Site Name: Plumstead fire station and land adjacent to fire station Site Address: Plumstead Area (ha): 0.14 **Current Use:** Fire station **Proposed Use:** Mixed use, including Vulnerability More Vulnerable active retail and Classification: restaurant frontages on ground floor and residential above. Listed building must be retained and refurbished Fluvial Source: Flood Zone 1 Flood Zone 2 Flood Zone 3 Flood Zone 3b Area Benefiting from Defences: (0.1% AEP): 0% (5%AEP): 0% (<0.1% EP): (1% AEP): 0% 100% **Surface Water Source** Risk of Flooding from Surface Water (RoFSW) Medium Risk of Flooding from Surface Water © Crown Copyright and database rights 2018. Ordnance Survey 100019695 Published using the Open Government License (OGL) version 3.0 200 400 600 800 1,000 m Figure A Risk of Flooding from Surface Water (RoFSW) **Critical Drainage Area** Group6_011 (6% Overlap), Group6_001 (0% Overlap) **Groundwater Source Bedrock Geology Thanet Sand Formation Superficial Geology** N/A **Bedrock Aquifer** Secondary A (100% Overlap) **Superficial Aquifer** N/A Designation Designation **Potential Groundwater Flooding Zone Other Sources Sewer Flooding** Internal Flood Incidents: 5 External Flood Incidents: 4 (within 4 digit postcode) **Artificial sources Site Specific Recommendations**

An assessment of surface water flow paths should be made prior to site design, to encourage the location of buildings and more vulnerable aspects of the development away from those areas at risk of surface water ponding.

Although the site is within Flood Zone 1, it is good practice to set finished floor levels a minimum of 300mm above ground level in order to reduce the risk of flooding from surface water, which is at medium risk in this area. It is recommended that consideration is given to the flow of surface water during the development of the site masterplan and layout to ensure effective management of surface water flows. A number of flood resistance and resilience measures can be implemented into new developments to mitigate potential flooding. Guidance on resilience measures can be found in the document 'Improving the Flood Performance of New Buildings, Flood Resilient Construction' published by The Department for Communities and Local Government (CLG).

Surface water 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 and increasing the risk of flooding to the site or neighbouring areas.

Reference to the SWMP Appendix D Figure D6 identifies that (prior to the completion of a site investigation to determine precise

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local conditions) infiltration of surface water into the ground is potentially suitable 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 within Flood Zone 1 and in accordance with NPPF does not require the application of the Exception Test. However, the site is at Medium Risk of Surface Water Flooding. It is recommended that development is located away from the area at risk of surface water flooding. If the site will increase the risk of flooding, a drainage strategy should be provided to show how the site will be drained. Where possible, SuDS should be used to drain the site.