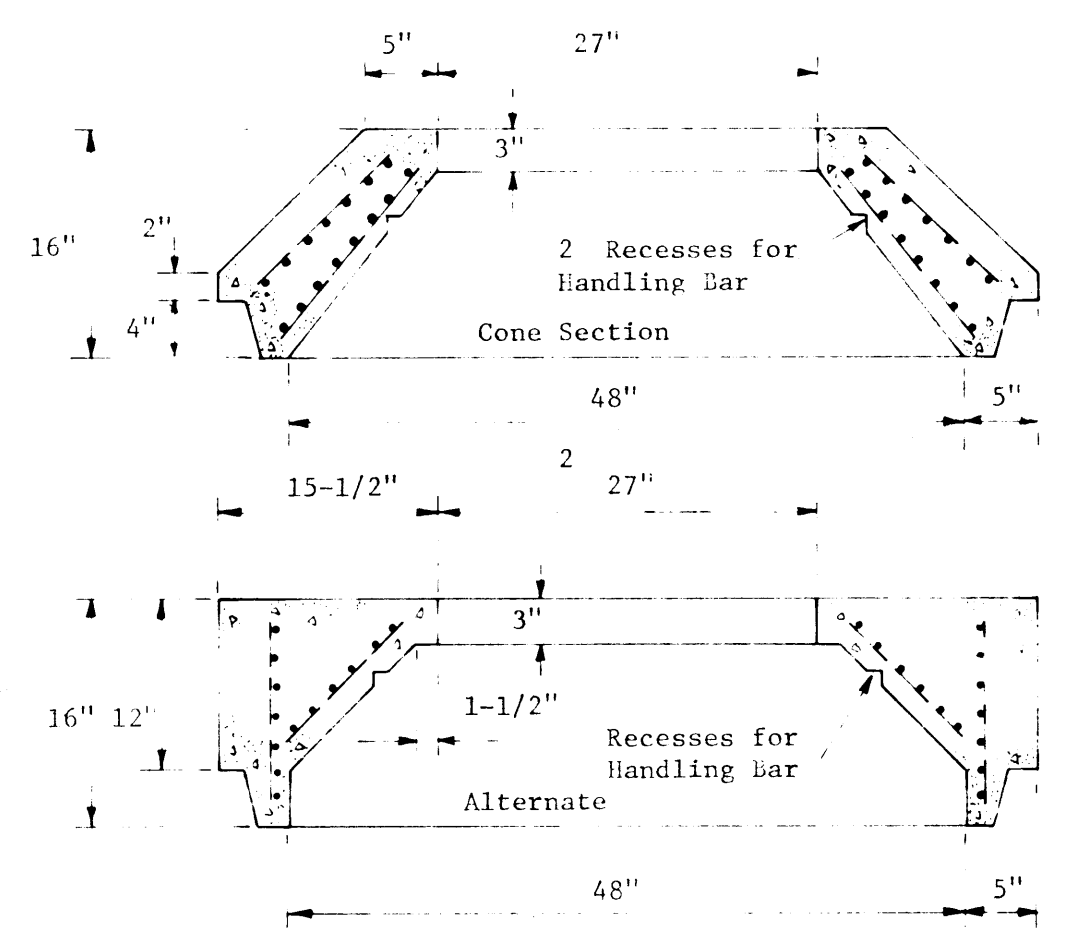
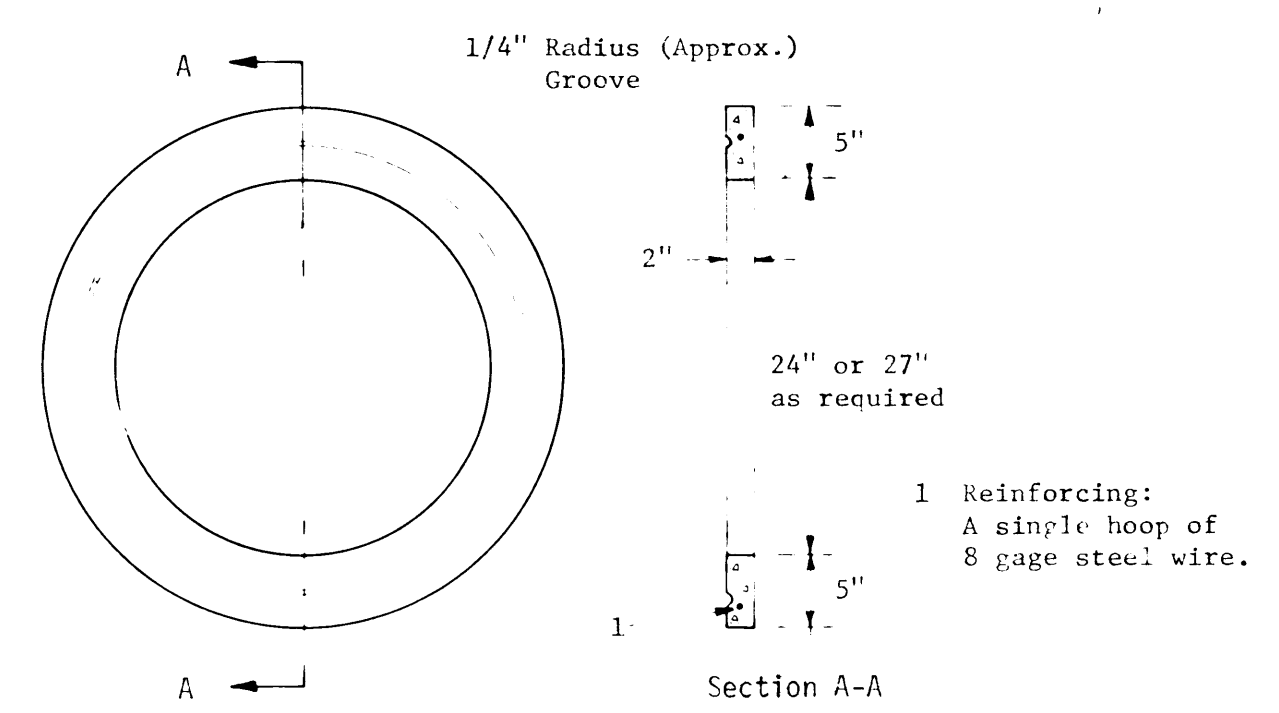


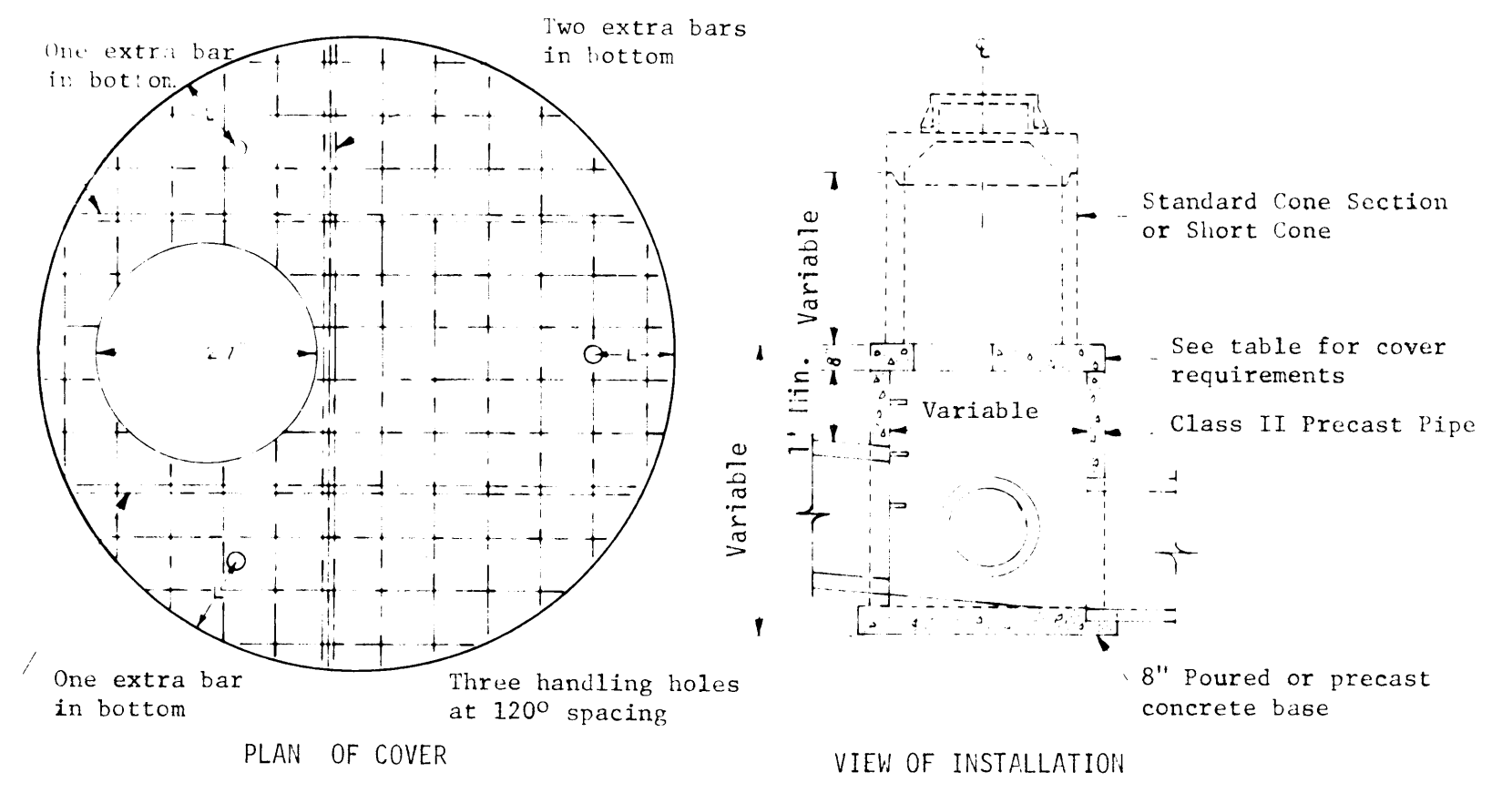
MANHOLE - TYPE III
(SECTIONAL CONCRETE PIPE)



SHORT CONES



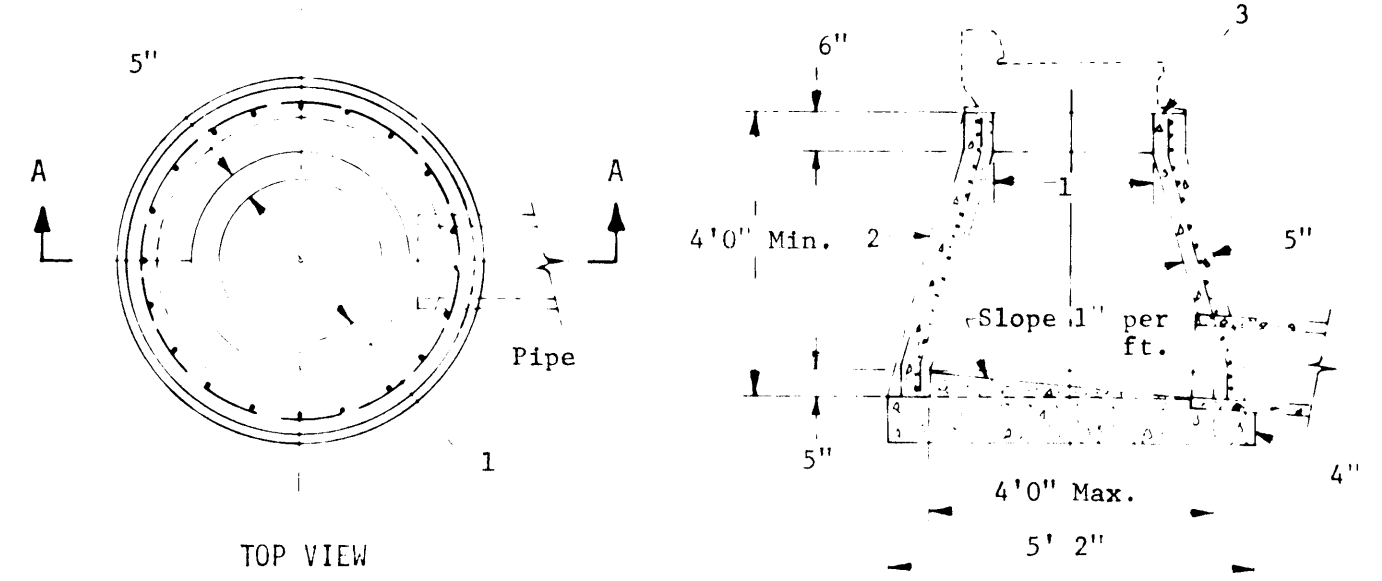
CONCRETE ADJUSTING RING



COVER REQUIREMENTS

Pipe Diameter	Cover Diameter	Weight of Section	T	K	L	Bottom Bars	Top Bars
48"	55"	1140#	6"	6"	8"	#4 at 6"	#3 at 6"
54"	65"	2000#	8"	6"	8"	#4 at 6"	#3 at 6"
60"	72"	2525#	8"	7"	9"	#4 at 6"	#3 at 6"
66"	79"	3105#	8"	7"	9"	#4 at 6"	#3 at 6"
72"	86"	3740#	8"	8"	10"	#4 at 6"	#3 at 6"

MANHOLE - TYPE IV



Reinforcing:
Single line steel wire fabric having an area of not less than 0.17 sq. in. per foot of height.

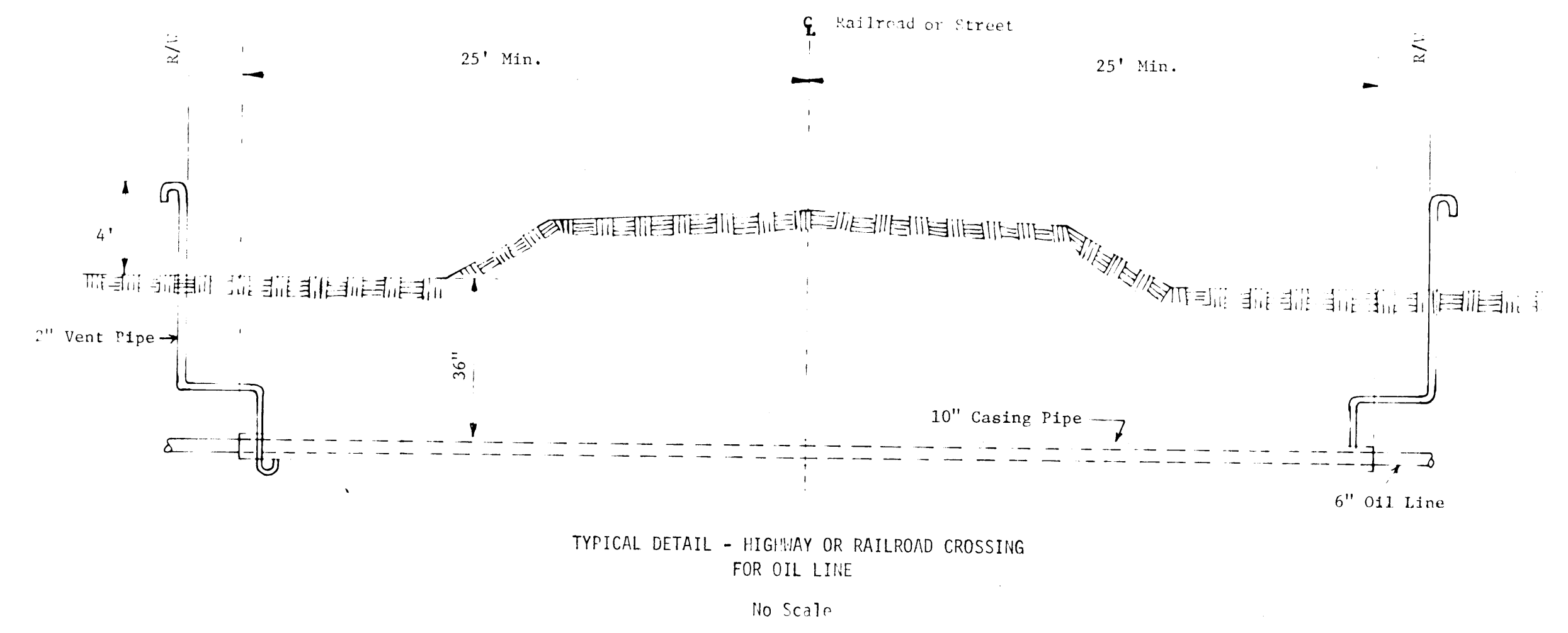
4. 6" poured concrete base or alternate precast concrete base.

1. 2'-0" Normal Opening.
2. A straight tapered wall is acceptable.
3. Use precast concrete adjusting ring where necessary.

CATCH BASIN

STATEMENT OF ESTIMATED QUANTITIES

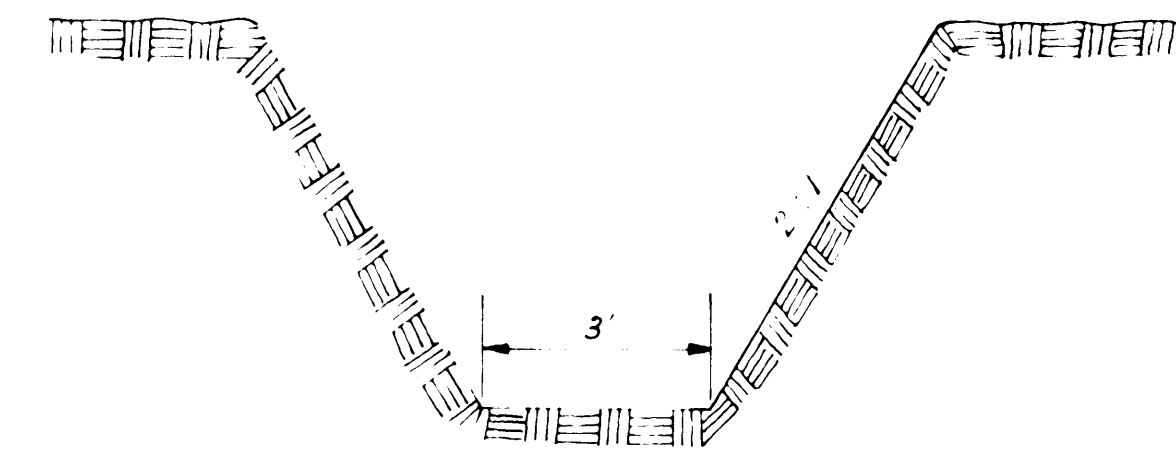
CONTRACT "A"				CONTRACT "B"			
Item No.	Item	Unit	Quantity	Item No.	Item	Unit	Quantity
BASE BID				BASE BID			
GRADING, PAVING & STORM SEWER				SANITARY SEWER			
1	Clearing & Grubbing	acre	42	31	8" Pipe 8-12' Deep	lin. ft.	1,083
2	Common Excavation	cu. yd.	33,750	32	8" Pipe 12-16' Deep	lin. ft.	719
3	Rock Excavation	cu. yd.	5	33	8" Pipe 16-18' Deep	lin. ft.	90
4	Granular Backfill	cu. yd.	500	34	10" Pipe 8-12' Deep	lin. ft.	406
5	Test Rolling	Lump Sum	8,330	35	12" Pipe 8-12' Deep	lin. ft.	242
6	Crushed Aggregate Base Course	cu. yd.	1,350	36	12" Pipe 12-16' Deep	lin. ft.	566
7	Prime Coat	gallon	370	37	6" Lot Service Pipe	cu. yd.	850
8	Bituminous Material for Mixture	ton	2,300	38	Rock Excavation - Sanitary Sewer	lin. ft.	117
9	Wearing Course Mixture	ton	2,300	39	Manholes - Sanitary	lin. ft.	10
10	Binder Course Mixture	ton	3,100	40	Manhole Casting - Sanitary	each	200
11	Base Course Mixture	ton	50	41	Crushed Rock	cu. yd.	7,166
12	24" C.M. Pipe Arch Culvert	lin. ft.	2	42	12" C.I. Water Line	lin. ft.	3,943
13	24" C.M. Pipe Arch Apron	each	6	43	8" C.I. Water Line	lin. ft.	45
14	12" C.M. Pipe Culvert	lin. ft.	11,330	44	6" C.I. Water Line	each	2
15	12" C.M. Pipe Aprons	each	300	45	12" Tee	each	8
16	Concrete Curb & Gutter	lin. ft.	1,682	46	12" Tee	each	7
17	Riprap	cu. yd.	647	47	12" Gate Valve	each	1
18	12" R.C.P. Storm Sewer	lin. ft.	60	48	8" Berd	each	9
19	15" R.C.P. Storm Sewer	lin. ft.	1,278	49	8" Tee	each	4
20	24" R.C.P. Storm Sewer	lin. ft.	1,392	50	8" Gate Valve	each	9
21	30" R.C.P. Storm Sewer	lin. ft.	494	51	6" Gate Valve	each	9
22	36" R.C.P. Storm Sewer	each	1	52	Hydrants	each	5
23	48" R.C.P. Storm Sewer	each	2	53	Rock Excavation - Water	cu. yd.	1
24	30" R.C.P. Apron	lin. ft.	121	54	Tapping Tee and Valve	each	1,910
25	48" R.C.P. Apron	lin. ft.	70	55	6" Oil Line	lin. ft.	110
26	Manholes - Storm	each	17	56	10" Casing for Oil Line	lin. ft.	4,985
27	Manhole Castings - Storm	each	7	57	12" Gate Valve	each	4
28	Manhole Casting - Storm	each	1	58	Tapping Tee and Valve	each	1
29	Catch Basins	each	17	ALTERNATE BID			
30	Sodding	sq. yd.	3,000	ALTERNATE NO. 1 - DEDUCT 48" STORM SEWER			
ALTERNATE NO. 1 - DEDUCT 48" STORM SEWER				ALTERNATE NO. 2 - DEDUCT 36" STORM SEWER			
2	Common Excavation	cu. yd.	+3,000	2	Common Excavation	cu. yd.	+400
23	48" R.C.P. Storm Sewer	lin. ft.	-494	18	12" R.C.P. Storm Sewer	lin. ft.	-133
25	48" R.C.P. Apron	each	-2	20	24" R.C.P. Storm Sewer	lin. ft.	+211
26	Manholes - Storm	lin. ft.	-7	22	36" R.C.P. Storm Sewer	lin. ft.	-730
27	Manhole Castings - Storm	each	-1	22A	24" R.C.P. Apron	each	+1
ALTERNATE NO. 2 - DEDUCT 36" STORM SEWER				22B	36" R.C.P. Apron	each	+1
2	Common Excavation	cu. yd.	+400	26	Manholes - Storm	lin. ft.	-8
18	12" R.C.P. Storm Sewer	lin. ft.	-133	27	Manhole Castings - Storm	each	-1
20	24" R.C.P. Storm Sewer	lin. ft.	+211				
22	36" R.C.P. Storm Sewer	lin. ft.	-730				
22A	24" R.C.P. Apron	each	+1				
22B	36" R.C.P. Apron	each	+1				
26	Manholes - Storm	lin. ft.	-8				
27	Manhole Castings - Storm	each	-1				



TYPICAL DITCH SECTION

FOR NEW DITCH TO BE CONSTRUCTED ON EAST EDGE OF PARK

NOT TO SCALE



As Built Nov. 1975