

Appendix 8 – Greenfield Runoff Rates

Considine Limited		Page 1
25 Hollingworth Court	4613	
Kent	THE STREET, BARHAM	
ME14 5PP	GREENFIELD-DRAINED AREA-P01	Micro
Date 12/11/2021	Designed by AEP	Drainage
File	Checked by JEM	Dialilade
Innovyze	Source Control 2020.1.3	

ICP SUDS Mean Annual Flood

Input

Return Period (years) 100 Soil 0.150
Area (ha) 0.306 Urban 0.000
SAAR (mm) 800 Region Number Region 7

Results 1/s

QBAR Rural 0.1 QBAR Urban 0.1

Q100 years 0.5

Q1 year 0.1 Q30 years 0.3 Q100 years 0.5



Appendix 9 – BRE365 Infiltration Test Results



Pit length = 2.7 m

Pit width $= 450 \, \text{mm}$ m

Pit depth = 2.7 m

Depth to top of water from ground level = 2.3 m

Start time of test $= 9:32 \, \text{am}$ $= 3.40 \, \text{am}$ Weather conditions

Observations and comments:

Soil type (highlight as necessary): gravel sand silt clay.

Please state depth of various strata.

General instructions:

- Dig a pit generally 2m long, 2m deep and 450mm wide. Trim the sides and base to make a regular shape as possible. Record the dimensions above.
- 2. Pour water in rapidly, use a bowser do not use a hose to fill the hole as this will ruin the test. Ideally fill the pit, but if not possible, 1m depth is acceptable.
- 3. Measure the depth of water until empty over time using the table overleaf.
- 4. Undertake the test at least three times this will likely be on a second and third day.

Considine job No._____ Date.



	And the second second
Depth to Water Level	Time
(m BGL.)	(Min.)
#Im 2.3m	0
2.4 than	2
2.5	4
2.58	6
2.61	8
2.4 m 2.5 2.58 2.61 2.7	10
	12
	14
	16
	18
Annual Control of the	20
	22
	24
	26
	28
	30
	35
	40
	45
	50
	55
	60 (1hr)
	65
	70
	75
	80
	85
	90
	95
	100
	105
	110
	115
	120 (2 hrs)
	130
	140
	150
	160
	170
	180 (3 hrs)
	190
	200
	210
	220
	230

D 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T
Depth to Water Level	Time
(m BGL.)	(Min.)
	240 (4 hrs)
	260
	280
	300 (5 hrs)
	320
	340
	360 (6 hrs)
	380
	400
	420 (7 hrs)
	440
	460
	480 (8 hrs)
	500
	-
	- 18
	ALC:
	10 5 10 10 10
	The second second
	T. A. TON

Considine job	No.
Date.	



Pit length = 2.7 m

Pit width $= 450 \, \text{mm}$ m

Pit depth = 2.7 m

Depth to top of water from ground level = 2.2 m

Start time of test $= 10:22 \, \text{am}$ = 10:30 = 10:30 Weather conditions

Dy-heary ran wight below.

Observations and comments:

Soil type (highlight as necessary): gravel sand silt clay.

Please state depth of various strata.

General instructions:

- 1. Dig a pit generally 2m long, 2m deep and 450mm wide. Trim the sides and base to make a regular shape as possible. Record the dimensions above.
- 2. Pour water in rapidly, use a bowser do not use a hose to fill the hole as this will ruin the test. Ideally fill the pit, but if not possible, 1m depth is acceptable.
- Measure the depth of water until empty over time using the table overleaf.
- 4. Undertake the test at least three times this will likely be on a second and third day.

Considine job No._____

TP1. Test 2.



D	
Depth to Water Level	Time
(m BGL.)	(Min.)
2.2	0
2.3	2
2.39	4
2.41	6
2.47	8
2.51	10
2.61	12
2.7	14
6.1	16
	18
The state of the s	20
	22
	24
	26
	28
	30
	35
The state of the s	40
	45
	50
	55
	60 (1hr)
	65
	70
	75
	80
	85
	90
	95
	100
	105
	110
	115
	120 (2 hrs)
	130
	140
	150
	160
	170
	180 (3 hrs)
	190
	200
	210
	220
	230

Depth to Water Level	Time
(m BGL.)	(Min.)
	240 (4 hrs)
	260
	280
	The second secon
	300 (5 hrs)
	320
	340
	360 (6 hrs)
	380
	400
	420 (7 hrs)
	440
	460
to the property of	480 (8 hrs)
	500
ASSESSMENT OF THE PERSON OF TH	
THE RESERVE OF THE PARTY OF THE	
Contract Con	
CONTRACTOR OF THE CONTRACTOR O	The state of the s
	Assessment of the second

Considine job	No.	
Date.		



Pit length	= 2-7	m
Pit width	= 450 mm	m
Pit depth	= 2.6	m
Depth to top of water from ground level	= 2.23	m
Start time of test	11:04 am	3 AMiny Ame
End time of test	11:08	5,00
Weather conditions	by with henry	rain night before.

Observations and comments:

Soil type (highlight as necessary): gravel sand silt clay.

Please state depth of various strata.

General instructions:

- 1. Dig a pit generally 2m long, 2m deep and 450mm wide. Trim the sides and base to make a regular shape as possible. Record the dimensions above.
- 2. Pour water in rapidly, use a bowser do not use a hose to fill the hole as this will ruin the test. Ideally fill the pit, but if not possible, 1m depth is acceptable.
- 3. Measure the depth of water until empty over time using the table overleaf.
- 4. Undertake the test at least three times this will likely be on a second and third day.

Considine job No.

TP1. Test 3.



Depth to Water Level (m BGL.)	Time (Min.)
2.23.	0
2.3	2
7.3/	4
2.42	6
2.42	8
2.55	10
2.55	12
empty	14
	16
	18
	20
	22
	24
	26
	28
	30
	35
	40
	45
	50
	55
	60 (1hr)
	65
	70
	75
	80
All well divide	85
	90
	95
	100
	105
	110
	115
	120 (2 hrs)
	130
	140
	150
	160
Λ.	170
	180 (3 hrs)
	190
	200
	210
	220
	230

Depth to Water Level	Time
(m BGL.)	(Min.)
(III BOL.)	240 (4 hrs)
	260
	280
	300 (5 hrs)
	320
	340
	360 (6 hrs)
A PART OF THE PART	380
	400
	420 (7 hrs)
	440
STOP ASSESSMENT OF STREET	460
Control of the Contro	480 (8 hrs)
	500
Water Company of the	
The state of the s	

Considine job No.	
Date.	



Pit length = 2 m

Pit width $= 450 \, \text{nm}$ m

Pit depth = 2.75 m

Depth to top of water from ground level = 2.260 m

Start time of test $= 10:06 \, \text{am}$ $= 10:14 \, \text{am}$ Weather conditions $= 2.14 \, \text{am}$ $= 10:14 \,$

Observations and comments:

Soil type (highlight as necessary): gravel sand silt clay.

Please state depth of various strata.

General instructions:

- Dig a pit generally 2m long, 2m deep and 450mm wide. Trim the sides and base to make a regular shape as possible. Record the dimensions above.
- 2. Pour water in rapidly, use a bowser do not use a hose to fill the hole as this will ruin the test. Ideally fill the pit, but if not possible, 1m depth is acceptable.
- Measure the depth of water until empty over time using the table overleaf.
- 4. Undertake the test at least three times this will likely be on a second and third day.

Considine job No._____



Depth to Water Level Time	
Depth to Water Level	
(m BGL.)	(Min.)
2.26	0
2.78	2
	4
	6
	8
	10
	12
	14
	16
	18
	20
	22
	24
THE RESERVE AND ASSESSMENT	26
	28
	30
	35
	40
	45
	50
	55
	60 (1hr)
THE PARTY OF THE P	65
	70
	75
	80
	85
	90
	95
	100
	105
	110
	115
	120 (2 hrs)
	130
	140
	150
	160
	170
	180 (3 hrs)
	190
	190
	190 200
	190 200 210
	190 200

Depth to Water Level	Time
(m BGL.)	(Min.)
(111 2 2 2)	240 (4 hrs)
Part of the second	260
A STATE OF THE STA	280
	300 (5 hrs)
	320
	340
	360 (6 hrs)
	380
	400
	420 (7 hrs)
	440
	460
	480 (8 hrs)
	500
	500
Value	

Considine job	No.
Date.	



Observations and comments:

Soil type (highlight as necessary): gravel sand silt clay.

Please state depth of various strata.

General instructions:

- 1. Dig a pit generally 2m long, 2m deep and 450mm wide. Trim the sides and base to make a regular shape as possible. Record the dimensions above.
- 2. Pour water in rapidly, use a bowser do not use a hose to fill the hole as this will ruin the test. Ideally fill the pit, but if not possible, 1m depth is acceptable.
- 3. Measure the depth of water until empty over time using the table overleaf.
- 4. Undertake the test at least three times this will likely be on a second and third day.

Considine job No.______

Tom Pit 2. Test 2.



Depth to Water Level	Time
(m BGL.)	(Min.)
2.21	0
2:5	2 4
	4
	6
	8
	10
	12
	14
	16
	18
	20
	22
	24
	26
	28
	30
	35
	40
	45
	50
	55
	60 (1hr)
	65
	70
	75
	80
	85
	90
	95
	100
	105
	110
	115
	120 (2 hrs)
	130
	140
	150
	160
	170
	180 (3 hrs)
	190
	200
	210
	220
	230

Depth to Water Level (m BGL.)	Time (Min.)
(III BOL.)	240 (4 hrs)
	260
	280
	300 (5 hrs)
	320
	340
	360 (6 hrs)
	380
	400
	420 (7 hrs)
	440
	460
	480 (8 hrs)
	500
A STATE OF THE PARTY OF THE PAR	
	4 1

Considine	job	No.		
Date				



Pit length	= <u>2</u> m
Pit width	= 450 mm m
Pit depth	= 2.45 m
Depth to top of water from ground level	= 2·33 m
Start time of test	11:22 am > hilling hime
End time of test	11:29 am
Weather conditions	Dry - henry own night before

Observations and comments:

Soil type (highlight as necessary): gravel sand silt clay.

Please state depth of various strata.

General instructions:

- 1. Dig a pit generally 2m long, 2m deep and 450mm wide. Trim the sides and base to make a regular shape as possible. Record the dimensions above.
- 2. Pour water in rapidly, use a bowser do not use a hose to fill the hole as this will ruin the test. Ideally fill the pit, but if not possible, 1m depth is acceptable.
- 3. Measure the depth of water until empty over time using the table overleaf.
- 4. Undertake the test at least three times this will likely be on a second and third day.

Considine job No.	
Date.	

TPZ. Test 3



Depth to Water Level	Time
(m BGL.)	(Min.)
2.33	0
2:45	2
	4
	6
	8
	10
	12
	14
	16
	18
	20
	22
	24
	26
	28
	30
	35
	40
	45
	50
	55
	60 (1hr)
	65
with an initial and	70
And the second	75
A Capacity in a 1	80
	85
	90
	95
	100
	105
	110
	115
	120 (2 hrs)
	130
	140
	150
	160
	170
	180 (3 hrs)
	190
	200
	210
	220

Depth to Water Level (m BGL.)	Time (Min.)
	240 (4 hrs)
	260
	280
	300 (5 hrs)
	320
	340
	360 (6 hrs)
	380
	400
	420 (7 hrs)
	440
	460
	480 (8 hrs)
	500
and the second second	
Bloom of postarious from	
	La A
Salar Balling	

Considine job No.	
Date.	



Project No: 4613 Sheet No. 1

Made By: **JEM** Revision: P01

Date: 20/09/2022 Project: BARHAM

<u>PIT 1 - TEST 1</u>

Length (m): 2.70

 Width (m):
 0.45
 Depth at 75% Full (m):
 2.40

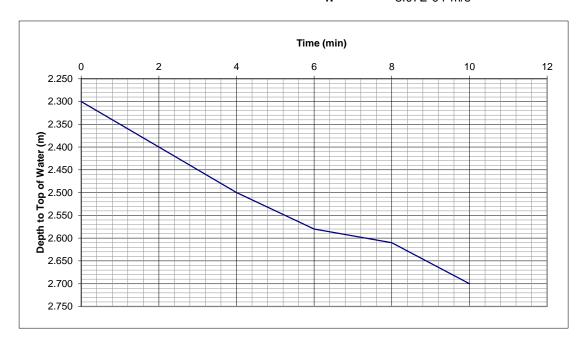
 Depth (m):
 2.70
 Time at 75% Full (mins.):
 2.00

 Void Ratio:
 1.00

Depth at 25% Full (m): 2.60 Time at 25% Full (mins.): 7.33

 $egin{array}{lll} {f V}_{p75-25} & 0.24 \\ {f a}_{p50} & 2.48 \\ {f t}_{p75-25} & 5.33 \end{array}$

f: 3.07E-04 m/s





Project No: 4613 Sheet No. 1

Made By: **JEM** Revision: P01

Date: 20/09/2022 Project: BARHAM

PIT 1 - TEST 2

Length (m): 2.70

 Width (m):
 0.45
 Depth at 75% Full (m):
 2.33

 Depth (m):
 2.70
 Time at 75% Full (mins.):
 2.56

Void Ratio: 1.00

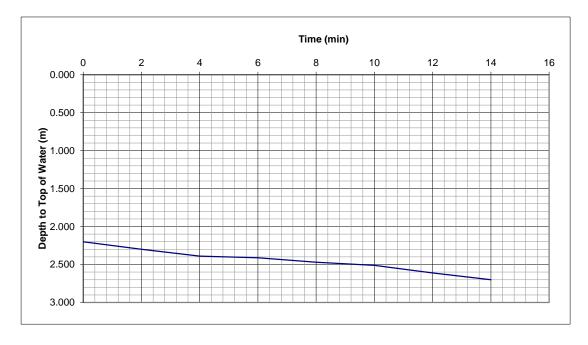
Depth at 25% Full (m): 2.58

Time at 25% Full (mins.): 11.30

 \mathbf{V}_{p75-25} : 0.30 \mathbf{a}_{p50} : 2.79

t_{p75-25}: 8.74

f: 2.08E-04 m/s





Project No: 4613 Sheet No. 1

Made By: **JEM** Revision: P01

Date: 20/09/2022 Project: BARHAM

PIT 1 - TEST 3

Length (m): 2.70

 Width (m):
 0.45
 Depth at 75% Full (m):
 2.35

 Depth (m):
 2.70
 Time at 75% Full (mins.):
 3.58

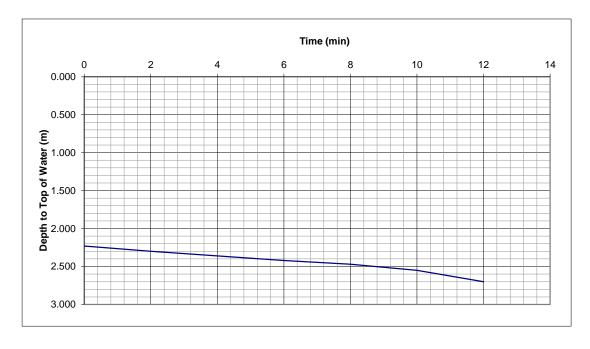
Void Ratio: 1.00

Depth at 25% Full (m): 2.58 **Time at 25% Full (mins.):** 10.43

V_{p75-25}: 0.29 **a**_{p50}: 2.70

t_{p75-25}: 6.85

f: 2.58E-04 m/s





Project No: 4613 Sheet No. 1

Made By: **JEM** Revision: P01

Date: 20/09/2022 Project: BARHAM

<u>PIT 2 - TEST 1</u>

Length (m): 2.00

 Width (m):
 0.45
 Depth at 75% Full (m):
 2.38

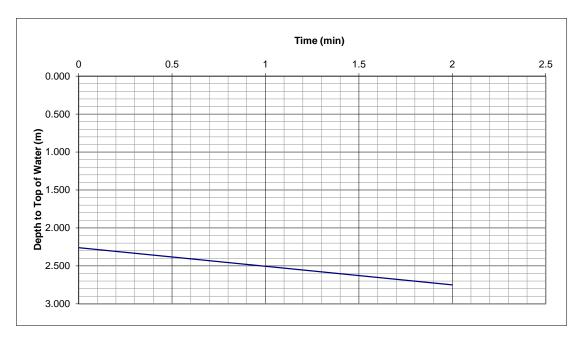
 Depth (m):
 2.75
 Time at 75% Full (mins.):
 0.50

 Void Ratio:
 1.00

Depth at 25% Full (m): 2.63 Time at 25% Full (mins.): 1.50

 V_{p75-25} : 0.22 a_{p50} : 2.10 t_{p75-25} : 1.00

f: 1.75E-03 m/s





Project No: 4613 Sheet No. 1

Made By: **JEM** Revision: P01

Date: 20/09/2022 Project: BARHAM

1.00

PIT 2 - TEST 2

Length (m): 2.00 Width (m): 0.45 Depth (m): 2.50

Void Ratio:

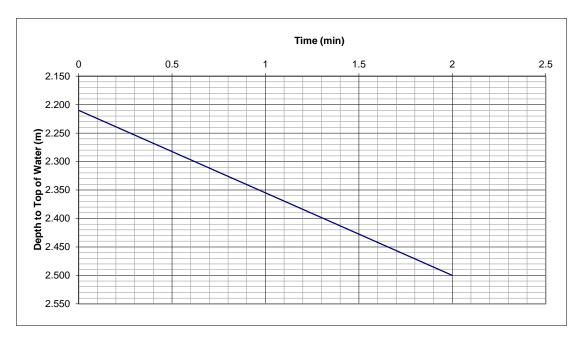
 Depth at 75% Full (m):
 2.28

 Time at 75% Full (mins.):
 0.50

Depth at 25% Full (m): 2.43 **Time at 25% Full (mins.):** 1.50

 ${f V}_{p75-25}$: 0.13 ${f a}_{p50}$: 1.61 ${f t}_{p75-25}$: 1.00

f: 1.35E-03 m/s





Project No: 4613 Sheet No. 1

Made By: **JEM** Revision: P01

Date: 20/09/2022 Project: BARHAM

PIT 2 - TEST 3

Length (m): 2.00 Width (m): 0.45

Depth (m): 2.45 **Void Ratio:** 1.00

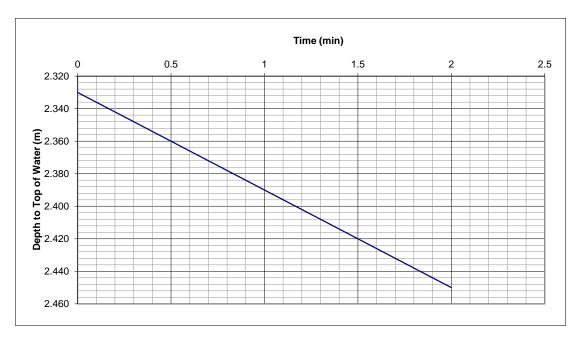
 Depth at 75% Full (m):
 2.36

 Time at 75% Full (mins.):
 0.50

Depth at 25% Full (m): 2.42 Time at 25% Full (mins.): 1.50

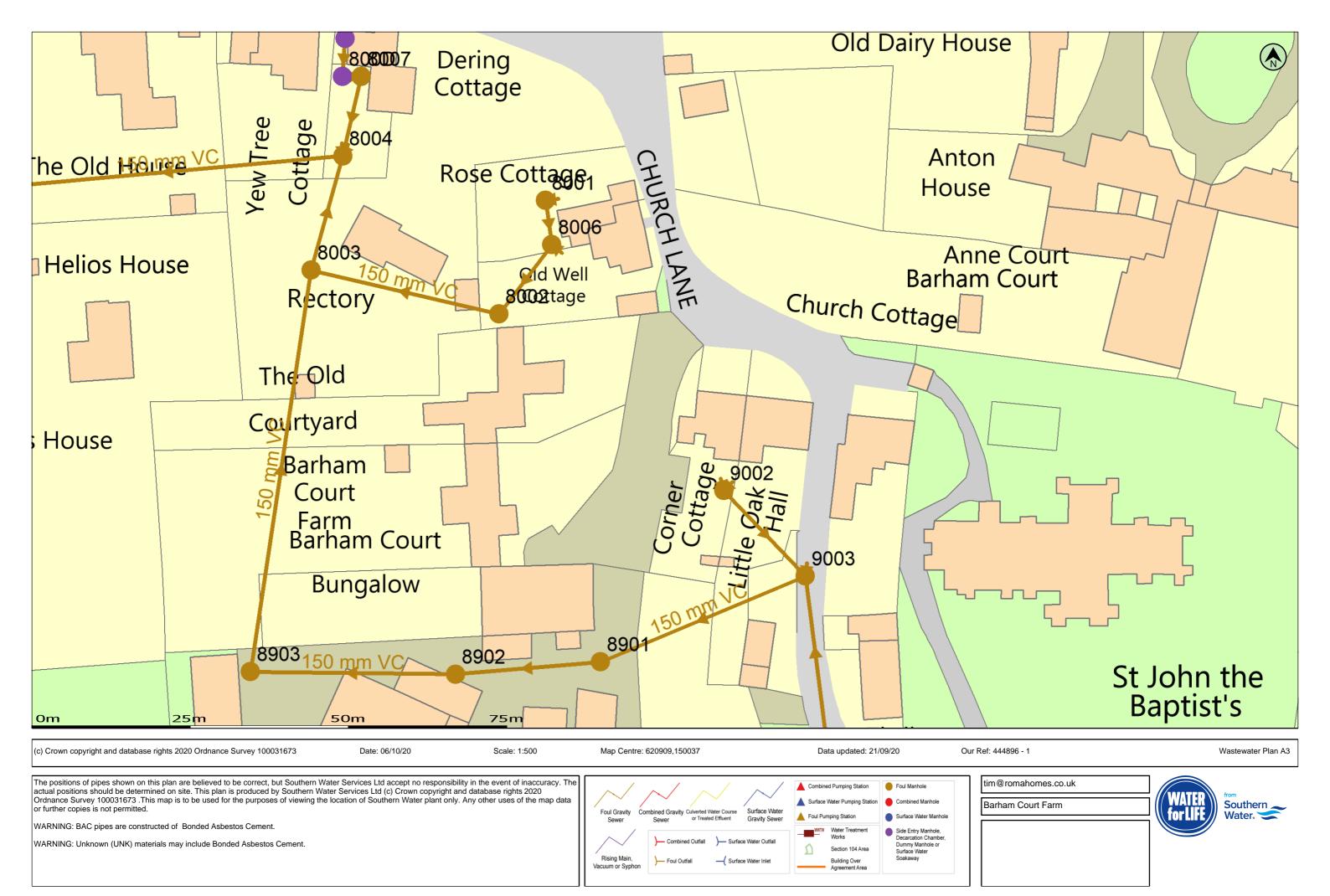
 $\mathbf{V}_{p75-25}:$ $\mathbf{a}_{p50}:$ $\mathbf{1.19}$ $\mathbf{t}_{p75-25}:$ $\mathbf{1.00}$

f: 7.54E-04 m/s





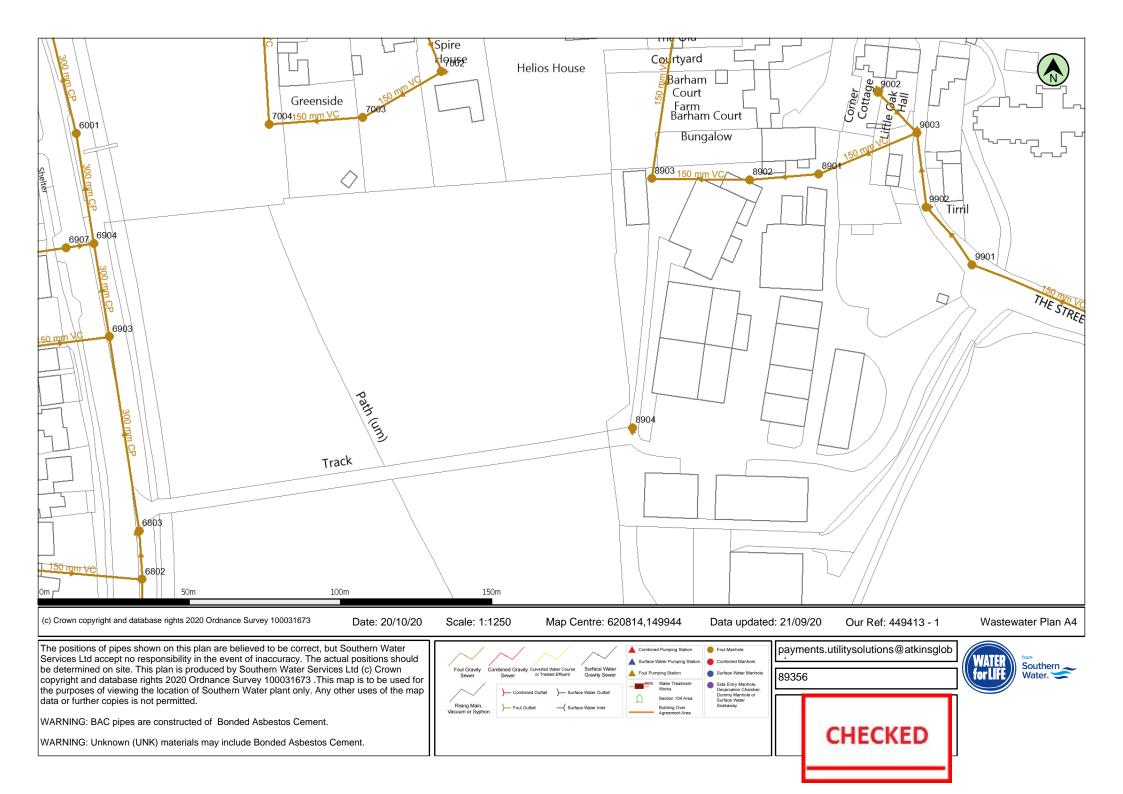
Appendix 10 – Public Sewer Records



Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert
8001	F	60.90	60.54	
8002	F	61.11	59.52	
8003	F	58.68	57.38	
8004	F	58.46	56.98	
8006	F	60.88	60.19	
8007	F	0.00	0.00	
800D	F	0.00	0.00	
801D	F	0.00	0.00	
8901	F	62.26	60.34	
8902	F	60.96	59.27	
8903	F	59.19	57.92	
9002	F	63.38	62.46	
9002	F	64.32	62.46	
9003	Г	04.32	02.14	

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert



Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert
6001	F	48.43	46.02	-
6802	F	48.99	46.77	-
6803	F	48.92	46.73	-
6903	F	48.54	46.54	-
6904	F	48.42	46.23	-
6907	F	0.00	0.00	-
7002	F	52.26	50.65	-
7003	F	50.12	48.77	-
7004	F	48.56	47.24	-
8901	F	62.26	60.34	-
8902	F	60.96	59.27	-
8903	F	59.19	57.92	-
8904	F	52.06	0.00	-
9002	F	63.38	62.46	-
9003	F	64.32	62.14	-
9901	F	66.51	64.98	-
9902	F	65.44	64.07	-

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert