

Appendix D - Ongoing Mitigation Measures

Consultant	Mitigation Measure
Design and Operation	
Tree Impact	
Heartwood Tree Consulting	The building design must be modified to include a suspended slab within the TPZs of trees 23 and 24 to reduce the encroachment for these trees.
Sustainability	
JHA	<p>The development should incorporate the following measures:</p> <ul style="list-style-type: none"> • High-performance building fabric (insulation, high thermal performance glazing, and external shading) to reduce heating and cooling demand. • High-efficiency electric HVAC systems exceeding NCC Section J requirements. • Electric heat pump hot water systems to replace gas-fired systems. • LED lighting with timer controls, daylight sensors, and occupancy sensors. • Roof-mounted solar photovoltaic (PV) system to generate renewable electricity on-site. • Sub-metering for energy monitoring, including renewable generation and EV charging infrastructure. • Water-efficient fixtures and fittings meeting minimum WELS ratings. • Rainwater capture and reuse for landscape irrigation and/or toilet flushing. • Selection of low-VOC and sustainable materials to improve indoor environmental quality. • Landscaping with predominantly native species to reduce irrigation demand and support biodiversity.
Waste	
Universal Foodservice designs	Staff are to be managed on best work health and safety practices relating to manual handling processes.
	Staff are to be managed on best work health and safety practices relating to manual handling processes when washing bins.
	On-site maintenance staff will be required to maintained landscaping to ensure it does not impede on waste vehicle sightlines.
	Design and install appropriate WH+S signage and line marking including low speed limits for vehicles. Vehicles to engage should alarm when reversing into the loading bay. Approved and compliant waste bins as detailed in the WMP to be employed. Contracted Waste collection staff only to be used to transfer waste from bins to the vehicle.
	Contaminated fluid is to be kept on the specified bunded pallet.
Operational Noise	
JHA	Acoustic screening at a height of 300mm above the height of the tallest condenser unit is required.
	Strategic location and selection of mechanical plant is required to ensure the cumulative noise levels at the receiver boundaries are met.
	Acoustic finishes treatment to minimise squeaky tyres and reduce noise emissions (i.e. sealed concrete) should be implemented.
Engagement and Social Impact	
Willowtree Communications	Architectural design and landscaping treatments (building articulation, setbacks, native planting, courtyards, rooftop gardens) are to be implemented to reduce visual and character impacts.
	Basement parking and a new Annam Road driveway to manage operational traffic and parking is required.
	The landscaping program should include tree retention where possible and compensatory planting.
	An Operational Waste Management Plan is to be prepared.
	Plant rooms are to be acoustically screened.
	Community engagement process is to be ongoing.
Transport, Traffic, and Parking	
Transport and Traffic Planning Associates	Provide fully serviced end of trip facilities.
	Create a site-specific TDM website and an introduction to TDM. Appoint a Travel Plan Coordinator to ensure successful implementation and monitoring of the TDM.
	Provide a formal "car share" parking space.
	Provide an access pack to all staff, residents and visitors, including the Transport Access Guide and information on sustainable travel facilities and initiatives.

Provide public transport information boards to make staff/visitors aware of alternative transport options available.

Construction Management	
Tree Impact	
Heartwood Tree Consulting	<p>Trees 9, 12, 13, 17, 19, 23, 24, 26 and 79 (9 trees) will have a major encroachment between 11.3% and 21.6%. Tree sensitive excavation methods must be undertaken under the supervision of the Project Arborist when excavating around these trees.</p> <p>Scaffolding erected within the TPZ must be done under the supervision of the project arborist. There may be instances where pruning of branches may be required to install scaffolding. The project arborist must be notified prior to the pruning of any tree branches and must supervise the pruning works. Any pruning must be undertaken by a minimum level 3 arborist.</p> <p>The Project Arborist must be informed prior to any further unplanned encroachment within the TPZs.</p> <p>The area within the tree protection fencing should be mulched with good quality leaf mulch to a depth of 100mm prior to construction to promote better tree health during the construction period.</p> <p>Ensuring that the soil moisture content stays above 50% within the TPZs will greatly benefit the trees to be retained on the site and will help offset the impacts of construction.</p>
Biodiversity	
Narla Environmental	<p>A CEMP may be required for the construction phase of the project, and will be prepared prior to issue of the Construction Certificate. The CEMP would include, as a minimum, industry-standard measures for the management of soil, surface water, weeds and pollutants, as well as site-specific measures, including the procedures outlined below. The proposed mitigation measures would include environmental safeguards for protection of neighbouring properties and nearby waterways in accordance with relevant policy documentation and Government guidelines. In order to address the potential impacts of the proposal on biodiversity, the mitigation and management measures outlined within this table would be implemented as part of the CEMP for the site.</p> <p>In accordance with AS 4970-2009 Protection of Trees on Development Sites, a Tree Protection Zone (TPZ) will be established around all trees designated for retention. These zones will be fenced and clearly signposted as no-disturbance areas to prevent accidental damage. If minor encroachments (<10% TPZ) occur, these must be compensated within the same TPZ area to maintain tree health. If major encroachments (>10% TPZ or within the Structural Root Zone) occur, a detailed root investigation using non-destructive methods (e.g., air-spading) must be undertaken. Tree-sensitive construction techniques (e.g., bridging over root zones) will be applied where required.</p> <p>To prevent sediment runoff and indirect biodiversity impacts, erosion and sediment control measures must be installed prior to earthworks and maintained throughout construction. These measures will comply with The Blue Book (Landcom 2004, Volume 1), the NSW industry standard for soil and water management. Regular inspections will be undertaken, and sediment basins/silt fences will be installed in high-risk areas to prevent runoff into nearby waterways or adjacent native vegetation.</p> <p>To protect retained native vegetation from accidental disturbance, temporary fencing will be erected around these areas. The fencing will be:</p> <ul style="list-style-type: none"> Clearly marked and signed as a 'No-go Zone' for construction workers. Monitored to ensure effectiveness, with repairs undertaken as necessary. Installed before ground disturbance and remain in place until completion of works. <p>Stockpiling sites will be designated outside of native vegetation zones to avoid trampling and degradation of retained habitats. Any soil or materials imported onto the site must be certified weed-free to prevent the introduction of invasive species or pathogens that could impact local biodiversity. Stockpiles will be managed to prevent erosion and sediment loss, with stabilisation measures applied where necessary.</p> <p>Prior to construction, the applicant should commission the services of a qualified and experienced Ecologist Consultant with a minimum tertiary degree in Science, Conservation, Biology, Ecology, Natural Resource Management, Environmental Science or Environmental Management. The Ecologist must be licensed with a current Department of Primary Industries Animal Research Authority permit and New South Wales Scientific License issued under the BC Act. The Ecologist will be commissioned to: Undertake an extensive pre-clearing survey, identifying potential habitat trees as well as reinspecting roof cavities of buildings to be removed for potential microbat species.</p>
Sustainability	
JHA	<p>Implementation of a Construction Waste Management Plan targeting up to 80% diversion of construction and demolition waste from landfill.</p> <p>Minimisation of waste generation through careful material selection and reuse.</p> <p>Recycling and reprocessing of construction materials wherever feasible.</p>

	Reduction in the volume of materials sent to landfill through on-site sorting.
	Compliance with environmental management measures to prevent impacts on surrounding vegetation and waterways during construction.
Construction Noise	
JHA	Comply with standard working hours.
	A detailed Construction Noise & Vibration Management Plan (CNVMP) is to be prepared prior to CC.
	Schedule noisy activities to occur outside of the most sensitive times of the day for each nominated receiver.
	Consider implementing equipment-specific screening or other noise control measures recommended in Appendix C of AS 2436:2010.
	Limit the number of trucks on site at the commencement of site activities to the minimum required by the loading facilities on site.
	When loading trucks, adopt best practice noise management strategies to avoid materials being dropped from height into dump trucks.
	Avoid unnecessary idling of trucks and equipment.
	Ensure that any miscellaneous equipment (extraction fans, hand tools, etc) not specifically identified in this plan incorporates silencing/shielding equipment as required to meet the noise criteria.
Contamination	
WSP	Follow CEMP and unexpected finds protocol.
Archaeological Heritage	
Urbis	In the unlikely event that any potential archaeological resources are uncovered during any site works, the unexpected archaeological finds procedure, outlined in Appendix FF , must be followed.
	In the unlikely event that human remains are uncovered during any site works, the human remains procedure, outlined in Appendix FF , must be followed.
Aboriginal Heritage	
Urbis	An Archaeological Induction is to be included in project inductions for all site contractors. This would provide guidance on potential archaeological features which may be uncovered during site works. The induction could be prepared by the Metropolitan LALC or Urbis and would supplement and inform the following chance finds procedures. A presentation by the LALC or Urbis should be provided to demolition and earthworks personnel at the initiation of the project.
	In the unlikely event that any potential archaeological resources are uncovered during any site works, the unexpected archaeological finds procedure, outlined in Appendix FF , must be followed.
	In the unlikely event that human remains are uncovered during any site works, the human remains procedure, outlined in Appendix EE , must be followed.
Engagement and Social Impact	
Willowtree Communications	A Construction Environmental Management Plan (CEMP) to be prepared prior to CC covering noise, dust, vibration, traffic, contractor behaviour, and unexpected heritage finds protocols.
	A Construction Noise and Vibration Management Plan (CNVMP) to be prepared.
	Acoustic treatments and temporary shielding during demolition and construction (as per Acoustic Studies) is to be implemented.
	A Construction Traffic Management Plan (CTMP) to be prepared.
	A Demolition and Construction Waste Management Plan to be prepared.
	The Unexpected finds protocol is to be followed.
	Clear communication channels are required during construction for existing residents to raise concerns and receive timely responses.
Transport, Traffic, and Parking	
Transport and Traffic Planning Associates	A detailed Traffic Management Plan is to be prepared for the CC documentation process.
Contamination	
WSP	A Construction Environmental Management Plan (CEMP) including an unexpected finds protocol should be developed and followed during the proposed development works.