

UNIT COSTS FOR CONSTRUCTION OF GRAVITY SEWERS (a) (b) (f)

Pipe Diameter (in)	Depth (ft)										
	8	10	12	14	16	18	20	22	24	26	28
6 (c)	\$38.04	\$41.16	\$43.69	\$46.80	\$50.48	\$55.93	\$62.52	\$71.10	\$82.47		
8	\$45.85	\$50.88	\$53.86	\$57.65	\$62.12	\$68.79	\$77.00	\$87.52	\$101.21		
10	\$55.34	\$62.95	\$66.59	\$71.14	\$76.64	\$84.94	\$95.10	\$108.26	\$125.27		
12		\$73.88	\$78.06	\$83.40	\$90.15	\$99.91	\$111.90	\$127.38	\$147.72	\$170.65	\$202.24
15		\$91.63	\$96.28	\$101.88	\$109.13	\$119.02	\$131.58	\$146.86	\$166.28	\$190.10	\$223.48
18		\$111.11	\$115.89	\$121.98	\$129.81	\$140.95	\$153.48	\$169.67	\$189.38	\$213.30	\$246.88
21 (e)		\$133.97	\$139.37	\$145.71	\$154.11	\$165.08	\$178.87	\$195.98	\$216.29	\$240.31	\$274.89
24 (e)		\$158.13	\$166.00	\$172.79	\$181.81	\$193.84	\$208.56	\$225.93	\$246.24	\$270.54	\$306.29
27 (d)		\$167.28	\$173.75	\$182.41	\$193.76	\$208.62	\$226.03	\$247.04	\$271.91	\$298.00	
30		\$187.59	\$194.66	\$203.92	\$215.86	\$230.75	\$248.38	\$270.69	\$296.63	\$323.82	
33		\$200.91	\$208.60	\$218.02	\$230.41	\$245.53	\$263.67	\$287.01	\$313.97	\$342.70	
36		\$205.53	\$213.33	\$223.32	\$235.89	\$251.14	\$270.20	\$293.71	\$321.25	\$351.71	
39		\$250.39	\$258.66	\$268.82	\$281.48	\$297.33	\$317.46	\$342.00	\$370.88	\$403.80	
42		\$272.93	\$283.08	\$295.52	\$311.01	\$330.02	\$355.52	\$386.25	\$421.89		
48		\$299.58	\$310.47	\$324.48	\$341.98	\$363.78	\$390.48	\$424.14	\$462.25		
54		\$347.18	\$359.25	\$373.99	\$391.77	\$413.83	\$441.24	\$476.46	\$517.85		
60		\$403.63	\$416.67	\$431.78	\$452.82	\$477.51	\$507.75	\$544.96	\$589.62		

- (a) Based on the Sacramento Area Sewer District (SASD) Standards and Specifications, Type II Bedding and Initial Backfill.
- (b) ENR 12099 - Average of 20 Cities and San Francisco, January 2020
- (c) VCP (24 inch and smaller)
- (d) RCP with calcareous aggregate.
- (e) If for structural reasons, and with SASD approval, RCP with calcareous aggregate is required for 21" or 24" pipeline, the above unit costs shall be reduced \$5.81 or \$16.03 respectively.
- (f) \$4.64 per cu.yd. For mechanical compaction of intermediate backfill

ADDITIONAL COST ITEMS:

1. Cost for pavement removal and replacement
 Removal = \$5.14 /L.F.
 Replacement= Asphaltic Concrete: \$206 /ton (1 ton = 160 S.F., 1 inch thick)
 Aggregate Base: \$47 /ton (1 ton = 20 S.F., 8 inch thick)
2. Temporary pavement = \$135 /ton (1 ton = 160 S.F., 1 inch thick)
3. Flagpersons = \$552 /day/person
4. Utility Crossings (service lines):
 Minor Utility, cross under = \$229 ea.
 To replace utilities = \$682 to \$1,154 ea.
5. Cost for crossing a major utility to be added. Amount varies.
6. Manholes:
 4' MH = \$2,748 for 7' depth plus \$229 /ft over 7 ft.
 5' MH type A or B = \$3,894 for 8' depth plus \$401 /ft over 8 ft.
 Lining additional = \$2,289 for 8' depth plus \$229 /ft over 8 ft.
7. Dewatering trench with wells: \$46 to \$101
8. T-Lock lining for RCP: \$8.24 /S.F.