

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

[signature pages follow]

BROWN & GAY ENGINEERS, INC.

By: 
ARNOLD GONZALEZ, JR. - SR. PM

8.7.19
Date

CITY OF ROUND ROCK

APPROVED AS TO FORM:

By: _____
Craig Morgan, Mayor

Stephan L. Sheets, City Attorney

Date

ADDENDUM TO EXHIBIT B

Engineering Services

The work to be performed by the ENGINEER under this contract consists of providing engineering services required for the development of construction plans for the widening and reconstruction of Gattis School Road from Red Bud Lane to Via Sonoma Trail and along Red Bud Lane approximately 500' south of Gattis School Road. The project consists of reconstructing approximately 0.65 miles of the existing 4-lane roadway section to a 6-lane divided facility and adding a right turn lane on Red Bud Lane. This project involves surveying, geotechnical, environmental, public involvement, engineering analyses, and associated details necessary to produce PS&E to a 90% design.

The ENGINEER shall perform all work and prepare all deliverables in accordance with the latest version of the City of Round Rock criteria.

The ENGINEER shall perform quality control and quality assurance (QA/QC) on all deliverables associated with this project.

The ENGINEER shall provide traffic control in accordance with the Texas Manual on Uniform Traffic Control Devices (TMUTCD) when performing onsite activities associated with this contract.

PROJECT MANAGEMENT (Function Code 145)

1. Meetings

- A. Attend and document additional Progress Meetings at the City of Round Rock office. Assume an additional two (2) meetings shall be required.

1. General Contract Administration

- A. Develop monthly invoices and progress reports.
- B. Subconsultant coordination.
- C. Design coordination with the City of Round Rock.
- D. Stakeholder/Utility Company coordination.

FIELD SURVEYING (Function Code 150) (Inland Geodetics)

1. General

- A. Surveys provided will be in accordance with the "Texas State Board of Land Surveying" and the applicable City of Round Rock regulations.
- B. Survey field notes will be submitted if requested by the City of Round Rock.
- C. Perform revisions to existing boundary surveys of certain parcels that are determined to have changed configuration or ownership either in adjoining properties for the development of acquisition and/or easement documents required to accommodate the proposed feature replacement and/or channel improvements.
- D. Prepare individual parcel plats and descriptions to be used by the City of Round Rock for required right of way acquisition and easement process.

DRAINAGE (Function Code 161)

60%-90% PS&E:

- A. Investigate, research, and review existing development within the Lake Forest Subdivision to evaluate the option of utilizing the existing detention facility located within the HOA property to accommodate additional storm run-off produced by the proposed roadway improvements. This analysis and design will be in lieu of incorporating a new detention pond facility originally proposed within the city-owned property located at the northwest corner of Lake Forest Drive and Gattis School Road.
- B. Incorporate all design surveys, as-built plans, and drainage models into computer aided drafting and develop topographies and surfaces. This data shall be utilized to develop drainage areas, hydrology and hydraulics. This shall include topographic working drawings to prepare the final drainage design.
- C. Develop storm water hydrology for the existing and ultimate roadway section throughout the limits of the project. The model shall incorporate the 10%, 4% and 1% annual chance storm (10-year, 25-year, and 100-year) events. Modeling shall develop storm water flows to all cross culverts and roadway conveyances. Based on the data developed, drainage infrastructure shall be designed for the project area to include a level of detail sufficient to establish cost estimates and required easements and possession and use agreements for the construction of the proposed drainage structures and channel improvements.
- D. Develop designs for all cross-drainage structures throughout the project limits. The cross drainage shall be modeled with HEC-RAS.
- E. Develop designs for proposed storm water collection systems for the proposed curb-and-gutter portion of the project area. Storm sewer designs shall be developed using Geopak Drainage.
- F. Identify potential utility conflicts based on design for the project area.
- G. Develop drainage easement requirements for the project area.
- H. Develop locations or adjustments for new or existing detention facilities if applicable.
- I. Coordinate the design with the City of Round Rock.

Signing, Pavement Markings and Signalization (Function Code 162)

60%-90% PS&E:

- A. **Signing & Pavement Markings** – Prepare signage and pavement marking plan sheets, layouts, and associated details.
 - Develop pavement marking and signing layouts.
- B. **Traffic Signal Layouts** – Prepare traffic signal plan sheets, layouts, and associated details:
 - Develop existing intersection layout.
 - Develop traffic signal layouts, showing the proposed traffic signal features, signal pole schedules, vehicle detection systems, signal phasing, conduit and cable schedules, electrical service (layout and detail sheets)

- Develop signal elevations.
- Assemble standard drawings.

C. **Quantity Summaries** – Prepare summary sheets of all signing, pavement markings, and traffic signal quantities.

MISCELLANEOUS (ROADWAY) (Function Code 163)

60%-90% PS&E

D. **Cost Estimates** – Prepare updated construction cost estimates at each milestone submittal.

ADDENDUM TO EXHIBIT C
Work Schedule

DATE*	MILESTONE
September 1, 2019	Notice to Proceed SWA #3 (90% PS & E)
September 12, 2019	Submit 60% PS & E to City and TxDOT
September 30, 2019	Receive 60% PS & E Comments
March 5, 2020	Submit 90% PS & E to City
April 2, 2020	Receive City 90% PS & E Comments
May 1, 2020	NTP FINAL 100% DESIGN

***Dates are subject to change as development progresses.**

ADDENDUM TO EXHIBIT D
Fee Schedule

Attached Behind This Page

**PROJECT NAME: GATTIS SCHOOL RD
FROM RED BUD LN TO VIA SONOMA TRL**

EXHIBIT D-1 - FEE SCHEDULE

FC	DESCRIPTION	BGE	CD&P	Inland	TOTAL
FC 110	ROUTE AND DESIGN STUDIES	\$0.00			\$0.00
FC 120	ENVIRONMENTAL	\$0.00	\$ -		\$0.00
FC 130	ROW	\$0.00			\$0.00
FC 145	GENERAL MANAGEMENT / COORDINATION	\$1,800.00			\$1,800.00
FC 150	FIELD SURVEYING AND PHOTOGRAMMERTRY			\$48,076.00	\$48,076.00
FC 160	ROADWAY DESIGN CONTROLS	\$0.00			\$0.00
FC 161	DRAINAGE	\$28,044.00			\$28,044.00
FC 162	SIGNING, PAVEMENT MARKINGS AND SIGNALIZATION	\$84,434.00			
FC 163	MISCELLANEOUS ROADWAY	\$14,559.00			\$14,559.00
	EXPENSES	\$140.00	\$0.00	\$ -	\$140.00
	TOTAL	\$128,977.00	\$0.00	\$48,076.00	\$177,053.00

BROWN GAY ENGINEERS, INC.

EXHIBIT D-1 - FEE SCHEDULE

PROJECT NAME: GATTIS SCHOOL RD

FROM RED BUD LN TO VIA SONOMA TRL

TASK DESCRIPTION	Senior Project Mgr	Project Manager	Project Engineer	EIT	Senior Engineer Tech	Senior CADD Op	Senior ENV	ENV Scientist	Admin/ Clerical	Total	TOTAL LABOR HRS. & COSTS
FC 145 PROJECT MANAGEMENT										0	\$1,800.00
Meetings	4									4	\$900.00
General contract administration	4									4	\$900.00
FC 161 DRAINAGE										0	\$28,044.00
Incorporate all design surveys and as-built info into CADD	2	2	4	4	8					20	\$2,670.00
Develop external storm water hydrology (ex/prop)		2	4	24	16					46	\$5,300.00
Develop external Drainage Area Map			4	8	8					20	\$2,312.00
Develop internal storm water hydrology (ex/prop)			4	8	16					28	\$3,192.00
Develop internal Drainage Area Map				8	8					16	\$1,760.00
Develop HEC-RAS designs for all cross drainage (ex/prop)										0	\$0.00
Hydraulic Data Sheets		2		8	16					26	\$2,988.00

PROJECT NAME: GATTIS SCHOOL RD
 FROM RED BUD LN TO VIA SONOMA TRL

TASK DESCRIPTION	Senior Project Mgr	Project Manager	Project Engineer	EIT	Senior Engineer Tech	Senior CADD Op	Senior ENV	ENV Scientist	Admin/ Clerical	TOTAL LABOR HRS. & COSTS
Culvert Layout P&P Sheets										0 \$0.00
Develop Geopak Drainage design for proposed storm sewer (ex/prop)										0 \$0.00
Storm Sewer P&P Sheets										0 \$0.00
Hydraulic Data Sheets-SS										0 \$0.00
Identify potential utility conflicts/adjustments			2	4	4					10 \$1,156.00
Develop drainage easements	2	2		4	8					16 \$2,118.00
Detention Design	2	2	4	24	16					48 \$5,750.00
Coordinate design with the CoRR staff	2	2								4 \$798.00
FC 162 SIGNING, PAVEMENT MARKINGS AND SIGNALIZATION										\$84,434.00
Signing & pavement markings	4	8	24	80	20					136 \$16,604.00
Traffic signal layouts	8	30	72	240	160					510 \$60,956.00
Quantity summaries	2	4	16	32						54 \$6,874.00
										0 \$0.00
FC 163 MISCELLANEOUS (ROADWAY)										\$14,559.00
Miscellaneous Drawings	8	4	17	8	4	12			3	56 \$7,449.00
Cost estimates	2	6	12	24	12					56 \$7,110.00
HOURS SUB-TOTALS	40	64	163	476	296	12	0	0	3	1054
CONTRACT RATE PER HOUR	\$225.00	\$174.00	\$138.00	\$110.00	\$110.00	\$90.00	\$195.00	\$130.00	\$69.00	
TOTAL LABOR COSTS	\$9,000.00	\$11,136.00	\$22,494.00	\$52,360.00	\$32,560.00	\$1,080.00	\$0.00	\$0.00	\$207.00	\$128,837.00
SUBTOTAL										\$128,837.00

FUNCTION CODE	TOTAL COSTS	TOTAL DIRECT EXPENSE	TOTAL LABOR COSTS	Senior Project Manager	Project Manager	Project Engineer	EIT	Senior Engineer Tech	Senior CADD Operator	Senior ENV	ENV Scientist	Admin/ Clerical	TOTAL MH BY FC
	\$128,977.00	\$140.00	\$128,837.00	40	64	163	476	296	12	0	0	3	1054
SUBTOTAL LABOR HOURS				40	64	163	476	296	12	0	0	3	1054
SUBTOTAL LABOR EXPENSES	\$128,977.00	\$140.00	\$128,837.00	3.8%	6.1%	15.5%	45.2%	28.1%	1.1%	0.0%	0.0%	0.3%	

OTHER DIRECT EXPENSES	QUANTITY	UNIT	RATE	
Mileage	250	mile	\$ 0.56	\$140.00
Photocopies B/W (11" X 17")		each	\$ 0.20	\$0.00
Photocopies Color (8 1/2" X 11")		each	\$ 0.75	\$0.00
Photocopies Color (11" X 17")		each	\$ 1.25	\$0.00
Geosearch (hazmat)		each	\$ 500.00	\$0.00
Large Format Plotting		SF	\$ 2.25	\$0.00
SUBTOTAL DIRECT EXPENSES				\$140.00

SUMMARY	
TOTAL LABOR COSTS	\$128,837.00
NON-SALARY (OTHER DIRECT EXPENSES)	\$140.00
GRAND TOTAL	\$128,977.00

INLAND GEODETICS

EXHIBIT D-1 - FEE SCHEDULE

**PROJECT NAME: GATTIS SCHOOL RD
FROM RED BUD LN TO VIA SONOMA TRL**

SERVICE	2 CREW	3 CREW	4 CREW	ADD	PM	RPLS	1GPS	TECH	GPS TECH	ADMIN	TOTAL
RATE / HOUR	\$138	\$160	\$183	\$42	\$136	\$132	\$118	\$98	\$98	\$54	
ROE					4 HRS	4 HRS					\$ 1,072.00
SITE VISITS (TASK 2)						8 HRS		4 HRS		2 HRS	\$ 1,556.00
50.1 - ADMIM MOBILIZE	0 HRS	0 HRS	0 HRS	0 HRS	4 HRS	12 HRS	0 HRS	4 HRS	0 HRS	2 HRS	\$ 2,628.00
ADDNL FIELD SURVEY	32 HRS				1 HRS	2 HRS	8 HRS	4 HRS		2 HRS	\$ 6,260.00
DELIVERABLES					2 HRS	2 HRS		16 HRS		2 HRS	\$ 2,212.00
50.2 - FIELD SURVEYING	32 HRS	0 HRS	0 HRS	0 HRS	3 HRS	4 HRS	8 HRS	20 HRS	0 HRS	4 HRS	\$ 8,472.00
BOUNDARY ANALYSIS						12 HRS		8 HRS			\$ 2,368.00
SECONDARY FIELD SURVEY	16 HRS					4 HRS	8 HRS				\$ 3,680.00
ROW ACQ PARCEL PROD (11)					2 HRS	8 HRS		172 HRS		4 HRS	\$ 18,400.00
ROW MONUMENTATION (11)	8 HRS					1 HRS	8 HRS			2 HRS	\$ 2,288.00
PARCEL REVISIONS (6)	20 HRS				16 HRS	10 HRS	12 HRS	24 HRS		4 HRS	\$ 10,240.00
50.3 - ROW ACQ TASKS	44 HRS	0 HRS	0 HRS	0 HRS	18 HRS	35 HRS	28 HRS	204 HRS	0 HRS	10 HRS	\$ 36,976.00
SUB-TOTAL	76 HRS	0 HRS	0 HRS	0 HRS	25 HRS	51 HRS	36 HRS	228 HRS	0 HRS	16 HRS	\$ 48,076.00
REIMBURSEABLE ITEMS											\$ -
REIMBURSEABLE SERVICES											\$ -
ESTIMATED FEE	\$10,488	\$0	\$0	\$0	\$3,400	\$6,732	\$4,248	\$22,344	\$0	\$864	\$48,076.00

Cost Variables:

GPS Receivers
Vehicle
ATV

\$15
\$60
\$55

Reimbursable Services Include:

\$0.00
\$0.00
\$0.00

Total:

\$0.00

Reimbursable Fees Include:

SUPPLIES
TITLES

\$0.00
\$0.00

Total:

\$0.00