



Appendix A Proposed Development Masterplan

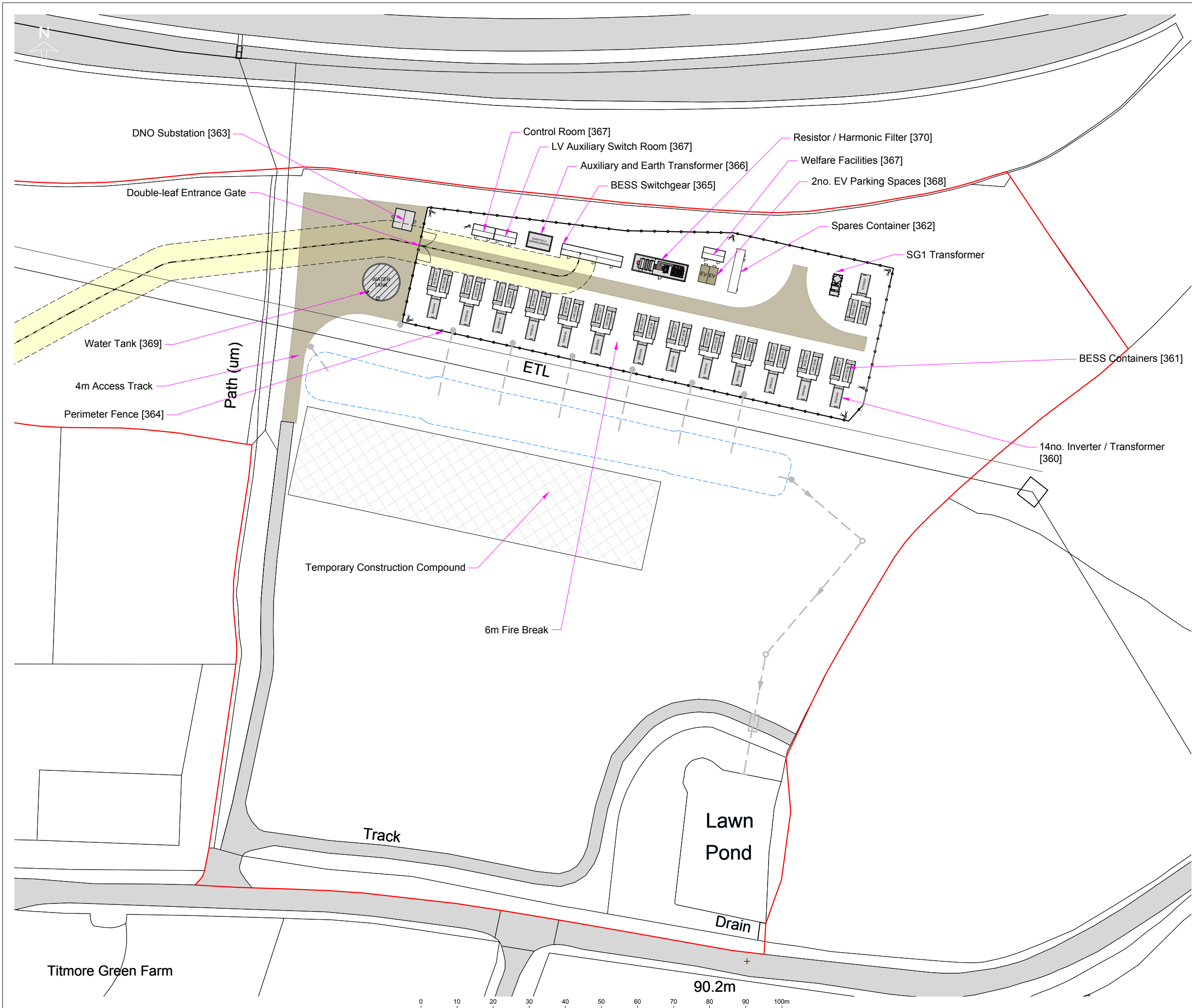
Flood Risk Assessment and Surface Water Drainage Strategy

Wymondley Battery Energy Storage System

Pivoted Power LLP (part of EDF Energy Renewables Ltd)

SLR Project No.: 402.065238.00001

10 April 2025



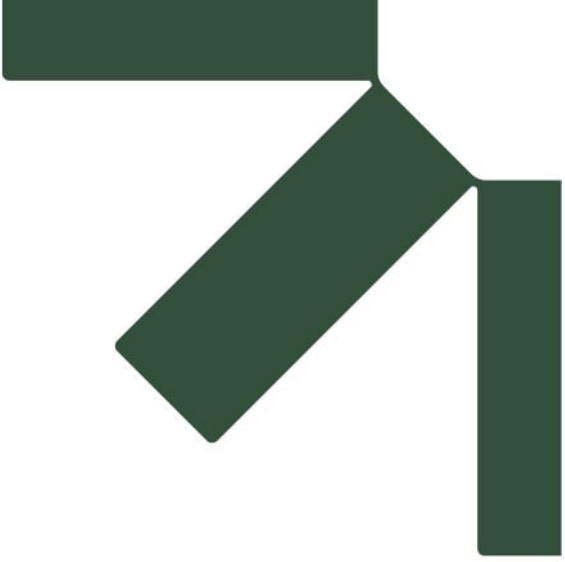
NOTES

1. Drawing details and dimensions for planning purposes only.

LEGEND

- PLANNING APPLICATION BOUNDARY
- PERIMETER FENCE
- CONSTRUCTION COMPOUND
- UNDERGROUND POC CABLE ROUTE AND EASEMENT
- SWALE
- DRAINAGE RUNS

08.	Title Updated	07.04.25	SRY
07.	Key updated	04.04.25	SRY
06.	Drainage layout updated	21.02.25	SRY
05.	Red line updated	21.02.25	SRY
04.	Site components updated	17.02.25	SRY
03.	BESS spaced to 1.5m	13.02.25	SRY
02.	Temp compound added	11.02.25	SRY
01.	Initial Issue	30.01.25	SRY
Rev	Description	Date	Checked
Drawing No. WYM-EDFR-BESS-CIV-PLN-300-08			
Project Wymondley BESS			
Title Site Layout Plan			
Scale	1:1000 @A3	Drawn by JL	Checked - Date 30.01.25



Appendix B Intrusive Ground Investigation Report

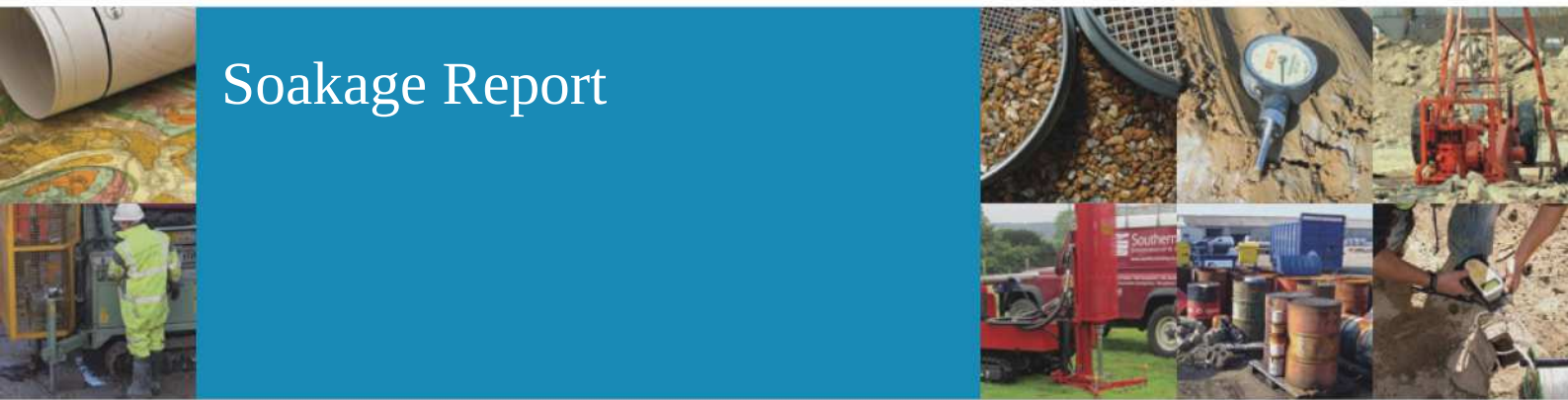
Flood Risk Assessment and Surface Water Drainage Strategy

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Soakage Report

Project Name: Little Wymondley

Location: Blakemore End Road, Little Wymondley,
Hitchin, Hertfordshire, SG4 7JJ

Client: SLR Consulting Limited

Project ID: JT0602

Report Date: 03 September 2024

Report Issue: 2

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For and on behalf of Southern Testing Laboratories Limited

DOCUMENT HISTORY AND STATUS

Issue No.	Date	Purpose or Status	Author	Check / Review
1	16/08/2024	Issued to Client	CJB/RJ	RJ
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A INTRODUCTION

1 Authority

Our authority for carrying out this work is contained in SLR Consulting Limited's Letter of Appointment (ref. 402.065238.00001) and dated 31st July 2024.

2 Location

The site is located approximately 0.6km to the south of Little Wymondley village centre, in Hertfordshire. The approximate National Grid Reference of the site is TL 21341 26739. The site location is indicated on Figure 1 within Appendix A.

3 Investigation Brief

In accordance with the Client's instructions, and our quotation, the following was included in our brief for this soakage investigation:

- Excavate 1No trial pit measuring 0.6m wide x 2.0m long x 3.0m deep at ISS site for BRE 365 soakage testing.
- Excavate 3No trial pits measuring 0.6m wide x 2.0m long x 3.0m deep at the BESS site for BRE 365 soakage testing.
- Provide factual report including calculated infiltration rates.

4 Scope

This factual report presents our exploratory hole logs and test results only.

As with any site there may be differences in soil conditions between exploratory hole positions.

This report is not an engineering design and the figures and calculations contained in the report should be used by the Engineer, taking note that variations will apply, according to variations in design loading, in techniques used, and in site conditions. Our figures therefore should not supersede the Engineer's design.

The findings and opinions conveyed via this investigation report are based on information obtained from a variety of sources as detailed within this report, and which Southern Testing Laboratories Ltd. believes are reliable. Nevertheless, Southern Testing Laboratories Ltd. cannot and does not guarantee the authenticity or reliability of the information it has obtained from others.

The investigation was conducted and this report has been prepared for the sole internal use and reliance of SLR Consulting Limited and their appointed Engineers. This report shall not be relied upon or transferred to any other parties without the express written authorisation of Southern Testing Laboratories Ltd. If an unauthorised third party comes into possession of this report they rely on it at their peril and the authors owe them no duty of care and skill.

The recommendations contained in this report are made in respect of the particular context of the investigation as described in the report and may not be appropriate to alternative development schemes. This report should be considered in its entirety and Southern Testing Laboratories Ltd accepts no responsibility for and excludes liability in respect of any omission or alteration made by others, and any use of the report for any purpose other than that for which it was produced.

B SITE SETTING

5 Geological Records

No formal desk study has been carried out, but reference has been made to both online and published geological maps to put the site into context.

5.1 Geology

The British Geological Survey Map covering the site indicates that the site geology consists of superficial Glaciofluvial Deposits over the Lowestoft Formation over bedrock deposits of the White Chalk Subgroup.

5.1.1 Glaciofluvial Deposits

The deposits comprise sediments transported and deposited by glacial meltwater, either sub-glacially, en-glacially, supra-glacially or downstream of glaciers via meltwater channels and/or glacial outwash events. Deposits are formed via number of processes and therefore vary greatly in depth. Sediments commonly comprise of sand and gravel, with moderate sorting and bedding. Fines including clay have generally been washed out leaving the sand and gravel which is commonly non-cohesive and highly permeable, a good bearing capacity and low settlement is common. However, lenses of silt, clay or organic material can be locally present.

5.1.2 Lowestoft Formation

The Lowestoft Formation comprises a large proportion of the superficial glacial deposits in Essex and East Anglia. It consists of bluish grey sandy clays containing copious chalk fragments and flints, with lesser amounts of gravel and boulders from more distant sources. This formation was formerly known as Chalky Boulder Clay.

5.1.3 White Chalk Subgroup (Hollywell Nodular Chalk & New Pit Chalk Formation)

The Holywell Nodular Chalk Formation constitutes the lowest formation in the White Chalk Subgroup. The formation typically comprises hard nodular chalks with thin flaser marls and significant proportions of shell debris in part. Inclined, conjugate, clay-mineralised and polished/striated shears are typical. The base of the formation is marked by the interbedded coloured marl and chalk succession characteristic of the Plenus Marls Member. The combination of inclined joints overlying the marl can create a groundwater flow horizon.

The New Pit Chalk Formation typically comprises a blocky creamy white, smooth textured chalk with well-developed marl seams. Small finger shaped flint occurs sporadically in the lower part of the sequence. Conjugate fractures are usually clay-coated and slickensided, reflecting the presence of many clay-rich marl seams.

The White Chalk outcrop in particular is frequently highly fractured and highly permeable, and usually has good infiltration characteristics. On the other hand, Chalk Head, highly weathered Chalk and Chalk under a low permeability superficial cover may have very poor infiltration characteristics.

Chalk is slightly soluble in water and, while it has excellent bearing properties when unweathered, this solubility can lead to deep weathering and softening, and the upper layers of chalk often have an irregular boundary with overlying strata

The Chalk may be softened by solution to a depth of 5 to 15 metres and bearing capacities and engineering properties improve with depth. Where there is an outcrop of impermeable soil overlying the chalk there may be a dramatically increased solution effect due to concentrated surface water flow to the Chalk close to the outcrop boundary.

Solution features are common in the Chalk, and these can present significant difficulties to development on affected sites.

C FIELDWORK

6 Strategy and Method

The strategy adopted for the soakage testing comprised the following:

Activity / Method	Purpose	Max Depth Range (mbgl)	Notes
TP01-TP04 and TP04A JCB 3CX 5 Tonne Tracked machine	Trial pit to investigate the ground conditions and allow for assessment of soakage potential using the BRE365 method.	2.5-3.2	BRE365 Soakage testing

Exploratory hole locations were specified by the Client and are shown in Figure 2 in Appendix A.

Due to the presence of buried and overhead utilities, particularly with regard to HV overhead pylons, a number of positions were moved slightly for health and safety reasons.

In-situ test method descriptions employed are given in Appendix B together with the test results.

7 General Site Description

The site comprises two large agricultural fields bisected by a number of overhead HV electrical cables on pylons.

The site is bound to the north by the A602 dual carriageway, to the west by Blakemore End Road with the National Grid Wymondley Substation beyond. To the south and east, the site is bound by sparse residential properties and farms set amongst generally an agricultural land use.

Access to the site from the south and west is off Stevenage Road and Blakemore End Road respectively.

8 Weather Conditions

The fieldwork was carried between the 7th and 9th August 2024, at which time the weather was generally dry and sunny. On the evening of the 8th August, intermittent rainfall was noted.

9 Soils as Found

The soils encountered are described in detail in the attached exploratory hole logs (Appendix A), but in general comprised a covering of topsoil over Glaciofluvial Deposits over the Lowestoft Formation. A summary is given below.

Depth to base (m)	Soil Type	Description
0.15-0.3	Topsoil	Loose brown silty fine to coarse Sand and very sandy slightly gravelly Clay with frequent rootlets and rare medium subrounded flint gravel.
0.4-0.8	Glaciofluvial Deposits	Brown silty gravelly fine to coarse SAND.
2.5-3.2*	Lowestoft Formation	Light brown and grey slightly gravelly sandy CLAY with occasional fissures and rare rootlets.

*Depth to base not proven.

10 Groundwater Observations

No groundwater was encountered in any of the exploratory holes undertaken on site.

D TEST RESULTS

11 Soakage Test Results

The BRE paper DG365, Ref [22] describes a method for site testing to determine soil infiltration rates at the proposed site of a soakaway. The in-situ test method is described in Appendix B.

Soakage tests were carried out across the site, at the locations shown on the attached site plan Figure 2, Appendix A. The full results of the soakage tests are presented within Appendix B.

The DG365 Ref [22], states that each pit should be allowed to drain three times to near empty, with filling on the same or consecutive days. Given the cohesive nature of the soils encountered, soakage was found to be poor and therefore three repeat tests at each location was not possible.

The infiltration rate from each trial hole is summarised in the table below. The soakage rate in this report is expressed as $l/m^2/minute$, which is a convenient rate to use. The BRE use a unit of m/sec , which is the value in $l/m^2/minute$ divided by 60,000.

Test ID	Test Depth (m bgl)	Test Number	Design Infiltration Rate		Notes
			l/m ² /minute	m/sec	
TP01	3.2	1	0.010	1.69x10 ⁻⁷	Result not compliant with BRE365 requirement since water did not fall to 25% max water depth. Calculation were based on actual fall of water level achieved.
TP02	2.8	1	0.025	4.12x10 ⁻⁷	Result not compliant with BRE365 requirement since water did not fall to 25% max water depth. Calculation were based on actual fall of water level achieved.
TP03	2.5	1	0.0046	7.72x10 ⁻⁸	Result not compliant with BRE365 requirement since water did not fall to 25% max water depth. Calculation were based on actual fall of water level achieved.
TP04	2.9	1	0.0046	7.67x10 ⁻⁸	Result not compliant with BRE365 requirement since water did not fall to 25% max water depth. Calculation were based on actual fall of water level achieved.

Note: The Design Infiltration Rate is the lowest of the three tests

Where three fillings have not been carried out, a reduction factor should be applied to the result to provide a design infiltration rate.

11.1 General Guidance on Design of Soakaways

Any soakaway scheme may require the approval of the Environment Agency, Building Control and, where applicable, the adopting Highways Authority.

Soakaways are used to store the immediate surface water run-off from hard surfaced areas, such as roof or carparks, and allow for efficient infiltration into the adjacent soil. They should be designed to discharge their stored water sufficiently quickly to provide the necessary capacity to receive run-off from a subsequent storm. The time taken for discharge depends upon the soakaway shape and size, and the surrounding soil's infiltration characteristics.

Groundwater levels can vary considerably from season to season and year to year, often rising in wet or winter weather, and falling in periods of drought. As such, a high groundwater table may affect the storage capacity of soakaways. In addition, it should be noted that an unsaturated zone may be required between the base of soakaways and the groundwater table, by the Environment Agency. Longer term monitoring may be required to establish actual groundwater levels as part of the planning approval process.

The design of soakaways can be square, circular (conventional) or trench excavations, and may be rubble filled, perforated precast concrete ring units, plastic cells or any similar structure that collects rainwater and run-off and allow discharge directly into the ground. Depending on the geological conditions, and depth at which suitable infiltration is achieved, soakaways can also be deep bored.

Long-term maintenance and inspection must be considered during the design and construction process. Maintenance of silt traps, gully pots and interceptors will improve the long-term performance of soakaways. The use of wet well chambers within the soakaway system can further assist in pollutant trapping and extending the operating life of soakaways.

Risk of pollution to the quality of groundwater must be considered as part of the design.

Generally, roof and surface run-off should not significantly impact on groundwater quality and subject to appropriate approvals from the Environment Agency could be discharged directly to soakaways. However, although again subject to approvals from the Environment Agency, paved surface run-off for larger trafficked areas should generally be passed through a suitable form of oil interception device prior to discharge to the soakaway.

Care must be taken to ensure that the discharge of large volumes of surface run-off into the soil does not disrupt the existing sub-surface drainage patterns. Similarly in areas of sloping topography, consideration should be given to the siting of soakaways to avoid potential discharge and or flooding of down slope areas.

REFERENCES

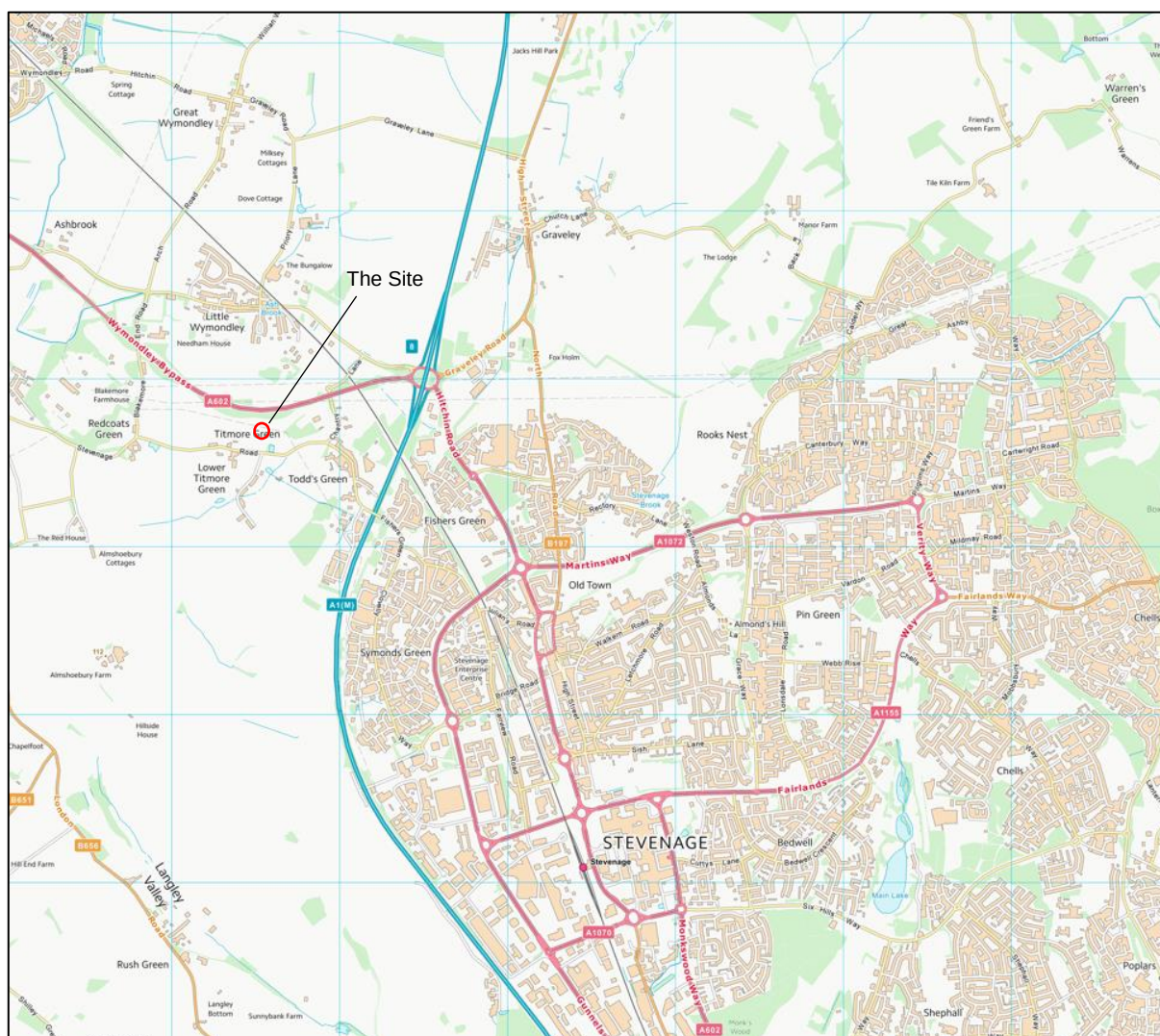
- [1] Building Research Establishment (BRE), "DG365 Soakaway Design," 2016.
- [2] BSI Standards, "BS 5930 Code of practice for ground investigations," 2015.
- [3] BSI Standards, "BS 3882:2015 Specification for Topsoil," 2015.
- [4] CIRIA, "C574 Engineering in Chalk," 2002.
- [5] R. N. Mortimore, Logging the Chalk, 2014.



APPENDIX A

Site Plans and Exploratory Hole Logs





Site:	Blakemore End Road, Little Wymondley, Hitchin SG4 7JJ	Project ID	JT0602
Figure 1	Site Location Plan	Date:	12/08/2024

Project Name:	Little Wymondley	Project ID:	JT0602	Figure 2 - Exploratory Hole Location Plan
Location:	Blakemore End Road, Little Wymondley, Hitchin SG4 7JJ	Engineer:	RJ	
Client:	SLR Consulting Limited	Scale:	1:5000	



Legend Key

- Locations By Type - Empty
- Locations By Type - TP

Key to Exploratory Hole Logs, Plans and Sections

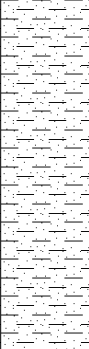
Backfill Symbols		Pipe Symbols		Principal Soil Types		Principal Rock Types		Drilling Records	
Arisings		Plain Pipe		Topsoil		Mudstone		Water Strike	
Concrete		Slotted Pipe		Made Ground		Claystone		Depth Water Rose	
Blacktop		Piezometer		Clay		Siltstone		Total Core Recovery (%) [TCR]	
Bentonite		Piezometer Tip		Silt		Sandstone		Solid Core Recovery (%) [SCR]	
Gravel Filter		Filter Tip		Sand		Limestone		Rock Quality Index (%) RQD]	
Sand Filter		Extensometer		Gravel		Chalk		Fracture Index (fractures / m) [FI]	
		Inclinometers		Peat					

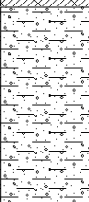
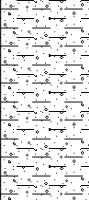
All soil and rock descriptions are in general accordance with BS5930 2015, BS EN ISO 14688-1:2002+A1:2013 and BS EN ISO 14689-1:2003. Chalk descriptions are also based on CIRIA C574 and "Logging the Chalk – R.N. Mortimer 2015". The Geology Code is only provided where a positive identification of the sample strata has been made.

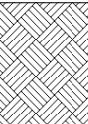
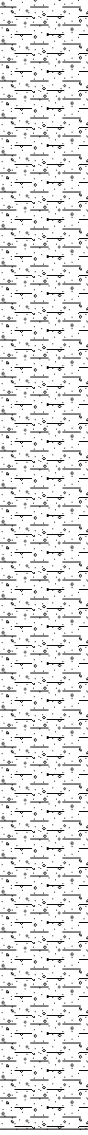
Location / Method Identifiers		In-situ Test Location / Method	
BH	Borehole (undefined)	DP	Dynamic Probe
CP	Cable Percussive	CPT	Cone Penetration Test
RC	Rotary Core	CBR	In-situ CBR Test
RO	Rotary Open Hole	DCP	CBR using Dynamic Cone Penetrometer
ODC	Rotary Odex/Symmetrix drilling cased	CBRT	CBR using TRL Probe
CP+RC	Cable Percussive to Rotary Core	PB	Plate Bearing Test
SNC	Sonic	SPT (S)	Standard Penetration Test (Split Barrel Sampler)
CFA	Continuous Flight Auger	SPT (C)	Standard Penetration Test (Solid Cone)
FA	Flight Auger	N	SPT Result
VC	Vibro Core	-/-	Blows/Penetration (mm) after seating drive
WLS+RC	Windowless (Dynamic) Sampler to Rotary Core	-*/-	Total Blows / Penetration (mm)
WLS	Windowless Sampler	()	Extrapolated Value
WS	Window Sampler	PPT	Perth Penetration (In-House Method - Equivalent N Value)
HA	Hand Auger	HP / UCS	Strength from Hand Penetrometer (kN/m ²)
C	Road / Pavement Core	IVN	Strength from Hand Vane ((kN/m ²) P = peak, R = residual
IP	Inspection Pit (Hand Excavation)	PID	Photo Ionisation Detector (ppm)
TP	Trial Pit (Machine Excavated)	MEXE	Mexi-Cone CBR (%)
OP	Observation Pit (Supported Excavation Hand or Machine)		

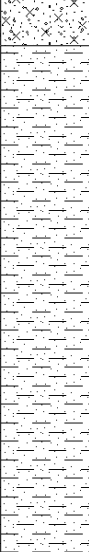
Samples / Test Type	
B	Bulk Sample
BLK	Block Sample
C	Core Sample
CBRS	CBR Mould Sample
D	Small Disturbed Sample
ES	Environmental Sample (Soil)
EW	Environmental Sample (Water)
GS	Environmental Sample (Gas)

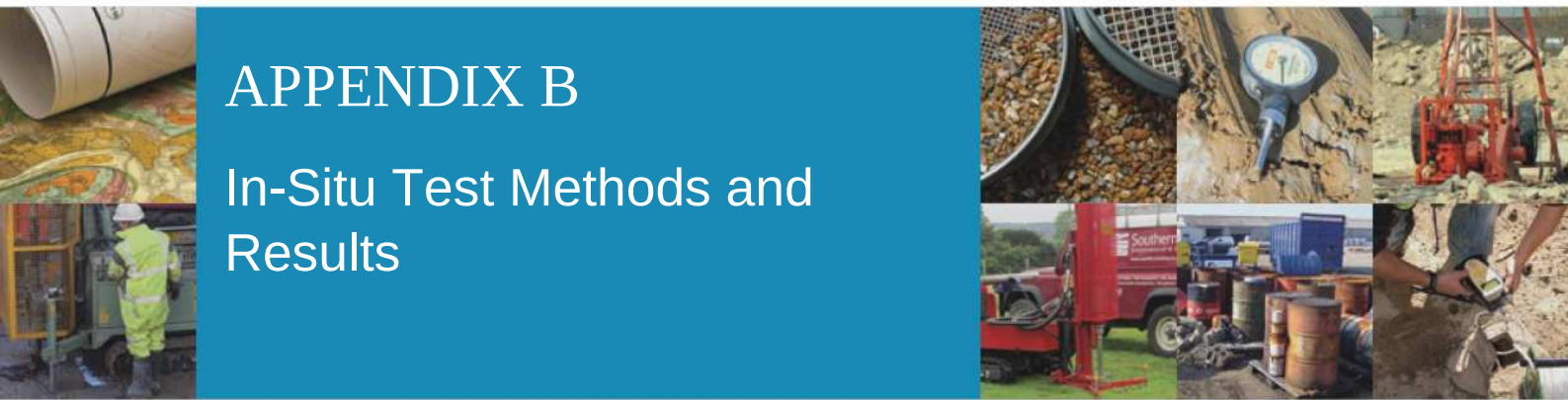
Samples / Test Type	
SPTLS	Standard Penetration Test Split Barrel Sample
TW	Thin Wall Push In Sample (e.g. Shelby Sampler)
U	Undisturbed Open Drive Sample (blows to take)
UT	Thin Wall Undisturbed Open Drive Sample (blows to take)
W	Water Sample (Geotechnical)
SP	Sample from Stockpile
P	Piston Sample
AMAL	Amalgamated Sample

 www.southerntesting.co.uk tel:01342 333100 www.stconsult.co.uk tel:01604 500020				Start - End Date:		Project ID:		Machine Type:		TP01		
				07/08/2024 - 09/08/2024		JT0602		JCB 3CX		Sheet 1 of 1		
Project Name:		Little Wymondley			Remarks:		Co-ordinates:		Level (m AOD):		Logger:	
							E 520846 - N 226902		95.31		CJB	
Location:		Blakemore End Road, Little Wymondley, Hitchin SG4 7JJ			1) National Grid Reference surveyed in. 2) Elevation surveyed in. 3) Groundwater not encountered. 4) BRE 365 testing undertaken. 5) Exploratory hole backfilled with material arisings upon completion.							
Client:		SLR Consulting Limited										
Samples and Insitu Testing				Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description				
Depth (m)	Type	Results										
				95.2	(0.15)		0.15	TOPSOIL comprising: Loose brown gravelly fine to coarse SAND. Gravel consists of fine to coarse subrounded to subangular flint.				
					(0.45)			Loose (estimated) brown silty gravelly fine to coarse SAND. Gravel consists of fine to coarse subrounded to angular flint. [GLACIOFLUVIAL DEPOSITS]				
				94.7			0.60	Stiff (estimated) light reddish brown slightly sandy CLAY with rare fissuring. [LOWESTOFT FORMATION]				1
					(0.70)							
				94.0			1.30	Firm (estimated) orangish brown sandy CLAY with rare fissures. [LOWESTOFT FORMATION]				2
					(1.90)			at 2.3m bgl becoming soft and occasional subangular flint cobble encountered.				
								at 2.8m bgl occasional fine to medium angular flint gravel encountered.				3
				92.1			3.20	Pit terminated at 3.20m.				4

 www.southerntesting.co.uk tel:01342 333100 www.stconsult.co.uk tel:01604 500020				Start - End Date:		Project ID:		Machine Type:		TP02		
				07/08/2024 - 09/08/2024		JT0602		JCB 3CX		Sheet 1 of 1		
Project Name:		Little Wymondley			Remarks:		Co-ordinates:		Level (m AOD):		Logger:	
							E 521509 - N 226745		95.30		CJB	
Location:		Blakemore End Road, Little Wymondley, Hitchin SG4 7JJ			1) National Grid Reference surveyed in. 2) Elevation surveyed in. 3) Groundwater not encountered. 4) BRE 365 testing undertaken. 5) Exploratory hole backfilled with material arisings upon completion.							
Client:		SLR Consulting Limited										
Samples and Insitu Testing				Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description				
Depth (m)	Type	Results										
				95.0	(0.30)		0.30	TOPSOIL comprising: Loose brown silty fine to coarse SAND with frequent rootlets and rare medium subrounded flint gravel.				
					(0.90)			Soft (estimated) orangish brown very sandy gravelly CLAY. Gravel consists of fine to coarse subrounded to subangular flint. [LOWESTOFT FORMATION]				
								at 0.7m bgl ~100mm diameter ceramic land drain encountered.				1
				94.1			1.20	Firm (estimated) light reddish brown sandy gravelly CLAY with occasional fissures. Gravel consists of fine to medium subrounded to angular flint. [LOWESTOFT FORMATION]				
								at 1.4m bgl becoming very stiff.				
								at 1.7m bgl frequent fissuring and becoming firm.				
					(1.60)			below 2.5m bgl no gravel encountered.				2
				92.5			2.80	Pit terminated at 2.80m.				
												3
Pit Dimension (m)				Pit Stability:				Water Strikes:				
Width:	0.50	Stable.										
Length:	2.30											
Depth:	2.80											

Southern Testing ST Consult www.southerntesting.co.uk tel:01342 333100 www.stconsult.co.uk tel:01604 500020				Start - End Date: 07/08/2024 - 09/08/2024		Project ID: JT0602		Machine Type: JCB 3CX		TP03 Sheet 1 of 1	
Project Name: Little Wymondley			Remarks: 1) National Grid Reference surveyed in. 2) Elevation surveyed in. 3) Groundwater not encountered. 4) BRE 365 testing undertaken. 5) Exploratory hole terminated due to refusal. 6) Exploratory hole backfilled with material arisings upon completion.		Co-ordinates: E 521659 - N 226732		Level (m AOD): 95.16		Logger: CJB		
Location: Blakemore End Road, Little Wymondley, Hitchin SG4 7JJ											
Client: SLR Consulting Limited											
Samples and Insitu Testing			Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description				
Depth (m)	Type	Results									
			94.9	(0.25)		0.25	TOPSOIL comprising: Brown very sandy slightly gravelly CLAY with frequent rootlets.				
							Stiff (estimated) light brown and grey slightly gravelly sandy CLAY with occasional fissures and rare rootlets. Gravel consists of fine to medium subrounded to subangular flint. [LOWESTOFT FORMATION]				
			below 0.7m bgl no rootlets.								
			at 0.9m bgl rare subangular nodular flint cobbles encountered.								
			below 1.2m bgl occasional pink mottling and rare fine subangular pink sandstone gravel.								
			at 1.4m bgl becoming desiccated and ~200mm wide pocket of white clayey silt encountered.								
			at 1.8m bgl occasional fine to coarse subangular chalk gravel encountered.								
			at 2.3m bgl becoming very stiff.								
			at 2.45m bgl recovered as coarse gravel size lumps of clay. Pit terminated at 2.50m.								
						92.7	(2.25)		2.50		
Pit Dimension (m)			Pit Stability:				Water Strikes:				
Width:	0.50		Stable.								
Length:	2.20										
Depth:	2.50										

 www.southerntesting.co.uk tel:01342 333100 www.stconsult.co.uk tel:01604 500020				Start - End Date:		Project ID:		Machine Type:		TP04			
				07/08/2024 - 09/08/2024		JT0602		JCB 3CX		Sheet 1 of 1			
Project Name:		Little Wymondley			Remarks:		Co-ordinates:		Level (m AOD):		Logger:		
							E 521427 - N 226751		95.76		CJB		
Location:		Blakemore End Road, Little Wymondley, Hitchin SG4 7JJ			1) National Grid Reference surveyed in. 2) Elevation surveyed in. 3) Groundwater not encountered. 4) BRE 365 testing undertaken. 5) Exploratory hole backfilled with material arisings upon completion.								
Client:		SLR Consulting Limited											
Samples and Insitu Testing				Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description					
Depth (m)	Type	Results											
				95.5	(0.30)		0.30	TOPSOIL comprising: Light brown clayey fine SAND with occasional rootlets and rare fine to medium angular flint gravel.				1	
					(0.50)			Loose (estimated) dark brown slightly gravelly silty fine to medium SAND with rare ~3-5mm wide roots. Gravel consists of fine to coarse subrounded to angular flint. [GLACIOFLUVIAL DEPOSITS]					
				95.0	(1.70)		0.80	Stiff (estimated) light brown sandy CLAY with occasional fissuring and rare black organic staining and fine angular flint gravel. [LOWESTOFT FORMATION]					
								at 1.2m bgl becoming very stiff and rare angular flint cobble encountered.					
								at 1.5m bgl flint boulder measuring 300mm x 150mm x 100mm encountered.					
								at 1.9m bgl ~10mm wide root encountered.					
				93.3	(0.40)		2.50	at 2.2m bgl occasional fine to medium subrounded to angular chalk gravel.					
								at 2.4m bgl ~100mm pocket of white clayey silt.					
				92.9			2.90	Stiff (estimated) greyish brown slightly sandy slightly gravelly CLAY with occasional fissures. Gravel consists of fine subangular chalk. [LOWESTOFT FORMATION]					
								Pit terminated at 2.90m.					
												3	
													4
													5
Pit Dimension (m)				Pit Stability:				Water Strikes:					
Width:		0.50		Stable.									
Length:		2.30											
Depth:		2.90											

A collage of six images related to geotechnical testing. Top left: A large white pipe. Top middle: A close-up of a soil sample in a sieve. Top right: A pressure gauge attached to a soil sample. Middle left: A worker in a high-visibility suit operating a machine. Middle right: A red truck with 'Southern' written on it. Bottom right: A person using a tool to work on a soil sample.

APPENDIX B

In-Situ Test Methods and Results

B

Soil and Rock Descriptions

All soil and rock descriptions are in general accordance with BS5930 Ref [4].

Anthropogenic soils ('made ground' or 'fill') describe materials which have been placed by man and can be divided into those composed of reworked natural soils and those composed of or containing man-made materials. 'Fill' is used to describe material placed in a controlled manner and 'made ground' is used to describe materials placed without strict engineering control.

The classification of materials such as topsoil is based on visual description only and should not be interpreted to mean that the material complies with criteria used in BS 3882 Ref [33].

Chalk descriptions are based on CIRIA C574 Ref [4] and Mortimore Ref [5].

The geology code is only provided on logs where a positive identification of the sample strata has been made.

Soakage Tests (after BRE DG365 2016)

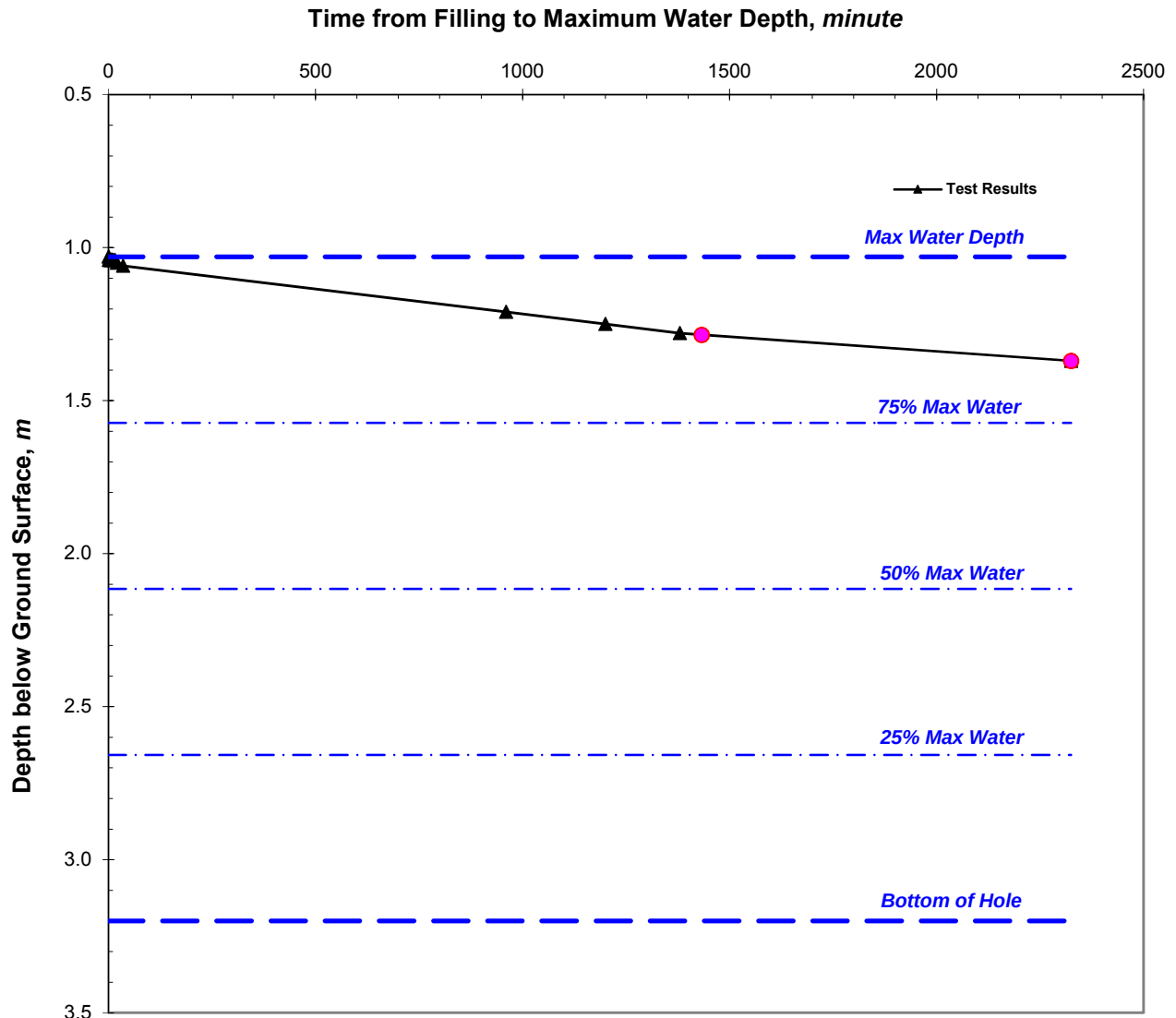
The BRE DG365 Ref [22] paper on soakaway design allows for the design of trench soakaways as well as traditional square and circular soakaways.

The test to measure the soil infiltration rate is carried out in pits which are excavated to the full depth of the proposed soakaway. The trial pits are filled and allowed to drain to empty or near empty, three times, on the same day or on consecutive days. Water levels are recorded against time. Where the sides are unstable the pit should be filled with granular material to provide stability during the test.

Calculated soakage rates are expressed as l/m²/minute, which is a convenient rate to use. The BRE use a unit of m/sec, which is the value in l/m²/minute divided by 60,000.

BRE Digest DG365 Soakage Test

Test Hole No: TP01
Test No: Test No 1 (Initial)



Pit Length, m	2.400	Depth to Water at Start of Test, m	1.030
Pit Width, m	0.550	Max Water Dropdown during Test, m	0.340
Depth to Pit Base, m	3.200	Total Soakage Test Time, min	2325.0
Depth to Top of Permeable Soils, m		Mean Internal Discharge Area, m ²	12.368
Depth to Groundwater Surface, m		Discharge Rate, litre/min	0.126
Depth to Top of Granular Fill, m		Soakage Rate, litre/m ² /min	0.010
Voids Assumed for Granular Fill, %	100%	BRE Soil Infiltration Rate, m/sec	1.69E-07

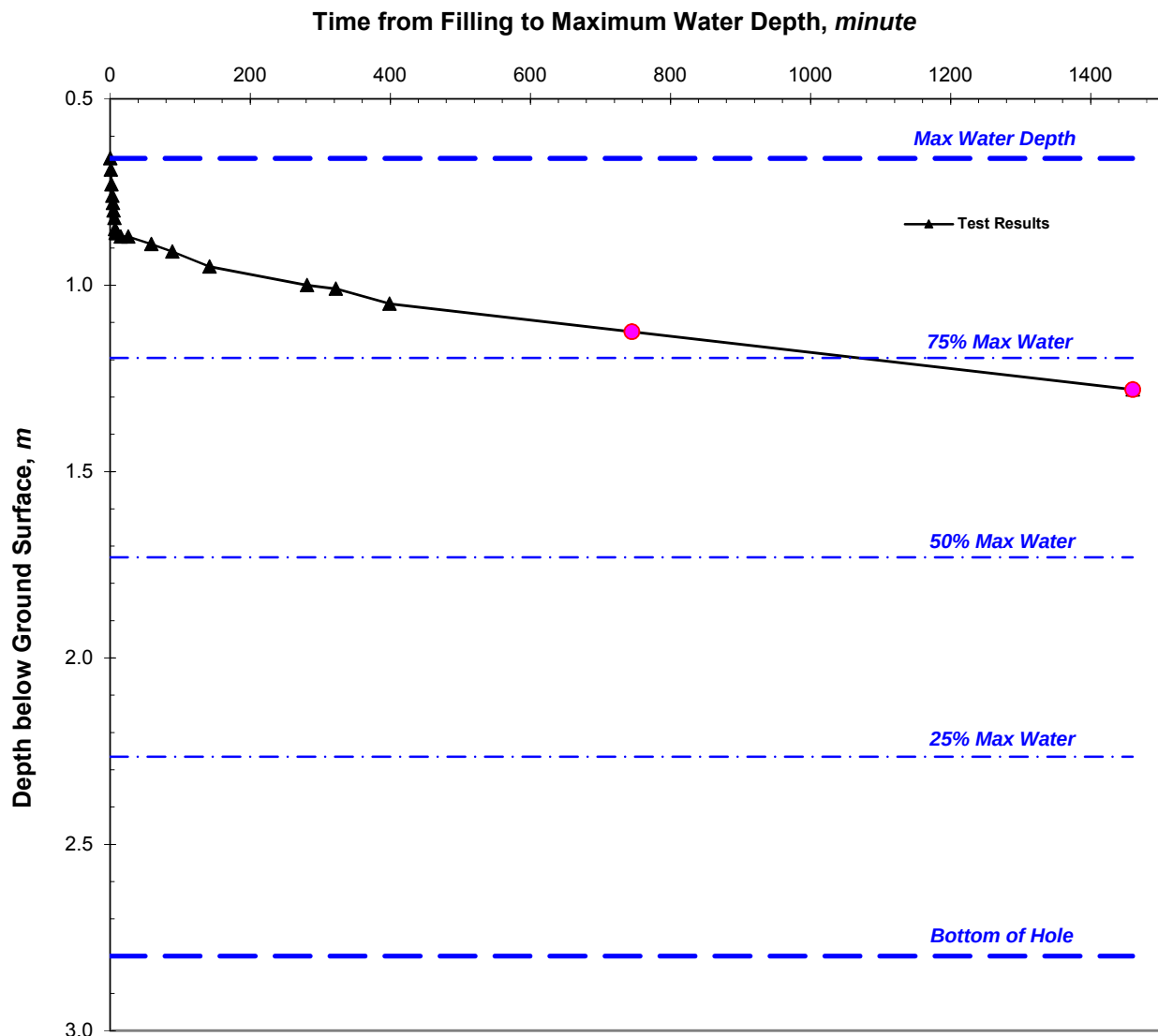
Comments:

Water level did not fall to 75% max water depth, calculations were based on actual fall of water level achieved.
Result not compliant with BRE365 requirement since water did not fall to 25% max water depth.

Client: SLR Consulting Limited	Job No: JT0602	Test Date: 07/Aug/2024
Site: , Little Wymondley, Hitchin	Tested By: CP/JB	Engineer: RJ Fig. S1

BRE Digest DG365 Soakage Test

Test Hole No: TP02
Test No: Test No 1 (Initial)



Pit Length, m	2.300	Depth to Water at Start of Test, m	0.660
Pit Width, m	0.500	Max Water Dropdown during Test, m	0.620
Depth to Pit Base, m	2.800	Total Soakage Test Time, min	1460.0
Depth to Top of Permeable Soils, m		Mean Internal Discharge Area, m ²	10.096
Depth to Groundwater Surface, m		Discharge Rate, litre/min	0.249
Depth to Top of Granular Fill, m		Soakage Rate, litre/m ² /min	0.025
Voids Assumed for Granular Fill, %	100%	BRE Soil Infiltration Rate, m/sec	4.12E-07

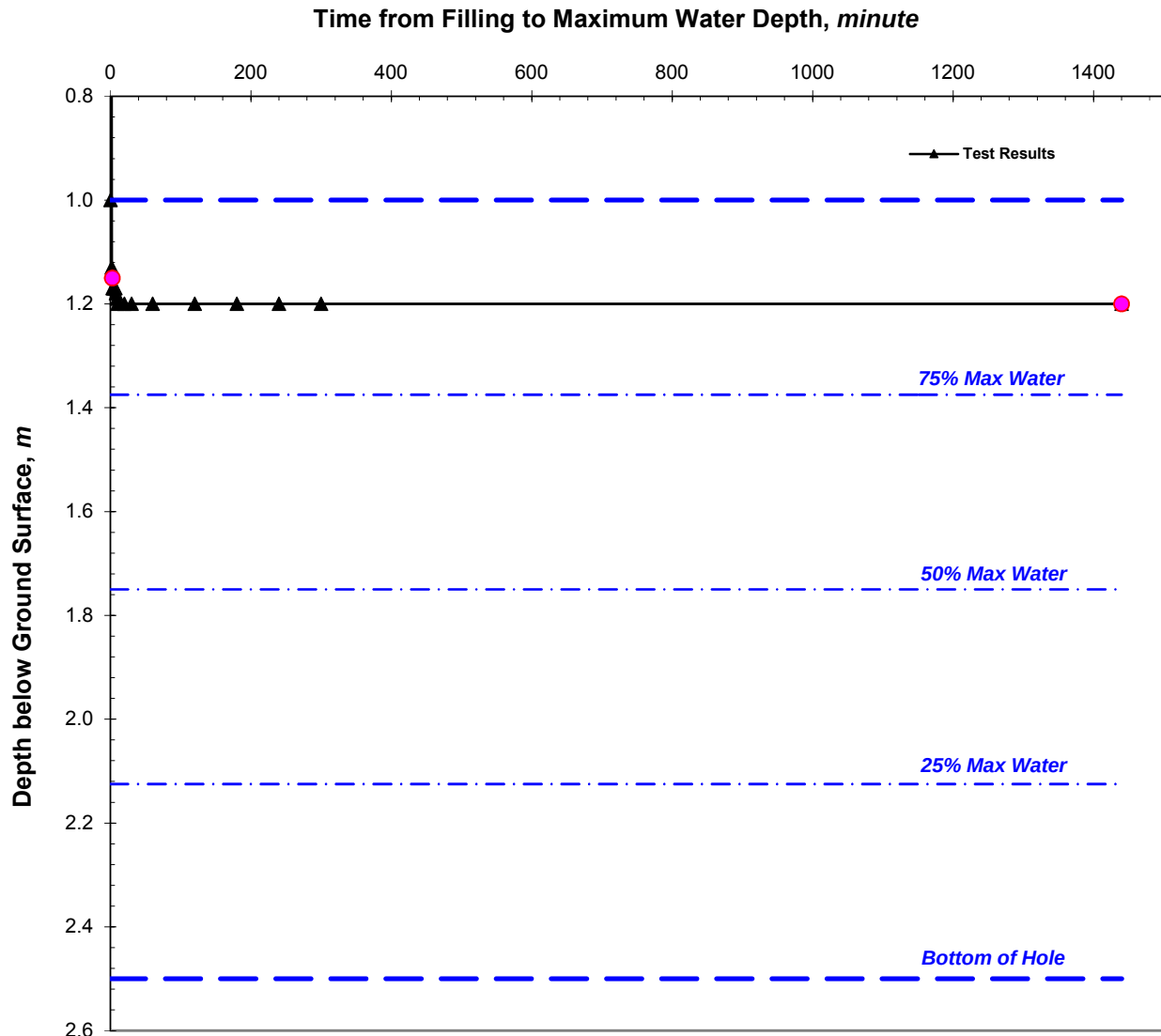
Comments:

Water level fell to 75% -- 50% max water depth, calculations were based on actual fall of water level achieved.
Result not compliant with BRE365 requirement since water did not fall to 25% max water depth.

Client: SLR Consulting Limited	Job No: JT0602	Test Date: 08/Aug/2024
Site: , Little Wymondley, Hitchin	Tested By: CP/JP	Engineer: RJ Fig. S2

BRE Digest DG365 Soakage Test

Test Hole No: TP03
Test No: Test No 1 (Initial)



Pit Length, m	2.200	Depth to Water at Start of Test, m	1.000
Pit Width, m	0.500	Max Water Dropdown during Test, m	0.200
Depth to Pit Base, m	2.500	Total Soakage Test Time, min	1440.0
Depth to Top of Permeable Soils, m		Mean Internal Discharge Area, m ²	8.255
Depth to Groundwater Surface, m		Discharge Rate, litre/min	0.038
Depth to Top of Granular Fill, m		Soakage Rate, litre/m ² /min	0.0046
Voids Assumed for Granular Fill, %	100%	BRE Soil Infiltration Rate, m/sec	7.72E-08

Comments:

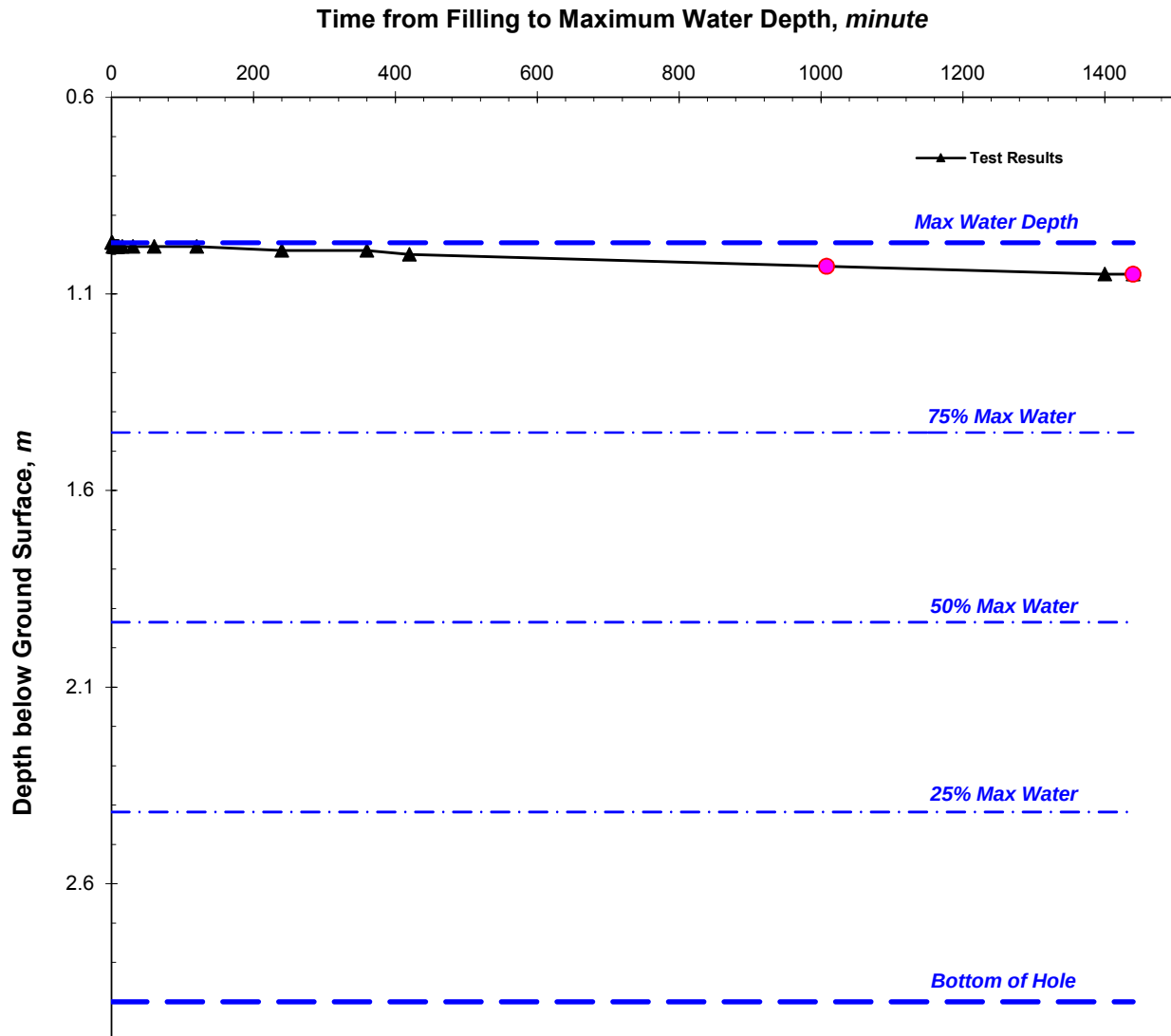
Water level did not fall to 75% max water depth, calculations were based on actual fall of water level achieved.
Result not compliant with BRE365 requirement since water did not fall to 25% max water depth.

Client: SLR Consulting Limited	Job No: JT0602	Test Date: 08/Aug/2024
Site: , Little Wymondley, Hitchin	Tested By: CP/JP	Engineer: RJ Fig. S3

BRE Digest DG365 Soakage Test

Test Hole No: TP04

Test No: Test No 1 (Initial)



Pit Length, m	2.300	Depth to Water at Start of Test, m	0.970
Pit Width, m	0.500	Max Water Dropdown during Test, m	0.080
Depth to Pit Base, m	2.900	Total Soakage Test Time, min	1440.0
Depth to Top of Permeable Soils, m		Mean Internal Discharge Area, m ²	11.566
Depth to Groundwater Surface, m		Discharge Rate, litre/min	0.053
Depth to Top of Granular Fill, m		Soakage Rate, litre/m ² /min	0.0046
Voids Assumed for Granular Fill, %	100%	BRE Soil Infiltration Rate, m/sec	7.67E-08

Comments:

Water level did not fall to 75% max water depth, calculations were based on actual fall of water level achieved.
Result not compliant with BRE365 requirement since water did not fall to 25% max water depth.

Client: SLR Consulting Limited	Job No: JT0602	Test Date: 08/Aug/2024
Site: , Little Wymondley, Hitchin	Tested By: CP/JP	Engineer: RJ Fig. S4



Photograph 1 - Looking down within TP01.



Photograph 2 - TP01 subsoil arisings.



Photograph 3 - Looking down within TP02.



Photograph 4 - TP02 subsoil arisings.



Photograph 5 - Looking down within TP03.



Photograph 6 - TP03 subsoil arisings.



Photograph 7 - Looking down within TP04.



Photograph 8 - TP04 subsoil arisings.



Photograph 9 - Looking down within TP04A.



Photograph 10 - TP04A subsoil arisings.



Photograph 11 - Looking south-west across the eastern parts of the site.



Photograph 12 - Looking west across the eastern parts of the site.



Photograph 13 – Looking broadly north across the eastern part of the site.



Photograph 14 – Looking east from the western boundary of the site.



Photograph 15 – Facing west at western site boundary and entrance from Blakemore End Road.

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Appendix C Anglian Water Asset Plan

Flood Risk Assessment and Surface Water Drainage Strategy

Wymondley Battery Energy Storage System

Pivoted Power LLP (part of EDF Energy Renewables Ltd)

SLR Project No.: 402.065238.00001

10 April 2025





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Date: 13/06/24

Scale: 1:1250

Map Centre: 521707,226709

Data updated: 30/04/24

Our Ref: 1493974 - 3

Wastewater Plan A3

This plan is provided by Anglian Water pursuant its obligations under the Water Industry Act 1991 sections 198 or 199. It must be used in conjunction with any search results attached. The information on this plan is based on data currently recorded but position must be regarded as approximate. Service pipes, private sewers and drains are generally not shown. Users of this map are strongly advised to commission their own survey of the area shown on the plan before carrying out any works. The actual position of all apparatus MUST be established by trial holes. No liability whatsoever, including liability for negligence, is accepted by Anglian Water for any error or inaccuracy or omission, including the failure to accurately record, or record at all, the location of any water main, discharge pipe, sewer or disposal main or any item of apparatus. This information is valid for the date printed. This plan is produced by Anglian Water Services Limited (c) Crown copyright and database rights 2024 Ordnance Survey 100022432. This map is to be used for the purposes of viewing the location of Anglian Water plant only. Any other uses of the map data or further copies is not permitted. This notice is not intended to exclude or restrict liability for death or personal injury resulting from negligence.

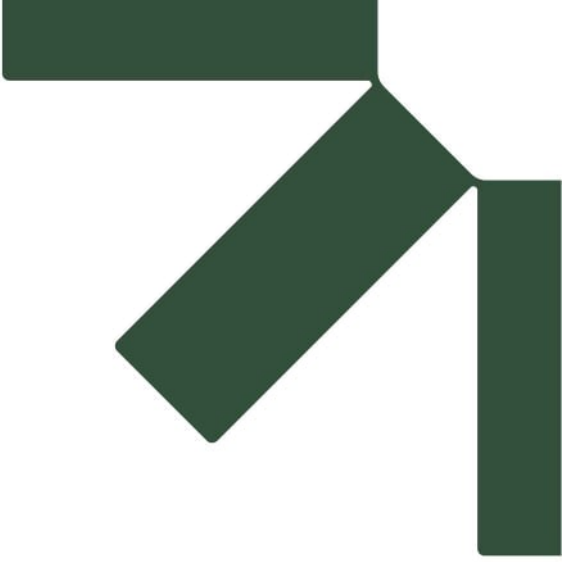
Foul Sewer				
Surface Sewer		Outfall*		
Combined Sewer				
Final Effluent		Inlet*		
Rising Main*				
Private Sewer*		Manhole*		
Decommissioned Sewer*				

*(Colour denotes effluent type)

utilitysitesearch@outlook.com

WY3





Appendix D Affinity Water Asset Plan

Flood Risk Assessment and Surface Water Drainage Strategy

Wymondley Battery Energy Storage System

Pivoted Power LLP (part of EDF Energy Renewables Ltd)

SLR Project No.: 402.065238.00001

10 April 2025



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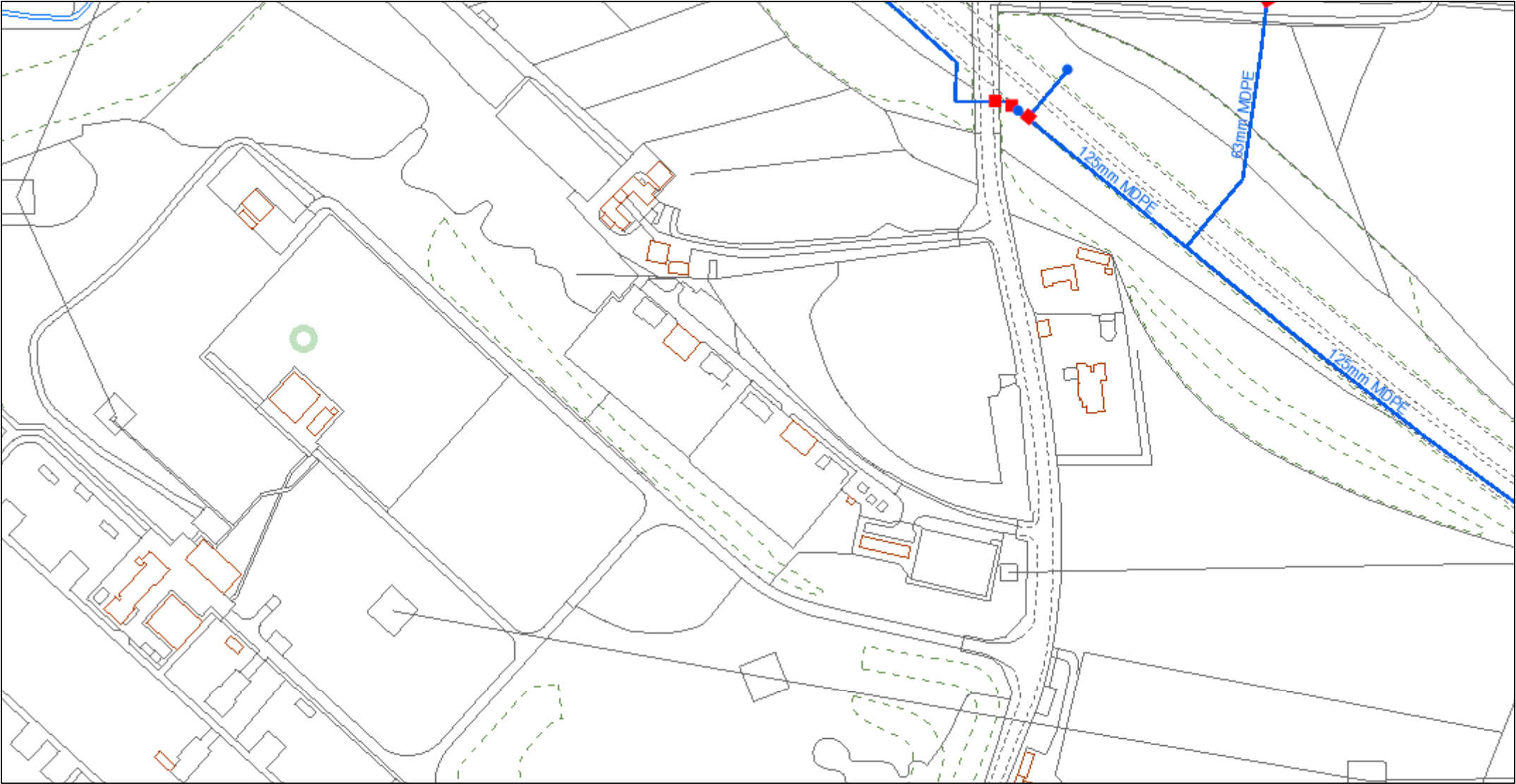
— Distribution Main	● Hydrant
— Asbestos Distribution Main	■ Fitting
— Abandoned Main	 Easement
— Asbestos Abandoned Main	 Company Boundary
— Adit / Tunnel	
— Cable	
● Searched Location	



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	Asbestos Distribution Main		Fitting
	Abandoned Main		Easement
	Asbestos Abandoned Main		Company Boundary
	Adit / Tunnel		
	Cable		
	Searched Location		



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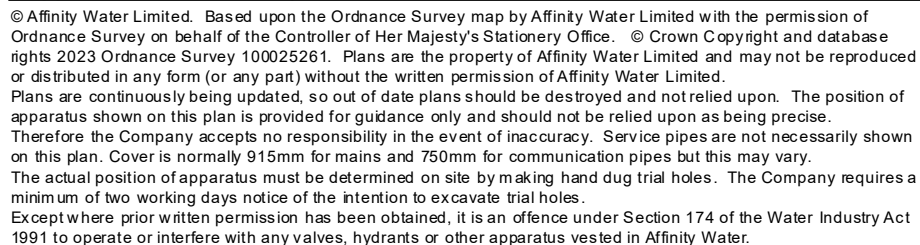


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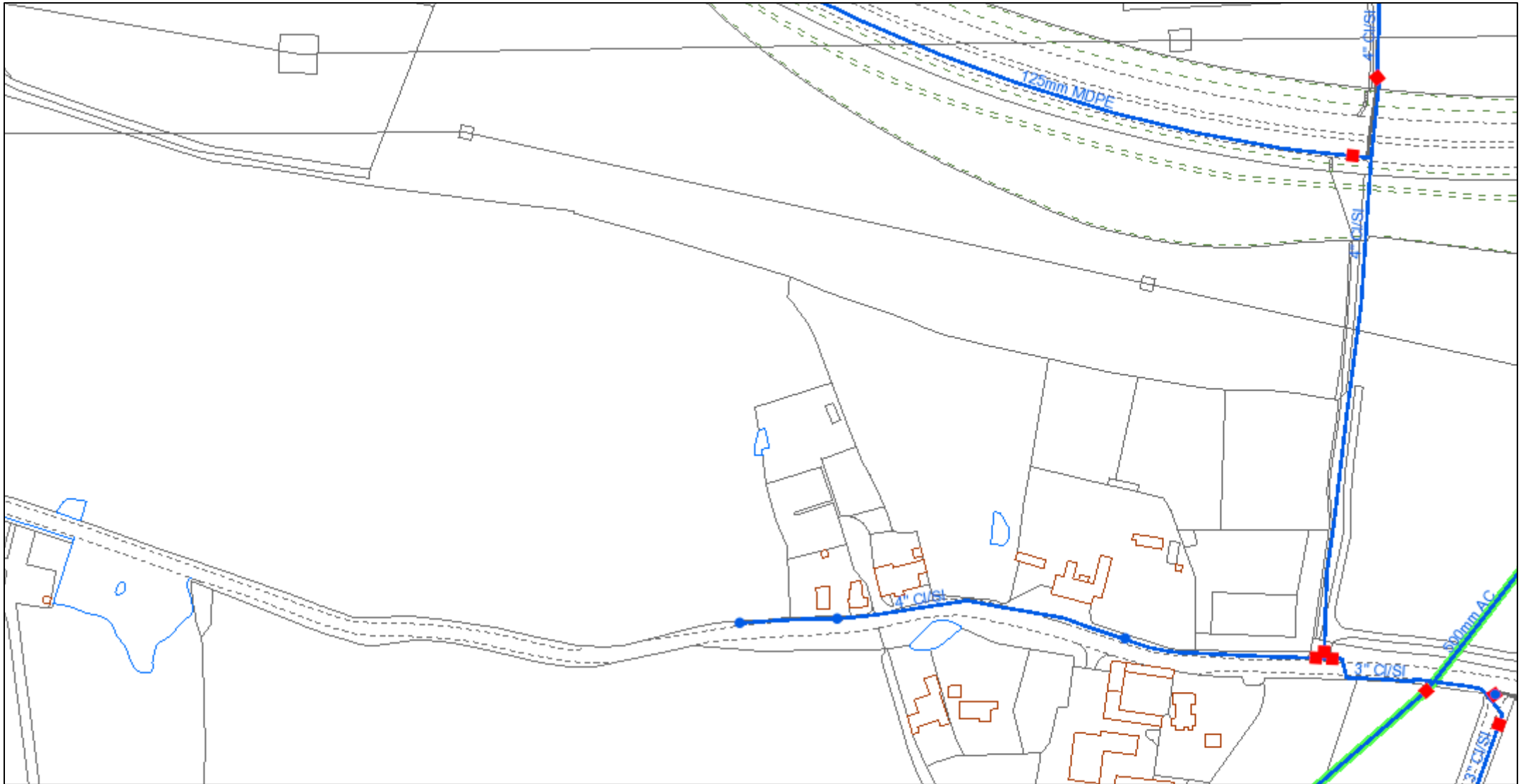


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-  Distribution Main
 Asbestos Distribution Main
 Abandoned Main
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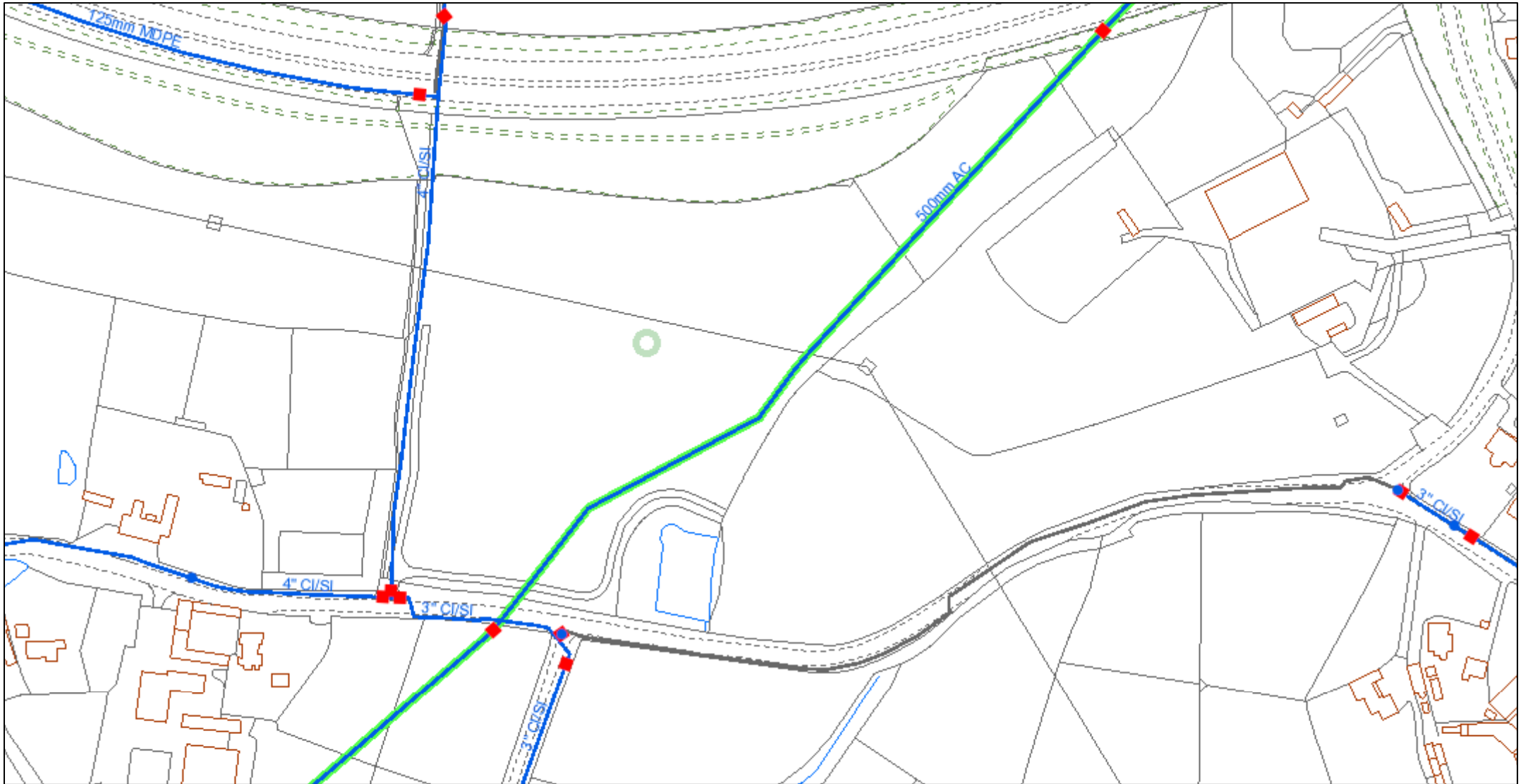


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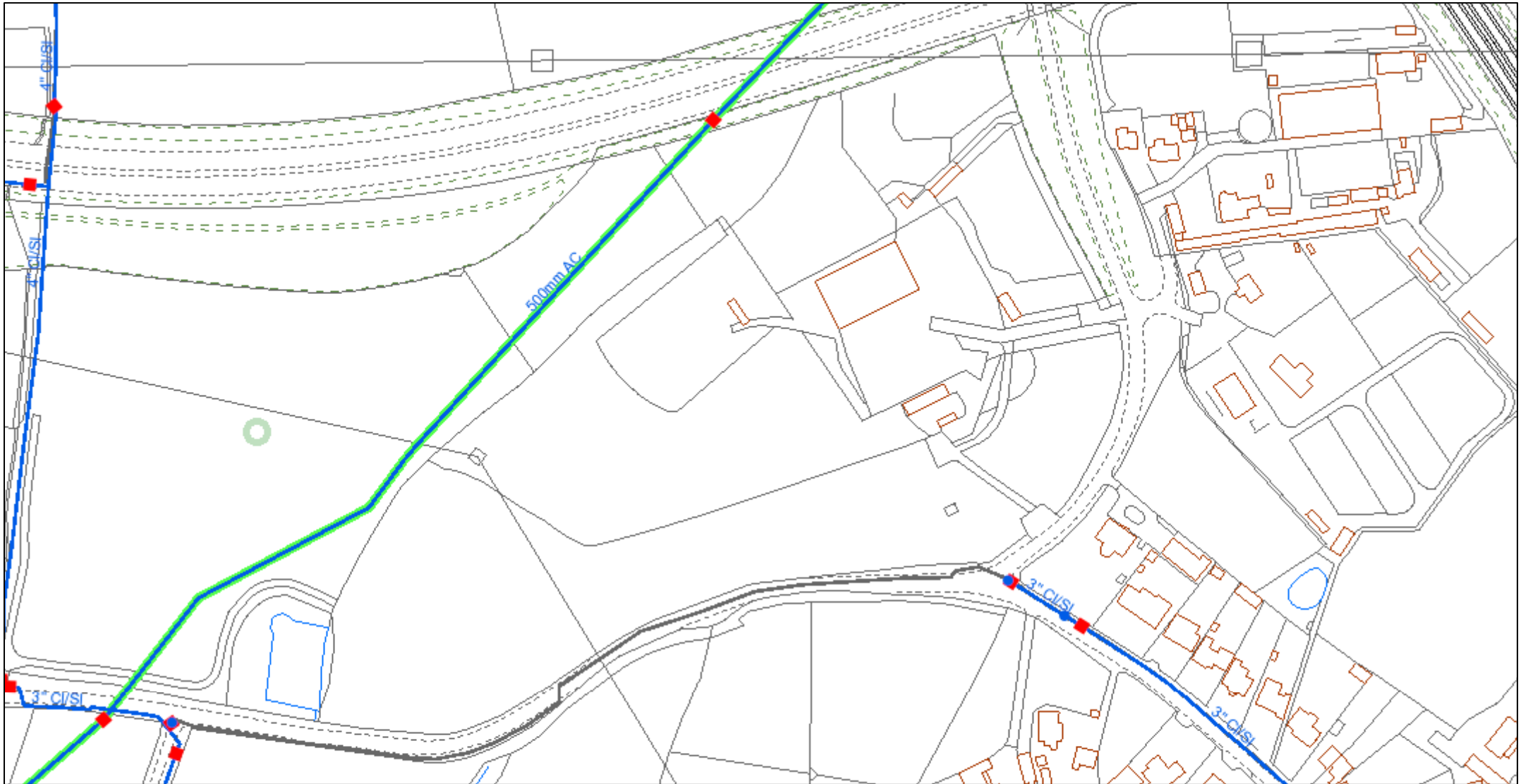
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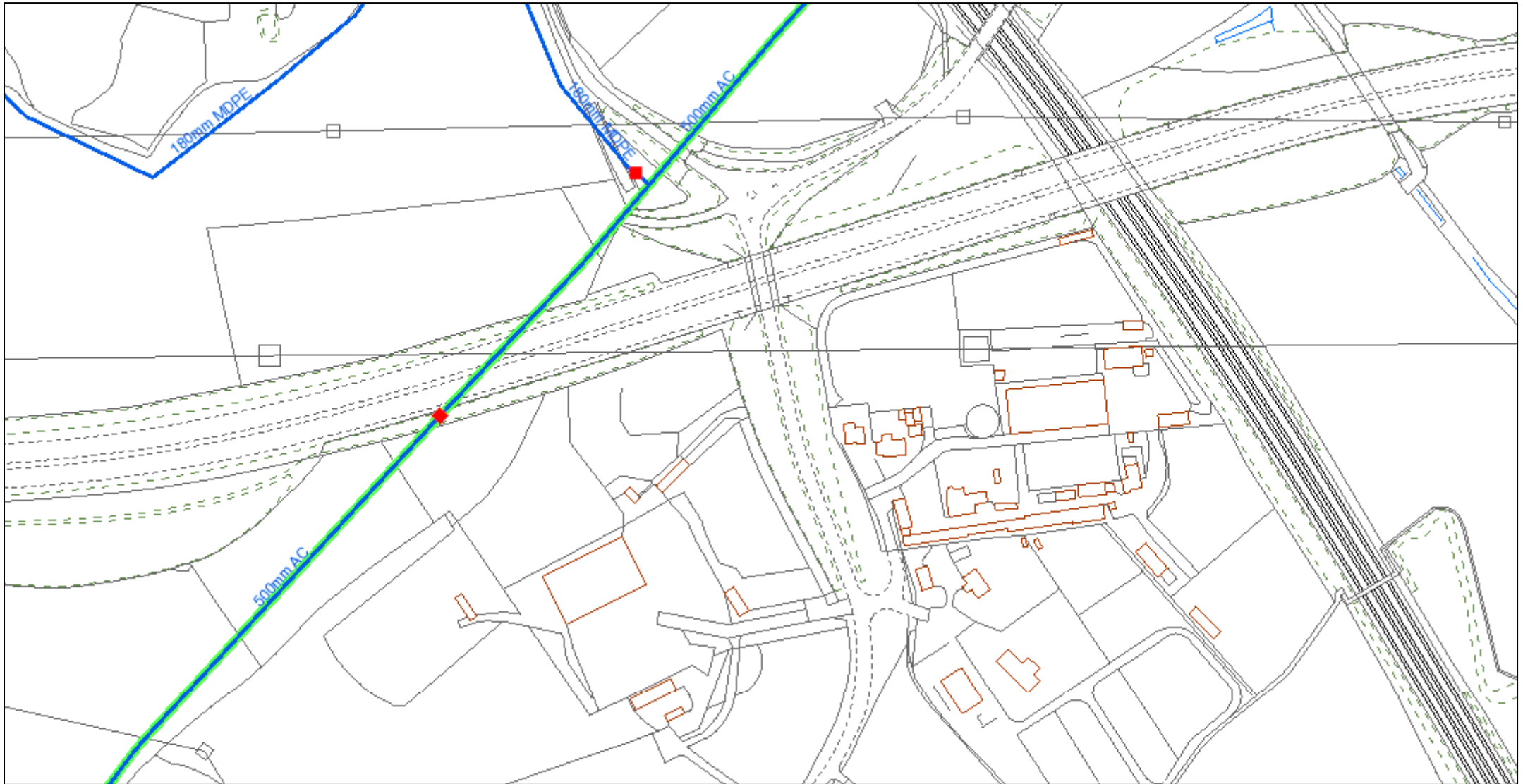


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