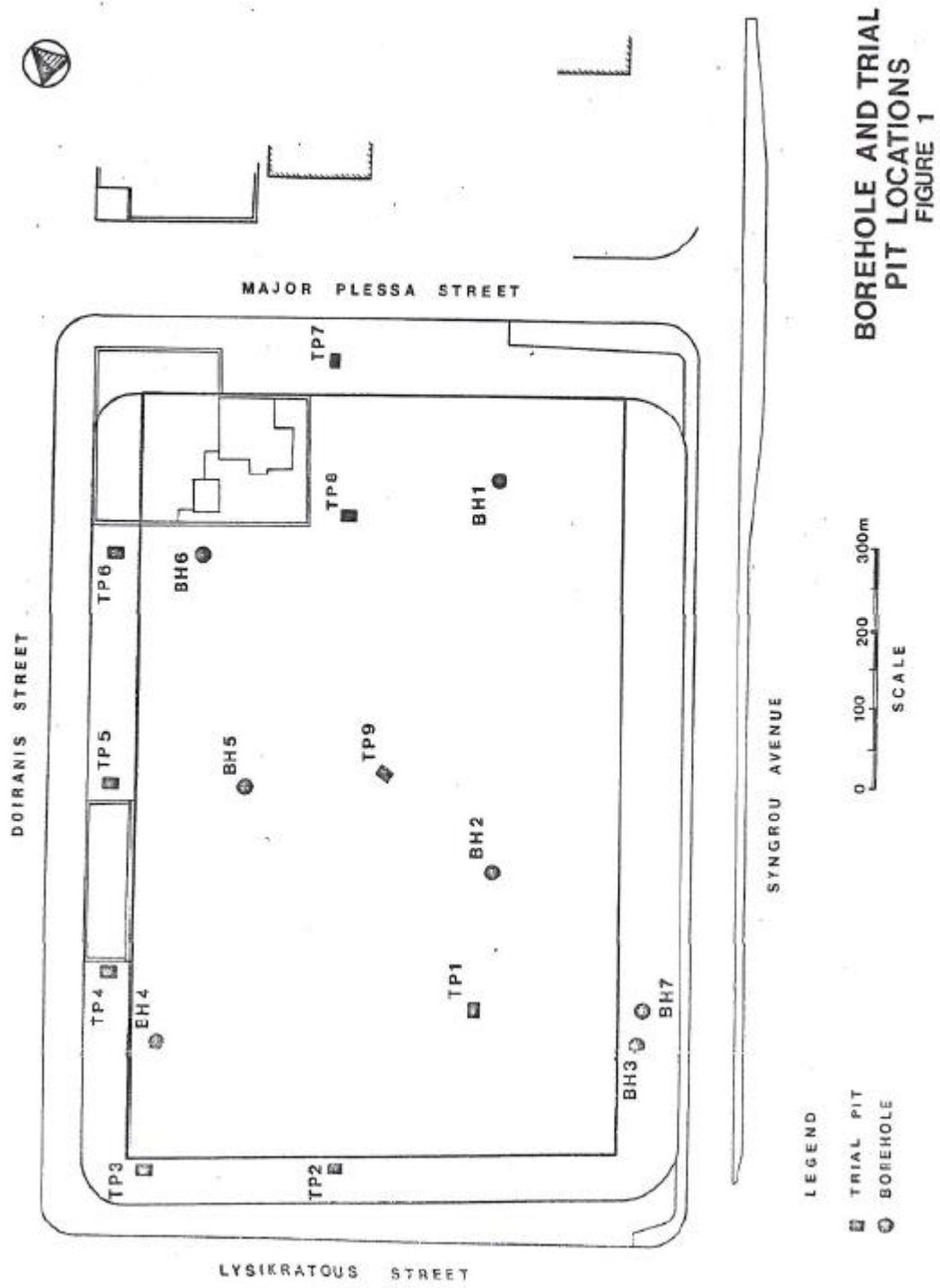


ΕΡΓΟ : ΩΝΑΣΕΙΟ ΕΘΝΙΚΟ ΜΕΤΑΜΟΣΧΕΥΤΙΚΟ ΚΕΝΤΡΟ  
ΕΔΑΦΤΕΧΝΙΚΑ .



**BOREHOLE AND TRIAL  
PIT LOCATIONS  
FIGURE 1**

ΕΡΓΟ : ΩΝΑΣΕΙΟ ΕΘΝΙΚΟ ΜΕΤΑΜΟΣΧΕΥΤΙΚΟ ΚΕΝΤΡΟ  
ΕΔΑΦΤΕΧΝΙΚΑ .

TABLE 1

MOISTURE CONTENT AND ATTERBERG LIMITS

| BOREHOLE | SAMPLE | DEPTH<br>(m) | MOISTURE<br>CONTENT<br>(%) | LIQUID<br>LIMIT | PLASTIC<br>LIMIT | PLASTICITY<br>INDEX |
|----------|--------|--------------|----------------------------|-----------------|------------------|---------------------|
| 1        | B2     | 1.80         | 12                         | 30              | 17               | 13                  |
|          | B4     | 2.80         | 12                         | 42              | 21               | 21                  |
|          | S10    | 5.20         | 24                         | 43              | 22               | 21                  |
|          | S15    | 7.12         | 17                         | 43              | 22               | 21                  |
|          | S19    | 9.53         | 22                         | 47              | 21               | 26                  |
|          | S23    | 11.45        | 18                         | 38              | 19               | 19                  |
|          | S27    | 13.17        | 20                         | 40              | 17               | 23                  |
|          | S31    | 15.30        | 19                         | 43              | 21               | 22                  |
|          | S37    | 18.10        | 20                         | 62              | 23               | 39                  |
|          | S43    | 21.26        | 18                         | 45              | 20               | 25                  |
|          | S51    | 25.29        | 16                         | 37              | 18               | 19                  |
| S61      | 30.39  | 18           | 47                         | 20              | 27               |                     |
| 2        | S12    | 9.50         | 20                         | 45              | 22               | 23                  |
|          | S14    | 10.50        | 19                         | 45              | 22               | 23                  |
|          | S15    | 12.00        | 20                         | 56              | 25               | 31                  |
| 3        | S9     | 5.85         | 21                         | 49              | 23               | 26                  |
|          | S13    | 9.25         | 22                         | 65              | 25               | 40                  |
|          | S17    | 12.30        | 17                         | 29              | 15               | 14                  |
|          | S21    | 15.04        | 15                         | 39              | 20               | 19                  |
|          | S25    | 18.44        | 18                         | 47              | 23               | 24                  |
| S29      | 21.02  | 21           | 53                         | 24              | 29               |                     |
| 4        | B3     | 2.70         | 14                         | 31              | 16               | 15                  |
|          | B5     | 3.80         | 19                         | 55              | 21               | 34                  |
|          | S10    | 6.20         | 18                         | 43              | 20               | 23                  |
|          | S14    | 8.05         | 24                         | 48              | 22               | 26                  |
|          | S18    | 11.10        | 20                         | 52              | 24               | 28                  |

ΕΡΓΟ : ΩΝΑΣΕΙΟ ΕΘΝΙΚΟ ΜΕΤΑΜΟΣΧΕΥΤΙΚΟ ΚΕΝΤΡΟ  
ΕΔΑΦΤΕΧΝΙΚΑ

TABLE I (Cont'd)

MOISTURE CONTENT AND ATTERBERG LIMITS

| BOREHOLE | SAMPLE | DEPTH<br>(m) | MOISTURE<br>CONTENT<br>(%) | LIQUID<br>LIMIT | PLASTIC<br>LIMIT | PLASTICITY<br>INDEX |
|----------|--------|--------------|----------------------------|-----------------|------------------|---------------------|
| 7        | U7     | 3,58         | 12                         | 61              | 26               | 35                  |
|          | U8     | 4,20         | 15                         | 42              | 22               | 20                  |
|          | U10    | 4,88         | 21                         | 51              | 24               | 27                  |

NOTES:

1. Moisture contents were determined according to ASTM Designation D 2216.
2. Atterberg limits were determined according to AASHTO Designations T89-66 and T90-70.







ΕΡΓΟ : ΩΝΑΣΕΙΟ ΕΘΝΙΚΟ ΜΕΤΑΜΟΣΧΕΥΤΙΚΟ ΚΕΝΤΡΟ  
ΕΔΑΦΤΕΧΝΙΚΑ .

OVE ARUP & PARTNERS

RECORD OF BOREHOLE 4

|           |                |
|-----------|----------------|
| APPENDIX  |                |
| JOB NO    | 0657           |
| MADE BY   | RJD            |
| DATE MADE | NOVEMBER, 1980 |

| DATE     | DEPTH TO WATER | DEPTH OF CASING | SAMPLES |       | CORRECTION | DEPTH | REDUCED LEVEL | DESCRIPTION OF STRATA                                                                                                                                                       |
|----------|----------------|-----------------|---------|-------|------------|-------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |                |                 | DEPTH   |       |            |       |               |                                                                                                                                                                             |
|          |                |                 | FROM    | TO    |            |       |               |                                                                                                                                                                             |
|          |                |                 |         |       |            |       |               | GROUND LEVEL 10.45m AD                                                                                                                                                      |
| 13.11.80 |                |                 |         |       |            | 0.40  | 10.05         | 150mm CONCRETE over hardcore rubble.                                                                                                                                        |
|          |                |                 | 1.45    | 1.45  | S(84)      |       |               | FILL - Fine grey brown clayey SILT and fine to coarse GRAVEL.                                                                                                               |
|          |                |                 | 2.15    | 2.45  | S(85)      | 1.90  | 9.65          |                                                                                                                                                                             |
|          | 2.60m          |                 | 3.02    | 3.32  | S(86)      |       |               | Dense pinkish brown clayey calcareous SILT with some fine to medium rounded gravel.                                                                                         |
|          |                |                 | 4.00    | 4.22  | S(106)     |       |               |                                                                                                                                                                             |
|          |                |                 | 4.20    | 5.13  | S(231)     | 4.50  | 6.00          |                                                                                                                                                                             |
|          |                |                 | 4.10    | 6.28  | S(216)     |       |               | Hard friable reddish brown mottled grey calcareous silty CLAY and clayey SILT with black stained closely spaced semi vertical joints, polished and slickensided below 6.0m. |
| 14.11.80 | 2.60           |                 | 4.20    | 7.95  | S(116)     |       |               |                                                                                                                                                                             |
|          |                |                 | 4.20    | 8.13  | S(116)     |       |               |                                                                                                                                                                             |
|          |                |                 | 4.20    | 9.16  | S(190)     |       |               |                                                                                                                                                                             |
|          |                |                 | 4.20    | 11.18 | S(167)     |       |               |                                                                                                                                                                             |
|          |                |                 | 4.20    | 11.90 | S(164)     |       |               |                                                                                                                                                                             |
|          |                |                 | 4.20    | 13.74 | S(160)     |       |               |                                                                                                                                                                             |
|          |                |                 |         |       |            | 14.80 | -4.05         | Base of moderately strong grey silty fine SANDSTONE.                                                                                                                        |
|          | 2.60           | 4.20            | 15.02   | 15.69 | S(240)     | 15.00 | -4.55         | Dense grey medium to coarse SAND interbedded with hard brown silty CLAY.                                                                                                    |
| 15.11.80 | 2.60           |                 | 4.20    | 16.50 | S(260)     |       |               |                                                                                                                                                                             |
|          |                |                 |         |       |            | 17.25 | -5.80         | Hard friable reddish brown mottled grey silty CLAY.                                                                                                                         |
|          |                |                 | 4.20    | 18.00 | S(210)     |       |               |                                                                                                                                                                             |
|          |                |                 |         |       |            | 17.31 | -5.90         |                                                                                                                                                                             |
|          |                |                 | 4.20    | 19.85 | S(300)     | 0.00  | -7.55         | Hard grey brown clayey calcareous SILT.                                                                                                                                     |

REMARKS

SPT at 1.15m - on a stone so result non representative.

Standard Penetration Tests

| At m  | From m | Blows per 30cm       | At m  | From m | Blows per 30cm   |
|-------|--------|----------------------|-------|--------|------------------|
| 4.00  | 4.00   | 30, 46, 160 for 70cm | 11.90 | 11.90  | 66               |
| 5.13  | 5.09   | 9, 22, 37, 94        | 13.74 | 13.74  | 50               |
| 6.28  | 4.20   | 21, 33, 75           | 15.69 | 15.69  | 45, 100 for 15cm |
| 7.95  | 7.90   | 24, 31               | 16.50 | 16.50  | 120              |
| 9.16  | 4.05   | 18, 35, 100 for 20cm | 18.00 | 18.00  | 87               |
| 9.16  | 7.02   | 9, 24, 48, 77        | 19.85 | 19.85  | 100 for 60cm     |
| 11.18 | 11.10  | 26, 100 for 45cm     |       |        |                  |

TYPE DRAGING  
Dry to 5.0m  
Water flush with single c  
barrel to END.  
DIAPHRAGM DRAG  
125m to 4.00m  
100m to END

CASING LINES  
107m to 4.2m

BOREHOLE 4

ΕΡΓΟ : ΩΝΑΣΕΙΟ ΕΘΝΙΚΟ ΜΕΤΑΜΟΣΧΕΥΤΙΚΟ ΚΕΝΤΡΟ  
ΕΔΑΦΤΕΧΝΙΚΑ .

| OVE ARUP & PARTNERS            |                |                 |         |       |        |        |        |                                                                      |                       | APPENDIX                       |  |
|--------------------------------|----------------|-----------------|---------|-------|--------|--------|--------|----------------------------------------------------------------------|-----------------------|--------------------------------|--|
| RECORD OF BOREHOLE 4           |                |                 |         |       |        |        |        |                                                                      |                       | JOB NO 9457                    |  |
|                                |                |                 |         |       |        |        |        |                                                                      |                       | MADE BY NJD                    |  |
|                                |                |                 |         |       |        |        |        |                                                                      |                       | DATE MADE November 1990        |  |
| DAILY PROGRESS                 | DEPTH TO WATER | DEPTH OF CASING | SAMPLES |       |        | LOG NO | DEPTH  | REDUCED LEVEL                                                        | DESCRIPTION OF STRATA |                                |  |
|                                |                |                 | DEPTH   |       | TYPE   |        |        |                                                                      |                       |                                |  |
|                                |                |                 | FROM    | TO    |        |        |        |                                                                      |                       |                                |  |
|                                | m              | m               | m       | m     |        | m      |        | GROUND LEVEL 10.450 AD                                               |                       |                                |  |
|                                |                | 4.20            | 21.93   | 22.08 | S(252) |        |        | Hard reddish brown mottled grey silty CLAY with black scaled joints. |                       |                                |  |
|                                | 2.60           | 4.20            | 22.78   | 22.81 | S(257) |        |        |                                                                      |                       |                                |  |
| 17.11.80                       | 2.60           |                 |         |       |        |        |        |                                                                      |                       |                                |  |
|                                |                | 4.20            | 23.86   | 23.94 | S(292) |        |        |                                                                      |                       |                                |  |
|                                |                | 4.20            | 25.45   | 25.52 | S(429) |        |        |                                                                      |                       |                                |  |
|                                |                |                 |         |       |        | 26.10  | -15.63 | 23cm Dense grey green fine SAND                                      |                       |                                |  |
|                                |                | 4.20            | 27.05   | 27.10 | S(600) |        |        |                                                                      |                       |                                |  |
|                                |                |                 |         |       |        | 28.15  | -17.60 | 5cm Dense grey green fine SAND                                       |                       |                                |  |
|                                |                | 4.20            | 28.45   | 28.51 | S(300) |        |        |                                                                      |                       |                                |  |
|                                |                | 4.20            | 29.90   | 29.98 | S(300) |        | -19.51 |                                                                      |                       |                                |  |
|                                |                |                 |         |       | END    |        |        |                                                                      |                       |                                |  |
| REMARKS                        |                |                 |         |       |        |        |        |                                                                      |                       | TYPE OF SPRING                 |  |
| Water Level : 16.11.80 - 2.60m |                |                 |         |       |        |        |        |                                                                      |                       | Diameter of Spring             |  |
| Standard Penetration Test      |                |                 |         |       |        |        |        |                                                                      |                       | CASING TUBES                   |  |
| At m                           | From m         | Blows per 75cm  |         |       |        |        |        |                                                                      |                       |                                |  |
| 21.93                          | 21.81          | 33,00 for 15cm  |         |       |        |        |        |                                                                      |                       |                                |  |
| 22.78                          | 22.70          | 56,100 for 15cm |         |       |        |        |        |                                                                      |                       |                                |  |
| 23.86                          | 23.88          | 74              |         |       |        |        |        |                                                                      |                       |                                |  |
| 25.45                          | 25.43          | 100 for 70cm    |         |       |        |        |        |                                                                      |                       |                                |  |
| 27.05                          | 27.05          | 100 for 50cm    |         |       |        |        |        |                                                                      |                       |                                |  |
| 28.45                          | 28.45          | 100 for 50cm    |         |       |        |        |        |                                                                      |                       |                                |  |
| 29.90                          | 29.98          | 100 for 50cm    |         |       |        |        |        |                                                                      |                       |                                |  |
|                                |                |                 |         |       |        |        |        |                                                                      |                       | <b>BOREHOLE 4<sub>10</sub></b> |  |





ΕΡΓΟ : ΩΝΑΣΕΙΟ ΕΘΝΙΚΟ ΜΕΤΑΜΟΣΧΕΥΤΙΚΟ ΚΕΝΤΡΟ  
ΕΔΑΦΤΕΧΝΙΚΑ .

TRIAL PIT NO 1

Ground Level (SL)

GL - 0.15 m CONCRETE  
0.15 - 0.45 m FILL - LIMESTONE rubble including boulders up  
to 0.3 m cubed .  
0.45 - 1.45 m FILL - Rubble, bricks and gravel in a greenish  
grey silty clay matrix .  
1.45 - 2.60 m Firm to stiff brown silty clay with some rounded  
fine to medium gravel .  
2.60 - 2.80 m Moderately weak pinkish brown coarse SANDSTONE  
with fine gravel and a calcareous matrix .

BASE OF PIT : 2.80 m. DRY .

Sandstone too hard for excavator .

TRIAL PIT NO 2

Ground Level

GL - 1.60 m FILL - rubble, bricks, gravel and some asphalt  
in a greenish grey silty clay matrix  
1.60 - 2.75 m Firm to stiff brown silty CLAY with some gravel,  
root holes towards the base and a few 5 mm shells  
2.75 - 2.90 m Moderately weak pinkish brown coarse SANDSTONE  
with fine gravel and a calcareous matrix

BASE OF PIT : 2.90 m. DRY

Sandstone too hard for excavator

ΕΡΓΟ : ΩΝΑΣΕΙΟ ΕΘΝΙΚΟ ΜΕΤΑΜΟΣΧΕΥΤΙΚΟ ΚΕΝΤΡΟ  
ΕΔΑΦΤΕΧΝΙΚΑ .

TRIAL PIT NO 3

Ground Level

GL - 1.15 m FILL - Bricks, rubble, gravel in a greenish grey and brown silty clay matrix.  
1.15 - 2.40 m Firm to stiff brown silty CLAY with some gravel.  
2.40 - 3.40 m Medium to dense, slightly cemented, pinkish brown silty CLAY with some rounded polymict fine to coarse gravel.

BASE OF PIT : 3.40 m. Water level: 2.62 m.

Water level rose from 2.95 to 2.64 m in 22 minutes.

Pit sides stable

TRIAL PIT NO 4

Ground Level

GL - 1.40 m FILL - Bricks, rubble, gravel and ash in a grey silty clay matrix.  
1.40 - 2.20 m Firm to stiff brown silty CLAY with some fine to coarse rounded polymict gravel.  
2.20 - 2.90 m Dense pinkish brown silty CLAY with some gravel.

BASE OF PIT : 2.90 m. Water level: 2.55 m .

Water level rose from 2.90 to 2.55 m in 25 minutes .