Draft Statement of Commitments

Subject	Commitments	Timing
Archival photographic recording of heritage item	Prior to demolition, excavation or construction work commencing on the site, an archival photographic recording of the heritage item at 1-21 Lindfield Avenue, in its context, documenting the Lindfield Avenue streetscape will be made	Prior to demolition
Erosion and Sediment Control during Construction	▪ Exits to the site will be provided with shaker grids to remove sediment from vehicle tyres before they leave the site; and ▪ Adequate dust control measures will be put in place during the construction phase.	Excavation and construction
ESD initiatives	The proposed development will seek to implement as many of the ESD initiatives set out within the ESD Report, Revision 1, dated October 2010 (**Appendix H**) as practicable.	Construction and operation
BASIX Requirements	The initiatives set out within the 'Schedule of BASIX commitments' (Refer to **Appendix M**) will be implemented.	Construction
Security - Access Control	▪ Secure access will be provided to the basement carpark. ▪ Residents will have access to the carpark via a resident card. ▪ Secure access will also be provided to the pedestrian entry to the residential component of the development off Lindfield Avenue. ▪ Secure lift access will be provided to residential floors within the development. ▪ Security control will ensure that access to the courtyard will not be available from the retail space at level 1 as this space will be provided as communal private open space for the residential development. ▪ An intercom security system will be installed in each apartment for authorising access to the residential areas by non-residents/visitors.	Construction and operation
Disabled Access	▪ The lift cars will have the appropriate controls/grab rails and emergency phone/intercom system for operation by a person with disability satisfying the requirements of AS1735.12 Part 7.2 Provision in lift cars, Part 7.3 Location & Part 7.4 Design; ▪ The following six units are proposed to have the plumbing installed, as built, to allow the unite to be fully adapted following the “Post adaption” plans and with the guidelines specifications of the AS4299-1995 adaptable housing “schedule of features for adaptable housing” for fittings and fixtures followed. - Type B1 unit (two of) on level 2;	Construction

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	- Type B1 unit (two of) on level 4; and - Type B1 unit (two of) on level 5. ▪ The bathrooms in the above adaptable units will be built with a hobbles shower area of the dimensions required and walls capable of having grab rails mounted in a manner to satisfy AS1428.1 Clause 10.2.8 & Figure 21; and ▪ Relevant sections of the surround built environment/public domain (footpaths/kerb ramps etc along adjoining roads) required to be completed as part of the development, to provide accessible paths of travel, are proposed to be compliant with the specifications set out in AS1428.1.	
Acoustic Treatments	Where appropriate the recommendations set out within the Environmental Noise and Vibration Impact Report, prepared by Acoustic Logic Consultancy, dated 30 September 2010 (**Appendix L**) will be implemented.	Construction
Vibration Monitoring	The following will be undertaken: ▪ prior to any works commencing on site, undertake dilapidation reports on adjoining buildings and roads; ▪ within 1-21 Lindfield Avenue limit the peak particle velocity to a threshold of 3mm/s for 10Hz to 30Hz and 3-5 for 30Hz to 60Hz; ▪ within 21 Lindfield Avenue seek to fit real time alarm and vibration logging; and ▪ undertake full time qualitative monitoring to confirm vibrations on adjoining structures are within tolerable limits.	Prior to commencement of construction
Developer Contributions	The following contribution rates will apply to the residential component of the development: ▪ $21,015.01 per 1 bedroom dwelling; ▪ $29,627.34 per 2 bedroom dwelling; and ▪ $35,483.96 per 3 bedroom dwelling. Developer contributions for the residential component of the development will be paid in accordance with the above rates (indexed to current CPI) prior to the Occupation Certificate being issued.	Prior to issue of Occupation Certificate
Geotechnical and Hydrogeological	▪ The temporary support for the shoring will include rock anchors extending beyond the site boundaries where required. ▪ Vibration effects (associated with general excavation but more critically sandstone excavation) on adjoining structures will be considered and dilapidation reports will be prepared where required. ▪ Drainage behind the shoring and below basement slabs will be provided if necessary. ▪ All excavation works will be carried out with reference to the Workcover NSW Code of Practice - Excavation Work (Cat 312).	Excavation and Construction

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	▪ Prior to work commencing on site, dilapidation reports will be carried out on adjoining buildings and roads. ▪ If the use of hydraulic rock breakers is required, full time quantitative vibration monitoring will be undertaken to confirm vibrations on adjoining structures are within tolerable limits. ▪ As the excavation will extend to the site boundaries permanent shoring will be provided. ▪ Where sandstone bedrock of medium or high strength is encountered within the proposed excavation depth, consideration will be given to founding above excavation level and providing anchors for lateral support. ▪ The shoring system will comprise soldier or contiguous pile walls with two levels of anchors for the temporary case, and soil nails where there are no structures adjacent to the site. ▪ If a pile wall is to be adopted it and a soldier pile wall is selected, this will be provided with reinforced shortcrete infill panels where it is adjacent to roadways and carparks. Where the pile wall will be adjacent to other buildings, a stiffer contiguous pile wall will be provided. Such walls will be socketed into the medium to high strength sandstone and, where this is above the excavation level, at least two rows of temporary anchors will be provided until permanent support can be provided by the floor slabs. ▪ Permission from neighbours will be obtained where anchors are to extend beyond the site boundaries. ▪ Further specific advice on lateral earth pressures for design of an anchored soldier pile shoring system will be provided after subsurface investigations on the site are carried out. As a guide, a trapezoidal earth pressure of 6H kPa (where H is the depth of the excavation in metres) could be used for preliminary design purposes. This maximum pressure should be assumed to apply over the central 60%of the height of the shoring, tapering to zero at the crest and toe of the shoring. Where there are settlements sensitive structures or services within a distance equal to the depth of shoring from the excavation, the maximum earth pressure magnitude should be increased to 8H kPa. Appropriate surcharge loads and hydrostatic pressures are additional. ▪ Grout injected Continuous Flight Auger techniques will be used in piling where necessary. ▪ Geotechnical inspections will be completed during the drilling of representative shoring piles to confirm the piles are extending to adequate depths and into appropriate strata. ▪ It is likely that the sandstone bedrock of medium and high strength will be effectively self supporting, though this will be confirmed by investigation when access to the site is possible. Even where sandstone is self supporting, geotechnical inspections will be undertaken on each lift of excavation to observe for potentially unstable wedges of rock in the face which may require stabilisation. ▪ If it is deemed necessary a soil nail wall may be used rather than a soldier pile wall. ▪ If a soil nail wall is used, excavation will occur to a depth of approximately 1.5m and a grid of rock bolts will be installed.	

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	Mesh will then be tied to the rockbolts and the face sprayed with shortcrete. Following the application of the shortcrete, the next 1.5m excavation will be conducted, and the process repeated to the base of the excavation or until better quality bedrock is encountered. ▪ It is expected that the soil nailing and shortcrete will probably extend to the top of the medium and high strength sandstone. ▪ If soil nailing is required, further specific geotechnical design mill be undertaken. ▪ Soil nails will be on a grid of 1.5m both vertically and horizontally. ▪ The upper soil nail will not be more than 0.5m from the surface. ▪ The lowest soil nail will not be more than 0.8m from the base of the shortcrete. ▪ The soil nail lengths will be approximately equal to the height of the material to be retained (for a vertical face), slightly less if the face is laid back at about 4V in 1H, however soil nail will have an absolute minimum length of 4m. ▪ As the soil nail support will extend beyond the boundary, it will not be possible to use it as a permanent retention system, in which case separately constructed retaining walls will be braced from the slabs of the proposed structure. ▪ If necessary, permission will be sought from neighbours prior to installing soil nails into their property. ▪ Following bulk excavation a site specific investigation will be undertaken to establish an allowable bearing pressure. It is anticipated that bedrock of medium and high strength will be exposed which should be suitable for an allowable bearing pressure of 3500kPa. ▪ If required, long term drainage of the basement will be made possible by the construction of subsoil drainage behind the shoring system and any retaining walls as well as subsoil drainage connected to a permanent failsafe sump and pump system placed below the car park floor slabs. ▪ If bulk excavation exposes medium and high strength sandstone bedrock, the design of the car park floor slabs will incorporate a subbase layer of DGB20 or similar crushed rock, compacted of at least 98% of Standard Medium Dry Density (SMDD). This will act as a separation / debonding layer from the weathered rock subgrade. ▪ Sand layers will not be used below trafficable slabs. ▪ Joints in concrete pavements will be dowelled or keyed to resist shear forces but not bending moments. ▪ Prior to detailed design a comprehensive geotechnical investigation will be carried out on the subject site to assess specific subsurface conditions and to provide a geotechnical report suitable for design purposes.	

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	▪ Five cored boreholes will be completed and PVC piezometer standpipes will be installed in two of the boreholes to check groundwater levels.	
Contamination	▪ Prior to the demolition of the existing site buildings, a suitably qualified consultant will undertake a hazardous building materials survey. ▪ The buildings will be demolished in accordance with the recommendations made within the hazardous building materials report. ▪ A preliminary soil and groundwater investigation will be undertaken at the site to make a preliminary assessment of the soil and groundwater contamination conditions at the site and assess the potential for significant widespread soil and groundwater contamination; and ▪ After the investigation waste classification documentation will be prepared for off-site disposal of soil and rock associated with the proposed basement excavation works. ▪ If it is not feasible to complete the preliminary investigation prior to demolition, those parts of the investigation that can be completed will be undertaken. ▪ The investigation will include soil sampling from a minimum of five boreholes distributed evenly across the site. This sampling density is approximately half that recommended by the EPA (DECCW) and is considered adequate for a preliminary investigation. Fill and natural soil/bedrock samples will be obtained and analysed for soil contaminants of concern. ▪ The preliminary investigation will include the installation of two temporary groundwater monitoring wells. One of the monitoring wells will be located adjacent to the north-east site boundary (i.e the north section of number 11 Havilah Lane), in the vicinity of the service station. Groundwater samples will be screened for Heavy metals, VOCs and TPH (as a minimum). ▪ In the event that the preliminary soil and groundwater investigation encounters elevated levels of contaminants at the site, additional investigation work will be undertaken if required. ▪ The site will be inspected by experienced environmental personnel during demolition and excavation works to assess any unexpected conditions or subsurface facilities that may be discovered.	Prior to demolition
Waste Management	▪ A waste caretaker will manage the garbage system of this development. The caretaker's duties will include the following: - generally maintaining and cleaning the garbage rooms. (Recommended at least once per week); - organising, maintaining and cleaning the general and recycled waste holding areas. Due to the nature of the waste it is recommended that in addition to cleaning, the garbage rooms be deodorised (recommended at least once per week);	Operation

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	- sorting recycled waste into appropriate receptacles; - organising for both Garbage and Recycled Waste pick-ups as required; - transporting appropriate waste containers between garbage rooms and collection areas to coincide with collection cycles and vice versa; and - assisting with the emptying of bins during collection. ▪ Organic waste will be handled and managed by the personnel responsible for maintaining landscaped areas. ▪ A total of 13 (1,000 litre) standard bins and 17 (240 litre) recycle bins will be provided for the residential component of the development. ▪ A total of 8 (1,000 litre) standard bins and 4 (1,00 litre) recyclable bins will be provided for the retail component of the development. ▪ Garbage Chute with 510mm diameter specifications to meet council requirements will be supplied. ▪ Construction of both the garbage areas and garbage rooms will meet all requirements set out in Ku-ring-gai City Council Codes, BCA and Australian Standards. ▪ The waste management system will be monitored in the initial stages to ensure that sufficient bins have been provided to handle the waste generated.	
Construction Management	▪ The construction will be under the control of a Head Contractor who will be appointed after the Approval is granted. Upon appointment and once they have become familiar with the site and developed a methodology for the construction of the project, the Contractor will prepare a Detailed Construction Management Plan for the development. ▪ Prevention of unauthorised access to the site is a high priority and will be managed throughout the construction period. When the Contractor is appointed, the site will be secured with fences and barriers and, if necessary, hoardings to an approximate of height of 2.4m. ▪ Alternate pedestrian routes around the site will be created and clearly signed. Particular attention will be paid to maintaining access and amenity for pedestrians and vehicles to each of the three street frontages. ▪ Appropriate signage will be placed on areas at street level, indicating the works area and restricted access to the site. ▪ The contractor will prepare demolition and excavation management plans. The applicant's representatives will review the demolition and excavation management plan issued by the contractor to ensure appropriate measures are in place for the works.	Excavation, demolition and construction

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	▪ All works will be undertaken in line with the requirements of Workcover NSW as well as the relevant standards and codes of practice. ▪ Contractors will be required to undertake a thorough induction specific to the site and hold on-site briefings periodically as the project and site evolves. ▪ All demolition and excavation works will be undertaken by appropriately licensed and experienced contractors, utilising the relevant codes of practice with regards to the generation of dust. ▪ Wet demolition practices are likely to be employed by demolition contractors to afford further protection against dust generation. ▪ Noise and vibration criteria will be established for the construction and operational stage of the proposed building in accordance with Department of Environment and Climate Change (DECC) guidelines including the DECC's Environmental Noise Control Manual and the Industrial Noise Policy. ▪ Control of noise and vibration will be achieved through the use of appropriately licensed and experienced contractors coupled with monitoring. ▪ Plant and equipment utilised during demolition will be required to meet relevant guidelines with regards to noise levels. ▪ Waste management & re-use principals will be applied to both the demolition as well as the construction stages of this development. The general principals include - minimising waste generation to landfills and maximising waste material avoidance, reuse & recycling. - increasing awareness of all employees and subcontractor employees to ensure they understand their responsibilities for waste management. - to comply with all relevant legislation and regulatory requirements relating to waste minimisation and waste management. ▪ During demolition of the existing building, all demolition waste that can be recycled (bricks, concrete, steel, timber and glass) will be taken off-site and sorted for recycling by specialist waste handling contractors where possible. ▪ Any waste from demolition or construction that cannot be recycled or reused either on-site or off-site, will be removed from the site and disposed of accordingly at approved landfill sites. ▪ Regular removal and emptying of bins and skips will be done via trucks that will be covered to stop waste from falling off during transport. ▪ All trucks will have their wheels cleaned prior to leaving the site so as not to deposit residue and dirt onto public roads.	

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	▪ The contractor will be responsible for ensuring excavated earth will be disposed off-site at an approved location for possible reuse as fill. ▪ During design and construction, consideration will be given to material options that minimise waste produced compared to alternatives that generate higher waste where possible. Where material waste is inevitable, efforts will be made to ensure that excess materials will be seen as a resource and used either on-site or off-site on other projects if economical to do so. ▪ To promote and increase awareness of waste management on-site, signs advertising waste management practices will be displayed in and around the site at all times. ▪ Waste separation bins and areas will be clearly labelled to encourage waste reuse and reduce disposal to landfill. ▪ CONCRETE/ BITUMIN - As much as possible, the concrete waste along with any surplus new concrete will be separated from other waste materials. Waste concrete will be taken to an appropriate facility for recycling, or disposed of accordingly. ▪ WOOD/ TIMBER - All wood should be reused or recycled unless it has been treated or contaminated and deemed not fit for any purpose. Where possible, wood pallets and packaging will be returned to the supplier for reuse. Where possible, wood materials used during the construction process (formwork, hoardings etc) will be reused. Wood unsuitable for reuse will be stored at designated areas on-site for collection and taken to recycling facilities. ▪ METALS - Where possible, metal drums will be returned to the supplier for reuse. Metal waste will be separated from other waste materials. Any metals not suitable for reuse will be stored and transported to an appropriate recycling facility ▪ PLASTICS/ GLASS - Glass and plastic waster will be stored on-site in collection bins and transported to recycling facilities. ▪ WALL/ CEILING LININGS - To minimise wall and ceiling lining waste during construction, plaster board and fibre cement, off-cuts will be encouraged to be used where possible. All waste plaster board and fibre cement sheets not suitable for reuse will be stored and transported to an appropriate recycling facility. ▪ At no time will hoses be used to clean roads. The use of water on site will be monitored and minimal usage will be encouraged.	