BPS

flood risk assessment

for the proposed conversion of existing ground floor shop/offices (B1) into 1 no. 2 bed self-contained flat (C3)

project:	305 Seaside Road	
client:	Mr A Dattani	
date:	Apr 23	
project no:	doc no:	version:
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Contents

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Appendix

1. Site Plans
2. Public Sewer Records
3. Environment Agency Product 4 ref. SSD302134
4. EA Flood Map for Planning (Rivers & Sea)
5. EA Risk of Flooding From Surface Water
6. EA Extent of flooding Reservoirs
7. Magic Map Groundwater Flooding Susceptibility Map

References

i. Geological Survey of Great Britain Solid Online Viewer

ii. CIRIA Report C753 The SuDS Manual

iii. Planning Practice Guidance – Flood Risk & Coastal Change

iv. EA Guidance – Flood Risk Assessments: climate change allowances (April 2016)

v. Local Authority Strategic Flood Risk Assessment (SFRA) Level 1

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Document Control

	Consultant	Date
Prepared By	rmh	11/04/23
Reviewed By	rmh	11/04/23

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1. Introduction

BPS has produced this Flood Risk Assessment (FRA) on behalf of Mr A Dattani. We accept no responsibility to any other party for the whole or part of its contents.

This FRA has been prepared in compliance with the National Planning Policy Framework (NPPF) requirements, the Planning Practice Guidance and CIRIA SuDS Manual.

This FRA is intended to support a planning application at 305 Seaside Road, Eastbourne, BN22 7NU. The level of detail included is commensurate and subject to the nature of the proposals.

We confirm that BPS are an 'appropriately qualified professional' company with extensive knowledge and experience in flood risk.

The information used to prepare the assessment is attached to the Appendices.

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2. Development Description and Site Area

2.1. Existing Site

Existing Site Summary

Site Name	305 Seaside
Location	305 Seaside Road, Eastbourne, BN22 7NU
NGR (approx.)	E 562235 N 100218
Application Site Area (ha)	0.015
Est. Impermeable area (%)	100
Site Type	Brownfield
Surrounding area	It is located in Eastbourne, a predominantly urban settlement. The western boundary runs adjacent to A259
Flood Zone Classification	Flood Zone 3
NPPF Vulnerability	Less Vulnerable
Geology	From the Geological Survey of Great Britain Solid Online Viewer, it can be seen that the underlying substrata here should be:- Bedrock Geology - Gault Formation – Mudstone. Superficial deposits - Alluvium – Clay, silt, sand and peat. This is likely to offer limited Infiltration for surface water. The infiltration rate will depend on the rock's homogeneity and whether any fractures or fissures are present.
Drainage	Foul water – Believed to discharge into the public sewer Surface water - Believed to discharge into the public sewer
Topographically	The survey data shows the site is flat

See the aerial photograph below: -

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2.2. Development Proposals

The proposed development relates to a planning application to convert existing ground floor shop/offices (B1) into 1 no. 2 bed self-contained flat (C3)

The proposed site plans are included for reference in Appendix 1

It is intended for the proposed levels to generally follow the lie of the existing land for the development

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2.3. The Sequential Test

Local Planning Authorities (LPA) are encouraged to take a risk-based approach to proposals for development in areas at risk of flooding by applying the Sequential Test. The sequential approach is followed to steer new developments to areas with the lowest probability of flooding and away from high-risk areas.

The National Planning Policy Framework (NPPF) sets out the vulnerability to flooding of different land uses. It encourages developments to be in areas of lower flood risk where possible. It stresses the importance of preventing increases in flood risk off-site to the broader catchment area. It requires the Sequential Test to be applied at all stages of the planning process, and generally, the starting point is the Environment Agency Flood Zone Maps.

EA's Flood Map for Planning identifies Flood Zones in accordance with Table 1 of the Planning Practice Guidance (PPG). The Zones are classified as follows: -

- **Flood Zone 1** (Low Probability) defined as land having less than a 1 in 1000 (<0.1%) annual probability of river or sea flooding

- **Flood Zone 2** (Medium Probability) defined as land having between a 1 in 100 (1%) and 1 in 1000 (0.1%) annual probability of river flooding or between a 1 in 200 (0.5%) and 1 in 1000 (0.1%) annual probability of sea flooding.

- **Flood Zone 3a** (High Probability) defined as land having a 1 in 100 or greater (>1%) annual probability of river flooding or land having a 1 in 200 or greater (>0.5%) annual probability of flooding from the sea. This is represented by "Flood Zone 3" on the Flood Map for Planning.

- **Flood Zone 3b** (The Functional Floodplain) this zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of a functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise:

  - Land having a 1 in 30 (3.3%) or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or

  - Land designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding).is defined as land where water must flow or be stored in flood times. This is not identified or separately distinguished from Zone 3a n the Flood Map for Planning.

The Planning Practice Guidance (PPG): Flood Risk and Coastal Change require all sources of flood risk to be treated consistently with river and tidal flooding in mapping probability and assessing the vulnerability of a development.

In appendixes 3 & 4, EA's Flood Maps show that the development site is located in a 1% (100-year storm) annual exceedance probability risk of flooding from sea or rivers. See critical EA maps below:-

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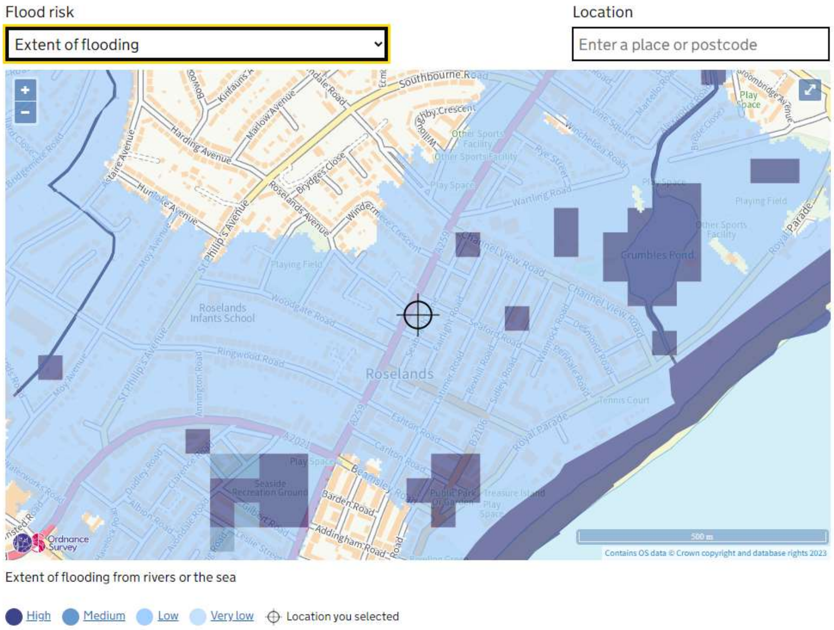
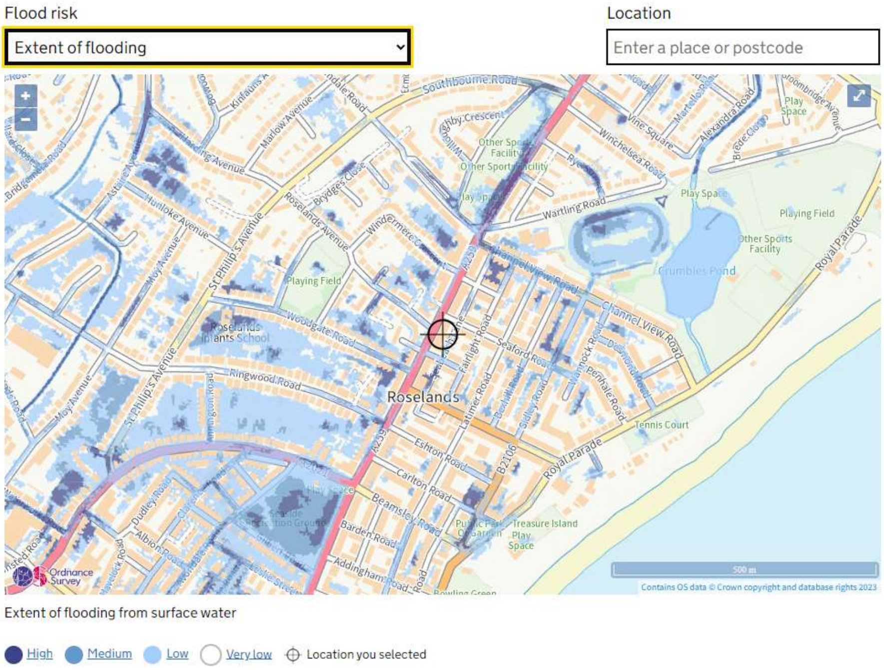
EA extent of flooding from the Sea & Rivers:-



EA extent of flooding from the surface water: -



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The Planning Practice Guidance: Flood Risk and Coastal Changes define the type and nature of different development classifications based on their flood risk vulnerability.

The flood risk vulnerability classifications are set out as follows:

Flood Risk Vulnerability Classifications	Zone 1	Zone 2	Zone 3a	Zone 3b
Essential Infrastructure - Essential transport & utility infrastructure, including electricity-generating power stations, water treatment works and wind turbines	√	√	e	e
Highly Vulnerable – Emergency services, basement dwellings, caravans, mobile homes, and park homes intended for permanent residential use. Installations requiring hazardous substances consent.	√	e	×	×
More Vulnerable - Hospitals, residential care homes. Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs, and hotels. Non–residential uses for health services, nurseries, and educational establishments.	√	√	e	×
Less vulnerable - shops; financial, professional, and other services; restaurants; offices; general industry, storage, and distribution; agriculture; waste & water treatment works	√	√	√	×
Water-compatible development - Flood control infrastructure, water and sewage transmission infrastructure and pumping stations; Docks, marinas, wharves, and Shipbuilding; Water-based recreation	√	√	√	√

Key:

√ Development is appropriate

× Development should not be permitted

e Exception Test Retired

Denotes the classification of this development

Using the above principles, the development would be classed as 'More vulnerable' within Flood Zone 3 under the NPPF guidance. As such, this development is required to implement the exception Test.

No further Sequential Test assessments have been undertaken in this case to support this FRA. However, the work undertaken as part of this flood risk assessment can help provide additional evidence to demonstrate that the development will not increase flood risk at the site or elsewhere, enabling an informed judgment.

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2.4. The Exception Test

As defined in the NPPF for the exception test to be passed:

a. It must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a Strategic Flood Risk Assessment where one has been prepared; and

b. A site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime, taking account of its users' vulnerability, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

a) Demonstrating the development provides wider sustainability benefits to the community that outweigh flood risk is outside the scope of this report and predominantly an issue for the planners.

b) This report's key objective is to establish the risks associated with flooding and demonstrate how these dangers can be suitably managed to fulfil part 'b' of The Exception Test.

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3. Potential Sources of Flood Risk

Flooding can occur from a variety of sources or a combination of sources, which may be natural or artificial. The Envirocheck Report included in Appendix 5 has provided an overview of the source maps data. The main categories of flooding have been assessed as part of this appraisal and summarised in the table below: -

Sources of Flood Risk Summary

Flood Source	Potential Risk High	Potential Risk Medium	Potential Risk Low	Appraisal Method Applied
Sea/Estuaries (Tidal)			√	EA extent of flooding from the sea map shows the site is at low risk from this source
Rivers (Fluvial)			√	EA extent of flooding from rivers map shows the site is at no risk from this source
Artificial Sources			√	EA extent of flooding from reservoirs map shows the site is at no risk from this source.
Surface Water (Pluvial)			√	EA extent of flooding from surface water shows the site is at low risk from this source.
Ground Water			√	MSDC SFRA & EA Historical flood data indicates no recorded groundwater flooding incidents.
Sewers			√	Having reviewed Local Authority SFRA documentation, there is no indication that the site has ever been subject to a sewer surcharge flooding.
Effects of Development			√	There will be no impact on existing run-off rates due to development.

The Table above identifies the potential sources of flood risk to the site in its current condition and the impacts the development could have on the broader catchment before mitigation. These are discussed in greater detail below.

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3.1. Sea/Estuaries (Tidal)

Seasonal high tides, storm surges, and storm-driven wave action may cause inundation of low-lying coastal areas by the sea. Tidal flooding is most commonly a result of two or more of these mechanisms, resulting in the overtopping or breaching of sea defences. River systems may also be subject to tidal influences.

This site is protected by the Eastbourne Sea Defence to a standard of protection of a 1 in 200 year flood event. This means that in any given year, there will be a 0.5% chance that this area will experience flooding from the sea.

Environment Agency Product 4 data included Appendix 4 and provided localised flood maps and detailed information for modelled floodwater depths for various events, both defended and undefended.

There is no flood risk associated with an undefended still-water flood scenario for this site

However, you should know that flood defences can fail or be overtopped. Therefore the worst-case scenario should be assumed to be the Undefended Risk Profile scenario.

The flood extents for each event (0.5% & 0.1%) are between 0.10-0.36m water depth.

Environment Agency flood history data has no records of flooding in this area.

The development is in the Eastbourne Town Flood Warning & Alerts Service Area.

Therefore, the flood risk posed by this source can be considered low

3.2. Rivers (Fluvial)

Flooding from watercourses occurs when flows exceed the channel's capacity or where a restrictive structure is encountered, which leads to water overtopping the banks into the floodplain. This process can be exacerbated when the debris is mobilised by high flows and accumulates at structures.

EA flood map data show that the site has a low probability of flooding from Fluvial events.

Therefore, the flood risk posed by this source can be considered low.

3.3. Artificial Sources

The Canal and River Trust (CRT) generally maintain canal levels using reservoirs, feeders and boreholes and manages water levels by transferring it within the canal system.

Water in a canal is typically maintained at predetermined levels by control weirs. When rainfall or other water enters the canal, the water level rises and flows over the weir. Suppose the level continues rising and reaches the level of the storm weirs. Control and storm weirs are customarily designed to take the water that legally enters the canal under normal conditions. However, unexpected water can enter the canal or the weirs.

EA flooding from the reservoirs map shows no risk of flooding.

Therefore, The flood risk posed by this source can be considered low.

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3.4. Surface Water (Pluvial)

Pluvial flooding can occur during prolonged or intense storm events when the infiltration potential of soils or the capacity of drainage infrastructure is overwhelmed, leading to the accumulation of surface water and the generation of overland flow routes. Flooding from surface water is challenging to predict as rainfall location and volume are difficult to forecast. In addition, local features can significantly affect the chance and severity of flooding.

The surface water risk categories are classified as follows: -

- **'Very Low**' Probability defined as land having less than a 1 in 1000 (<0.1%) annual probability of surface water flooding
- **'Low**' Probability defined as land having between a 1 in 1000 (0.1%) and 1 in 100 (1.0%) annual probability of surface water flooding.
- **'Medium'** Probability defined as land having between a 1 in 100 (1.0%) and 1 in 30 (3.3%) annual probability surface water flooding.
- **'High'** Probability) defined as land having a 1 in 30 (3.3%) or greater annual probability of surface water flooding

EA flood risk summary defines the site as primarily in an area with a very low risk of surface water flooding.

Local SFRA & EA historical flood data suggest no instances of surface water flooding in the surrounding area.

Therefore, the flood risk posed by this source can be considered low.

3.5. Ground Water

Groundwater flooding occurs when the water table rises above ground elevations. It is most likely to happen in low-lying areas underlain by permeable geology.

Local SFRA & historical flood records suggest that the site is in an area with no history of groundwater flooding susceptibility.

Therefore, the flood risk posed by this source can be considered low.

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3.6. Sewers

Sewer flooding occurs when intense rainfall overloads the sewer system capacity (surface water, foul or combined) and/or when sewers cannot discharge freely into watercourses due to high water levels. Sewer flooding can also be caused when problems such as blockages, collapses or equipment failure occur in the sewerage system. Infiltration, the entry of soil or groundwater into sewer systems via faults within the sewerage system's fabric, is another cause of sewer flooding.

Local SFRA & historical flood records suggest no instances of sewers flooding in the surrounding area.

Therefore, the flood risk posed by this source can be considered low

3.7. Effect of Development

Providing drainage strategies are followed, the development will not impact surface water run-off flows or increase the risk of flooding in the local or broader catchment.

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4. Climate Change

When the impact of climate change is considered, it is generally accepted that the standard of protection provided by current defences will reduce with time. The global climate is continually changing, but it is widely recognised that we are now entering a period of accelerating changes are expected to cause significant global climate shifts during this century.

The nature of climate change in the UK future projects frequent occurrences of short-duration, high-intensity rainfall and more frequent periods of long-duration rainfall. These effects will increase the flood zones associated with rivers and the amount of flooding experienced from other inland sources. The rise in sea level will change the frequency of high-water levels relative to today's sea levels. It will also increase the extent of the area at risk should sea defences fail, Changes in wave heights due to increased water depths and possible changes in the frequency, duration and severity of storm events are also predicted.

4.1. Potential Changes in Climate

Peak River Flow

Peak river flow allowances show the anticipated changes to peak flow by river basin district.

Environment Agency has peak river flow allowances by river basin district (based on a 1961 to 1990 baseline) which are shown in the table below: -

Applies across all of England	**Total potential change anticipated for the '2020s' (2015 to 2039)**	**Total potential change anticipated for the '2050s' (2040 to 2069)**	**Total potential change anticipated for the '2080s' (2070 to 2115)**
Upper end	25%	50%	105%
Higher central	15%	30%	45%

The NPPF and supporting Planning Practice Guidance state that residential development should be considered for at least 100 years.

Sea level

Global sea levels will continue to rise, depending on greenhouse gas emissions and the climate system's sensitivity.

Environment Agency has provided sea-level allowances by river basin district for each epoch in mm per year (based on a 1981 to 2000 baseline) – the total sea-level rise for each epoch is in brackets which are shown in the table below: -

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Area of England	Allowance	2000 to 2035 (mm)	2036 to 2065 (mm)	2066 to 2095 (mm)	2096 to 2125 (mm)	Cumulative Rise 2000 to 2125 (metres)
South East	Upper end	6.9 (242)	11.3 (339)	15.8 (474)	18.2 (546)	1.60
South East	Higher central	5.7 (200)	8.7 (261)	11.6 (348)	13.1 (393)	1.20

The NPPF and supporting Planning Practice Guidance state that residential development should be considered for a minimum of 100 years. Therefore, the 1 in 200-year flood level should be calculated between the current day and the year 2123.

To ensure that any recommended mitigation measures are sustainable and effective throughout the lifetime of the development, it is necessary to include the appraisal of the extreme flood level commensurate with the planning horizon for the proposed development.

Peak Rainfall Intensity

Increased rainfall affects river levels and land and urban drainage systems.

Environment Agency has provided peak rainfall intensity allowances in small catchments (less than 5km^2) or urban drainage catchments (based on a 1961 to 1990 baseline), which are shown in the table below: -

Cuckmere and Pevensey Levels Management Catchment peak rainfall allowances

3.3% annual exceedance rainfall event		
Epoch	**Central allowance**	**Upper-end allowance**
2050s	20%	40%
2070s	20%	40%
1% annual exceedance rainfall event		
2050s	20%	45%
2070s	25%	45%

*Use '2050s' for development with a lifetime up to 2060 and use the 2070s epoch for development with a lifetime between 2061 and 2125.

The Drainage Strategy should ensure no increase in runoff rate from the site for the upper-end allowance.

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4.2. Impacts of Climate Change on the Development Site

Climatic change will impact how the proposed development affects flood risk elsewhere.; therefore, potential increases in the future need to be considered when assessing flood risk.

The increase in tidal extremes that results from rising sea levels is significant and therefore needs to be considered to ensure that flood risk is appropriately mitigated over the development's lifetime.

For residential development, the design life of 100 years is assumed, and therefore an increase of 45% in peak rainfall intensity is to be used in the surface water management strategy calculations.

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5. Flood Risk Mitigation

Section 3.0 has identified the flooding sources that could pose a risk to the site. This section sets out the mitigation measures to be incorporated to address and reduce the risk of flooding to within acceptable levels.

The key objectives of flood risk mitigation are:

- to reduce the risk of the development being flood
- to ensure continued operation and safety during flood events
- to ensure that the flood risk downstream of the site is not increased by increased run-off
- to ensure that the development does not increase flood risk elsewhere

Mitigation Measures Summary

Mitigation Measure	Appropriate	Comment
Careful location of development within site boundaries (i.e., Sequential Approach)	√	See section 5.1
Raising floor levels	✕	See section 5.2
Land raising	✕	See section 5.2
Compensatory floodplan storage	✕	Not required
Flood resistance & resilience	√	See section 5.3
Alterations / Improvements to channels and hydraulic structures	✕	Not required
Flood defences	✕	Not required
Flood Warning	√	See section 5.4
Management of development run-off	✕	Not required

5.1. Application of the Sequential Approach at a Local Scale

The sequential approach to flood risk management can also be adopted on a site-based scale, often the most effective mitigation form. For example, large schemes would mean locating the more vulnerable dwellings on the higher parts of the site and placing parking, recreational land or commercial buildings in lower-laying and higher-risk areas.

The residential conversion has been considered with the sequential approach philosophy.

If the additional migration methods outlined are implemented, the potential risk of site surface water flooding will decrease.

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Therefore, it is considered that the sequential approach has been applied in this instance

5.2. Raising Floor Levels & Land Raising

The Environment Agency recommends that finished floor levels for a development that does not include sleeping accommodation on the ground floor should normally be set to whichever is higher of the following, where relevant:

- A minimum of 300mm above the fluvial 1% AEP + 35% climate change level.
- The fluvial 1% AEP + 70% climate change level.
- A minimum of 300mm above the tidal 0.5% AEP level and appropriate allowance should be made for climate change based on the vulnerability classification of the development.
- 300mm above the general ground level of the site.

Finished Floor Levels for sleeping accommodation should normally be set to whichever is higher of the following:

- A minimum of 600mm above the fluvial 1% AEP + 35% climate change level.
- The fluvial 1% AEP + 70% climate change level
- A minimum of 600mm above the tidal 0.5% AEP level plus an allowance for climate change.

The proposed development is to convert existing ground floor shop/offices (B1) into 1 no. 2 bed self-contained flat (C3). where all the floors levels have previously been established.

Consequently, floor raising, and land raising are not considered a viable form of mitigation at this site.

5.3. Flood Resistance and Resilience

During a flood event, floodwater can find its way into properties through a variety of routes, including:

- Ingress around closed doorways
- Ingress through airbricks and up through the ground floor.
- Backflow through overload sewers discharging inside the property through ground floor toilets and sinks.
- Seepage through the external walls
- Seepage through the ground and up through the ground floor
- Ingress around cables services through external walls.

Since flood management measures only manage the risk of flooding rather than eliminate it, flood resilience and resistance measures may need to be incorporated into the buildings' design. The two possible alternatives are:

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Flood Resistance or 'dry proofing - Water Exclusion Strategy

Flood water is prevented from entering the building, for example, using flood barriers across doorways and airbricks, or raising floor levels. These measures are considered appropriate for 'more vulnerable' development, where recovery from internal flooding is not considered practical.

Flood Resilience or 'wet proofing' - Water Entry Strategy

Accepts that flood water will enter the building and allow for this situation through careful internal design, such as raising electrical sockets and fitting tiled floors. The finishes and services are such that the building can quickly be returned to use after the flood. Such measures are generally only considered appropriate for some 'less vulnerable' uses and where the use of an existing building is to be changed where it can be demonstrated that no other measure is practicable.

The approach for flood Resistance/Resilience design and construction has been considered in the following table: -

Design Water Depth*	Approach
Design Water Depth above 0.6m	• Allow water through the property to avoid the risk of structural damage. • Attempt to keep water out for low depths of flooding 'Water Entry Strategy' **
Design Water Depth from 0.3m to 0.6m	• Attempt to keep water out, in full or in part, depending on the structural assessment. • If structural concerns exist, follow approach above**
Design Water Depth up to 0.3m	• Attempt to keep water out 'Water Exclusion Strategy.'

*Design water depth should be based on assessing all flood types that can impact the building.

** In all cases the 'water exclusion strategy can be followed for flood water depths up to 0.3m

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Following Section 5.2 the existing floor level (estimated 3.32m AOD) is to remain.

EA Product 4 Flood Event Data Undefended Annual Exceedance Probability

Storm event	**Flood water level (m)**	**Height above Ex. floor level (m)**
1 in 200 year (0.5%)	3.36	0.10
1 in 200 year (0.5%) + CC (2115)	5.62	2.37
1 in 1000 year (0.1%)	3.61	0.36
1 in 1000 year (0.1%) + CC (2115)	5.87	2.62

Therefore, the proposal is to consider flood resistance measures to the existing structure to prevent floodwater from entering the building, providing safe refuse.

The flood resistance improvements to incorporate are as follows: -

- The floors are ground-bearing solid construction with low permeability with watertight joints.
- Existing airbricks removed.
- A waterproof barrier (tanking) is applied internally to the structure's floor and walls.
- A transparent waterproof wall sealant solution is applied to any exterior walls to prevent long-standing water seepage.
- A flood door is provided at the entrances
- Non-return valves on the drainage pipes to prevent backflow flooding.
- Sub-floor materials should retain structural integrity with good drying and cleaning properties (i.e., engineering bricks, concrete blocks, closed-cell installation, and damp-proof membranes).
- Services are taken into the building at a high level.
- Raising electrical sockets
- To prevent damage, communications wiring should be protected by suitable insulation in the distribution ducts.
- Provide an emergency egress window above the floodwater for means of escape.

Flood resistance measures should be taken to a height of at least 300mm above the 1 in 1000-year (0.1%) flood level, or Est 700mm above the existing floor level, so there should no risk of flooding from all events up to 1 in 1000-year (0.1%).

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It should be noted that 1 in 200-year (0.5%) flood level (with sea-level climate allowance) would be greater than the 0.6m design depth above the current floor level, making further flood resistance measures unworkable. Alternative mitigation measures have been considered in Section 5.4.

Reference is also made to the Department for Communities and Local Government Publication 'Preparing for Floods' and Environment Agency Floodline Publication 'Damage Limitation' when considering floodproofing measures.

Before construction, the local Building Control department should agree on all floodproofing measures.

This is considered an acceptable risk and practical solution in consideration of converting an existing residential building.

5.4. Flood Warning

The Environment Agency operates a flood forecasting and warning service in areas at risk of flooding from rivers or the seas.

Whilst the probability of an event of sufficient magnitude to cause floodwaters to reach the levels discussed in this report is low, the risk of such an occurrence is always present. Therefore, the opportunity exists for all residents within the flood risk area to receive early flood warnings.

All future owners and occupiers must be aware of the potential flood threat and include signing up for the Environment Agency's Floodline Service to form a part of any tenancy agreement. This would be a similar situation for all residents in this area, and local flood warnings are likely to be broadcast widely, allowing evacuation to occur safely ahead of the time of danger.

A definitive site-specific Flood Emergency Evacuation Plan is to be agreed upon with the Local Authority. It should include sea-level allowances increasing over the years to provide forewarning allowing residents to prepare themselves and their property for flood events or evacuate the area if necessary.

Advice should be sort from the emergency services when producing an evacuation plan for the development as part of the Flood Emergency Evacuation Plan.

A Flood Emergency Evacuation Plan document is to be provided during the introduction to ensure that owners and occupiers of the property are aware that the development is at risk of flooding.

If all mitigation measures noted above are implemented, the proposed conservation's overall flood risk would be less than its current occupied state.

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6. Conclusions

This FRA has assessed flood risk sources for the proposed and demonstrates that the development is at an acceptable level of flood risk, subject to the recommended flood mitigation strategies outlined in Section 5 are implemented.

This Flood Risk Assessment (FRA) has assessed the overall flood risk for the proposed development with the principles set out in the National Planning Policy Framework (NPPF), the associated Planning Practice Guidance and EA Regulations. We can conclude that providing the strategies within this report are followed, the risk of flooding on and off the site will remain unchanged post-development, which means the proposed development can be accommodated.

Consequently, it has been shown that the development can pass the second element of the Exception Test and therefore meet the requirements of the NPPF.

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