Appendix 1 – Mitigation Measures – Bungendore High School

#	Reason	Mitigation measure	Timing	Significance after mitigation
Trai	nsport and Access			
TT 1	To provide a prioritised pedestrian crossing and ensure safe walking access for students. The provision of a raised threshold further acts as a traffic calming intervention in slowing down vehicle speeds.	Provide two wombat crossings, one on Birchfield Drive and one on Bridget Avenue	Pre- Operation	Not significant
TT 2	To ensure safer crossing for pedestrians with formalised waiting space at the refuge island, for east-west crossing movements	Provide formalised refuge crossings with barrier kerb	Pre- Operation	Not significant
TT 3	To ensure walking and cycling access for students to the school site in all directions.	Provide missing footpaths within the immediate vicinity of the school site on Birchfield Drive, Winyu Rise and Bridget Avenue. • School frontage: 3.2m wide footpath as per Walking Space Guide Type 3 Footpath (Local footpath – High activity). • Non-school frontage: 1.5m wide footpath.	Pre- Operation	Not significant
TT 4	To provide student and staff bicycle parking spaces based on forecasted demand as per mode share targets.	Provide secure sheltered bicycle storage areas (up to a total of 34 bicycle parking spaces) close to the school gates on Birchfield Drive (main entrance) and Bridget Avenue.	Pre- Operation	Not significant
TT 5	To provide bus zone requirements based on forecasted demand as per mode share targets, ensuring efficiency of drop-off / pick-up operation.	Provide a bus zone along Birchfield Drive (on the school side) for four standard 12.5m buses and coaches for excursions, with a total length of 70m. The location of the	Pre- Operation	Not significant

#	Reason	Mitigation measure	Timing	Significance after mitigation
		proposed bus zone is downstream of the wombat crossing. Arrival of buses to be staggered to manage bus demand during the peak hours.		
TT 6	The placement of bus stops in proximity to school site reduces walk distances and promote bus usage. Coordination with bus schedules to align with school bell times.	Continue conversations with TfNSW Bus Planning Team to better align existing school bus services with adjusted school bell times. This includes a proposed route connecting from Gundaroo, Sutton and Wamboin.	All stages	Not significant
TT 7	Kiss and drop zone length (120m) is based on advice from QPRC to provide additional capacity in alignment with observations made at Jerrabomberra High School.	Provide kiss and drop zone (120 metres) and accessible kiss and drop (4 spaces) along school frontage on Birchfield Drive.	Constructio n	Not significant
TT 8	To reduce overspill of staff parking onto surrounding residential streets.	Provide staff parking within the school site (50 spaces). No on-site parking is to be provided for students.	Constructio n	Not significant
TT 9	To promote accessibility and inclusion, and in alignment with advice from QPRC.	Provide one accessible parking space on Birchfield Drive for use by parents/ guardians/ visitors to the school.	Pre- occupation	Not significant
TT 10	To address operational and safety concerns at the school site.	Within the first 12 months of operation, appoint a School Travel Coordinator and establish a School Transport Committee.	Within 12 months of the of operation	Not significant
TT 11	To inform the community on the travel choices available for the school site, as well as pick-up and drop-off procedures.	Develop and distribute the Travel Access Guide to the school community prior to the school opening.	Operation	Not significant
TT 12	To address ongoing operational and safety concerns at the school site.	A School Transport Plan must be prepared to the satisfaction of the DoE Transport Planning Team.	Operation	Not significant

#	Reason	Mitigation measure	Timing	Significance after mitigation
TT 13	To address ongoing operational and safety concerns at the school site.	The School Transport Plan is to be reviewed on an annual basis for the first two years and updated (if required) to the satisfaction of the DoE Transport Planning team to ensure active and sustainable travel measures are implemented	Operation	Not significant
TT 14	To ensure safe operations of roads around the site.	Prior to the commencement of operation, all required School Zone signage, speed management signage and associated pavement markings must be installed, inspected by TfNSW and handed over to TfNSW.	Operation	Not significant
Nois	se and Vibration			
N V1	To achieve internal and external building services noise and vibration criteria.	Appropriate equipment selection and noise mitigation design.	Design	Not significant
N V2	To minimise disruption to nearby residential receivers.	Outside School Hours Care activities between 6am and 7am should take place indoors, with windows and doors closed. Acoustic louvres to be installed within Hall and Covered Outdoor workshop areas where required to achieve environmental noise emission criteria. Implement feasible and reasonable mitigation measures for traffic generation in alignment with the NSW Road Noise Policy. Restrict usage of Public Address to daytime hours only (7am to 6pm). Use directional speakers and set volume levels to the minimum required to ensure clarity and audibility. Where practicable, all	Operation	Not significant

#	Reason	Mitigation measure	Timing	Significance after mitigation
		loading dock activities, waste removal and noisy cleaning activities should take place between 7am and 10pm.		
N V3	To control noise intrusion into sensitive spaces throughout the school.	Façade glazing and lightweight elements and doors to be designed to control noise break-in to sensitive areas. Natural ventilation to incorporate acoustic louvres where noise break-in is required to be controlled (e.g. Hall). Install acoustically absorptive finishes to underside of outdoor learning areas to control reverberation build up and mitigate noise intrusion.	Design	Not significant
N V4	To manage noise and vibration impacts during construction.	Contractor to develop a detailed CNVMP once specific details of proposed construction activities and staging are known.	Pre- construction / construction	Not significant
Con	tamination and Hazardous Wa	ste		
C H1	To compensate for the low sampling density completed for the PSI.	A robust unexpected finds protocol is to be prepared by a suitably qualified environmental consultant and that this protocol be implemented during the development/construction phase of the project.	Pre- construction	Not significant
C H2	To determine waste classification	Additional testing should be undertaken during development works to confirm the waste classification, prior to any off-site disposal of waste.	Constructio n	Not significant
Floo	oding			
F1	To ensure excess runoff during significant rainfall events are directed away from building openings	Refinement of civil and stormwater considerations to increase capacity of the existing flow path north of Buildings A and C, and	Pre- construction	Not significant

#	Reason	Mitigation measure	Timing	Significance after mitigation	
		implementation of a wall around the edge of the upper terrace to restrict overflows into the lower terrace.			
F2	To determine the most appropriate response strategy for the school. See TTW's Preliminary Flood Emergency Response Plan for the school, dated 11th February 2025.	Preparation of a FERP to determine the time to inundation and recession, isolation time (if any), staff roles and responsibilities, etc.	Pre- operation	Not significant	
F3	To provide emergency response guidance in the event of a flood event and further reduce flood risks associated with the activity.	This FERP is based on the Concept Design information for the proposed site, and must be reviewed following the detailed design stage, and updated prior to the site becoming operational.	Pre- operation	Not significant	
F3	To ensure all staff and students are aware of the flood risks present onsite and the flood protocols and procedures via signage.	Install flood evacuation signage in accordance with the FERP.	Pre- operation	Not significant	
F4	To ensure that supplies within the kit are sufficient and in working condition.	A Flood Emergency Kit must be prepared.	Pre- operation	Not significant	
F5	To ensure all staff are aware of their specific roles and associated flood response actions.	Staff must be delegated responsibilities as per the FERP.	Operation	Not significant	
F6	To ensure that information is up to date and procedures are updated regularly.	The FERP must be reviewed and updated regularly.	Operation	Not significant	
F7	To ensure all staff workers and students are familiar with the sound of the alert and their subsequent flood response actions.	Flood drills are to be held by staff annually.	Operation	Not significant	
Sto	Stormwater				
S W 1	To avoid polluting the water and/or blocking the stormwater network. To prevent sediment from leaving the site with stormwater runoff.	Implementation of Erosion and Sediment Control measures as described in Section 4 of the Civil Engineering Design Report and on the Erosion and	Design and Constructio n	Not significant	

#	Reason	Mitigation measure	Timing	Significance after mitigation
	To prevent the depositing of material onto the public roadway. To prevent sediment discharged from the site from entering the stormwater inlet structure and contaminating the water course.	Sediment Control Plan in Appendix A. Erosion and sediment controls are to be maintained until the site is fully stabilised to prevent pollution of the receiving environment.		
S W 2	To ensure the development is not worsening flow conditions in downstream receiving stormwater networks and waterways.	Implementation of Stormwater Quantity Controls as described in Section 3, 3.1 and 3.2 of the Civil Engineering Design Report through the provision of two OSD tanks.	Design, Constructio n and Operation	Not significant
S W 3	To ensure that stormwater discharge is of adequate quality to protect downstream receiving stormwater networks and waterways, in accordance with Council's requirements.	Provision of stormwater quality treatment measures as part of the WSUD as described in Section 3.5, 3.6 and 3.7 of the Civil Engineering Design Report and shown on the stormwater drawings in Appendix A	Design, Constructio n and Operation	Not significant
Abo	riginal Cultural Heritage			
A1	To ensure record keeping.	The AODD report should be kept as evidence of the Due Diligence Process having been applied to the subject area.	Throughout life of the project	Not significant
A2	To manage the event that an unexpected Aboriginal archaeological find is uncovered.	Should any archaeological deposits be uncovered during any site works, the following steps must be followed: 1. All works within the vicinity of the find must immediately stop and the location cordoned off with signage installed to stop any accidental impact to the finds. The find must not be moved 'out of the way' without assessment. 2. The site supervisor or another nominated site representative must contact either the project	During construction	Not significant

#	Reason	Mitigation measure	Timing	Significance after mitigation	
		archaeologist (if relevant) or Heritage NSW (Enviroline 131 555) to contact a suitably qualified archaeologist. 3. The nominated archaeologist must assess the find and its potential extent. 4. If impacts to the identified site extent are required, an Aboriginal Cultural Heritage Assessment Report and an AHIP application process must be undertaken. 5. Works in the vicinity of the find can recommence only after an AHIP is granted from Heritage NSW.			
A3	To address the unlikely discovery of human remains.	If any suspected human remains are discovered during any activity, you must: 1. Immediately cease all work at that location and not further move or disturb the remains. 2. Notify the NSW Police and Heritage NSW Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location. 3. Not recommence work at that location unless authorised in writing by Heritage NSW.	Construction	Not significant	
Soc	Social Impacts				
SI 1	To benefit the Bungendore community by providing access to facilities for afterhours use.	Following the opening of Bungendore High School, investigate opportunities for the school to participate in the department's shared use initiatives.	Operation	Not significant	

#	Reason	Mitigation measure	Timing	Significance after mitigation
SI 2	To support the development of social cohesion and sense of belonging within the student cohort through the provision of spaces for recreation and social connection.	Investigate opportunities for the school to provide activities and programs before, during and/or after- school that encourage students to meet and connect. This could include sport, recreational or other special interest programs and activities.	Operation	Not significant
SI 3	To foster greater awareness of Aboriginal culture.	Investigate opportunities to promote regular education and knowledge sharing programs in partnership with the local Aboriginal community.	Operation	Not significant
SI 4	To address traffic impacts during school operations.	During operation, undertake traffic monitoring to identify any significant impacts to the local road network.	Operation	Not significant
SI 5	To improve amenity for students.	During operation, continue to monitor the comfort of students onsite. Identify suitable areas for students to use at break times during poor weather conditions.	Operation	Not significant
SI 6	To mitigate against flood risk.	During operation, deliver training to staff and students to ensure they are familiar with emergency procedures during flooding events.	Operation	Not significant
Odo	our			
O 1	To minimise the potential for odour generation and maintain a high standard of hygiene.	An Odour Management Plan is to be prepared which ensures regular cleaning of bedding and manure. The frequency of cleaning and changeover of animal bedding would be based on the type and quantity of animals being housed.	Operation	Not significant

#	Reason	Mitigation measure	Timing	Significance after mitigation
O 2	To reduce odour potential from the tank.	Investigate building an enclosed effluent storage tank within the Site.	Pre- Constructio n	Not significant
O 3	To reduce odour potential to surrounding residential areas and to utilize the composted materials in the vegetable beds.	Locate the composting activities on the eastern portion of the AG parcel, near the vegetable beds.	Constructio n	Not significant
O 4	To confirm the absence of odour and ensure the effectiveness of odour control measures.	Undertake field odour surveys during operational phases with the main objectives being: The extent of the odour plume, The intensity of the odour, and The characteristics of the detected odours.	Operation	Not significant
Win	d			
W 1	To ensure seating areas are suitable for their intended use based on the local wind conditions.	Include vertical barriers (screens, booths, landscaping, etc) to sufficient height and density around the seating areas based on the desired area of protection/size of seating area. Recommended height is typically to standing height (~1.5-2 m) for a small, seated area. Locate seating areas away from corners and/or include options to switch to the other aspect of the corner for seating depending on the prevalent wind direction.	Construction	Not significant
Biod	diversity			
B1	Manage the risk of indirect impacts from sedimentation, erosion and contamination.	An Erosion and Sediment Control Plan must be implemented in accordance with the Landcom/Department of Housing Managing Urban	Pre- Constructio n	Not significant

#	Reason	Mitigation measure	Timing	Significance after mitigation
		Stormwater, Soils and Construction Guidelines (Blue Book).		
B2	Manage the risk of indirect impacts from sedimentation, erosion and contamination.	Any imported mulch must comply with the Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014 and the Mulch Order 2016 recognised by the NSW Environment Protection Authority as being "fit for purpose" with respect to the works under the REF. Mulch must not include physical or chemical contaminants or introduce weeds, disease or pests.	Constructio	Not significant
В3	To improve biodiversity values of the proposal site.	Any street trees removed should be replaced with advanced trees, at least at a 1:1 ratio, and preferably locally endemic native species. Advanced trees are to be planted to increase canopy cover and provide shade/reduce urban heat affects.	Construction Pre- operation	Not significant
Tre	e Removal			
T R1	To ensure trees are protected during construction phase.	Installation of tree protection fencing to exclude construction from the TPZ of retained trees. TPZ fencing will be installed as per Section 3.1.1.	Constructio n	Not significant
T R2	Protection of retained trees during tree removal and site clean-up.	Stump and root material from a tree elected for removal that is growing in close association with a tree nominated for retention are to be cut to ground level or by other means deemed appropriate. Tree removals are to be undertaken by a suitably qualified and experienced arborist.	Construction	Not significant

		Mitigation measure	Timing	Significance
#	Reason			after mitigation
T R3	Protect roots within TPZ by preventing root damage during unavoidable excavation.	Any unavoidable excavation within the demarked TPZ will be undertaken by hydro excavation. Any exposed roots >20 mm in diameter will be assessed by the appointed consulting arborist to determine if they require pruning	Constructio n	Not significant
Soil	s and Salinity			
S A1	To ensure salinity conditions are considered during the design and construction.	Soil aggressivity characteristics detailed through this report be appropriately considered by the project engineers during the design of the proposed activity.	Pre- construction	Not significant
Оре	erational Waste			
O W 1	To manage waste impacts and ensure compliance with waste management system	The wastes generated will be properly assessed, classified and managed in accordance with the EPA's guidelines to ensure proper treatment, transport and disposal.	Operation	Not significant
O W 2	To manage waste impacts and ensure compliance with waste management system	The collection and storage of waste and removal by a licensed contractor.	Operation	Not significant
O W 3	To manage waste impacts and ensure compliance with waste management system	Garbage is to be stored and collected on a regular basis. Sufficient space is to be provided for the storage of garbage and recycling.	Operation	Not significant
O W 4	To manage waste impacts and ensure compliance with waste management system	The waste bins and storage areas should have adequate signage in place	Operation	Not significant
O W 5	To manage waste impacts and ensure compliance with waste management system	Waste collection areas have been identified on the school compound.	Operation	Not significant
O W 6	To manage waste impacts and ensure compliance with waste management system	Driveways and loading docks have been designed in accordance with the relevant authority requirements to allow the safe passage of a laden	Operation	Not significant

#	Reason	Mitigation measure	Timing	Significance after mitigation
		garbage collection vehicle in all seasons.		
O W 7	To manage waste impacts and ensure compliance with waste management system	Appropriate training is to be provided to the school management, staff, students, cleaners and contractors, annually as a minimum and as part of new employee inductions. Training should be documented and the outcomes discussed, and issues addressed.	Pre- Operation	Not significant
O W 8	To manage waste impacts and ensure compliance with waste management system	The OWMP will be reviewed, revised and updated every 12 months or as required depending on changes at the school and formalised.	Operation	Not significant
O W 9	To manage waste impacts and ensure compliance with waste management system	Actual volumes of waste and recycling collected are to be obtained and recorded to enable waste volume evaluation by the school.	Operation	Not significant
O W 10	To manage waste impacts and ensure compliance with waste management system	Achieve, acknowledge and comply with waste targets set for the school. Undertake reasonable processes to reach the waste targets determined for the school.	Operation	Not significant
Con	struction Waste			
C W 1	To manage waste impacts during construction	The CWMP must be implemented for the duration of construction works.	Constructio n	Not significant
C W 2	To manage waste impacts and ensure compliance with waste management system	Relevant waste management details will be indicated on a site plan for all workers, including the location of the main skip bin.	Pre- Constructio n Constructio n	Not significant

#	Reason	Mitigation measure	Timing	Significance after mitigation
		Staff and subcontractors will undergo site induction and ongoing toolbox talks that will detail waste minimisation and reuse management measures, including the requirements of the waste management hierarchy. Waste minimisation training will include energy consumption awareness that promotes energy conservation methods including minimising energy use by switching off equipment when not in use.		
C W 3	To maximise reuse and recycling of waste material	The NSW Governments Waste Management Hierarchy of 'avoid-reduce- reuse-recycle-disposal' will be followed as the framework of waste management throughout the project. The reuse/and or recycling of waste materials generate on site shall be maximised as far as practical, to minimise the need for treatment or disposal of those materials off site.	Pre-Construction Construction	Not significant
C W 4	To manage asbestos safely if required.	Asbestos will be managed in accordance with a site Asbestos Removal Control Plan or Asbestos Management Plan if required. Asbestos waste is to be managed as per the POEO (2014) Part 7 Transportation and Management of Asbestos Waste.	Construction	Not significant
C W 5	To manage waste impacts and ensure compliance with waste management system	Waste material generate on-site will be transported and disposed of at an approved waste disposal facility in accordance with relevant requirements.	Pre- Constructio n Constructio n	Not significant

#	Reason	Mitigation measure	Timing	Significance after mitigation
C W 6	To manage waste impacts and ensure compliance with waste management system	A waste register will be developed and maintained, detailing types of waste collected, amounts, date/time, and details of disposal.	Constructio n	Not significant
C W 7	To manage waste impacts and ensure compliance with waste management system	A S143 notice under the POEO Act will be completed should the offsite (on private property) lawful disposal of waste material deemed necessary.	Constructio n	Not significant
C W 8	To manage waste impacts and ensure compliance with waste management system	The relevant licences of waste facilities utilised for the disposal of project waste will be obtained to ensure they are legally able to accept the waste.	Pre- Constructio n Constructio n	Not significant
C W 9	To manage waste impacts and ensure compliance with waste management system	Disposal of waste streams identified in Sections 3.5 to 3.7 of the CWMP is to be conducted by a licensed waste contractor. Waste is to be taken to a waste facility lawfully able to receive it. Waste is to be tracked and recorded.	Constructio n	Not significant
C W 10	To manage waste impacts and ensure compliance with waste management system	Stockpiles of waste material designated for offsite disposal is to be stockpiled more than 2 metres from drainage lines and retained vegetation or alternatively placed within separate skip bins for the different waste streams.	Constructio n	Not significant
C W 11	To manage waste impacts and ensure compliance with waste management system	Regular visual inspections will be conducted to ensure that work sites are kept tidy and to identify opportunities for reuse and recycling.	Constructio n	Not significant
C W 12	To manage waste impacts and ensure compliance with waste management system	The CWMP is to be updated once the recycling/disposal contractors has been established.	Pre- Constructio n Constructio n	Not significant

#	Reason	Mitigation measure	Timing	Significance after mitigation			
Con	Construction General						
CI 1	To manage impacts during the construction stage of the project	The Principal Main Works Contractor is responsible for developing and implementing a comprehensive Construction Management Plan that integrates Workplace Health and Safety (WHS), Environmental, and Quality management.	Pre- construction	Not significant			
Site	Servicing						
H S1	To minimise soil disturbance	Plan service routes efficiently, reuse excavated soil for backfilling, stabilise exposed areas with mulch or vegetation, and implement silt barriers to prevent erosion and runoff.	Constructio n	Not significant			
H S2	To minimise noise during construction	Restrict noisy activities to standard working hours, use noise barriers near sensitive areas, maintain equipment with noisedampening devices, and inform residents and businesses about highnoise activities in advance as per the traffic consultant's report.	Constructio	Not significant			
H S3	To minimise visual impact	Above-ground hydraulic services to use neutral or natural-coloured materials for utility structures, positioned discreetly, landscaping for screening, and incorporate aesthetic design elements to blend with the surroundings as per the landscape architect's report.	Constructio n	Not significant			