Our Ref: 680815-L03

23rd October 2023

Concept Developments
131-135 Oatlands Drive,
Weybridge,
Surrey
KT13 9LB

For the attention of Katie Reynolds

RE: Flood Risk Assessment Addendum
Land lying south of 152 High Street, Old Woking GU22 9JH

Introduction

RSK Land and Development Engineering Ltd (RSK) was commissioned to carry out a Flood Risk Assessment (FRA) Addendum by Concept Developments following a revision to the site boundary.

The comments given in this report and opinions expressed are subject to RSK Group Service Constraints provided in **Appendix A**.

Site Details and proposals

The site is located off High Street, Old Woking. The site is currently an open area of green space located to the south east of the recent residential refurbishment of the former White Hart Hotel public house. Land adjacent to the site has been recently developed and includes three residential dwellings and the aforementioned refurbishment of the White Hart Hotel into residential dwellings and associated infrastructure.

The site area is approximately 0.027ha in size and the application for planning permission is for the development of a single unit with associated parking and landscaping.

The proposed site layout plans are included in **Appendix B**.

Figure 1: Site Location Plan

Site Characteristics

Topography

A site-specific topographic survey has been carried out by Solent Surveys. The survey is limited in data due to difficulty in accessing overgrown parts of the site. However, data was collected as far as was possible and shows the existing site levels vary from 24.04m above ordnance datum (mAOD) to 22.62mAOD. The ground levels generally fall in a southerly direction towards the River Wey.

Geology

Based on published geological records for the area (British Geological Survey online mapping), the site exhibits the following geology:

Superficial Geology: River Terrace Deposits (undifferentiated) – Sand and Gravel. Superficial

Deposits formed up to 3 million years ago in the Quaternary Period. Local environment previously dominated by rivers.

Base rock Geology: Thames Group – Clay, Silt, Sand and Gravel. Sedimentary Bedrock formed approximately 34 to 56 million years ago in the Paleogene Period. Local environment previously dominated by shallow seas.

Hydrology

The nearest main river to the site is the River Wey which flows in an easterly direction to the south of the site. The River Wey is a tributary of the River Thames and is one of two major tributaries in Surrey.

The river emerges as two branches before it joins at Tilford, upstream of Old Woking and the development site. The River Wey splits into three branches as it approaches the locality of Old Woking. The river was branched during works in the 20th century to alleviate flooding to the town by digging and creating new channels.

Flood Risk

Fluvial Flood Risk

The latest EA published flood zone maps shows that the site wholly lies within Flood Zone 1.

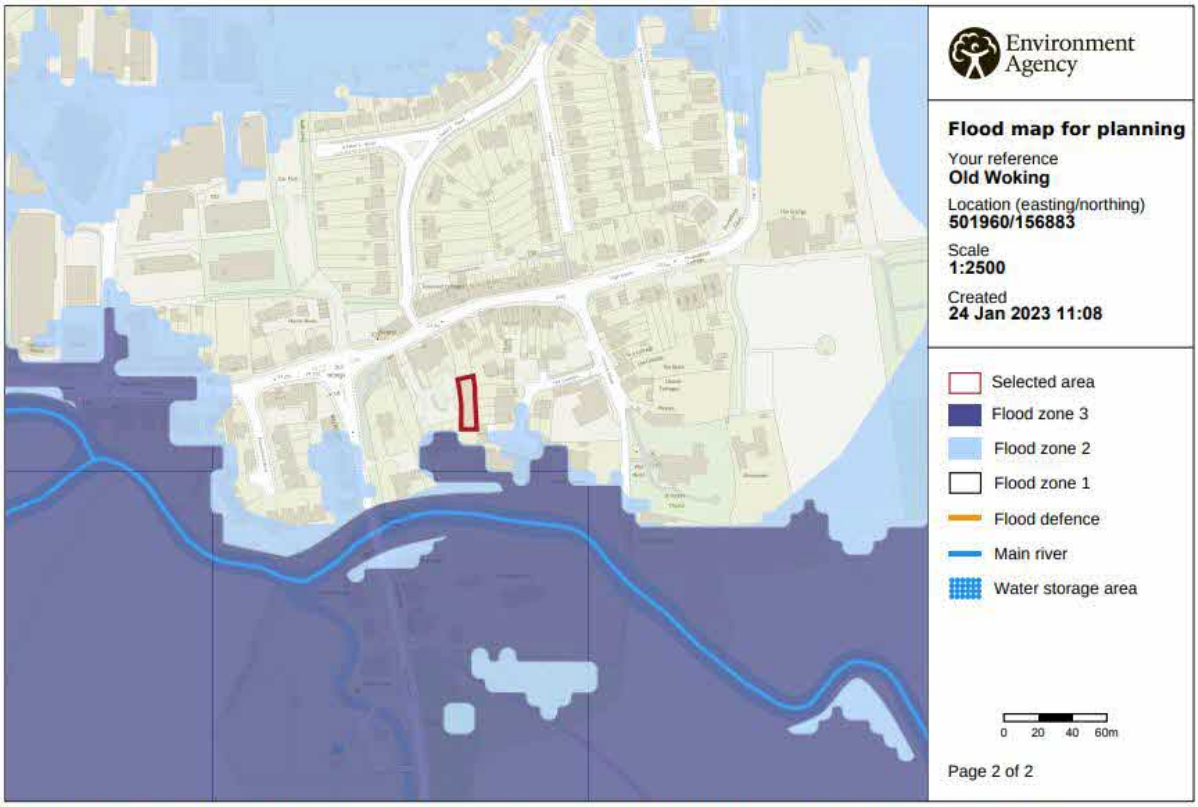

Figure 2: EA Flood Map for Planning

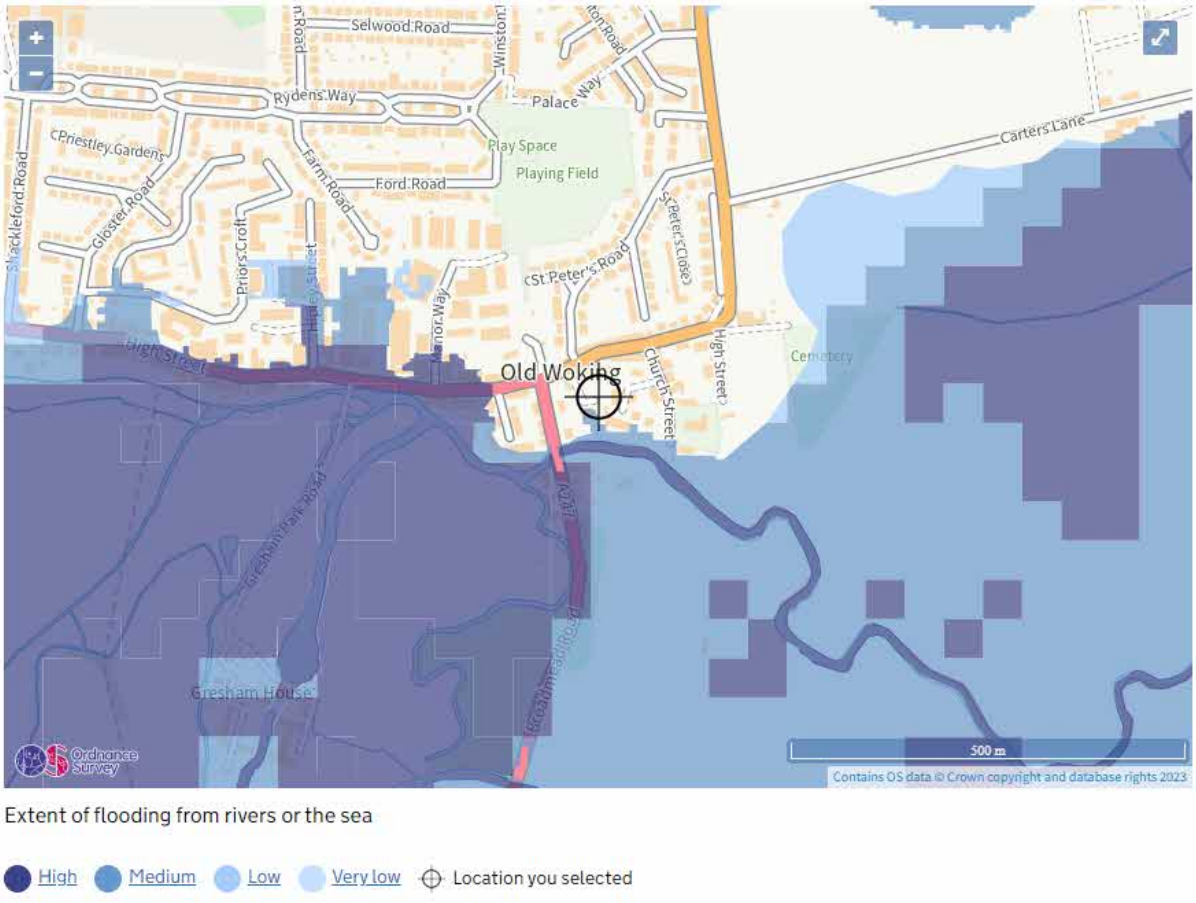

Figure 3: Flood Risk from Rivers and Sea Mapping

The latest 'Flood risk from rivers or the sea' map indicates that the site is considered to be at a **very low** risk of fluvial flooding.

Pluvial Flood Risk

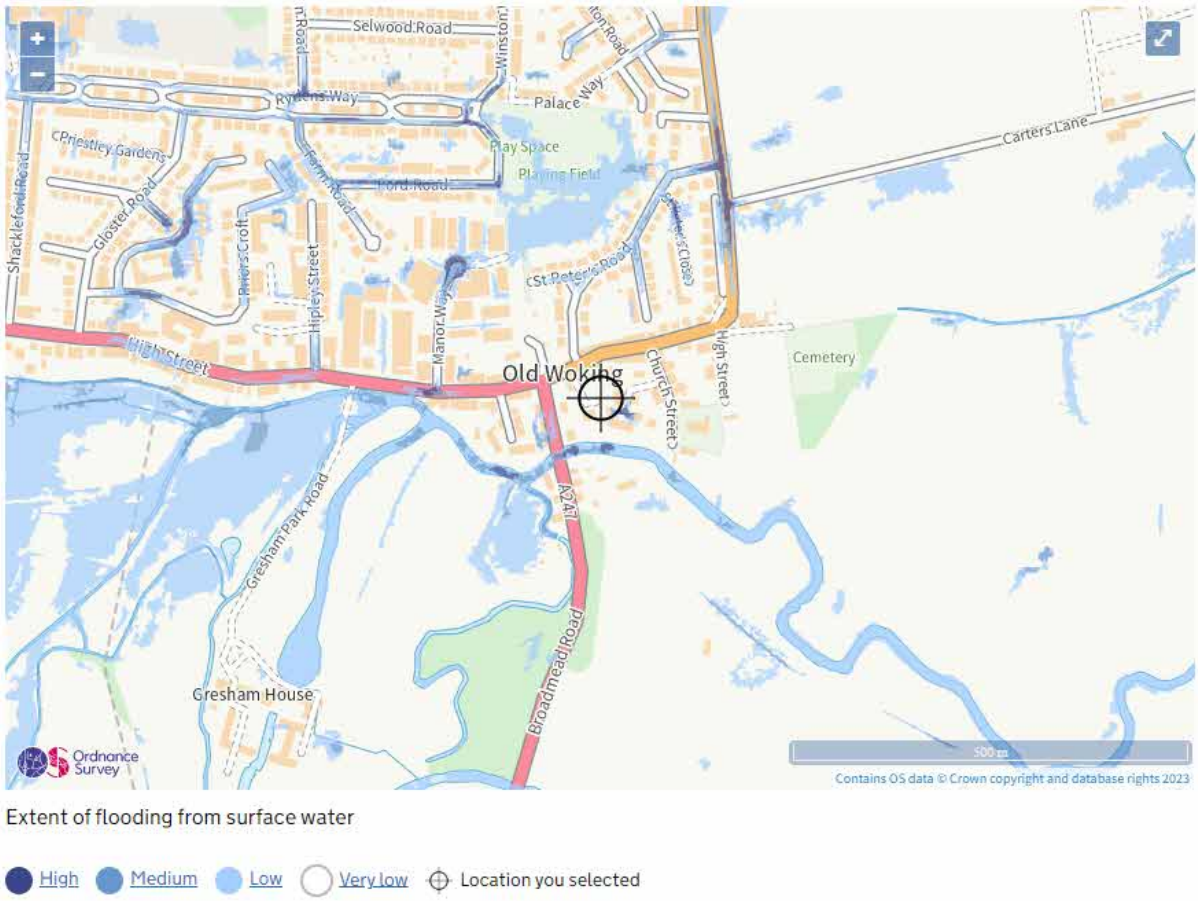

Figure 4: Flood Risk from surface water

If intense rain is unable to soak into the ground or be carried through manmade drainage systems, for a variety of reasons, it can run off over the surface causing localised floods before reaching a river or other watercourse. Generally, where there is impermeable surfacing or where the ground infiltration capacity is exceeded, surface water runoff can occur. Excess surface water flows from the site are believed to drain naturally to the local water features, either by overland flow or through infiltration.

The EA's surface water flood map (see **Figure 4**) shows that the site is at a **very low** risk of surface water flooding, with some areas of medium to high risk located off site to the south east.

Reservoir Flood Risk

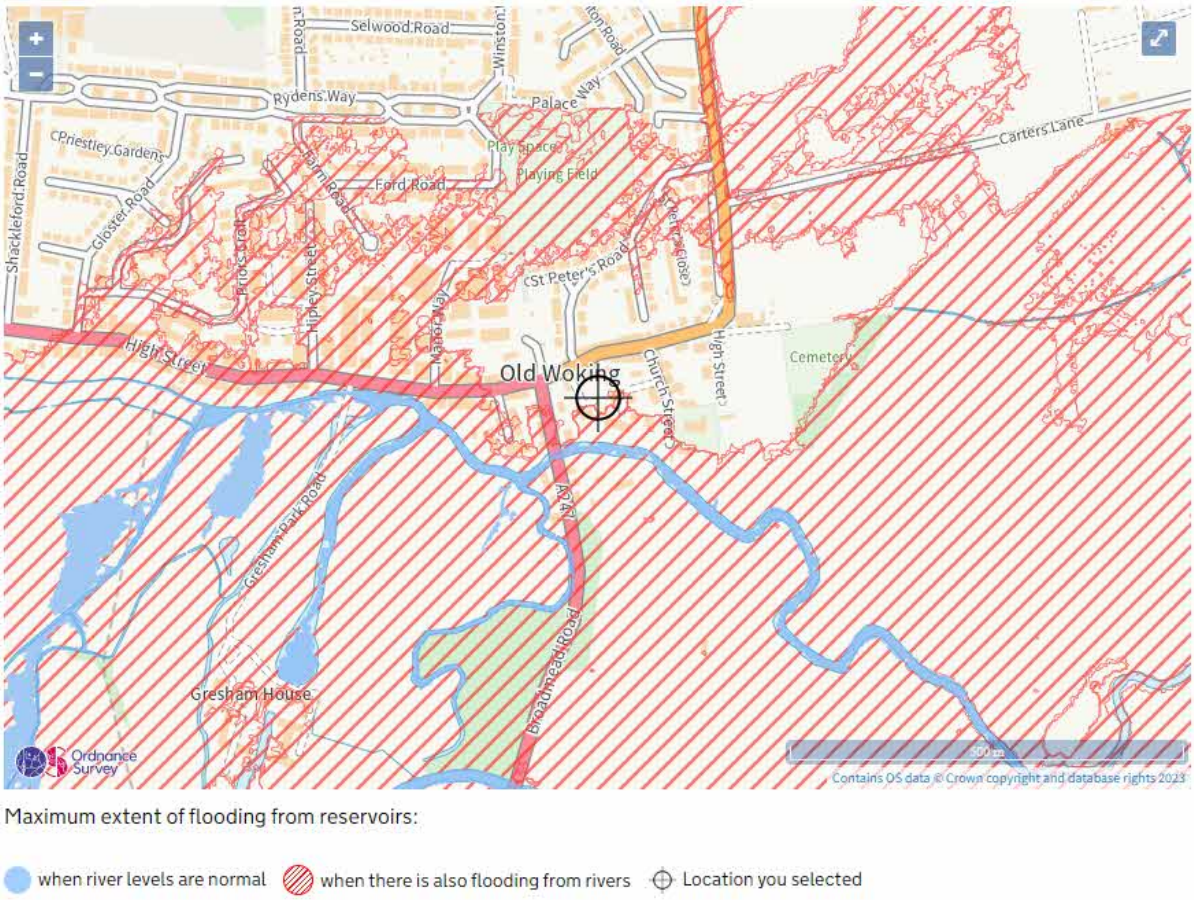

Figure 5: Flood Risk from Reservoirs

The EA's online reservoir flood risk mapping was updated in 2021 to demonstrate the potential maximum extent of flooding for two scenarios - a "dry day scenario" in which river levels are "normal", and a "wet day scenario" where the flooding from the reservoir coincides with river flooding.

The map shows that the site is not in a location at risk of reservoir flooding when river levels are normal. There is considered to be a residual risk should the peak fluvial event and reservoir failure occur at the same time, with the site lying adjacent to the mapped extent. However, the reality is a reservoir failure is more likely to occur sometime after the peak of the event.

Reservoir flooding is extremely unlikely. There has been no loss of life in the UK from reservoir flooding since 1925. Since then, reservoir safety legislation has been introduced to ensure reservoirs are maintained. Reservoirs can be managed over time, controlling inflow/outflow of water and therefore there is the capacity to control the effects of climate change. Increased rainfall has the potential to increase base flow, but this should be minimal. It is unlikely that there will be a substantial change to the risk of flooding for this site as a result of climate change. The resultant flood risk is considered to be **very low**.

Planning context

The NPPF and PPG set out the criteria for development and flood risk by stating that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increase flood risk elsewhere.

With reference to Annex 3 of the NPPF, the proposed development falls under the café/restaurant classification and is included within the 'more vulnerable' class.

Table 2 of the PPG (as reproduced below as Table 1) illustrates the site is located within Flood Zone 1 and the development is therefore classified as 'appropriate'.

Table 1: Flood risk vulnerability and flood zone 'compatibility'

Flood Risk Vulnerability Classification		Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Flood Zone	Zone 1	Appropriate	Appropriate	Appropriate	**Appropriate**	Appropriate
	Zone 2	Appropriate	Appropriate	Exception Test Required	Appropriate	Appropriate
	Zone 3a	Exception Test Required	Appropriate	Should not be permitted	Exception Test Required	Appropriate
	Zone 3b functional floodplain	Exception Test Required	Appropriate	Should not be permitted	Should not be permitted	Should not be permitted

As the site is located entirely within Flood Zone 1, the development passes the sequential and exception test criteria with respect to flooding.

Conclusions and Recommendations

This FRA complies with the NPPF and Planning Practice Guidance and demonstrates that flood risk from all sources has been considered in the proposed development. It is also consistent with the Local Planning Authority requirements with regard to flood risk.

Based on the available information, the proposed development site lies in an area designated by the EA as Flood Zone 1. The flood risk to the site from fluvial, pluvial and reservoir flooding is assessed as very **low**.

This FRA also recommends that due to the minor nature of the development (1no. unit) and the location of the entire site in Flood Zone 1, that the development should not be precluded on flood risk grounds.

Should you have any additional queries, please do not hesitate to contact the undersigned.

Yours sincerely,
For RSK LDE Limited

Colin Whittingham
Director

Enc. Appendix A Terms of Appointment
Enc. Appendix B Site Layout Proposals

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APPENDIX A
RSK GROUP SERVICE CONSTRAINTS

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1. This report and the drainage design carried out in connection with the report (together the "Services") were compiled and carried out by RSK LDE Ltd (RSK) for Concept Developments Ltd (the "client") in accordance with the terms of a contract between RSK and the "client" dated November 2022. The Services were performed by RSK with the skill and care ordinarily exercised by a reasonable civil engineer at the time the Services were performed. Further, and in particular, the Services were performed by RSK taking into account the limits of the scope of works required by the client, the time scale involved and the resources, including financial and manpower resources, agreed between RSK and the client.

2. Other than that expressly contained in paragraph 1 above, RSK provides no other representation or warranty whether express or implied, in relation to the Services.

3. Unless otherwise agreed in writing, the Services were performed by RSK exclusively for the purposes of the client. RSK is not aware of any interest of or reliance by any party other than the client in or on the Services. Unless expressly provided in writing, RSK does not authorise, consent or condone any party other than the client relying upon the Services. Should this report or any part of this report, or otherwise details of the Services or any part of the Services be made known to any such party, and such party relies thereon that party does so wholly at its own and sole risk and RSK disclaims any liability to such parties. Any such party would be well advised to seek independent advice from a competent environmental consultant and/or lawyer.

4. It is RSK's understanding that this report is to be used for the purpose described in the introduction to the report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the report is used, or the proposed use of the site change, this report may no longer be valid and any further use of or reliance upon the report in those circumstances by the client without RSK's review and advice shall be at the client's sole and own risk. Should RSK be requested to review the report after the date of this report, RSK shall be entitled to additional payment at the then existing rates or such other terms as agreed between RSK and the client.

5. The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions contained in this report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the report in the future shall be at the client's own and sole risk. Should RSK be requested to review the report in the future, RSK shall be entitled to additional payment at the then existing rate or such other terms as may be agreed between RSK and the client.

6. The observations and conclusions described in this report are based solely upon the Services, which were provided pursuant to the agreement between the client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out or required by the contract between the client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this report, RSK did not seek to evaluate the presence on or off the site of asbestos, electromagnetic fields, lead paint, heavy metals, radon gas or other radioactive or hazardous materials.

7. The Services are based upon RSK's observations of existing physical conditions at the site gained from a walk-over survey of the site together with RSK's interpretation of information including documentation, obtained from third parties and from the client on the history and usage of the site. The Services are also based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely. The Services clearly are limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the walk-over survey. Further RSK was not authorised and did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the Services. RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK and including the doing of any independent investigation of the information provided to RSK save as otherwise provided in the terms of the contract between the client and RSK.

8. The phase II or intrusive environmental site investigation aspects of the Services is a limited sampling of the site at pre-determined borehole and soil vapour locations based on the operational configuration of the site. The conclusions given in this report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent of the limited area depends on the soil and groundwater conditions, together with the position of any current structures and underground facilities and natural and other activities on site. In addition chemical analysis was carried out for a limited number of parameters [as stipulated in the contract between the client and RSK] [based on an understanding of the available operational and historical information,] and it should not be inferred that other chemical species are not present.

9. Any site drawing(s) provided in this report is (are) not meant to be an accurate base plan, but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (boreholes, trial pits etc) annotated on site plans are

not drawn to scale but are centred over the appropriate location. Such features should not be used for setting out and should be considered indicative only.

APPENDIX B
SITE LAYOUT PROPOSALS

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Key

- EXISTING TREES TO BE RETAINED
- TREE ROOT PROTECTION AREA
- EXISTING TREES TO BE REMOVED
- PROPOSED TREE
- EV — EV CHARGING POINT
- C.S. — CYCLE STORE
- B.R. — BIN/REFUSE STORAGE
- B.T. — BLACK TARMAC
- BLOCK PAVIOURS
- +00.00 — EXISTING SPOT SITE LEVELS
- + 00.00 — PROPOSED SPOT SITE LEVELS
- FLOOD ZONE 2
- FLOOD ZONE 3
- FFL +00.00 — PROPOSED FINISHED FLOOR LEVELS (SUBJECT TO CONFIRMATION AT WORKING DRAWINGS STAGE)

0 1 2 3 4 5 10 15 20M

Scale 1:200

HALO ARCHITECTS

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Status: Planning Issue

Client: Concept Developments Ltd

Project Title: Land to R/O, 152 High Street Old Woking GU22 9JH

Rev. | Date | Detail

Drawing Title: Proposed Site Plan

Scale	Date	Drawn
1:200@A3	10.2023	KF

Job No.	Drawing No.	Rev.
HA21-218	P203	-