



ITEM 20420 TRENCH EXCAVATION OF EARTH

STATION	HT	AUG HT	LENGTH	WIDTH	CY
55+15+42	3.17	3.28	34.58	3.75	15.75
55+50	3.39	3.56	46.58	3.75	23.02
55+96.58	3.73				

EXCAVATION OF DI AT 56+00
 $5.0' \times \frac{[(6.84/2)^2 \times \pi]}{2} \times 1.0 = 6.80 \text{ cy}$
 OVERS' $.1 \times (6.84/2)^2 \times \pi \times 1/2 \times 150\% = .20$
 ITEM 20430 GRANULAR BACKFILL FOR STRUCTURES PIPE
 $(55+96.58 - 56+15+42) \times 3.75 \times 100 \times 1/27 = 15.0 \text{ cy}$
 $65' \times 0.1875 \times 3.75 = 4.5 \text{ cy}$
 $8.5' \times 0.8' \times 3.75 = 10.3 \text{ cy}$
 $7(0.84/2)^2 \times \pi \times 1/27 = 5.2 \text{ cy}$
 6.55 cy C.B. 01/15/08 CPN 1/24/08

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STATION	HT	AUG HT	LENGTH	WIDTH	CY
56+03.42	3.6	3.63	46.58	3.75	23.48
56+50	3.65	3.70	24.28	3.75	12.48
56+74.28	3.75				

EXCAVATION OF DI AT 56+77.7
 $\frac{[(6.84/2)^2 \times \pi]}{2} \times 5.00 = 6.80 \text{ cy}$
 OVERS' $\frac{[(6.84/2)^2 \times \pi]}{2} \times 1.35 \times 150\% = .71 \text{ cy}$
 ITEM 20430 GRANULAR BACKFILL FOR STRUCTURES PIPE
 $(70.86 + 2) \times 3.75 \times 1.35 \times 1/27 = 13.96 \text{ cy}$
 13.96 cy C.B. 01/24/08 CPN 1/24/08

pipe $72.86 \times 3.14 \times (.875)^2 / 27 = -3.24 \text{ cy}$
 8.85 cy
 -3.24 cy
 5.61 cy C.B. 01/24/08 CPN 1/24/08

ITEM 20420 TRENCH EXCAVATION OF EARTH

STATION	HT	AUG HT	LENGTH	WIDTH	CY
56+03.42	1.91	2.03	46.58	3.75	13.13
56+50	2.14	2.59	24.28	3.75	8.73
56+74.28	3.04				

EXCAVATION OF DI AT 56+00
 $3.28 \text{ HT} \times \frac{[(6.84/2)^2 \times \pi]}{2} \times 1/27 = 4.46 \text{ cy}$
 26.32 cy C.B. 01/24/08 CPN 1/24/08

ITEM 20430 GRANULAR BACKFILL FOR STRUCTURES PIPE
 $(70.86 + 2) \times 3.75 \times 1.35 \times 1/27 = 13.96 \text{ cy}$
 13.96 cy
 pipe $72.86 \times 3.14 \times (.875)^2 / 27 = -3.24 \text{ cy}$
 5.61 cy C.B.

ORIGINAL SURVEY PLOTTED: DATE: 01/24/08

FINAL SURVEY PLOTTED: DATE: 01/24/08