PLANNING
BUILDING
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CITY PLAN SERVICES

18 October 2016

Our Ref: 15-200

NSW Department of Planning and Environment
23-33 Bridge Street
Sydney NSW 2000

Attention: Brent Devine (Senior Planner)

Dear Brent,

RE: RESPONSE TO SUBMISSIONS - CAMDEN MEDICAL CAMPUS - SSD_7387

Further to your letter dated 12 September 2016, City Plan Strategy and Development (CPSD) has reviewed the submissions received resultant from the exhibition of the above State Significant Development Application (SSDA). Submissions were received from the following parties/agencies:

- Camden Council (CC);
- Environmental Protection Authority (EPA);
- Sydney Water (SW);
- Rural Fire Service (RFS);
- Transport for NSW (TfNSW);
- Office of Environment and Heritage (OEH);
- Department of Primary Industries (DPI); and
- Roads and Maritime Services (RMS).

There were also a few queries from the Department of Planning and Environment (DPE) in your letter and the public submissions made in relation to the application.

On behalf of the Applicant, CPSD has reviewed the various matters raised in these submissions and provides a collated response in the accompanying table at Appendices 1 and 2. In responding to the matters raised, CPSD has taken advice from specialist consultants and technical experts and this advice is also attached at Appendices 3 to 8 for your information.

The attached documents address the submissions received.

We trust that the above information assists the DPE in finalising its assessment of the subject application in the near future.

Should you require any further clarification or information in respect to this response, please do not hesitate to contact Mel Krzus (Associate Director) or James Kingston (Project Planner) on 02 8270 3500.

Yours Sincerely,

Stephen Kerr
Executive Director

Appendix 1

Response to Agency Submissions

Authority/ Submission Author	Issue Raised (refer to respective submission letters for detailed issues)	Response
Camden Council	The proposed development includes a significant variation to the maximum building height development standard that applies to the site. The merits of this variation and its impacts upon the surrounding area, in particular the impacts upon the residential properties to the east and south east, must be carefully assessed by the Department.	This is a matter for the DPE but we note a robust Clause 4.6 Variation Request report has been submitted providing clear justification for the variation including consideration of impacts on surrounding residential uses. Specifically, we note that all relevant matters for consideration under Clause 4.6 have been addressed and satisfied and that the variation will result in a better planning outcome for the site and surrounds.
As above	The proposed development's interface with adjacent land, in particular the residential properties to the east and south east, is of critical importance. These residential properties generally contain single storey detached dwellings and present a much lower density character than that of the adjacent B5 Business Development zone. The Department must carefully consider the appropriateness of the interface of the proposed development with these properties, in respect the development's design and operations, and have regard to the existing low density residential character of the area.	As above, this is a matter for the DPE but the EIS considers the interface with the adjacent residential land in detail and potential future operational impacts. Refer to the EIS (and accompanying design statement by HPI) for further detail. We consider that the proposed development will result in a better planning outcome for the site and surrounds than envisaged under the Growth Centres SEPP and Turner Road DCP.
As above	The DA should be widely notified to property owners and occupiers in the surrounding area with particular regard to the residential properties to the east and south east.	This is a matter for the DPE.
As above	Parts of lot 845, DP 1203105 are mapped as bush fire prone land. It would therefore appear the proposed development is Integrated Development, as it is defined as a special bush fire protection purpose and requires a Bush Fire Safety Authority pursuant to Section 100B of the Rural Fires Act 1997 (Integrated development). Clarification from the NSW Rural Fire Service should be sought on this matter.	The response prepared by Ecological at **Appendix 3** confirms that the adjacent "riparian corridor will not contain sufficient vegetation or be of a size and shape that supports a bushfire and is not categorised as bush fire prone vegetation". Furthermore, we note that under Division 4.1, Section 89J, Clause (1)(f) states that a bushfire safety authorisation under Section 100B of the Rural Fires Act 1997 is not required for State Significant Development.
As above	The proposed development appears to include the construction of a new stormwater drainage outlet within the adjacent riparian corridor. Any works within waterfront land must either be consistent with the Oran Park and Turner Road Waterfront Land Strategy 2009, or will require a Controlled Activity Approval from the Department of Primary Industries Water pursuant to the Water Management Act 2000 (Nominated Integrated development).	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"All proposed works for the detailed design will be in accordance with the waterfront land strategy. The current design submitted as part of the concept submission is consistent with these requirements. It is noted that the existing outlet is to be removed and replaced with a new outlet at the revised location."*

As above	The site is subject to an existing stormwater drainage easement that benefits Council. This easement is proposed to be relocated to facilitate the construction of the proposed development. The proposed relocation of Council's drainage easement must be negotiated separately with Council.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"The easement was originally located on the proposed site boundary. This boundary has been amended since the stormwater pipe was constructed.* *It is proposed to relocate this easement to better align with the current site boundary. The existing stormwater pipe is proposed to be realigned in conjunction with site regrading to suit the proposed easement. This will be discussed with council during the detailed design process for an integrated outcome prior to the submission of the relevant future DA."*
As above	A landscaped buffer with a minimum width of 2m must be provided along the site's frontage adjacent to the riparian corridor.	A minimum 2 metre landscaped buffer is provided adjacent to the riparian corridor with a much greater provision at the interface with the riparian corridor at the southern end of the development. Refer to the submitted landscape plans for further detail.
As above	Indicative details/perspectives of the proposed development's presentation to the adjacent riparian corridor and land to the south/south west should be provided to understand the visual impacts from those elevations.	An additional indicative perspective of the development from the riparian zone prepared by HPI accompanies this submission at **Appendix 8**. An extract is below. 
As above	Consideration should be given to the location of future signage for the proposed development. Signage zones should be identified as part of the proposal with their overall placement integrated in the overall design.	Signage is not a part of the subject SSDA. A separate DA will be lodged for signage where the merits of such will be addressed at that time.
As above	All lighting must comply with AS4282 and AS1158.	Noted. The subject SSDA is conceptual at this stage and lighting will be addressed as a part of the detailed landscape scheme for future stage DAs. However, if the DPE consider it to be necessary, this could be conditioned as a matter to be addressed in future stage DA(s)
As above	All glazing used externally must not exceed 20% reflectivity.	Noted. The subject SSDA is conceptual at this stage and detailed materials (including reflectivity properties) will be addressed as a part of the detailed landscape scheme for future stage DAs. However, if the DPE consider it to be necessary, this could be conditioned as a matter to be addressed in future stage DA(s)
As above	All required roof mounted equipment should be integrated into the overall design of the proposed development to ensure it is neither visually dominant nor prominent.	The plant rooms for the Hospital and the operating theatres are positioned on Level Two. This allows for a roof space that is free of equipment which can facilitate future staged development without unduly affecting hospital operations or the visual massing of the development.

As above	The detailed design of all future buildings should be consistent with the Turner Road Development Control Plan 2007.	Noted. The concept development is capable of complying with the relevant design based provisions of the DCP, with compliance to be demonstrated in future stage detailed DA(s).
As above	The intersection analysis appears to be inconsistent with previous applications, which indicated the intersection of Gregory Hills Drive/The Hermitage Way and Donovan Boulevard has some movements operating at a level of service F. The additional traffic from this development would significantly affect the operation of this intersection. A peer review of the modelling should be undertaken to ensure the intersection can accommodate the traffic generated by this development.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"The analysis is consistent with the precinct approval (refer to the Badgally Road Extensions Report - Appendix B (Cardno, 2009) and deemed to be both reasonable and conservative. Differences in the operational performance of the intersection in comparison to a recent application are directly related to the trip distribution assumptions and the level of traffic signal optimisation undertaken for this study. Refer to section 5.10.3 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details".*
As above	The surrounding road network is currently under construction and should be completed prior to any of the proposed development becoming operational.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"This is consistent with the study assumptions. Refer to section 2.1.2 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details".*
As above	The number of proposed access points appears excessive and may create confusion and potential conflict for motorists. Rationalisation of the access points should be considered.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"The proposed hospital and its access points are designed to provide safe and efficient access across the site. This is achieved through segregating and designating access points for specific hospital uses, which includes ambulance emergency access, general public access, car parking, staff and service vehicles.* *These principles align with the building requirements of a hospital, and results in a controlled environment that limits the number of high frequency access points and achieves safe and efficient access for all user groups. Refer to section 3.4 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details."*
As above	The proposed access off The Hermitage Way should be physically limited to left in/left out only.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"This is consistent with the study assumptions and will be further detailed as part of the subsequent DA's."*
As above	No heavy vehicle access is permitted to/from the site from/to The Hermitage Way as outlined in the Turner Road Development Control Plan 2007.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"This is consistent with the study assumptions and detailed in section 3.3 and figure 3.2 of the Traffic Impact and Parking Assessment. All heavy vehicle access will be restricted to Digitaria Drive."*
As above	As the proposed accesses will be controlled by boom gates, an analysis of queue lengths during peak arrival times needs to be provided to ensure the queue lengths can be accommodated without spilling onto the road network. The traffic report states this will be undertaken in the future, however this needs to be undertaken now as the outcome of this assessment may result in the scale of the development being too large for this site if queueing cannot be accommodated within the site.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"An assessment was undertaken and indicated that queuing could be accommodated under the proposed full design arrangement.* *Spatial provision is also noted to be conservative and allows for boom gate operations and further adjustments to be made to proposed access driveways and queuing area. The report references that known advancements in technology will occur during the progressive staged development of the facility and result in site efficiency improvements, which will further reduce the spatial needs for these types of operations. Refer to section 4.2*

		in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details."
As above	Details on the entry system should be provided, as the traffic report states this is dependent on advances in technology.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"The appraisal that was undertaken to support the full development concept approval is deemed to be sufficient and robust for demonstrating the appropriate scale and layout of the proposed development and its ability to manage traffic flow and queuing. It is also noted that this assessment does not rely on advancements in technology, which are likely to provide and allow for further site efficiencies and as a result the assessment is deemed to be conservative. A detailed review of queuing area requirements will be undertaken as part of future staged development applications and will account for demand and changes in technology at the point of the staged planning application.* *Refer to section 4.2 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details."*
As above	Further details on loading and servicing are required, including how many vehicles are expected per day and the sizes of those vehicles. The detail provided indicates 12.5m vehicles are to service the site. Is this adequate or will larger vehicles be required? No dimensions of any loading bays have been provided. A loading/service management plan should be prepared to ensure vehicles are not waiting on public roads in order to access the site.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"A large number of service bays are proposed and this allows for operational flexibility. The design provision is also noted to be above what is typically provided at similar developments. The turning path analysis confirmed that the allocated loading bay areas within the concept plan are sufficient to accommodate the design service vehicle that has been determined for the site. Refer to section 4.5 and appendix I in the Traffic Impact and Parking Assessment for further information. Further details will be provided as part of future staged planning submissions."*
As above	The number of accessible car parking spaces required should be in accordance with Building Code of Australia.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"The total parking provision is significantly more than required to according to AS 2890.1 and 2890.6 (including BCA) and the allocation of accessible spaces will be detailed within the future staged planning submissions. Refer to section 4.2 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details."*
As above	As the proposed development will be constructed in stages, it is essential the number of car parking spaces required for each stage be provided as each stage is developed.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"Car parking requirements for each stage will be determined as part of future proposals."*
As above	The recommendation of a travel choice strategy is not supported by Council officers. There is no access to Gledswood Hills by mass public transit and there is no plan at this time to construct a rail link to Gledswood Hills. The bus services in this area are not substantial at this time, so the limited amount of available public transport results in	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"This view point appears to be very short term and does not align with NSW Government policy. It should be noted that the development of the hospital site will be delivered in stages and the ultimate development (concept design) may have a 10-20 year horizon. Under this scenario, the SWGC and the Gledswood Hills precinct and its surroundings will be fully formed, offering*

	the higher dependency on private cars.	*a connected network and population density that offers multiple opportunities to better manage travel demand beyond the current status quo. On this basis, a travel choice/ travel demand strategy/ travel plan should be supported as it will help to better optimise current and future network assets and support PT service offerings."*
As above	Turning path assessments of car park areas should be undertaken as part of this application as this could affect the layout of the site and the number of parking spaces provided.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"A high level AS2890.1 & 6 together with turning path appraisal has been undertaken to support this stage in the planning process. The results are presented in section 4.2 and appendix I in the Traffic Impact and Parking Assessment indicate that the layout is suitable for accommodating vehicle types across the site. Further detailed appraisals will be undertaken to support subsequent planning submissions."*
As above	The queue length of the right turn out of The Hermitage Way with the development is 92.2m however the length of the bay is only 45m. The right turn bay should be extended to accommodate the aforementioned queue length as it would also affect through traffic by blocking the through lane.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"The queuing beyond the turning bay on The Hermitage Way northern approach occurs with or without the proposed development change and is predominantly associated with traffic from other proposed uses. Additional traffic generated by the hospital was found to be insignificant (i.e. 3m increase in queue length) and not to have any further impact on the operating performance of the intersection during peak periods.* *Refer to section 5.10.3 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details."*
As above	The traffic report does not analyse any impact on the intersections to the east of the development, and this needs to be considered.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"The study has appraised critical intersections to the east of the site, which were found to operate satisfactorily. Refer to sections 5.4 and 5.10.4 in the Traffic Impact and Parking Assessment for further details."*
As above	The intersection of Gregory Hills Drive and Camden Valley Way has been modelled using three through lanes in each direction. There is no indication if this will be constructed by the time this development is complete. Modelling should be provided based on the current road network without presuming upgrades have/will occur.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"The modelling is consistent with the precinct approval, which includes three travel lanes in each direction along Camden Valley Way (refer to the Badgally Road Extension Report (Cardno, 2009)) and is associated traffic levels by 2026. The full development of the site and associated traffic generation is likely to occur beyond this date and the modelling is therefore deemed to be appropriate. Refer to section 5.10.1 in the Traffic Impact and Parking Assessment for further details. Please note the staging of the site will be assessed in subsequent planning submissions and will address the likely impacts to Camden Valley Way prior to its upgrade to 3 traffic lanes."*
As above	The driveways, car parking spaces, traffic aisles and internal roads including ramps and loading areas must be designed in accordance with the current AS 2890 parts 1 and 2.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"All of the aforementioned will be designed in accordance with AS 2890.1 (inclusive of 2890.2) and addressed as part of subsequent staged planning proposals. Refer to section 4.2 in the Traffic Impact and Parking Assessment for further details."*

As above	The site map and building plans should be compared to the South Creek tributary through the site in order to assess the flood affectation of the proposed development. All of the proposed development must be above the Probable Maximum Flood (PMF) level as required by Council's Flood Risk Management Policy. This includes access to the proposed basement.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"As shown on the flooding plan attached as part of the stormwater and servicing strategy report, the PMF is wholly contained within the vegetated buffer zone of the South Creek tributary. This means that all of the development is above the PMF level including the basement carpark access. If required more information can be provided."*
As above	The entire development, including all stormwater management systems, must be designed in accordance with the Council's Flood Risk Management Policy, the NSW Floodplain Development Manual 2005 and Council's Engineering Specifications.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"Noted. All designs currently undertaken as part of this submission have been undertaken in accordance with these requirements."*
As above	Council officers disagree with the following statement in the EIS: · The EIS states that "as per council requirements a minimum freeboard of 300mm is required above the 100 year ARI flood level for all habitable floor levels. Further to this, advice was received from Council in response to the initial SEARS application stating that the site was to have a minimum freeboard of 2.3m above the riparian corridor." Hospitals need to be above the PMF. I note that in accordance with the matrix of Council's Flood Risk Management Policy, hospitals, being critical infrastructure, are an unsuitable land use for flood prone land. In addition, the Stormwater Management and Servicing Report (May 2016) includes Appendix B of the Flood Assessment Report prepared by Mott MacDonald (not the full report). It shows HEC-RAS cross sections only for the 1% Annual Exceedance Probability (AEP) level but does not provide the PMF level.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"As shown on the flooding plan attached as part of the stormwater and servicing strategy report, the PMF is wholly contained within the vegetated buffer zone of the South Creek tributary. This means that all of the development is above the PMF level including the basement carpark access. If required more information can be provided as part of the formal DA submission."* To clarify, the reference to "formal" DA submission means the future detailed stage DA(s).
As above	A suitable pump out system for the basement car park must be provided.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"Noted. This design will be undertaken during the detailed Noted. This design will be undertaken during the detailed."*
As above	The applicant may consider an alternative OSD basin as the proposed underground tank being approximately 20m x 35m over a two way road, as scaled off from the submitted plans, could be difficult and impractical to construct. An alternative could be an above ground basin.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"Noted. Alternative solutions have been suggested in the stormwater and servicing strategy report such as utilising pipe capacity by upsizing the pipes in the site, this will be looked at during the detailed design. Above ground detention was looked at but was not considered acceptable due to the area constraints on the site."*
As above	The decommissioning and re-alignment of Council's existing stormwater drainage easement needs to be designed so that there is no reduction or adverse impacts to the pre-development conditions.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"Noted. Details will be confirmed following discussions with council, design will be undertaken to ensure no adverse impacts to the upstream development."*

As above	As a basement car park is proposed further salinity investigation must be undertaken to the depth proposed by the development and if required appropriate mitigation requirements identified.	The response prepared by ADE Consulting at **Appendix 7** confirms that the proposed location for the basement carpark will not be affected by any saline soils.
As above	The acoustic report submitted is considered inadequate as it fails to assess the following: · noise from mechanical plant to be installed associated with the premises; · noise from the multi-level car park; · cumulative noise from the open car park and the multi-level car park; · noise from loading docks; · Council officers questions the stated 66 vehicles using The Hermitage Way in the morning AM peak time in 2026 as this seems very low; · the assessment of noise from the car park has only been based on 50% use of the open car park. Council officers consider this to be an underestimate; · regarding the sleep disturbance criteria emergence test, Council officers do not agree with the two-step process where minimum internal noise levels below 50-55dB(A) are unlikely to awaken people. Council only accepts the L1- background +15dB(A); and · a construction noise management plan should be provided.	The response by Mott MacDonald at **Appendix 5** addresses these issues, with a summary provided below: * In relation to mechanical plant, Acoustic Logic notes that as the subject application is for a concept SSDA, equipment selection has not yet been made. However, in the acoustic report submitted with the SSDA, Acoustic Logic identify the acoustic criteria that are required to be complied with, with compliance to be demonstrated in future stage DA(s). * In relation to noise from the carpark, Acoustic Logic notes that it is intended that the carpark will be fully enclosed by FC panel cladding system to the facades, therefore mitigating any potential noise impact to nearby sensitive receivers. Final materiality and a detailed acoustic assessment will be addressed in the future stage DA(s) for the concept. * Cumulative noise from the car parking areas was addressed in Section 7.6 of the original Acoustic Report submitted with the SSDA. * In relation to noise from the loading dock, Acoustic Logic notes that as information regarding truck sizes, number of trucks and hours of deliveries are unknown at this stage, a detailed assessment will be undertaken as a part of future stage DA(s). Furthermore, we note that the loading dock has been located to the north of the proposed hospital building and away from the sensitive interface on The Hermitage Way (which is opposite residential uses). This "separation" is considered to assist in mitigating any potential acoustic impact from loading trucks on residential uses in the vicinity of the site. * In relation to the query about traffic volumes, Acoustic Logic notes that this information was provided by the traffic engineers, Mott MacDonald. * In relation to the comments about the carpark occupancy, Acoustic Logic notes as follows: "Open car park has a capacity of 211 *spaces, predictions for the open car park are based on 50% of these possible spaces either being occupied/entering and vacated/leaving per hour. We note that this does not mean that there will only be a maximum of 50% occupied. This means that in the space of 1 hour 50% of the vehicles would enter and leave in the same hour. In our experience, even in health projects this is very much conservative. "* * In relation to the comments about the sleep disturbance criteria, Acoustic Logic states that the background plus 15dB(A) requirement noted by Council was assessed in Table 12 of the Acoustic Report submitted with the SSDA. * In relation to the final comment, a construction noise management plan will be prepared for future stage DA(s) where consent is sought for construction works.

As above	Will the facility use a supply of water, other than from Sydney Water mains, which may include but is not limited to: ·rainwater tanks; · stormwater harvesting systems; · water treatment systems; and/or ·groundwater. If any of the above is to be incorporated, a risk assessment must be undertaken in accordance with the Australian Guidelines for Water Recycling: Managing Health and Environmental Risk (Phase 1 & 2).	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"At this stage it is anticipated that rainwater reuse systems to capture roof runoff will be utilised on the site for landscaping purposes only. This will be confirmed during the detailed design stage with the relevant risk assessments to be undertaken as per the requirements during the design development."*
As above	Trade waste agreements will need to be obtained in accordance with Sydney Water requirements. Pre-treatments may need to be installed in accordance with Sydney Water requirements.	Noted - no action required at this conceptual stage. To be addressed in future detailed stage DA(s).
As above	Environmental Protection Authority (EPA) licenses may be required for the handling and disposal of clinical/special waste.	Noted - no action required at this conceptual stage. To be addressed in future detailed stage DA(s).
As above	A waste management plan must be submitted in accordance with the NSW Health Waste Management guidelines.	Draft waste plans were submitted. They are preliminary due to the conceptual nature of the development. Detailed waste management plans will be submitted with future stage DA(s).
As above	It is acknowledged a development of this size will require water cooling systems (cooling towers) to be installed. The design of the buildings will need to include where are they to be located and how many are proposed. Installation and operation of cooling towers must comply with the requirements of the Public Health Act 2010 and Regulation 2012 and are required to be inspected by Council.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"Noted. Details of this system will be provided as part of the submission of the relevant future DA."*
As above	All warm water systems (thermostatic mixing valves) must be installed and operated in accordance with the Public Health Act 2010, Regulation 2012 and NSW Health requirements (warm water systems are regulated by NSW Health). Notification is to be provided to NSW Health of any thermostatic mixing valves being installed.	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"Noted. Details of this system will be provided as part of the submission of the relevant future DA."*
As above	Any pool provided as part of a hospital is defined as a public pool under the Public Health Act 2010. Operation of public pools, including hydrotherapy pools, must comply with the requirements of the Public Health Act 2010 and Regulation 2012 and be inspected by Council.	No pool is to be provided as a part of the development at this conceptual stage.
As above	Any area defined as a holding room or mortuary must comply with the requirements of the Public Health Act 2010 and Regulation 2012 and be inspected by Council.	Noted - no action required at this conceptual stage. To be addressed in future detailed stage DA(s).

As above	Any food supplied to patients under a food safety program and not considered to be retail sale will be regulated by the NSW Food Authority. Any food supplied that is not under the food safety program and is considered to be retail sale will be regulated by either the New South Wales Food Authority or Council in accordance with the Food Regulation Partnership.	Noted - no action required at this conceptual stage. To be addressed in future detailed stage DA(s).
As above	The fit out of food premises shall comply with Food Act 2003, AS 4674 and AS 1668 1 and 2.	Noted - no action required at this conceptual stage - to be addressed in future detailed stage DA(s).
As above	Any area where skin penetration procedures are carried out and not undertaken by, or under the direct supervision of a health practitioner, is to comply with the requirements of the Public Health Act 2010 and Regulation 2012 and be inspected by Council.	Noted - no action required at this conceptual stage. To be addressed in future detailed stage DA(s).
As above	Any area where beauty treatments are carried out and not undertaken by, or under the direct supervision of a health practitioner, is to comply with requirements of the Local Government Act 1993 and the Local Government (General) Regulation 2005 and be inspected by Council.	Noted - no action required at this conceptual stage. To be addressed in future detailed stage DA(s).
As above	Any procedures carried out by a health practitioner, or under the direct supervision of a health practitioner would not be regulated under the Public Health Act 2010. All health practitioners are registered with Australian Health Practitioner Regulation Agency. Acupuncturists are registered with Chinese Medicine Board.	Noted - no action required at this conceptual stage. To be addressed in future detailed stage DA(s).
As above	Devices that use or emit radiation and/or lasers may require EPA licenses.	Noted - no action required at this conceptual stage. To be addressed in future detailed stage DA(s).
As above	The DA approved vegetation management plan (VMP) for the riparian corridor is dated 24 April 2012 and was approved by DA 277/2012. It is noted a construction certificate related to DA 277/2012 appears to have acknowledged a revised VMP dated 13 February 2015. This revised VMP modified the treatment for part of the riparian corridor. The EIS refers to a further revised VMP dated 6 November 2015 and states that this VMP was approved by a further construction certificate related to DA 277/2012. Council officers do not agree with this statement in that it does not appear that any construction certificate has been approved further revising the VMP. Council officers reiterate the DA approved VMP for the riparian corridor remains the VMP dated 25 April 2012 approved by DA 277/2012.	The response prepared by Ecological at **Appendix 3** addresses the issues raised surrounding the VMP with the relevant extract provided below: *"ELA note that there are 3 iterations of the VMP (dated April 2012, February 2015 and November 2015) relevant to the site and that the VMP dated February 2015 is the document which was understood to have been accepted by Council for the site and should therefore be the version used for the EIS. ELA can also confirm that appropriate bushfire hazard assessment has been carried out which reflects the VMP dated February 2015 (22nd September 2016)."* We note that the Proponent has been in discussions with Council with regard to the VMP, which has informed the comments above.

	The bush fire report submitted with the EIS needs to reflect the approved VMP for the riparian corridor which would appear to require asset protection zones on adjoining land including this site. Any modifications to the VMP that applies to the riparian corridor should be assessed by Council via a Section 96 Modification application.	
As above	All waste management will need to comply with the Protection of the Environment (Operations) Act 1997, the Waste Regulation and the Work Health and Safety Act.	Draft waste plans were submitted with the original SSDA. They are preliminary due to the conceptual nature of the development. Detailed waste management plans will be submitted with future stage DA(s).
As above	The draft waste management plan (WMP) must provide additional detail for the construction WMP.	Draft waste plans were submitted with the original SSDA. They are preliminary due to the conceptual nature of the development. Detailed waste management plans will be submitted with future stage DA(s).
As above	The ongoing WMP will need to be accompanied by plans showing waste storage locations within the site. The ongoing WMP should also detail the movement of bins from storage areas to collection points, whether whole waste receptacles will be removed and replaced (for hazardous wastes this will be the case), who will be responsible for this (ancillary staff, nursing staff, etc.) and how access to areas for hazardous waste storage will be managed/restricted.	Draft waste plans were submitted with the original SSDA. They are preliminary due to the conceptual nature of the development. Detailed waste management plans will be submitted with future stage DA(s).
As above	It is recommended that you consult with the NSW EPA, Safe Work Australia and NSW Health to seek advice on the above matters.	Noted.
As above	Appropriate and adequate seating should be provided in outdoor areas and pick up zones.	Noted. The SSDA is conceptual at this stage but if the DPE consider it to be necessary, this could be conditioned, with consistency to be demonstrated in the relevant future stage DA(s)
As above	Provision must be made for drop off and pick up zones and adequate signage for these zones must be provided. This should include provision for any anticipated community transport buses and specialist day surgery patients' commuter buses.	Noted. The SSDA is conceptual at this stage but if the DPE consider it to be necessary, this could be conditioned, with consistency to be demonstrated in the relevant future stage DA(s)

As above	Section 94 Contributions 1. Lot 845, DP 1203105 is a residue lot created out of the subdivision Development Consent 997/2014. 2. The land subject to this development is on proposed lot 846 in stage 4 of Development Consent 997/2014. Section 94 contributions are to be paid prior to the issue of a subdivision certificate in accordance with Condition 5.0(15) of Development Consent 997/2014. 3. All Section 94 contributions for the land must be paid to Council in accordance with Condition 5.0(15) of Development Consent 997/2014 prior to the construction of any part of the proposed development.	Noted.
Environmental Protection Authority	1. Statutory Considerations	As the subject SSDA is for a concept only, any licencing requirements will be addressed in the future detailed stage DA(s) for construction and operation.
As above	2. Air Quality	The recommended conditions of consent are accepted but as consent is not sought for construction at this concept stage, we recommend that they be imposed as conditions in future stage DA(s) for construction of the proposed concept.
As above	3. Noise and Vibration	A CNVMP can be developed prior to construction. As consent is not sought for construction at this concept stage, we recommend that this be imposed as a condition in future stage DA(s) for construction of the proposed concept.
As above	4. Water Quality	A CEMP can be developed prior to construction. As consent is not sought for construction at this concept stage, we recommend that this be imposed as a condition in future stage DA(s) for construction of the proposed concept. With regard to the sewer connection comments, Mott MacDonald has confirmed in its submission at **Appendix 4** that these have been identified on the Site works plans submitted. The design of the sewer system has been undertaken to take into allowance the future development located on the subject site.
As above	5. Waste	The recommended conditions of consent are accepted but as consent is not sought for construction at this concept stage, we recommend that they be imposed as conditions in future stage DA(s) for construction of the proposed concept.
Sydney Water	Water	Comments noted. No action required at this stage.
As above	Wastewater	Comments noted. No action required at this stage.
Rural Fire Service	Issues raised re: VMP, maintenance of the riparian zone and lack of information to assess potential bushfire hazard and impact on the development in accordance with Planning for Bushfire Protection 2006.	These issues have been addressed in the response prepared by Ecological at **Appendix 3**. The response concludes as follows: *"The riparian corridor will not contain sufficient vegetation or be of a size and shape that supports a bushfire and is not categorised as bush fire prone vegetation."*
Office of Environment and Heritage (OEH)	Note that OEH has not been previously requested to provide flood risk management comments on 2015 'Civil Engineering Report - South Creek Tributary CC, Mott Mac'	Noted - no response required.

As above	Recommend that relevant measures are applied to basement and deck car parks in accordance with Camden Council's Flood Risk Management Policy (April 2006)	The response by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"This has been addressed as the entrance to the basement carpark is above the PMF level as required by the flood management policy. Refer to the flooding plan attached to the stormwater and servicing strategy report accompanying the SSD submission."*
Department of Primary Industries	The proponent should demonstrate the proposed riparian protection area in Management Zone 1 is consistent with the requirements of the Oran Park and Turner Road Waterfront Land Strategy 2009. Specifically, the restored and rehabilitated riparian protection area should comprise: a) a core riparian zone of an average of 40 metres (20 metres either side of the watercourse) measured from the top of the bank, b) the width of the watercourse itself, and c) a 10 metre vegetated buffer either side of the core riparian zone; [For additional detail refer to Appendix A of DPI submission]	Works within Riparian Zone are not the subject of this SSDA. Notwithstanding this, the response prepared by Ecological at **Appendix 3** confirms that the *"riparian corridor provided through the site is in-line with the boundaries for waterfront land in the Oran Park and Turner Road Waterfront Land Strategy 2009 and it also follows the boundary of the Riparian Protection Areas in the Growth Centres SEPP. The revegetation proposed in each version of the VMP have recommended local provenance vegetation with planting densities appropriate for the location within the corridor e.g. tree planting not to be carried out on batters. The later versions of the VMP (both February 2015 and November 2015) both have a modified planting style to accommodate the creation of a low bushfire hazard vegetation community whilst still providing a diverse assemblage of local provenance native species."*
As above	Revegetation should be undertaken using local provenance vegetation, with the core riparian zone revegetated to a density that would occur naturally [For additional detail refer to Appendix A of DPI submission]	Works within Riparian Zone are not the subject of this SSDA.
As above	Works on waterfront land, including outlets structures, should be consistent with the DPI Water Guidelines for Controlled Activities (2012) available at http://www.water.nsw.gov.au/water-licensing/approvals/controlled-activity. [For additional detail refer to Appendix A of DPI submission]	Noted and to be addressed in future detailed stage DA(s).
Transport for NSW	Recommendation 1 - Provide footpath connection to bus stops located adjacent to the hospital	We understand that the provision of a footpath along the frontage of the site to connect to future bus stops is a requirement in the Turner Road DCP and has been addressed as a part of previous development consents (for subdivision) for the site. Further information can be provided to the DPE if required but details can be demonstrated in the future stage DA(s).
As above	Recommendation 2 - Prepare a Green Travel Plan that promotes public transport usage by hospital staff	The TIPA prepared by Mott MacDonald and submitted with the original SSDA commits to the preparation of a Green Travel Plan, to be prepared for future detailed stage DA(s).
As above	Recommendation 3 - Prior to the commencement of any works on the site, a Construction Traffic Management Plan (CTMP) prepared by a suitably qualified person shall be submitted to the Principal Certifying Authority (PCA).	As consent is only sought for a concept and no construction works, we recommend that a condition be imposed requiring the preparation of a preliminary CTMP for future stage DA(s), with final CTMPs to be prepared prior to CC.

Department of Planning and Environment	The Department requests detailed shadow analyses are provided to accurately assess potential overshadowing and solar access impacts due to increased building heights on the established residential housing to the east. The shadow analyses should include a variety of potential future building designs, including positioning of the building on the far eastern extent of the compliant building envelope.	CPSD sought further clarification on this matter from the DPE given consent is not sought for a building envelope on the far eastern extent of the "compliant building envelope" shown in the shadow analysis purely as a basis for comparison between impacts ("compliant" vs. proposed shadows). The DPE confirmed that it simply requires confirmation that any future development able to be constructed within the proposed building envelope would not deny adjoining or adjacent residential properties an acceptable level of sunlight to their existing living areas or areas of private open space. The EIS addressed this in detail in Section 8.3.2. In summary, we note that the mid-winter shadow analysis prepared confirms that there will be some minor overshadowing to the riparian zone and to the south of the site (which is the site of a future health services facility) in the morning, and some minor overshadowing to the residential uses to the east of the site at 3pm. However, the extent of overshadowing at 3pm is minimal and does not affect any private open space. Refer to the figure below.  WINTER SOLSTICE 3PM Despite this, all areas surrounding the site benefit from no overshadowing for the majority of the day between 9am and 3pm in mid-winter. Given the scale of the development, it would be expected that some overshadowing would occur, but this overshadowing has been able to be minimised due to the substantial setbacks of the taller components of the built form. We also note that the comparative shadow analysis undertaken at 3pm (refer Appendix 7) demonstrates that the shadow cast by the proposed building envelope is less than what would be cast by a fully compliant building envelope (which complies with the SEPP height standard and building setback requirements to The Hermitage Way under the Turner Road DCP).

RMS	RMS has raised a number of issues with regard to the modelling and assessment undertaken by Mott MacDonald in the TIPA.	A detailed response to each of the issues/queries raised by RMS in relation to the traffic modelling has been prepared by Mott MacDonald. The conclusion is provided below: *"The modelling undertaken was consistent with the precinct approval (that presented in the Badgally Road Extension Report (Cardno, 2009)). The test undertaken to address RMS comments indicated that the proposed changes would either have no impact on modelling results or would result in comparable performance".*

Appendix 2

Response to Public Submissions

Submitter	Summary of Issues Raised	Response
Public Submission 1 - Dart West Developments	No objection raised. Support for hospital noted.	No response required as the submission supports the proposed development.
Public Submission 2 - Resident at Discovery Circuit	Light spill from development.	We note that the future design of the hospital, which will be subject to future detailed DAs, will ensure that the potential for light spill will be minimised. All external lighting will be designed in accordance with *AS 4282-1997 Control of the obtrusive effects of outdoor lighting*. As consent is only sought for a concept at this stage, minimisation of light spill will be demonstrated in future stage DA(s) for detailed design and construction of the development.
As above	Ambulance noise.	Ambulance Noise was addressed in the Acoustic Report prepared by Acoustic Logic and submitted with the SSDA (refer to Section 7.6.2). The relevant extract is below: *"…ambulance noise is not subject to the noise emission requirements of the Industrial Noise Policy, however, we note:* *o Sirens to ambulances are not typically used within the site. Typically, the only exception to this would be for a short duration burst to alert motorists within the site. We would expect this would not typically be necessary during night time periods, as there will be much fewer motorists on the site at this time.* *o The Ambulance Bay is located over 100m away from the residences. Noise from an ambulance idling in the ambulance bay would not be expected to be audible at these residences".*
As above	Excessive traffic.	Traffic generation was addressed in the Traffic Impact and Parking Assessment prepared by Mott MacDonald. The TIPA confirmed that the development would not adversely impact upon the operation of the surrounding road network.
Public Submission 3 - SJB Planning on behalf of Sekisui	Road infrastructure - lack of delivery of the Hermitage Way, north of the proposed hospital site and the dependency of the hospital on the delivery of critical road infrastructure	The accompanying response prepared by Mott MacDonald at **Appendix 4** addresses this issue, with an extract provided below: *"Delivery of road infrastructure required for the development, as noted by SJB, should be ensured prior to construction and operation. Therefore, as consent is only sought for a concept, this matter may be addressed in future detailed stage (DAs) for construction and operation of the development. Subject to obtaining approvals from all statutory authorities and Council the proponents are targeting to have this link completed by 30 June 2017."*
Public Submission 4 - Greenfields	Support for proposal but identified Oran Park Town Centre as a suitable alternative location for the proposal	Noted. There may be other locations within the South West which are identified as good locations for a private hospital. However, the land within Oran Park Town Centre is not under the ownership of the Applicant and the submitted SSDA demonstrates that the site is well located and is suitable for the proposed private hospital development.

In addition to the commentary above, we note that the Proponent undertook a letterbox drop to over 240 homes in the area nominated by Council and no objections were received as a result of that consultative process.

Appendix 3

Response prepared by Ecological

Richard Harris
Director Development
Gregory Hills Development Company Pty Ltd
PO Box 119
Oatlands NSW 2117

ECO LOGICAL AUSTRALIA PTY LTD
ABN 87 096 512 088
www.ecoaus.com.au

Ref: 4417

14 October 2016

Dear Richard,

RE: Ecological and Riparian Assessment Review – Gregory Hills Corporate Park

Eco Logical Australia (ELA) was engaged to prepare a response a number of the issues raised by both Camden Council and the Department of Primary Industries (DPI) with respect to the Environmental Impact Statement (EIS) for the Camden Medical Precinct (SSD 7387) Lot 845 DP 1203105.

With respect to the Camden Council issues raised in their letter of submission (dated 2nd September 2016), Ecological Issue item 1 is as follows:

Ecological

1. *The DA approved vegetation management plan (VMP) for the riparian corridor is dated 24 April 2012 and was approved by DA 277/2012.*

   It is noted a construction certificate related to DA 277/2012 appears to have acknowledged a revised VMP dated 13 February 2015. This revised VMP modified the treatment for part of the riparian corridor.

   The EIS refers to a further revised VMP dated 6 November 2015 and states that this VMP was approved by a further construction certificate related to DA 277/2012. Council officers do not agree with this statement in that it does not appear that any construction certificate has been approved further revising the VMP.

   Council officers reiterate the DA approved VMP for the riparian corridor remains the VMP dated 25 April 2012 approved by DA 277/2012.

   The bush fire report submitted with the EIS needs to reflect the approved VMP for the riparian corridor which would appear to require asset protection zones on adjoining land including this site.

   Any modifications to the VMP that applies to the riparian corridor should be assessed by Council via a Section 96 Modification application.

ELA note that there are 3 iterations of the VMP (dated April 2012, February 2015 and November 2015) relevant to the site and that the VMP dated February 2015 is the document which was understood to have been accepted by Council for the site and should therefore be the version used for the EIS. ELA can also confirm that appropriate bushfire hazard assessment has been carried out which reflects the VMP dated February 2015 (22nd September 2016).

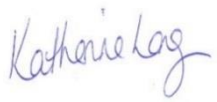
With respect to the issues raised by DPI, the comments in the submission (dated 5th September 2016) specifically refer to the VMP dated November 2015. With the approved version of the VMP yet to be confirmed, we have addressed the recommendations which DPI have raised as outlined below:

1. *The proponent should demonstrate the proposed riparian protection area in Management Zone 1 is consistent with the requirements of the Oran Park and Turner Road Waterfront Land Strategy 2009. Specifically, the restored and rehabilitated riparian protection area should comprise:*
    a) a core riparian zone of an average of 40 metres (20 metres either side of the watercourse) measured from the top of the bank,
    b) the width of the watercourse itself, and
    c) a 10 metre vegetated buffer either side of the core riparian zone;
2. *Revegetation should be undertaken using local provenance vegetation, with the core riparian zone revegetated to a density that would occur naturally; and*
3. *Works on waterfront land, including outlets structures, should be consistent with the DPI Water Guidelines for Controlled Activities (2012) available at http://www.water.nsw.gov.au/water-licensing/approvals/controlled-activity.*

The riparian corridor provided through the site is in-line with the boundaries for waterfront land in the *Oran Park and Turner Road Waterfront Land Strategy 2009* and it also follows the boundary of the Riparian Protection Areas in the Growth Centres SEPP. The revegetation proposed in each version of the VMP have recommended local provenance vegetation with planting densities appropriate for the location within the corridor e.g. tree planting not to be carried out on batters. The later versions of the VMP (both February 2015 and November 2015) both have a modified planting style to accommodate the creation of a low bushfire hazard vegetation community whilst still providing a diverse assemblage of local provenance native species

If you have questions about any aspect of this letter, please contact me on (02) 4201 2207.

Yours sincerely,



Katherine Lang

Senior Environmental Consultant

Richard Harris
Director Development
Gregory Hills Development Company Pty Ltd
PO Box 119
Oatlands NSW 2117

ECO LOGICAL AUSTRALIA PTY LTD
ABN 87 096 512 088
www.ecoaus.com.au

Ref: 4417

22 September 2016

Dear Richard,

RE: Camden Medical Campus Precinct – NSW Rural Fire Service Request for Additional Information.

Eco Logical Australia (ELA) prepared Bushfire Protection Assessment (Ref 11WOLECO-0051 dated 24 April 2012) and Addendum (Ref 4417 dated 24 May 2016) for the Camden Medical Campus Precinct at Camden Valley Way, Gregory Hills (hereafter referred to as the 'subject land').

The bushfire protection assessment was subsequently referred to the NSW Rural Fire Service (NSW RFS) by the Department of Planning and Environment. Following a review of the report, the NSW RFS requested additional information on the maintenance regime and management in perpetuity of the riparian corridor within the site.

This letter provides additional information to address the NSW RFS concerns:

- It has been confirmed that the Vegetation Management Plan prepared by ELA (Ref 872, dated February 2015) is the current (approved by Camden Council as part of the Construction Certificate for the Precinct) applicable to the site. There have been subsequent versions but these have not been signed off on. The February 2015 VMP is the version to be used in the NSW RFS assessment.

- In regards to the ongoing management of the riparian corridor, it is not the developer's intention to transfer ownership/management of the riparian corridor to Camden Council. It will remain in private ownership. As such a legal mechanism can be established to ensure ongoing management in accordance with the VMP if required.

- The following is observed in respect to the management zones within the riparian corridor:
    - Zone 1b of the Riparian Corridor running north –south is to be landscaped in such a way that it will not constitute a bushfire hazard. This will result in an area of vegetation within Management Zone 1a that is less than 20 m in width either side of the watercourse and less than 1 ha in size (when taking out the non-vegetated bed and culvert/road crossing). The size and arrangement of the vegetation in Zone 1a will not support a bushfire when considered in conjunction with the management of Zone 1b to APZ standards. Further to this it will not require mapping as bush fire prone vegetation in accordance with the NSW RFS *Guide to Bush Fire Prone Land Mapping Version 5b*.

- The VMP provides that the vegetation within the 1b zone of the Riparian Corridor will feature small trees and shrubs with a grassy understorey, with the following planning regime consistent with an asset protection zone to ensure a bushfire hazard is not created:
  - Trees will be planted to allow a crown separation of 2-5 m at maturity. Tree canopy cover will not exceed 15%; and
  - Shrub and sedge plantings will be designed as clumps or islands and will not cover more than 20% of the total revegetation area (refer to Section 3.1 of the VMP).
- For management Zone 1b, the following additional maintenance activities are required;
  - Mature trees should have lower limbs removed up to a height of 2m above the ground.
  - Remove or thin understory plants and shrubs less than 3m in height in order to maintain the clumps of plantings and keep the cover at 20%.
  - Prune mature trees where applicable to maintain crown separation.
  - Grasses and herbs are to be kept short and where possible green.
  - Ground fuels such as fallen leaves, twigs (less than 6 mm in diameter) and bark should be removed on a regular basis.

Based on the above information, the riparian corridor will not contain sufficient vegetation or be of a size and shape that supports a bushfire and is not categorised as bush fire prone vegetation.

If you have questions about any aspect of this letter, please contact me on (02) 8536 8600.

Yours sincerely,

Danielle Meggos

Bushfire Consultant

FPAA BPAD Certified Practitioner No. BPD-L2- 37742

BPAD Bushfire Planning & Design Accredited Practitioner Level 2

Appendix 4

Responses prepared by Mott McDonald

MOTT MACDONALD

Brent Devine
Planning Services
GPO Box 39
Sydney NSW 2001

Your Reference
368851

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383 Kent Street
Sydney NSW 2000
PO Box Q1678, QVB
Sydney, NSW 1230
Australia

T +61 (0)2 9098 6800
F +61 (0)2 9098 6810
mottmac.com

Camden Medical Campus Authority Comments – Civil and Traffic

7 October 2016

Dear Sir,

This letter has been prepared in response to the civil and traffic related comments received from the various authorities in response to the concept SSD submission for the Camden Medical Campus at Gledswood Hills. Below is a table summarising the comments received and our response to each of the comments.

Authority	Issue Raised	Summary of Response
Camden Council	The proposed development appears to include the construction of a new stormwater drainage outlet within the adjacent riparian corridor. Any works within waterfront land must either be consistent with the Oran Park and Turner Road Waterfront Land Strategy 2009, or will require a Controlled Activity Approval from the Department of Primary Industries Water pursuant to the Water Management Act 2000 (Nominated Integrated development).	This is noted. All proposed works for the detailed design will be in accordance with the waterfront land strategy. The current design submitted as part of the concept submission is consistent with these requirements. It is noted that the existing outlet is to be removed and replaced with a new outlet at the revised location.
Camden Council	The site is subject to an existing stormwater drainage easement that benefits Council. This easement is proposed to be relocated to facilitate the construction of the proposed development. The proposed relocation of Council's drainage easement must be negotiated separately with Council.	Noted. The easement was originally located on the proposed site boundary. This boundary has been amended since the stormwater pipe was constructed. It is proposed to relocate this easement to better align with the current site boundary. The existing stormwater pipe is proposed to be realigned in conjunction with site regrading to suit the proposed easement. This will be discussed with council during the detailed design process for an integrated outcome prior to the submission of the relevant future DA.
Camden Council	The intersection analysis appears to be inconsistent with previous applications, which indicated the intersection of Gregory Hills Drive/The Hermitage Way and	The analysis is consistent with the precinct approval (refer to the Badgally Road Extensions Report - Appendix B (Cardno, 2009) and deemed to be both reasonable

Authority	Issue Raised	Summary of Response
	Donovan Boulevard has some movements operating at a level of service F. The additional traffic from this development would significantly affect the operation of this intersection. A peer review of the modelling should be undertaken to ensure the intersection can accommodate the traffic generated by this development.	and conservative. Differences in the operational performance of the intersection in comparison to a recent application are directly related to the trip distribution assumptions and the level of traffic signal optimisation undertaken for this study. Refer to section 5.10.3 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details.
Camden Council	The surrounding road network is currently under construction and should be completed prior to any of the proposed development becoming operational.	This is consistent with the study assumptions. Refer to section 2.1.2 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details.
Camden Council	The number of proposed access points appears excessive and may create confusion and potential conflict for motorists. Rationalisation of the access points should be considered.	The proposed hospital and its access points are designed to provide safe and efficient access across the site. This is achieved through segregating and designating access points for specific hospital uses, which includes ambulance emergency access, general public access, car parking, staff and service vehicles. These principles align with the building requirements of a hospital, and results in a controlled environment that limits the number of high frequency access points and achieves safe and efficient access for all user groups. Refer to section 3.4 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details.
Camden Council	The proposed access off The Hermitage Way should be physically limited to left in/left out only.	This is consistent with the study assumptions and will be further detailed as part of the subsequent DA's.
Camden Council	No heavy vehicle access is permitted to/from the site from/to The Hermitage Way as outlined in the Turner Road Development Control Plan 2007.	This is consistent with the study assumptions and detailed in section 3.3 and figure 3.2 of the Traffic Impact and Parking Assessment. All heavy vehicle access will be restricted to Digitaria Drive.
Camden Council	As the proposed accesses will be controlled by boom gates, an analysis of queue lengths during peak arrival times needs to be provided to ensure the queue lengths can be accommodated without spilling onto the road network. The traffic report states this will be undertaken in the future, however this needs to be undertaken now as the outcome of this assessment may result in the scale of the development being too large for this site if queueing cannot be accommodated within the site.	An assessment was undertaken and indicated that queuing could be accommodated under the proposed full design arrangement. Spatial provision is also noted to be conservative and allows for boom gate operations and further adjustments to be made to proposed access driveways and queuing area. The report references that known advancements in technology will occur during the progressive staged development of the facility and result in site efficiency improvements, which will further reduce the spatial needs for these types of operations. Refer to section 4.2 in the Traffic Impact

Authority	Issue Raised	Summary of Response
		and Parking Assessment that formed part of the original SSD application for further details.
Camden Council	Details on the entry system should be provided, as the traffic report states this is dependent on advances in technology.	The appraisal that was undertaken to support the full development concept approval is deemed to be sufficient and robust for demonstrating the appropriate scale and layout of the proposed development and its ability to manage traffic flow and queuing. It is also noted that this assessment does not rely on advancements in technology, which are likely to provide and allow for further site efficiencies and as a result the assessment is deemed to be conservative. A detailed review of queuing area requirements will be undertaken as part of future staged development applications and will account for demand and changes in technology at the point of the staged planning application. Refer to section 4.2 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details.
Camden Council	Further details on loading and servicing are required, including how many vehicles are expected per day and the sizes of those vehicles. The detail provided indicates 12.5m vehicles are to service the site. Is this adequate or will larger vehicles be required? No dimensions of any loading bays have been provided. A loading/service management plan should be prepared to ensure vehicles are not waiting on public roads in order to access the site.	A large number of service bays are proposed and this allows for operational flexibility. The design provision is also noted to be above what is typically provided at similar developments. The turning path analysis confirmed that the allocated loading bay areas within the concept plan are sufficient to accommodate the design service vehicle that has been determined for the site. Refer to section 4.5 and appendix I in the Traffic Impact and Parking Assessment for further information. Further details will be provided as part of future staged planning submissions.
Camden Council	The number of accessible car parking spaces required should be in accordance with Building Code of Australia.	The total parking provision is significantly more than required to according to AS 2890.1 and 2890.6 (including BCA) and the allocation of accessible spaces will be detailed within the future staged planning submissions. Refer to section 4.2 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details.
Camden Council	As the proposed development will be constructed in stages, it is essential the number of car parking spaces required for each stage be provided as each stage is developed.	Car parking requirements for each stage will be determined as part of future proposals.
Camden Council	The recommendation of a travel choice strategy is not supported by Council officers. There is no access to Gledswood Hills by mass public transit and there is no plan at this time to construct a rail	This view point appears to be very short term and does not align with NSW Government policy. It should be noted that the development of the hospital site will be delivered in stages and the

Authority	Issue Raised	Summary of Response
	link to Gledswood Hills. The bus services in this area are not substantial at this time, so the limited amount of available public transport results in the higher dependency on private cars.	ultimate development (concept design) may have a 10-20 year horizon. Under this scenario, the SWGC and the Gledswood Hills precinct and its surroundings will be fully formed, offering a connected network and population density that offers multiple opportunities to better manage travel demand beyond the current status quo. On this basis, a travel choice/ travel demand strategy/ travel plan should be supported as it will help to better optimise current and future network assets and support PT service offerings.
Camden Council	Turning path assessments of car park areas should be undertaken as part of this application as this could affect the layout of the site and the number of parking spaces provided.	A high level AS2890.1 & 6 together with turning path appraisal has been undertaken to support this stage in the planning process. The results are presented in section 4.2 and appendix I in the Traffic Impact and Parking Assessment indicate that the layout is suitable for accommodating vehicle types across the site. Further detailed appraisals will be undertaken to support subsequent planning submissions.
Camden Council	The queue length of the right turn out of The Hermitage Way with the development is 92.2m however the length of the bay is only 45m. The right turn bay should be extended to accommodate the aforementioned queue length as it would also affect through traffic by blocking the through lane.	The queuing beyond the turning bay on The Hermitage Way northern approach occurs with or without the proposed development change and is predominantly associated with traffic from other proposed uses. Additional traffic generated by the hospital was found to be insignificant (i.e. 3m increase in queue length) and not to have any further impact on the operating performance of the intersection during peak periods. Refer to section 5.10.3 in the Traffic Impact and Parking Assessment that formed part of the original SSD application for further details.
Camden Council	The traffic report does not analyse any impact on the intersections to the east of the development, and this needs to be considered.	The study has appraised critical intersections to the east of the site, which were found to operate satisfactorily. Refer to sections 5.4 and 5.10.4 in the Traffic Impact and Parking Assessment for further details.
Camden Council	The intersection of Gregory Hills Drive and Camden Valley Way has been modelled using three through lanes in each direction. There is no indication if this will be constructed by the time this development is complete. Modelling should be provided based on the current road network without presuming upgrades have/will occur.	The modelling is consistent with the precinct approval, which includes three travel lanes in each direction along Camden Valley Way (refer to the Badgally Road Extension Report (Cardno, 2009)) and is associated traffic levels by 2026. The full development of the site and associated traffic generation is likely to occur beyond this date and the modelling is therefore deemed to be appropriate. Refer to section 5.10.1 in the Traffic Impact and

Authority	Issue Raised	Summary of Response
		Parking Assessment for further details. Please note the staging of the site will be assessed in subsequent planning submissions and will address the likely impacts to Camden Valley Way prior to its upgrade to 3 traffic lanes.
Camden Council	The driveways, car parking spaces, traffic aisles and internal roads including ramps and loading areas must be designed in accordance with the current AS 2890 parts 1 and 2.	All of the aforementioned will be designed in accordance with AS 2890.1 (inclusive of 2890.2) and addressed as part of subsequent staged planning proposals. Refer to section 4.2 in the Traffic Impact and Parking Assessment for further details.
Camden Council	The site map and building plans should be compared to the South Creek tributary through the site in order to assess the flood affectation of the proposed development. All of the proposed development must be above the Probable Maximum Flood (PMF) level as required by Council's Flood Risk Management Policy. This includes access to the proposed basement.	As shown on the flooding plan attached as part of the stormwater and servicing strategy report, the PMF is wholly contained within the vegetated buffer zone of the South Creek tributary. This means that all of the development is above the PMF level including the basement carpark access. If required more information can be provided.
Camden Council	The entire development, including all stormwater management systems, must be designed in accordance with the Council's Flood Risk Management Policy, the NSW Floodplain Development Manual 2005 and Council's Engineering Specifications.	Noted. All designs currently undertaken as part of this submission have been undertaken in accordance with these requirements.
Camden Council	Council officers disagree with the following statement in the EIS: ● The EIS states that "as per council requirements a minimum freeboard of 300mm is required above the 100 year ARI flood level for all habitable floor levels. Further to this, advice was received from Council in response to the initial SEARS application stating that the site was to have a minimum freeboard of 2.3m above the riparian corridor." Hospitals need to be above the PMF. I note that in accordance with the matrix of Council's Flood Risk Management Policy, hospitals, being critical infrastructure, are an unsuitable land use for flood prone land. In addition, the Stormwater Management and Servicing Report (May 2016) includes Appendix B of the Flood Assessment Report prepared by Mott MacDonald (not the full report). It shows HEC-RAS cross sections only for the 1% Annual Exceedance Probability (AEP) level but does not provide the PMF level.	As shown on the flooding plan attached as part of the stormwater and servicing strategy report, the PMF is wholly contained within the vegetated buffer zone of the South Creek tributary. This means that all of the development is above the PMF level including the basement carpark access. If required more information can be provided as part of the formal DA submission.
Camden Council	A suitable pump out system for the basement car park must be	Noted. This design will be undertaken during the detailed

Authority	Issue Raised	Summary of Response
	provided.	design by the hydraulics engineers. The drainage system has been currently designed to cater for this discharge.
Camden Council	The applicant may consider an alternative OSD basin as the proposed underground tank being approximately 20m x 35m over a two way road, as scaled off from the submitted plans, could be difficult and impractical to construct. An alternative could be an above ground basin.	Noted. Alternative solutions have been suggested in the stormwater and servicing strategy report such as utilising pipe capacity by upsizing the pipes in the site, this will be looked at during the detailed design. Above ground detention was looked at but was not considered acceptable due to the area constraints on the site.
Camden Council	The decommissioning and re-alignment of Council's existing stormwater drainage easement needs to be designed so that there is no reduction or adverse impacts to the pre-development conditions.	Noted. Details will be confirmed following discussions with council, design will be undertaken to ensure no adverse impacts to the upstream development.
Camden Council	Will the facility use a supply of water, other than from Sydney Water mains, which may include but is not limited to: ● rainwater tanks; ● stormwater harvesting systems; ● water treatment systems; and/or ● groundwater. If any of the above is to be incorporated, a risk assessment must be undertaken in accordance with the Australian Guidelines for Water Recycling: Managing Health and Environmental Risk (Phase 1 & 2).	At this stage it is anticipated that rainwater reuse systems to capture roof runoff will be utilised on the site for landscaping purposes only. This will be confirmed during the detailed design stage with the relevant risk assessments to be undertaken as per the requirements during the design development.
Camden Council	It is acknowledged a development of this size will require water cooling systems (cooling towers) to be installed. The design of the buildings will need to include where are they to be located and how many are proposed. Installation and operation of cooling towers must comply with the requirements of the Public Health Act 2010 and Regulation 2012 and are required to be inspected by Council.	Noted. Details of this system will be provided as part of the submission of the relevant future DA.
Camden Council	All warm water systems (thermostatic mixing valves) must be installed and operated in accordance with the Public Health Act 2010, Regulation 2012 and NSW Health requirements (warm water systems are regulated by NSW Health). Notification is to be provided to NSW Health of any thermostatic mixing valves being installed.	Noted. Details of this system will be provided as part of the submission of the relevant future DA.
Public Submission 3 - SJB Planning on behalf of Sekisui	Road infrastructure - lack of delivery of the Hermitage Way, north of the proposed hospital site and the dependency of the hospital on the delivery of critical road infrastructure	Delivery of road infrastructure required for the development, as noted by SJB, should be ensured prior to construction and operation. Therefore, as consent is only sought for a concept, this matter may be addressed in future detailed stage (DAs) for

Authority	Issue Raised	Summary of Response
		construction and operation of the development. Subject to obtaining approvals from all statutory authorities and Council the proponents are targeting to have this link completed by 30 June 2017.
Environmental Protection Authority	Water Quality	It is noted that no erosion and sediment management control plans were prepared as part of the concept SSD submission. These will be prepared as part of the future DA submission in accordance with the requirements in Managing Urban Stormwater: Soils and Construction. With regards to the sewer connection points, these have been identified on the Siteworks plans. The design of the sewer system has been undertaken to take into allowance the future development located on the subject site.
Office of Environment and Heritage (OEH)	Recommend that relevant measures are applied to basement and deck car parks in accordance with Camden Council's Flood Risk Management Policy (April 2006)	This has been addressed as the entrance to the basement carpark is above the PMF level as required by the flood management policy. Refer to the flooding plan attached to the stormwater and servicing strategy report accompanying the SSD submission.

If you have any queries please do not hesitate to contact the undersigned.

Kind Regards

Sean Reilly
Senior Civil Engineer
sean.reilly@mottmac.com

Response to RMS Comments - Camden Medical Campus

General comments:

- The Badgally Road Extension Report (Cardno, 2009) supported the approval of the Turner Road Precinct and was used as a benchmark for the SIDRA modelling. The configuration of the model was therefore largely based on the approach presented in the Cardno report to demonstrate consistency and a comparison with the approved development of this precinct.
- Many parameters referred to in the RMS comments (turning lane lengths, approach distances etc.) were conservative values adopted as part of the proposed development modelling process and any modification to these as recommended would only improve the modelling outcome.
- The adoption of a 2016 existing condition SIDRA modelling assessment would be inconsistent and not align with the approved development within the precinct, and as a result is not valid in this circumstance (modification to approved development).

No.	Comment	Response	Reference
	Camden Valley Way / Gregory Hills Drive		
1	There are currently short bus lanes existing on all four legs. Model does not show these bus lanes.	This is a graphical issue only – the model restricts these short lanes to be used by buses only.	-
2	TCS plan seems to show Model early bus start when bus arrives in bus lane. However model doesn't seem to have adopted this phasing.	Note that this was not accounted for within the study that supports the precinct approval. All scenario models can be altered to reflect this current operation.	-
3	As per SCATS in AM peak Phases ACDEG runs and in PM peak Phase ADEG runs. Standard double diamond phasing is in place at this intersection. Model seems to have adopted show different phasing arrangement.	The model adopts a leading right turn phasing arrangement which optimises operational performance and is appropriate for the unbalanced traffic demands at this intersection. Double diamond phasing was tested but was found to result in decreased performance.	-
4	User given phase times have been adopted in the model with cycle time of 115 sec for AM peak and 130 sec in PM peak. Clarification is required as to how this phase times were determined? User given cycle time of 140 sec should be adopted for modelling.	These phase times were selected for operational performance and are more conservative than those adopted for the study that obtained precinct approval (cycle time of 100s in the AM peak and 130s in the PM peak). The approach adopted is also consistent with RMS comments provided as part of the consultation process for the original precinct approval, which highlighted that cycle times should generally be 90s – 150s. The cycle times adopted are also consistent with the RMS Modelling Guidelines, which indicate that the maximum cycle time under saturated conditions is 120 – 150s.	Badgally Road Extension Report – Section 1.4.1 and Appendix D RMS Modelling Guidelines – Section 14.2.8
5	SIDRA default value for Signal	The values set for signal coordination	-

	Coordination parameter in the Signals tab of the Vehicle Movement Data dialog has changed for through movement on North, South and East approach. Clarification/justification should be given for the change. The Signal Coordination parameter in the Signals tab of the Vehicle Movement Data dialog is used for modelling vehicle platoons due to signal coordination effects. This may be useful if the intersections are network together and if Coordinated Site = Yes is specified in the Network Timing dialog.	are based on the proximity of adjacent signalised intersections and are deemed appropriate due to the following: • Clearway conditions along Camden Valley Way and 'no stopping' along Gregory Hills Drive • Camden Valley Way operating as a major arterial corridor. • Gregory Hills Drive will be constructed to connect to Badgally Road and Campbelltown in the near future (early 2017) and will operate as a main east- west route and signalised intersections. • Lack of friction with side roads • It is consistent with modelling undertaken that supported the precinct approval.	
6	Similar change has been in PM peak for North and South approach and need justification.	Refer to comment 5.	-
	Gregory Hills Drive / Central Hills Drive		
7	Turning lane lengths on all approaches appears to be shorter than existing and should be reviewed.	These values were adopted to ensure the modelling provided conservative results. It is noted that increasing these values will only improve the performance of modelled intersections.	-
8	Through lane length on east approach should be 520m. Model seems to show as 320m. On north approach it should be 180.	Refer to comment 7.	-
9	SIDRA default value for Signal Coordination parameter in the Signals tab of the Vehicle Movement Data dialog has changed for all movement on West and East approach. Clarification/justification should be given for the change. The Signal Coordination parameter in the Signals tab of the Vehicle Movement Data dialog is used for modelling vehicle platoons due to signal coordination effects. This may be useful if the intersections are network together and if Coordinated Site = Yes is specified in the Network Timing dialog.	Refer to comment 5.	-
10	Similar change has been in PM peak for North and South approach and need justification.	Refer to comment 5.	

11	Phase sequence adopted appears to be slightly different than existing.	The phasing adopted is a minor refinement to the precinct approval and is conservative. It accounts for unfeasible operating conditions and removes the proposed filter right turn operation for Central Hills Drive and Holborn Circuit approaches. This operating condition is not permitted under the proposed dual right turn lane arrangement.	Badgally Road Extension Report – Section 4.1 and Appendix D
12	Minor error in priorities showing opposing movements. All other approaches should be checked for similar errors.	The priorities adopted represent standard road rules. Modification would not impact the modelling results since the right turn movements have their own phase.	-
13	User given phase times have been adopted in the model with cycle time of 100 sec for AM peak and 110 sec in PM peak. Clarification is required as to how these phase times were determined.	Refer to comment 4.	Refer to comment 5.
	Gregory Hills Drive / The Heritage Way / Donovan Boulevard		
14	Right turning lane length on West approach should be 135m. Model seems to show as 107m.	Refer to comment 7.	-
15	First exit lane on The Hermitage Way is a short lane. Model appears to show it as a full length lane.	Noted – Modelling to be adjusted to account for this arrangement. This is a critical intersection – what is the impact.	-
16	SIDRA default value for Signal Coordination parameter in the Signals tab of the Vehicle Movement Data dialog has changed for all movement on West and East approach. Clarification/justification should be given for the change. The Signal Coordination parameter in the Signals tab of the Vehicle Movement Data dialog is used for modelling vehicle platoons due to signal coordination effects. This may be useful if the intersections are network together and if Coordinated Site = Yes is specified in the Network Timing dialog.	Refer to comment 5.	-
17	Similar change has been in PM peak for North and South approach and need justification.	Refer to comment 5.	-
18	Filter right turns have allowed in the Model on all approaches in AM and PM peak. Please check with Network ops team of RMS if this	The filter right turns on all approaches are consistent with the phasing presented in the precinct approval.	Badgally Road Extension Report –

	would be case in 2026.		Appendix D
19	Cycle time adopted in the model appears to be too low (77sec). Cycle time of 100 sec for AM peak and 110 sec in PM peak. Clarification is required as to how this phase times were determined.	Refer to comment 4.	Refer to comment 5.
20	Minor error in priorities showing opposing movements. All other approaches should be checked for similar errors.	Refer to comment 12.	-
	Gregory Hills Drive / South Spine Road		
21	There seems to be no information available in SCATS for this intersection. Please discuss with Network Ops phasing and cycle time adopted for this intersection.	Phasing and cycle time is generally consistent with the precinct approval and has been optimised for operational performance.	Badgally Road Extension Report – Appendix D
22	Phasing adopted in the model needs to be reviewed. Phase A appears incorrect with only ped phasing running and no vehicle movements, No other phases have ped movement running.	Phase A is an all-red phase, consistent with that presented in the precinct approval for this intersection. This phase is provided to maximise pedestrian crossing opportunities to the planned retail centre nearby.	Badgally Road Extension Report – Section 4.1 and Appendix D
23	Minor error in priorities showing opposing movements. All other approaches should be checked for similar errors.	Refer to comment 12.	-
	General Comments		
24	Other scenario files have similar errors/issues and should be reviewed as well.	Noted – modifications will be consistent as indicated in responses above.	-
25	It is noted that no SIDRA analysis was undertaken for the current year existing conditions. As a result the future models couldn't be compared against the existing conditions.	Future conditions will be significantly different from existing conditions due to the nature of the precinct. The Badgally Road Extension Report (Cardno, 2009) forms a modelling benchmark, which supported the approval of the precinct.	Badgally Road Extension Report
26	For future fully developed scenario, modelling each intersection in isolation is perhaps not the correct way. The proper way to model this would (as a minimum) be as a Network Model using SIDRA Network.	The SIDRA models account for surrounding intersections through signal coordination, which is both conservative and consistent with the modelling approach adopted under the precinct approval. Queuing was reviewed and was found not to impact on adjacent intersections. The adoption of SIDRA Network analysis would not be consistent with precinct approval.	-

Comparison of Results (based on RMS trip generation)

A test was undertaken based on the above comments to determine the impact resulting from the changes proposed by RMS. The results are presented below for each intersection with modifications as indicated.

Camden Valley Way / Gregory Hills Drive

The modifications to the model at this intersection include the following:

- Double diamond phasing was adopted.

AM Peak				PM Peak			
Degree of Saturation (DoS)	Level of Service (LoS)	Average Delay(s)	95% Back of Queue (m)	Degree of Saturation (DoS)	Level of Service (LoS)	Average Delay(s)	95% Back of Queue (m)
Initial results as per report							
0.858	C	30.7	198	1.085	D	51.0	285
Test 1 – Results as per RMS proposed modifications							
0.804	C	29.4	190.8	1.012	D	51.6	273

The results indicate similar performance levels to that presented in the report, with minor increases in performance in most cases.

Gregory Hills Drive / Central Hills Drive

The modifications to the model at this intersection include the following:

- Turning lane lengths on all approaches were reviewed and adjusted to better match existing conditions.
- Through lane lengths on the North and East approaches were reviewed and adjusted to better match existing conditions.

AM Peak				PM Peak			
Degree of Saturation (DoS)	Level of Service (LoS)	Average Delay(s)	95% Back of Queue (m)	Degree of Saturation (DoS)	Level of Service (LoS)	Average Delay(s)	95% Back of Queue (m)
Initial results as per report							
0.608	B	19.9	109	0.801	C	29.0	184
Test 1 – Results as per RMS proposed modifications							
0.608	B	19.9	109	0.801	C	29.0	184

The results indicate that minor revisions to the lane lengths make no impact on the modelling results.

Gregory Hills Drive / The Hermitage Way / Donovan Boulevard

The modifications to the model at this intersection include the following:

- Right turning lane length on West approach increased to 135m.
- First exit lane on The Hermitage Way was revised to a short lane.

AM Peak				PM Peak			
Degree of Saturation (DoS)	Level of Service (LoS)	Average Delay(s)	95% Back of Queue (m)	Degree of Saturation (DoS)	Level of Service (LoS)	Average Delay(s)	95% Back of Queue (m)
Initial results as per report							
0.901	B	27.5	154	0.925	B	23.5	135
Test 1 – Results as per RMS proposed modifications							
0.901	B	27.5	154	0.925	B	23.5	135

The results indicate that minor revisions to the lane configurations make no impact on the modelling results.

Conclusion

The modelling undertaken was consistent with the precinct approval (that presented in the Badgally Road Extension Report (Cardno, 2009)). The test undertaken to address RMS comments indicated that the proposed changes would either have no impact on modelling results or would result in comparable performance.

Appendix 5

Response prepared by Acoustic Logic

MANAGING DIRECTORS
MATTHEW PALAVIDIS
VICTOR FATTORETTO

DIRECTORS
MATTHEW SHIELDS
BEN WHITE

20160742.1/0710A/R0/MF

07/10/2016

Gregory Hills Corporate Park Pty Ltd
PO Box 119
OATLANDS NSW 2117

Camden Medical Campus Precinct, Gledswood Hills - Acoustic Discussion - Councils RFI's

This letter has been drafted by Acoustic Logic in regards to the request for further information regarding the Concept Development Application to Council for the Camden Medical Precinct.

Please refer to the acoustic comments in red below.

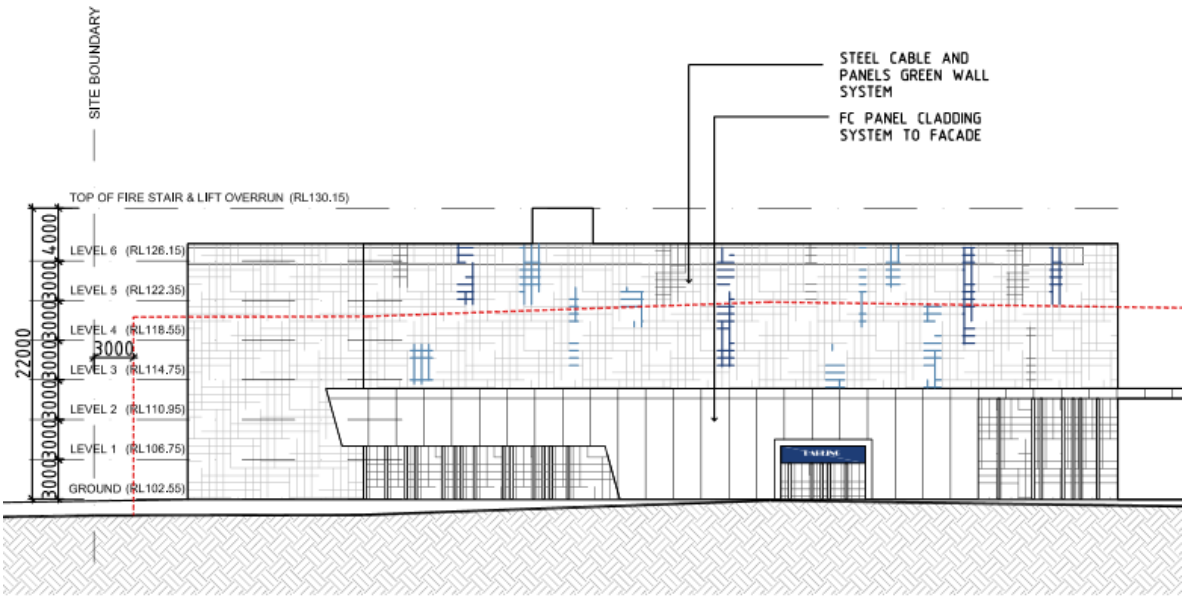
The acoustic report submitted is considered inadequate as it fails to assess the following:

- *Noise from mechanical plant to be installed associated with the premises.*
    - We note that the application to council is for a concept D.A, as so information regarding equipment selections and locations are unknown at this stage. Hence, a detailed assessment has not been carried out. However, in section 7 of the submitted report we have outlined the acoustic criteria which is applicable and noise levels which when either designed/installed will need to be complied with.
- *Noise from the multi-level car park.*

SYDNEY
A: 9 Sarah St Mascot NSW 2020
T: (02) 8339 8000
F: (02) 8338 8399

SYDNEY MELBOURNE BRISBANE CANBERRA
LONDON DUBAI SINGAPORE GREECE

ABN: 11 068 954 343



- As shown above the proposed multistorey car park is fully enclosed by FC panel cladding system to facades therefore shall not result any noise issues to receivers.

- *cumulative noise from the open car park and the multi-level car park.*
  - Cumulative noise levels form open carpark have been addressed in Section 7.6.
- *Noise from loading docks.*
  - We note that the application council is a concept D.A, as so information regarding truck sizes, number of trucks and hours of deliveries are unknown at this stage and have not been assessed in the report. This would typically take place at the detailed D.A stages.
- *Council officers questions the stated 66 vehicles using The Hermitage Way in the morning AM peak time in 2026 as this seems very low.*
  - This is the actual traffic volumes have been provided to Acoustic Logic by the Traffic Engineer Mott McDonald.
- *The assessment of noise from the car park has only been based on 50% use of the open car park. Council Officers consider this to be an underestimate.*
  - Open car park has a capacity of 211 spaces, predictions for the open car park are based on 50% of these possible spaces either being occupied/entering and vacated/leaving per hour. We note that this does not mean that there will only be a maximum of 50% occupied. This means that in the space of 1 hour 50% of the vehicles would enter and leave in the same hour. In our experience, even in health projects this is very much conservative.
- *regarding the sleep disturbance criteria emergence test, Council officers do not agree with the two-step process where minimum internal noise levels below 50-55dB(A) are unlikely to awaken people. Council only accepts the L1- background 15dB(A)*

- Acoustic Logic already assessed sleeping disturbance based on this requirement BG +15, please refer to Table 12 of the submitted acoustic report.

- *A construction noise management plan should be provided.*
  - We note that the application to council is a concept D.A, as so information regarding excavation/demolition methodologies are unknown at this stage. Hence, a detailed assessment has not been carried out. Typically, this is carried out at CC stage

We trust this information is satisfactory. Please contact us should you have any further queries.

Yours faithfully,

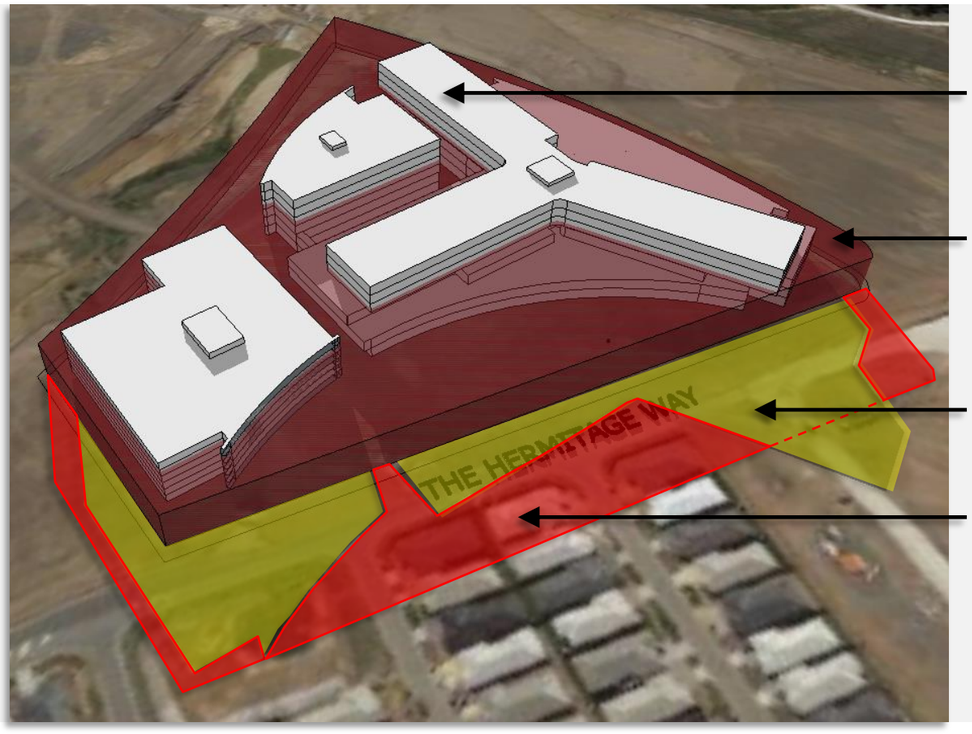
Acoustic Logic Consultancy Pty Ltd
Matthew Furlong

Appendix 6

3pm Comparative Shadow Analysis prepared by HPI

Shadow impacts from planning control building envelope

Shadow impacts from proposed development building envelope



Proposed development

Building envelope as defined by planning controls:

- 5 metre setback from The Hermitage Way
- 3 metre setback from other site boundaries
- 15 metre height control

Shadow cast by proposed development

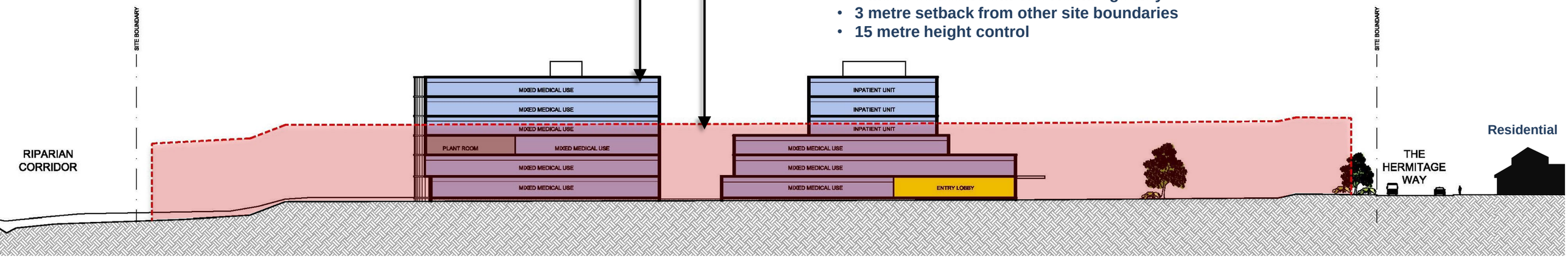
Shadow impacts from planning control building envelope "additional" to the proposed design

*Shadows shown here are taken at 3pm, Winter Solstice

Proposed development

Building envelope as defined by planning controls:

- 5 metre setback from The Hermitage Way
- 3 metre setback from other site boundaries
- 15 metre height control



SECTION A- A

BUILDING ENVELOPE ANALYSIS

Status: Concept DA
Date: 18 May 2016
Version: 1

Camden Medical Campus
Gregory Hills Corporate Park

Health Projects International
A to Z of Health Planning

GREGORY HILLS CORPORATE PARK

Appendix 7

Salinity Response prepared by ADE Consulting

STC-307-11093 / SAL1 / v3 final

Site Address: **Holborn Circuit, Gledswood Hills NSW**
Subject Area: **Holborn Circuit, Gledswood Hills NSW**

Date: 18.10.2016

Mark Sweeney

CYRE Projects Pty Ltd

Dear Mr. Mark Sweeney,

A.D. Envirotech Australia Pty Ltd (ADE) was commissioned by Gregory Hills Corporate Park Pty Ltd (GHCP) to provide level 1 inspection and geotechnical testing in accordance with AS 3798-2007 'Guidelines on earthworks for commercial and residential developments', as the Geotechnical Inspection and Testing Authority (GITA).

The gate checks carried out on materials imported into GHCP has been completed in accordance with ADE Report 'Fill Management Protocol, Ref: 6908.Lot 701, DP1154772, Gregory Hills Drove, Gledswood Hills NSW.FMP1 v1 final', dated 29th November 2013 (GHCP FMP).

Douglas Partner has carried out the salinity invesitgation and management plan (76510 Dated May 2012) which indicates that the lot consists of materials of slightly to moderately saline.

The proposed carpark has a RL of 99.800 and the filling starts at a RL of 99.950. Therefore the proposed location for the basement carpark will not be affected by the salinity of the soils.

Based on the laboratory results of the materials placed in the subject car park area, the materials will not have have any adverse effect on the salinity.

Yours sincerely,

Bikesh Deoju,

Geotechnical Engineer
A.D. Envirotech Pty Ltd
b.deoju@adenvirotech.com.au

Appendix 8

Riparian Zone Perspective (Indicative) prepared by HPI