APPENDIX B

Updated Table of Proposed Mitigation Measures

Item	Potential Environmental Impact	Approach
Accessibility	The proposed design is capable of compliance with the relevant statutory accessibility legislation. Further development and refinement of detailed design requirements, such as internal fit out design, and details of stairs, walkways, lifts, sanitary facilities, and other access features will be included within future construction documentation.	The project will be undertaken in accordance with the recommendations made by Group DLA in the 'Access Planning Review Report', dated 14 October 2021 and the 'RE: Lang Walker AO Medical Research Centre – LWMRB , Macarthur – SSD-17491477 Response to Submissions – Accessibility Statement – Rev B', dated 5 April 2022.
Aboriginal Heritage	The Aboriginal community has been consulted regarding heritage management of the project. The site has been determined to contain low archaeological potential.	The project will be undertaken in accordance with the recommendations made by Biosis in the 'Aboriginal Cultural Heritage Assessment Report, dated 27 January 2022.
Aeronautical	The project will not protrude into or impact relevant airspace. The construction cranes will require aviation-standard obstacle lighting.	The project will be undertaken in accordance with the recommendations made by AviPro in the 'Aviation Impact Assessment Report', dated 7 October 2021.
B**uilding Code of Australia**	The project is Compliance with the BCA for these specific is capable of complying with the BCA through a combination of deemed-to-satisfy provisions and performance solutions. A detailed BCA assessment and identification of deemed-to-satisfy provisions and performance solutions will occur at the Crown Certificate stage.	The project will be undertaken in accordance with the recommendations made by Group DLA in the 'Building Code of Australia 2019 Amendment 1 (BCA) Capability Statement', dated 29 October 2021.
Bushfire	Part of the site is identified as being within the 100m 'bushfire prone land' buffer.	The project will be undertaken in accordance with the recommendations made by BlackAsh in the 'Bushfire Assessment Report for the EIS', dated 20 October 2021 and the 'RE: Lang Walker AO Medical Research Building LWMRB , Macarthur – SSD-17491477 Response to Submissions', dated 25 March 2022
Biodiversity	Direct, prescribed, and indirect impacts to threatened biodata are considered negligible due to the absence of connectivity and habitat available on site.	A request for a BDAR wavier was issued for the site on 10 November 2021.
Construction Management	Construction of the project will take place across five phases.	The project will be undertaken in accordance with the construction management principles of the Construction Management Plan, prepared by CPM Consulting, dated October 2021.
Consultation	During the schematic design phase, the project team consulted with key stakeholders relevant to the project. The outcomes of the consultation were used to drive the detailed design of the project.	The project will be undertaken in accordance with the recommendations made by WSP in the 'Bushfire Assessment Report for the EIS', dated 20 October 2021.

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Contamination	A contamination investigation was undertaken for the proposal.	The investigation concluded the site is suitable for the proposed health research facility and no further investigation is currently necessary.
Crime Prevention of Environmental Design	A review of CPTED principles was undertaken for the proposed health research facility. This involved speaking with key stakeholders for background information and context, reviewing existing standards and guidelines, and reviewing current architectural plans and site plans. Key CPTED requirements have been reflected in the documentation, to the extent required at this stage of the design process. Further review of relevant documentation will be undertaken in future design stages.	The project will be undertaken in accordance with the recommendations made by LCI in the 'CPTED Report', dated 20 October 2021.
Ecologically Sustainable Design	A review of the design against the four principles of ESD (precautionary principle, inter-generational equality, conservation of biological diversity, and ecological integrity, and improved value) has been undertaken. A broad set of ESD initiatives have been targeted within the current project design. The initiatives include ESD strategies that benefit the design and ongoing operation phases of the development and measures to minimise consumption of resources, water (including water sensitive urban design) and energy.	The project will be undertaken in accordance with the recommendations made by LCI in the 'Environmentally Sustainable Design Report', dated 19 October 2021.
Fire Engineering	Following a fire engineering review, performance-based fire engineering can be utilised to demonstrate compliance with the performance requirements of the BCA.	The project will be undertaken in accordance with the recommendations made by Holmes Fire in the 'Fire Engineering Letter of Intent', dated 14 October 2021.
Flooding	The site is generally flood free during both the 1% AEP and PMF events. Minor overland flows on Parkside Crescent and the existing car park are very shallow in the 1% AEP and are of low hazard. Water quality assessment reports include that post development water quality objectives will be met through the proposed stormwater treatment train.	The project will be undertaken in accordance with the recommendations made by TTW in the 'Flood Assessment and Stormwater Management Report', dated 20 October 2021.
Geotechnical	A geotechnical investigation was undertaken for the proposal. Localised service and lift pit excavations will likely require some light to medium ripping assistance or the use of rock hammers for the excavation of medium strength or stronger shale. An assessment of vibration must be undertaken before construction begins in selecting appropriate equipment. As the work will be undertaken with 20m of what are likely vibration-sensitive structures, vibration trials must be undertaken prior to construction commencing. As the health research facility basement levels are proposed at RL 75, it is not expected that the excavation will encroach into the zone of influence of the adjacent building foundations.	The project will be undertaken in accordance with the recommendations made by Douglas Partners in the 'Report on Preliminary Geotechnical Investigation', dated 2 July 2021.

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	If design plans change and excavation does encroach into the zone of influence of the adjacent buildings or services, shoring will be required to avoid compromising the existing foundations. There is potential for groundwater inflow into the excavation along the interface of the fill and natural clay as indicated by standing water levels at around RL 75.1 – 76.6 (Bores 203, 204 and 208 as measured 11 June 2021). It is noted that groundwater levels can fluctuate with seasonal climatic changes and variability in the permeability of the subsurface strata. Whilst the extent of groundwater inflow would be dependent on prior weather conditions, short-term inflow rates would be expected to be controlled from sumps within the excavation. In the longer-term, however, given the depth of the basement, the requirements for drainage behind perimeter walls (including any shotcrete walls) and under-floor drainage will need to be included. Environmental testing may need to be carried out to classify the spoil. The type and extent of testing undertaken would depend on final use or destination of the spoil and requirements of the receiving site. As a minimum, allowance should be made during bulk excavation to stockpile topsoil, fill and underlying residual soils separately, to enable the best possible waste classification of the natural soils/rock to be achieved.	
Hazard Management	A screening assessment for the proposal to undertaken the risk of storage and handling of dangerous goods and control measures was undertaken. The assessment concluded a preliminary hazard analysis is not required for the project. Should storage conditions or volumes change, the contents and finding of the report will be reviews and risks associated with any change assessed and controlled.	The project will be undertaken in accordance with the recommendations made by WSP in the 'SEPP 33 Preliminary Hazard Analysis', dated 12 October 2021.
Heritage	The site has been determined to contain low archaeological potential.	The project will be undertaken in accordance with the recommendations made by Biosis in the 'Historical Heritage Assessment', dated 28 October 2021.

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Noise and Vibration	Conceptual treatments have been provided to address the impact generated by mechanical services during operation. Also, performance requirements have been provided for building envelope construction to mitigate noise intrusion from external noise sources, such as local road traffic. Operational procedures have been advised for the use of the loading dock, so related noise emissions are minimised. Noise emissions from vehicular activities on local roads related to the use of the development were found to be compliant with the relevant noise criteria for local roads. Performance requirements have been nominated for the acoustic enclosure of the stand-by generator. A construction noise and vibration management plan will be implemented to manage the noise and vibration impact onto the nearest affected premises.	The project will be undertaken in accordance with the recommendations made by PWNA in the 'Environmental Impact Statement – Acoustic Assessment', dated 29 October 2021.
Sediment and Erosion Control	A sediment and erosion control plan has been prepared for the project.	Construction of the project will be undertaken in accordance with the recommendations made by TTW in the 'Sediment and Erosion Control Plan, dated 14 October 2021.
Social Impact Assessment	An assessment of the social impacts of the proposal on the way of life, community, accessibility, culture, health and wellbeing, surroundings, livelihoods, and decision making systems was undertaken. The project was found to have a variety of positive and negative impacts.	The project will be undertaken in accordance with the recommendations made by WSP in the 'Social Impact Assessment', dated 13 October 2021.
Traffic and Transport	The parking demand for staff and visitors has been calculated on a first principles basis and totals 68. This can be accommodated by the total parking supply upon completion of the Stage 2 Campbelltown Hospital Campus (2023). Furthermore, Traffic modelling undertaken by PTC previously indicates the road network has ample capacity remaining and should be able to adequately accommodate the 68 trips generated by the development in both peak hours. A preliminary construction traffic management plan has been prepared for the project. A green travel plan will be prepared for the project prior to occupation.	The project will be undertaken in accordance with the recommendations made by PTC in the 'Transport and Accessibility Impact Assessment', dated 20 October 2021.
Utilities	Existing infrastructure is capable of accommodating the project.	The project will be undertaken in accordance with the recommendations made by LCI in the 'Utilities Impact Assessment', dated 14 October 2021.

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Waste Management	The impact of the generation and collection of waste on the proposal will be minimal. Storage and collection of waste will comply with the Campbelltown Development Control Plan 2015 and good waste management practice. Once the health research facility is operational, waste collection will be undertaken as part of the existing waste services of the Campbelltown Hospital Campus and will result in only a slight increase in vehicle movements.	The project will be undertaken in accordance with the recommendations made by LCI in the 'Waste Management Plan', dated 13 October 2021.
Wind	Wind safety criterion will be met at all outdoor locations on and around the proposed health research facility.	The project will be undertaken in accordance with the recommendations made by RWDI in the 'Pedestrian Wind Assessment', dated 15 October 2021.