

Our Ref. J159
Date 26 October 2024

Suds Compliance Statement

Proposal: New Residential Development

Location: Car Park of Crown & Sceptre PH, Main Road, Neath, SA10 8

This Suds Compliance Statement has been prepared in support the above planning application to demonstrate that the drainage strategy outlined is viable and compliant with SUDs legislation.

Drainage Strategy

The development proposal is a block of apartments with shared garden space and dedicated parking at the rear, to be constructed on the western half of the existing car park of the Crown & Sceptre public house.

Soakaway testing has revealed moderate percolation rates in the soils underlying the carpark at circa 1m below ground level, which are sufficient to support a scheme of surface water disposal wholly by infiltration into the soils within the development area.

As such there is no requirement for any offsite connection for surface water drainage.

The outline suds drainage design as illustrated on the appended Strategy Plan comprises:

- Building roof downpipes discharging into the surface of planted suds areas sited provisionally as shown: one strip to the front and three 'raingarden' areas to the rear of the apartment block
- These upper-train soft-suds areas will be sized to meet interception area requirements, but lined below-ground with impermeable membrane to prevent underlying ground infiltration in close proximity to the proposed building and highway boundary
- Cleansed flows pass onward out of the lined raingardens into a perforated distributor pipe loop laid flat in a clean-stone trench beneath the dedicated car-park area to the rear.
- The car-park area is to be constructed of permeable surfacing and sub-base materials to enable diffuse infiltration of the development flows over a wide area at a suitable distance from the proposed building and neighbouring existing dwellings.



The proposed surface water drainage system as a whole will be sized to meet all Suds standards including volumetric sizing, interception, exceedance etc.

Levels shown on the strategy plan are indicative only at this stage. Full design calculations, levels and details to be provided in the forthcoming SAB application.

Foul-only drainage is proposed to connect to an existing manhole chamber on the DCWW combined sewer running along the road fronting the site.

The site is not in or near any flood zone on the Flood Map for Planning.

Compliance with the National SuDS standards S1-S6 is as follows:

Standard S1 – Surface Water Run-off Destination

Priority Level 1: Collection for use

Water butts are not proposed given the risk of under-use leading to stagnant water build-up. A water butt will be provided if this is preferred by the SAB.

Priority Level 2: Infiltration to ground

Yes, this is the single disposal mechanism for this project.

Priority Level 3: Discharge to a surface water body

Not required / applicable for this development.

Priority Level 4: Discharge to a surface water sewer, highway drain, or other drainage system

Not required / applicable for this development.

Priority Level 5: Discharge to a combined sewer

Not required / applicable for this development.

Standard S2 – Surface Water runoff hydraulic control

Upper suds-train features are provided in the form of shallow planted strips and raingardens circa 1m deep filled with filter media (sandy topsoil).

These vegetated areas together with the filter drain trench and porous carpark subbase will provide the necessary flow attenuation and storage. Infiltration into the deeper soils is via the filter drain trench soakaway loop beneath the dedicated development carpark area.



All Suds components will be sized with capacity to accommodate 100yr flows + climate change, and suitable half-drain times, based on the measured BRE-365 soakaway test rates.

Full hydraulic calculations and soakaway test results to be provided in the forthcoming SAB application package.

Standard S3 – Water Quality

The requisite on-plot cleansing and interception is provided in the form of the upper train shallow soft suds areas.

Standard S4 – Amenity

The proposed upper-train features will be integrated into the proposed landscaping scheme as well as providing the necessary drainage function.

Standard S5 – Biodiversity

The proposed soft-landscaped areas will be carefully designed with appropriate slopes, floral species and soil properties to ensure suitable thriving habitat to promote biodiversity.

Standard S6 – Construction, Operation and Maintenance and Structural Integrity

All proposed suds drainage items are shallow and of standard materials, designed for ease of construction and future maintenance.

Flows are kept at or near surface as far as practicable and below-ground pipework is minimised as far as practicable.

There is no SAB-adoptable infrastructure proposed within this private single-owner site, and the site owner / operator will be responsible for the maintenance of the drainage system in perpetuity.

A maintenance plan will be included in the full SAB application covering routine and remedial maintenance requirements of all suds drainage items.



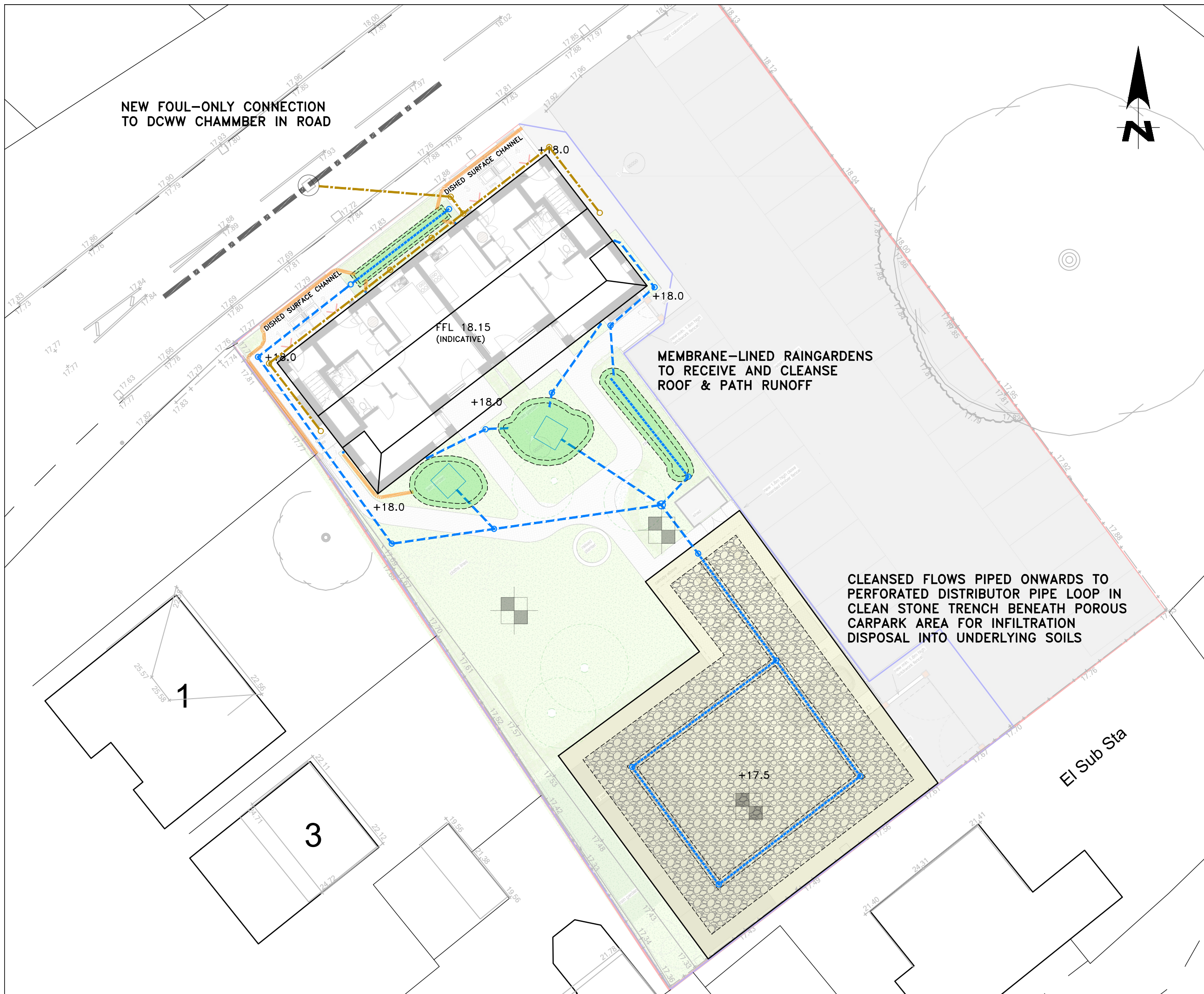
APPENDICES:

DRAINAGE STRATEGY PLAN

SOAKAWAY TEST RESULTS

PUBLIC SEWER MAP

FLOOD MAP FOR PLANNING

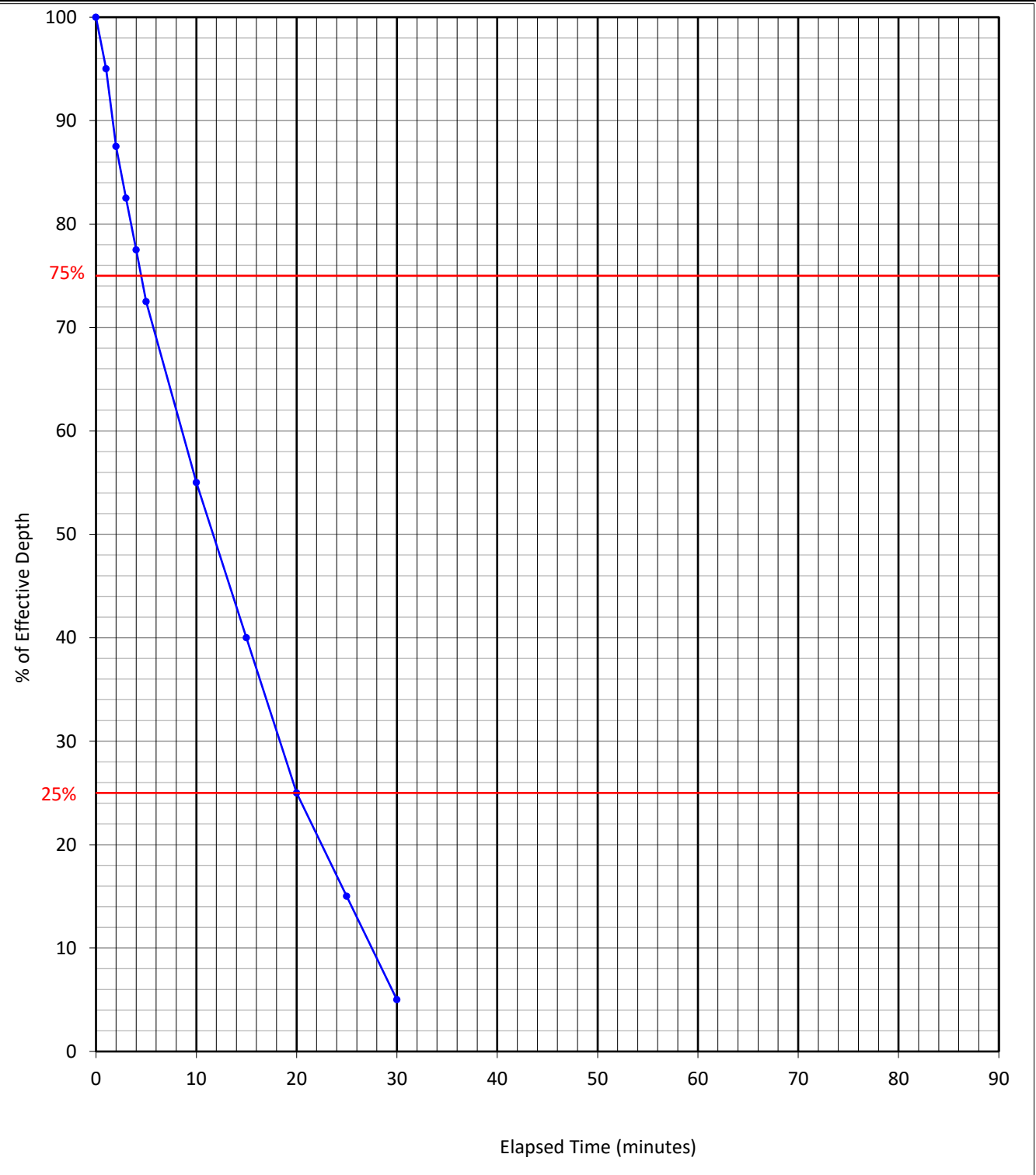


REV DATE		
 34 Culfor Road, Loughor, Swansea SA4 6TY tel: 01792 893407 mob: 07843 491524 e: admin@tulipengineering.co.uk w: www.tulipengineering.co.uk		
CLIENT: FCHA		
PROJECT: CADOXTON RESIDENTIAL DEVELOPMENT		
DRG TITLE: DRAINAGE STRATEGY PLAN		
DATE: 26.10.24	STATUS: PLANNING	SCALE: 1:200
DRG No. J159/100 REV. -		SIZE: A3

SPENCER QUANTUM - Soakaway Test

Project: Former Crown & Sceptre Car Park, Cadoxton
Project No: Q1463
Client: First Choice Housing Association

Test Location : TP01
Test No : 1
Date : 26/09/2024



	t_{p75} = 4.0 minutes
	t_{p25} = 20.0 minutes

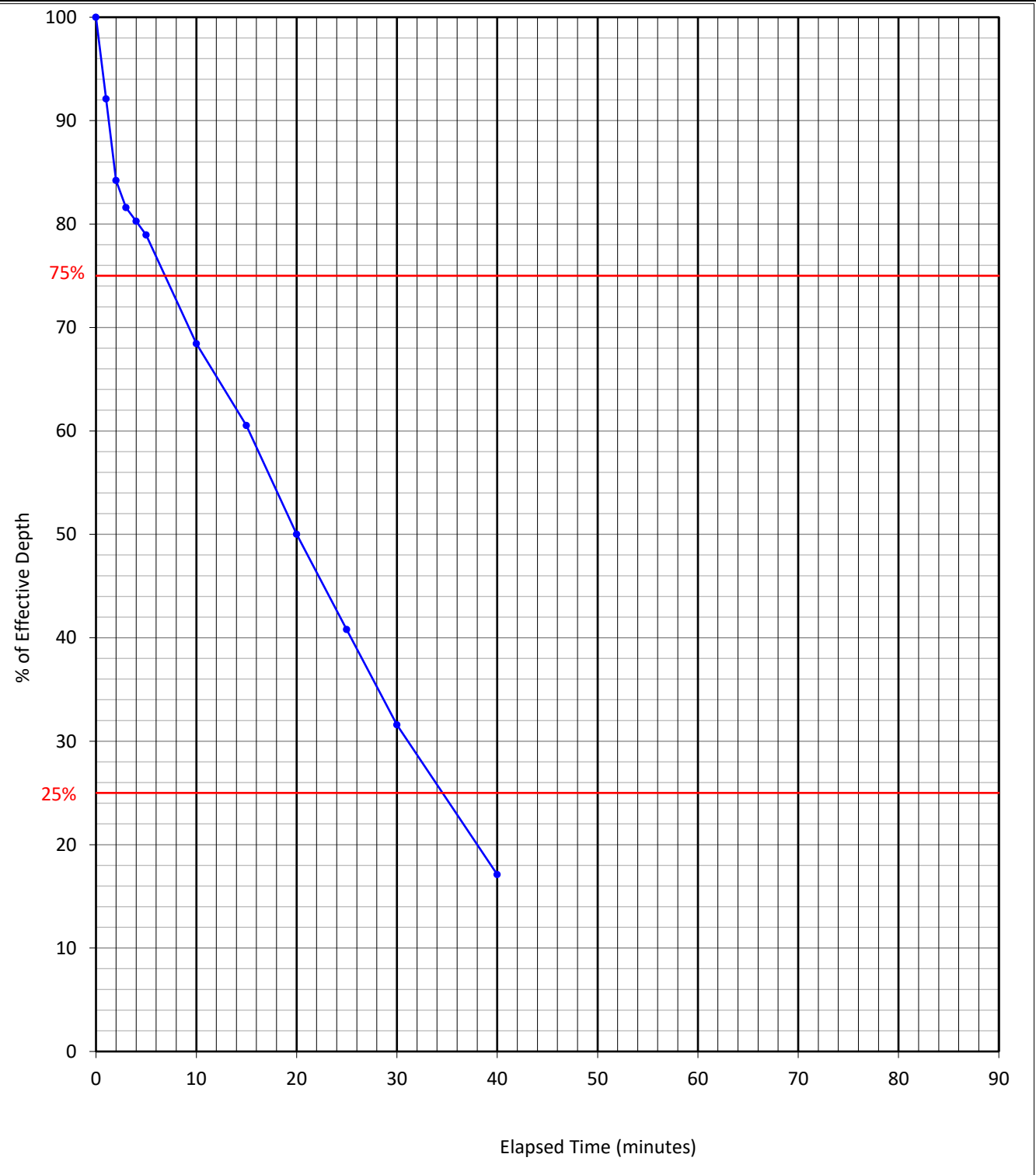
Remarks: Unable to fill pit above 0.6m depth



SPENCER QUANTUM - Soakaway Test

Project: Former Crown & Sceptre Car Park, Cadoxton
Project No: Q1463
Client: First Choice Housing Association

Test Location : TP01
Test No : 2
Date : 26/09/2024



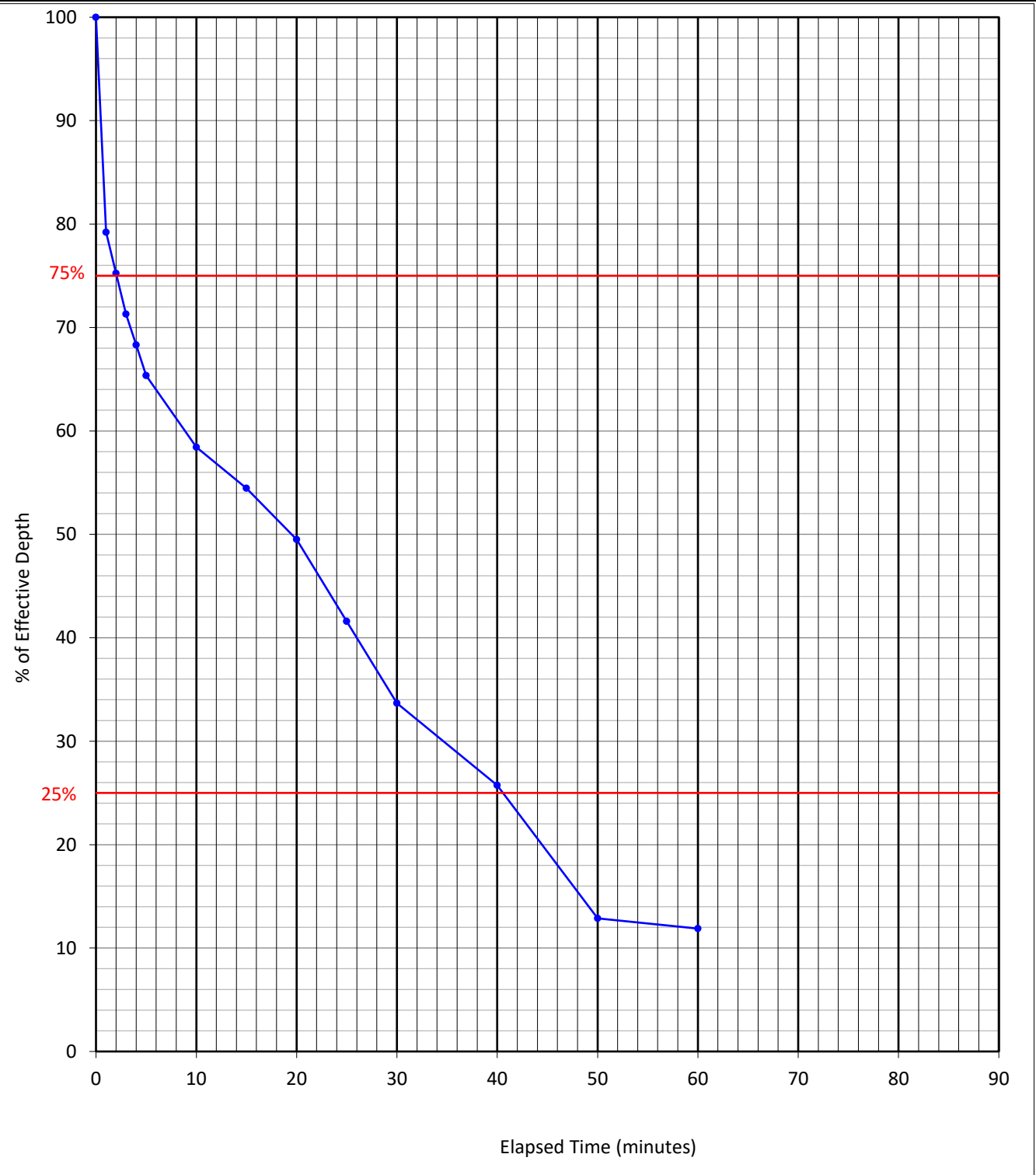
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	t_{p25} = 34.0 minutes

Remarks: Unable to fill pit above 0.62m depth

SPENCER QUANTUM - Soakaway Test

Project: Former Crown & Sceptre Car Park, Cadoxton
Project No: Q1463
Client: First Choice Housing Association

Test Location : TP01
Test No : 3
Date : 26/09/2024



	t_{p75} = 2.0 minutes
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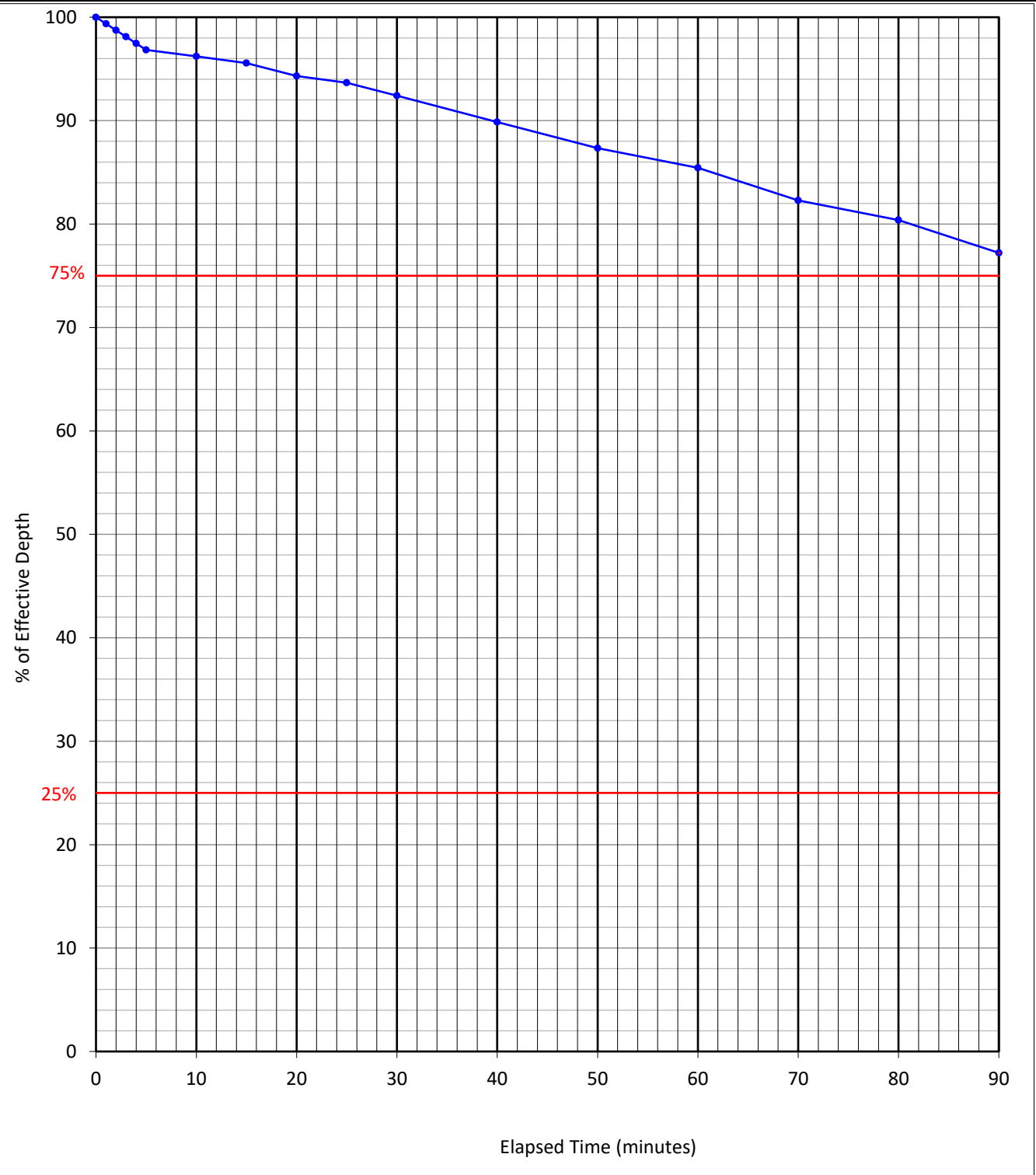
Sheet 2 of 2

Remarks: Unable to fill pit above 0.51m depth

SPENCER QUANTUM - Soakaway Test

Project: Former Crown & Sceptre Car Park, Cadoxton
Project No: Q1463
Client: First Choice Housing Association

Test Location : TP02
Test No : 1
Date : 26/09/2024



	t_{p75} =		minutes
	t_{p25} =		minutes

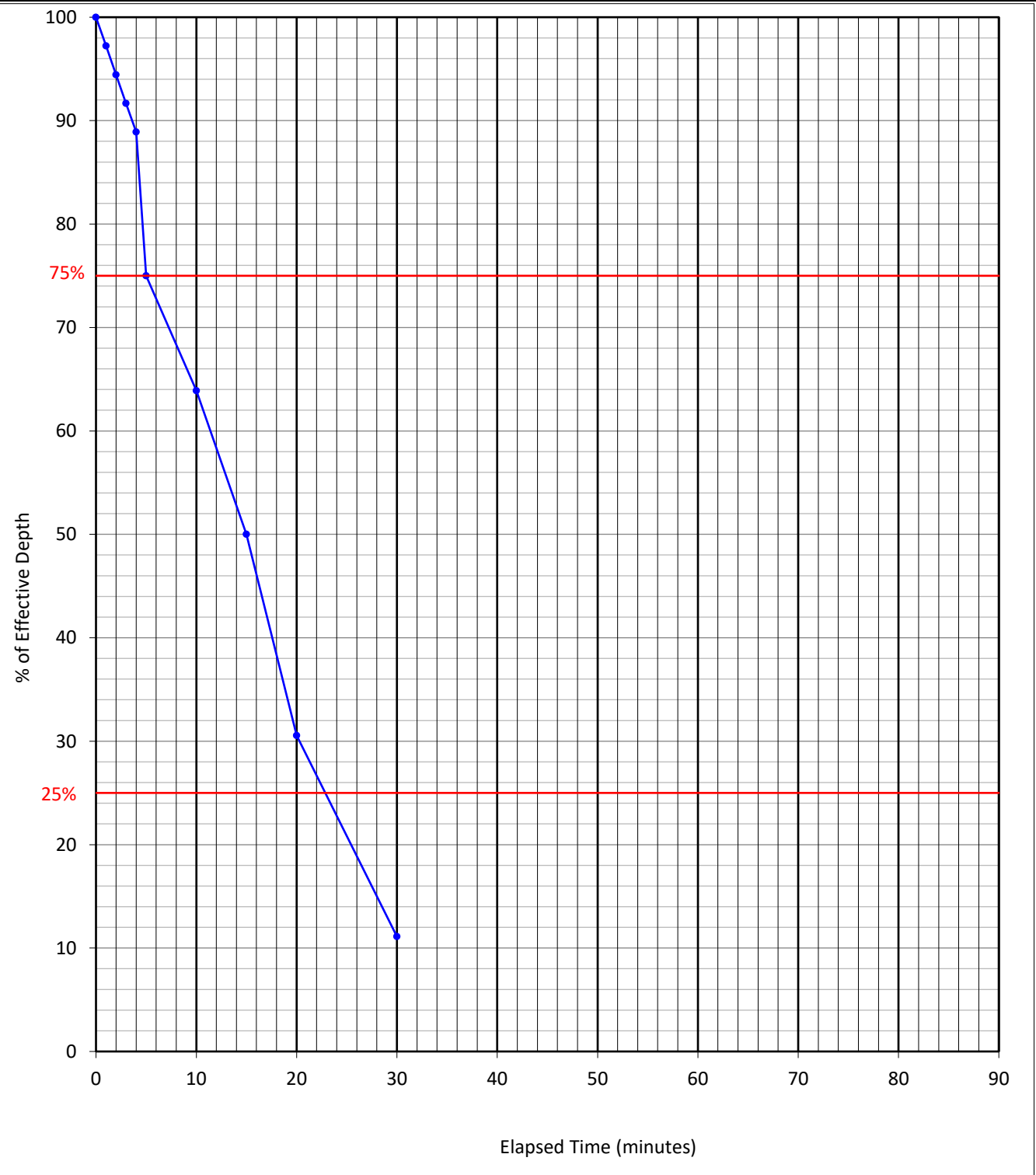
Remarks: Unable to fill pit above 0.21m depth.
75% Effective depth not reached in 90mins



SPENCER QUANTUM - Soakaway Test

Project: Former Crown & Sceptre Car Park, Cadoxton
Project No: Q1463
Client: First Choice Housing Association

Test Location : TP03
Test No : 1
Date : 26/09/2024



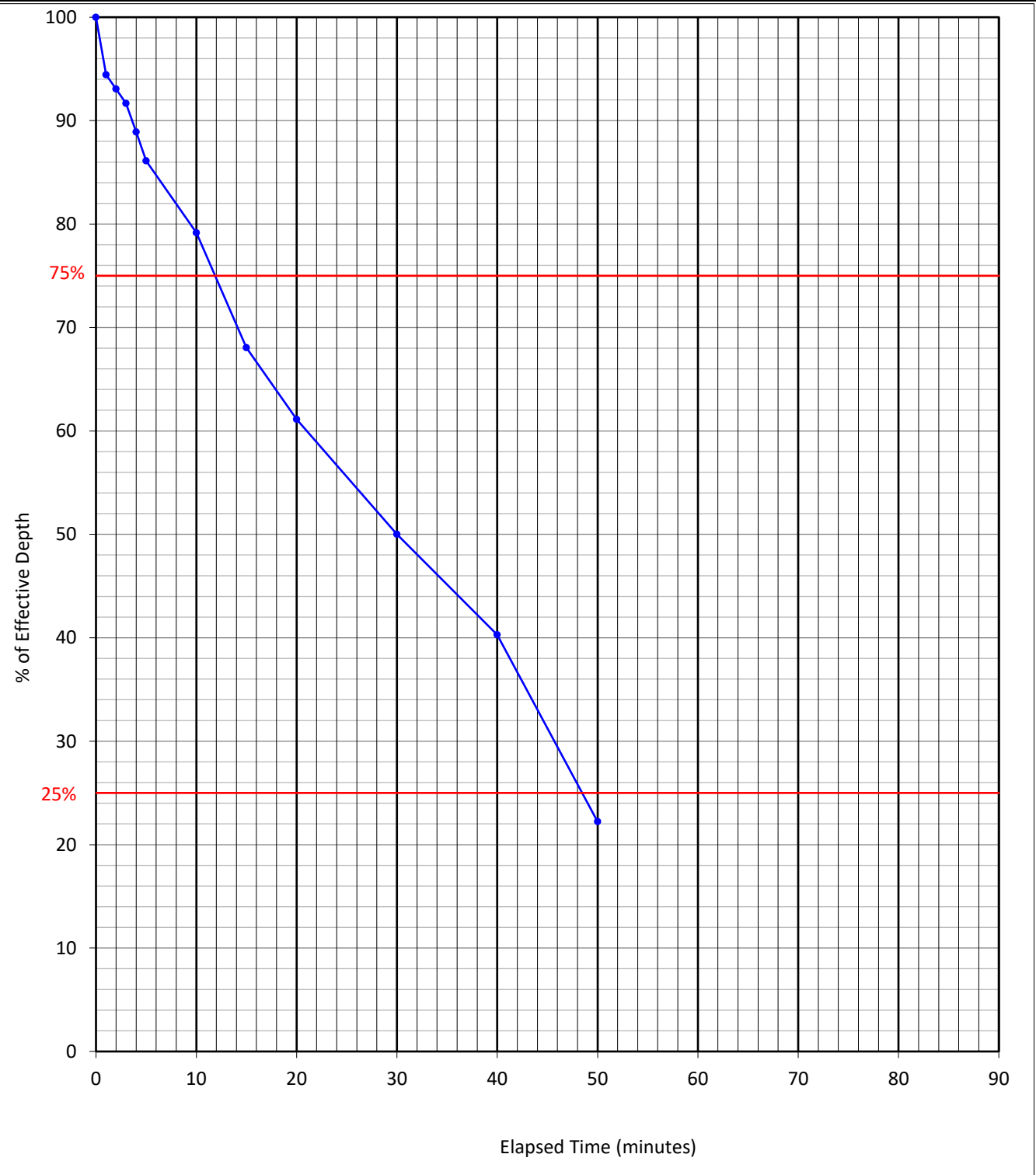
	t_{p75} = 5.0 minutes
	t_{p25} = 23.0 minutes

Remarks: Unable to fill pit above 0.74m depth

SPENCER QUANTUM - Soakaway Test

Project: Former Crown & Sceptre Car Park, Cadoxton
Project No: Q1463
Client: First Choice Housing Association

Test Location : TP03
Test No : 2
Date : 26/09/2024



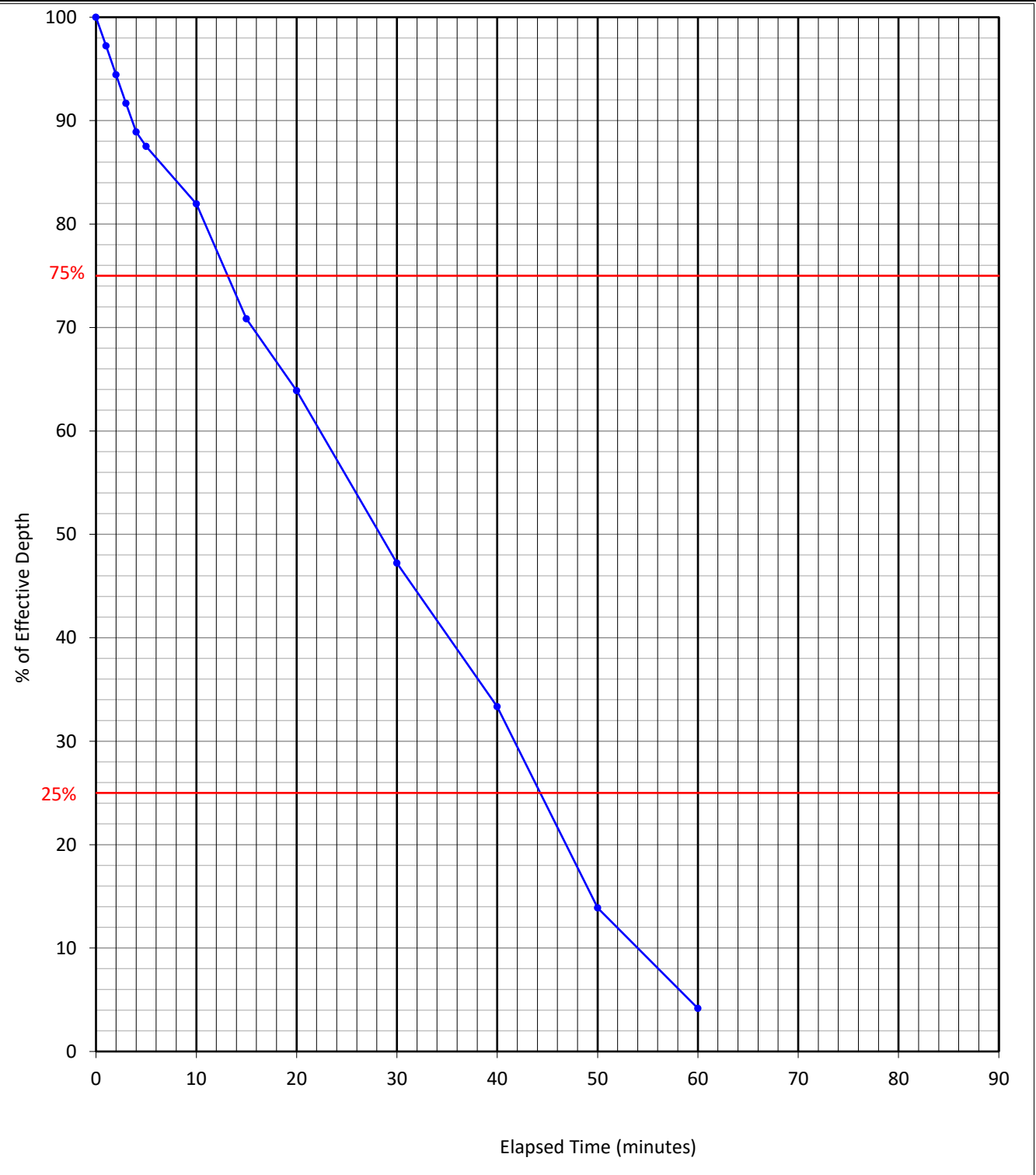
	t_{p75} = 12.0 minutes
	t_{p25} = 48.0 minutes

Remarks: Unable to fill pit above 0.74m depth

SPENCER QUANTUM - Soakaway Test

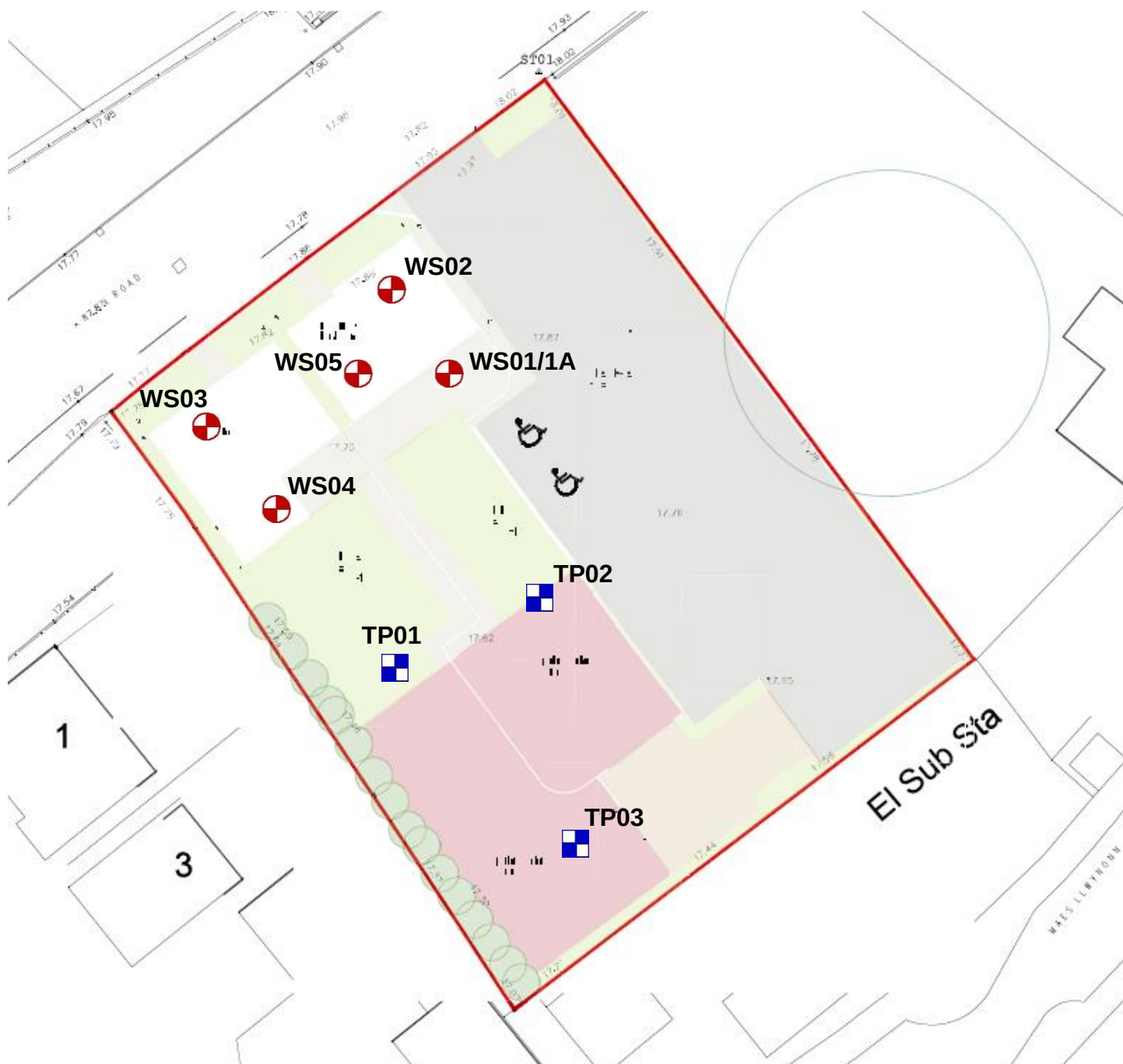
Project: Former Crown & Sceptre Car Park, Cadoxton
Project No: Q1463
Client: First Choice Housing Association

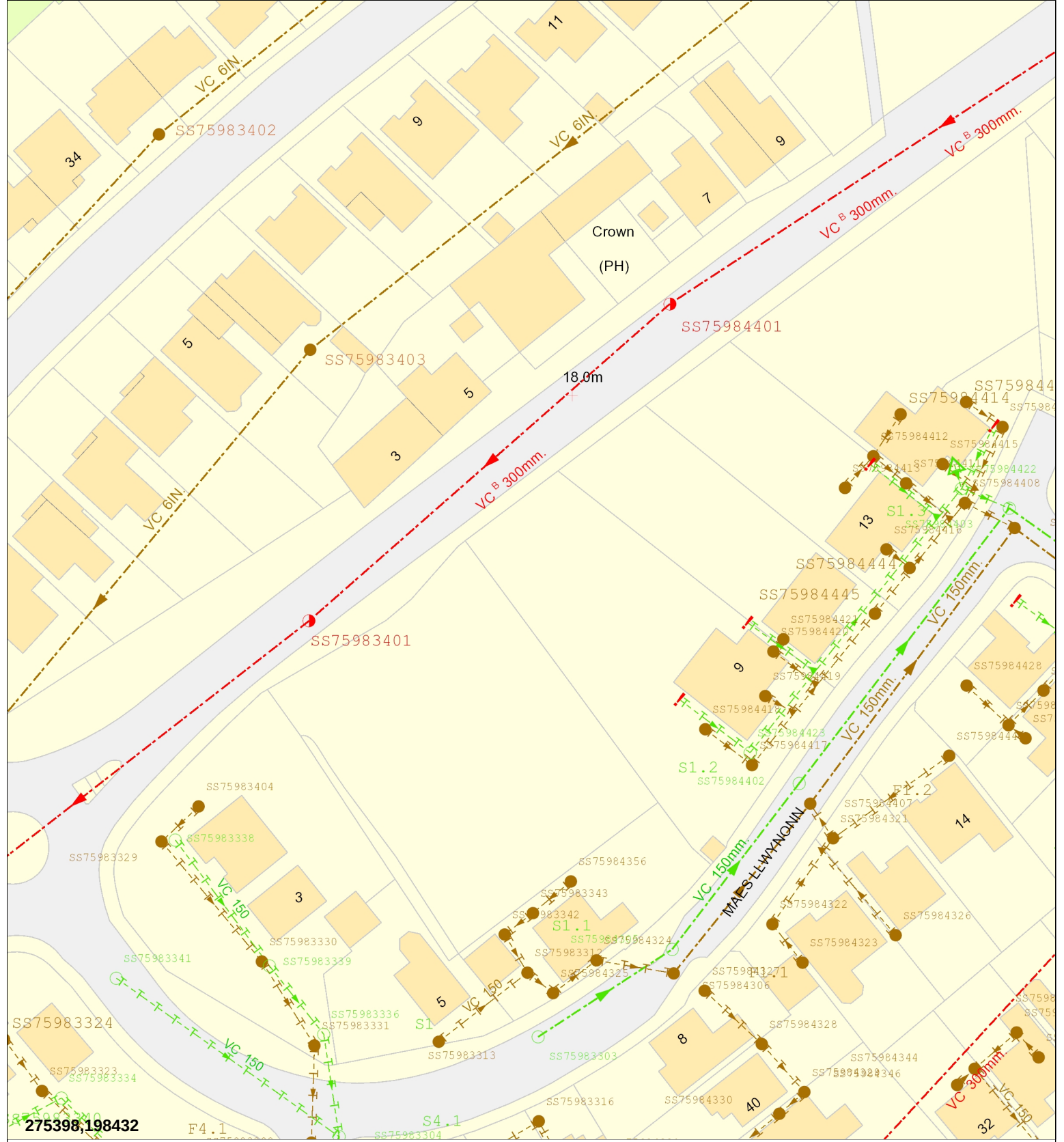
Test Location : TP03
Test No : 3
Date : 26/09/2024



	t_{p75} = 13.0 minutes
	t_{p25} = 44.0 minutes

Remarks: Unable to fill pit above 0.74m depth





275398,198432

Scale: 1:700

30/08/2024

**EXACT LOCATION OF
ALL APPARATUS TO
BE DETERMINED ON
SITE**

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**Dwr Cymru
Welsh Water**

LEGEND

	Sluice Valve		Gravity Sewer
	Air Valve SINGLE		Rising Main
	Tap		Outfall
	Pressure Reducing Valve		Pumping Station
	Meter		Lampole
	Bulk Meter		Combined Sewer Overflow
	Fire Hydrant		Special Purpose Chamber
	Cap		Treatment Works
	Non Dwr Cymru		Private Sewer Transfer
	Existing Distribution Main		Lateral Drain
	Inspection Chamber		NB: Sewer symbol colour indicates the sewer type.

RED - Combined
GREEN - Surface Water
BROWN - Foul

Whilst every reasonable effort has been taken to correctly record the pipe material of DCWW assets, there is a possibility that in some cases pipe material (other than Asbestos cement or Pitch Fibre) may be found to be asbestos cement (AC) or Pitch Fibre (PF). It is therefore advisable that the possible presence of AC or PF pipes be anticipated and considered as part of any risk assessment prior to excavation

Dwr Cymru Cyfyngedig ('the Company') gives this information as to the position of its underground apparatus by way of general guidance only and on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other works made in the vicinity of the company's apparatus and any onus of locating the apparatus before carrying out any excavations rests entirely on you. The information which is supplied hereby by the company, is done so in accordance with statutory requirements of sections 198 and 199 of the Water Industry Act 1991 based particular, but without prejudice to be generality of that foregoing, it should be noted that the records that are available to the company may not disclose the existence of a drain sewer or disposal main laid before 1 September 1989, or if they do, the particulars thereof including their position underground may not be accurate. It must be understood that the furnishing of this information is entirely without prejudice to the provision of the New Roads and Street Works Act 1991 and the company's right to be compensated for any damage to its apparatus.

Flood Map for Planning - Detail
Enter title (max 35 characters)

Legend

TAN15 Defended Zones

- Rivers
- Sea
- Rivers and Sea

Rivers

- Flood Zone 3
- Flood Zone 2

Sea

- Flood Zone 3
- Flood Zone 2

Surface Water and Small Watercourses

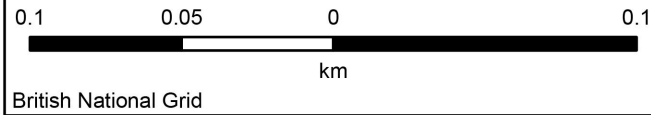
- Flood Zone 3
- Flood Zone 2



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Scale at A3: 1:2,500

Date: 30/08/2024



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