

Land bound by Plumstead Road, Burrage Road, Spray Street and Woolwich New Road, Woolwich, SE18

Summary Information	
Site Reference	P4-W9
Address	Land bound by Plumstead Road, Burrage Road, Spray Street and Woolwich New Road, Woolwich, SE18
Area (ha)	2.3
Current Use	Numerous uses - retail, commercial services, restaurant, hot food takeaway, offices, private educational facilities, place of worship, former public market and residential.
Current Vulnerability	Less Vulnerable
Proposed Use	Residential-led mix-use.
Proposed Vulnerability	More Vulnerable

Current Risk Summary					
Fluvial			Groundwater		
FZ2	0.00	% of site	Limited potential for flooding to occur	100	% of site
FZ3a	0.00	% of site	Potential for flooding of properties below ground level	0.00	% of site
FZ3b	0.00	% of site	Potential for flooding to occur at surface	0.00	% of site
Surface Water			Sewer Flooding		
High	12.24	% of site	Number of incidents within the predominant postcode	30 - 40	
Medium	38.37	% of site	Is the site located within the Thamesmead area?	No	
Low	55.38	% of site			
Flood Defences			Flood Warning Area		
The site is at risk of flooding from rivers taking into account the presence and condition of flood defences according to the EA's RoFRS layer.			The EA Flood Warning Service is not available at this site.		

See webmap supporting assessment: [Greenwich - Level 1 and 2 SFRA](#)



1.1 Surface Water

Description of Flood Mechanism	
Surface water flood risk is concentrated in the western and central areas of the site in all risk scenarios, including areas of high risk. There are some small areas within the east of the site near Parry Place in the medium and low risk scenarios.	
Mitigation – Flood Risk Requirements	Mitigation – Surface Water Drainage
Development should be directed away from the western and central areas of the site, towards the eastern section of the site. Development should comply with SFRA - Level 2 Report Section 4 mitigation requirement numbers 4.3 and 4.9.	See SFRA Level 2 Report mitigation requirement 5.0 for further development stipulations Developments should apply the Sustainable Drainage Hierarchy set out in Policy SI 13 of the London Plan as well as Policy E2 of the Greenwich Local Plan, and Policy EN6 of the draft Local Plan for further development stipulations. Ground investigations are required to confirm whether infiltration SuDS are suitable.
Climate Change Considerations	
During the high risk events, the extent increases from a small area in the centre of the site to covering the majority of the western section of the site, other than the northwestern corner. The maximum depth increases from 0.3m to 0.9m. The maximum velocity and hazard remain unchanged. During the medium risk events, the existing extents increase northwards and southwards in the western section of the site, and there is a small increase in the northeastern corner of the site. The maximum velocity increases from 1.0 m/s to 2.0 m/s and maximum hazard increases from 1.25 to 2.0. The maximum depth remains unchanged. During the low risk events, there are small increases in extent around the existing areas of low risk, particularly in the southeastern corner of the site. The maximum depth, velocity and hazard remain unchanged.	

Risk Assessment				
Parameter	High	Medium	Low	Units
Max. Depth	0.3	1.2	1.2	m
Max. Velocity	0.5	1.0	2.0	m/s
Max. Hazard	1.25	1.25	2.0	N/A



Risk Assessment – with Climate Change				
Parameter	High	Medium	Low	Units
Max. Depth	0.9	1.2	1.2	m
Max. Velocity	0.5	2.0	2.0	m/s
Max. Hazard	1.25	2.0	2.0	N/A

1.2 Sewer

Risk Assessment	Mitigation Requirements
The site falls within a postcode area where there are 30 - 40 reported flood incidents from sewer flooding. The site is assumed to be served by separate surface water, combined and foul sewer networks, given their proximity to the site.	The applicant must consult with TWUL to confirm if the development site has historically flooded. TWUL must agree to any proposed sewer connections. If historic flooding has occurred, the applicant must demonstrate how this risk will be managed throughout the development's lifetime.

1.3 Groundwater

Risk Assessment	Mitigation Requirements
This site has a limited potential for groundwater flooding to occur. The site is underlain by Thanet Sand Formation bedrock geology and Alluvium superficial deposits.	For new developments that involve groundworks, especially if basements are planned, the applicant should carry out a screening study (as a minimum) to establish if there are any subterranean flood risk issues that may require further investigation. If there is a potential level of impact, mitigation actions must be proposed. This must be prepared by a chartered professional or specialist.

1.4 Artificial

Risk Assessment	Mitigation Requirements
This site is not at risk of flooding from reservoirs.	N/A - No reservoir risk is predicted at this site.



1.5 Planning Considerations – Safety of Development

A. Can the development be future proofed for climate change considerations?
- Climate change impacts are projected to increase the extent of surface water flooding in all risk scenarios. In the high risk events the maximum depth of flooding is expected to increase while in the medium risk events maximum velocity and hazard are expected to increase. - See SFRA - Level 2 Report Section 4 mitigation requirement number 4.4 for the required flood resistant / resilient building stipulations.
B. Can the development be designed safe throughout its lifetime without increasing flood risk elsewhere?
- 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.
C. What is the cumulative impact of the development land use change and will flood risk increase?
- The development land use is changing from 'Less Vulnerable' to 'More Vulnerable'. - The site is predominantly impermeable, with a few permeable areas within the site boundary, in the eastern and central areas of the site. - Development must mitigate any increase in impermeable area to the site with runoff storage to prevent any increase in flood risk. An increase in impermeable area coverage on site will increase surface water runoff and flood risk if not managed properly.
D. How can the development reduce risk overall?
- Direct development towards the eastern areas of the site where there is less risk of surface water flooding. - By complying with Policy E2 of the Greenwich Local Plan and Policy EN6 of the draft Local Plan through demonstrating that the development will avoid or minimise all sources of flood risk to people and property taking climate change into account, and incorporating SuDS measures in order to manage surface water runoff as close to its source as possible and to meet the required SuDS performance standards. - By complying with SFRA - Level 2 Report Section 4 mitigation requirement 4.4.
E. Which safe access and egress routes are recommended?
Safe access and egress routes should be directed from Parry Place towards Spray Street where there is limited risk of surface water flooding.
F. Will development require a flood risk permit / watercourse consent?
No, the site is not located within 16m of a Tidal River, 8m of a Main River or 5m of an Ordinary Watercourse.
G. Can the site pass the Exception Test?



The Exception Test is not required as the site is not located within Flood Zones 2, 3a, or 3b.

