

City of Sydney

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15 April 2011

Our Ref: R/2011/17
Your Ref: MP 09_0212

Mr Simon Bennett
Team Leader, Strategic Assessment
NSW Department of Planning
23-33 Bridge Street
SYDNEY NSW 2000

Dear Mr Bennett

**RE: EXHIBITION OF PROJECT APPLICATION FOR BROADWAY BUILDING –
UNIVERSITY OF TECHNOLOGY SYDNEY BROADWAY (MP 09_0212)**

I refer to your letter regarding the above project application.

I understand the project involves the construction of a new 12 storey building with basement parking for 160 vehicles, an architectural feature, and modifications to the existing Building 10 carpark to accommodate bicycle facilities and vehicle access for the Broadway Building, and bridge access between the two buildings.

The following comments and recommended conditions of consent (Attachment A) are provided by the City of Sydney's Planning Assessment Unit.

Landscaping to the laneway

The Landscape Concept Plan provides insufficient detail of the proposed landscaping to the laneway. Whilst there is detailed information on growing mediums, the overall strategy and vision for the landscape architecture is not sufficiently demonstrated in the Concept Plan. For instance, the Landscape Design Report proposes opportunities for hanging elements and vertical growing structures, as well as several 'microclimate zones' within the laneway. These concepts are interesting and positive, however, the Concept Plan only shows a single row of 'tall open habit flowering trees' and no response to the various microclimate zones or vertical elements proposed.

The laneway provides a great opportunity for 'public' space away from the traffic of Broadway and activation by various uses. The proposed plan, however, showing the single row of trees does not illustrate how the laneway is intended to function or how the landscape responds to the adjacent built form or uses.

city of villages

Accordingly, it is recommended that the Landscape Concept Plan be amended to include details demonstrating how the laneway could be designed to maximise opportunities discussed in the text of the Landscape Design Report. Montages of the laneway, and illustrative plans/elevations would assist to demonstrate the features of an improved design.

In addition, the following should be considered:

- Adequate setbacks of buildings to allow for the natural development of tree canopies;
- Trees are proposed in a continuous line and therefore it is recommended that continuous trenches are installed as this maximises the soil volume available to the trees;
- Provision for drainage of such systems is an important aspect of the design and needs to be carefully considered; and
- The use of advanced tree stock in all public areas is recommended. The larger the tree planted the less chance of vandalism and the higher the chance of the tree establishing in the environment.

Corridor between the binary screen and building

Concern is raised with the effect of the binary screen extending down to the footway level which places a physical barrier between the building and the street where people can walk on both sides of the screen. This screen will potentially provide a concealment hazard, especially when the building side is not illuminated. Measures shall be implemented to provide passive surveillance at night time, such as the provision of lighting within these corridors.

Binary screen and continuous weather protection for pedestrians on Broadway

It is recommended that the external screen be adjusted to provide some weather protection along Broadway for improved pedestrian amenity. The distance that the screen is positioned off the face of the building at level 1 should be increased, and could be achieved by deflecting the screen and overhanging the footpath to provide a partial awning. The maximum degree of cover might be in the order of half of the footpath width. The length of the awning should be maximised along the Broadway facade and should be aligned with the height of the screen from the footpath level. In addition, the screen could be terminated in part or in full to a height of no less than 2200mm above the footpath to allow direct visual access to the activities within the building where appropriate. Any awning treatment will need to be higher than the minimum 2200mm and comply with Council's requirements. Alternatively, an independent lightweight weather protection awning should be required of the applicant to the satisfaction of the City of Sydney Council.

Street trees

The current proposal retains the five Council street trees located along Broadway which must be protected during all stages of development. The proposal to plant new street trees shall be in accordance with the City's *Street Tree Master Plan*. The street tree plan shall be submitted to Council's Tree Management Unit for approval to ensure the tree species and technical specifications for tree selection, planting and maintenance are in accordance with the approved *Street Tree Master Plan*.

Closure of Jones Street

The City's understanding is that UTS intends on a permanent road closure of Jones Street between Broadway and Thomas Street, and subsequent public domain upgrade of this area. This proposal was highlighted in the UTS Masterplan however has not been included in this Project Application. Please ensure that the Proponent is aware that the provisions of the *Roads Act 1993* apply to the closure of this road and undertaking of public domain works.

Green Travel Plan

The City encourages UTS to implement a Green Travel Plan for the site. A Green Travel Plan for the entire UTS would be a preferable outcome, but as a minimum one must be prepared for this building prior to its occupation. The Proponent should contact a member of Council's Strategic Transport Unit to discuss the Green Travel Plan prior to its submission.

Thank you for the opportunity to provide input at this stage of the proposal. Should you require further information or wish to arrange a meeting, please contact Lily Chu by telephone on 9265 9333 or by email at lchu@cityofsydney.nsw.gov.au.

Yours sincerely,



Graham Jahn LFRAIA Hon AIA Hon FPIA Hon FNZIA
Director City Planning and Regulatory Services

**MP 09_0212
UTS BROADWAY BUILDING
CONSTRUCTION OF A NEW 12 STOREY BUILDING**

ATTACHMENT A – RECOMMENDED CONDITIONS OF APPROVAL

DESIGN QUALITY EXCELLENCE

- (a) In order to ensure the design quality excellence of the development is retained:
 - (i) The design architect is to have direct involvement in the design documentation, contract documentation and construction stages of the project;
 - (ii) The design architect is to have full access to the site and is to be authorised by the applicant to respond directly to the consent authority where information or clarification is required in the resolution of design issues throughout the life of the project;
 - (iii) Evidence of the design architect's commission is to be provided prior to release of the Construction Certificate.
- (b) The design architect of the project is not to be changed without prior notice and approval of the Council.

LANDSCAPE PLAN – LANEWAY PLANTING

A detailed landscape plan, drawn to scale, by a qualified landscape architect or landscape designer, should be submitted and must include:

- (a) Location of existing and proposed structures on the site including existing trees. Adequate setbacks of buildings should be provided to allow for the natural development of tree canopies.
- (b) Details of earthworks including mounding, retaining walls and planter boxes. Continuous trenches rather than individual tree pits should be considered as this maximises the soil volume available to trees.
- (c) Location, numbers and type of plant species. The use of advanced tree stock in all public areas is recommended. The larger the tree planted the less chance of vandalism and the higher the chance of the tree establishing in the environment.
- (d) Details of planting procedure and maintenance.
- (e) Details of drainage and watering systems.

PUBLIC DOMAIN PLAN

Three copies of a detailed Public Domain Plan must be prepared by an architect, urban designer or landscape architect and must be lodged with Council's Public Domain Section and approved by Council prior to a Construction Certificate being issued for any new building work (including internal refurbishments) excluding approved preparatory, demolition or shoring work.

The Public Domain Plan must be prepared in accordance with the City of Sydney's Public Domain Manual. The works to the public domain are to be completed in accordance with the approved plan and the Public Domain Manual before any Occupation Certificate is issued in respect of the development or before the use commences, whichever is earlier.

The detailed documentation shall be provided at a level and standard suitable for construction purposes. Documentation shall include but not be limited to:

- (a) A1 sized public domain plans at scale 1:200;
- (b) Cross sections and Elevations at scale 1:100;
- (c) Include specifications for the proposed works;
- (d) Ensure maximum footpath cross falls of 2.5% from building line to top of kerb;
- (e) Long Sections at scale 1:200;
- (f) Construction details at appropriate scale;
- (g) Schedules and specification;
- (h) Services;
- (i) Entire scope of works on Council property including intersection treatments with the proposed new road pavements, line marking, parking, kerb and gutters;
- (j) Civil and stormwater infrastructure;
- (k) Footpaths and pavements, treatment to the right of carriageway, road restoration;
- (l) Street tree planting;
- (m) utility poles, and service pits;
- (n) Species, quantity, spacing, sizes of planting, staking and/or tree guard;
- (o) Materials and finishes;
- (p) Furniture and fixtures;
- (q) Street lighting, pedestrian lighting and feature lighting;
- (r) Irrigation system, drainage lines, pits and automated irrigation measures;
- (s) Extent of temporary works and permanent features to be clearly shown, including furnishing and/or footings, finished surfaces, service and planting.

The documentation shall also provide detailed design for safety and security which encompasses the following:

1. The through site links (or pedestrian streets), shall be designed and developed in accordance with the following principles:
 - i. Safe, passive surveillance, activity and night time use and provision for active surveillance at clearly defined entry points;
 - ii. Equitable and easy access by the provision of a continuous paths of travel (consistent with AS 2107);
2. Well lit to safety standards (AS1158 pedestrian lighting). Use of metal halide (white) lighting, giving regard to highlighting any unique architectural or public art features;
3. Uninhibited public access 24 hours a day to all public and communal areas;
4. Direct route with direct views from adjacent streets or public domain and provide clear, unencumbered sight lines;
5. All public areas are to be open and not pass through or under buildings (unless generous dimensions are provided with a minimum height three storeys for the entire length and a maximum depth 18 metres).

Note: A Public Domain Works Guarantee deposit will be required for the public domain works, in accordance with the City of Sydney's adopted fees and charges and the Public Domain Manual. The Public Domain Works Guarantee must be submitted as an unconditional bank guarantee in favour of Council as security for completion of the obligations under this consent.

Council's Public Domain section must be contacted to determine the guarantee amount prior to lodgement of the guarantee. The guarantee must be lodged with Council prior to a Road Opening Permit for works on the public way being issued.

ALIGNMENT LEVELS TO BROADWAY, WATTLE & JONES STREETS

- (a) Prior to a Construction Certificate being issued, footpath alignment levels for the building must be submitted to Council for approval. The submission must be prepared by a Registered Surveyor and must be in accordance with the City of Sydney's Public Domain Manual.
- (b) These alignment levels, as approved by Council, are then to be incorporated into the plans submitted with the application for a Construction Certificate, excluding a Construction Certificate for approved preparatory, demolition or shoring work.

PUBLIC DOMAIN WORKS - HOLD POINTS AND HANDOVER

- (a) Prior to a Construction Certificate being issued for a new building work, excluding approved preparatory, demolition and shoring work, a set of hold points for approved public domain and civil construction work is to be determined with and approved by the City's Public Domain section in accordance with the City's Public Domain Manual.
- (b) Completion and handover of the constructed public domain works is to be undertaken in accordance with the City's Public Domain Manual,

including requirements for as-built (Works-as-Executed) documentation, certification and defects liability period.

STORMWATER AND DRAINAGE - MAJOR DEVELOPMENT

On-site detention, treatment and re-use is encouraged.

- (a) Prior to a Construction Certificate being issued, details of the proposed stormwater disposal and drainage from the development including a system of on-site stormwater detention in accordance with Council's standard requirements and details of the provision and maintenance of overland flow paths must be submitted to and approved by Council. All approved details for the disposal of stormwater and drainage are to be implemented in the development.
- (b) Any proposed connection to the Council's underground drainage system will require the owner to enter into a Deed of Agreement with the Council and obtain registration on Title of a Positive Covenant prior to Construction Certificate being issued and prior to the commencement of any work within the public way.
- (c) The requirements of Sydney Water with regard to the on site detention of stormwater must be ascertained and complied with. Evidence of the approval of Sydney Water to the on-site detention must be submitted prior to a Construction Certificate being issued.
- (d) An "Application for Approval of Stormwater Drainage Connections" must be submitted to the Council with the appropriate fee at the time of lodgement of the proposal for connection of stormwater to the Council's drainage system.

PAVING MATERIALS

The surface of any material used or proposed to be used for the paving of colonnades, thoroughfares, plazas, arcades and the like which are used by the public must comply with AS/NZS 4586:2004 (including amendments) "Slip resistance classification of new pedestrian surface materials".

FOOTPATH DAMAGE BANK GUARANTEE

A Footpath Damage Bank Guarantee calculated on the basis of an area of 720sqm of asphalt site frontage must be lodged with Council in accordance with the City of Sydney's adopted Schedule of Fees and Charges. The Footpath Damage Bank Guarantee must be submitted as an unconditional bank guarantee in favour of Council as security for repairing any damage to the public domain in the vicinity of the site.

The guarantee must be lodged with Council prior to issue of a Construction Certificate.

LIGHTING – PUBLIC DOMAIN AND PUBLICLY ACCESSIBLE AREAS

The applicant shall provide a system of underground street and pedestrian lighting along all roads, footpaths in accordance with Council and Energy Australia standards. Detailed plans and construction specifications for the works shall be prepared, submitted to Council for approval and certified as

complying with Council's and Energy Australia's specifications prior to the issue of the first Construction Certificate for public domain works.

The Lighting Plan(s) shall indicate layout, location, connections, conduits, types, luminaires, fixtures and category for street lighting, pedestrian lighting and feature lighting.

The detailed plans and supporting documentation shall conform to the following design criteria:

- (a) Lighting in the through site link between Wattle and Jones Streets comply with AS1158.3.1 Category P1;
- (b) Lighting designs to be certified by a practicing lighting engineer; and
- (c) That all fittings and fixtures used other than metal halide luminaires shall be compatible with those used within Energy Australia's street lighting network. A separate development application is required to be lodged and approved prior to any external floodlighting or illumination of the building or site landscaping.

ACCESS AND FACILITIES FOR PERSONS WITH DISABILITIES

The building, including the laneway, must be designed and constructed to provide access and facilities for people with a disability in accordance with the *Building Code of Australia* and the *City of Sydney Access DCP 2004*.

ASSOCIATED ROADWAY COSTS

All costs associated with the construction of any new road works including kerb and gutter, road pavement, drainage system and footway shall be borne by the developer. The new road works must be designed and constructed in accordance with the City's "Development Specification for Civil Works Design and Construction".

BICYCLE PARKING

The layout, design and security of bicycle facilities either on-street or off-street must comply with the minimum requirements of Australian Standard AS 2890.3 – 1993 Parking Facilities Part 3: Bicycle Parking Facilities except that:

- (a) all bicycle parking for staff / employees of any land uses must be Class 2 bicycle facilities, and
- (b) all bicycle parking for visitors of any land uses must be Class 3 bicycle rails.

CAR PARKING SPACES AND DIMENSIONS

The design, layout, signage, line marking, lighting and physical controls of all off-street parking facilities must comply with the minimum requirements of Australian Standard AS/NZS 2890.1 - 2004 Parking facilities Part 1: Off-street car parking and Council's Development Control Plan.

ACCESSIBLE PARKING SPACE

The design, layout, signage, line marking, lighting and physical controls of all off-street accessible parking facilities must comply with the minimum requirements of Australian Standard AS/NZS 2890.6 - 2009 Parking facilities Part 6: Off-street parking for people with disabilities. The details must be submitted to and approved by the Principal Certifying Authority prior to a Construction Certificate being issued.

COST OF SIGNPOSTING

All costs associated with signposting for any kerbside parking restrictions and traffic management measures associated with the development shall be borne by the developer.

LOADING WITHIN SITE

All loading and unloading operations associated with servicing the site must be carried out within the confines of the site, at all times and must not obstruct other properties/units or the public way.

LOADING/PARKING KEPT CLEAR

At all times the service vehicle docks, car parking spaces and access driveways must be kept clear of goods and must not be used for storage purposes, including garbage storage.

LOCATION OF ACCESSIBLE CAR PARKING SPACES

Where a car park is serviced by lifts, accessible spaces for people with mobility impairment are to be located close to lifts. Where a car park is not serviced by lifts, accessible spaces for people with mobility impairment are to be located at ground level, or accessible to ground level by a continually accessible path of travel, preferably under cover.

LOCATION OF VISITOR PARKING

All visitor parking spaces must be grouped together, and located at the most convenient location to the car parking entrance. All spaces must be clearly marked 'visitor' prior to the issue of an occupation certificate or the use commencing, whichever is earlier. All signs must be maintained in good order at all times.

TRAFFIC WORKS

Any proposals for alterations to the public road, involving traffic and parking arrangements, must be designed in accordance with RTA Technical Directives and must be referred to and agreed to by the Sydney Traffic Committee prior to any work commencing on site.

VEHICLE ACCESS

The site must be configured to allow a vehicle to be driven onto and off the site in a forward direction.

ACCESS DRIVEWAYS TO BE CONSTRUCTED

Approved driveways are to be constructed for all vehicular access to the construction site in accordance with the requirements of Council's "Driveway Specifications" to the satisfaction of Council.

LOADING AND UNLOADING DURING CONSTRUCTION

The following requirements apply:

- (a) All loading and unloading associated with construction activity must be accommodated on site.
- (b) If, during excavation, it is not feasible for loading and unloading to take place on site, a Works Zone on the street may be considered by Council.
- (c) A Works Zone may be required if loading and unloading is not possible on site. If a Works Zone is warranted an application must be made to Council at least 8 weeks prior to commencement of work on the site. An approval for a Works Zone may be given for a specific period and certain hours of the days to meet the particular need for the site for such facilities at various stages of construction. The approval will be reviewed periodically for any adjustment necessitated by the progress of the construction activities.
- (d) In addition to any approved construction zone, provision must be made for loading and unloading to be accommodated on site once the development has reached ground level.
- (e) The structural design of the building must allow the basement and/or the ground floor to be used as a loading and unloading area for the construction of the remainder of the development.

NO OBSTRUCTION OF PUBLIC WAY

The public way must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances. Non-compliance with this requirement will result in the issue of a notice by Council to stop all work on site.

USE OF MOBILE CRANES

The following requirements apply:

- (a) Mobile cranes operating from the road must not be used as a method of demolishing or constructing a building.
- (b) For special operations including the delivery of materials, hoisting of plant and equipment and erection and dismantling of on site tower cranes which warrant the on-street use of mobile cranes, permits must be obtained from Council for the use of a mobile crane. The permits must be obtained 48 hours beforehand for partial road closures which, in the opinion of Council will create minimal traffic disruptions and 4 weeks beforehand in the case of full road closures and partial road closures which, in the opinion of Council, will create significant traffic disruptions.

- (c) Special operations and the use of mobile cranes must comply with the approved hours of construction. Mobile cranes must not be delivered to the site prior to 7.30am without the prior approval of Council.

CONSTRUCTION TRAFFIC

- The applicant must submit detailed Traffic Management Plans and Traffic Control Plans to the City prior to works taking place on site.
- The approved truck route plan shall form part of the contract and must be distributed to all truck drivers.
- All vehicles must enter and exit the site in a forward direction.
- All Traffic Control Plans associated with this Construction Traffic Management Plan must comply with Australian Standards and RTA's Traffic Control At Work Sites Guidelines.
- The applicant must provide Council with details of the largest truck that will be used during the demolition, excavation and construction, prior to the start of any work on site and obtain approval from City's Construction Regulation Unit for the use of this vehicle.

NOTE: No dog trailers to be used without City's Construction Regulation Unit approval.

- The developer must obtain a permit from the City's Construction Regulation Unit regarding the placing of any plant/equipment on public ways.
- No queuing, parking or marshalling of vehicles on City roads is not permitted.
- All vehicles associated with the development shall be parked wholly within the site. All site staff related with the works are to park in a designated off street area, no staff are to park on the street.
- All loading and unloading must be within the development site or at an approved "Works Zone".
- The applicant must comply with development consent for hours of construction.
- Traffic Controllers are NOT to stop traffic on the public street(s) to allow trucks to enter or leave the site. They MUST wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site - **the vehicles already on the road have right-of-way.**
- Trucks are not (at no time) allowed to reverse into the site from the road for safety reasons (unless specific approval is obtained from the City's Construction Regulation Unit).
- Pedestrians may be held only for very short periods to ensure safety when trucks are leaving or entering BUT you must NOT stop pedestrians in

anticipation i.e. **at all times the pedestrians have right-of-way on the footpath not the trucks.**

- Physical barriers to control pedestrian or traffic movements need to be determined by the Construction Regulations Unit prior to commencement of work.
- Any temporary adjustment to a Bus Stop or Traffic Signals will require the applicant to obtain approval from the STA and RTA respectively prior to commencement of works.
- The developer must apply to the Construction Regulations Unit to organise appropriate approvals for cranes and barricades etc.
- The developer must apply to Building Compliance Unit to organise appropriate approvals for hoarding prior to commencement of works.
- The developer must apply to the Work Zones Co-ordinator to organise appropriate approvals for the Work Zones.
- WorkCover requires that Traffic Control Plans must comply with Australian Standards 1742.3 and must be prepared by a Certified Traffic Controller (under RTA regulations).

STREET TREE TO BE RETAINED

The following street tree shall be retained and protected throughout the development.

Tree No:	Botanical Name	Dimension (metres)	Setback Required
1-5	<i>Platanus x hybrida</i> (Plane)	12 x 12	4 metres

STREET TREE PROTECTION

Street trees must be protected in accordance with the Australian Standard 4970 Protection of trees on development sites. All street trees must be protected during the construction works as follows:

- (a) Tree trunk and major limb protection shall be undertaken prior to or during the installation of any approved hoardings or scaffoldings. The protection shall be installed by a qualified Arborist (AQF 2 or 3) and must include;
 - (i) An adequate clearance, minimum 250mm, must be provided between the structure and tree branches, limbs and trunk at all times,
 - (ii) Tree trunk/s and/or major branches, located within 500mm of any hoarding or scaffolding structure, must be protected by wrapped hessian or similar material to limit damage, and
 - (iii) Timber planks (50mm x 100mm or similar) shall be placed around tree trunk/s. The timber planks shall be spaced at 100mm intervals, and must be fixed against the trunk with tie wire, or strapping. The hessian and timber planks must not be fixed to the tree in any instance, or in any fashion.

- (iv) Tree trunk and major branch protection is to remain in place for the duration of construction and development works, and shall be removed at the completion of the project.
- (b) All hoarding support columns are to be placed a minimum of 300mm from the edge of the existing tree pits/setts, so that no sinking or damage occurs to the existing tree setts. Supporting columns must not be placed on any tree roots that are exposed.
- (c) Materials or goods, including site sheds, must not be stored or placed:
 - (i) Around or under the tree canopy; or
 - (ii) Within two (2) metres of the trunks or branches of any street trees.
- (d) Any damage sustained to street tree/s as a result of the erection of hoardings, scaffolding, or due to the loading/unloading of vehicles adjacent the site, must be immediately reported to the Council's Street Tree Contract Coordinator on 9265 9673, in order to determine the appropriate action for maintaining the health and structural integrity of any damaged street tree.
- (e) Details of the methods of protection must be submitted to and be approved by Council prior to the commencement of works and such approval should be forwarded to the Principal Certifying Authority. All approved protection measures must be maintained for the duration of construction and development works. Any tree on the footpath which is damaged or removed during construction must be replaced.

STREET TREE PLANTING & MAINTENANCE

A Landscape Plan indicating the location of the street trees to be planted in association with the development must be submitted to Council for approval prior to the commencement of works. Street trees must be located and planted in accordance with the City's Street Tree Master Plan, and the following:

The street tree(s) must be planted:

- (i) By a qualified Arborist or Horticulturist (AQF Level 3); and
- (ii) Before the issuing of an Occupation Certificate.

The tree pits must be inspected by Council's Contract Coordinator – Street Trees, before and after planting.

All street trees planted in accordance with the approved Landscape Plan must be maintained by a qualified Horticulturist or Arborist (AQF Level 2 or 3) for a minimum period of twelve (12) months commencing on the planting date. Maintenance includes, without limitation, watering, weeding, removal of rubbish from tree base, pruning, fertilizing, pest and disease control and any other operations to maintain a healthy robust tree.

At the end of the twelve (12) month maintenance period, written approval must be obtained from Council before hand-over of any street tree to Council.

If a street tree has been replaced due to maintenance deficiencies during the twelve (12) month maintenance period, the twelve (12) month maintenance period will start again from the date that the street tree is replaced.

HOURS OF WORK AND NOISE – OUTSIDE CBD

The hours of construction and work on the development must be as follows:

- (a) All work, including building/demolition and excavation work, and activities in the vicinity of the site generating noise associated with preparation for the commencement of work (eg. loading and unloading of goods, transferring of tools etc) in connection with the proposed development must only be carried out between the hours of 7.30am and 5.30pm on Mondays to Fridays, inclusive, and 7.30am and 3.30pm on Saturdays, with safety inspections being permitted at 7.00am on work days, and no work must be carried out on Sundays or public holidays.
- (b) All work, including demolition, excavation and building work must comply with the *City of Sydney Building Sites Noise Code* and Australian Standard 2436 - 1981 "Guide to Noise Control on Construction, Maintenance and Demolition Sites".

NOISE MANAGEMENT PLAN - CONSTRUCTION SITES

A noise management plan shall be submitted to Council for approval prior to any work commencing and complied with during any construction works. The plan must be prepared by a suitably qualified person, who possesses the qualifications to render them eligible for membership of the Australian Acoustic Society, Institution of Engineers Australia or the Australian Association of Acoustic Consultants. The plan must include, but not be limited to the following:-

- (a) identify sensitive locations near to the site;
- (b) identify potential impacts (ie exceedances of the goals at the identified locations);
- (c) Mitigation measures to control noise and dust from the site, the noise reduction likely and the feasibility and reasonableness of these measures;
- (d) Selection criteria for plant and equipment;
- (e) Community consultation;
- (f) Details of work schedules for all construction phases;
- (g) Selection of traffic routes to minimise residential noise intrusion;
- (h) Schedule of plant and equipment use and maintenance programs;
- (i) Noise monitoring techniques and method of reporting results;
- (j) The methodology to be employed for handling and investigating any complaints should they arise;
- (k) Site induction details for employees and contractors, and;

- (l) A declaration of available technologies and the reason for the selection of the preferred technology from a noise generating perspective should be included.

DEMOLITION, EXCAVATION AND CONSTRUCTION MANAGEMENT

- (a) Prior to the commencement of demolition and/or excavation work the following details must be submitted to and be approved by the Principal Certifying Authority:
 - (i) Plans and elevations showing distances of the subject building from the location of adjoining and common/party walls, and (where applicable) the proposed method of facade retention.
 - (ii) A Demolition Work Method Statement prepared by a licensed demolisher who is registered with the Work Cover Authority. (The demolition by induced collapse, the use of explosives or on-site burning is not permitted.)
 - (iii) An Excavation Work Method Statement prepared by an appropriately qualified person.
 - (iv) A Waste Management Plan for the demolition and or excavation of the proposed development.
- (b) Such statements must, where applicable, be in compliance with AS2601-1991 Demolition of Structures, the Occupational Health and Safety Act 2000 and Regulation; Council's Policy for Waste Minimisation in New Developments 2005, the Waste Minimisation and Management Act 1995, and all other relevant acts and regulations and must include provisions for:
 - (i) A Materials Handling Statement for the removal of refuse from the site in accordance with the *Waste Minimisation and Management Act 1995*.
 - (ii) The name and address of the company/contractor undertaking demolition/excavation works.
 - (iii) The name and address of the company/contractor undertaking off site remediation/disposal of excavated materials.
 - (iv) The name and address of the transport contractor.
 - (v) The type and quantity of material to be removed from site.
 - (vi) Location and method of waste disposal and recycling.
 - (vii) Proposed truck routes, in accordance with this development consent.
 - (viii) Procedures to be adopted for the prevention of loose or contaminated material, spoil, dust and litter from being deposited onto the public way from trucks and associated equipment and the proposed method of cleaning surrounding roadways from such deposits. (Note: With regard to demolition of buildings, dust

emission must be minimised for the full height of the building. A minimum requirement is that perimeter scaffolding, combined with chain wire and shade cloth must be used, together with continuous water spray during the demolition process. Compressed air must not be used to blow dust from the building site).

- (ix) Measures to control noise emissions from the site.
- (x) Measures to suppress odours.
- (xi) Enclosing and making the site safe.
- (xii) A certified copy of the Public Liability Insurance indemnifying Council for \$10,000,000 against public prosecution for the duration of the demolition works.
- (xiii) Induction training for on-site personnel.
- (xiv) Written confirmation that an appropriately qualified Occupational Hygiene Consultant has inspected the building/site for asbestos, contamination and other hazardous materials, in accordance with the procedures acceptable to Work Cover Authority.
- (xv) An Asbestos and Hazardous Materials Clearance Certificate by a person approved by the Work Cover Authority.
- (xvi) Disconnection of utilities.
- (xvii) Fire Fighting. (Fire fighting services on site are to be maintained at all times during demolition work. Access to fire services in the street must not be obstructed).
- (xviii) Access and egress. (Demolition and excavation activity must not cause damage to or adversely affect the safe access and egress of the subject building or any adjacent buildings).
- (xix) Waterproofing of any exposed surfaces of adjoining buildings.
- (xx) Control of water pollution and leachate and cleaning of vehicles tyres (proposals must be in accordance with the *Protection of the Environmental Operations Act 1997*).
- (xxi) Working hours, in accordance with this development consent.
- (xxii) Any Work Cover Authority requirements.
- (c) The approved work method statements and a waste management plan as required by this condition must be implemented in full during the period of construction.

NOISE - GENERAL

- (a) The $L_{Aeq\ 15minutes}$ noise level emitted from the use must not exceed 5dB above the background (LA_{90}) noise level in any Octave Band Centre Frequency (31.5 Hz to 8 kHz inclusive) between the hours of 7.00am and 12.00 midnight when assessed at the boundary of any affected

receiver. The background noise level must be measured in the absence of noise emitted from the use in accordance with Australian Standard AS 1055.

- (b) The $L_{Aeq, 15\text{minutes}}$ noise level emitted from the use must not exceed the background (LA90) noise level in any Octave Band Centre Frequency (31.5 Hz to 8 kHz inclusive) between the hours of 12.00 midnight and 7.00 am when assessed at the boundary of any affected receiver. The background noise level must be measured in the absence of noise emitted from the use in accordance with Australian Standard AS 1055.
- (c) The use of the premise must be controlled so that any emitted noise is at a level so as not to create and "offensive noise" as defined in the *Protection of the Environment Operations Act 1997* to any affected receiver.

NOISE – MECHANICAL PLANT / MACHINERY

An $L_{Aeq, 15\text{minute}}$ noise level emitted from the use must not exceed the LA90, 15minute noise level by more than 3dB in any Octave Band Centre Frequency (31.5 Hz to 8 kHz inclusive) when assessed inside any commercial premises provided that:

- (a) The $L_{Aeq, 15\text{minute}}$ noise level and the LA90, 15minute noise level shall both be measured with all external doors and windows of the commercial premises closed.
- (b) The LA90, 15minute noise level shall be measured in the absence of noise emitted from the use but with the ventilation equipment (including air-conditioning equipment) normally servicing the commercial premises operating.
- (c) The $L_{Aeq, 15\text{minute}}$ noise level shall be adjusted for modifying factors in accordance with Appendix 2 of the *Noise Guide For Local Government* published by DECCW.
- (d) The use of the premises shall be controlled so that any emitted noise is at a level so as not to create an "offensive noise" as defined in the *Protection of the Environment Operations Act 1997* to any affected receiver.
- (e) In this clause, the term "noise level emitted from the use" means the contributing noise level from the use in isolation to any other ambient noise and account must therefore be taken of the $L_{Aeq, 15\text{minute}}$ when the use is not in operation.
- (f) In circumstances where this development application refers to a modification or addition to an existing use, the background noise level referred to in this clause pertains to the LA90, 15minute noise level measured in the absence of all noise from the site.

LAND CONTAMINATION

Upon finalisation of the project a Site Audit Statement is provided to Council by the accredited Site Auditor containing a statement that the site is suitable for

the proposed use and any conditions attached to the SAS are discussed with Council prior to the issue of the SAS.

GAS-FIRED POWER GENERATION PLANT:

Should any systems such as a gas fired power generation plant <1MW be proposed, the following further information should be submitted for review and consultation with Council:

- (a) Details of the size and power output, make, and model of the proposed gas-fired plant.
- (b) Details of the proposed location of the gas-fired plant and any flues shown on a map, and showing relationship and distances to surrounding buildings.
- (c) Should the proposed gas-fired plant not exceed 1MW, thereby excluding it from the need for an Environmental Protection Licence from DECCW, an air quality assessment shall be undertaken by a suitably qualified environmental consultant and provided to Council :-
 - (i) That demonstrates that the policy requirements of the *"Interim DECC Nitrogen Oxide Policy for Co-generation in Sydney"* can be met by the proposed tri-generation plant.
 - (ii) To assess the impact on local air quality from the installation of tri-generation plant and the likelihood of impacts from offensive odour and fumes on nearby receptors. Any air quality modelling undertaken shall be in accordance with DECCW guidance *"Approved Methods for the modelling and assessment of air pollutants in New South Wales"*. Details of any recommendations or mitigation controls to be put in place shall be provided.

MECHANICAL VENTILATION

- (a) The premises must be ventilated in accordance with the Building Code of Australia and AS1668.1-1998 and AS1668.2-1991.
- (b) Details of any mechanical ventilation and/or air conditioning system complying with AS1668.1-1998 and AS1668.2-1991, the Building Code of Australia and relevant Australian Standards must be prepared by a suitably qualified person certified and certified in accordance with Clause A2.2(a)(iii) of the Building Code of Australia, to the satisfaction of the Certifying Authority prior to the issue of a Construction Certificate.
- (c) Prior to issue of an Occupation Certificate and following the completion, installation, and testing of all the mechanical ventilation systems, a Mechanical Ventilation Certificate of Completion and Performance in accordance with Clause A2.2(a)(iii) of the Building Code of Australia, must be submitted to the Principal Certifying Authority.

SUBSTATION

Prior to occupation of the building, an appropriately qualified person shall confirm in writing that the emissions of Electro Magnetic Fields (EMF) comply

with ARPANSA guidelines – “Interim guidelines on limits of exposure to 50/60 Hz electric and magnetic fields.”

COVERING OF LOADS

All vehicles involved in the excavation and/or demolition process and departing the property with demolition materials, spoil or loose matter must have their loads fully covered before entering the public roadway.

VEHICLE CLEANSING

Prior to the commencement of work, suitable measures are to be implemented to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site. It is an offence to allow, permit or cause materials to pollute or be placed in a position from which they may pollute waters.