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Flood Risk and SuDS Statement

April 2021

FLOOD RISK AND SUSTAINABLE DRAINAGE FEASIBILITY STATEMENT

For

Eagle Mews, 146-150 Royal College Street

London NW1 0TA

For

Cumbrae Properties

Prepared by:	HartDixon
Reference:	20098 fra and sustainable drainage statement
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Date: 27 April 2021

1.0 INTRODUCTION

1.1 This statement sets out the proposals examined by the professional design team appointed by the owner for sustainable surface water drainage from the new building to be constructed at 146-150 Royal College Street London NW1 0TA.

1.2 The development site is currently a private car park and part of a larger property as shown on the image below. The remainder of the property is former warehouse buildings that were converted to offices some years ago.

146-150 Royal College Street property outline of property and new building

1.3 This statement should be read in conjunction with other information which describe the history, size and of the existing building and extension in more detail.

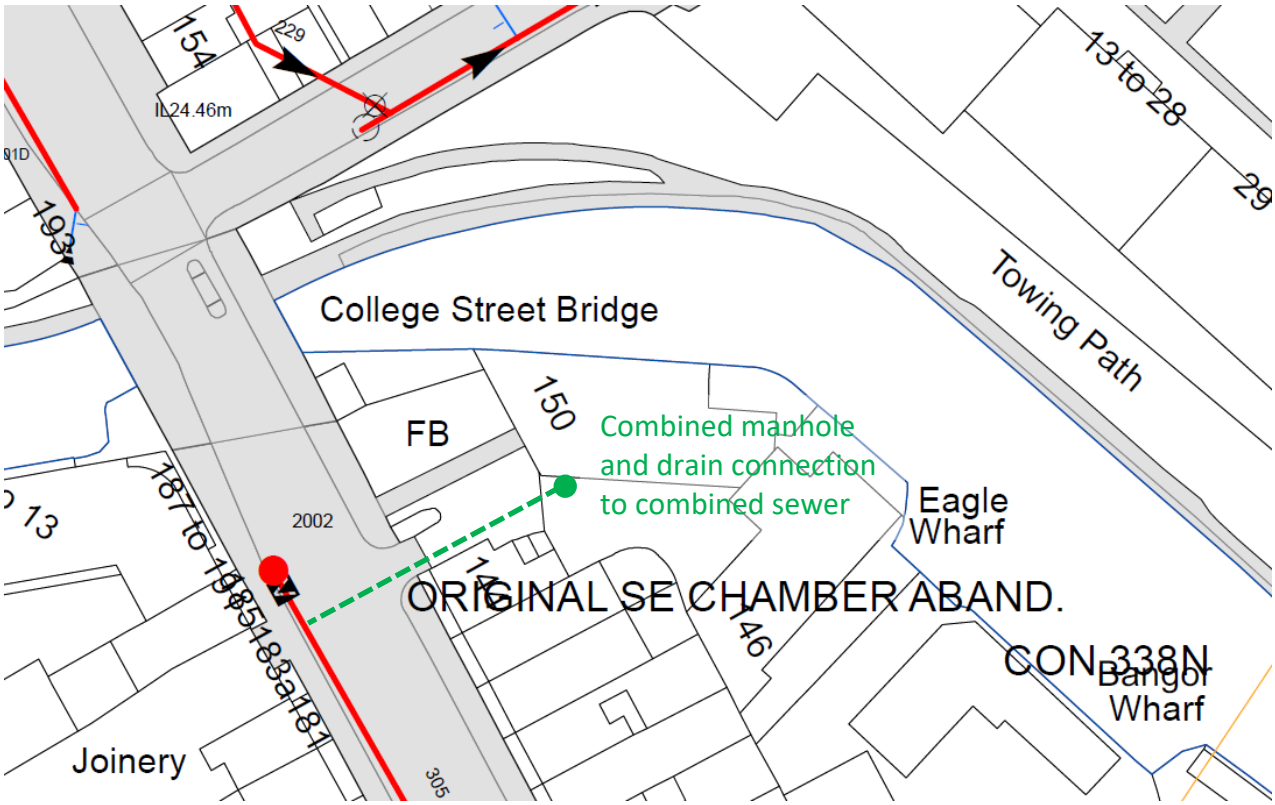
1.4 The statement incorporates advice provided by other members of the design team engaged on the new building

1.5 This report considers the detailed application of national, London wide and local policies in relation to both flood risk and sustainable drainage.

2.0 EXISTING SITE AND DRAINAGE

2.1 The development site was mostly occupied by residential houses similar to those to the south along Royal College Street until the 1960's. At this point they appear to have been demolished to provide a car park and access to the warehouse buildings to the rear of the property. The majority of the area proposed for the development is impermeable hard standing.

2.2 Surface water from gullies in the car park is piped to a sump which also collects rainwater and foul water from the office buildings. The combined effluent connects to the combined sewer which runs along Royal College Street as shown on the sketch below.

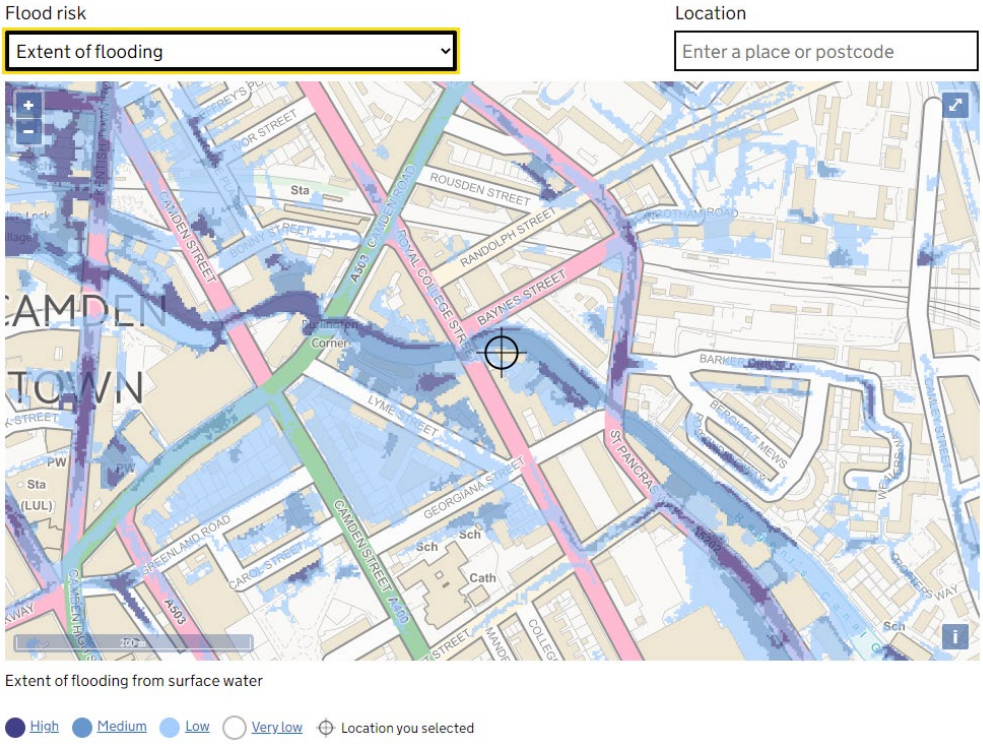


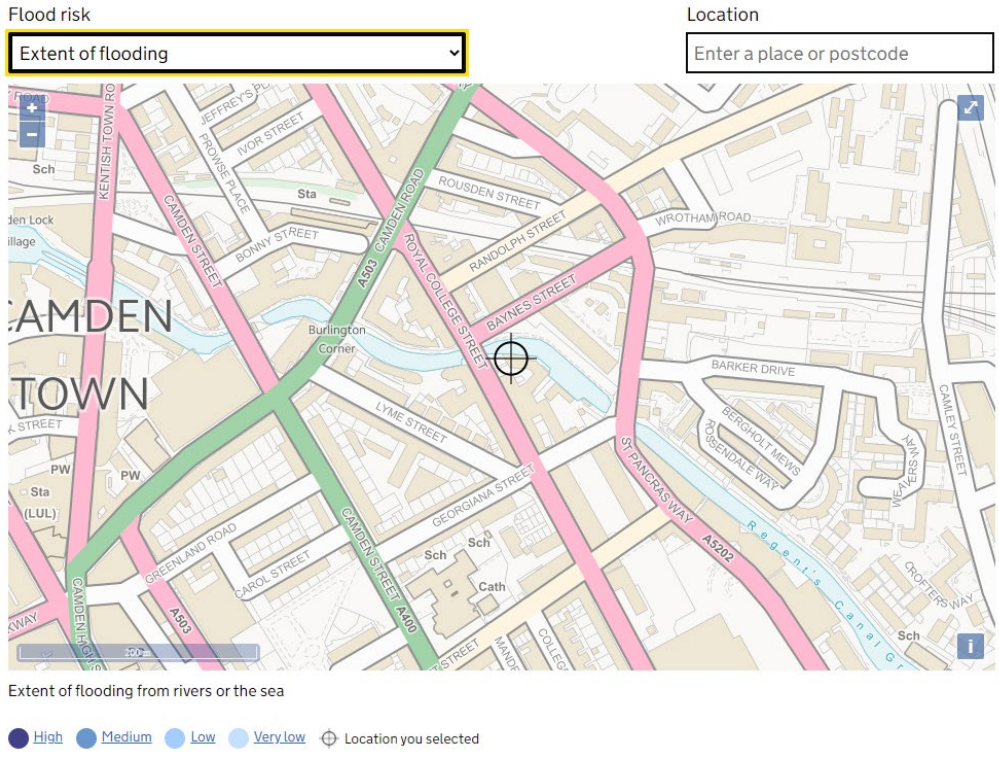
Part plan from Thames Water records of utility sewers marked up to show existing connection

3.0 FLOOD RISKS

3.1 The site is located in Environment Agency Flood Zone 1 and is less than 1 hectare, a formal flood risk assessment is not therefore required.

3.2 The images below have been taken from The Environment Agency on line tool. These indicate that there is a low risk of surface water flooding to part of the area and no risk of flooding from the adjacent canal





3.3 The design of the new building places the single entrance door at the top of a slope down into the existing courtyard as shown on the Architects drawings submitted with the planning application. It can be concluded that there is no other requirement for flood risk mitigation for the new building.

4.0 PROPOSED BUILDING AND DRAINAGE DESIGN

4.1 The proposed building is a 4 storey office with toilets on each floor as shown on the Architects plans and images submitted with the planning application with a total gross internal area of less than 800m², below the threshold for major developments.

4.2 New toilets and provisions for tenants showers and tea points will drain into the existing sewer connection. Rainwater collected from the roof of the new building will be collected and discharged into the canal. Some of this rainwater will be collected and stored to irrigate the new planting along the canal edge.

4.3 All outlets in the new building will be fitted with water saving devices to meet BREEAM requirements for excellent.

4.4 The new foul water discharge is much less than the current surface water from the existing car park so is a net reduction in discharge to the public sewer.

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5.0 POLICIES RELATING TO SUSTAINABLE DRAINAGE

The applicable local authority policy is Camden Planning Guidance Water and Flooding March 2019, the following paragraphs detail the proposals for compliance with this policy.

6.0 SUSTAINABLE DRAINAGE OPTIONS CONSIDERED

The following options have been considered in accordance with the drainage hierarchy set out in section 3.11 of the above policy:

SUDS drainage hierarchy	*Suitable for the site (Y/N)*	*Comment*
Store rainwater for later use	Y	Some rainwater collected from roof will be collected and used to irrigate new planting at ground floor
Use infiltration techniques	N	No soakaway areas are available within the confines of the land ownership
Attenuate rainwater in ponds or open water features for gradual release	N	No suitable areas are available within the confines of the land ownership or nearby
Attenuate rainwater by storing in tanks or sealed water features for gradual release	N	No suitable areas are available within the confines of the building ownership or nearby
Discharge rainwater direct to a watercourse	Y	Rainwater will be discharged into the adjacent canal
Discharge rainwater to a surface water sewer/drain	N	No surface water sewer is available
Discharge rainwater to the combined sewer	N	Rainwater will be discharged into the adjacent canal

7.0 WATER EFFICIENCY AND RAINWATER REUSE

7.1 All WC's in the building will be fitted with low flush volume cisterns, basin taps and showers will be fitted with restrictors to limit water flow.

7.2 Rainwater from the roof of the new building will be discharged into the adjacent canal

7.3 Some rainwater collected from the roof of the new building will be stored and used for irrigation of new planting at ground floor level.

7.4 In summary the proposal for water efficiency and rainwater re-use satisfies the Camden Planning Guidance Water and Flooding March 2019.