



planning consultants

APPENDIX A

Modified Mitigation Measures (Mod 4)

SSD-26876801

Relocation of The Forest High School

Allambie Road, Allambie Heights

Prepared for: Department of Education
June 2025

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
Architecture	- Prior to the issue of any relevant Construction Certificate, detailed plans that demonstrate compliance with Standard 3.2.3 of the Australian and New Zealand Food Standards Code, the Food Act 2003 and Australian Standard AS 4674 'Design, construction and fit out of food premises', must be submitted to and approved by the Certifying Authority. These plans are to be prepared by a suitably qualified person. The plans must detail adequate provision for storage including separate storage of food, equipment, chemicals and personal belongings. - Prior to the issue of any relevant occupation certificate, certification is to be provided from a suitably qualified person demonstrating that the design, construction and fit out of food premises kitchen is compliant with the requirements of AS 4674 Design, construction and fit out of food premises. Details demonstrating compliance are to be submitted to the Principal Certifying Authority.	Section 6.1 Appendix G
Tree Protection	- All tree pruning and removal is to be carried out by an arborist with a minimum AQF Level 3 qualification in Arboriculture. - All tree work must be in accordance with Australian Standard AS 4373-2007, Pruning of Amenity Trees and the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998). - Permission must be granted from the relevant consent authority prior to removing or pruning of any of the subject trees. Approved tree works will not be carried out before the installation of tree protection measures. - Any additional construction activities within the TPZ of the subject trees must be assessed and approved by the project arborist and must comply with AS 4970-2009 – Protection of trees on development sites. - The following tree protection guidelines must be implemented during the construction period if no tree-specific recommendations are detailed. <u>E1 Tree protection fencing</u> The TPZ is a restricted area delineated by protective fencing or the use of an existing structure (such as a wall or fence). Trees that are to be retained must have protective fencing erected around the TPZ (or as specified in the body of the report) to protect and isolate it from the construction works. Fencing must comply with the Australian Standard, AS 4687-2007, Temporary fencing and hoardings. Tree protection fencing must be installed prior to site establishment and remain intact until completion of works. Once erected, protective fencing must not be removed or altered without the approval of the project arborist. If the protective fencing requires temporary removal, trunk, branch and ground protection must be installed and must comply with AS 4970-2009, Protection of Trees on Development Sites. Tree protection fencing shall be: - Enclosed to the full extent of the TPZ (or as specified in the Recommendations and Tree Protection Plan). - Cyclone chain wire link fence or similar, with lockable access gates. - Certified and Inspected by the Project Arborist. - Installed prior to any machinery or material are brought to site and before the commencement of works. - Prominently sign posted with 300 mm x 450 mm boards stating, "NO ACCESS - TREE PROTECTION ZONE". <u>E2 Crown protection</u> Tree crowns/canopy may be injured or damaged by machinery such as; excavators, drilling rigs, trucks, cranes, plant and vehicles. Where crown protection is required, it will usually be located at least one meter outside the perimeter of the crown. Crown protection may include the installation of a physical barrier, pruning selected branches to establish clearance, or the tying/bracing of branches.	Section 6.7 Appendix J

Mitigation Measures

Environmental Impact

Mitigation Measure

EIS Section or
AppendixE3 Trunk protection

Where provision of tree protection fencing is impractical or must be temporarily removed, trunk protection shall be installed for the nominated trees to avoid accidental mechanical damage.

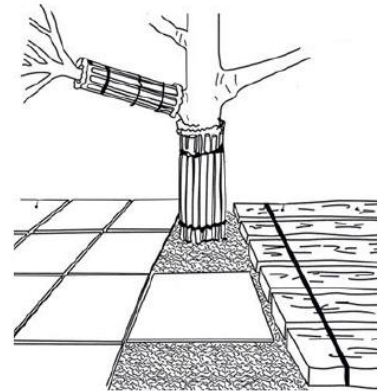
The removal of bark or branches allows the potential ingress of micro-organisms which may cause decay. Furthermore, the removal of bark restricts the trees' ability to distribute water, mineral ions (solutes), and glucose.

Trunk protection shall consist of a layer of either carpet underfelt, geotextile fabric or similar wrapped around the trunk, followed by 1.8 m lengths of softwood timbers aligned vertically and spaced evenly around the trunk (with an approx. 50 mm gap between the timbers).

The timbers must be secured using galvanised hoop strap (aluminium strapping). The timbers shall be wrapped around the trunk but not fixed to the tree, as this will cause injury/damage to the tree.



Tree protection fencing



Trunk protection fencing

E4 Ground protection

Tree roots are essential for the uptake/absorption of water, oxygen and mineral ions (solutes). It is essential to prevent the disturbance of the soil beneath the dripline and within the TPZ of trees that are to be retained. Soil compaction within the TPZ will adversely affect the ability of roots to function correctly.

If temporary access for machinery is required within the TPZ ground protection measures will be required. The purpose of ground protection is to prevent root damage and soil compaction within the TPZ. Maintain a thick layer of mulch around all retained trees to a depth of 100 mm using coarse pine bark or wood chip material that complies with AS 4454. Where the existing landscape within the TPZ is to remain unaltered (e.g. garden beds or turf) mulch may not be required.

For heavy vehicle access within TPZ, ground protection may include a permeable membrane such as geotextile fabric beneath a layer of crushed rock or rumble boards.

If the grade is to be raised within the TPZ, the material should be coarser or more porous than the underlying material.

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	<u>E5 Root protection and investigation</u> If incursions/excavation within the TPZ are unavoidable, root investigation may be needed to determine the extent and location of roots within the area of construction activity. The location and distribution of roots are found through non-destructive excavation (NDE) methods such as hydro-vacuum excavation (sucker truck), air spade and manual excavation. Root investigation does not guarantee the retention of the tree. If the project arborist identifies conflicting roots that requiring pruning, they must be pruned with a sharp implement such as; secateurs, pruners, handsaws or a chainsaw back to undamaged tissue. The final cut must be a clean cut. <u>E6 Underground services</u> All underground services should be routed outside of the TPZ. If underground services need to be installed within the TPZ, they should be installed using horizontal directional drilling (HDD), non-destructive excavation (NDE) methods such as hydro-vacuum, Air Spade or manually excavated trenches. The horizontal drilling/boring must be at minimum depth of 600 mm below grade. Trenching for services is to be regarded as "excavation". The project arborist should assess the likely impacts of boring and bore pits on retained trees.	
Landscaping	No mitigation measures required.	Section 6.8 Appendix L
Ecologically Sustainable Development	- The new school will exceeding the National Construction Code (NCC) Section-J Energy efficiency requirements by at least 10%. - The new school will meet the sustainability requirements outlined in the School Infrastructure New South Wales (SINSW) Educational Facilities Standards and Guidelines. - The new school will be registered with the Green Building Council of Australia (GBCA) for a formal 5 Star Green Star certification, under the Green Star Design and As Built v1.3 tool. - Soft landscaping will be used to reduce the heat island effect and improve outdoor thermal comfort. Were possible include cool paving with high albedo surface and hardscaping and roofing materials with high Solar Reflectance Index (SRI) being mindful of glare. - The new school will implement planting around parking and other areas adjacent to hardscaped areas to improve shading and to reduce the heat island effect. - For landscaping, native species with low water requirements will be selected. - The new school will include Water Sustainable Urban Design features such as permeable paving, to contribute towards natural absorption and water detention against potential increased storm events. - The new school will collect and reuse rainwater from roofs to be used for landscape irrigation. - The new school will reduce Water consumption through efficient irrigation systems and efficient water fixtures. - Hardscape levels will be designed to allow for passive irrigation. - The new school will include shading around external plant areas for improved cooling performance. - The new school will include 99kW photovoltaic array, as an onsite energy generation system.	Section 6.10 Appendix M
Operational Traffic	<u>Prior to Initial Occupation</u> - The following infrastructure upgrades and public transport service changes are to occur prior to the occupancy of the new school by students: - Pedestrian crossing on Rodborough Road adjacent to Allambie Road with associated pedestrian fencing and any associated streetlighting on the western boundary of Rodborough Road approaching the pedestrian crossing - New bus zones on the northern and southern sides of Aquatic Drive to the west of the intersection with Allambie Road - Temporary pedestrian crossing on Aquatic Drive to the west of the intersection with Allambie Road	Section 6.6 Appendix N Appendix A to Modification 4 Report

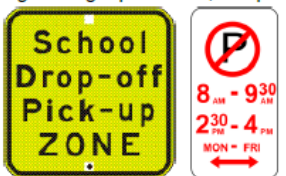
Mitigation Measures

Environmental Impact

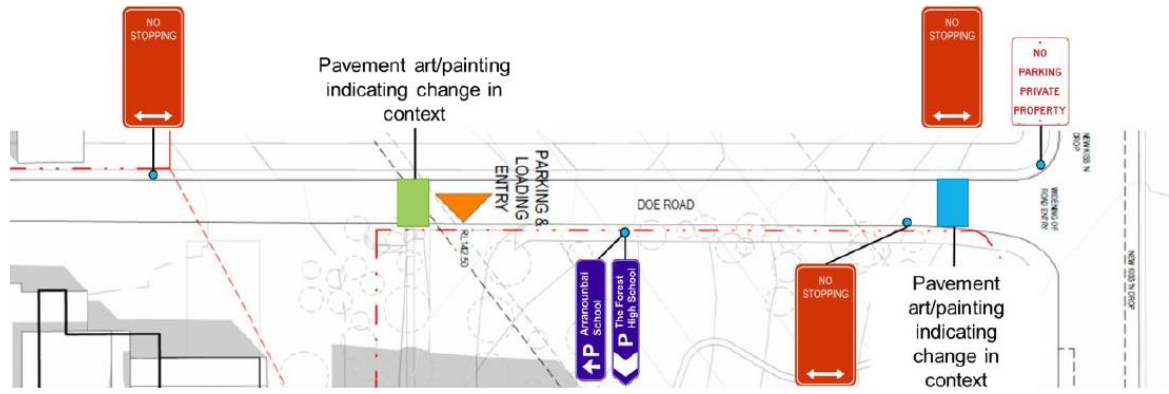
Mitigation Measure

EIS Section or Appendix

- On-street pick-up/drop-off bays on the northern and southern sides of Aquatic Drive to the west of the temporary pedestrian crossing and on the western side of Allambie Road
- Widening of existing shared path adjacent to the school along Aquatic Drive and Allambie Road to 4m (where feasible)
- Footpath along the northern side of Aquatic Drive.
- 121 bicycle and 61 scooter parking spaces.
- Removal of the bus stop on Allambie Road (TSN 2100177) per request from TfNSW due to road safety issues.
- Traffic signage on the roads surrounding the school shall be generally in accordance with the image below subject to the approval of the roads authority - Northern Beaches Council.

Street	From	To	Change
Allambie Road, eastern side	Southern boundary of school	Aquatic Drive	No Parking signs (r5-40) (including time limited ones) replaced with No Stopping signs (r5-400) 
Aquatic Drive	Allambie Road	Aquatic Centre entry	Provide School Drop-off Pick-up zone (R9-303) and No Parking (R5-41) signs along Aquatic Drive, except where bus stops are proposed 
Arnhem Road	Allambie Road	Allambie Road	No change to signage

- Where required by the relevant road authority, a road safety audit shall be prepared for works within a public road.
- Signage is proposed along the driveway generally as shown below, to reinforce to drivers that parking is limited to staff of TFHS and staff/visitors of Arranounbai School and pavement marking/colouring/art is proposed at the two key locations to indicate to drivers that the road is not a public road and the context has changed.

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	 - The gate at the entry to the carpark entry driveway shall be relocated to the east so that a minimum of 6m is provided within which to conduct a U-turn. - The following transport encouragement initiatives are to occur in the first year post occupation: - Staggered bell times - School Transport Committee - Funded Travel Coordinator - Governance arrangement as per School Transport Plan - Ridescore (if available) - Transport Access Guide - NSW Police road safety training - Tap on every time program - Bike repair quarterly on school grounds - Cycle to school competition with paid prizes (e.g. win a bike) - Bicycle skills training - Inquire into Bicycle NSW Spring Cycle Event - Bicycle network decals on paths - The relocation of school special routes to new school location is to align with the first date of occupancy. <u>Within 2 Years of Initial Occupation or prior to Occupation by more than 1,200 students</u> - The following infrastructure upgrade is to occur within 2 years of initial occupation by students or prior to the occupancy of the school by 1,200 students, whichever occurs first: - upgrade of the roundabout intersection at Aquatic Drive and Allambie Road.	
Construction Traffic	<u>On-site Works and Stage 1 Public Domain and Road Works</u> - Existing hardstand near the existing Allambie Road vehicular access will be used for initial on-site construction vehicle parking and upon completion of the shell of the on-site basement carpark, it will be made available for use by construction workers. - Prior to construction works commencing, the Principal Contractor will develop a Construction Pedestrian and Traffic Management Plan which will detail how traffic, pedestrian and cyclist access will be managed during the construction works. - Traffic flows and vehicle/pedestrian separation are a major consideration and pedestrian routes are to be maintained throughout construction. Traffic control personnel will be provided by the Principal Contractor during operating hours, or as advised by the	Appendix A to Modification 4 Report Section 6.6 Appendix N Appendix X Attachment P to Submissions Report

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	Principal Contractor within their Construction Pedestrian and Traffic Management Plan. The CTMP should adopt and comply with the overarching CMP and Communications Strategy. - Key issues for traffic, pedestrian and cyclist management during construction is to be considered in the Construction Pedestrian and Traffic and Management Plan include, but is not limited to: - Provide safe and uninterrupted access for pedestrians and vehicles accessing the construction site, surrounding roads and neighbour's driveways; - Ensure maximum safety of site personnel, pedestrians, cyclists, commuters, and drivers; - Minimise environmental nuisance and impact as a result of construction traffic; - Ensure construction traffic does not unduly interrupt existing traffic flows on the local road network; - Safe operation of buses and other transport services during construction in adjacent roads; - Have no vehicles arrive at the site, without prior arrangement, outside the approved working hours; - Encourage site workers to utilise local public transport system and car sharing wherever possible; - Timely and effective implementation of traffic management measures; - Fulfilling the Council and the Roads and Maritime Services requirements, where applicable. - Ensure construction vehicles do not park or wait on Aquatic Drive or the western access driveway (DoE Shared Driveway). Construction vehicles are to wait at an appropriate location within the locality (to be confirmed in the CTMP) before coming to site. The CTMP will also detail contractors parking locations. - The CTMP will be required to detail construction access for TFHS which should be from an alternate location rather than the access road to Arranounbai when possible. Traffic is to be managed during construction of the driveway and car park to mitigate traffic impacts on Arranounbai. Construction traffic on the western access driveway (DoE Shared Driveway) will not be permitted during the peak DoE Arranounbai student arrival (8.20 – 9.00 am) and departure periods (2.30 – 3.00 pm). In addition, the CTMP shall detail how sightlines either side of the western access driveway and Aquatic Drive intersection are to be maintained. - Communications Strategy - the CTMP shall comply with and integrate with the Communications Strategy including adoption of the complaints handling procedures detailed in therein and ensure that stakeholders are engaged prior to works and kept informed of potential traffic and parking impacts from the works. Specifically, this would involve: - The Cerebral Palsy Alliance - Sunnyfield - The Arranounbai School - Residential receivers on Allambie Road, Arnhem Road and Sunlea Place - Residential receivers on Madison Way - Pedestrian and vehicular movements into and around the site will be maintained, or alternate routes determined where necessary, and be defined by clear signage. If necessary, physical traffic management personnel will be used to guide pedestrians and vehicles safely. - Temporary hoarding appropriate to the interaction between pedestrians and construction works (as per Workcover requirements and Australian Standards) will be constructed to prevent unauthorized access to the construction site. These hoardings and fences may be staged to allow for appropriate construction methodologies to be planned. - Deliveries to within the site will be managed through dedicated site entrances and exits. These will be outlined by the Principal Contractor. - Materials will be staged and stored in such a way to promote a clear and safe work site. At all times, materials are to be stored within the confines of the site. While loading and unloading vehicles, it will be clearly stated that vehicles must not obstruct roads, driveways and escape routes from the building or fire protection equipment. - Any required works zones shall be subject to the requirements of the relevant road authority. - Construction workers shall be discouraged from parking in residential areas. The head contractor shall regularly monitor if on-street parking by construction workers in surrounding residential streets. Potential posting of signs in surrounding residential streets stating	

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	that construction workers are not to park and a number to report non-compliant vehicles by residents to further mitigate the likelihood of construction workers parking in surrounding residential streets. • Truck loads shall be covered during transportation off-site • Neighbouring properties shall be notified of construction works and timing. Any comments would be recorded and taken into consideration when planning construction activities • All construction activities, including the delivery of materials, shall not impede traffic flow along local roads unless a permit has been issued by the relevant road authority. • Materials shall be delivered and spoil removed during standard construction hours • Idling trucks near sensitive receivers is to be avoided wherever practicable. • Deliveries shall be planned to ensure a consistent and minimal number of trucks arriving at the site at any one time • Vehicles shall enter and exit the site in a forward direction along the travel path shown on delivery maps • Drivers shall always give way to pedestrians and plant.	
	<u>Stage 2 Public Domain and Road Works</u> • Prior to construction works commencing, the Principal Contractor will develop a Construction Pedestrian and Traffic Management Plan which will detail how traffic, pedestrian and cyclist access will be managed during the construction works. • Traffic flows and vehicle/pedestrian separation are a major consideration and pedestrian routes are to be maintained throughout construction. Traffic control personnel will be provided by the Principal Contractor during operating hours, or as advised by the Principal Contractor within their Construction Pedestrian and Traffic Management Plan. The CTMP should adopt and comply with the overarching CMP and Communications Strategy. • Pedestrian and vehicular movements into and around the site will be maintained, or alternate routes determined where necessary, and be defined by clear signage. If necessary, physical traffic management personnel will be used to guide pedestrians and vehicles safely. • Any required works zones shall be subject to the requirements of the relevant road authority. • Construction workers shall be discouraged from parking in residential areas. The head contractor shall regularly monitor if on-street parking by construction workers in surrounding residential streets. Potential posting of signs in surrounding residential streets stating that construction workers are not to park and a number to report non-compliant vehicles by residents to further mitigate the likelihood of construction workers parking in surrounding residential streets. • Truck loads shall be covered during transportation off-site • Neighbouring properties shall be notified of construction works and timing. Any comments would be recorded and taken into consideration when planning construction activities • All construction activities, including the delivery of materials, shall not impede traffic flow along local roads unless a permit has been issued by the relevant road authority. • Materials shall be delivered and spoil removed during standard construction hours • Idling trucks near sensitive receivers is to be avoided wherever practicable. • Deliveries shall be planned to ensure a consistent and minimal number of trucks arriving at the site at any one time. • Drivers shall always give way to pedestrians and plant. • The Stage 1 temporary crossing be managed by traffic controllers during school pickup and drop-off – i.e. between the hours of 8:00am and 9:30am and between 2:30pm and 4:00pm Mondays to Fridays • The Stage 2 raised pedestrian and bicycle crossing shall be constructed during a period/s when the school is not attended by students (e.g. school holidays)	Section 6.6 Appendix N Appendix X Attachment P to Submissions Report Appendix E to Modification 4 Report
Biodiversity	• No clearing will occur during the early evening or at night, when nocturnal fauna species are most likely to be active. • The direction of clearing will ensure that fauna species are directed away from threats such as roads, developed areas or disturbed areas.	Section 6.7 Appendix O

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	- Trained ecologist or licensed wildlife handler is on-call during all native vegetation clearance in the case that native fauna is injured and requires capture. - Areas of vegetation outside the development footprint are to be clearly demarcated with temporary chain mesh fencing to prevent accidental clearing during the construction phase. - Areas of disturbance are to be rehabilitated as soon as practicable. - Areas of vegetation outside the development footprint are to be clearly demarcated with temporary chain mesh fencing to prevent accidental clearing during the construction phase. - All vehicles, equipment, footwear and clothing will be clean and free of weed propagules prior to entering the subject land. - Any weeds that are removed during the construction phase will be disposed of appropriately. - Sensitive environmental areas are to be identified and communicated in all onsite briefings, for all staff prior to conducting work on the site. - A Vegetation Management Plan (VMP) is to be prepared prior to construction. - The VMP is to ensure that the persons undertaking the development undertakes initial weed removal and planting works over a minimum of three (3) years. - Where evidence of breeding (such as microbat roosting or presence of raptor nest) is detected during pre-clearance surveys, delay demolition until after relevant breeding season). - Undertake ecological preclearing surveys of native vegetation areas. - Ecologist to undertake a preclearance survey of the subject land prior to development to identify any suitable fallen (or to be felled) timber to be relocated. Ecologist to supervise relocation and placement of salvaged habitat features into retained bushland on site. - Install noise barriers along interface of vegetation and development where feasible. - Avoid works during evening hours. - Artificial lighting should be reduced where possible within the subject land. - Lights should be turned off at night (where not required for security) and any essential lighting should be fitted with directional shades to avoid light spill into adjoining areas. - Stockpiles are to be covered during high winds. - Truck movements monitored and kept to a minimum during high winds. - Use of water spray/truck on exposed soils to suppress dust where required. - Implementation of the VMP will require on-going, suitably qualified bush regenerators, and an appropriately qualified ecologist. - The key objectives of the VMP will include the rehabilitation and reconstruction of Duffys Forest. - The VMP will aim to meet the benchmark values, as contained within BioNet Vegetation Classification, for PCT 1786. - The VMP is to be carried out in perpetuity and is to include appropriate monitoring and adaptive management. - If pre-clearing surveys detect microbats using prescribed impact features, avoid demolition during Bent-winged Bat breeding season (December to February). - Ecologist to undertake diurnal bat roost searches and inspection of areas of non-native vegetation (to search for Powerful Owls) over two days prior to demolition.	
Operational Noise and Vibration	- Construct a 2.1 metre high lapped and capped timber fence noise barrier along the southern and western side of the Games Courts in accordance with the Fencing Strategy prepared by Architectus, dated October 2022. - The external doors to the Movement Studio / Lecture Theatre are to be closed when events are being carried out in these spaces. - The sound power level of each speaker in the public address system, mechanical plant shall comply with the following noise criteria:	Section 6.11 Appendix P Attachment H to Submissions Report Attachment I to Submissions Report

Mitigation Measures

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Appendix

Receiver	Period	Noise level – dB(A)			
		Recommended amenity noise level L_{eq}	Measured RBL	Project noise trigger level $L_{eq}(15\text{minute})$	
			RBL ⁽¹⁾	Intrusiveness	Amenity ^{(2),(3)}
NCA 01 & NCA 02 Residential	Daytime	55	37 ⁽⁴⁾	42	53
	Evening	45	32 ⁽⁴⁾	37	43
	Night-time	40	30 ⁽⁴⁾	35	38
NCA 03 Residential	Daytime	55	45 ⁽⁴⁾	50	53
	Evening	45	41 ⁽⁴⁾	46	43
	Night-time	40	33 ⁽⁴⁾	38	38
School classrooms	When in use	35 (internal)	n/a	n/a	48⁽⁵⁾
Commercial	When in use	65	n/a	n/a	68
Industrial	When in use	70	n/a	n/a	73

(1) RBL = Rating Background Level

(2) The recommended amenity noise level has been used as the Project amenity noise level as there are no other industries present or likely to be introduced

(3) The Project amenity noise level has been converted to a 15-minute level by adding 3 dB

(4) The minimum RBL as per the NPI has been adopted

(5) A +10 dB correction has been applied to the internal criterion to convert the level to an external criterion.

- The acoustic investigation required prior to the issue of any relevant Construction Certificate as required by the Noise Assessment by Resonate shall investigate the impacts associated with the design, specification and locations of noise generating mechanical plant, the public address system and school bell and specifically consider the noise impacts on DoE Arranounbai School to determine the need for any additional noise mitigation measures to limit noise emissions to the relevant NMLs for both indoor and outdoor environments at the DoE Arranounbai School;
- DoE PCG meetings will operate to provide the appropriate forum for discussion and collaborative resolution of issues specifically for DoE Arranounbai School associated with the construction phase, the transitional relocation phase and early operations of the new School (3 months post commencement of operations as detailed below). The PCG processes will continue to help ensure student or School community concerns and issues can be raised and addressed in a timely manner.
- The Transition Action/Education Readiness Plan to be developed by DoE will also address issues associated with the transition of students to the new School. It will consider the potential impacts of the relocation on the DoE Arranounbai School community and provide inclusive opportunities to build awareness of the new School, facilitate site visits for DoE Arranounbai School students, and encourage independent way finding where possible dependent on student needs and capabilities. School Design - Traffic and Parking impacts on adjacent land uses and the vulnerable community.

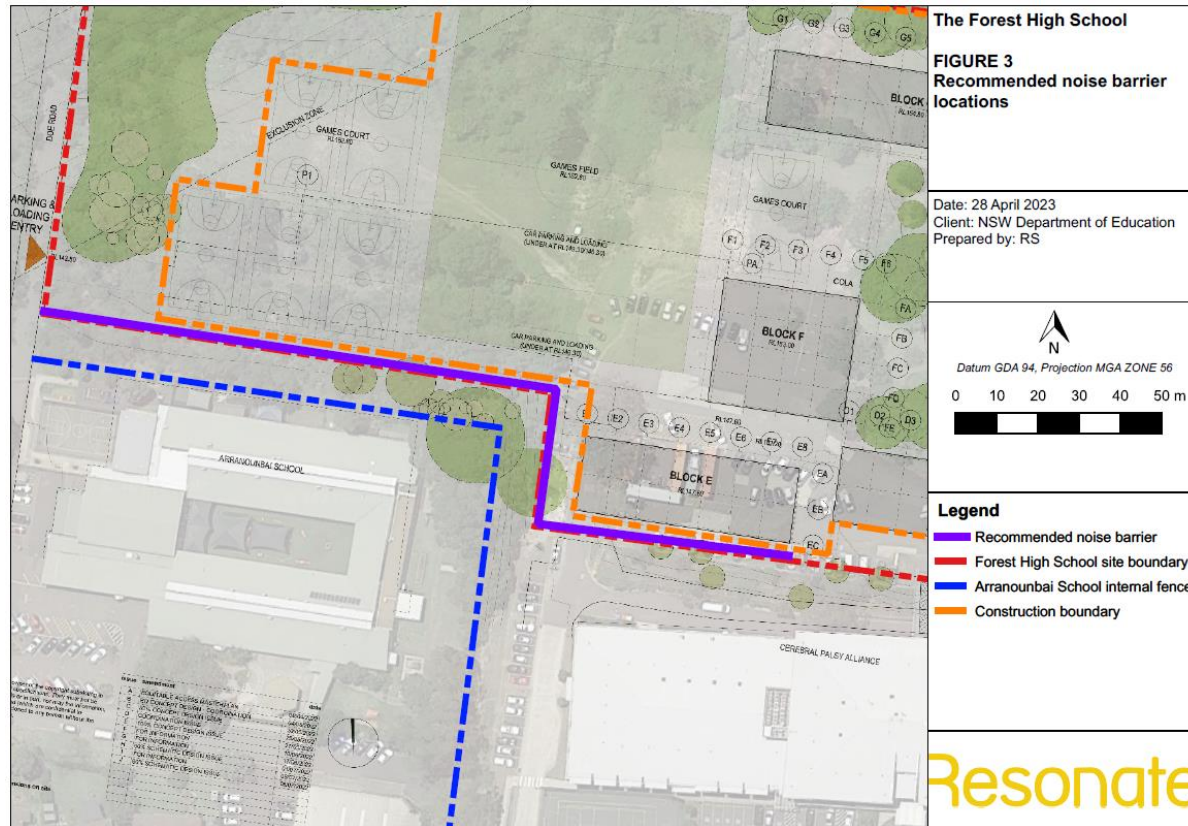
Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
Construction Noise and Vibration	<u>All Works within the Site and Stage 1 Public Domain and Road Works</u> • Prior to the commencement of major construction works, the contractor shall develop a Construction Noise and Vibration Management Plan (CNVMP). The CNVMP should: ○ identify relevant construction noise and vibration criteria as detailed in this report ○ identify neighbouring sensitive land uses for noise and vibration ○ summarise key noise- and vibration-generating construction activities and the associated predicted levels at neighbouring land uses ○ summarise stakeholder consultation and complaints handling for noise and vibration in accordance with the overarching CMP prepared by Johnstaff and dated 1 May 2023 and the Communications Strategy contained within that CMP– the CVMP shall adopt and shall comply with the CMP Communications Strategy and requirements to ensure that stakeholders are engaged prior to works and kept informed of potential noise, and vibration impacts from the works. Specifically, this will involve: ○ The Cerebral Palsy Alliance ○ The Arranounbai School ○ Residential receivers on Allambie Road, Arnhem Road and Sunlea Place ○ Residential receivers on Madison Way, ○ identify reasonable and feasible work practices to be implemented during the works • Detailed design and installation of 5 m noise hoarding along the southern and part eastern boundary of the project site designed to achieve the noise management levels specified by Resonate for Arranounbai School in both indoor and outdoor environments • Provision of respite periods for construction works will be agreed with the Arranounbai School to facilitate quiet use of the outdoor play areas during recess and lunchtime. These are expected to be between 10.45 – 11.00 am for recess and 12.45 - 1.30 pm for lunch. However DoE Arranounbai School preferred times shall be the subject of PCG discussions and agreement as detailed below prior to and during the construction process. • A process for urgent contact between the building contractor and Arranounbai School to facilitate immediate response to noise issues arising within the School. For example, where a specific type of (high Frequency) noise was adversely affecting a member of the School community, the builder should respond by ceasing the noise or providing additional portable and plant specific noise attenuation to be installed in-situ around noisy operating plant. • A process for unattended noise monitoring at the DOE Arranounbai play area fencing during the construction works including process for monthly review by the PCG and acute review in the occasion of a complaint.	Section 6.11 Appendix P Attachments H and I to Submissions Report

Mitigation Measures

Environmental Impact

Mitigation Measure

EIS Section or Appendix



- Construction hours for the project will be limited to: Monday to Friday = 7am to 6pm, Saturday = 8am to 1pm, Sunday and Public Holidays = No work unless otherwise approved by Council and the Consent Authority.
- Site access and delivery points shall be located as far away from residences as possible.
- Truck movements shall use arterial roads and be diverted away from residential streets where feasible.
- Deliveries to/from site shall not occur during the night time period where possible.
- Site management procedures will include the following:
 - Regularly train workers and contractors (such as at toolbox talks) to use equipment in ways to minimise noise.
 - Site managers to periodically check the site and nearby residences for noise problems so that solutions can be quickly applied.
 - Processes that generate lower noise levels will be selected where feasible.
 - Noisy plant will be located as far away from residences as is practical to allow efficient and safe completion of the task.
 - The potential shielding provided by site topography and intervening buildings will be taken into account in locating equipment.

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	- Site compounds will be located as far away as possible from residences. - Equipment that is used intermittently will be shut down or throttled down to a minimum during periods where it is not in use. - Works will be planned to minimise the reduce the noise from reversing signals. - Warning horns will not be used as signalling devices. - Two way radios will be set to the minimum effective volume. - Noise associated with packing up plant and equipment at the end of works will be minimised. - Avoid the use of radios or stereos outdoors. - Avoid the overuse of public address systems. - Avoid shouting, and minimise talking loudly and slamming vehicle doors. - Turn off all plant and equipment when not in use. - Install noise barriers (blankets) / hoardings along the southern boundary of the project site. - Equipment management will include the following: - Selection of low-noise plant and equipment where possible - Equipment will be well maintained - Equipment will have quality mufflers and silencers installed where relevant - Equipment not in use on site will be shut down - Tasks will be completed using the minimum feasible power and equipment. - The CVNMP will include a process for unattended noise monitoring along the northern boundary of the DoE Arranounbai School (i.e. boundary of the play area) during the construction works including process for monthly review by the PCG and acute review in the occasion of a complaint. - Where vibration intensive activities are to be carried within 20 metres from Arranounbai School, only the following vibratory roller and hydraulic hammer will be used: - Vibratory roller up to 4 tonnes. - Small or medium hydraulic hammer.	
	<u>Stage 2 Public Domain Works</u> - Construction hours for the project will be limited to: Monday to Friday = 7am to 6pm, Saturday = 8am to 1pm, Sunday and Public Holidays = No work unless otherwise approved by Council and the Consent Authority. - Truck movements shall use arterial roads and be diverted away from residential streets where feasible. - The contractor must co-ordinate with the school to schedule especially noisy works outside of noise-sensitive periods such as exams, music performances and assemblies; - Respite periods from especially noisy works must be provided and must include the school lunch period and at least one other hour during the school day; - The contractor must co-ordinate with the school to schedule, wherever practicable, noise sensitive activities away from the north and west facades of Blocks A, F and G which are in direct line of sight of the works zone; and - Especially noisy works must be scheduled outside of core school hours wherever practicable or where the above mitigation measures are not possible. - Attended vibration monitoring must be undertaken at the commencement of work and in the event of a complaint, in order to verify the safe working distances. If the levels exceed the vibration limits listed in Section 4.2 of the Construction Noise and Vibration Management Plan prepared by E-LAB Consulting dated 29 April 2025, all reasonable and feasible mitigation measures must be employed to minimise vibration impacts.	Section 6.11 Appendix P Attachments H and I to Submissions Report Attachment D to Modification 3 Report
Geotechnical Investigations	No specific mitigation measures required.	Section 6.16 Appendix Q

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
Civil Engineering, Stormwater and Flooding	- The erosion and sediment control plan contained in Appendix C of the Civil Engineering report prepared by Enstruct, dated 28 September 2022 is to be implemented. - The erosion and sediment controls are to be maintained until the site is fully stabilised to prevent pollution of the receiving environment. Dust control measures, including best practice and in accordance with NSW Workplace Health and Safety Regulations and the Protection of the Environment Operations Act 1997, shall be implemented to minimise dust to neighbouring residents and businesses and ensure any airborne substance is kept within the boundaries of the site. Measures may include but not be limited to: - Water sprays - Bunker storage - Limiting size of stockpiles and covering stock piles - Vertical barriers e.g. fencing with fine mesh attached - Exhaust and capture	Section 6.4 Section 6.5 Appendix R
Bushfire	- Asset Protection Zones are to be provided and maintained in accordance with the Bushfire Protection Assessment Report prepared by Australian Bushfire Protection planners, dated August 2022. - The management of the Asset Protection Zones to the west and north of the buildings and the landscape gardens across the remainder of the school site shall comply with the standards contained in Appendix 4 of Planning for Bushfire Protection 2019 and the NSW Rural Fire Services' Publication – 'Standards for Asset Protection Zones'. - Asset Protection Zones shall comply with the standards provided by Appendix A4.1.1 – Inner Protection Area (IPA) of Planning for Bushfire Protection 2019. - The remainder of the school site (except for the retained Duffys Forest vegetation) shall comply with the standards provided by Appendix A4.1.2 – Outer Protection Area (OPA) of Planning for Bushfire Protection 2019. - A construction standard of BAL 12.5 applies to all buildings within buildings within 100 metres of the hazard on the Ausgrid land to the north of Allambie Road and 100 metres to the east of the Duffys Forest vegetation within the western portion of the school site. - To protect against ember attack, all buildings shall be constructed to comply with Section 3 and Section 5 (BAL 12.5) of A.S. 3959-2018 – 'Construction of Buildings in Bushfire Prone Areas'. - The walls of the Carpark shall be constructed of non-combustible materials with a one-hour fire-rated roller shutter provided to the entry to the carpark. - The roller shutter door shall be fitted with a Vesta activation sensor to close the door in the event of a bushfire occurring in the vegetation on the western side of the driveway to the Arranounbai School. - The fire-fighting water supply to the proposed school shall comply with the Building Code of Australia [BCA] and A.S. 2419.1 – 2022 with a hydrant supply installed to provide coverage to all buildings. - An additional hydrant shall be provided at the western end of Block G and in the Carpark. A Booster Valve Assembly shall also be provided, located on Allambie Road between the Entry and Exit points to the Loading Area. - The fire-fighting water supply to the proposed school shall comply with the Building Code of Australia [BCA] and A.S. 2419.1 – 2022 with a hydrant supply installed to provide coverage to all buildings. An additional hydrant shall be provided at the western end of Block G and in the Carpark. - A Booster Valve Assembly shall also be provided, located on Allambie Road between the Entry and Exit points to the Loading Area. - Electricity and gas supplies shall be laid underground. - A Bushfire Emergency and Evacuation Plan (PEEP) shall be prepared for the school. - The BEEP shall establish protocols for the relocation of students and staff initially to the on-site safe refuge (Block F – GYM) and protocols for the evacuation of the school, from the on-site safe refuge via buses using Allambie Road, travelling north to Warringah Road, if advised by the Emergency Services.	Section 6.3 Appendix V

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
Site Remediation	- Any asbestos or contaminant impacted fill will be stockpiled separately to clean natural soils excavated to minimise cross contamination and subsequent potential for higher volumes of cut materials needing removal from the site. - No asbestos or contaminant impacted fill will be reused on the site at the final surface for capping, garden beds, landscaping, playing fields, courts or within remnant vegetation areas in the western portion of the site. - After completion of remediation / development, an EMP must be prepared that summarises the 'as built' site status and requirements for the operational phase of the site to minimise risks of exposure to capped and contained contaminant impacted fill and any other areas of the site that may require long term environmental management. - Implementation responsibility of the EMP for capped and contained materials will be the NSW Department of Education. - A minimum of five days' notice to Safe Work NSW for asbestos management works (associated with asbestos in soil excavation) is required. This must be undertaken by the contractor and a copy of correspondence submitted to NSW Department of Education or the Principal and the appointed environmental consultant. Asbestos licensed contractors in NSW can lodge the notification electronically using Safe Work NSW Asbestos and demolition online notification system or complete the notification form available on the Safe Work NSW website. - In accordance with the requirements of State Environmental Planning Policy No 55 – Remediation of Land (SEPP55, 1998), the soil remediation works are considered Category 2 remediation works. Therefore, a development application is not required to be submitted to Northern Beaches Council. In accordance with clause 16 (2a) of SEPP 55, 30 days notification must be provided to City of Sydney Council before the commencement of remediation works at the site. The notification document must be in accordance with the provisions of SEPP 55. - Confirmation of the Northern Beaches Council permitting requirements must be completed by the chosen remediation contractor and a copy of correspondence submitted to NSW Department of Education or the Principal and the appointed environmental consultant. - Air monitoring set up and reporting to be undertaken by a licensed asbestos assessor (LAA). - A minimum of eight sampling pumps with cowls will be set up and air quality sampled over an eight (8) hour period (1 day) concurrently with construction hours. The pump locations will be nominated by the LAA. An additional asbestos air monitoring cowl will be placed near one of the pumps to act as a 'control'. The cowls shall be analysed by a NATA accredited laboratory in accordance with the membrane filtration method and the National Institute for Occupational Safety and Health (NIOSH), 2005. Guidance Notes on Membrane Filter Method on estimating air borne asbestos fibres- Second Edition – NOHSC – 3003. - A surface inspection by an appropriately qualified person will be completed to assess for ACM following building and structure demolition in the north-east of the site and prior to removal of topsoil and vegetation to mitigate the potential for stockpiles of ACM impacted soils to be generated. - The handling of asbestos contaminated fill as part of the civil earthworks will be undertaken by an asbestos removal contractor who holds the appropriate class of Asbestos Licence, issued by the Safe Work NSW. There are two types of licenses: Class A (can remove any amount of FA, ACM, non-friable asbestos and asbestos contaminated dust or debris) and Class B (can remove any amount of non-friable asbestos, ACM, asbestos contaminated dust or debris associated with the removal of non-friable asbestos or ACM). Due to the presence of bonded ACM and some AF/FA, a Class A licensed asbestos removalist must be engaged for the remediation work that deals with asbestos contaminated fill. - The engaged contractor will ensure that risk assessments and control measures are implemented in accordance with the Work Health Safety Act 2011 Code of Practice titled: How to Safely Remove Asbestos and any other guidance notes required for work within NSW. Prior to the commencement of the remediation works, the contractor must notify the regulator in writing at least five days before the licensed asbestos removal work commences and develop an asbestos removal control plan. - All asbestos containing materials will be disposed off-site at a suitably licensed landfill (unless they can be capped and contained as per the Remediation Action Plan provided at Appendix W). - Excavation is to occur in areas proposed for inground services trenching, lower ground levels, plant rooms or any other works expected to intercept the contaminant impacted fill.	Section 4.7 Section 6.16 Appendix W

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	• Stockpiles of asbestos contaminated fill will be managed in accordance with Section 6.7.7 of the Remediation Action Plan provided at Appendix W. • A water spray bowser must be available on the site to suppress any potential airborne dusts released during the excavation and during the loading of trucks. • Where groundwater is required to be pumped from excavations or minor dewatering, the groundwater will • be managed in the following ways depending on the water quality, site aspects and construction requirements: ◦ Minimise contact with groundwater across the site. ◦ Do not use for dust suppression unless water quality sampling has been undertaken and confirmed that groundwater quality is suitable for application to surface soils on the site. ◦ Excavate a soak away pit for groundwater into the same shallow unconfined sandy aquifer that will dissipate down gradient of the excavation, ensuring that no significant contamination is present in the groundwater via sampling to characterise. ◦ If groundwater requires discharge off the site to sewer (Sydney Water trade waste agreement) or Council stormwater systems, the appropriate permission from the authority for that discharge must be granted prior to discharge occurring. This will likely require sampling of groundwater to determine quality parameters. ◦ Discharging to sewer or stormwater would likely require a treatment system to be established that removes suspended solids and potentially contaminants. ◦ Engage a licensed liquid waste contractor to dispose of groundwater to an appropriate facility. • Remediation validation criteria and recording of Information is to be undertaken in accordance with Section 6.7 of the Remediation Action Plan provided at Appendix W. • A remediation validation report will be prepared at the completion of the remediation works concurrently with an updated EMP document with 'as built' information. The validation report will be prepared in general accordance with NSW EPA Guidelines for Consultants reporting on Contaminated Land (2020), specifically Table 2.6 of the guideline. All field information, recorded information and data will be presented in the report. • Environmental controls are to be implemented in accordance with Section 9.3 of the Remediation Action Plan provided at Appendix W. • Site inspection will be undertaken during remediation in the following areas: ◦ Inspection of trucks used for transporting materials from the site to ensure that soil adhering to the wheels or undercarriage is minimised. Any accumulation of soil will be removed prior to departure from the site ◦ Sedimentation control measures will be inspected weekly or after heavy rain. This will involve checking the sedimentation control structures are operating effectively, with no silt being discharged to stormwater. Corrective action will be instituted where necessary and a follow up inspection will be undertaken to verify the outcome of the corrective action. ◦ Observation of site activities to assess the extent of dust generation from the work site. ◦ If routine site inspections and/or external parties identify a potential issue relating to the remediation works, potential issues will be logged, validated and where required, rectified. • An emergency response plan will be prepared prior to the commencement of the remediation works. The purpose of the plan will be to identify possible emergency situations and to define procedures that would be used to ensure the safety of both on- and off-site personnel in the event of an emergency. • The remedial contractor must prepare a stormwater management plan during remedial works and as part of the project CEMP. The stormwater management plan must indicate site specific background information, compliance requirements, regulatory requirements, incident management, monitoring, review, responsibilities and document control. • The remedial contractor must prepare a noise control plan during remedial works and as part of the project CEMP. The odour control plan must indicate site specific background information, compliance requirements, regulatory requirements, noise types and sources, incident management, monitoring, review, responsibilities and document control.	

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	- The remedial contractor must prepare an odour control plan when excavating fill materials and as part of the project CEMP. The odour control plan must indicate site specific background information, compliance requirements, regulatory requirements, odour types and sources, incident management, monitoring, review, responsibilities and document control. - The remedial contractor must prepare a remediation program that outlines key milestones and timelines for remedial activity. The schedule must consider detailed designs at the time and earthworks programming. - Prior to the issuing of the construction certificate, a NSW EPA accredited Site Auditor is to be appointed for the duration of the works until the issue of a Site Audit statement. The following reports are to be submitted to the appointed Site Auditor for review and approval prior to issuing the construction certificate. Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the construction certificate. - All remediation and validation works are to be carried out in accordance with the Remediation Action Plan (RAP) that has been reviewed and approved by the Site Auditor. Any recommendations within the approved RAP must be followed during works. - Prior to the exportation of waste (fill and/or soil) from the site, the waste materials must be tested and classified in accordance with the provisions of the Protection of the Environment Operations Act 1997 and the NSW EPA Waste Classification Guidelines, Part 1: Classification of Waste (November 2014). Testing is required prior to off-site disposal. In accordance with DECC Waste Classification Guidelines (2014) materials identified for off-site disposal must be removed by a suitably qualified contractor to an appropriately licensed waste facility. 'Chain of Custody' documentation including receipts shall be kept for the exportation of waste (fill and/or soil material) from the site. Details demonstrating compliance are to be submitted to the Principal Certifying Authority within seven (7) days of transport and made available to Council upon request. - Any new information revealed during remediation, demolition or construction works that has the potential to alter previous conclusions about site contamination or hazardous materials shall be immediately notified to the NSW EPA accredited Site Auditor and the Principal Certifying Authority. Any variations to the approved Remediation Action Plan shall be submitted to and approved in writing by the Site Auditor prior to the continuing of such work. - At the completion of remediation works a validation report is to be prepared by, or reviewed and approved, by a certified consultant as defined under NSW EPA Contaminated Land Consultant Certification Policy and submitted to the satisfaction of the Principal Certifying Authority. The Validation Report must be in accordance with the requirements of the following: - State Environmental Planning Policy (Resilience and Hazards) 2021 compliance; - Contaminated Land Management Act 1997; - Relevant NSW EPA guidelines including the NSW EPA Guidelines for Consultants reporting on contaminated Land: Contaminated land guidelines 2020. The report shall document the following: - The extent of validation sampling, and the results of the validation testing; and - That the remediation and validation of the site has been undertaken in accordance with the Remediation Action Plan (RAP) that has been reviewed and approved by the Site Auditor. Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of any interim / final Occupation Certificate. - Upon completion of the works, a Site Audit Statement must be submitted to Council and the Principal Certifying Authority on completion of remediation works. The Site Audit Statement must be prepared by a Site Auditor registered with the NSW Department of Planning, Industry and Environment (DPIE) and must be in accordance with the EPA's Site Audit Scheme and the protocol outlined in the NSW EPA (1997) document entitled Guidelines for Consultants Reporting on Contaminated Sites, and the NSW EPA (2017) Guidelines for the NSW Site Auditor Scheme. The Site Audit Statement must state the following: - That the remediation and validation has been completed in accordance with the approved Remediation Action Plan and that the site is suitable for its proposed use; and - That the long-term Environmental Management Plan (EMP) prepared for the site is suitable for its proposed use. Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of any interim / final Occupation Certificate.	

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	- The applicant must register a covenant on the title of the land under Section 88E of the Conveyancing Act 1919, to indicate that contaminated fill is being managed under a management plan onsite. The covenant shall be binding upon the registered proprietors of the subject land and successors on the title, binding the owners to be responsible for ongoing maintenance and any future rehabilitation works required in terms of the encapsulated materials. This covenant shall also include, but not necessarily be limited to, the following; i) Survey delineating the position, depth and dimensions of any containment cells. ii) The Environmental Management Plan as reviewed by the NSW EPA accredited site auditor, as required by the development consent. Details demonstrating compliance are to be submitted to Council and the Principal Certifying Authority, prior to the issue of any interim / final Occupation Certificate. - The requirements of the EMP are to be fully implemented in perpetuity from the issue of any interim / final occupation certificate. Any future intrusive ground works carried out that have the potential to conflict with any residual contamination remaining onsite must only be carried out in accordance with the EMP.	
Construction Management	- All site works and construction will be subject to the overarching Construction Management Plan and adopt and implement the communications Strategy contained therein - Appropriate hoarding/fencing (as specified in Australian Standards and SafeWork NSW requirements) will be installed to prevent public and staff access and to maintain security for the various areas of the works. - Site Notices will be erected at the boundary of the site. The site notices will include details of; Principal Contractor details, name of Site Manager and 24-hour contact number, approved hours of work, and details of the Principal and other appropriate stakeholders. Safety related statutory signage will also be erected on the boundary of the site in accordance with WorkCover requirements. - Site, precinct information and traffic signage and any temporary traffic measures required will be installed and maintained for the duration of the Works. - The Contractor is responsible for maintaining safe access to the Site and the safe Movement of vehicles and pedestrians within and throughout the Site. This safe access must be documented by the Contractor as part of its Contractor's Construction Management Plan. The Contractor is responsible for maintaining clear access to roadways, laneways or easements throughout the duration of the works. - It is anticipated that some work zones would be proposed along the frontage of Allambie Road and the site. This will be documented by the Contractor as part of its Contractor's Construction Management Plan. - The Contractor is to include an onsite parking solution for as many vehicles as possible for the duration of the works within their Site Establishment and Construction Methodology submission. Construction workers will be discouraged from parking in residential areas. - These public and property protection measures will be reviewed at the time of contract award and during monthly PCG meetings, to ensure alignment with proposed preferred methodologies and to ensure that the safety of the public and staff is maintained at all times during the works. - The site amenities and compounds erected will accommodate lunch, bathroom and change facilities for the duration of the project. Contractor and sub-contractors will be advised during their site inductions that there is no parking within the adjacent streets to the site or on the neighbours property. To minimise impact on street parking, contractors and sub-contractors will be encouraged to use public transport or car share. - Construction hours for the project are as follows: Monday to Friday = 7am to 6pm, Saturday = 8am to 1pm, Sunday and Public Holidays = No work. Some work may need to be completed outside of the above hours. These activities will be planned in consultation with the neighbours to the site. If works have impacts outside the site consultation with local authorities will be undertaken. Any disruptions will be documented and communicated to ensure all aspects of the works are clearly understood by all parties and to minimise disruption. - Deliveries will be scheduled and distributed to ensure avoidance of congestion to surrounding roads networks. Materials handling will be conducted within the construction site perimeter reducing any impacts on traffic flows.	Section 4.7 Appendix E to Modification 4 Report

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	• Opportunities for respite periods of works associated with the carpark will be explored with the adjoining school, if it is found that works adjacent are impacting student use of the outdoor areas. • Prior to construction works commencing, the Principal Contractor will develop a Construction Pedestrian and Traffic Management Plan which will detail how traffic, pedestrian and cyclist access will be managed during the construction works. • Traffic flows and vehicle/pedestrian separation are a major consideration and pedestrian routes are to be maintained throughout construction. Traffic control personnel will be provided by the Principal Contractor during operating hours, or as advised by the Principal Contractor within their Construction Pedestrian and Traffic Management Plan. • Pedestrian and vehicular movements into and around the site will be maintained, or alternate routes determined where necessary, and be defined by clear signage. If necessary, physical traffic management personnel will be used to guide pedestrians and vehicles safely. • Temporary hoarding appropriate to the interaction between pedestrians and construction works (as per Workcover requirements and Australian Standards) will be constructed to prevent unauthorized access to the construction site. These hoardings and fences may be staged to allow for appropriate construction methodologies to be planned. • Deliveries to within the site will be managed through dedicated site entrances and exits. These will be outlined by the Principal Contractor. • Materials will be staged and stored in such a way to promote a clear and safe work site. At all times, materials are to be stored within the confines of the site. While loading and unloading vehicles, it will be clearly stated that vehicles must not obstruct roads, driveways and escape routes from the building or fire protection equipment. • An Environmental Management Plan (EMP) that complies with environmental legislation will be developed by the Principal Contractor. The EMP will describe the environmental strategy, methods, controls, and requirements for the execution of the Works. It will stand alone as the master document for site environmental activities. • The primary aim and objective of the EMP will be to provide a framework of procedures to minimise the impacts of the construction of the project on the environment. The environmental performance of the contractor will be monitored throughout the Works. • Noise from the construction site shall not exceed the limits set out in the Interim Construction Noise Guidelines, EPA and Australian Standards. No machine work will occur outside the approved working hours set unless approval has been given through the DA process. • The noise and vibration from the use of any plant equipment and/or building services associated with the premises shall not give rise to an offensive noise as defined under the provisions of the Interim Construction Noise Guidelines, EPA and Australian Standards. • As part of noise mitigation for the project, the contractor will be responsible for the management, checking of compliant maintenance regimes and statutory supervision of all equipment, such as making sure all trucks and machinery involved in the Works will be checked for defective exhaust systems and general servicing. • Guidelines for operational limits, identification of at risk receivers and implementation of mitigation measures will be provided in a project Noise and Vibration Management Plan. • Unattended noise monitoring will be undertaken along the northern boundary of the Arranounbai School (i.e. boundary of the play area) during the construction works associated with the new car park. • Detailed procedures and reporting of the noise monitoring should be outlined in the project's construction noise and vibration management plan. • Odours associated with demolition for the site will be assessed and minimised. All plant and machinery involved in the Works will be regularly serviced and checked for exhaust emissions and catalytic converters are to be utilised. • The contractor undertaking the Works will be required to comply with Australian Standard 4970-2009: • Protection of Trees on Development Sites for the proper care and protection of trees retained and integrated into the construction project. • The contractor will be required to put in place procedures to protect trees throughout the development process.	

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	- The contractor undertaking the Works will be required to submit for approval to the Principal a comprehensive plan regarding guidance on how to protect retained trees during construction work. This plan will need to define how to calculate the tree and crown area requiring protection and isolation from construction activities and the use of tree protection measures such as barriers and protectors. - A comprehensive stormwater management plan will be developed by the Principal Contractor undertaking the Works. - The Contractor will be required to recycle and reuse materials where possible. The contractor will be required to arrange for the sorting and recycling of waste materials and packaging to ensure maximum recycling is achieved. The contractor will be committed to achieving compliance with the EPA guidelines. All packaging is to be removed before materials are delivered to site to minimise waste generation on site. The appointed Principal Contractor will develop a strategy in accordance to the statutory regulations for dust control, and a comprehensive Soil and Water Management Plan, both of which will be included in the EMP. This strategy will include control measures and document how these measures are to be implemented and monitored. - Prior to commencing the works onsite and at completion, the appointed Principal Contractor will generate a Pre and Post Dilapidation Report. The full extent of the Dilapidation reports will be agreed with the Principal prior to investigations proceeding. The report shall cover as a minimum the following areas: - Existing roads and access roads; - Infrastructure; - Adjoining properties; - Existing landscape, including trees to be retained; - Services mains; - Stormwater systems; and - Existing utilities and authority services. - The full extent of the Dilapidation reports will be agreed with the Principal prior to investigations proceeding - Issues arising during construction shall be raised through the formal Project Control Group (PCG) that is a standard Department of Education project governance structure. - The PCG will meet monthly (or more frequently as required). - The PCG shall operate: - In advance of the commencement of construction for 3 months; and - Throughout the entire construction period; and - For 3 months post handover and commencement of operations. - The PCG shall oversee the implementation of the Communications Strategy. - The appointed Principal Contractor will comply with the requirements of the Communications Strategy.	
Operational Waste	- General learning spaces, staff areas and library - Onsite cleaning staff to collect bin liners from all bins as required throughout day and transfer materials to main waste room for disposal. Cleaners to use segregated trolley to keep streams separate. - Canteen (back of house) - Onsite cleaning staff to collect bin liner from general waste bins as required throughout day and transfer materials to main waste room for disposal. Cardboard and organic MGB's collected as required transferred daily to the waste collection area. - Staff kitchenettes and food tech learning spaces - Onsite cleaning staff to collect bin liners from all bins as required throughout day and transfer materials to main waste room for disposal. Cleaners to use segregated trolley to keep streams separate. - Wood tech learning spaces - Onsite cleaning staff to collect bin liners from all bins as required throughout day and transfer materials to main waste room for disposal. Cleaners to use segregated trolley to keep streams separate. Off cuts will be reused where possible. Sawdust and non-reusable wood can be segregated in a designated bin/cage – collection to be arranged as required. - Science labs – Onsite cleaning staff to collect bin liners from all bins as required throughout day and transfer materials to main waste room for disposal. Cleaners to use segregated trolley to keep streams separate. Hazardous Material - Filter paper, gloves, tissues,	Section 6.12 Appendix Y

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	paper towel, benchcote, spent silica, and sample vials that have been contaminated with hazardous chemicals will be placed directly into the designated bin or bag for chemically contaminated. Liquid chemicals to be stored as directed within a bunded chemical storage cabinet stored within lab storeroom. Collection of waste chemicals to be conducted by specialty contractor directly from lab storeroom upon request by school lab staff. Broken glass or sharps to be placed in a sharp's container. When full containers to be placed in lab storeroom. collection by specialty contractor directly from lab storeroom upon request by school lab staff. • Gym - Onsite cleaning staff to collect bin liners from all bins as required throughout day and transfer materials to main waste room for disposal. Cleaners to use segregated trolley to keep streams separate. • Outdoor areas - Bin enclosures throughout outdoor areas will provide 1x120L bin for general waste and 1x120L bin for mixed recycling (bins will always be located together and not separated). Bins will be lined, and facilities staff will collect bin liners when full in a 1100L bin for transfer back to the waste storage area – this avoids the need to swap full bins for empty bins and is thus a far more efficient way to empty all bins and reduces storage space for spare 120L bins. • Student bathrooms - Hand dryers will be implemented throughout all bathrooms to reduce paper handtowel waste. Sanitary bins will also be provided in bathrooms – these will be serviced directly by the specialty contractor.	
Construction Waste	• All waste generated during the project is assessed, classified and managed in accordance with the "Waste Classification Guidelines Part 1: Classifying Waste" (NSW EPA 2009). • The body of any vehicle or trailer, used to transport waste or excavation spoil from the premises, is covered before leaving the premises to prevent any spill or escape of any dust, waste or spoil from the vehicle or trailer. • Mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorized plant leaving the site, is removed before the vehicle, trailer or motorized plant leaves the premises. • Appropriate control measures to eliminate/minimise the airborne emission of dust and fibres, such as: ○ Dust screening barrier around site and relevant areas within site. ○ Cover stockpiles. ○ Water suppression. • Identify all asbestos and asbestos containing material and record in an asbestos register for the project. • Assess the risk of exposure to airborne asbestos. • Eliminate or minimise the risks associated with asbestos by implementing control measures. • Continually review control measures to ensure they are effective. Each subcontractor working on the site will be required to adhere to this Waste Management Plan (WMP). The Head Contractor will ensure each subcontractor: • Takes practical measures to prevent waste being generated from their work. • Implements procedures to ensure waste resulting from their work will be actively managed and where possible recycled, as part of the overall site recycling strategy. • Implements source separation of off cuts to facilitate reuse, resale or recycling. The Site Manager will be responsible for: • Ensuring there is a secure location for on-site storage of materials to be reused on site, and for separated materials for recycling off site. • Ensuring all skips/bins/stockpiles are clearly labelled identifying which material is suitable for each receptacle. • Engaging appropriate waste and recycling contractors to remove waste and recycling materials from the site. • Co-coordinating between subcontractors, to maximise on site reuse of materials. • Monitoring of bins on a regular basis by site supervisors to detect any contamination or leakage.	Section 6.12 Appendix Z

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	- Ensuring the site has clear signs directing staff to the appropriate location for recycling and stockpiling station/s. And that each bin/skip/stockpile is clearly sign posted. - Providing training to all site employees and subcontractors in regard to the WMP. - If a subcontractor cause a bin to be significantly contaminated, the Site Manager will be advised by a non-conformance report procedure. The offending subcontractor will then be required to take corrective action, at their own cost. The non-conformance process would be managed by the Head Contractors' Quality Management Systems. - Retaining demolition and construction waste dockets to confirm and verify which facility received the material for recycling or disposal. - All site employees and sub-contractors will be required to attend a site specific induction that will outline the components of the WMP and explain the site specific practicalities of the waste reduction and recycling strategies outlined in the WMP. - All employees are to have a clear understanding of which products are being reused/recycled on site and where they are stockpiled. They are also to be made aware of waste reduction efforts in regard to packaging. - The site manager will post educational signage in relation the recycling activities on site in breakout areas, lunchrooms etc.	
Heritage	- An Interpretation Plan will be prepared and implemented. The Interpretation Plan will be prepared by suitably qualified interpretation specialist, and will promote and celebrate the First Nations cultural heritage and history and significance of the former Country Children's Hostel that occupied the site, in accessible locations throughout the sites. - Interpretative materials will be included in the design of the school to enhance the historical, social and associative values of the site. - An open space area, or courtyard, at the archaeologically sensitive zone will be retained. This will avoid major excavation and disturbance of the area. A low impact walking path through the sensitive zone will be included to reflect the connection between the subject site and the nearby AHIMS site and the landscape to the north. The schematic design is consistent with this recommendation. - The proposal will retain the cultural plantings where possible and incorporate them into the design of the school. - New plantings could include native species or Hills Figs, Ficus and Schinus specimens similar to those at the entrance to the site. - If First Nations objects are identified during demolition or excavation works, an AHIP will be required before any action which involves harm can occur. - In the event that future demolition and/or construction works uncover or disturb any unexpected historical archaeological features or deposits on site, all works in this area will cease and Heritage NSW must be notified immediately, in accordance with Section 146 of the Heritage Act. - An unexpected find procedure will be developed and implemented prior to the commencement of on-site work to explain the process of stop-work provisions if these be required.	Section 6.2 Appendix AA Appendix BB Appendix CC
Social Impacts	- The overarching Construction Management Plan prepared by Johnstaff and dated 1 May 2023, that accompanies these Mitigation Measures will be implemented in full in tandem with any future issues specific or overarching CMP to address local amenity, vibration, noise, dust traffic and site management and delivery scheduling. The Construction Management Plan. Construction Management Plan - Issues arising during construction shall be raised through the formal Project Control Group (PCG) that is a standard Department of Education project governance structure. - The PCG will meet monthly (or more frequently as required and set out below) and will include the Principals of TFHS and DoE Arranounbai School as well as the DoE Director of Learning Outcomes. - The PCG shall operate 3 months prior to construction commencing; and - The entire construction period duration; and - The transition period post handover of the School and including the first three months following the commencement of School teaching operations.	Section 6.13 Appendix DD Attachment M to the Submissions Report Attachment P to Submissions Report

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	- The PCG shall oversee the implementation of the Communications Strategy (contained in the CMP). Issues raised directly through the implementation of the Communications Strategy (including as direct complaints or through online (website) feedback forms shall be reported to the PCG monthly so that oversight of issues or complaints raised and responses is maintained. - Through the PCG the Principals and School communities (both DoE Arranounbai School and TFHS) will be: Week to Week Issue Management: - Provided with a 3-weekly look-ahead of planned construction activities. This will provide the information DoE Arranounbai School needs to ensure the school community is adequately informed in advance of the planned activities. DoE Arranounbai School principal and staff can then provide pre-emptive training and familiarisation for vulnerable students with targeted management approaches for key vulnerable students. - Collaboratively involved in the design of solutions to issues as they arise and opportunities, and specifically for DoE Arranounbai School: - Student participation in the design of driveway threshold graphic treatments - Provision of noise cancelling headphones for all classes at DoE Arranounbai School as requested by the school community - Co-ordination of additional cleaning of internal or external areas as required during construction as requested by the school community - Opportunities for a program of Arranounbai School site visits or construction worker exchange, to encourage understanding of the construction process, assist pre-emptive training for noisy situations and provide a sense of control for students. This might include visits to the school from construction workers, with demonstration of equipment to encourage a sense of understanding and control for interested students. - Design of DoE Arranounbai School curtilage modifications, including access control/fencing and secure gates around the Arranounbai School car park, to facilitate safe access for vulnerable students and prevent unauthorised use of the car park, and to facilitate greater control for the school over their immediate environment. - Develop and provide an Induction Training Kit for construction workers on the nature of Arranounbai School and likely construction impacts including instructions for workers to: - Drive and conduct themselves in a respectful manner on the site and in the neighbourhood, maintain the speed limit of in the western access driveway (DoE Shared Driveway) and not park on the shared driveway. - All construction traffic shall be removed from the shared access driveway during Arranounbai School peak pick up and drop off times generally 8.15 – 9.00 am and 2.30 – 3.00 pm – to be agreed prior to construction commencing through the PCG - Respect and observe any noise respite periods including elimination of music, vehicle noises loud voices and the like. - Respond immediately and with care to complaints and keep a register of complaints and their resolution as detailed above to be provided to the PCG for review monthly and to DPE on request. - Appropriate adaptive management procedures that detail a process for urgent contact between the building contractor and Arranounbai School to facilitate immediate response to acute residual noise issues arising within the school. For example, where a specific type of (high frequency or other) noise was adversely affecting a member of the school community, the builder should respond by ceasing the noise and/or providing additional portable and plant specific noise attenuation to be installed in-situ around operating plant - Opportunities for noise respite periods for construction works during recess and lunchtime. - Process for unattended noise monitoring and review along the northern boundary of the DoE Arranounbai School (i.e., boundary of the play area) during the construction works. Adaptive Issue Management - able to request additional meetings including weekly or bi-weekly meetings as required to adaptively manage impacts associated with construction and transition. The response to DoE Arranounbai School issues will be proactive and build on the existing trusted relationships between the DoE SI project team, the DoE Director of Learning Outcomes, and the DoE Arranounbai School Principal. It will be designed for ongoing engagement to build awareness and preparedness for the construction program and the transition phase.	

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
	- Implementation of the CMP SIA management measures undertaken by or on behalf of the proponent (including Communications Strategy and PCG meetings procedures specified above) will continue during the three-month transitional period following handover and opening of the new TFHS. Urgent (acute) Issue Management - Provided with direct channels of communication with the appointed builder and construction Project Managers that will last the duration of construction, relocation, and commencement of operations that will provide rapid responses to urgent issues raised to protect and maintain the wellbeing of vulnerable community members. CMP Communications Strategy - The Communications Strategy contained in the CMP is to be implemented to provide systematic and regular communication with all neighbours and stakeholders, as follows. - Regular information regarding the site and project activities will be provided to neighbours and stakeholders. This will establish a dynamic response process that allows for the adjustment of management and operational methods for the benefit of all parties. - The Communication Strategy will operate for the 3 months prior to construction and the entire construction period duration and the 3-month transition period post-handover of the School and commencement of operations. It specifically requires communications and project updates to affected receivers and stakeholders, including: - The Cerebral Palsy Alliance - The Arranounbai School - Sunnyfield Disability Services - Residential receivers on Allambie Road, Arnhem Road and Sunlea Place - Residential receivers on Madison Way - Additional stakeholders identified as a result of public exhibition of the proposed development.	
Electrical Services	- Prior to the issue of any relevant Construction Certificate relating to a building where mechanical ventilation is required to be installed in a food premises, detailed plans must be submitted to and approved by the principal certifier that demonstrate compliance with Australian Standard (AS) 1668.2 "The use of ventilation and air-conditioning in buildings - Mechanical ventilation in buildings". These plans are to be prepared by a suitably qualified person. - Prior to the issue of any relevant occupation certificate, certification is to be provided that any outdoor lighting does not detrimentally impact upon the amenity of other premises and complies with where relevant, Australia Standard AS 1158.3:2005 Lighting for roads and public spaces – Pedestrian Area (Category P) lighting – Performance and design requirements and Australian Standard AS 4282:1997 Control of the obtrusive effects of outdoor lighting.	Section 6.14 Appendix EE
Hydraulic Services	Portable fire extinguishers and fire blankets shall be provided throughout in accordance with AS2444-2001 and NCC 2019 E1.6. Classrooms are required to have extinguishers and fire blankets in to AS2444 and Education Facilities Standards and Guidelines (EFSG – 573).	Section 6.14 Appendix FF
Mechanical Services	Where Mechanical ventilation is required to be installed in the food premises it must comply with Australian Standard (AS) 1668.2 "The use of ventilation and air conditioning in buildings - Mechanical ventilation in buildings" Prior to any relevant Occupation Certificate (OC) being issued, certification is to be provided by a suitably qualified person that the mechanical ventilation complies with the above requirements.	Section 6.14 Appendix GG
Communications Services	- Telecommunication connections that provide links to Arranounbai School will be maintained. - Augmentation of the NBNCo as required to support the new school will be funded by SINSW.	Section 6.14 Appendix HH
Consultation	Additional consultation to be undertaken in accordance with the Consultation Report prepared by NSW Department of Education, dated October 2022.	Section 5 Appendix II