



Officer Report

Application Number: HGY/2023/0344
Application Type: **Approval of details reserved by a condition**
Address: Strategic Development Partnership (SDP) Sites, Welbourne, North Island, Ferry Island, Ashley Road East and Ashley Road West, Station Road, London, N17,
Proposal: Approval of details pursuant to Conditions B3 (Drainage – Attenuation Details) and B4 (Drainage - Design Implementation, Maintenance Management) in relation to Plot B (FERRY ISLAND site) of the Tottenham Hale Centre development planning permission (LPA ref: HGY/2018/2223) dated 27 March 2019
Case Officer: Philip Elliott
Valid Date: 03/02/2023
Applicant: Refer to Company Name
Agent: Matthew Eyre

RECOMMENDATION

Approve

REPORT FOR CONSIDERATION UNDER DELEGATED POWERS

1. APPLICATION DETAILS

Reference No: HGY/2023/0344

Ward: Tottenham Hale

Date received: 03/02/2023

Last amended date: N/A

Drawing number of plans: Surface Water Drainage Strategy Ferry Island dated 5th December 2021 by Whitby Wood.

Address: Strategic Development Partnership (SDP) Sites, Welbourne, North Island, **Ferry Island**, Ashley Road East and Ashley Road West, Station Road, London, N17

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Applicant: Midgard Ltd.

Officer contact: Philip Elliott

2. APPROVED DEVELOPMENT

Planning permission (Reference: HGY/2018/2223) was granted on 27/03/2019 for: Demolition works and clearance of existing site to provide a mixed-use development comprising 6 buildings up to 38 storeys in height, which together with pavilion and basement accommodation will provide up to 104,053m² of floorspace (GIA), comprising residential (Use Class C3) (up to 1,036 units), retail (Use Class A1-A4), health centre (Use Class D1), office (Use Class B1), leisure (Use Class D2) parking and servicing areas, hard and soft landscaping (including the provision of a new public square), highways works, creation of new vehicular accesses and the realignment of Station Road, decentralised energy network works and other associated works.

3. CONSULTATION RESPONSE

Flood & Water Management Lead (Lead Local Flood Authority (LLFA))

Thursday, December 21, 2023, comments

After reviewing the applicant's submitted Surface Water Drainage Strategy dated 5th December 2021 as prepared by Whitby Wood, we would like to request that the applicant utilises more up to date FEH rainfall datasets rather than usage of FSR rainfall method for the hydraulic calculations.

The model results should be provided for critical storm durations of each element of the system and should demonstrate that there is no surcharging of the system for the QBAR rainfall, no flooding of the surface of the site for the 3.3% (1in30) rainfall, and flooding only in safe areas for the 1% (1in100) plus climate change.

Officer note: The drainage consultants, Whitby Wood, prepared the original drainage strategy for the planning application and have been involved with submissions for the approval of details of similar conditions on the other plots. They reviewed the requested change in modelling approach and disagree based on the following reasons:

- *The approved strategy in the planning permission and subsequent detailed plot designs to date are based on the FSR approach and 1 day storm durations. These form a wider strategy across the plots, with Plot B being the largest. This approach was agreed as part of the planning permission and is used as the baseline for the detailed design.*
- *Changing the approach now would be a fundamental and onerous change to the way the entire surface water drainage network is modelled and would likely result in an increased attenuation requirement, with the greatest impact on Plot B due to it having the largest area of public realm and hard landscaping.*
- *The original approach has been used in the approval of details on Plot A (Conditions A3/A4 Ref: HGY/2021/0079), Plot D (Conditions D3/D4 Ref: HGY/2020/1610), and Plot E (Conditions E3 and E4 Refs: HGY/2019/3118 and HGY/2019/3121).*
- *Accordingly, the suggested change of approach for the last plots deviates from the agreed strategy as part of the planning permission, the impacts of which are most onerous on Plot B due to it being the largest and could lead to effects on drainage in completed plots.*
- *As a result, Whitby Wood do not agree with changing the modelling approach at this late stage as the modelling submitted pursuant to Conditions B3/B4 demonstrates the proposals are consistent with the approved drainage strategy set out in the July 2018 Tottenham Hale Centre Flood Risk Assessment.*

Wednesday, February 14, 2024; and Monday, April 22, 2024, comments (summarised)

Current available guidance and standards should be followed that uses the FEH rainfall method as opposed to the submission which reflects the drainage strategy approved in 2018 and is based on FSR and 1 day storm durations.

I agree that using the FEH rainfall dataset may increase the storage by 20% to 30%. I have also noted the site constraints in terms of shallow utility depths, tree pits, DHN network etc but these are not LLFA's concerns. Current standards should be followed.

Officer note: The drainage strategy was agreed in the original planning permission and incorporated into the proposals. A change in methodology and an increase in requirements at this stage, i.e. the last plot would be a departure from the approach approved across other plots and would be inconsistent. Whilst Plot C utilised an FEH approach, that site was sufficiently unconstrained to allow for it to be applied.

The FEH and FSR approaches use different rainfall data sets as the basis of the hydraulic modelling. The FSR approach has been used at planning stage and ever since, up to the current construction stage design with the exception of the approval of drainage details for Plot C.

The rainfall intensities can be quite different between the two approaches, in some areas the FSR data has a greater intensity, in some areas the FEH has a greater intensity. Typically, in London and the South-East, the FEH data set can have rainfall intensities that are up to 40% higher than the FSR data. This has a significant impact on the hydraulic modelling results and can result in very significant increases in attenuation being required, which for this site could be in the region of 40%.

The site is very congested, with blue roofs being utilised on the building roofs, and below ground attenuation used within the plot boundary. There are many constraints on the site, and it is not feasible to increase the below ground attenuation volume at this stage of the project. The following factors constrain the tank depths and plan area (and therefore volume):

- *The shallow depth of the public sewer, which means the depth of the attenuation is limited.*
- *The tanks must pass over the proposed basement, again limiting the depth of tanks.*
- *The large number of tree pits across the site reduce areas available for attenuation.*
- *Services coordination constrains tank areas.*
- *Extensive DHN infrastructure that significantly restricts the areas that the tank can extend into.*

As can be seen from the drainage drawings, the unusual shape of the below ground tanks indicates that the applicant has had to try and fit it in around the above constraints, and that increasing this volume would not be feasible.

The site is already designed to accommodate a 1 in 100-year return period storm with a 40% increase in rainfall intensity allowance for climate change. As is the principle of the SuDS approach, the site is providing the maximum reduction in surface water discharge rate from the site, when all the constraints are considered.

4. ANALYSIS/ASSESSMENT

Condition B3 reads:

B3) Drainage – Attenuation Details (LBH Local Lead Flood Authority)

Prior to the commencement of the Plot B development other than demolition, below ground and building core works, full details of the drainage attenuation in respect of Plot B shall be submitted in writing to and for approval by the local Planning Authority.

Attenuation measures shall demonstrate compliance with the relevant London Plan (2016) Standards, in relation to greenfield runoff rate, and the approved details shall then be implemented as approved and maintained thereafter.

REASON: to mitigate flood risk.

Condition B4 reads:

B4) Drainage – Design Implementation, Maintenance Management (LBH Local Lead Flood Authority)

Prior to commencement of the Plot B development other than demolition, below ground and building core works, details of design implementation, maintenance and management of the sustainable drainage scheme

in respect of Plot B shall be submitted in writing to and for approval by the Local Planning Authority, those details shall include:-

- i) Information about the design storm periods and intensity, discharge rates for both pre and post development, means of access for maintenance, methods used to control surface water discharge from the Plot.
- ii) Any works required off site to ensure adequate discharge of surface water without causing flooding.
- iii) Floodwater exceedance routes, both on and off site.
- iv) Timetable for implementation.
- v) A detailed management maintenance plan for the lifetime of the Plot B development, which shall include arrangements for adoption by an appropriate public body or statutory undertaker, management by Residents management company or other arrangements to secure the operation of the drainage scheme throughout the lifetime of the Plot B development.

The scheme shall be implemented, retained, managed and maintained within Plot B in accordance with the approved details.

REASON: To prevent increased risk of flooding to improve water quality and amenity to ensure future maintenance of the surface water drainage system.

Pursuant to Conditions B3 and B4 the applicant has submitted a Surface Water Drainage Strategy. It includes details of the drainage attenuation in respect of Plot B and demonstrates compliance with the relevant London Plan (2016) Standards in relation to greenfield runoff rate.

The Strategy includes details of design implementation, maintenance and management of the proposed sustainable drainage scheme for Plot B which includes blue roofs, drainage channels, and attenuation tanks.

The concerns from the Flood & Water Management Lead (LLFA) regarding the rainfall data sets used to identify the required amount of attenuation are acknowledged. However, the strategy follows other approval of details applications (that have been approved and discharged) that utilised the method proposed under the original permission.

The network would be designed to accommodate a 1 in 100-year storm event without flooding, whilst also providing an allowance of 40% increase in rainfall intensity for climate change. The site constraints such as the location of the sewer, basement, services and heat network infrastructure, and tree pits reduce areas available for attenuation. The maximum amount of attenuation has been provided given these constraints and, as such, the details are considered to be acceptable.

5. RECOMMENDATION

APPROVE THE DRAINAGE – ATTENUATION AND DESIGN IMPLEMENTATION, MAINTENANCE MANAGEMENT DETAILS RELATING TO PLOT B (FERRY ISLAND SITE) RESERVED BY CONDITIONS B3 AND B4 ATTACHED TO HGY/2018/2223.

As shown on approved drawings/documents: Surface Water Drainage Strategy Ferry Island dated 5th December 2021 by Whitby Wood.