3948 - NEW CITY COURT
Consultation Responses – Comments relating to Drainage

Flood resistance and resilience
At a number of locations on the ground floor, the proposed finished floor levels are below the maximum modelled water level of 4.75 m AOD based on Environment Agency breach modelling data. Specifically, at the northeast (FFL = 4.65 m AOD) and southeast of the site (FFL = 3.5 m and 4.7 m AOD), indicated on drawing P120 (Tower TN03 GA Plans – Level G).

We would therefore recommend that finished floor levels should be raised a minimum of 300 mm above the modelled 2100 year maximum water level, anticipated through a breach of the River Thames defences, in line with Southwark's Strategic Flood Risk Assessment (SFRA) 5.2.6. Where this is not achievable, or flood depths of above 600 mm are anticipated, flood resistance and resilience measures should be adopted to mitigate the potential damage to property in case of flooding; these measures depend on the estimated flood depth and type of development and further guidance can be found in our SFRA (e.g. 5.2.7) and from the Environment Agency: www.gov.uk/guidance/flood-risk-assessment-in-flood-zones-2-and-3#extra-flood-resistance-and-resilience-measures

We note that flood barriers have been proposed as a mitigation measure in the Flood Risk Assessment. Please note that barriers are not a preferred flood resistance measure, outlined in our SFRA below, and we would therefore like to see proposals for alternative flood resistance and resilience measures in line with the above guidance.

"The use of temporary resistance measures is considered appropriate for existing properties, however they are not recommended for new development. This is because the temporary measures require intervention to function plus continued maintenance procedures which cannot be guaranteed. Permanent flood resistance measures such as use of low permeability materials to prevent water ingress are therefore recommended for new development." SFRA, 5.2.7.

AKT II Response:

The existing Georgian terrace properties on St Thomas Street have Finished Floor Levels set above the Environment Agency breach water level of 4.75m AOD (FFL varies from 5.22m to 4.97m). As these are existing buildings we understand that the current arrangement is considered to be appropriate.

Existing Keats House will have the FFL (4.65m AOD) set below the EA breach level of 4.75m AOD and therefore, temporary flood protection barriers are proposed as mitigation measures which we understand are considered appropriate for existing properties.

With regards to the new development the majority of the building has the FFL of 5.00m which is set above the EA flood level of 4.75m AOD.
The gym and retail areas to the East will have the FFL set at 4.70 and the single retail unit at King's Head Yard will have the FFL of 3.50m AOD and therefore, the following flood resilience measures in addition to temporary flood barriers are proposed;

- *use of water resistant wall coatings,*
- *electrical wiring above the breach level and carried down from the ceiling.*

The new vehicular access on King's Head Yard will be protected by a permanent barrier as it is not possible to raise the access point above the EA breach level due to the existing levels.

Drainage strategy

We are pleased to see proposals to limit surface water discharges through the use of Sustainable Drainage Systems (SuDS), including blue roofs. Southwark Council typically requires development to limit surface water discharges to greenfield runoff rates, estimated at 3.81 l/s for the site; however, we can accept the proposed rate of 5 l/s in this instance.

Since the proposed drainage strategy is preliminary, I would therefore like to recommend the following Condition:

Condition (drainage strategy)

No works shall commence until a detailed surface water drainage strategy, incorporating Sustainable Drainage Systems, has been submitted to and approved in writing by the Local Planning Authority. The strategy should limit surface water runoff rates as detailed in the Drainage Strategy prepared by AKT II (dated November 2018) during the 1% Annual Exceedance Probability (AEP) event plus climate change allowance. The site drainage must be constructed to the approved details.

Reason: To minimise the potential for the site to contribute to surface water flooding in accordance with Southwark's Strategic Flood Risk Assessment (2017) and Policy 5.13 of the London Plan (2015).

AKT II Response:

Noted.

Basement Impact Assessment

A preliminary Basement Impact Assessment (BIA) has been submitted based on a desktop study (prepared by AKT II, 27/11/18). This document outlines additional data requirements including ground investigations to inform a full BIA, therefore, I would like to propose the Condition below.

Since the proposed basement (SSL = -4.65 m AOD) is below the groundwater level observed at historic boreholes, we would like the full BIA to consider how the proposals will impact on groundwater levels and propose mitigation measures, as appropriate.

Condition (Basement Impact Assessment): No works shall commence until suitable investigations are undertaken to determine the ground and groundwater conditions (including levels) at the site and a basement impact assessment is submitted to and approved in writing by the Local Planning Authority. This should include groundwater flood risk mitigation measures as required, with the measures constructed to the approved details. Specifically we would like the BIA to assess if the lowest level of the basement will be above, or below the groundwater levels recorded from the ground investigations. We would like the applicant to consider fluctuations in groundwater levels and the risks this can pose to the

site. We request that the BIA includes a plan of the basement area within the boundary of the site, with any known (investigated) basements and subterranean structures adjacent to the site. This is to see if there may be a risk of obstructing groundwater flows which could potentially cause a build up of pressure on the upstream side of the subterranean structures. Further guidance on preparing BIAs can be found in Appendix I of Southwark's Strategic Flood Risk Assessment: https://www.southwark.gov.uk/environment/flood-risk-management/strategic-flood-risk-assessment-sfra?chapter=2
Reason: To minimise the potential for the site to contribute to changes in groundwater conditions and any subsequent flooding in accordance with Southwark's Strategic Flood Risk Assessment.

AKT II Response:
Noted.

Water Comments: *Following initial investigations, Thames Water has identified an inability of the existing water network infrastructure to accommodate the needs of this development proposal. Thames Water have contacted the developer in an attempt to agree a position on water networks but have been unable to do so in the time available and as such Thames Water request that the following condition be added to any planning permission. No properties shall be occupied until confirmation has been provided that either:- all water network upgrades required to accommodate the additional flows from the development have been completed; or - a housing and infrastructure phasing plan has been agreed with Thames Water to allow additional properties to be occupied. Where a housing and infrastructure phasing plan is agreed no occupation shall take place other than in accordance with the agreed housing and infrastructure phasing plan. Reason - The development may lead to no / low water pressure and network reinforcement works are anticipated to be necessary to ensure that sufficient capacity is made available to accommodate additional demand anticipated from the new development. The developer can request information to support the discharge of this condition by visiting the Thames Water website at thameswater.co.uk/preplanning. Should the Local Planning Authority consider the above recommendation inappropriate or are unable to include it in the decision notice, it is important that the Local Planning Authority liaises with Thames Water Development Planning Department (telephone 0203 577 9998) prior to the planning application approval.*

The proposed development is located within 15m of our underground water assets and as such we would like the following informative attached to any approval granted. The proposed development is located within 15m of Thames Waters underground assets, as such the development could cause the assets to fail if appropriate measures are not taken. Please read our guide "working near our asset" to ensure your workings are in line with the necessary processes you need to follow if you're considering working above or near our pipes or other structures. https://developers.thameswater.co.uk/Developing-a-large-site/Planning-your-development/Working-near-or-diverting-our-pipes. Should you require further information please contact Thames Water. Email: developer.services@thameswater.co.uk
There are water mains crossing or close to your development. Thames Water do NOT permit the building over or construction within 3m of water mains. If you're planning significant works near our mains (within 3m) we will need to check that your development doesn't reduce capacity, limit repair or maintenance activities during and after construction, or inhibit the services we provide in any other way. The applicant is advised to read our guide

working near or diverting our pipes. https://developers.thameswater.co.uk/Developing-a-large-site/Planning-your-development/Working-near-or-diverting-our-pipes.

AKT II Response:
Noted.

Waste Comments
Thames Water would advise that with regard to the combined water network infrastructure capacity, we would not have any objection to the above planning application, based on the information provided.

AKT II Response:
Noted.