



Land at Stovolds Hill, Cranleigh, Surrey - Pitch 1

Planning Inspectorate Appeal Reference: AP/R3650/W/25/3367393

Flood Risk Assessment

Job Number: 1325.1

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Acronym	Definition
AOD	Above Ordnance Datum
CC	Climate Change
EA	Environment Agency
FRA	Flood Risk Assessment
LPA	Local Planning Authority
NPPF	National Planning Policy Framework
PPG	Planning Practice Guidance (Flood Risk and Coastal Change)
RoFSW	Risk of Flooding from Surface Water
RP	Return Period
SuDS	Sustainable Drainage Systems

Executive Summary

This Flood Risk Assessment (FRA) supports the planning appeal for Pitch 1 at Land West of Stovolds Hill, Cranleigh. It addresses the flood risk matters raised by the Local Planning Authority and demonstrates, using site-specific evidence, that the proposed development would be safe for its lifetime and would not increase flood risk elsewhere, in accordance with the National Planning Policy Framework (NPPF, December 2024) and the Planning Practice Guidance (PPG) on Flood Risk and Coastal Change.

The Site lies wholly within Flood Zone 1 and is not at risk of flooding from rivers or the sea. Flood Zones relate solely to fluvial and tidal flooding and do not represent surface water flood risk. There are no fluvial, tidal, groundwater, sewer, reservoir or artificial sources of flooding affecting Pitch 1. Surface water flooding is the only source requiring assessment.

The Local Planning Authority has relied primarily on national surface water mapping and site photographs. These are screening-level tools and do not define site-specific flood depths, velocities, hazard or development acceptability, as confirmed by the Environment Agency's own correspondence. National policy instead requires surface water flood risk to be assessed through a site-specific FRA that considers layout, finished levels and mitigation, including post-development scenarios.

A site-specific surface water assessment, supported by modelling of pre- and post-development scenarios for the 1:30yr and 1:100yr plus 40% climate change allowance rainfall events, has been undertaken to test whether flood risk can be effectively managed. The modelling demonstrates feasibility of mitigation in principle and assesses relative changes in surface water behaviour.

The assessment shows that, with mitigation in place, Pitch 1 remains flood-free during both assessed events. The residential pitch is located on a raised platform above modelled surface water levels. Surface water displaced by the raised platform is managed through defined conveyance and storage, including reinstated and regularised drainage features, resulting in more controlled and hydraulically efficient routing than under existing unmanaged conditions. The modelling indicates no increase in flood risk elsewhere, with a marginal improvement in off-site surface water behaviour.

Climate change has been addressed through application of a 40% allowance within the design flood assessment. Residual risks are mitigated through raised finished levels, open and inspectable conveyance, and the ability to secure maintenance by condition. The development does not rely on evacuation to ensure safety.

In policy terms, the proposed development falls within the Highly Vulnerable flood risk vulnerability classification. Table 2 of the NPPF and PPG confirms that Highly Vulnerable development is appropriate in Flood Zone 1. For surface water flooding, PPG paragraph 027 (Reference ID: 7-027-20220825) confirms that a proportionate approach should be taken and that the Sequential Test need not be applied where a site-specific FRA demonstrates safety for the lifetime of the development and no increase in flood risk

elsewhere. This FRA meets those criteria. This approach is reinforced by Court of Appeal authority, including *Substation Action Save East Suffolk Ltd v Secretary of State for Energy Security and Net Zero & Ors* [2024] EWCA Civ 12, which confirms that Flood Zones and the Sequential Test relate to fluvial and tidal flooding only.

Overall, the FRA demonstrates that surface water flood risk at Pitch 1 can be effectively managed through layout and mitigation, that the development would be safe for its lifetime, and that flood risk would not be increased elsewhere. There is no flood risk policy basis to resist the proposed development.

Summary of Flood Risk Findings and Policy Compliance

Matter	Relevant policy / guidance	Site-specific finding for Pitch 1	Outcome
Flood Zone classification	NPPF Chapter 14; Flood Map for Planning	Site lies wholly within Flood Zone 1	Lowest fluvial and tidal flood probability
Sources of flooding	NPPF Chapter 14	No fluvial, tidal, groundwater, sewer, reservoir or artificial flood risk. Surface water only	Assessment correctly scoped
Development vulnerability	NPPF Annex 3 and Table 2	Residential mobile home and touring caravan are Highly Vulnerable	Highly Vulnerable use acceptable in Flood Zone 1
Flood Zone compatibility	NPPF Table 2	Highly Vulnerable development compatible with Flood Zone 1	No Flood Zone policy restriction
Role of national mapping	NPPF and PPG	National surface water mapping and photographs are screening-level only	Site-specific FRA required and provided
Assessment approach	NPPF Chapter 14; PPG	Site-specific FRA with pre and post-development assessment	Proportionate and policy-compliant
Design flood events	PPG; national guidance	1:30yr and 1:100yr +40% climate change allowance	Appropriate for lifetime of development
Flood risk to development areas	NPPF Chapter 14	Raised platform keeps Pitch 1 flood-free in all assessed events including the <i>design</i> flood	Development safe for lifetime
Management of displaced floodwater	NPPF Chapter 14	Defined conveyance and storage provided	Displaced volumes appropriately managed
Off-site flood risk	NPPF decision-taking tests	No increase in flood risk elsewhere with marginal betterment indicated	Policy compliant
Climate change	NPPF Chapter 14	40% allowance applied to surface water assessment	Future risk addressed
Residual risk and exceedance	PPG	Managed through levels, open conveyance and maintenance	Residual risk low and acceptable
Sequential Test	NPPF Chapter 14; PPG; Court of Appeal authority	Site-specific FRA demonstrates that the development can be made safe for its lifetime through layout and mitigation, with no increase in flood risk elsewhere. Flood Zones and the Sequential Test relate to fluvial and tidal flooding only; surface water flood risk is addressed through site-specific assessment.	Sequential Test not required
Exception Test	NPPF Chapter 14	Site lies within Flood Zone 1 and the Sequential Test is not engaged. In any event, the FRA demonstrates safety for the lifetime of the development and no increase in flood risk elsewhere.	Exception Test not triggered
Overall policy compliance	NPPF Chapter 14; PPG	Development safe for lifetime with no increased flood risk elsewhere	No flood risk policy objection

1. Introduction

This site-specific Flood Risk Assessment (FRA) is submitted on behalf of the Appellant in support of a planning appeal for Pitch 1, Land North of Lydia Park, Stovolds Hill, Cranleigh (Ref: AP/R3650/W/25/3367393). The development comprises the change of use of land for the stationing of one residential mobile home, one touring caravan, and related domestic infrastructure. In accordance with the NPPF, the proposed use is classified as Highly Vulnerable.

The site lies entirely within Flood Zone 1 as defined by the Environment Agency (EA) Flood Map for Planning, confirming it is at the lowest risk of fluvial or tidal flooding. Consequently, the planning issues in dispute relate exclusively to surface water (pluvial) flood risk. This assessment adheres to the distinction between fluvial Flood Zones and surface water risk confirmed by the Court of Appeal in *Substation Action Save East Suffolk Ltd v SSNZ* [2024].

A central objective of this FRA is to address the Local Planning Authority's reliance on national screening-level mapping and qualitative photographs. The EA identifies the Risk of Flooding from Surface Water (RoFSW) dataset as a catchment-scale tool unsuitable for property-level decisions or determining site-specific flood depths and hazards. To provide the Inspector with a robust evidence base, this FRA incorporates bespoke 1D/2D hydraulic modelling for the 1 in 30-year and 1 in 100-year plus 40% climate change events.

Crucially, the modelling and mitigation strategy presented are not limited to the artificial boundary of Pitch 1 but reflect an integrated site-wide system serving the unified hydraulic environment north of the access track. This approach ensures that the mitigation measures for Pitch 1 (specifically raised platforms and the reinstatement of engineered conveyance ditches) function as a critical anchor for a wider network that secures a net hydraulic betterment for Pitch 2 and adjacent appeal sites.

By demonstrating that the managed post-development scenario ensures the safety of occupiers for the lifetime of the development without increasing risk elsewhere, this FRA confirms that the Sequential Test need not be applied for surface water flooding, as per PPG Paragraph 027. The appropriate baseline for this assessment is the designed, managed condition, which restores and enhances the site's natural drainage capacity through soil scarification and defined flow routes.

2. Policy and Guidance Framework

This Flood Risk Assessment has been prepared having regard to the relevant national planning policy and guidance applicable to flood risk and surface water management in England. The assessment is framed to address the policy tests that are material to the determination of this appeal and to the matters in dispute.

The principal policy document is the National Planning Policy Framework (NPPF, December 2024). Flood risk policy is set out within Chapter 14, which requires that development should be directed away from areas at highest risk of flooding and that, where development is proposed in areas at risk, it should only be permitted where it can be demonstrated, through a site-specific assessment, that the development would be safe for its lifetime and would not increase flood risk elsewhere.

Paragraph 167 of the NPPF establishes the core test relevant to this appeal. It requires that planning decisions ensure flood risk is not increased elsewhere and that development is appropriately flood resistant and resilient, incorporating sustainable drainage systems unless demonstrated to be inappropriate. For the purposes of this appeal, the relevant consideration is whether surface water flood risk affecting Pitch 1 can be appropriately managed through layout, levels and mitigation.

Paragraphs 172 to 177 of the NPPF set out the application of the Sequential Test and, where relevant, the Exception Test. These provisions apply to all forms of flooding, but the Framework is explicit that the Sequential Test is not required where a site-specific Flood Risk Assessment demonstrates that, within the site boundary, no built development or access would be located in areas at risk of flooding from any source, taking account of mitigation and future flood risk. This FRA has been prepared to address that test in relation to surface water flooding.

The Flood Risk Vulnerability Classification in Annex 3 of the NPPF identifies caravans, mobile homes and park homes intended for permanent residential use as Highly Vulnerable development. This classification is acknowledged throughout this assessment. However, the classification does not preclude development in Flood Zone 1, nor does it pre-determine acceptability in areas affected by surface water flooding where a site-specific assessment demonstrates safety and no increased risk elsewhere.

The national policy framework is supported by the Planning Practice Guidance (PPG): Flood Risk and Coastal Change, most recently updated in September 2025. The PPG clarifies the purpose and scope of a site-specific Flood Risk Assessment and confirms that all sources of flooding, including surface water, should be assessed in a consistent manner. Importantly, the PPG recognises that national flood risk mapping, including surface water flood maps, is intended to provide an initial screening tool and does not remove the need for site-specific assessment where mitigation, layout or level changes are proposed.

The PPG further confirms that a proportionate approach should be taken to applying the Sequential Test for surface water flooding. Where a site-specific Flood Risk Assessment clearly demonstrates that the layout, design and mitigation measures would ensure occupiers remain safe for the lifetime of the development and

that flood risk is not increased elsewhere, the Sequential Test may not be required. That principle is central to this FRA.

Local planning policy relevant to flood risk is contained within the Waverley Borough Local Plan Part 1. These policies align with the NPPF in requiring development to be safe from flooding, to avoid increasing flood risk elsewhere, and to manage surface water appropriately. No local policy imposes a more onerous test than national policy for surface water risk in Flood Zone 1.

Local Plan Policy CC4 requires development to be located, designed and laid out so that it is safe, minimises flood risk and does not increase flood risk elsewhere, supported by a site-specific Flood Risk Assessment where surface water risk is present. The appeal site lies in Flood Zone 1 and is not affected by fluvial flooding, with surface water being the only relevant mechanism. This Flood Risk Assessment includes site-specific 2D direct rainfall modelling of the existing unmanaged condition and the proposed managed condition for the 1 in 30 year and 1 in 100 year plus climate change events. The results show that, with the raised platform and on-site conveyance and storage measures, the pitch remains dry and there is no increase in flood risk elsewhere. The development is therefore safe for its lifetime and compliant with Policy CC4.

Local Plan Policy NE2 seeks the retention or creation of undeveloped buffer zones of 5m to ordinary watercourses. Within the pitch footprint there is no engineered or defined ordinary watercourse, only a broad overland flow path under existing unmanaged conditions. The proposal sets the raised platform clear of this route and provides defined conveyance alongside it. The development does not involve culverting or building over an ordinary watercourse and does not encroach into a functional watercourse corridor, and is therefore not in conflict with the intent of Policy NE2.

This FRA has been prepared to demonstrate compliance with both national and local policy requirements. It is framed to address surface water flood risk on the basis of site-specific evidence, to avoid reliance on national screening datasets as determinative, and to assess the acceptability of the development in its managed post-development form, which is the appropriate basis for decision-making at appeal stage.

3. Site Description and Physical Characteristics

The appeal site comprising Pitch 1 is located at Land West of Stovolds Hill, Cranleigh, Surrey. The Site lies to the north of the Lydia Park access track and is accessed from Stovolds Hill. The surrounding landform is gently undulating and forms part of a wider surface water catchment that drains generally from west to east towards Cobblers Brook, which is designated as a Main River further downstream. The nearest site postcode is GU8 4BW and the OS grid reference is TQ 02193 37809.

Pitch 1 occupies a low-lying part of the wider landholding. Existing ground levels across the Site vary gradually, with no abrupt changes in topography, and surface water movement is governed primarily by shallow gradients rather than incised channels. Under existing conditions, surface water flows across the Site as shallow, diffuse overland flow during periods of intense rainfall, reflecting the local topography and the absence of defined, engineered drainage control.

The Site lies within an area underlain by clay geology, which limits infiltration capacity and results in surface water runoff during heavy rainfall events. This is consistent with mapped geological conditions and observed surface water behaviour within the wider locality. The presence of clay soils reinforces the importance of surface conveyance and storage, rather than infiltration, as the primary mechanism for surface water management.

Historically, an open ditch or drainage feature crossed the Site on an approximate west-to-east alignment. This feature is acknowledged in the Local Planning Authority's evidence and is shown on historic plans and mapping, where it is typically labelled as a "drain". The historic function of this feature was to provide a preferential conveyance route for surface water arising from the wider catchment, transferring flows across the Site towards downstream watercourses.

Over time, alterations to the landform and development activity in the locality have resulted in the infilling or loss of this open drainage feature. As a consequence, surface water that was previously conveyed in a defined manner now spreads across a broader area as shallow overland flow. This change in surface water behaviour is material to the current flood risk context but does not represent an immutable condition.

There are no fluvial watercourses within or immediately adjacent to Pitch 1 that would give rise to river flooding. The Site is not influenced by tidal processes, reservoir flooding, or coastal mechanisms. The only drainage features of relevance to flood risk are those associated with surface water conveyance within the ordinary watercourse network and overland flow paths.

The physical characteristics of the Site therefore indicate that surface water flood risk is governed by topography, shallow gradients, low permeability soils, and the historic loss of defined conveyance. These characteristics inform the mitigation strategy assessed within this FRA, which seeks to replace unmanaged, diffuse flow with defined conveyance and storage, while ensuring that occupied areas are raised above modelled surface water levels.



FIGURE 1 – SITE LOCATION PLAN

4. Development Proposal

The proposed development comprises the change of use of land to provide one Gypsy and Traveller residential pitch (Pitch 1) at Land West of Stovolds Hill, Cranleigh. The pitch would accommodate one residential mobile home and one touring caravan, together with associated hardstanding and limited domestic infrastructure required to support permanent residential occupation.

The proposal does not involve the construction of permanent buildings. Development is limited to the siting of caravans, formation of hardstanding, and localised ground regrading associated with the raised pitch platform and surface water mitigation measures assessed within this Flood Risk Assessment.

Vehicular and pedestrian access is taken from the existing lawful access serving land adjacent to Lydia Park. The proposal does not alter access arrangements, introduce new access points, or increase off-site impermeable area.

The layout of Pitch 1 has been informed directly by the surface water flood risk. The residential pitch is located on a raised platform, with finished levels set above modelled surface water levels for the 1:30yr and 1:100yr plus 40% climate change allowance rainfall events. This ensures that all occupied areas remain flood-free during design flood conditions.

The development is designed to operate within a managed surface water regime. The layout allows for defined surface water conveyance and storage features, including reinstated and regularised drainage aligned with historic flow paths and a parallel linear drainage channel adjacent to the developed area. These measures form an integral part of the mitigation strategy and ensure that surface water displaced by the raised platform is appropriately accommodated without increasing flood risk elsewhere.

The scale and form of development are modest and proportionate to the Site context, with flood risk managed through layout, design levels and controlled conveyance rather than resistance or emergency measures, enabling surface water flood risk to be effectively managed and ensuring safe occupation for the lifetime of the development in accordance with national policy.

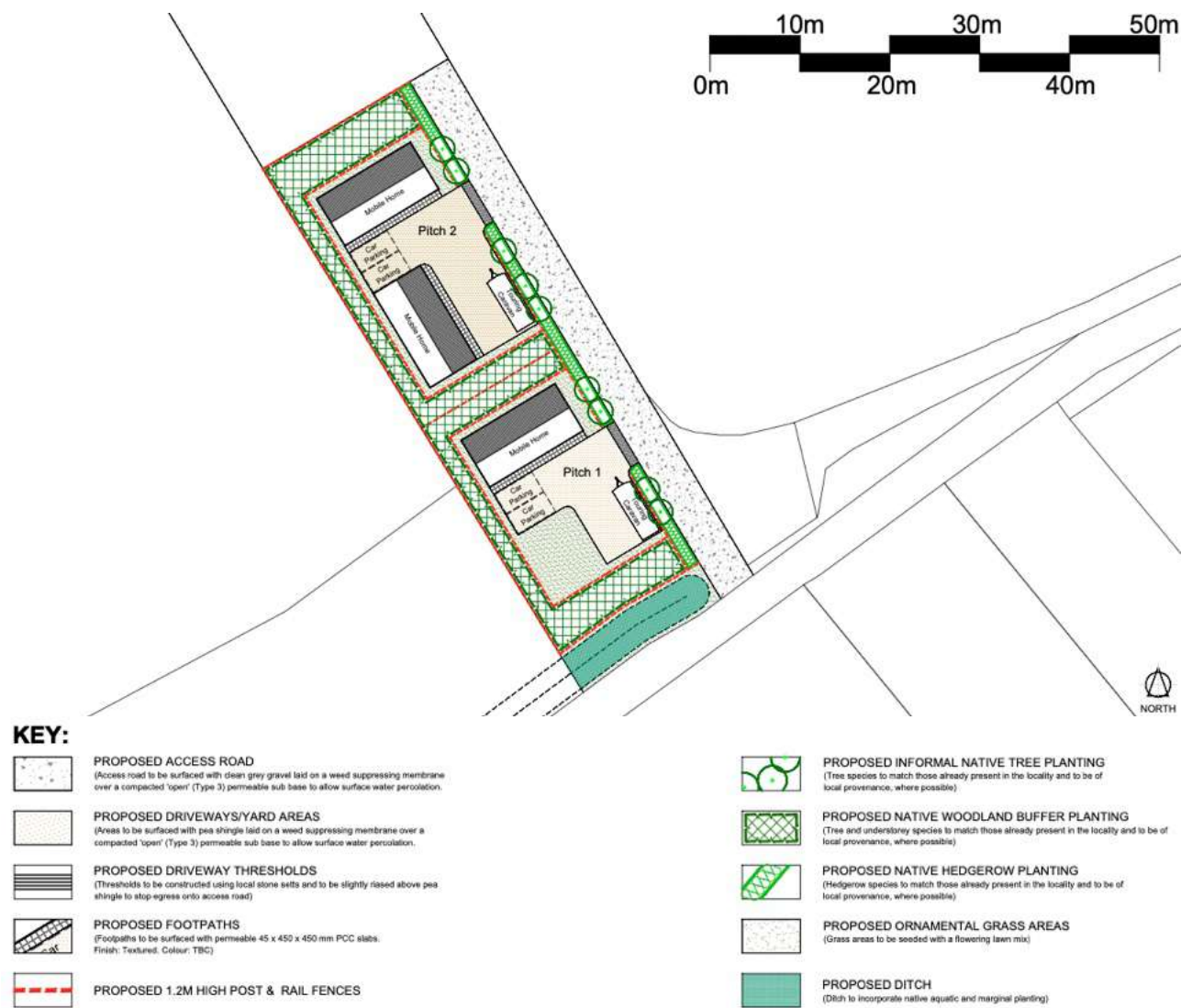


FIGURE 2 – DEVELOPMENT PROPOSAL (PROPOSED LAYOUT)

5. Flood Risk Assessment

5.1 Overview

Surface water flooding is the sole source of flood risk relevant to Pitch 1. The Site is not affected by fluvial or tidal flooding and lies entirely within Flood Zone 1 on the Environment Agency Flood Map for Planning. The nearest areas of Flood Zone 2 and Flood Zone 3 are located well away from the Site and do not influence the proposed development, as shown on Figure 3.

Flood Zones relate exclusively to flooding from rivers and the sea. They do not represent surface water flood risk. In fluvial and tidal terms, the Site is therefore in the lowest category of flood risk.

There is no evidence of flood risk to the Site from groundwater, sewers, reservoirs or artificial sources. Those sources are not relevant to the acceptability of the proposed development.

Surface water flooding is the only flood risk mechanism requiring assessment at Pitch 1. Surface water flood risk arises during periods of intense rainfall when runoff from the wider catchment exceeds the capacity of the existing unmanaged drainage regime. Under these conditions, water flows across the Site as shallow overland flow, governed by local topography and low-permeability soils.



FIGURE 3 – FLOOD MAP FOR PLANNING (RIVERS AND SEA)

Table 1: Flood Zones (Flood Map for Planning – Rivers and Sea) - taken from Paragraph: 078**Reference ID: 7-078-20220825**

Flood Zone	Definition
Flood Zone 1 – Low Probability	Land having a less than 0.1% annual probability of flooding from rivers or the sea . Shown as “clear” on the Flood Map for Planning, being all land outside Flood Zones 2, 3a and 3b.
Flood Zone 2 – Medium Probability	Land having between a 1% and 0.1% annual probability of river flooding , or between a 0.5% and 0.1% annual probability of sea flooding. Shown in light blue on the Flood Map for Planning.
Flood Zone 3a – High Probability	Land having a 1% or greater annual probability of river flooding , or a 0.5% or greater annual probability of sea flooding. Shown in dark blue on the Flood Map for Planning.
Flood Zone 3b – Functional Floodplain	Land where water from rivers or the sea has to flow or be stored in times of flood. Identification should take account of local circumstances and not be defined solely by probability. This normally comprises land with a 3.3% or greater annual probability of flooding where flood risk management infrastructure is operating effectively, or land designed to flood, such as flood attenuation areas, even if it would only flood in more extreme events. Functional Floodplain is identified by the local planning authority in the Strategic Flood Risk Assessment and is not shown separately from Flood Zone 3a on the Flood Map for Planning.

5.2 Existing surface water context

The Site lies within an area identified on the Environment Agency's Risk of Flooding from Surface Water (RoFSW) mapping as being at risk during high-intensity rainfall events. The mapping indicates areas of potential surface water ponding and overland flow associated with rainfall events of varying probability.

RoFSW mapping is a national-scale screening tool based primarily on topographic data. It does not account for site-specific drainage features, the introduction of mitigation, changes in ground levels, or engineered conveyance. It does not define actual flood depths, flow velocities or hazard classification for a developed site. Within this FRA, RoFSW mapping is therefore treated as contextual evidence only, indicating that further site-specific assessment is appropriate.

Under existing conditions, surface water flows across the Site in a relatively unmanaged manner. Flow is generally diffuse and shallow, spreading across a broad area rather than being conveyed within a defined channel. This reflects the historic loss or infilling of an open drainage feature that previously provided preferential conveyance across the Site.

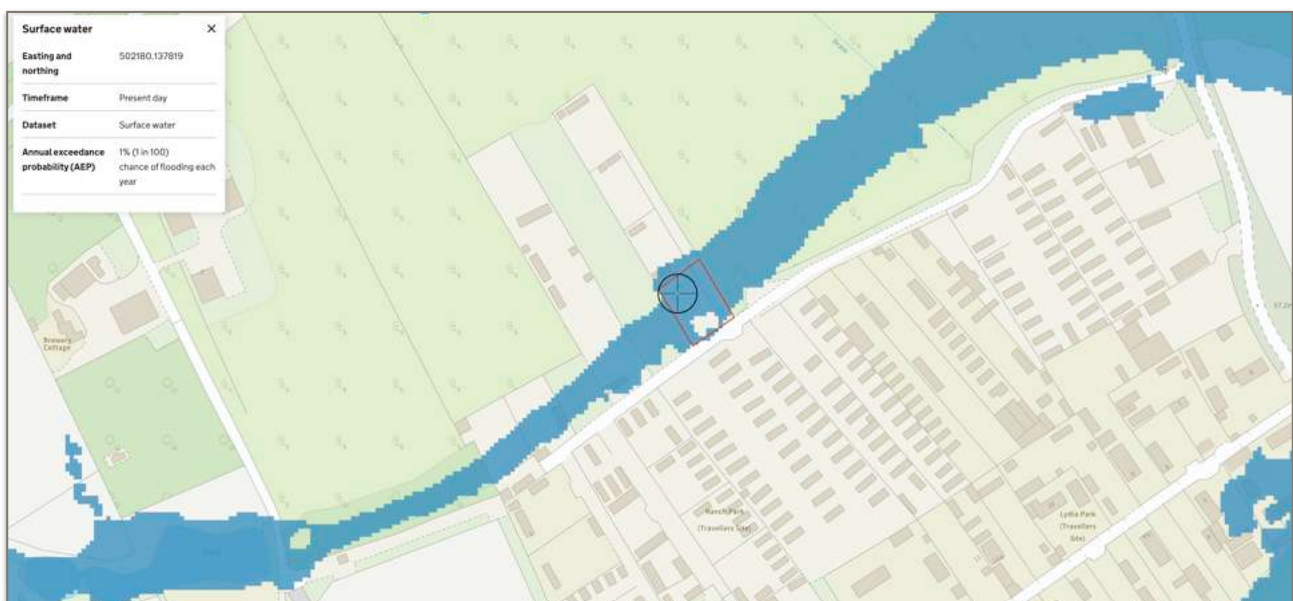


FIGURE 4 – RISK OF FLOODING FROM SURFACE WATER (ROFSW) MAPPING



FIGURE 5 – SITE TOPOGRAPHY WITH EA SURFACE WATER FLOOD RISK MAPPING (≥0.2M DEPTH, CLIMATE CHANGE)

The surface water layer shown on Figure 5 is taken from the Environment Agency’s Risk of Flooding from Surface Water (RoFSW) dataset and displays areas where the national model predicts surface water depths of 0.2m or greater, taking account of climate change allowances.

This mapping is produced using national-scale modelling, supplemented in some areas by locally compatible models prepared by Lead Local Flood Authorities. It is a probabilistic screening product, meaning it shows the likelihood of surface water flooding occurring over time, rather than the outcome of any specific rainfall event or site layout.

In published form, the dataset groups risk into three broad likelihood bands:

- High (around 1 in 30 chance or greater in any year),
- Medium (between 1 in 30 and 1 in 100 chance), and
- Low (less than 1 in 100 chance in any year).

The mapping does not represent site-specific design flood events, does not account for detailed local drainage features or ground level changes, and does not show how flood risk would change following development or mitigation. It is intended to provide strategic, catchment-scale screening information to indicate where more detailed, site-specific assessment is appropriate.

For that reason, within this FRA the RoFSW mapping is used for context only, to illustrate the broad surface water mechanisms influenced by topography. The acceptability of the proposed development is instead

assessed using site-specific modelling of pre and post-development scenarios, which is the appropriate basis for decision-making at appeal stage.

5.3 Historic drainage features and conveyance

Historic mapping and evidence referenced by the Local Planning Authority confirm the presence of an open ditch or drainage feature crossing the Site on a west-to-east alignment. This feature functioned as an ordinary watercourse and provided defined conveyance for surface water arising from the wider catchment.

The infilling or loss of this feature has altered surface water behaviour, resulting in less efficient conveyance and increased lateral spread of floodwater during intense rainfall events. The current unmanaged condition therefore represents a degraded drainage regime rather than a natural or optimised baseline.

The historic existence of this drainage feature is material, as the proposed mitigation does not introduce a new flow path but seeks to reinstate and regularise a previously established conveyance corridor in an engineered and controlled manner.

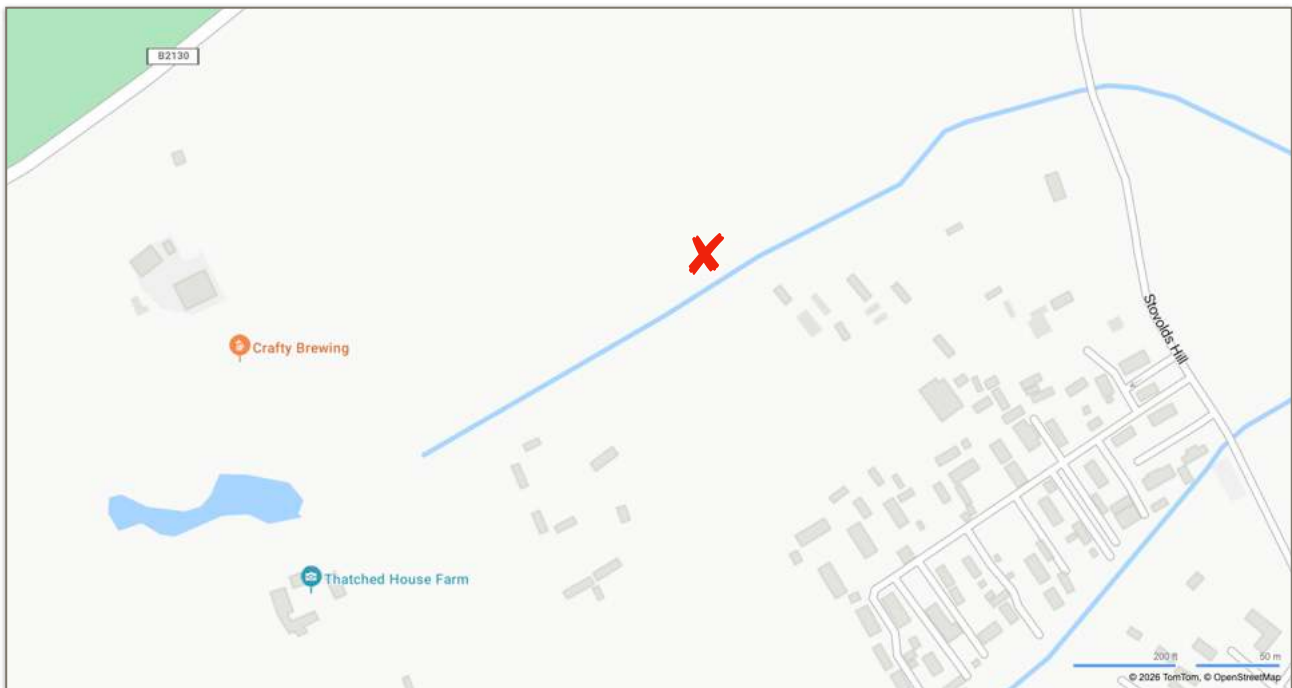


FIGURE 6 – HISTORIC MAPPING SHOWING DRAIN / DITCH ALIGNMENT WITH SITE MARKED IN RED CROSS (BASE MAPPING: OPENSTREETMAP)

5. Surface Water Assessment and Modelling Method

Surface water flood risk at Pitch 1 has been assessed using a site-specific two-dimensional hydraulic model constructed in TUFLOW and run using a direct rainfall (rain-on-grid) approach. This method applies design rainfall uniformly across the model domain and routes runoff over a high-resolution representation of the ground surface, allowing overland flow paths, shallow ponding and storage to be simulated. The approach is appropriate at this site because surface water flooding is governed by local topography, shallow gradients and low-permeability soils rather than by a formal piped drainage network or a single defined watercourse.

The model has been built using standard TUFLOW control files and GIS layers, with geometry and spatial definition controlled through the TGC file and boundary and rainfall controls defined through the TBC file. The model domain covers Pitch 1 and the surrounding contributing area so that surface water mechanisms influencing the site are represented in a hydraulically consistent manner. This is necessary because surface water behaviour at the site is not confined to the appeal boundary and is influenced by wider overland flow paths and local topographic controls.

Topography within the model is represented using a digital terrain surface resolved at a scale sufficient to capture subtle level changes, shallow flow routes and local depressions that control surface water movement. Road cut lines and local level controls have been included through the GIS shape inputs referenced in the geometry control file. This allows the model to reproduce the observed tendency for diffuse overland flow across the site under intense rainfall.

Surface roughness has been assigned to the surface using a materials and land use dataset, with Manning's n values allocated to represent grassed areas, tracks, hardstanding and other surface types. This ensures that differences in flow resistance between surface types are reflected in the hydraulic response and that runoff routing and ponding behaviour are not artificially uniform across the domain.

Rainfall inputs have been derived from FEH22 data and applied using a TUFLOW event file. The rainfall time series used in the simulations are consistent with the FEH catchment descriptors and rainfall profiles contained in the FEH_Catchment_Descriptors dataset, and are applied through a global rainfall boundary condition defined in the model control files. The rainfall is applied as net rainfall, with losses treated conservatively to reflect the clay geology and limited infiltration capacity at the site. This ensures that runoff volumes and flood extents are not underestimated.

Two design events have been simulated for both pre-development and post-development scenarios. These are the 1:30yr event and the 1:100yr event with a 40% climate change allowance. These events are appropriate for assessing surface water flood risk affecting the development and for testing compliance with national planning policy in relation to lifetime safety and climate change resilience.

The pre-development scenario represents the existing unmanaged condition, including current ground levels and the absence of a defined, engineered conveyance feature along the historic ditch alignment. The post-development scenario incorporates the proposed raised platform for Pitch 1 together with reinstated and regularised surface water conveyance and the parallel linear drainage corridor, represented within the model as open conveyance and storage features. This representation is intended to test mitigation in principle and to assess relative change in surface water behaviour, rather than to fix final engineering dimensions at this stage.

Model outputs have been reviewed in terms of flood extent, depth distribution and flow routing for both scenarios. The assessment focuses on whether occupied areas remain dry during the assessed events, whether surface water displaced by the development is safely accommodated through defined conveyance and storage, and whether there is any increase in flood risk to land beyond the site boundary.

The modelling has been undertaken at a level of detail proportionate to the planning stage. It provides a site-specific evidence base that goes beyond national screening datasets and allows the effects of layout and mitigation to be tested clearly. Detailed engineering design, final cross-sections, dimensions and construction specification, where appropriate would be refined at a later stage and secured through planning condition.

Table A. Summary of Surface Water Modelling Approach

Item	Description
Modelling software	TUFLOW (2D hydraulic model)
Modelling approach	Direct rainfall (rain-on-grid) applied across the model domain
Purpose of modelling	To test surface water behaviour under pre and post-development conditions and demonstrate feasibility of mitigation in principle
Model domain	Pitch 1 and surrounding contributing area to represent relevant overland flow paths and storage
Topography	Digital terrain surface used to represent existing ground levels and local flow controls
Surface roughness	Variable Manning's n values assigned using land use / materials dataset
Infiltration and losses	Treated conservatively to reflect clay soils and limited infiltration capacity
Rainfall source	FEH-derived design rainfall applied via TUFLOW event file
Events modelled	1:30yr and 1:100yr +40% climate change allowance
Scenarios tested	Pre-development (existing unmanaged condition) and post-development (with raised platform and managed conveyance/storage)
Key outputs reviewed	Flood extent, depth distribution, flow routing, and relative change between scenarios
Use of results	To demonstrate safety of the pitch, management of displaced flows, and no increase in flood risk elsewhere
Design status	Feasibility and policy compliance in principle, not detailed construction design

5.1 Surface water assessment approach

Surface water flood risk has been assessed using site-specific modelling to test both pre-development and post-development scenarios. The modelling considers the 1:30yr and 1:100yr plus 40% climate change allowance rainfall events, which are appropriate design events for assessing surface water flood risk affecting Highly Vulnerable development.

The surface water modelling has been undertaken to test the feasibility and effectiveness of mitigation in principle and to assess relative change in flood behaviour between pre-development and post-development scenarios. It is not intended to fix detailed engineering design, dimensions or construction specifications.

The purpose of the modelling is to demonstrate that, the development can be made safe for its lifetime and can be delivered without increasing flood risk elsewhere through appropriate layout, levels and managed conveyance. Matters of detailed design, including final profiles, widths, gradients and construction details of drainage features, are capable of refinement at a later stage and, where necessary, would be secured through planning condition. This is consistent with the role of a Flood Risk Assessment at appeal stage.

Although the model represents the wider local surface water system, this is necessary because surface water mechanisms affecting Pitch 1 are not confined to the site boundary. The interpretation of results within this FRA is specific to Pitch 1 and its immediate surroundings.

5.2 Proposed mitigation measures

The proposed development incorporates a managed surface water strategy comprising:

- Raised platforms for the residential pitch, lifting occupied areas above modelled surface water levels for all assessed events.
- Reinstatement of a defined surface water conveyance feature along the Site boundary, reflecting the alignment of the historic ditch and providing controlled transfer of surface water across the Site.
- A linear drainage feature running parallel to the developed area, designed to intercept residual shallow overland flow and provide additional temporary storage. For assessment purposes this feature has been represented in the model as an open conveyance element, while allowing flexibility in final delivery as a shallow open channel and/or French drain with oversized carrier pipes.

These measures replace diffuse, uncontrolled flow with defined conveyance and storage, consistent with best practice surface water management and national policy objectives.

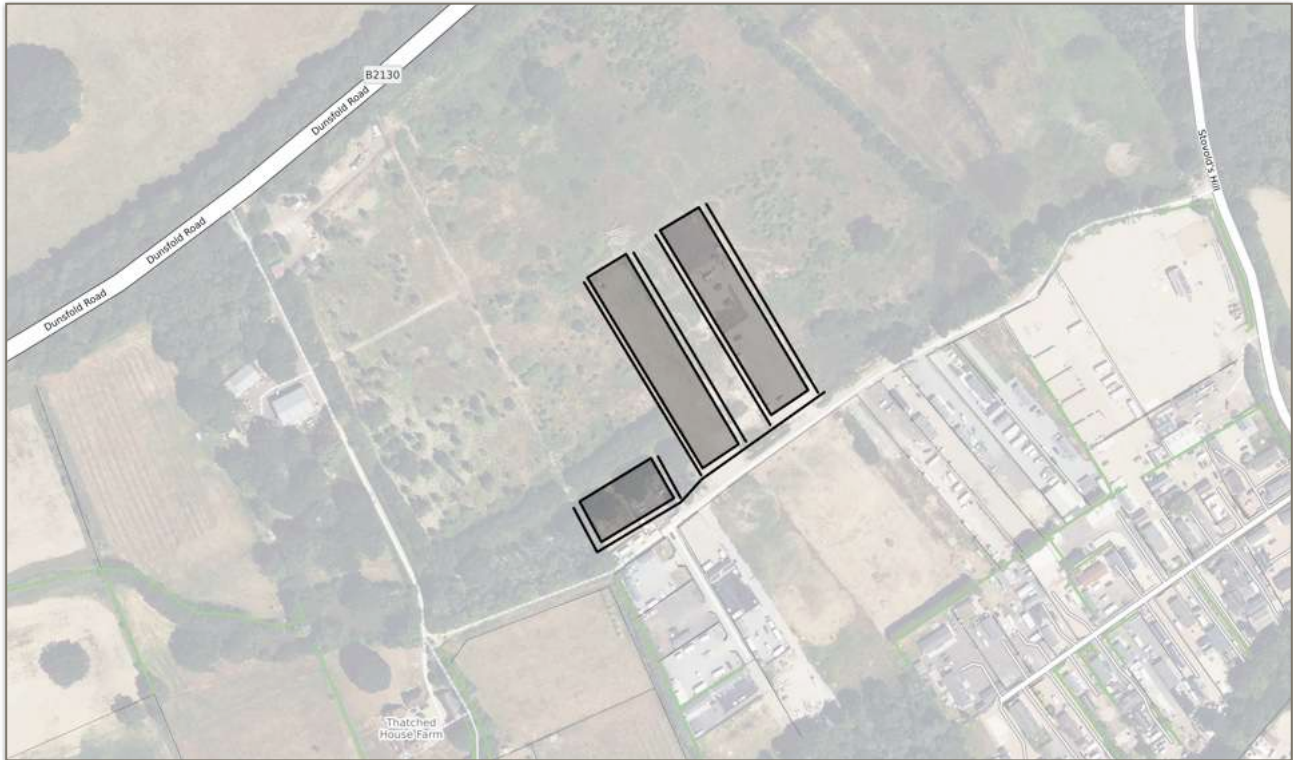


FIGURE 7 – PROPOSED SURFACE WATER MITIGATION STRATEGY (CONCEPT PLAN)

5.3 Post-development surface water behaviour

The preliminary modelling demonstrates that, under post-development conditions:

- The raised pitch platforms remain flood-free during both the 1:30yr and 1:100yr plus 40% climate change allowance events.
- Surface water displaced by the introduction of raised platforms is accommodated within the reinstated conveyance feature and the parallel linear drainage corridor.
- Surface water is conveyed through the Site in a more defined, hydraulically efficient manner than under existing unmanaged conditions.
- Additional storage provided by the linear drainage feature further offsets displaced volumes and reduces localised ponding.
- There is no increase in flood risk to land beyond the Site boundary, and the modelling indicates a marginal reduction in off-site flood depths compared to the existing condition.

These findings demonstrate that surface water flood risk to Pitch 1 can be effectively managed and that the development would be safe for its lifetime without increasing flood risk elsewhere.



FIGURE 7 – SURFACE WATER MODELLING, PRE-DEVELOPMENT SCENARIO, 1:30YR RAINFALL EVENT

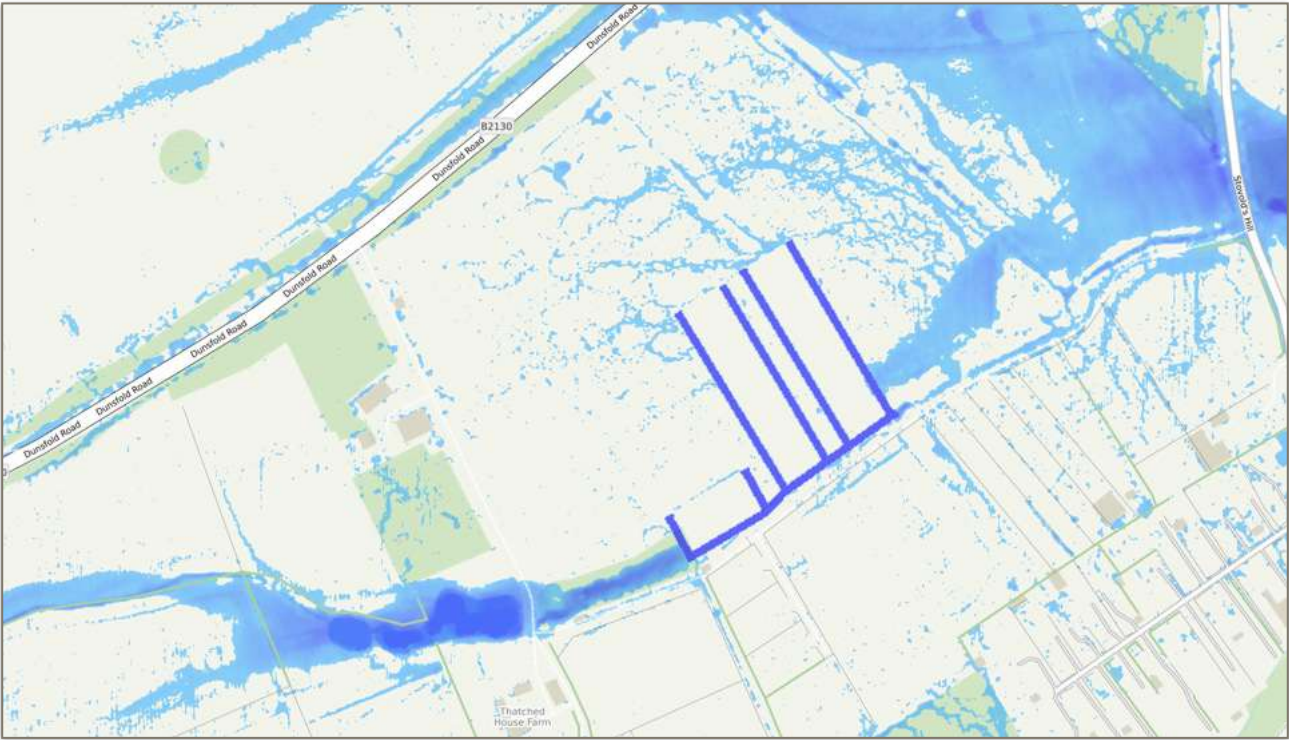


FIGURE 8 – SURFACE WATER MODELLING, POST-DEVELOPMENT SCENARIO, 1:30YR RAINFALL EVENT

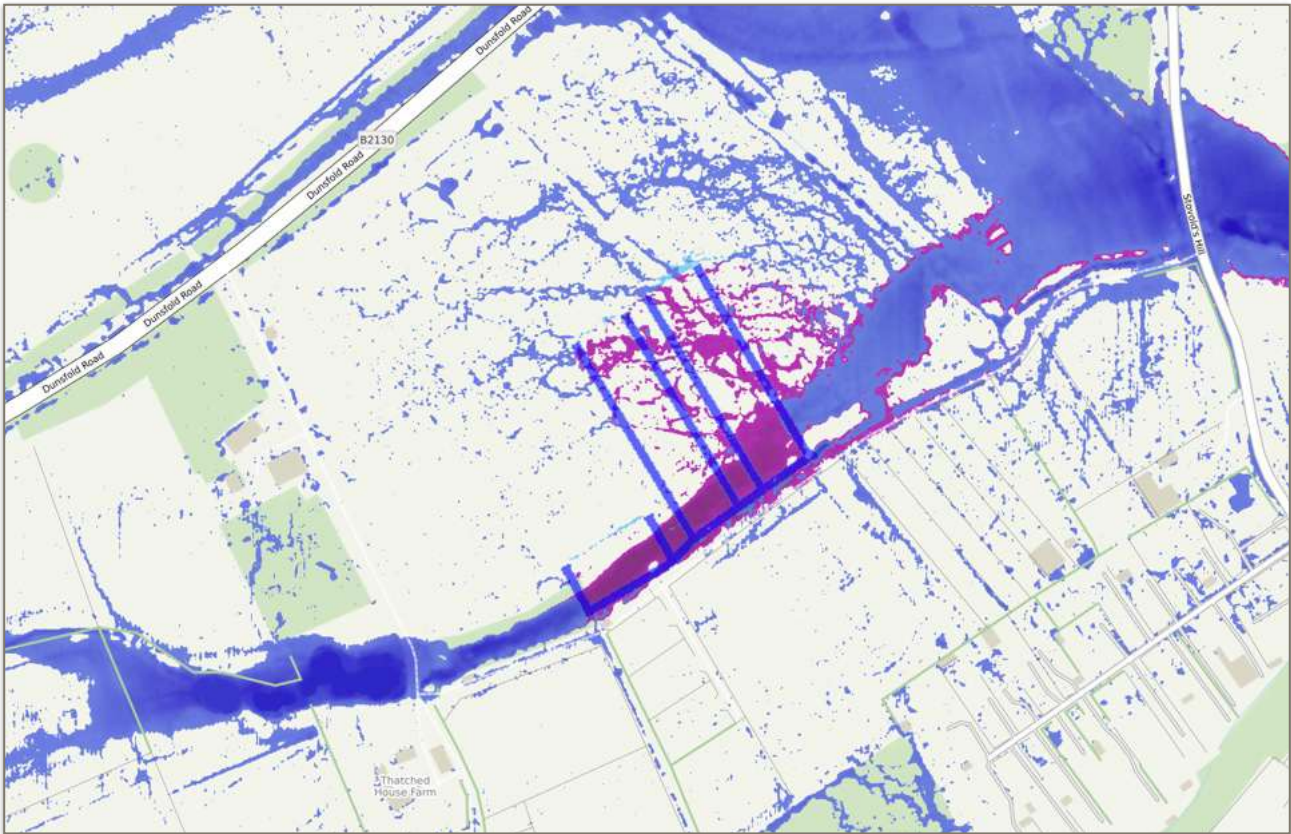


FIGURE 9 – SURFACE WATER MODELLING, COMPARISON OF PRE- AND POST-DEVELOPMENT FLOOD EXTENTS, 1:30YR RAINFALL EVENT

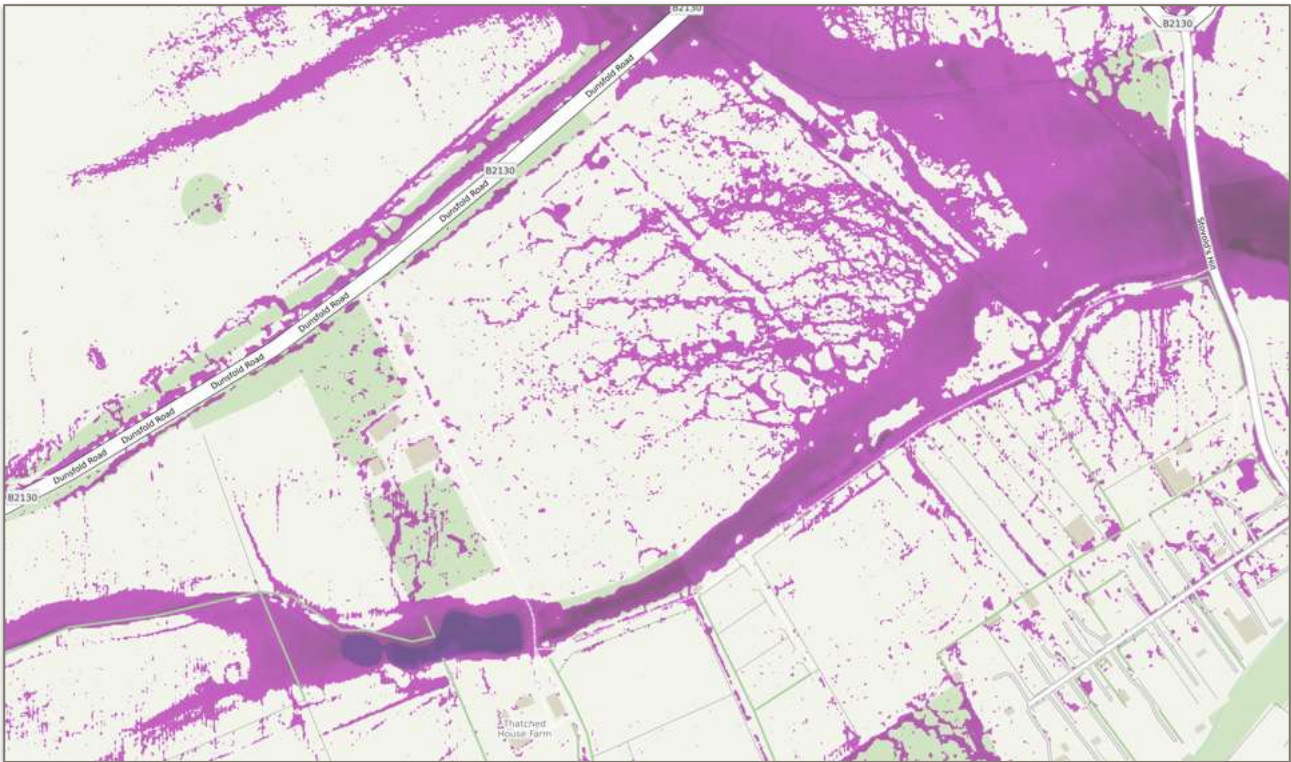


FIGURE 10 – SURFACE WATER MODELLING, PRE-DEVELOPMENT SCENARIO, 1:100YR+CC RAINFALL EVENT

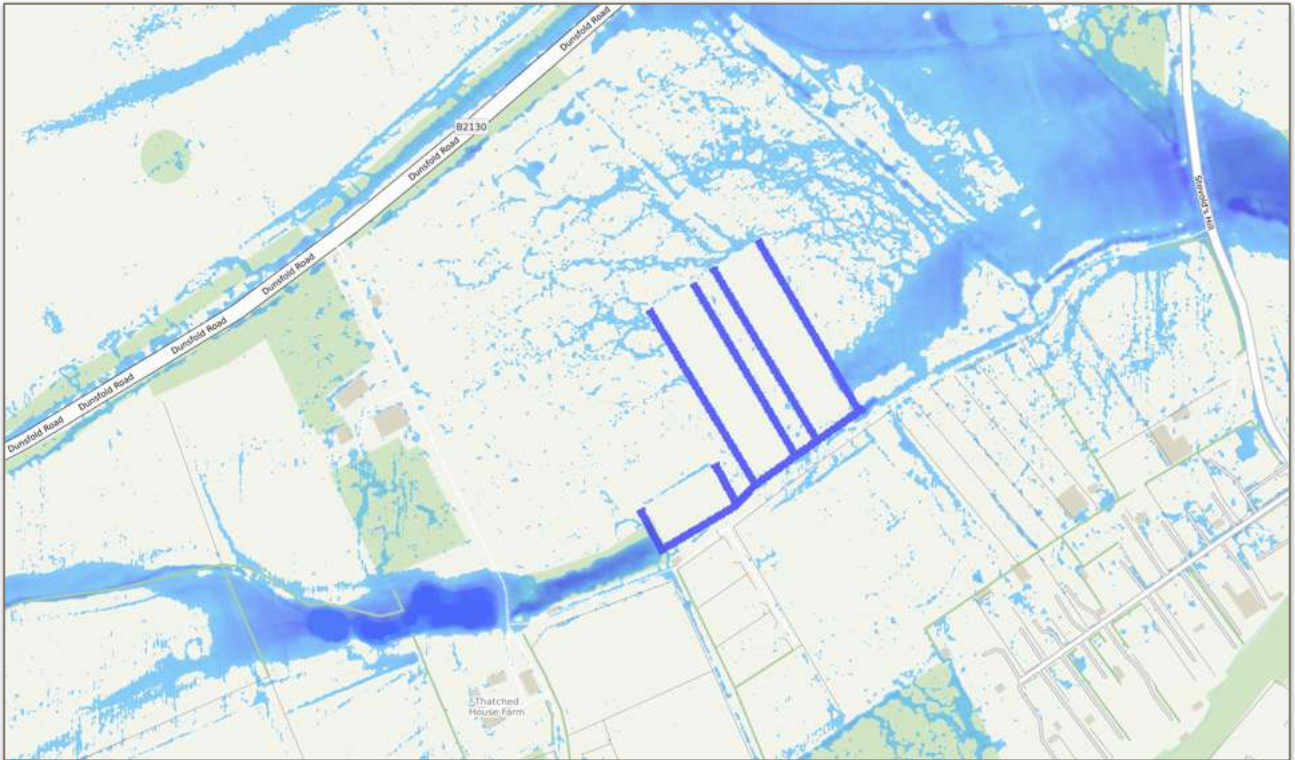


FIGURE 11 – SURFACE WATER MODELLING, POST-DEVELOPMENT SCENARIO, 1:100YR+CC RAINFALL EVENT

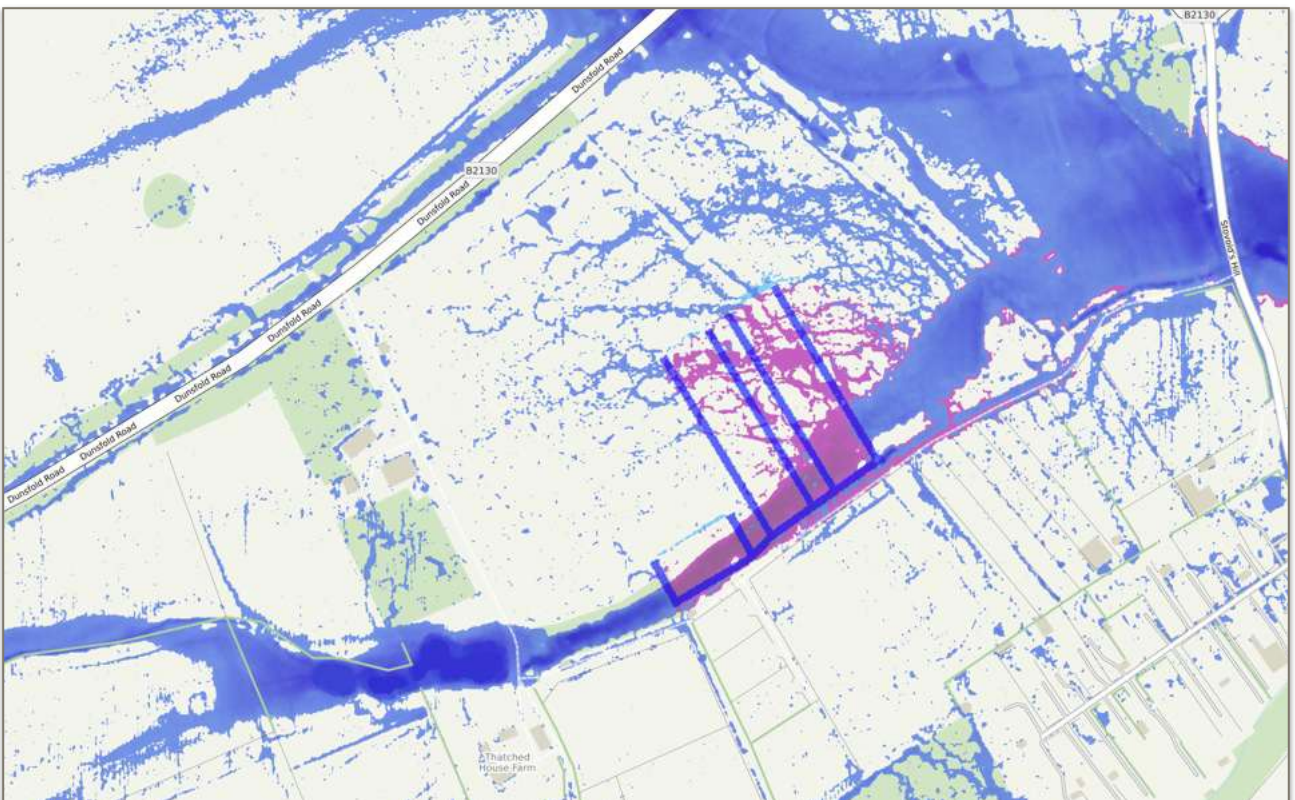


FIGURE 12 – SURFACE WATER MODELLING, COMPARISON OF PRE- AND POST-DEVELOPMENT FLOOD EXTENTS, 1:100YR+CC RAINFALL EVENT

6. Other Sources of Flood Risk

This chapter considers other potential sources of flooding in accordance with national guidance and confirms whether they are relevant to Pitch 1. Each source is addressed briefly to demonstrate that surface water flooding is the governing mechanism for the Site.

6.1 Fluvial/Tidal flooding

Pitch 1 lies within Flood Zone 1 on the Environment Agency Flood Map for Planning, Figure 13, and is not at risk of flooding from rivers. There are no Main Rivers within or adjacent to the Site. The nearest Main River, Cobblers Brook, lies further downstream and does not exert a fluvial influence on Pitch 1 due to distance and intervening topography. Fluvial flooding is not a source of risk to the proposed development.

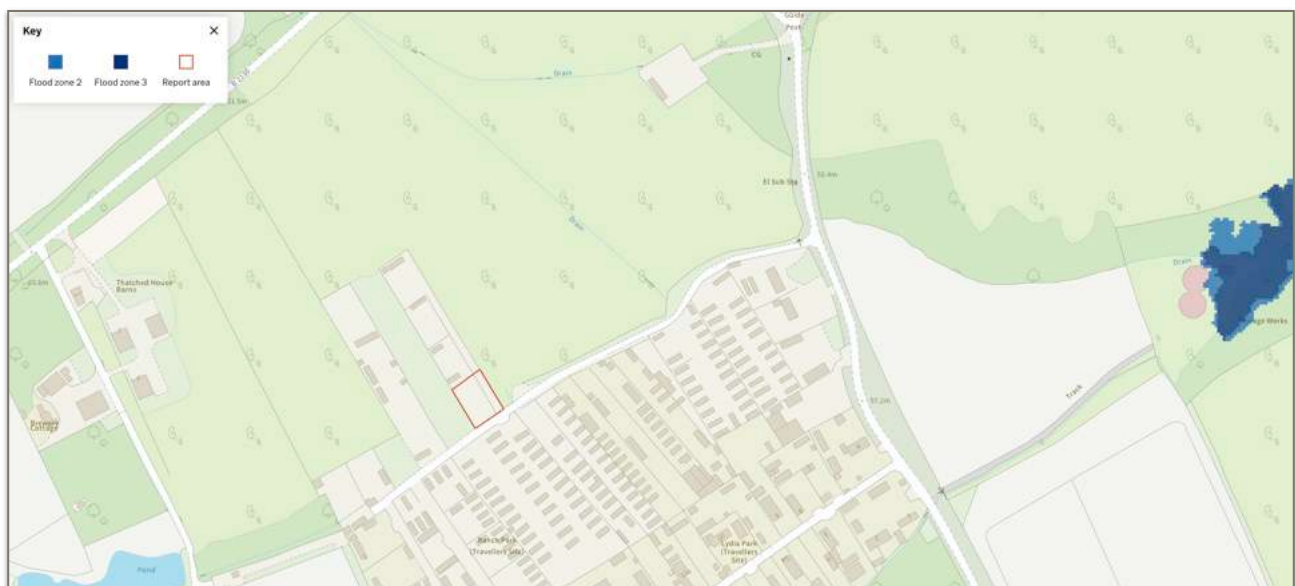


FIGURE 13 – FLOOD MAP FOR PLANNING (RIVERS AND SEA)

6.2 Flood Risk from Groundwater

The Site is underlain by clay geology, which limits infiltration and reduces the likelihood of groundwater emergence. There is no evidence of groundwater flooding affecting the Site or the immediate locality. While groundwater levels may rise seasonally following prolonged rainfall, there is no indication that groundwater emergence presents a material flood risk to Pitch 1. Groundwater flooding is not considered a significant source of risk.

Flooding from groundwater typically occurs following prolonged periods of wet weather within low laying areas underlain by permeable aquifers. When aquifers are fully saturated, flooding at surface level can occur from the sub-surface strata. DEFRA's Groundwater Vulnerability Maps indicate a *Unproductive-Low* 'vulnerability', indicating that elevated groundwater is unlikely to occur close to the surface in this area, and therefore has low potential for groundwater flooding, Figure 14.

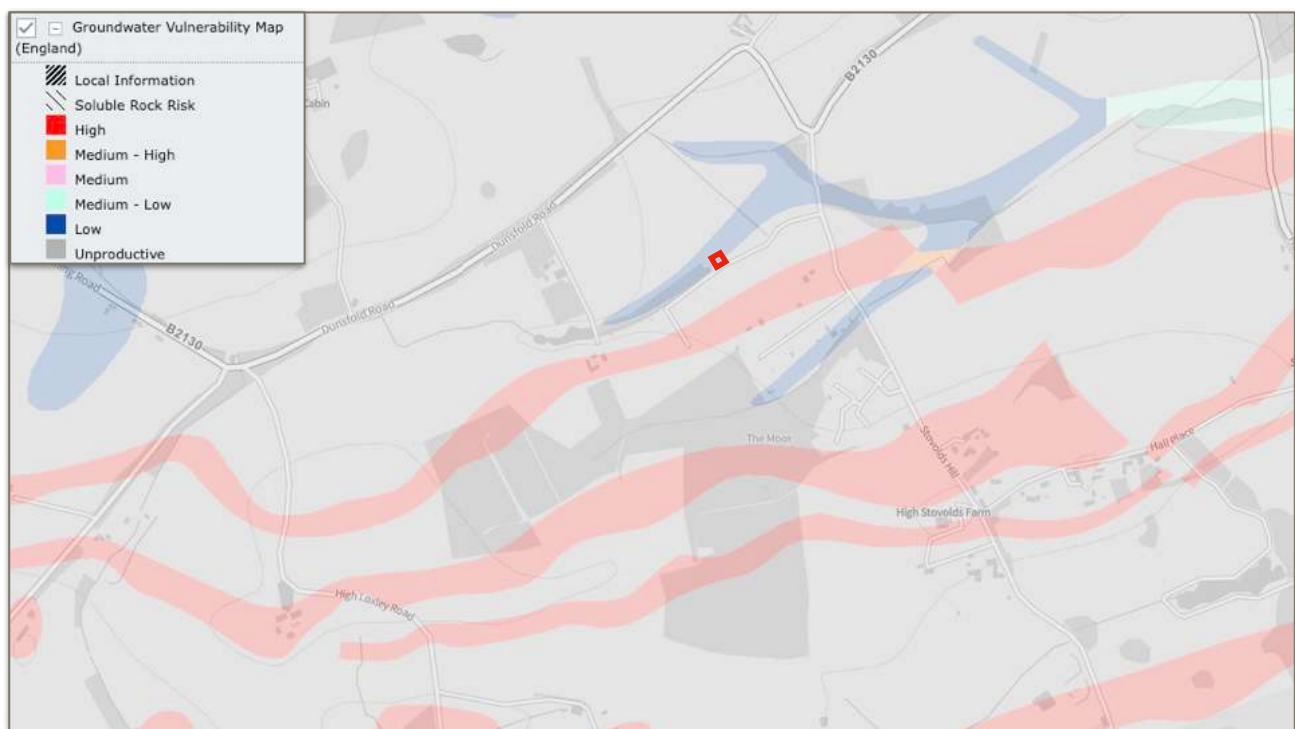


FIGURE 14 – DEFRA GROUNDWATER VULNERABILITY MAP

The site area is underlain by a substrata comprised of rocks that have negligible significance in terms of groundwater influence. They consist of bedrock or superficial deposits with a low permeability that naturally offer protection to any aquifers that may be present beneath.

Furthermore, groundwater flooding is an important consideration for subterranean basements. However, this is the siting of a mobile home and touring caravan, with no basements proposed in this instance. Therefore, the likelihood of groundwater flooding at ground level is considered to be low risk.

6.3 Flood Risk from Reservoir and Infrastructure Failure

The EA's information states that reservoir flooding is extremely unlikely to happen and there has been no loss of life in the UK from reservoir flooding since 1925. The Reservoir Act of 1975 ensures that reservoirs are inspected regularly and essential safety work is carried out.

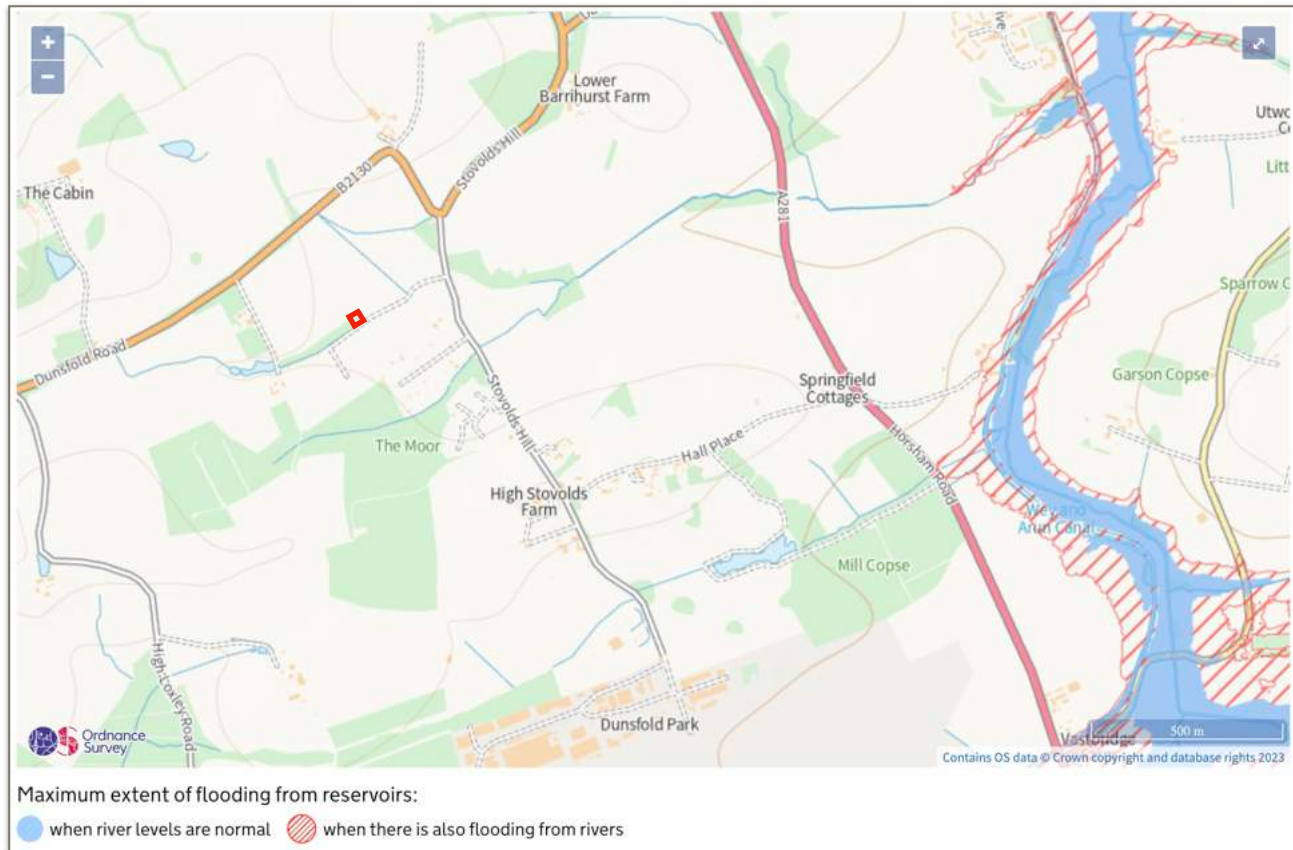


FIGURE 15 – ENVIRONMENT AGENCY FLOOD RISK FROM RESERVOIRS MAP

Environment Agency reservoir flood mapping has been reviewed. Figure 15 shows that Pitch 1 does not lie within an area at risk of flooding in the unlikely event of a reservoir breach. Reservoir flooding is not a source of risk.

Sewer flooding

There are no public foul or surface water sewers within Pitch 1 that would give rise to sewer flooding. The Site is not dependent on connection to a public surface water sewer for drainage. There is no record of sewer surcharge affecting the Site. Sewer flooding is not relevant.

Artificial sources

There are no artificial water bodies, raised canals or engineered structures within or adjacent to the Site that could give rise to flooding. Artificial sources of flooding are not applicable.

7. Flood Risk Mitigation and Site Layout

This chapter sets out the mitigation principles incorporated into the proposed development at Pitch 1 and explains how the site layout responds to surface water flood risk. The measures described are assessed on the basis of effectiveness in managing surface water, maintaining safe occupation for the lifetime of the development, and avoiding increased flood risk elsewhere. The approach is proportionate to the appeal stage and addresses mitigation in principle rather than fixing final construction detail.

7.1 Development layout and levels

The layout for Pitch 1 has been informed by the identified surface water mechanisms affecting the Site. The residential pitch is located on a raised platform, with finished levels set above modelled surface water levels for both the 1:30yr and the 1:100yr plus 40% climate change allowance events. This ensures that all occupied areas associated with the residential mobile home and touring caravan remain flood-free during design flood conditions.

The use of raised platforms is a standard and effective method of managing surface water flood risk for Highly Vulnerable development where overland flow is present. The approach avoids reliance on flood resistance or resilience measures within living accommodation and provides inherent safety through level design.

7.2 Managed conveyance and storage

The introduction of raised platforms has the potential to displace surface water that would otherwise pass across the Site under existing conditions. The mitigation strategy explicitly addresses this by providing defined conveyance and storage features to accommodate displaced volumes and to improve overall surface water behaviour.

A reinstated open conveyance feature is proposed along the Site boundary, reflecting the alignment of the historic ditch acknowledged in the Local Planning Authority's evidence. This feature provides a defined route for surface water to pass through the Site in a controlled manner, replacing the existing diffuse overland flow regime. The conveyance feature is intended to function as an ordinary watercourse, maintaining continuity of flow and allowing inspection and maintenance access.

In parallel with the reinstated conveyance feature, a linear drainage corridor is proposed along the edge of the developed area. This feature serves a dual function. It intercepts residual shallow overland flow that may arise during extreme rainfall events and provides additional temporary storage to offset volumes displaced by the raised platforms. For the purposes of assessment, this corridor has been represented within the surface water model as an open conveyance element. In practice, it would be delivered as a shallow open channel and/or a French drain incorporating oversized carrier pipes, subject to detailed design.

These features do not introduce new flow paths or redirect surface water towards sensitive receptors. They regularise and improve existing surface water movement across the Site, increasing hydraulic efficiency and reducing the lateral spread of floodwater.

7.3 Crossings and continuity of flow

Where defined conveyance features intersect internal access routes, any crossings would be limited in length and designed to maintain hydraulic capacity and continuity of flow. Such crossings would be localised and would not constitute long-reach culverting. Inspection and maintenance access would be retained. Bridge structures are not proposed.

The principle of maintaining open conveyance wherever practicable ensures that surface water behaviour remains visible, inspectable and manageable, reducing long-term flood risk.

7.4 Access and egress considerations

The flood risk management strategy for Pitch 1 is based on inherent safety through layout and levels rather than on behavioural or operational measures. The residential pitch is located on a raised platform that remains above modelled surface water levels for both the 1:30yr and the 1:100yr plus 40% climate change allowance events. As a result, the occupied areas remain dry during the design events and do not depend on access, evacuation or emergency response measures to achieve safety.

As demonstrated in Figure 16, the proposed mitigation measures also deliver a reduction in surface water flood extent along the site access compared to the existing unmanaged condition, in the same location as the flooding shown in Photograph 1 and Photograph 2 in Appendix WBC 1 of the Council's Statement of Case. This confirms that the scheme not only secures safe occupation of the pitch itself, but also results in a clear and measurable improvement in surface water behaviour along the access route relative to the baseline scenario.

The development is therefore safe in situ for its lifetime by design, and flood risk is addressed through geometry, levels and managed conveyance rather than through reliance on warning, evacuation or management procedures.



FIGURE 16 – MODELLED SURFACE WATER FLOOD EXTENT AT ACCESS ROUTE, PRE (PURPLE) AND POST-DEVELOPMENT (BLUE) DESIGN EVENT

7.5 Wider benefits and interaction with adjacent land

Although the mitigation strategy has been assessed specifically for Pitch 1, the defined conveyance and storage features form part of a wider surface water system affecting adjacent pitches and land parcels. The surface water modelling indicates that the introduction of managed conveyance results in a net betterment in surface water behaviour, including a marginal reduction in off-site flood depths compared to the existing unmanaged condition.

The fact that mitigation measures also benefit adjacent land does not undermine their effectiveness for Pitch 1. On the contrary, it reflects the reality that surface water processes operate at a catchment scale and that well-designed mitigation can deliver local and wider benefits simultaneously. The assessment of Pitch 1 within this FRA is therefore robust, notwithstanding that the mitigation strategy interacts positively with the wider site context.

7.6 Relationship to the 2022 Stovolds Hill Appeal Decision (APP/R3650/W/22/3297332)

In 2022, the Planning Inspectorate determined an appeal at Stovolds Hill (APP/R3650/W/22/3297332) concerning land served by the same access lane and subject to the same surface water flooding context as the present appeal. In that case, the Inspector concluded that future occupiers would be safe from flooding and that the development would not increase flood risk elsewhere, notwithstanding the acknowledged presence of surface water flooding in the wider area and along Stovolds Hill itself.

That conclusion was reached on the basis of a site-specific Flood Risk Assessment and a mitigation strategy, but without the benefit of detailed two-dimensional hydraulic modelling of pre- and post-development surface water behaviour. The Inspector nevertheless accepted that flood risk could be satisfactorily addressed through layout, levels and managed drainage, and found no conflict with national or local flood risk policy on that basis.

The present appeal is supported by a materially stronger and more detailed evidence base. A site-specific TUFLOW direct rainfall model has been constructed and used to simulate both pre-development and post-development scenarios for the 1:30yr and the 1:100yr plus 40% climate change allowance events. This modelling demonstrates explicitly that the pitch platform remains flood-free in the design events and that surface water is conveyed in a more controlled and hydraulically efficient manner than under the existing unmanaged condition.

Crucially, the modelling also demonstrates that there is no increase in flood risk elsewhere and that there is a marginal reduction in flood extent downstream of the site in the post-development scenario. That is a stronger and more conservative evidential position than was available to the Inspector in the 2022 appeal, where flood risk was nevertheless found not to justify refusal.

It is also material that the site considered in the 2022 appeal was affected by more extensive surface water flooding than Pitch 1 is under existing conditions. Despite that, the Inspector was satisfied that flood risk could be acceptably managed. In the present case, the area of flooding to be addressed is more limited, and the mitigation strategy is supported by a higher standard of site-specific, quantitative evidence. There is therefore no policy or evidential basis to apply a more onerous approach to Pitch 1 than was applied in the earlier decision.

7.7 Wider Catchment Context and Source of Surface Water Flows

Surface water flooding affecting land in the vicinity of Stovolds Hill is not generated solely within the immediate area of Pitch 1. The wider topography shows that a significant proportion of surface water flows originate from higher ground to the north of Dunsfold Road and are conveyed southwards and eastwards by natural gradients towards Cobblers Brook. This broader catchment context is evident from both topographic mapping and the pattern of overland flow routes represented within the site-specific modelling.

Figure 17 shows the wider FEH contributing catchment overlaid on site topography using 1m contour intervals. This illustrates the broader catchment context and the natural gradients that route surface water from higher ground towards and past the site, confirming that Pitch 1 lies within a through-flow corridor rather than at the head of the catchment.

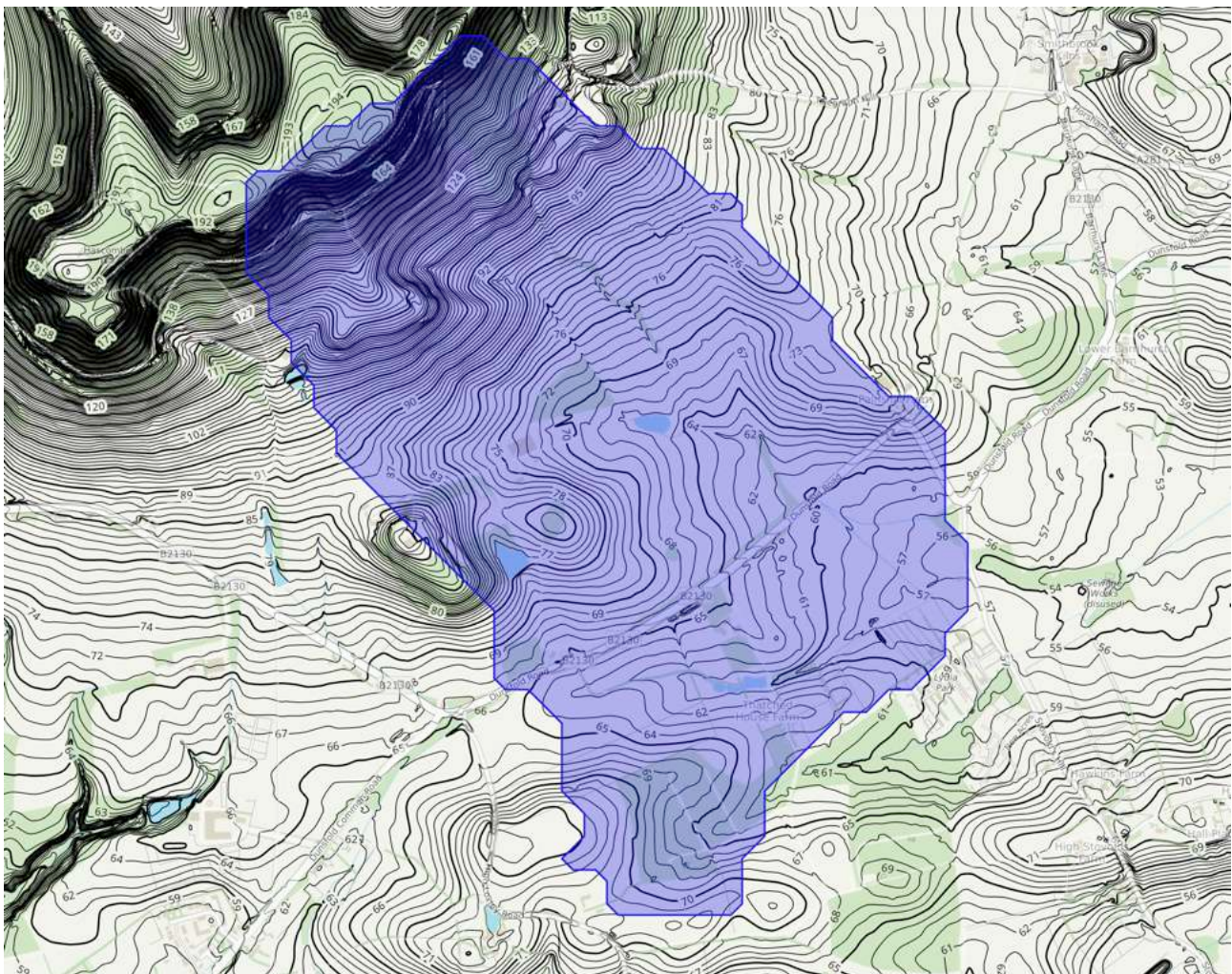


FIGURE 17 – WIDER CATCHMENT TOPOGRAPHY (1M CONTOURS) AND FEH CONTRIBUTING AREA

Pitch 1 lies along this wider overland flow corridor rather than at the head of the catchment. In practical terms, this means that the dominant surface water mechanism at the site is the passage of runoff generated upstream across the land, rather than the generation of a large volume of new runoff within the Pitch 1 area itself. The modelling undertaken for this appeal reflects this by including the upstream contributing area within the model domain, ensuring that through-flows are represented in a hydraulically consistent manner.

The existing unmanaged condition allows these flows to spread laterally across the site as shallow, diffuse overland flow, in part because the historic drainage corridor has been lost or degraded. This results in inefficient conveyance and localised ponding during intense rainfall events. The proposed mitigation strategy does not seek to divert or concentrate new flows towards sensitive receptors. Instead, it regularises and controls the passage of these wider catchment flows through the site by reinstating defined conveyance and providing additional storage alongside the developed area.

The post-development modelling demonstrates that this approach is effective. Surface water is routed through the site in a more controlled and hydraulically efficient manner, the pitch platform remains flood-free during the assessed events, and there is no increase in flood risk downstream. The fact that the site is primarily affected by through-flow rather than locally generated runoff further supports the conclusion that the development does not create a new source of flood risk and that the mitigation strategy addresses the governing surface water mechanisms in a proportionate and appropriate way.

7.8 Summary

The proposed layout and mitigation measures ensure that Pitch 1 remains flood-free during the assessed surface water events, that displaced surface water is effectively managed through defined conveyance and storage, and that flood risk is not increased elsewhere. The strategy replaces unmanaged diffuse flow with a controlled, engineered approach that is consistent with national policy and best practice.

8. Residual Risk, Exceedance and Climate Change

This chapter considers residual flood risk associated with events more extreme than those modelled, potential exceedance pathways, and the implications of climate change over the lifetime of the development. The purpose is to demonstrate that the proposed mitigation strategy remains appropriate and that occupiers of Pitch 1 would remain safe under foreseeable future conditions.

8.1 Climate change considerations

Climate change has been explicitly accounted for within the surface water assessment through testing of the 1:100yr rainfall event with a 40% climate change allowance, which represents the design flood scenario relevant to surface water risk for Highly Vulnerable development. This allowance reflects current national guidance and provides a conservative basis for assessing future risk over the lifetime of the development.

The modelling demonstrates that, with the proposed mitigation measures in place, Pitch 1 remains flood-free during the design flood event. On this basis, the development is considered resilient to the effects of climate change in relation to surface water flooding. No further uplift is required for planning purposes.

8.2 Exceedance and extreme events

No drainage system can be designed to contain all possible rainfall events. Residual risk may arise during rainfall events that exceed the design standard or where multiple extreme conditions coincide. The assessment of exceedance behaviour is therefore an important component of flood risk management.

In exceedance scenarios beyond the 1:100yr plus climate change allowance event, surface water would continue to follow defined conveyance routes provided by the reinstated ditch and the linear drainage corridor. These features are designed to accommodate and direct excess flows away from occupied areas, reducing the likelihood of uncontrolled ponding or flow across the raised pitch platform.

The raised platform for Pitch 1 provides inherent protection against exceedance events by maintaining finished levels above surrounding ground. Even where shallow surface water may be present within parts of the wider Site during extreme events, the occupied areas remain protected and safe.

8.3 Residual risks associated with blockage or failure

Residual risk may also arise from blockage or reduced performance of drainage features due to debris accumulation or lack of maintenance. This risk is mitigated through the use of open conveyance wherever practicable, which allows visual inspection and straightforward maintenance.

Localised crossings are designed to be short and hydraulically continuous, minimising the risk of blockage. The avoidance of long-reach culverting reduces the potential for unseen failures and improves long-term resilience.

A maintenance regime for drainage and conveyance features would be secured through planning condition to ensure that the system continues to function as intended for the lifetime of the development.

8.5 Summary

Residual flood risk at Pitch 1 has been considered with regard to climate change, exceedance and potential system failure. The proposed mitigation strategy provides a resilient response that maintains safe occupation during extreme rainfall events and accommodates future climate change. Residual risks are low, understood, and capable of being managed through appropriate design and maintenance.

9. Sequential and Exception Test Considerations

This chapter addresses flood risk vulnerability, Flood Zone compatibility, and the applicability of the Sequential and Exception Tests in relation to the proposed development at Pitch 1. The assessment is undertaken with reference to the National Planning Policy Framework (NPPF) and the associated Planning Practice Guidance (PPG).

9.1 Flood risk vulnerability classification

The proposed development at Pitch 1 comprises a residential mobile home and associated touring caravan intended for permanent residential use. In accordance with Table 2 of the NPPF and PPG, this form of development falls within the Highly Vulnerable flood risk vulnerability classification.

The vulnerability classification is acknowledged throughout this Flood Risk Assessment and informs the level of scrutiny applied to flood risk and mitigation. It does not, in itself, preclude development, but must be considered alongside Flood Zone compatibility and the findings of the site-specific assessment.

9.2 Flood Zone compatibility

Pitch 1 lies wholly within Flood Zone 1 on the Environment Agency Flood Map for Planning. Flood Zones relate exclusively to flooding from rivers and the sea and do not reflect surface water flood risk.

Table 2 of the NPPF and PPG sets out the compatibility of different flood risk vulnerability classifications with the Flood Zones. The table confirms that Highly Vulnerable development is appropriate in Flood Zone 1, with no requirement for either the Sequential Test or the Exception Test on Flood Zone grounds.

Accordingly, there is no policy restriction arising from Flood Zone classification or flood risk vulnerability that would prevent the proposed development at Pitch 1.

9.3 Flood Zone Definition and Policy Scope

Flood Zones, as defined by the Environment Agency Flood Map for Planning, relate solely to flooding from rivers and the sea, including Main Rivers, ordinary watercourses where modelled, and tidal influences. This scope is explicit within national policy and guidance and is consistently reflected in planning decision-making.

The Planning Practice Guidance (Flood Risk and Coastal Change) makes clear that Flood Zones do not represent surface water flood risk and must not be used as a proxy for assessing surface water probability, depth or hazard. Surface water flooding is addressed separately through site-specific Flood Risk Assessments and is not categorised through the Flood Zone framework.

Recent appeal decisions and established planning practice have consistently confirmed this distinction, with Inspectors recognising that Flood Zones cannot be extended or reinterpreted to represent surface

water flooding, nor can surface water mapping be used to reclassify land into higher Flood Zones. The acceptability of development affected by surface water flooding must instead be determined on the basis of whether a site-specific assessment demonstrates that the development would be safe for its lifetime and would not increase flood risk elsewhere.

In this case, Pitch 1 lies wholly within Flood Zone 1 and is therefore in the lowest category of fluvial and tidal flood probability. Surface water flood risk is addressed separately within this FRA through site-specific assessment and mitigation, in accordance with national policy and guidance.

9.4 Distinction between Flood Zones and surface water flooding

Building on the scope of Flood Zones set out above, Flood Zones and Table 2 of the PPG do not allocate surface water probability, nor do they impose development restrictions based on surface water mapping such as the Environment Agency's Risk of Flooding from Surface Water dataset.

Where surface water flooding is identified, national policy requires that acceptability is determined through a site-specific Flood Risk Assessment, taking account of layout, finished levels and mitigation. This FRA has been prepared on that basis.

9.5 Applicability of the Sequential Test

The Sequential Test is intended to steer development towards areas at lowest probability of flooding. In Flood Zone terms, Pitch 1 already occupies the lowest probability category.

In relation to surface water flooding, the Planning Practice Guidance (Flood Risk and Coastal Change) provides specific and up-to-date advice on how the Sequential Test should be applied. Paragraph 027 (Reference ID: 7-027-20220825, revised 17 September 2025) states that:

*"In applying paragraph 175 a proportionate approach should be taken. Where a site-specific flood risk assessment demonstrates clearly that the proposed layout, design, and mitigation measures would ensure that occupiers and users would remain safe from current and future **surface water** flood risk for the lifetime of the development (therefore addressing the risks identified e.g. by Environment Agency flood risk mapping), without increasing flood risk elsewhere, then the sequential test need not be applied."*

This Flood Risk Assessment demonstrates that the residential pitch is located on a raised platform above modelled surface water levels for the 1:30yr and the 1:100yr plus 40% climate change allowance events; that surface water displaced by the development is accommodated through defined conveyance and storage; and that surface water behaviour is improved relative to the existing unmanaged condition, with no increase in off-site flood risk.

On this basis, and in direct accordance with the Planning Practice Guidance, the Sequential Test is not required in relation to surface water flooding for the proposed development at Pitch 1.

9.6 Applicability of the Exception Test

The Exception Test applies only where development is proposed in areas of higher flood risk, typically Flood Zones 2 or 3, and where the Sequential Test has identified no reasonably available alternative sites at lower risk.

As Pitch 1 lies within Flood Zone 1 and the Sequential Test is not required, the Exception Test is not triggered. There is no policy requirement to apply the Exception Test for the purposes of determining this appeal.

Table 2: Flood risk vulnerability and flood zone ‘incompatibility’ - taken from Paragraph: 079

Reference ID: 7-079-20220825

Flood Risk Vulnerability Classification		Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Flood Zone	Flood Zone 1	✓	✓	✓	✓	✓
	Flood Zone 2	✓	✓	Exception test required	✓	✓
	Flood Zone 3a	Exception test required	✓	✗	Exception test required	✓
	Flood Zone 3b - Functional Floodplain	Exception test required	✓	✗	✗	✗
Key: ✓ Development is appropriate ✗ Development should not be permitted						

Notwithstanding this, the findings of this FRA demonstrate that the development would be safe for its lifetime and would not increase flood risk elsewhere, which aligns with the underlying objectives of the Exception Test.

9.7 Summary

The proposed development at Pitch 1 complies fully with national policy in relation to flood risk vulnerability, Flood Zone compatibility, and the Sequential and Exception Tests. Highly Vulnerable development is appropriate in Flood Zone 1, and the site-specific Flood Risk Assessment demonstrates that surface water flood risk can be effectively managed through layout and mitigation. There is therefore no flood risk policy basis to resist the proposed development.

10. Conclusions

This Flood Risk Assessment has been prepared to support the planning appeal for Pitch 1 at Land West of Stovolds Hill, Cranleigh. The assessment has been undertaken in accordance with the NPPF and the PPG, with a focus on the matters in dispute.

The Site lies wholly within Flood Zone 1 and is not at risk of flooding from rivers or the sea. Flood Zones relate exclusively to fluvial and tidal flooding and do not reflect surface water flood risk. There are no fluvial, tidal, groundwater, sewer, reservoir or artificial sources of flooding affecting Pitch 1. Surface water flooding is the sole flood risk mechanism requiring detailed consideration.

Surface water flood risk has been assessed using site-specific evidence, including surface water modelling of pre-development and post-development scenarios for the 1:30yr and the 1:100yr plus 40% climate change allowance rainfall events. The modelling has been undertaken to demonstrate feasibility of mitigation in principle and to assess whether flood risk can be effectively managed through layout and design.

The assessment demonstrates that, with the proposed mitigation measures in place, Pitch 1 would be safe for its lifetime. The residential pitch is located on a raised platform above modelled surface water levels for both assessed events. Surface water displaced by the introduction of raised platforms is accommodated through reinstated and regularised conveyance features and a parallel linear drainage corridor providing defined flow paths and additional storage. Surface water is conveyed through the Site in a more controlled and hydraulically efficient manner than under existing unmanaged conditions.

The modelling indicates that there would be no increase in flood risk elsewhere as a result of the development. On the contrary, the introduction of defined conveyance and storage results in a marginal improvement in surface water behaviour relative to the existing baseline, including a reduction in off-site flood depths. The fact that the mitigation strategy also benefits adjacent land does not undermine its effectiveness for Pitch 1 and reflects the catchment-based nature of surface water processes.

Climate change has been explicitly addressed through inclusion of a 40% allowance within the design flood assessment. Residual risks associated with exceedance and system performance have been considered and are mitigated through raised finished levels, open and inspectable conveyance features, and the ability to secure ongoing maintenance by condition. The development does not rely on evacuation during flood events to ensure safety.

In policy terms, the proposed development falls within the Highly Vulnerable flood risk vulnerability classification. Table 2 of the NPPF and PPG confirms that Highly Vulnerable development is appropriate in Flood Zone 1. In relation to surface water flooding, the Planning Practice Guidance confirms that the Sequential Test should be applied proportionately and need not be applied where a site-specific Flood Risk Assessment demonstrates that occupiers would remain safe for the lifetime of the development and that

flood risk would not be increased elsewhere. This FRA meets those criteria. The Sequential Test is therefore not required and the Exception Test is not triggered.

On the basis of the evidence presented, the proposed development at Pitch 1 complies fully with national and local flood risk policy. The Flood Risk Assessment demonstrates that surface water flood risk can be effectively managed through layout and mitigation, that the development would be safe for its lifetime, and that flood risk would not be increased elsewhere. There is therefore no flood risk policy basis to resist the proposed development.

Note:

This Flood Risk Assessment has been prepared on behalf of the Client for the purposes of supporting a planning appeal and associated planning decision-making in relation to flood risk at the Site. The assessment has been undertaken in accordance with national planning policy and guidance and is proportionate to the appeal stage, with the objective of demonstrating flood risk acceptability in principle.

The report is based on information available at the time of preparation, including published datasets, site observations and preliminary technical assessments. It does not constitute a detailed drainage or construction design. Matters of detailed engineering design, specification, dimensions and long-term maintenance are capable of refinement at a later stage and, where relevant, would be secured through appropriately worded planning conditions.

This report has been prepared solely for the stated purpose and for the sole benefit of the Client. It should not be relied upon by any other party, nor used for any other purpose, without the prior written consent of the author. No responsibility or liability is accepted to third parties.

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