70 Ember Farm Way
East Molesey
Surrey, KT8 OBL
6th July 2023

Dear Jack,

I am submitting an objection to the application 2022/3525 (Molesey Venture Site, Orchard Lane, East Molesey) on the grounds that the Flood Risk Assessment provided to support the application completed by KRS Environmental and the commissioned by Lifestyle Residences and Sons of the Divine Providence does not adequately assess the flood risk of the development. There are 4 areas of concern:

(1) There is little evidence that the basement development has been assessed for its impact on ground water or conveyancing routes of surface water. The applicant has not provided any evidence that the basement will not cause harm to the local water environment, hydrogeology, ground conditions or biodiversity on the site.
(2) The applicant has provided no evidence that a Sequential Test or Exception Test has been done and passed.
(3) The report focuses on mitigating flood risk for the development but does not demonstrate that it does not increase flood impact else where outside the site.
(4) There are a number of inaccuracies or unsubstantiated statements within the FRA

1)Proposed Basement Assessment

The only significant reference to the basement in the FRA is with regard to mitigation measures such as raising the basement entrance. The assessment of the potential impact of the basement developments under Buildings A and C seem superficial. The applicant's flood assessment dated May 2023 stated that there were no below surface infrastructure and buildings located or proposed for the site: see exact below

'3.10 Groundwater Flooding Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded. Groundwater flooding tends to occur sporadically in both location and time. When groundwater flooding does occur, it tends to mostly affect low-lying areas, below surface infrastructure and buildings (for example, tunnels, basements and car parks) underlain by permeable rocks (aquifers). No below surface infrastructure and buildings are located or are proposed for the site. The risk of flooding from groundwater flooding is considered to be not significant.'

After I highlighted this omission on 21/6/2023 a new FRA was submitted on the 26/6/23. This updated version has superficial analysis of the geological and ground water conditions. It references no ground water being observed in boreholes to depths 2.1 (mBGL) in the South West of the site based on planning application 2011/5700. The basement is not being built in the South West of the site, it is being built in the North of the site where the land is lower. Having reviewed the FRA for application 2011/5700 there is no mention of these boreholes. The Applicant's FRA should substantiate their statement with the data. There is also a reference to no ground water being encountered to 1.5(mBGL) in recent borehole investigations on site. I would ask that it is detailed when and where these were done. Local neighbours were aware that site investigations were being carried out last summer. It was during a period of prolonged dry weather. Groundwater levels can fall during prolonged dry weather so this is not an accurate representation of the ground water levels on the site under normal conditions. Thames Water comments on pg.2 of its Project Brief document for moving the water main (dated 09/11/2022) that ground water has been identified at 1.5m below ground level: '*From proximity to the water course and nearby boreholes where ground water was identified approximately 1.5m below ground level, it is assumed that dewatering will be required. Geotechnical ground investigations for soil properties and groundwater levels will be required during detailed design to understand the geology within the area.'*

The basement carpark under Building A is being built to a depth of 3.1m, well below the ground water level which is probably around 1.5m in the area. The approximate GEA sq m of the basement development under building A and C is 2,462 sq m. The site is 0.75 hectares (7500 sq m.) so 33% of the site area is going to have basement development below ground. No detailed assessment of the impact of this change has been provided. It is likely that the building of

this basement would require dewatering. This can have a significant impact on a wide area because ground water can be drawn down and could impact on ecology, trees, foundations etc. The extent of the impact will depend among other things on the hydraulic gradient and porosity of the superficial deposits. There is no evidence provided showing the impact of this construction. In the longer term again it has not been demonstrated that there will be no adverse impact on ground water flows, the environment and biodiversity, ground stability and neighbouring properties from the basement development.

It is interesting to note that many London Boroughs have stringent requirements that need to be satisfied for planning applications for basement developments. These include screening questions to indicate whether a full Basement Impact Assessment is required for the application. I have included an extract below of some of the typical screening questions with regard to ground water. If the answer to any of these is yes or unknown further investigation is required. For this site the answer to at least 2 of these is yes suggesting the basement aspect of the development should require further investigation.

1) Is the site located directly above an aquifer?
2) Will the proposed basement extend below the water table?
3) Is the site within 100m of a river, well or potential spring line?

For your reference I have attached the Basement Assessment document for planning applications from the London Borough of Richmond.

Thames Water made a comment in the Regulation 19 consultation for the New Local Plan that: *'As a result of their subterranean nature, basement developments that are connected to the sewerage network can be at risk of sewer flooding from surcharge of the sewers should sewers become overloaded. As a result, additional text should be added to the policy in relation to basement flooding'* pg. 26 Draft Regulation 22 Statement of Consultation June 2023. In their objection dated 09/06/2023 Thames Water highlight that the proposed development is within 15m of a strategic Sewer. Again any impact on sewage flooding by the basement development has not been detailed in the FRA.

I do not believe that is would be prudent for the LPA to grant planning permission for this development without a Basement Impact Assessment. It is difficult to see how the LPA can be satisfied that it has been demonstrated that the proposed basement development is safe and will not increase risk elsewhere. I would request that the LPA commission a Basement Impact Assessment conducted by an independent 3rd party company. Certainly, as a local resident I am not satisfied that the impact of the proposed basement has been adequately assessed, shown to be safe with no adverse impacts for the site, environment or neighbours.

2) Sequential Test and Exception Test

As the site is in both Flood Zone 2 and 3 a sequential test would be applicable in this case. The FRA section 6.0 Sequential Test pg.34 states '*The Site Allocations section (Chapter 9) of the LPA's emerging Local Plan, confirms that the application site (reference D6/US462) is proposed to be allocated for the delivery, within 1-5 years, of 61 additional residential units (i.e. in addition to the existing units). The site should, therefore, be deemed to have passed the Sequential Test*.'

However in the Draft Regulation 22 Statement of Consultation for the Emerging Local Plan (June 2023) the Environment Agency have commented '*The Environment Agency consider the plan to be unsound as it is not consistent with national policy or justified by the evidence base. According to their Flood Map, 31 residential sites and four employment sites are located in Flood Zone 2 and 3. These sites have not been sequentially tested, and the Exception Test has not been applied, in accordance with paragraphs 161-165 of the NPPF.'*

I would therefore assume that a sequential test has not been done for this site. As a result the application is contrary to the NPPF and Elmbridge LPA Flood Risk Management policies.

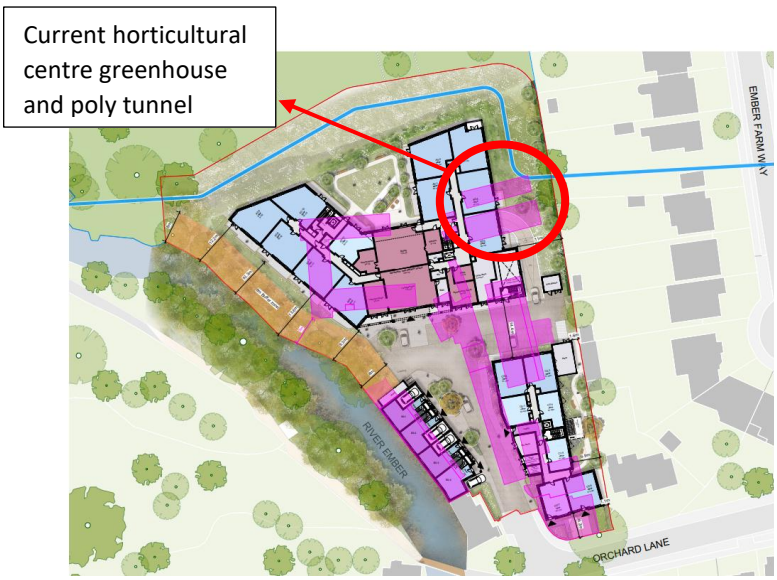
The FRA section 6.3 Wider Sustainability Benefits goes onto justify the sustainability benefits of the proposed development. It is not clear how these are substantiated to justify the conclusion that the development would pass the Exception Test. Below are just a few examples of claims of sustainability of the development that are unsubstantiated or inaccurate: -

- *'The development will see disused land come forward for redevelopment and will be actively used and has presented the opportunity to create a quality affordable and sustainable development' (FRA June 2023 pg.36)*. The land is not disused it is currently occupied by tenants.
- *'In respect of landscape impact and effect the scheme aims to conserve and enhance the character of the landscape. The proposals would not materially impact on the character of the landscape therefore, it would be preserved and improved. The landscape impact will be low on this site and surrounding area already has the infrastructure to deal with residential development'. (FRA June 2023 pg. 37)*. The proposal involves the removal of 14 mature trees and 4 groups of trees which contain approx. another 10 trees. The size and scale of the proposed blocks of flats will be overbearing. It doesn't enhance or respond positively to the local environment. The development reduces the landscaped areas vs. the current site.
- *'The site is sustainable and within walking distance of the local community and services*.' '*a highly sustainable location well-served by public transport and close to local facilities. The existing transport infrastructure will be utilised and there will be no need for new infrastructure near the site.' (FRA June 2023 pg. 36).* The development is aimed at +65 age group. The nearest supermarkets are in Molesey district centre which is c. 1,770m and on the Portsmouth road which is c. 1,127m. It is inevitable that the demographic are likely to use cars to access these facilities. Indeed, SCC consultation to this response to the application stated *'It is proposed that many of the residents of the development would be over 60 years old and some may therefore have limited mobility. Nearby public transport facilities within a short access distance of the site would therefore be necessary to avoid increased car based trips. The applicant has not proposed any improvements to existing bus services or infrastructure. As part of any Section 106 negotiations, a contribution towards maintaining and enhancing local bus services and/or infrastructure which will support the sustainability of this site should be sought*'. The main bus route is the 515 the nearest stop for this 800m south of the site on Ember Lane and it only offers an hourly service. It doesn't operate on Sunday's or Bank Holidays and finishes at 7pm.
- *'The scheme will also see the integration of modern methods of construction, minimising future energy use. The design is also actively seeking to minimise the embedded carbon footprint within the construction materials.' (FRA June 2023 pg. 36)* I wonder what the carbon footprint is for the unnecessary moving of the Thames Water Main?

3) Not Increasing Flood Risk Elsewhere

The FRA states that the development does not increase the flood risk elsewhere. Most of the FRA talks to mitigating flood risk on the site. One way it is proposing to do this is by raising the FFL by around 45cm-1m depending on the area of the site. The 1 in 100 year (+20%) flood event map below shows that the North of the site would be subject of flooding. In the North East area of the site the ground level is c. 8.44m AOD. It is relatively undeveloped currently only containing a greenhouse and poly tunnel. It is proposed that there would be an increase in built over area in the North East of the site to accommodate Building A. The ground level is proposed to be raised to 9.45m AOD to make Building A safe in the event of flooding. The North West area of the site is c. 8.70mAOD (Node 53471). The built over area is also being increased.

The FRA admits that in the 1 in 100 year (+20%) scenario the North East of the site '*may be inundated with floodwater'*. The mitigation measures above may protect the proposed development but there is no further evaluation of whether the development would have an adverse impact on the surrounding area. Flood water during a 1 in 100 year (+20%) flood event will need to go somewhere. It has not been demonstrated that as a result of this development that the flood water wouldn't be pushed towards either the River Mole causing flooding further downstream or towards Ember Farm Way increasing risk there. This added to the lack of robust assessment on the impact of the basement development on flooding demonstrates that the applicant has not effectively shown that the development will not increase flood risk elsewhere.



Appendix map showing current build footprint vs. proposed built footprint

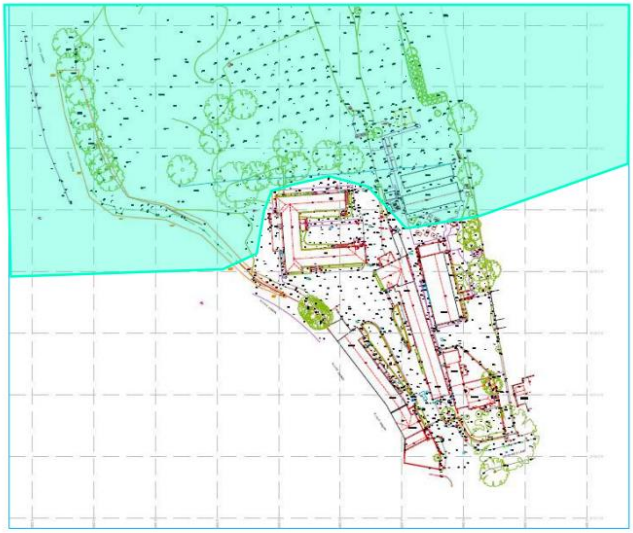


Figure 8 - 1 in 100 Year (+20%) Flood Outline

I also note some other statements in the FRA which I consider a cause for concern:

Section 4.1 Calculation of Net Loss or Gain in flood storage capacity the report states:

'The proposed development proposes minimal new structures compared to the existing situation and will therefore allow floodwater to pass through the site with minimal effect on the conveyance routes. Therefore, mitigation measures are not required.'

The comparison of current built area to proposed built area seems to me to show there is a reduction in conveyance routes North to South through the site driven by the size and scale of Building A. Building A fills nearly the entire site from West to East. Site width is approximately 76m at the location of Building A. There will only 2 gaps across the site of 11m on the East and 8m on the west. There are currently 3 gaps between the buildings.

Later in the same section it observes:

'As per Page 17 of the SFRA the proposed development will result in a net reduction in flood risk and will ensure that floodplain storage and flow routes are not affected by:

1. Maintaining a similar built area compared to the existing situation'

The map above (which is provided in the appendix of the flood assessment) shows the current structures in purple vs. the proposed new structures. The buildings highlighted by the red circle are green houses. I am unclear how point 1 above is substantiated as there clearly is an increase in the built area. The GIA of the existing buildings is stated as 1,892 (sq. m) in the Existing Area Schedule (Nov 2022). In the amended Design and Access Statement Addendum (June 2023) the applicant states the proposed GIA is 9,992 (sq m.). The increase in built development is further identified in Table 7 in the flood assessment. It shows an increase in buildings on the site of over 1,000 sq m (+74%) vs. the current development and reduction in landscapes by over 500 sq m (-15%.)

Table 7 - Existing and Proposed Site Areas

Existing		Proposed	
Type of Development	Area (m²)	Type of Development	Area (m²)
Landscaping	3,783	Landscaping & Green roofs	3,222
Buildings	1,484	Buildings	2,575
Hardscape	2,240	Hardscape & Permeable Paving	1,710

Based on the evidence I have provided in this objection it is difficult to be sure that the FRA submitted by the applicant demonstrates that the potential consequences of the development in terms of flooding are acceptable. There is no evidence that a Sequential Test has been conducted and passed or that the site would pass an Exception

Test. It has not been adequately demonstrated that this is a sustainable location for this development or that the benefits of development outweigh the potential risks. Based on the submitted FRA I don't think it can be proved the development is compliant with the NPPF or Elmbridge LPA policies on minimising flood risk. On that this basis the application should be refused.

If the LPA is minded to grant this application I would urge it to commission an independent Flood Risk Assessment and Basement Impact Assessment for this application in order to satisfy itself that all the flood implications of the application are fully assessed and mitigated. An independent review was commissioned of the applicant's Financial Viability Assessment. The applicant has now submitted three Flood Risk Assessments for this application and none of which appear to comprehensively assess all the issues or demonstrate the full potential impact of the development. Indeed, at the time of writing this letter the latest report from June 2023 still shows inaccurate or unsubstantiated statements which somewhat undermine its credibility.

Kind Regards,

Katherine Le Clerc

Also attached to this objection London Borough of Richmond User guide Basement Assessment