

Appendix B – Mitigation Measures

SSD-79709963 – 459 – 461 Chapel Road, Bankstown

Consultant	Mitigation Measure
Design and Operation	
Arboricultural	
Moore Trees	<ul style="list-style-type: none"> • A Project Arborist is to be appointed to oversee all arboricultural-related works for the project • Trees 8-10 and Trees 13-14 will be retained for the purpose of the site and will be regularly maintained to ensure tree health. • The Tree Protection Zone (TPZ) and Structural Root Zone will be implemented to ensure the protection of the trunk and branches of the subject tree.
Geotechnical	
JK Geotechnics	<ul style="list-style-type: none"> • A Water Services Coordinator will be engaged to assess whether a ‘Specialist Engineering Assessment’ is required as the site is situated near water mains and sewer pipes. • The on-grade floor slab be provided within underfloor drainage.
Heritage	
GBA Heritage	<ul style="list-style-type: none"> • Prior to the commencement of any works, an Archival Photographic Recording of the existing site will be made. • A Heritage Interpretation Plan will be commissioned and implemented for any approved future construction on the site, which interprets the significant history of the site for site users and visitors. • A Salvage Schedule will be commissioned, identifying evidence of congregational and community involvement with the site (including signs, plaques, stained glass windows and more) and that such items be reused insofar as possible and as indicated in the Heritage Interpretation Plan.
Plan of Management – Childcare Centre	
SDG	<ul style="list-style-type: none"> • Staff and parents/carers will be brief on how to access the centre. • Staff and parents/carers will be issues with access pass/fob/code to maintain secure access to the parking area, and from either the parking area or street to the ground floor foyer. Secure covered bike racks within the parking area will be provided to encourage people to ride to the childcare centre. • Users of the childcare centre will be instructed to park properly and not block any part of neighbouring driveways, and no dropping off/picking up passengers in the middle of the street is to occur.

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	<ul style="list-style-type: none"> The childcare centre will adopt measures to reduce noise emissions including limited outdoor play area in the morning and afternoon, no outdoor music and more.
Plan of Management - Church	
SDG	<ul style="list-style-type: none"> Members of the Church attending the site will be instructed to park properly and not block any art of neighbouring driveways, and no dropping off/picking up passengers in the middle of the street is to occur. Request that wedding, funeral and other non-Church event organisers make guests aware that parking is limited prior to the event, and encourage people to use public or active modes of transport. The Church will train staff and volunteers in how to manage vehicular and people movement onsite prior and following church services and related events. A booking system will be made available to allow community members and groups to book the community facility. Wedding ceremonies are limited to 20 additional services per annum. Special ceremonies, such as funerals will not be held during the peak periods of the childcare centre to avoid conflicting parking use. The staff team will train staff and volunteers how to manage vehicular and people movement onsite. Measures will be implemented to reduce noise emissions including signage, ensuring doors remain closed during noisy functions and no amplified music in the pre-function area.
Accessibility and BCA	
NCC	<ul style="list-style-type: none"> Implementation of recommended performance solutions outlined within the BCA Report to ensure compliant with the relevant DTS provisions. An assessment of the performance solutions should be undertaken by an appropriate fire engineer.
Solar	
Windtech	<ul style="list-style-type: none"> Limitations to the maximum normal specular reflectance of visible light of the external façade glazing is recommended to minimise any glare.
Wind	
Windtech	<ul style="list-style-type: none"> Wind mitigation designs including the overalled recessed design, impermeable balustrades, impermeable intertenancy screens and full-height impermeable end screens will be retained in the final design. Tower setback designs will minimise down-wash wind impacts. Existing trees along Chapel Road will mitigate any winds and down-wash impacts. Additional mitigation measures have been incorporated within the development, such as: <ul style="list-style-type: none"> Retention of the proposed impermeable awning along Chapel Road and French Avenue. Inclusion of densely foliating vegetation and raised planter zones Inclusion of the proposed and existing street trees. Wind mitigation strategies have been incorporated to improve the conditions of the childcare and Level 18 communal open space including:

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	<ul style="list-style-type: none"> - Retention of the proposed 1.8m impermeable screens along the perimeter - Inclusion of vegetation and planter zones - Areas intended for short duration stationary activities will be situated away from corners of buildings that are subject to adverse wind conditions
Noise	
SLR Consulting	<p>Mechanical plant treatment</p> <ul style="list-style-type: none"> • Mitigation measures will be considered during the detail design stage. Mitigation measures include the following: <ul style="list-style-type: none"> - Positioning mechanical plant away from nearby receivers. - Acoustic attenuators fitted to duct work. - Screening around mechanical plant - Acoustic insulation within duct work • Air cooled package units will be treated accordingly to mitigate noise impacts. <hr/> <p>Façade treatment recommendation</p> <ul style="list-style-type: none"> • Façade treatment will be provided to achieve compliance with the internal noise criteria. <hr/> <p>Community halls and foyer spaces</p> <ul style="list-style-type: none"> • Glazing elements will be provided to mitigate operational noise from community halls and foyer spaces. • An Operational Noise Management Plan will be provided at a later stage and will support noise mitigation.
Construction Management	
Aboricultural	
Moore Trees	<ul style="list-style-type: none"> • Excavation within Trees 8,9 and 10 will be excavated by hand (without the use of heavy machinery) to a depth of 400mm. Any roots encountered while excavating may be pruned cleanly with a sharp saw. • Tree pruning is permitted to allow for scaffolding clearance. Pruning will be no greater than 100mm in diameter. • The site will have dedicated areas for the exclusive use of construction access points, position of site sheds, latrines and temporary services, and storage of materials. These dedicated areas will be outside any TPZ. • If any tree is damaged during construction, the Project Arborist will be notified as soon as possible to undertake remedial action. • During construction, lengths of timber will be fastened around the trunk with a geotextile fabric (or similar) with hoop iron strapping and not fixed directly onto the trunk of the tree. Tree protection signage will be attached to the trunk protection.
Aboriginal Heritage	

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AMBS	<ul style="list-style-type: none"> Although the site has not been identified as being of Aboriginal heritage, in the event that any Aboriginal objects be exposed during any future works, development of the site will cease, and Heritage NSW will be informed.
Geotechnical	
JK Geotechnics	<ul style="list-style-type: none"> If variations in subsurface conditions between the completed boreholes are found, JK Geotechnics is to be engaged. Detailed dilapidation reports will be prepared for 14 French Avenue and 457 Chapel Road prior to demolition and excavation. The demolition and excavation of the site will be completed using suitably experienced and insured contractors.
HAZMAT	
Reditus	<p>General</p> <ul style="list-style-type: none"> Prior to demolition, all hazardous materials are to be removed and a destructive assessment of areas of the site that were not accessible during this assessment is to be completed. Works will cease if any previously unidentified suspected hazardous materials be identified during demolition. Materials will be inspected by an experienced environmental consultant or occupational hygienist. <hr/> <p>Asbestos Containing Materials ('ACM')</p> <ul style="list-style-type: none"> All materials presumed to contain asbestos will be treated as such. As greater than 10m² of bonded ACM has been identified on the site, a Class B Asbestos Removal Contractor will be engaged to prepare an asbestos removal control plan for the proposed works. Although no friable asbestos was identified on the site, if it is found during removal works, a Class A licensed asbestos removal contractor must remove the materials. <hr/> <p>Synthetic Mineral Fibres ('SMF')</p> <ul style="list-style-type: none"> During removal of SMF, airborne monitoring for SMF is recommended to be completed to meet requirements of NSW Work Health and Safety Regulation 2011 (although SMFs are currently not on the schedule of substances requiring health surveillance). <hr/> <p>Lead Dust</p> <ul style="list-style-type: none"> A risk assessment is to be carried out before demolition works. All contractors and workers involved in the cleaning, repairing or replacement of ceilings are to follow procedures, identified in Appendix DD.
Noise and Vibration	
SLR Consulting	<p>Implement community consultation or notification measures</p> <ul style="list-style-type: none"> Notification detailing work activities, dates and hours, impacts and mitigation measures, indication of work schedule over the night-time period, any operational noise benefits from the works (where applicable) and contact telephone number.

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	<ul style="list-style-type: none"> Notification should be a minimum of 7 calendar days prior to the start of works. For projects other than maintenance works more advanced consultation or notification may be required.
	<p>Site inductions</p> <ul style="list-style-type: none"> All employees, contractors and subcontractors are to receive an environmental induction. The induction must at least include: <ul style="list-style-type: none"> All project specific and relevant standard noise and vibration mitigation measures Relevant licence and approval conditions Permissible hours of work Any limitations on high noise generating activities Location of nearest sensitive receivers Construction employee parking areas Designated loading/unloading areas and procedures Site opening/closing times (including deliveries) Environmental incident procedures.
	<p>Behavioural practices</p> <ul style="list-style-type: none"> No swearing or unnecessary shouting or loud stereos/radios on site. No dropping of materials from height, throwing of metal items and slamming doors.
	<p>Verification</p> <ul style="list-style-type: none"> Where specified under Appendix C of the CNVG a noise verification program is to be carried out for the duration of the works in accordance with the Construction Noise and Vibration Management Plan and any approval and licence conditions.
	<p>Attended vibration measurements</p> <ul style="list-style-type: none"> Where required attended vibration measurements should be undertaken at the commencement of vibration generating activities to confirm that vibration levels are within the acceptable range to prevent cosmetic building damage.
	<p>Building condition surveys</p> <ul style="list-style-type: none"> Undertake building dilapidation surveys on all buildings located within the buffer zone prior to commencement of activities with the potential to cause property damage.
	<p>Construction hours and scheduling</p> <ul style="list-style-type: none"> Where feasible and reasonable, construction should be carried out during the standard daytime working hours. Work generating high noise and/or vibration levels should be scheduled during less sensitive time periods.
	<p>Equipment selection</p>

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	<ul style="list-style-type: none"> • Use quieter and less vibration emitting construction methods where feasible and reasonable. • For example, when piling is required, bored piles rather than impact-driven piles will minimise noise and vibration impacts. Similarly, diaphragm wall construction techniques, in lieu of sheet piling, will have significant noise and vibration benefits. • Ensure plant including the silencer is well maintained. <hr/> <p>Plant noise levels and rental plant and equipment</p> <ul style="list-style-type: none"> • The noise levels of plant and equipment must have operating Sound Power or Sound Pressure Levels compliant with the criteria in Appendix H of the CNVG. • Implement a noise monitoring audit program to ensure equipment remains within the more stringent of the manufacturers specifications or Appendix H of the CNVG. • The noise levels of plant and equipment must have operating Sound Power or Sound Pressure Levels compliant with the criteria in Appendix H of the CNVG. <hr/> <p>Use and siting of plant</p> <ul style="list-style-type: none"> • The offset distance between noisy plant and adjacent sensitive receivers is to be maximised. • Noise-emitting plant to be directed away from sensitive receivers. • Only have necessary equipment on site. <hr/> <p>Plan worksites and activities to minimise noise and vibration</p> <ul style="list-style-type: none"> • Locate compounds away from sensitive receivers and discourage access from local roads. • Plan traffic flow, parking and loading/unloading areas to minimise reversing movements within the site. • Where additional activities or plant may only result in a marginal noise increase and speed up works, consider limiting duration of impact by concentrating noisy activities at one location and move to another as quickly as possible. • Very noise activities should be scheduled for normal working hours. If the work cannot be undertaken during the day, it should be completed before 11:00pm. • Where practicable, work should be scheduled to avoid major student examination periods when students are studying for examinations such as before or during Higher School Certificate and at the end of higher education semesters. • If programmed night work is postponed the work should be re-programmed and the approaches in this guideline apply again. <hr/> <p>Minimise disturbance arising from delivery of goods to construction sites</p> <ul style="list-style-type: none"> • Loading and unloading of materials/deliveries is to occur as far as possible from sensitive receivers. • Select site access points and roads as far as possible away from sensitive receivers. • Dedicated loading/unloading areas to be shielded if close to sensitive receivers. • Delivery vehicles to be fitted with straps rather than chains for unloading, wherever possible. • Avoid or minimise these out of hours movements where possible. <hr/> <p>CNVMP</p> <ul style="list-style-type: none"> • A Construction Noise and Vibration Management Plan will be prepared before any works

