

Appendix C – Mitigation Measures

SSD-80904224 – 93 Bridge Road, Westmead

Consultant	Mitigation Measure
Design and Operation	
Wind Impacts	
RWDI	Wind tunnel testing or computational wind simulations will be undertaken during detailed design stage to quantify and confirm the predicted conditions discussed in the preliminary pedestrian wind assessment. The conceptual wind control measures and wind mitigation strategy can be further refined as part of these studies.
Reflectivity	
RWDI	<ul style="list-style-type: none"> A preliminary solar reflectivity study has been undertaken by RWDI, it is recommended that further simulations be undertaken prior to construction to quantify the potential for glare. RWDI recommend using glass with a relatively low visible reflectance to reduce any potential solar glare.
Noise and Vibration	
RWDI	<p>Glazed Façade Elements</p> <ul style="list-style-type: none"> In order to achieve the project internal noise limits, the glazing components of the façade of the proposed development must meet the acoustic performance requirements provided.
	<p>Vehicular noise:</p> <ul style="list-style-type: none"> To minimise noise generated by vehicles driving over loose items on the ground, any speed bumps, drainage grates or expansion joint covering plates should be firmly fixed such that they do not generate any rattling noises when driven over by vehicles. Use of the loading dock will generally be restricted to between 7 am and 6 pm Monday to Saturday, with no deliveries on Sundays or public holidays. Signs are to be displayed in the loading dock reminding drivers to switch off their engines during idling unless required to run to perform necessary activities. To ensure compliance of Receiver R01 with relevant noise criteria, a 1.8 m high barrier should be installed along the northern boundary of the site.
	<p>Mechanical Services:</p> <ul style="list-style-type: none"> Mechanical plant will be located as far as practicable from nearby noise-sensitive receivers. In-duct acoustic treatments, such as internally lined ductwork or silencers, will be incorporated into mechanical systems to reduce noise transmission.

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	<ul style="list-style-type: none"> Acoustic barriers or enclosures will be constructed around plant equipment to contain and attenuate noise emissions. Acoustic louvres will be used where necessary to provide ventilation while mitigating sound propagation.
CPTED	
Group GSA	<p>The following measures will be implemented:</p> <ul style="list-style-type: none"> Separation fencing and access gates will clearly delineate communal and public spaces. Visual cues and signage will define access limitations and establish ownership boundaries. Balconies and terraces will be designed to enable passive surveillance of the public domain and communal areas. Enhanced lighting and CCTV will be installed in locations with limited visibility. Communal open spaces will be positioned to maximise natural surveillance from surrounding residential units. Low-level landscaping will be used to maintain clear sightlines throughout. Lighting and surveillance infrastructure will be provided in low-use areas to enhance safety and visibility. Public domain design will encourage evening activity in key locations to support active surveillance. A low-level planting strategy will be implemented to avoid obstructed views and maintain passive surveillance. All landscaping will be subject to regular maintenance to prevent overgrowth. Building lobbies will be access-controlled and fitted with intercom and CCTV systems. Public realm design will incorporate environmental cues and physical barriers to discourage unauthorised entry into private areas. Pedestrian pathways will feature straightened alignments, fencing, and open sightlines to reduce concealment opportunities. Vegetation will be managed to maintain visibility along all thoroughfares. Ground-floor residential units will include defensible space and territorial design cues to reinforce private ownership. Secure entryways and enhanced lighting will be provided to reduce potential vulnerability. Basement parking areas will be access-controlled and monitored by CCTV. Lighting, clear sightlines, and signage will be used to reinforce spatial hierarchy and discourage unauthorised access.
ESD	
Arkes 4 Sustainability Consulting	<p>Materials Selection and Responsible Sourcing</p> <ul style="list-style-type: none"> The project will, where feasible, minimise environmental impact through responsible materials selection. Excavated soil and shale will be reused on-site where suitable, including potential use as aggregate in landscape hardscaping or other landscaping applications. Locally made and manufactured products will be prioritised wherever practicable to reduce transportation emissions and support local supply chains. For all fenced and decking areas, the project will use timber certified by a recognised forest certification scheme (e.g., FSC) and possessing a valid Chain of Custody (CoC) certificate, where feasible. Alternatively, the project will consider using reclaimed or reused timber to reduce embodied carbon and support circular economy principles. The project will identify and apply opportunities for responsibly sourced products across the building structure, envelope, systems, and interior finishes. Where feasible, materials from the demolition and strip-out of existing structures will be reused or recycled and reintegrated into the new development.

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	<p>Green Roofs and Walls</p> <ul style="list-style-type: none"> Green elements will be incorporated through the use of planted façades and container planters on communal balconies to mitigate urban heat island effects. All green walls and planted façades will be supported by adequate irrigation and drainage systems to ensure long-term plant health and safety in use. Plant species will be selected for resilience to high wind exposure and solar conditions relevant to the site. <p>Where practicable, the project will reuse harvested on-site water for irrigation of green walls and balcony planting.</p>
Stormwater	
ADW Johnson	<p>Water Sensitive Urban Design</p> <ul style="list-style-type: none"> Treatment devices including Rainwater tanks, Gross Pollutant Traps and Media Filtration will be implemented into the stormwater drainage design to treat runoff generated by the development prior to discharge.
Visual Impact	
Group GSA	<p>Group GSA have recommended the implementation of the following mitigation measures:</p> <ul style="list-style-type: none"> Vertical articulation will be incorporated into the building design to break down the perceived bulk and scale of the vertical massing and create a more refined and legible built form. Muted colour palettes and carefully selected façade finishes will be used to provide a visually sensitive response that reflects the established character of Bridge Road and assists in visually recessing the upper tower elements into the skyline. High-quality landscaping will be integrated throughout the ground plane to soften built edges, enhance visual amenity, and reduce the perceived scale of the development at the pedestrian level.
Landscaping	
Distinctive	Landscaping is to be maintained in accordance with the strategy outlined in the Landscape Design Report
Construction Management	
Baker Ryan Stewart	Construction is to be undertaken in accordance with the Construction Environmental Management Plan prepared by Baker Ryan Stewart, as well as the specific measures identified within individual consultant reports.
Stormwater	
ADW Johnson	A preliminary Erosion and Sediment Control Plan has been provided within the concept engineering plans by ADW Johnson. The Erosion and Sediment Control Plan is indicative only as another Erosion and Sediment Control Plan will be provided as part of the construction certificate drawings and a further plan will be provided by the contractor to evolve during construction.
Construction Noise	

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RWDI	<p>To manage predicted exceedances of the Noise Management Levels (NMLs) during standard construction hours, the proponent will prepare and implement a Construction Noise and Vibration Management Plan (CNVMP), in accordance with the NSW Interim Construction Noise Guideline (ICNG). The CNVMP will outline all reasonable and feasible measures to minimise noise and vibration impacts on nearby sensitive receivers and will include, but not be limited to, the following components:</p> <ul style="list-style-type: none"> • Identification of all nearby residences and other noise- and vibration-sensitive land uses. • Description of the approved construction hours. • Detailed identification of construction activities, including work areas, equipment to be used, and expected duration. • Specification of general and activity-specific work practices to minimise noise emissions. • Selection of plant and processes with reduced noise outputs, where feasible. • A complaints handling and response procedure. • A noise and vibration monitoring program to validate predictions and guide adaptive management. • A community consultation process for high-impact works, including notification protocols and engagement strategies. • An assessment and engagement process for any proposed works outside of standard construction hours. • Induction and training procedures for site personnel and subcontractors, outlining responsibilities and expectations regarding noise and vibration management. <p>The CNVMP will be developed prior to the commencement of any construction works and will be implemented for the duration of the construction period.</p>
Construction Traffic	
Ason Group	<ul style="list-style-type: none"> • Truck routes to and from the site will be designated to minimise disruption to local roads, pedestrian areas, and sensitive land uses. • Truck volumes for each construction stage will be managed to limit traffic congestion and scheduled to avoid peak periods where feasible. • Construction site access arrangements will be designed to prioritise safety, efficiency, and minimal disruption to surrounding properties and road users • Work zones will be clearly defined and approved, ensuring safe and efficient movement of vehicles, workers, and pedestrians around the site. • Pedestrian and cyclist access will be maintained wherever possible, with safe detours and clear signage provided when required. • Construction worker parking, if required, will be accommodated in designated off-street areas to avoid impacting local parking supply. • Traffic control measures, including signage, temporary barriers, and the use of traffic controllers, will be implemented to ensure the safety of road users and construction personnel. • Public transport access will be maintained and not obstructed by construction activities. • Access to and from adjacent buildings will be preserved throughout construction. • Construction vehicle movements will be limited to pre-approved and designated routes, with on-site supervision to manage vehicle arrivals and departures. • All construction activities will be undertaken in accordance with the approved hours of work: <ul style="list-style-type: none"> - Weekdays: 7:00am – 5:00pm - Saturdays: 8:00am – 5:00pm - No work on Sundays or public holidays, unless otherwise approved

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	A detailed CPTMP confirming these measures will be prepared and submitted as part of the subsequent planning stage, and will be implemented throughout the construction period to manage impacts on traffic, access, and safety.
Tree Removal and Protection	
Greenspace Arbour	Tree protection measures are to be adhered to in accordance with the Preliminary Tree Protection Plan prepared by Greenspace Arbour.
Hydro-geological impacts	
JC Geotechnics	<p>To ensure the safe and compliant delivery of excavation works and minimise impacts on surrounding structures and services, the following measures will be implemented:</p> <ul style="list-style-type: none"> • All demolition, stripping, and excavation activities will be undertaken with care to avoid destabilising, undermining, or removing support from neighbouring buildings, infrastructure, and underground services. • Dilapidation reports will be prepared for adjoining properties, roads, and pavements prior to the commencement of any demolition or excavation works. • Excavation works will be carried out in accordance with the NSW Code of Practice: Excavation Work (2020) to ensure safe excavation practices are followed. • A Vibration Monitoring Plan will be developed to monitor vibration impacts during bulk excavation. Continuous vibration monitoring will be undertaken throughout the excavation period to ensure compliance with safe limits and to protect nearby structures. • While groundwater is not anticipated to be encountered, groundwater seepage is expected during excavation. This will be managed using conventional sump and pump techniques, and a Dewatering Management Plan will be prepared prior to the commencement of construction. • Basement excavation will be supported by an engineered in-situ shoring system (such as a soldier pile wall), which will be installed before excavation begins to ensure stability of the excavation face and adjacent structures. • The proposed building will be constructed on footings founded within shale bedrock, as determined by geotechnical investigation and engineering design.
Contamination	
Sydney Environmental Group	<ul style="list-style-type: none"> • A Stage 2 Detailed Site Investigation (DSI) will be undertaken following completion of demolition works to investigate identified Potential Areas of Environmental Concern (PAECs). • The DSI will determine whether further contamination management or remediation is required before redevelopment works commence. • If contamination is identified, a Remedial Action Plan (RAP) will be prepared by a suitably qualified contaminated land consultant. The RAP will outline remediation strategies and methodologies necessary to render the site suitable for the proposed use. • A Hazardous Building Materials Survey will be completed for all existing structures prior to demolition, identifying any asbestos, lead-based paint, or other hazardous substances. • Where hazardous materials are identified and removed, a clearance inspection will be undertaken by an appropriately qualified occupational hygienist or a SafeWork NSW licensed asbestos assessor to verify that the site is safe for subsequent works. • A waste classification assessment will be conducted for any soils intended for off-site disposal, in accordance with the NSW EPA Waste Classification Guidelines (2014).

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	<ul style="list-style-type: none"> Transport and disposal records for all waste materials will be maintained to demonstrate compliance with regulatory requirements and enable auditing if required.
Archaeological	
Austral	<ul style="list-style-type: none"> In the event that any Aboriginal object is discovered during works, all activity in the immediate vicinity will cease. The find will not be moved or disturbed. A qualified archaeologist will be engaged to assess the discovery and provide further management recommendations, which may include notifying Heritage NSW and consulting with registered Aboriginal stakeholders. In the event that any suspected Aboriginal ancestral remains are encountered: <ul style="list-style-type: none"> All works at the location of the discovery will immediately cease; The NSW Police and Heritage NSW's Environment Line (131 555) will be notified as soon as practicable; The remains will not be moved or disturbed; Works will not recommence at the affected location unless written authorisation is received from Heritage NSW.