Elmbridge Borough Council Level 2 Strategic Flood Risk Assessment

Elmbridge Borough Council

Version 2

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Quality information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position
1	16/02/2024	Version 1: Draft Report for review by Elmbridge BC, Surrey CC and the Environment Agency	SL	Sarah Littlewood	Project Manager
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1. Introduction

1.1 Project Background

1.1.1 "Flood risk" is a combination of the probability and the potential consequences of flooding. Areas at risk of flooding are those at risk of flooding from any source, now or in the future. Sources include rivers and the sea, direct rainfall on the ground surface, rising groundwater, overwhelmed sewers and drainage systems, reservoirs, canals and lakes and other artificial sources. Flood risk also accounts for the interactions between these different sources.

1.1.2 The National Planning Policy Framework[1] (NPPF) and associated Planning Practice Guidance (PPG) for Flood Risk and Coastal Change[2] set out the active role Local Planning Authorities (LPAs) should take to ensure that flood risk is understood and managed effectively and sustainably throughout all stages of the planning process. The NPPF outlines that Local Plans should be supported by a Strategic Flood Risk Assessment (SFRA) and LPAs should use the findings to inform strategic land use planning.

1.1.3 The overall approach of the NPPF to flood risk is broadly summarised in Paragraph 165 *(formerly paragraph 159, NPPF 2021)*:

"Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere".

1.1.4 NPPF Paragraph 173 *(formerly paragraph 167, NPPF 2021)* states:

"When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:

a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location,

b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment,

c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate,

d) any residual risk can be safely managed, and

e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan".

1.1.5 Elmbridge Borough Council (BC) are preparing a New Local Plan which contains the overall vision and framework for future development in the area, addressing needs and opportunities in relation to housing, the economy, community facilities and infrastructure, as well as providing a basis for conserving and enhancing the natural and historic environment, mitigating and adapting to climate change, and achieving well designed places. The emerging New Local Plan will set out planning policies and proposals for how communities and places in the Borough will develop over a period of up to 15 years.

1.1.6 AECOM has been commissioned by Elmbridge BC to prepare a **Level 2 SFRA** to inform the ongoing preparation of the emerging New Local Plan. This report and associated appendices form the Level 2 SFRA for Elmbridge BC.

[1] Department for Levelling Up, Housing and Communities. Updated December 2023. *National Planning Policy Framework*. https://www.gov.uk/government/publications/national-planning-policy-framework--2

[2] Department for Levelling Up, Housing and Communities. Ministry of Housing, Communities and Local Government. Updated August 2022. *Planning Practice Guidance: Flood Risk and Coastal Change.* http://planningguidance.planningportal.gov.uk/blog/guidancygfyufe/flood-risk-and-coastal-change/

1.2 Level 1 SFRA

1.2.1 The purpose of a **Level 1 SFRA** is to collate and analyse the most up to date readily available flood risk information for all sources of flooding and provide an overview of flood risk issues across the Borough. The **Level 1 SFRA** considers the risk of flooding now and in the future as a result of climate change.

1.2.2 In order to assess the risk of flooding from rivers (and the sea), the NPPF uses Flood Zones, which describe the risk of flooding from low to high probability. Table 1 in the PPG (Flood Risk and Coastal Change) defines the Flood Zones, and this is reproduced in Table 1-1.

Table 1-1 Flood Zones Definitions (PPG Flood Risk and Coastal Change Table 1)

Flood Zone	Definition	Probability of Flooding
Flood Zone 1	Land having a less than 1 in 1,000 probability of river or sea flooding each year (0.1% AEP). Shown as clear on the Flood Map – all land outside Flood Zones 2 and 3.	Low
Flood Zone 2	Land having between a 1 in 100 and 1 in 1,000 probability of river flooding each year (between 1% and 0.1% AEP); or land having between a 1 in 200 and 1 in 1,000 probability of sea flooding (between 0.5% and 0.1% AEP)	Medium
Flood Zone 3a	Land having a 1 in 100 or greater probability of river flooding each year (greater than 1% AEP); or land having a 1 in 200 or greater probability of sea flooding (greater than 0.5% AEP).	High
Flood Zone 3b	Land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise: • Land having an annual probability of 1 in 30 (greater than 3.3% AEP) of flooding, with existing flood risk management features and structures operating effectively, • Land that is 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). LPAs should define Flood Zone 3b within their SFRA in agreement with the Environment Agency. It is not separately distinguished from Flood Zone 3a on the Flood Map for Planning (Rivers and Sea).	Functional Floodplain

1.2.3 The Level 1 SFRA Report provides guidance on:

- The application of the Sequential Test when allocating future development sites to inform the Local Plan, as well as by developers promoting development on windfall sites. The Sequential Test is the decision-making process whereby future development is steered towards areas of lowest flood risk.
- Managing and mitigating flood risk, the application of sustainable drainage systems (SuDS), and the preparation of site-specific Flood Risk Assessments (FRAs).
- Potential flood risk management objectives and policy considerations which may be developed and adopted by the LPA as formal policies within their emerging Local Plan.

1.2.4 A Level 1 SFRA[3] was prepared for Elmbridge BC in 2019 and is currently being updated.

1.3 Level 2 SFRA

1.3.1 The Environment Agency guidance 'How to prepare a strategic flood risk assessment'[4] states that where a **Level 1 SFRA** shows that land outside areas at risk of flooding now or in the future cannot appropriately accommodate all the necessary development, it may be necessary to increase the scope of the assessment to a **Level 2 SFRA** to provide the information necessary for application of the Exception Test, where appropriate. A **Level 2 SFRA** should consider the detailed nature of the flood characteristics within a flood zone including, where possible:

- flood probability,

[3] AECOM, February 2019, Elmbridge BC Level 1 SFRA. https://www.elmbridge.gov.uk/planning/planning-policy-and-guidance/strategic-flood-risk-assessment-sfra
[4] Environment Agency, March 2022, *How to prepare a strategic flood risk assessment* https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment

- flood depth,
- flood velocity,
- rate of onset of flooding; and
- duration of flood.

1.3.2 This more detailed information about the nature of flood risk in the Borough enables users to:

- apply the Sequential Test by identifying the severity and variation in risk *within* medium and high flood risk areas,
- establish whether proposed site allocations or windfall sites, on which the emerging Local Plan will rely, are capable of being made safe throughout their lifetime without increasing flood risk elsewhere, and
- begin to consider the application of the Exception Test, where relevant.

Exception Test

1.3.3 The purpose of the Exception Test is to ensure that, where it may be necessary to locate development in areas at risk of flooding, new development in Flood Zone 2 and Flood Zone 3 is only permitted if it can be demonstrated that:

a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and

b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

1.3.4 Both elements of the Exception Test should be satisfied for development to be allocated or permitted.

1.3.5 Table 2 in the PPG Flood Risk and Coastal Change (reproduced in Table 1-2) identifies when the Exception Test is required. It is noted that some types of development are not permitted, regardless of the application of the Exception Test.

1.3.6 Full details of the vulnerability classifications for different types of development can be found in Table 2[5] of the PPG Flood Risk and Coastal Change.

Table 1-2 Flood risk vulnerability and Flood Zone 'incompatibility' (PPG Table 2)

Vulnerability Classification		Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Flood Zone	1	✓	✓	✓	✓	✓
	2	✓	Exception Test Required	✓	✓	✓
	3a	Exception Test Required [a]	×	Exception Test Required	✓	✓
	3b	Exception Test Required [b]	×	×	×	✓ [b]

✓ - Exception Test is not required × - Development should not be permitted

"a" In Flood Zone 3a essential infrastructure should be designed and constructed to remain operational and safe in times of flood.
"b" In Flood Zone 3b (functional floodplain) essential infrastructure that has passed the Exception Test, and water-compatible uses, should be designed and constructed to:

- *remain operational and safe for users in times of flood,*
- *result in no net loss of floodplain storage,*
- *not impede water flows and not increase flood risk elsewhere.*

[5] *Planning Practice Guidance (PPG) flood risk and coastal change. Table 2: Flood risk vulnerability and flood zone 'incompatibility'* https://www.gov.uk/guidance/flood-risk-and-coastal-change#table2

1.4 Report Structure

Datasets and Consultation

1.4.1 To inform the development of the Level 2 SFRA, flood risk datasets have been provided by the Environment Agency, Surrey County Council (in their role as the Lead Local Flood Authority (LLFA)), and Elmbridge BC. Section 2 of this Report provides information on the datasets used.

Mapping

1.4.2 Appendix A of this Report provides Borough wide mapping of flood risk datasets to enable comparison of the flood risk across the study area.

Site Screening to support Sequential Test

1.4.3 A number of factors are influencing the spatial strategy in the Elmbridge Borough and a large pool of potential allocation sites has been under consideration during the preparation of the emerging New Local Plan.

1.4.4 A high level sieving exercise has been undertaken to identify:

- Proportion of the site in each Flood Zone as shown on the Flood Map for Planning and Reduction in Risk of Flooding from Rivers and Sea due to Defences.
- Flood Warning Area, Flood Priority Area and Recorded Flood Outline in which the site is located.
- The sites proximity to the nearest Main River and Ordinary Watercourse.
- Sewer flood records based on the site's postcode area.
- River Management, Operational and Body catchment in which the site is located.
- Groundwater Management, Operational and Body catchment in which the site is located.
- The sites Bedrock and Superficial Geology and Susceptibility to Groundwater Flooding status.
- Proportion of the site at high, medium or low risk of surface water flooding, based on the Risk of Flooding from Surface Water map. The low risk of flooding from surface water layer can be used as an indication of future flood risk.
- Proportion of the site at risk of reservoir inundation.

1.4.5 This information was provided to Elmbridge BC in an MS Excel Workbook to enable the application of the sequential approach to their site selection.

1.4.6 Elmbridge BC have undertaken the Sequential Test for 199 sites and have identified 41 sites for consideration within this Level 2 SFRA.

Site Assessment Proformas

1.4.7 All the potential development sites are included within the mapping in Appendix A. AECOM have prepared site assessment proformas for sites that were identified to be within Flood Zone 2 and/or Flood Zone 3, or to have access routes within the Flood Zones. These are included in Appendix B. The purpose of the Level 2 SFRA is to assess the flood risk posed to the sites and inform the Exception Test, as described in Section 3.

1.4.8 Consideration has also been made of those sites that are at surface water flood risk or in a Priority Flood Group. The mapping in Appendix A has been used to undertake these assessments.

1.5 Future Updates

1.5.1 SFRAs are intended to be living documents which are kept up to date as information on flood risk management changes.

1.5.2 The Environment Agency SFRA guidance[4] states that in order to remain up to date, it may be necessary to update a SFRA to incorporate any changes to:

- the predicted impacts of climate change on flood risk,
- detailed flood modelling - such as from the Environment Agency or Lead Local Flood Authority,
- the local plan, spatial development strategy or relevant local development documents,
- local flood management schemes,
- flood risk management plans,
- local flood risk management strategies, and
- national planning policy or guidance.

1.5.3 In addition, the SFRA may also need to be reviewed after any significant flood event.

1.5.4 It is noted that future changes to modelling, planning guidance, or climate change impacts may alter the level of risk posed to a specific site. The most up-to-date flood risk data must be used throughout the planning process to inform ongoing site planning and development design.

2. Datasets

2.1 Overview

2.1.1 The following datasets and sources of information have been obtained to inform the Level 2 SFRA.

2.2 River Modelling Outputs

2.2.1 As part of the Environment Agency's national programme of coastal and fluvial modelling studies, hydraulic models have been developed for the Main Rivers in the Borough including the River Thames, River Rythe, Dead River, River Mole and River Wey. These are described in turn in the sections, along with a summary of the outputs that have been used to inform the Level 2 SFRA site assessments.

Climate Change Allowances

2.2.2 The Environment Agency's online guidance 'Flood risk assessments: climate change allowances'[6] sets out the climate change allowances for peak river flows that should be considered. The allowances vary by management catchment which are sub-catchments of river basin districts. The management catchments of relevance to the Elmbridge study area are 'Maidenhead and Sunbury', 'Mole', and 'Wey and tributaries', as shown in Table 2-1.

2.2.3 A range of allowances are provided based on percentiles[7]. The guidance states that for SFRAs the *central* and *higher central* allowances should be used. When preparing site specific FRAs, the allowance that should be considered is based on the Flood Zone and the vulnerability classification of the development. For example, where More Vulnerable or Less Vulnerable development is proposed in Flood Zones 2 or 3a, the *central* allowance should be applied.

2.2.4 The allowances that have been used within this Level 2 SFRA are detailed in the following sections. These take into account the allowance specified in the guidance (as noted in Table 2-1) as well as considering what modelled flood extents are *available* within the hydraulic models received from the Environment Agency.

Table 2-1 Peak river flow allowances for management catchments in Elmbridge (based on a 1981 to 2000 baseline)

Management Catchment	Allowance category	Total potential change anticipated for '2020s' (2015 to 2039)	Total potential change anticipated for '2050s' (2040 to 2069)	Total potential change anticipated for '2080s' (2070 to 2125)
Maidenhead and Sunbury	Central (50th)	14%	17%	35%
	Higher Central (70th)	19%	25%	47%
	Upper End (95th)	32%	45%	81%
Mole	Central (50th)	11%	6%	12%
	Higher Central (70th)	16%	12%	20%
	Upper End (95th)	27%	26%	40%
Wey and tributaries	Central (50th)	10%	9%	24%
	Higher Central (70th)	15%	17%	36%
	Upper End (95th)	28%	36%	71%

[6] Environment Agency, Published February 2016, Updated May 2022. Flood risk assessments: climate change allowances. https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances

[7] A percentile describes the proportion of possible scenarios that fall below an allowance level. The 50th percentile is the point at which half of the possible scenarios for peak flow fall below it, and half fall above it. The central allowance is based on the 50th percentile; higher central allowance is based on the 70th percentile; upper end allowance is based on the 95th percentile.

River Thames

2.2.5 The Environment Agency's latest model of the Lower Thames was *primarily* developed by JBA Consulting between 2013 and 2020. The model development is recorded in the Lower Thames and Jubilee River Modelling Report (2020), also known as the Thames Hurley to Teddington 2019 model and report[8].

2.2.6 WSP Binnies have been undertaking flood modelling of the Lower Thames since 2014 as part of their involvement in the River Thames Scheme (RTS). As part of this work, modifications and improvements have been made to the Lower Thames model. This includes the latest set of Lower Thames model runs in 2021-2022. The study area for this set of results is the River Thames and its floodplain from Datchet to Teddington. These model outputs are based on the river as it is now, without the RTS included. The modelling undertaken is documented in the Lower Thames Flood Modelling Report[9]. Modelling of the RTS design development is reported separately.

2.2.7 It is noted that the intention is that the WSP Binnies report supplements the JBA Modelling Report, rather than repeating the content contained within it and therefore both are referenced in this Level 2 SFRA. The two modelling reports (by JBA Consulting and WSP Binnies) should be read in conjunction to gain a full understanding of the latest Lower Thames flood model.

2.2.8 Modelling has been undertaken for events where the River Thames represents the main source of flooding (**Thames dominated**) and, conversely, when the tributaries are the key source of flooding (**Tributary dominated**).

2.2.9 The following scenarios were undertaken for both the Thames dominated and Tributary dominated models:

- **Defended scenarios** for the following Annual Exceedance Probability (AEP) events: 50%, 20%, 10%, 5%, 3.33%, 2%, 1.33%, 1%, 0.5% and 0.1%. The 3.3% AEP flood extents have been used as the starting point from which to delineate Flood Zone 3b Functional Floodplain for Elmbridge BC, as mapped in **Appendix A Figure 1** and the site assessments in **Appendix B**.
- **Climate change scenarios**: Increases in peak flows of 10%, 20%, 25%, 35% and 81% have been applied to the defended 1% AEP modelled event. Modelling results for the full suite of new allowances, as set out in Table 2-1, are not currently available. It is not currently within the scope of this SFRA to re-run the Lower Thames model to account for the new climate change allowances. Datasets are available for the central (35%), and upper end (81%) allowances for the Maidenhead and Sunbury management catchment. There is no appropriate dataset available for the higher central allowance (47%) therefore the upper end has been used as a conservative approach.
- **Undefended scenarios** for the 1% and 0.1% AEP events (to inform the development of Flood Zones 3 and 2 respectively on the Flood Map for Planning (Rivers and Sea)[10]).

2.2.10 The following outputs were produced from the hydraulic modelling: maximum flood extents, maximum depth grids, maximum velocity grids, maximum hazard rating grids and maximum water level grids.

2.2.11 Flood 'hazard' categorises the danger to people for different combinations of flood water depth and velocity. The derivation of these categories is based on the methodology set out by Defra in their Flood Risk Assessment Guidance for New Development FD2320/TR2[11] using the following equation:

*Flood Hazard Rating = ((v+0.5)*D) + DF Where v = velocity (m/s), D = depth (m), DF = debris factor*

2.2.12 The resulting values are grouped into hazard ratings as shown in Table 2-2.

[8] JBA Consulting, July 2020, Lower Thames, Jubilee River and River Ash Modelling Study. *(Referred to as the Thames: Hurley to Teddington model).*
[9] WSP Binnies, November 2023, Lower Thames Flood Modelling Report. *(Referred to as the Thames: Datchet to Teddington model).*
[10] EA Flood Map for Planning https://flood-map-for-planning.service.gov.uk/
[11] Defra and Environment Agency (2005) FD2320/TR2 Flood Risk Assessment Guidance for New Development.

Table 2-2 Flood Hazard Categories

Flood Hazard		Description
Low	HR < 0.75	Caution – Flood zone with shallow flowing water or deep standing water
Moderate	0.75 ≥ HR ≤ 1.25	Dangerous for some (i.e., children) – Danger: flood zone with deep or fast flowing water
Significant	1.25 > HR ≤ 2.0	Dangerous for most people – Danger: flood zone with deep fast flowing water
Extreme	HR > 2.0	Dangerous for all – Extreme danger: flood zone with deep fast flowing water

2.2.13 The following outputs from the River Thames modelling have been used in this Level 2 SFRA.

2.2.14 **Appendix A Figure 2** shows the Lower Thames: *Thames dominated* maximum flood extents for the defended 1% AEP event including climate change scenarios. **Appendix A Figure 3** shows the Lower Thames: *Tributary dominated* maximum flood extents for the defended 1% AEP event including climate change scenarios. These are also included within the site assessments in **Appendix B**.

2.2.15 **Appendix A Figure 4** shows the maximum hazard rating for the Lower Thames: *Thames dominated* design event (1% AEP plus a 35% central allowance for climate change). **Appendix A Figure 5** shows the maximum hazard rating for the Lower Thames: *Tributary dominated* design event (1% AEP plus a 35% allowance for climate change). These are also included within the site assessments in **Appendix B.**

2.2.16 **Appendix A Figure 6** shows the maximum hazard rating for the Lower Thames: *Thames dominated* upper end climate change allowance scenario (1% AEP plus an 81% allowance for climate change). **Appendix A Figure 7** shows the maximum hazard rating for the Lower Thames: *Tributary dominated* upper end climate change allowance event (1% AEP plus an 81% allowance for climate change). The upper end has been displayed due to the absence of an appropriate dataset for the higher central climate change allowance (47%).

2.2.17 Section 11.8 of the WSP Binnies Lower Thames Modelling Report provides a discussion of the results from the Lower Thames modelling with regard to the risk of flooding on the Lower River Mole. The Lower Mole defences are thought to provide a high standard of protection, so the model results have been questioned when flooding is shown. Improvements have been made to the model which partly addresses this, but some queries remain. Section 11.8 of the Lower Thames Modelling Report discusses this aspect further and concludes that, on detailed inspection, the model results and the high confidence in the standard of protection afforded by the Lower Mole defences, the approach used to set the model inflows is leading to an overly conservative approach and an overestimation of flooding from the Mole.

2.2.18 As noted on page 88 of the Report, a meeting was held between technical experts from the Environment Agency, WSP Binnies and JBA. The following approach was agreed:

- For *River Thames dominated floods*, the predicted flood extents for the River Mole from the 2021 model will not be used **upstream of the A309 Hampton Court Way**. Results downstream of this road are primarily due to flooding from the River Thames, whereas upstream flooding is primarily from the River Mole (and River Ember). The approach used to set the model inflows is leading to an overly conservative approach and an overestimation of flooding from the Mole. (This approach is consistent with what was agreed for the JBA 2019 model).
- For *River Thames tributary dominated floods*, the model predictions are reasonable and can be used unchanged. These represent the best estimate of flood risk on the Lower Mole **between Island Barn and Hampton Court Way**. The rest of the Lower Mole is best represented by the Lower Mole model.

2.2.19 As a result, both the Lower Thames (*Thames dominated*) and Lower Thames (*Tributary dominated*) results have been modelled within this SFRA.

- Lower Thames (*Thames Dominated*) – relevant for sites along the Thames frontage and on the Mole downstream of the A309 Hampton Court Way.
- Lower Thames (*Tributary Dominated*) – relevant for sites along the Mole between Island Barn and Hampton Court Way.
- Lower Mole (described below) – for sites along the River Mole upstream of Island Barn.

2.2.20 The Environment Agency have provided a shapefile highlighting which model or models should be used in the Lower Mole/Thames area. It is indicated within the site assessments in **Appendix B** which model(s) have been used to assess each site.

River Wey

2.2.21 Modelling of the Lower Wey was supplied by the Environment Agency from the River Wey Flood Alleviation Schemes: Lower Wey (Byfleet/Weybridge) Baseline Modelling[12]. The Lower Wey model extends from Guildford to the confluence with the Thames at Weybridge. The model is a 1D-2D linked model.

2.2.22 The following scenarios were undertaken:

- **Defended scenarios** for the following AEP events: 20%, 5%. 3.33%, 2%, 1.33%, 1%, 0.5% and 0.1%. The 3.3% AEP flood extent has been used as the starting point from which to delineate Flood Zone 3b Functional Floodplain for Elmbridge BC, as mapped in **Appendix A Figure 1** and the site assessments **in Appendix B**.
- **Climate change scenarios**: 10%, 15%, 25%, 35% and 70% increases in peak flows applied to the defended 1% AEP modelled event based on Environment Agency (Adapting to Climate Change: Advice for Flood and Coastal Erosion Risk Management Authorities)[13] guidance. Available datasets for the central (24%), higher central (36%) and upper end (71%) allowances for the Wey and tributaries management catchment are suitable reference points.
- **Undefended scenarios** for the 1% and 0.1% AEP events (to inform the development of Flood Zones 3 and 2 respectively on the Flood Map for Planning (Rivers and Sea)[10]).

2.2.23 The following outputs were produced from the hydraulic modelling: maximum flood extent, maximum depth grids, maximum velocity grids, maximum hazard rating grids and maximum water level grids.

2.2.24 **Appendix A Figure 8** shows the Lower Wey maximum flood extents for the defended 1% AEP event including climate change scenarios. This is also included within the site assessments in **Appendix B**.

2.2.25 **Appendix A Figure 9** shows the maximum hazard rating for the design event (1% AEP plus a 25% central allowance for climate change). This is also included within the site assessments in **Appendix B**.

2.2.26 **Appendix A Figure 10** shows the maximum hazard rating for the higher central climate change allowance (1% AEP plus a 35% allowance for climate change).

River Mole

2.2.27 Modelling for the River Mole within Elmbridge BC is covered by two models, the Middle Mole and the Lower Mole.

Middle Mole

2.2.28 Modelling of the Middle Mole was supplied by the Environment Agency from the Leatherhead and Middle Mole Flood Alleviation Scheme[14]. The model covers the Middle Mole and twelve of its tributaries. The model is a 1D-2D linked model.

2.2.29 The following scenarios were undertaken for:

- **Defended scenarios** for the following AEP events: 50%, 20%, 5%, 3.33%, 2%, 1.33%, 1% and 0.1%. The 3.3% AEP flood extent has been used as the starting point from which to delineate

[12] Capita AECOM, September 2019, River Wey Flood Alleviation Schemes: Lower Wey (Byfleet/Weybridge) Baseline Modelling Report
[13] Environment Agency, April 2016, Adapting to climate change: guidance for risk management authorities https://www.gov.uk/government/publications/adapting-to-climate-change-for-risk-management-authorities
[14] CH2M, October 2018, Leatherhead and Middle Mole Flood Alleviation Scheme

Flood Zone 3b Functional Floodplain for Elmbridge BC, as mapped in **Appendix A Figure 1** and the site assessments in **Appendix B**.

- **Climate change scenarios**: 25%, 35% and 70% increases in peak flows applied to the defended 1% AEP modelled event. Modelling results for the full suite of new allowances, as set out in Table 2-1, are not currently available. It is not currently within the scope of this SFRA to re-run the Middle Mole model to account for the new climate change allowances. The modelled 25% scenario has been used as a conservative outline for both the central allowance (12%) and higher central allowance (20%).
- **Undefended scenarios** for the 5%, 1%, 1%+25% climate change, 1%+35% climate change , 1%+70% climate change and 0.1% AEP events. The 1% and 0.1% AEP events have been used to inform the development of Flood Zones 3 and 2 on the Flood Map for Planning (Rivers and Sea)[10].

2.2.30 The following outputs were produced from the hydraulic modelling: maximum flood extents, maximum depth grids, maximum velocity grids, maximum water level grids and maximum hazard rating grids. Modelled flood extents have been derived from multiple storm durations.

2.2.31 **Appendix A Figure 8** shows the Middle Mole maximum flood extents for the defended 1% AEP event including climate change scenarios. This is also included within the site assessments in **Appendix B**.

2.2.32 **Appendix A Figure 11** shows the maximum hazard rating for the design event (1% AEP plus a 25% climate change allowance) for the 24 hour storm. The 24 hour storm event has been used as it indicates the most widespread hazard across Elmbridge. The 12 hour storm indicated more widespread hazard near Cobham and Stoke D'Abernon Railway Station compared to the 24 hour storm, however this does not impact any of the sites considered within this Level 2 SFRA. This is also included within the site assessments in **Appendix B**.

Lower Mole

2.2.33 Modelling of the Lower Mole was supplied by the Environment Agency from the Lower Mole Flood Risk Study[15]. The catchment area covers four main rivers: the Lower Mole, Ember, Dead River and the Leathe. The model is a 1D-2D linked model.

2.2.34 The following scenarios were undertaken:

- **Defended scenarios** for the following AEP events: 20%, 5%, 1.33%, 1%, 0.5% and 0.1%. Due to the absence of the 3.33% AEP flood extent, the 1.33% flood extent has been used as the starting point from which to delineate Flood Zone 3b Functional Floodplain for Elmbridge BC. This has been mapped in **Appendix A Figure 1** and the site assessments in **Appendix B**.
- **Climate change scenarios**: a 20% increase in peak flows applied to the defended 1% AEP modelled event. Modelling results for the full suite of new allowances, as set out in Table 2 1, are not currently available. It is not currently within the scope of this SFRA to re-run the Lower Mole model to account for the new climate change allowances. As noted in Table 2-1, the higher central allowance for the Mole management catchment is 20%. The 20% allowance has been used as a conservative outline for the central allowance (12%) within this Level 2 SFRA.
- **Undefended scenarios** for the 1%, 0.5% and 0.1% AEP events. The 1% and 0.1% AEP events have been used to inform the development of Flood Zones 3 and 2 on the Flood Map for Planning (Rivers and Sea)[10].

2.2.35 The following outputs were provided with the hydraulic modelling: maximum flood extents and .dat files for depth, velocity, flow and water level. No hazard information was provided. Due to updated modelling available for the Dead River (described in next section), clipped flood extents for the Lower Mole have been provided by the Environment Agency. Lower Mole maximum depth grids used within this SFRA have been clipped to match this extent. **It is noted that the Lower Mole is not indicated to come out of bank during the defended 1% AEP event.**

[15] Halcrow Group Limited, March 2009, Lower Mole Flood Risk Study.

2.2.36 **Appendix A Figure 8** shows the Lower Mole maximum flood extent for the defended 1% AEP event including a 20% allowance for climate change. This is also included within the site assessments in **Appendix B**.

2.2.37 Maximum depth grids have been extracted from the depth .dat file and have been mapped in **Appendix A Figure 12** for the design event (1% AEP plus a 20% allowance for climate change) in the absence of hazard ratings. This is also included within the site assessments in **Appendix B**.

Dead River Modelling

2.2.38 Modelling of the Dead River was supplied by the Environment Agency from the Dead River and Surbiton Stream Flood Risk Management (FRM) Study[16]. Additional climate change scenario runs were performed in 2017[17]. The model is a 1D-2D linked model.

2.2.39 No formal defences were identified for the study and therefore the defended and undefended model scenarios are the same. The following scenarios were undertaken:

- **Defended scenarios** for the following AEP events: 20%, 5%, 2%, 1.33%, 1%, 0.5%, 0.4% and 0.1%. Due to the absence of the 3.33% AEP flood extent, the 2% AEP flood extent has been used as the starting point from which to delineate Flood Zone 3b Functional Floodplain for Elmbridge BC. This has been mapped in **Appendix A Figure 1** and the site assessments in **Appendix B**.
- **Climate change scenarios**: a 20% increase in peak flows applied to the defended 1% AEP modelled event as agreed with an Environment Agency Project Manager in 2013. The 25%, 35% and 70% increases in peak flows applied to the defended 1% AEP modelled event as agreed with the Environment Agency in 2017. Modelling results for the full suite of new allowances, as set out in Table 2-1, are not currently available. It is not currently within the scope of this SFRA to re-run the Dead River model to account for the new climate change allowances. As noted in Table 2-1, the higher central allowance for the Mole management catchment is 20%. The 20% allowance has been used as a conservative outline for the central allowance (12%) within this Level 2 SFRA.
- **Undefended scenarios** for the 5%, 1% and 0.1% AEP events. The 1% and 0.1% AEP events have been used to inform the development of Flood Zones 3 and 2 on the Flood Map for Planning (Rivers and Sea)[10].

2.2.40 The following outputs were provided with the hydraulic modelling: maximum flood extent, maximum depth grid, maximum velocity, maximum hazard rating, maximum water level.

2.2.41 **Appendix A Figure 8** shows the Dead River maximum flood extents for the defended 1% AEP event including climate change scenarios. This is also included within the site assessments in **Appendix B**.

2.2.42 **Appendix A Figure 13** shows the maximum hazard rating for the design event (1% AEP plus a 20% climate change allowance). This is also included within the site assessments in **Appendix B**.

River Rythe

2.2.43 Modelling of the River Rythe was supplied by the Environment Agency from the River Rythe Modelling Report[18]. The model is a 1D-2D linked model and includes the River Rythe and an unnamed tributary.

2.2.44 No raised defences were identified within the study area and therefore all scenarios have been classed as undefended. The following scenarios were undertaken:

- Scenarios for the following AEP events: 50%, 20%, 10%, 5%, 3.33%, 2%, 1.33%, 1%, and 0.1%. The 3.3% AEP flood extent has been used as the starting point from which to delineate Flood Zone 3b Functional Floodplain for Elmbridge BC, as mapped in **Appendix A Figure 1** and the site assessments in **Appendix B**. Scenarios for the 1% AEP and 0.1% AEP events (to inform the development of Flood Zones 3 and 2 respectively on the Flood Map for Planning (Rivers and Sea)[10]).

[16] JBA, April 2013, Dead River and Surbiton Stream FRM Study.
[17] JBA, July 2017, Dead River Climate Change Modelling Technical Note.
[18] JacksonHyder, April 2016, River Rythe Modelling Report.

- **Climate change scenarios**: a 20% increase in peak flows applied to the 1% AEP modelled event. Modelling results for the full suite of allowances, as set out in Table 2-1, are not currently available. It is not currently within the scope of this SFRA to re-run the River Rythe model to account for the new climate change allowances. As noted in Table 2-1, the central allowance for the Mole management catchment is 12% and therefore the 20% dataset has been used as a conservative approach. The higher central allowance is 20% and therefore the available dataset is suitable.

2.2.45 The following outputs were produced from the hydraulic modelling: maximum flood extent, maximum depth grids, maximum velocity grids, maximum hazard rating grids and maximum water level grids.

2.2.46 **Appendix A Figure 8** shows the River Rythe maximum flood extents for the 1% AEP event including the 20% allowance for climate change scenario. This is also included within the site assessments in **Appendix B**.

2.2.47 **Appendix A Figure 14** shows the maximum hazard rating for the design event (1% AEP plus a 20% climate change allowance). This is also included within the site assessments in **Appendix B**

Summary of River Flooding Outputs

Flood Zone 3b Flood Outlines

2.2.48 Table 2-3 summarises the modelled flood outlines that have been used to define Flood Zone 3b for each watercourse.

2.2.49 As noted in the Level 1 SFRA, in Elmbridge there are some areas within these modelled flood extents that are already developed and are prevented from flooding by the presence of existing infrastructure or solid buildings. Whilst these areas will be subject to frequent flooding, it may not be practical to refuse all future development. As such, and in accordance with the PPG[2], existing building footprints, where they can be demonstrated to exclude floodwater, will not be defined as Functional Floodplain. The land surrounding these buildings are important flow paths and flood storage areas and properties within these areas will be subject to frequent flooding; therefore, care must be given to the future sustainability of such development. Refer to Level 1 SFRA Section 5.3 for further information on the approach to future development in these locations.

2.2.50 For watercourses where the 1 in 30 year event (3.33% AEP), or a suitable equivalent dataset, is not available, Flood Zone 3a should be used until further detailed information is known. Should modelled outlines for the 1 in 30 year (3.33% AEP) become available in the future for the Lower Mole and Dead River, for example through an accepted flood model prepared as part of a site specific FRA, this would be used to refine the extent of Flood Zone 3b.

Table 2-3 Annual probability of flooding used to define Flood Zone 3b Functional Floodplain

Model		Annual Probability of flooding
Lower Thames	Thames Dominated	1 in 30 (3.3% AEP)
	Tributary Dominated	1 in 30 (3.3% AEP)
Lower Wey		1 in 30 (3.3% AEP)
Middle Mole		1 in 30 (3.3% AEP)
Lower Mole		1 in 75 (1.33% AEP)
Dead River		1 in 50 (2% AEP)
River Rythe		1 in 30 (3.3% AEP)

Design Event Flood Outlines

2.2.51 The design event for fluvial flooding is the 1 in 100 year (1% AEP) event plus an appropriate allowance for climate change. Table 2-4 summarises the modelled flood outlines that have been referred to within this SFRA for each watercourse, as explained in the previous sub sections.

Table 2-4 Modelling outputs to assess risk of flooding from rivers

Model		Modelled scenario used for the design event
Lower Thames	Thames Dominated	1 in 100 year (1% AEP) plus 35%
	Tributary Dominated	1 in 100 year (1% AEP) plus 35%
Lower Wey		1 in 100 year (1% AEP) plus 25%
Middle Mole		1 in 100 year (1% AEP) plus 25%
Lower Mole		1 in 100 year (1% AEP) plus 20%
Dead River		1 in 100 year (1% AEP) plus 20%
River Rythe		1 in 100 year (1% AEP) plus 20%

2.3 Risk of Flooding from Surface Water

Flood Extents

2.3.1 The Environment Agency's Risk of Flooding from Surface Water (RoFSW) dataset includes GIS layers showing the extent of flooding from surface water that could result from a flood with a 3.33%, 1% and 0.1% AEP in any given year.

2.3.2 It is noted that the RoFSW mapping is not to be used at property level. This is due to the way the maps have been produced and the fact that they are indicative. The maps are therefore not appropriate to act as the sole evidence for any specific planning or regulatory decision or assessment of risk in relation to flooding at any scale without further supporting studies or evidence. However, the mapping provides a useful source of information to identify the risk of surface water flooding to the local area in which a site is located, and the general patterns of surface water flow and ponding.

2.3.3 The RoFSW mapping is due for update in 2024.

2.3.4 Mapping for the whole study area is included in **Appendix A Figure 15**. Mapping local to each of the sites considered in this Level 2 SFRA is provided in the site assessments in Appendix B.

Climate change

2.3.5 The Environment Agency's online guidance 'Flood risk assessments: climate change allowances'[19] sets out the climate change allowances for peak rainfall intensity allowances for specific 'management catchments' and provides advice on applying climate change projections when preparing flood risk assessments. The allowances for the management catchments of relevance to Elmbridge are set out in Table 2-5 and Table 2-6.

Table 2-5 Peak rainfall intensity climate change allowances 3.3% annual exceedance rainfall event

Management Catchment	Allowance category	Total potential change anticipated for '2050s' (up to 2060)	Total potential change anticipated for '2070s' (2061 to 2125)
Wey and tributaries Management Catchment	Central (50th)	20%	25%
	Upper end (95th)	35%	35%
Mole Management Catchment	Central (50th)	20%	20%
	Upper end (95th)	35%	35%

[19] Environment Agency (published 2016 and updated May 2022) Flood risk assessments: climate change allowances. https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances

Maidenhead and Sunbury Management Catchment	Central (50th)	20%	25%
	Upper end (95th)	35%	35%

Table 2-6 Peak rainfall intensity climate change allowances 1% annual exceedance rainfall event

Management Catchment	Allowance category	Total potential change anticipated for '2050s' (up to 2060)	Total potential change anticipated for '2070s' (2061 to 2125)
Wey and tributaries Management Catchment	Central (50th)	20%	25%
	Upper end (95th)	40%	45%
Mole Management Catchment	Central (50th)	20%	25%
	Upper end (95th)	40%	40%
Maidenhead and Sunbury Management Catchment	Central (50th)	20%	25%
	Upper end (95th)	40%	40%

2.3.6 The RoFSW mapping does not contain a specific climate change scenario. Instead, the 0.1% AEP flood outputs from the RoFSW mapping have been used as a proxy for the 1% AEP including an allowance for climate change. It is recognised that this is a conservative approach, however this provides a useful identification of areas that could be at risk in the future as a result of more extreme rainfall events.

2.4 Groundwater Flooding

BGS Susceptibility to Groundwater Flooding

2.4.1 The British Geological Survey (BGS) dataset 'Susceptibility to Groundwater Flooding' can be used to identify where there is potential for groundwater flooding to occur based on geological and hydrogeological information.

2.4.2 The information shown in the Susceptibility to Groundwater Flooding mapping is based on conceptual understanding of the regional geology and hydrogeology and is therefore only an indication of where groundwater flooding may occur. It does not indicate hazard or risk, any information on the depth to which groundwater flooding may occur, nor the likelihood of the occurrence of an event of a particular magnitude. This information should not be used in isolation to make planning decisions at any scale or to indicate the risk of groundwater flooding, but it does provide a high level overview of the potential for groundwater flooding. The map shows the following information:

- **Limited potential for groundwater flooding to occur**: In this area there is a limited potential, based on an understanding of the underlying geology and hydrogeological conditions, that groundwater flooding may occur.
- **Potential for groundwater flooding of property situated below ground level**: In this area there is the potential, based on an understanding of the underlying geology and hydrogeological conditions, that groundwater flooding may occur in property or infrastructure *below ground level*, such as basements.

- **Potential for groundwater flooding to occur at surface**: In this area there is the potential, based on an understanding of the underlying geology and hydrogeological conditions, that groundwater flooding may occur *above the ground*.

2.4.3 All other areas are not considered to be prone to groundwater flooding.

2.4.4 Most climate change models indicate an increased likelihood of drier summers, albeit with more intense rainfall when it occurs, and wetter winters. As groundwater flooding occurs primarily as a response to extended periods of rain during late autumn and early winter, there may be an increased risk of groundwater flooding arising from these changing rainfall patterns. However, the complex relationship between rainfall, recharge, groundwater storage and flow make the response to climate change uncertain. As a result, no further modelling or mapping has been undertaken to specifically identify the risk of groundwater flooding in the future as a result of climate change. It is considered that the locations of groundwater flooding are likely to remain similar to those identified in the BGS mapping, however the impact of climate change may be to increase the frequency and severity of groundwater flooding in those locations.

2.4.5 Mapping for the whole study area, including the sites considered in this Level 2 SFRA, is included within **Appendix A Figure 16**. Mapping local to each of the sites considered in this Level 2 SFRA is provided in the site assessments in **Appendix B**.

2.5 Reservoir Flooding

2.5.1 The Environment Agency's reservoir flood extents include the extents for all large, raised reservoirs in the event that they were to fail and release the water held on both a dry and wet day when local rivers are at normal levels. This is a 'worst case scenario' and it is unlikely that any actual flood would be this large. This data does not give an indication of the probability of reservoir flooding occurring.

2.5.2 The likelihood of reservoir flooding is much lower than other forms of flooding. Current reservoir regulation, which has been further enhanced by the Flood and Water Management Act, aims to make sure that all reservoirs are properly maintained and monitored in order to detect and repair any problem[20].

2.5.3 Mapping local to each of the sites considered in this Level 2 SFRA is provided in the site assessments in **Appendix B**.

2.6 Historic Flood Records

Recorded Flood Outlines

2.6.1 The Borough has a history of significant flooding events, specifically from the River Thames, with major events occurring in 1929, 1937, 1947, 1954, 1968, 1974, 1979, 1988, 1990, 2000, 2003, 2011, 2014 and 2019. The Environment Agency dataset 'Recorded Flood Outlines' has been used to inform the Level 2 SFRA site assessments.

2.6.2 Mapping for the whole study area, including the sites considered in this Level 2 SFRA, is included within **Appendix A Figure 17**. Mapping local to each of the sites considered in this Level 2 SFRA is provided in the site assessments in **Appendix B**.

Lead Local Flood Authority Records

2.6.3 In their role as the LLFA, SCC has duties to record and investigate flood incidents relating to local sources of flooding, namely flooding from surface water, groundwater and ordinary watercourses. SCC has provided a 'Property Flood Roads' dataset indicating road locations along which internal, external or unknown property flooding has been reported to SCC.

2.6.4 This dataset is presented spatially in **Appendix A Figure 17**. Mapping local to each of the sites considered in this Level 2 SFRA is provided in the site assessments in **Appendix B**.

[20] Press Release: 'Reservoir flood maps published' https://www.gov.uk/government/news/reservoir-flood-maps-published

Sewer Flooding Records

2.6.5 Elmbridge BC provided sewer flooding records for the last 5 years, obtained from Thames Water. Due to data protection requirements, this data has not been provided at the individual property level; rather the register comprises the number of properties within 4 digit postcode areas that have experienced flooding, either internally or externally, over the last 5 years. It should be noted that it is likely that there have also been unreported sewer flooding incidents in this area over this time period.

2.6.6 This data has been referred to within the Level 2 SFRA site assessments in **Appendix B**.

3. Level 2 SFRA Site Assessments

3.1 Proforma Template

3.1.1 Site assessment proformas are included in **Appendix B**. Table 3-1 provides an overview of the fields in the proforma and the source of the information or dataset. An overview of the risk of flooding is provided, based on the available datasets, followed by recommendations for how development could be delivered on the site to meet part (2) of the Exception Test.

Table 3-1 Datasets and information used for Level 2 Site Assessment Proformas

Proforma Field	Dataset / information used
Site Description	
Site Allocation and LAA References	As provided by Elmbridge BC (Excel sheet and GIS layer of sites).
Delivery Period	As provided by Elmbridge BC (Excel sheet and GIS layer of sites).
Site Name	As provided by Elmbridge BC (Excel sheet and GIS layer of sites).
Area (ha)	The area of the site (hectares).
Proposed use	As provided by Elmbridge BC.
Vulnerability classification	Defined in accordance with Flood Risk and Coastal Change PPG Table 2.
Flood Zones and Historic Flooding	
Proportion within each Flood Zone	Flood Map for Planning (Rivers and Sea) Flood Zone 2; Flood Map for Planning (Rivers and Sea) Flood Zone 3; Flood Map for Planning (Rivers and Sea); Flood Zone 3b Functional Floodplain outline created from 3.33% AEP Middle Mole, Lower Wey, River Thames and River Rythe; 2% AEP Dead River and 1.33% AEP Lower Mole.
Flood Warning Area	Environment Agency Flood Warning Areas.
Flood Priority Area and Status	As provided by SCC.
Proximity to Main River/Watercourse	Calculated using the Environment Agency Main River dataset obtained from the Defra Data Services Platform and the OS watercourse layer provided by Elmbridge BC.
Recorded River Flooding Outlines in which the site is located	The dates of the flood events that have affected the site, as detailed in the Environment Agency 'Recorded Flood Outlines'.
Sewer flooding records within the post code area in which the site is located:	As provided by Elmbridge BC, obtained by Thames Water. Described in Section 2.6.
River Mapping	
Maximum Flood Extents	Maximum flood extent map(s) for the watercourses relevant to the site (River Thames, River Wey, River Rythe, Lower Mole, Middle Mole and Dead River), as described in Section 2.2.
Maximum Flood Depth	Maximum flood depth map(s) for the watercourses relevant to the site (Lower Mole), as described in Section 2.2.
Maximum Flood Hazard	Maximum flood hazard map(s) for the watercourses relevant to the site (River Thames, River Wey, River Rythe, Middle Mole and Dead River), as described in Section 2.2.
Surface Water Flooding	
Risk of Flooding from Surface Water Map	Environment Agency dataset obtained from the Defra Data Services Platform.
Groundwater Flooding	
Bedrock Geology	Bedrock geology underlying the site, based on BGS mapping.
Superficial Geology	Superficial geology underlying the site, based on BGS mapping.
BGS Susceptibility for Groundwater Flooding	A BGS dataset which gives a high level overview of where groundwater flooding may occur based on a conceptual understanding of regional geology and hydrogeology. Described further in Section 2.4.
Water Framework Directive	
Fluvial Information: River Management and Operational Catchments; Waterbody Name	Extracted from the Environment Agency Dataset obtained from the EA Catchment Explorer.
Groundwater Information: Groundwater Management and Operational Catchments; Groundwater Body Name	Extracted from the Environment Agency Dataset obtained from the EA Catchment Explorer.
Other sources	
Flooding from Reservoirs in the Event of a Break or Failure (when river levels are normal and when there is also flooding from rivers)	Environment Agency datasets obtained from the Defra Data Services Platform.
Summary	

An overview of the risk of flooding to the site now and in the future (as a result of the impacts of climate change) based on the information within the proforma.
Site Specific Recommendations
Recommendations for how development could be delivered on the site to meet the requirements of part 2 of the Exception Test (where required) i.e., that it will be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall. Recommendations are made in line with the development management measures presented within the Level 1 SFRA[3] (Chapter 7.3) and typically address the following: - Applying the sequential approach within the development site, - Setting back development from the edge of watercourses, - Finished floor levels, - Floodplain compensation storage, - Access and egress arrangements, - Flood warning and evacuation procedures, - Surface water management and considerations for SuDS, - Further investigation of groundwater levels.

3.2 Summary of Site Assessments

3.2.1 Table 3-2 summarises the findings that are within the site assessments in **Appendix B**. The sites have been grouped by settlement area. It is noted in Table 3-2 whether or not the Exception Test is required in accordance with Table 2 of the PPG (Table 1-2), based on Flood Zone and development vulnerability classification.

3.2.2 The last column Table 3-2 provides a summary of the flood risk assessment and implications for safety of proposed development. This identifies that for several of the sites, identified in orange, safe access/egress is not likely to be available for the developments during the design event (1% AEP plus a central allowance for climate change).

3.2.3 Following the findings of the SFRA, Elmbridge BC have removed some of these sites from their Local Plan. However, they remain in the SFRA as they form part of the evidence base for decisions made by Elmbridge BC. It is noted in Table 3-2 which sites have been removed.

3.2.4 **For the following sites, Elmbridge BC, in consultation with Emergency Planners, will need to determine whether reliance on evacuation prior to a flood event and the provision of places of safety are an appropriate approach to demonstrate safety of development and satisfy the Exception Test. Elmbridge BC should also consider and identify opportunities to improve access routes in the future as part of wider infrastructure delivery in these areas.**

3.2.5 This applies to the following sites and further detail is provided in Table 3-2 and Appendix B:

- D5 89-90 Woodfield Road, Thames Ditton, KT7 0DS
- MOL2 133-135 Walton Road, East Molesey, KT8 0DT
- MOL15 Pavilion Sports Club car park, Hurst Lane, East Molesey, KT8 9DX.
- WEY10 8 Sopwith Drive (Less Vulnerable development)
- WEY35 Horizon Business Village (Less Vulnerable development)

3.2.6 As well as demonstrating the safety of the proposed development, the Exception Test also requires that development of the site must not increase flooding to surrounding areas, and where possible the risk is reduced. For several of the development sites, a large proportion of the site is within the flood extent for the design flood (1% AEP including central climate change allowance) and therefore it may not be possible to provide floodplain compensation storage within the site for any increase in building footprint. **(Refer to Level 1 SFRA Section 5.6 for information on floodplain compensation storage). As a result, the built footprint of the new development of the site should not exceed that of the existing development and where possible should be reduced.** This applies to the following sites and further detail is provided in Table 3-2 and Appendix B:

- D5 89-90 Woodfield Road, Thames Ditton, KT7 0DS (0.07ha, 97% in design flood extent)
- D11 Garages to rear of Blair Avenue, Weston Green (0.11ha, 55% in design flood extent)
- MOL2 133-135 Walton Road, East Molesey, KT8 0DT (0.11ha, 95% in design flood extent)

- WEY10 8 Sopwith Drive (1.14ha, 97% in design flood extent)
- WEY26 The Heights, Weybridge (20ha, 58% in design flood extent)
- WEY35 Horizon Business Village (1.92ha, 87% in design flood extent)

3.2.7 For **all** proposed development sites:

- Peak surface water runoff rate from the development must be as close as reasonably practicable to the greenfield run runoff rate from the same rainfall event. Supporting evidence must be submitted to justify the proposed discharge rate. Development proposals must demonstrate that the surface water will be managed and discharged from the site in accordance with the drainage hierarchy. Development offers the opportunity to utilise a range of sustainable surface water management techniques which not only contribute to a reduction in discharge rates from the site, but provide amenity, biodiversity and water quality improvements and contribute to mitigating climate change by considering both drought and flood conditions. Development proposals must demonstrate sustainable approaches to the management of surface water making use of SuDS and incorporate soft landscaping, planting, and permeable surfacing.

3.2.8 For sites where the BGS Susceptibility to Groundwater Flooding mapping shows that there may be risk of groundwater flooding at surface or below ground:

- A preliminary Hydrogeological Risk Assessment (HRA) should be undertaken to determine ground conditions and groundwater levels in proximity to the site, and to identify whether the proposed development will impact on groundwater, either from subsurface construction or from changes to surface water drainage. The potential impact of climate change will be included within this assessment. Should the preliminary HRA identify potential for impact, a full HRA should be prepared to identify proposed mitigation measures.

3.2.9 For sites in close proximity to a Main River or other watercourse:

- The Environmental Permitting Regulations 2016 require a Flood Risk Activity Permit (FRAP) to be obtained for works on or near a Main River, on or near a flood defence structure, or in a floodplain. Applicants should review the Environment Agency flood risk activities: environmental permit information[21] to determine if a permit is required.
- Responsibility for the consenting of works by third parties on Ordinary watercourses, under Section 23 of the Land Drainage Act 1991 (as amended by the Flood and Water Management Act 2010), lies with the LLFA. SCC is responsible for the consenting of works to Ordinary Watercourses and has powers to enforce un-consented and non-compliant works. This includes any works (including temporary) that affect flow within the channel (such as in channel structures or diversion of watercourses). Enquiries and applications for Ordinary Watercourse consent should be sent to suds@surreycc.gov.uk. Further information can be found on the SCC website[22].

3.2.10 For sites within a Flood Priority Area, developers should work with the LLFA, SCC, to determine how development can contribute towards measures to improve the management of local surface water flood risk. This is relevant to the following sites (shown on the maps in Appendix A[23]):

- COS17 Selden Cottage and Ronmar, Leatherhead Road, KT22 0EX
- D3 4-6 Manor Road South and 4 Greenways, Hinchley Wood
- ESH15 Unit A & B Sandown Industrial Park, Esher 9
- ESH16 River Mole Business Park, Mill Road, Esher

[21] Flood risk activities: environmental permits. https://www.gov.uk/guidance/flood-risk-activities-environmental-permits
[22] https://www.surreycc.gov.uk/people-and-community/emergency-planning-and-community-safety/flooding-advice/more-about-flooding/ordinary-watercourse-consents
[23] Figure 12 shows the Risk of Flooding from Surface Water mapping. As detailed in Level 1 SFRA Table 2-1, the Priority Areas were supplied by SCC for information. In accordance with the license, this dataset has not been mapped in the Level 1 or Level 2 SFRA.

- ESH17 Units C and D, Sandown Industrial Park, Mill Road, Esher
- MOL6 Garages to the rear of Island Farm Road, West Molesey
- WOT3 Garages to the rear of 84-92 Rodney Road, Walton-on-Thames
- WOT12 147 Sidney Road, KT12 3SA
- WOT35 The Heath Centre, Rodney Road, Walton-on-Thames, KT12 3LB
- WEY10 8 Sopwith Drive
- WEY26 The Heights, Weybridge
- WEY35 Horizon Business Village

Table 3-2 Summary of flood risk issues and constraints

Site Allocation Reference	Area (ha)	Address	Units	Year in Local Plan (when development is likely to occur)	Flood Zone 1 (%)	Flood Zone 2 (%)	Flood Zone 3a (%)	Flood Zone 3b (%)	River Model(s) used to assess site	Proportion of site at risk of flooding from rivers during design event (1% AEP + central CC allowance)	Risk of Flooding from Surface Water: from RoFSW mapping and SCC Priority Area	Susceptibility to Groundwater Flooding (BGS Dataset)	Exception Test Required?	Summary of Flood Risk Constraints and Safety of Development (Refer to Appendix B for full details and recommendations for each site).
Cobham, Oxshott, Stoke D'Abernon and Downside														
COS1	0.27	Cedar House, Mill Road, Cobham, KT11 3AL	7	1 to 5 years	31	69	0	0	Middle Mole	2%	Site at low risk. Surrounding area at greater risk. Not in a Priority Area.	Potential at surface.	Exception Test is not required	The southern edge of the site is at risk of flooding from the River Mole during the design event (1 in 100 year plus 25% climate change), with a hazard rating Low. Mill Road and River Hill to the south and west of the site are at risk of flooding, with hazard ratings Low to Extreme. Safe access/egress is that is Low hazard and dry is achievable via Stoke Road to the south east of the site. The site is at very low risk of flooding from surface water (0.1%≥ AEP).
Thames Ditton, Long Ditton, Hinchley Wood and Weston Green														
D2	0.23	Car Park south of Southbank, Thorkhill Road, Thames Ditton	7	1 to 5 years	70	30	0	0	River Rythe and Lower Thames: Thames Dominated	7% (Thames)	High risk in west of site, and in the local area.	None shown to be prone to groundwater flooding.	Exception Test is not required	The north west of the site is at risk of flooding from the River Thames during the design event. Safe access/egress is achievable (east along Southbank, north onto Winters Road, east onto Portsmouth Road and south onto Windmill Lane). Development should be steered away from areas within the fluvial design event, however if development is considered within this part of the site, floodplain compensation would be required within any increase in built footprint within the 1 in 100 plus appropriate climate change allowance (refer to Level 1 SFRA Section 5.6). This site is at medium to high risk of flooding from surface water (1% to 3.33% AEP).
D5	0.07	89-90 Woodfield Road, Thames Ditton, KT7 0DS	7	1 to 5 years	0	55	45	0	River Rythe	97%	Medium to high risk.	Potential below ground and at surface.	Exception Test required: Site partially located within Flood Zone 3a. Proposed development has a vulnerability classification of More Vulnerable.	The majority of the site (97%) is at risk of flooding from the River Rythe during the design event (1 in 100 year plus 20% climate change). Access routes out of the floodplain are at Significant hazard during the design event. The site is at medium to high risk of flooding from surface water (1% to 3.33% AEP). **Elmbridge BC, in consultation with Emergency Planners, will need to determine whether reliance on evacuation prior to a flood event and the provision of places of safety are an appropriate approach to demonstrate safety of development and satisfy the Exception Test.** **The majority of the site (97%) is at risk of flooding during the design event. It will not be possible to deliver floodplain compensation storage within the site for any increase in built footprint and therefore, proposed development should not increase the built footprint. A review of the existing site by EBC shows that the majority of the site is already developed, and therefore the allocation of this site is not anticipated to increase the building footprint. (Refer to Level 1 SFRA Section 5.6 for details of Floodplain Compensation Storage).** A 5 metre wide buffer strip should be maintained alongside Ordinary Watercourses. New development within 8m of an Ordinary Watercourse will require consent from Surrey County Council (as LLFA). Refer Level 1 SFRA Section 5.3.
D7	0.35	47 Portsmouth Road	25	1 to 5 years	0	99	0	1	River Rythe and Lower Thames: Thames Dominated	0.7% (Rythe)	Low to high risk on site and in surrounding area. Not in a Priority Area.	Potential at surface.	Development is not permitted in Flood Zone 3b. Exception Test is not required for More Vulnerable development in in Flood Zone 1 and 2.	The River Rythe (Main River) and an adjoining Ordinary Watercourse are culverted beneath the site. The south and east of this site are indicated to be at risk of flooding from the River Rythe during the design event. 1% of the site is shown to be within Flood Zone 3b (3.33% AEP) from the Rythe. Development is not permitted in Flood Zone 3b. New development within 8m of a Main River will require consent from the Environment Agency. (Guidance on Environment Agency Flood Risk Activity Permits is available online https://www.gov.uk/guidance/flood-risk-activities-environmental-permits). Opportunities to de-culvert the watercourse beneath the site should be explored as part of the development proposals for the site. An 8 metre wide undeveloped buffer strip should be retained alongside Main Rivers. Revised hydraulic modelling would need to be undertaken to determine the design event flood extent once de-culverted. Safe access/egress is achievable from the north of the site via the A307 southbound.
D9	0.09	Corner Cottage, Portsmouth Road, KT7 0TQ	5	1 to 5 years	0	100	0	0	Lower Thames: Thames Dominated	0%	Site at low risk. A307 at high risk. Not in a Priority Area.	None shown to be prone to groundwater flooding.	Exception Test is not required	This site has been defined as Flood Zone 2 by the Environment Agency due to its location within the September 1968 historic flood outline. Modelling for this site does not indicate the site to be at risk of flooding from rivers during the design event. Safe access/egress is achievable via the A307 southbound. This site is at very low to low risk of flooding from surface water (0.1%≥ AEP), however the A207 is at high risk of surface water flooding and SCC hold records of flooding along this road. Consideration should be made of the impact of the development on local surface water flowpaths; proposed development provides an opportunity to contribute towards reducing the risk of surface water flooding along the A307. Developers should explore opportunities to contribute to schemes with SCC (as the LLFA).
D11	0.11	Garages to the rear of Blair Avenue, Weston Green	4	1 to 5 years	0	100	0	0	Lower Mole	55%	Site at low risk. Not in a Priority Area.	Not shown to be prone to groundwater flooding.	Exception Test is not required	This site has been defined as Flood Zone 2 by the Environment Agency due to both its location within the 0.1% AEP modelled flood extent and its location within the September 1968 historic flood outline. This site is at risk of flooding from rivers during the design flood event. In the absence of hazard mapping for the Lower Mole, flood depths have been assessed. Depths of up to 0.1m are experienced across the site along Cranbrook Drive. Safe access/egress is likely to be achievable via Cranbrook Drive and on to Station Road to the east of the site. **Although the site does not require an Exception Test, a site specific FRA will be required to demonstrate that the development will be safe. Given the risk of flooding to the site and local area, Emergency Plans would need to be developed for occupants of the site in consultation with EBC and Emergency Planners to set out the response in the event of flooding, including access routes and places of safety.**

Site Allocation Reference	Area (ha)	Address	Units	Year in Local Plan (when development is likely to occur)	Flood Zone 1 (%)	Flood Zone 2 (%)	Flood Zone 3a (%)	Flood Zone 3b (%)	River Model(s) used to assess site	Proportion of site at risk of flooding from rivers during design event (1% AEP + central CC allowance)	Risk of Flooding from Surface Water: from RoFSW mapping and SCC Priority Area	Susceptibility to Groundwater Flooding (BGS Dataset)	Exception Test Required?	Summary of Flood Risk Constraints and Safety of Development (Refer to Appendix B for full details and recommendations for each site).
														Approximately half of the site (55%) is at risk of flooding during the design event. Any increase in built footprint within the design flood extent will need to be compensated for, on a level for level volume for volume basis within the site. (Refer to Level 1 SFRA for details of Floodplain Compensation Storage).
D12	0.53	Sandpiper, Newlands Avenue, Thames Ditton, KT7 0HF	21	6 to 10 years	83	17	0	0	River Rythe	0%	Site at low risk. Not in a Priority Area.	Potential at surface.	Exception Test is not required	Development of the site must ensure that the risk of flooding to surrounding areas is not increased, and where possible reduced. (As the site is not shown to be at risk of flooding during the design event, floodplain compensation storage is not likely to be required). The site is at low risk of flooding from surface water (0.1% AEP) in the north and south. Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) is achievable for the site. Onslow Way and Newlands Avenue to the north and west of the site are not shown to be at risk of flooding from rivers during the design event. Roads to the south of the site are at Low hazard.
D15	0.55	Flats 9-41 and Garages on Longmead Road, Thames Ditton, KT7 0JF	37	11 to 15 years	79	21	0	0	River Rythe and Lower Thames: Thames Dominated	0%	Site at low risk. Not in a Priority Area.	Potential below ground and at surface.	Exception Test is not required	This site is not indicated to be at risk of flooding from rivers during the design event. Safe access and egress is achievable via Longmead Road and Weston Green Road to the west of the site. The site is at low to low risk of flooding from surface water (0.1%≥ AEP).
D16	0.21	Ashley Road Car Park, Thames Ditton	14	11 to 15 years	8	92	0	0	Lower Thames: Thames Dominated	69%	Site at medium risk. Surrounding area at risk. Not in a Priority Area.	Potential below ground.	Exception Test is not required	**EBC NO LONGER INTEND TO TAKE THIS SITE FORWARD WITHIN THE LOCAL PLAN.** This site is indicated to be at risk of flooding from rivers during the design event. Dry pedestrian access/egress may be achievable via Ashley Road to the west of the site. (Main routes via High Street and Watts Road are at Moderate hazard). The site is at medium to high risk of flooding from surface water (1% to 3.33% AEP). **69% of the site is at risk of flooding during the design event. Development should be steered away from this area and any increase in built footprint within the design flood extent will need to be compensated for, on a level for level volume for volume basis within the site. (Refer to Level 1 SFRA for details of Floodplain Compensation Storage). Given the current use of the site as a car park, this will significantly limit the number of units that can be delivered on the site.**
D17	0.66	Nuffield Health Club, Simpson Way, Long Ditton	16	11 to 15 years	100	0	0	0	Lower Thames: Thames Dominated	0%	Local area susceptible to surface water flooding. Not in a Priority Area.	Not shown to be prone to groundwater flooding.	Exception Test is not required	The site is in Flood Zone 1, low probability of flooding from rivers. However, the River Thames is 100m to the north of the site, and access along Portsmouth Road to the west of the site is shown to be at risk during the design event including climate change. Alternative safe routes of access/egress are available for the site; to the east along Portsmouth Road, and on to Brighton Road; west along Portsmouth Road and south on Windmill Lane; or pedestrian access to the south on to Williams Grove. It is recommended that an Emergency Plan is developed for occupants of the site to set out the response in the event of flooding in the local area.
D21	0.32	Nuffield Health Car Park, Simpson Way, Long Ditton	10	11 to 15 years	100	0	0	0	Lower Thames: Thames Dominated	0%	Local area susceptible to surface water flooding. Not in a Priority Area.	Not shown to be prone to groundwater flooding.	Exception Test is not required	The site is in Flood Zone 1, low probability of flooding from rivers. However, the River Thames is 200m to the north of the site, and access along Portsmouth Road to the west of the site is shown to be at risk during the design event including climate change. Alternative safe routes of access/egress are available for the site; to the east along Portsmouth Road, and on to Brighton Road; west along Portsmouth Road and south on Windmill Lane; or pedestrian access to the south on to Williams Grove. It is recommended that an Emergency Plan is developed for occupants of the site to set out the response in the event of flooding in the local area.
D25	0.09	5A-6A Station Road, Esher, KT10 8DY	5	11 to 15 years	27	73	0	0	Lower Mole	0%	Site at low risk. Not in a Priority Area.	Potential below ground and at surface.	Exception Test is not required	This site is not indicated to be at risk of flooding from rivers during the design event. In the absence of hazard mapping for the Lower Mole, flood depths have been assessed. Safe access/egress is achievable along Station Road. The site is at low risk of flooding from surface water (0.1% AEP).
East and West Molesey														
D6	0.64	Sundial House, The Molesey Venture	61	1 to 5 years	35	64	0	1	Lower Thames: Tributary Dominated and Lower Mole	26% (Thames)	Site at low risk. Not in a Priority Area.	Not shown to be prone to groundwater flooding.	Development is not permitted in Flood Zone 3b. Exception Test is not required for More Vulnerable development in in Flood Zone 1 and 2.	1% of the site lies within Flood Zone 3b (3.33% AEP) where new development should not be permitted. The north and north west of the site are indicated to be at risk of flooding from rivers during the design event. Safe access/egress is achievable during the design event via Orchard Lane and south onto Ember Lane. Development within the design flood extent (1% AEP including central climate change allowance) must not decrease the available floodplain storage. Given that only some of the site (26%) is located in the flood extent for the design flood (1% AEP including central climate change allowance), it may be possible to provide floodplain compensation storage within the site for any increase in building footprint. Floodplain compensation must be provided in relation to the design event (1 in 100 year), on a level for level and volume for volume basis. (Refer to Level 1 SFRA Section 5.6). The site is at very low to low risk of flooding from surface water (0.1%≥ AEP).
D18	0.08	118-120 Bridge Road, East Molesey, KT8 9HW	6	11 to 15 years	69	31	0	0	Lower Thames: Tributary Dominated and Lower Mole	0%	Site at low risk. Surrounding area at risk. Not in a Priority Area.	Potential below ground and at surface.	Exception Test is not required	The site is not indicated to be at risk of flooding from rivers during the design event. Safe access/egress is achievable to the west of the site. This site is at very low to low risk of flooding from surface water (0.1%≥ AEP). However, the surrounding roads (Bridge Road and Arnison Road) are shown to be susceptible to surface water flooding. Proposals for the site should seek to provide improvements to local surface water management.
D19	0.17	Industrial units at 67 Summer Road East	12	11 to 15 years	0	100	0	0	Lower Thames: Tributary Dominated	0%	Site at medium risk. Not in a Priority Area.	Not shown to be prone to groundwater flooding.	Exception Test is not required	The site is not indicated to be at risk of flooding from rivers during the design event. Summer Road, the main access for the site, is shown to have a section at Moderate hazard, but the remainder of the route along Summer Road is Low hazard, and then the route along the A306 is dry. Improvements to Summer Road, or identification of alternative routes

Site Allocation Reference	Area (ha)	Address	Units	Year in Local Plan (when development is likely to occur)	Flood Zone 1 (%)	Flood Zone 2 (%)	Flood Zone 3a (%)	Flood Zone 3b (%)	River Model(s) used to assess site	Proportion of site at risk of flooding from rivers during design event (1% AEP + central CC allowance)	Risk of Flooding from Surface Water: from RoFSW mapping and SCC Priority Area	Susceptibility to Groundwater Flooding (BGS Dataset)	Exception Test Required?	Summary of Flood Risk Constraints and Safety of Development (Refer to Appendix B for full details and recommendations for each site).
		Molesey KT8 9LX							and Lower Mole					from the site to the A306 should be provided to demonstrate safe access for the site. This site is at medium to high risk of flooding from surface water (1% to 3.33% AEP).
MOL2	0.11	133-135 Walton Road, East Molesey, KT8 0DT	8	1 to 5 years	0	100	0	0	Lower Thames: Thames Dominated and Tributary Dominated	95% (Thames Dom)	Local area susceptible to surface water flooding. Not in a Priority Area.	Potential at surface.	Exception Test is not required	The site is indicated to be at risk of flooding from River Thames (Thames Dominated) during the design event. Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) is not achievable. The site and the section of Walton Road adjoining the site is at Moderate hazard during the design event (River Thames, Thames Dominated scenario). However, this is the edge of the floodplain, and the route along Walton Road to the west is then Low hazard and dry, and there is a dry access route to Hurst Road (avoiding the floodplain of the Dead River). **Elmbridge BC, in consultation with Emergency Planners, will need to determine whether improvements can be made to Walton Road to provide a more reliable access route, and/or whether reliance on evacuation prior to a flood event is sufficient.** The majority of the site (95%) is at risk of flooding during the design event. It will not be possible to deliver floodplain compensation storage within the site for any increase in built footprint. Therefore, proposed development should not increase the built footprint. A review of the existing site by EBC shows that the majority of the site is already developed, and therefore the allocation of this site is not anticipated to increase the building footprint.
MOL 3	0.05	Garage block west of 14 and north of 15 Brende Gardens, West Molesey	4	1 to 5 years	98	2	0	0	Dead River, Lower Mole and Lower Thames: Tributary Dominated	0%	Local area susceptible to surface water flooding. Not in a Priority Area.	Potential at surface.	Exception Test is not required	The site is not indicated to be at risk of flooding from rivers during the design event. Safe access/egress is likely to be achievable to the north of the site via Walton Road and then east and north to A3050 Hurst Road. Given the risk of flooding in the local area, and the need to follow specific access routes, Emergency Plans would need to be developed for occupants of the site to set out the response in the event of flooding including access routes and places of safety. The site is at very low to low risk of flooding from surface water (0.1%≥ AEP.
MOL4	0.39	East Molesey Car Park, Walton Road, East Molesey	23	1 to 5 years	2	98	0	0	Lower Thames: Thames Dominated and Tributary Dominated	87% (Thames Dom)	Site at low risk, surrounding roads at medium risk.	Potential below ground level and at surface.	Exception Test is not required	**THIS SITE IS NO LONGER AVAILABLE AND WILL NOT BE TAKEN FORWARD IN THE LOCAL PLAN.** This site is indicated to be at risk of flooding from rivers during the design event. Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) is achievable for the site, south onto St Mary's Road and then west to Beauchamp Road, north onto High Street, west onto Walton Road, north onto Rosemary Avenue and west onto Hurst Road. (Routes east from the site along Walton Road, or east along St Mary's Road are at Significant hazard, and therefore not suitable routes). Development of the site must ensure that the risk of flooding to surrounding areas is not increased, and where possible reduced. Given that the majority (87%) of the site is located within the flood extent for the design flood (1% AEP including central climate change allowance), it will not be possible to provide floodplain compensation storage within the site for any increase in building footprint. As a result, the built footprint of the new development of the site should not exceed that of the existing development. This may limit the number of units that can be delivered on the site. (Refer to Level 1 SFRA for details of Floodplain Compensation Storage).
MOL8	0.24	7 Seymour Close and Land to rear of 103-113 Seymour Close, East Molesey, KT8 0JY	5	6 to 10 years	100	0	0	0	Lower Thames: Thames Dominated and Tributary Dominated	0%	Local roads susceptible to surface water flooding.	Potential below ground level.	Exception Test is not required	The site is not indicated to be at risk of flooding from rivers during the design event, however the local area and access routes are at risk. Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) is achievable for the site. A dry route is available west along Beauchamp Road, north along High Street, west along Walton Road, north along Rosemary Evenue and then west along Hurst Road. (Routes to the east from the site would include the part of Walton Road at Significant hazard and are therefore not suitable routes). The site is located within the 'River Mole at Esher and East Molesey' Flood Warning Area. Given the risk of flooding from rivers in the wider area, it is recommended that Emergency Plans are developed for occupants of the site to set out the response in the event of flooding, including access routes and places of safety.
MOL9	0.2	11-27 Down Street, West Molesey, KT8 2TG	7	6 to 10 years	49	51	0	0	Dead River	0%	Local roads susceptible to surface water flooding.	Potential at surface.	Exception Test is not required	This site is not indicated to be at risk of flooding from rivers during the design event. Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) is achievable to the north and east of the site via Down Street. A dry route is available north via Faraday Road and Rosemary Avenue and then west along A3050 Hurst Road. (Routes west from the site towards Pool Road and Molesey Road are at risk of flooding from the Dead River during the design event. Hazard ratings in some sections are Moderate and Significant and therefore these routes are not safe). The site is at very low to low risk of flooding from surface water (0.1%≥ AEP), however the local area is susceptible to surface water flooding.
MOL10	0.11	Vine Medical Centre, 69 Pemberton Road, East Molesey, KT8 9LJ	7	6 to 10 years	0	100	0	0	Lower Thames: Thames Dominated and Tributary Dominated	87% (Thames Dom)	Low risk on the site. Not in a Priority Area.	Potential at surface.	Exception Test is not required	**THIS SITE IS NO LONGER AVAILABLE AND WILL NOT BE TAKEN FORWARD IN THE LOCAL PLAN.** This site is indicated to be at risk of flooding from the River Thames during the design event. Although the site does not require an Exception Test, a site specific FRA will be required to demonstrate that the development will be safe. Safe access/egress is likely to be achievable to the east along Vine Road, Arnison Road and then south along Bridge Street and Esher Road. Emergency Plans would need to be developed for occupants of the site to set out the response in the event of flooding including access routes and places of safety. **Any increase in built footprint within the design flood extent will need to be compensated for, on a level for level volume for volume basis within the site. (Refer to Level 1 SFRA for details of Floodplain Compensation Storage). 87% of the site is at risk of flooding during the design event. It is therefore unlikely to be possible to deliver floodplain compensation storage within the site for any increase in built footprint. Therefore, proposed development should not increase the built footprint. This may limit the number of units that can be delivered on the site.** The site is at very low to low risk of flooding from surface water (0.1%≥ AEP).

Site Allocation Reference	Area (ha)	Address	Units	Year in Local Plan (when development is likely to occur)	Flood Zone 1 (%)	Flood Zone 2 (%)	Flood Zone 3a (%)	Flood Zone 3b (%)	River Model(s) used to assess site	Proportion of site at risk of flooding from rivers during design event (1% AEP + central CC allowance)	Risk of Flooding from Surface Water: from RoFSW mapping and SCC Priority Area	Susceptibility to Groundwater Flooding (BGS Dataset)	Exception Test Required?	Summary of Flood Risk Constraints and Safety of Development (Refer to Appendix B for full details and recommendations for each site).
MOL12	0.51	Henrietta Parker Centre, Ray Road, West Molesey	13	11 to 15 years	4	96	0	0	Dead River, Lower Mole and Lower Thames: Tributary Dominated	0%	Medium risk on the site and in wider area. Not in a Priority Area.	Potential at surface.	Exception Test is not required	The site is not indicated to be at risk of flooding from rivers during the design event, however the local area and access routes are at risk. Safe access/egress is likely to be achievable to the north of the site via Walton Road and then east and north to A3050 Hurst Road. Given the risk of flooding in the local area, and the need to follow specific access routes, Emergency Plans would need to be developed for occupants of the site to set out the response in the event of flooding including access routes and places of safety.
MOL13	0.11	Parking /garages at Grove Court Walton Road East Molesey KT8 0DG	7	11 to 15 years	100	0	0	0	Lower Thames: Thames Dominated and Tributary Dominated	0%	Local roads susceptible to surface water flooding.	Potential below ground level.	Exception Test is not required	The site is not indicated to be at risk of flooding from rivers during the design event, however the local area and access routes are at risk. Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) is achievable for the site, south along Esher Road. This route is shown to be dry in the River Thames (Thames Dominated) model results, and Low hazard in the River Thames (Tributary Dominated) results. (Routes from the site to the west would include the part of Walton Road at Significant hazard (Thames Dominated scenario) and are therefore not suitable routes). The site is located within the 'River Mole at Esher and East Molesey' Flood Warning Area. Given the risk of flooding from rivers in the wider area, it is recommended that Emergency Plans are developed for occupants of the site to set out the response in the event of flooding, including access routes and places of safety.
MOL14	0.27	43 Palace Road, East Molesey, KT8 9DN	18	11 to 15 years	16	77	0	7	Lower Thames: Thames Dominated	83%	Low risk to site and surrounding area. Not in a Priority Area.	Potential below ground level.	Development is not permitted in Flood Zone 3b. The Exception Test is not required for development proposals in Flood Zone 1 and 2	**THIS SITE IS NO LONGER AVAILABLE AND WILL NOT BE TAKEN FORWARD IN THE LOCAL PLAN.** This site is indicated to be at risk of flooding from rivers during the design event. Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) may be achievable for the site, west along Palace Road, and then east onto either Wolsey Road or Arnison Road to turn south along Bridge Street and Esher Road. There is one section of Low hazard along this route. (Alternative routes along Palace Road to the east, or along the A3050 are at Signifcant and Extreme hazard from the Thames and not safe routes). 7% of the site lies within Flood Zone 3b (3.33% AEP) where new development should not be permitted. Redevelopment of existing buildings may be permitted, but only where the vulnerability of the development is not increased (and where possible reduced) and the number of occupants does not increase. The site is at very low to low risk of flooding from surface water (0.1%≥ AEP). **Although the site does not require an Exception Test, a site specific FRA will be required to demonstrate that the development will be safe. Given that safe access/egress is not likely to be achievable for the site, Elmbridge BC, in consultation with Emergency Planners, will need to determine whether reliance on evacuation prior to a flood event and the provision of places of safety within the development are an appropriate approach to demonstrate safety of development within a site specific FRA.** **83% of the site is at risk of flooding during the design event. Development should be steered away from this area. Any increase in built footprint within the design flood extent will need to be compensated for, on a level for level volume for volume basis within the site. (Refer to Level 1 SFRA for details of Floodplain Compensation Storage).**
MOL15	0.34	Pavilion Sports Club car park, Hurst Lane, East Molesey, KT8 9DX	9	11 to 15 years	0	100	0	0	Lower Thames: Thames Dominated and Tributary Dominated	0%	Low risk to site and surrounding area. Not in a Priority Area.	Potential below ground level.	Exception Test is not required	**Although the site does not require an Exception Test, a site specific FRA will be required to demonstrate that the development will be safe, will not increase flood risk and where possible reduce flood risk overall.** This site is not indicated to be at risk of flooding from rivers during the design event however the area to the north and the south of the site is at risk from the River Thames (Thames Dominated). The main access to the site via Hurst Lane (to the south) and the A3050 (to the north) is shown to be at Significant and Extreme hazard (Appendix A Figure 4). Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) can only be achieved for the site using the pedestrian access through to Palace Road, and thereby to Arnison Road, and south onto Bridge Street and Esher Road. Consideration of whether a vehicular route can be provided through to Palace Road or Parsons Mead should be made as part of the development proposals for the site. Given the risk of flooding to the wider area, Emergency Plans would need to be developed for occupants of the site to set out the response in the event of flooding including access routes and places of safety.
MOL16	0.21	Tesco Metro car park, Walton Road, East Molesey	11	11 to 15 years	0	100	0	0	Lower Thames: Thames Dominated and Tributary Dominated	100% (Thames Dom)	Medium on site and in local area. Not in a Priority Area.	Potential below ground and at surface.	Exception Test is not required	**THIS SITE IS NO LONGER AVAILABLE AND WILL NOT BE TAKEN FORWARD IN THE LOCAL PLAN.** This site is indicated to be at risk of flooding from rivers during the design event based on outputs from the Thames Dominated model. Safe access/egress is not achievable. The site is at very low to low risk of flooding from surface water (0.1%≥ AEP). **Although the site does not require an Exception Test, a site specific FRA will be required to demonstrate that the development will be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall. Given that safe access/egress is not likely to be achievable for the site, Elmbridge BC, in consultation with Emergency Planners, will need to determine whether reliance on evacuation prior to a flood event and the provision of places of safety within the development are an appropriate approach to demonstrate safety of development within a site specific FRA.** **The entire site (100%) is at risk of flooding during the design event. It will not be possible to deliver floodplain compensation storage within the site for any increase in built footprint. Therefore, proposed development should not increase the built footprint. Given the current use as a car park, this will significantly limit the viable development on the site.**

Site Allocation Reference	Area (ha)	Address	Units	Year in Local Plan (when development is likely to occur)	Flood Zone 1 (%)	Flood Zone 2 (%)	Flood Zone 3a (%)	Flood Zone 3b (%)	River Model(s) used to assess site	Proportion of site at risk of flooding from rivers during design event (1% AEP + central CC allowance)	Risk of Flooding from Surface Water: from RoFSW mapping and SCC Priority Area	Susceptibility to Groundwater Flooding (BGS Dataset)	Exception Test Required?	Summary of Flood Risk Constraints and Safety of Development (Refer to Appendix B for full details and recommendations for each site).
MOL19	0.41	5 Matham Road, East Molesey, KT8 0SX	23	11 to 15 years	50.2	48.6	0.5	0.7	Lower Thames: Tributary Dominated and Lower Mole	1.8% (Thames)	Low risk on site.	Potential below ground and at surface.	Exception Test required: Site is partially Flood Zone 3a and proposed development has a vulnerability classification of More Vulnerable.	0.7% of this site is defined as Flood Zone 3b where new development should not be permitted. Redevelopment of existing buildings may be permitted, but only where the vulnerability of the development is not increased (and where possible reduced) and the number of occupants does not increase. This site is indicated to be at risk of flooding from rivers during the design event based on outputs from the Lower Thames: *Thames Dominated* model. Safe access/egress is likely to be achievable to the west of the site. Safe refuge should be designed into the development above the extreme flood event plus an allowance for climate change. The site is at very low to low risk of flooding from surface water (0.1%≥ AEP).
Esher														
ESH9	0.17	Café Rouge, Portsmouth Road, Esher, KT10 9AD	20 + 117m^2	1 to 5 years	13	87	0	0	River Rythe	0%	Site at low risk. Surrounding area at risk.	Potential at surface.	Exception Test is not required	This site has been defined as Flood Zone 2 by the Environment Agency due to its location within the September 1968 historic flood outline. This site is not indicated to be at risk of flooding from rivers during the design event. Safe access/egress is achievable to the south of the site. The site is at very low to low risk of flooding from surface water (0.1%≥ AEP).
ESH12	0.1	Garages at Farm Road, Esher, KT10 8AX	3	6 to 10 years	2	98	0	0	Lower Mole	0%	Risk to site is low. Risk to access is medium. Not in a Priority Area.	Potential at surface.	Exception Test is not required	This site is not indicated to be at risk of flooding from rivers during the design event. Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) is achievable within Lower Green. However, the routes out of Lower Green are at risk of flooding, i.e. More Lane south to Esher, and Douglas Road leading east. A section of More Lane has maximum flood depths of up to 0.1m and 0.15m; this is considered the preferred route. The route along Douglas Road is shown to be at risk of flooding along a longer extent and to greater depths. (Refer to Appendix A Figure 12 for detailed version colour palette for the Lower Mole maximum depth mapping). The site is at low and very low risk of flooding from surface water (0.1%≥ AEP).
ESH15	1.33	Unit A & B Sandown Industrial Park, Esher	40	6 to 10 years	97.4	2.2	0.3	0.1	Middle Mole	0.3%	Site at low risk. Within a Priority Area.	Potential at surface.	Exception Test required: Site is partially Flood Zone 3a and proposed development has a vulnerability classification of More Vulnerable.	**THIS SITE IS NO LONGER AVAILABLE AND WILL NOT BE TAKEN FORWARD IN THE LOCAL PLAN** 0.1% of this site is defined as Flood Zone 3b where new development should not be permitted. This part of the site should be retained as floodplain and steps taken to restore land to provide a more natural edge of the River Mole. An 8 metre wide undeveloped buffer strip should be retained alongside Main Rivers and opportunities taken for riverside restoration. New development within 8m of a Main River will require consent from the Environment Agency. Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) is achievable *within* Lower Green. However, the routes out of Lower Green are at risk of flooding, i.e. More Lane south to Esher, and Douglas Road leading east. A section of More Lane has maximum flood depths of up to 0.1m and 0.15m; this is considered the preferred route. The route along Douglas Road is shown to be at risk of flooding along a longer extent and to greater depths. (Refer to Appendix A Figure 12 for detailed version colour palette for the Lower Mole maximum depth mapping). A suitable place of safe refuge should be defined within Lower Green and/or the proposed development.
ESH16	2.1	River Mole Business Park, Mill Road, Esher	200	6 to 10 years	98	2	0	0	Middle Mole	0%	Site at low risk. Within a Priority Area.	Potential at surface.	Exception Test is not required	A small part of the site has been defined as Flood Zone 2 by the Environment Agency due to its location within the September 1968 historic flood outline. The site is not shown to be at risk of flooding from the Middle or Lower Mole during the design event. Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) is achievable *within* Lower Green. However, the routes out of Lower Green are at risk of flooding, i.e. More Lane south to Esher, and Douglas Road leading east. A section of More Lane has maximum flood depths of up to 0.1m and 0.15m; this is considered the preferred route. The route along Douglas Road is shown to be at risk of flooding along a longer extent and to greater depths. (Refer to Appendix A Figure 12 for detailed version colour palette for the Lower Mole maximum depth mapping). A suitable place of safe refuge should be defined within Lower Green and/or the proposed development. The site is at medium to high risk flooding from surface water (1% to 3.33% AEP).
Weybridge														
WEY10	1.14	8 Sopwith Drive	1404m^2	1 to 5 years	0	27	73	0	Lower Wey	97.4%	Low risk on site. Local roads at risk. Within 'Brooklands and Parvis Road catchment' Priority Area.	Limited potential for groundwater flooding to occur.	Exception Test is not required: Proposed development is Less Vulnerable.	This site is indicated to be at risk of flooding from River Wey during the design event. Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) is achievable away from the site via Vickers Drive South north to an area that is not at risk of flooding during the design event (a 'dry island'). The route along Wellington Way to the east, has a small section at Moderate/Significant hazard. Elmbridge BC, in consultation with Emergency Planners, will need to determine whether reliance on evacuation prior to a flood event and the provision of places of safety are an appropriate approach to demonstrate safety of development. **As the proposed development is Less Vulnerable this may be acceptable.** **The majority of the site (97%) is at risk of flooding during the design event. It will not be possible to deliver floodplain compensation storage within the site for any increase in built footprint. Therefore, proposed development should not increase the existing built footprint. As the site is proposed for Less Vulnerable development, proposals should consider options for flood resilience. A review of the existing site by EBC**

Site Allocation Reference	Area (ha)	Address	Units	Year in Local Plan (when development is likely to occur)	Flood Zone 1 (%)	Flood Zone 2 (%)	Flood Zone 3a (%)	Flood Zone 3b (%)	River Model(s) used to assess site	Proportion of site at risk of flooding from rivers during design event (1% AEP + central CC allowance)	Risk of Flooding from Surface Water: from RoFSW mapping and SCC Priority Area	Susceptibility to Groundwater Flooding (BGS Dataset)	Exception Test Required?	Summary of Flood Risk Constraints and Safety of Development (Refer to Appendix B for full details and recommendations for each site).
														shows that the majority of the site is already developed, and therefore the allocation of this site is not anticipated to increase the building footprint. The site is at low to high risk of flooding from surface water (0.1% to 3.33% AEP).
WEY19	0.18	Shell Petrol Filling Station, 95 Brooklands Road, Weybridge KT13 0RP	5	11 to 15 years	89.3	8.3	2.4	0	Lower Wey	4%	Low risk. Not in a Priority area.	Limited potential for groundwater flooding to occur.	Exception Test required: Site is partially Flood Zone 3a and proposed development has a vulnerability classification of More Vulnerable.	This site is indicated to be at risk of flooding from the River Wey during the design event (1% AEP plus 25% climate change allowance). Safe access/egress (i.e. that is dry or Low hazard during the 1% AEP event including central climate change allowance) is achievable north along Brooklands Road. (The route south is shown to be at risk of flooding with hazard rating Significant, and therefore not a suitable alternative). Development of the site must ensure that the risk of flooding to surrounding areas is not increased, and where possible reduced. As the area of the site impacted during the design event is isolated to the south west corner, it is recommended that this area is not developed and used for landscaping or public space only. The site is at low to high risk of flooding from surface water (0.1% to 3.33% AEP).
WEY26	20	The Heights, Weybridge	9500m^2	11 to 15 years	23.7	33.7	39.7	2.9	Lower Wey	58%	Low risk on site. Local roads at risk. Within 'Brooklands and Parvis Road catchment' Priority Area.	Potential below ground level.	Development is not permitted in Flood Zone 3b. For proposed development in Flood Zones 1 - 3a, the Exception Test is not required as the proposed development is Less Vulnerable.	This site is indicated to be at risk of flooding from the River Wey during the design event. Safe access/egress (i.e. that is dry of Low hazard during the 1% AEP event including central climate change allowance) is achievable west along Wellington Way and the north along Brooklands Road. (Routes west along Wellington Way, or south along Brooklands Road are shown to be at Significant hazard and are therefore not safe routes). Development is not permitted in Flood Zone 3b and should be set back from the River Wey. New development within 8m of a Main River will require consent from the Environment Agency. (Guidance on Environment Agency Flood Risk Activity Permits is available online https://www.gov.uk/guidance/flood-risk-activities-environmental-permits). **Development of the site must ensure that the risk of flooding to surrounding areas is not increased, and where possible is reduced. 58% of the site is indicated to be at risk of flooding during the design event (1% AEP plus 25% climate change). Any increase in built footprint within the design flood extent will need to be compensated for, on a level for level volume for volume basis within the site. (Refer to Level 1 SFRA Section 5.6 for details of Floodplain Compensation Storage). A review of the existing site by EBC shows that the majority of the site is already developed, and therefore the allocation of this site is not anticipated to increase the building footprint. As the site is proposed for Less Vulnerable development, proposals should consider options for flood resilience for parts of the scheme. Refer to Level 1 SFRA Section 5.8.** The site is at low to high risk of flooding from surface water (0.1% to 3.33% AEP).
WEY35	1.92	Horizon Business Village	6000m^2	11 to 15 years	0	14.5	77.6	7.9	Lower Wey	87%	Low risk on site. Local roads at risk. Within 'Brooklands and Parvis Road catchment' and 'A245 Junction' Priority Areas.	Limited potential for groundwater flooding to occur.	Development is not permitted in Flood Zone 3b. For proposed development in Flood Zones 1 - 3a, the Exception Test is not required as the proposed development is Less Vulnerable.	This site is indicated to be at risk of flooding from the River Wey during the design event. Safe access/egress is not currently achievable for this site. The site is at low to high risk of flooding from surface water (0.1% to 3.33% AEP). This site lies partially within Flood Zone 3b. New development should not be permitted within the Flood Zone 3b extent, and this area should preferentially be returned to natural floodplain. **Although the site does not require an Exception Test, a site specific FRA will be required to demonstrate that the development will be safe. Given that safe access/egress is not likely to be achievable for the site, Elmbridge BC, in consultation with Emergency Planners, will need to determine whether reliance on evacuation prior to a flood event are an appropriate approach to demonstrate safety of development within a site specific FRA. As the proposed development is Less Vulnerable this may be acceptable.** **The majority of the site (87%) is at risk of flooding during the design event. It will not be possible to deliver floodplain compensation storage within the site for any increase in built footprint. Therefore, proposed development should not increase the built footprint. As the site is proposed for Less Vulnerable development, proposals should consider options for flood resilience. A review of the existing site by EBC shows that the majority of the site is already developed, and therefore the allocation of this site is not anticipated to increase the building footprint.**
Walton On Thames														
WOT2	0.31	Leylands House, Molesey Road, Walton-on-Thames	56	11 to 15 years	28	72	0	0	Dead River	0%	Low risk. Not in a Priority Area.	Potential at surface.	Exception Test is not required	This site itself is not shown to be at risk of flooding from the Dead River during the design event. Land to the west and north of the site, including access north along Molesey Road is at risk, with a Low to Moderate hazard rating. Safe access/egress is likely to be achievable to the east, via Fernbank Avenue south on to Field Common Lane, west to Molesey Road and then south. The site is at very low to low risk of flooding from surface water (0.1%≥ AEP).
WOT6	0.08	Garages to the rear of 17-27 Field Common Lane, Walton-	3	1 to 5 years	0	100	0	0	Dead River	0%	Low risk on site and surrounding area. Not in a Priority Area.	Potential at surface.	Exception Test is not required	This site is not indicated to be at risk of flooding from the Dead River during the design event. Safe access/egress is likely to be achievable via Byron Close, Field Common Lane and south on to Molesey Road. Given the risk of flooding from rivers to the local area, Emergency Plans would need to be developed for occupants of the site to set out the

Site Allocation Reference	Area (ha)	Address	Units	Year in Local Plan (when development is likely to occur)	Flood Zone 1 (%)	Flood Zone 2 (%)	Flood Zone 3a (%)	Flood Zone 3b (%)	River Model(s) used to assess site	Proportion of site at risk of flooding from rivers during design event (1% AEP + central CC allowance)	Risk of Flooding from Surface Water: from RoFSW mapping and SCC Priority Area	Susceptibility to Groundwater Flooding (BGS Dataset)	Exception Test Required?	Summary of Flood Risk Constraints and Safety of Development (Refer to Appendix B for full details and recommendations for each site).
		On-Thames, KT12 3QH												response in the event of flooding including access and places of safety. The site is at very low to low risk of flooding from surface water (0.1%≥ AEP).
WOT8	0.11	16-18 Sandy Lane, KT12 2EQ	7	1 to 5 years	50	50	0	0	Dead River	0%	Low risk on site. Local roads at risk. Not in a Priority Area.	Potential at surface.	Exception Test is not required	This site is not indicated to be at risk of flooding from the Dead River during the design event. Safe access/egress is achievable east on Sandy Lane and then south on to Terrace Road. Given the risk of flooding from rivers to the local area, Emergency Plans would need to be developed for occupants of the site to set out the response in the event of flooding including access and places of safety. The site is at very low to low risk of flooding from surface water (0.1%≥ AEP). Surrounding roads are shown to be susceptible to surface water flooding.
WOT14	0.1	20 Sandy Lane, Walton-on-Thames, KT12 2EQ	7	6 to 10 years	45	55	0	0	Dead River	0%	Low risk on site. Local roads at risk. Not in a Priority Area.	Potential at surface.	Exception Test is not required	This site is not indicated to be at risk of flooding from the Dead River during the design event. Safe access/egress is achievable east on Sandy Lane and then south on to Terrace Road. Given the risk of flooding from rivers to the local area, Emergency Plans would need to be developed for occupants of the site to set out the response in the event of flooding including access and places of safety. The site is at very low to low risk of flooding from surface water (0.1%≥ AEP). Surrounding roads are shown to be susceptible to surface water flooding.
WOT23	0.11	Unit Rear of and 12-14 Sandy Lane, Walton-On-Thames, KT12 2EQ	9	11 to 15 years	97	3	0	0	Dead River	0%	Low risk on site. Local roads at risk. Not in a Priority Area.	Potential at surface.	Exception Test is not required	This site is not indicated to be at risk of flooding from the Dead River during the design event. Safe access/egress is achievable east on Sandy Lane and then south on to Terrace Road. Given the risk of flooding from rivers to the local area, Emergency Plans would need to be developed for occupants of the site to set out the response in the event of flooding including access and places of safety. The site is at very low to low risk of flooding from surface water (0.1%≥ AEP). Surrounding roads are shown to be susceptible to surface water flooding.
WOT37	0.2	Land north of Mellor Close, Walton-on-Thames, KT12-3RX	5	11 to 15 years	55	45	0	0	Dead River	0%	Low risk on site. Local roads at risk. Not in a Priority Area.	Potential at surface.	Exception Test is not required	This site is not indicated to be at risk of flooding from the Dead River during the design event. Safe access/egress is likely to be achievable via Mellor Close. Safe refuge should be designed into the development above the extreme flood event plus an allowance for climate change. The site is at very low to low risk of flooding from surface water (0.1%≥ AEP).

Appendix A Borough-Wide Mapping

Appendix B Site Assessments

B.1 Cobham, Oxshott, Stoke D'Abernon and Downside

COS1 Cedar House, Mill Road, Cobham, KT11 3AL

B.2 Thames Ditton, Long Ditton, Hinchley Wood, and Weston Green

D2 Car Park south of Southbank, Thorkhill Road, Thames Ditton

D5 89-90 Woodfield Road, Thames Ditton, KT7 0DS

D7 47 Portsmouth Road

D9 Corner Cottage, Portsmouth Road, KT7 0TQ

D11 Garages to the rear of Blair Avenue, Weston Green

D12 Sandpiper, Newlands Avenue, Thames Ditton, KT7 0HF

D15 Flats 9-41 and Garages on Longmead Road, Thames Ditton, KT7 0JF

D16 Ashley Road Car Park, Thames Ditton

D17 Nuffield Health Club, Simpson Way, Long Ditton

D21 Nuffield Health Car Park, Simpson Way, Long Ditton

D25 5A-6A Station Road, Esher, KT10 8DY

B.3 East and West Molesey

D6 Sundial House, The Molesey Venture

D18 118-120 Bridge Road, East Molesey, KT8 9HW

D19 Industrial units at 67 Summer Road East Molesey KT8 9LX

MOL2 133-135 Walton Road, East Molesey, KT8 0DT

MOL3 Garage block west of 14 and north of 15 Brende Gardens, West Molesey

MOL4 East Molesey Car Park, Walton Road, East Molesey

MOL8 7 Seymour Close and Land to rear of 103-113 Seymour Close, East Molesey, KT8 0JY

MOL9 11-27 Down Street, West Molesey, KT8 2TG

MOL10 Vine Medical Centre, 69 Pemberton Road, East Molesey, KT8 9LJ

MOL12 Henrietta Parker Centre, Ray Road, West Molesey

MOL13 Parking/garages at Grove Court, Walton Road, East Molesey, KT8 0DG

MOL14 43 Palace Road, East Molesey, KT8 9DN

MOL15 Pavilion Sports Club car park, Hurst Lane, East Molesey, KT8 9DX

MOL16 Tesco Metro car park, Walton Road, East Molesey

MOL19 5 Matham Road, East Molesey, KT8 0SX

B.4 Esher

ESH9 Café Rouge, Portsmouth Road, Esher, KT10 9AD

ESH12 Garages at Farm Road, Esher, KT10 8AX

ESH15 Unit A & B Sandown Industrial Park, Esher

ESH16 River Mole Business Park, Mill Road, Esher

B.5 Weybridge

WEY10 8 Sopwith Drive

WEY19 Shell Petrol Filling Station, 95 Brooklands Road, Weybridge KT13 0RP

WEY26 The Heights, Weybridge

WEY35 Horizon Business Village

B.6 Walton on Thames

WOT2 Leylands House, Molesey Road, Walton-on-Thames

WOT6 Garages to the rear of 17-27 Field Common Lane, Walton-On-Thames, KT12 3QH

WOT8 16-18 Sandy Lane, KT12 2EQ

WOT14 20 Sandy Lane, Walton-on-Thames, KT12 2EQ

WOT23 Unit Rear of and 12-14 Sandy Lane, Walton-On-Thames, KT12 2EQ

WOT37 Land north of Mellor Close, Walton-on-Thames, KT12-3RX