Jacobs’ Responses to GANSW Design Review

The issues raised by GANSW have been listed and numbered below in italics with a response provided for each.

1  *GANSW generally supports the proposal.*

   Noted.

2  *However consider aspects of the built form and façade articulation to be underdeveloped.*

   The SSDA application was submitted during the Design Development process. Detailed aspects of the building and façade will be further developed during the documentation stage. Refer responses nos. 16-23 later in this document.

3  *The multi-storey carpark is considered likely to adversely impact the Hospital Road streetscape.*

   We note that the carpark has been deliberately pushed as far north as possible away from hospital road using the most efficient carpark footprint, therefore allowing retention of the existing line of trees which will help keep the main character of the street. New crossings and landscape will help organise and direct pedestrian traffic to new and clear wayfinding strategies that will identify direction to the existing and new entries. This new carpark build and landscaping will help improve the current streetscape. The requirement to provide adequate carparking along with clarity to its access and also proximity & interface with the future new main entry of this stage and the next 2 planned stages has driven the siting of this carpark. This in addition will allow for future carparking expansion all of which will affect the streetscape but due to comments above such as landscaping will improve the streetscape.

4  *The northern precinct would benefit from a range of uses, not just parking.*

   Most of the land north of Hospital Road is unaffected by this proposal and is available for future development which could be a mix of carparking and any other uses that don’t have a need for clinical adjacency with the main hospital building. Other than carparking, the majority of Stages 1 and 2 do require close clinical adjacency.

5  *Good amenity and proximity to a waterfront reserve may make the northern precinct an attractive area for future hospital buildings and this should be explored.*
There is no desire to expand clinical services to the north as it is operationally inefficient, would encroach on necessary parking facilities that are located to provide approach & destination clarity. In addition, development of this site would result in sprawl of the hospital facility which is not functionally acceptable to the workings of a cohesive hospital development on this site.

6 The proposed multi-storey parking structures do not improve or activate Hospital Road.

Noted. The masterplan seeks to activate the central pedestrian spine running from the Multiblock through Stages 1 and 2 to the educational precinct, in preference to the vehicular access route.

7 Remote parking necessitates significant pedestrian travel distances to hospital buildings.

The location of the multi-storey carpark was selected because it is likely to be directly opposite the future main hospital entrance in Stage 2. It should be noted that parking for patients with limited mobility is provided under and directly adjacent to the Stage 1 building. More extensive excavation for underground parking beneath clinical buildings is not practical because of excessive cost, acid sulphate soils and proximity to the foundations of existing heritage buildings and the river. Walking distances from the multi-storey carpark to the existing buildings and Stage 1 will not be more than that from existing on-grade parking.

8 Options for integrating parking with buildings that activate Hospital Road ‘stitching’ the two sides of the site together should be explored.

For the foreseeable future any facilities that do not require close adjacency to the acute services can be accommodated in existing buildings. Most of the land north of Hospital Road is unaffected by this proposal and is available for future development. With a reduction in the numbers of cars needing to travel beyond the carpark, it may be possible in future to pedestrianize Hospital Road beyond the multi-storey carpark.

9 An integrated landscape strategy should describe how landscaping is used to establish intuitively navigated pedestrian routes incorporating garden and places to sit.

The masterplan does have an integrated landscape strategy. The core of the design strategy is a new landscaped pedestrian avenue linking the principal buildings on the campus: the Multiblock, Stage 1, Stage 2 and the Education Precinct. This will incorporate the existing row of mature Jacaranda trees and will incorporate the Stage 2 new main hospital entry at its midpoint.

The majority of work required to establish the landscaped pedestrian avenue will take place in Stage 2 when the location of the Acute Services Building and a new permanent main entry point has been confirmed. Until then it is not proposed to landscape areas, such as the on-grade carpark, that may form the footprint of the forthcoming building.

Internal amenity

10 It should be confirmed that proposed skylights admit sufficient light; increasing the area of glazing should be considered if appropriate.
The area of skylights to the northern end of the Hospital Street atrium was increased following GANSW’s initial comments.

11 Artificial lighting should accentuate the generous volume of the space rather than throw light downwards from ceiling mounted luminaires.

Uplighting to the ceiling and underside of the internal bridges has been incorporated and the geometry carefully considered to avoid glare to existing bedroom windows.

12 It is not yet clear how the Hospital Street will integrate with the existing main hospital entrance and whether any improvements to the existing admission reception area are proposed.

The existing main hospital entrance is not altered by this proposal. As shown on the floor plans, entry to Stage 1 comes off the existing route between the main entry and the public lifts into the northern end of the Hospital Street atrium.

Note that the Stage 2 building is likely to contain a new main hospital entrance and that Stage 1 has been designed with both existing and future scenarios in mind, including the fact that the entry point to Stage 1 would be relocated to the other end of the Hospital Street atrium when Stage 2 is complete.

13 It should be demonstrated that balconies receive some winter sun and that balcony depth does not unduly limit daylight penetration to adjacent internal areas.

The balconies receive very little winter sun because of their orientation. The orientation of the new building has been determined by the location of the existing heritage buildings, the adjacencies required with the Multiblock acute services, and the desire not to shade inpatient rooms in the Multiblock.

The architectural design is led by the internal clinical requirements, not by the ancillary external spaces. Many of the balconies and terraces are designed for rehabilitation. Patients undertake therapeutic exercises using a variety of topographies and walkways that are permanently installed in these outdoor spaces. These spaces need to be adjacent to the associated indoor clinical facilities for close clinical observation. With these constraints it has not been possible to configure the balconies to take advantage of winter sun. They will receive winter sun for a short period in the morning.

Note that the 4.2m floor to floor heights allow considerable depth of daylight penetration from the balconies.

14 We note that balconies shown in 3D visualisations appear deeper than those shown in plan and that Figure 17 in the Schematic Design report show level 3 balconies omitted.

We believe this refers to the two Level 4 balconies which, unfortunately, are not shown in the visuals, but are in fact included in both the tender drawings and the plans submitted with the SSDA. The visuals will be updated and resubmitted. We confirm that other than this error, the depth of the balconies shown in the visuals has been modelled accurately and is in accordance with the plans submitted.
Plant rooms located adjacent to balconies on the southern corner of each floor should be enclosed by acoustic attenuation sufficient to mitigate their potential acoustic impact.

Plant room attenuation has been assessed and mitigation strategies implemented by the acoustic consultant in conjunction with the mechanical consultant.

**Built form and facade expression**

The stated architectural intent for the proposed CSB is to achieve ‘continuity of form and materiality’ by adapting stylistic features of the historically significant Stephenson and Turner buildings.

“Adaptation of stylistic features” may be the GA’s subjective opinion of the design, but it is not an accurate reflection of Jacob’s intention. In our opinion continuity of form and material has been achieved without mimicry or pastiche by adopting those broad architectural strategies of the original buildings that are still relevant today.

In particular, the proposed CSB incorporates rendered curved/bullnosed horizontal banding that references similar features of existing buildings and a terracotta cladding system to match existing brickwork.

The terracotta does not ‘match’ the brickwork. It comprises 1200 x 300mm suspended rainscreen panels. This and the glazing and other proposed cladding systems are clearly contemporary with tolerances, details and finishes that are quite different to the 75 year old buildings. Perhaps this has not been explained clearly enough, but it seems inherent to us that a contemporary hospital cannot possibly mimic a 75 year old building. The very essence of the intended relationship between the 2 buildings will be the contrast between the actual scale, materiality and detail of the two buildings, despite their similar point of departure. The truth is that the new building will make the existing buildings look very old and we don’t consider this a bad thing.

GANSW has previously expressed reservations about this approach and consider the proposed CSB falls short in demonstrating subtlety and clarity of expression seen in the existing buildings.

The Architects have noted GANSW’s opinion. Refer to comments above.

New buildings should enable old buildings to be legible by maintaining clear distinction between the two by creating thresholds and adopting contrasting but complementary articulation and expression.

Note that the Multiblock has been extended and modified significantly in the past so that currently, in many places, it is not clearly legible, especially internally. The proposal, although unable to repair that damage (because the existing hospital must remain fully operational throughout construction), manages to maintain legibility despite the need for total functional integration.

Interpretation should involve making a considered response to a heritage building having understood it as a whole rather than referencing the heritage building’s most readily identifiable stylistic feature/s in the new building.

Agreed.

If stylistic cues are to be taken from the heritage buildings, they should be applied deftly and with consideration of original architectural intent.

Agreed.
21 The proposed CSB features bullnosing to rendered banding but not the areas of terracotta facade above or below these bands. The effect is not one of wrapping facades, but something less cohesive and without a clear organising principle.

The heritage buildings are curved only where the façade is rendered or glazed. Brickwork corners are square. The only curved face brickwork is part of the 1980s extensions. The new building follows the logic of the original buildings, with rendered facades curved and terracotta square.

22 The proposed projecting stair cores have potential to successfully interpret existing stair cores, however the success of these elements will depend on detailing the glazing such that the curved plane does not become faceted.

Curved glass is specified. It is not intended to be faceted.

23 Circular openings in awnings are considered impractical and should be reconsidered.

The circular openings are a key component of the new building’s identity and architectural expression. The balconies and canopies with openings are of such a scale that they will be clearly visible across the river and by pedestrians approaching the main entries. Sunlight passing through the openings will create a large illuminated oval on the façade or paving below. With the passing day that oval will move, and will be visible both from within the building and externally.

We assume the GA regards the circular openings as impractical because they allow passage of sun, wind and rain. The balconies are not intended to be used by patients during inclement weather, whether they are covered or not. The openings in entry canopies are either not above principle pedestrian paths, or have glazed skylights covering them.

24 The proposed multi storey carpark is considered unlikely to contribute positively to the streetscape and amenity of Hospital Road.

The carpark will contribute to the amenity of those travelling to the hospital by car.

25 The Visual Impact Assessment has not adequately described the visual impact of the parking structure on Hospital Road and should be revised to do so.

The VIA can be amended to include an additional viewpoint of the carpark on Hospital Road. The conclusions are unlikely to be altered.

26 Blank screened facades with little setback from the street are likely to be imposing. Strategies for reducing the impact of the parking structures such as the incorporation of public art and facade articulations should be explored.

Setback from the street is provided and existing street trees are retained. The carpark façade has articulations associated with the canopies and stairs and projecting floor slab bands, a level of detail not normally provided to hospital carparks.

An arts strategy will be commenced soon by Health Infrastructure in accordance with the “NSW Health and the Arts” guidelines. The Architects will work with HI and the hospital to integrate public art into the proposed buildings, including the carpark.
Landscape

27 Some proposed landscaped courtyards appear to experience significant overshadowing - particularly the courtyard adjacent to the patient drop-off area and the roof terrace. It should be verified that these provide good amenity throughout the year.

The landscape area adjacent to the patient drop off-area is at the base of a lightwell and will not receive sunshine in winter. It is not directly accessible from habitable rooms and its amenity is seen as providing a landscaped outlook to the floors above and from the basement patient entry foyer.

The new building is positioned to the south of the existing Multiblock and is lower than it, so naturally it is mostly in shadow during winter months. It is therefore not possible to provide good amenity year round for people occupying those courtyards. However, the courtyards also provide amenity for people occupying the adjacent internal spaces with plentiful daylight and views to natural vegetation.

28 The viability of gardens in these spaces as well as likely thermal comfort should be considered.

Planting is selected to suit the micro-environment in each specific location, including those with little sun penetration. It is not intended that shaded external areas be habitable in winter. The hospital street atrium provides this amenity.

29 Ample places to sit outside in sun and shade should be provided.

This is available in the existing north-facing Hospital Green which is retained.

ESD Strategy

30 Solar power generation, solar water heating, external solar shading and rainwater systems should be incorporated in the proposal.

Sustainability and Energy targets are in accordance with Health Infrastructure’s Design Guidance Note No. 11. That is, the project targets an equivalent of Green Star 4 star as aspirational within the context of project location, scope and budgetary allowances, with no requirement for documentation or certification. In addition, the project will achieve a minimum 10% improvement on the NCC J energy requirements, which will be demonstrated through JV3 modelling. The Energy Improvement Allowance of 2% on this project can be spent on initiatives and systems if a further 5% improvement on NCC Part J Performance is achieved along with a maximum 7 year payback period.

Public art, cultural heritage and community consultation

31 The proposal should support the specific needs and reflect the cultural heritage of the diverse community which includes indigenous and refugee populations. Consultation and engagement is crucial to identify specific cultural needs and to verify the proposal is welcoming, accommodating and supportive. The early development of a public art strategy is encouraged. Public art should be developed with community to celebrate cultural heritage and be integral to the architecture and landscape to mitigate the risk of omission.

An arts strategy will be commenced soon by Health Infrastructure in accordance with the “NSW Health and the Arts” guidelines. The Architects will work with HI and the hospital to integrate public art into the proposed buildings.
Our recommendations are as follows:

32 Consider uses for the land north of Hospital Road other than for carparking.

Most of the land north of Hospital Road is unaffected by this proposal and is available for future development which could be a mix of carparking and other uses that may not have a need for clinical adjacency with the main hospital building. Other than carparking, most of Stages 1 and 2 do require close clinical adjacency.

33 Demonstrate pedestrian travel routes, distances and walking times as part of the proposal for people using the proposed multi-level car parks.

It should be noted that parking is provided under and directly adjacent to the Stage 1 building for patients with limited mobility. Proposed pedestrian travel routes are shown on pages 13, 14 and 26 of the submitted Concept DA Proposal report. Maximum walking distances are in the order of a few hundred metres and walking times are of 5 to 10 minutes.

Note that the hospital currently provides a courtesy bus serving the existing on-grade carparking.

34 Reduce the impact of the multi-storey carparks on hospital road by improving the facade design and incorporating public art.

As mentioned previously, an arts strategy will be commenced soon by Health Infrastructure in accordance with the “NSW Health and the Arts” guidelines. The Architects will work with HI and the hospital to integrate public art into the proposed buildings including the carpark.

It is not intended to change the façade design because there are no functions other than carparking required in the multi-storey structure at this time. In addition the existing street trees are retained in front of the façade and the proposed design has a level of quality and detail not normally provided to hospital carparks with timber look full height vertical battens and projecting floor slab bands breaking up the scale of the façade.

35 Verify adequacy of natural light within the ‘Hospital Street’.

The area of skylights to the northern end of the Hospital Street atrium was increased following GANSW’s initial comments. A further increase is limited by requirements for fire separation. Artificial lighting will ensure sufficient illumination on days with low levels of natural light.

It should be noted that the Atrium contains vital clinical, service and public access links at Lower Ground Floor, Ground Floor, Level 1 and Level 2. These links are essential if the Multiblock is to remain a viable hospital facility in the long term. They connect to the primary lift core of the Multiblock using a route above the existing loading dock, where the architectural impact on the heritage building is minimized.

36 Ensure plant rooms are acoustically well isolated.

This has been done by the Acoustic and Mechanical consultants.

37 Review southern balcony configuration to ensure adequate light penetration to adjacent rooms and good access to winter sun.
The orientation of the building has been determined by the location of the existing heritage buildings, the adjacencies required with the Multiblock acute services, and the desire not to shade inpatient rooms in the Multiblock. The architectural design is led by the internal clinical requirements, not by the ancillary external spaces. Many of the balconies and terraces are designed for rehabilitation. Patients undertake therapeutic exercises using a variety of topographies and walkways that are permanently installed in these outdoor spaces. These spaces need to be adjacent to the associated indoor clinical facilities for close clinical observation. With these constraints it has not been possible to configure the balconies to take advantage of winter sun. They will receive winter sun for a short period in the morning. The 4.2m floor to floor heights allow considerable depth of daylight penetration from the balconies.

38 Rethink facade expression to better interpret and enhance existing heritage buildings.

It is not intended to change the façade design because Client and Architect are agreed that the current design sufficiently interprets and enhances the existing heritage buildings.

39 Make ESD commitments.

Sustainability and Energy targets are in accordance with Health Infrastructure’s Design Guidance Note No. 11. That is, the project targets an equivalent of Green Star 4 star as aspirational within the context of project location, scope and budgetary allowances, with no requirement for documentation or certification. In addition, the project will achieve a minimum 10% improvement on the NCC J energy requirements, which will be demonstrated through JV3 modelling.

40 Detail public art, cultural heritage and community consultation processes.

An arts strategy with appropriate heritage and community consultation will be commenced soon by Health Infrastructure in accordance with the processes set out in the “NSW Health and the Arts” guidelines. The Architects will work with HI and the hospital to integrate public art into the proposed buildings. Note that considerable consultation has already taken place with the local community and hospital staff, including a number of open information events that were well attended. HI, the hospital and the architects are all committed to continuing comprehensive consultation.

In summary it should be noted that some of the GA’s comments conflict with the responses provided by the other agencies and with the requirements of the client, users, the community and the brief. The Architects’ design is a genuine and thoroughly thought through response to the often contradictory opinions and interests of all the various stakeholders and a carefully considered balance with the resources available and the constraints imposed. We believe it will produce a high quality architectural outcome that sets a standard and a future pathway for continued development of the hospital campus.