#### **COUNCIL ACTION FORM**

Meeting Date: March 14, 2019

Staff Contact: John Sullivan, Public Works Director

Agenda Item: Street & Stormwater Construction Bid Approval.

### **Background / Description of Item:**

Bids were opened on Thursday, March 7th, 2019 at 2:00 pm for the Westwood 2019 Street and Stomwater rehabilitation projects. Bids were submitted from three (3) different firms:

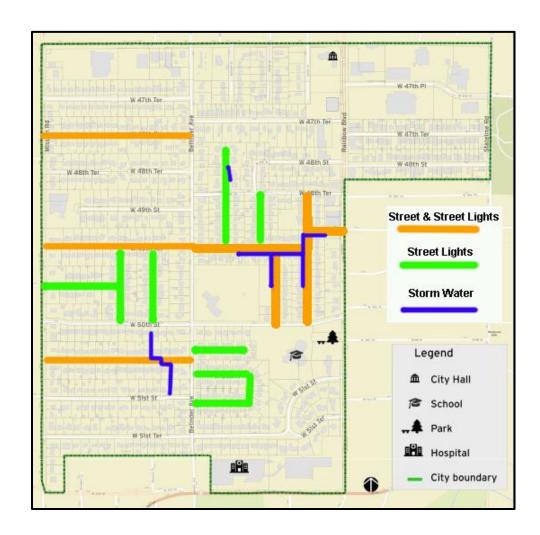
Contractor	Base Bid Amount	Base Bid + Lighting Alt
G-B Construction	\$3,105,454.45	\$3,290,364.95
McAnany Construction	\$2,792,792.00	\$2,978,978.00
KS Heavy Construction	\$2,601,699.10	\$2,822,221.10
Engineers Estimate	\$3,270,252.27	\$3,510,502.37

These construction bids do not include the cost for purchasing the 74 +1 street light fixtures and poles for the seven (7) project streets, nor the 51 additional street light fixtures and poles for installing lights on the additional streets. The construction bids does include the cost for installation of the wiring and other equipment needed to for the street lights, if that element of the project is pursued. Based on the low bidder, that additional cost is about \$348,174 for installing lights on the seven project streets, and about \$220,522 for the additional streets.

The construction bids also do not include the cost for needed tree removal. Some of the projected costs, like the use of Flyash at a line item cost of \$102,000 for base material, is based on a potential maximum amount. Lesser amounts and costs may be realized.

The purchase cost per street light fixture and pole is \$2,874, or \$362,124 for 126 new lights. There is also a one-time \$1,680 tooling charge to embed the City of Westwood logo on the pole access door of each street light pole. Based on the low bid numbers from Kansas Heavy Construction, the estimated total project cost to install new street lights for all of the project streets and additional streets would be about \$3,186,025. The estimated cost for reconstructing only the street and stormwater infrastructure and not installing any new street lights would be about \$2,253,525

	Est Total Project	All Street	
	Cost	<b>Light Costs</b>	
Bid – No Street Lights	\$2,253,525		
Bid + Project Street Lights	\$2,818,929	\$565,404	
Bid + All Street Lights	\$3,186,025	\$367,096	
Totals	\$3,186,025	\$932,500	29.3%



### **Staff Recommendation:**

Authorize the Mayor to execute a contract with Kansas Heavy Construction in an amount not to exceed \$2,822,221.10 subject to the City Attorney's review, corrections and approval.

4121 West 83<sup>rd</sup> Street, Suite 156 • Prairie Village, Kansas 66208 (913) 385-2670 • Fax (913) 385-2671 **www.uhlengineering.com** 

March 11, 2019

John Sullivan Director of Public Works City of Westwood 2545 West 47th Street Westwood, KS 66205

## 2019 STREET & STORM SEWER REHABILITATION PROGRAM CITY OF WESTWOOD, KANSAS

Dear Mr. Sullivan,

Bids were opened on Thursday, March 7th, 2019 for the above referenced project.

Three bids were received. The contractors each provided a bid ranging from \$2,601,699.10 to \$3,105,454.45 for the base bid and 2,822,221.10 to 3,290,364.95 for the base + Alternate bid. The summary sheet is attached.

Kansas Heavy Construction is the apparent low bidder. We have reviewed their bid along with the other documentation they submitted and believe that they are qualified to undertake and complete this project satisfactorily.

Therefore, it is recommended that the City award Kansas Heavy Construction the contract to build the project for the Base Bid –or- the Base Bid + Alternate in the following amounts:

\$2,601,699.10 Base Bid

\$2,822,221.10 Base Bid + Alternate

If you have questions or comments on this matter, please contact me at 913.385.2670.

Sincerely,

**UHL ENGINEERING, INC.** 

Terry S. Uhl

# WESTWOOD 2019 STREET, STORM LIGHT IMPROVMENTS CITY OF WESTWOOD, KANSAS 3/7/2019 2:00 PM CST

				Apparent Low Bidder									
				Engine	er's Estimate	Bidders Average Kansas Heavy Constru				G-B (	Construction	McAnany Construction	
Item			Drainet		or o Loumato		oro Average	Tunious no	avy construction		Jonisti dotton	Moraldii	y construction
No.	Description	Unito	Project	Unit Price	Item Total	Unit Price	Item Total	Unit Price	Item Total	Unit Price	Item Total	Unit Price	Item Total
Clearin	Description	Units	Total Qty	Unit Price	item rotai	Unit Price	item rotai	Unit Price	item rotai	Unit Price	item rotai	Unit Price	item rotai
1	Mobilization	L.S.	10	\$5,500.00	\$55,000.00	\$18,816.60	\$188,166.00	\$9,100.00	\$91,000.00	\$21,260.00	\$212,600.00	\$26,089.80	\$260,898.00
2	Traffic Control	L.S.	10	\$2,200.00	\$22,000.00	\$2,810.00	\$28,100.00	\$1,815.00	\$18,150.00	\$3,150.00	\$31,500.00	\$3,465.00	\$34,650.00
3	Remove Storm Sewer	L.F.	525	\$22.00	\$11,550.00	\$28.10	\$14,752.50	\$43.30	\$22,732.50	\$20.00	\$10,500.00	\$21.00	\$11,025.00
4	Remove Existing 4.5'x3.5' Box Pipe	L.F.	96	\$55.00	\$5,280.00	\$60.50	\$5,808.00	\$85.50	\$8,208.00	\$75.00	\$7,200.00	\$21.00	\$2,016.00
5	Remove Curb Inlet	Each	6	\$2,200.00	\$13,200.00	\$1,068.33	\$6,410.00	\$1,180.00	\$7,080.00	\$1,500.00	\$9,000.00	\$525.00	\$3,150.00
6	Remove Junction Box/Grate Inlet	Each	3	\$1,650.00	\$4,950.00	\$1,068.33	\$3,205.00	\$1,180.00	\$3,540.00	\$1,500.00	\$4,500.00	\$525.00	\$1,575.00
7	Remove Curb and Gutter	L.F.	12,452	\$6.60	\$82,180.56	\$4.18	\$52,049.36	\$2.70	\$33,620.40	\$3.55	\$44,204.60	\$6.29	\$78,323.08
- 8	Remove Concrete Sidewalk	S.Y.	2,049	\$12.10	\$24,792.42	\$9.78	\$20,046.05	\$9.50	\$19,465.50	\$10.35	\$21,207.15	\$9.50	\$19,465.50
9	Remove Asphalt Pavement	S.Y.	15,667	\$16.50	\$258,503.85	\$17.87	\$279,917.07	\$10.40	\$162,936.80	\$26.10	\$408,908.70	\$17.10	\$267,905.70
10	Remove Driveway	S.Y.	2,906	\$19.80	\$57,544.74	\$12.77	\$37,109.62	\$12.60	\$36,615.60	\$18.15	\$52,743.90	\$7.56	\$21,969.36
	,		,	,	1 + - 7 -		,	,	1 + /	, -	, , , , , , , , , , , , , , , , , , , ,	*	, , ,
Erosion	Control												
11	Erosion Control	L.S.	10	\$2,200.00	\$22,000.00	\$1,206.67	\$12,066.67	\$1,515.00	\$15,150.00	\$1,005.00	\$10,050.00	\$1,100.00	\$11,000.00
							•		•		•		•
Streets	& Driveways												
12	Concrete curb and gutter - Vertical	L.F.	9,456	\$22.00	\$208,038.60	\$22.21	\$210,049.28	\$21.00	\$198,576.00	\$24.50	\$231,672.00	\$21.14	\$199,899.84
13	Concrete curb and gutter - Driveway/ADA	L.F.	3,841	\$22.00	\$84,495.40	\$22.21	\$85,321.41	\$21.00	\$80,661.00	\$24.50	\$94,104.50	\$21.14	\$81,198.74
14	Concrete Sidewalk	S.Y.	2,721	\$66.00	\$179,572.80	\$48.46	\$131,850.59	\$35.00	\$95,235.00	\$60.00	\$163,260.00	\$50.37	\$137,056.77
15	Flyash	S.Y.	15,813	\$11.00	\$173,941.90	\$4.28	\$67,679.64	\$6.50	\$102,784.50	\$1.00	\$15,813.00	\$5.34	\$84,441.42
16	Asphalt Pavement- Patch	S.Y.	74	\$82.50	\$6,121.50	\$98.17	\$7,264.33	\$119.00	\$8,806.00	\$76.50	\$5,661.00	\$99.00	\$7,326.00
17	Asphalt Pavement (Full Depth)	S.Y.	15,813	\$48.95	\$774,041.46	\$27.16	\$429,533.79	\$29.70	\$469,646.10	\$27.20	\$430,113.60	\$24.59	\$388,841.67
18	4" Granular Base (AB3 Under Asphalt Pavement)	S.Y.	15,813	\$6.05	\$95,668.05	\$6.71	\$106,052.52	\$7.90	\$124,922.70	\$5.35	\$84,599.55	\$6.87	\$108,635.31
19	Concrete Driveway Commercial 8"	S.Y.	135	\$77.00	\$10,418.10	\$90.61	\$12,232.80	\$115.00	\$15,525.00	\$84.00	\$11,340.00	\$72.84	\$9,833.40
20	Concrete Driveway Residential 6"	S.Y.	2,974	\$63.80	\$189,741.20	\$69.77	\$207,486.07	\$63.00	\$187,362.00	\$74.00	\$220,076.00	\$72.30	\$215,020.20
21	ADA Ramp w/ truncated Domes Wrap (Type C)	Each	6	\$2,750.00	\$16,500.00	\$5,914.59	\$35,487.56	\$4,012.00	\$24,072.00	\$7,200.00	\$43,200.00	\$6,531.78	\$39,190.68
22	ADA Ramp w/ truncated Domes (Type A)	Each	4	\$1,650.00	\$6,600.00	\$1,626.92	\$6,507.67	\$1,675.00	\$6,700.00	\$1,720.00	\$6,880.00	\$1,485.75	\$5,943.00
23	Concrete Collar	Each	6	\$220.00	\$1,320.00	\$808.33	\$4,850.00	\$990.00	\$5,940.00	\$700.00	\$4,200.00	\$735.00	\$4,410.00
24	Integral Conc. Wall (Demo+Conc.+Reinf. portion only)	Each	2	\$2,750.00	\$5,500.00	\$4,716.97	\$9,433.93	\$4,900.00	\$9,800.00	\$5,200.00	\$10,400.00	\$4,050.90	\$8,101.80
			<u> </u>	<del>+=,:=====</del>	1+-,	* 1,1 12121	140,00000	+ 1,000100	140,000.00	<del>+</del>	14 . 0, . 0 0	+ 1,000100	140,101100
Storm S	Sewers												
25	Pipe 15" (RCP)	L.F.	93	\$71.50	\$6,649.50	\$103.52	\$9,627.05	\$78.00	\$7,254.00	\$137.00	\$12,741.00	\$95.55	\$8,886.15
26	Pipe 18" (RCP)	L.F.	26	\$88.00	\$2,288.00	\$109.22	\$2,839.63	\$86.00	\$2,236.00	\$144.00	\$3,744.00	\$97.65	\$2,538.90
27	Pipe 24" (RCP)	L.F.	320	\$104.50	\$33,440.00	\$115.68	\$37,018.67	\$93.00	\$29,760.00	\$148.00	\$47,360.00	\$106.05	\$33,936.00
28	Pipe 30" (RCP)	L.F.	28	\$121.00	\$3,388.00	\$130.17	\$3,644.67	\$110.00	\$3,080.00	\$165.00	\$4,620.00	\$115.50	\$3,234.00
29	Pipe 24" (HDPE)	L.F.	222	\$93.50	\$20,757.00	\$89.45	\$19,857.90	\$53.00	\$11,766.00	\$145.00	\$32,190.00	\$70.35	\$15,617.70
30	Arch Pipe 29"x18" (Concrete)	L.F.	120	\$181.50	\$21,780.00	\$140.32	\$16,838.00	\$126.00	\$15,120.00	\$170.00	\$20,400.00	\$124.95	\$14,994.00
31	Arch Pipe 44"x27" (Concrete)	L.F.	62	\$220.00	\$13,640.00	\$185.23	\$11,484.47	\$174.00	\$10,788.00	\$220.00	\$13,640.00	\$161.70	\$10,025.40
32	2'x5' RCB	L.F.	378	\$330.00	\$124,740.00	\$387.20	\$146,361.60	\$290.00	\$109,620.00	\$565.00	\$213,570.00	\$306.60	\$115,894.80
33	4'x4' RCB	L.F.	97	\$275.00	\$26,675.00	\$378.87	\$36,750.07	\$330.00	\$32,010.00	\$500.00	\$48,500.00	\$306.60	\$29,740.20
34	4'x6' Curb Inlet	Each	6	\$5,940.00	\$35,640.00	\$4,300.00	\$25,800.00	\$4,700.00	\$28,200.00	\$4,000.00	\$24,000.00	\$4,200.00	\$25,200.00
35	4'x7' Curb Inlet	Each	1	\$6,490.00	\$6,490.00	\$4,725.00	\$4,725.00	\$5,200.00	\$5,200.00	\$4,250.00	\$4,250.00	\$4,725.00	\$4,725.00
36	6'x7' Curb Inlet	Each	2	\$6,490.00	\$12,980.00	\$5,958.33	\$11,916.67	\$6,500.00	\$13,000.00	\$5,600.00	\$11,200.00	\$5,775.00	\$11,550.00
37	4'x11' Curb Inlet	Each	4	\$6,820.00	\$27,280.00	\$7,050.00	\$28,200.00	\$7,800.00	\$31,200.00	\$6,000.00	\$24,000.00	\$7,350.00	\$29,400.00
38	36" Nyoplast Inlet	Each	1	\$3,300.00	\$3,300.00	\$4,666.67	\$4,666.67	\$5,100.00	\$5,100.00	\$5,750.00	\$5,750.00	\$3,150.00	\$3,150.00
39	4'x4' Junction Box	Each	2	\$5,500.00	\$11,000.00	\$3,241.67	\$6,483.33	\$3,300.00	\$6,600.00	\$2,750.00	\$5,500.00	\$3,675.00	\$7,350.00
40	4'x6' Junction Box	Each	1	\$6,050.00	\$6,050.00	\$4,350.00	\$4,350.00	\$4,200.00	\$4,200.00	\$3,600.00	\$3,600.00	\$5,250.00	\$5,250.00
41	6'x6' Junction Box	Each	1	\$8,250.00	\$8,250.00	\$5,166.67	\$5,166.67	\$4,900.00	\$4,900.00	\$4,300.00	\$4,300.00	\$6,300.00	\$6,300.00
42	7'x7' Junction Box	Each	1	\$9,900.00	\$9,900.00	\$5,516.67	\$5,516.67	\$5,600.00	\$5,600.00	\$3,600.00	\$3,600.00	\$7,350.00	\$7,350.00
43	Connect new RCP to existing Culvert	Each	2	\$5,500.00	\$11,000.00	\$1,568.33	\$3,136.67	\$830.00	\$1,660.00	\$1,250.00	\$2,500.00	\$2,625.00	\$5,250.00
44	Remove and ReplaceCurb Inlet Lid and Throat	Each	5	\$2,750.00	\$13,750.00	\$2,230.00	\$11,150.00	\$2,300.00	\$11,500.00	\$2,500.00	\$12,500.00	\$1,890.00	\$9,450.00
45	Flowable Fill	C.Y.	880	\$134.20	\$118,096.00	\$96.25	\$84,700.00	\$110.00	\$96,800.00	\$100.00	\$88,000.00	\$78.75	\$69,300.00
46	Concrete Encasement	LF	70	\$132.00	\$9,240.00	\$147.33	\$10,313.33	\$112.00	\$7,840.00	\$225.00	\$15,750.00	\$105.00	\$7,350.00
47	Remove and ReplaceCurb Inlet Lid and Throat	Each	2	\$2,750.00	\$5,500.00	\$2,488.33	\$4,976.67	\$2,500.00	\$5,000.00	\$3,075.00	\$6,150.00	\$1,890.00	\$3,780.00
			_	, _,	, -,	7-,	, .,	, - , <del></del>	1,-,	, -, - : 5.00	,,-,	T .,	, -,

# WESTWOOD 2019 STREET, STORM LIGHT IMPROVMENTS CITY OF WESTWOOD, KANSAS 3/7/2019 2:00 PM CST

andscape		F 000	ФС CO	MOO 455 40	ΦΕ 00	#00 FFF 07	#C 00	I#20 444 00	фг. г.г.	I#00 400 05	фг ог	I #07 440 45
48 Sodding disturbed areas	S.Y.	5,069	\$6.60	\$33,455.40	\$5.63	\$28,555.37	\$6.00	\$30,414.00	\$5.55	\$28,132.95	\$5.35	\$27,119.15
nitary Sewer												
49 8" PVC (SDR-26)	L.F.	183	\$110.00	\$20,130.00	\$107.75	\$19,718.25	\$56.00	\$10,248.00	\$136.00	\$24,888.00	\$131.25	\$24,018.75
50 4' Standard Manhole	Each	1	\$4,950.00	\$4,950.00	\$5,866.67	\$5,866.67	\$3,600.00	\$3,600.00	\$3,500.00	\$3,500.00	\$10,500.00	\$10,500.00
51 5' Standard Manhole With Inside Drop	Each	1	\$5,500.00	\$5,500.00	\$6,625.00	\$6,625.00	\$4,000.00	\$4,000.00	\$8,000.00	\$8,000.00	\$7,875.00	\$7,875.00
52 Removal of Existing Sanitary Sewer	L.S.	1	\$3,300.00	\$3,300.00	\$7,401.04	\$7,401.04	\$8,300.00	\$8,300.00	\$11,280.00	\$11,280.00	\$2,623.13	\$2,623.13
					\$0.00	\$0.00		\$0.00		•		•
reet Lights					\$0.00	\$0.00		\$0.00				
L1 Controller Lighting Equipment Enclosure - Cont 4	EA	3	\$5,475.00	\$16,425.00	\$4,560.00	\$13,680.00	\$4,560.00	\$13,680.00	\$5,130.00	\$15,390.00	\$3,990.00	\$11,970.00
L2 Controller Pedestal foundation	CY	3	\$800.00	\$2,400.00	\$2,213.08	\$6,639.25	\$2,740.00	\$8,220.00	\$1,500.00	\$4,500.00	\$2,399.25	\$7,197.75
L3 3/4 x 8ft Copperweld Rod	EA	3	\$137.00	\$411.00	\$106.37	\$319.10	\$74.00	\$222.00	\$180.00	\$540.00	\$65.10	\$195.30
L4 Unfused Kit for Ground Wire - SG1	EA	74	\$56.00	\$4,144.00	\$55.90	\$4,136.60	\$41.00	\$3,034.00	\$91.00	\$6,734.00	\$35.70	\$2,641.80
L5 Fuse Holders - SF1	EA	148	\$56.00	\$8,288.00	\$53.75	\$7,955.00	\$42.00	\$6,216.00	\$82.50	\$12,210.00	\$36.75	\$5,439.00
L6 Screw Base Foundation With Integral Cable Retainer - SH1	EA	74	\$752.00	\$55,648.00	\$834.17	\$61,728.33	\$756.00	\$55,944.00	\$1,085.00	\$80,290.00	\$661.50	\$48,951.00
L7 Sternberg Decorative Luminare - SL1	EA	74	\$106.00	\$7,844.00	\$104.17	\$7,708.33	\$96.00	\$7,104.00	\$132.50	\$9,805.00	\$84.00	\$6,216.00
L8 Pole 14' Decirative With Custom Logo - A	EA	74	\$415.00	\$30,710.00	\$398.97	\$29,523.53	\$590.00	\$43,660.00	\$315.00	\$23,310.00	\$291.90	\$21,600.60
L9 #2 1-Conductor RHH/RHW/Use Copper	LF	1,890	\$2.97	\$5,613.30	\$2.55	\$4,825.80	\$2.60	\$4,914.00	\$2.75	\$5,197.50	\$2.31	\$4,365.90
_10 #10 1-Conductor RHH/RHW/Use Copper	LF	4,060	\$0.74	\$2,984.10	\$0.85	\$3,437.47	\$1.10	\$4,466.00	\$0.50	\$2,030.00	\$0.94	\$3,816.40
#8 1-Conductor RHH/RHW/Use Copper	LF	17,190	\$1.21	\$20,799.90	\$1.07	\$18,336.00	\$1.30	\$22,347.00	\$0.75	\$12,892.50	\$1.15	\$19,768.50
_12 #6 1-Conductor RHH/RHW/Use Copper	LF	3,420	\$1.64	\$5,608.80	\$1.40	\$4,799.40	\$1.60	\$5,472.00	\$1.20	\$4,104.00	\$1.41	\$4,822.20
#4 1-Conductor RHH/RHW/Use Copper	LF	5,580	\$2.13	\$11,885.40	\$1.61	\$8,965.20	\$1.80	\$10,044.00	\$1.45	\$8,091.00	\$1.57	\$8,760.60
.14 #14 Trace Wire	LF	8,880	\$0.63	\$5,594.40	\$0.59	\$5,268.80	\$0.70	\$6,216.00	\$0.45	\$3,996.00	\$0.63	\$5,594.40
.15 Ingrade Junction Box Preformed Class II	EA	14	\$800.00	\$11,200.00	\$463.50	\$6,489.00	\$495.00	\$6,930.00	\$465.00	\$6,510.00	\$430.50	\$6,027.00
16 Boring	LF	220	\$127.00	\$27,940.00	\$15.27	\$3,358.67	\$18.00	\$3,960.00	\$12.05	\$2,651.00	\$15.75	\$3,465.00
L17 Trenching and Backfill	LF	8,660	\$12.00	\$103,920.00	\$13.10	\$113,474.87	\$15.80	\$136,828.00	\$9.65	\$83,569.00	\$13.86	\$120,027.60
L18 3" PVC Schedule 40 Conduit	LF	600	\$10.81	\$6,486.00	\$2.03	\$1,216.00	\$2.10	\$1,260.00	\$2.15	\$1,290.00	\$1.83	\$1,098.00
L19 2" PVC Schedule 40 Conduit	LF	620	\$6.32	\$3,918.40	\$1.05	\$648.93	\$1.10	\$682.00	\$1.10	\$682.00	\$0.94	\$582.80
_20   1" PVC Schedule 40 Conduit	LF	7,750	\$3.91	\$30,302.50	\$0.74	\$5,735.00	\$0.90	\$6,975.00	\$0.55	\$4,262.50	\$0.77	\$5,967.50
				\$362,122.80 \$3,270,252.27				\$348,174.00 \$2,601,699.10		\$288,054.50 \$3,105,454.45		\$288,507.35 \$2,792,792.0
reet Lights Alternate #1				φ3,210,232.21				φ2,001,099.10		\$5,105,454.45		φ2,192,192.
LA1 Controller Lighting Equipment Enclosure - Cont 4	EA	1	\$5,475.00	\$5,475.00	\$4,421.45	\$4,421.45	\$4,560.00	\$4,560.00	\$5,130.00	\$5,130.00	\$3,574.35	\$3,574.35
A2 Controller Pedestal foundation	CY	1	\$800.00	\$800.00	\$2,213.08	\$2,213.08	\$2,740.00	\$2,740.00	\$1,500.00	\$1,500.00	\$2,399.25	\$2,399.25
A3 3/4 x 8ft Copperweld Rod	EA	<u>'</u>	\$137.00	\$137.00	\$106.37	\$106.37	\$74.00	\$74.00	\$180.00	\$180.00	\$65.10	\$65.10
A4 Unfused Kit for Ground Wire - SG1	EA	 51	\$56.00	\$2,856.00	\$55.90	\$2,850.90	\$41.00	\$2,091.00	\$91.00	\$4,641.00	\$35.70	\$1,820.70
A5 Fuse Holders - SF1	EA	102	\$56.00	\$5,712.00	\$53.75	\$5,482.50	\$42.00	\$4,284.00	\$82.50	\$8,415.00	\$36.75	\$3,748.50
A6 Screw Base Foundation With Integral Cable Retainer - SH1	EA	51	\$752.00	\$38,352.00	\$832.50	\$42,457.50	\$756.00	\$38,556.00	\$1,080.00	\$55,080.00	\$661.50	\$33,736.50
A7 Sternberg Decorative Luminare - SL1	EA	51	\$106.00	\$5,406.00	\$104.17	\$5,312.50	\$96.00	\$4,896.00	\$132.50	\$6,757.50	\$84.00	\$4,284.00
A8 Pole 14' Decirative With Custom Logo - A	EA	51	\$415.00	\$21,165.00	\$363.97	\$18,562.30	\$485.00	\$24,735.00	\$315.00	\$16,065.00	\$291.90	\$14,886.90
A9 #2 1-Conductor RHH/RHW/Use Copper	LF	630	\$2.97	\$1,871.10	\$2.55	\$1,608.60	\$2.60	\$1,638.00	\$2.75	\$1,732.50	\$2.31	\$1,455.30
A10 #10 1-Conductor RHH/RHW/Use Copper	LF	2,940	\$0.74	\$2,160.90	\$0.85	\$2,489.20	\$1.10	\$3,234.00	\$0.50	\$1,470.00	\$0.94	\$2,763.60
A11 #8 1-Conductor RHH/RHW/Use Copper	LF	13,450	\$1.21	\$16,274.50	\$1.07	\$14,346.67	\$1.30	\$17,485.00	\$0.75	\$10,087.50	\$1.15	\$15,467.50
A12 #6 1-Conductor RHH/RHW/Use Copper	LF	2,740	\$1.64	\$4,493.60	\$1.40	\$3,845.13	\$1.60	\$4,384.00	\$1.20	\$3,288.00	\$1.41	\$3,863.40
A13 #4 1-Conductor RHH/RHW/Use Copper	LF	2,150	\$2.13	\$4,579.50	\$1.61	\$3,454.33	\$1.80	\$3,870.00	\$1.45	\$3,117.50	\$1.57	\$3,375.50
A14 #14 Trace Wire	LF	6,010	\$0.63	\$3,786.30	\$0.59	\$3,565.93	\$0.70	\$4,207.00	\$0.45	\$2,704.50	\$0.63	\$3,786.30
A15 Ingrade Junction Box Preformed Class II	EA	5	\$800.00	\$4,000.00	\$461.83	\$2,309.17	\$490.00	\$2,450.00	\$465.00	\$2,325.00	\$430.50	\$2,152.50
A16 Boring	LF	220	\$127.00	\$27,940.00	\$15.27	\$3,358.67	\$18.00	\$3,960.00	\$12.05	\$2,651.00	\$15.75	\$3,465.00
A17 Trenching and Backfill	LF	5,800	\$12.00	\$69,600.00	\$13.10	\$75,999.33	\$15.80	\$91,640.00	\$9.65	\$55,970.00	\$13.86	\$80,388.00
A18 3" PVC Schedule 40 Conduit	LF	200	\$10.81	\$2,162.00	\$2.03	\$405.33	\$2.10	\$420.00	\$2.15	\$430.00	\$1.83	\$366.00
	LF	300	\$6.32	\$1,896.00	\$1.05	\$314.00	\$1.10	\$330.00	\$1.10	\$330.00	\$0.94	\$282.00
A19 I2" PVC Schedule 40 Conduit												
	LF	5,520	\$3.91	\$21,583.20	\$0.74	\$4,103.20	\$0.90	[\$4,968.00	\$0.55	\$3,036.00	\$0.78	\$4,305.60
A19 2" PVC Schedule 40 Conduit A20 1" PVC Schedule 40 Conduit		5,520	\$3.91	\$21,583.20 \$240,250.10	\$0.74	\$4,103.20	\$0.90	\$4,968.00 \$220,522.00	\$0.55	\$3,036.00 \$184,910.50	\$0.78	\$4,305.60

*Sheet 2* 3/8/2019