RECEIVED: 05/08/2026



SL15

CAUSEWAY GEOTECH



RECEIVED: 05/08/2026

SL15

CAUSEWAY GEOTECH

RECEIVED: 05/08/2026

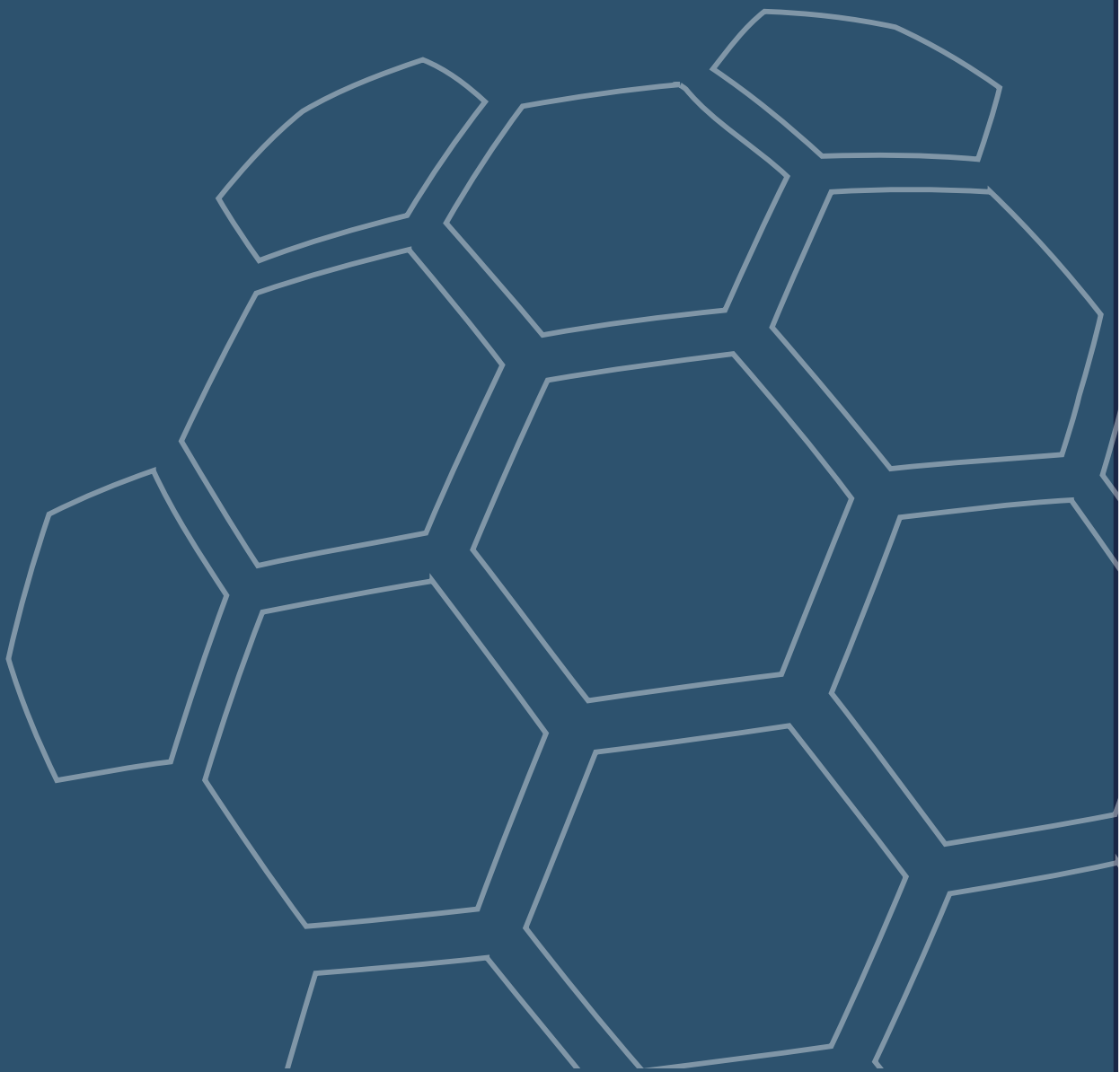


SL15

CAUSEWAY GEOTECH

APPENDIX H – SOAKAWAY TEST RESULTS AND LOGS

RECEIVED: 05/08/2026



CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
24-0211	Kingston Lands, Galway	SA01
Coordinates 526915.50 E 724900.81 N	**Client:** King Construction	
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO	Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 31.07 mOD / **Date:** 03/06/2025 / **Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			30.87	0.20		TOPSOIL with fine roots (0.5-2.0mm).	
			30.57	0.50		Reddish brown slightly silty gravelly fine to coarse SAND with low cobble content. Gravel is angular to subangular fine to coarse. Cobbles are angular.	
			29.27	1.80		Greyish brown slightly silty gravelly fine to coarse SAND with high cobble content. Gravel is subangular to subrounded fine to coarse. Cobbles are subangular to subrounded.	
						End of trial pit at 1.80m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 1.80
Width: 1.80
Length: 2.45

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA02
Coordinates 526835.97 E 724871.43 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 25.37 mOD	**Date:** 03/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			25.32	0.05		TOPSOIL with fine roots (0.5-2.0mm).	
						Light grey slightly gravelly clayey fine to coarse SAND with low cobble content. Gravel is subangular fine to coarse. Cobbles are subangular.	
			24.82	0.55		Light greyish reddish brown slightly gravelly clayey fine to coarse SAND with medium cobble and low boulder content. Gravel is subangular fine to coarse. Cobbles and boulders are subangular.	
			23.57	1.80		End of trial pit at 1.80m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 1.80
Width: 1.90
Length: 3.35

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA03
Coordinates 526796.24 E 724797.35 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 23.46 mOD	**Date:** 04/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						Firm brownish black amorphous PEAT with medium roots (2.0-5.0mm) and high cobble content.	
		Water infiltrating along peat-clay interface.	22.86	0.60		Very stiff dark grey slightly gravelly sandy CLAY with medium cobble content. Sand is fine to coarse. Gravel is angular to subrounded fine to coarse. Cobbles are subangular. (Upper strata contact is beneath water and not visible. Unit logged from excavated material.)	
			22.16	1.30		End of trial pit at 1.30m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes

Struck at (m)	Remarks
0.60	Water infiltrating along peat-clay interface.

Depth: 1.30
Width: 3.15
Length: 3.70

Remarks:

Stability: Moderately stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA04
Coordinates 526733.87 E 724783.02 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 23.39 mOD	**Date:** 04/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						Firm brownish black amorphous PEAT with fine roots (0.5-2.0mm). (Lower contact is obscured by groundwater.)	
		Water infiltrating along peat-clay interface.	22.39	1.00		Stiff grey slightly gravelly sandy CLAY with medium cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
			21.84	1.55		End of trial pit at 1.55m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks
1.00	Water infiltrating along peat-clay interface.

Depth: 1.55
Width: 2.10
Length: 3.05

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
24-0211	Kingston Lands, Galway	SA05
Coordinates	**Client:**	
526633.96 E 724757.29 N	King Construction	
Method:	**Client's Representative:**	Sheet 1 of 1
Trial Pitting	TOBIN / MKO	Scale: 1:25
Plant:	**Elevation**	**Date:** / **Logger:**	
29t Tracked Excavator	25.50 mOD	06/06/2025 / OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						MADE GROUND: Soft brown slightly gravelly sandy CLAY with fine roots (0.5-2.0mm). Sand is fine to coarse. Gravel is subrounded fine to coarse of various lithologies, predominantly granite. (Reworked topsoil)	
			25.00	0.50		Light brownish grey slightly gravelly silty fine to coarse SAND with medium cobble and boulder content. Gravel is angular to subrounded fine to coarse. Cobbles and boulders are angular to subangular.	
			23.95	1.55		End of trial pit at 1.55m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 1.55
Width: 2.10
Length: 3.55

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA06
Coordinates 526584.05 E 724755.56 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 25.27 mOD	**Date:** 06/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			25.07	0.20		TOPSOIL with fine roots (0.5-2.0mm).	
						Reddish brown slightly silty gravelly fine to coarse SAND with low cobble content. Gravel is subangular fine to coarse. Cobbles are subangular.	
			24.47	0.80		End of trial pit at 0.80m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 0.80
Width: 1.60
Length: 2.15

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
24-0211	Kingston Lands, Galway	SA07
Coordinates	**Client:**	
526515.80 E 724790.44 N	King Construction	
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO	Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 22.07 mOD **Date:** 06/06/2025	**Logger:** OR FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			21.92	0.15		MADE GROUND: Soft brown slightly gravelly sandy CLAY with fine roots (0.5-2.0mm). Sand is fine to coarse. Gravel is subrounded fine to coarse of various lithologies, predominantly granite. (Reworked topsoil)	
						Mottled reddish brown gravelly fine to coarse SAND with low cobble content. Gravel is subangular fine to coarse. Cobbles are subangular.	
			21.07	1.00		Brownish grey slightly silty gravelly fine to coarse SAND with low cobble and boulder content. Gravel is subangular fine to coarse. Cobbles and boulders are subangular.	
			20.17	1.90		End of trial pit at 1.90m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 1.90
Width: 2.10
Length: 4.10

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA08
Coordinates 526535.55 E 724707.38 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 23.22 mOD	**Date:** 06/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						MADE GROUND: Brownish grey gravelly fine to coarse SAND with medium cobble content. Gravel is angular to subangular fine to coarse. Cobbles are angular.	
			22.02	1.20		Brownish grey gravelly slightly silty fine to coarse SAND with medium cobble and low boulder content. Gravel is angular to subrounded fine to coarse. Cobbles and boulders are subangular.	
			20.32	2.90		End of trial pit at 2.90m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 2.90
Width: 2.65
Length: 3.05

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA09
Coordinates 526704.67 E 724741.13 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 23.92 mOD	**Date:** 04/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						Firm brownish black amorphous PEAT with medium roots (2.0-5.0mm).	
		Water infiltrating along peat-boulders contact.	23.27	0.65		Brownish grey BOULDERS of granite. Boulders are subangular to subrounded. (Clean boulders with no other constituents coating them. Upper contact is obscured by groundwater.)	
			22.72	1.20		End of trial pit at 1.20m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes

Struck at (m)	Remarks
0.65	Water infiltrating along peat-boulders contact.

Depth: 1.20
Width: 2.25
Length: 3.00

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA10
Coordinates 526762.46 E 724729.26 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 24.78 mOD	**Date:** 04/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						Firm brownish black sandy amorphous PEAT with fine roots (0.5-2.0mm).	
			24.28	0.50		Brownish grey slightly gravelly clayey fine to coarse SAND with low cobble content. Gravel is subangular fine to coarse. Cobbles are subangular.	
			23.38	1.40		End of trial pit at 1.40m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks
1.40	

Depth: 1.40
Width: 1.50
Length: 3.30

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH	**Project No.** 24-0211	**Project Name:** Kingston Lands, Galway	**Trial Pit ID** SA11
	Coordinates 526708.59 E 724700.35 N	**Client:** King Construction	
Method: Trial Pitting		**Client's Representative:** TOBIN / MKO	Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 26.70 mOD	**Date:** 04/06/2025	**Logger:** OR FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						MADE GROUND: Soft brown slightly gravelly sandy CLAY with fine roots (0.5-2.0mm). Sand is fine to coarse. Gravel is subrounded fine to coarse of various lithologies, predominantly granite. (Reworked topsoil)	
			26.35	0.35		Reddish brown gravelly slightly clayey fine to coarse SAND with low cobble content. Gravel is angular to subangular fine to coarse. Cobbles are subangular.	
			25.80	0.90		Light brownish grey gravelly slightly clayey fine to coarse SAND with medium cobble content. Gravel is angular to subangular fine to coarse. Cobbles are subangular.	
			25.55	1.15		End of trial pit at 1.15m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 1.15
Width: 1.80
Length: 2.65

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA12
Coordinates 526764.22 E 724652.48 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 29.01 mOD	**Date:** 09/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			28.76	0.25		TOPSOIL with fine roots (0.5-2.0mm).	
						Mottled reddish brown slightly gravelly silty fine to coarse SAND with low cobble content. Gravel is subangular to subrounded fine to coarse. Cobbles are subangular.	
			27.86	1.15		Light brownish grey slightly silty gravelly fine to coarse SAND with medium cobble content. Gravel is subangular to subrounded fine to coarse. Cobbles are subangular.	
			27.41	1.60		End of trial pit at 1.60m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 1.60
Width: 1.50
Length: 2.65

Remarks:
Incorrectly labelled as SA14 in photographs.

Stability:	Termination Reason	Last Updated
Stable	Terminated at refusal on boulder / possible bedrock.	05/08/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
24-0211	Kingston Lands, Galway	SA13
Coordinates 526725.30 E 724619.89 N	**Client:** King Construction	
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO	Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 25.16 mOD / **Date:** 09/06/2025 / **Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			24.96	0.20		TOPSOIL with fine roots (0.5-2.0mm).	
						Dark brown angular to subangular COBBLES with a little clay.	
			24.21	0.95		Firm dark brownish black slightly gravelly sandy CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse. Cobbles are subangular.	
			23.91	1.25		Light brownish grey slightly gravelly clayey fine to coarse SAND with low cobble content. Gravel is subangular fine to coarse. Cobbles are angular.	
			23.06	2.10		End of trial pit at 2.10m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes		Depth: 2.10	Remarks:
Struck at (m)	Remarks	Width: 2.80	
		Length: 3.40	

Stability:	Termination Reason	Last Updated
Stable	Terminated at refusal on boulders / possible bedrock.	05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA15
Coordinates 526654.29 E 724675.68 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 27.39 mOD	**Date:** 09/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			27.09	0.30		TOPSOIL with fine roots (0.5-2.0mm).	
			26.74	0.65		Dark reddish brown slightly gravelly silty fine to coarse SAND with low cobble content. Gravel is subangular fine to coarse. Cobbles are subangular.	
						End of trial pit at 0.65m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 0.65
Width: 1.80
Length: 3.45

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA16
Coordinates 526652.34 E 724619.48 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 24.98 mOD	**Date:** 09/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			24.68	0.30		TOPSOIL with fine roots (0.5-2.0mm).	
			23.93	1.05		Mottled dark reddish brown slightly gravelly silty fine to coarse SAND with medium cobble content. Gravel is subangular fine to coarse. Cobbles are subangular.	
			22.98	2.00		Light brownish grey gravelly slightly silty fine to coarse SAND with high cobble content. Gravel is subangular fine to coarse. Cobbles are subangular.	
						End of trial pit at 2.00m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 2.00
Width: 1.60
Length: 2.50

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA18
Coordinates 526565.65 E 724643.04 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 23.26 mOD	**Date:** 05/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						MADE GROUND: Soft brown slightly gravelly sandy CLAY with fine roots (0.5-2.0mm). Sand is fine to coarse. Gravel is subrounded fine to coarse of various lithologies, predominantly granite. (Reworked topsoil)	
			22.86	0.40		Reddish brown gravelly slightly silty fine to coarse SAND with medium cobble content. Gravel is subangular fine to coarse. Cobbles are subangular.	
			22.06	1.20		End of trial pit at 1.20m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 1.20
Width: 1.60
Length: 2.35

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No. 24-0211	**Project Name:** Kingston Lands, Galway		**Trial Pit ID** SA19
Coordinates 526587.20 E 724590.45 N	**Client:** King Construction		
Method: Trial Pitting	**Client's Representative:** TOBIN / MKO		Sheet 1 of 1 Scale: 1:25
Plant: 29t Tracked Excavator	**Elevation** 24.08 mOD	**Date:** 05/06/2025	**Logger:** OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						TOPSOIL with fine roots (0.5-2.0mm).	
			23.78	0.30		Reddish brown gravelly slightly silty fine to coarse SAND with medium cobble and boulder content. Gravel is subangular fine to coarse. Cobbles and boulders are subangular.	
			22.68	1.40		End of trial pit at 1.40m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 1.40
Width: 1.70
Length: 2.50

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
24-0211	Kingston Lands, Galway	SA20
Coordinates	**Client:**	
526560.01 E 724550.00 N	King Construction	
Method:	**Client's Representative:**	Sheet 1 of 1
Trial Pitting	TOBIN / MKO	Scale: 1:25
Plant:	**Elevation**	**Date:** / **Logger:**	
29t Tracked Excavator	22.45 mOD	05/06/2025 / OR	FINAL

RECEIVED: 05/08/2026

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						MADE GROUND: Soft brown slightly gravelly sandy CLAY with fine roots (0.5-2.0mm). Sand is fine to coarse. Gravel is subrounded fine to coarse of various lithologies, predominantly granite. (Reworked topsoil)	
			22.00	0.45		Dark reddish brown gravelly slightly silty fine to coarse SAND with medium cobble content. Gravel is angular to subangular fine to coarse. Cobbles are subangular.	
			21.20	1.25		End of trial pit at 1.25m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 1.25
Width: 1.60
Length: 2.60

Remarks:

Stability: Stable

Termination Reason: Terminated at refusal on boulder / possible bedrock.

Last Updated: 05/08/2025

AGS

Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA01
Test Date: 04 June 2025

RECEIVED: 06/08/2026

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	1.40	2.45
test pit base dimensions	1.40	2.20
test pit depth (m)	1.80	

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	1.00	0.80
2	1.05	0.75
4	1.05	0.75
6	1.05	0.75
8	1.10	0.70
10	1.17	0.63
14	1.22	0.58
18	1.25	0.55
22	1.30	0.50
26	1.39	0.41
31	1.39	0.41
36	1.45	0.35
46	1.54	0.26
56	1.80	0.00

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.60 m
depth to water surface (target) 1.20 m
time to reach target depth 12.0 mins

Test end

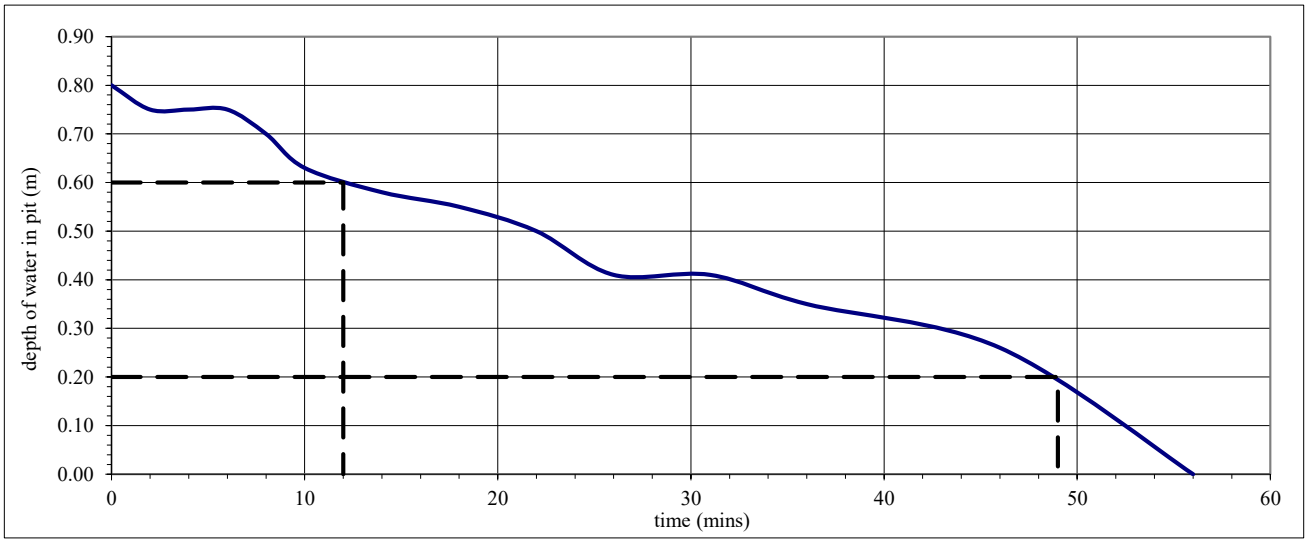
25% head of water at 0.20 m
depth to water surface (target) 1.60 m
time to reach target depth 49.0 mins

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Test infiltration rate (f) = 9.50E-05 m/s

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
12	1.20	0.60	37	1.26	5.99	5.7E-03	0.342
49	1.60	0.20					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA02
Test Date: 04 June 2025

RECEIVED: 06/08/2026

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	1.90	3.35
test pit base dimensions	1.55	2.85
test pit depth (m)	1.80	

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	1.00	0.80
2	1.04	0.76
4	1.05	0.75
6	1.06	0.74
8	1.10	0.70
11	1.17	0.63
13	1.22	0.58
15	1.25	0.55
18	1.30	0.50
23	1.38	0.42
28	1.40	0.40
33	1.45	0.35
40	1.54	0.26
50	1.60	0.20
62	1.68	0.12

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.60 m
depth to water surface (target) 1.20 m
time to reach target depth 12.0 mins

Test end

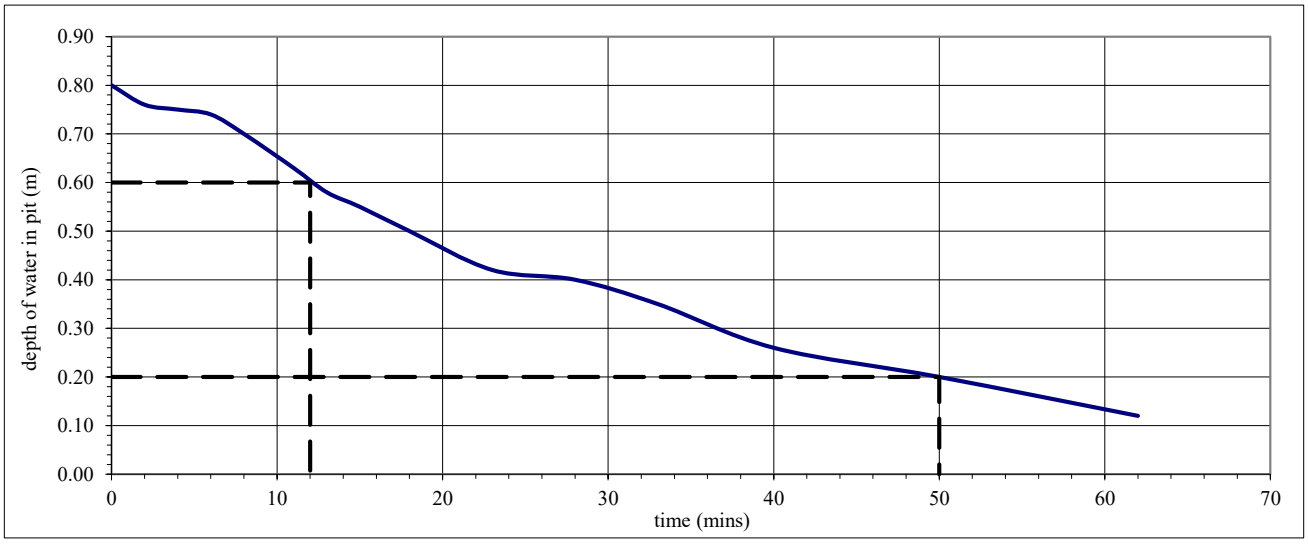
25% head of water at 0.20 m
depth to water surface (target) 1.60 m
time to reach target depth 50.0 mins

soil infiltration rate $f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$

Test infiltration rate (f) = 1.05E-04 m/s

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, t_{p75-25} (mins)	Volume of water lost, V_{p75-25} (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
12	1.20	0.60	38	1.93	8.03	6.3E-03	0.379
50	1.60	0.20					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA03
Test Date: 04 June 2025

RECEIVED: 06/08/2026

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	3.15	3.70
test pit base dimensions	3.15	3.70
test pit depth (m)	1.30	

depth to groundwater before adding water (m) = 0.60

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.55	0.05
5	0.55	0.05
10	0.55	0.05
20	0.55	0.05
34	0.54	0.06
49	0.50	0.10

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.04 m
depth to water surface (target) 0.56 m
time to reach target depth not reached

Test end

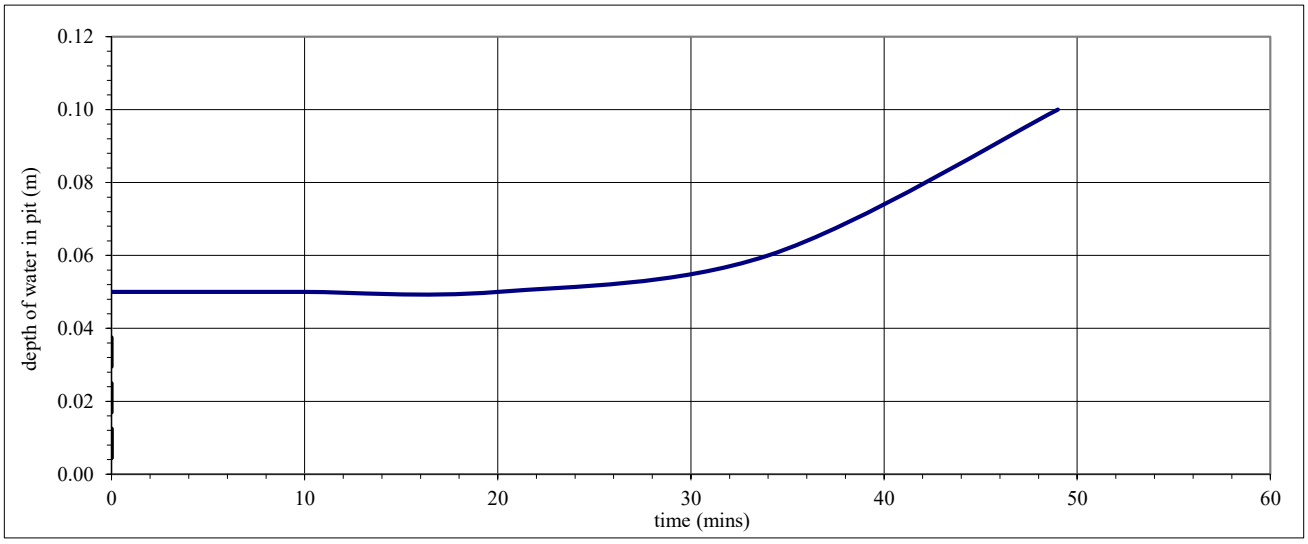
25% head of water at 0.01 m
depth to water surface (target) 0.59 m
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$

Infiltration rate (f) not calculated
(water level rose during course of test)

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, t_{p75-25} (mins)	Volume of water lost, V_{p75-25} (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
	0.56	0.04	N/A				
	0.59	0.01					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA04
Test Date: 04 June 2025

RECEIVED: 06/08/2026

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	2.10	3.05
test pit base dimensions	1.80	2.60
test pit depth (m)	1.55	

depth to groundwater before adding water (m) = 1.01

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.25	0.76
5	0.28	0.73
25	0.36	0.65
53	0.40	0.61
61	0.40	0.61

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.57 m

depth to water surface (target) 0.44 m

time to reach target depth not reached

Test end

25% head of water at 0.19 m

depth to water surface (target) 0.82 m

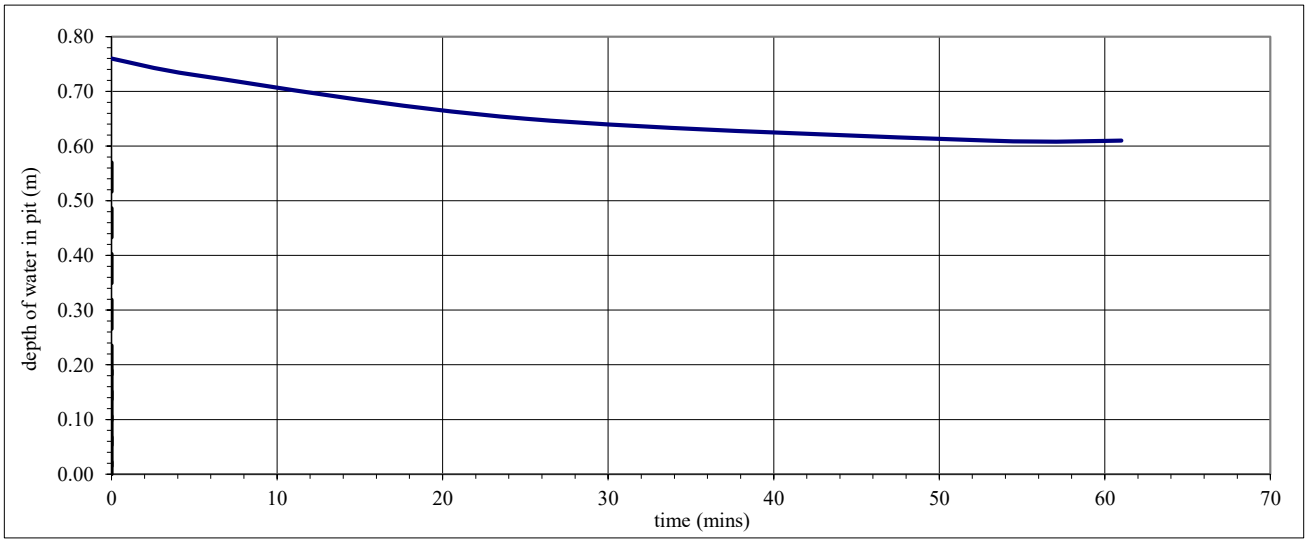
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
	0.44	0.57	N/A				
	0.82	0.19					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA05
Test Date: 06 June 2025

RECEIVED: 06/08/2026

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	2.10	3.55
test pit base dimensions	2.10	2.30
test pit depth (m)	1.55	

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.60	0.95
10	0.69	0.86
20	0.76	0.79
30	0.83	0.72
50	0.88	0.67
79	0.95	0.60

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.71 m
depth to water surface (target) 0.84 m
time to reach target depth 32.0 mins

Test end

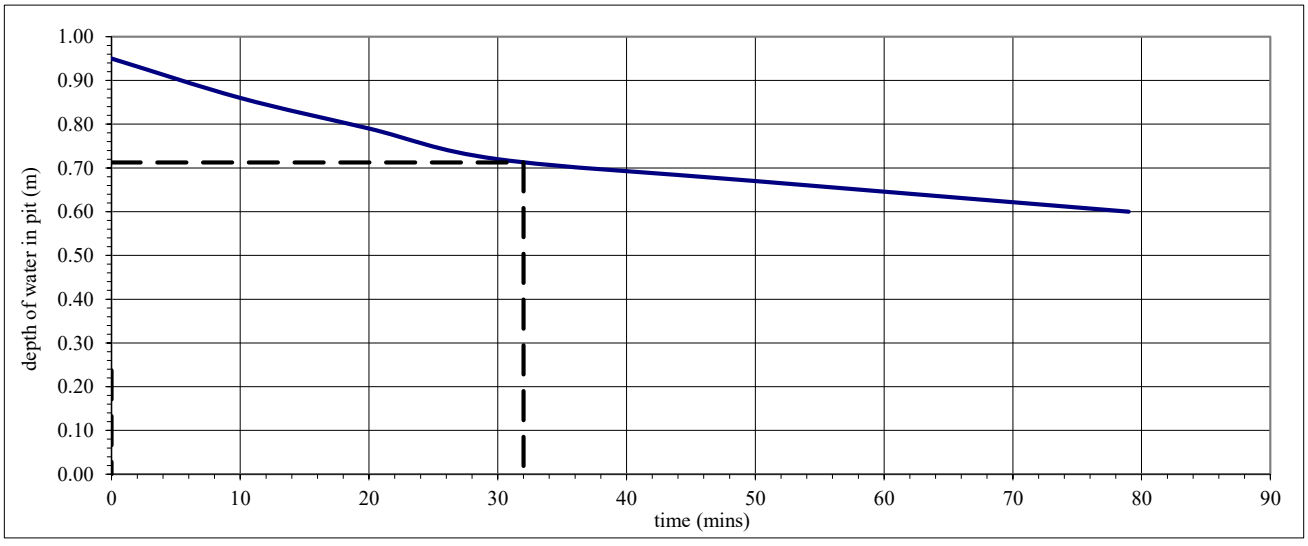
25% head of water at 0.24 m
depth to water surface (target) 1.31 m
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$

Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, t_{p75-25} (mins)	Volume of water lost, V_{p75-25} (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
32	0.84	0.71	N/A				
	1.31	0.24					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA06
Test Date: 06 June 2025

RECEIVED: 06/08/2026

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	1.60	2.15
test pit base dimensions	1.60	1.30
test pit depth (m)	0.80	

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.40	0.40
4	0.44	0.36
9	0.47	0.33
20	0.49	0.31
28	0.50	0.30
41	0.52	0.28
66	0.56	0.24
78	0.57	0.23
93	0.59	0.21

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.30 m
depth to water surface (target) 0.50 m
time to reach target depth 28.0 mins

Test end

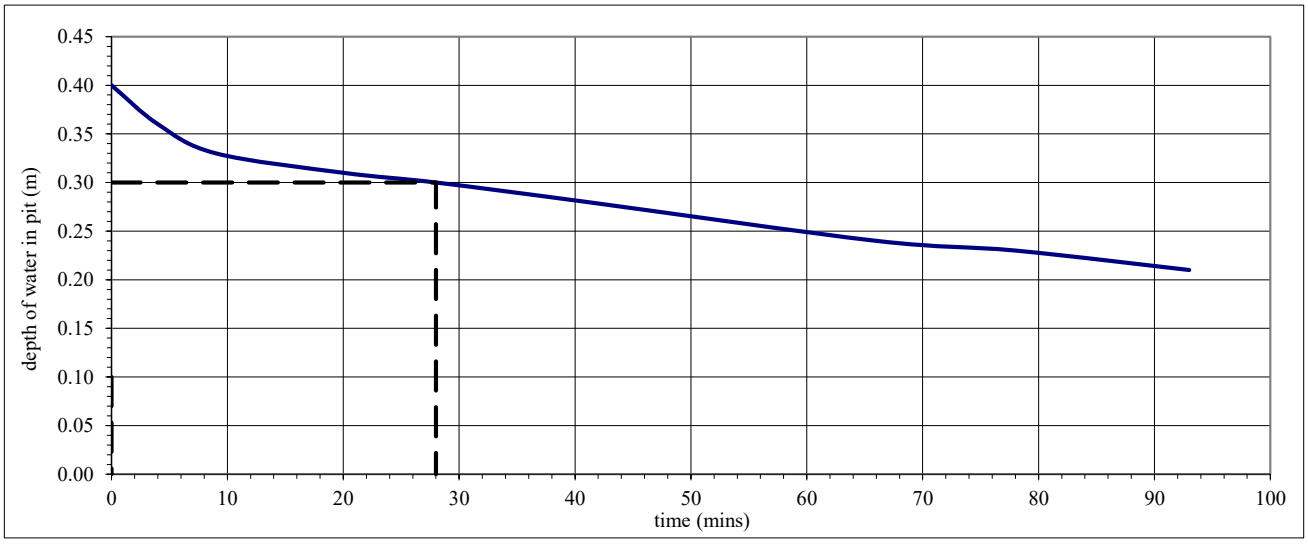
25% head of water at 0.10 m
depth to water surface (target) 0.70 m
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
28	0.50	0.30	N/A				
	0.70	0.10					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA07
Test Date: 06 June 2025

RECEIVED: 06/08/2026

	width (m)	length (m)
test pit top dimensions	2.10	4.10
test pit base dimensions	1.70	2.20
test pit depth (m)	1.90	

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.60	1.30
7	0.75	1.15
16	0.80	1.10
24	0.83	1.07
28	0.85	1.05
40	0.94	0.96
48	1.01	0.89
61	1.04	0.86

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.98 m
depth to water surface (target) 0.93 m
time to reach target depth 38.0 mins

Test end

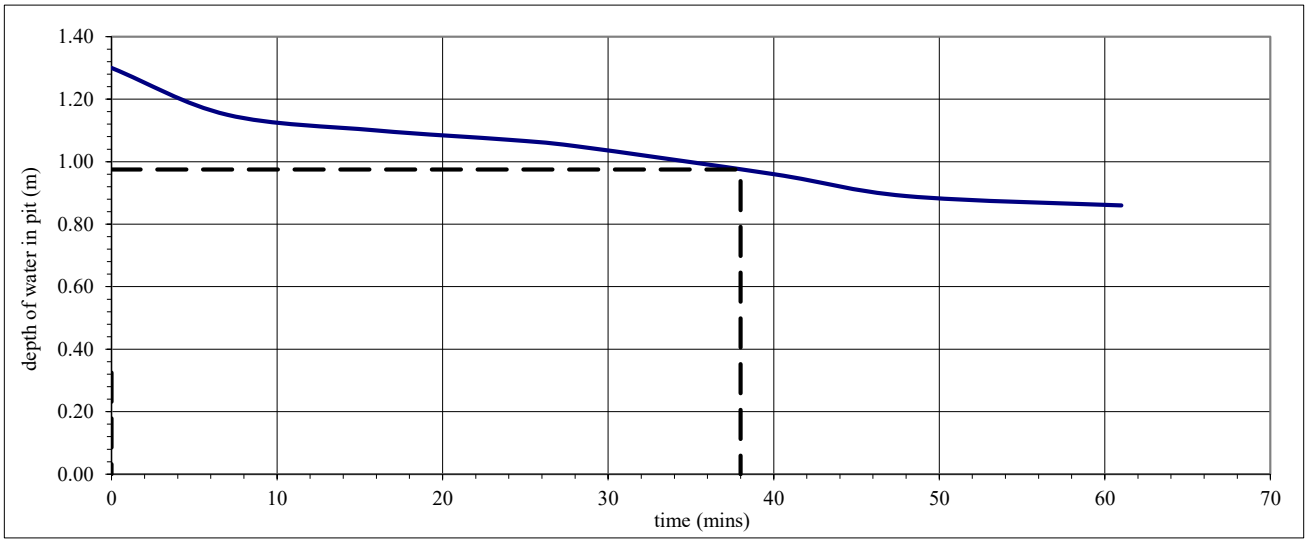
25% head of water at 0.33 m
depth to water surface (target) 1.58 m
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
38	0.93	0.98	N/A				
	1.58	0.33					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA08 (A)
Test Date: 06 June 2025

RECEIVED: 06/08/2026

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	3.05	2.65
test pit base dimensions	1.70	2.15
test pit depth (m)	2.20	

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.90	1.30
2	1.15	1.05
4	1.30	0.90
6	1.41	0.79
18	2.19	0.01

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.98 m
depth to water surface (target) 1.23 m
time to reach target depth 3.0 mins

Test end

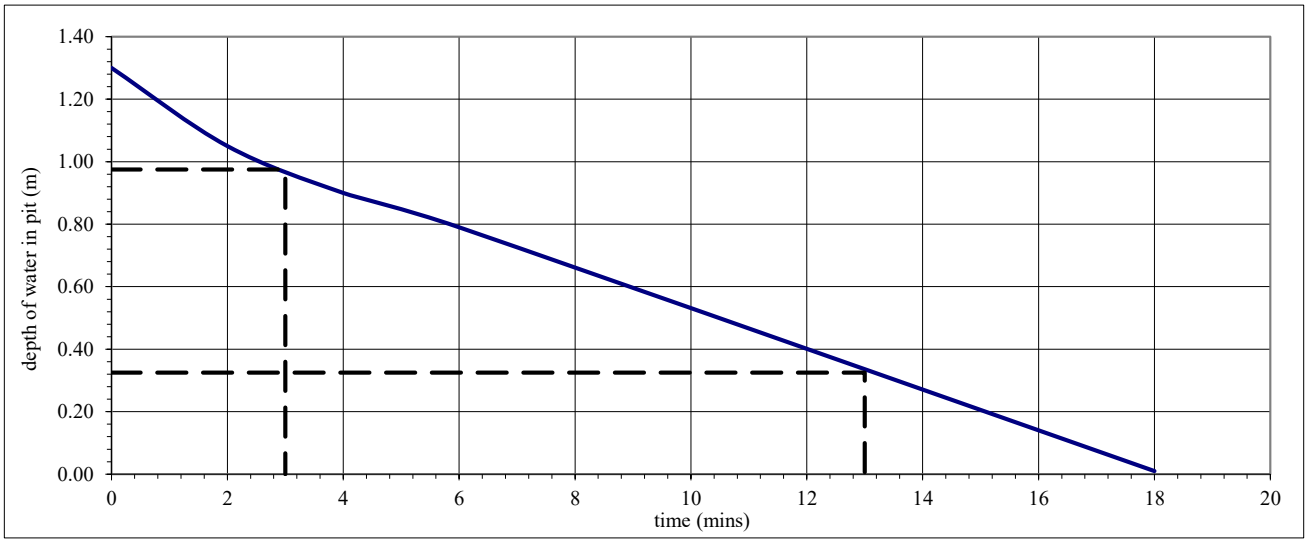
25% head of water at 0.33 m
depth to water surface (target) 1.88 m
time to reach target depth 13.0 mins

soil infiltration rate $f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$

Test infiltration rate (f) = 5.76E-04 m/s

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, t_{p75-25} (mins)	Volume of water lost, V_{p75-25} (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
3	1.23	0.98	10	3.14	9.10	3.5E-02	2.072
13	1.88	0.33					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA08 (B)
Test Date: 06 June 2025

RECEIVED: 06/08/2026

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	3.05	2.65
test pit base dimensions	1.70	2.15
test pit depth (m)	2.20	

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.80	1.40
3	0.97	1.23
4	1.06	1.14
5	1.10	1.10
7	1.20	1.00
9	1.27	0.93
13	1.37	0.83
17	1.49	0.71
20	1.56	0.64
26	1.62	0.58
65	1.90	0.30

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 1.05 m
depth to water surface (target) 1.15 m
time to reach target depth 6.0 mins

Test end

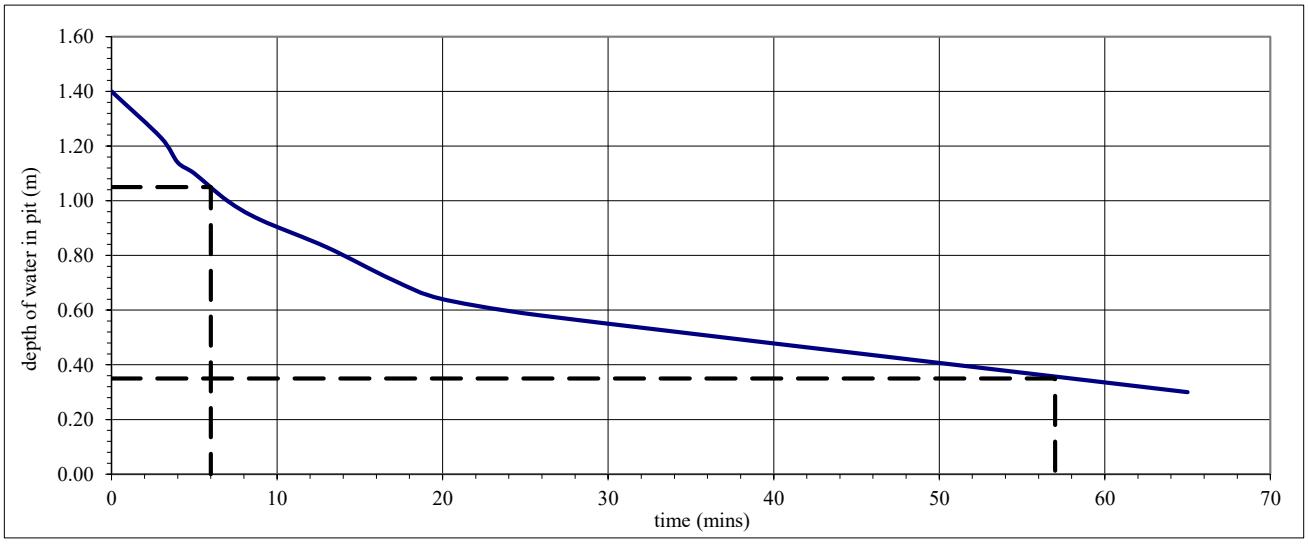
25% head of water at 0.35 m
depth to water surface (target) 1.85 m
time to reach target depth 57.0 mins

soil infiltration rate $f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$

Test infiltration rate (f) = 1.18E-04 m/s

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, t_{p75-25} (mins)	Volume of water lost, V_{p75-25} (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
6	1.15	1.05	51	3.45	9.56	7.1E-03	0.425
57	1.85	0.35					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA08 (C)
Test Date: 06 June 2025

RECEIVED: 06/08/2026

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	3.05	2.65
test pit base dimensions	1.70	2.15
test pit depth (m)	2.20	

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.69	1.51
2	0.80	1.40
13	1.20	1.00
18	1.33	0.87
24	1.43	0.77
35	1.60	0.60
55	1.77	0.43
75	1.86	0.34

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 1.13 m
depth to water surface (target) 1.07 m
time to reach target depth 9.0 mins

Test end

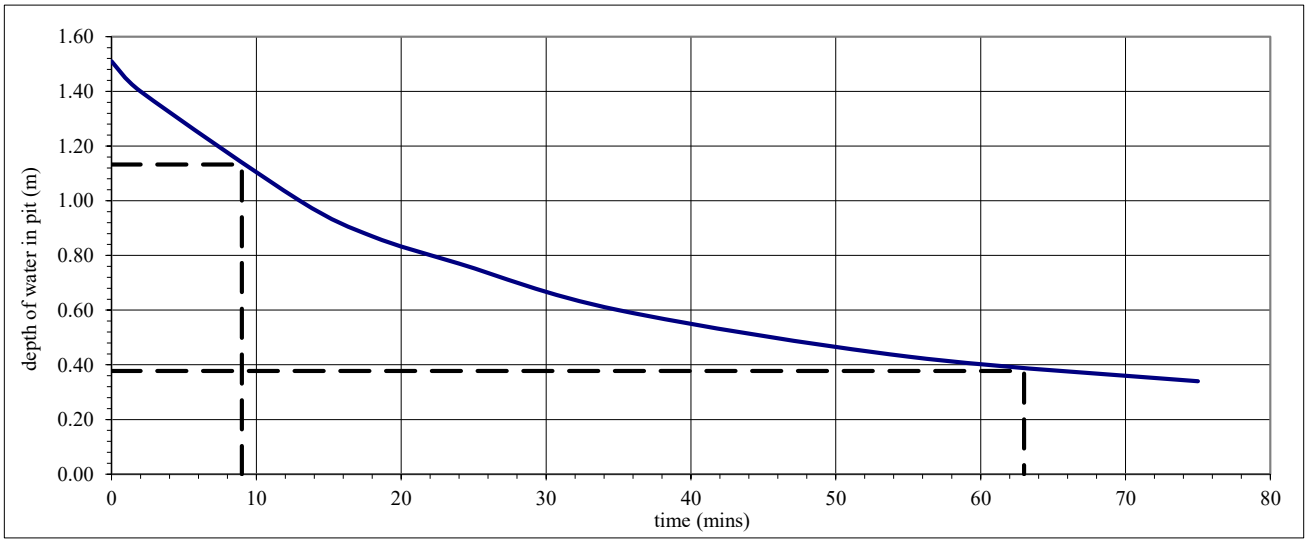
25% head of water at 0.38 m
depth to water surface (target) 1.82 m
time to reach target depth 63.0 mins

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Test infiltration rate (f) = 1.17E-04 m/s

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
9	1.07	1.13	54	3.81	10.07	7.0E-03	0.420
63	1.82	0.38					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA09
Test Date: 05 June 2025

RECEIVED: 06/08/2026

	width (m)	length (m)
test pit top dimensions	2.25	3.00
test pit base dimensions	2.25	3.00
test pit depth (m)	1.20	

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

depth to groundwater before adding water (m) = 0.65

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.49	0.16
7	0.50	0.15
22	0.51	0.14
44	0.52	0.13
60	0.54	0.11
76	0.55	0.10

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.12 m
depth to water surface (target) 0.53 m
time to reach target depth 52.0 mins

Test end

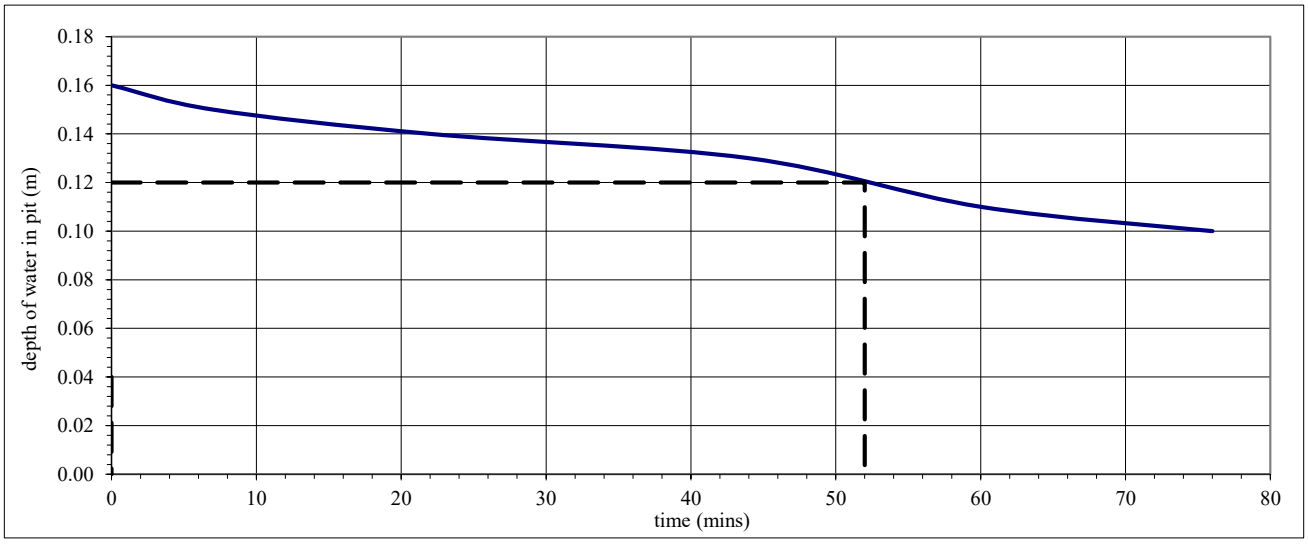
25% head of water at 0.04 m
depth to water surface (target) 0.61 m
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$

Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, t_{p75-25} (mins)	Volume of water lost, V_{p75-25} (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
52	0.53	0.12	N/A				
	0.61	0.04					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA10
Test Date: 05 June 2025

RECEIVED: 06/08/2026

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	1.50	3.30
test pit base dimensions	1.40	1.50
test pit depth (m)	1.40	

depth to groundwater before adding water (m) = 1.35

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.50	0.85
2	0.55	0.80
4	0.70	0.65
8	0.77	0.58
16	0.84	0.51
20	0.85	0.50
31	0.88	0.47
37	0.94	0.41
41	0.96	0.39
51	0.97	0.38
69	1.02	0.33
85	1.10	0.25
96	1.14	0.21
106	1.15	0.20

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.64 m
depth to water surface (target) 0.71 m
time to reach target depth 4.0 mins

Test end

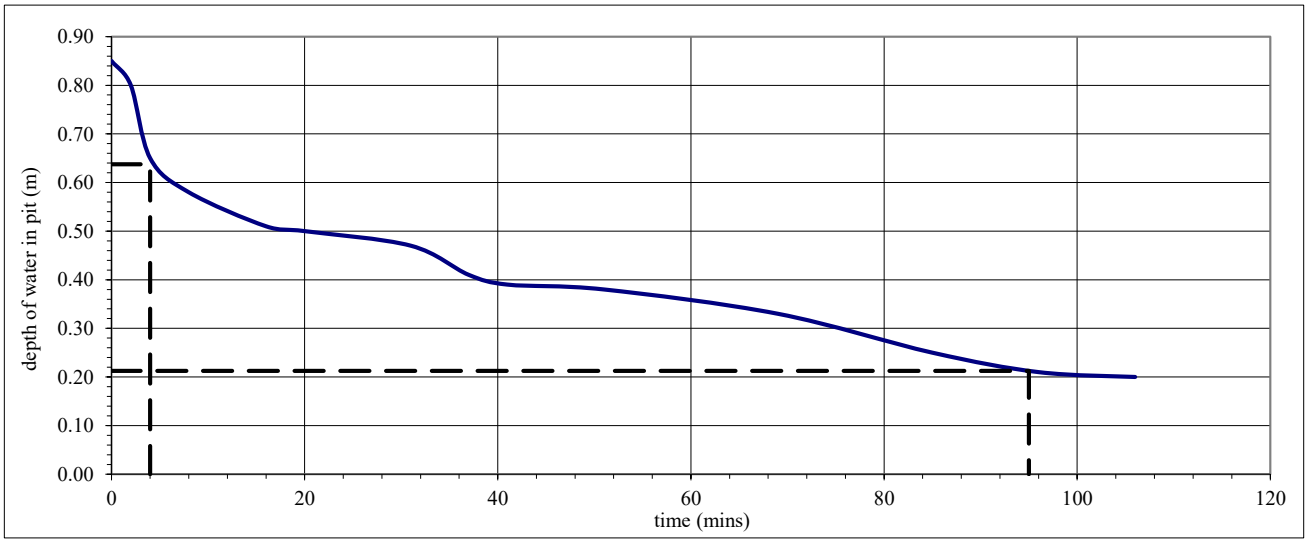
25% head of water at 0.21 m
depth to water surface (target) 1.14 m
time to reach target depth 95.0 mins

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Test infiltration rate (f) = 4.52E-05 m/s

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
4	0.71	0.64	91	1.29	5.22	2.7E-03	0.163
95	1.14	0.21					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA11
Test Date: 05 June 2025

RECEIVED: 06/08/2026

	width (m)	length (m)
test pit top dimensions	1.80	2.65
test pit base dimensions	1.80	2.30
test pit depth (m)	1.15	

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.40	0.75
5	0.44	0.71
16	0.50	0.65
26	0.57	0.58
42	0.61	0.54
55	0.63	0.52
75	0.67	0.48
92	0.70	0.45
114	0.76	0.39
121	0.78	0.37

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.56 m

depth to water surface (target) 0.59 m

time to reach target depth 33.0 mins

Test end

25% head of water at 0.19 m

depth to water surface (target) 0.96 m

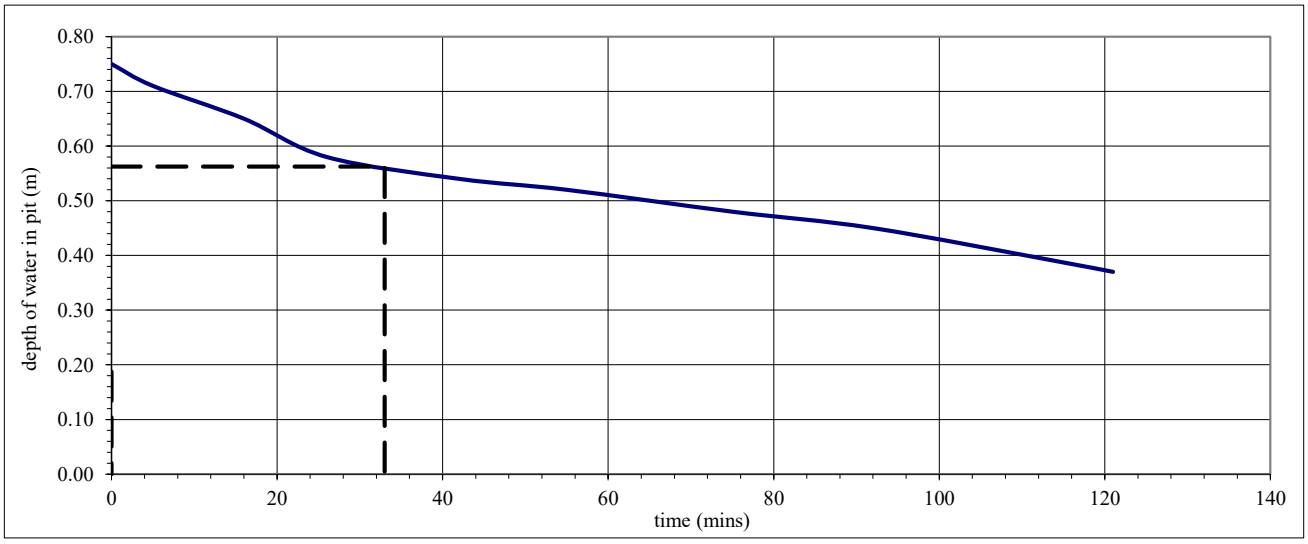
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
33	0.59	0.56	N/A				
	0.96	0.19					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA12
Test Date: 09 June 2025

RECEIVED: 06/08/2026

	width (m)	length (m)
test pit top dimensions	1.50	2.65
test pit base dimensions	1.50	1.15
test pit depth (m)	1.60	

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.30	1.30
26	1.00	0.60
55	1.45	0.15
109	1.60	0.00

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.98 m
depth to water surface (target) 0.63 m
time to reach target depth 11.0 mins

Test end

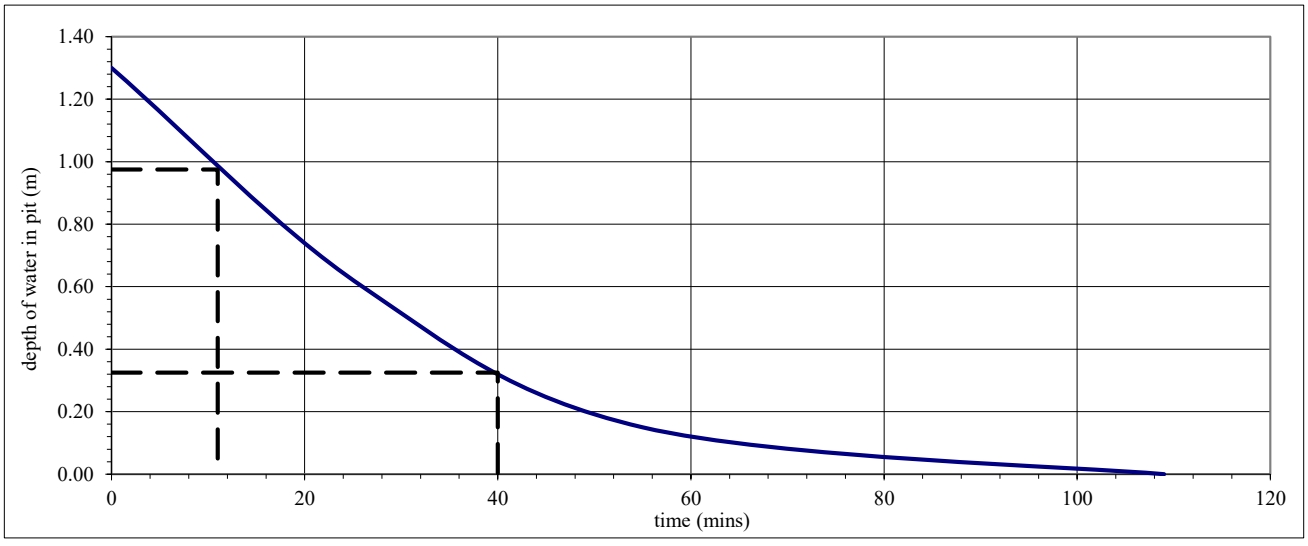
25% head of water at 0.33 m
depth to water surface (target) 1.28 m
time to reach target depth 40.0 mins

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Test infiltration rate (f) = 1.74E-04 m/s

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
11	0.63	0.98	29	1.72	5.67	1.0E-02	0.626
40	1.28	0.33					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA13
Test Date: 09 June 2025

RECEIVED: 06/08/2026

	width (m)	length (m)
test pit top dimensions	2.80	3.40
test pit base dimensions	1.90	2.00
test pit depth (m)	2.10	

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.95	1.15
78	1.11	0.99
104	1.18	0.92
140	1.30	0.80
155	1.58	0.52
170	1.73	0.37
253	1.76	0.34

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.86 m
depth to water surface (target) 1.24 m
time to reach target depth 127.0 mins

Test end

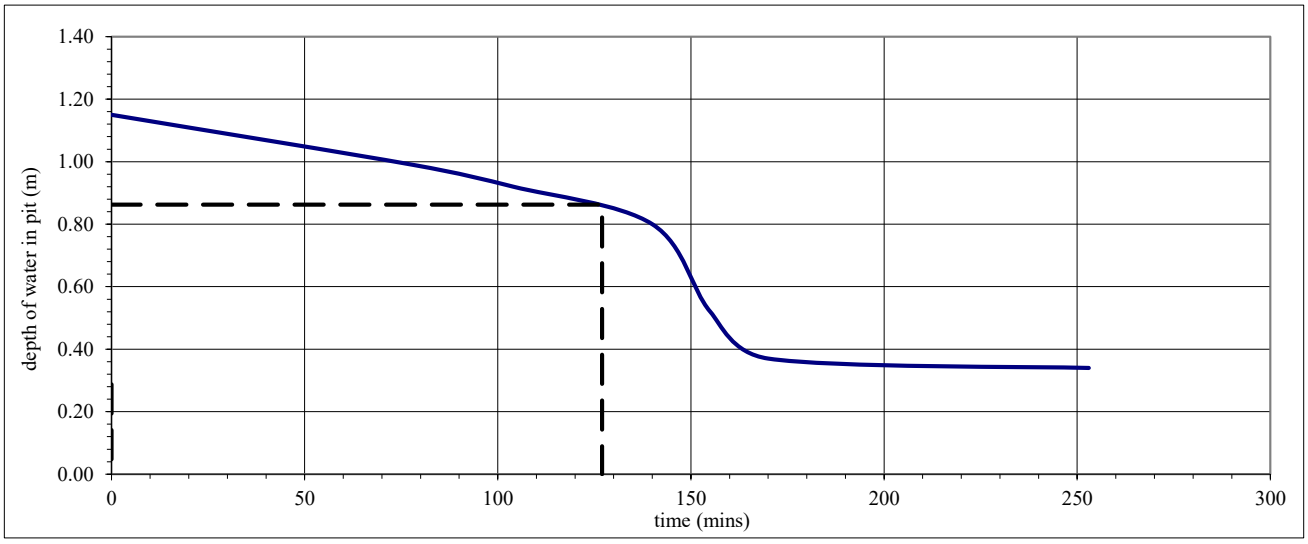
25% head of water at 0.29 m
depth to water surface (target) 1.81 m
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
127	1.24	0.86	N/A				
	1.81	0.29					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA15
Test Date: 09 June 2025

RECEIVED: 06/08/2026

	width (m)	length (m)
test pit top dimensions	1.80	3.45
test pit base dimensions	1.80	2.50
test pit depth (m)	0.65	

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.05	0.60
9	0.10	0.55
31	0.15	0.50
55	0.16	0.49
125	0.22	0.43
159	0.22	0.43
188	0.23	0.42
218	0.24	0.41
301	0.29	0.36

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.45 m
depth to water surface (target) 0.20 m
time to reach target depth 100.0 mins

Test end

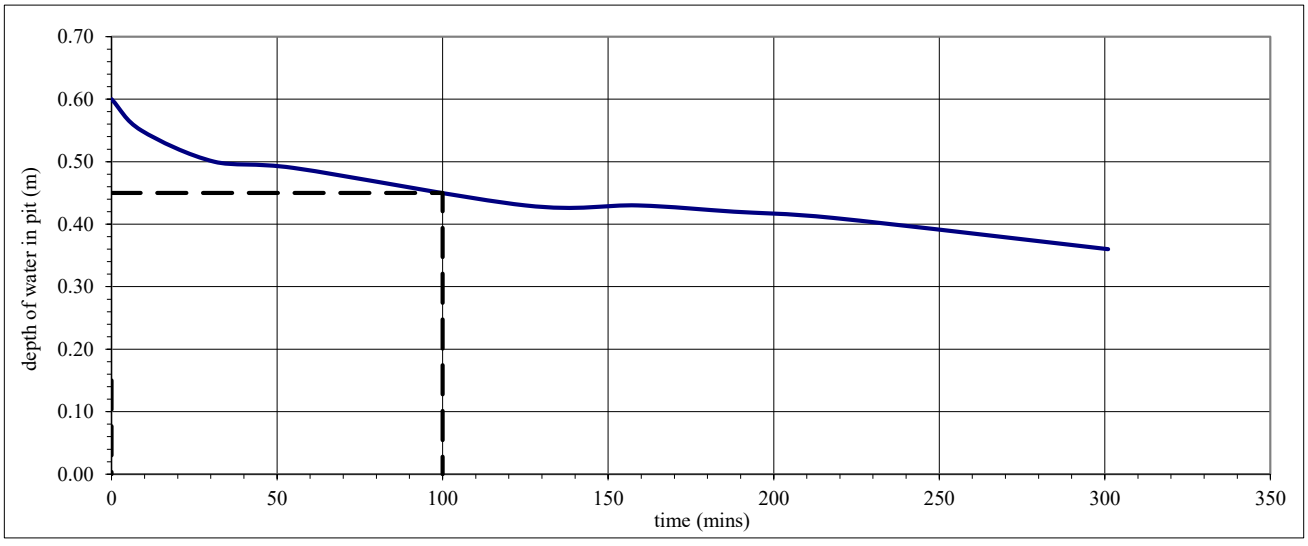
25% head of water at 0.15 m
depth to water surface (target) 0.50 m
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$

Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, t_{p75-25} (mins)	Volume of water lost, V_{p75-25} (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
100	0.20	0.45	N/A				
	0.50	0.15					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA16
Test Date: 09 June 2025

RECEIVED: 06/08/2026

	width (m)	length (m)
test pit top dimensions	1.80	2.50
test pit base dimensions	1.80	1.15
test pit depth (m)	2.00	

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.60	1.40
20	0.68	1.32
39	0.73	1.27
112	0.88	1.12
142	0.90	1.10
175	1.00	1.00
205	1.06	0.94
288	1.16	0.84

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 1.05 m
depth to water surface (target) 0.95 m
time to reach target depth 159.0 mins

Test end

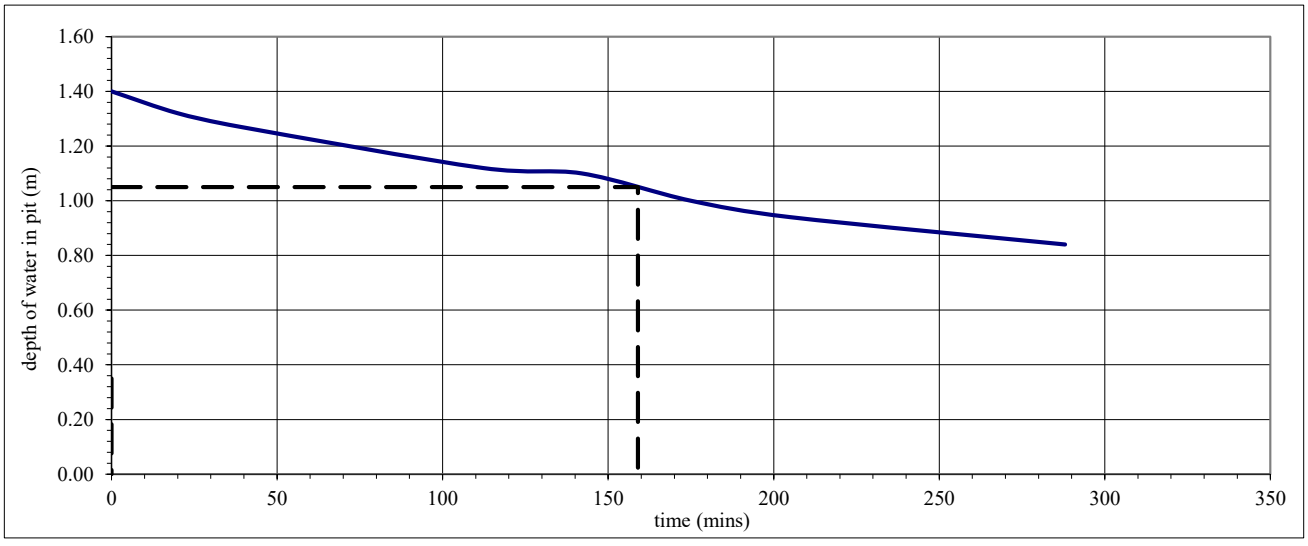
25% head of water at 0.35 m
depth to water surface (target) 1.65 m
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
159	0.95	1.05	N/A				
	1.65	0.35					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA18
Test Date: 05 June 2025

RECEIVED: 06/08/2026

	width (m)	length (m)
test pit top dimensions	1.60	2.35
test pit base dimensions	1.60	1.10
test pit depth (m)	1.20	

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.50	0.70
5	0.55	0.65
16	0.58	0.62
30	0.66	0.54
79	0.98	0.22
96	1.07	0.13
110	1.12	0.08
120	1.19	0.01

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.53 m
depth to water surface (target) 0.68 m
time to reach target depth 32.0 mins

Test end

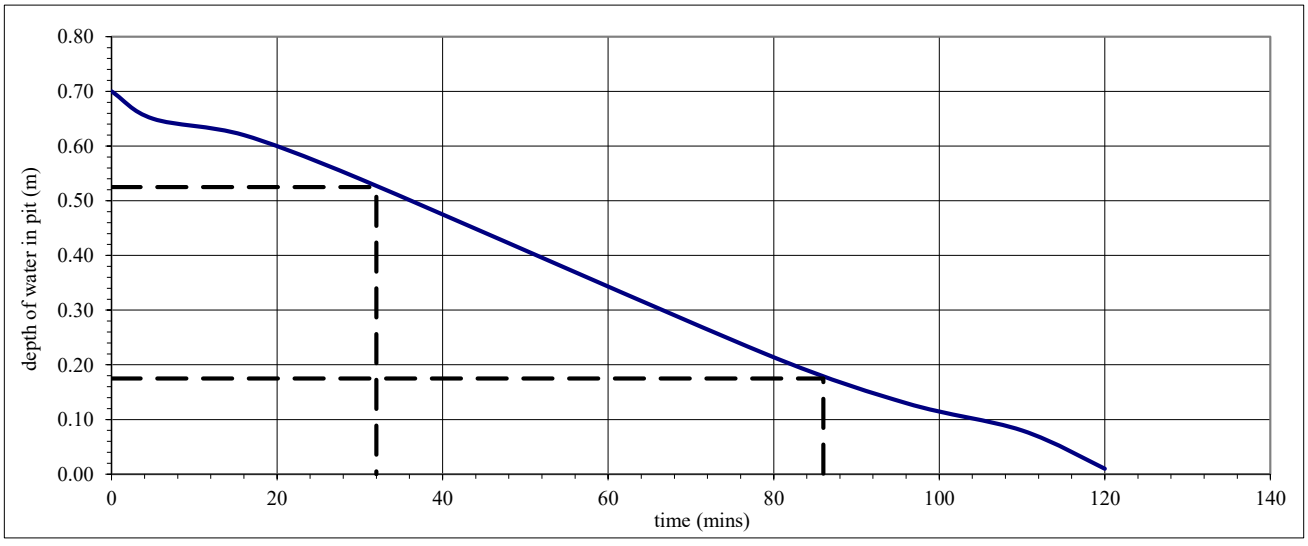
25% head of water at 0.18 m
depth to water surface (target) 1.03 m
time to reach target depth 86.0 mins

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Test infiltration rate (f) = 6.64E-05 m/s

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
32	0.68	0.53	54	0.82	3.81	4.0E-03	0.239
86	1.03	0.18					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA19
Test Date: 05 June 2025

RECEIVED: 06/08/2026

	width (m)	length (m)
test pit top dimensions	1.70	2.50
test pit base dimensions	1.70	1.15
test pit depth (m)	1.90	

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.40	1.50
6	0.44	1.46
22	0.61	1.29
41	0.65	1.25
59	0.72	1.18
76	0.80	1.10
92	0.90	1.00
103	0.95	0.95
118	1.00	0.90
133	1.04	0.86
146	1.09	0.81
154	1.10	0.80
174	1.19	0.71

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 1.13 m

depth to water surface (target) 0.78 m

time to reach target depth 71.0 mins

Test end

25% head of water at 0.38 m

depth to water surface (target) 1.53 m

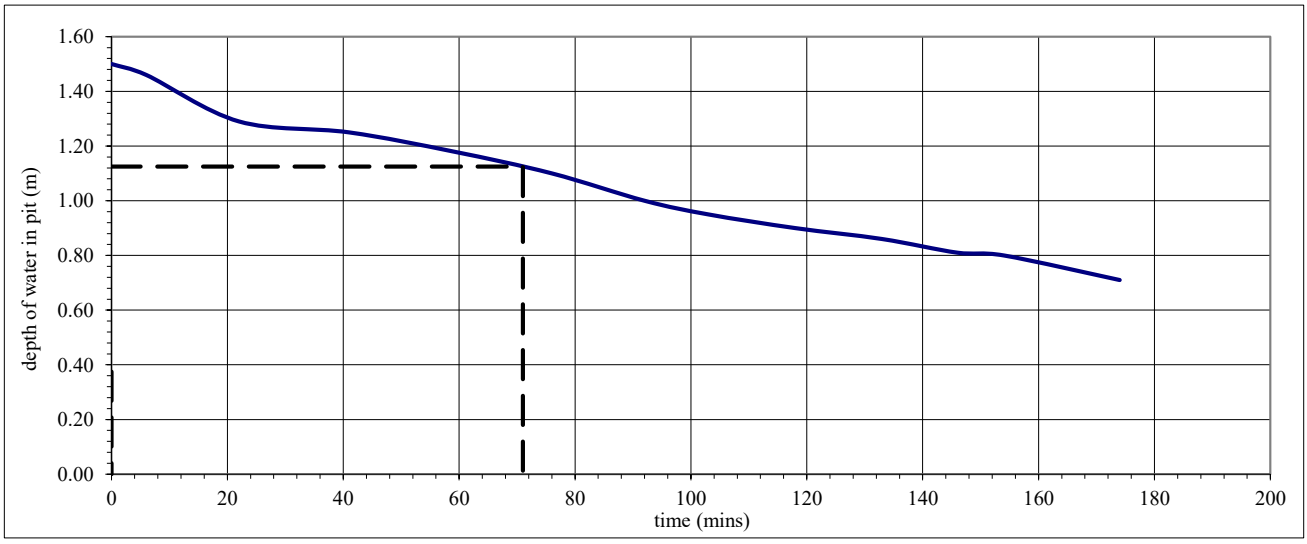
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
71	0.78	1.13	N/A				
	1.53	0.38					



Soakaway Infiltration Test

Project No.: 24-0211
Site: Kingston Lands, Galway
Test Location: SA20
Test Date: 06 June 2025

RECEIVED: 06/08/2026

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	1.60	2.60
test pit base dimensions	1.55	1.30
test pit depth (m)	1.25	

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.54	0.71
5	0.56	0.69
21	0.66	0.59
56	0.75	0.50
67	0.80	0.45
87	0.89	0.36
97	0.90	0.35
116	0.91	0.34
128	0.93	0.32
158	1.00	0.25
175	1.02	0.23
182	1.05	0.20
190	1.08	0.17

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.53 m

depth to water surface (target) 0.72 m

time to reach target depth 41.0 mins

Test end

25% head of water at 0.18 m

depth to water surface (target) 1.07 m

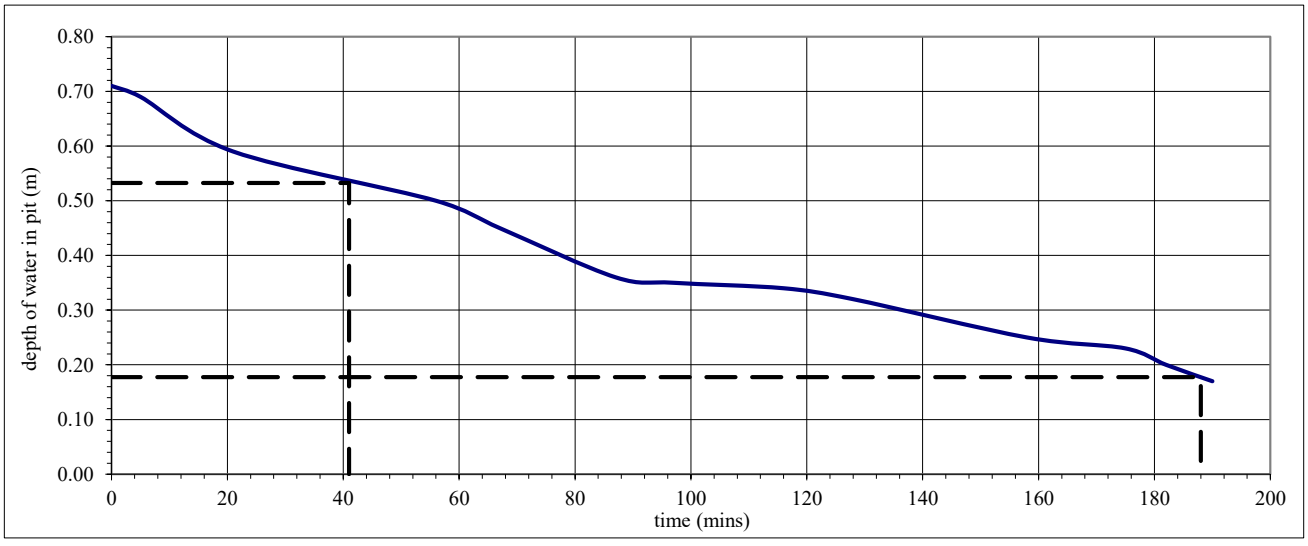
time to reach target depth 188.0 mins

soil infiltration rate $f = \frac{V_{p75\text{-}25}}{a_{s50} \times t_{p75\text{-}25}}$

Test infiltration rate (f) = 2.50E-05 m/s

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, $t_{p75\text{-}25}$ (mins)	Volume of water lost, $V_{p75\text{-}25}$ (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, (m/min)	Soil infiltration rate, f (m/h)
41	0.72	0.53	147	0.93	4.21	1.5E-03	0.090
188	1.07	0.18					



APPENDIX I – SOAKAWAY PHOTOGRAPHS

RECEIVED: 05/08/2026



RECEIVED: 05/08/2026

SA01



RECEIVED: 05/08/2026

SA01



SA01

CAUSEWAY GEOTECH


RECEIVED: 05/08/2026
CAUSEWAY
GEOTECH
Project Name
KINGSTON LANDS, GALWAY
Project Number
24-0211
Date
2025-06-03
SA01

SA01



SA02

CAUSEWAY GEOTECH



SA02

CAUSEWAY GEOTECH



SA02

CAUSEWAY GEOTECH



SA02

CAUSEWAY GEOTECH



SA03

CAUSEWAY GEOTECH



SA03

CAUSEWAY GEOTECH



SA03

CAUSEWAY GEOTECH


RECEIVED: 05/08/2026
CAUSEWAY GEOTECH
KINGSTON LANDS, GALWAY
24-0211
2025-06-03
SA03
0.1
0.2
0.3
0.4
0.5

SA03



RECEIVED: 05/08/2026

SA04



SA04

CAUSEWAY GEOTECH



SA04

CAUSEWAY GEOTECH



SA04

CAUSEWAY GEOTECH



RECEIVED: 05/08/2026

SA05


RECEIVED: 05/08/2026
CAUSEWAY
GEOTECH
Project Name
KINGSTON LANDS, GALWAY
Project Number
24-0211
Date
2025-06-06
EH Number
SA05
(m) 0.1 0.2 0.3 0.4 0.5

SA05



SA05

CAUSEWAY GEOTECH



SA05

CAUSEWAY GEOTECH



SA06

CAUSEWAY GEOTECH



RECEIVED: 05/08/2026

SA06



SA06

CAUSEWAY GEOTECH



SA06

CAUSEWAY GEOTECH



SA07

CAUSEWAY GEOTECH



RECEIVED: 05/08/2026

SA07



SA07



SA07

CAUSEWAY GEOTECH



RECEIVED: 05/08/2026

SA08

CAUSEWAY GEOTECH


RECEIVED: 05/08/2026
CAUSEWAY
KINGSTON LANDS, GALWAY
24-0211
2025-06-06
SA08

SA08



SA08

CAUSEWAY GEOTECH



RECEIVED: 05/08/2026

SA09