URBIS

APPENDIX F – MITIGATION MEASURES

In accordance with the DPE *State significant development guidelines: Preparing an Environmental Impact Statement' (December 2021)*, this appendix provides a table of the proposed mitigation measures (excluding any measures that are part of the physical design and layout of the project and included in the project description). The mitigation measures are informed by the technical assessment prepared by specialist consultants as discussed in Section 6 of the EIS. The table has directly related mitigation measures responding to each impact also based upon the range of technical and specialist consultant reports appended to the EIS.

Following the implementation of relevant mitigation measures, the proposed development will not result in any significant adverse impacts on the surrounding environment.

Item	Stage of Project	Mitigation Measure	Residual Impact
Aboriginal Cultural Heritage Assessment Report (ACHAR)	Construction	In the unlikely event that human remains are uncovered during any site works, a Human Remains Procedure should be implemented.	No impact
	Construction	Aboriginal Cultural Heritage Induction materials should be prepared for inclusion in site inductions for any contractors working at the subject area.	No impact
	Construction	If any suspected Aboriginal objects are uncovered in the course of construction activities, the Unexpected Finds Policy outlined in the ACHAR must be followed.	No impact
Heritage Impact Statement (HIS)	Prior to Construction	An Archival Recording should be prepared prior to any demolition or works at the site. The Archival Recording should be prepared by a suitably qualified heritage consultant in accordance with HNSW Guidelines and should be retained by the School Archives as a record of works to the place	No impact
Historical Archaeological Impact Assessment (HAIA)	Construction	In the unlikely event that human remains are uncovered, a Human Remains Procedure should be implemented.	No impact
	Construction	In the unlikely event that unexpected finds are uncovered, an Unexpected Finds Procedure should be implemented.	No impact

Item	Stage of Project	Mitigation Measure	Residual Impact
HAIA	Occupation	No further assessment of the subject site is required for historical archaeology in relation to the current proposal. Future works at other areas of The King's School, however, require assessment.	No impact
Construction Traffic	Construction	The proposed procedures and mitigation measures will be further outlined in the comprehensive Construction Management Plan, to be development by the contractor prior to the issuance of a Construction Certificate.	Low impact
Biodiversity Development Assessment Report (BDAR)	Construction	Timing works to avoid critical life cycle events such as breeding or nursing. Tree felling of hollow bearing trees should be undertaken outside of spring and summer. If this is not possible, strict pre-clearing protocols must be observed when removing tree hollows.	Low impact
	Construction	Instigating clearing protocols including pre-clearing surveys, daily surveys, and staged clearing. The presence of a trained ecological or licensed wildlife handler during clearing events. A pre-clearance survey of trees and buildings to be removed and identification and location of habitat trees by a suitably qualified ecologist is required.	Low impact
	Construction	Installing artificial habitats for fauna in adjacent retained vegetation and habitat, or human made structures to replace the habitat resources lost and encourage animals to move from the impact site. Should any trees be removed that have habitat hollows / fissures, they should be retained as ground fauna habitat and / or used as replacement hollows and attached to retained trees.	Low impact
	Prior to CC and Operation	Lighting to be designed to minimise impacts to nocturnal and diurnal fauna. Light pollution can be reduced by limiting the duration of spotlight illumination, reducing the brightness of lights where possible, installing shield fixtures to reduce light scattering, and using narrow-spectrum light sources to reduce the wavelengths likely to interfere with animal behaviour. Wildlife-friendly lighting should be considered adjacent to retained bushland areas (adjacent to important habitat).	Low impact

Item	Stage of Project	Mitigation Measure	Residual Impact
BDAR	Prior to CC	Clearing protocols that identify vegetation to be retained, prevent inadvertent damage, and reduce soil disturbance is preferable in situations where partial clearing is proposed (e.g. removal of native vegetation by chainsaw rather than heavy machinery). Boundaries of the impact area to be clearly delineated with heavy duty fencing, retained areas marked with “No Go” signage, in particular in the areas adjacent to the APZ.	No impact
	Construction	Sediment barriers or sedimentation ponds to control the quality of water released from the site into the receiving environment. Utilise appropriate controls to manage exposed soil surfaces and stockpiles to prevent sediment discharged into waterways.	No impact
	Construction	Noise barriers or daily/seasonal timing of construction and operational activities to reduce impacts of noise. All construction noise should be limited to acceptable work hours.	Low impact
	Construction	Adaptive dust monitoring programs to control air quality. Dust suppression measures to be implemented during construction works to limit dust on site.	No impact
	Construction	Temporary fencing to protect significant environmental features such as riparian zones. Temporary fencing and signage to be installed at the edge of the subject land to prevent entry into adjacent retained vegetation	Low impact
	Construction	Hygiene protocols to prevent the spread of weeds or pathogens between infected areas and uninfected areas. Vehicles, machinery and building refuse associated with the development construction should remain only within construction footprint areas, avoiding weed or pathogen related impacts to vegetation outside of the subject land.	Low impact
	Construction	Prevent rubbish dumping. Waste bins to be present on site. Covers to be used to prevent blown litter and the entry of pest animals or rain.	No impact

Item	Stage of Project	Mitigation Measure	Residual Impact
BDAR	Construction	Staff training and site briefing to communicate environmental features to be protected and measures to be implemented.	No impact
	Construction	All staff working on the development will undertake an environmental induction as part of their site familiarisation.	Low impact
	Operation	Making provision for the ecological restoration, rehabilitation and/or ongoing maintenance of retained native vegetation on or adjacent to the subject land. The retained vegetation would be managed as part of the broader school grounds maintenance. Weeds should be managed and controlled within the adjacent vegetation to be retained	No impact
Bushfire Assessment Report	Construction	At the commencement of construction and in perpetuity, all grounds for a minimum distance of 73 metres to the north, east and west from the proposed Boarding House shall be maintained as an Inner Protection Area as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones' and Appendix 4 of PBP 2019.	No impact
	Construction	At the commencement of construction and in perpetuity, all grounds for a minimum distance of 30 metres to the north from the proposed Day Boy House shall be maintained as an Inner Protection Area as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones' and Appendix 4 of PBP 2019.	No impact
	Prior to CC	Any new landscaping in the minimum required APZs is to comply with the provisions of Table 7.4a and Appendix 4 of PBP 2019.	No impact
	Prior to CC	Construction for the proposed STEAM Building and Staff Residences (and future construction for the Day Boy House and Sports Pavilion) shall comply with Section 3 and Section 6 (BAL 19) Australian Standard AS3959-2018 Construction of buildings in bush fire-prone areas and Section 7.5 of PBP 2019 2019.	No impact
	Prior to CC	Future construction for the proposed Boarding House (and associated Staff Quarters) shall comply with Section 3 and Section 7 (BAL 29) Australian Standard AS3959-2018 Construction of buildings in bush fire-prone areas and Section 7.5 of PBP 2019.	No impact

Item	Stage of Project	Mitigation Measure	Residual Impact
Bushfire Assessment Report	Prior to OC	Prior to occupation, a Bushfire Emergency Management and Evacuation Plan is prepared in accordance with the NSW Rural Fire Service Guide to Developing a Bush Fire Emergency Management and Evacuation Plan.	No impact
	Prior to CC	Any new internal hydrant system, electrical services and gas services are to comply with the requirements set out within Table 6.8c of PBP 2019.	No impact
	Prior to CC	The proposed internal roads shall comply with the access requirements as set out within Table 6.8b of PBP 2019.	No impact
Arboricultural Impact Assessment	Construction	All tree removal work and tree pruning work is to be carried out by an experienced Arborist with minimum Australian Qualification Framework (AQF) Level 3 qualifications in accordance with AS4373-2007 Pruning of amenity trees and other applicable legislation and policies.	Low impact
	Construction	Selective tree reduction pruning is to be undertaken to a total of five (5) branches on Tree AP-00433 in accordance with the specification provided to enable adequate clearance to the proposed STEAM building (including adequate clearance from the temporary scaffolding structures required to facilitate construction of the STEAM building).	No impact
	Prior to CC	A total of 432 trees to be retained and protected in accordance with AS497-4009 Protection of trees on development sites (and in accordance the relevant Tree Location Plans).	No impact
	Prior to CC	A Project Arborist experienced in tree protection on construction sites should be engaged prior to the commencement of any works on site. The Project Arborist shall monitor and report regularly to the Principal Certifying Authority (PCA) and the applicant on the condition and protection of the retained trees during the works.	No impact
	Construction	The Project Arborist is to supervise and monitor any excavation, machine trenching or compacted fill placement within the TPZ of retained trees throughout construction.	No impact

Item	Stage of Project	Mitigation Measure	Residual Impact
Arboricultural Impact Assessment	Prior to CC	Following design development (and prior to any construction works taking place on site), a dedicated Tree Protection and Management Plan is to be prepared by a suitably qualified AQF Level 5 Arborist to ensure that all trees nominated for retention are not adversely impacted by the proposed works.	No impact
	Prior to CC	In order to compensate for the proposed tree removal, replacement planting should be provided at a minimum ratio of 1:1. This will ensure there is no incremental loss of canopy cover over time and that the integrity of the surrounding landscape setting is maintained in the long term	No impact
	Prior to CC	A minimum of 451 large growing, locally endemic compensatory tree planting should be provided within the open space areas associated with the wider campus masterplan.	No impact
	Prior to CC	The tree species chosen for planting should be provided at a minimum pot size of 200mm and are to align with the requirements for stock selection as stipulated by AS2303-2015 Tree stock for landscape use.	No impact
Noise and Vibration Impact Assessment	Prior to CC	Compliance with the minimum façade glazing thickness and acoustic seal requirements.	Low impact
	Prior to CC	Notifying all identified as sensitive receivers prior to the commencement of works.	Low impact
	Construction	Implementing respite periods when construction activities exceed the “highly noise affected level” to protect the amenity of nearby residential receivers. Specific recommendations regarding respite periods are to be address within a Construction Noise and Vibration Management Plan.	Low impact
	Construction	Noise from construction processes to buildings within The King’s School campus is to be managed through liaison with a representative of The King’s School and the contractor.	No impact

Item	Stage of Project	Mitigation Measure	Residual Impact
Noise and Vibration Impact Assessment	Construction	In the event of ongoing complaints of excessive vibration, vibration monitoring is to be implemented (as part of the detailed Stage 1 works) along the property boundary closest to the vibration receiver who issued the complaint for a short period of time to ascertain whether vibration parameters have been exceeded. If exceedances are found, adjustments to the construction process exceeding the parameter must be made to reduce the vibration level at the receiver.	No impact
	Construction	In the event of ongoing complaints of excessive noise, noise monitoring is to be implemented (as part of the detailed Stage 1 works) along the property boundary closest to the noise receiver who issues the complaint for a short period to ascertain whether noise parameters are above reasonable levels. If exceedances are found, adjustments to the construction process exceeding the parameter must be made to reduce the noise level at the receiver, or appropriately manage time slots of usage of the process to minimise impacts on the receiver in question.	No impact
	Construction	The implementation of quiet work methods and technologies where possible.	No impact
	Construction	Procedures to review and handle complaints are to be implemented.	No impact
	Construction	A copy of the Construction Noise and Vibration Management Plan is to be available to contractors and form part of site induction.	No impact
Flood Risk Assessment	Prior to CC	Adopt the minimum flood planning levels identified within the Flood Risk Assessment.	No impact
Erosion and Sediment Control Plan	Construction	A silt fence is to be installed to prevent silt and waste being transported into the proximity of the site and neighbouring properties	No impact
	Construction	A catch drain with hay bales will be utilised to carry and treat site runoff which will then be captured by a sedimentation basin that will be installed at the lowest point of site excavation	No impact

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Erosion and Sediment Control Plan	Construction	Due to site's existing subsurface being a combination of asphalt and concrete, the existing pits on site will require sandbags or geotextile pit interest until the surface is demolished. Following demolition, silt barriers can be installed.	No impact
	Construction	At the point of entry to the site, cattle grids will be provided to ensure that vehicles and machinery leaving the site do not transport sediment on their wheels.	No impact
Contamination	Construction	Implementation of an unexpected finds protocol (UFP) during construction.	No impact
	Construction	Implementation of the site-specific recommendations of the hazardous materials register	No impact
Social Impact Assessment	Construction	Adhere to all recommendations included within the Noise and Vibration Assessment and Construction Management Plan	No impact
	Prior to CC	Integration of design principles informed by local Aboriginal culture and Country Narratives in the design of new buildings and landscaping.	No impact
	Prior to CC	Workshops with local Aboriginal communities and the integration of design principles informed by local Aboriginal culture and Country Narratives in the design of new buildings	No impact
	Operation	Implementation of the School Transport Plan.	No impact
	Construction and Operation	Continue to communicate with stakeholders and the community about the implementation of measures to reduce the negative impacts of traffic and parking around the school.	No impact
	Construction	Develop and implement a complaints and feedback process to monitor the construction activities and engage and keep up to date the community on progress and inviting opportunities for feedback.	No impact
	Operation	Continue making facilities available for community use and hire	No impact