

Site Name: Car Wash site					
Site ID:	P7	Site Address:	Plumstead	Area (ha):	0.23
Current Use:	Car wash and other small businesses	Proposed Use:	Intensify workspace use to the rear of the site. Add a commercial unit with public frontage along high street edge, residential above	Vulnerability Classification:	More Vulnerable
Tidal Source:					
Flood Zone 1 (<0.1% AEP):	Flood Zone 2 (0.1% AEP):	Flood Zone 3 (1% AEP):	Flood Zone 3b (5%AEP):	Area Benefiting from Defences:	
91%	9%	9%	0%	1.69%	
Flood Zones and Flood Defences					
Figure A - Flood Zones					
Flood Defence Source:	fluvial	Upstream of Thames Barrier?	No		
Flood Defence Type:	high_ground	Standard of Protection:	20		
Flood Warning Area	Tidal Thames from Erith High Street East to Woolwich Arsenal (2% Overlap)	Emergency Rest Centre	St. Patrick's RC Primary School		
Residual Tidal Flood Risk					

Site Name: Car Wash site

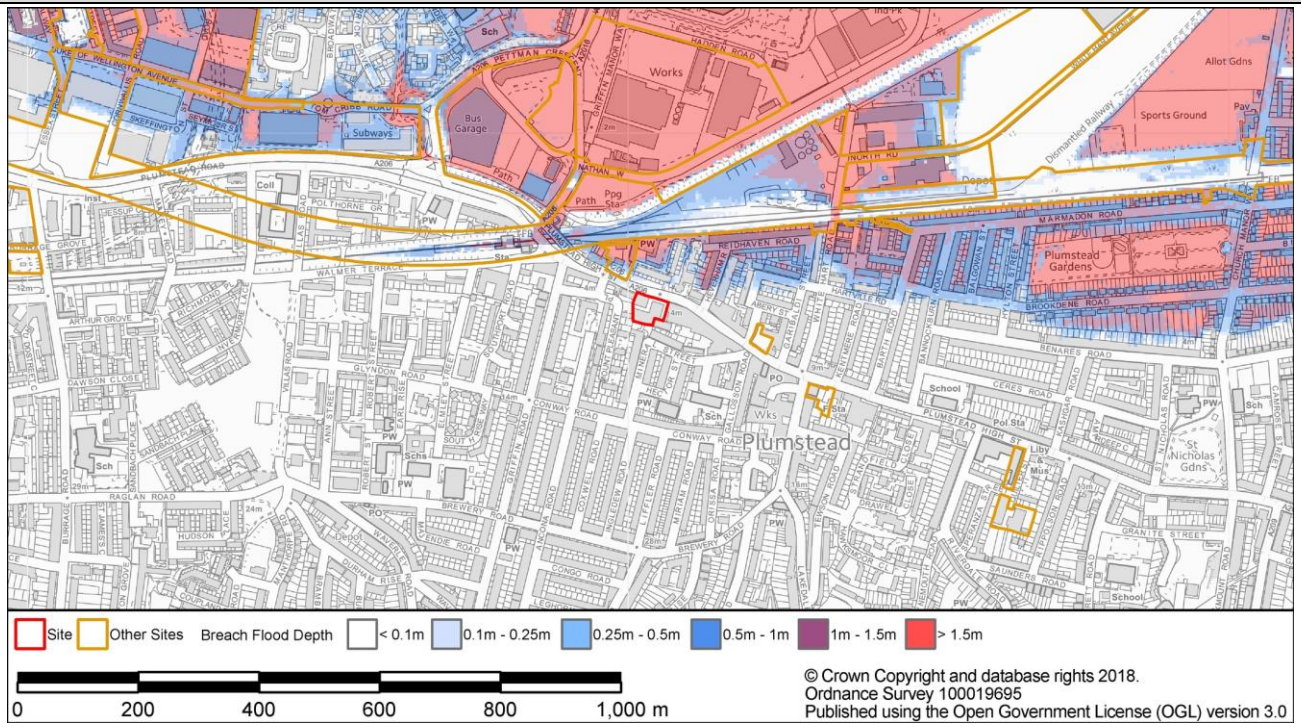


Figure B - Maximum Flood Depth (Downriver Breach Assessment, 0.5% AEP 2115)

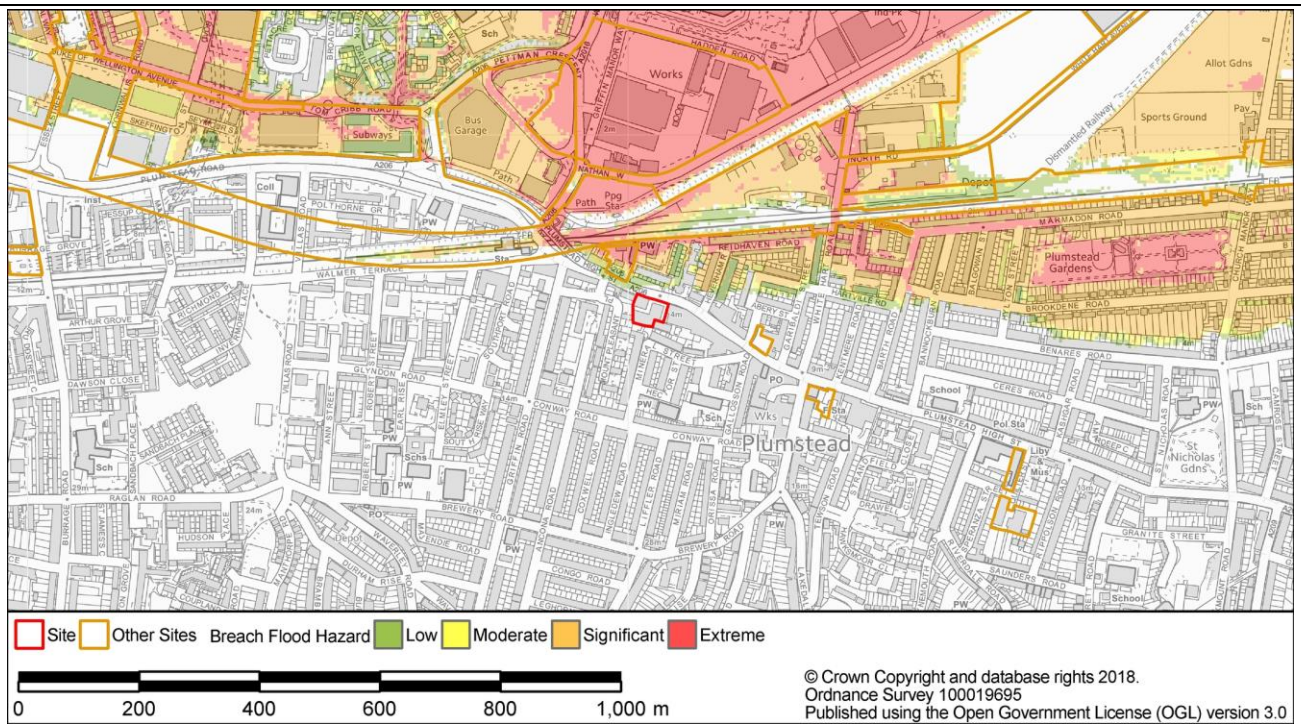


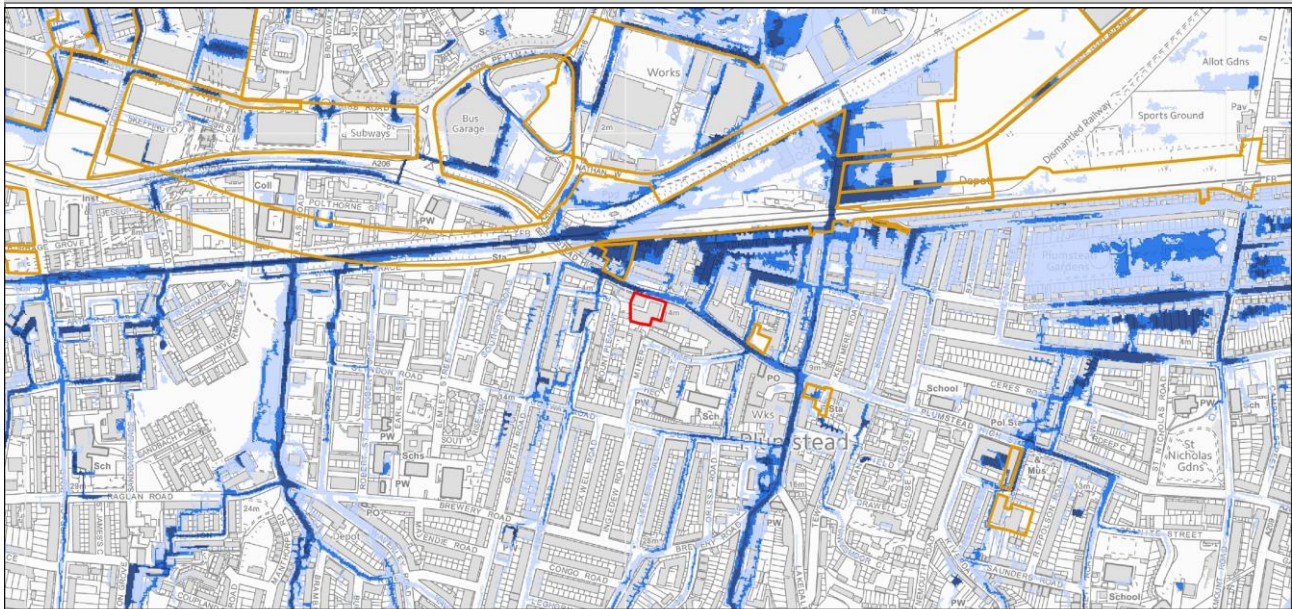
Figure C - Maximum Flood Hazard (Downriver Breach Assessment, 0.5% AEP 2115)

Surface Water Source

Risk of Flooding from Surface Water (RoFSW)

Low

Site Name: Car Wash site



Site
 Other Sites
 Water Courses
 Risk of Flooding from Surface Water
 High
 Medium
 Low

0 200 400 600 800 1,000 m

 © Crown Copyright and database rights 2018.
 Ordnance Survey 100019695
 Published using the Open Government License (OGL) version 3.0

Figure D Risk of Flooding from Surface Water (ROFSW)

Critical Drainage Area Group6_011 (96% Overlap), Group6_001 (4% Overlap)

Groundwater Source

Bedrock Geology	Thanet Sand Formation	Superficial Geology	Head - Clay, Silt, Sand, Gravel
Bedrock Aquifer Designation	Secondary A (100% Overlap)	Superficial Aquifer Designation	Secondary (undifferentiated) (100% Overlap)

Potential Groundwater Flooding Zone Zone A

Other Sources

Sewer Flooding (within 4 digit postcode) Internal Flood Incidents: 5 External Flood Incidents: 4

Artificial sources

Site Specific Recommendations

The site is predominantly located within Flood Zone 1. The other part of the site is located within Flood Zone 3. A small proportion of the area of Flood Zone 3 on the site is located in an area that benefits from High Ground flood defences. This part of the site is at residual risk of tidal flooding. More vulnerable development should be located within Flood Zone 1 where possible. The ROFSW map shows that the north of the site is at low risk of surface water flooding. An assessment of the local surface water flow paths should be made during the development of the site design to encourage the location of buildings, more vulnerable aspects of the development to be placed away from those areas at risk of surface water ponding.

Potential overland flow paths from surface water should be determined and appropriate solutions proposed to minimise the impact of the development, whilst ensuring that flows are not diverted towards other properties elsewhere. Developers should consider using design for exceedance approaches by using urban areas and infrastructure to help manage local flooding. Flow paths should be assessed to inform the strategic location of SuDS and techniques to route flows around the edge of buildings. Careful consideration should be given to the use of fences and landscaping walls so as to prevent causing obstruction to flow routes. Safe egress points would be most appropriately located to the west and south of the site to Mount Pleasant and Mineral Street. Reference to the SWMP Appendix D Figure D6 identifies that (prior to the completion of a site investigation to determine precise local conditions) infiltration of surface water into the ground is uncertain for the site. Site investigations will be required prior to the development of a Drainage Strategy for the site. Development should utilise sustainable urban drainage systems (SUDS) unless there are practical reasons for not doing so. The site is located within the Group6_011 Critical Drainage Area. The potential development must not increase flood risk to other areas within the CDA. Where an increased risk exists, developers need to provide a Drainage Strategy to demonstrate how they intend to address this, by what methods, over what timeframe and how maintenance of such works would be funded over its lifetime. This should include a consideration of SuDS in line with the London Plan 5.13 and Local Plan Policies. Surface water run-off should be managed in line with Royal Greenwich's surface water management requirements, as set out in Chapter 4 of the Developer Guidance.

Summary

The site is predominantly located within Flood Zone 1. A small proportion of the site is at residual risk of tidal flooding. The site is at low surface water flood risk. Tidal flood risk mitigation measures should be implemented into the site design to manage flood risk. It is recommended that effective surface water management measures are implemented, including careful site and building layout and the incorporation of SuDS, in order to reduce flooding both on the site and routing of flood water to other areas. On this basis, it is likely that this site could pass the Exception Test.