# DETERMINATION OF SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

## GENERAL INFORMATION

| | | | | | |
|---|---|---|---|---|---|
| **Site Name:** | *Istead Rise* | | | **Job No:** | *25046* |
| **Engineer:** | *Jag Johal* | **Date:** | *10/09/2025* | **Weather:** | *Rain* |

## TEST PIT DETAILS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Trial Pit Number:** | *MTP104* | | **Test** *1* **of** *2* | | | | |
| **Length (m):** | *2.0* | **Width (m):** | *0.5* | | **Depth (m):** | *2.7* | |
| **Depth to Groundwater (m):** | *n/a* | | | | | | |
| **Time Filling Commenced:** | *10:18* | | **Time Filling Completed:** | | | *10:20* | |
| **Depth to Water at Start of Test:** | | *1.52* | | | | | |
| **Effective Depths:** | | **75%:** | *1.80* | **50%:** | *2.09* | **25%:** | *2.37* |

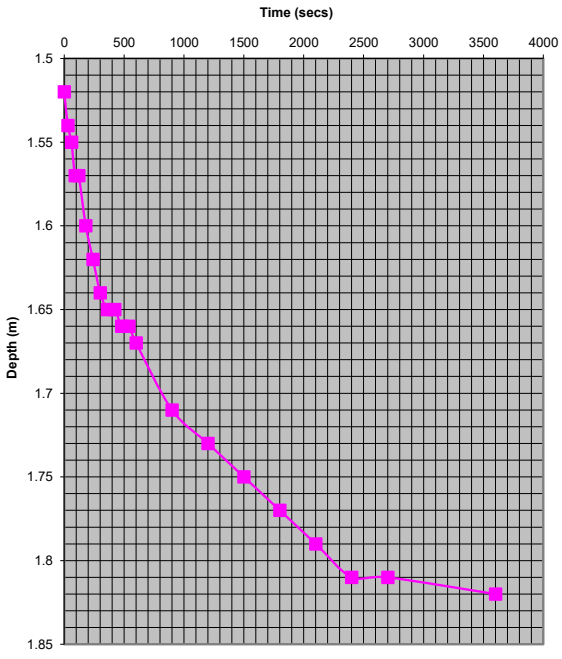
NOTE: Soakage to at least 25% effective depth is required in order to calculate infiltration rate. If infiltration rates are slow extrapolation maybe required to determine time at which 25% effective depth would be achieved.

## TEST PIT RESULTS

### TEST DATA

| Time | t (mins) | t (secs) | Depth to Water (m) |
|---|---|---|---|
| 10:20 | 0 | 0 | 1.520 |
| | 0.5 | 30 | 1.540 |
| | 1 | 60 | 1.550 |
| | 1.5 | 90 | 1.570 |
| | 2 | 120 | 1.570 |
| | 3 | 180 | 1.600 |
| | 4 | 240 | 1.620 |
| | 5 | 300 | 1.640 |
| | 6 | 360 | 1.650 |
| | 7 | 420 | 1.650 |
| | 8 | 480 | 1.660 |
| | 9 | 540 | 1.660 |
| | 10 | 600 | 1.670 |
| | 15 | 900 | 1.710 |
| | 20 | 1200 | 1.730 |
| | 25 | 1500 | 1.750 |
| | 30 | 1800 | 1.770 |
| | 35 | 2100 | 1.790 |
| | 40 | 2400 | 1.810 |
| | 45 | 2700 | 1.810 |
| | 60 | 3600 | 1.820 |

### MTP104




t at 75% Effective Depth: _____ secs
t at 25% Effective Depth: _____ secs

Infiltration Rate f = Vp75-25 / ap50 x tp75-25

| | | |
|---|---|---|
| Vp75-25: | ***0.57*** | m3 |
| ap50: | ***3.825*** | m2 |
| tp75-25 | ***0*** | secs |

**f =** ***#DIV/0!*** **m/s**

# DETERMINATION OF SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

## GENERAL INFORMATION

| | | | | | |
|---|---|---|---|---|---|
| **Site Name:** | *Istead Rise* | | | **Job No:** | *25046* |
| **Engineer:** | *Jag Johal* | **Date:** | *10/09/2025* | **Weather:** | *Rain* |

## TEST PIT DETAILS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Trial Pit Number:** | *MTP104* | | **Test** *2* **of** *2* | | | | |
| **Length (m):** | *2.0* | **Width (m):** | *0.5* | | **Depth (m):** | *2.7* | |
| **Depth to Groundwater (m):** | *N/A* | | | | | | |
| **Time Filling Commenced:** | *11:20* | | **Time Filling Completed:** | | | *11:22* | |
| **Depth to Water at Start of Test:** | | *2.39* | | | | | |
| **Effective Depths:** | | **75%:** | *2.46* | **50%:** | *2.52* | **25%:** | *2.59* |

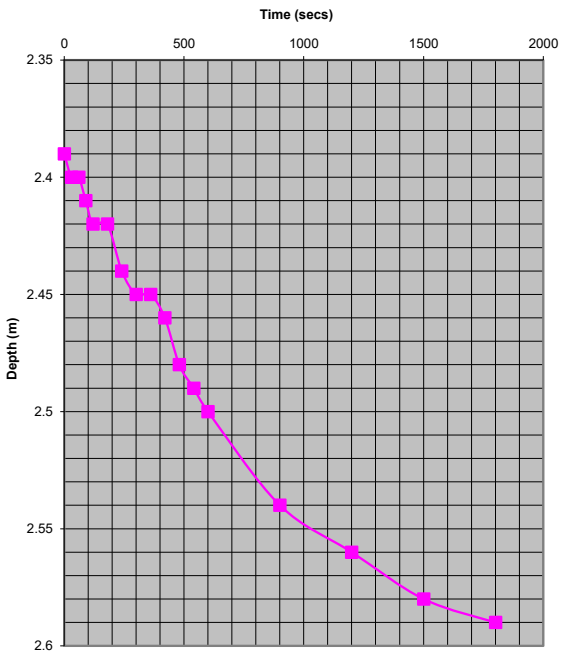
NOTE: Soakage to at least 25% effective depth is required in order to calculate infiltration rate. If infiltration rates are slow extrapolation maybe required to determine time at which 25% effective depth would be achieved.

## TEST PIT RESULTS

### TEST DATA

| Time | t (mins) | t (secs) | Depth to Water (m) |
|---|---|---|---|
| 11:22 | 0 | 0 | 2.390 |
| | 0.5 | 30 | 2.400 |
| | 1 | 60 | 2.400 |
| | 1.5 | 90 | 2.410 |
| | 2 | 120 | 2.420 |
| | 3 | 180 | 2.420 |
| | 4 | 240 | 2.440 |
| | 5 | 300 | 2.450 |
| | 6 | 360 | 2.450 |
| | 7 | 420 | 2.460 |
| | 8 | 480 | 2.480 |
| | 9 | 540 | 2.490 |
| | 10 | 600 | 2.500 |
| | 15 | 900 | 2.540 |
| | 20 | 1200 | 2.560 |
| | 25 | 1500 | 2.580 |
| | 30 | 1800 | 2.590 |

### MTP104




t at 75% Effective Depth: ***420*** secs
t at 25% Effective Depth: ***1800*** secs

Infiltration Rate f = Vp75-25 / ap50 x tp75-25

| | | |
|---|---|---|
| Vp75-25: | ***0.13*** | m3 |
| ap50: | ***1.65*** | m2 |
| tp75-25 | ***1380*** | secs |

**f =** *5.70927E-05* **m/s**

# DETERMINATION OF SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

## GENERAL INFORMATION

| | | | | | |
|---|---|---|---|---|---|
| **Site Name:** | *Istead Rise* | | | **Job No:** | *25046* |
| **Engineer:** | *Jag Johal* | **Date:** | *10/09/2025* | **Weather:** | *Rain* |

## TEST PIT DETAILS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Trial Pit Number:** | *MTP105* | | **Test** *1* **of** *2* | | | | |
| **Length (m):** | *2.0* | **Width (m):** | *0.5* | | **Depth (m):** | *2.7* | |
| **Depth to Groundwater (m):** | *N/A* | | | | | | |
| **Time Filling Commenced:** | *12:00* | | **Time Filling Completed:** | | | *12:02* | |
| **Depth to Water at Start of Test:** | | *1.8* | | | | | |
| **Effective Depths:** | | **75%:** | *2.01* | **50%:** | *2.23* | **25%:** | *2.44* |

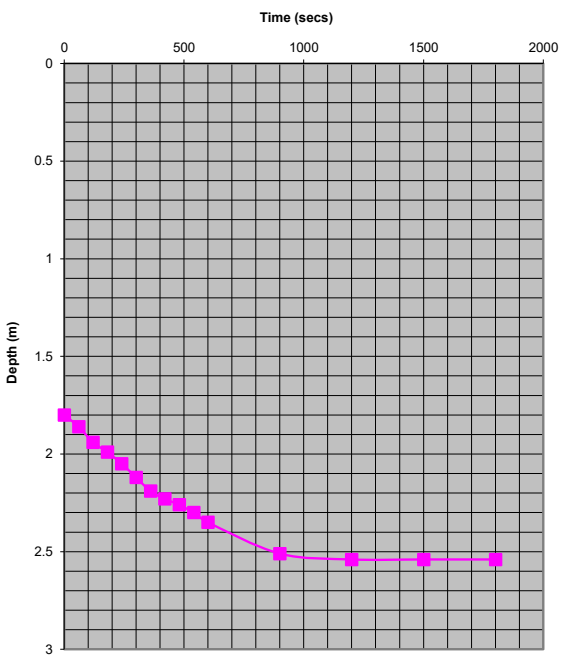
NOTE: Soakage to at least 25% effective depth is required in order to calculate infiltration rate. If infiltration rates are slow extrapolation maybe required to determine time at which 25% effective depth would be achieved.

## TEST PIT RESULTS

### TEST DATA

| Time | t (mins) | t (secs) | Depth to Water (m) |
|---|---|---|---|
| 12:02 | 0 | 0 | 1.800 |
| | 1 | 60 | 1.860 |
| | 2 | 120 | 1.940 |
| | 3 | 180 | 1.990 |
| | 4 | 240 | 2.050 |
| | 5 | 300 | 2.120 |
| | 6 | 360 | 2.190 |
| | 7 | 420 | 2.230 |
| | 8 | 480 | 2.260 |
| | 9 | 540 | 2.300 |
| | 10 | 600 | 2.350 |
| | 15 | 900 | 2.510 |
| | 20 | 1200 | 2.540 |
| | 25 | 1500 | 2.540 |
| | 30 | 1800 | 2.540 |

### MTP105




t at 75% Effective Depth: ***283*** secs
t at 25% Effective Depth: ***750*** secs

Infiltration Rate f = Vp75-25 / ap50 x tp75-25

| | | |
|---|---|---|
| Vp75-25: | ***0.43*** | m3 |
| ap50: | ***3.125*** | m2 |
| tp75-25 | ***467*** | secs |

**f =** ***0.000291*** **m/s**

# DETERMINATION OF SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

## GENERAL INFORMATION

| | | | | | |
|---|---|---|---|---|---|
| **Site Name:** | *Istead Rise* | | | **Job No:** | *25046* |
| **Engineer:** | *Jag Johal* | **Date:** | *10/09/2025* | **Weather:** | *Rain* |

## TEST PIT DETAILS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Trial Pit Number:** | *MTP105* | | **Test** *2* **of** *2* | | | | |
| **Length (m):** | *2.0* | **Width (m):** | *0.5* | | **Depth (m):** | *2.7* | |
| **Depth to Groundwater (m):** | *N/A* | | | | | | |
| **Time Filling Commenced:** | *12:34* | | **Time Filling Completed:** | | | *12:35* | |
| **Depth to Water at Start of Test:** | *2.23* | | | | | | |
| **Effective Depths:** | | **75%:** | *2.34* | **50%:** | *2.44* | **25%:** | *2.55* |

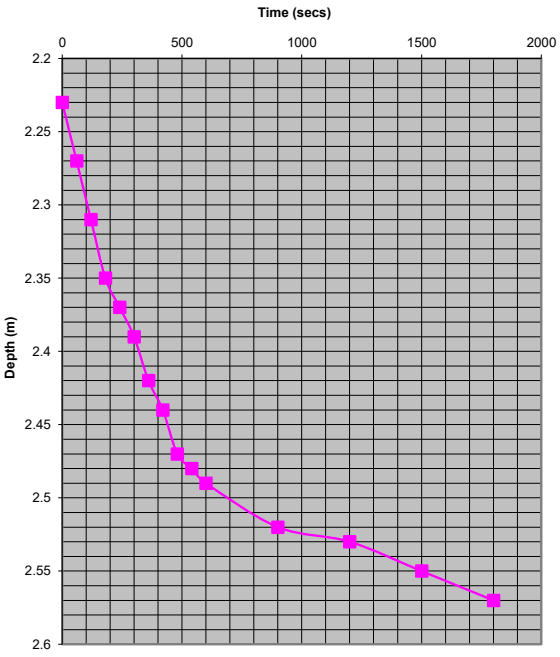
NOTE: Soakage to at least 25% effective depth is required in order to calculate infiltration rate. If infiltration rates are slow extrapolation maybe required to determine time at which 25% effective depth would be achieved.

## TEST PIT RESULTS

### TEST DATA

| Time | t (mins) | t (secs) | Depth to Water (m) |
|---|---|---|---|
| 12:35 | 0 | 0 | 2.230 |
| | 1 | 60 | 2.270 |
| | 2 | 120 | 2.310 |
| | 3 | 180 | 2.350 |
| | 4 | 240 | 2.370 |
| | 5 | 300 | 2.390 |
| | 6 | 360 | 2.420 |
| | 7 | 420 | 2.440 |
| | 8 | 480 | 2.470 |
| | 9 | 540 | 2.480 |
| | 10 | 600 | 2.490 |
| | 15 | 900 | 2.520 |
| | 20 | 1200 | 2.530 |
| | 25 | 1500 | 2.550 |
| | 30 | 1800 | 2.570 |

### MTP105




t at 75% Effective Depth: ***165*** secs
t at 25% Effective Depth: ***1500*** secs

Infiltration Rate f = Vp75-25 / ap50 x tp75-25

| | | |
|---|---|---|
| Vp75-25: | ***0.21*** | m3 |
| ap50: | ***2.05*** | m2 |
| tp75-25 | ***1335*** | secs |

**f =** ***7.67E-05*** **m/s**