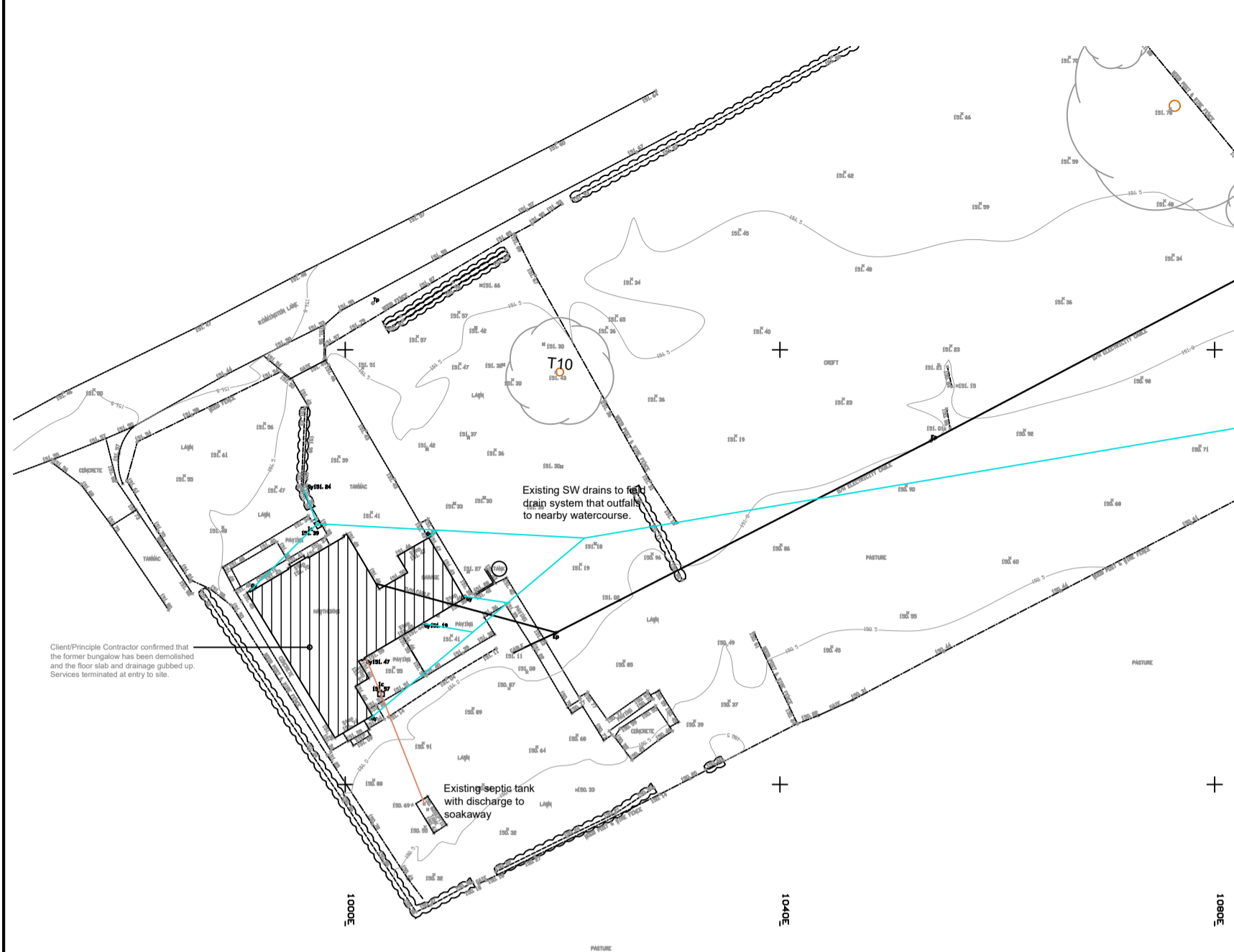


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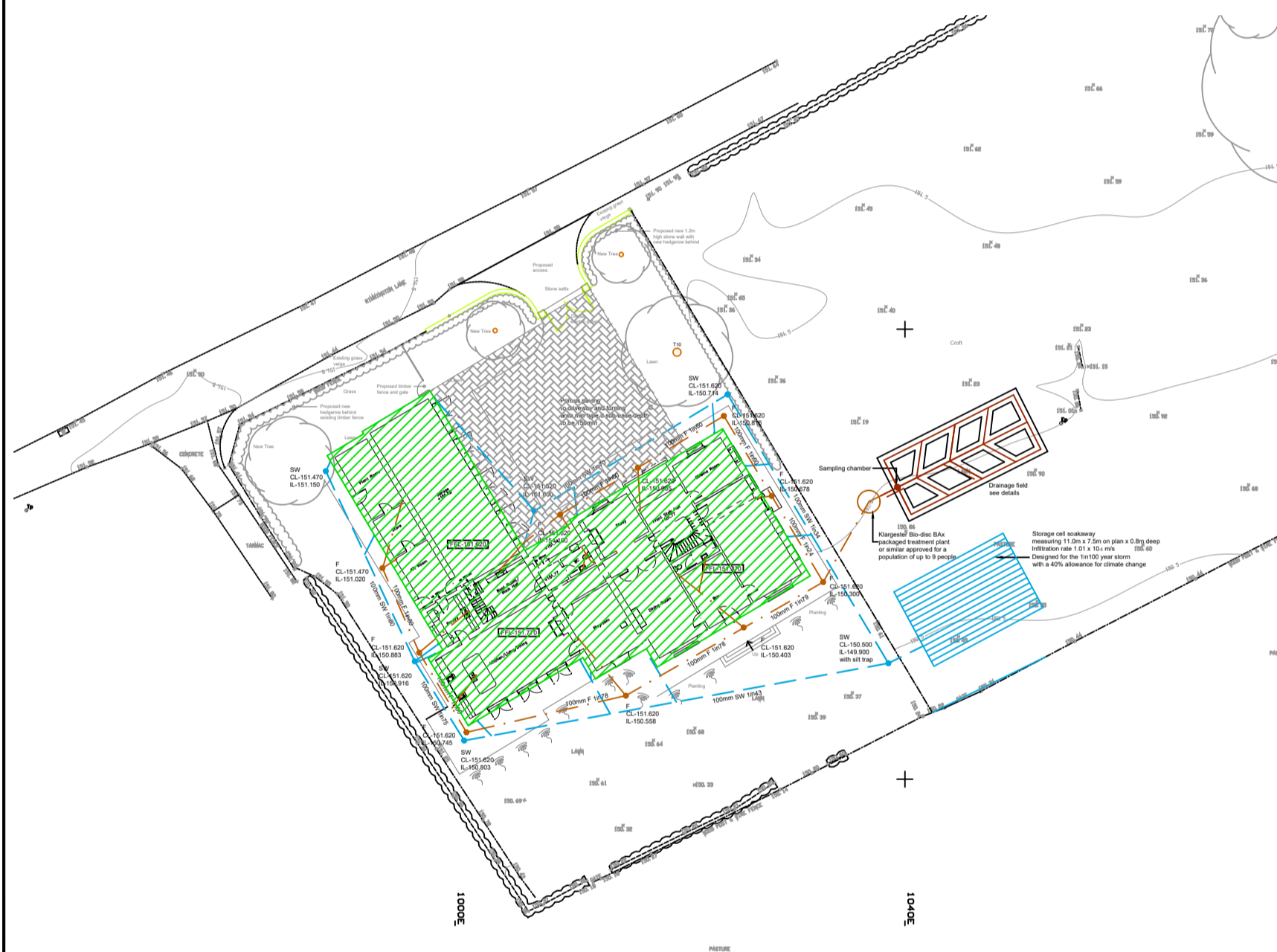
Notes:
 1. This drawing is to be read in conjunction with all relevant architect's and engineer's drawings.
 2. It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

Packaged Treatment Plant Sizing				
Description	No of rooms/Occupancy	Flow Litre/Day Per Head Total	Bod Grams/Day Per Head Total	NH Per Head Total
7 Bedroom Property	9 Person	150 x 9 = 1350L/d	60 x 9 = 540g/d	8 x 9 = 72g/d
Effluent Quality		20mg/l BOD	30mg/l SS	20mg/l NH-N

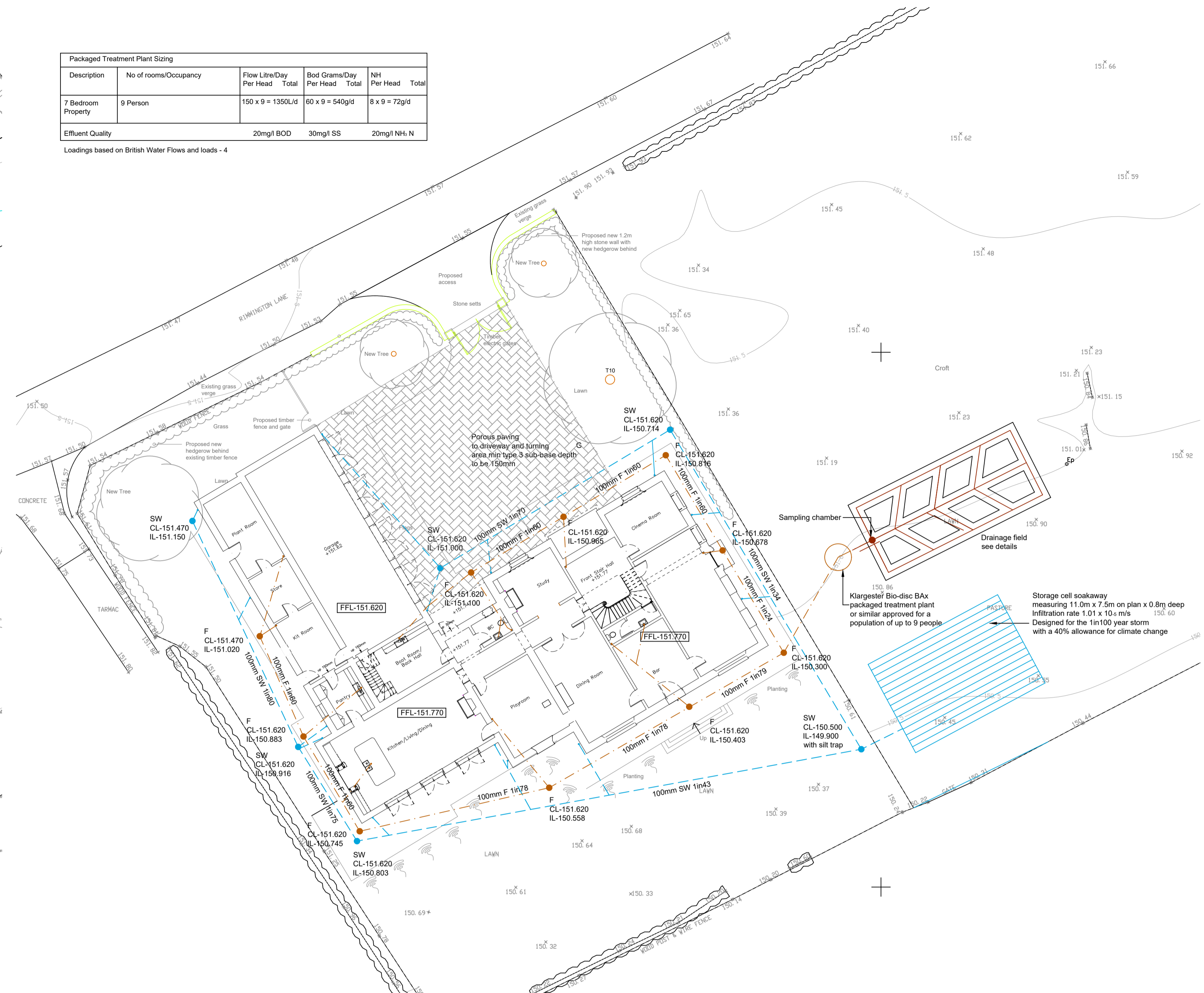
Loadings based on British Water Flows and loads - 4



Existing Site Plan (1:500)



Proposed Catchment Area (1:500)
 608m2 with 10% urban Creep = 669m2



Proposed Site Plan (1:200)

Drainage Strategy

Surface Water
 The site is located within flood zone 1 with a low risk of flooding from rivers or the sea or from pluvial or reservoir flooding.

There is an existing property on the site that will be demolished and replaced with a larger property.

NPPF guidelines require that surface water arising from a developed site should as far as practicable be managed in a sustainable manner to mimic the surface water flows arising from the site prior to development.

The national planning policy guidance sets out the hierarchy of drainage to promote the use of sustainable drainage systems. The aim of the hierarchy is to drain surface water run-off as high up the drainage hierarchy as reasonably practical.

1. Into the ground (Infiltration).
2. A surface water body.
3. To a surface water sewer.
4. To a combined sewer.

Percolation tests have been carried out on the site on 20th Nov 2023 see Topping Engineers report 23379-PTR-001. The lowest recorded infiltration rate was 1.01 x 10⁻⁵ m/s.

This is a rate that ensures infiltration is viable and has therefore been used to design the soakaway.

A 10% allowance for urban creep has been added to the proposed catchment area.
 The soakaways have been designed to cater for the 1in100 year storm with a 40% allowance for climate change.

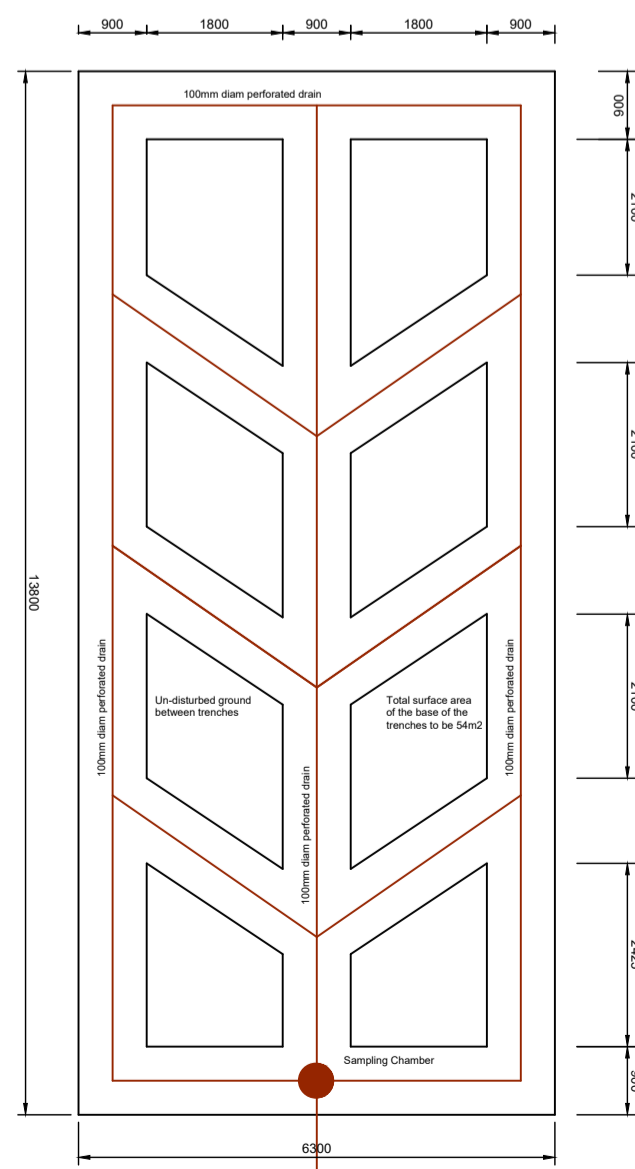
The driveways will be formed using porous paving, based on the infiltration rates a min 148mm depth of type 3 (30% voids) sub-base will be required.

See proposed drainage plan and micro-drainage calculations.

This will ensure the proposed development has no detrimental impact on the downstream infrastructure.

Foul Drainage

There are no public sewers in the area, the existing property drains to a septic tank with an outfall to a soakaway. This will be replaced with a new packaged treatment plant and drainage field.
 See detailed proposals.



Drainage Field Details

BASED ON THE PERCOLATION TESTS A VIP OF 30 HAS BEEN USED
 THE PROPOSED DEVELOPMENT IS A 4 BEDROOM HOUSE
 BASED ON THE BRITISH WATER CODE OF PRACTICE
 FLOWS AND LOADS - 4 TABLES
 THE DESIGN POPULATION (P) = 9 PEOPLE
 THE AREA OF DRAINAGE FIELD BASED ON THE ABOVE
 PERCOLATION RATE AND A POPULATION OF 9 PEOPLE =
 64m2
 A1 = P x Vp x 0.20
 WHERE p=NUMBER OF PERSONS AND Vp IS THE
 PERCOLATION VALUE (secs/mm) AND A1 FLOOR AREA
 OF DRAINAGE FIELD IN m2

P1	Building layout amended and drainage updated	03-09-25	
No.	Revision	Date	Drwn

Status **Approval**

Client
 Project
The Hawthorns
 Rimington Lane, Rimington

Drawing title
Drainage Proposals

Drawn	PB	Chkd	Date	Nov 2023	Scale	var
Contract No.	23379	Drw No.	DR-C-0101	Revision		P1