

Rudgwick Glebe, Lynwick Street, Rudgwick, RH12 3DJ

03 March 2026

Flood Risk & SuDS Technical Note

1 Purpose and Scope

- 1.1 This Flood Risk and Sustainable Drainage (SuDS) Technical Note has been prepared to support a "Planning in Principle" (PiP) application at this site. The flood risk and SuDS constraints relating to this are set out, together with the principles of the development's surface water drainage design.
- 1.2 No responsibility is accepted to any third party for the use of all or part of this document in connection with this or any other development.

2 Existing Site Context & Flood Risk Profile

- 2.1 A block plan and aerial view of this site are shown in Appendix A. The site comprises vacant, soft landscaped parcel of land at the north end of Rudgwick village, some 10km west of Horsham.
- 2.2 A detailed topographic survey is not yet available. Freely available online LIDAR data indicates a northeast to southwest fall. There is a significant dry valley that bisects the site: refer to the contoured lidar map in Appendix A. The site levels range between 61.5m above Ordnance Datum (AOD) and 58m AOD - approximately.
- 2.3 Hydrology: an unnamed watercourse flows some metres in from, but parallel to, the west boundary. The site is within the River Arun's catchment: the Arun lies approximately 1.6km to the south. This flows broadly southwards, depositing into the English Channel at Littlehampton.
- 2.4 Geology: The British Geological Survey (BGS) online mapping indicates that the site is underlain by Weald Clay, with no superficial deposits overlying.
- 2.5 The Environment Agency's (EA) Rivers and Seas flood map in Appendix B shows this site lying in Flood Zone 1, Low Risk. The nearest Flood Zone 2/3 area lies to the south (correlating with the River Arun, south of Rudgwick village).
- 2.6 The site is affected by 2 surface water flood patterns, according to the EA's Surface Water Flood Map in Appendix B. The stream close to the west boundary floods, forming the larger flood pattern. The valley mentioned in section 2.2 above also is prone to flooding – as shown by the lesser pattern in the middle of this site. As this flooding originates within the site, it is of little importance: the proposed development's drainage system shall intercept this volume and route it sustainably.

- 2.7 Artificial sources: flooding from reservoirs, canals and docks. The EA's reservoir flooding map (in Appendix B) shows the site is not liable to flood from this source. There are no docks or canals close to the site. There is no risk of flooding from these sources, therefore.
- 2.8 Historical flooding: according to the EA's Historical Flood Map in Appendix B the site has not been affected by flooding in the past.
- 2.9 Groundwater flooding: Horsham District Council's Strategic Flood Risk Assessment gives no indication that this vicinity is liable to flood from this source.
- 2.10 The site is removed from the nearest Groundwater Source Protection Zone. The EA's Groundwater Vulnerability map in Appendix B shows the site lying in an unproductive zone.
- 2.11 The predicted effects of Climate Change have been assessed. The second surface water flood map in Appendix B shows the extent up to 2060. The flood patterns are only slightly more extensive than the current day scenario. The part of the site that is due to be developed is clear of flood risk from **all** sources - over its predicted lifetime.

3 Preliminary Drainage Appraisal

- 3.1 The proposed site layout is shown in Appendix C.
- 3.2 The site falls under the jurisdiction of Horsham District Council, acting as the Lead Local Flood Authority (LLFA) on behalf of West Sussex County Council. The LLFA will expect the surface water drainage design to follow the SuDS hierarchy, prioritising infiltration where feasible and discounting it only through evidence-based assessment.
- 3.3 Defra published the National Standards for SuDS ("NSS") on 19 June 2025. The key principles underpinning the NSS include a natural approach to managing water and an early and integrated design. Any proposed drainage strategy for this site will need to demonstrate compliance with the 7 SuDS standards, namely:
- Standard 1: Runoff destinations
 - Standard 2: Management of everyday rainfall
 - Standard 3: Management of extreme rainfall
 - Standard 4: Water quality
 - Standard 5: Amenity
 - Standard 6: Biodiversity
 - Standard 7: Design of drainage for construction, operation, maintenance, decommissioning and structural integrity
- 3.4 The desktop geology for the site indicates that shallow infiltration features are most likely unfeasible

for this site, due to the high clay content of Weald Clay. A site-specific investigation, including infiltration testing in accordance with BRE Digest 365, will be undertaken to confirm the low soakage rate.

- 3.5 The development's surface water shall be routed to the stream that flows through this site, subject to survey and soil soakage testing.
- 3.6 The runoff rate shall be limited to greenfield rates.
- 3.7 Measures that intercept the first 5mm of every rainfall event shall be included in the design – eg rain gardens and/or swale.
- 3.8 A water butt shall be provided in each garden space – in accordance with the requirements of Standard 1. This measure will reduce the demand for potable water.
- 3.9 The surface water drainage network shall be sized to hold the 1 in 100yrs + 45% climate change storm volume. FEH22 data and CV values of 1.0 shall be used in the drainage calculations.
- 3.10 Ordinary Watercourse Consent (OWC): no development is proposed within 8m of the watercourse, except for the drainage run and outfall headwall. An OWC application shall be submitted to the LLFA in due course.

4 Conclusion

- 4.1 The overall flood risk classification for the site is Low. The flooding extent associated with the existing stream is to remain free of development. The secondary flow route originates within the site and shall be managed effectively through a well-designed SuDS network.
- 4.2 Desktop geology suggests that infiltration features are unlikely to be viable for this site. A new outfall will therefore be required. The low infiltration rate shall be confirmed in accordance with BRE Digest 365.
- 4.3 The development's SuDS design shall comply with local drainage policies and DEFRA's National Standards for SuDS.

- End of Technical Note -

Appendix A

Site Block Plan, Aerial View & Contoured LiDAR Map







Appendix B

EA Flood & Groundwater Maps



Environment Agency Flood Map for Planning

The site lies in fluvial Flood Zone 1



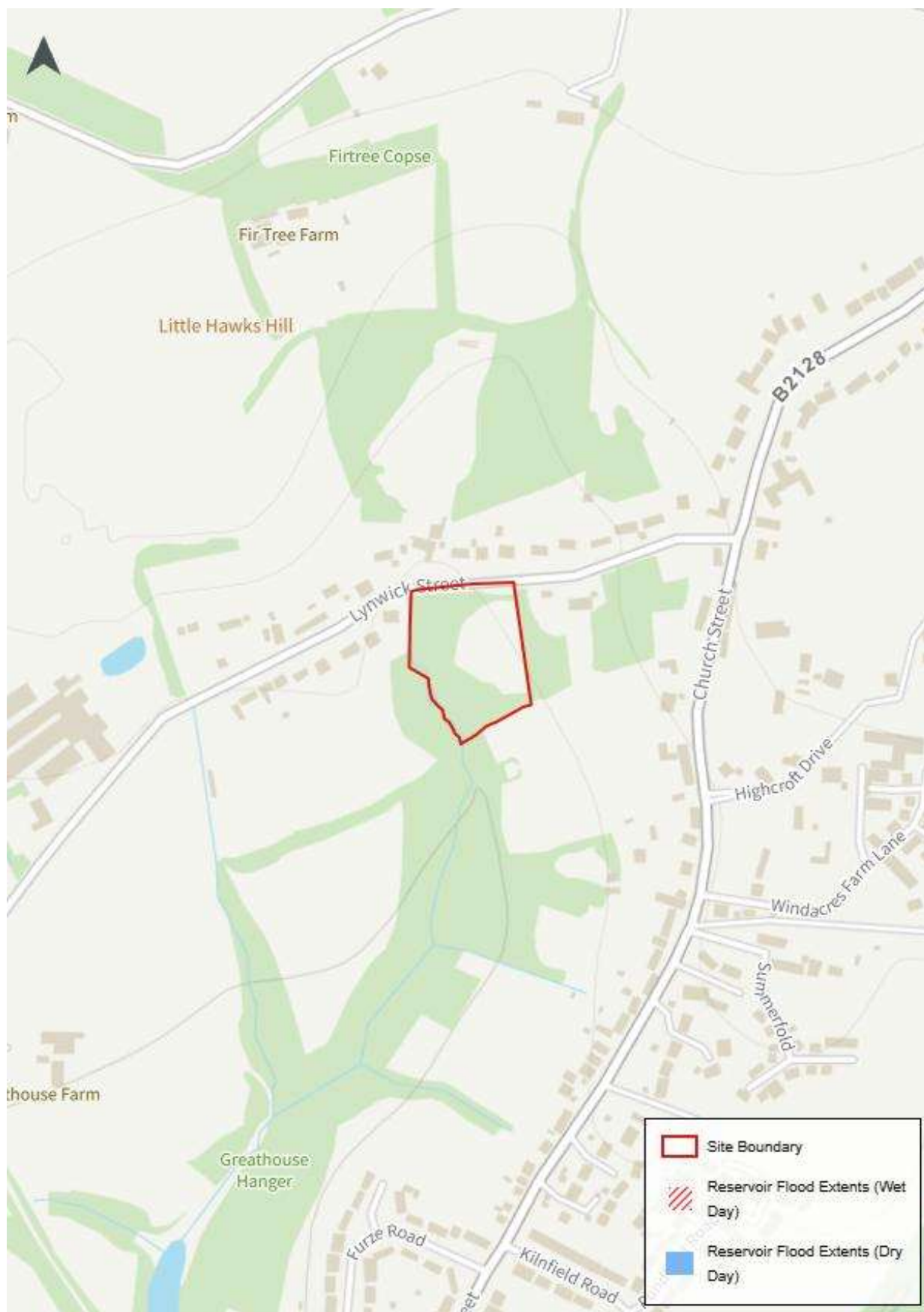
Environment Agency Surface Water Flood Extents Map – Current Day

There are 2 bands of surface water flooding, one affecting the west and another that originates in the site



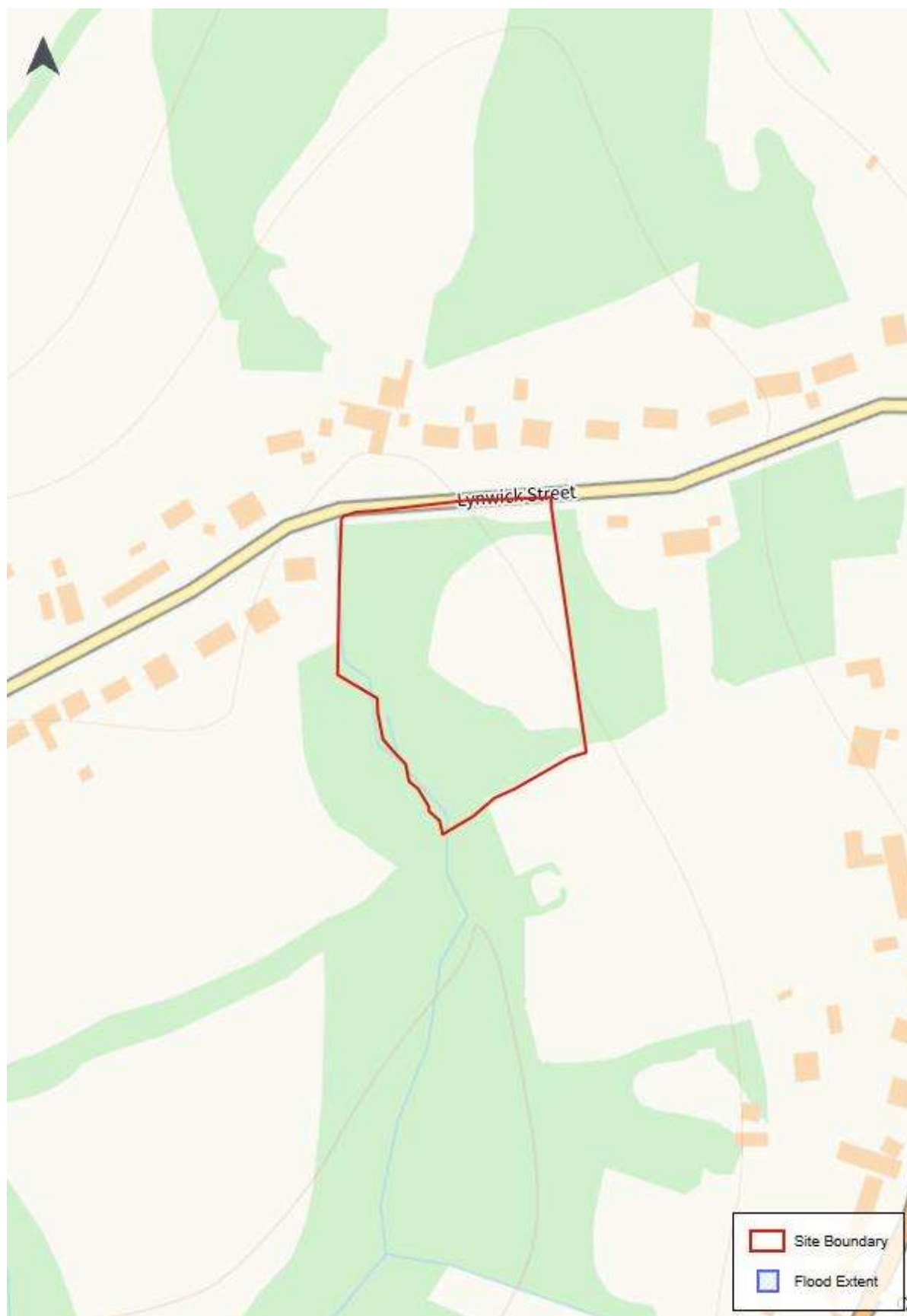
Environment Agency Surface Water Flood Extents Map – Yearly Chance of Flooding: 2040-2060

There are 2 bands of surface water flooding, one affecting the west and another that originates in the site



Environment Agency Flood Risk from Reservoirs

The site is clear from the risk of flooding from this source



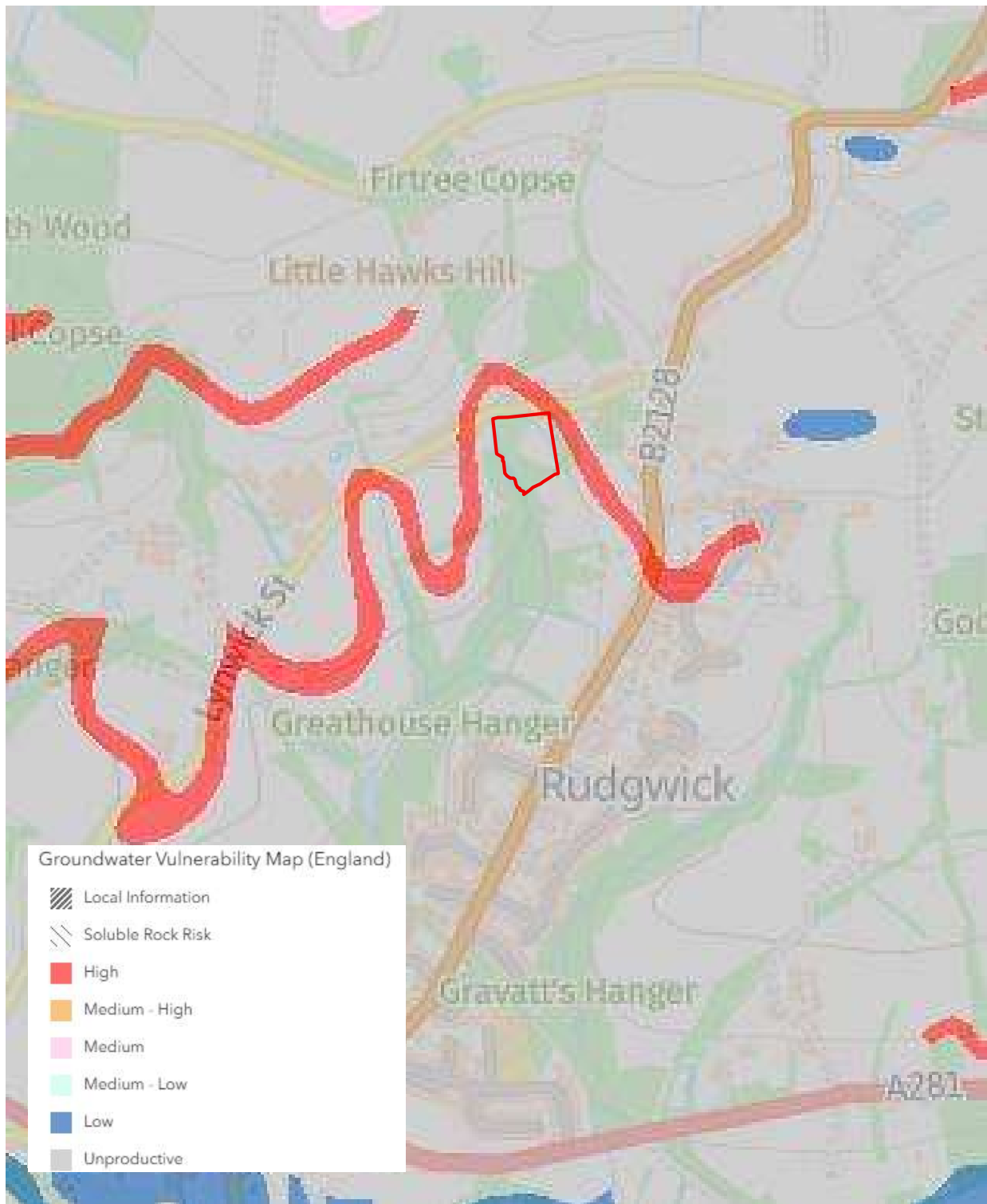
DEFRA Historical Flooding Map

Neither this site nor anywhere in the vicinity has been affected by flooding in the past



Environment Agency Groundwater Source Protection Zones Map

The site is removed from the nearest such Zone



Environment Agency Online Groundwater Vulnerability Zones Map

The site overlies an Unproductive Zone



Client		Title		Status	
CROSS HOMES (LEWES) LTD		RUDGWICK 4-UNIT FEASIBILITY SITE PLAN		FEASIBILITY	
Datum architects		Project		Date of Issue	
Delta House 16 Bridge Rd Haywards Heath RH16 1AU Tel: 01444 717950 office@datum-architects.co.uk		LYNWKICK STREET, RUDGWICK, RH12 3DJ		26/02/2026	
				Scale	
				1:500 @ A3	
				PROJECT - STAGE - DRAWING - REVISION	
				DA2512-F-04d	



Civil Engineering - Transport Planning - Flood Risk

GTA Civils & Transport, Maple House, 192-198 London Road, Burgess Hill, West Sussex, RH15 9RD
T: 01444 871444 E: enquiries@gtacivils.co.uk [www: gtacivils.co.uk](http://www.gtacivils.co.uk)
GTA Civils & Transport Limited, Registered in England No. 11917461. VAT Registration No. 319 2609 02



Certificate No.89542021