Department of Planning, Housing and Infrastructure

Our ref: SSD: 34919690

Mr Stephen Barry
Planning Director
Office of the Independent Planning Commission NSW
Suite 15.02, Level 15, 135 King Street
Sydney NSW 2000

Via email: callum.firth@ipcn.nsw.gov.au

7 March 2024

Subject: Novus Build to Rent (SSD 34919690) – Response to Request for Information

Dear Mr Barry

I refer to your correspondence, dated 22 February 2024 which requested further information in relation to the above State significant development application currently before the Independent Planning Commission (Commission).

The Department has provided a response to the Commission's request in **Attachment A**. The response includes revisions to the design and project documentation which, if adopted, would require modifications to the recommended conditions of consent.

The Department also notes the Applicant has provided correspondence dated 1 March 2024 and 6 March 2024 which provides additional information in response to the items raised by the Commission. A copy of the Applicant's response is provided at **Attachment B**.

Please do not hesitate to contact Caleb Ball, Senior Planning Officer on 9274 6186 should you require any further information or clarification in relation to these matters.

Yours sincerely,

[redacted]

Amy Watson
A/Director
State Significant Acceleration

ATTACHMENT A – Response to the Commission's Request for additional information

If the panel were to approve the Application, are there any reasons why the Panel should not impose conditions or make modifications to the application to align with the independent flood advice including:

a) *a review of the flood assessment documentation to reflect the adoption of the recommended greater flow rate for design and recommended 1% AEP flood event level (15% blockage and climate change scenario).*

The Applicant has completed a review of the flood assessment documentation and proposes design revisions in response to the recommendations made in the Independent Flood Review (Westra, 2024). The Applicant's review (**Attachment B**) adopts the recommended flow rate of 41.6m^3/s and recommended 1% AEP flood event level (15% blockage and climate change scenario (Molino Stewart, 2023).

As a result of this review, the Applicant has proposed design revisions which are described in detail below.

b) *increased design levels to preserve a Flood Planning Level of at least 0.5m above the recommended 1% AEP design flood event, including of the basement crest and other sources of water ingress and building footprint currently proposed below this level.*

The Applicant has confirmed they are able to adopt a revised flood planning level of at least 0.5m above the recommended 1% AEP flood event level (15% blockage and climate change scenario) for ingress points to the development, including the basement ramp crest – except for the substation access points and loading dock entry as discussed below.

For clarity, the revised Flood Planning Level (revised FPL) discussed here is defined as the flood level (AHD) described in the '1% AEP (15% Bridge Blockage, Climate Change)' scenario within Table 1 of the Flood Risk Assessment prepared by Molino Stewart and dated 20 June 2023, with the addition of a 500mm freeboard.

The applicant has proposed increasing the basement ramp to a level equal to or greater than 6.92m AHD, which is an increase of 220mm and would comply with the revised FPL. The revised level would provide a greater level of flood protection to the majority of the building footprint below the revised FPL and critically, to the basement levels.

However, the Applicant advises the following design levels below the revised FPL would remain unchanged due to the constraints of the site and that adequate flood protection is provided relative to the risk to life in these areas:

- Substation access points (point 16, 17) as the substation floor is located at 6.2m AHD, 0.1m above the 1% AEP flood level with 15% bridge blockage. This level of passive flood protection is considered adequate based on its limited use, a sufficient flood warning time and the provision of a back up generator on basement levels.
- Loading Dock Entry (point 7) as the design proposes flood gates to 6.6m in this area to protect the loading dock during a 1% AEP and incorporates flood doors to storage areas which would contain stored materials in the event of a flood.

A full description of water ingress points is described in the Independent Flood Advice commissioned by the Department and prepared by GRC Hydro, 2 November 2023 (see Figure 2 and Table 1A). The applicant advises that all other ingress points would remain above the revised FPL. Therefore, no further alterations to other proposed design levels are necessary.

The Department supports the approach proposed by the Applicant as:

- the proposal is consistent with the requirements of the Parramatta Local Environment Plan 2011 and the Parramatta Development Control Plan 2011.
- The revised FPL (6.92m AHD) reflects a substantial increase in freeboard over levels described in the Council endorsed Lower Parramatta River Floodplain Risk Management Study – Flood Study Review (SKM, 2005a) (6.7m AHD).
- the finished floor level of the ground floor and all ingress points, except for the substation and loading dock, are located above the FPL
- active controls generally consistent with measures described in the DCP provide sufficient protection to the substation and loading dock, when considering the limited risk to life (in those areas) and when implemented in combination with an effective shelter in place strategy and FERP.

c) The provision of a land connection at the recommended 1% AEP event level;

The Applicant has reviewed this point and has confirmed it would not be feasible to provide a land connection at the recommended 1% AEP (15% blockage and climate change scenario) event level.

The Department has reviewed the Applicant's additional information and agrees that it is not possible to provide a land connection at the recommended 1% AEP event level as this would:

- be above and beyond the requirements of cl 7.9(3)(b) of the PLEP
- render the site undevelopable as the surrounding land at its highest point is at 6.2m AHD which is between 90mm and 299mm below the 1% AEP (15% blockage and climate change scenario)

The Parramatta Local Environmental Plan 2011 (PLEP) provides floodplain risk management measures to minimise the flood risk for future developments within the mapped floodplain risk. The PLEP states:

(3) Development consent must not be granted to the erection of a building on land to which this clause applies unless the consent authority is satisfied the building:

…..

(b) has an emergency access point to land above the 1% annual exceedance probability event

The definition of the annual exceedance probability is derived from the Floodplain Development Manual (as required by Clause 7.9(5) of the PLEP):

> ***Annual exceedance probability (AEP):*** *the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage.*

The Planning Certificate provided by Council to the Applicant for the site identifies a flood planning level of RL6.7m (which is the Council endorsed 1% AEP of RL6.2m + 0.5m freeboard).

The Department assessed the application and concluded that the south eastern corner of the site where the access ramp connects to the pedestrian footpath on Harris Street would be provided at RL6.2m. Therefore, the proposal satisfies the statutory requirements of cl 7.9(3)(b) and provides access to land above a 1% AEP flood event.

Modelling conducted by the Applicant in accordance with relevant guidelines confirmed that floodwaters would remain below this level during a 1% AEP event (Molino Stewart, 2023). The Independent Flood Advice commissioned by the Department and prepared by GRC Hydro, 2 November 2023 also confirmed that the proposal complies with cl 7.9(3)(b) of the PLEP.

Based on these findings the Department is satisfied that the proposal meets the requirements of cl 7.9(3)(b) of the PLEP as it provides a connection to land at the Council endorsed 1%AEP of RL 6.2m. The Department agrees with the Applicant that it is not feasible nor necessary to provide a land connection at the recommended 1% AEP (15% Bridge Blockage + Climate Change) event level.

d) ***A review of the Flood Emergency Response Plan to assess if a suitable response can be achieved in scenarios of higher rate-of-risk of flood water, including in a PMF event from overland and creek flooding;***

The Applicant has reviewed the FERP and indicates that the response measures were developed with consideration of the PMF and the corresponding higher rate of rise. The Applicant indicates that there is sufficient time for occupants to go from the basement or ground floor to refuge areas. The Department supports this finding on the basis that FloodSmart flood warnings (or a comparable alternative service) have been adopted as the

basis for the flood evacuation trigger and that active flood mitigation measures are proposed to provide protection during a PMF event.

The Applicant has updated the FERP in response to the issues outlined in Seth Westra's independent flood advice (Attachment B). The updates include:

- requiring the building manager to send an early alert to residents when severe weather or flood warnings are issued by relevant services and agencies
- requiring bi annual reviews from the building manager on emergency supplies stored on level 2 above the PMF level

The Department considers that these solutions adequately respond to the residual flood risk given the infrequent nature of the PMF, that flood warnings would provide for at least 60 minutes for people in the basement to evacuate to a refuge area in response to the PMF. The adoption of the revised FPL and corresponding increase in basement crest level would also result in a minor increase in the time available for flood gates to activate and for people located in basement levels to evacuate during a PMF event.

However the Department recognises that a review may identify additional measures that may be implemented by the Applicant to further reduce risk to life and therefore supports the inclusion of a condition to review the Flood Emergency Response Plan including up to a PMF event from overland and creek flooding. The Department recommends amending condition E12 to require a detailed review of flood event scenarios including the 1% AEP and up to the PMF and a suitability assessment of the strategies developed for each flood event.

e) Inclusion of consideration for a non-zero probability of failure of flood gates; and

The Applicant has reviewed the FERP and considered the implications of flood protection devices failing. The Applicant in response has confirmed they are able to adopt a revised flood planning level of at least 0.5m above the recommended 1% AEP flood event level (15% blockage and climate change scenario) therefore the site is passively protected up to the 1% AEP flood event.

The Applicant has also updated the FERP to include a requirement for the building manager to send an early alert to residents when severe weather or flood warnings are issued by relevant services and agencies. Condition E12 would require the Applicant to identify measures to regularly maintain, test and operate the flood protection devices.

The Department considers the measures outlined in the FERP and requirements of Condition E12 appropriate as the ground floor and basement are protected up to the 1% AEP event level by passive measures and regular maintenance and testing of the flood protection devices would be required. The residents will also be sent an alert by the building manager when the BoM issues a severe weather alert or flood warning. The Department notes the

Applicant will be the owner and operator of the Build to Rent development and therefore will be responsible for the ongoing maintenance and operation of the building.

However, the Department recognises further consideration for a non zero probability of failure of flood gates might identify additional measures that may be implemented by the Applicant to further reduce risk to life. Therefore, the Department recommends Condition E12 be amended to require the consideration of measures to minimise the risk to life in the event that any flood protection devices fail.

f) *Inclusion of consideration of human factors in an emergency response, including the 72 hour shelter in place provision of the Parramatta Local Environmental Plan*

Clause 7.9(3)(a)(ii) of the PLEP requires the development to be connected to an emergency electricity and water supply. However, the Parramatta Local Environmental Plan 2011 does not require a 72 hour shelter in place strategy.

The Parramatta Development Control Plan 2011 (PDCP) specifies the duration of Shelter in Place provisions. Control 5(b) of Section 6.7.4 of the PDCP states: *"Unless otherwise advised by Council, facilities must be designed for a refuge stay of at least 72 hours, with longer time periods addressed in design, equipment and provisioning."*

Based upon analysis undertaken by Molino Stewart in 2015 to inform updates to the PLEP, the Applicant identified an estimated maximum flood duration of a 6 hours during a PMF event. The Applicant confirmed the proposal includes the provision of 6 hours of water supply and sewerage and up to 24 hours of electricity.

The additional information provided by the Applicant (Attachment B) has indicated that a contingency of 15% could feasibly be provided with some minor design amendments, which would allow up to 7 hours of water supply and sewerage.

The Independent Flood Advice (Westra, 2024) considered the proposed emergency electrical and water supply and concluded that there is limited risk to life during a PMF event where people remain within the residential habitable parts of the building during a flood event.

The Department carefully considered the PLEP and PDCP during its assessment and considers that the provisions of the LEP and objectives of the DCP are met by the development.

The Department considers that the duration of a potential PMF event is well understood and established based on conservative assumptions. The Independent Flood Advice prepared by both Westra (2024) and GRC Hydro consider 6 hours to be a representative timeframe of site

inundation during a PMF event. Generally, events of lower frequency are predicted to result in shorter inundation periods.

On this basis the Department considers it unnecessary to require the Applicant to provide a 72 hour shelter in place strategy when considering the specific flood risks of the development. Instead, the Department recommends Condition E12 be revised to require the provision of a minimum 6 hours (with a contingency for up to 7 hours) of emergency water and sewerage supply and storage and 24 hours of electricity supply.

The Department supports the consideration of human factors during the development of the FERP. While the Applicant has demonstrated some consideration of human factors (**Attachment B**), the Department recommends Condition E12 be revised to require consideration of human factors and the further development of appropriate mitigation measures.