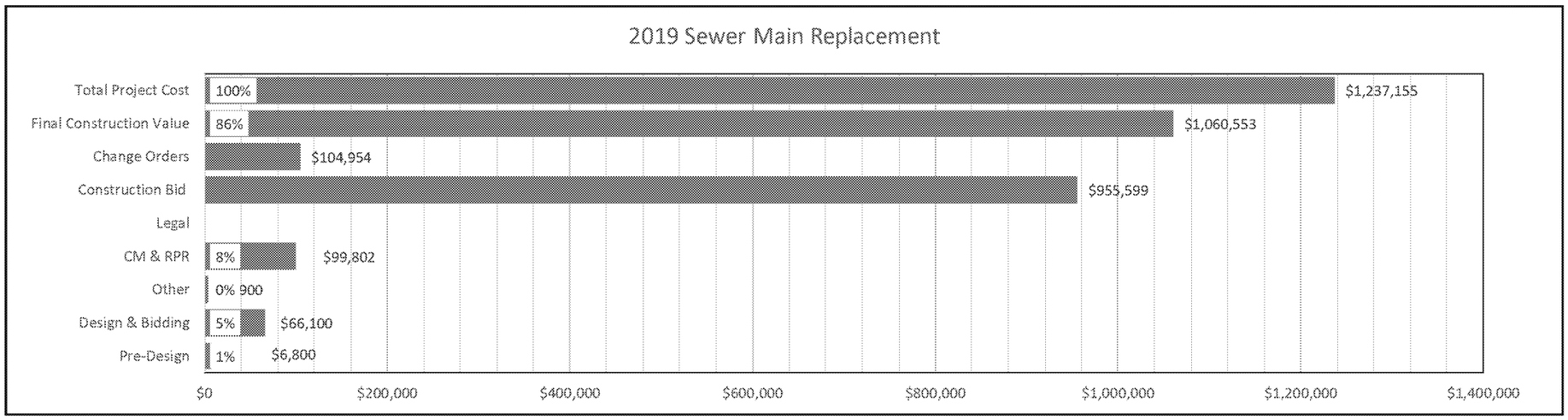
Project: 2019 Sewer Main Replacement **80800801-80100-00026**

	Cost	% of Total	Firm(s)	Source	Date	Notes
Pre-Design	$6,800	1%	HRG	COA #06	7/20/2018	Study Phase, report preparation
Design & Bidding	$66,100	5%	HRG	COA #06	7/20/2018	
Other	$3,900	0%				Ricardo Ayler easement
CM & RPR	$99,802	8%	HRG	HRG invoice	12/23/2019	total engineering costs verified by actual billings
Legal						
Construction Bid	$955,599			Bid tab	2/15/2019	
Change Orders	$104,954					COs through 2/25/2020
Final Construction Value	$1,060,553	86%	Rogele	AFP NO 4	2/10/2020	contract value as of 2/25/2020. Final adjusting CO will be done in March 2020
% Change Orders	*+9.9%*					

Total Project Cost **$1,237,155** 100%



HRG
CAPITAL REGION WATER 2019 SEWER REPLACEMENT PROJECT
FEBRUARY, 15, 2019 @10:00am

Engineering & Related Se rvice s
AN EMPIOYEE-OWNED COMPANY
4379.0478/06

2019 SEWE

Number	Manufacturer	**Quantity**
GENERAL		
1	MOBILIZATION PROJECT MANAGEMENT	1
2	EROSION SEDIMENTATION CONTROL	1
3	TRAFFIC MAINTENANCE PROTECTION	1
4	BY-PASS PUMPING	1
5	CLEARING AND GRUBBING	1
SEWER PIPE, APPURTENANCES RELATED **WORK**		
6	12" REINFORCED CONCRETE SEWER PIPE INSTALLATION	30
7	15" REINFORCED CONCRETE SEWER PIPE INSTALLATION	71
8	8[11] SDR 35 PVC SEWER PIPE INSTALLATION	5
9	10" SDR 35 PVC SEWER PIPE INSTALLATION	40
10	12" SDR 35 PVC SEWER PIPE INSTALLATION	322
11	15" SDR 35 PVC SEWER PIPE INSTALLATION	245
12	18" PS46 PVC SEWER PIPE INSTALLATION	177
13	24" PS46 PVC SEWER PIPE INSTALLATION	5
14	30" PS46 PVC SEWER PIPE INSTALLATION	210
15	4" AND 6" INSERTA TEES	23
16	10" INSERTA TEES	5
17	15" x 15" SDR 35 PVC TEE	1
18	18" x 15" SDR 35 PVC TEE	1
19	4" OR 6" SEWER LATERAL RECONNECTION	23
20	10" SEWER LATERAL RECONNECTION	5
21	4" OR 6" SEWER LATERAL REPLACEMENT	120
22	6" CORRUGATED HDPE BASE DRAIN PIPE	10
23	8" SEWER RECONNECTION	1

Number	Manufacturer	**Quantity**
24	10" SEWER RECONNECTION	2
25	12" SEWER RECONNECTION	4
26	15" SEWER RECONNECTION	1
27	18" SEWER RECONNECTION	2
28	24" SEWER RECONNECTION	1
29	30" SEWER RECONNECTION	1
30	12" CONNECTION TO EXISTING MANHOLE	1
31	10" CURED-IN-PLACE-PIPE INSTALLATION	328
32	18" CURED-IN-PLACE-PIPE INSTALLATION	315
33	CIPP SEWER LATERAL REINSTATEMENT	15
34	CIPP INTERNAL GRINDING/CUTIING OF EXISTING LATERALS	3

BID TABULATION

:R REPLACEMENT PROJECT

	Rogele, Inc.		DOLi Construction Corporation		Greenland Construction, Inc.	
Unit Of Measure	Unit cost	Extension	Unit Cost	Extension	Unit cost	Extension
L.S.	$ 57,017.50	$ 57,017.50	$ 150,000.00	$ 150,000 .00	$ 357,150.00	$ 357,150.00
L.S.	$ 5,000.00	$ 5,000.00	$ 1,000.00	$ 1,000.00	$ 19,000.00	$ 19,000.00
L.S.	$ 19,700.00	$ 19,700 .00	$ 10,000.00	$ 10,000.00	$ 97,500.00	$ 97,500.00
L.S.	$ 27,400.00	$ 27,400.00	$ 25,000.00	$ 25,000.00	$ 63,000.00	$ 63,000.00
L.S.	$ 9,700.00	$ 9,700.00	$ 2,500.00	$ 2,500 .00	$ 25,055 .00	$ 25,055.00
L.F.	$ 258.85	$ 7,765.50	$ 136.00	$ 4,080.00	$ 238.00	$ 7,140.00
L.F.	$ 218.50	$ 15,513 .50	$ 141.00	$ 10,011.00	$ 252.00	$ 17,892.00
L.F.	$ 200.00	$ 1,000.00	$ 136.00	$ 680.00	$ 36.00	$ 180.00
L.F.	$ 87.00	$ 3,480.00	$ 137.00	$ 5,480.00	$ 38.00	$ 1,520.00
L.F.	$ 271.00	$ 87,262.00	$ 141.00	$ 45,402.00	$ 48.00	$ 15,456.00
L.F.	$ 328.80	$ 80,556.00	$ 186.00	$ 45,570.00	$ 56.00	$ 13,720.00
L.F.	$ 315.10	$ 55,772.70	$ 211.00	$ 37,347.00	$ 66.00	$ 11,682.00
L.F.	$ 300.00	s 1,500.00	$ 236.00	$ 1,180.00	$ 96.00	$ 480.00
L.F.	$ 365.50	$ 76,755 .00	$ 261.00	$ 54,810 .00	$ 103.00	$ 21,630.00
EA.	s 325.00	$ 7,475.00	$ 250.00	$ 5,750 .00	$ 618.00	$ 14,214.00
EA.	$ 800.00	$ 4,000.00	$ 500.00	$ 2,500.00	$ 950.00	$ 4,750.00
EA.	s 1,500.00	$ 1,500.00	$ 600.00	$ 600.00	$ 1,500.00	$ 1,500.00
EA.	$ 2,500.00	$ 2,500.00	$ 1,000.00	$ 1,000.00	$ 2,100.00	$ 2,100.00
EA.	$ 950.00	$ 21,850.00	$ 1,000.00	$ 23,000.00	$ 661.00	$ 15,203.00
EA.	$ 1,100.00	$ 5,500 .00	s 1,000.00	$ 5,000.00	s 840.00	$ 4,200.00
L.F.	$ 175.75	$ 21,090.00	$ 100.00	$ 12,000.00	$ 215.00	$ 25,800.00
L.F.	$ 100.00	$ 1,000.00	$ 100.00	$ 1,000 .00	$ 60.00	$ 600.00
EA.	$ 500.00	$ 500.00	$ 1,000.00	$ 1,000 .00	$ 1,100.00	$ 1,100.00

	Rogele, Inc.		DOLi Construction Corporation		Greenland Construction, Inc.	
Unit Of Measure	Unit cost	Extension	Unit Cost	Extension	Unit cost	Extension
EA.	$ 525.00	$ 1,050.00	$ 1,000.00	$ 2,000 .00	$ 1,300.00	$ 2,600 .00
EA.	$ 550.00	$ 2,200 .00	$ 1,000.00	$ 4,000.00	$ 1,500.00	$ 6,000.00
EA.	$ 600.00	$ 600.00	$ 3,000.00	$ 3,000.00	$ 2, 200.00	$ 2,200.00
EA.	$ 860.00	$ 1,720.00	$ 4,000.00	$ 8,000.00	$ 2,900.00	$ 5,800.00
EA.	$ 1,600.00	$ 1,600.00	$ 4,000.00	$ 4,000.00	$ 3,600.00	$ 3,600.00
EA.	$ 1,900.00	$ 1,900.00	$ 5,000.00	$ 5,000.00	$ 4,015.00	$ 4,015.00
EA.	$ 2,500.00	$ 2,500.00	$ 2,000.00	$ 2,000.00	$ 3,000.00	$ 3,000 .00
L.F.	$ 78.10	$ 25,616 .80	$ 65.00	$ 21,320.00	$ 185.00	$ 60,680.00
L.F.	$ 127.60	$ 40,194.00	$ 105.00	$ 33,075 .00	$ 245.00	$ 77,175.00
EA.	$ 495.00	$ 7,425.00	$ 200.00	$ 3,000.00	$ 1,981.00	$ 29,715.00
EA.	$ 715.00	$ 2,145 .00	$ 1,000.00	$ 3,000.00	$ 2,600.00	$ 7,800.00

35	SPOT REPAIR 1	1
36	SPOT REPAIR 2	1
SEWER EXCAVATION SUITABLE BACKFILL		
37	O' - 10' Depth	178
SEWER EXCAVATION AGGREGATE BACKFILL		
38	O' - 10' Depth	807
39	10' - 12' Depth	270
SEWER MANHOLES, APPURTENANCES RELATED WORK		
40	MANHOLE SSMH-004200 INSTALLATION	1
41	MANHOLE SSMH-004201 INSTALLATION	1
42	MANHOLE SSMH-004202 INSTALLATION	1
43	MANHOLE SSMH-004203 INSTALLATION	1
44	MANHOLE SSMH-004204 INSTALLATION	1
45	MANHOLE SSMH-004205 INSTALLATION	1
46	MANHOLE SSMH-000798 REPLACEMENT	1
47	MANHOLE SSM H-001476 REPLACEMENT	1
48	MANHOLE SSMH-001617 REPLACEMENT	1
49	MANHOLE SSMH-002108 REPLACEMENT	1
so	MANHOLE SSMH-002324 REPLACEMENT	1
51	MANHOLE SSMH-001863 REHABILITATION	1
52	MANHOLE SSMH-001856 REHABILITATION	1

Number	Manufacturer	**Quantity**
53	MANHOLE SWMH-000681 REHABILITATION	1
54	MANHOLE SWMH-000685 REHABILITATION	1
55	REMOVE EXISTING MANHOLE SSMH-001477	1
56	TYPE C STORM SEWER INLET REPLACEMENT	3
57	TYPE M STORM SEWER INLET REPLACEMENT	7
58	TYPE M INLET TOP REPLACEMENT	1
SURFACING/RESTORATION		
59	VEGETATIVE SURFACE RESTORATION (S-1.01)	178
60	MUNICIPAL HMA - BASE COURSE PAVEMENT RESTORATION (S-3.01)	978
61	MUNICIPAL HMA - WEARING COURSE PAVEMENT RESTORATION (S-3.01)	978
62	S.R. 3010 HMA - WEARING COURSE PAVEMENT RESTORATION (S-4.01)	30
63	S. R. 3010 HMA - BINDER COURSE PAVEMENT RESTORATION (S-4 . 01)	8
64	S.R. 3010 HMA - BASE BINDER COURSE PAVEMENT RESTORATION (S-4 . 01)	15
65	S.R. 230 HMA - WEARING COURSE PAVEMENT RESTORATION (S-4.02)	25
66	S.R. 230 HMA - BINDER COURSE PAVEMENT RESTORATION (S-4.02)	10
67	S.R. 230 HMA - BASE BINDER COURSE PAVEMENT RESTORATION (S-4.02)	17
68	TEMPORARY PAVING SURFACE RESTORATION	515
MISCELLANEOUS		
69	CONCRETE CURB RESTORATION	60
70	GRANITE CURB RESTORATION	30
71	CLAY DIKE	10
72	RELOCATION OF EXISTING WALNUT STREET LATERAL	so
73	TEMPORARY BRACING OF EXISTING UTILITY POLE ON LOGAN STREET	1
74	TEMPORARY BRACING OF EXISTING UTILITY POLE ON RADNOR STREET	1
75	LEAD WATER SERVICE REPLACEMENT	6
76	LEAD WATER SERVICE REPLACEMENT OUTSIDE EXISTING SEWER TRENCH	90
77	FLOWABLE FILL	15
78	UNSUITABLE SUBGRADE BEARING MATERIAL REPLACEMENT	10
79	ADDITIONAL UNCLASSIFIED EXCAVATION	10
80	ADDITIONAL AGGREGATE BACKFILL	10
81	MISCELLANEOUS CONCRETE INSTALLATION	10

TOTAL **$ 995,599.00** $ 1,053,070.00 $ 1,545,000.00

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT TABULATION OF BIDS RECEIVED FRIDAY, FEBRUARY 15, 2

L.S.	$ 21,785.00	$ 21,785.00	$ 15,000.00	$ 15,000.00	$ 35,000.00	$ 35,000.00
L.S.	$ 21,900.00	$ 21,900 .00	$ 15,000.00	$ 15,000 00	$ 15,500 .00	$ 15 ,500.00
L.F.	$ 1.00	$ 176.00	$ **175.00**	$ 31,150.00	$ **121.00**	$ 21,538.00
L.F.	$ 1.00	$ 807.00	$ 190.00	$ 153,330.00	$ 185.00	$ 149,295.00
L.F.	$ **1.00**	$ 270.00	$ **250.00**	$ 67,500.00	$ 216.00	$ 58,320.00
EA.	$ 8,000.00	$ 8,000.00	$ 3,500.00	$ 3,500.00	$ 4,100.00	$ 4,100.00
EA.	$ 6,500.00	$ 6,500.00	$ 3,500.00	$ 3,500.00	$ 4,100.00	$ 4,100.00
EA.	$ 6,700.00	$ 6,700.00	$ 3,500.00	$ 3,500 .00	$ 4,100.00	$ 4,100.00
EA.	$ 6,200.00	$ 6,200.00	$ 3,500.00	$ 3,500.00	$ 4,100.00	$ 4,100.00
EA .	$ 7,100.00	$ 7,100.00	$ 3,500.00	$ 3,500.00	$ 4,100.00	$ 4,100.00
EA.	$ 6,300.00	$ 6,300.00	$ 3,500.00	$ 3,500.00	$ 4,100.00	$ 4,100.00
EA .	$ 13,300.00	$ 13,300.00	$ 6,000.00	$ 6,000.00	$ 4,500.00	$ 4,500.00
EA.	$ 7,700.00	$ 7,700.00	$ 3,500.00	$ 3,500.00	$ 4,500.00	$ 4,500.00
EA.	$ 7,400.00	$ 7,400.00	$ 3,500.00	$ 3,500.00	$ 4,500.00	$ 4,500.00
EA.	$ 7,700.00	$ 7,700.00	$ 3,500.00	$ 3,500.00	$ 4,500.00	$ 4,500.00
EA.	$ 8,700.00	$ 8,700.00	$ 5,000.00	$ 5,000.00	$ 4,500.00	$ 4,500.00
EA.	$ 6,500.00	$ 6,500.00	$ 4,000.00	$ 4,000.00	$ 11,000 .00	$ 11,000.00
EA.	$ 6,500.00	$ 6,500.00	$ 4,000.00	$ 4,000.00	$ **11,000 .00**	$ 11,000.00

	Rogele, Inc.		DOLi Construction Corporation		Greenland Construction, Inc.	
Unit Of Measure	**Unit cost**	**Extension**	**Unit Cost**	**Extension**	**Unit cost**	**Extension**
EA.	$ 6,500.00	$ 6,500.00	$ 4,000.00	$ 4,000.00	$ 11,000.00	$ 11,000.00
EA.	$ 7,830.00	$ 7,830.00	$ 4,000.00	$ 4,000.00	$ 11,000.00	$ 11,000.00
EA.	$ 3,400.00	$ 3,400.00	$ 1,500.00	$ 1,500.00	$ 3,000.00	$ 3,000.00
EA.	$ 3,500.00	$ 10,500.00	$ 2,500.00	$ 7,500.00	$ 2,500.00	$ 7,500.00
EA.	$ 3,300.00	$ 23,100.00	$ 2,500.00	$ 17,500.00	$ 2,500.00	$ 17,500.00
EA.	$ 1,600.00	$ 1,600.00	$ 2,500.00	$ 2,500.00	$ 1,200.00	$ 1,200.00
L.F.	$ 70.00	$ 12,460.00	$ 5.00	$ 890.00	$ 26.00	$ 4,628.00
S.Y.	$ 72.50	$ 70,905.00	$ 70.00	$ 68,460.00	$ 51.00	$ 49,878.00
S.Y.	$ 21.50	$ 21,027.00	$ 15.00	$ 14,670.00	$ 28.00	$ 27,384.00
S.Y.	$ 57.00	$ 1,710.00	$ 50.00	$ 1,500.00	$ 28.00	$ 840.00
C.Y.	$ 360.00	$ 2,880.00	$ 500.00	$ 4,000.00	$ 685.00	$ 5,480.00
C.Y.	$ 360.00	$ 5,400.00	$ 500.00	$ 7,500.00	$ 685.00	$ 10,275.00
S.Y.	$ 55.00	$ 1,375.00	$ 50.00	$ 1,250.00	$ 28.00	$ 700.00
C.Y.	$ 225.00	$ 2,250.00	$ 500.00	$ 5,000.00	$ 685.00	$ 6,850.00
C.Y.	$ 310.00	$ 5,270.00	$ 500.00	$ 8,500.00	$ 685.00	$ 11,645.00
S.Y.	$ 25.00	$ 12,875.00	$ 1.00	$ 515.00	$ 40.00	$ 20,600.00
L.F.	$ 125.00	$ 7,500.00	$ 100.00	$ 6,000.00	$ 185.00	$ 11,100.00
L.F.	$ 125.00	$ 3,750.00	$ 100.00	$ 3,000.00	$ 300.00	$ 9,000.00
EA.	$ 500.00	$ 5,000.00	$ 50.00	$ 500.00	$ 1,100.00	$ 11,000.00
L.F.	$ 150.00	$ 7,500.00	$ 100.00	$ 5,000.00	$ 135.00	$ 6,750.00
L.S.	$ 5,500 .00	$ 5,500.00	$ 1,000.00	$ 1,000.00	$ 3,900.00	$ 3,900.00
L.S.	$ 5,500.00	$ 5,500.00	$ 1,000.00	$ 1,000.00	$ 3,900.00	$ 3,900.00
EA.	$ 1,100.00	$ 6,600.00	$ 1,000.00	$ 6,000.00	$ 2,400.00	$ 14,400.00
L.F.	$ 97.00	$ 8,730.00	$ 100.00	$ 9,000.00	$ 116.00	$ 10,440.00
C.Y.	$ 390.00	$ 5,850.00	$ 200.00	$ 3,000 . 00	$ 300.00	$ 4,500.00
C.Y.	$ 75.00	$ 750.00	$ 50.00	$ 500.00	$ 160.00	$ 1,600.00
C.Y.	$ 35.00	$ 350.00	$ SO.DO	$ 500.00	$ 65.00	$ 650.00
TON	$ 65.90	$ 659.00	$ SO.DO	$ 500.00	$ 72.00	$ 720.00
C.Y.	$ 450.00	$ 4,500.00	$ 200.00	$ 2,000.00	$ 535.00	$ 5,350.00

LUNGER, P.E.

CAPITAL REGION WATER EXPLANATION OFADJUSTED UNIT COST:

1. Bid Item Nos. 6 & 10 are the installation of 12" Reinforced Concrete Pipe and 12" PVC Pipe, repsectively. These bid items were combined to provide a single cost/l.f. for 12" pipe.
2. The extended cost was calculated as the Quanity times the Unit Cost. ($7,765.50+$87,262 = $95,027.50)
3. The extended costs for bid items 6-14 and 31, 32 total $395,415.50 and represent the major rehab/replacement bid items.
4. The total extended cost was divided by the extended cost for Bid Item Nos. 6 & 10 to yield its percentage. ($95,027.50/$395,415.50=0.241 or 24.1%)
5. The total project cost was determined by adding the engineering fees and the construction contract amount.
6. The calculated percentage was multiplied by the total project cost. (24.1% x $1,237,155 = $297,317)

BID ITEM	MAJOR LINE ITEMS	QTY	UNIT	UNIT COST	EXT.
8	8" SDR 35 PVC SEWER PIPE INSTALLATION	5	LF	$200.00	$1,000.00
9	10" SDR 35 PVC SEWER PIPE INSTALLATION	40	LF	$87.00	$3,480.00
6	12" REINFORCED CONCRETE SEWER PIPE INSTALLATION	30	LF	$258.85	$7,765.50
10	12" SDR 35 PVC SEWER PIPE INSTALLATION	322	LF	$271.00	$87,262.00
7	15" REINFORCED CONCRETE SEWER PIPE INSTALLATION	71	LF	$218.50	$15,513.50
11	15" SDR 35 PVC SEWER PIPE INSTALLATION	245	LF	$328.80	$80,556.00
12	18" PS46 PVC SEWER PIPE INSTALLATION	177	LF	$315.10	$55,772.70
13	24" PS46 PVC SEWER PIPE INSTALLATION	5	LF	$300.00	$1,500.00
14	30" PS46 PVC SEWER PIPE INSTALLATION	210	LF	$365.50	$76,755.00
		1060			
31	10" CURED-IN-PLACE-PIPE INSTALLATION	328	LF	$ 78.10	$25,616.80
32	18" CURED-IN-PLACE-PIPE INSTALLATION	315	LF	$ 127.60	$40,194.00
		643			
				TOTALS	**$395,415.50**

1 2 3

ENGINEERING, LEGAL, OTHER COST	$	176,602
CONSTRUCTION VALUE AS OF 2/28/2020	$	1,060,553
5 **TOTAL PROJECT COST**	**$**	**1,237,155**

*these values match the CIP cost summary xls sheet

% of total rehab/replace cost	TOTAL CONSTRUCTION COST FOR BID ITEM	TOTAL PROJECT COST FOR BID ITEM	ADJUSTED UNIT COST	
0.3%	$2,682	$3,129	$626	LF
0.9%	$9,334	$10,888	$272	LF
2.0%	$254,875	6 $297,317	7 $845	LF
4 22.1%				
3.9%	$257,670	$300,577	$951	LF
20.4%				LF
14.1%	$149,589	$174,499	$986	LF
0.4%	$4,023	$4,693	$939	LF
19.4%	$205,866	$240,147	$1,144	LF

6.5%	$68,707	$80,148	$244	LF
10.2%	$107,805	$125,757	$399	LF

100%	**$1,060,553**	**$1,237,155**

Final compensating CO remains for March 2020

these two are combined into a single 12"
pipe cost in columns I, J, K

these two are combined into a single 15"
pipe cost in columns I, J, K