**SECTION 77 OF THE TOWN AND COUNTRY PLANNING ACT   
1990 (AS AMENDED)**

**CALL IN INQUIRY INTO THE PROPOSED DEVELOPMENT OF THE UNITED KINGDOM HOLOCAUST MEMORIAL AND LEARNING CENTRE LOCATED WITHIN VICTORIA TOWER GARDENS, MILLBANK, LONDON SW1P 3YB**

**REBUTTAL STATEMENT OF CE NUNNS, BSc (HONS). CWEM, MCIWEM, CEnv, ADDRESSING THE PROOF OF EVIDENCE OF MR MICHAEL COOMBS (CD8.50)**

**On behalf of**

**THE SECRETARY OF STATE FOR HOUSING COMMUNITIES AND LOCAL GOVERNMENT**

**TOWN AND COUNTRY PLANNING (INQUIRIES   
PROCEDURE) (ENGLAND) RULES 2000**

**V2 21.09.20**

Introduction

1. This is the Rebuttal Statement of Charlotte Nunns addressing the Proof of Evidence of Michael Coombs (CD8.50) on behalf of Save Victoria Gardens in respect of matter pertaining to flood risk.
2. It should be noted and appreciated that just because I have not addressed every aspect of Mr Coomb’s Proof of Evidence in this rebuttal, it should not be taken that I necessarily agree with what he has said.
3. Having fully read and understood Mrs Coomb’s Proof of Evidence, I consider that there are three main aspects on the flood risk assessment to which he is challenging.
4. Firstly, Mr Coombs gives weight to the Environment Agency’s previous objections and their recommendation for refusal by WCC on emergency access and egress grounds.
5. Secondly, is the matter relating to the National Planning Policy Framework (NPPF) vulnerability classification of the development in respect of the application of the Sequential Test.
6. Thirdly, is the impact and consequence of the assessment of breach of the river wall to the site and whether this renders the site unacceptable.

Objections

1. Mr Coombs refers to the Environment Agency letter dated 9th August 2019. However subsequent to this further consultation with the Environment Agency was undertaken and the Flood Risk Assessment was updated in October 2019 (CD 5.4) and the Environment Agency responded 2nd December 2019 (CD 5.16). It recommended that WCC consider access and egress. This is because WCC is the competent authority in emergency planning and not the Environment Agency. No objections have been received from WCC in this respect.
2. The Environment Agency removed its objection within their letter of 2nd December 2019 (CD 5.16), with the recommendation of various conditions.
3. No further objections or rebuttals have been received relating to flood risk.

Vulnerability Classification

1. The Sequential Test should be applied by the Local Planning Authority to establish whether there are any other viable alternative sites available which are at a lower risk of flooding whilst considering other planning matters.
2. The vulnerability classification is largely irrelevant as either way, whether less or more vulnerable, there is still the need to confirm that the site will be safe for the lifetime of the development, whether that’s through the Exception Test or not.
3. According to the Westminster City Plan (CD2.3) Policy CM28.1 Basement Development “The Environment Agency classes self‐contained basements, without internal access to upper floors above the breach level as highly vulnerable uses, and those with access to upper floors above the breach level as more vulnerable and this policy must be read in conjunction with the flooding policy.” Therefore, even assuming that the development is classified within the ‘residential’ criteria to which the Environment Agency classification above pertains, the vulnerability could as a maximum be classed as more vulnerable as occupants would be able to access the ground floors. The entrance threshold is 4.75mAOD so even in a breach scenario the depth of water entering the building would be 9cm/90mm (extreme water level of 4.84mAOD). This gives rise to a risk to people rating of ‘Very Low Hazard- Caution’ described as “Flood zone with shallow flowing water or deep standing water” with no danger to any of the identified people/groups. Therefore it can be concluded that the occupants would be able to evacuate the building through the 90mm of water. The table and maps are reproduced in Appendix A for reference.
4. It is worth noting that there are no current National or Westminster City Council Planning policies which prohibit non-residential basement development within Flood Zone 3 or the rapid inundation zone.
5. I would also consider that the development is not within the same highly vulnerable category as basement dwellings, as basement dwellings are;
   1. Permanently occupied and are therefore essential to be operational as dwellings at all times;
   2. Residents may not be aware of the risk of flooding, let alone the consequence of rapid inundation;
   3. Generally, residents do not have a flood evacuation plan in place;
   4. Residents may be asleep at the point of inundation causing a greater risk to loss of life;
   5. Were flooding to occur, it would render the residents homeless.
6. None of these scenarios apply to this managed site or its occupants and therefore I consider that the site should be classed as less vulnerable. This is also because as a museum has similarities in function and operation associated with ‘Buildings used for shops, café’s and leisure as they all have similar opening hours and where occupants are admitted and controlled and subject to a flood warning and evacuation procedure (similar to a fire evacuation procedure).
7. I also consider that a detailed flood action plan, flood warning and evacuation procedure could be reasonably requested through the application of a planning condition and be informed by the Environment Agency flood warning system to allow evacuation prior to any overtopping or breach (caused by high water levels in combination with defence failure).
8. Were the development to be considered as more vulnerable (which I consider it is not but less vulnerable for the reasons above), the application of the exception test would be required.
9. In order to satisfy the second part of the exception test it must be demonstrated that the development will be safe for its lifetime when considering the vulnerability of its users and that the development won’t increase flood risk elsewhere.
10. A flood risk assessment has been undertaken which acknowledges flood risk from the River Thames (albeit low risk) and demonstrates how the residual risk is mitigated through the implementation of a flood warning, flood action plan and evacuation plan, to mitigate the impact of flooding. This is discussed in further detail in the following section.
11. In respect of Mr Coombs’ challenge regarding the application of the Sequential Test and the suitability for the site, as it is within Flood Zone 3, this is a matter to be determined by WCC (or the Planning Inspector in the absence of WCC determining the application). The Flood Risk Assessment provides the information to support the Sequential Test to be undertaken and the Proof Of Evidence of The Rt Hon Ed Balls and Rt Hon Lord Pickles (CD 8.01) Section E justifies in detail the reasoning for the site location in the wider planning context and accounting for all material considerations.

Breach Scenario

1. The second aspect which Mr Coombs questions is the risk and impact of a breach failure of the riverwall.
2. There are two credible scenarios in which the wall may breach;
   1. The wall fails due to high water levels in the Thames and structural instability of the wall, causing collapse;
   2. High water levels in the Thames and an external force such as a boat, lorry collision or terror attack.
3. In scenario a, the water levels would need to be sufficiently high to have enough pressure to cause collapse, in this event the Thames barrier would be closed and flood warnings and/or alerts would be issued.
4. It is important to consider the strategic importance of the Thames defences and the robust inspection programme, which is in operation by the Environment Agency. They have inspected the existing wall and have classified it as ‘good’ and therefore the wall shouldn’t fail. ‘Good’ requires no immediate improvement works or maintenance. Therefore, the likelihood of the wall failing at the location adjacent to the museum and causing rapid inundation, I consider to be extremely low. Irrespective of the proposed development the Environment Agency consider that the wall condition is ‘good’ and sufficient to protect the existing urban area such as the houses of parliament and the buildings within the vicinity.
5. The Environment Agency (CD5.16) have also recommended a planning condition that would require “a condition survey of the existing river wall” and any required “improvements or repairs to be undertaken prior to the construction works.” This is to ensure that the “structural integrity of the flood defence is not compromised so that the development can remain safe for its lifetime and to reduce flood risk on site and elsewhere.”
6. When considering Climate Change and the resulting breach flood levels, Mr Coombs fails to consider the robust Thames Estuary Plan, which is the current strategy and commits to continue to defend London from flooding. It also commits to continue to maintain and upgrade the defences to account for climate change, whether that be through strategic Environment Agency lead or through riparian owner (for which the EA can instruct).
7. In scenario b, this would require both high water levels in the Thames, which similarly to scenario a, the Thames barrier would be closed, and flood warnings and/or alerts would be issued and a collision/impact to the wall, along the section adjacent to the museum. I consider that the likelihood of the combined event occurring to also be extremely low.
8. In conclusion the two scenarios have to be considered against the balance of probability and I can only conclude that the likelihood of breach would be extremely low.
9. So, the outstanding question in my view has to be whether the residual risk from the extremely low likelihood is effectively mitigated and manged to ensure occupants are safe.
10. The FRA recommends that a flood warning and evacuation plan be implemented on site, this is a realistic and reasonable requirement and if, accounting for high water levels and Environment Agency flood alerts and warnings, would provide sufficient time duration to evacuate the occupants from the site. The process is not too dissimilar to that of a fire evacuation and staff could be well briefed to safely evacuate everyone.
11. That said, a flood alert/warning would not include any warning of a localised breach within the defence (from scenarios a and b) and water would enter the site rapidly, however no more so than would occur to the existing site with the current users of Victoria Tower Gardens. Similarly, there would be no time to evacuate anyone, irrespective of whether they were in the basement or at ground level. The overriding consideration is therefore the balance of probability which I have addressed previously. It is worth noting that the threshold level of 4.75mAOD against a breach flood level of 4.84mAOD, would give rise to a 9cm depth of flood water entering the building and basement area. According to the Environment Agency guidance ‘Flood Risk to People’ methodology a depth of 0.10m (10mm more than the 90mm at the threshold) in conjunction with a velocity of 0.3-1.0m/s gives rise to a risk to people rating of ‘Very Low Hazard- Caution’ described as “Flood zone with shallow flowing water or deep standing water” with no danger to any of the identified people/groups. Therefore it can be concluded that the occupants would be able to evacuate the building through the 90mm of water. The table and maps are reproduced in Appendix A for reference.
12. There is dry refuge to the south of Millbank, on Horseferry Road and Lambeth Bridge which is in close proximity to the entrance of the museum, which can be accessed by foot, where there is no flooding predicted in both present day and future climate change breach scenario (see Appendix A map).

Conclusion

1. It is reasonable and achievable to mitigate this risk to its occupants through a robust flood action and evacuation plan informed by the Environment Agency’s flood warning system. The flood risk has to be considered as a balance of probability of the failure of the nationally significant defences protecting London and the consequence of the potential flooding. The proposed mitigation and measures in place, including a flood action plan (regularly reviewed) would reduce the risk to occupants to a minimal level. Therefore, I consider the risk of breach failure extremely low (as per the whole of Westminster which affords similar defences) and the residual risk would be appropriately manged through a flood action plan.

Appendix A

A close up of a map

Description automatically generated

A screenshot of a cell phone

Description automatically generated