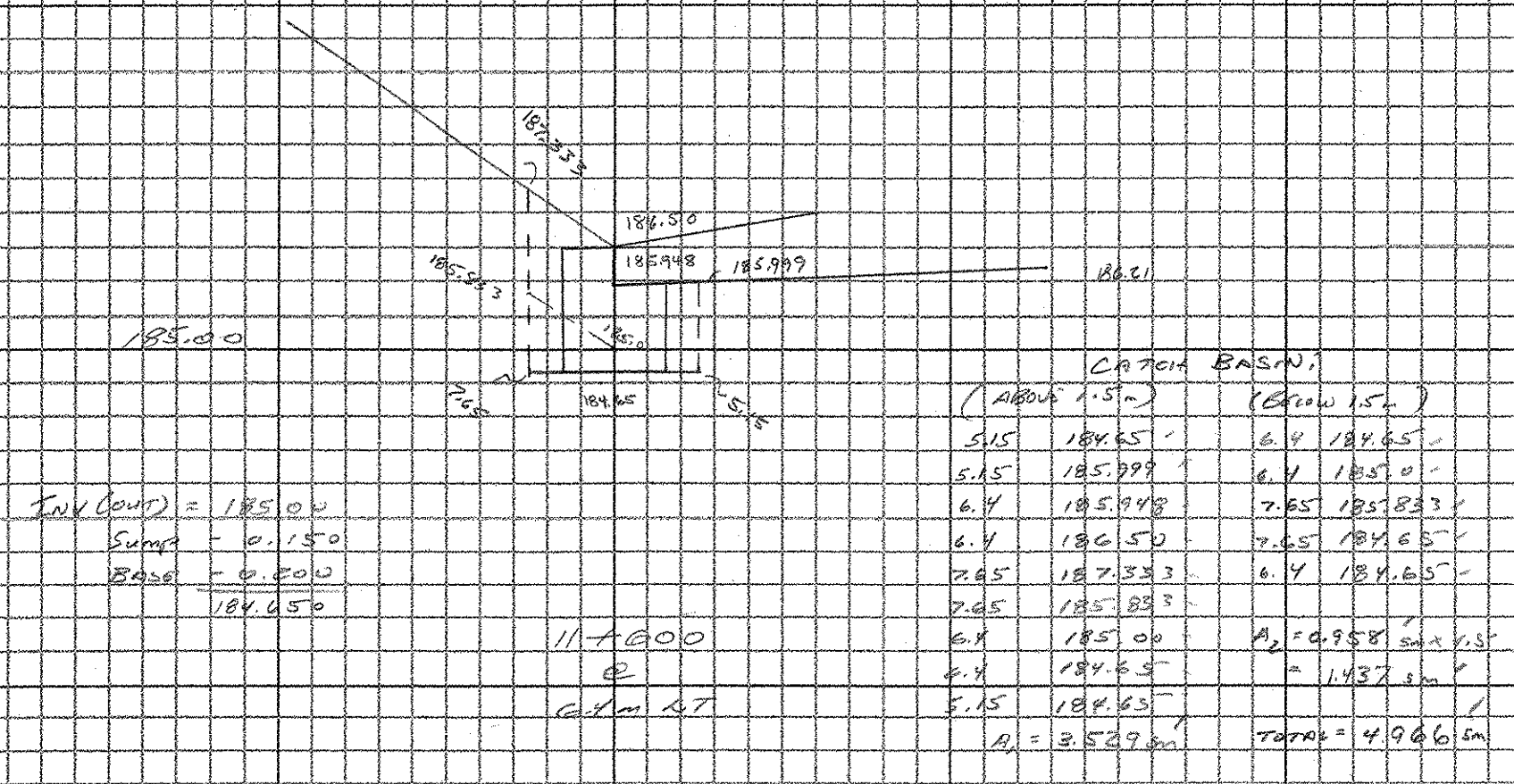


PIPE AREA =  $48.2m \times 0.6m = 28.92m^2$   
 VENT PIPE =  $\frac{\pi}{4} \times 0.6^2 \times 1.5 = 0.16m^2$   
 TOTAL =  $29.08m^2$

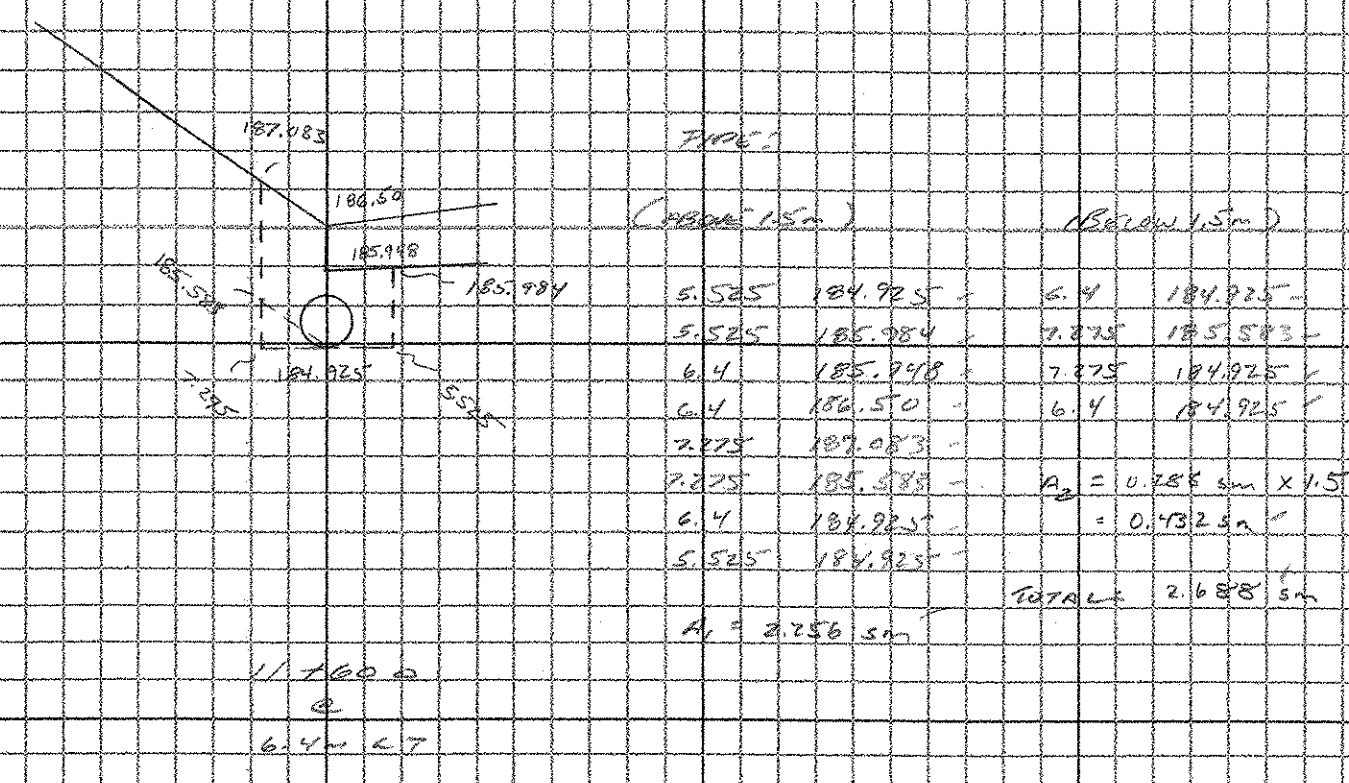
204.20 TRENCH EXCAVATION OF EARTH  
 CATCH BASIN:  $4.96m \times 2.5m = 12.405m^3$   
 PIPE:  $(2.688m + 1.978m) \times 4.66m = 12.712m^3$   
 TOTAL =  $12.4133m^3$

DRAINAGE SYSTEM #16  
 117600, 6.5m RT → 117650, 6.4m LT

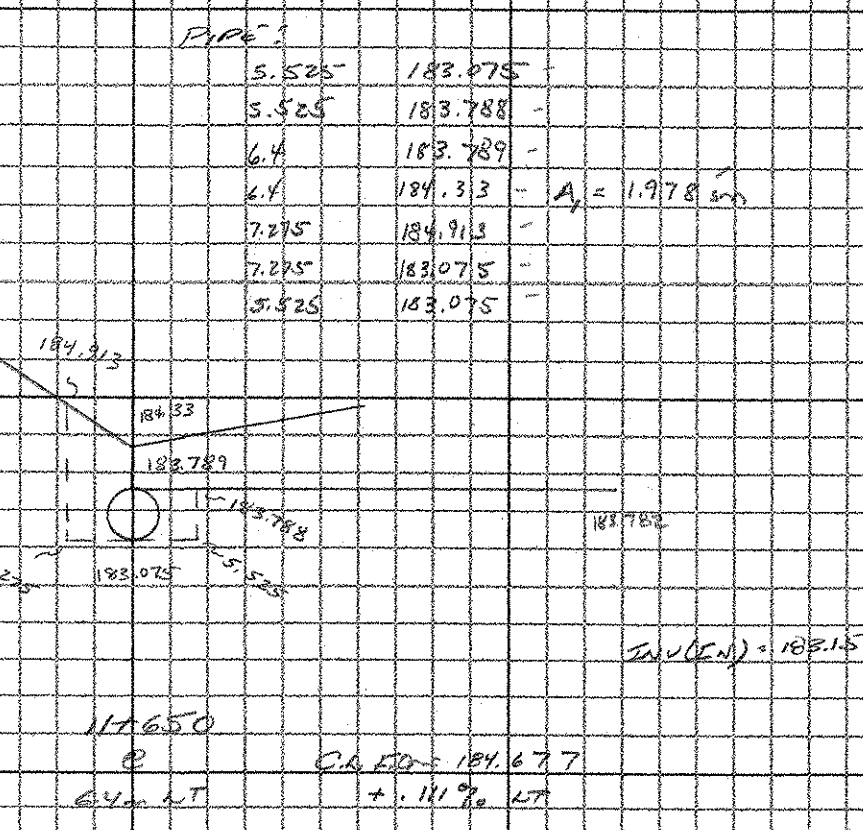


CATCH BASIN:

| LINE  | COORDINATES    | AREA |
|-------|----------------|------|
| 1     | 184.65, 184.65 | 0.00 |
| 2     | 184.65, 185.00 | 0.00 |
| 3     | 185.00, 185.00 | 0.00 |
| 4     | 185.00, 184.65 | 0.00 |
| 5     | 184.65, 184.65 | 0.00 |
| TOTAL |                | 0.00 |

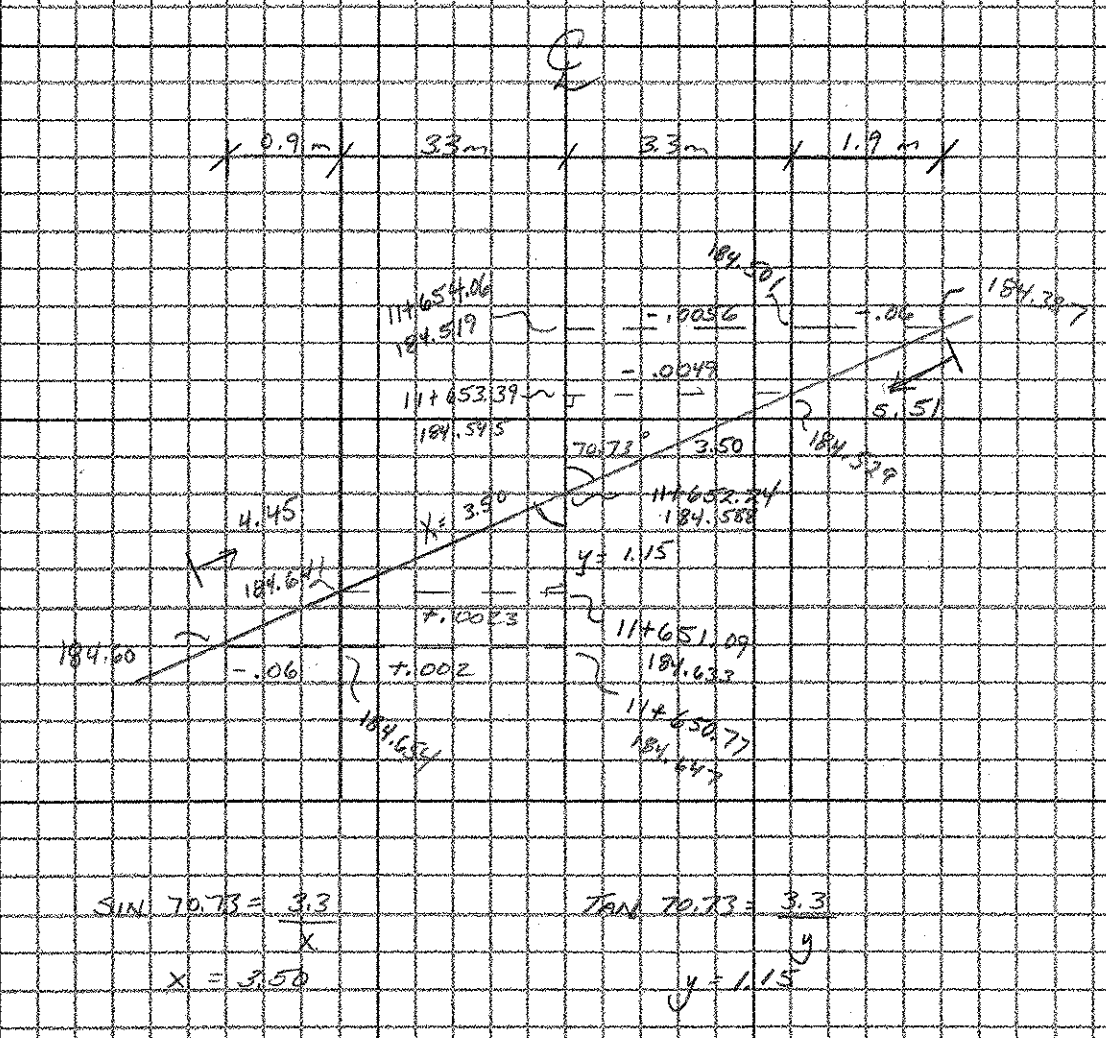


NEW 48.2m x 6.4m x 600mm CIPED w/ PRECAST CATCH BASIN



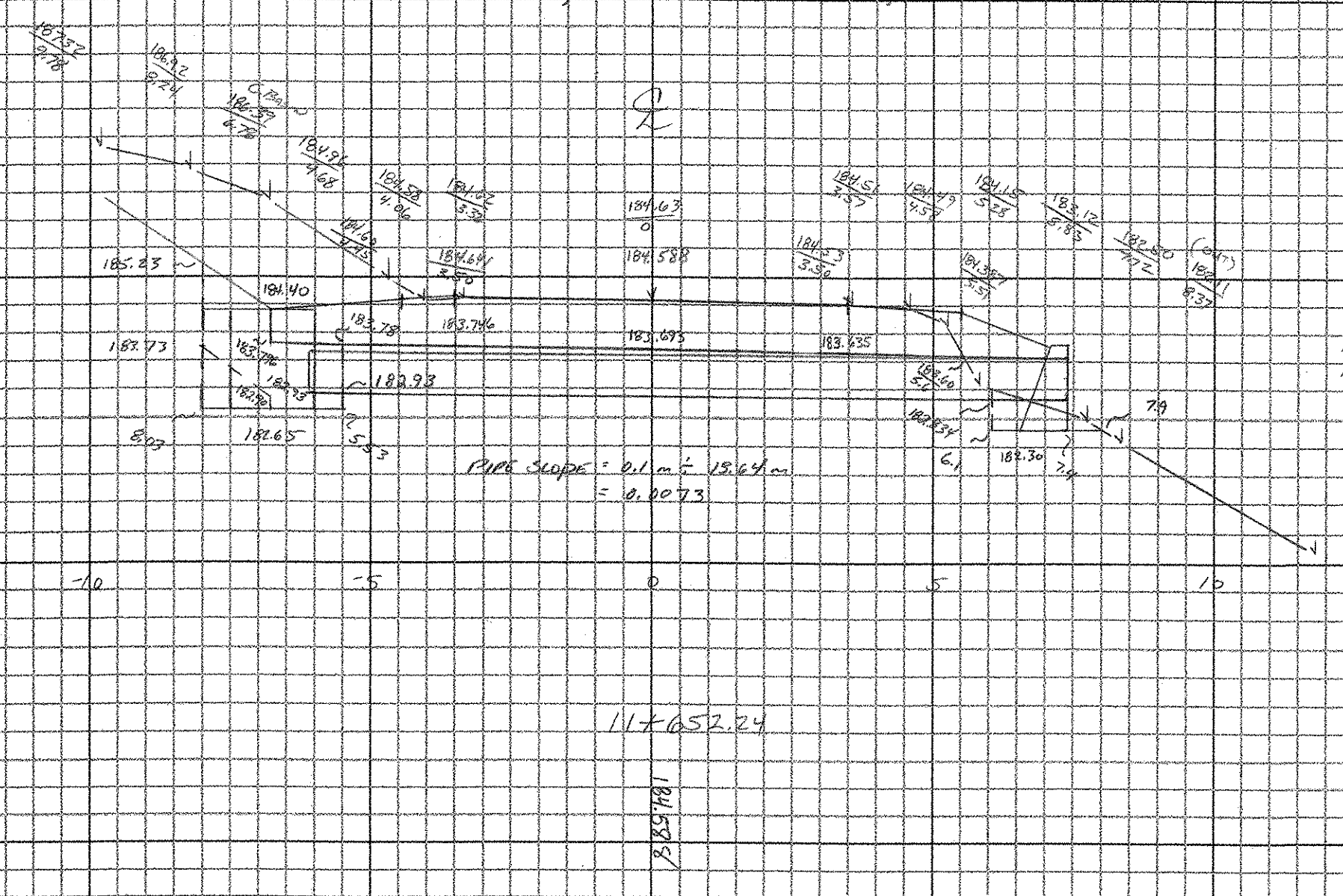
204.20 PRECAST CONCRETE CATCH BASIN  
 1 EA

DRAINAGE SYSTEM #17  
 117650, 6.4m LT → 117655, 7.0m RT



CATCH BASIN:

| LINE  | COORDINATES    | AREA |
|-------|----------------|------|
| 1     | 184.65, 184.65 | 0.00 |
| 2     | 184.65, 185.00 | 0.00 |
| 3     | 185.00, 185.00 | 0.00 |
| 4     | 185.00, 184.65 | 0.00 |
| 5     | 184.65, 184.65 | 0.00 |
| TOTAL |                | 0.00 |



NEW 48.2m x 6.4m x 600mm CIPED w/ PRECAST CATCH BASIN

204.20 TRENCH EXCAVATION OF EARTH

| LINE  | COORDINATES    | AREA |
|-------|----------------|------|
| 1     | 182.65, 182.65 | 0.00 |
| 2     | 182.65, 183.00 | 0.00 |
| 3     | 183.00, 183.00 | 0.00 |
| 4     | 183.00, 182.65 | 0.00 |
| 5     | 182.65, 182.65 | 0.00 |
| TOTAL |                | 0.00 |

TOTAL =  $34.317m^3$   
 =  $1.08m^3$  T. ROCK  
 =  $33.237m^3$

204.21 TRENCH EXCAVATION OF ROCK  
 (EXIST. H.W.) 6m BY 6 GREENWOOD  
 (2.0m x 0.6m) x 1.5m =  $1.8m^3$

204.22 STONE FILL TYPE II  
 6m BY 6 GREENWOOD  
 0.3m x 2.6m x 4.5m =  $3.51m^3$   
 0.3m x 8.2m x 3.0m =  $7.74m^3$   
 TOTAL =  $11.25m^3$

204.23 GEB UNDER STONE FILL  
 5.25m x 4.6m =  $24.15m^2$



# CROSS SECTION SHEET

CBB - DWG  
 2/22/05

PROJECT NAME: GRAFTON - ROCKINGHAM  
 PROJECT NUMBER: STP 0126 4(S) C/P  
 FILE NAME: DRAINAGE  
 PLOT DATE: 07-JUN-2000 13:  
 PROJECT LEADER: C. GREENWOOD  
 DRAWN BY: C. GREENWOOD  
 DESIGNED BY: J. BRER  
 CHECKED BY: J. BRER  
 const: g:/common/cadd/m-xsection.dgn SHEET 14 OF 23