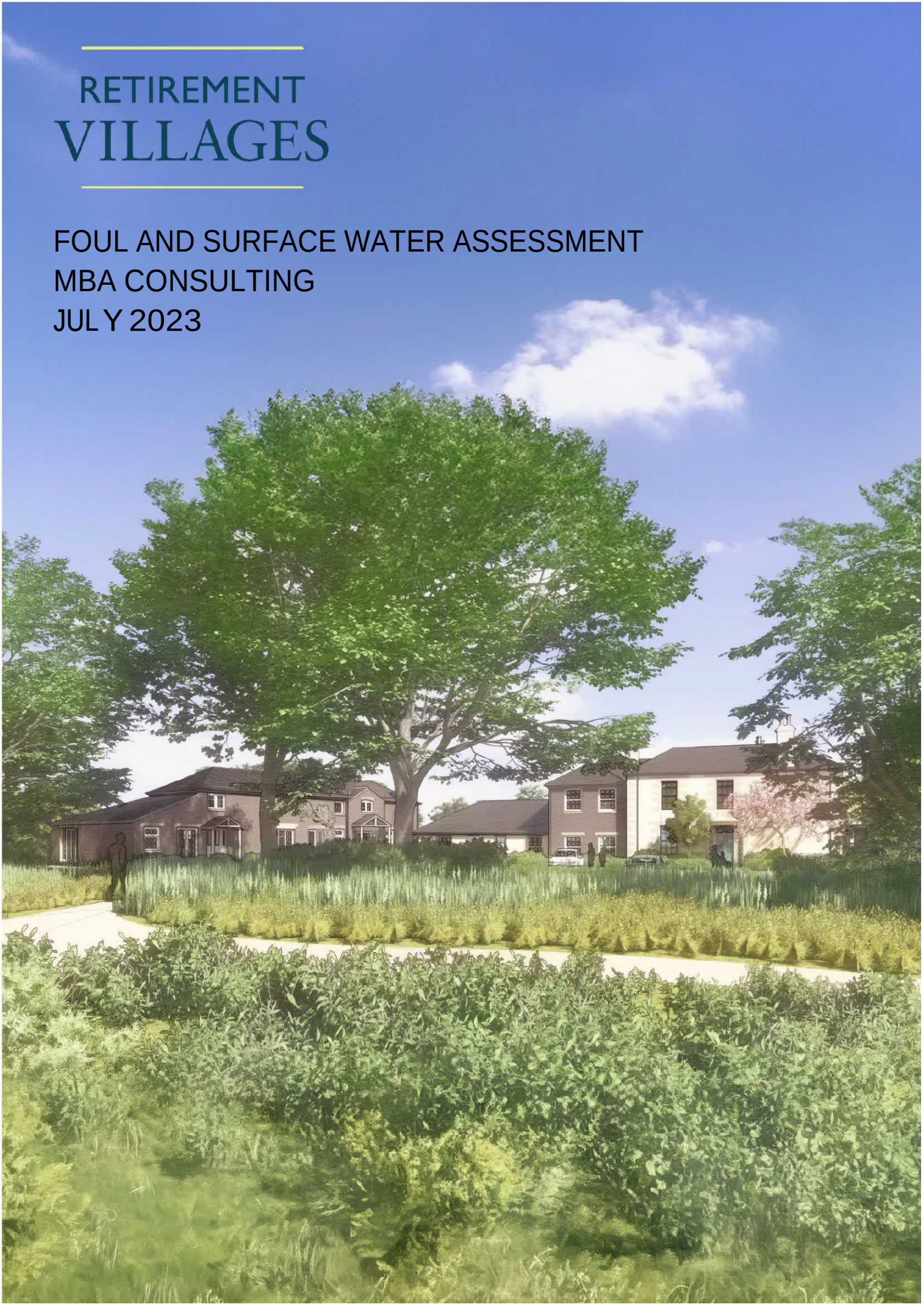
RETIREMENT VILLAGES

FOUL AND SURFACE WATER ASSESSMENT

MBA CONSULTING

JULY 2023



MBA CONSULTING

FOUL AND SURFACE WATER ASSESSMENT

CONVERSION FROM CARE HOME TO APARTMENTS,
PENLEE HOUSE, ROSELAND PARC,
TREGONY,
CORNWALL, UK

JULY 2023 | PROJECT REF: 22323

DOCUMENT CONTROL SHEET

To ensure this is the latest issue, a control table can be found below with updates identified.

Document Control				
Client	Job Number			
Retirement Villages	22323			
Version	Date	Description	Prepared By	Checked By
A	07.08.2023	Suitable for issue to Client.	MP	SH
B	18.08.2023	Suitable for issue to Client.	MP/TT	CO

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CONTENTS

APPENDICES

1.0 INTRODUCTION

1.1 MBA's Client is Retirement Villages.

1.2 The Client is proposing to alter and extend the existing building to allow conversion from a classic care home to care apartments for older people in need of care and support.

1.3 The existing premises currently provides 18no. care bedrooms with ensuite, 1no. assisted bathroom and 2no. staff WC/changing facilities. These will be replaced with 9no. extra care units for older people.

1.4 The Planning Practice Guidance to the National Planning Policy Framework dated July 2021 states that a Flood Risk Assessment (FRA) is required where a proposed development is greater than 1 ha in size or in an area where the Environment Agency (EA) have indicated there may be drainage problems, i.e. Critical Drainage Areas.

1.5 The application site is smaller than 1Ha and outside of any Critical Drainage Area. However, MBA Consulting have been commissioned to carry out a Flood Risk Assessment (FRA) to support the planning application for the proposed development.

1.6 This report therefore comprises a site-specific flood risk assessment and outlines the proposals for the disposal of surface water, and foul water, from the site.

2.0 SITE LOCATION AND DESCRIPTION

2.1 Penlee House is within the grounds of the Roseland Parc retirement village in Tregony, Cornwall at Ordnance Survey Grid Reference (OSGR) SW 92718 45017. The site is within the village of Tregony and is accessed from a driveway off the B3287 (Tregony Hill/Fore Street).

2.2 The site is situated on high ground at approximately 51.00m AOD and generally, slopes gently from the north east to the south west.

2.3 The site currently consists of access road, buildings, parking areas, and landscaped grassed spaces.

2.4 The red line application site area is 0.36 hectares.

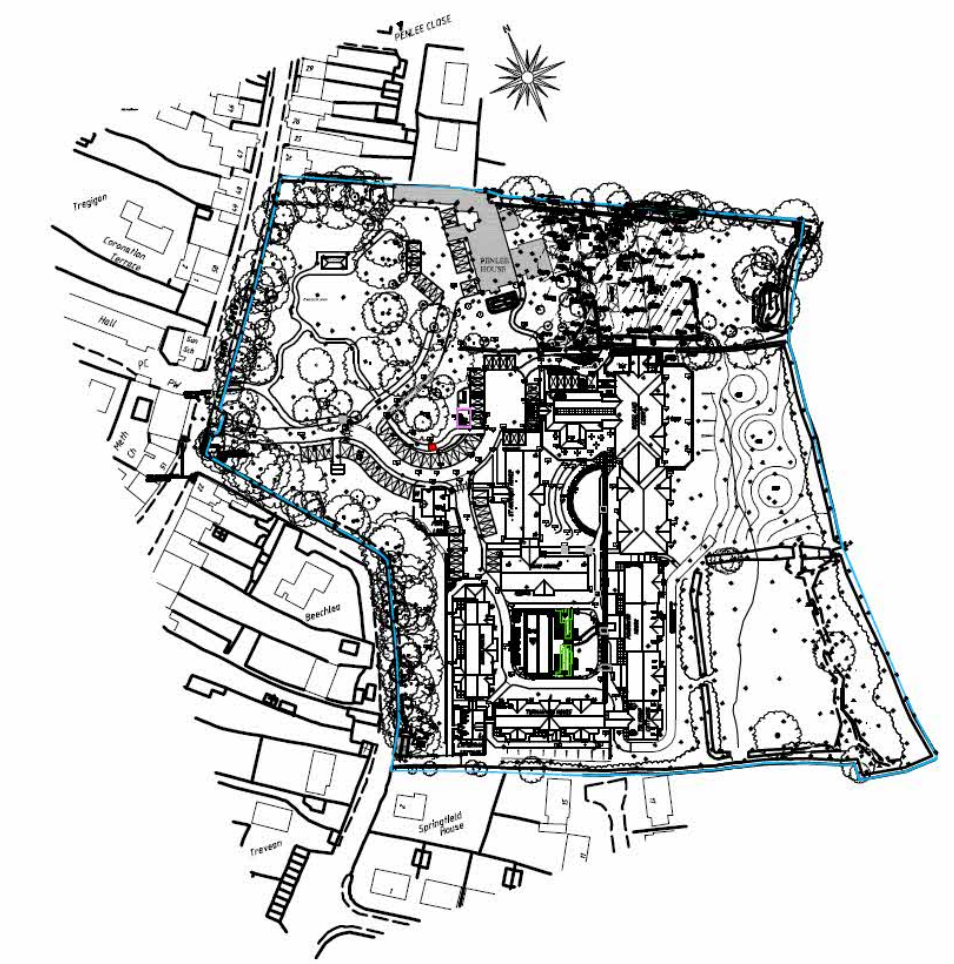


FIGURE 1.0 – SITE LOCATION (NTS)

3.0 EXISTING HYDROLOGY

3.1 The EA Drainage Guidance for Cornwall dated May 2015 and Cornwall Council's Strategic Flood Risk Assessment – Level 1 (SFRA1) identifies the development to be outside a Critical Drainage Area.

3.2 The original Penlee House and later extensions are all served by soakaway's.

3.3 The development is significantly elevated above any watercourses and known surface water features.

4.0 FLOOD RISK ASSESSMENT

4.1 The site has been assessed taking into account the Planning Policy Guidance to the National Planning Policy Framework and the Level 1 Strategic Flood Risk Assessment published in 2009 by Cornwall Council. The individual parameters are set out below.

4.2 Flooding from rivers or from the sea

4.3 The Environment Agency has identified the site as an area which has a very low risk of flooding from rivers and sea (please refer to extracts from the Environment Agency Flood Risk mapping in Appendix B). Generally this means that the chance of flooding each year from rivers or the sea is 0.1% (1 in 1000) or less and places the development area wholly within Flood Zone 1.

4.4 Cornwall Councils Strategic Flood Risk Assessment mapping also shows the site free of flooding and places the site wholly within Flood Zone 1. There are no watercourses upstream of the site which may contribute to flood risk within he site, and the site is significantly elevated above watercourses downstream of the site to present a risk of flooding from rivers. The site is elevated approximately 36.0m above an unnamed tributary to the lower River Fal (ID:1513) approximately 427.0m to the south of the site.

4.5 There is a spring and stream running along the eastern boundary of the wider estate feeding a series of ponds also within the grounds of the wider estate. The stream is approximately 84.0m to the east of Penlee House. There is a very low risk of flooding to Penlee House from these features due the topography and the elevated nature of the site. Penlee House is approximately 8-12m higher than these features lower within the estate. The stream connects to the aforementioned unnamed tributary to the lower River Fal (ID:1513) approximately 427.0m to the south of the site.

4.6 The nearest beach at Portholland is approximately 5.0km to the south east of the site. There is a very low risk of the site flooding from the sea.

4.7 Flooding from Land.

4.8 The uphill northern boundary comprises of a stone wall. The immediate area within the site boundary is lined with well established trees and green spaces. There are 2no. neighbouring property gardens which back onto the site here. The absence of any significant areas of hardstanding in these locations, and levels falling away from the site rather than towards it, means it is unlikely that overland exceedance flows will develop and cause flooding on site from these areas.

4.9 The neighbouring public highway, the B3287 (Tregony Hill/Fore Street), is drained via gullies and underground drainage system. This road is well maintained by the local

highway authority. Penlee House is at least 1.0m higher than this neighbouring highway. The highway is unlikely to cause flooding on site.

4.10 Design of the surface water disposal systems within the site will be required to comply with the current 'Drainage Guidance for Cornwall' published by the Environment Agency in 2015 (see section 5). This will ensure that the risk to adjacent property resulting from the development of this site is minimal.

4.11 The Environment Agency has identified the site as an area at very low risk of flooding from surface water. This means that each year this area has a chance of flooding of less than 0.1%. Flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. In addition, local features can greatly affect the chance and severity of flooding.

4.12 Flooding from Groundwater

4.13 The site has been identified as being susceptible to ground water as indicated on Cornwall Council's interactive strategic flood risk mapping. However, there are no recorded incidents of flooding of the site as a result of groundwater. The site is currently served by soakaways.

4.14 The proposed development of the property does not involve significant changes to existing ground levels and therefore there is low risk of flooding from groundwater.

4.15 Existing Ordnance Survey mapping and site survey information indicates that there are no known surface water features within close proximity to the development. The Environment Agency deem flooding from groundwater is unlikely in this area. Therefore given the ground elevation above existing hydrological features, it is considered unlikely that the site will be subject to any flooding from groundwater.

4.16 Flooding from Sewers

4.17 The south west water record is included at Appendix C. This shows there are no public sewers within the site. The nearest public sewer is a DN150 combined, and located within the B3287 (Tregony Hill/Fore Street), to the west of the site. Penlee House's foul sewer connects to this through the west boundary of the site. The public foul sewer is well maintained by South West Water. The topography of the site serves to prevent this sewer flooding site which is elevated (refer to point 4.9) above the aforementioned sewer.

4.18 Recent changes to the application and charging process introduced by Ofwat mean that SWW no longer review sewer capacity and are obliged to fund any improvements required to the network from the infrastructure charge imposed on any development

within their area of operation. Therefore, there is low risk of flooding from public sewers as capacity must be made available.

4.19 In addition, there are existing private sewers serving the wider site. The topography of the wider site serves to prevent these sewers flooding site which is elevated above the wider site. The risk of sewers flooding the site is low.

4.20 Flooding from Reservoirs, Canals and Other Artificial Sources

4.21 There are no reservoirs, canals or other artificial sources in the vicinity of the property which might give rise to a risk of flooding. The Environment Agency deem flooding from reservoirs is unlikely in this area.

4.22 Notwithstanding any of the above, typical floor levels to dwellings will be 150mm above external ground levels to reduce the risk of flooding the developments proposed dwellings.

5.0 SURFACE WATER DRAINAGE DESIGN STRATEGY

5.1 Design of the development's drainage infrastructure and Sustainable Urban Drainage System (SUDS) is to be carried out in line with best practice and to industry standard design procedures. A number of publications, including statutory instruments, design guidance and best practice guidance will apply to different components of the final infrastructure.

5.2 The sections below provide an overview of the design standards to be used on this project for various aspects of the surface water drainage design.

5.3 The design of the surface water drainage is required to follow the 'Drainage Guidance for Cornwall' issued by the Environment Agency (EA) published as part of the Cornwall Council Strategic Flood Risk Assessment (SFRA). These both comply with the Planning Policy Guidance for the National Planning Policy Framework dated July 2021. Compliance is deemed to satisfy the Environment Agency in controlling the risk of flooding of and from the proposed development.

5.4 The site is in an area identified outside any Critical Drainage Area in the Cornwall Council SFRA. This requires the drainage system to comply with the 'Outside Critical Drainage Areas – Drainage Standards Guidance' included at Appendix A.

5.5 This requires that following the Building Regulations Drainage hierarchy, surface water should: -

Drain to a soakaway or infiltration system designed in accordance with the SUDS Manual - CIRIA C697, using a minimum of a 30-year return period storm.

Alternatively, where an FRA demonstrates that infiltration is not possible: -

A sustainable drainage system shall be provided ensuring flow attenuation, no adverse impact on water quality and where possible habitat creation.

5.6 In the first instance, surface water should be directed to infiltration in accordance with the SUDS manual. Soakaways are to be designed for a 1 in 30 year storm with allowance for climate change and with storm water up to the 1 in 100 year storm retained on site.

5.7 Where infiltration cannot be achieved a sustainable drainage system should be provided to attenuate and restrict off-site flows.

5.8 The total discharge from the site should be no more than the theoretical greenfield run-off rates from each of the corresponding 1, 10, 30 and 100 year storms. When these values are less than 5 litres/second, a rate of 5 litres/second can be used.

Attenuation may not be necessary if the discharge is directly to coastal waters. In these cases the impact on the receiving environment in terms of habitat, erosion and water quality should be assessed.

5.9 The existing building discharges surface water to soakaways suggesting the site has good soil infiltration characteristics suitable for the use of soakaways.

5.10 The surface water drainage design will take into account future climate change as outlined within Technical Guidance for the National Planning Policy Framework. This recommends that a 50% increase in the rainfall intensities be allowed for future climate change over the next 100 years.

5.11 In accordance with Ciria report C753 The SUDs Manual para 24.7.2, to allow for future urban expansion within the development, an increase in paved surface area of 10% will be applied to soakaway calculations.

5.12 Soakaways will be designed for the 1 in 100yr storm. An appropriate factor of safety will be applied to all soakaway calculations in accordance with Cornwall Council policies and standards for SUDS.

5.13 It is prudent to consider the impact of blockage or similar on the development. The potential impact of events in excess of the drainage design standard, or blockage occurring have therefore been assessed. The overland (exceedance) flows head towards the southern boundary of the site. There is an extensive grassed areas in this locale providing opportunity for exceedance flows to percolate to ground.

5.14 The detailed design of the drainage systems will need to be submitted to the LLFA for approval prior to construction. It should include at that stage the following information.

- A description of the foul and surface water drainage systems operation
- Details of the final drainage schemes including calculations and layout
- A Construction Environmental Management Plan
- A Construction Quality Control Procedure
- A plan indicating the provisions for exceedance pathways, overland flow routes and proposed detention features
- A timetable of construction including a plan indicating the phasing of development including the implementation of the drainage systems

- Confirmation of who will maintain the drainage systems and a plan for the future maintenance and management, including responsibilities for the drainage systems and overland flow routes

6.0 FOUL DRAINAGE ASSESSMENT

6.1 The public sewers maintained by South West Water in the vicinity of the site are shown in Appendix C.

6.2 The existing care home was previously registered for 18no. occupants with staff staying overnight. The proposed extra care units to replace the existing will have less than this occupancy level with high numbers of single occupancy of units. It is projected that the occupancy level will fall to 12 or 13.

6.3 It is proposed that the foul water discharge from the development will be directed to the existing public (South West Water) combined sewer in the road adjacent to the development utilising the sites existing connection.

6.4 Recent changes to the application and charging process introduced by Ofwat mean that SWW no longer review sewer capacity and are obliged to fund any improvements required to the network form the infrastructure charge imposed on any development within their area of operation.

6.5 However, SWW have confirmed that the public foul sewer will accommodate the proposed development. Please refer to Appendix C. It should be noted that an existing connection may be present to the adopted sewer already.
This will be confirmed by further CCTV inspections.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 The flood risk has been assessed following the principals of National Planning Policy Framework and the level 1 Strategic Flood risk Assessment for Cornwall. It is concluded that the proposed development of the site does not significantly increase the risk of flooding offsite and the property is not considered to be at significant risk of flooding.

7.2 It is further concluded that the design of a surface water drainage system using the principles of SUDS and compliant with the requirements of the Cornwall Strategic Flood Risk Assessment is achievable within the confines of the site.

7.3 The foul water discharge from the property can be served by connection to public foul sewer.

Signed..... Dated: August 2023
MARK POWELL EngTech. TMICE
FOR AND ON BEHALF OF
MBA CONSULTING

APPENDIX A

Cornwall Council

Outside Critical Drainage Areas - Drainage Standards Guidance for Cornwall

Revised January 2010

This sheet is intended as guidance for drainage not in areas identified as Critical Drainage Areas.

Greenfield Development Sites - greater than 1 hectare

Following the Building Regulations Drainage hierarchy, surface water should:-

i. Drain to a soakaway or infiltration system designed in accordance with the SUDS Manual - CIRIA C697, using a minimum of a 30-year return period storm.

Where an FRA demonstrates that infiltration is not possible:-

ii. A sustainable drainage system shall be provided ensuring flow attenuation, no adverse impact on water quality and where possible habitat creation.

The total discharge from the site should aim to mimic greenfield rates. These shall be no more than the theoretical greenfield run-off rates from each of the corresponding 1, 10, 30 and 100 year storms. When these values are less than 5 litres/second, a rate of 5 litres/second can be used. Attenuation may not be necessary if the discharge is directly to coastal waters. In these cases the impact on the receiving environment in terms of habitat, erosion and water quality should be assessed.

The design must take into account the appropriate allowance for increased rainfall from climate change. This should be based on the lifetime of the development, the guidance in Annex B of PPS25 and the PPS25 Practice Guide.

Underground attenuation and piped sections should be designed for a minimum of the 30-year storm. However total discharge rates from the site must still be controlled for the 100-year storm. Attenuation of events exceeding the piped system may be achieved by temporary flooding of open spaces or car parks. If surface flooding of open areas is not appropriate, the formal drainage system should be designed for the 100 year storm.

Where infiltration is not used, long-term storage must be provided to store the additional volume of run-off caused by any increase in impermeable area. This is in addition to the attenuation storage required to address flow rates, see Appendix F of the Drainage Guidance for Cornwall Council. Alternatively rainwater harvesting can be used to offset this volume.

The long-term storage should discharge at a rate not exceeding 2 litres/second/hectare, as per *Preliminary rainfall run-off management for developments DEFRA /Environment Agency guidance W5-074 Revision D.*

Safe and appropriate flow routes from blockage and exceedance of the drainage system must be evaluated. This must demonstrate no property flooding or increase in flood risk, either offsite or to third parties.

Previously Developed Sites - greater than 1 hectare

Development should aim for the standards of a greenfield site outlined above. Where this is not possible the FRA should demonstrate how a sustainable drainage system is being provided which meets the policy aims of PPS25 to reduce flood risk on and off site. The FRA should demonstrate how the development will reduce run-off rates as much as is reasonably practicable.

Small Development Sites, less than 1 hectare.

Note that the Environment Agency are not consulted on sites of less than 1 hectare that are not in Critical Drainage Areas unless there are other constraints such as Main Rivers or the site lies within Flood Zone 2 or 3. Therefore the guidance for sites less than 1 hectare are based on best practice to address flood risk.

Following the Building Regulations Drainage hierarchy, surface water should aim to:-

i. Drain to a soakaway or infiltration system designed in accordance with the SUDS Manual - CIRIA C697, using a minimum of a 30-year return period storm.

Where infiltration is not possible:-

ii. A sustainable drainage system should be provided ensuring flow attenuation, no adverse impact on water quality and where possible habitat creation.

The total discharge from the site should be no more than the theoretical greenfield run-off rates from each of the corresponding 1, 10, 30 and 100 year storms. When these values are less than 5 litres/second, a rate of 5 litres/second can be used. Attenuation may not be necessary if the discharge is directly to coastal waters. In these cases the impact on the receiving environment in terms of habitat, erosion and water quality should be assessed.

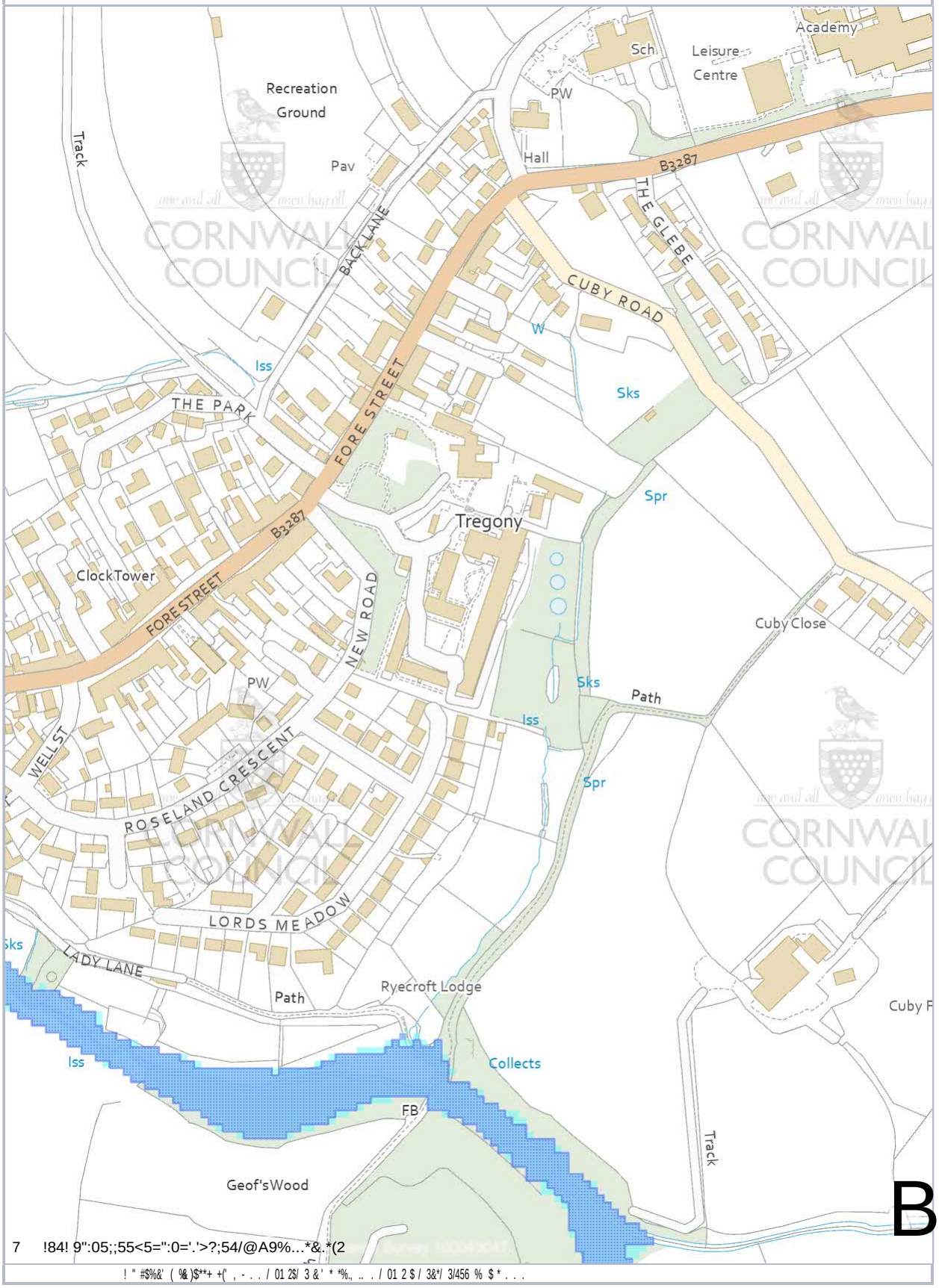
(Products exist that allow individual properties to restrict run-off to of 1.5 litres/second, using private underground storage tanks. A discharge of this rate is typically achieved on the commercially available systems using a proprietary device on the outlet with an orifice of around 30mm. This is combined with a sediment trap and a filter to prevent blockage. Storage is provided on the property in an underground tank or crate system, operating with a maximum depth of water of approximately 500mm. The size of the tank is based on the impermeable area draining to the system. Due to the small orifice size these systems would remain in private ownership as they are unlikely to be adopted.)

The design should take into account the appropriate allowance for increased rainfall from climate change. This should be based on the lifetime of the development, the guidance in Annex B of PPS25 and the PPS25 Practice Guide.

Underground attenuation and piped sections should be designed for a minimum of the 30-year storm. However total discharge rates from the site should still be controlled from the 100-year storm at the greenfield run-off rate from the 100 year storm. Attenuation of events exceeding the piped system may be achieved by temporary flooding of open spaces or car parks. If surface flooding of open areas is not appropriate, the formal drainage system should be designed to accommodate the 100 year storm.

Safe and appropriate flow routes from blockage and exceedance of the drainage system should be evaluated. This should demonstrate no property flooding or increase in flood risk, either offsite or to third parties.

APPENDIX B



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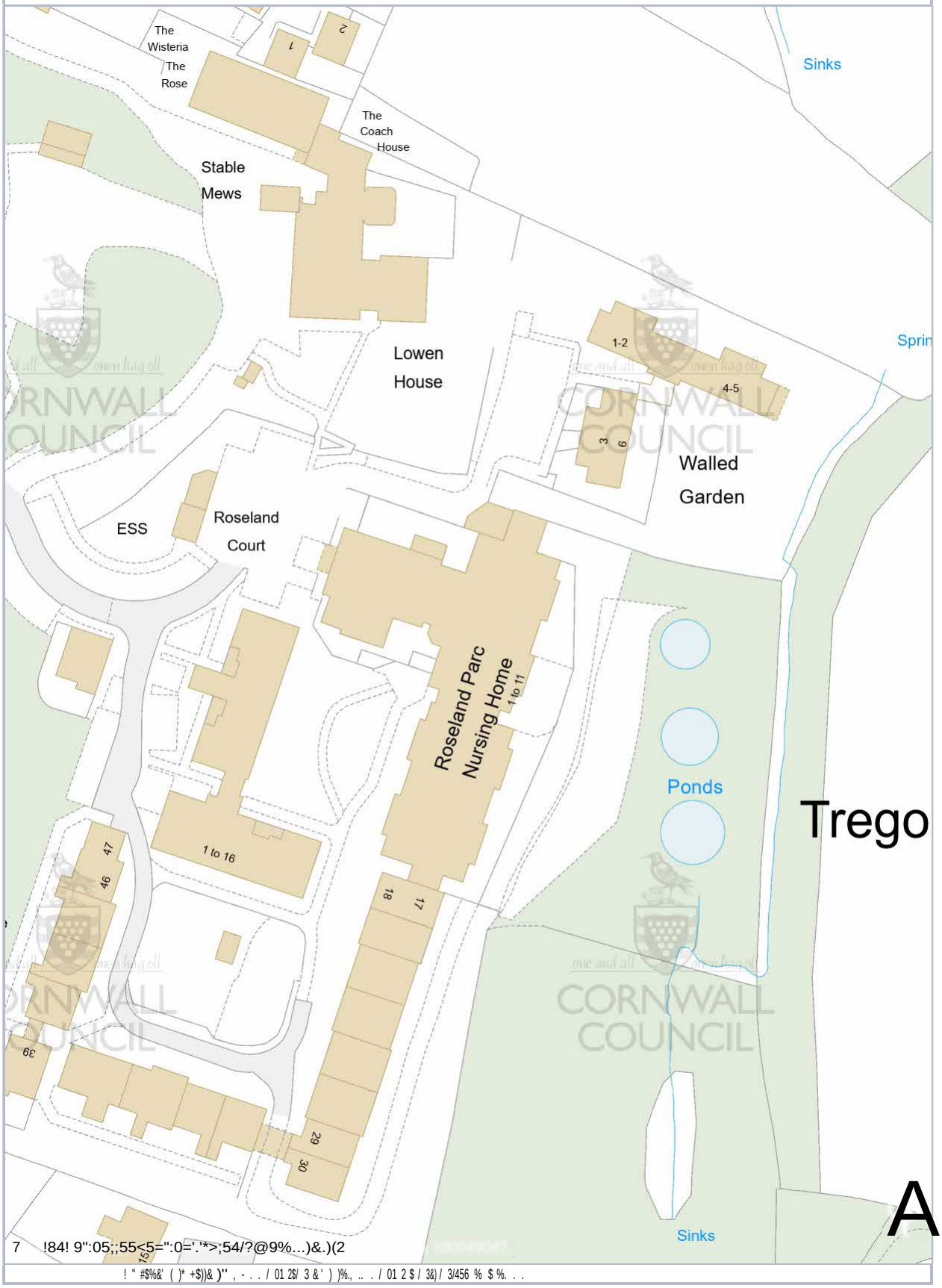

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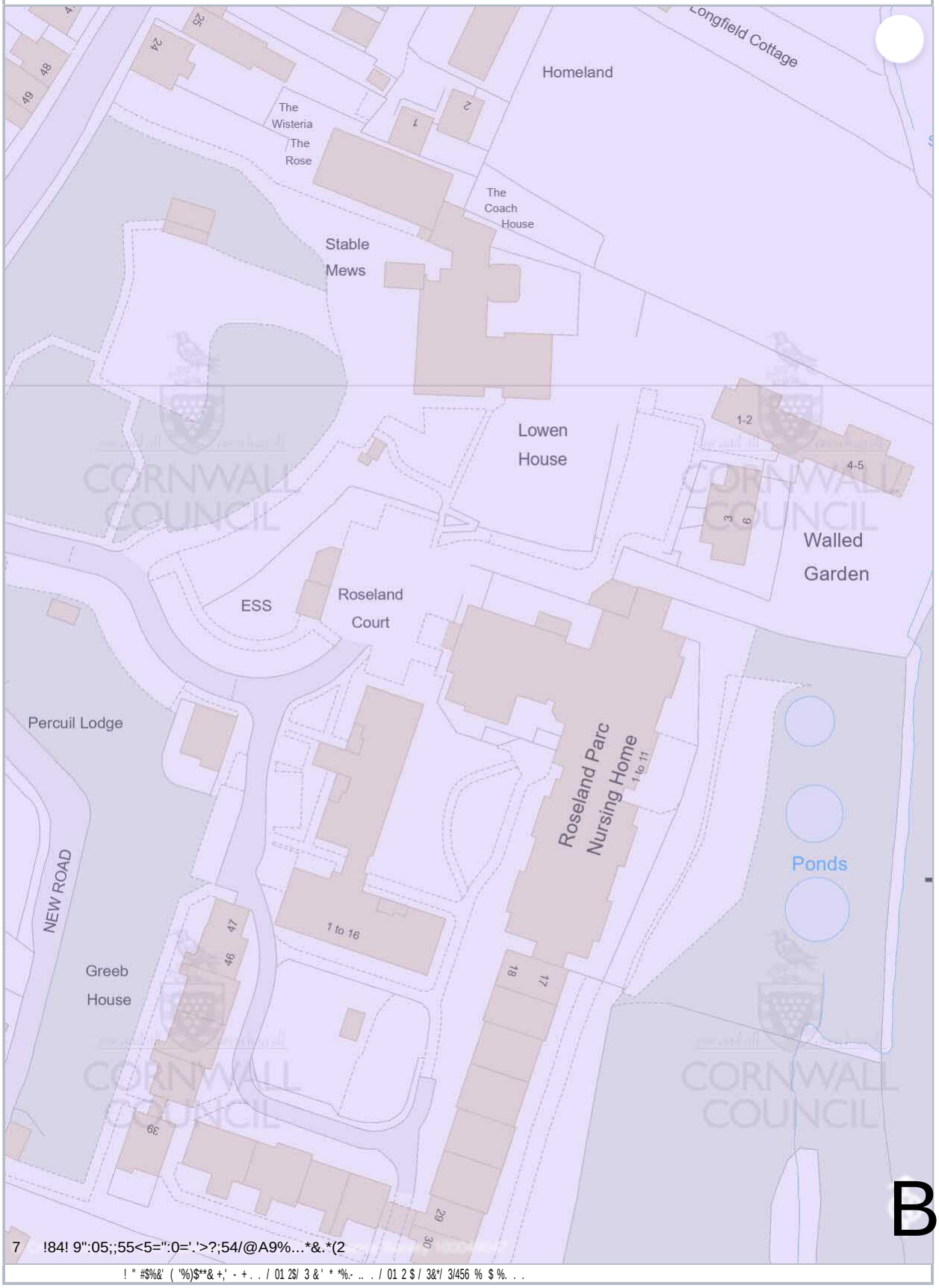
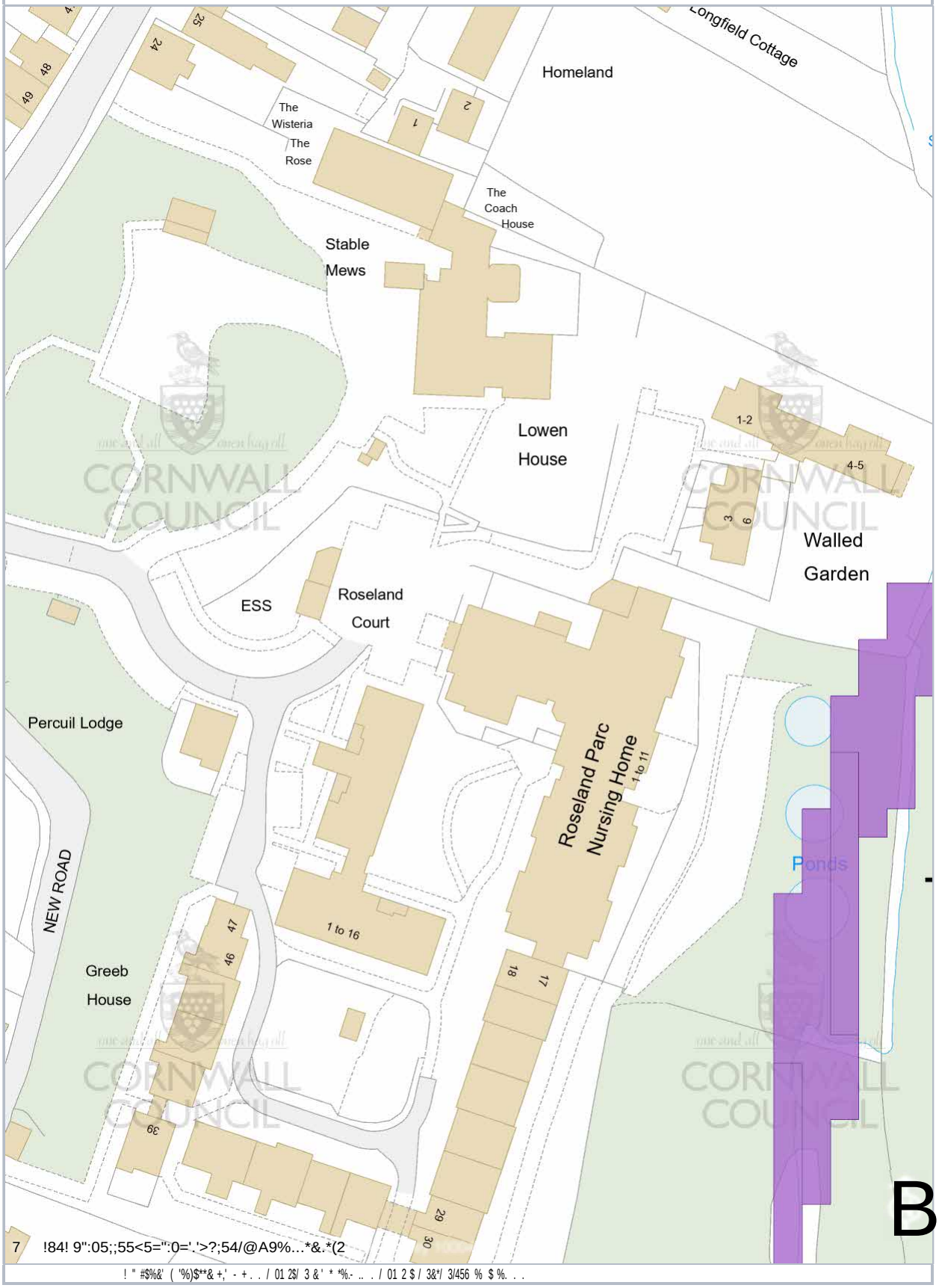
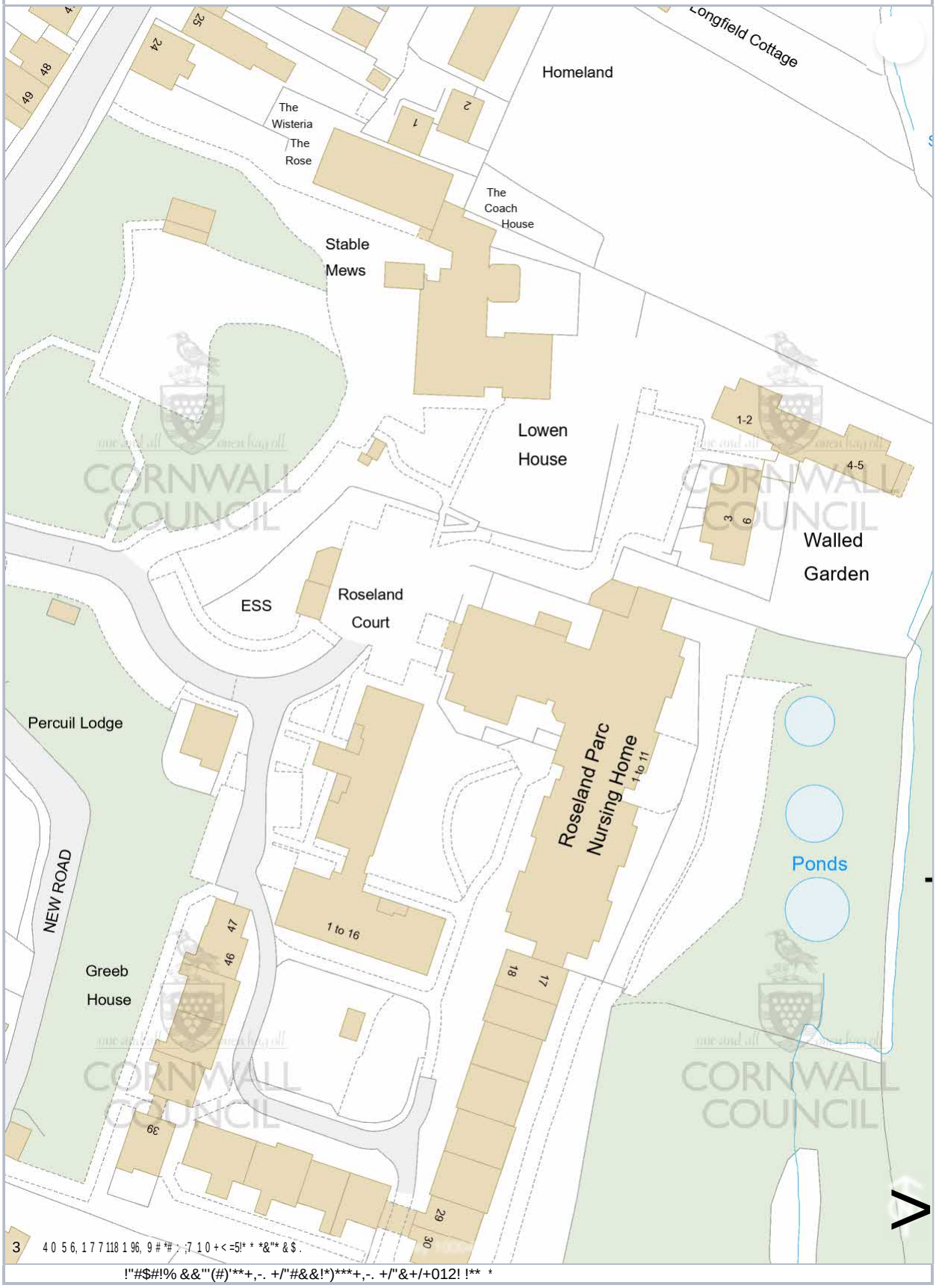
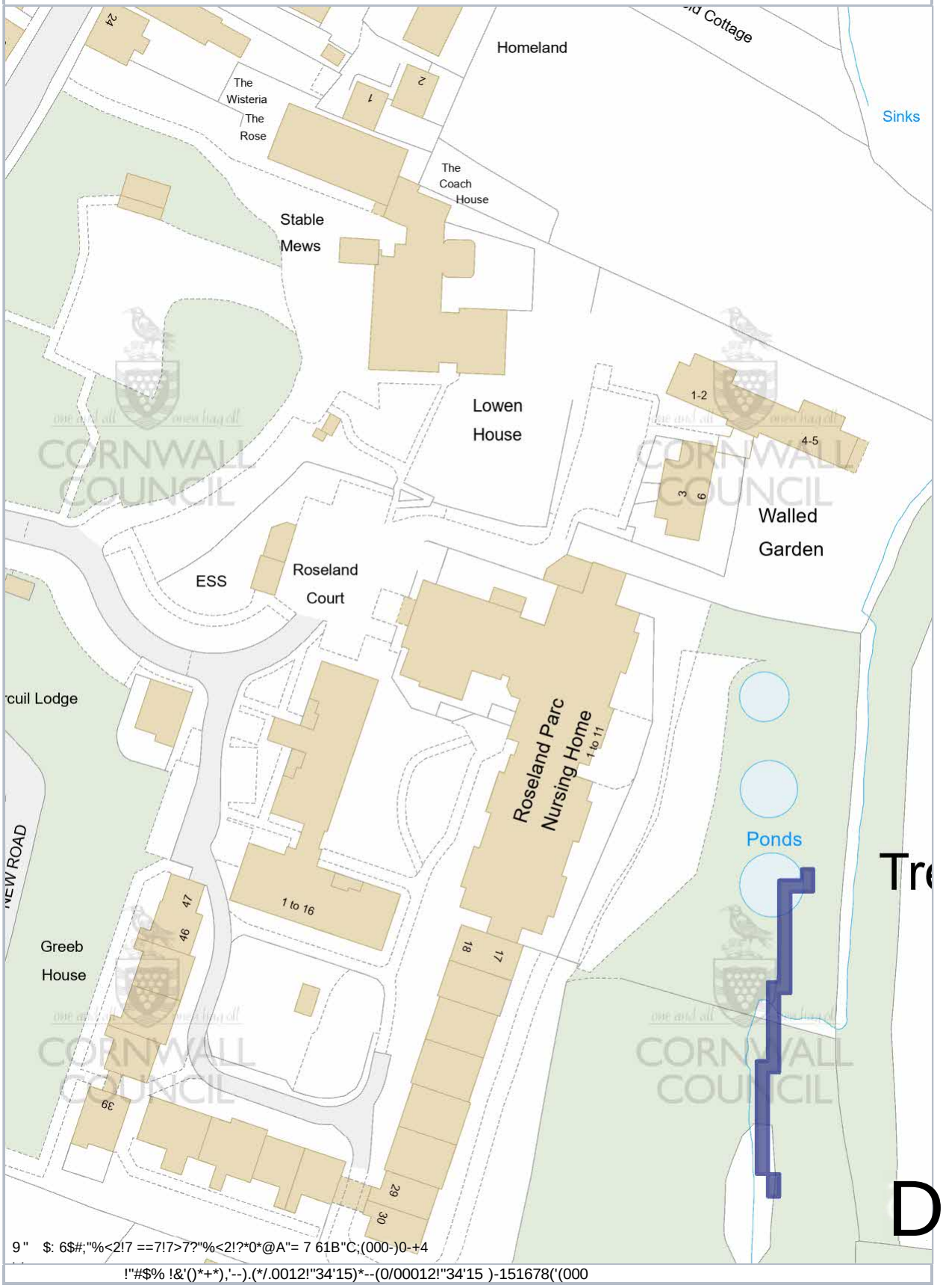
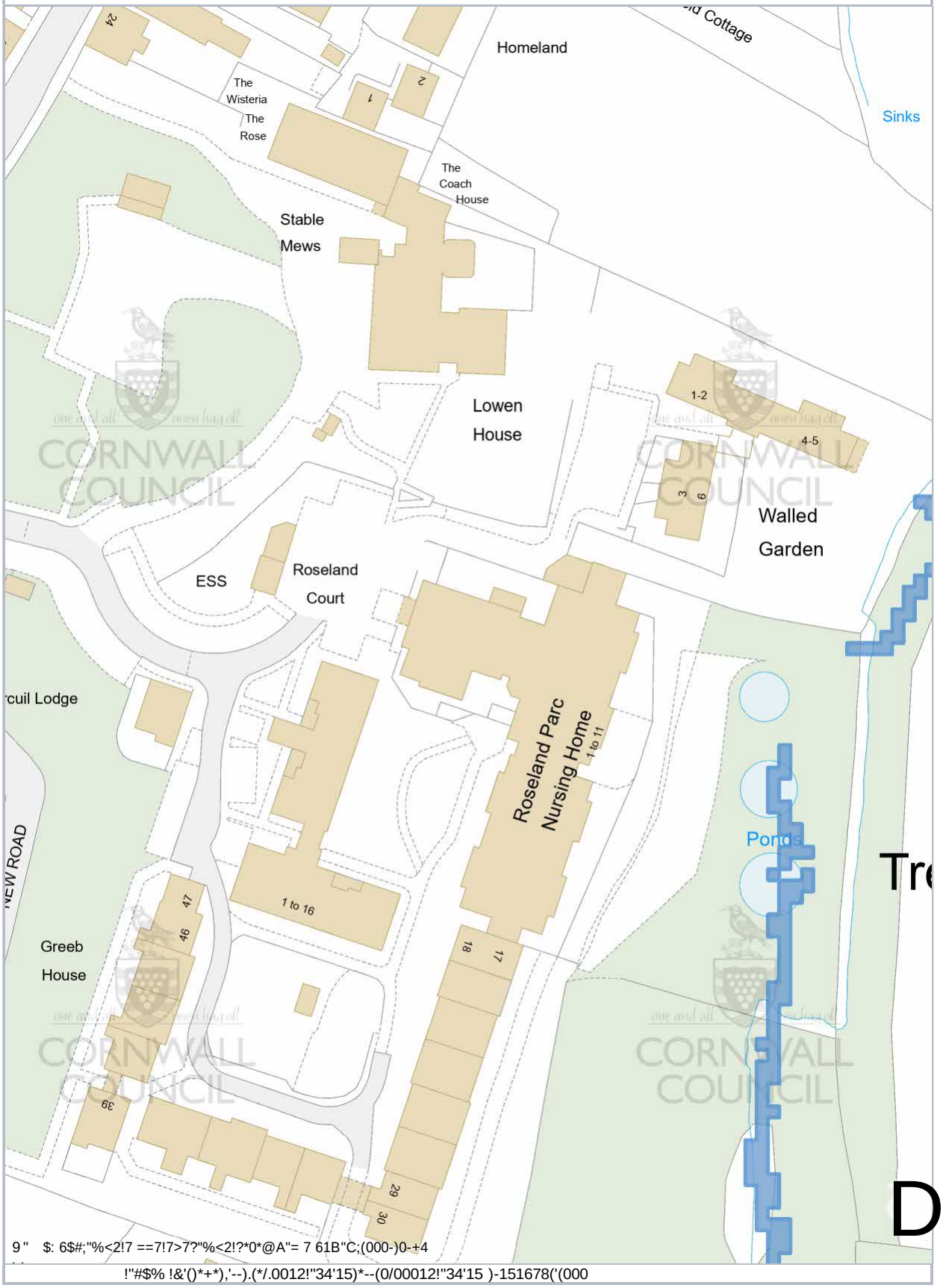
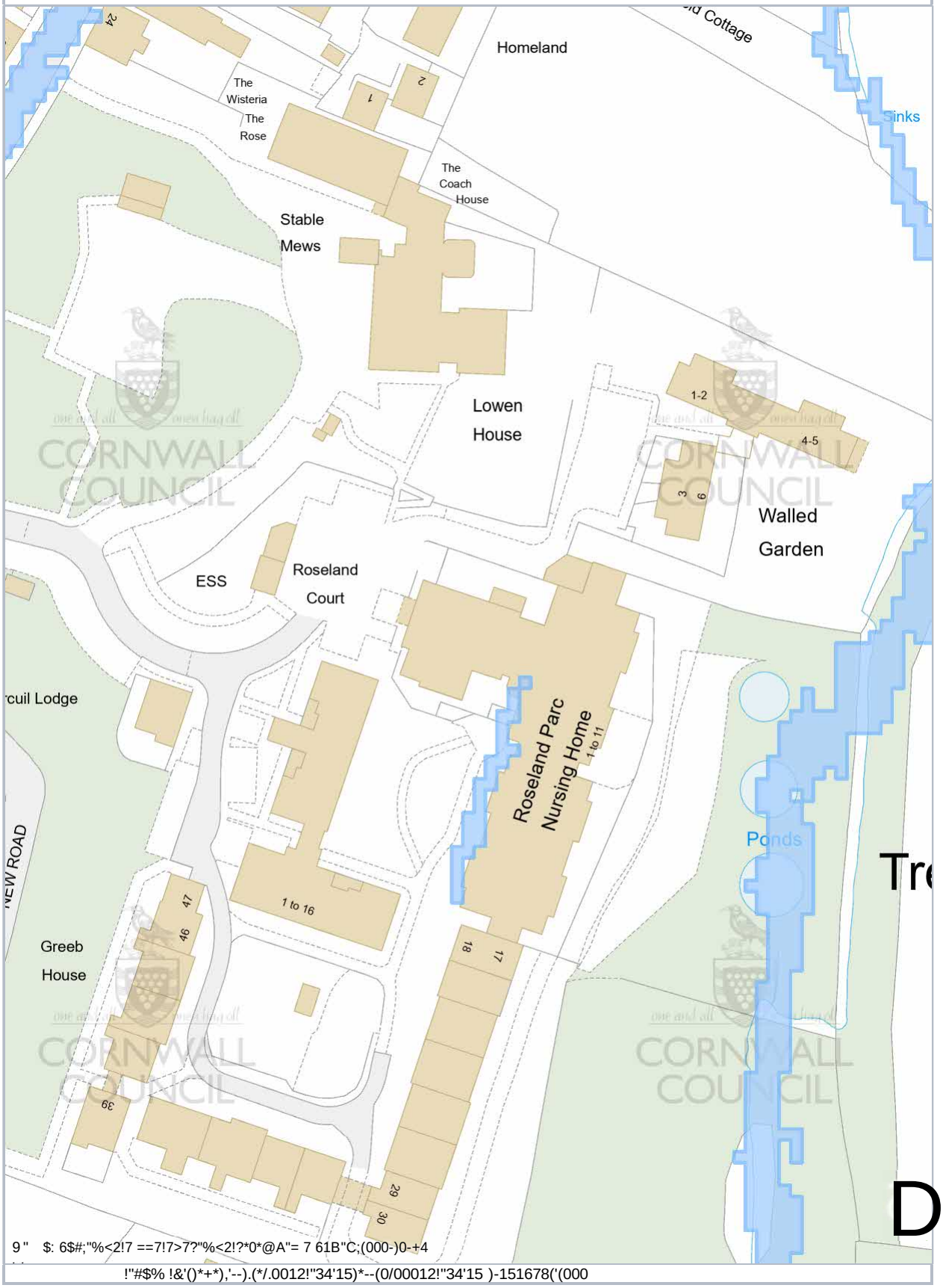





Longfield Cottage
Homeland
The Wisteria
The Rose
The Coach House
Stable Mews
Lowen House
1-2
4-5
Walled Garden
ESS
Roseland Court
Percuil Lodge
NEW ROAD
Greeb House
Roseland Parc Nursing Home
1 to 11
1 to 16
Ponds
CORNWALL COUNCIL







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Flood map for planning

Your reference	Location (easting/northing)	Created
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Your selected location is in flood zone 1, an area with a low probability of flooding.

You will need to do a flood risk assessment if your site is **any of the following:**

- bigger that 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

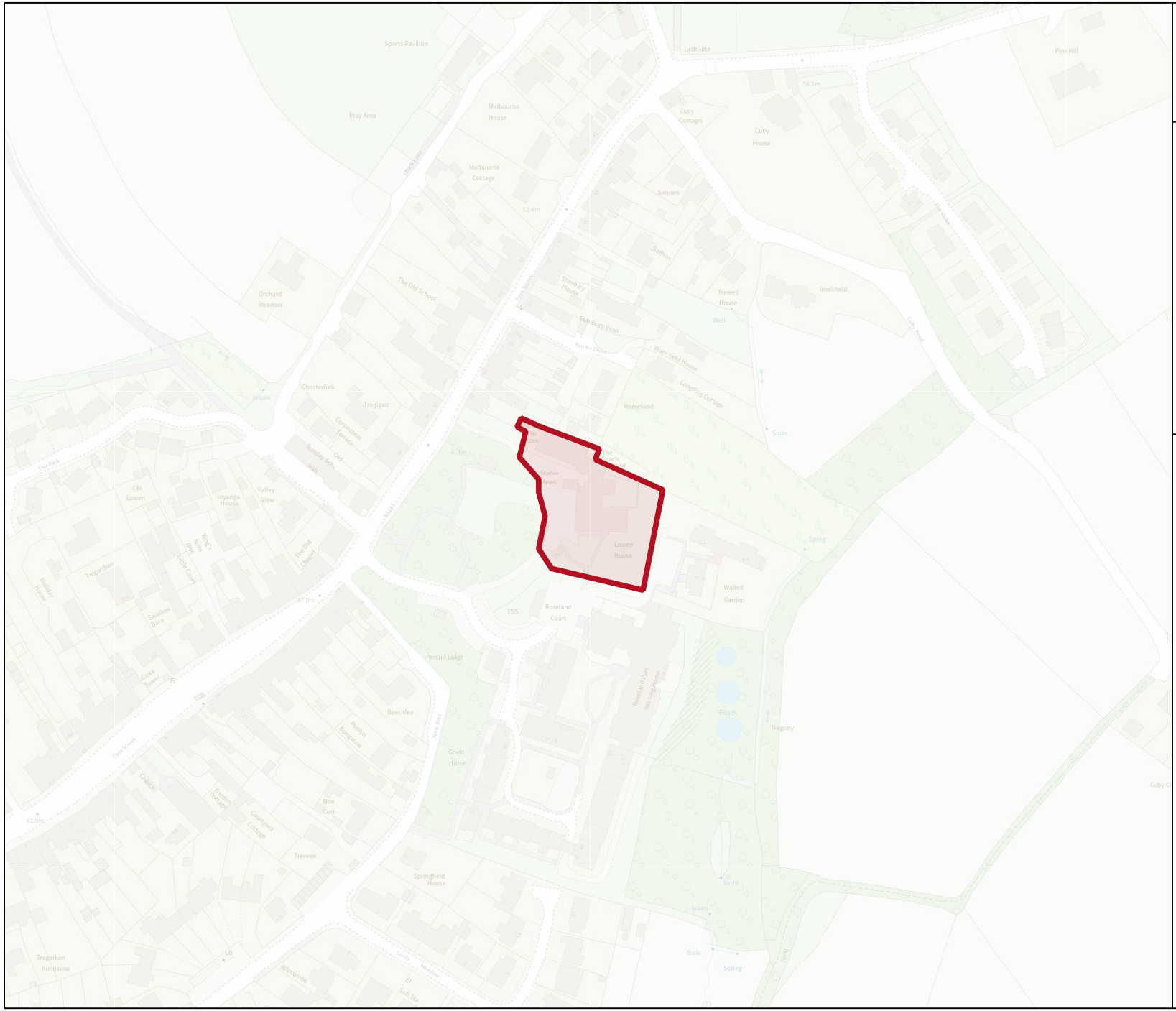
Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2022 OS 100024198. https://flood-map-for-planning.service.gov.uk/os-terms



Environment Agency

Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
192718/45010

Scale
1:2500

Created
3 Aug 2023 14:51

- Selected area
- Flood zone 3
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Water storage area

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APPENDIX C

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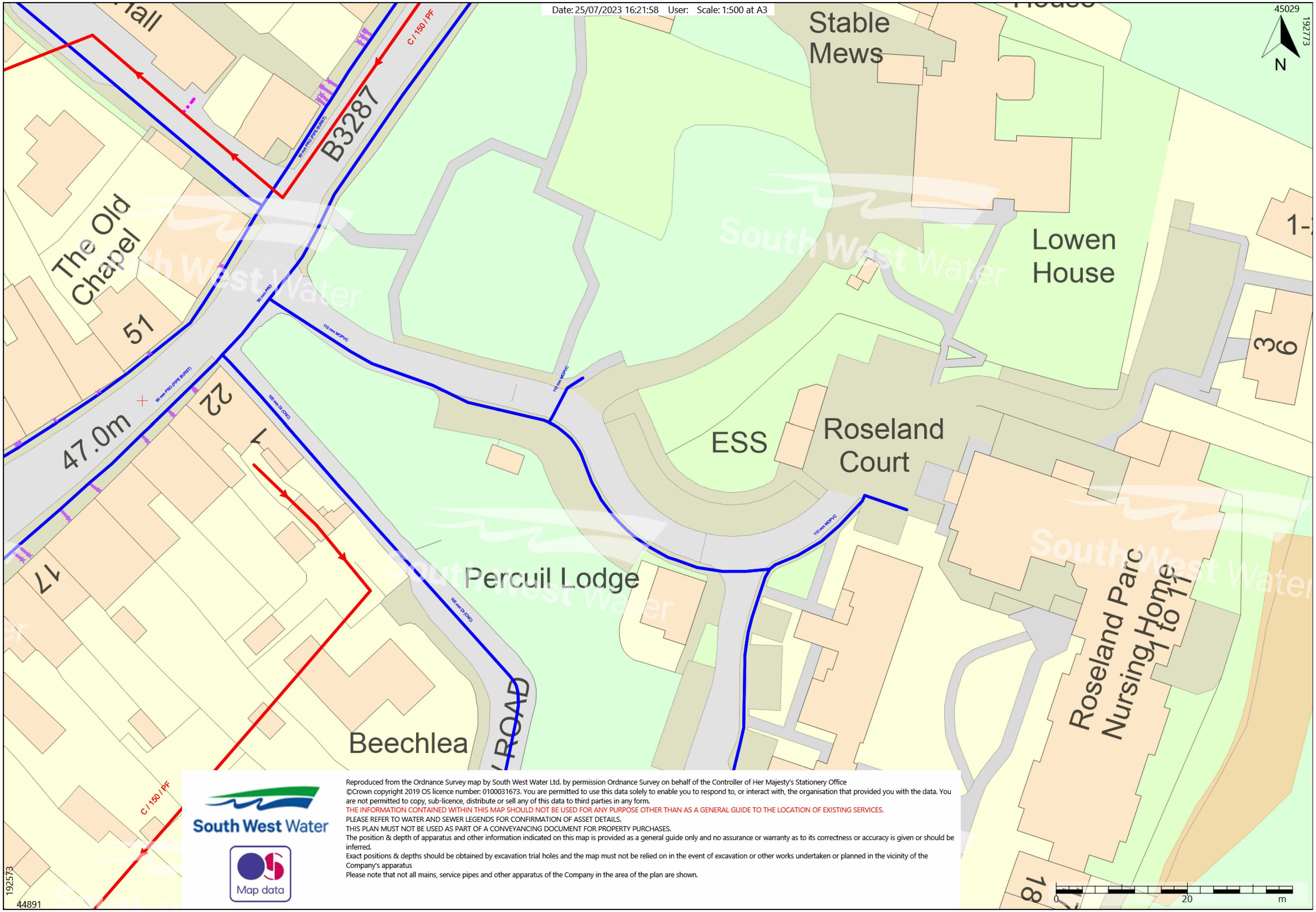

THE INFORMATION CONTAINED WITHIN THIS MAP SHOULD NOT BE USED FOR ANY PURPOSE OTHER THAN AS A GENERAL GUIDE TO THE LOCATION OF EXISTING SERVICES.
PLEASE REFER TO WATER AND SEWER LEGENDS FOR CONFIRMATION OF ASSET DETAILS.
THIS PLAN MUST NOT BE USED AS PART OF A CONVEYANCING DOCUMENT FOR PROPERTY PURCHASES.
The position & depth of apparatus and other information indicated on this map is provided as a general guide only and no assurance or warranty as to its correctness or accuracy is given or should be inferred.
Exact positions & depths should be obtained by excavation trial holes and the map must not be relied on in the event of excavation or other works undertaken or planned in the vicinity of the Company's apparatus
Please note that not all mains, service pipes and other apparatus of the Company in the area of the plan are shown.

Date: 25/07/2023 16:23:25 User: Scale: 1:1250 at A3

45133

192922

N

Orchard Meadow

The Old School

Saffron

Stanbury House

Trewell House

Brookfield

Well

CUBY ROAD

Stanbury Vean

PENLEE CLOSE

Waterfield House

Longfield Cottage

Homeland

Sinks

Issues

Chesterfield

Tregigan

Coronation Terrace

The Old Sunday School

Hall

B3287

The Wisteria

The Rose

The Coach House

47.1m

Stable Mews

THE PARK

Chi Lowen

Inyanga House

Valley View

The Old Chapel

King's Arms (PH)

Little Court

Tregarthen

Holiday House

Swallow Barn

Lowen House

1-2

4-5

3&3

Walled Garden

Spring

ESS

Roseland Court

47.0m

Percuil Lodge

Roseland Parc Nursing Home

1 to 11

1 to 16

Ponds

Tregony

Clock Tower

FORE STREET

TCB

Beechlea

NEW ROAD

Greeb House

Panlyn Bungalow

Kea Barn

Church

Garden Cottage

Courtyard Cottage

Noweth Cottage

Trevean

42.0m

THE SQUARE

War Memorial Shelter

Tregarken Bungalow

Springfield

Path (um)

0 40 80 m

South West Water

Map data

Reproduced from the Ordnance Survey map by South West Water Ltd. by permission Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
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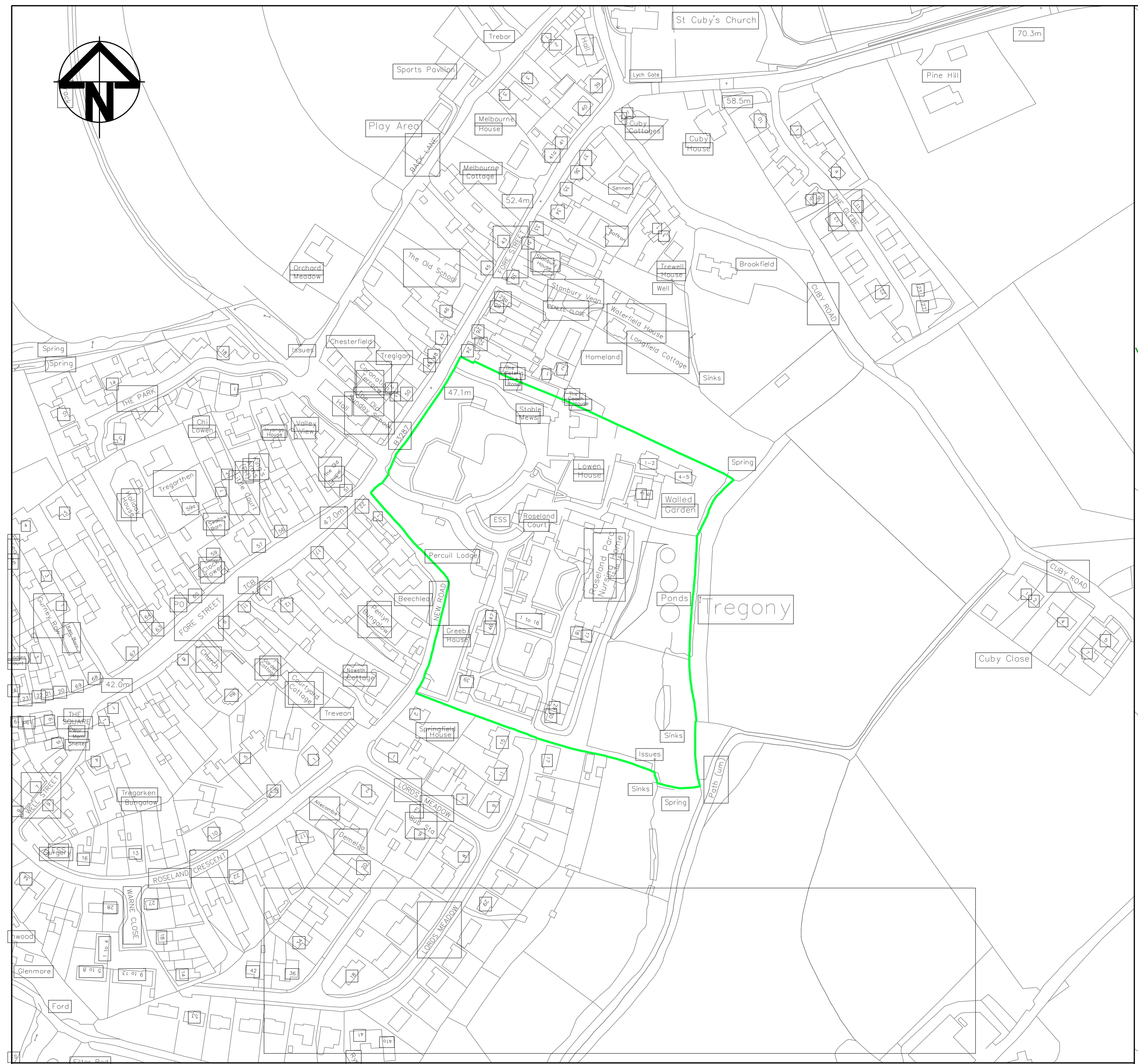
THE INFORMATION CONTAINED WITHIN THIS MAP SHOULD NOT BE USED FOR ANY PURPOSE OTHER THAN AS A GENERAL GUIDE TO THE LOCATION OF EXISTING SERVICES.
PLEASE REFER TO WATER AND SEWER LEGENDS FOR CONFIRMATION OF ASSET DETAILS.
THIS PLAN MUST NOT BE USED AS PART OF A CONVEYANCING DOCUMENT FOR PROPERTY PURCHASES.
The position & depth of apparatus and other information indicated on this map is provided as a general guide only and no assurance or warranty as to its correctness or accuracy is given or should be inferred.
Exact positions & depths should be obtained by excavation trial holes and the map must not be relied on in the event of excavation or other works undertaken or planned in the vicinity of the Company's apparatus
Please note that not all mains, service pipes and other apparatus of the Company in the area of the plan are shown.

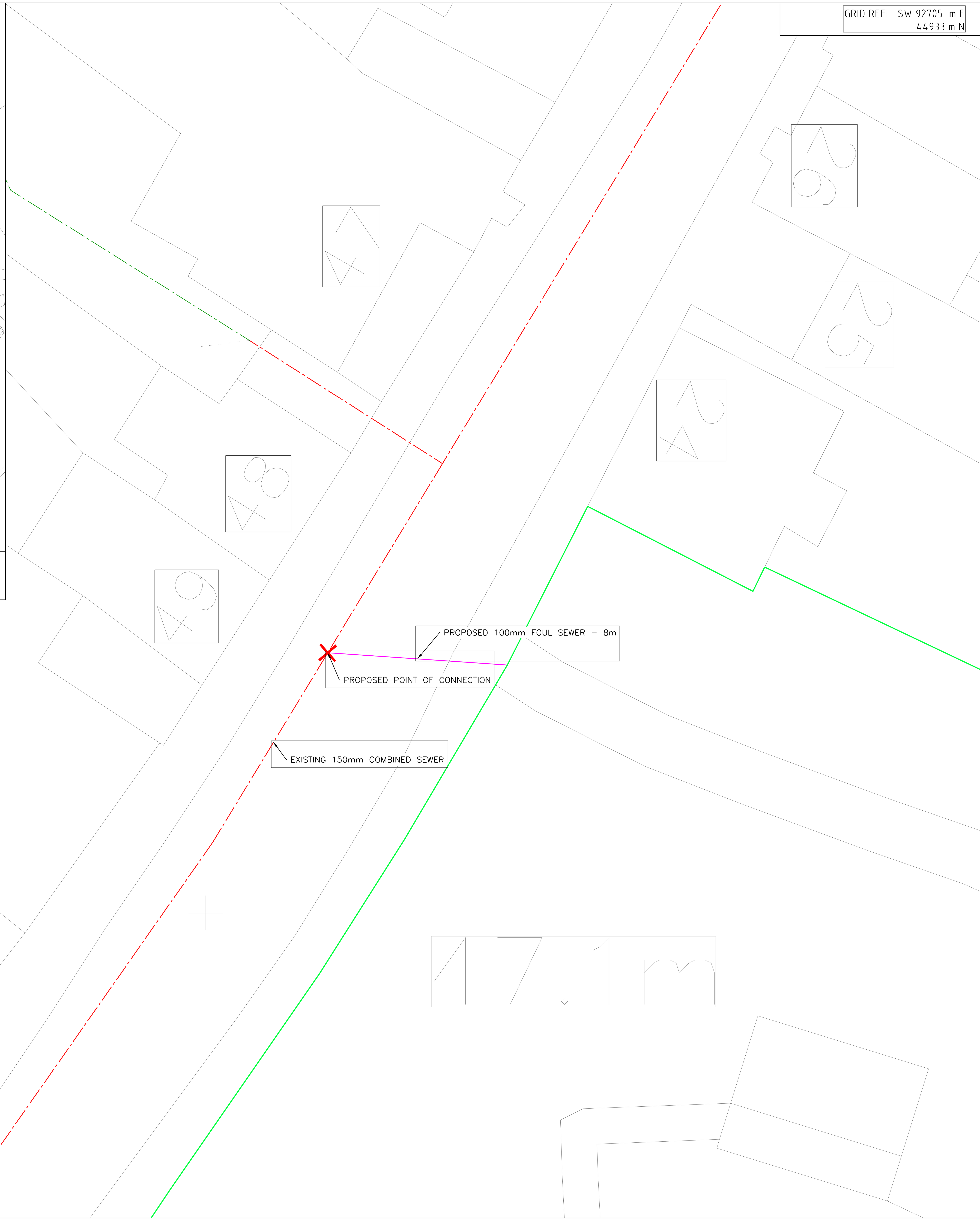
192423

44788



LOCATION PLAN

SCALE 1:2500 @ A1



PROPOSED SITE LAYOUT

SCALE 1:100 @ A1

SCALE 1 : 100

NOTES:

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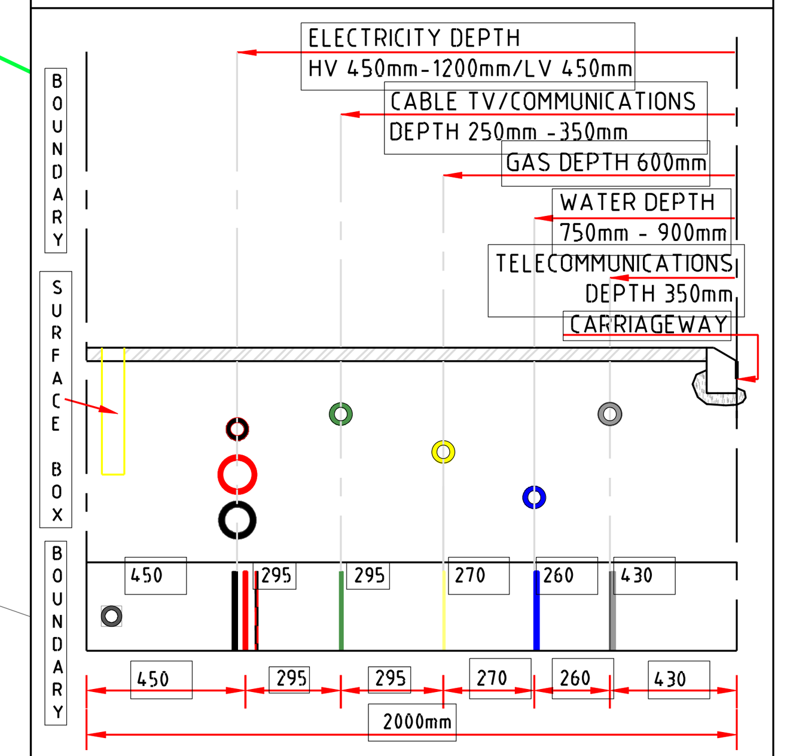
2. Preliminary and tender stage drawings shall not be used for construction.
3. This drawing is not intended to show details of foundations, ground conditions or contaminants. Any suspected contamination found by the Contractor is to be reported to the Consultant and further investigated by a suitable expert appointed by the Contractor.
4. All dimensions are in millimetres unless stated otherwise. All levels are in metres and needs to be confirmed on site, by the Contractor, and needs to be communicated to SWW Project Managers, before construction.
5. The Contractor is to verify exact details of existing services, all ground levels and building / site dimensions along proposed pipe routes prior to construction. Any discrepancies are to be reported to the Consultant.
6. Setting out to be based on information shown on the Developer's drawings and not by scaling. Discrepancies are to be reported to the Consultant.
7. Minimum cover to sewers should be 350mm in Domestic gardens. 500mm in Domestic Driveways and Parking areas with Vehicle Gross Weight Less than 7.5 tonnes. 900mm in Domestic Driveways, Agricultural land, Parking areas and Narrow streets, with Limited access to Vehicles with gross weight greater than 7.5 tonnes and 1.2m in Highway roads.
8. The Contractor is responsible for all pipe fittings and resistance to thrusts.
9. Coloured plastic marker tape at least 150mm wide is to be laid at a minimum of 200mm above the soffit of the pipe. The tape shall be printed with a description of the service in bold capital letters throughout its length, in intervals not exceeding 700mm and shall incorporate a corrosion resistant tracing system for non-metallic pipes.
10. Responsibility for any element of design not specified or approved by the Consultant lies with the Contractor.
11. The Contractor is to construct works in accordance with CESWI 7th Edition, Sewers for Adoption 7th Edition and SWW's Technical Standards.
12. The Contractor is to comply in all respects with current Building Legislation and British Standards. This drawing must be read with and checked by the Contractor against any structural, geotechnical or other specialist documentation available.
13. The Foundation of the Building should be 150mm below the Invert Level of the Pipe

KEY - SEWERS

- NEW PUBLIC FOUL SEWER
- EXISTING PUBLIC FOUL SEWER
- NEW PUBLIC SURFACE WATER SEWER
- EXISTING PUBLIC SURFACE WATER SEWER
- NEW PUBLIC COMBINED SEWER
- EXISTING PUBLIC COMBINED SEWER
- EXISTING PRIVATE FOUL SEWER
- EXISTING SEWER TO BE ABANDONED
- TO BE ABANDONED (BROWN)
- PROPOSED POINT OF CONNECTION (RED)



Issue	Description	Drn	Chkd	Appd	Date
P1	INITIAL ISSUE	JY	SK	HS	03/08/23

South West Water

Scale (A1): SCALE_A1 | Datum: DATUM

Project: PENLEE HOUSE, ROSELAND COURT, TREGONY, TR2 5PD

Title: PRE-DEVELOPMENT POINT OF CONNECTION ENQUIRY PROPOSED FOUL SEWER

Work Request No.	Drawing No.	Issue
3812223	0001	P1

CAD Ref FILENAME

PLOTINFO VER ©

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www.southwestwater.co.uk

Tyler Toogood
MBA Consulting
Boscawen House
Chapel Hill
Truro
TR1 3BN

Direct line: (01392) 443644
Planning Team: (01392) 442836
Our ref: WR 3812223/SK
Email: developerservicesplanning@southwestwater.co.uk

11 August 2023

Dear Mr Toogood

Pre Planning: Point of connection enquiry – Provision of new public sewers

Proposal: Commercial development of 9no retirement apartments
Location: Penlee House, Roseland Court, Tregony TR2 5PD

Further to my letter dated 3 August 2023 regarding the Pre Planning Point of Connection Enquiry for the above proposal, I am now able to provide the following response.

The following has been based upon the information in your completed application form and accompanying correspondence. Therefore, should any of the information now be different, please ensure that you inform South West Water of any amendments to ensure the response is accurate.

Please note: The following information is a desk-top budget estimate to provide an approximation of the costs for the above proposed development. If you would like South West Water to provide a formal offer for any of the activities detailed in this letter, please forward the relevant application to Developer Services.

To download these applications and view associated timescales for these activities, please visit our website: www.southwestwater.co.uk/developers

The estimates provided are based on the New Connection and Developer Services – Charging Arrangements 2023-24 and is valid until 31 March 2024. For further information, please refer to the company's Charging Arrangements 2023-24 document. This can be located on our website: www.southwestwater.co.uk/developerservices.

The estimate has been split into sections for ease of use:

Section 1: Site specific charges waste water sewer requisitions

Section 2: Sewer connections

Section 3: Adoption of public sewers

Section 4: Infrastructure charges

Section 5: Income Offsets

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Section 6: Environmental Incentives

Section 7: Surface Water Run-off Destination Hierarchy

Section 8: Asset Protection

Application forms and timescale for delivery of these processes can be found on our website at www.southwestwater.co.uk/developerservices.

You can if you wish, use an alternative provider, i.e., another Undertaker to supply your site. This is known as New Appointees and Variations (NAV's). Further details of what a NAV is can be found at https://www.ofwat.gov.uk/regulated-companies/markets/nav-market
Details of how South West Water interact with a NAV can be found at - https://www.southwestwater.co.uk/developer-services/water-services-and-connections/using-a-nav/

Should you require a Pre Planning: Point of Connection enquiry for the clean water services for this site, please contact the Developer Services Pre-Development Team.

I trust this provides the information required for the proposed development. However, if you have any questions or queries, please contact me on direct line: 01392 443644.

Alternatively, you can contact the Pre Development Team on 01392 442836 or via email: DeveloperServicesPlanning@southwestwater.co.uk.

Yours sincerely

[redacted]

Sally Kirk
Pre Development Coordinator

South West Water

Peninsula House, Rydon Lane, Exeter, EX2 7HR
www.southwestwater.co.uk

Section 1: Site specific charges for a sewer requisition

If a customer does not wish to self-lay, the company can provide a service to construct a sewerage connection for domestic purposes on behalf of the customer.

Point of connection – Foul sewer
This requires 8 metres of 100mm off-site foul sewer to our 150mm diameter combined sewer located in the roadway (B3287).

Budget Estimate
The estimated cost of this work is shown below: (all priced exclude VAT)

No.	Description	Unit	Value	Contestable/Non contestable	No	Total
SR1	Administration Fee	Per scheme	£1,984.00	Non-contestable	1	£1,984.00
SR5	Design of scheme	Per scheme	£5,245.00	Contestable	1	£5,245.00
SR7	Pipelaying in made ground in land not owned or occupied by the Developer.	Per metre	£1,049.00	Contestable	8	£8,392.00
					Total	£15,621.00

Total cost of scheme: £15,621.00

Note: Applicants for connection services (these may be developers or self-lay providers (SLPs)) have the choice over who provides the infrastructure and over who owns those connection assets. The services over which there is competition are referred to as 'contestable'.

Some other services, such as those linked to the security of water supply may only be provided by the appropriate water company. These are known as 'non-contestable' services.

Included within the rates are:-

1. Gravity sewers up to 200mm internal diameter.
2. Excavation and reinstatement to pre-existing ground conditions.
3. Up to two metres in depth and including any necessary manholes.
4. Compensation for grazing only. Should the third party require above and beyond this, then the company will look to recover the actual cost incurred in the payments.
5. Traffic management provides for two-way lights. Should the work require further traffic management, this will be included in the quote.
6. The administration fee covers the project management of the scheme and includes but is not limited to the customer communication, contract management, financial management of the scheme.

Exclusions will be charged on an actual cost basis on the bespoke quote

1. Any items contained within Schedule 13 of the Water Industry Act.
2. Where there is a need for additional traffic management above two-way lights e.g. road closure or three-way lights, this will be shown as bespoke item on the quotation.
3. Rising mains and pumping stations. Should a customer not be able to obtain the necessary third party rights to undertake this work, the company will provide a bespoke quotation for them.
4. Any other utility diversions required as a consequence of the work.
5. On surface water sewers, any costs associated with discharging the water to other than a public sewer.

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Should an application not proceed past quotation stage, the Company will charge you the costs involved to date as shown within the Charging Arrangements 23/24/

If a third party is to undertake the contestable items, they must be accredited for that particular type of work.

It is not known if any ecological constraints are present at the site and no allowance has been made within the estimate or programme for any ecological remedial measures that may be required

Please note that the proposed route is based on a desk-top review. Until an application has been submitted to and accepted by the company, no guarantee can be given that the sewer can be installed as per the sketch or to suit your requirements.

Public records

I have enclosed plans to show the location of the public sewers in the vicinity of the site and the indicative route for the proposed sewers to the points of connection. The information indicated on the plan is only as a guide and no assurance as to the accuracy is given or implied. The Company accepts no liability whatsoever for any error or omission in the information.

Section 2: Sewer connections

This covers the connection of the property/properties to the public sewer.

Applications should be made whether the connection is directly to the public sewer or indirectly (via private drain).

No.	Description	Unit	Value	Contestable/Non contestable		Total
SC1	Admin Fee	Per application	£80.00	Non-contestable	1	£80.00
SC2	Inspection Fee (Visit)	Per connection	£219.00	Non-contestable	1	£219.00
					Total	**£299.00**

Total cost for the sewer connections: £299.00
(all priced exclude VAT)

* *Additional fees will be applicable if further inspections are required.*

Section 3: Adoption of public sewers without a Pump Station

If the development is to be adopted into the company sewerage system, sewers and pumping stations must be constructed in accordance with defined standard and processes.

Unless otherwise stated charges are fixed. The prices quoted will be amended only if a cost change is generated by the customer.

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No.	Description	Unit	Value	Contestable/Non contestable	No	Total
SA1	Admin Fee	Per application	£489.00	Non-contestable	1	£489.00
SA2	Technical Vetting Fee without PS	Per property with a minimum fee £375.25	£19.00	Non-contestable	9	£375.25
SA4	Inspection Fee	Per property with a minimum fee £980.00	£52.00	Non-contestable	9	£980.00
					Total	£1,844.25

Total cost for the adoption of the public sewers: £1,844.25
(all priced exclude VAT)

* Additional fees will be applicable if further vetting or inspections are required

All Section 104 agreements will need to be supported by a bond. This bond should be 10% of the construction costs of the scheme.

Included within the charges are

1. The administration fee covers administration of the process including the provision of maintenance and vesting certificates.
2. Vetting – covers the review of the drawings in accordance with the specification.
3. The vetting cost is based on one submission and two re-submissions. Should there be any subsequent re-submissions further fees will apply.
4. Inspection fees are based ongoing inspections during construction, maintenance inspection and one revisit for remedial inspection. Should there be any subsequent re-inspections further fees will apply.
5. The company will undertake the first CCTV inspection of the sewers. Should a subsequent CCTV inspection be required to prove that remedial work is complete the developer will be required to provide and fund this.

Excluded from the charges

1. The company will not monitor the alarms to the pumping station until such time as the pumping station is vested.
2. Any jetting required enabling CCTV inspection. It is the developer's responsibility to make sure that the sewers are clean and ready for CCTV.
3. Any compensation payable to third party landowners for access or rights for the sewer laying or discharge.

Security

Cash bond (maximum value of bond) - £3,000

Other security - this can be by means of an insurance policy, bank guarantee or other means as agreed with the developer and the Company.

A construction schedule should be submitted by the developer for confirmation of the bonding value. If no schedule is submitted before technical approval is granted, the Company's schedule will be used.

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Section 4: Infrastructure charges

The infrastructure charge is authorised under Section 146(2) of the Water Industry Act 1991. Charges have been set to recover the costs of network reinforcement involving new development from those making demand on the water and sewerage systems rather than from existing customers of the water and sewerage companies.

To calculate the infrastructure charge for the retirement apartments, please complete the enclosed loading sheet and return to Developer Services by email to developerservicesplanning@southwestwater.co.uk

Section 5: Income Offsets

The payment will apply to every first-time new connection (clean or waste) to the Company's network and will be deducted from infrastructure charges.

The income offset is calculated on a per property basis for a domestic house and will be deducted from the infrastructure charges payable for the connection. Where the building is not for a single dwelling a different scenario, then the relevant multiplier that is used for previous site usage will be used as a means for calculating the income offset.

Payment of income offsets

Income offsets may only be applied once. Therefore, if they have already been deducted as part of one the following examples, they will not be deducted again: -

a. As part of a previous requisition

b. As part of a previous Asset Payment to an SLP

Income offsets will only be offset against infrastructure charges where the individual plot connection is made on or after the 1 April 2020.

To calculate the income offset for the retirement apartments, please complete the enclosed loading sheet and return to Developer Services by email to developerservicesplanning@southwestwater.co.uk

Section 6: Environmental Incentives

South West Water are offering to reduce the water infrastructure charge for new development by 75%. The reduced rate will apply to infrastructure charges for developments which meet the specified criteria.

Developers will need to demonstrate, using the building regulations calculator that:

properties are built with water efficient fittings and fixed appliances
mean water usage would not exceed the potential consumption of 110 litres per person, per day rather than the 125 litres per person, per day expected in the relevant Building Regulations.

Applications for this scheme will need to be submitted at the same time as the application for the relevant service.

Please note late or retrospective applications for the sustainable infrastructure charge cannot be accepted onto the scheme and it is currently only available on clean water infrastructure charges.

Section 7: Surface Water Run-off Destination Hierarchy

The statutory Water and Sewerage Undertaker supports the Planning Policy Guidance for Flood Risk & Coastal Change statement. The applicant must demonstrate how its proposed development will have separate foul and surface water drainage systems and not be detrimental to existing infrastructure, the public and environment (and that any provisions for protecting infrastructure have been agreed with SWWL as service-provider). You will need to demonstrate that the prospective surface run-off will discharge as high up the hierarchy of drainage options as is reasonably practicable (with evidence that the Run-off Destination Hierarchy has been addressed, and reasoning as to why any preferred disposal route is not reasonably practicable): In all cases, where there is a risk of flooding the development will be made safe and flood risk not increased elsewhere.

1. Water re-use (smart water butts/rainwater harvesting etc.)
   Provide written evidence as to why water re-use practises are not a viable option for your proposal

2. Discharge into the ground (infiltration); or where not reasonably practicable,
   Provide written evidence as to why Infiltration devices, including Soakaways, Swales, Infiltration Basins and Filter Drains do not meet the design standards as specified in either H3 Building Regulation standards for areas less than 100m2. Soakaways serving larger areas must meet the design standard specified in BS EN 752-4 (para 3.36) or BRE Digest 365 Soakaway Design.

3. Discharge to a surface waterbody; or where not reasonably practicable,
   Provide written evidence for refusal of discharge consent from owner of water body (Environment Agency, Local Authority, Riparian Owner etc)

4. Discharge to a surface water sewer, highway drain, or another drainage system; or where not reasonably practicable,
   Provide written evidence for refusal of discharge to drainage system (Highway Authority, Environment Agency, Local Authority, Private ownership)

5. Discharge to a combined sewer. (Subject to Sewerage Undertaker carrying out capacity evaluation)
   South West Water will carry out a hydraulic capacity review of the combined sewerage network before permission will be granted to discharge to the combined sewer.

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Having reviewed the current information as to proposed surface water disposal for this development, please note that method proposed to discharge into the ground (infiltration) is acceptable and meets with the Run-off Destination Hierarchy.

Section 8: Asset Protection

Clean Water
Please find attached a plan showing the approximate location of a public 110mm water main in the vicinity of the above proposed development. Please note that no development will be permitted within 3 metres of the water main. The water main must also be located within a public open space and ground cover should not be substantially altered.

Should the development encroach on the 3 metre easement, the water main will need to be diverted at the expense of the applicant.

If you need help in locating the apparatus, please use our dial before you dig service - https://www.southwestwater.co.uk/services/your-water/dial-before-you-dig.

The precise position of water mains and sewers must be ascertained by hand digging trial holes after first contacting South West Water, who will give such information as is available regarding the general location of the mains and sewer in the area. No liability is accepted for the accuracy of any information given as to the position or existence of water mains and sewers. In particular, service pipes and drainage connection are not generally shown on mains records, but their presence should be anticipated and precautions taken to avoid damage. We recommend that before you proceed with any proposal that you precisely identify the location of the water mains and sewers and not rely on our drawings as an accurate position of them.