							ESSMENT - Guildhall 1			, 111g11 .				
ddress: (Guildhall 1	L and Guildl	hall 2, High		Area:	1.26 Ha								
	Street, Ki	ngston upo	n Thames		Site Referenc	e: KNK14					Current Ris	k Summary		
									FI	uvial / Tic	lal	G	roundwat	er
Current Use				Propos	Proposed Use		FZ2	100	% of Site	<25	1.98	% o		
Residential-led				ed mixed-use devel	I mixed-use development, including commercial,		FZ3a	93.06	% of Site	25-50	35.9	% c		
Con	nmercial,	business an	d service us	es		business and			FZ3b	7.53	% of Site	50-75	62.12	% (
										rface Wat	-	>75	0	%
<u> </u>	www.omt \/l	norohility (loccificatio	•		Droposod Vulnorak	ility Classification		1 in 30*	0.14	% of Site		Artificial	—
	irrent vui		Classificatio	1		Proposed Vulnerability Classification			1 in 100*+ 1 in 1000*	7.09 17.57	% of Site % of Site	Reservoir	YES	At
		ss Vulnerat				More Vu	Inorable		1 IN 1000.	17.57	Sewer F	looding		_
	Le	ss vuinerat	Jie			wore vu	literable			N	o. of Incider	Ū.		74-
									* return periods for potential flood event					/4-
							FLUVIAL /		· return period	us for poten	ual liood event	S FZ3d (Sur	face water)	
	Rick Acc	essment (r	Defended, H	ogsmill)			FLOVIAL /	HDAL						
Parame		FZ3b	FZ3a	*FZ3a+CC	Units	Descri	iption of Flood Mechanism		Site	Access / E	gress			
Time of O		N/A	0	0	Hrs		t risk from fluvial flooding from the		Site access a	-	-		• Self-con	
Min. De		N/A N/A	0	0	m		, which partially covers the site.		be directed t	-			permitted	
Max. De		N/A	2.93	3.27	m		t risk from fluvial flooding from the		site toward a	reas of St J	ames's Road		requirem	
Max. Velo	•	N/A	1.95	1.98	m/s	-	I, which partially covers the site. sk extent for the climate change		at the lowest	risk of fluv	vial flooding.		stipulatio	
Max Flood	,	N/A	7.74	7.87	m AOD		ne rivers Thames and Hogsmill covers						• A FRA m	
Aax Ground		N/A	8.26	8.26	m AOD	all the site.							 Include 	
Ain Ground	Level	N/A	5.09	5.09	m AOD		nge is predicted to increase the flood						to addres	
Max Flood I	Hazard	N/A	8.22	9.17	N/A	depth, hazard defended sce	, velocity and flood levels in the pario only						• See SFR	A Le
Duration of	Flood	N/A	>27	>27	Hrs		be partially flooded from the onset						4.2 and 4.	.3 fo
ne +35% Climate	e Change Allo	wance event is	reviewed				in flooded for in excess of 27 hours.						 Develop) a Fl
Risk A	Assessme	nt (Undefei	nded, Hogsr	nill)			essment is for the worse case only, which is the River Hogsmill for						 Site use 	rs sh
Parame		FZ3a	*FZ3a+CC	Units			a and Thames for Undefended data.						Service.	
Time of O		N/D	N/D	Hrs										
Min. De		N/D	N/D	m										
Max. De	-	N/D	N/D	m										
Max. Velo		N/D	N/D	m/s										
Max. Haz		N/D	N/D	N/A		Figure 1 - F	luvial Flood Depth Map		Figure 2 - Fl	uvial Floo	d Hazard Ma	р		
Duration of	Flood	N/D	N/D	Hrs										
		Diels Ace					SURFACE V	VATER						
Parame	tor		essment 1 in 100	1 in 1000	Units		Site Access / Egress		Mi	tigation	Flood Risk R	aguiromon	+c	1
Min. De		1 in 30		1 in 1000		Site accoss a	nd egress routes should be		Developme	-		•		4.
Max. De		N/A N/A		0.00 - 0.15 0.90 - 1.20	m m		he south and south east of the site		of the site wi			-		
Max. Velo	-	N/A N/A	> 2.00	> 2.00	m/s		ston Hall Road and towards the		flooding.					
Max. Haz		N/A N/A	1.25 - 2.00		N/A		on St James's Road where there is a		See also SF	RA - Level 2	2 Report Sect	ion 4 mitigat	ion	
					npact of current risk	lower risk of	flooding.		requirement	numbers 4	.2 and 4.3 for	r further dev	elopment	
			lood Mecha		, see e. carrent hok				stipulations.					
ntre of the site arts of Kingsto oding.	gh and med e. on Hall Road	ium risk of su I and St James	rface water flo Road are at ri	oding, especiall sk from surface	water									
• Climate change is predicted to increase the maximum hazard of surface water flooding.				e water	Figure 3 - RoFSW Flood Depth Map			Figure 4 - RoESW/ Flood Hazard Man					1	
поочінь.						Figure 3 - RoFSW Flood Depth Map			Figure 4 - RoFSW Flood Hazard Map					





Flood Defences

Site is not in an area benefitting from flood defences.

Flood Warning Area The EA Flood Warning Service is available at this site.

Mitigation / FRA Requirements

d basement dwellings and bedrooms are not 3a. See SFRA Level 2 Report mitigation Imber 4.10 for additional basement

- e submitted as part of a planning application. priate flood resistance or resilience measures licted flood depths.
- el 2 Report mitigation requirement numbers further development stipulations.
- od Emergency and Evacuation Plan for the site. uld be signed up to the EA's Flood Warning

Mitigation - Surface Water Drainage

 A site-specific FRA is required for new proposals in Flood Zone 2 or 3, including minor development and change of use.
 All planning applications need a flood risk

assessment and/or drainage strategy with a completed SuDS/Drainage proforma.

• Developments should apply the Sustainable Drainage Hierarchy set out in Policy SI 13 of the London Plan.

• Ground investigations are required to confirm whether infiltration SuDS are suitable.

SITE ASSESSMENT - Guildhall 1 and Guildhall 2, High Street

SEWER Risk Assessment

• The site falls within a postcode areas where there are 74 and 89

reported flood incidents from sewer flooding.

• The site is assumed to be served by separate surface water and foul sewer networks, given their proximity to the site.

Figure 5 - Thames Water Sewer Flood Map

Mitigation Requirements

Applicant must consult with TWUL to confirm if the development site has historically flooded. TWUL must agree to any proposed sewer connections.
Where historic flooding has occurred, the applicant must show how this risk will be managed for the lifetime of the development.

GROUNDWATER Risk Assessment

The susceptibility to groundwater flooding is of 50-75% in the majority of the site area.
The site is underlain by London Clay bedrock geology and superficial deposits of

Langley Silt and Alluvium - Clay, silt, sand and peat.

Figure 6 - Areas Susceptible to Groundwater Flooding Map
Mitigation Requirements
 Applicant should carry out a screening study (as a minimum) to establish if there are
subterranean flood risk issues that may require further investigation.
 If there is a potential level of impact, mitigation actions must be proposed.
 Must be prepared by a chartered professional or specialist.

R	lis
 This site is at risk of flooding from 	n ı
Extent.	
Figure 7 - Outline Reservoir Flo	00
Mitig	at

Propose appropriate and proportionate risk management measures.
A suitable emergency response plan should be put in place, including an emergency warning system in the event of a reservoir flooding incident.
Local Authority Emergency Planning Officers must be consulted to create a reservoir failure emergency and evacuation plan.

PLANNING CONSIDERATIONS

Safety of Development

A. Can the development be future proofed for climate change considerations?

• Yes. See SFRA - Level 2 Report Section 4 mitigation requirement number 4.2 for compensatory flood storage stipulations.

B. Can the development be designed safe throughout its lifetime without increasing flood risk elsewhere?

• Yes. The development must use surface water drainage techniques to manage surface water runoff onsite through above ground SuDS and / or below ground attenuation. Green drainage infrastructure should be prioritised to provide wider ecological / biodiversity benefits as per London Plan Policy SI 13.

• See SFRA - Level 2 Report Section 4 mitigation requirement number 4.5 for compensatory flood storage stipulations.

C. What is the cumulative impact of the development land use change and will flood risk increase?

• The development land use is changing from the 'Less Vulnerable' to the 'More Vulnerable' classification, as residential uses have been proposed.

• The site is currently a brownfield site with hardstanding areas with some minor landscaping. This offers an opportunity to improve flood attenuation through the new development.

D. How can the development reduce risk overall?

• Development should be directed away from central areas of the site where there is a higher risk of surface water flooding.

Site access and egress routes should be directed to the south west of the site towards Kingston Hall Road as there is a lowest risk of flooding.

• By complying with Policy DM4 of the Kingston Core Strategy (2012) through including SuDS to ensure that the development is not vulnerable to surface water, sewer and groundwater flooding and to reduce the overall level of flood risk in the borough and beyond.

• By complying with SFRA - Level 2 Report Section 4 mitigation requirement numbers 4.2, 4.3 and 4.5.

E. Will development require a flood risk permit/watercourse consent?

• No. The site is not located within 8m of a Main River or 5m of an Ordinary Watercourse.

F. Can the site pass the Exception Test?

Yes. The Exception Test is required for this site as 93.06% of the site area in Flood Zone 3a (fluvial) and 7.09% of the site in Flood Zone 3a (surface water) and the proposed vulnerability classification is 'More Vulnerable'.
This can be passed by making the site safe throughout its lifetime without increasing flood risk elsewhere (see questions A, B, and C). The site could also reduce flood risk overall with appropriate SuDS and flood storage compensation

• This can be passed by making the site safe throughout its lifetime without increasing flood risk elsewhere (see questions A, B, and C). The site could also reduce flood risk overall with appropriate S measures implemented (see 'Mitigation - Flood Risk Requirements' and 'Mitigation - Surface Water Drainage' boxes).

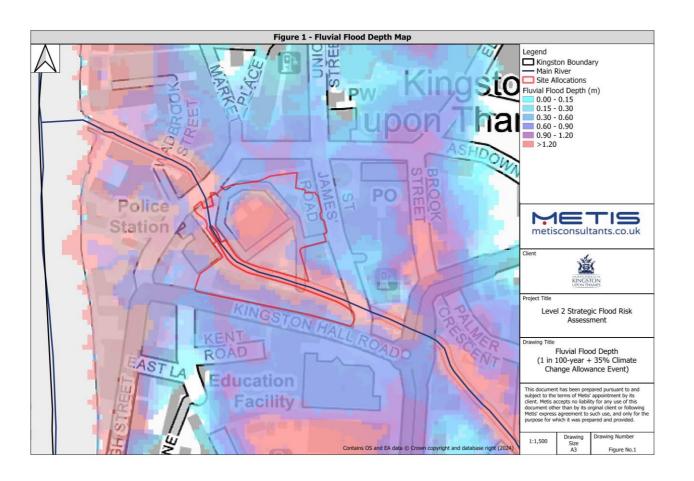
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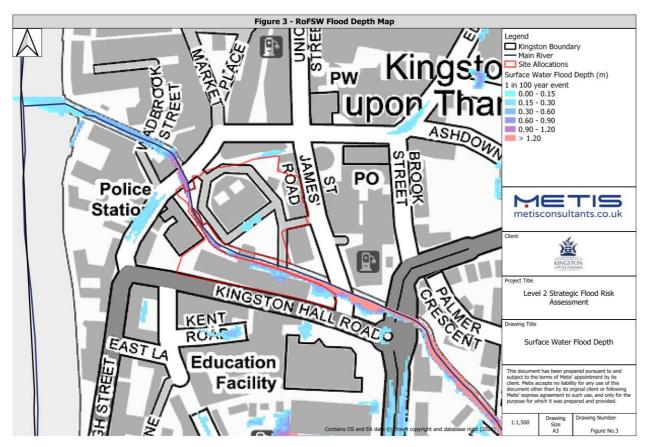
k Assessment

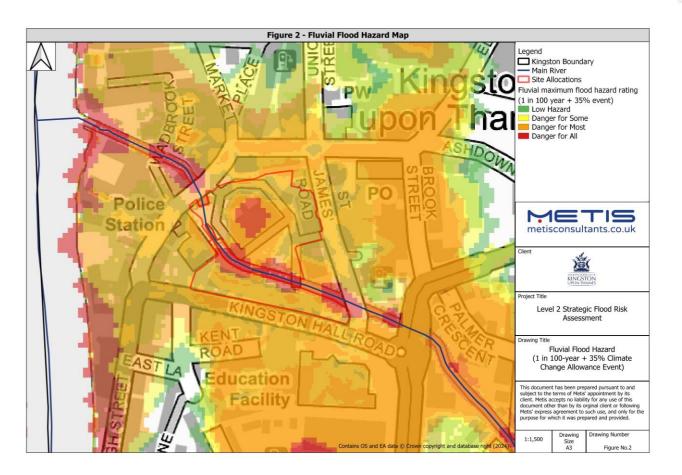
reservoirs based on the EA reservoir Wet Day

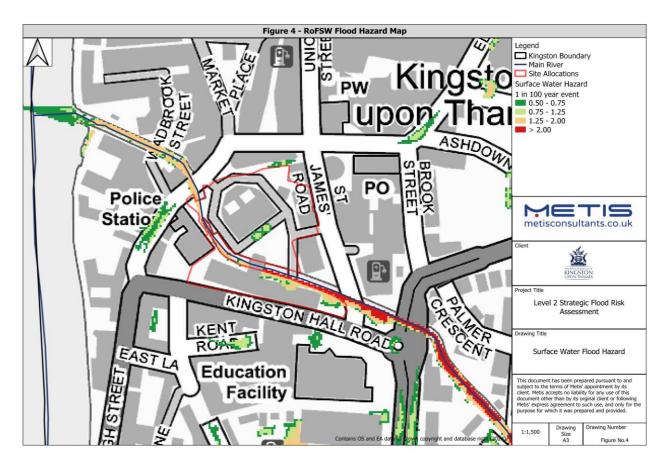
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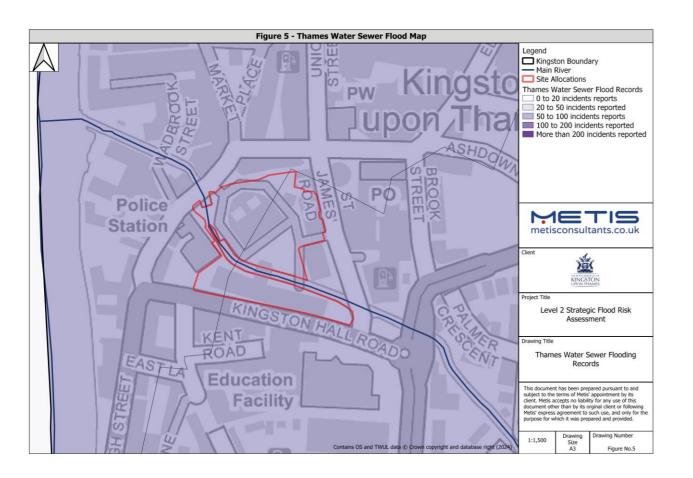


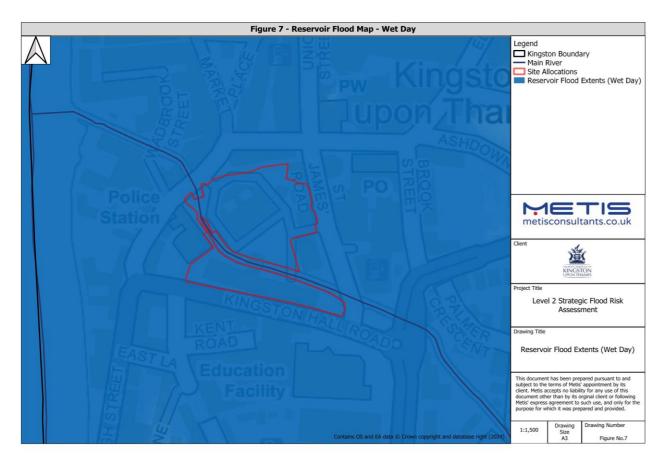


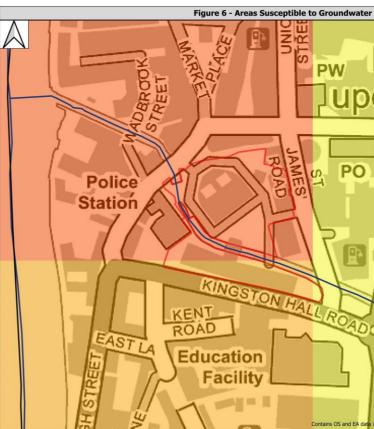














r Flooding Map	
Kingsto on∠Thai	Legend → Kingston Boundary → Main River → Site Allocations Groundwater Flood Risk < 25% > = 25% <50% → = 50% <75% → = 75%
ASHDOWA BROOK STREET	metisconsultants.co.uk
	Client KINGSTON Project Title
RET	Level 2 Strategic Flood Risk Assessment
O CENT	Drawing Title Areas Susceptible to Groundwater Flooding
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© Crown copyright and database right (2024)	1:1,500 Drawing Size A3 Figure No.6