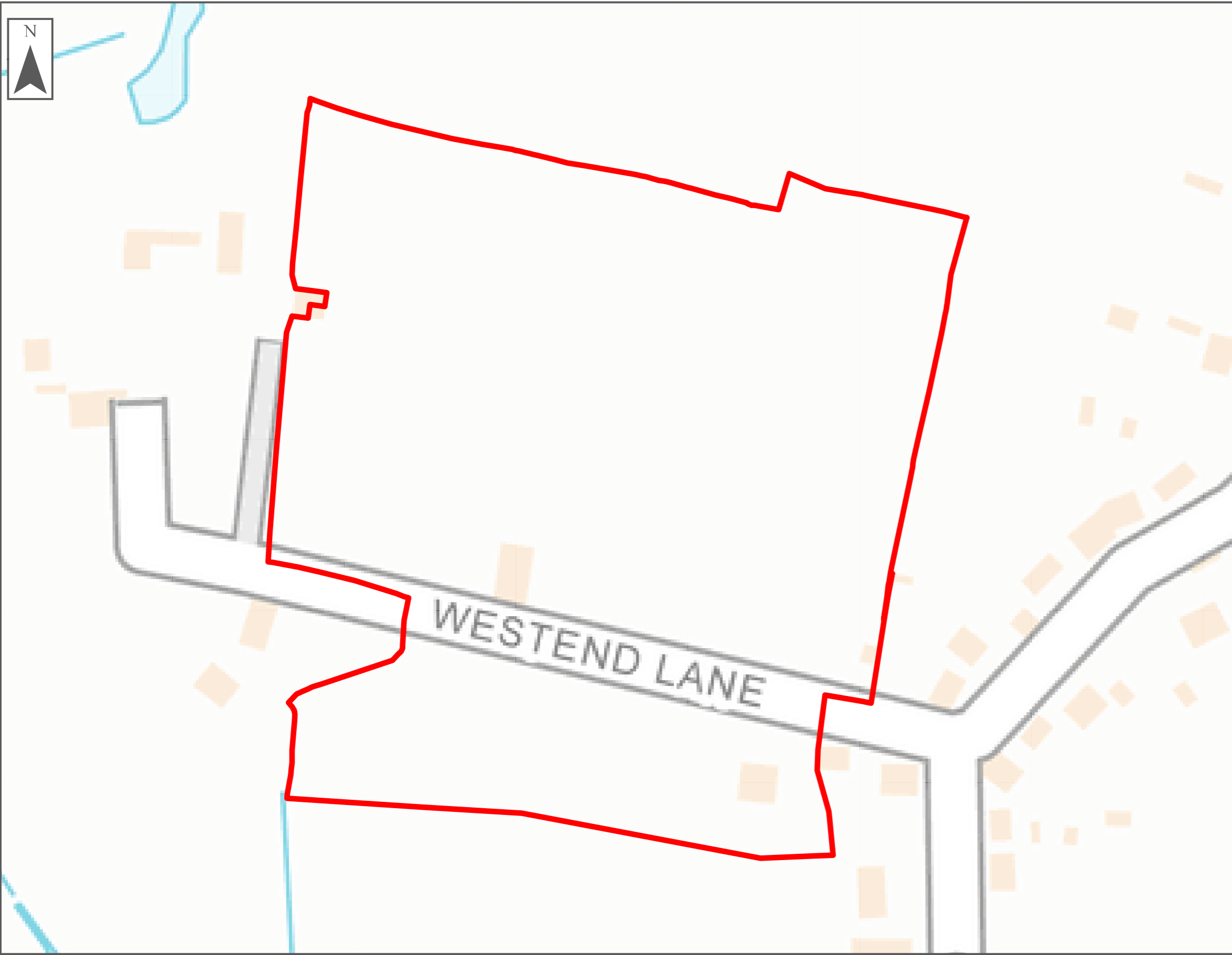


Site details	Site Number	13			
	OS Grid reference	ST 60683 92145			
	Area	4.69 hectares			
Sources of flood risk	Existing drainage features	The site is located north and south of Westend Lane. The Westend Rhine flows north of the site before changing direction to flow south towards the site. The course change again before it reaches the site to flows in a south west direction away from the village. It then changes direction again to flow south easterly around the edge of the village.			
	Fluvial		5% AEP	1% AEP	0.1% AEP
		Proportion of site at risk (%)	0	0	0
		Range of depths (m)	-	-	-
		Maximum hazard	-	-	-
	Tidal	Defended			
			5% AEP	0.5% AEP	0.1% AEP
		Proportion of site at risk (%)	0	0	0
		Range of depths (m)	-	-	-
		Maximum hazard	-	-	-
		Undefended			
			5% AEP	0.5% AEP	0.1% AEP
		Proportion of site at risk (%)	43	60	73
	Range of depths (m)	0 – 2.0	0 – 2.5	0 – 2.5	
	Maximum hazard	Not available			
Surface Water	Proportion of site at risk (RoFfSW)				
	3.3% AEP	1% AEP		0.1% AEP	
	0	0		0	
Flood history	The site is outside of the Environment Agency's historic flood map.				
Flood risk management infrastructure	Defences	Defence Type	Standard of Protection	Condition	
		Penstock	n/a	n/a	
		Tidal embankment	0.5% AEP	Good	
	Residual risk		Outlet failure	Oldbury Pill embankment breach	Power station embankment breach
		Proportion at risk (%)	0	0	0
		Range of depths (m)	-	-	-
Maximum hazard	-	-	-		

Site details	Site Number	13			
	OS Grid reference	ST 60683 92145			
	Area	4.69 hectares			
Emergency planning	Flood warning	<p>The site is partially covered along the northern boundary by the Severn Estuary at Oldbury on Severn, Northwick and Avonmouth Flood Alert Area.</p> <p>The site is partially covered by the Severn Estuary at Oldbury-on-Severn, Westend, Cowhill and Olveston areas Flood Warning Area.</p>			
	Access and egress	<p>The main access and egress route along Westend Lane, down Camp Road and out via Chapel Road or Church Road. Both Chapel Road and Church Road are at risk of flooding in fluvial, tidal and residual risk scenarios resulting in the potential for the site to become cut off in a flood event.</p>			
Climate Change	Implications for the site		1% AEP		
			Central	High Central	Upper End
		Proportion at risk (%)	0	0	0
		Range of depths (m)	-	-	-
		Maximum hazard	-	-	-
			Tidal (defended) 0.5% AEP		Tidal (defended) 0.1% AEP
		Proportion at risk (%)	53		84
		Range of depths (m)	0 – 2.5		0 – 2.5
	Maximum hazard		Maximum hazard		
	Danger for Most		Danger for All		
NPPF and planning implications	Sequential Test	The Sequential Test will need to be passed. Only once the Sequential Test is passed should the Exception Test be applied			
	Exception Test requirements	<p>The Exception test will be required in the following scenarios</p> <ul style="list-style-type: none"> • If More Vulnerable and Essential Infrastructure is proposed in FZ3a. • If Highly Vulnerable development is proposed in FZ2. • If Essential Infrastructure is proposed in Flood Zone 3b <p>Development will not be permitted in the following scenarios</p> <ul style="list-style-type: none"> • Highly Vulnerable infrastructure within FZ3a and FZ3b. • More and Less Vulnerable Infrastructure within FZ3b. 			

Site details	Site Number	13
	OS Grid reference	ST 60683 92145
	Area	4.69 hectares
	<p>Requirements for site-specific Flood Risk Assessment</p> <p>Guidance for developers</p>	<ul style="list-style-type: none"> At the planning application stage, a site-specific flood risk assessment will be required if any development is located within Flood Zones 2 and 3 or for any development greater than one hectare in Flood Zone 1. Modelling has shown that the site is at tidal flood risk in the future. The Sequential approach should be used to direct buildings away from the risk areas. In the future, with climate change, defences will be overtopped in both 0.5% and 0.1% scenarios flooding up to 84% of the site, if the defences are maintained at the current standard. The site also becomes a dry island during future tidal flooding with both Westend Lane and Camp Road flooded. To pass the Exception Test, it needs to be demonstrated that the development can be made safe. Other sources of flooding should also be considered as part of a site-specific flood risk assessment Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage The long-term strategy for maintenance of the defences should be considered. The defences currently provide protection to the site from a 0.5% AEP event. However, in the future the level of overtopping of the defence means the site will be at risk if no action is taken. Investment would be required to sustain the current level of flood risk at the site into the future. New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff and onsite attenuation schemes would need to be tested against the hydrographs of the Rhine system to ensure flows are not exacerbated downstream within the catchment Assessment for runoff should include allowance for climate change effects New development must seek opportunities to reduce overall level of flood risk at the site, for example by: <ul style="list-style-type: none"> Reducing volume and rate of runoff Relocating development to zones with lower flood risk Creating space for flooding Green infrastructure should be considered within the mitigation measures for surface water runoff

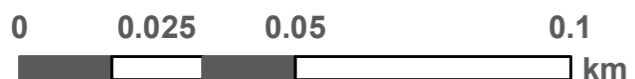


LEVEL 2 SITE SUMMARY TABLES

OLDBURY ON SEVERN LEVEL 2 STRATEGIC FLOOD RISK ASSESSMENT

LEGEND

<p>Fluvial Depth 1% AEP (Present Day)</p> <p>Depth (m)</p> <ul style="list-style-type: none"> 0 - 0.10 0.10 - 0.50 0.50 - 1.00 1.00 - 1.50 1.50 - 2.00 2.00 - 2.50 2.50 - 3.00 3.00 - 3.50 3.50 - 4.00 >4.00 	<p>Risk of Flooding from Surface Water (RoFfSW)</p> <ul style="list-style-type: none"> 3.3% AEP 1% AEP 0.1% AEP
<p>Tidal Depth 0.5% AEP (Present Day Defended)</p> <p>Depth (m)</p> <ul style="list-style-type: none"> 0 - 0.10 0.10 - 0.50 0.50 - 1.00 1.00 - 1.50 1.50 - 2.00 2.00 - 2.50 2.50 - 3.00 3.00 - 3.50 3.50 - 4.00 >4.00 	<p>Fluvial Depth 1% AEP (Present Day)</p> <p>Hazard Rating</p> <ul style="list-style-type: none"> Very low hazard - caution Danger for some Danger for most Danger for all
<p>Tidal Depth 0.1% AEP (Present Day Defended)</p> <p>Depth (m)</p> <ul style="list-style-type: none"> 0 - 0.10 0.10 - 0.50 0.50 - 1.00 1.00 - 1.50 1.50 - 2.00 2.00 - 2.50 2.50 - 3.00 3.00 - 3.50 3.50 - 4.00 >4.00 	<p>Tidal Hazard 0.5% AEP (Present Day Defended)</p> <p>Hazard Rating</p> <ul style="list-style-type: none"> Very low hazard - caution Danger for some Danger for most Danger for all
<p>Tidal Hazard 0.1% AEP (Present Day Defended)</p> <p>Hazard Rating</p> <ul style="list-style-type: none"> Very low hazard - caution Danger for some Danger for most Danger for all 	<p>Tidal Hazard 0.1% AEP (Present Day Defended)</p> <p>Hazard Rating</p> <ul style="list-style-type: none"> Very low hazard - caution Danger for some Danger for most Danger for all
<p>Residual risk scenarios (0.5% AEP)</p> <ul style="list-style-type: none"> Oldbury Pill embankment breach Outfall failure 	<p>Residual risk scenarios (0.5% AEP)</p> <ul style="list-style-type: none"> Power station embankment breach



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Authority Information

- Potential Site Location
- Rhines

Fluvial (Present Day)

- 5% AEP
- 1% AEP
- 0.1% AEP

LEGEND

Fluvial (Future 2080s)

- 1% AEP (Central)
- 1% AEP (Higher Central)
- 1% AEP (Upper End)

Tidal (Present Day)

- 0.5% AEP (defended)
- 0.5% AEP (undefended)
- 0.1% AEP (defended)
- 0.1% AEP (undefended)

Tidal (Future 2117)

- 0.5% AEP (defended)
- 0.5% AEP (undefended)
- 0.1% AEP (defended)
- 0.1% AEP (undefended)