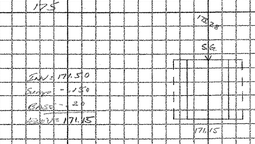
DRAINAGE SYSTEM #29 B

12+700, 6.4m LT ~ 12+781, 6.4m LT

STATION	EL of PIPE	SEAMPOE	DEPTH	DISTANCE	AREA (ABOVE 1.5m)	AREA (BELOW 1.5m)
12+781.25	171.425	172.257	1.832			
				18.75	28.125	6.625
12+720	171.30	172.175	1.875			
				20	30	6.5
12+740	171.175	172.950	1.775			
				20	30	3.48
12+760	171.05	172.623	1.573			
				19.75	27.532	0.721
12+779.75	170.925	172.213	1.288			
					115.657 sm	17.329 sm x 1.5 = 25.994 sm



Pipe Slope = 0.5m ÷ 80m
= 0.00625

204.20 TRENCH EXCAVATION of EARTH

CATCH BASIN = (1.5m x 2.5m x 2.5m) + (0.83m x 2.5m x 2.5m x 1.5) = 13.281 cm

PIPE = 141.651 sm x 1.75m = 247.889 cm

TOTAL EXC = 261.17 cm + 7. Rock 6.956 cm = 256.214 cm

601.26620 600 mm CPEP (SL)

81.08 m

604.20 PRECAST REIN CONC CATCH BASIN

1 EA

204.21 TRENCH EXCAVATION of ROCK

(BOULDERS) Fm. by D. BREER & C. GREENWOOD

0.9m x 1.3m x 0.7m = 0.819 cm
0.65m x 1.8m x 1.8m = 1.17 cm
1.5m x 0.6m x 0.9m = 0.819 cm
1.4m x 1.1m x 0.6m = 0.924 cm
0.6m x 1.6m x 0.9m = 0.864 cm
1.6m x 0.7m x 0.7m = 0.780 cm
0.7m x 0.7m x 1.2m = 0.588 cm
1.5m x 1.1m x 0.6m = 0.990 cm
6.956 cm

204.21 TRENCH EXC. of ROCK

(BOULDERS) Fm. By C. GREENWOOD

0.8m x 1.1m x 1.7m = 1.496 cm

204.20 TRENCH EXC. of EARTH

CATCH BASIN

(ABOVE 1.5m)		(BELOW 1.5m)	
-7.65	174.505	-7.65	177.005
-7.65	173.005	-7.65	172.00
-6.9	172.53	-6.4	172.00
-6.4	172.53	-6.4	172.53
-6.4	172.00	-6.7	172.53
-5.15	172.00	-7.65	177.005
-5.15	172.00		
-6.4	172.53		
-6.4	174.03		
-6.7	174.03		
-7.65	174.505		

A_1 = 3.65 sm

W_1 = 3.65 sm x 2.5 = 9.125 cm

A_2 = 0.858 sm x 1.5 = 1.339 sm

W_2 = 1.332 sm x 2.5 = 3.33 cm

PIPE

(ABOVE 1.5m)		(BELOW 1.5m)	
-5.15	172.234	-2.2	172.42
-2.2	172.42	-2.9	172.41
-2.9	172.41	-3.3	172.33
-3.3	172.33	-2.2	172.42
-5.3	172.33		
-5.9	172.33		
-5.9	172.905		
-5.15	172.905		

A_3 = 13.891 sm

W_3 = 13.891 sm x 1.93 = 26.810 cm

A_4 = 1.234 sm x 1.5 = 1.847 sm

W_4 = 1.847 sm x 1.93 = 3.565 cm

TOTAL = 42.830 cm
- 1.496 cm ROCK

Est EXCAV = 41.334 cm

601.26825 750 mm CPEP (SL)

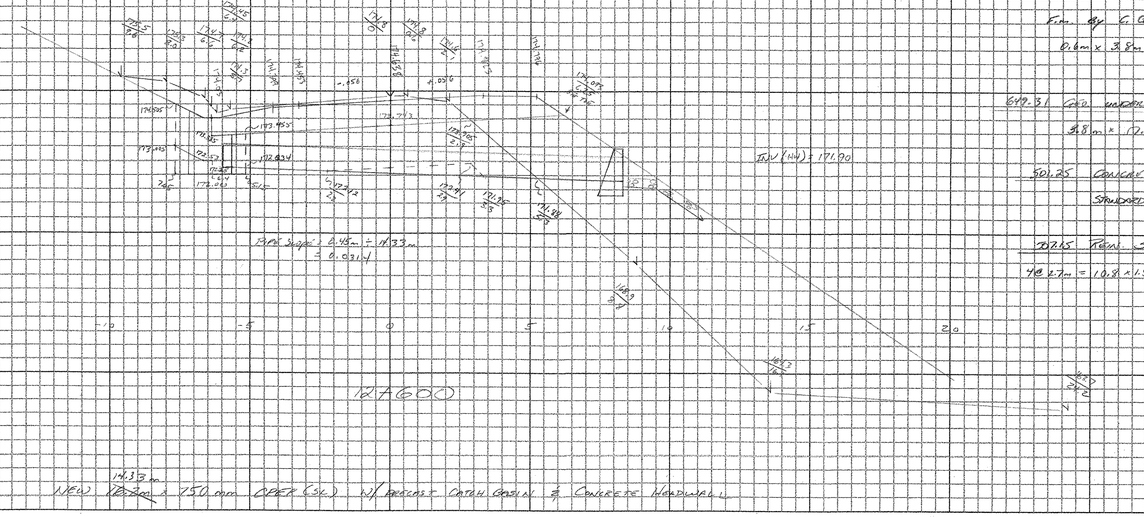
14.33 m

604.20 PRECAST REIN. CONC. CATCH BASIN

1 EA

DRAINAGE SYSTEM #29 A

12+600, 6.4m LT ~ 12+600, 8.3m RT



14.33 m
NEW 750 mm CPEP (SL) w/ PRECAST CATCH BASIN & CONCRETE HEADWALL

613.11 STONE FILL, TYPE II

Fm. by C. GREENWOOD

0.6m x 3.8m x 17m = 38.76 cm

649.31 CLEARING WITHOUT STUMPS 1.2m

3.8m x 17.0m = 64.6 sm

501.05 CONCRETE CLASS B

STANDARD D-2 2.6 cm

707.15 REIN. STEEL

40 x 7m = 10.8 x 1.552 = 16.76 Kg

DONE 4/05/03

DONE 3/7/05

PROJECT NAME: GRAFTON - ROCKINGHAM	
PROJECT NUMBER: STP 0126 (4) S	CONTRACT #2
FILE NAME: DRAINAGE	PLOT DATE: 07-JUN-2000 13:
PROJECT LEADER:	DRAWN BY: C. GREENWOOD
DESIGNED BY:	CHECKED BY: D. BREER
const: g:/common/cadd/m-xsection.dgn	SHEET 22 OF 23

VAOT Metric

CROSS SECTION SHEET

143 DRAIN