



Appendix F - Site Investigation

EXECUTIVE SUMMARY

Project Reference	22.02.031.
Site Location	Shipton Road, Woodstock, Oxfordshire, OX20 1QJ.
OS Grid Reference	Approximate centre of the site – 445940, 216137.
Current Site Use	The site is part of a farmer's arable field.
Development Proposals	A residential development, with associated access roads, gardens and public open space.
Existing Buildings	There are no buildings on the site.
Topography	The site slopes downwards towards the east at less than 1°.
Published Geology	Bedrock of the Cornbrash Formation.
Hydrology	Based on the local Ordnance Survey map, the nearest surface watercourse is an unnamed tributary of the River Cherwell, approximately 250m to the north.
Hydrogeology	The Cornbrash Formation is classified as a Secondary A Aquifer.
Ground Conditions Encountered	Topsoil over the Cornbrash Formation.
Groundwater Encountered	No groundwater seepages were encountered during the fieldworks.
Infiltration Results	Tests were undertaken at eight locations down to depths ranging from 0.7m to 1.2m and recorded typical infiltration rates between 2.8×10^{-6} m/s and 2.2×10^{-5} m/s, which is indicative of strata with low permeability.

This executive summary should be read in conjunction with the main report.

Project Ref: 22.02.031

Approximate locations of
trial pits



Geotechnical and Geoenvironmental Consultants

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Title: Exploratory Hole Location Plan
Proposed

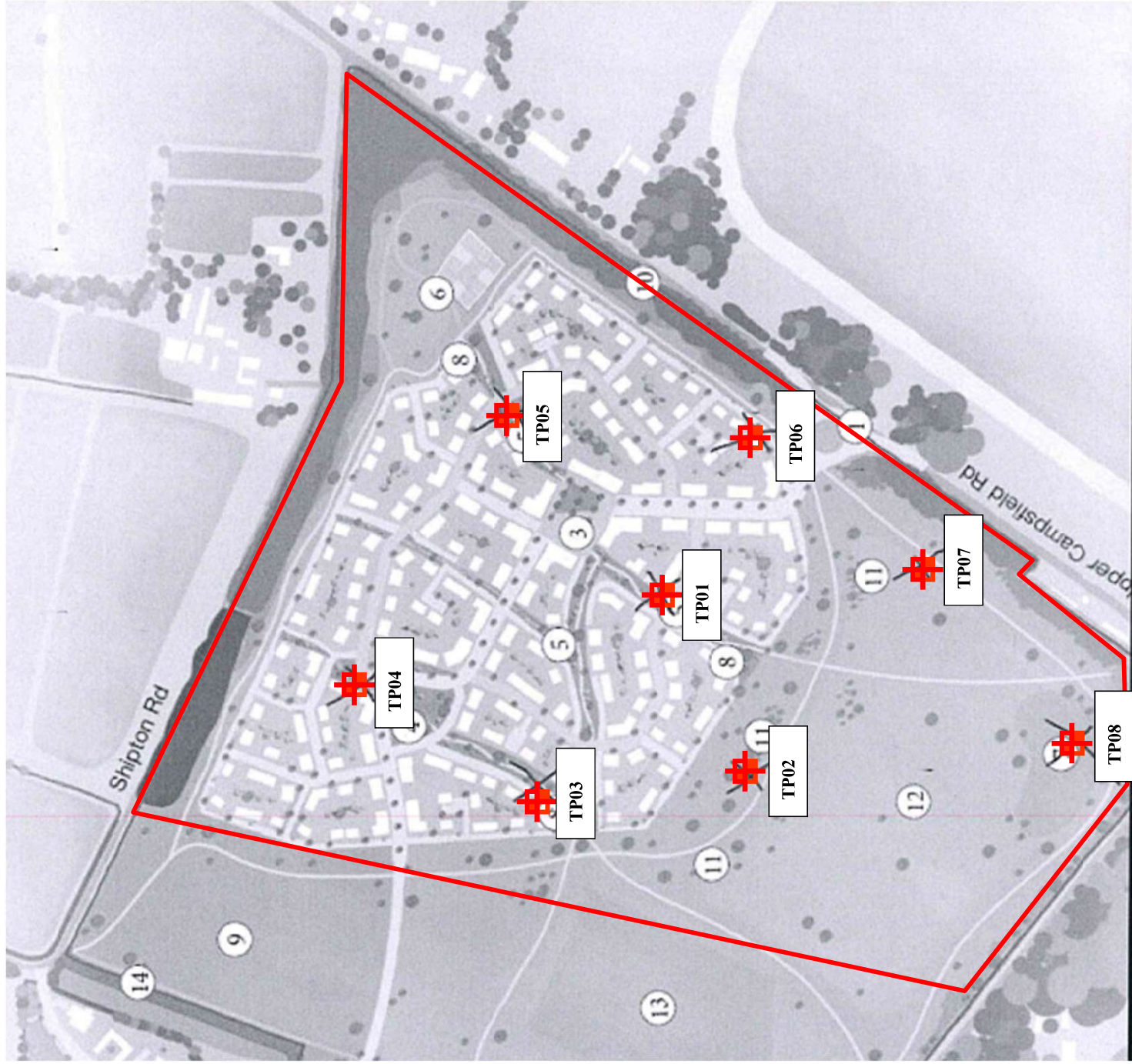
Site: Shipton Road
Woodstock, OX20 1QJ

Scale: NTS

Drawn by: LC

Date: 03/2022

Dwg No: Fig 3





Trial Pit Log

Trial Pit No.

TP 101

Project Location: Shipton Road, Woodstock, OX20 1QJ

Co-ords: 445914E - 216170N

Project Number:
22.02.031

Level:

Logged By:

Dates: 07/03/2022

Lee Chippington
to BS 5930:2015

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth (m)	Type	Result					
				0.20			TOPSOIL Brown gravelly clayey organic fine to medium SAND. Gravel is coarse angular limestone	
				1.00			CORNBRASH FORMATION Medium strong fractured light brown LIMESTONE. Moderately weathered so that it was recovered as gravel and cobbles - becomes less weathered with depth	
							End of Trial Pit at 1.00m	1
								2

Method of excavation: JCB 3CX **Dimensions:** 0.60m W x 1.50m L x 1.00m D

Stability: Sides Stable

Groundwater: Not encountered

Remarks: Trial pit terminated in rock

ISO 9001
REGISTERED FIRM

AGS Association of Geotechnical & Geoenvironmental Specialists



Trial Pit Log

Trial Pit No.

TP 102

Project Location: Shipton Road, Woodstock, OX20 1QJ

Co-ords: 445798E - 216070N

Project Number:
22.02.031

Level:

Logged By:

Dates: 07/03/2022

Lee Chippington
to BS 5930:2015

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth (m)	Type	Result					
				0.30			TOPSOIL Brown gravelly clayey organic fine to medium SAND. Gravel is coarse angular limestone	
				1.20			CORNBRAsh FORMATION Medium strong fractured light brown LIMESTONE. Moderately weathered so that it was recovered as gravel and cobbles - becomes less weathered with depth	1
							End of Trial Pit at 1.20m	2

Method of excavation: JCB 3CX **Dimensions:** 0.60m W x 1.50m L x 1.20m D

Stability: Sides Stable

Groundwater: Not encountered

Remarks: Trial pit terminated in rock

ISO 9001
REGISTERED FIRM

Association of Geotechnical & Geoenvironmental Specialists



Trial Pit Log

Trial Pit No.

TP 103

Project Location: Shipton Road, Woodstock, OX20 1QJ

Co-ords: 445790E - 216290N

Project Number:
22.02.031

Level:

Logged By:

Dates: 07/03/2022

Lee Chippington
to BS 5930:2015

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth (m)	Type	Result				
				0.30			TOPSOIL Brown gravelly clayey organic fine to medium SAND. Gravel is coarse angular limestone
				1.10			CORNBRAsh FORMATION Medium strong fractured light brown LIMESTONE. Moderately weathered so that it was recovered as gravel and cobbles - becomes less weathered with depth
							End of Trial Pit at 1.10m

Method of excavation: JCB 3CX **Dimensions:** 0.60m W x 1.50m L x 1.10m D

Stability: Sides Stable

Groundwater: Not encountered

Remarks: Trial pit terminated in rock





Trial Pit Log

Trial Pit No.

TP 104

Project Location: Shipton Road, Woodstock, OX20 1QJ

Co-ords: 445865E - 216449N


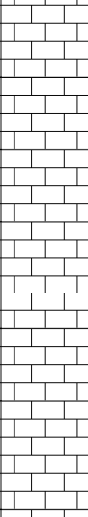
Project Number:
22.02.031

Level:

Logged By:

Dates: 07/03/2022

Lee Chippington
to BS 5930:2015

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth (m)	Type	Result				
				0.30			TOPSOIL Brown gravelly clayey organic fine to medium SAND. Gravel is coarse angular limestone
				1.20			CORNBRAsh FORMATION Medium strong fractured light brown LIMESTONE. Moderately weathered so that it was recovered as gravel and cobbles - becomes less weathered with depth
							End of Trial Pit at 1.20m

Method of excavation: JCB 3CX **Dimensions:** 0.60m W x 1.50m L x 1.20m D

Stability: Sides Stable

Groundwater: Not encountered

Remarks: Trial pit terminated in rock





Trial Pit Log

Trial Pit No.

TP 105

Project Location: Shipton Road, Woodstock, OX20 1QJ

Co-ords: 446073E - 216314N

Project Number:
22.02.031

Level:

Logged By:

Dates: 08/03/2022

Lee Chippington
to BS 5930:2015

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth (m)	Type	Result					
				0.30			TOPSOIL Brown gravelly clayey organic fine to medium SAND. Gravel is coarse angular limestone	
				1.10			CORNBRAsh FORMATION Medium strong fractured light brown LIMESTONE. Moderately weathered so that it was recovered as gravel and cobbles - becomes less weathered with depth	1
							End of Trial Pit at 1.10m	2

Method of excavation: JCB 3CX **Dimensions:** 0.60m W x 1.50m L x 1.10m D

Stability: Sides Stable

Groundwater: Not encountered

Remarks: Trial pit terminated in rock

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Trial Pit Log

Trial Pit No.

TP 106

Project Location: Shipton Road, Woodstock, OX20 1QJ

Co-ords: 446079E - 216107N

Project Number:
22.02.031

Level:

Logged By:

Dates: 08/03/2022

Lee Chippington
to BS 5930:2015

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth (m)	Type	Result					
				0.30			TOPSOIL Brown gravelly clayey organic fine to medium SAND. Gravel is coarse angular limestone	
				1.10			CORNBRAsh FORMATION Medium strong fractured light brown LIMESTONE. Moderately weathered so that it was recovered as gravel and cobbles - becomes less weathered with depth	1
							End of Trial Pit at 1.10m	2

Method of excavation: JCB 3CX **Dimensions:** 0.60m W x 1.50m L x 1.10m D

Stability: Sides Stable

Groundwater: Not encountered

Remarks: Trial pit terminated in rock





Trial Pit Log

Trial Pit No.

TP 107

Project Location: Shipton Road, Woodstock, OX20 1QJ

Co-ords: 445963E - 215937N


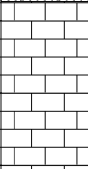
Project Number:
22.02.031

Level:

Logged By:

Dates: 08/03/2022

Lee Chippington
to BS 5930:2015

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth (m)	Type	Result				
				0.40			TOPSOIL Brown gravelly clayey organic fine to medium SAND. Gravel is coarse angular limestone
				0.70			CORNBRASH FORMATION Medium strong fractured light brown LIMESTONE. Moderately weathered so that it was recovered as gravel and cobbles - becomes less weathered with depth
							End of Trial Pit at 0.70m

Method of excavation: JCB 3CX **Dimensions:** 0.60m W x 1.50m L x 0.70m D

Stability: Sides Stable

Groundwater: Not encountered

Remarks: Trial pit terminated in rock





Trial Pit Log

Trial Pit No.

TP 108

Project Location: Shipton Road, Woodstock, OX20 1QJ

Co-ords: 445860E - 215818N


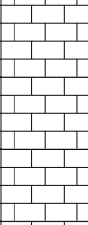
Project Number:
22.02.031

Level:

Logged By:

Dates: 08/03/2022

Lee Chippington
to BS 5930:2015

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth (m)	Type	Result				
				0.30			TOPSOIL Brown gravelly clayey organic fine to medium SAND. Gravel is coarse angular limestone
				0.70			CORNBRAsh FORMATION Medium strong fractured light brown LIMESTONE. Moderately weathered so that it was recovered as gravel and cobbles - becomes less weathered with depth
							End of Trial Pit at 0.70m

Method of excavation: JCB 3CX **Dimensions:** 0.60m W x 1.50m L x 0.70m D

Stability: Sides Stable

Groundwater: Not encountered

Remarks: Trial pit terminated in rock



Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 07/03/2022

Test Location: TP01_Test_1

Groundwater: unknown

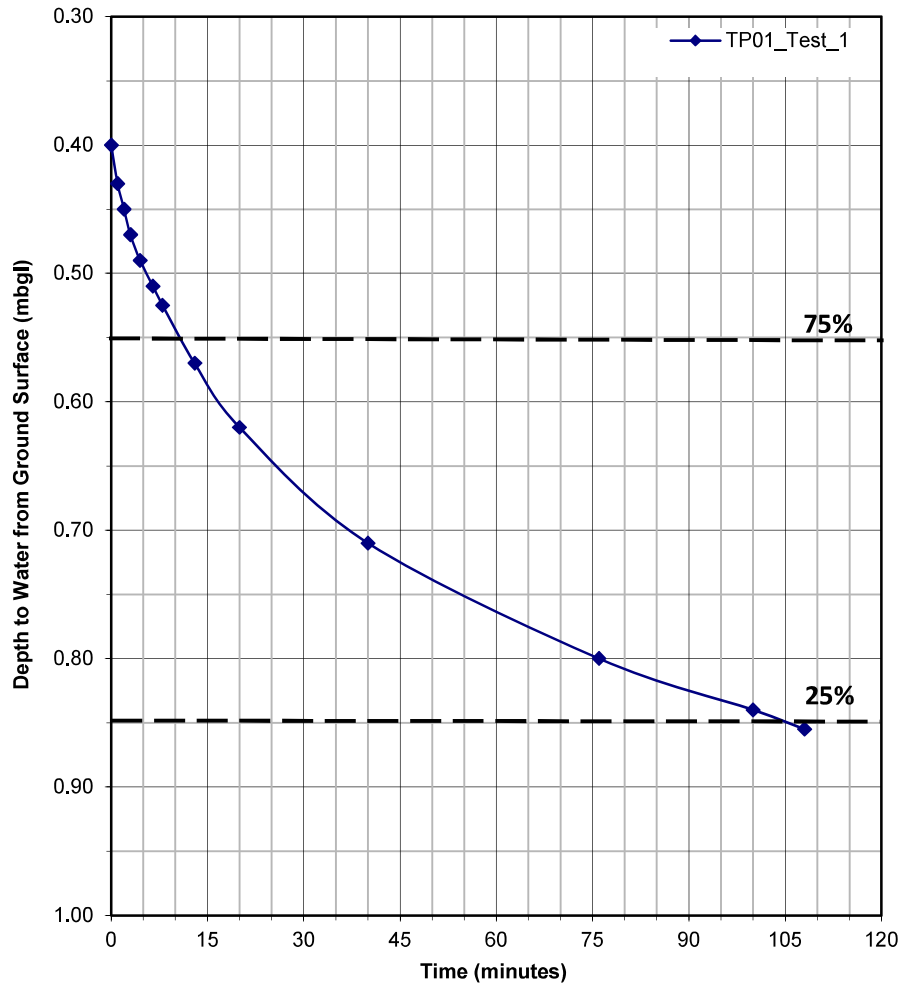
Dimensions: 0.6mWx1.5mLx1.00mD

Soil Description - test response zone:

0.2m to 1.0m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)

Time (mins)Depth BGL

0	0.40
1	0.43
2	0.45
3	0.47
4.5	0.49
6.5	0.51
8	0.53
13	0.57
20	0.62
40	0.71
76	0.80
100	0.84
108	0.86



Calculated Soil Infiltration Rate. $f = 2.2 \times 10^{-5}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

Report:
22.02.031

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 07/03/2022

Test Location: TP02_Test_1

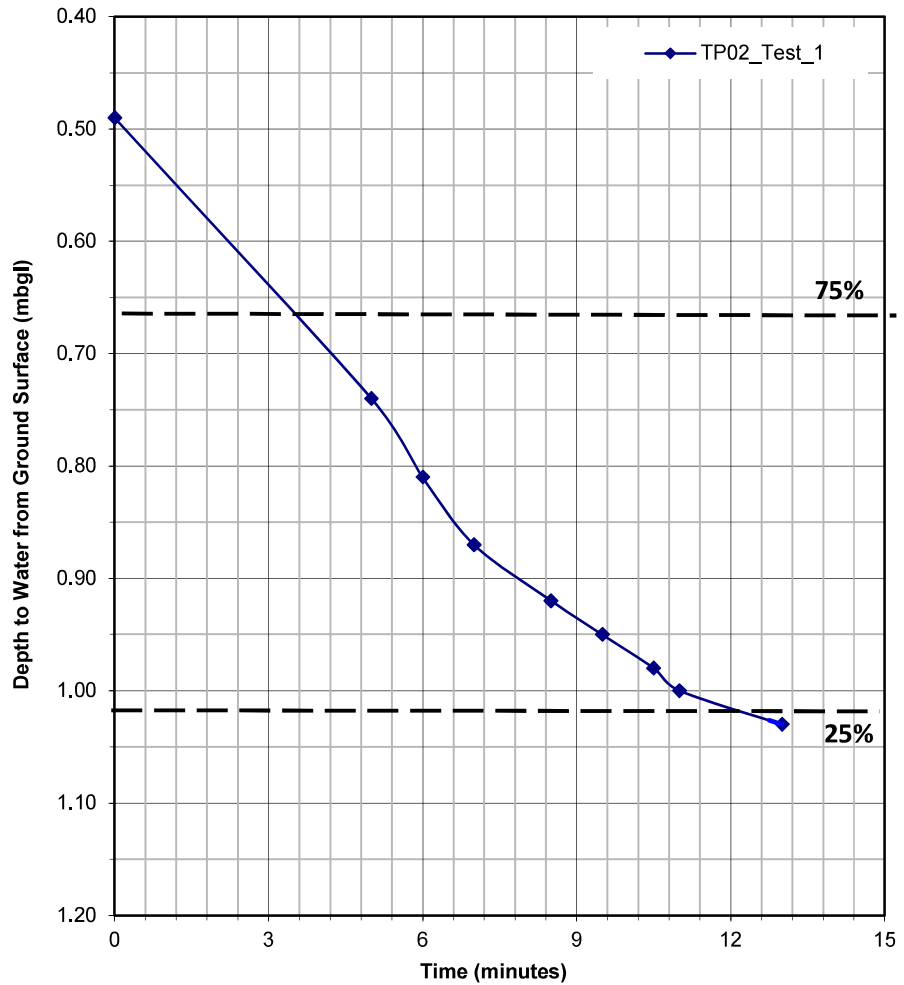
Groundwater: unknown

Dimensions: 0.6mWx1.5mLx1.20mD

Soil Description - test response zone:

0.3m to 1.2m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)

Time (mins)	Depth BGL
0	0.49
5	0.74
6	0.81
7	0.87
8.5	0.92
9.5	0.95
10.5	0.98
11	1.00
13	1.03



Calculated Soil Infiltration Rate. $f = 2.5 \times 10^{-4}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

Report:
22.02.031

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 07/03/2022

Test Location: TP02_Test_2

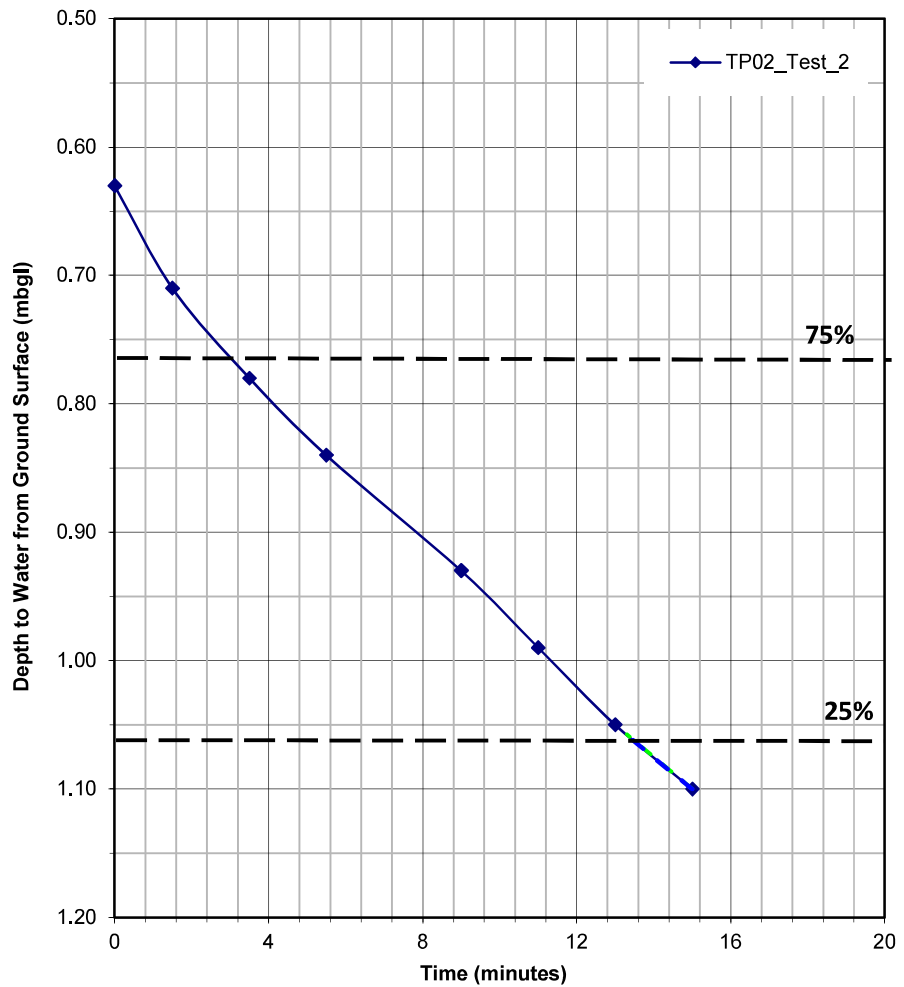
Groundwater: unknown

Dimensions: 0.6mWx1.5mLx1.20mD

Soil Description - test response zone:

0.3m to 1.2m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)

Time (mins)	Depth BGL
0	0.63
1.5	0.71
3.5	0.78
5.5	0.84
9	0.93
11	0.99
13	1.05
15	1.10



Calculated Soil Infiltration Rate, $f = 2.0 \times 10^{-4}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

Report:
22.02.031

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 07/03/2022

Test Location: TP02_Test_3

Groundwater: unknown

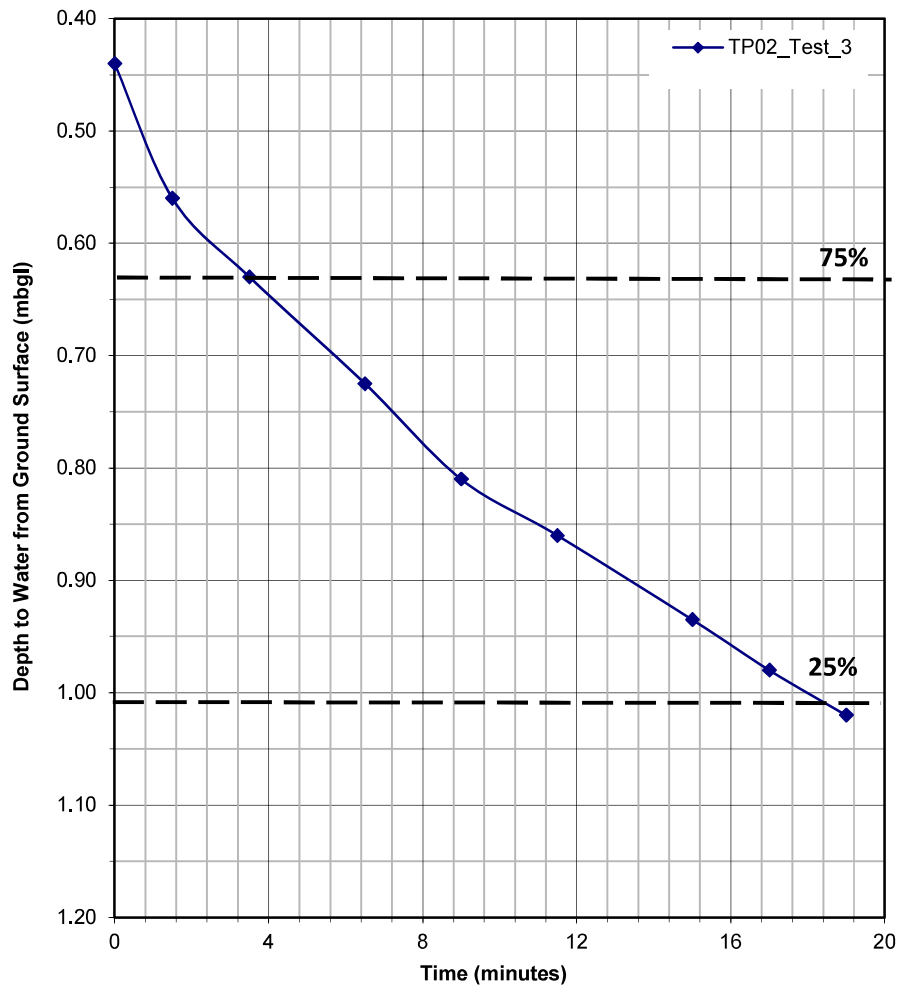
Dimensions: 0.6mWx1.5mLx1.20mD

Soil Description - test response zone:

0.3m to 1.2m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)

Time (mins) Depth BGL

0	0.44
1.5	0.56
3.5	0.63
6.5	0.73
9	0.81
11.5	0.86
15	0.94
17	0.98
19	1.02



Calculated Soil Infiltration Rate. $f = 1.5 \times 10^{-4}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

Report:
22.02.031

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 07/03/2022

Test Location: TP03_Test_1

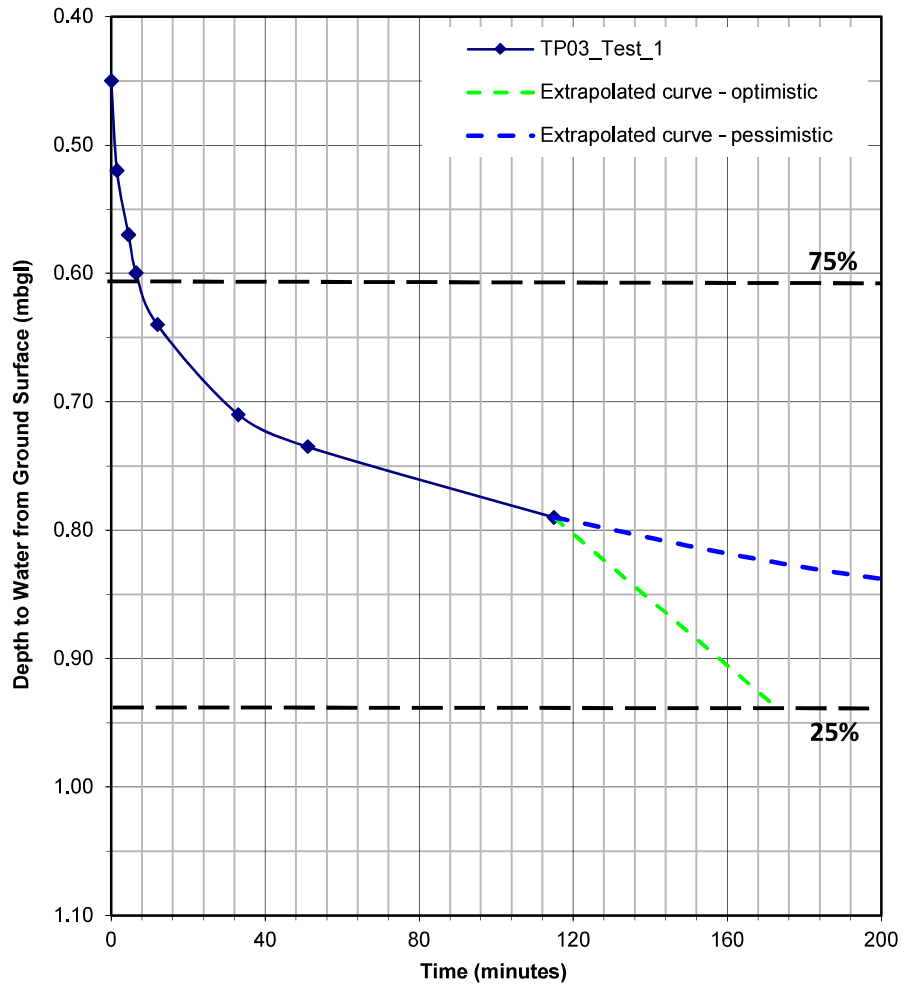
Groundwater: Dry m (before start of test)

Dimensions: 0.6mWx1.5mLx1.10mD

Soil Description - test response zone:

0.3m to 1.1m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)

Time (mins)	Depth BGL
0	0.45
1.5	0.52
4.5	0.57
6.5	0.60
12	0.64
33	0.71
51	0.74
115	0.79



Calculated Soil Infiltration Rate, $f = 3.4 \times 10^{-6}$ to 1.3×10^{-5} m/s
 Result calculated from extrapolated data: GUIDE ONLY

**TRIAL PIT INFILTRATION TESTING
 to BRE Digest 365**

Report:
 22.02.031

Site: Shipto Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 07/03/2022

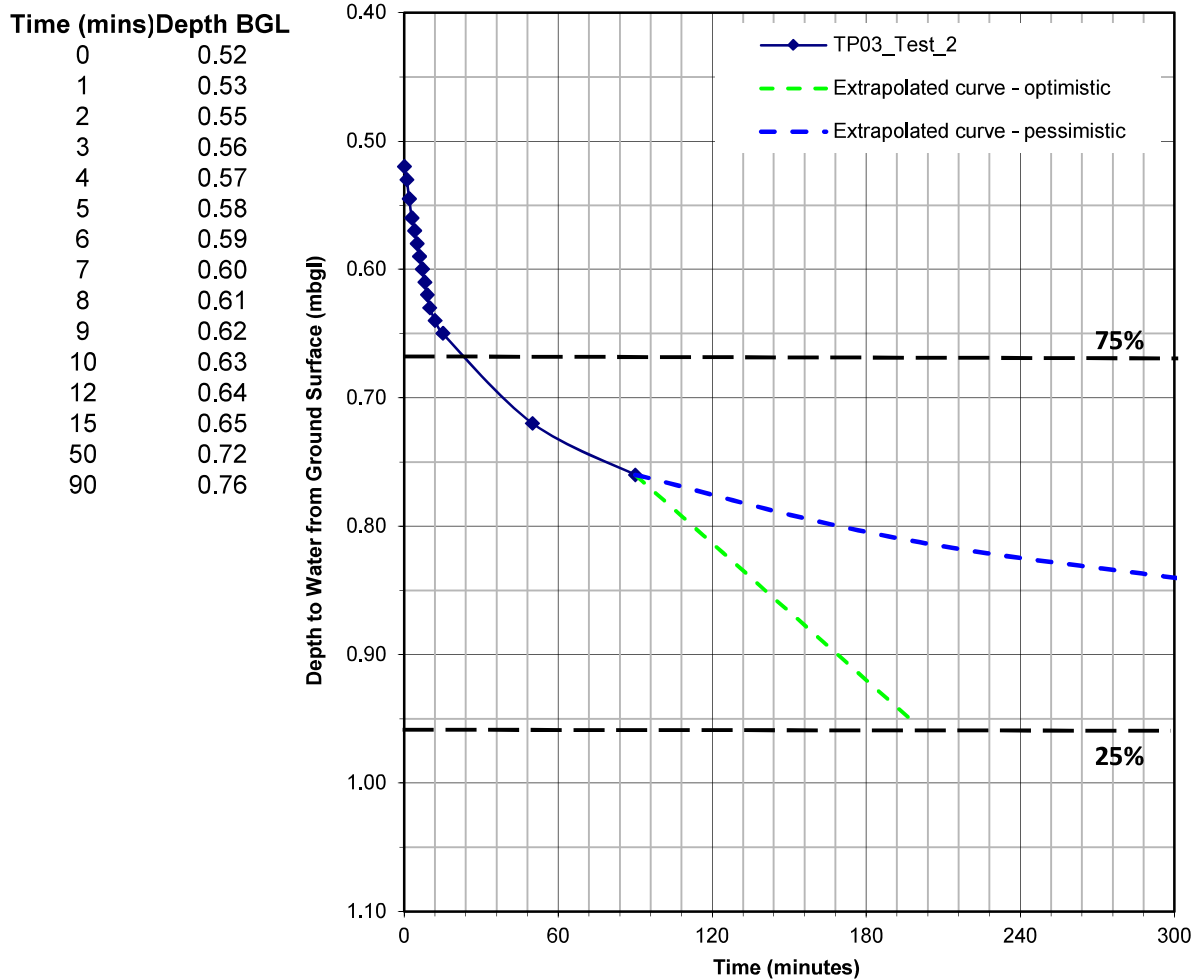
Test Location: TP03_Test_2

Groundwater: Dry m (before start of test)

Dimensions: 0.6mWx1.5mLx1.10mD

Soil Description - test response zone:

0.3m to 1.1m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)



Calculated Soil Infiltration Rate, $f = 1.5 \times 10^{-6}$ to 1.2×10^{-5} m/s
 Result calculated from extrapolated data: GUIDE ONLY

**TRIAL PIT INFILTRATION TESTING
 to BRE Digest 365**

Report:
 22.02.031

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 07/03/2022

Test Location: TP04_Test_1

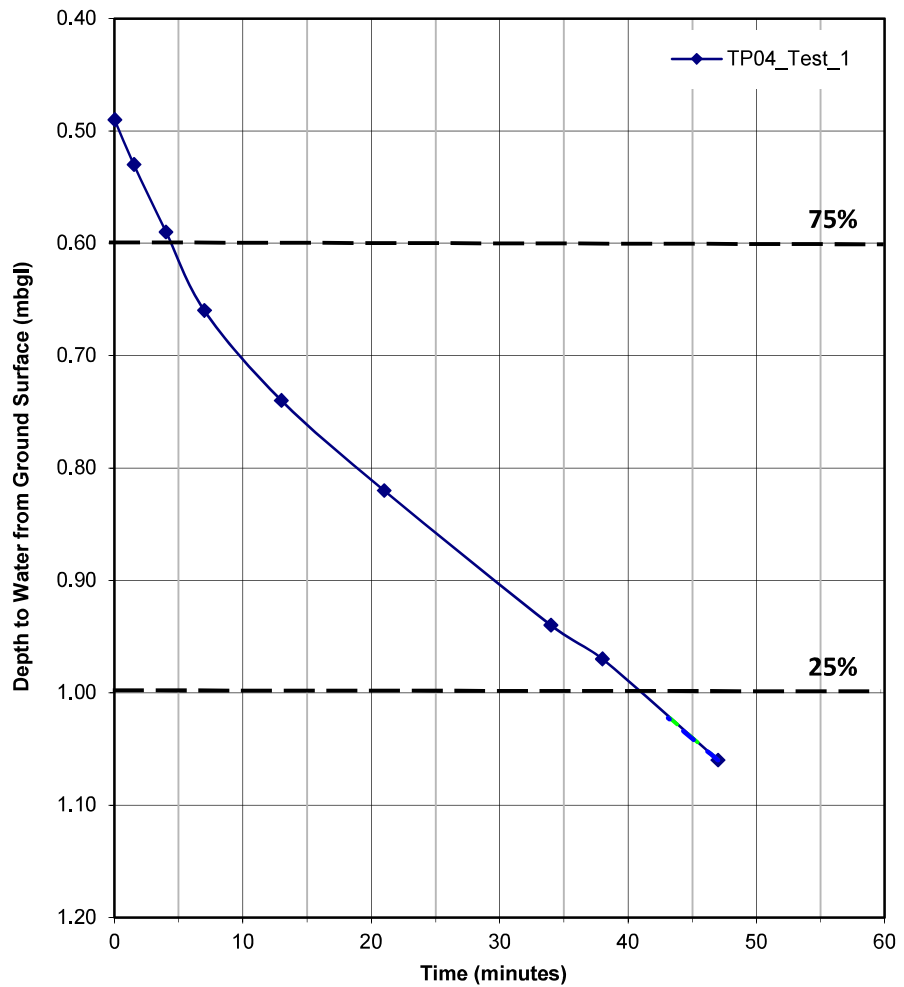
Groundwater: unknown

Dimensions: 0.6mWx1.5mLx1.20mD

Soil Description - test response zone:

0.3m to 1.2m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)

Time (mins)	Depth BGL
0	0.49
1.5	0.53
4	0.59
7	0.66
13	0.74
21	0.82
34	0.94
38	0.97
47	1.06



Calculated Soil Infiltration Rate. $f = 6.3 \times 10^{-5}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

Report:
22.02.031

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 07/03/2022

Test Location: TP04_Test_2

Groundwater: unknown

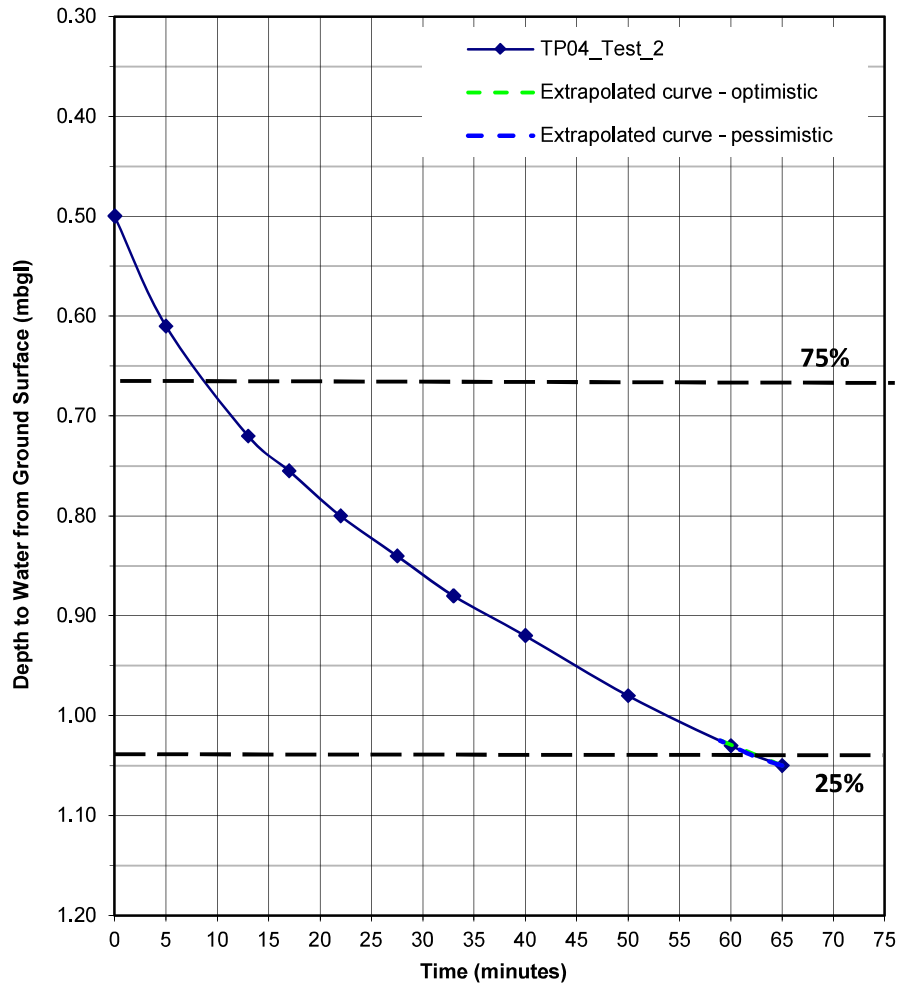
Dimensions: 0.6mWx1.5mLx1.20mD

Soil Description - test response zone:

0.3m to 1.2m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Foration)

Time (mins)Depth BGL

0	0.50
5	0.61
13	0.72
17	0.76
22	0.80
27.5	0.84
33	0.88
40	0.92
50	0.98
60	1.03
65	1.05



Calculated Soil Infiltration Rate. $f = 4.5 \times 10^{-5}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

**Report:
22.02.031**

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 07/03/2022

Test Location: TP04_Test_3

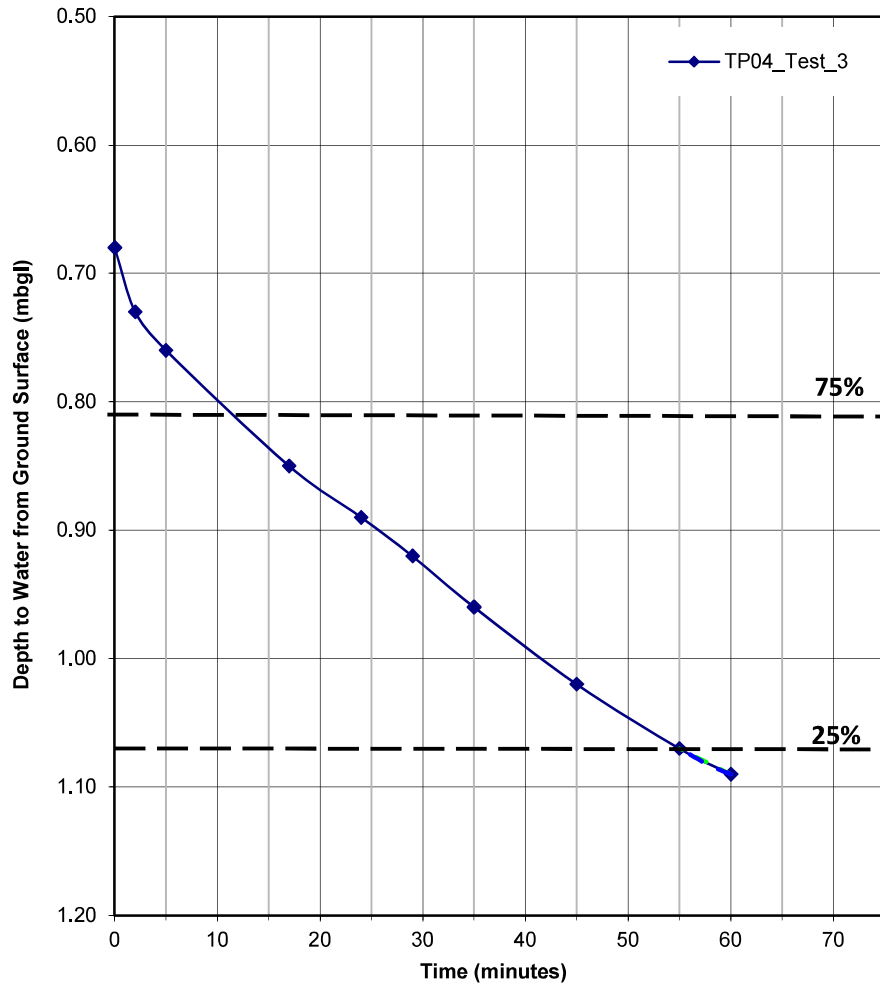
Groundwater: unknown

Dimensions: 0.6mWx1.5mLx1.20mD

Soil Description - test response zone:

0.3m to 1.2m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)

Time (mins)	Depth BGL
0	0.68
2	0.73
5	0.76
17	0.85
24	0.89
29	0.92
35	0.96
45	1.02
55	1.07
60	1.09



Calculated Soil Infiltration Rate. $f = 4.5 \times 10^{-5}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

Report:
22.02.031

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 08/03/2022

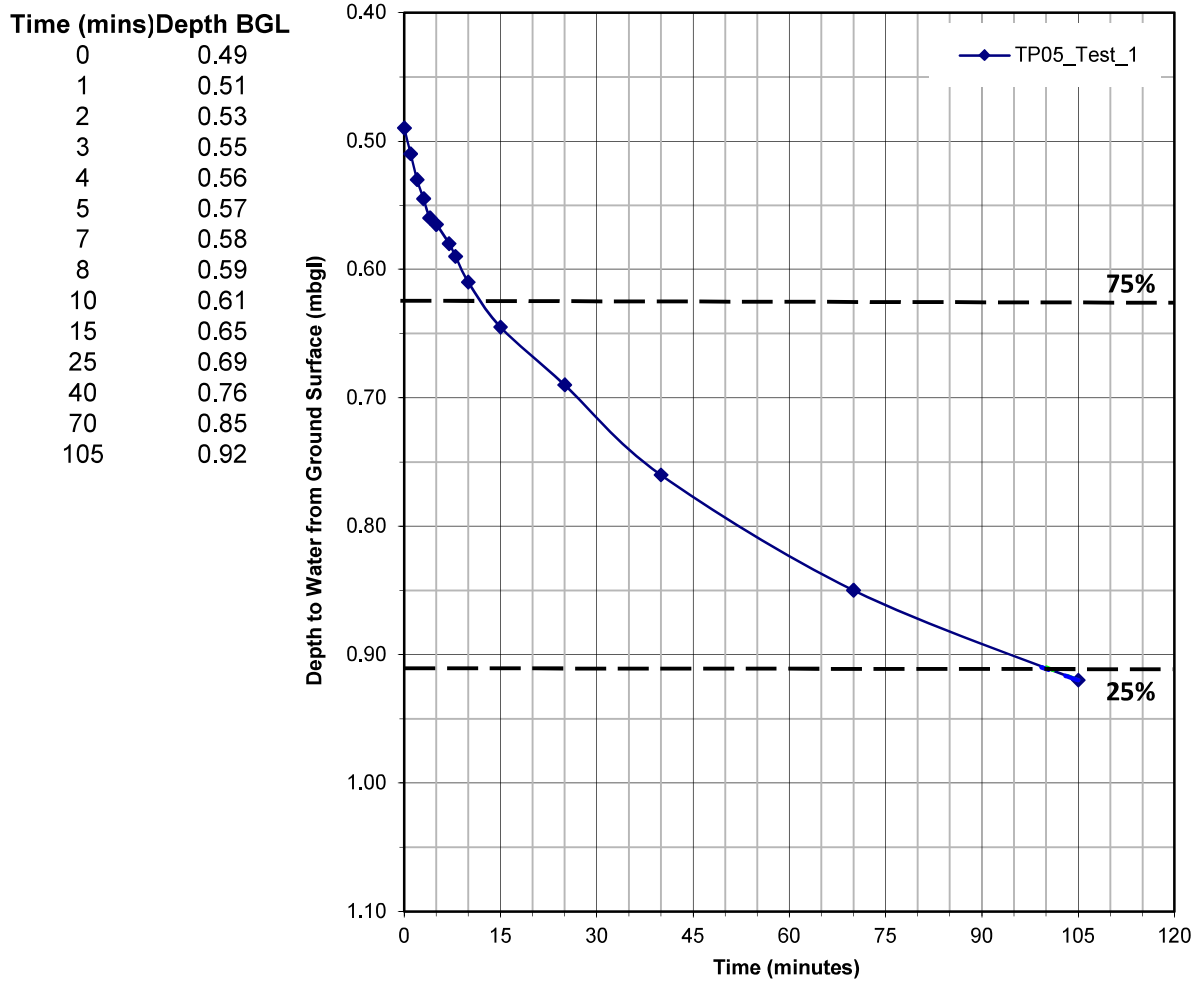
Test Location: TP05_Test_1

Groundwater: unknown

Dimensions: 0.6mWx1.5mLx1.05mD

Soil Description - test response zone:

0.3m to 1.05m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)



Calculated Soil Infiltration Rate. $f = 2.3 \times 10^{-5}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

Report:
22.02.031

Site: Sipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 08/03/2022

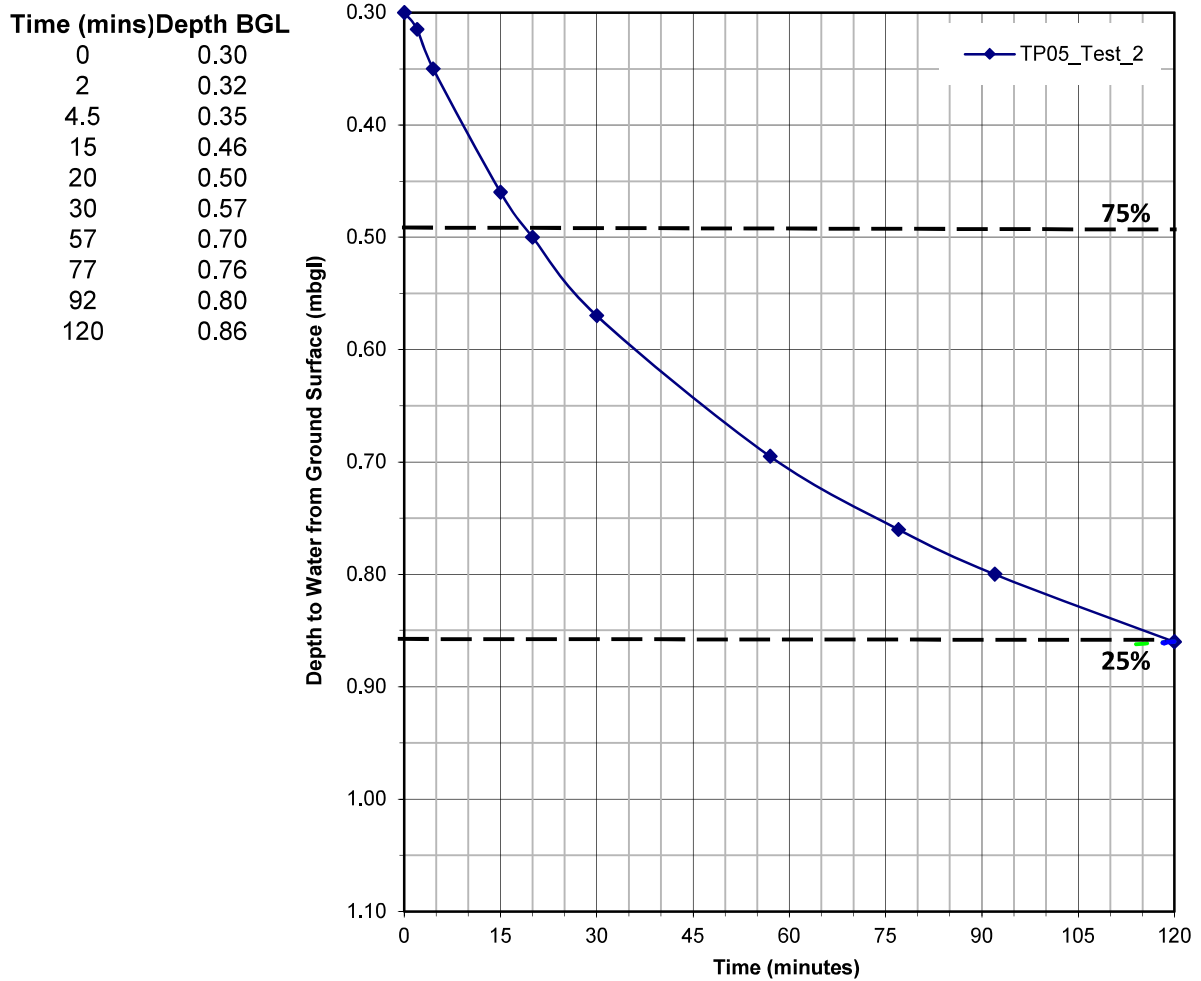
Test Location: TP05_Test_2

Groundwater: unknown

Dimensions: 0.6mWx1.5mLx1.05mD

Soil Description - test response zone:

0.3m to 1.05m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)



Calculated Soil Infiltration Rate. $f = 2.3 \times 10^{-5}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

Report:
22.02.031

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 08/03/2022

Test Location: TP05_Test_3

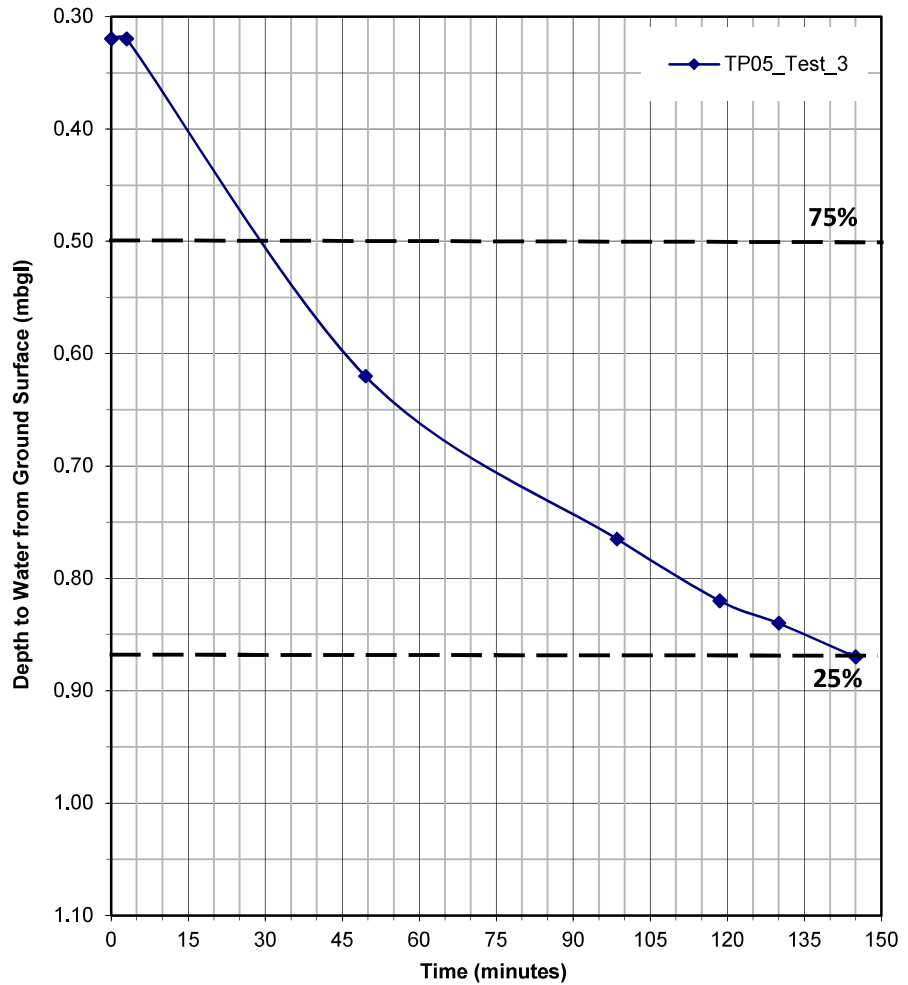
Groundwater: unknown

Dimensions: 0.6mWx1.5mLx1.05mD

Soil Description - test response zone:

0.3m to 1.05m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)

Time (mins)	Depth BGL
0	0.32
3	0.32
49.5	0.62
98.5	0.77
118.5	0.82



Calculated Soil Infiltration Rate, $f = 2.0 \times 10^{-5}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

**Report:
22.02.031**

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 08/03/2022

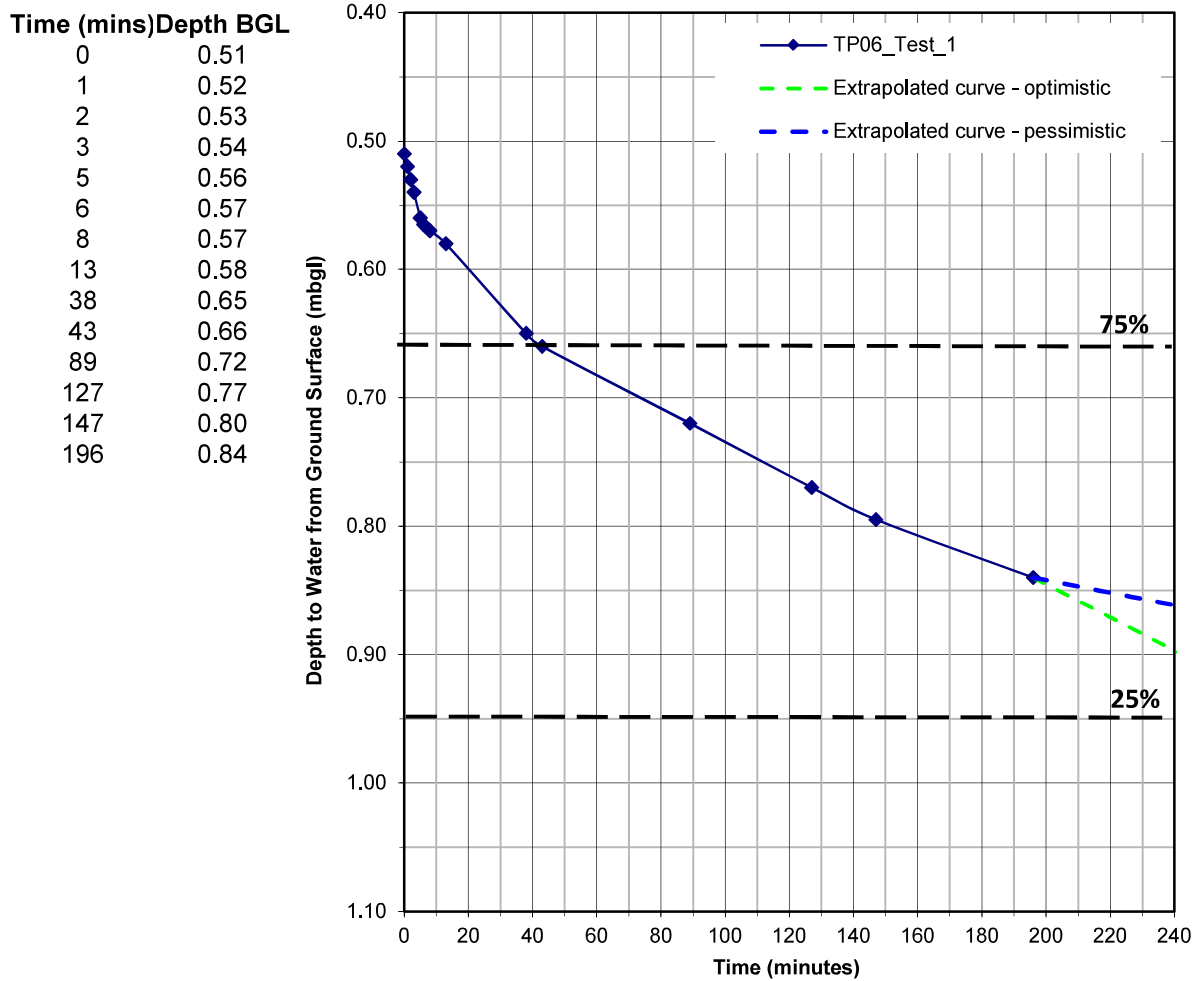
Test Location: TP06_Test_1

Groundwater: unknown

Dimensions: 0.6mWx1.5mLx1.10mD

Soil Description - test response zone:

0.3m to 1.1m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)



Calculated Soil Infiltration Rate, $f = 5.0 \times 10^{-6}$ to 8.6×10^{-6} m/s
Result calculated from extrapolated data: GUIDE ONLY

**TRIAL PIT INFILTRATION TESTING
 to BRE Digest 365**

**Report:
 22.02.031**

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 08/03/2022

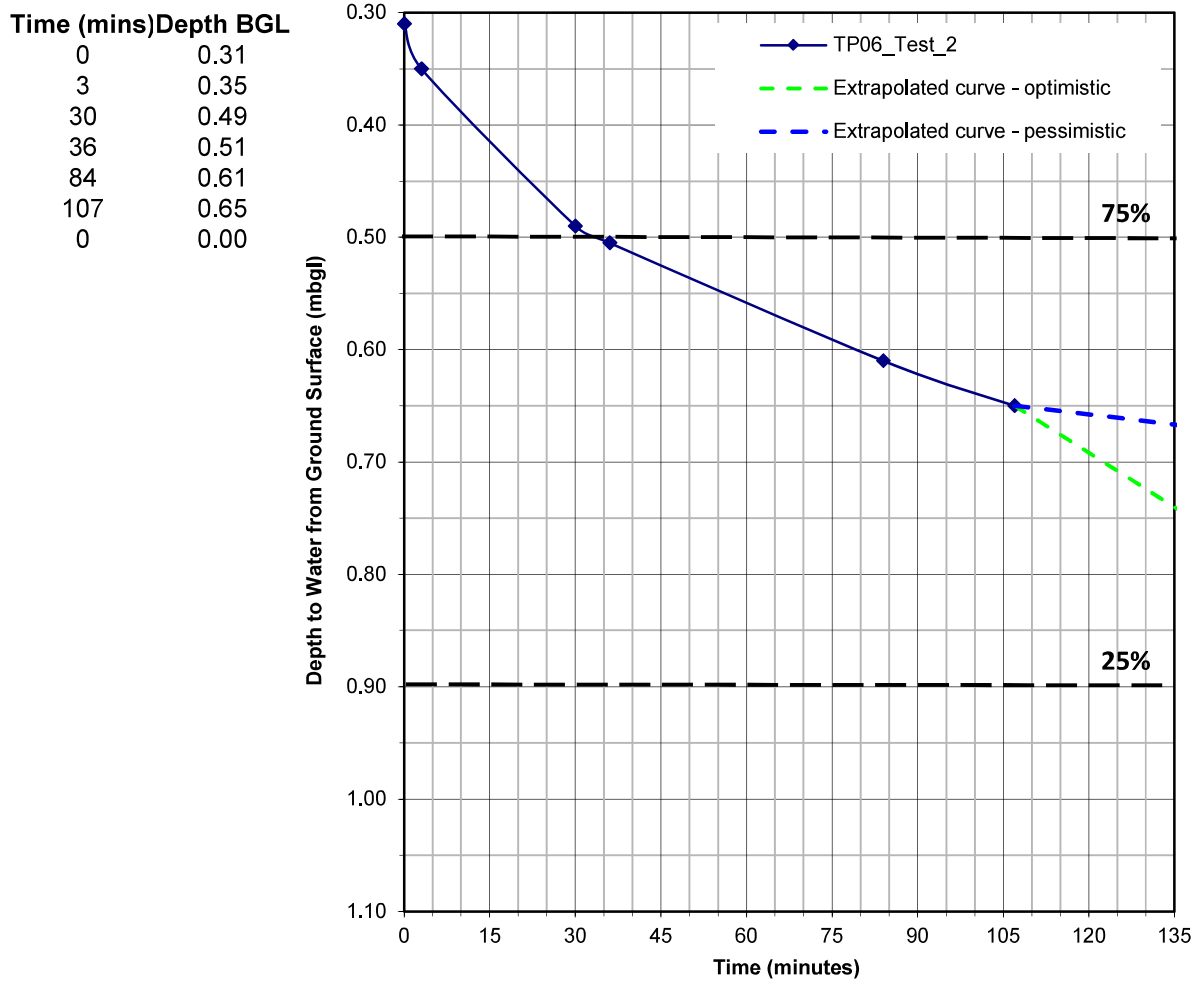
Test Location: TP06_Test_2

Groundwater: unknown

Dimensions: 0.6mWx1.5mLx1.10mD

Soil Description - test response zone:

0.3m to 1.1m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)



Calculated Soil Infiltration Rate, $f = 2.8 \times 10^{-6}$ to 1.6×10^{-5} m/s
Result calculated from extrapolated data: GUIDE ONLY

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

Report:
22.02.031

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 08/03/2022

Test Location: TP07_Test_1

Groundwater: unknown

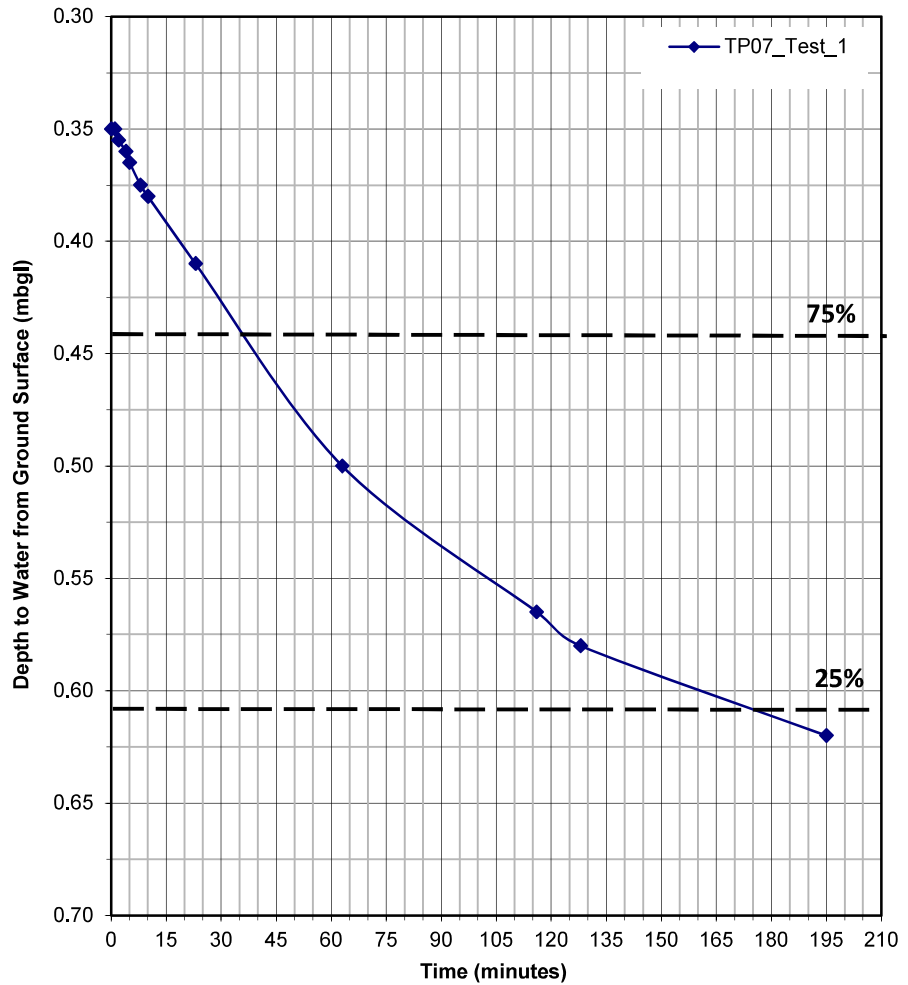
Dimensions: 0.6mWx1.5mLx0.70mD

Soil Description - test response zone:

0.4m to 0.7m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)

Time (mins) Depth BGL

0	0.35
1	0.35
2	0.36
4	0.36
5	0.37
8	0.38
10	0.38
23	0.41
63	0.50
116	0.57
128	0.58
195	0.62



Calculated Soil Infiltration Rate. $f = 1.1 \times 10^{-5}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

**Report:
22.02.031**

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 08/03/2022

Test Location: TP07_Test_2

Groundwater: unknown

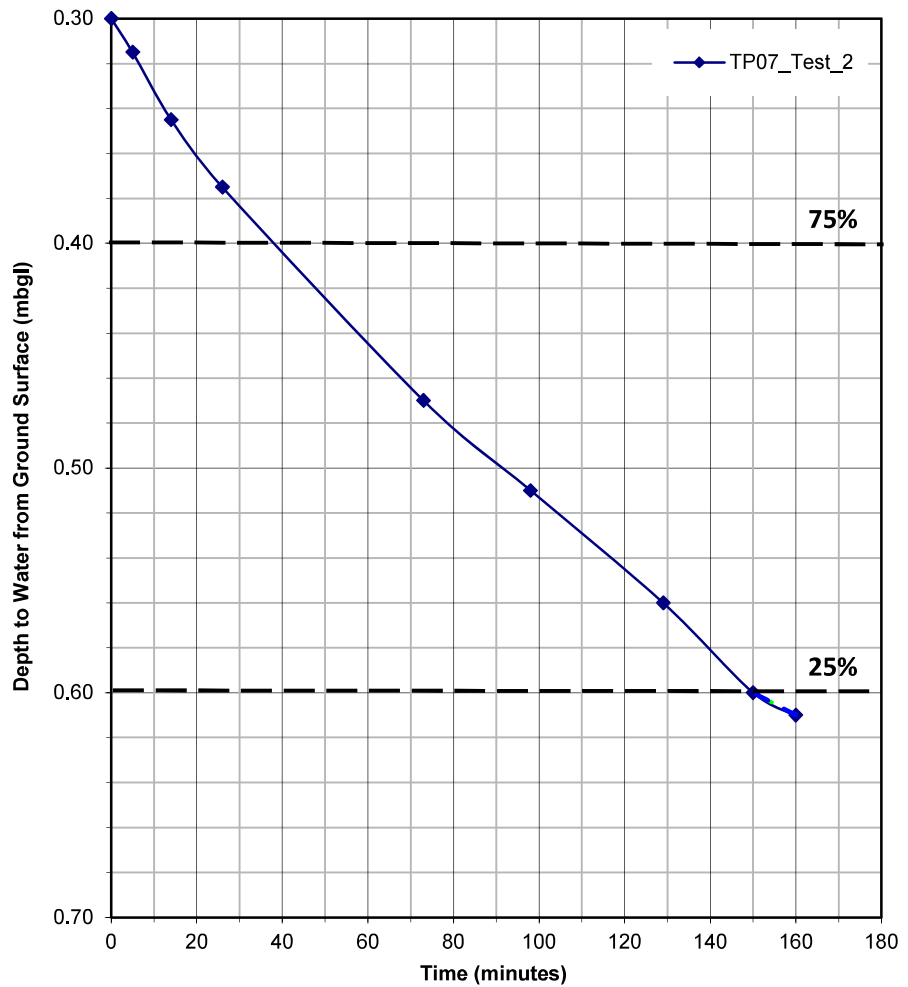
Dimensions: 0.6mWx1.5mLx0.70mD

Soil Description - test response zone:

0.4m to 0.7m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)

Time (mins)Depth BGL

0	0.30
5	0.32
14	0.35
26	0.38
73	0.47
98	0.51
129	0.56
150	0.60
160	0.61



Calculated Soil Infiltration Rate. $f = 1.5 \times 10^{-5}$ m/s

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

**Report:
22.02.031**

Site: Shipton Road, Woodstock, OX20 1QJ

Report No: 22.02.031

Date Tested: 08/03/2022

Test Location: TP08_Test_1

Groundwater: unknown

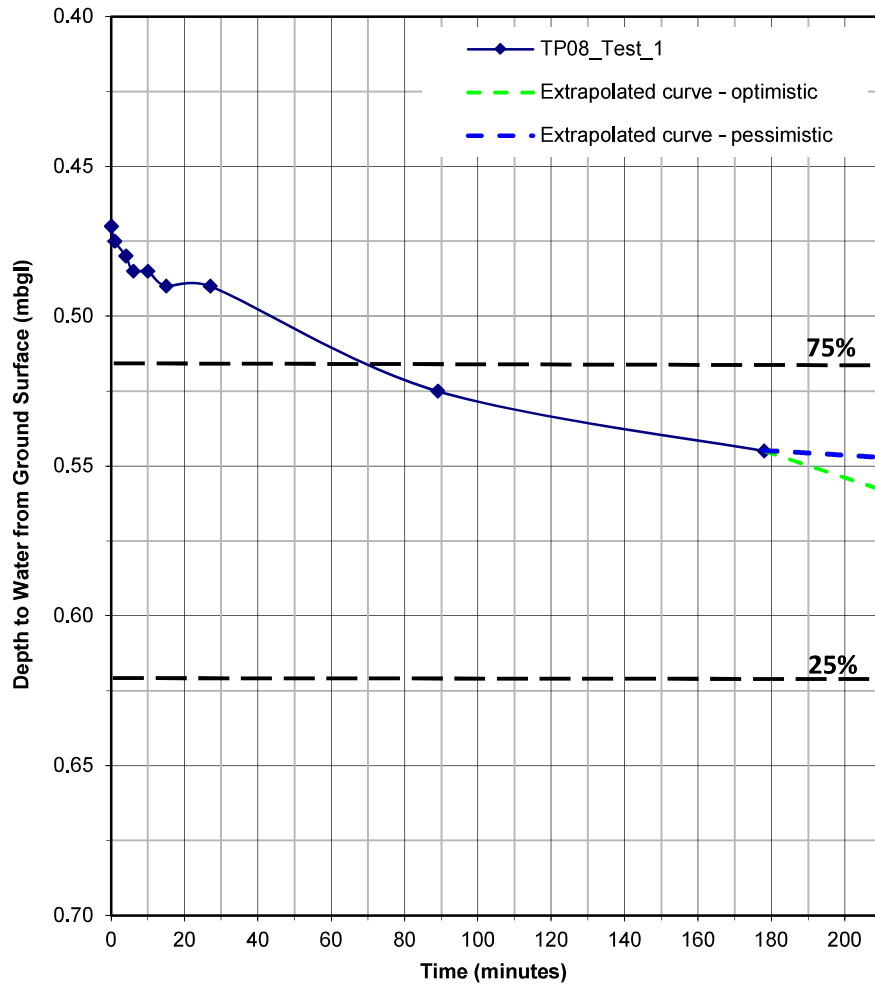
Dimensions: 0.6mWx1.5mLx0.70mD

Soil Description - test response zone:

0.2m to 0.7m - Fractured LIMESTONE, recovered as gravel and cobbles (Cornbrash Formation)

Time (mins)Depth BGL

0	0.47
1	0.48
4	0.48
6	0.49
10	0.49
15	0.49
27	0.49
89	0.53
178	0.55



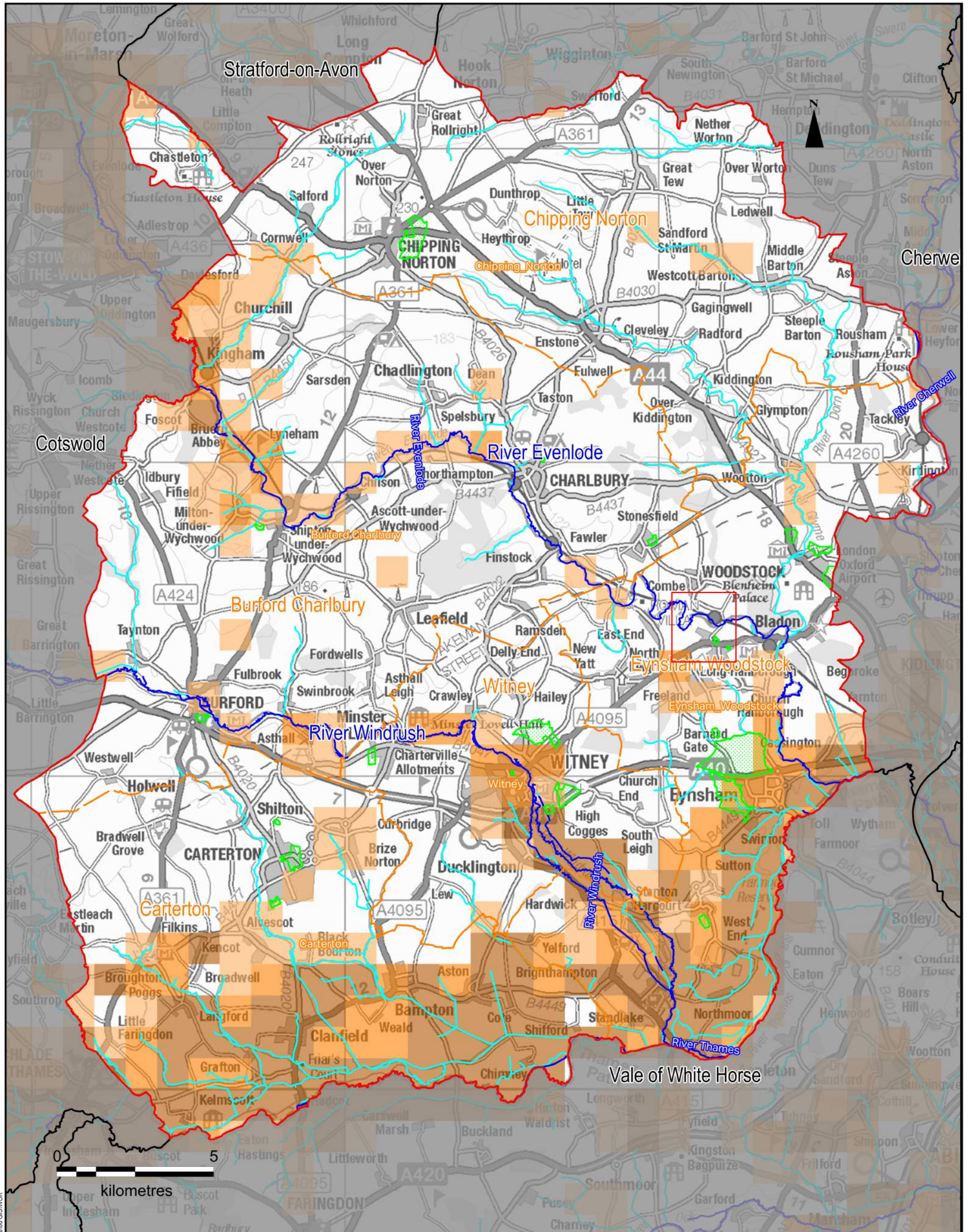
Calculated Soil Infiltration Rate, $f = 2.5 \times 10^{-7}$ to 3.9×10^{-6} m/s
Result calculated from extrapolated data: GUIDE ONLY

**TRIAL PIT INFILTRATION TESTING
to BRE Digest 365**

**Report:
22.02.031**



Appendix G - Areas Susceptible to Groundwater Flooding



LEGEND

- West Oxfordshire District Boundary
- LP Potential Development Sites
- West Oxfordshire Sub-boundaries
- Main Rivers
- Ordinary Watercourses

Areas Susceptible to Groundwater Flooding

< 25%	(2142)
>= 25% < 50%	(594)
>= 50% < 75%	(353)
>= 75%	(427)

Notes
 The 1:50,000 scale digital map data is generalised and the geological interpretation should be used only as a guide to the geology at a local level, not as a site-specific geological plan based on detailed site investigations.

Intended Use
 This map is intended to provide a strategic overview of susceptibility to groundwater flooding and should not be used to assess flood risk for individual properties.

Revision Details

SEB	EC	Nov 2016	Suffix
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Scale at A3: 1:110,000

Drawn	SEB	Checked	SL
Approved	EC	Date	November 2016

Purpose of Issue
 FINAL ISSUE

Project Title
WEST OXFORDSHIRE COUNCIL STRATEGIC FLOOD RISK ASSESSMENT

Drawing Title
AREAS SUSCEPTIBLE TO GROUNDWATER FLOODING (ASTGWF)

AECOM Internal Project No. 60505363

Client

 WEST OXFORDSHIRE DISTRICT COUNCIL


AECOM
 Surrey House
 4 Bedford Park
 Croydon
 CR9 2AP
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Drawing Number
FIGURE 6

Rev
02



Appendix H - MicroDrainage Calculations

Infrastruct CS Ltd		Page 1
The Stables High Cogges, Witney Oxfordshire, OX29 6UN	Greenfield Runoff Land East of Park View Woodstock	
Date 31/03/2022 File	Designed by MBD Checked by RJW	
Innovyze	Source Control 2020.1.3	

ICP SUDS Mean Annual Flood

Input

Return Period (years)	100	Soil	0.400
Area (ha)	17.400	Urban	0.000
SAAR (mm)	634	Region Number	Region 6

Results 1/s

QBAR Rural	52.7
QBAR Urban	52.7
Q100 years	168.2
Q1 year	44.8
Q30 years	119.5
Q100 years	168.2



Appendix I - Thames Water Capacity Enquiry



Mateo Blanco

Infrastruct CS LSD
The Stable
High Cogges Farm
Witney, Oxfordshire
OX29 6UN



05 June 2024

Pre-planning enquiry: Capacity concerns

Dear Mateo

Thank you for providing information on your development at Land West of Park View, Land South of Shipton Road, Woodstock, OX20 1QF. Your development consists of 400 houses on an existing greenfield site (48ha in size). You are proposing to discharge the Foul Water drainage into existing Thames Water Foul Water Sewer MH 6601 via a pumping station with a proposed pumped discharge rate of 10 l/s. No Surface Water proposal made within this application.

We have completed the assessment of the foul water flows and surface water run-off based on the information submitted in your application with the purpose of assessing sewerage capacity within the existing Thames Water sewer network.

Foul Water

We've assessed your **foul water** proposals and concluded that our sewerage network will not have enough capacity to serve your **full** development at this time but have been advised this STW is being investigated which may lead to upgrade works.

In order to ensure we make the appropriate upgrades – or 'off-site reinforcement' – to serve the remainder of your development, we'll need to carry out modelling work, design a solution and build the necessary improvements. This work is done at our cost.

Once we've begun modelling, we may need to contact you to discuss changing the connection point for capacity reasons. Please note that we'll pay the cost of covering any extra distance if the connection needs to be made at a point further away than the nearest practicable point of at least the same diameter.

How long could modelling and reinforcement take?

Typical timescales for a development of your size are:

Modelling: 8 months
Design: 6 months
Construction: 6 months
Total: 20 months

If the time you're likely to take from planning and construction through to first occupancy is longer than this, we'll be able to carry out the necessary upgrades in time for your development. If it's shorter, please contact me on the number below to discuss the timing of our activities.

What do you need to tell us before we start modelling?

We will only carry out modelling once we're confident that your development will proceed. In order to have this confidence, we'll need to know that you **own the land and have either outline or full planning permission**. Please email this information to us as soon as you have it.

If the modelling shows we need to carry out reinforcement work, then before we start construction we'll need you to supply us with notification that you've confirmed your F10 – Notification of construction project - submission to the Health and Safety Executive.

Surface Water

In accordance with the Building Act 2000 Clause H3.3, positive connection of surface water to a public sewer will only be consented when it can be demonstrated that the hierarchy of disposal methods have been examined and proven to be impracticable. Before we can consider your surface water needs, you'll need written approval from the lead local flood authority that you have followed the sequential approach to the disposal of surface water and considered all practical means.

The disposal hierarchy being:

- 1) rainwater use as a resource (for example rainwater harvesting, blue roofs for irrigation)
- 2) rainwater infiltration to ground at or close to source
- 3) rainwater attenuation in green infrastructure features for gradual release (for example green roofs, rain gardens)
- 4) rainwater discharge direct to a watercourse (unless not appropriate)
- 5) controlled rainwater discharge to a surface water sewer or drain
- 6) controlled rainwater discharge to a combined sewer.

Where connection to the public sewerage network is required to manage surface water flows, we will accept these flows at a discharge rate in line with CIRIA's best practice guide on SuDS or that stated within the sites planning approval.

Where disposal of Surface Water is other than to a public sewer, then the applicant shall ensure that approval for the discharge has been obtained from the appropriate authorities.

Please see our [FAQ's leaflet](#) for additional information.

Capacity at STW?

The receiving network is served by Church Hanborough STW and there isn't capacity to serve the development currently but is currently being investigated to upgrade the network.

What do I need to do next?

If you've satisfied the points above, then you should compare your own timeline with the typical timescales we've suggested for our activities. If the time you're likely to take from planning and construction through to first occupancy is **more** than the total time we're likely to take, we'll be able to carry out the necessary upgrades in time for your development.

If you've any further questions, please contact me on 0800 009 3921.

Yours sincerely

Abdul Afzal

Adoption Engineer

Developer Services – Adoptions Engineer, Sewer Adoptions Team