Pacific Railroad Approval		-2	-24	-16	-8	-16					\$ (7,840)
Subtotal Surveying and Environmental Services		14	150	32	32	60	0	0	0	\$	\$ 28,280
200 - HEC-RAS Model Evaluation and Reporting											
1	Develop unsteady flow HEC-RAS model (using FEMA model data) to evaluate preliminary engineering design layout.	2	24	60	32	16					\$ 15,280
2	Develop design refinements/modifications to accommodate revised hydraulic model results	1	16	40	20	4					\$ 9,600
3	Hydraulic evaluation of design refinements/modifications to accommodate revised hydraulic model results	1	16	40	20						\$ 9,360
4	Prepare H&H Report in accordance with UPRR guidelines for 60% design submittal		8	20	8						\$ 4,400
Subtotal Reevaluate HEC-RAS Model Results		4	64	160	80	20				\$	\$ 38,640



Project: Ditch H Channel Extension to Oyster Creek - Final Design
 Client: Fort Bend County & City of Sugar Land
 Date: 03/31/2009
 By: cwjfd
 Filename: M:\Projects\Fbc\FBC15-02\Admin\Contract\Proposal\20090331\20090401-Revise Proposal Fee-Ditch H Extension.xls\Proposal 090331

ATTACHMENT B

Scope of Work and Estimated Engineering Fee for Ditch H Channel Extension to Oyster Creek (Updated)

Task No.	Description	Engineering Hours					Surveying Hours			Sub-Consultant	Cost
		Prin	PM	Eng	EIT/Des	CAD/Clerk	RPLS	LS Tech	LS Crew		
300 - Final Engineering and Contract Document Preparation											
1	Prepare cover sheet, general notes, control survey and standard detail drawings		2	8	8	24					\$ 3,440
2	Prepare plan and profile drawings including channel improvements, weir structure, beffed chute, culvert installation, and storm sewer	4	20	40	60	80					\$ 19,000
3	Prepare cross-sections for weir structure, beffed chute, channel modifications, culvert installation, and storm sewer		16	24	40	80					\$ 13,840
4	Prepare details for channel modifications, culvert installation, and storm sewer		16	24	40	80					\$ 13,840
5	Prepare structural details for weir structure/beffed chute, stilling basin retaining walls, culvert headwall, and junction box		32	48	120	100					\$ 27,680
6	Prepare plan and details for stormwater pollution prevention		4	4	12	20					\$ 3,400
7	Submit 60% design documents including plans, specification and cost estimate for review and comments	2	4	8	8	12					\$ 3,440
8	Incorporate 60% design comments and complete drawings ¹		4	8	12	24					\$ 4,560
9	Submit 90% design documents for review and comments ¹	2	4	8	8	12					\$ 3,800
10	Incorporate 90% design comments and finalize drawings ¹		4	8	12	24					\$ 4,560
11	Submit final design documents for review and approval ¹	2	4	8	8	12					\$ 3,800
12	Obtain private utility approval for design documents ¹		4	8	8	8					\$ 3,040
13	Obtain public agency approval for design documents ¹		8	16	8	16					\$ 5,280
14	Submit approved design documents for bids ¹	2	4	8	8	8					\$ 3,520
15	Provide bidding assistance including pre-bid meeting, preparation of addenda (as required), bid tabulation, bid evaluation, and recommendation. ¹		12	12	8	8					\$ 4,960
16	Incorporate Brazos River stop log structure into spillway design at 90% submittal ^{1,2}	5	28	96	152	152					\$ 43,600
Subtotal Final Engineering & Design		12	138	232	360	508					\$ 161,760



Project: Ditch H Channel Extension to Oyster Creek - Final Design
 Client: Fort Bend County & City of Sugar Land
 Date: 03/31/2009
 By: cw7/dc
 Filename: M:\Projects\FBC\FBC15-02Admin\Contract\Proposal\20090331\20090401-Revised Proposal Fee-Ditch H Extension.xls\Proposal 090331

ATTACHMENT B

Scope of Work and Estimated Engineering Fee for Ditch H Channel Extension to Oyster Creek (Updated)

Task No	Description	Engineering Hours					Surveying Hours			Sub-Consultant	Cost
		Prin	PM	Eng	BIT/Des	CAD/Clerk	RPLS	LS Tech	LS Crew		
400 - Construction Phase Services											
1	Attend construction kick-off and project progress meetings including meeting minutes (based on 6)		32	32		16					\$ 10,720
2	Review shop drawings and other submittals including response to RFI's and change orders (based on 20)		10	40	40	10					\$ 11,300
3	Periodic site observation with written report and project completion punchlist (based on 8, plus coord)		40	32	24	16					\$ 14,560
4	Provide M&E models, spreadsheets, etc. upon completion of the project. Provide final report to the project participants.		24	64	24	16					\$ 15,520
5	Provide as-built drawings to participants upon construction completion (based on 24 sheets)		4	24	48	72					\$ 13,440
Subtotal Construction Phase Services			110	192	136	130					\$ 65,540
Total Project Engineering Services Estimated Fee										\$ 339,080.00	

- NOTES:**
- Hourly rates for task budget are based on the current 2009 BGE rate schedule.
 - See following additional services proposal for details



Project: Ditch H Channel Extension to Oyster Creek - Final Design

Client: Fort Bend County & City of Sugar Land

Date: 03/31/2009

By: cw01c

Filename: M:\Projects\Fbc\FBC15-02\Admin\Contract\Proposal\20090331\20090401- Revised Proposal Fee-Ditch H Extension.xls\Proposal 090331

ATTACHMENT B

Scope of Work and Estimated Engineering Fee for Ditch H Channel Extension to Oyster Creek (Updated)

Task No.	Description	Engineering Hours					Surveying Hours			Sub-Consultant	Cost
		Prin	PM	Eng	EIT/Des	CAAD/Clerk	RPLS	LS Tech	LS Crew		
Scope of Work and Estimated Engineering Fee for Reconfiguration of the Hydraulic Structure											
1	Stop Log Structural Support - Plan and Elevation Sheet (1 Sheet)	1	4	12	16	16					\$ 5,120
2	Stop Log Structural Support - Sections (3 Sheets)	1	6	30	48	40					\$ 12,520
3	Stop Log Structural Support - Details (3 Sheets)	1	6	30	48	40					\$ 12,520
4	Pedestrian Bridge Modifications for Vehicular Traffic - Plan/Elevation, Sections and Details (revise 3 sheets)	1	4	16	32	40					\$ 8,880
5	Civil Design for Reconfiguration incl Layout, Vehicular Access and Material Selection	1	8	8	8	16					\$ 4,560
6											\$ -
7											\$ -
8											\$ -
9											\$ -
10											\$ -
	Subtotal Hours	5	28	96	152	152	0	0	0		
	Rate - 2009	\$240	\$180	\$120	\$100	\$70	\$130	\$90	\$155		
	Total Professional Service Hours	5	28	96	152	152	0	0	0		
Total Project Engineering Services Estimated Fee \$										43,600.00	



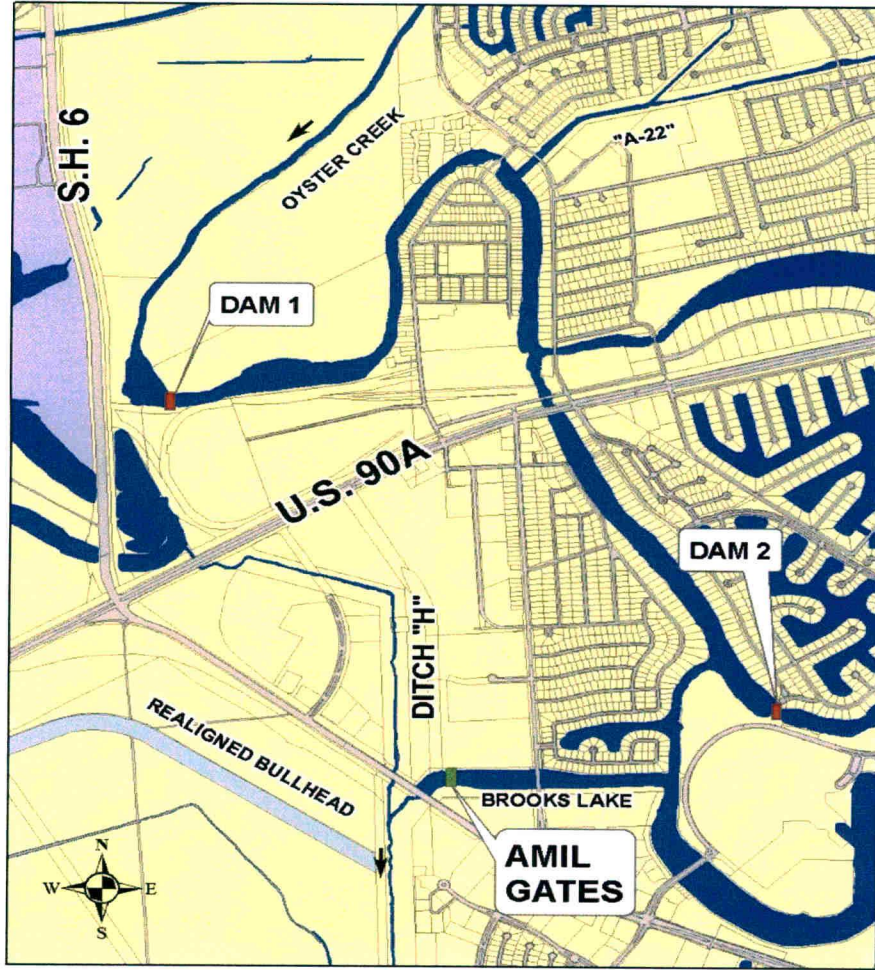
**Fort Bend County Drainage District
Ditch "H" Extension**

ATTACHMENT C - Engineering and Surveying Billing Rates

			3/31/2009
	Title	Abbreviation	Max. Billing Rate
	Principal	Princ	\$ 240.00
	Engineering Project Manager	PM	\$ 180.00
	Engineering Manager	EM	\$ 160.00
	Senior Engineer	Sr Eng	\$ 140.00
	Engineer	Eng	\$ 120.00
	Engineer-in-Training	EIT	\$ 100.00
	Senior Engineering Designer	Sr Des	\$ 115.00
	Engineering Designer	Des	\$ 90.00
	Engineering Technician	Tech	\$ 70.00
	Surveying Project Manager	PM	\$ 188.00
	Registered Professional Land Surveyor	RPLS	\$ 130.00
(1)	Field Crew - Conventional	Field	\$ 120.00
(2)	Field Crew - GPS	GPS	\$ 155.00
	Surveying Technician	Tech	\$ 90.00
	Administrative Support	Cler	\$ 70.00

- (1) All surveying will be based on the hourly rate for field surveying being charged by Brown & Gay Engineers, Inc. at the time work is done (currently \$120.00 per field crew hour). The hourly rate includes imputed costs for survey equipment, vehicles, materials such as stakes, flagging and iron rods and for personnel.
- (2) Should Global Positioning System (GPS) surveying be used on the project, an additional charge of \$35.00 per hour will be charged for equipment.

RATESHEET2009.xls





**DITCH "H" EXTENSION
PHASE ONE PROJECT**

- Legend**
- HWY 90A
 - UNION PACIFIC RAILROAD
 - DITCH "H"

