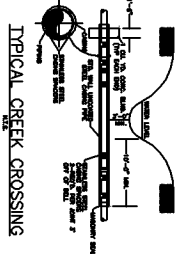
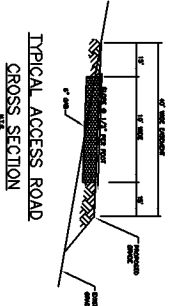


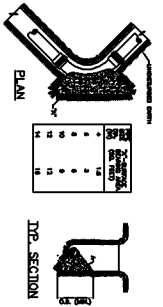
JACK AND BORE CROSSING



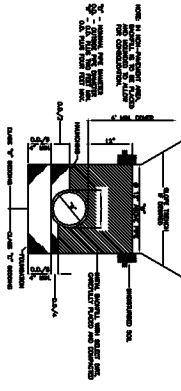
TYPICAL CREEK CROSSING



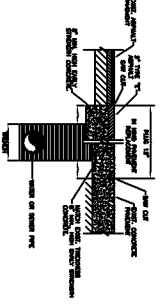
TYPICAL ACCESS ROAD CROSS SECTION



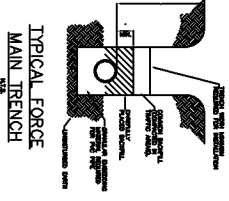
FORCE MAIN THRUST BLOCKS



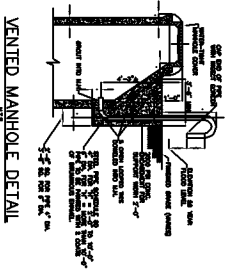
SEWER PIPE BEDDING



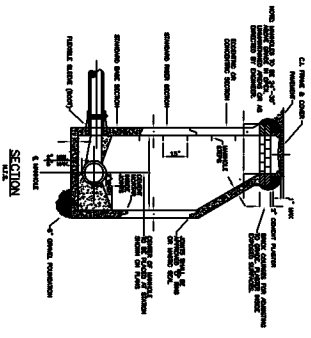
PAVEMENT REPLACEMENT



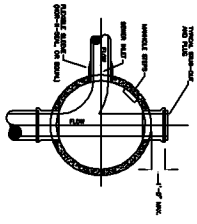
TYPICAL FORCE MAIN TRENCH



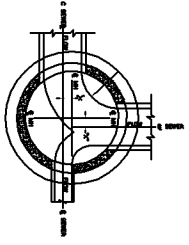
VENTED MANHOLE DETAIL



STANDARD PRECAST 4'-0" MANHOLE



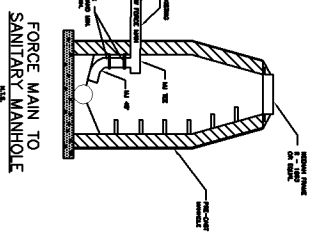
PLAN



SECTIONAL PLAN

MANHOLE SIZE	COVER SIZE	COVER WEIGHT (LBS)	COVER WEIGHT (KG)
18"	18"	150	68
24"	24"	250	113
30"	30"	350	159
36"	36"	450	204
42"	42"	550	250
48"	48"	650	295
54"	54"	750	341
60"	60"	850	387
66"	66"	950	432
72"	72"	1050	478
78"	78"	1150	523
84"	84"	1250	569
90"	90"	1350	614
96"	96"	1450	660
102"	102"	1550	705
108"	108"	1650	751
114"	114"	1750	796
120"	120"	1850	842
126"	126"	1950	887
132"	132"	2050	933
138"	138"	2150	978
144"	144"	2250	1024
150"	150"	2350	1069
156"	156"	2450	1115
162"	162"	2550	1160
168"	168"	2650	1206
174"	174"	2750	1251
180"	180"	2850	1297
186"	186"	2950	1342
192"	192"	3050	1388
198"	198"	3150	1433
204"	204"	3250	1479
210"	210"	3350	1524
216"	216"	3450	1570
222"	222"	3550	1615
228"	228"	3650	1661
234"	234"	3750	1706
240"	240"	3850	1752
246"	246"	3950	1797
252"	252"	4050	1843
258"	258"	4150	1888
264"	264"	4250	1934
270"	270"	4350	1979
276"	276"	4450	2025
282"	282"	4550	2070
288"	288"	4650	2116
294"	294"	4750	2161
300"	300"	4850	2207
306"	306"	4950	2252
312"	312"	5050	2298
318"	318"	5150	2343
324"	324"	5250	2389
330"	330"	5350	2434
336"	336"	5450	2480
342"	342"	5550	2525
348"	348"	5650	2571
354"	354"	5750	2616
360"	360"	5850	2662
366"	366"	5950	2707
372"	372"	6050	2753
378"	378"	6150	2798
384"	384"	6250	2844
390"	390"	6350	2889
396"	396"	6450	2935
402"	402"	6550	2980
408"	408"	6650	3026
414"	414"	6750	3071
420"	420"	6850	3117
426"	426"	6950	3162
432"	432"	7050	3208
438"	438"	7150	3253
444"	444"	7250	3300
450"	450"	7350	3345
456"	456"	7450	3391
462"	462"	7550	3436
468"	468"	7650	3482
474"	474"	7750	3527
480"	480"	7850	3573
486"	486"	7950	3618
492"	492"	8050	3664
498"	498"	8150	3709
504"	504"	8250	3755
510"	510"	8350	3800
516"	516"	8450	3846
522"	522"	8550	3891
528"	528"	8650	3937
534"	534"	8750	3982
540"	540"	8850	4028
546"	546"	8950	4073
552"	552"	9050	4119
558"	558"	9150	4164
564"	564"	9250	4210
570"	570"	9350	4255
576"	576"	9450	4301
582"	582"	9550	4346
588"	588"	9650	4392
594"	594"	9750	4437
600"	600"	9850	4483
606"	606"	9950	4528
612"	612"	10050	4574
618"	618"	10150	4619
624"	624"	10250	4665
630"	630"	10350	4710
636"	636"	10450	4756
642"	642"	10550	4801
648"	648"	10650	4847
654"	654"	10750	4892
660"	660"	10850	4938
666"	666"	10950	4983
672"	672"	11050	5029
678"	678"	11150	5074
684"	684"	11250	5120
690"	690"	11350	5165
696"	696"	11450	5211
702"	702"	11550	5256
708"	708"	11650	5302
714"	714"	11750	5347
720"	720"	11850	5393
726"	726"	11950	5438
732"	732"	12050	5484
738"	738"	12150	5529
744"	744"	12250	5575
750"	750"	12350	5620
756"	756"	12450	5666
762"	762"	12550	5711
768"	768"	12650	5757
774"	774"	12750	5802
780"	780"	12850	5848
786"	786"	12950	5893
792"	792"	13050	5939
798"	798"	13150	5984
804"	804"	13250	6030
810"	810"	13350	6075
816"	816"	13450	6121
822"	822"	13550	6166
828"	828"	13650	6212
834"	834"	13750	6257
840"	840"	13850	6303
846"	846"	13950	6348
852"	852"	14050	6394
858"	858"	14150	6439
864"	864"	14250	6485
870"	870"	14350	6530
876"	876"	14450	6576
882"	882"	14550	6621
888"	888"	14650	6667
894"	894"	14750	6712
900"	900"	14850	6758
906"	906"	14950	6803
912"	912"	15050	6849
918"	918"	15150	6894
924"	924"	15250	6940
930"	930"	15350	6985
936"	936"	15450	7031
942"	942"	15550	7076
948"	948"	15650	7122
954"	954"	15750	7167
960"	960"	15850	7213
966"	966"	15950	7258
972"	972"	16050	7304
978"	978"	16150	7349
984"	984"	16250	7395
990"	990"	16350	7440
996"	996"	16450	7486
1002"	1002"	16550	7531

GOVERNING DIMENSIONS FOR PRECAST MANHOLES



FORCE MAIN TO SANITARY MANHOLE



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STANDARD SEWER DETAILS

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