Appendix C – Mitigation measures

Mitigation measures

Detailed design

- The proposed development is to be designed and constructed in accordance with the requirements of the BCA.
- Where the design of the development does not meet the requirements of the deemed-to-satisfy provisions of the BCA appropriate performance solutions should be documented and provided at Construction Certificate stage.
- The proposed development is to be designed and constructed in accordance with the requirements of the National Construction Code 2022 and the relevant Australian Standards.
- Detailed construction drawings must have regard for the recommendations of:
    - BCA Report (**Appendix O**)
    - Accessibility Compliance Report (**Appendix P**)
    - Arboricultural Impact Assessment (**Appendix L**)
    - BASIX Certificate (**Appendix M**)
    - NatHERS Certificate (**Appendix AN**)
    - Ecologically Sustainable Development Report (**Appendix AF**)
    - Stormwater Management Report (**Appendix K**)
    - Traffic and Parking Impact Assessment (**Appendix T**)
    - Noise and Vibration Impact Assessment (**Appendix V**)
    - Environmental Wind Study Report (**Appendix N**)
    - Visual Impact Analysis (**Appendix Q**)
    - Geotechnical Investigation Report (**Appendix Y**)
    - Salinity Assessment Letter (**Appendix AO**)
    - Preliminary Site Investigation Report (**Appendix Z**)
    - Construction Demolition Waste Management Plan (**Appendix AD**)
    - Aboriginal Cultural Heritage Assessment (**Appendix AB**)
    - Services Plan (**Appendix AH**)
    - Building Services Infrastructure (**Appendix AJ**).

Construction management

- The noise control measures recommended within the Noise and Vibration Impact Assessment (**Appendix V**) must be followed throughout the construction phase, including the standard working hours for construction.
- The vibration control measures recommended within Section 6.10 of the Noise and Vibration Impact Assessment (**Appendix V**) must be followed throughout the construction phase.
- Waste management is to be undertaken in accordance with the Construction and Demolition Waste Management Plan (**Appendix AD**).
- The preliminary Construction Traffic Management Plan within the Traffic and Parking Assessment Report (**Appendix T**) must be updated prior to the commencement of construction at the site to address the construction timeframes, processes and methodologies to be confirmed during the detailed design and the construction phase.
- Pedestrians walking along the site frontage must be protected by temporary construction fencing. A traffic controller will supervise vehicle movements into and out of the site and will ensure that pedestrians have the right of way.
- Access to the site must be managed by the Principal Contractor. All workers and visitors employed on the site will be required to undergo a formal site induction in accordance with Workcover and WH&S requirements.

Site preparation and excavation

Mitigation measures

- Archaeological test excavation in accordance with the methodology described within the Aboriginal Cultural Heritage Assessment (**Appendix AB**) and the Connecting with Country Report (**Appendix AC**) must be undertaken post demolition and prior to any site excavation.
- Site preparation is to be undertaken in accordance with the recommendations under 9 of the Report on Preliminary Geotechnical Investigation (**Appendix Z**).

Trees and landscaping

- Tree protection fencing is to be implemented in accordance with the tree protection plan and AS4980-2025 Protection of Trees on Development Sites under the guidance of the project arborist (AQF Level 5) to ensure all trees designated for retention remain as a sustainable part of the landscape in the long term.
- Tree protection measures recommended within the Arboricultural Impact Assessment provided at **Appendix L** shall be implemented prior to the commencement of any site works and shall remain in place for the duration of the development.

Water quality

- Ocean guard baskets to be fitted at the inlet connection to OSD.
- 1 x 10m^2 SF Precast fitted with 5 x 690mm Psorb StormFilter Cartridges.

Groundwater and salinity

- Detailed groundwater investigation, testing, long term groundwater level monitoring, and a Groundwater Seepage Analysis to be undertaken to support the feasibility assessment of a drained basement structure and the approvals process with reference to the DPE (2022) guidelines.

Contamination

- A Construction Environmental Management Plan (CEMP) for the excavation, waste classification, and handling of surplus soils from the site is to be developed. The CEMP should be developed in accordance with relevant Hills Shire Council Development Control Plan (DCP) and development consent conditions.
- A hazardous materials survey (HMS) is to be completed by a suitably qualified consultant, to confirm the presence / location of any hazardous materials within the existing building fabrics prior to commencement of demolition works.
- An inspection of the exposed surface across the site following building demolition and removal of associated wastes (including vegetation) to be conducted as part of any asbestos clearance reporting by a suitably qualified environmental consultant.
- The bulk excavation of site soils will be required to facilitate the construction of the basement levels. All soils designated for off-site disposal, including any virgin excavated natural material (VENM), must be pre-classified in accordance the EPA (2014) Waste Classification Guidelines. This will include the collection and analysis of representative soil samples, to characterise any wastes for disposal.
- In accordance the EPA (2014) Waste Classification Guidelines and the POEO Act/Regulation (1997), all soil and rock materials designated for off-site disposal must be classified, transported and disposed to EPA-licensed waste facilities.

Noise and vibration

- Facade acoustic treatments designed to comply with the criteria summarised in Section 4.1 of the Noise and Vibration Impact Assessment (**Appendix V**)

Mitigation measures

- Mitigation measures to be implemented with the criteria summarised in Section 6.4.1 of the Noise and Vibration Impact Assessment.

Crime prevention through environmental design

- Adopt Crime prevention through environmental design (CPTED) principles, including CCTV appropriate lighting and clear signage to support safety amenity and perceptions of security.

Ecologically sustainable development

- Sustainable Buildings SEPP 2022 BASIX energy score of 61% and average NatHERS thermal performance rating of 7 stars.
- Installation of photovoltaic panels and building integrated photovoltaics to generate renewable electricity to offset demand and minimise stress on the grid.
- Target to recycle or reuse at least 90% of construction waste, implement waste streaming to support operation phase recycling outcomes.
- Water efficient fixtures and fittings will reduce the water consumption of the site.
- High solar reflectance finishes, site greening through on-grade canopy cover and terrace landscaping to reduce urban heat island effect.
- Use of mix of vernacular design, overhands, high-performance windows and mechanical systems to deliver optimised thermal comfort performance.

Community engagement

- Ongoing engagement with the community and stakeholders should be undertaken by the proponent to monitor and manage social impacts throughout the project lifecycle. Implementing a grievance mechanism to address community complaints and concerns is also important to anticipate and mitigate potential impacts in the early stages of the project.

Wind mitigation

- Implement a combination of horizontal (awnings, canopies, pergolas) and vertical (landscaping, screening) windbreaks to address both downwash and channelling wind effects.
- Maintain dense, evergreen perimeter landscaping and street trees to provide year-round wind buffering and reduce horizontal wind speeds.
- Provide awnings at ground-level entrances to deflect downwash winds and improve pedestrian comfort.
- Locate seating and pedestrian activity areas beneath pergolas to enhance wind protection at ground level.
- Incorporate a 1.8m high solid windscreen with integrated landscaping to the Level 11 communal open space to mitigate elevated wind exposure.
- Position communal seating areas beneath sheltered structures (awnings/pergolas) to improve usability and comfort.
- Retain sliding louvred screens to balconies to reduce direct wind penetration while maintaining airflow permeability.
- Increase balustrade solidity to a minimum of 70% for exposed upper-level and corner balconies to minimise wind acceleration effects.

Mitigation measures

Aboriginal heritage

- The Aboriginal Cultural and Heritage Assessment (**Appendix AB**) should be kept as evidence of the Due Diligence Process having been applied to the subject area.
- Unexpected finds and human remains procedures should be implemented as harm mitigation measures post SSDA approval and prior construction.
- Should clearly identifiable human remains be uncovered anywhere within the subject site, the following procedure should be implemented:
    - All works within the vicinity of the find must immediately stop. The find must be cordoned off and signage installed to avoid accidental impact.
    - The site supervisor or other nominated manager must notify the NSW Police and Heritage NSW (Enviroline 131 555).
- The use of native plants and vegetation in landscaping.
- Consultation with RAPs should continue until the finalisation of the development and throughout the duration of the project to ensure the opportunity for community input is provided.