1ST HORIZON

Our Ref: 8607-R09 **Date**: 5 November 2026

Haslar IRC, Phase II –Rebuttal Proof of Flood Risk and Drainage Matters

1.1 My name is [redacted] and I am a Chartered Water and Environmental Manager (C.WEM) and flood risk and drainage consultant as Technical Director in Hydrology at Enzygo Ltd, with 13 years of experience, including providing evidence to public inquiries. This evidence is provided on behalf of 1st Horizon Ltd.

1.2 The following provides a Rebuttal Proof of Flood Risk and Drainage Matters in support of the proposals at Haslar IRC, Phase II, Dolphin Way, Haslar, Hampshire PO12 2AW.

1.3 This is additional to the Flood Risk and Drainage related Proof of Evidence (dated 20th October 2026) [**CD 8.7**] I provided in support of the crown application reference 26/00216/CROWN and follows receipt of the Rule 13 Party, No Detention No Haslar (NDNH), Statement of Case.

Points Raised Related to Flood Risk and Drainage Matters

Introduction

1.4 'Main Issue Five' details NDNH's statements on compliance with national flood risk and drainage policy, specifically matters related to the Sequential Test, Exception Test and conformity with the industry standard *drainage hierarchy*.

1.5 While there are references to the Sequential Test and Exception Test in the FRA where flood risk policy is outlined [**CD3.22, Section 6.4**], the planning evidence and relative balance of those matters is not my area of expertise to discuss. I therefore defer to my colleague, Mr [redacted], on those matters and refer you to the relevant sections of his Proof of Evidence [**CD8.2**]. I will however, address matters within my expertise, namely related to the appropriacy of the *Flood Evacuation Management Plan* (FEMP) which provides part of the measures contributing to the safety of the development and its occupants for the lifetime of the development when considering the Exception Test. I will also address the NDNH comments titled 'Not increase flood risk elsewhere and, where possible, reduce flood risk overall' which relate to the *Drainage Hierarchy* as specified above.

Flood Evacuation Management Plan

1.6 NDNH's statement provides a section on page 35 titled 'Be safe for its anticipated lifetime in accordance with policy F7; and'. NDNH acknowledge the design ground floor levels of the proposed buildings now includes a freeboard above the design flood level.

1.7 It is important I expand on the design levels element, as the proposed floor level is the backstop for safety of site occupants should a flood occur with insufficient warning to facilitate a complete evacuation of the site. Should there be such an unlikely occurrence, site occupants will remain dry in their living accommodation above flooding until such time as flood waters recede. Lunar cycles last a little over 24 hours, thus from peak tide during a storm surge to low tide (~12 hours) the range is potentially 4m or more difference between the peak and low tides in observed events [Coastal Modelling Report **CD3.10**, Appendix B, Figure 1-14, page 12]. The Site floods to a maximum

depth of 1.11m in a 1 in 200-year upper end climate change event in 2125 [Coastal Modelling Report **CD3.10**, Table 4.2 on page 22]. This will mean there is sufficient lowering of tidal flood waters to allow flooding at the site to fully recede.

1.8 Flood water will not be trapped in the site. Drawing 0007 [FRA **CD3.22**] shows flow arrows would direct water north away from the high point on south-eastern boundary towards the Site entrance. This, combined with the onsite drainage system aiding the reduction of flood levels after the outfall is no longer surcharged, will mean flooding would recede within less than 12 hours from the storm peak.

1.9 In comments specific to the Flood Evacuation Management Plan (FEMP), NDNH highlight the following issues:

- The FEMP is based on present-day depth of flooding, suggesting that the FEMP is not viable across the proposed lifetime of the development.
- The Coastal Partners covering Gosport highlighted evacuation of site occupants requires travel across areas of significant and extreme flood hazard.
- The FEMP does not address the Care and Separation Unit where vulnerable occupants are catered for.

1.10 Regarding the lifetime of the development and the increase in flooding at the latter end of the proposed development lifetime, the only difference the plan would contend with is the modelled flood depths for the Site, which would increase from 0.48m as outlined in Table 6.1 of the FEMP [**CD3.23**], to 1.11m following climate change, as I have confirmed in this rebuttal proof above. The FEMP will be unchanged by an increase in flood level following climate change as the design of buildings provides a refuge from flooding for the 1 in 200-year plus climate change to 2125. Therefore, the actions following receipt of flood warnings will remain unaltered throughout the lifetime of the development. NDNH mention the FEMP is a living document. This should ensure the organisation reviewing this document maintain current best practice when reviewed, and any change in flood risk inclusive of new climate change allowances is accounted for. The present-day flood depths are the most appropriate consideration for site users once the development opens.

1.11 To clarify, the FEMP's purpose is to primarily manage the evacuation of the Site, using triggers related to the Environment Agency's Flood Warnings Direct Service, *before* the onset of flooding that would prevent evacuation. The FEMP covers eventualities including breach or non-evacuation due to insufficient warning and in those events, the accommodation and main site area provide dry refuge. The risk of flooding along evacuation routes should be a lesser consideration if an advanced evacuation is undertaken as intended by the FEMP.

1.12 Finally, the considerations for vulnerable occupants of the Site will be dealt with on an individual basis as governed by assigned staff in the Care and Separation facility. Staff there will have a duty of care for those occupants, and the evacuation triggers will be acted on by those staff when requesting transport appropriate to people in their care. The FEMP is a document to be referred to when considering when to evacuate and by what route, based on flood warning information received; not the specifics of how each vulnerable occupant will be dealt with as no doubt, requirements can be broad and differ with individuals.

Drainage Hierarchy

1.13 NDNH have raised the issue of the drainage hierarchy followed by the proposed drainage strategy as presented in the FRA [**CD3.22**, Drawing Hydrology-0001]. In the statement section titled 'Not increase flood risk elsewhere and, where possible, reduce flood risk overall', para 170, page 36, NDNH state:

"NDNH will be guided by Hampshire County Council regarding reducing flood risk elsewhere. However, NDNH notes that while the FRA acknowledges two areas of potential high risk surface water ponding in the north of the site,[72] the drainage strategy is contrary to the hierarchy of discharge (it uses sewers which are the last resort, rather than SuDS or watercourses). Southern Water has not permitted surface water discharge to the foul or combined sewer network. Sewer capacity is therefore already low and relies entirely on the private sewer system. NDNH considers this has the potential to present a flood risk and a drainage problem generally."

1.14 Discharge of surface water should follow the hierarchy of discharge (National Standards for Sustainable Drainage Systems, July 2025) as I have outlined in my main proof of evidence [**CD8.7**, para 3.6, page 7]:

1. Collection for non-potable use: Due to the nature of the development, it is not reasonably practicable to install water butts or tanks for non-potable use.
2. Infiltration to ground: The use of infiltration-based SuDS has not been utilised for this Site due to the clayey bedrock mapped at the Site. The LLFA pre-application response confirms this approach **[CD 3.22, Appendix G]**
3. Discharged to an above ground surface water body: There are no watercourses inside the Site boundary, or within 100m.
4. Discharged to a surface water sewer, or another piped surface water drainage system: There is a public surface water sewer located beneath the northern area of Haslar. There are also private surface water sewers located within the Site's boundary. Capacity will be provided in this asset where it is lacking following consent, as is the statutory responsibility of Southern Water.
5. Discharge to a combined sewer: There are no combined sewers located within the vicinity of the Site.

1.15 Therefore, the proposed drainage strategy follows this hierarchy as the surface water sewer is the only reasonably located system. For clarity, discharge to the sea via a newly constructed outfall through an established seawall would trigger works that outweigh the benefits from a free discharge, thus the SuDS system proposed restricted flows to the sewer that would only require a limited upgrade to facilitate those flows, details of which to be secured via a S106 application with Southern Water that can only occur following planning consent. The receiving surface water sewer, while in the ownership of the existing IRC facility, carries flows from a public sewer thus, capacity inquiries have been made with Southern Water on connecting to this surface water sewer system as covered in Section 5.5 of my proof of evidence [**CD8.7**]. The timing of connection coinciding with the provision of capacity in the receiving surface water system can be covered by an appropriately worded condition.

Closure

1.16 I trust that this addresses all matters, and that there are no further concerns relating to flood risk and drainage matters.