

May 3, 1917.

Weston Road South—Building Locks and Setting Up Compressor Plant.

Foreman—Locks	10 days	@ \$4.00	\$ 40.00	\$44.00
Comp.	11 days		22.00	
Engineer—Locks	55 hrs.	@ .40	22.00	32.00
Comp.	80		21.00	
Fireman—Locks	60	@ .35	21.00	10.50
Comp.	30		21.60	
Carpenter—Locks	54	@ .40	21.60	4.00
Comp.	10		26.00	
Team—Locks	39	@ .66	26.00	26.00
Comp.	39		53.40	
Excavation—Locks	178	@ .30	53.40	
Timbering—	30	@ .30	9.00	
Backfill—	200	@ .30	60.00	
Engineer—Pump	102	@ .40	40.80	
Watchman—	8 dys.	@ 2.00	16.00	
Labor Pump	30 hrs.	@ .30	9.00	
Labor—Concr., Locks	226	@ .30	67.80	
Moving—Comp.	981	@ .30	294.30	
Cement—Locks	162 bags	@ .40	64.80	
Sand—	13 cu. yds.	@ 1.50	27.00	
Stone—	30	@ 2.00	60.00	32.80
Cement—Comp.	82 bags	@ .40	32.80	13.50
Sand—	9 cu. yds.	@ 1.50	13.50	30.00
Stone—	15	@ 2.00	30.00	
Single Lock			\$538.40	\$503.10

Open Cut—Weston Road South.

Sandy Loam; Length, 456 ft.; Depth, 13.4 ft.; Width 6 ft.

Unit	Total Time	Total Volume	Unit	Total Cost
Foreman	61 days	1,390 c. yds.	0.045 days / c. yds.	\$ 244.00
Watchman	61	1,390	0.045 hrs.	192.00
Engineer—hoist	425 hrs.	1,390	0.315	170.00
—pump	614	1,390	0.455	215.60
Plant	50	1,390	0.040	20.00
Fireman	270	1,390	0.200	94.50
Labor, Pump	80	1,390	0.060	24.00
Excavating	2,967	1,390	2.200	890.10
Timbering	276	1,390	0.205	82.80
Backfill	998	742	1.345	299.40
Surplus	391	608	0.643	117.30
Concrete	1,028	129	8.090	308.40
Team D	157	608	0.260	106.05
Team Moving Q	20	456 c. ft.	0.044	13.35
Labor	40	456	0.088	12.00
Bricklayer	333	45,000 br.	7.400	249.75
labor	683	45,000	15.180	204.90
Cement Concr.	685 bags	456 lin. ft.		274.00
Brick	525	45,000		157.50
Stone	127 c. yds.			254.00
Sand	76			114.00
Brick	45,000			495.00
Forms				50.00
Lumber				300.00
				\$4,848.65

Total cost of brick in place, per thousand, \$26.54.

The manholes are built 2 ft. 6 ins. x 4 ft. (inside measurement). Manholes Nos. 1 and 2 are built of 18-in. brickwork throughout the bottom 9 ft., while the middle 20 ft. are of 14-in. brickwork and the remainder of 9-in. or two rings.

Weston Road South—24-in. Pipe.

851 ft. South of Northland Street to 635 ft. Further South.
Dry Sand and Clay Loam; (Macadam). Length,
635 ft.; Width, 4 ft.; Average Depth, 13.7 ft.

Item	Total Time	Total Material	Unit	Cost in Hours Labor
Foreman	45 days	635 ft. of sewer	hrs. / c. yd.	2.58
Excavation	3,286 hours	1,275 cu. yds.		2.13
Surplus	321	152		1.09
Timbering	690	635 ft. sewer	lin. ft.	0.614
Backfill	690	1,123 cu. yds.	c. yd.	7.00
Concrete (hand mixed)	524	75		0.91
Team	139	152		0.34
Pipelaying	214	625 feet	lin. ft.	11.50
Concrete M.H.	23	2 cu. yds.	c. yd.	6.57
Bricklayer	23	3,500	/1,000	11.14
Helper	39	3,500		
Cement		83		
Pipe		300		
M. H.		49		
Brick		3,500		
Stone		60 yds.		
Sand		45		
Pipe				
Junctions				

Concrete, hand-mixed; surplus earth moved at different times, some having to be picked and scraped off road.

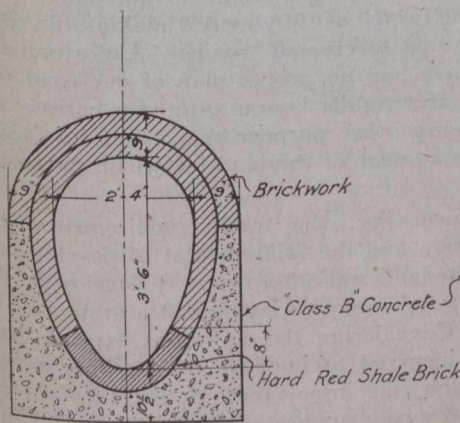
Weston Road South—Northland Street to 851 ft. South. 18-in. Pipe.

Dry Sand and Clay Loam; (Macadam.) Length, 851 ft.;
Width, 3.5 ft.; Average Depth, 19.2 ft.

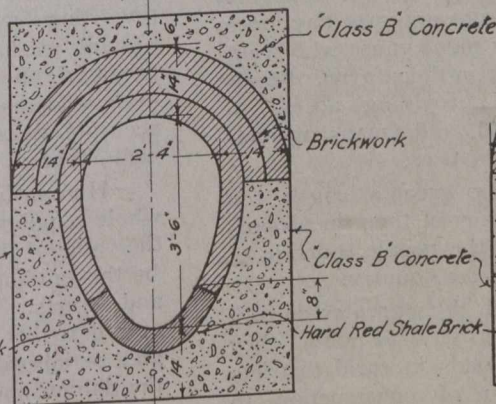
Classification	Total Time	Total Material	Unit	Cost in Hours Labor
Foreman	34 days	851 ft. of sewer	hrs. / c. yd.	2.26
Excavation	4,776 hrs.	2,118 c. yds.		0.78
Backfill	1,558	1,997		1.29
Timbering	1,100	851 lin. ft.	lin. ft.	3.91
Surplus	587	150 c. yds.	c. yd.	0.393
Team	59	150		0.38
Pipelaying	315	830 feet	lin. ft.	8.74
Concrete	725	83 c. yds.	c. yd.	7.0
Bricklayer	79	11,200 br.	/1000	17.70
Helper	208			
Cement		97 bags		
Manholes		118		
Concrete		374		
Brick		11,200 br.		
Stone		71 c. yds.		
Sand		54 c. yds.		
Pipe				
Junctions				

Summary of Costs.

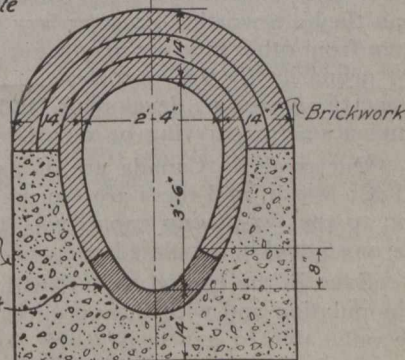
Tunnel Section	\$12,767.52
Open Cut	4,848.65
Building Locks	538.40
Setting up Compressors	503.10
Shaft and Manhole No. 3	625.75
No. 2	1,644.50
No. 1	609.25
Lining 2' 8" x 4' sewer	1,217.10
Compressed Air	3,663.56
24" Pipe	3,295.50
18" Pipe	4,873.40
Lumber, Oil, and other Incidentals	1,336.89
Total	\$35,323.62



2' 4" x 3' 6" EGG SHAPE BRICK SEWER
STA. 10+64 TO STA. 13+80



2' 4" x 3' 6" EGG SHAPE BRICK SEWER
WITH CONCRETE COVER
STA. 14+20 TO STA. 15+12
Sewer Sections.



2' 4" x 3' 6" EGG SHAPE BRICK SEWER
STA. 13+80 TO STA. 14+20