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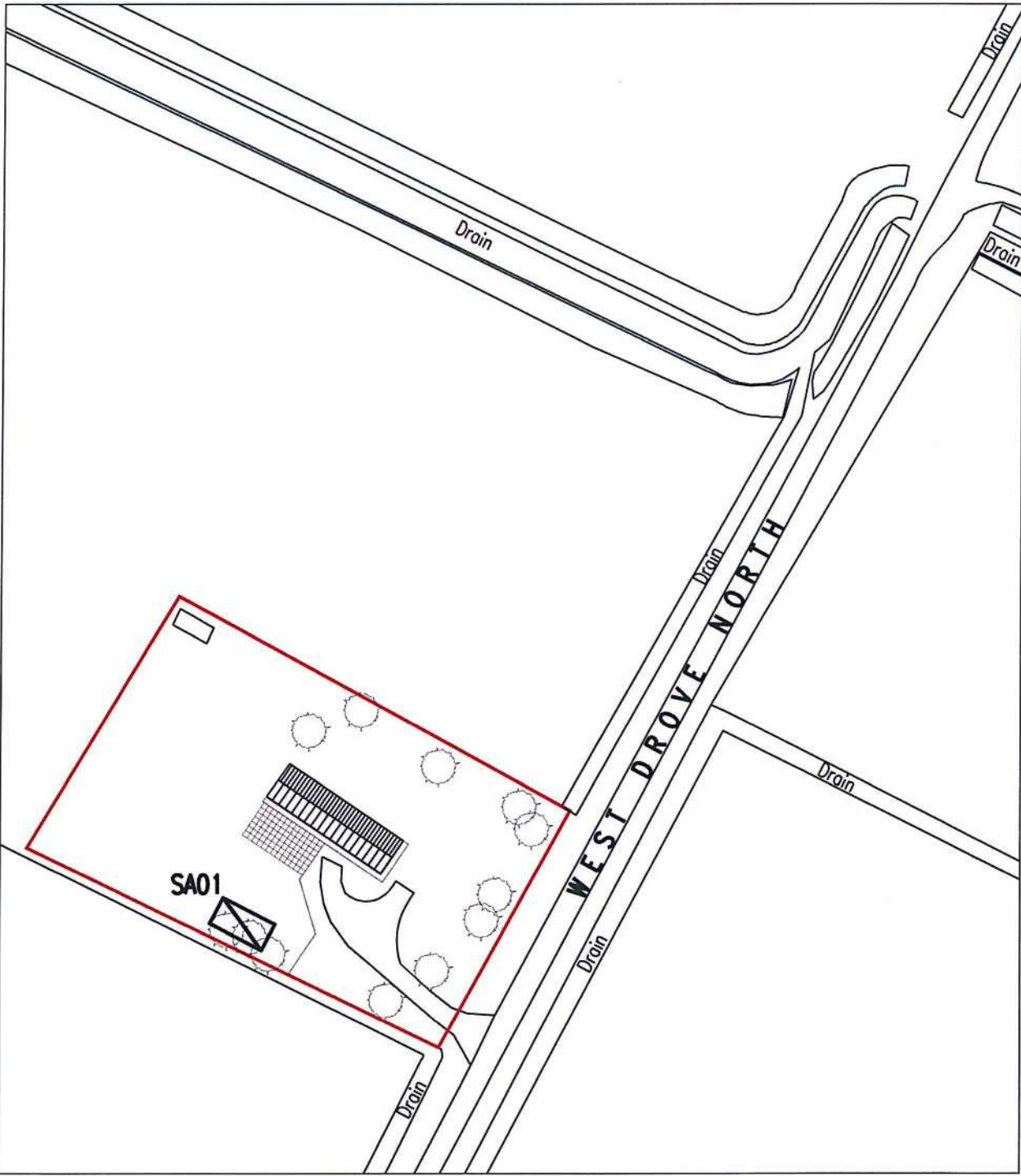
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CONSULTING STRUCTURAL AND CIVIL ENGINEERS

Sheet No.					Rev
40419/SK01					-
Status		FOR INFORMATION			
Date	Dec,'19	Drawn	SA	Checked	SRC
Scale	1:100	Design	SRC	File Name	40419-SK01

Project Soakaway & Drainage Design,
Barn Conversion, West Drove North,
Gedney Hill, for GR Merchant

Title Proposed Site Plan
Showing Soakaway Location



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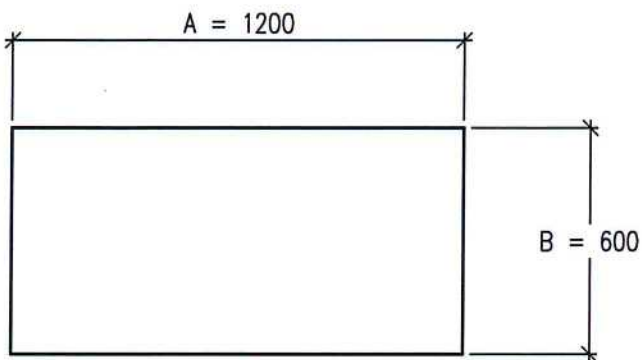
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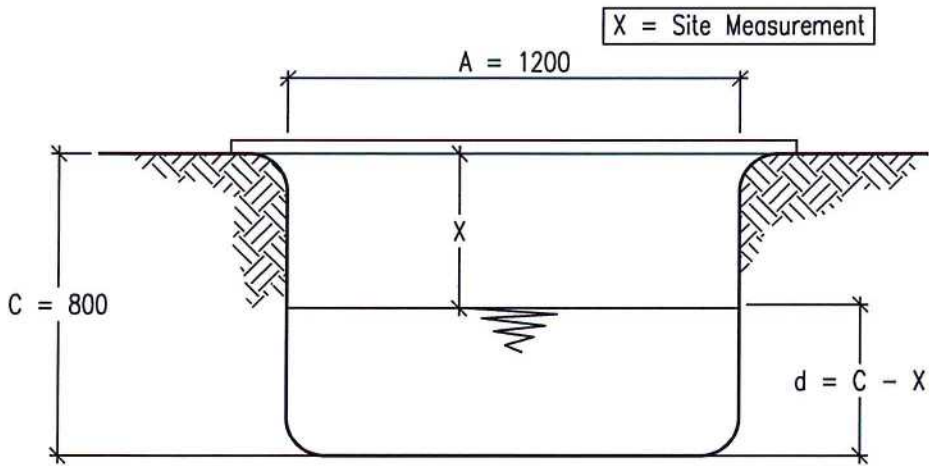
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Sheet No. 40419/SA01					Rev -
Status	FOR INFORMATION				
Date	Nov, '19	Drawn	SA	Checked	SRC
Scale	1:20	Design	-	File Name	40419-SA01

Project	Soakaway & Drainage Design, Barn Conversion, West Drove North, Gedney Hill, For GR Merchant	Title	Infiltration Soak Away Sketch
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Plan On SA01



Section Through SA01

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Soak-Away Test SA 01

Job Reference Barn Conversion, West Drove North,
Gedney Hill

SA01	
TIME (Mins)	DEPTH mm (d)
0	390
15	385
30	390
45	390
60	390
75	390
105	390
135	390
165	390
195	388
255	385
315	385
375	382

Job No. 40419

Date 06/11/2019

Trial Dimensions

A = 1.2 m
B = 0.6 m
C = 0.8 m

C.S.Area of
SA01 = 0.72 m²

Total Volume = 0.006 m³
75% Volume = 0.004 m³
25%Volume = 0.001 m³

Time Taken From 75% Volume to 25% Volume

108 Mins

Effective Depth From 75% Volume to 25% Volume

0.004 m

50% Effective Internal Surface Area Including Base area

0.7344 m²

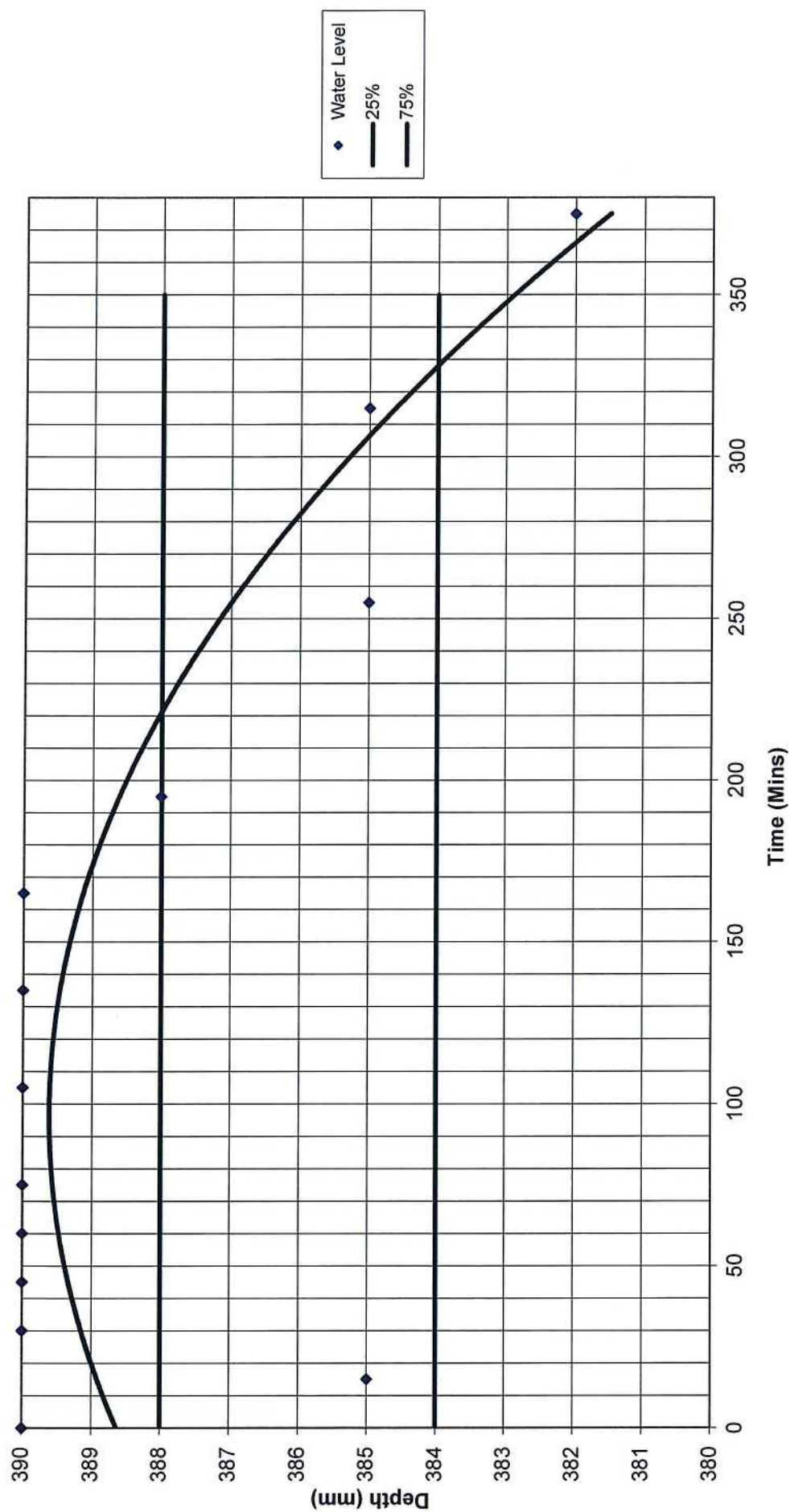
Soil Infiltration rate, f

6.0518E-07 m/s

6.05 x 10⁻³ mm/s

Barn Conversion, West Drove North, Gedney Hill, For GR Merchant
Job No. 40419

Plot showing water level against time for SA01



Job Details

Barn Conversion, West Drove North,
Gedney Hill, For GR Merchant

40419 - SA02

Title

Soakaway Size Calculations

Calculated Infiltration Rate (m/s)

6.05E-07

Design Rainfall - R	
M5-60	Z1
0.02	1
M10-D	Z2
0.02	1.24

Soakaway Dimensions

Polystorm Crate	Number	Total Lengths	Half Effective
Width	0.5	17	8.5
Length	1	2	2
Depth	0.4	1	0.4

R = 0.0248 m

Inflow To Soakaway

Area (m ²)	x	R
151		0.0248

Internal Surface Area Not Including Base (50% depth)
21.2 m²

Storage Volume
6.46 m³

Inflow = 4.9448 m³

Outflow From Soakaway

Internal SA (50%)	Infiltration Rate	Storm Duration (s)	
10.6	6.0518E-07	60	3600

Outflow = 0.023093669 m³

Storage Required

Inflow -	Outflow	
4.9448	0.023094	4.921706331

Soakaway Has Been Designed For A
10 Year Storm Of 60 Minute Duration

Storage Volume With 30% Free (Required)

6.398218231

NB. Actual Storage Volume Needs To Be
Greater Than Storage Volume + 30%

Actual Storage Volume

6.46

