RSPD

Roads & Sewers for Planning & Design

# Drainage & SUDs Strategy
# In support of Residential Development at

Land at Sunningdale,
Gregory Walk, Sedlescombe,
East Sussex



**Jamie Finch MCIHT**
June 2020
Revision [B]

Drainage & SUDS Strategy
At
Sunningdale, Sedlescombe

# Contents

Drainage & SUDS Strategy
At
Sunningdale, Sedlescombe

## Amendments

| Revision | Date | Description |
|---|---|---|
| 0 | July 2019 | First Issue |
| A | November 2019 | Updated Planning Layout |
| B | June 2020 | Updated Point of Discharge on Drainage Strategy Plan |

## References

| Reference | Title |
|---|---|
| A | CIRIA Publication 753 – The SUDS Manual (2015) |
| B | Sewers for Adoption 7th Edition (Wrc 2012) |
| C | Part H of the Building Regulations (2015) |
| D | The Soakaway Design Guide (KCC 2000) |
| E | Guide to the Sustainable Drainage Systems in East Sussex (June 2015) |
| F | Planning Practice Guidance (2016) |

Drainage & SUDS Strategy
At
Sunningdale, Sedlescombe

## Introduction

This Drainage & SUDS Strategy has been developed in support of a planning application for the construction of 9 new residential dwellings and the retention of an existing dwelling at Land at Sunningdale, Gregory Walk, Sedlescombe, East Sussex, TN33 0QZ.

The aim of the Drainage Strategy is to incorporate and adopt Best Management Practices (BMP's) for Sustainable Urban Drainage Systems (SUD's) in accordance with Site Specific Technical Reports and Published Documents referenced in Page (ii). This document also aims to identify the methods of drainage available for the Surface Water Drainage.

A layout of the proposed scheme can be found in the appendices of this document.

## Development Description and Location

The development proposal is for the erection of 9 new residential dwellings and the retention of an existing dwelling in the generous garden area of the land at Sunningdale. This land is located within the village of Sedlescombe and is in the district of Rother.

The location of the proposed site is at grid reference 578140, 117720 as shown in the location plans in the appendices.

## Existing Drainage

There are public foul water sewers in the vicinity of the application site in Gregory Walk and The Street, which runs through the middle of Sedlescombe, however there are no public surface water sewers. There is a river to the South of the proposed development, the River Line which is a tributary of the River Brede. It is likely that the current situation allows the surface water that is generated from this catchment to runoff directly to the River Line.

## Site Geology

The site is underlain by the Ashdown Formation as described by the British Geological Survey, typically consists of siltstones and finely grained sandstones with subordinate amounts of finely bedded mudstone. This Mudstone is arranged in rhythmic units "Cyclothems" and is commonly divided by thin pebble beds. In the East of the county, the formation tends to be more clayey in its lowermost part, whereas the uppermost 30 - 50m tend to be a sandier material.

Typically, because the Ashdown Formation is so variable it is generally deemed as unsuitable for infiltration, therefore, no soakage testing has been undertaken at this site.

## Ground Water

Local geotechnical records have been checked, which indicates groundwater is approximately 15m below ground level.

The proposed development site has been checked against Environment Agency Source Protection Zones (SPZ's) for groundwater and can be confirmed that the proposed development is outside of any SPZ's. A plan of the SPZ map is contained in the appendices.

## Topography

The land at Sunningdale is bounded at the Western, Southern and Eastern edges with mature hedging and trees, whereas the Northern boundary is shared with the existing homes at Gregory Walk. The River Line also runs along the Southern Boundary of the site.

The land is quite variable and generally slopes to the South West corner of the land. The site has not yet had the benefit of a full topographical survey, but would be undertaken prior to any detailed design work being undertaken.

## Design Objective

The objective of the design will be to;

a) Retain/reduce the quantity of surface water runoff leaving the development area, to equal or less than the greenfield runoff rate for all storms, up to and including the 1 in 100 year return period + 20% climate change, while still assessing the effect of the + 40% climate change.
b) Improve the quality of surface water runoff by infiltration methods and open SUD's wherever possible.

## Development Drainage Proposals

### Surface Water Drainage

It is not intended that the proposed development drainage will be offered for adoption to any of the statutory authorities, however, the surface water calculations for the proposed development will be in accordance with the requirements set out in Planning Practice Guidance, East Sussex County Council SUDS publications and CIRIA 753 SUDS Manual.

Given the local geology is generally deemed unsuitable for infiltration, the strategy will focus on utilising open SUDS to retain surface water before being allowed to discharge into the River Line at the Southern Boundary of the site.

The development consists of up to 9 new residential dwellings and the retention of an existing dwelling. These dwellings will be serviced by a new access road, footway and off road parking for each of the new homes, which will increase the impermeable area at the site.

The new road and footways have been measured and generate 766.83m² of impermeable area. The new dwellings with their respective driveways generate 960.46m² of impermeable area.

These catchments can be seen on the Drainage Strategy drawing. The Drainage Strategy drawing also shows the indicative surface water network for the development, directing the development water to a new attenuation area. This attenuation will function on the basis of being a dry basin

above underground attenuation crates. It is intended that the dry basin will only fill in the critical storm scenario for the climate change adjusted 1 in 100 year storm.

The 1 in 1 year greenfield runoff for the site has been calculated at 2.2l/s and therefore the discharge from the planned attenuation will be designed to accommodate this limited discharge.

The attenuation at the South West boundary, being the dry basin and underground geocellular storage is currently planned at 130m$^3$ which for the 40% climate change event would require further storage to be found on site, which can be easily be accommodated in a permeable paving system in the private driveways and other system storage.

The system has currently been designed in a particular way, as invert levels with the drainage will need to remain flexible until the precise location and depth of a strategic water main crossing the site has been confirmed. Once this information has been gathered along with a full topographical survey, the final design can be confirmed.

## Foul Water Drainage

There are public foul sewers in Gregory Walk, however the details of these sewers have not yet been confirmed. It is not possible to confirm the foul water drainage strategy without the provision of a topographical survey to review against public sewer asset plans, however it would be sensible to assume a small package pumping station may be required.

# Residual Flood Risk

This development has not been formally assessed in a site specific flood risk assessment as the site sits entirely within Environment Agency Flood Zone 1. This is confirmed in the Flood Maps for Planning, contained in the appendices. Although there is no formal flood risk assessment for this site, this Drainage strategy takes the principles normally identified within a flood risk assessment, to incorporate them within the detailed design, focusing on reduction and mitigation of flood risk for both on and off site.

Surface Water Drainage systems have been designed to cater for and up to the 1 in 100 year return period, plus 20% and 40% climate change, retaining the surface water on site in accordance with LLFA requirements and Industry Guidance.

Local groundwater levels have been assessed and considered a low risk of groundwater flooding, as the groundwater is estimated at around 15m BGL.

## Future Maintenance

Maintenance regimes of the various drainage methods will vary, depending on the development proposals and surroundings. However, a general guide to the maintenance of the various methods of drainage have been provided below;

### Maintenance of Ponds & Wetland

There will a newly designated dry basin, which will be situated at the South West of the Proposed development.

The dry basin has been designed as an attenuation area, however is not intended to hold water permanently all year round, only coming into operation in the +20% and +40% climate change adjusted critical storms for the 1 in 100 year event. It will always have adequate storage for the full range of designed storms.

The new area will have attenuation with sloping banks at a 1:3 gradient to allow safer access and egress for maintenance when required.

The banks of the new area shall be laid to grass (seeded) to prevent any future potential scour. The growth of selected grasses and other plant life will encourage future biodiversity potential.

All maintenance operations are to be carried out in accordance with the tabulated recommendations.

The ongoing maintenance activities for these ponds are tabulated below in Table 1.

*Table 1 – Pond & Wetland Maintenance Activities – By the appointed Management Company*

| Maintenance Activity | Remedial Action | Inspection Frequency | |
|---|---|---|---|
| Inspect perimeter for Litter and debris | Remove litter and debris with appropriate tools and dispose to the appropriate facility. | Pre-completion | Monthly |
| | | Post completion – up to 1 year | Quarterly |
| | | On-going | Annually or as required |
| Inspect vegetation for even growth and retained height. | Re-seed where necessary and cut back meadow grass etc.. outside of bird nesting seasons. | Pre-completion | Half Yearly |
| | | Post completion – up to 1 year | Half Yearly |
| | | On-going | Half Yearly |
| Inspect channel and discharge points for erosion. | Repair any affected areas by replacing any lost soil and re-turfing where necessary. | Pre-completion | Quarterly |
| | | Post completion – up to 1 year | Quarterly |
| | | On-going | Annually or as required |
| Inspect outlet pipes and culverts for sediment build-up. | Remove any excess sediment from the pipes/culverts with drainage rods and/or professional jetting techniques. | Pre-completion | Monthly |
| | | Post completion – up to 1 year | Quarterly |
| | | On-going | Annually or as required |
| Inspect main water body for sediment build up. | Remove excess sediment build up when pool volume is reduced by up to 20%. Clearance is normally every 10 – 20 years. | Pre-completion | Monthly |
| | | Post completion – up to 1 year | Quarterly |
| | | On-going | Annually or as required |

## Maintenance of Gullies and Catch pits

To ensure the long-term effectiveness of the surface water collection asset, the sediment that accumulates within the sump of the conventional gully pot or catch pit must periodically be removed to prevent it from entering the rest of the network. The frequency of this maintenance operation will vary depending on the density of the site, vegetation, design of the drainage system, other permeable areas and if the site is pre or post construction.

All maintenance operations are to be carried out in accordance with the manufacturer's recommendations.

The ongoing maintenance activities for this system are tabulated below in Table 2.

*Table 2 – Gully and Catch Pit Maintenance – By the appointed Management Company.*

| Maintenance Activity | Remedial Action | Inspection Frequency | |
|---|---|---|---|
| Inspect Gullies and Catch-pits | Clear any sediment or detritus found in the chamber/s. If sediment has built up within the pipe network, this should be cleared with rodding equipment or professional jetting techniques. | Pre-completion | Monthly |
| | | Post completion – up to 1 year | Quarterly |
| | | On-going | Annually |

## Maintenance of Geocellular Storage

To ensure the long term effectiveness of the storage asset, the sediment that accumulates within the SUDS system must periodically be removed to prevent it from entering the chamber and slowing the infiltration of the system. The frequency of this maintenance operation will vary depending on the density of the site, vegetation, design of the drainage system, other permeable areas and if the site is pre or post construction.

All maintenance operations are to be carried out in accordance with the manufacturer's recommendations.

The ongoing maintenance activities for this system are tabulated below in Table 3.

*Table 3 – Soakaway/Attenuation Maintenance by the appointed Management Company*

| Maintenance Activity | Remedial Action | Inspection Frequency | |
|---|---|---|---|
| Inspect Catch-pits | Clear any sediment or detritus found in the chamber/s. If sediment has built up within the pipe network, this should be cleared with rodding equipment or professional jetting techniques. | Pre-completion | Monthly |
| | | Post completion – up to 1 year | Quarterly |
| | | On-going | Annually |

# Appendices

- Site Location Plans
- Source Protection Zone Map
- Geoindex Map
- Flood Maps for Planning
- Development Proposals
- Drainage Strategy Layout
- Calculations

MAGiC

# Location Plan




## Legend

Projection = OSGB36
xmin = 575000
ymin = 116300
xmax = 580500
ymax = 119500

0 0.1 5 0.3
km

Map produced by MAGIC on 8 July, 2019.

MAGiC

# SPZ Map


## Legend

**Source Protection Zones merged (England)**

- Zone I - Inner Protection Zone
- Zone I - Subsurface Activity
- Zone II - Outer Protection Zone
- Zone II - Subsurface Activity
- Zone III - Total Catchment
- Zone III - Subsurface Activity
- Zone of Special Interest

Projection = OSGB36
xmin = 572200
ymin = 114700
xmax = 583300
ymax = 121100

0 0.35 0.7
km

Map produced by MAGIC on 8 July, 2019.

# Bedrock Geology

GEOINDEX ONSHORE




GeoIndex Onshore Data Sources: NERC, Natural England, English Heritage and Ordnance Survey

# Map Key

**Bedrock geology 1:50,000 scale**

- ASHDOWN FORMATION - SANDSTONE, SILTSTONE AND MUDSTONE
- TUNBRIDGE WELLS SAND FORMATION - SILTSTONE, MUDSTONE AND SANDSTONE
- GREYS LIMESTONES MEMBER - MUDSTONE AND LIMESTONE, INTERBEDDED
- WADHURST CLAY FORMATION - MUDSTONE
- BLUES LIMESTONES - MUDSTONE AND LIMESTONE, INTERBEDDED
- ASHDOWN FORMATION - MUDSTONE
- PURBECK GROUP - MUDSTONE, SANDSTONE AND LIMESTONE
- WADHURST CLAY FORMATION - SANDSTONE
- TUNBRIDGE WELLS SAND FORMATION - MUDSTONE AND SILTSTONE

# Flood map for planning

| Your reference | Location (easting/northing) | Created |
|---|---|---|
| **Sunningdale** | **578140/117720** | **4 Jul 2019 7:46** |

**Your selected location is in flood zone 1, an area with a low probability of flooding.**

## This means:

- you don't need to do a flood risk assessment if your development is smaller than 1 hectare and not affected by other sources of flooding
- you may need to do a flood risk assessment if your development is larger than 1 hectare or affected by other sources of flooding or in an area with critical drainage problems

**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.


Environment Agency

**Flood map for planning**

Your reference
**Sunningdale**

Location (easting/northing)
**578140/117720**

Scale
**1:2500**

Created
**4 Jul 2019 7:46**

- Selected point
- Flood zone 3
- Flood zone 3: areas benefitting from flood defences
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Flood storage area

0 20 40 60m

GOV.UK
Long term flood risk information

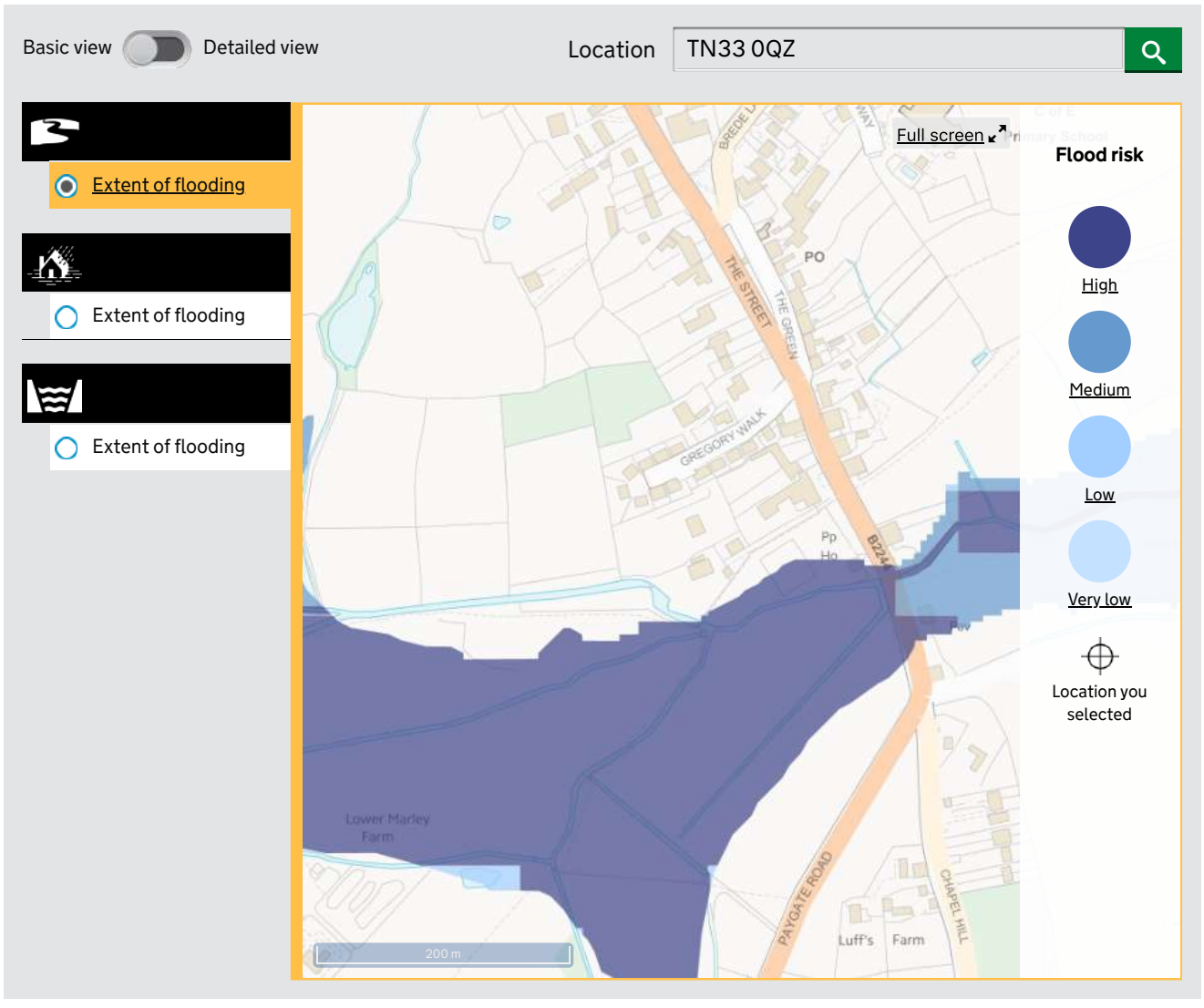
# Learn more about flood risk

Select the type of flood risk information you're interested in. The map will then update.

You can learn more about the ways we describe flood risk. Alternatively select a legend item or feature from the map for an explanation of that flood risk.

'Detailed view' shows more technical information.

> All information, particularly the likelihood of surface water flooding, is a general indicator of an area's flood risk. As such it is not suitable for identifying whether an individual property will flood. This service uses computer models to assess an area's long term flood risk from rivers, the sea, surface water and some groundwater. It does not include flood risk from sources such as blocked drains and burst pipes.




▶ Accuracy of surface water flood risk information

View the flood risk information for another location

GOV.UK
Long term flood risk information

# Learn more about flood risk

Select the type of flood risk information you're interested in. The map will then update.

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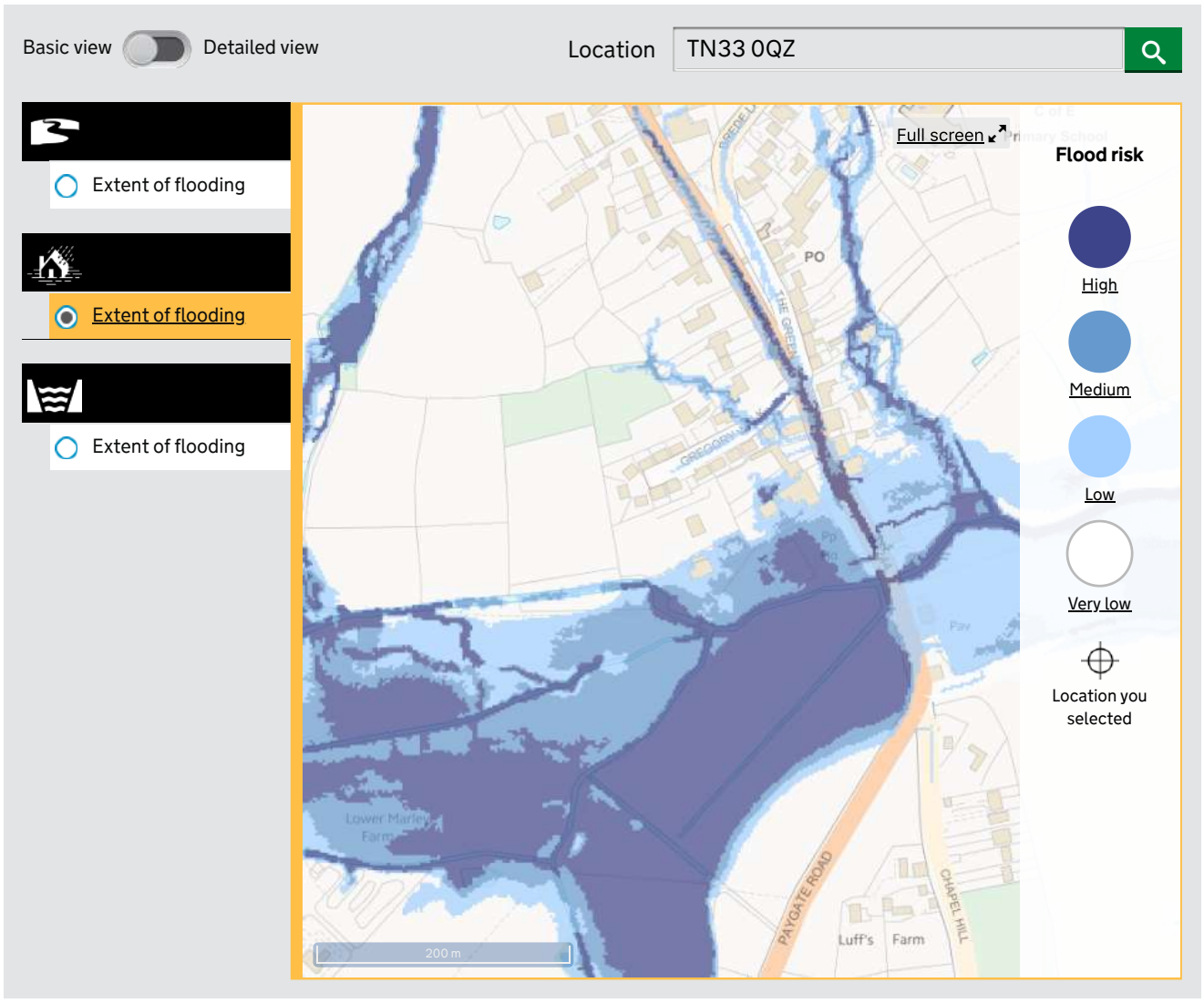


▶ Accuracy of surface water flood risk information

View the flood risk information for another location

GOV.UK
Long term flood risk information

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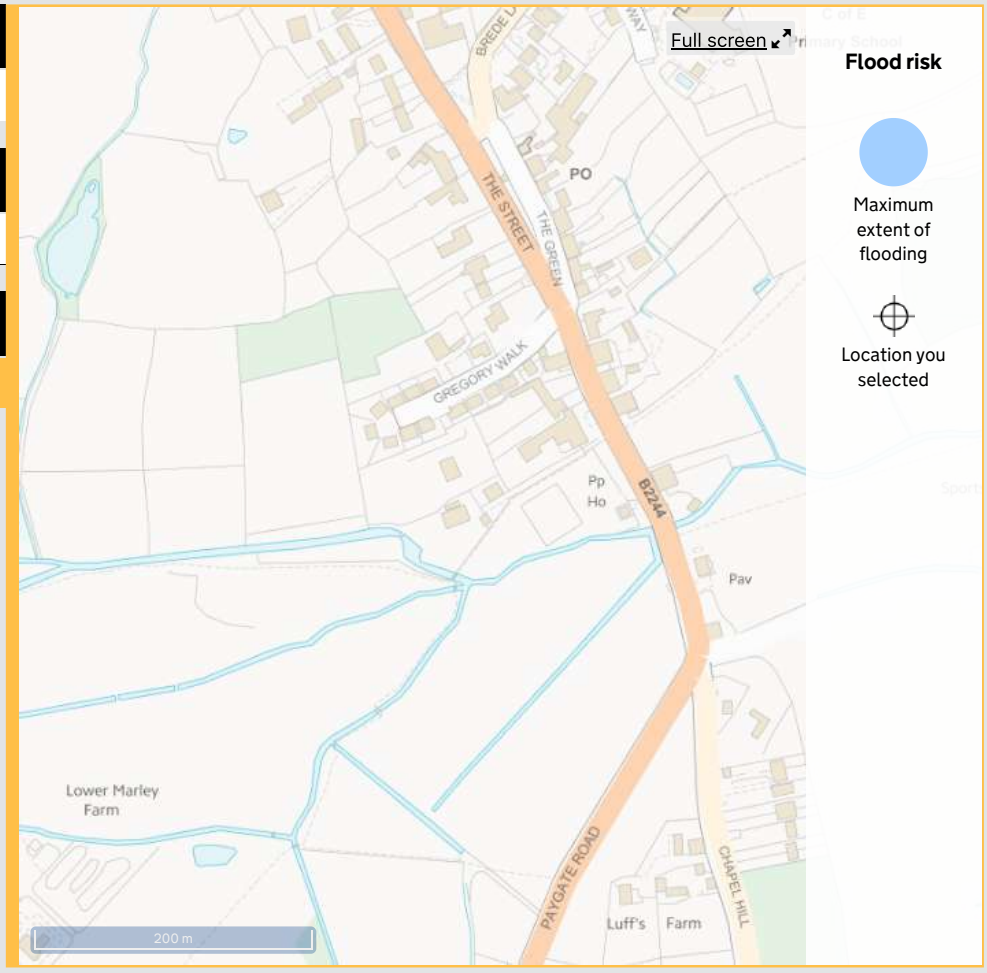
Basic view Detailed view

Location TN33 0QZ

Extent of flooding

Extent of flooding

Extent of flooding

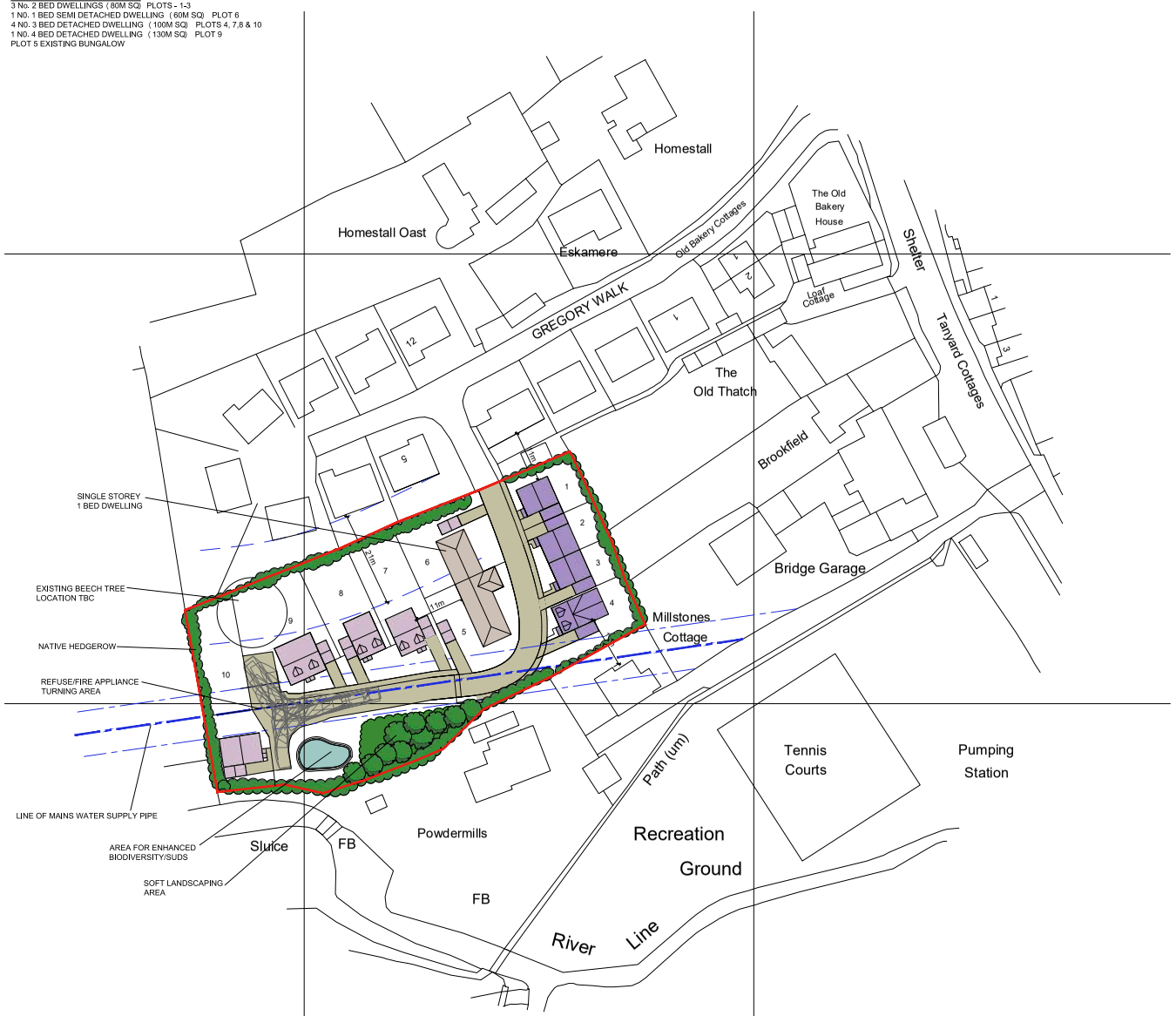



▶ Accuracy of surface water flood risk information

View the flood risk information for another location

# SITE PLANS AS PROPOSED

SCHEDULE OF ACCOMMODATION
3 No. 2 BED DWELLINGS ( 80M SQ) PLOTS - 1-3
1 N0. 1 BED SEMI DETACHED DWELLING ( 60M SQ) PLOT 6
4 N0. 3 BED DETACHED DWELLING ( 100M SQ) PLOTS 4, 7,8 & 10
1 N0. 4 BED DETACHED DWELLING ( 130M SQ) PLOT 9
PLOT 5 EXISTING BUNGALOW




N

SITE PLAN 1:500

1:500 0 10m 20m 30m 40m 50m


N

LOCATION PLAN 1:1250

1:1250 0 20m 40m 60m 80m 100m 120m

ALL DIMENSIONS TO BE CHECKED AND CONFIRMED ON SITE
SUBJECT TO PLANNING & BUILDING CONTROL APPROVAL

**NOTES:**
THIS DRAWING SHALL NOT BE SCALED
ALL BUILDING WORKS SHALL CONFORM WITH THE CURRENT BUILDING REGULATIONS, THE RELEVANT BRITISH STANDARDS, CODES OF PRACTICE AND ALL RELEVANT STATUTORY REGULATIONS. ALL MATERIALS AND WORKMANSHIP SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH RELEVANT BRITISH STANDARDS AND MANUFACURERS SPECIFICATIONS.

ALL DIMENSIONS ARE TO BE CHECKED AND VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORKS.

ALL ELECTRICAL WORKS TO COMPLY WITH CURRENT IEE REGULATIONS.

SEE ALSO RELEVANT DRAWINGS FROM ANY SPECIALIST WORK OR STRUCTURAL DETAILS.



PLEASE NOTE THAT PLANS ARE DRAWN TO THE SCALE SPECIFIED AND CAN BE SCALED FOR PLANNING PURPOSES ONLY.

WE ADVISE THAT IT IS THE DUTY OF THE EMPLOYER/CLIENT TO APPOINT THE NECESSARY CONSULTANTS UNDER THE REQUIREMENTS OF THE CURRENT CDM REGULATIONS 2015. TO INCLUDE THE SEPERATE APPOINTMENT OF A PRINCIPAL CONTRACTOR/DESIGNER IN ACCORDANCE WITH HSE LEGAL REQUIREMENTS. FOR FURTHER INFORMATION REFER TO THE HSE GUIDANCE AT THE FOLLOWING WEBSITE : www.hse.gov.uk.

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THE OLD LIBRARY DUDLEY ROAD TUNBRIDGE WELLS KENT TN1 1LE
T 01892 440393 E info@msdarchitects.com W www.msdarchitects.co.uk

**PROJECT:**
**NEW RESIDENTIAL DEVELOPMENT**
LAND AT SUNNINGDALE
GREGORY WALK
SEDLESCOMBE
EAST SUSSEX
TN33 0QB

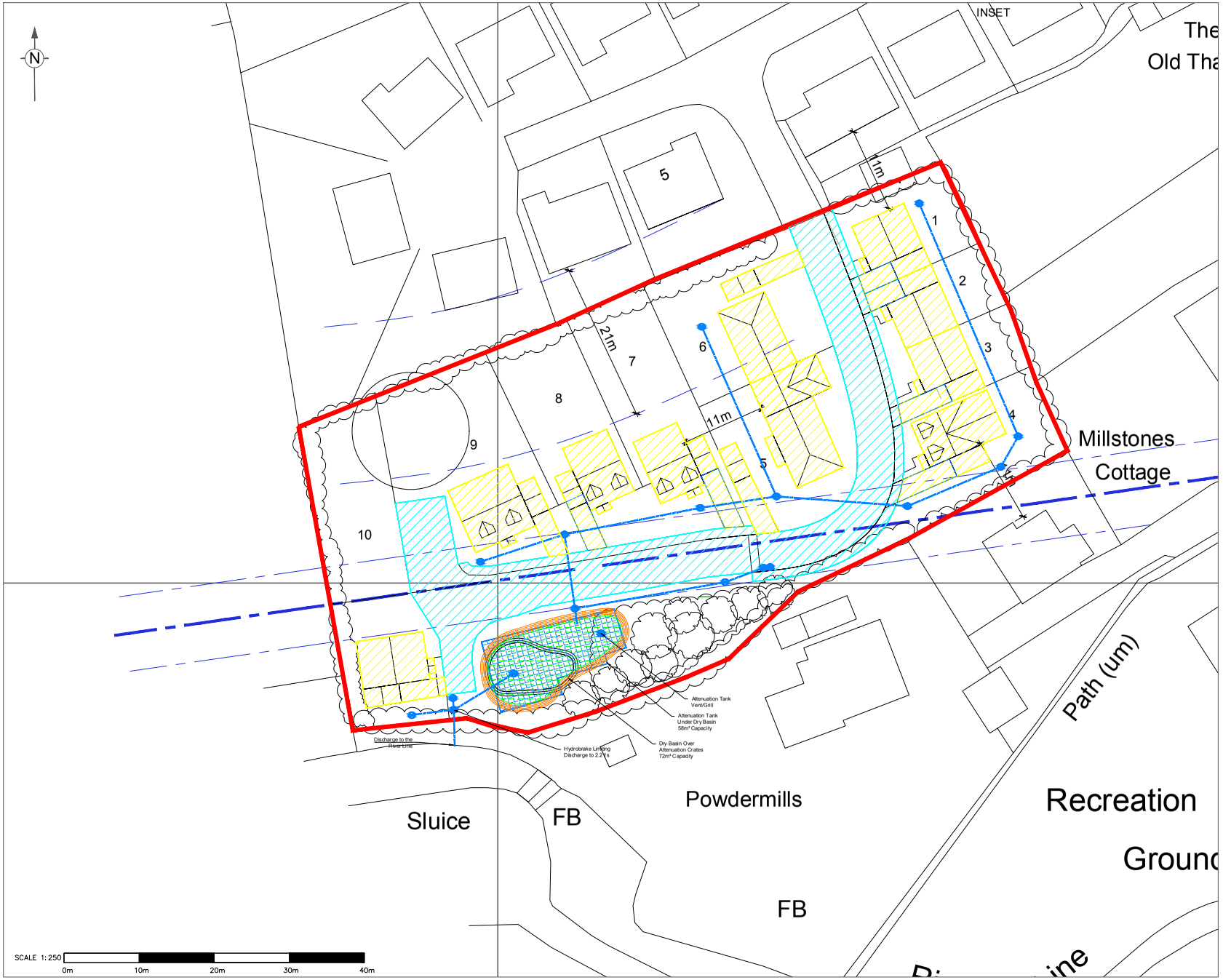
SCALE 1:500 & 1:1250@ A1

SITE PLAN AS PROPOSED

PURPOSE: PLANNING
DATE: SEPT 19 DWG NO. 1449 P002



SUNNINGDALE GREGORY WALK SEDLESCOMBE EAST SUSSEX




General Notes

KEY:

- Surface Water Drain
- Surface Catch Pit/Manhole
- Attenuation Crates
- Roads & Footway Catchment 766.83m²
- Plot Catchment Total 960.46m²

# PLANNING

| No. | Revision/Issue | Date |
|---|---|---|
| B | Point of Discharge Moved | 06/20 |
| A | Updated Planning Layout | 11/19 |


RSPD
Roads & Sewers for Planning & Development
www.roadsandsewers.co.uk 07876 573377


Project Name and Address
LAND AT SUNNINGDALE
SEDLESCOMBE,
EAST SUSSEX

Description
SW DRAINAGE STRATEGY

| Project | Sheet |
|---|---|
| 5101 | 01 |
| Date: 04/07/2019 | |
| Scale: 1:250 @ A1 | |

HR Wallingford
*Working with water*

# Greenfield runoff estimation for sites

www.uksuds.com | Greenfield runoff tool

| | |
|---|---|
| Calculated by: | |
| Site name: | Land at Sunningdale |
| Site location: | Sedlescombe |

This is an estimation of the greenfield runoff rate limits that are needed to meet normal best practice criteria in line with Environment Agency guidance "Preliminary rainfall runoff management for developments", W5-074/A/TR1/1 rev. E (2012) and the SuDS Manual, C753 (Ciria, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site coordinates

| | |
|---|---|
| Latitude: | 50.93139° N |
| Longitude: | 0.53353° E |

| | |
|---|---|
| Reference: | |
| Date: | 2019-07-04 19:39 |

| Methodology | IH124 |
|---|---|

## Site characteristics

| | |
|---|---|
| Total site area (ha) | 0.4520 |

## Methodology

| | |
|---|---|
| Qbar estimation method | Calculate from SPR and SAAR |
| SPR estimation method | Calculate from SOIL type |

| | Default | Edited |
|---|---|---|
| SOIL type | 4 | 4 |
| HOST class | --- | --- |
| SPR/SPRHOST | 0.47 | 0.47 |

## Hydrological characteristics

| | Default | Edited |
|---|---|---|
| SAAR (mm) | 808 | 808 |
| Hydrological region | 7 | 7 |
| Growth curve factor: 1 year | 0.85 | 0.85 |
| Growth curve factor: 30 year | 2.3 | 2.3 |
| Growth curve factor: 100 year | 3.19 | 3.19 |

## Notes:

(1) Is $Q_{BAR}$ < 2.0 l/s/ha?

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consents are usually set at 5.0l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set in which case blockage work must be addressed by using appropriate drainage elements.

(3) Is SPR/SPRHOST ≤ 0.3?

## Greenfield runoff rates

| | Default | Edited |
|---|---|---|
| Qbar (l/s) | 2.58 | 2.58 |
| 1 in 1 year (l/s) | 2.19 | 2.19 |
| 1 in 30 years (l/s) | 5.94 | 5.94 |
| 1 in 100 years (l/s) | 8.23 | 8.23 |

Land at Sunningdale, Sedlescombe

| | | |
|---|---|---|
| Controlled Discharge/Soakage Rate | 2.2 | l/s |
| Total Impermeable Area | 1729 | m^2 |
| Runoff Coefficient | 1 | |

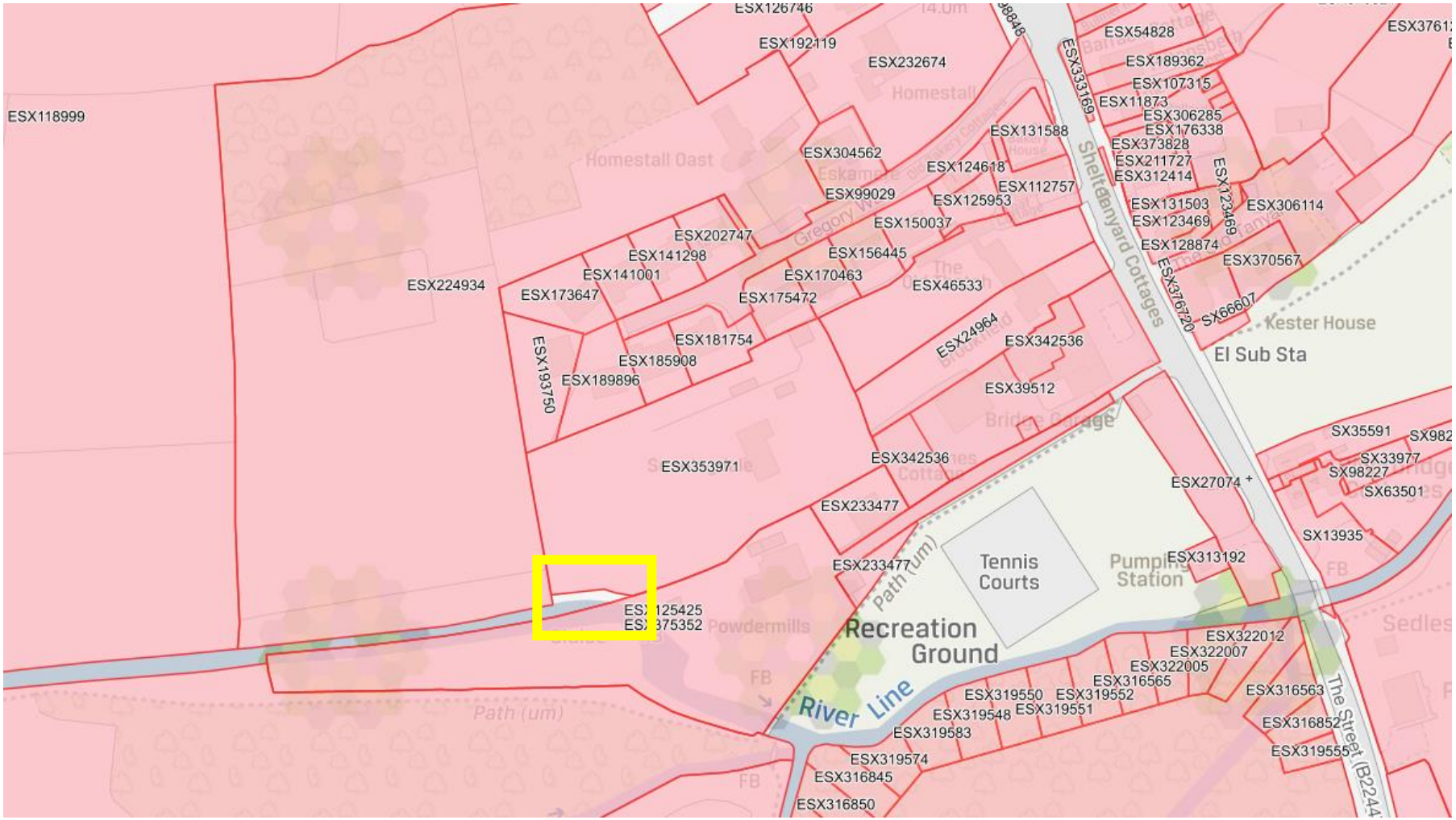
| Storage Calculations for 1 in 30 year return period | | | | | |
|---|---|---|---|---|---|
| Storm Duration | Rainfall Intensity mm/h | Area m^2 | Peak Flow l/s | Adjusted Peak Flow | Storage Required m^3 |
| 15 | 99.71 | 1729 | 47.92681 | 45.72681 | 41.15413 |
| 30 | 63.52 | 1729 | 30.53165 | 28.33165 | 50.99697 |
| 60 | 39.88 | 1729 | 19.1688 | 16.9688 | 61.08768 |
| 120 | 23.82 | 1729 | 11.44937 | 9.249369 | 66.59546 |
| 240 | 13.96 | 1729 | 6.710042 | 4.510042 | 64.9446 |
| 360 | 10.27 | 1729 | 4.936399 | 2.736399 | 59.10621 |
| 600 | 6.71 | 1729 | 3.225242 | 1.025242 | 36.90871 |
| 1440 | 2.98 | 1729 | 1.432373 | -0.76763 | -66.323 |

| | | |
|---|---|---|
| Controlled Discharge/Soakage Rate | 2.2 | l/s |
| Total Impermeable Area | 1729 | m^2 |
| Runoff Coefficient | 1 | |

| Storage Calculations for 1 in 100 year return period + 20% CC | | | | | |
|---|---|---|---|---|---|
| Storm Duration | Rainfall Intensity mm/h | Area m^2 | Peak Flow l/s | Adjusted Peak Flow | Storage Required m^3 |
| 15 | 160.48 | 1729 | 77.13664 | 74.93664 | 67.44297 |
| 30 | 103.6 | 1729 | 49.79658 | 47.59658 | 85.67385 |
| 60 | 63 | 1729 | 30.28171 | 28.08171 | 101.0941 |
| 120 | 37.04 | 1729 | 17.80372 | 15.60372 | 112.3468 |
| 240 | 21.47 | 1729 | 10.31981 | 8.119813 | 116.9253 |
| 360 | 15.58 | 1729 | 7.488714 | 5.288714 | 114.2362 |
| 600 | 10.14 | 1729 | 4.873913 | 2.673913 | 96.26086 |
| 1440 | 5.11 | 1729 | 2.456183 | 0.256183 | 22.1342 |

| | | |
|---|---|---|
| Controlled Discharge/Soakage Rate | 2.2 | l/s |
| Total Impermeable Area | 1729 | m^2 |
| Runoff Coefficient | 1 | |

| Storage Calculations for 1 in 100 year return period + 40% CC | | | | | |
|---|---|---|---|---|---|
| Storm Duration | Rainfall Intensity mm/h | Area m^2 | Peak Flow l/s | Adjusted Peak Flow | Storage Required m^3 |
| 15 | 187.22 | 1729 | 89.98954 | 87.78954 | 79.01059 |
| 30 | 120.86 | 1729 | 58.09281 | 55.89281 | 100.6071 |
| 60 | 73.5 | 1729 | 35.32866 | 33.12866 | 119.2632 |
| 120 | 43.22 | 1729 | 20.77421 | 18.57421 | 133.7343 |
| 240 | 25.05 | 1729 | 12.04058 | 9.840583 | 141.7044 |
| 360 | 18.17 | 1729 | 8.733629 | 6.533629 | 141.1264 |
| 600 | 11.83 | 1729 | 5.686231 | 3.486231 | 125.5043 |
| 1440 | 5.96 | 1729 | 2.864746 | 0.664746 | 57.43401 |


ESX126746
ESX192119
ESX232674
ESX54828
ESX189362
ESX107315
ESX11873
ESX306285
ESX176338
ESX373828
ESX211727
ESX312414
ESX131588
ESX304562
ESX124618
ESX112757
ESX99029
ESX125953
ESX150037
ESX131503
ESX123469
ESX306114
ESX128874
ESX370567
ESX202747
ESX141298
ESX141001
ESX156445
ESX170463
ESX46533
ESX175472
ESX173647
ESX224934
ESX118999
ESX181754
ESX185908
ESX189896
ESX193750
ESX24964
ESX342536
ESX39512
ESX353971
ESX233477
ESX27074
ESX313192
ESX125425
ESX375352
Tennis Courts
Recreation Ground
Pumping Station
Kester House
El Sub Sta
Sheltaanyard Cottages
Homestall Oast
Powdermills
River Line
Path (um)
The Street (B2244)
ESX322012
ESX322007
ESX322005
ESX316565
ESX319550
ESX319552
ESX319551
ESX319548
ESX319583
ESX319574
ESX316845
ESX316850
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ESX316852
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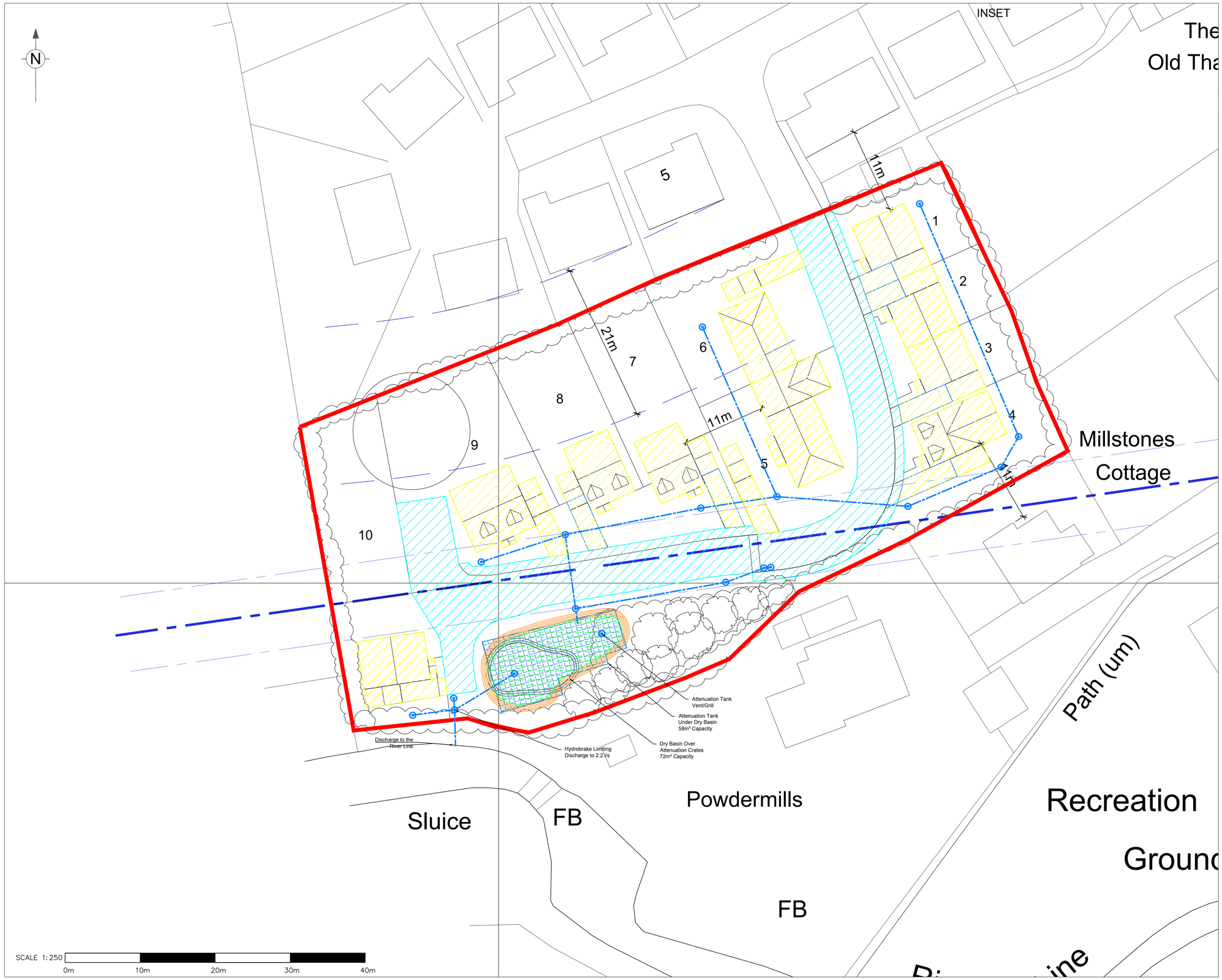
SX98227
SX63501
SX13935
SX66607




General Notes

KEY:

- Surface Water Drain
- Surface Catch Pit/Manhole
- Attenuation Crates
- Roads & Footway Catchment 766.83m²
- Plot Catchment Total 960.46m²

# PLANNING

| No. | Revision/Issue | Date |
|---|---|---|
| B | Point of Discharge Moved | 06/20 |
| A | Updated Planning Layout | 11/19 |

RSPD
Roads & Sewers for Planning & Design Ltd
www.roadsandsewers.co.uk
07876 573377

Project Name and Address
LAND AT SUNNINGDALE
SEDLESCOMBE,
EAST SUSSEX

Description
SW DRAINAGE STRATEGY

Project 5101

Date 04/07/2019

Scale 1:250 @ A1

Sheet 01