

EXHIBIT F - Work Items and Estimated Man-Hours For
 19th Street Reconstruction - Final Design of Phase B (Contract Amendment No. 7)
 City of Lawrence, KS
 Date: 10/23/2018
 Client Project No. PW1535 & PW1721
 PEC Project No. 15A66-004

Work Item	Project Manager	Cost \$155/hr	Senior Design Tech	Cost \$120/hr	Design Engineer	Cost \$95/hr	Project Engineer	Cost \$115/hr	CAD	Cost	Total Cost of Work Item	
Specialty Work Items - Amendment #7 (Non-Basic Services)												
Survey - Update Locates/Base Drawing											\$ 6,000	
Survey - Fire Station #5											\$ 4,000	
Structural - Project Management/QC												
Structural - Update/Revise Tunnels/Retaining Walls Design/Plans											\$ 3,000	
Electrical - Lighting Designs/Plans												
Traffic Signals - Signal Design (19th/Stewart)											\$ -	
Traffic Signals - Signal Design (19th/Iowa)												
Traffic Signals - Foundation Design (19th/Iowa)											\$ -	
Traffic Signals - Fiber-Optic Conduit Design											\$ -	
Shop Drawing Reviews & Work on 19th Street Terrace											\$ 7,106	
Geotechnical - Drilling & Report/Tunnel and Wall Design											\$ 7,894	
Overhead Work Items - Amendment #7 (Basic Services)												
Project Management - General	4	\$ 620.00		\$ -		\$ -	2	\$ 230	0	\$ -	\$ 850	
Update Corridor Model (19th Street Profile Revision)		\$ -	2	\$ 240.00		\$ -	2	\$ 230	2	\$ 36	\$ 506	
Finalize Intersection Grading		\$ -	2	\$ 240.00		\$ -	2	\$ 230	2	\$ 36	\$ 506	
Finalize Sidewalk & Ramp Grading		\$ -	2	\$ 240.00		\$ -	6	\$ 690	2	\$ 36	\$ 966	
Additional Utility Coordination	2	\$ 310.00	2	\$ 240.00		\$ -	6	\$ 690	0	\$ -	\$ 1,240	
Coordination with KU Project	2	\$ 310.00		\$ -		\$ -	2	\$ 230	0	\$ -	\$ 540	
Coordination with Water/Sewer	2	\$ 310.00	2	\$ 240.00		\$ -	2	\$ 230	0	\$ -	\$ 780	
Update/Coordination Meetings	4	\$ 620.00	4	\$ 480.00		\$ -	4	\$ 460	0	\$ -	\$ 1,560	
Plan Revisions & Utilities - Amendment #7 (Basic Services)												
Revise Construction Plan/Profile		\$ -	4	\$ 480.00		\$ -	4	\$ 460	4	\$ 72	\$ 1,012	
Revise General Plan Setup		\$ -	4	\$ 480.00		\$ -	8	\$ 920	4	\$ 72	\$ 1,472	
Revise Paving Plans		\$ -	4	\$ 480.00		\$ -	4	\$ 460	4	\$ 72	\$ 1,012	
Revise Demolition Plan		\$ -	4	\$ 480.00	4	\$ 380		\$ -	8	\$ 144	\$ 1,004	
Revise Intersection Details	4	\$ 620.00	8	\$ 960.00		\$ -	8	\$ 920	8	\$ 144	\$ 2,644	
Revise Erosion Control Plans		\$ -		\$ -	4	\$ 380	4	\$ 460	4	\$ 72	\$ 912	
NOI - Phase B		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$ -	
Pavement Marking Plan Conversion		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$ -	
Revise Traffic Control	2	\$ 310.00	4	\$ 480.00	8	\$ 760	4	\$ 460	12	\$ 216	\$ 2,226	
Revise Construction Sequencing	2	\$ 310.00	4	\$ 480.00	4	\$ 380	4	\$ 460	8	\$ 144	\$ 1,774	
Revise Cross Sections		\$ -	8	\$ 960.00		\$ -	8	\$ 920	8	\$ 144	\$ 2,024	
Revise Quantities		\$ -	8	\$ 960.00	4	\$ 380	4	\$ 460	12	\$ 216	\$ 2,016	
KDOT Permitting		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$ -	
Fire Station #5 Plans - Amendment #7 (Basic Services)												
Construction Plans	4	\$ 620.00	8	\$ 960.00	4	\$ 380	8	\$ 920	12	\$ 216	\$ 3,096	
Paving Plans	4	\$ 620.00	8	\$ 960.00	4	\$ 380	8	\$ 920	12	\$ 216	\$ 3,096	
Demolition Plan		\$ -	8	\$ 960.00	4	\$ 380	4	\$ 460	12	\$ 216	\$ 2,016	
Construction Sequencing	4	\$ 620.00	8	\$ 960.00	4	\$ 380	8	\$ 920	12	\$ 216	\$ 3,096	
Quantities	2	\$ 310.00	8	\$ 960.00	4	\$ 380	8	\$ 920	12	\$ 216	\$ 2,786	
TOTALS												
		\$ 5,580		\$ 12,240		\$ 4,180		\$ 12,650		\$ 2,484	\$ 65,134	
NON-BASIC SERVICES											\$ 28,000	
BASIC SERVICES		36	\$ 5,580	102	\$ 12,240	44	\$ 4,180	110	\$ 12,650	138	\$ 2,484	\$ 37,134
	Project Manager		Senior Design Tech		Design Engineer		Project Engineer		CAD			