

DATE \_\_\_\_\_ BY \_\_\_\_\_  
 ORIGINAL SURVEY PLOTTED PLATE NO. \_\_\_\_\_  
 SURVEY PLOTTED PLATE NO. \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_

20A.20 TRENCH EARTH (PIPE)  $11.83 \text{ m}^2 \times 1.45 \text{ m} = 17.2 \text{ m}^3$

NOTE: END AREA BY (X,Y) COORDINATES  
 X = OFFSET  
 Y = ELEVATION

POINT#	OFFSET	ELEVATION
1	-34.90	39.88
2	-34.90	41.03
3	-31.95	41.10
A	-24.10	40.13
5	-24.10	39.53
1	-34.90	39.85

END AREA USING AREA PROGRAM:  $11.83 \text{ m}^2$

20A.20 TRENCH EARTH (D.I.) @ 100%:  
 $2.2 \text{ m} \times 2.2 \text{ m} \times 1.5 \text{ m} = 7.26 \text{ m}^3$   
 LESS D.I. VOLUME =  $1.70 \text{ m}^3$   
 $5.6 \text{ m}^3$

DRAINAGE NOTE #7 & #9:  
 DRAINAGE BOOK 2 PGS 38 & 50.

TE (D.I.) @ 150%:  
 $2.2 \times 2.2 \times 1.2 = 5.81 \text{ m}^3$   
 LESS D.I. BASE 12 MONTHS =  $0.99 \text{ m}^3$   
 $4.82 \text{ m}^3$

20A.21 TRENCH ROCK (D.I.) @ 100%:  
 D.I. HEIGHT 1.5m  $\rightarrow 1.70 \text{ m}^3$  MINUS BASE PAID @ 150% ( $0.29 \text{ m}^3$ )  
 $\rightarrow 0.31 \text{ m}^3$  (FROM STANDARD D-I)  
 $2.01 \text{ m}^3$

TRENCH ROCK (D.I.) @ 150%:  
 $1.5 (1.2 \text{ m} \times 1.2 \text{ m} \times 1.2) = 0.44 \text{ m}^3$   
 TOTAL TRENCH ROCK NOTE 7:  $2.45 \text{ m}^3$

TOTAL TRENCH EARTH (DRAINAGE NOTE 7):

PIPE  $17.2 \text{ m}^3$   
 D.I. (100%)  $5.6 \text{ m}^3$   
 D.I. (150%)  $1.1 \text{ m}^3$   
 $23.9 \text{ m}^3$

20A.20 TRENCH EARTH (PIPE)  $2.85 \text{ m}^2 \times 1.45 \text{ m} = 4.1 \text{ m}^3$

POINT#	OFFSET	ELEVATION
1A	-21.90	39.48
2A	-21.90	39.90
3A	-11.0	38.41
4A	-10.0	38.41
5A	-9.2	38.58
6A	-9.2	38.18
1A	-21.90	39.48

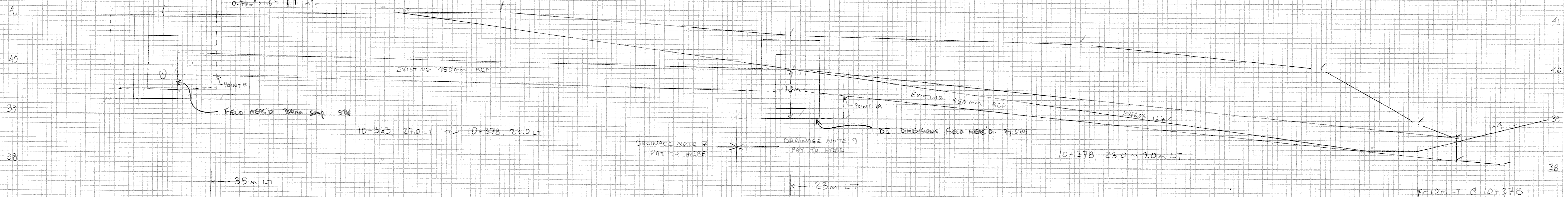
END AREA USING AREA PROGRAM:  $2.85 \text{ m}^2$

TRENCH EARTH (D.I.)  $2.2 \text{ m} \times 2.2 \text{ m} \times 1.0 \text{ m} = 4.84 \text{ m}^3$   
 LESS T. ROCK =  $1.45 \text{ m}^3$   
 $3.4 \text{ m}^3$

TOTAL TRENCH EARTH FOR NOTE #9:

PIPE  $4.1 \text{ m}^3$   
 D.I.  $3.4 \text{ m}^3$   
 $7.5 \text{ m}^3$   
 STW 6-26-06

20A.21 TRENCH ROCK (D.I.)  
 D.I. HEIGHT 1.0m  $\rightarrow 1.45 \text{ m}^3$  (FROM STD D-I)



20A.20 TRENCH EARTH FOR 0.5 METERS OUTSIDE D.I.:  $1.1 \text{ m} \times 2.2 \text{ m} \times 2.2 \text{ m} = 5.32 \text{ m}^3$   
 LESS TRENCH ROCK (SEE BELOW) =  $1.63 \text{ m}^3$   
 $3.7 \text{ m}^3$  STW 6-26-06

20A.20 TRENCH EARTH AT 100% FACTOR (PIPE):  $6.95 \text{ m}^2 \times 1.45 \text{ m} = 10.1 \text{ m}^3$

NOTE: END AREA BY (X,Y) COORDINATES

POINT#	OFFSET (X)	ELEVATION (Y)
1	-6.3	38.89
2	-15.56	39.24
3	-16.18	39.47
4	-16.39	39.28
5	-16.70	39.30
6	-16.70	40.47
7	-16.22	40.98
8	-11.00	39.19
9	-10.00	38.19
10	-7.52	39.70
1	-6.3	38.89

TOTAL T.E.:  
 D.I.  $3.7 \text{ m}^3$   
 PIPE (100%)  $10.1 \text{ m}^3$   
 PIPE (150%)  $0.2 \text{ m}^3$   
 $14.0 \text{ m}^3$

END AREA  $6.95 \text{ m}^2$  USING AREA PROGRAM

20A.20 TRENCH EARTH AT 150% FACTOR (PIPE):  $0.08 \text{ m}^2 \times 1.45 \text{ m} \times 1.5 = 0.2 \text{ m}^3$

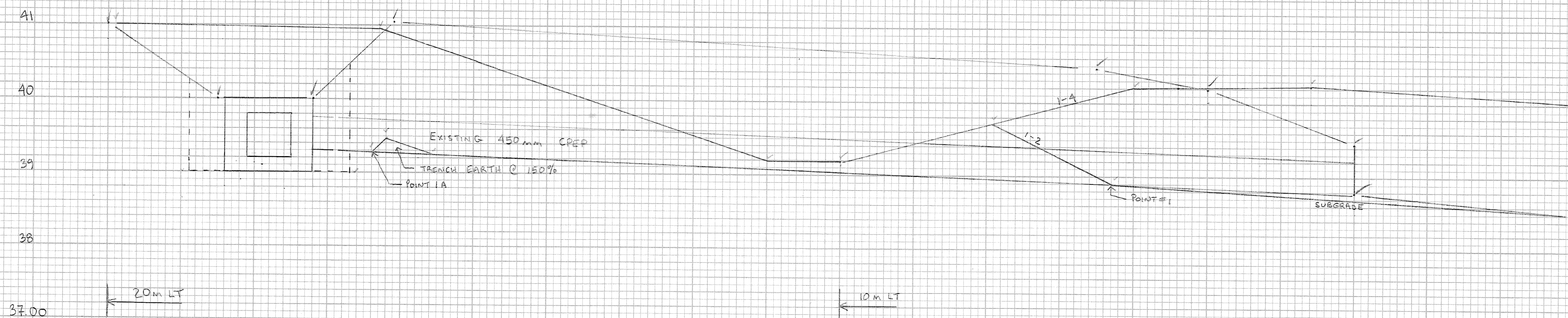
POINT	OFFSET	ELEVATION
1A	-10.39	39.58
2A	-16.18	39.47
3A	-15.56	39.24
1A	-10.39	39.58

END AREA USING AREA PROGRAM  $0.08 \text{ m}^2$

20A.21 TRENCH ROCK (D.I.):

D.I. HEIGHT = 0.9m  $\rightarrow 1.32 \text{ m}^3$  (FROM STANDARD D-I)  
 D.I. COVER  $\rightarrow 0.31 \text{ m}^3$  (FROM STD D-I)  
 $1.63 \text{ m}^3$

DRAINAGE NOTE #4: (DRAINAGE BOOK 2 PAGE 22)



ALBION-SWANTON BR# 036-1(1)  
 DRAINAGE

DRAWN BY: S. WHEATLEY 6-26-06  
 CHECKED BY: \_\_\_\_\_  
 SCALE \_\_\_\_\_ SHEET 2 OF 10

DI, TP Vol 4 Plat V 6, Sec 04/21/07