

Our Ref: F2018/00420

17 September 2018

Social Infrastructure Assessments  
Department of Planning & Environment  
GPO Box 39 Sydney NSW 2001

Attention: Ms Megan Fu  
Application No: SSD 9113

Dear Megan,

**Re: State Significant Development Application: Prince of Wales Hospital  
Redevelopment Stage 1 (SSD 9113)**

I refer to your letter dated 27 August 2018 seeking comment on the development application (DA) lodged by NSW Health Infrastructure (HI) for stage 1 of Prince of Wales Hospital Redevelopment, located at the corner of Botany and Magill Streets.

The proposal is to facilitate the construction and operation of a 13 level Acute Services Building (ASB) providing an Adults' Emergency Department, Operating Theatres, Central Sterilising Service Department, Intensive Care Unit, Inpatient Units, Ambulance Bays and a Helipad.

Council acknowledges that the proposed development has the potential to deliver significant social benefits to the community. However, the size and scale of the proposed building will have a significant impact on neighbouring residential areas. The following issues should therefore be fully considered and addressed prior to determination of the proposal.

**Bulk and scale**

The proposed building is 13 storeys in height (approximately 55.4m above the proposed ground level) including a rooftop helipad. The EIS claims that the proposed ASB is in harmony with the form and scale of the buildings in the UNSW precinct to the immediate west, connects with the existing campus clinical departments and enables integration with future additional health services facilities to the north. In terms of its interface with the low-density residential area to the south of Magill Street, the EIS states that the proposed building is set back from the street allowing a landscaped buffer zone, to minimise overshadowing and visual privacy impacts.

In relation to height, bulk and scale, Council notes that the submitted drawings are inadequate to allow a meaningful comparison with the built form of existing adjoining and surrounding development. The elevations and sections drawings for the proposed development do not show the outline of any adjoining buildings,

structures and roads, as reference points for assessing the height and bulk of the proposed building.

It is also noted that the Architectural Design Statement (provided as part of the EIS), whilst addressing in great detail the underlying design principles for the Randwick health campus (e.g. patient flows, emergency requirements, hospital logistics, etc), provides little consideration of the bulk and scale impacts on the adjoining residential properties on Magill Street and nearby.

Council considers that the proposed development is significantly larger in size and scale than the established residential built forms to the south (i.e. predominantly two-storey dwelling houses along Magill Street). The proposed building envelope will be visually dominant especially when viewed from the outlook of residents on Magill Street.

It is therefore recommended that:

- In relation to the proposed southern buffer area to Magill Street, the landscape plan for this buffer area be reviewed to incorporate more deep soil planting and reduce hardstand areas to screen the visual impact of the overbearing south elevation; and
- In terms of the documents and plans submitted for the proposed development, HI should:
  - amend all elevations and sections to include the outline of adjoining and surrounding buildings, structures and roads for reference purposes; and
  - include details of where sections are taken from on all floor plans.

### **Airport height restriction**

The subject site is affected by the Obstacle Limitation Surface (OLS). The EIS states that the OLS varies from approximately RL 85.0 to RL95.0 and the proposed development will likely exceed these height datums. As such, approval of these exceedances will be required from the Sydney Airport Corporation (SAC). However, no details of compliance have been provided in the EIS.

### **Solar access and overshadowing**

The shadow analysis shows that a number of properties (i.e. 7-15 Magill Street) will not achieve 3 hours of solar access to living areas or private open spaces given the cumulative impacts from the proposed ASB and existing buildings.

Council notes that for properties at 7-15 Magill Street, the loss of solar access will be severe as these properties have north-facing windows. This loss is exacerbated by the fact that the south facing rear yards of these properties will be for the most part of the day overshadowed by their respective dwelling houses.

As such, Council recommends that appropriate design measures be applied to maximise solar access for those properties to the south of the ASB site.

### **Transport, parking and accessibility**

The proposed development does not provide for any additional parking (except for 12 time-limited drop-off parking). It is intended that the proposed development will access the 2,300 off-street car parking bays available at the

existing campus (accessed via Easy Street or Hospital Road). An internal public connection from the ASB over Hospital Road to the existing campus is proposed. The EIS also outlines that many visitors to the ASB will arrive via the existing basement car park, into the current Barker Street entrance via the car park lifts.

The EIS estimates that the campus will need an additional 151 parking spaces by 2022 and an additional 289 parking spaces by 2027 assuming a business as usual approach. The EIS states that the additional parking requirement for the ASB could be offset by potential mode share shifts, likely to occur as a result of the committed public transport improvements (e.g. light rail) and a Green Travel Plan to be prepared by HI.

The Transport Assessment Report, provided with the EIS notes that the light rail (Randwick bound services) will have sufficient forecast capacity to accept increased patronage from hospital staff and visitors. The report further states that estimated mode share shifts of hospital staff, e.g. a 3% increase in public transport mode shift, a 1% increase in car-pooling shift, and a 2% increase in cycling mode shift, have the potential to negate the 289 additional spaces required by the ASB.

In relation to construction traffic, a Construction Pedestrian and Traffic Management Plan (CPTMP) will be prepared to minimise impacts to traffic and other modes of transport. The EIS concludes that the reduction in traffic generation as a result of the removal of the 92 residential dwellings is likely to offset any increases in traffic during construction. The EIS notes that two-way traffic on surrounding streets will be maintained and on-street parking around the construction site will be retained where possible.

The proposal includes a new drop off facility off Botany Street and a new emergency department drop off via an access from Magill Street. It also proposes to open Magill Street (currently a no through road) to facilitate drop-off trips and access to the existing campus car park in a legible manner. As such, streets adjoining the ASB site (Botany Street, Magill Street and Hospital Road) will experience increased traffic. However, given that no on-site parking (except for drop-off parking) is proposed, the EIS claims that the additional traffic generation is not likely to be significant.

As a result of expected drop-off trips and traffic accessing the Hospital Road car park via Magill Street, the daily traffic volume for Magill Street is predicted to increase from 300 vehicles per day (vpd) to 2,500 vpd. The EIS notes that this complies with the RMS Guide on maximum daily vehicle throughput for local streets (3,000 vpd).

To facilitate effective traffic movements, the proposal includes the following intersection amendments:

- Botany Street/ABS Access Road/UNSW Gate 11 intersection to be signalised with appropriate turning bays; and
- Botany street/Magill Street to operate as a priority intersection with a right-turn bay located in Botany Street.

### **Parking**

The EIS states that the 'no parking provision' is proposed based on the assumption that the improved public transport services complemented with the

implementation of a Green Travel Plan will lead to potential mode share shifts, reducing the reliance on private vehicle for staff and patients.

While acknowledging Sydney's strategic shift towards more sustainable transport models, Council recommends that further information be provided, in particular details of the Green Travel Plan to justify:

- if the predicted increase in public and active transport usage will sufficiently offset the forecast parking demand of staff, patients and visitors; and
- if the proposal, with no on-site parking provided, could effectively manage any additional parking demand without placing extra pressure on the existing road network.

The Transport Assessment Report notes that previous surveys estimated that the existing off-campus parking demand (from staff and visitors) is approximately 550 spaces while there is a total of 222 on-street parking spaces available in the surrounding road network (2017 Arup survey).

Council notes that as a result of the proposed development, the number of available on-street parking will be significantly reduced (e.g. removal of parking spaces along Eurimbla Avenue and potential loss of parking on Magill and Botany Streets). Council stresses that these surrounding residential streets have already been under constant pressure due to the high demand for residents, staff and visitors parking and any additional on-street parking demand associated with the proposal if not appropriately managed, will further exacerbate the parking situation of these areas. On this basis, Council requests that further investigation be undertaken to identify the need for on-site parking in the development site. Furthermore, Council requests that HI consider a parking strategy on the existing parking provision available on campus to manage parking demands of staff shift rotations.

### ***Green Travel Plan***

The Transport Assessment Report recommends a Green Travel Plan, to promote the use of public transport, walking and cycling by patrons and employees.

While Council supports the preparation of a Green Travel Plan, it is noted that a Green Travel Plan has not been provided with the EIS. This means that the Department of Planning and Environment (DPE) cannot be satisfied as to a fundamental matter of consideration, being the potential effectiveness of the Green Travel Plan towards improving transport mode shifts. This in turn questions the suitability of the 'no parking provision' based on the reliance of the Green Travel Plan and other transport modes.

In response, Council requests that a Green Travel Plan be submitted to the DPE as part of its assessment of the subject DA. In addition, Council requests that HI explore all possible incentives as part of the preparation of the Green Travel Plan, to effectively promote public and active transport modes, including ongoing monitoring of the performance (e.g. successes, failures and progress) and ongoing methods for improvement.

### ***Bicycle networks and infrastructure***

In relation to bicycle paths and supporting bicycle infrastructure (including bicycle parking spaces and end of trip facilities), it is noted that the proposed

development does not provide for any new dedicated bicycle lanes, or shared paths. It is also noted that a bicycle parking hub is not provided within the ASB site itself but adjoining to the proposed parking development, within the existing hospitals campus. The EIS does not provide any information on the number of bicycle spaces to be provided in the bicycle hub.

Council considers that relying on surrounding campus areas for bicycle parking supply is a poor outcome particularly given the reliance on sustainable travel modes (i.e. public and active transport) for access to the proposed development. High quality bicycle access and end of trip facilities are necessary to support the projected cycling modal shift.

In addition, a network of east-west and north-south cycling routes should be provided throughout the hospitals campus to improve access to Randwick Junction Town Centre, the Light Rail terminus, UNSW and surrounds.

Specifically, Council recommends the inclusion of the following measures to deliver a mode shift to walking and cycling, including:

- a new separated cycleway along the north edge of the ASB site;
- a potential bicycle lane, planting and wider footpath on Hospital Road to facilitate traffic calming and pedestrian and bike rider safety;
- a separated cycleway on Magill Street and Francis Martin Drive, to connect to UNSW to the west, and to St Pauls St and the Spot to the east; and
- high quality parking facilities in multiple locations across the ASB site.

Council also requests footpath widening along Botany St extending into the development site to accommodate a shared path (of approximately 3.5-4m wide). This shared path is essential particularly given the strategic location of the site to High Street and light rail and its interface with UNSW. It will largely improve permeability across these sites and allow for better access by walking and cycling. The delivery of this shared path will require HI to either dedicate land to Council as public road or to convey suitable use rights to Council over a portion of their land.

The proposed measures (by Council) outlined above on new cycleways and shared pathways would also reinforce site permeability. The pedestrian circulation routes through the hospitals campus are supported. However, we note that many of these routes are through existing campus buildings which are difficult to navigate. Council therefore requests that these cross pedestrian routes be reinforced by a wayfinding strategy, to be implemented as part of any future redevelopment of the wider hospitals campus.

### ***Construction traffic***

Council request that all construction trucks entering the site must turn left into the site from Botany Street and all trucks exiting the site must turn right into Botany Street and travel north to Alison Road unless prior approval is provided in writing by Council. This is to ensure that construction trucks avoid Barker Street and Botany Street (south of the site).

Council requests that HI closely liaise with Council's Transport Engineers regarding travel routes for construction trucks in preparation of the CPTMP and once completed, the CPTMP should be submitted to Council for approval.

### ***Operation traffic***

In relation to the two intersections (Botany Street/UNSW Gate 11/ASB access and Botany Street/Magill Street), Council notes that the proposed configuration/intersection amendments will result in loss of on-street parking along Botany Street, which however has not been considered in the EIS. Council therefore requests that relevant information (e.g. total number of parking to be removed) be included for clarity.

In terms of the proposed signal controlled intersection, Council recommends that HI, in consultation with UNSW approach RMS at an early stage so that the traffic signal could be installed during demolition to achieve improved intersection capacity and pedestrian amenity during both the construction and operation phases.

The Transport Report includes an assessment/comparison of road network impacts associated with the two scenarios being 'opening up Magill Street' and 'retaining the closure of Magill Street'. The report notes that opening Magill Street and allowing direct access to the Hospital Road car park via Magill Street may generate 950 traffic movements per day on Magill Street while the retained closure of Magill Street will require vehicles wishing to access the car park to do so via Botany and Barker Streets.

Based on the SIDRA modelling conducted for the Botany Street/Barker Street intersection (provided in the Transport Assessment Report), Council considers that the proposed opening of Magill Street will not result in significant improvement of the intersection performance. To effectively reduce traffic impacts and associated traffic noise on Magill Street, Council requests that Magill Street be retained as a no through road. Reduced traffic on Magill Street will have positive flow-on effect on the Botany Street/Magill Street intersection. Without the need to deal with high traffic volume, reconfiguration of the intersection may not be warranted and as such, a larger number of existing on-street parking spaces could be retained.

### **Drainage and flooding**

A Civil Report has been prepared detailing the existing stormwater infrastructure services at the site as well as the proposed stormwater design.

Two Council-owned stormwater pipes currently run from north to south along Eurimbla Avenue. These drainage pipes while serving the drain catchments from the north of High Street and the existing Eurimbla Avenue runoff, also connect with the Light Rail Project.

The southern portion of these two stormwater pipes are proposed to be removed prior to any excavation works, to make way for the construction of the ASB. The northern portion of the pipes will continue to service the area to the north of the ASB site. A diversion system is proposed which originates from the High Street low point, runs west along High Street and then south along Botany Street. The diversion works will be carried out under the Early and Enabling Works REF (not as part of this DA).

Two on-site detention (OSD) tanks are proposed to service the ASB. One will be located in the north-west corner of the site to service any runoff from the building hydraulics system from the roof, podium levels and helipad. The other OSD tank will be located in-ground in the south-east corner of the site (the lowest point) to

capture any runoff from the ground areas to minimise bypassing flows. The EIS states that the proposed OSD volumes will address the 20-year Average Recurrence Interval (ARI) storm event and comply with Council's OSD requirements.

A range of measures, including vegetated buffer, bioretention swales, vegetated swales and filtration devices are proposed to improve water quality before stormwater discharges from the site. Discharged water is required to be monitored to demonstrate compliance with the acceptable criteria.

The Civil Report notes that all existing flood studies concurred that the site is affected by overland flooding generated from the upstream catchment of approximately 14ha. Eurimbla Avenue, which is lower than its parallel running roads (Botany Street and Hospital Road) is considered as the main overland flow path. Another overland flow path, bound by Botany Street, drains a 3.6ha catchment that is located to the west of Botany Street.

A review of the existing and post-development flooding conditions indicates that the proposed development does not increase flooding impacts to private properties neighbouring the site during rainfall events up to, and including the 1-in-100-year event. According to the flood modelling, the Probable Maximum Flood (PMF) post-development levels decrease by approximately 60cm at Magill Street, near Hospital Road and increase by up to 30cm at High Street low area and Botany Street compared with the existing conditions. The modelling shows that the PMF events are to be contained within road reserves.

In a letter dated 24 August 2018, HI wrote to Council seeking Council's confirmation in regards to the stormwater and flood management solution in relation to the proposed development. As a result of the proposal, construction of new buildings will occur across an existing overland flow path for stormwater. The objective of the design solution proposed by HI is to:

- divert stormwater flows around the proposed buildings; and
- manage flows in flood events to ensure that there is no transference of flood water or flood impacts on properties in accordance with the requirements of the Randwick DCP 2013.

Council has advised HI of the following in considering the proposal:

- In line with previous advice, Council's preference is that if the existing piped drainage system is diverted within the site, it should be constructed as a separate system to the detention system required for the development. This would allow an easement to be created and for Council to own and maintain the drainage asset but not the detention system. It is noted that the on-site detention system presented to Council is in the order of 25 times larger than Council's existing stormwater system that runs through the site;
- Section 5.2 of Part B8 of the Randwick DCP 2013 requires that the development minimises adverse impacts on flooding, conveyance of floodwaters and floodplain storage volume. The flood modelling work undertaken by HI's consultant team demonstrates that the adverse flooding impacts on homes and streets created by the design layout will be mitigated by the proposed on-site detention system. The hospital owns and maintains other on-site detention systems for its developed area. Similarly, the on-site detention system required for the proposed

development, whether in-line or separated, should be owned and maintained by the hospital;

- Council has previously raised questions about the potential for sediment to accumulate in the inline detention system due to the flat grade and absence of a low flow channel in the design. The accumulation of sediment may result in public health impacts including odour and may also increase the need for maintenance. HI has previously advised that this was being investigated but has not yet informed Council of the outcome of this investigation; and
- Council understands that the detention system is required to have an inlet capacity of 12cu.m/s. The design of the inlet structures should consider both public safety in dry weather and in storm situations and consideration should be given to their appearance as an urban design element.

On this basis, Council confirms that the solution proposed by HI is acceptable subject to the above points being further considered and solutions developed. Council requests that should the proposal be approved, relevant conditions of consent be included to effectively address these issues.

The design of the site stormwater drainage system will be the subject of standard conditions noting that on-site stormwater detention is required for this development.

The proposed development is defined as a "Critical Facility" and the habitable floor levels and openings into the structure must comply with the relevant sections of "Table A – Floor Levels for Buildings" in Part B8 of the Randwick DCP 2013.

### **Biodiversity**

The EIS notes that no approval to remove vegetation is being sought under this DA. The proposed removal of certain trees along Hospital Road and on existing private properties was the subject of previous approvals (i.e. Demolition DA/208/2018). Further approval for removal of trees along Botany Street, Magill Street and Hospital Road will be sought under a separate Review of Environmental Factors (REF).

A Biodiversity Development Assessment Report has been prepared in response to Secretary's Environmental Assessment Requirements (SEARs). The report confirms that no remnant vegetation occurs within the site and no threatened flora and fauna was recorded for the site.

An Arboricultural Impact Assessment was undertaken to assess impacts on trees (more than 4m in height) immediately adjacent to the construction site. It assessed 11 trees along Botany Street and Hospital Road and concluded that 2 trees on Hospital Road are subject to a high impact into the Tree Protection Zone (TPZ), 7 trees on Botany Street and 1 tree on Hospital Road are subject to a medium impact and 1 tree on Botany Street is subject to a minor encroachment. The report notes that further detailed assessments are required to determine suitability for retention of the trees likely to be impacted by the proposed development.

Council strongly recommends that any proposed removal of trees be considered and assessed as part of this DA given that it is the current DA which requires tree removal to enable the proposed development.

Consistent with the recommendations of the Arborist Report, Council requests that further detailed assessments (root mapping), via non-destructive methods, be undertaken to assist with the retention of those trees identified with a high, medium or low impact rating. A site-specific Tree Protection Plan is also required to be prepared for all trees being retained and those located within 10m of any construction activities.

Given that the Arborist Report submitted for this DA only assesses 11 trees, Council requests that detailed Arborist assessment be undertaken for other trees within and around the site, including street streets along Eurimbla Avenue and Magill Street.

Council seeks to enter into an agreement with HI to ensure there is no 'net loss' of vegetation from public property, as well as a form of compensation to offset any likely environmental impact associated with the tree removal by either:

- a direct financial payment being made to Council to facilitate tree plantings in same streets or the surrounding areas/suburbs; or
- HI undertaking such public tree plantings at its own cost, which must meet all of Council's requirements and specifications.

### **Landscaping and public domain**

New landscaping and public domain works are proposed over numerous building levels, with the key features being:

- Magill Street landscape and internal courtyard (central) at the ED and satellite loading dock (Level-02);
- Botany Street park, central courtyard, internal courtyard (north-east) and northern boundary vegetation at Front of House department (Level-01);
- ICU courtyard at ICU and Medical Assessment Unit department (Level 03);
- Trafficable rooftop courtyard and non-trafficable rooftops at IPU department (Level 04).

The EIS states that the landscape concept plan highlights strategic opportunities for a landscaped outlook and interface along Botany and Magill Streets and Hospital Road.

As part of the landscape concept plan, Council requests HI to consider incorporating an interpretive use of an old sandstone stormwater culvert which was uncovered (crossing High Street at Eurimbla Avenue) during light rail works. The light rail works required the stone culvert to be removed and it is now in Council's possession. Photos of the insitu culvert are provided below.

Given that there are no public parks or open spaces in close proximity to the culverts former location, Council would support an interpretive use of the sandstone in landscape works associated with the project development so that the former craftsmanship and construction methods can be recognised appropriately in a local setting.



In addition, the Landscape Design Report and Plans submitted for the DA are required to be revised to include the following additional information:

- a Planting Plan & Plant Schedule which includes proposed species, botanic and common names, pot size at the time of planting, quantity, location, dimensions at maturity and any other details required to fully describe the works;
- a schedule showing the number of (as a percentage of total) the endemic, native and exotic species that will be used in all new planting, as well as the number of new canopy trees to be planted compared to the number of trees to be removed;
- location of existing street trees in Botany Street to be retained in accordance with the 'Tree Protection Measures' condition, and how the planting strategy within the site will respond to the existing vegetation; and
- lighting strategy for paths and gardens to assist with way finding as well as surveillance/security.

### **Heritage**

The Heritage Impact Statement (HIS) submitted as part of the EIS addresses relevant statutory and non-statutory conservation planning controls. The HIS concludes that there are no heritage items or heritage conservation areas within the site and that the proposed development will not impact on the conservation values of the heritage items and heritage conservation areas within the vicinity of the site.

According to the Preliminary Aboriginal Archaeological Assessment (PAAA), the likelihood that Aboriginal archaeological remains have survived within the study area is difficult to assess and any surviving archaeological remains would be of considerable archaeological significance due to their rarity. The PAAA provides recommendations in relation to archaeological monitoring, consultation and approvals.

The Historical Archaeological Assessment (HAA) undertaken for the proposal provides a map showing areas of nil to low, and low to moderate archaeological potential within the study area. The HAA provides recommendations in relation to Archaeological Research Design, archaeological testing, reporting, storage of artefacts and co-ordination with the Aboriginal archaeological program.

Clause 5.10(1) of the Randwick LEP 2012 includes an objective of conserving the heritage significance of heritage items and heritage conservation areas including associated fabric, settings and views.

The heritage property which is closest to the subject site is "Cotswold" at no.4 Hay Street while all other heritage items and heritage conservation areas are further away. The heritage item is separated from the subject site by properties on the southern side of Magill Street. The separation distance would be sufficient to avoid impact on the fabric of the heritage item, and minimise impact on its streetscape setting. Should the proposed development be approved, consent conditions should be included relating to methods of construction and dilapidation recording. The 13 storey development will have some visibility in views towards the heritage item from Hay Street, but the intervening Magill Street properties should assist in reducing impacts on the amenity of the rear of the heritage item. Similarly, the development will not be prominent in views from surrounding heritage items and heritage conservation areas.

The assessments of Aboriginal and Historical archaeology which have been submitted are sufficient to meet statutory requirements, and their recommendations should be included as conditions of consent (should the DA be approved).

The PAAA notes that Aboriginal historical associations with the area, for example Aboriginal children who lived at the Randwick Asylum, are likely to be of ongoing importance to the local Aboriginal community. If there are opportunities for onsite interpretation of the history of the place, consultation should be undertaken with the La Perouse Local Aboriginal Land Council to determine whether recognition of these or other Aboriginal associations with the area would be appropriate to commemorate in some form within the context of the proposed development. This would be consistent with interpretive displays elsewhere within the hospitals campus. A consent condition should be included that should Aboriginal or Historical archaeological material be discovered during site investigations or subsequent construction works, a comprehensive Interpretation Strategy and Plan for the site, including appropriate community consultation, be prepared and implemented as part of the proposed development.

In relation to the social impact of the proposed development, Council requests that photographic evidence catalogue the residences of Eurimbla Avenue (subject to the demolition). This may then be used in the future to set out the historical and social ties of those residences to the area through interpretive plaques, publications and/or as a social record of a changing landscape.

### **Noise and vibration**

A Noise and Vibration Impact Assessment has been prepared to provide a quantitative assessment of potential construction and operational noise impacts on noise-sensitive receivers in the vicinity of the proposed development.

The assessment report provides the following findings in relation to potential construction impacts:

- residential areas to the north and south of the site will be affected the most by noise and vibration arising from the proposed construction works. For works/activities proposed outside recommended standard hours (i.e. 6am-7am, Monday to Friday), the predicted noise levels at these residential receivers have the potential to awaken people from sleep and

increased noise impacts are expected when factoring in any concurrent Light Rail construction works;

- construction traffic noise levels will have no adverse impact on nearby receivers during the day time period;
- construction traffic will not worsen the Sleep Disturbance and Sleep Awakening impacts on the High Street and Botany Street residential receivers; and
- construction traffic noise levels have the potential to cause sleep disturbance and affect the health and wellbeing of residents from Magill Street and Hospital Road.

The assessment report recommends that for any works occurring during the night time period (i.e. 6am -7am, no other night time construction works proposed between 6pm and 6am) that have the potential to affect residential receivers, all reasonable and feasible mitigation measures be exercised to reduce the construction works noise levels. To address impacts from the construction traffic, the report recommends that construction traffic movements be planned and managed wherever possible to limit the frequency of construction vehicle movements and avoid Magill Street and Hospital Road during early morning and out of standard hours. The report further notes that potential vibration impacts on sensitive equipment within the existing hospitals campus and UNSW buildings and residential areas to the north and south of the site are to be managed through the Construction Noise and Vibration Management Plan (CNVMP).

In terms of potential operational impacts, the report concludes that:

- The ambulance bay and ED drop-off operations (along Magill Street) satisfy applicable noise criteria during day, evening and night time periods and are unlikely to cause sleep disturbance;
- The satellite loading dock proposed in the south-east corner of the site will be accessed via Hospital Road. It is an enclosed facility with solid wall along its south and west boundaries and landscape screening along the street edge providing shielding to Magill Street residents. Noise emissions due to vehicle movements and loading/unloading operations satisfy the NPI noise criteria during day, evening and night time periods;
- The night time noise from the loading dock, truck reversing alarms in particular will exceed the Sleep Disturbance Screening Criteria, but unlikely to cause awakening from sleep or affect health and wellbeing of receivers. The report recommends administration controls be implemented to manage the beeper noise;
- Traffic generated on High Street, Botany Street and Hospital Road is unlikely to have adverse noise impacts on surrounding residents;
- The night time traffic noise on Magill Street is likely to awaken people from sleep and potentially affect health and wellbeing of the receivers; and
- The noise levels from helicopter movements associated with the new landing site are predicted to be 10 to 15 dB(A) above the current noise exposure from the existing landing site for residents to the north of High Street. The predicted noise levels will be similar to the current situation for residents to the south of the site.

The report recommends that feasible and reasonable noise mitigation measures be considered and implemented to address night-time traffic noise impacts to Magill Street during operation.

### ***Construction***

Council notes that according to the EIS, there will be no construction works proposed between 6pm and 6am on weekdays, between 5pm and 8am on Saturdays and no works on Sundays and public holidays. However, construction works will be undertaken between 6am and 7am on weekdays and 1pm to 5pm on Saturdays, which are 'out of the standard hours'. To avoid sleep disturbance on residents to the south and north of the site, Council strongly recommends that the construction hours be reviewed and no construction works be undertaken between 6am and 7am. This requirement is consistent with all other construction sites within the Randwick LGA.

Consistent with the recommendations of the Noise and Vibration Assessment Report, Council requires that appropriate mitigation measures be included in the CNVMP to reduce construction traffic noise during the sensitive times, e.g. no truck movements along Magill Street and Hospital Road and no idling or parking of trucks on the surrounding residential streets. Council recommends that relevant conditions be included to reinforce these noise mitigation measures.

### ***Operation***

The proposed layout of the satellite loading dock being an enclosed facility with access provided via Hospital Road is generally supported. However given the close proximity of the proposed access point to nearby residences, Council recommends that the loading dock be reconfigured to locate the access point further away from the Magill Street end. Council understands that administration controls will be implemented to manage night time noise from the loading dock (i.e. truck reversing alarms). It is recommended that these controls be included as conditions of any consent, which should also address noise generated from loading/unloading at night time.

In relation to any ongoing night-time traffic noise on Magill Street, Council requests that the Noise and Vibration Impact Assessment Report be updated to include detailed acoustic assessment for each individual property, with specific mitigation measures proposed to minimise noise impacts on these properties (e.g. building acoustic treatments to the most sensitive receivers). Long term noise monitoring and validation of mitigation works should be undertaken upon commencement of operation of the ASB to assess if the acoustic mitigation measures are effective. Consultation should also be undertaken with the most affected receivers during this noise validation process.

The EIS has not outlined how the noise impact from the helicopter operations can be managed. It is therefore recommended that noise from this source be investigated in more detail including consideration of alternative landing locations for minimised noise impacts on nearby residential areas.

### **Sustainability**

The EIS outlines that the proposed development will achieve a theoretical 4-Star Green Star rating and a high level of sustainability performance aligned to industry best practice. Given the strategic objectives of the ASB, the wider Randwick Campus Hospital and the Randwick Collaboration Area, as a globally

renowned centre for excellence in health, education, training, Council believes and requests that the ASB should strive for a minimum 5 star green star rating to signify 'Australian Excellence' as a high-performance healthcare facility.

Council requests HI investigate the following key measures to improve its green star rating:

- Excess Energy from roof mounted photovoltaic systems could be exported to the University to reduce payback periods and provide a viable renewable energy solution;
- Openable windows/louvres to allow for cross ventilation would improve passive cooling especially in the internal car parking areas, administrative and non-sterile sections of the proposed building;
- Increased permeable areas in landscaped areas including internal courtyard is encouraged to meet proposed Water Sensitive Urban Design Objectives;
- Cyclist facilities for visitors, patients and staff should be provided including end of trip facilities; and
- Indoor Environment Quality (IEQ) should be a priority for a healthcare facility. Low Volatile Organic Compound (VOC) finishes, paints and adhesives should be utilised to improve indoor air and environment quality.

### **Interface issues on Magill Street**

In summary the following key issues and corresponding measures are proposed to improve the amenity of those residences along Magill Street.

- Council recommends that further measures be considered to reduce the visual dominance of the proposed development;
- Council recommends that Magill Street remain a no through road which is likely to reduce the estimated traffic volume, being 2,500 vpd during operation by appropriately 950 vpd; and
- To avoid sleep disturbance from construction noise, Council requests that no construction works be proposed between 6am and 7am. To minimise night-time noise impact of the satellite loading dock, Council recommends that the access points of the loading lock be located away from the Magill Street end. In relation to ongoing traffic noise during night time, Council requests that the Noise and Vibration Assessment Report be reviewed to include specific noise mitigation measures for properties along Magill Street.

The above issues are pertinent to maintaining environmental amenity and providing a high quality design outcome to this prominent site, in the interest of both Council and the wider community. The Department of Planning and Environment is strongly urged to pursue design amendments with HI prior to proceeding with the application, to effectively respond to these issues.

Should you have any queries or wish to further discuss any of the issues raised above, please do not hesitate to contact Elena Sliogeris, Coordinator, Strategic Planning on 9093 6961 or Ting Xu, Senior Strategic Planner on 9093 6890.