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SITE NAME: Depot Bruce Grove
 SITE LOCATION: Depot Bruce Grove, Orpington
 SITE AREA: 3564 sq.metres

FLUVIAL (RIVERS)

	% OF SITE	AREA (sq.m)
FLOOD ZONE 2	0	0
FLOOD ZONE 3A	0	0
FLOOD ZONE 3B	0	0

SUMMARY: The whole of the site is located within Flood Zone 1. In agreement with this, no recorded incidents of river flooding in this location are held by the Environment Agency.

SURFACE WATER

	% OF SITE	AREA (sq.m)	MAX ANTICIPATED DEPTH
HIGH RISK OF FLOODING:	0	0	0m
MEDIUM RISK OF FLOODING:	3	107	0.6m
LOW RISK OF FLOODING:	84	2994	1.2m

SUMMARY: Parts of the site are shown to be at 'Low' and 'Medium' risk of flooding from surface water, with a maximum anticipated depth of approximately 1.2m. Mitigation measures will be required to reduce or manage the risk of surface water flooding to the proposed development; consideration should be given to the impact of those measures on the risk of flooding in the surrounding area.

Subject to ground conditions, the site is suitable for bespoke infiltration SuDS and in the vicinity of a surface water sewer. The proposed development drainage should therefore use the full SuDS hierarchy as specified by Policy 5.13 of the London Plan.

GROUNDWATER

SUMMARY: The London Borough of Bromley does not hold any records of Groundwater flooding affecting the site. The British Geological Survey groundwater mapping however indicates that there is potential for groundwater to impact upon sub-surface development in this area. It is recommended that ground investigation is undertaken to estimate the depth of groundwater under the site, inform design of the development and its site specific flood risk assessment.

SEWERS

SUMMARY: There is a surface water sewer approximately 2 metres from the site boundary, the residual risk of flooding from the sewer as a result of blockage should be considered by a site specific Flood Risk Assessment (FRA). Thames Water should be consulted as part of the FRA to determine the capacity of this and any other sewers in the vicinity and their likelihood of surcharging.

ARTIFICIAL

SUMMARY: 73% of the site is in an area at risk of flooding in the unlikely event of a reservoir breach. The site specific Flood Risk Assessment should consider this as a residual risk and liaise with the London Borough of Bromley Emergency Planning team to identify suitable mitigation measures. Under the Reservoirs Act 1975, reservoirs in England and Wales are inspected and supervised by reservoir panel engineers and since 1925, no incidents resulting in the loss of life have taken place.

SITE SUMMARY

SITE ALLOCATION: The 'Depot Bruce Grove' site has been allocated for Residential use and is therefore classified as 'More Vulnerable' in accordance with Table 2 of the Planning Practice Guidance to the National Planning Policy Framework.

PLANNING IMPLICATION: There are no Main Rivers or Ordinary Watercourses within 500m of the allocated development site. The site is entirely located within Flood Zone 1 and is therefore an appropriate location for all development types, including Residential.

Legend

- Allocated Development Sites
- Borough Boundary
- Main River
- Culverted Main River
- Ordinary Watercourse
- Culverted Ordinary Watercourse
- Flood Zone 3 with a 70% allowance for climate change
- Risk of flooding from Rivers**
 - Flood Zone 3B
 - Flood Zone 3
 - Flood Zone 2
- Risk of flooding from Surface Water**
 - High risk of flooding (3.3% AEP)
 - Medium Risk of flooding (1% AEP)
 - Low risk of flooding (0.1% AEP)
- Risk of flooding from groundwater**
 - Limited potential for groundwater flooding to occur
 - Potential for groundwater flooding of property situated below ground level
 - Potential for groundwater flooding to occur at surface
- Suitability for infiltration SuDS**
 - Highly compatible for infiltration SuDS
 - Opportunities for bespoke infiltration SuDS
 - Probably compatible for infiltration SuDS
 - Very significant constraints are indicated
- Flood Risk from Reservoirs**
 - Reservoir flood extents

USE THE BUTTONS BELOW TO DISPLAY / HIDE DIFFERENT SOURCES OF FLOOD RISK TO THE ALLOCATED SITE.

RISK OF FLOODING FROM RIVERS AND SEA

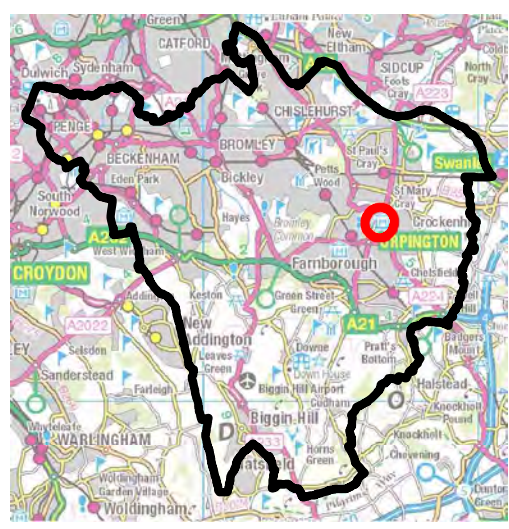
RISK OF FLOODING FROM SURFACE WATER

RISK OF FLOODING FROM GROUNDWATER

SuDS SUITABILITY

RISK OF FLOODING FROM RESERVOIRS

SITE LAYOUT



ORIGINATED	BN	15/05/2017
CHECKED	JB	16/05/2017
VERIFIED	GP	17/05/2017

