

Collin County

**SUPPLEMENTAL #2 TO EXHIBIT B
SUMMARY OF MANHOURS BY CLASSIFICATION & MAJOR TASK ANALYSIS**

FM 2551 (FM 2514 to FM 2170)
CP&Y, Inc
LUMP SUM

SUPPLEMENTAL NO. 2		
TxDOT FUNCTION CODE	DESCRIPTION OF WORK TASK	TOTAL COST
160	Roadway Design Controls	\$ 242,240.00
161	Drainage	\$ 100,280.00
163	Miscellaneous Roadway	\$ 113,300.00
	Direct Costs	\$ 2,016.00
	7% Escalation of Remaining Design Fee (as of November 1, 2018)	\$ 28,769.00
	CP&Y Subtotal	\$ 486,605.00
Sub	BW2 Engineering	\$ 70,000.00
Total		\$556,605.00

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LUMP SUM

TxDOT FUNCTION CODE	DESCRIPTION OF WORK TASK	No. of PS&E Sheets	Project Manager	Senior Design Engineer	Design Engineer / SR ENGR Tech	EIT/CADD Tech	Clerical	Total Labor Hours	Total Labor Cost per Task
			\$230.00	\$180.00	\$150.00	\$115.00	\$90.00		
FC 160 - Roadway Design Controls									
160.1	Verify Schematic Geometry								
160.1.1	Revise Established Horizontal and Vertical Geometry		60	60	200	120		440	\$68,400.00
160.3	Typical Sections								
160.3.1	Proposed Typical Sections	2	8	30	60	40		138	\$20,840.00
160.4	Roadway Plan and Profile								
160.4.1	Revise FM 2551 and Prepare FM 2514 Plan & Profile	32	16	40	120	120		296	\$42,680.00
160.4.5	Cross Street Plan & Profile	1	4	8	8	8		28	\$4,480.00
Subtotal Roadway Design								902	\$136,400.00
160.7	Cross Sections								
160.7.1	Final Roadway Cross Sections	90	8	40	120	120		288	\$40,840.00
Subtotal Cross Sections						-		288	\$40,840.00
160.9	3D Modeling								
160.9.1	Modeling Design		20	60	100	80		260	\$39,600.00
160.9.2	Verify grading and ROW limits		20	40	60	40		160	\$25,400.00
Subtotal Cross Sections						-		160	\$25,400.00
	Total 125		136	278	668	528	0	1610	\$242,240.00
	Cost		\$ 31,280.00	\$ 50,040.00	\$ 100,200.00	\$ 60,720.00	\$ -		

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			\$230.00	\$180.00	\$150.00	\$115.00	\$90.00			
FC 161 - Drainage										
161.2	Storm Drain Design									
161.2.1	Field Inventory of Existing Drainage Structures			8	40	40		88	\$12,040.00	
161.2.3	Interior Drainage Area Maps	9	4	16	20	20		60	\$9,100.00	
161.2.4	Storm Sewer Hydraulic Data Sheets	4	4	20	80	80		184	\$25,720.00	
161.2.5	Storm Sewer Plan & Profiles	32	12	40	80	80		212	\$31,160.00	
161.2.6	Lateral Profiles	6	12	20	60	60		152	\$22,260.00	
Subtotal Drainage Design								696	\$100,280.00	
	Total		51	32	104	280	280	0	696	\$100,280.00
	Cost			\$ 7,360.00	\$ 18,720.00	\$ 42,000.00	\$ 32,200.00	\$ -		

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			\$230.00	\$180.00	\$150.00	\$115.00	\$90.00			
FC 163 - Miscellaneous Roadway										
163.3	Traffic Control Plans									
163.3.1	Conceptual Phasing Layout		8	20	40	40		108	\$16,040.00	
163.3.2	General Notes/Sequence of Construction Narrative	1	2	16	20	20		58	\$8,640.00	
163.3.4	TCP Typical Sections	8	8	20	40	20		88	\$13,740.00	
163.3.5	Traffic Control Plans	36	8	20	80	40		148	\$22,040.00	
163.3.7	Shoring Wall Layouts	2		16	24	16		56	\$8,320.00	
Subtotal Traffic Control								458	\$68,780.00	
163.10	Miscellaneous Project Management									
163.10.3.1	Miscellaneous Project Meetings (assumed 10 meetings)		80	60	60			200	\$38,200.00	
163.10.3.2	Subconsultant Coordination		16	8	8			32	\$6,320.00	
Subtotal Project Management								200	\$38,200.00	
	Total		47	122	160	272	136	0	690	\$113,300.00
	Cost			\$ 28,060.00	\$ 28,800.00	\$ 40,800.00	\$ 15,640.00	\$ -		

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**FM 2551 (FM 2514 to FM 2170)
CP&Y, Inc
LUMP SUM**

REMAINING FEE		
	DESCRIPTION OF WORK TASK	Amount Remaining
	PM/Admin	\$ 8,777.76
	Basic Design Services	\$ 400,191.84
	Reimbursible Expenses	\$ 2,012.68
	CP&Y Subtotal	\$ 410,982.28
	7% Escalation of Remaining Design Fee (as of January 1, 2018)	\$ 28,769.00

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SUMMARY OF MANHOURS BY CLASSIFICATION & MAJOR**

**FM 2551 (FM 2514 to FM 2170)
CP&Y, Inc.
LUMP SUM**

DIRECT COSTS

DESCRIPTION	ASSUMPTIONS	UNITS
Color Bond Plot	/ Foot	200
Mileage	/ Mile	1200
Car Rental	/ Day	
11" X 17" copies	/ Sheet	2100
11" X 17" Mylar	/ Sheet	
Hotel	/Night	
Per Diem	/Day	
GPS Receiver	/Day	
Haz Mat Database Search	Each	
Delivery Services	/ Delivery	
		TOTAL DIRECT COSTS:

TASK ANALYSIS

COST PER	TOTAL COST
\$ 6.00	\$ 1,200.00
\$ 0.505	\$ 606.00
\$ 65.00	\$ -
\$ 0.10	\$ 210.00
\$ 1.00	\$ -
\$ 108.00	\$ -
\$ 61.00	\$ -
\$ 80.00	\$ -
\$ 350.00	\$ -
\$ 16.00	\$ -
\$	\$ 2,016.00

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FM 2551 (FM 2514 to FM 2170)
SURVEY AND ROW (BW2 Engineering)
LUMP SUM

DIRECT COSTS	QUANTITY	UNIT	UNIT COST	TOTAL
Task 1 - Survey parcel plats and easements	40	PARCEL	\$900.00	\$36,000.00
Task 2 - ROW map and legal descriptions	40	PARCEL	\$650.00	\$26,000.00
Right-of-Entry Assistance	As Needed			\$3,000.00
Additional Services	As Needed			\$5,000.00
TOTAL				\$70,000.00