

APPENDIX A
COST ESTIMATE

Table of Planned Drainage Facilities

Estimation of Probable Costs

ID	Location	Facility Type	Facility Size	Facility Type	No. of Facilities	Quantity	Unit	Unit Cost	Construction Cost	R/W Cost	Eng/CM/Prj Mgt Cost (30%)	Contingency (20%)	Total Cost
High Priority													
A-1	on Ave. K from 20th St. W to 22nd St. W	Regional	108"	RCP	1	1,510	ft	\$1,200.00	\$1,812,000.00	-	\$543,600.00	\$362,400.00	\$2,718,000.00
A-1	on 20th St. W b/w Ave. K and Ave. K-8	Regional	84"	RCP	1	2,570	ft	\$400.00	\$1,028,000.00	-	\$308,400.00	\$205,600.00	\$1,542,000.00
A-1	on 20th St. W b/w Ave. K-8 and Ave. M	Regional	78"	RCP	1	8,030	ft	\$375.00	\$3,011,250.00	-	\$903,375.00	\$602,250.00	\$4,516,875.00
A-5A	on 35th St. W b/w Ave. J and Ave. K	Regional	12'W x 8'H	RCB	1	18,489	cy	\$1,200.00	\$22,186,666.67	-	\$6,656,000.00	\$4,437,333.33	\$33,280,000.00
A-5A	on Ave. K b/w 32th St. W and 35th St. W	Lateral	78"	RCP	1	980	ft	\$375.00	\$367,500.00	-	\$110,250.00	\$73,500.00	\$551,250.00
A-5B	on 35th St. W b/w Ave. L and 820' North of Ave. L	Regional	66"	RCP	2	820	ft	\$350.00	\$574,000.00	-	\$172,200.00	\$114,800.00	\$861,000.00
A-7	on West J Ave. b/w 45th and 50th	Lateral	108"	RCP	1	2,760	ft	\$1,200.00	\$3,312,000.00	-	\$993,600.00	\$662,400.00	\$4,968,000.00
A-7	on 45th St. W b/w Ave. J and Ave. K	Lateral	90"	RCP	1	5,220	ft	\$550.00	\$2,871,000.00	-	\$861,300.00	\$574,200.00	\$4,306,500.00
A-7A	on Ave. K b/w 42th and 45th St W	Regional	84"	RCP	1	1,450	ft	\$400.00	\$580,000.00	-	\$174,000.00	\$116,000.00	\$870,000.00
A-9A	on 65th St. b/w W. J Ave to W. J-8 Ave	Regional	12'W X 8' H	RCB	1	3,822	cy	\$1,200.00	\$4,586,666.67	-	\$1,376,000.00	\$917,333.33	\$6,880,000.00
A-9A	on 65th St. W b/w Ave. J-8 and Ave. J-12	Regional	120"	RCP	1	1,365	ft	\$1,500.00	\$2,047,500.00	-	\$614,250.00	\$409,500.00	\$3,071,250.00
A-11B	on Ave. L between 10th St. W and SR-14	Regional	42"	RCP	1	720	ft	\$245.00	\$176,400.00	-	\$52,920.00	\$35,280.00	\$264,600.00
A-12	on 60th St W b/w Ave. L and Ave. M	Regional	90"	RCP	1	5,250	ft	\$550.00	\$2,887,500.00	-	\$866,250.00	\$577,500.00	\$4,331,250.00
A-12	on Ave. M between from Kensington Circle to 60th St W	Regional	72"	RCP	1	1,320	ft	\$375.00	\$495,000.00	-	\$148,500.00	\$99,000.00	\$742,500.00
B-5B	on Ave. L between 8th St. W and Sierra Hwy.	Lateral	72"	RCP	1	2,350	ft	\$375.00	\$881,250.00	-	\$264,375.00	\$176,250.00	\$1,321,875.00
C-2	on Ave. H-4 from pond west of Evelyn Ct. to 10th St. W	Lateral	66"	RCP	1	1,220	ft	\$350.00	\$427,000.00	-	\$128,100.00	\$85,400.00	\$640,500.00
D-3	on Ave. I from Trevor Ave. to Division St.	Lateral	60"	RCP	2	1,190	ft	\$335.00	\$797,300.00	-	\$239,190.00	\$159,460.00	\$1,195,950.00
D-3	On W. I Ave. b/w Division and 3rd St.	Lateral	48"	RCP	1	1,410	ft	\$270.00	\$380,700.00	-	\$114,210.00	\$76,140.00	\$571,050.00
D-3	On W. I Ave. b/w 3rd and 5th St.	Lateral	36"	RCP	1	1,350	ft	\$175.00	\$236,250.00	-	\$70,875.00	\$47,250.00	\$354,375.00
D-3	On 5th St. b/w I Ave and Kettering Ave. & On Kettering Ave. b/w 5th and Challenger Way	Lateral	36"	RCP	1	1,470	ft	\$175.00	\$257,250.00	-	\$77,175.00	\$51,450.00	\$385,875.00
D-3B	On 3rd St. E b/w W. Ave I and E Keettering St & on Kettering St b/w 3rd and 5th	Lateral	24"	RCP	1	1,325	ft	\$135.00	\$178,875.00	-	\$53,662.50	\$35,775.00	\$268,312.50
D-4	on Division St. between Ave. I and E. Green Acres	Lateral	78"	RCP	1	3,250	ft	\$375.00	\$1,218,750.00	-	\$365,625.00	\$243,750.00	\$1,828,125.00
D-4	On Division St. b/w W. J Ave and W. J-9 Ave.	Lateral	48"	RCP	1	2,550	ft	\$270.00	\$688,500.00	-	\$206,550.00	\$137,700.00	\$1,032,750.00
D-4	On Division St. b/w W. J-9 Ave and W. K Ave.	Lateral	48"	RCP	1	2,490	ft	\$270.00	\$672,300.00	-	\$201,690.00	\$134,460.00	\$1,008,450.00
D-4	On Division St. b/w W. K Ave and W. K-8 Ave.	Lateral	36"	RCP	1	2,600	ft	\$175.00	\$455,000.00	-	\$136,500.00	\$91,000.00	\$682,500.00
D-4F	On E. K Ave. b/w Division St. and Sierra Highway	Lateral	60"	RCP	1	850	ft	\$335.00	\$284,750.00	-	\$85,425.00	\$56,950.00	\$427,125.00
D-4G	On E. K Ave. b/w Division St. and 5th St.	Lateral	84"	RCP	1	2,640	ft	\$400.00	\$1,056,000.00	-	\$316,800.00	\$211,200.00	\$1,584,000.00
D-4H	On 5th St. E: between Ave. K and Ave. K-4 and north of K-12	Regional	60"	RCP	1	3,575	ft	\$335.00	\$1,197,625.00	-	\$359,287.50	\$239,525.00	\$1,796,437.50
D-4I	On E. K-12 Ave b/w 5th and 7th St.	Lateral	42"	RCP	1	1,030	ft	\$245.00	\$252,350.00	-	\$75,705.00	\$50,470.00	\$378,525.00
D-4I	On 7th St. E. K-12 Ave. and E. L Ave	Lateral	36"	RCP	1	1,350	ft	\$175.00	\$236,250.00	-	\$70,875.00	\$47,250.00	\$354,375.00
D-4J	Extending from Ave. K to service open space between 11th St. E and Carpenter Dr.									-	\$0.00	\$0.00	\$0.00
E-1	On Challenger Way b/w E. Lancaster Blvd and E. J Ave.	Regional	66"	RCP	1	2,680	ft	\$350.00	\$938,000.00	-	\$281,400.00	\$187,600.00	\$1,407,000.00
E-1	On Challenger Way b/w E. J Ave. and E. K Ave.	Regional	54"	RCP	1	5,300	ft	\$300.00	\$1,590,000.00	-	\$477,000.00	\$318,000.00	\$2,385,000.00
E-1	On Challenger Way b/w E. K Ave. and E. L Ave.	Regional	42"	RCP	1	5,290	ft	\$245.00	\$1,296,050.00	-	\$388,815.00	\$259,210.00	\$1,944,075.00
E-2	on Ave. I from Challenger Way to 15th St. E	Regional	96"	RCP	2	2,760	ft	\$650.00	\$3,588,000.00	-	\$1,076,400.00	\$717,600.00	\$5,382,000.00
F-1	on 20th St. E from Ave. I to E. Kettering St.	Regional	102"	RCP	2	1,340	ft	\$1,000.00	\$2,680,000.00	-	\$804,000.00	\$536,000.00	\$4,020,000.00
F-1	on 20th St. b/w E. J-8 Ave and E. K Ave.	Regional	96"	RCP	2	2,500	ft	\$650.00	\$3,250,000.00	-	\$975,000.00	\$650,000.00	\$4,875,000.00
SUBTOTAL												\$102,746,525.00	
Medium Priority													
A-5B	on 35th St. W from Ave. L-4 to Ave. L-6	Regional	60"	RCP	2	710	ft	\$335.00	\$475,700.00	-	\$142,710.00	\$95,140.00	\$713,550.00
A-9A	on 65th St. W b/w Ave. L and Ave. L-8	Regional	78"	RCP	1	2,460	ft	\$375.00	\$922,500.00	-	\$276,750.00	\$184,500.00	\$1,383,750.00
B-5	Follows ex. channel south of Ave. K near SR-14.	Regional	21'W x 10.5' H	RCB	2	3,640	cy	\$1,200.00	\$8,736,000.00	-	\$2,620,800.00	\$1,747,200.00	\$13,104,000.00
J-1	Along the ex. channel b/w 40th St. W and 42nd St. W from W. Ave. N to existing pond 470' north of W. Ave M-8.	Regional	45'Wx9'H	Earthen Channel	1	51,603	cy	\$10.00	\$516,029.63	\$303,432.05	\$245,838.50	\$163,892.34	\$1,229,192.52
SUBTOTAL												\$16,430,492.52	
Low Priority													
A-1	b/w Ave. H and Ave. I, and b/w SR-14 and 30th St. W	Regional	200'W x 7'H	Earthen Channel	1	228,789	cy	\$10.00	\$2,287,885.19	\$1,131,772.27	\$1,025,897.24	\$683,931.49	\$5,129,486.18
A-2	Driveway west of Pond 2 from Ave. G-8 to Ave. H	Regional	12'W x 8' H	RCB	3	5,881	cy	\$1,200.00	\$21,173,333.33	-	\$6,352,000.00	\$4,234,666.67	\$31,760,000.00

ID	Location	Facility Type	Facility Size	Facility Type	No. of Facilities	Quantity	Unit	Unit Cost	Construction Cost	R/W Cost	Eng/CM/Prj Mgt Cost (30%)	Contingency (20%)	Total Cost
A-2	on Ave. G-8 from 30th St. W to 50th St. W	Regional	12'W x 8'H	RCB	2	15,896	cy	\$1,200.00	\$38,151,111.11	-	\$11,445,333.33	\$7,630,222.22	\$57,226,666.67
A-2	on 50th St. W from Ave. G-8 to Ave. G	Regional	12'W x 8'H	RCB	2	3,748	cy	\$1,200.00	\$8,995,555.56	-	\$2,698,666.67	\$1,799,111.11	\$13,493,333.33
A-2	on Ave. G from 50th St. W to 60th St. W	Regional	80'W x 7'H	Earthen Channel	1	81,376	cy	\$10.00	\$813,762.96	\$488,521.58	\$390,685.36	\$260,456.91	\$1,953,426.81
A-2	on 60th St. W between Ave. F and Ave. G	Regional	80'W x 7'H	Earthen Channel	1	40,382	cy	\$10.00	\$403,822.22	\$242,424.24	\$193,873.94	\$129,249.29	\$969,369.70
A-3	north of Ave. F-6 between 65th St. W and 70th St. W	Regional	60'W x 7'H	Earthen Channel	1	26,592	cy	\$10.00	\$265,922.22	\$181,129.48	\$134,115.51	\$89,410.34	\$670,577.55
A-4	on West H Ave. b/w 25th and 45th	Regional	120"	RCP	1	10,100	ft	\$1,500.00	\$15,150,000.00	-	\$4,545,000.00	\$3,030,000.00	\$22,725,000.00
A-4	on West H Ave. b/w 45th and 55th	Regional	72"	RCP	1	8,020	ft	\$375.00	\$3,007,500.00	-	\$902,250.00	\$601,500.00	\$4,511,250.00
A-4	on West H Ave. b/w 55th and 60th	Regional	66"	RCP	1	2,650	ft	\$350.00	\$927,500.00	-	\$278,250.00	\$185,500.00	\$1,391,250.00
A-4	on West H Ave. b/w 60th and 65th	Regional	60"	RCP	1	2,600	ft	\$335.00	\$871,000.00	-	\$261,300.00	\$174,200.00	\$1,306,500.00
A-4	on West H Ave. b/w 65th and 70th	Regional	48"	RCP	1	2,560	ft	\$270.00	\$691,200.00	-	\$207,360.00	\$138,240.00	\$1,036,800.00
A-4A	on 40th, from South of West H Ave. to W. H Ave.	Regional	96"	RCP	1	3,120	ft	\$650.00	\$2,028,000.00	-	\$608,400.00	\$405,600.00	\$3,042,000.00
A-4B	on 45th, from North of West H Ave. to W. H Ave.	Lateral	48"	RCP	1	1,850	ft	\$270.00	\$499,500.00	-	\$149,850.00	\$99,900.00	\$749,250.00
A-4C	on 50th, from North of West H Ave. to W. H Ave.	Lateral	48"	RCP	1	1,850	ft	\$270.00	\$499,500.00	-	\$149,850.00	\$99,900.00	\$749,250.00
A-4D	on 55th, from North of West H Ave. to W. H Ave.	Lateral	36"	RCP	1	2,700	ft	\$175.00	\$472,500.00	-	\$141,750.00	\$94,500.00	\$708,750.00
A-4E	on 60th, from North of West H Ave. to W. H Ave.	Lateral	30"	RCP	1	2,630	ft	\$155.00	\$407,650.00	-	\$122,295.00	\$81,530.00	\$611,475.00
A-4F	on 65th, from North of West H Ave. to W. H Ave.	Lateral	54"	RCP	1	2,660	ft	\$300.00	\$798,000.00	-	\$239,400.00	\$159,600.00	\$1,197,000.00
A-5	on West I Ave. b/w 30th and 35th	Regional	430'X7'	Earthen Channel	1	284,179	cy	\$10.00	\$2,841,792.59	\$1,322,773.19	\$1,249,369.73	\$832,913.16	\$6,246,848.67
A-5	on West I Ave. b/w 35th and 40th	Regional	320'X7'	Earthen Channel	1	203,874	cy	\$10.00	\$2,038,737.04	\$966,023.88	\$901,428.27	\$600,952.18	\$4,507,141.37
A-5	on West I Ave. b/w 40th and 50th	Regional	320'X7'	Earthen Channel	1	406,972	cy	\$10.00	\$4,069,722.22	\$1,928,374.66	\$1,799,429.06	\$1,199,619.38	\$8,997,145.32
A-5	on 50th, from W. Lancaster Blvd to W. I Ave.	Regional	320'X7'	Earthen Channel	1	266,664	cy	\$10.00	\$2,666,637.04	\$1,263,544.54	\$1,179,054.47	\$786,036.31	\$5,895,272.36
A-5A	on 35th, from W. J Ave. to W. Lancaster Blvd.	Regional	60'X7'	Earthen Channel	1	24,368	cy	\$10.00	\$243,677.78	\$165,977.96	\$122,896.72	\$81,931.15	\$614,483.61
A-5A	on Ave. K b/w 30th St. W and 32th St. W	Lateral	78"	RCP	1	1,320	ft	\$375.00	\$495,000.00	-	\$148,500.00	\$99,000.00	\$742,500.00
A-5A	on 30th, from W. Ave. L-8. to W. Ave. K.	Lateral	48"	RCP	1	7,880	ft	\$270.00	\$2,127,600.00	-	\$638,280.00	\$425,520.00	\$3,191,400.00
A-5B	on west of 33rd st. b/w W. Ave. K to W. Ave. K-8	Regional	50'Wx5'H	Earthen Channel	1	22,685	cy	\$10.00	\$226,851.85	\$200,872.36	\$128,317.26	\$85,544.84	\$641,586.32
A-5B	on 35th St. W b/w Ave. K-8 and 820' North of Ave. L	Regional	66"	RCP	2	1,900	ft	\$350.00	\$1,330,000.00	-	\$399,000.00	\$266,000.00	\$1,995,000.00
A-5B	on 35th St. b/w W. Ave. L and Ave L-4.	Regional	60"	RCP	2	1,230	ft	\$335.00	\$824,100.00	-	\$247,230.00	\$164,820.00	\$1,236,150.00
A-5B	on 35th St. b/w W. L-6 and L-12 Ave.	Regional	60"	RCP	2	1,880	ft	\$335.00	\$1,259,600.00	-	\$377,880.00	\$251,920.00	\$1,889,400.00
A-5B	starts from Columbia Way to 30th St.	Regional	60"	RCP	2	7,430	ft	\$335.00	\$4,978,100.00	-	\$1,493,430.00	\$995,620.00	\$7,467,150.00
A-5C	on 40th St: from Ave. I to Ave. J	Regional	84"	RCP	1	5,250	RCP	\$375.00	\$1,968,750.00	-	\$590,625.00	\$393,750.00	\$2,953,125.00
A-5C	on 40th St W from Ave. J to Ave. J-12	Regional	72"	RCP	1	4,140	ft	\$375.00	\$1,552,500.00	-	\$465,750.00	\$310,500.00	\$2,328,750.00
A-5C	on 40th St W between Ave. J-12 and Ave. L-8	Regional	54"	RCP	1	9,000	ft	\$300.00	\$2,700,000.00	-	\$810,000.00	\$540,000.00	\$4,050,000.00
A-6	b/w Ave. I and Ave. J from 60 St. W to 70 St. W.	Regional	140'Wx7'H	Earthen Channel	1	166,291	cy	\$10.00	\$1,662,914.81	\$866,161.62	\$758,722.93	\$505,815.29	\$3,793,614.65
A-6A	on 65th St. b/w Ave H-8 to 2,650 south of Ave I.	Lateral	84"	RCP	1	5,400	ft	\$400.00	\$2,160,000.00	-	\$648,000.00	\$432,000.00	\$3,240,000.00
A-8	on 52nd St. b/w W. J Ave. and W. K Ave.	Regional	72"	RCP	1	10,430	ft	\$375.00	\$3,911,250.00	-	\$1,173,375.00	\$782,250.00	\$5,866,875.00
A-9	on West J Ave. b/w 60th and 70th	Regional	220'Wx7'H	Earthen Channel	1	271,893	cy	\$10.00	\$2,718,929.63	\$1,330,808.08	\$1,214,921.31	\$809,947.54	\$6,074,606.57
A-9	on 70th St. b/w W. J Ave. and W. J-8 Ave.	Regional	140'Wx7'H	Earthen Channel	1	81,449	cy	\$10.00	\$814,488.89	\$424,242.42	\$371,619.39	\$247,746.26	\$1,858,096.97
A-9	on W. J-8 Ave. b/w 70th and 75th St. & on 70th St. b/w W. L Ave. and W. J-8 Ave.	Regional	12'W X 9' H	RCB	1	16,582	cy	\$1,200.00	\$19,898,666.67	-	\$5,969,600.00	\$3,979,733.33	\$29,848,000.00
A-9	on W. L Ave. b/w 75th and 80th St.	Regional	72"	RCP	1	2,660	ft	\$375.00	\$997,500.00	-	\$299,250.00	\$199,500.00	\$1,496,250.00
A-9	on 80th St. South of W. L Ave.	Regional	54"	RCP	1	3,970	ft	\$300.00	\$1,191,000.00	-	\$357,300.00	\$238,200.00	\$1,786,500.00
A-9A	on 65th St. W b/w Ave. J-12 and Ave. K	Regional	120"	RCP	1	1,320	ft	\$1,500.00	\$1,980,000.00	-	\$594,000.00	\$396,000.00	\$2,970,000.00
A-9A	on 65th St. W b/w W. K Ave and Ave. L	Regional	102"	RCP	1	5,315	ft	\$1,000.00	\$5,315,000.00	-	\$1,594,500.00	\$1,063,000.00	\$7,972,500.00
A-9A	on 65th St. North of W. I-14 Ave	Regional	66"	RCP	1	1,560	ft	\$350.00	\$546,000.00	-	\$163,800.00	\$109,200.00	\$819,000.00
A-9B	on K Ave., West of 65th St.	Lateral	90"	RCP	1	2,630	ft	\$550.00	\$1,446,500.00	-	\$433,950.00	\$289,300.00	\$2,169,750.00
A-9C	on Ave. K from 60th St. to 65th St.	Regional	12'W x 9'H	RCB	1	4,262	cy	\$1,200.00	\$5,114,666.67	-	\$1,534,400.00	\$1,022,933.33	\$7,672,000.00
A-9C	on 60th St b/w W. K-8 and W. K Ave	Regional	120"	RCP	1	2,740	ft	\$1,500.00	\$4,110,000.00	-	\$1,233,000.00	\$822,000.00	\$6,165,000.00
A-9C	on 60th St. W b/w Ave. K-8 and Ave. K-12	Regional	120"	RCP	1	1,120	ft	\$1,500.00	\$1,680,000.00	-	\$504,000.00	\$336,000.00	\$2,520,000.00
A-9C	on 60th St b/w W. L and W. K-12 Ave	Regional	120"	RCP	1	1,480	ft	\$1,500.00	\$2,220,000.00	-	\$666,000.00	\$444,000.00	\$3,330,000.00
A-9C	on W. L Ave. b/w 57th and 60th St.	Regional	78"	RCP	1	1,340	ft	\$375.00	\$502,500.00	-	\$150,750.00	\$100,500.00	\$753,750.00
A-9C	on 57th St. b/w W. L Ave and W. L-8 Ave.	Regional	48"	RCP	1	2,740	ft	\$270.00	\$739,800.00	-	\$221,940.00	\$147,960.00	\$1,109,700.00
A-9D	on Ave. L from 65th St. to 70th St.	Lateral	84"	RCP	1	2,680	ft	\$400.00	\$1,072,000.00	-	\$321,600.00	\$214,400.00	\$1,608,000.00
A-9D	on 70th St. from Ave. L to Ave. L-8	Lateral	60"	RCP	1	2,780	ft	\$335.00	\$931,300.00	-	\$279,390.00	\$186,260.00	\$1,396,950.00
A-9E	East of 80th St. South of W. L-Ave	Lateral	30"	RCP	1	2,760	ft	\$155.00	\$427,800.00	-	\$128,340.00	\$85,560.00	\$641,700.00
A-10	on 25th St. b/w West J Ave. and Columbia Way	Regional	66"	RCP	1	16,080	ft	\$350.00	\$5,628,000.00	-	\$1,688,400.00	\$1,125,600.00	\$8,442,000.00

ID	Location	Facility Type	Facility Size	Facility Type	No. of Facilities	Quantity	Unit	Unit Cost	Construction Cost	R/W Cost	Eng/CM/Prj Mgt Cost (30%)	Contingency (20%)	Total Cost
A-11	on 15th St. W b/w 17th St. W and Ave. K-8	Lateral	8'Wx6'H	RCB	1	918	cy	\$1,200.00	\$1,101,851.85	-	\$330,555.56	\$220,370.37	\$1,652,777.78
A-11	on Ave. K-8 from 15th St. W to 20th St. W	Regional	42"	RCP	1	2,530	ft	\$245.00	\$619,850.00	-	\$185,955.00	\$123,970.00	\$929,775.00
A-11A	on 15th St. b/w W. K-8 Ave. and Columbia Way	Regional	42"	RCP	1	7,290	ft	\$245.00	\$1,786,050.00	-	\$535,815.00	\$357,210.00	\$2,679,075.00
A-11B	on 10th St. b/w W. L Ave. and Columbia Way	Regional	42"	RCP	1	5,320	ft	\$245.00	\$1,303,400.00	-	\$391,020.00	\$260,680.00	\$1,955,100.00
B-3A	On 15th St W b/w Lancaster Blvd and Norberry St., on Norberry St b/w 12th and 15th st	Lateral	30"	RCP	1	2,720	ft	\$155.00	\$421,600.00	-	\$126,480.00	\$84,320.00	\$632,400.00
B-4A	On 15th St. b/w W. J Ave and W. J-8 Ave. & On W. J-8 Ave, b/w 15th St. and 12th St.	Lateral	24"	RCP	1	3,960	ft	\$135.00	\$534,600.00	-	\$160,380.00	\$106,920.00	\$801,900.00
B-4B	On Kingtree Ave, south of W. J Ave.	Lateral	18"	RCP	1	1,170	ft	\$120.00	\$140,400.00	-	\$42,120.00	\$28,080.00	\$210,600.00
B-4C	On Gadsden Ave. b/w W. J-10 and W. J-12 Ave.	Lateral	24"	RCP	1	2,700	ft	\$135.00	\$364,500.00	-	\$109,350.00	\$72,900.00	\$546,750.00
B-4D	On Beech Ave. b/w W. J-4 and J-10 Ave.	Lateral	24"	RCP	1	3,050	ft	\$135.00	\$411,750.00	-	\$123,525.00	\$82,350.00	\$617,625.00
B-5	South of Ave. K to Ave L, SR-14 to 5th St W	Regional	15.5'W x 12' H	RCB	2	12,222	cy	\$1,200.00	\$29,333,333.33	-	\$8,800,000.00	\$5,866,666.67	\$44,000,000.00
B-5A	On W. K Ave. b/w 15th St. and west of Park Ave.	Lateral	48"	RCP	1	3,930	ft	\$270.00	\$1,061,100.00	-	\$318,330.00	\$212,220.00	\$1,591,650.00
B-5C	Along East of the existing Earthen Channel b/w W. L Ave and Columbia Way	Regional	15.5'W x 12' H	RCB	2	7,720	cy	\$1,200.00	\$18,528,888.89	-	\$5,558,666.67	\$3,705,777.78	\$27,793,333.33
B-5D	On Ave. L b/w 8th St. W and 6th St. W	Lateral	54"	RCP	1	610	ft	\$300.00	\$183,000.00	-	\$54,900.00	\$36,600.00	\$274,500.00
C-1	Outlet Structure				1		Ea	\$50,000.00	\$50,000.00	-	\$15,000.00	\$10,000.00	\$75,000.00
C-1	On 15th St. b/w W. G Ave and W. G-8 Ave.	Regional	120"	RCP	1	2,710	ft	\$1,500.00	\$4,065,000.00	-	\$1,219,500.00	\$813,000.00	\$6,097,500.00
C-1	On 15th St. b/w W. G-8 Ave and W. H Ave.	Regional	102"	RCP	1	2,690	ft	\$1,000.00	\$2,690,000.00	-	\$807,000.00	\$538,000.00	\$4,035,000.00
C-1A	On W. G-8 Ave. b/w 15th and 10th St.	Lateral	48"	RCP	1	2,630	ft	\$270.00	\$710,100.00	-	\$213,030.00	\$142,020.00	\$1,065,150.00
C-2	On W H-4 Ave. b/w Fig Ave. and 10th St.	Lateral	42"	RCP	1	1,330	ft	\$245.00	\$325,850.00	-	\$97,755.00	\$65,170.00	\$488,775.00
C-2A	On 10th St. b/w W. H-4 Ave and W. H-8 Ave & on W. H-8 Ave. b/w 10th St. and Fig Ave	Lateral	60"	RCP	1	2,950	ft	\$335.00	\$988,250.00	-	\$296,475.00	\$197,650.00	\$1,482,375.00
D-1	Outlet Structure				1		Ea	\$50,000.00	\$50,000.00	-	\$15,000.00	\$10,000.00	\$75,000.00
D-1	Along East of Sierra Highway	Regional	100' x 7'	Earthen Channel	1	56,324	cy	\$10.00	\$563,240.74	\$315,656.57	\$263,669.19	\$175,779.46	\$1,318,345.96
D-1	Along East of Sierra Highway	Regional	80' x 7'	Earthen Channel	1	41,606	cy	\$10.00	\$416,059.26	\$249,770.43	\$199,748.91	\$133,165.94	\$998,744.54
D-1A	On W. G-8 Ave. b/w Sierra Highway to City Boundary	Lateral	30"	RCP	1	2,860	ft	\$155.00	\$443,300.00	-	\$132,990.00	\$88,660.00	\$664,950.00
D-2	on H-6 from Trevor Ave. to Division St.	Lateral	72"	RCP	1	1,920	ft	\$375.00	\$720,000.00	-	\$216,000.00	\$144,000.00	\$1,080,000.00
D-2	on Division St. from Ave. H-6 to Ave. H-8	Lateral	72"	RCP	-								
D-2A	on Ave. H-8 b/w Division St. and Carrousel Dr.	Lateral	66"	RCP	1	1,110	ft	\$350.00	\$388,500.00	-	\$116,550.00	\$77,700.00	\$582,750.00
D-3A	on Yucca Ave. b/w Ave. I to W. Nugent St.	Lateral	48"	RCP	1	3,925	ft	\$270.00	\$1,059,750.00	-	\$317,925.00	\$211,950.00	\$1,589,625.00
D-3A	on W. Nugent b/w Yucca Ave. and Trevor Ave.	Lateral	48"	RCP	1	500	ft	\$270.00	\$135,000.00	-	\$40,500.00	\$27,000.00	\$202,500.00
D-3A	on Trevor Ave. from W. Nugent St. to W. Ave J.	Lateral	48"	RCP	1	1,325	ft	\$270.00	\$357,750.00	-	\$107,325.00	\$71,550.00	\$536,625.00
D-3A	on W. Ave J from 140' east of Sierra Hwy to Trevor Ave.	Lateral	42"	RCP	1	725	ft	\$245.00	\$177,625.00	-	\$53,287.50	\$35,525.00	\$266,437.50
D-4A	On Lancaster Blvd. b/w Division St and Foxton St.	Lateral	66"	RCP	1	1,480	ft	\$350.00	\$518,000.00	-	\$155,400.00	\$103,600.00	\$777,000.00
D-4A	On Lancaster Blvd. b/w Foxton St and Andale Ave.	Lateral	42"	RCP	1	2,260	ft	\$245.00	\$553,700.00	-	\$166,110.00	\$110,740.00	\$830,550.00
D-4A	On Andale Ave. b/w Lancaster Blvd. and Oldfield St.	Lateral	30"	RCP	1	1,430	ft	\$155.00	\$221,650.00	-	\$66,495.00	\$44,330.00	\$332,475.00
D-4B	On Foxton St. b/w Lancaster Blvd. and E. Nugent St.	Lateral	30"	RCP	1	1,390	ft	\$155.00	\$215,450.00	-	\$64,635.00	\$43,090.00	\$323,175.00
D-4C	On E. J Ave b/w Glenraven Rd and 5th St.	Lateral	48"	RCP	1	1,910	ft	\$270.00	\$515,700.00	-	\$154,710.00	\$103,140.00	\$773,550.00
D-4C	On 5th St b/w E. J Ave and Woodington Dr.; on Woodington Dr. b/w 5th St. and Sancroft Ave.; on Sancroft b/w Woodington and E. Ave. J-5; on Ave. J-5 b/w Sancroft to 500' east of 7th St. E	Lateral	42"	RCP	1	3,330	ft	\$245.00	\$815,850.00	-	\$244,755.00	\$163,170.00	\$1,223,775.00
D-4D	On E. J-8 Ave b/w Division St and 5th St.	Lateral	54"	RCP	1	2,680	ft	\$300.00	\$804,000.00	-	\$241,200.00	\$160,800.00	\$1,206,000.00
D-4D	On 5th St. b/w E. J-8 Ave and E. J-10 Ave & On E. J-10 Ave b/w 5th St. and 7th St.	Lateral	36"	RCP	1	1,690	ft	\$175.00	\$295,750.00	-	\$88,725.00	\$59,150.00	\$443,625.00
D-4E	On Glenraven Rd. b/w E. J-8 Ave and E. J-11 Ave.	Lateral	24"	RCP	1	790	ft	\$1,000.00	\$790,000.00	-	\$237,000.00	\$158,000.00	\$1,185,000.00
D-4H	on 5th St. b/w E. K-4 Ave and E. K-10 Ave	Regional	60"	RCP	1	1,830	ft	\$335.00	\$613,050.00	-	\$183,915.00	\$122,610.00	\$919,575.00
E-1	Outlet Structure				1		Ea	\$50,000.00	\$50,000.00	-	\$15,000.00	\$10,000.00	\$75,000.00
E-1	On 3rd St. north of E. H Ave. & On E. H Ave. b/w 3rd St. and Challenger Way	Regional	108"	RCP	2	4,230	ft	\$1,200.00	\$10,152,000.00	-	\$3,045,600.00	\$2,030,400.00	\$15,228,000.00
E-1	On Challenger Way b/w E. H Ave. and E. I Ave.	Regional	108"	RCP	2	5,150	ft	\$1,200.00	\$12,360,000.00	-	\$3,708,000.00	\$2,472,000.00	\$18,540,000.00
E-2	On 15th St. b/w E. I Ave. and E. K-4 Ave.	Regional	66"	RCP	2	11,830	ft	\$350.00	\$8,281,000.00	-	\$2,484,300.00	\$1,656,200.00	\$12,421,500.00
E-2	On 15th St. b/w E. K-8 Ave. and E. L Ave.	Regional	66"	RCP	2	2,580	ft	\$350.00	\$1,806,000.00	-	\$541,800.00	\$361,200.00	\$2,709,000.00
E-2	on 15th St. E between Ave. K-4 to Ave. K-8	Regional	66"	RCP	2	1,370	ft	\$350.00	\$959,000.00	-	\$287,700.00	\$191,800.00	\$1,438,500.00
F-1	Outlet Structure				1		Ea	\$50,000.00	\$50,000.00	-	\$15,000.00	\$10,000.00	\$75,000.00
F-1	Along East of 20th St from approx. 4,370' north of E. H Ave & on 20th St. b/w E. H Ave and E. I Ave.	Regional	120"	RCP	2	5,890	ft	\$1,500.00	\$17,670,000.00	-	\$5,301,000.00	\$3,534,000.00	\$26,505,000.00
F-1	on 20th St. b/w E. Kettering Ave and E. J-8 Ave.	Regional	102"	RCP	2	6,630	ft	\$1,000.00	\$13,260,000.00	-	\$3,978,000.00	\$2,652,000.00	\$19,890,000.00
F-1	on 20th St. E from Ave. K to Ave. K-8	Regional	96"	RCP	2	2,720	ft	\$650.00	\$3,536,000.00	-	\$1,060,800.00	\$707,200.00	\$5,304,000.00
F-1	on 20th St. b/w E. K-8 Ave and E. L Ave.	Regional	96"	RCP	2	2,630	ft	\$650.00	\$3,419,000.00	-	\$1,025,700.00	\$683,800.00	\$5,128,500.00
F-1A	On E. I Ave. b/w 20th St and 23rd St.	Lateral	60"	RCP	1	2,700	ft	\$335.00	\$904,500.00	-	\$271,350.00	\$180,900.00	\$1,356,750.00

ID	Location	Facility Type	Facility Size	Facility Type	No. of Facilities	Quantity	Unit	Unit Cost	Construction Cost	R/W Cost	Eng/CM/Prj Mgt Cost (30%)	Contingency (20%)	Total Cost
F-1A	On 25rd St. b/w E. Ave. I and E. Lancaster Blvd.	Lateral	42"	RCP	1	2,590	ft	\$245.00	\$634,550.00	-	\$190,365.00	\$126,910.00	\$951,825.00
F-2A	On E. K Ave. b/w 20th St. and 22nd St.	Lateral	36"	RCP	1	1,360	ft	\$175.00	\$238,000.00	-	\$71,400.00	\$47,600.00	\$357,000.00
G-1	Outlet Structure				1		Ea	\$50,000.00	\$50,000.00	-	\$15,000.00	\$10,000.00	\$75,000.00
G-1	On 26th St. b/w E. H Ave. and E. I Ave.	Regional	120' x 7'	Earthen Channel	1	135,007	cy	\$10.00	\$1,350,066.67	\$724,517.91	\$622,375.37	\$414,916.91	\$3,111,876.86
G-1	West of Carefree Ct. b/w J-6 and J-10, and b/w E. K Ave. and E. L Ave.	Regional	85' X 7'	Earthen Channel	1	106,641	cy	\$10.00	\$1,066,405.93	\$627,060.38	\$508,039.89	\$338,693.26	\$2,540,199.45
G-1A	On E. I Ave. b/w 26th St and 35th St.	Lateral	42"	RCP	1	4,660	ft	\$245.00	\$1,141,700.00	-	\$342,510.00	\$228,340.00	\$1,712,550.00
G-1A	On 35th St. b/w E. I Ave. and E. Lancaster Blvd.	Lateral	24"	RCP	1	2,680	ft	\$135.00	\$361,800.00	-	\$108,540.00	\$72,360.00	\$542,700.00
G-2	On Kettering Ave. b/w 26th St. and 30th St.	Regional	96"	RCP	1	1,865	ft	\$650.00	\$1,212,250.00	-	\$363,675.00	\$242,450.00	\$1,818,375.00
G-2	On 30th St. E b/w E Kettering St & Lancaster Blvd, Lancaster Blvd from 30th St E to channel to E	Regional	96"	RCP	1	2,565	ft	\$650.00	\$1,667,250.00	\$0.00	\$500,175.00	\$333,450.00	\$2,500,875.00
G-2	On 32nd St., extending south from Lancaster Blvd to ex. channel	Regional	85' X 7'	Earthen Channel	2	14,767	cy	\$10.00	\$295,348.15	\$86,834.25	\$114,654.72	\$76,436.48	\$573,273.60
H-1	On 42nd St. b/w E. Lancaster Blvd. and E. K-12 Ave.	Regional	150' x 7'	Earthen Channel	1	400,330	cy	\$10.00	\$4,003,300.00	\$2,060,950.41	\$1,819,275.12	\$1,212,850.08	\$9,096,375.62
H-2	On E. J Ave. b/w 42nd St. and 50th St.	Lateral	60"	RCP	1	4,050	ft	\$335.00	\$1,356,750.00	-	\$407,025.00	\$271,350.00	\$2,035,125.00
H-2	On E. J Ave. b/w 50th St. and 55th St.	Lateral	60"	RCP	1	2,665	ft	\$335.00	\$892,775.00	-	\$267,832.50	\$178,555.00	\$1,339,162.50
H-2	On 55th St. b/w E. Ave. J and E. Ave. J-8	Lateral	24"	RCP	1	2,660	ft	\$135.00	\$359,100.00	-	\$107,730.00	\$71,820.00	\$538,650.00
H-2A	On 50th St. b/w E. Ave. J and E. Ave. J-8	Lateral	18"	RCP	1	2,670	ft	\$120.00	\$320,400.00	-	\$96,120.00	\$64,080.00	\$480,600.00
H-3	On E. K Ave b/w 42nd St. and 55th St. & on 55th St. b/w south of E. K Ave.	Regional	66"	RCP	1	8,060	ft	\$350.00	\$2,821,000.00	-	\$846,300.00	\$564,200.00	\$4,231,500.00
H-4	Begin at Ave. K b/w 40th and 50th St. E to Ave. L and 50th St. E	Regional	85' X 7'	Earthen Channel	1	120,794	cy	\$10.00	\$1,207,940.74	\$710,284.66	\$575,467.62	\$383,645.08	\$2,877,338.11
I-1	Running diagonally from the corner of 25th St. and W. F Ave. towards the northeast	Regional	200'Wx7'H	Earthen Channel	1	39,910	cy	\$10.00	\$399,103.70	\$197,428.83	\$178,959.76	\$119,306.51	\$894,798.81
I-1	On W. F Ave. b/w 25th St. and 30th St.	Regional	200'Wx7'H	Earthen Channel	1	93,743	cy	\$10.00	\$937,429.63	\$463,728.19	\$420,347.35	\$280,231.56	\$2,101,736.73
I-1	On W. F Ave. b/w 30th St. and 35th St.	Regional	200'Wx7'H	Earthen Channel	1	123,444	cy	\$10.00	\$1,234,437.04	\$610,651.97	\$553,526.70	\$369,017.80	\$2,767,633.52
I-1	On W. F Ave. b/w 35th St. and 40th St.	Regional	150'Wx7'H	Earthen Channel	1	87,290	cy	\$10.00	\$872,900.00	\$449,380.17	\$396,684.05	\$264,456.03	\$1,983,420.25
I-1	On W. F Ave. b/w 40th St. and 45th St.	Regional	150'Wx7'H	Earthen Channel	1	89,297	cy	\$10.00	\$892,966.67	\$459,710.74	\$405,803.22	\$270,535.48	\$2,029,016.12
I-1	On W. F Ave. b/w 45th St. and 50th St.	Regional	150'Wx7'H	Earthen Channel	1	89,297	cy	\$10.00	\$892,966.67	\$459,710.74	\$405,803.22	\$270,535.48	\$2,029,016.12
I-1	On W. F Ave. b/w 50th St. and 55th St.	Regional	150'Wx7'H	Earthen Channel	1	87,290	cy	\$10.00	\$872,900.00	\$449,380.17	\$396,684.05	\$264,456.03	\$1,983,420.25
I-1	On W. F Ave. b/w 55th St. and 60th St.	Regional	150'Wx7'H	Earthen Channel	1	87,959	cy	\$10.00	\$879,588.89	\$452,823.69	\$399,723.77	\$266,482.52	\$1,998,618.87
I-1A	On 25th St. North of W. F Ave.	Lateral	30"	RCP	1	1,290	ft	\$155.00	\$199,950.00	-	\$59,985.00	\$39,990.00	\$299,925.00
I-1B	On 30th St. North of W. F Ave.	Lateral	30"	RCP	1	1,230	ft	\$155.00	\$190,650.00	-	\$57,195.00	\$38,130.00	\$285,975.00
I-1C	On 35th St. North of W. F Ave.	Lateral	36"	RCP	1	1,240	ft	\$175.00	\$217,000.00	-	\$65,100.00	\$43,400.00	\$325,500.00
I-1D	On 40th St. North of W. F Ave.	Lateral	36"	RCP	1	1,230	ft	\$175.00	\$215,250.00	-	\$64,575.00	\$43,050.00	\$322,875.00
I-1E	On 45th St. North of W. F Ave.	Lateral	42"	RCP	1	1,580	ft	\$245.00	\$387,100.00	-	\$116,130.00	\$77,420.00	\$580,650.00
I-1F	On 50th St. North of W. F Ave.	Lateral	48"	RCP	1	1,540	ft	\$270.00	\$415,800.00	-	\$124,740.00	\$83,160.00	\$623,700.00
I-1G	On 55th St. North of W. F Ave.	Lateral	54"	RCP	1	1,430	ft	\$300.00	\$429,000.00	-	\$128,700.00	\$85,800.00	\$643,500.00
												SUBTOTAL	\$578,104,081.96
												TOTAL COST	\$697,281,099.48

Costs are intended to envelope administration, engineering, construction management and includes in-service cost of improvements

Unit Pricing

18" RCP	\$120.00	LF	78" RCP	\$375.00	LF	
24" RCP	\$135.00	LF	84" RCP	\$400.00	LF	
30" RCP	\$155.00	LF	90" RCP	\$550.00	LF	
36" RCP	\$175.00	LF	96" RCP	\$650.00	LF	
42" RCP	\$245.00	LF	102" RCP	\$1,000.00	LF	
48" RCP	\$270.00	LF	108" RCP	\$1,200.00	LF	
54" RCP	\$300.00	LF	120" RCP	\$1,500.00	LF	
60" RCP	\$335.00	LF	Outlet Structure	\$50,000.00	EA	
66" RCP	\$350.00	LF	RCB	\$1,200.00	CY	RCBs utilized Caltrans standards for RCB wall thickness to calculate cubic yardage
72" RCP	\$375.00	LF	Earthen Channel	\$10.00	CY	The width shown is the top width of channel. A cross section was cut for earthen channels utilizing 3H:1V side slopes to estimate the cy of excavation required.