

File No: DA2016/017/01
Contact: Louise Mansfield/LP

13 June 2018

Nabil Investments Pty Ltd
c/- Michael De Silva
PO Box A2577
SYDNEY SOUTH NSW 1235

Dear Sir/Madam

Section 4.55(2) Modification Application No. DA2016/017/01
27-35 Punchbowl Road, Belfield
LOT 10 IN DP 592982

Approval Date Made On: 7 June 2018
Determination Made by: Strathfield Local Planning Panel

Reference is made to your application of 7 March 2018, to modify Development Consent No. DA2016/017 at the abovementioned address.

Pursuant to Section 4.55(2) of the Environmental Planning and Assessment Act 1979, the proposed modification(s) to Development Consent No. 2016/017 involving a revised design of the northernmost building (Building F, previously Building E) including provision of additional units and redesign of basement parking at 27-35 Punchbowl Road, Belfield be **APPROVED**, subject to:

1. The original conditions of consent Application (DA2016/017) as approved by Sydney Central Planning Panel on 15 June 2017 for demolition and construction of a 4-7 storey mixed use building comprised of 5 retail suites and (111) apartments, with basement parking for 221 cars.
2. As modified by the Section 4.55(2) application (DA2016/017/1) involving:
 - Amendment to Condition No.1;
 - Amendment to Condition No.8;
 - Amendment to Condition No.15; and
 - Amendment to Condition No.18

Accordingly, Development Consent No.2016/017/1 is approved as following:

Condition No.1

Plans

1. The development shall be completed in accordance with the approved plans and documents listed below, prior to the building being used or occupied and any variation as required by conditions of this consent:

Existing/Demolition Plan, Drawing No. A-180, Rev G, prepared by Olsson & Associates Architects, dated 26/4/17.

Basement 2, Drawing No. A-2B2-A, Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

Basement 1, Drawing No. A-2B1-A , Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

Lower Ground Level, Drawing No. A-201-A , Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

Ground Level, Drawing No. A-202-A , Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

Upper Ground Level, Drawing No. A-203-A , Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

Level 2, Drawing No. A-204-A, Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

Level 3, Drawing No. A-205-A, Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

Level 4, Drawing No. A-206-A, Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

Level 5, Drawing No. A-207-A, Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

Level 6, Drawing No. A-208-A, Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

Roof Plan, Drawing No. A-209, Rev 3, prepared by Olsson & Associates Architects, dated 28/2/2018, received by Council 7 March 2018.

Adaptable Apartments, Drawing No. A-250, Rev 3, prepared by Olsson & Associates Architects, dated 28/2/2018, received by Council 7 March 2018.

N-S Elevations, Drawing No. A-301-A , Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

E-W Elevations, Drawing No. A-302-A, Rev 4, prepared by Olsson & Associates Architects, dated 15/5/2018, received by Council 17 May 2018.

Privacy Screens, Drawing No. A-310, Rev 3, prepared by Olsson & Associates Architects, dated 28/2/2018, received by Council 7 March 2018.

Sections I, Drawing No. A-401 , Rev 3, prepared by Olsson & Associates Architects, dated 28/2/2018, received by Council 7 March 2018.

Sections II, Drawing No. A-402, Rev 3, prepared by Olsson & Associates Architects, dated 28/2/2018, received by Council 7 March 2018.

Materials & Finishes, Drawing No. A-501 , Rev 3, prepared by Olsson & Associates Architects, dated 28/2/2018, received by Council 7 March 2018.

Landscape Plan LA-01, Issue 4, prepared by Jila, dated 17/11/2017, received by Council 7 March 2018.

Landscape Plan LA-02, Issue 4, prepared by Jila, dated 17/11/2017, received by Council 7 March 2018.

Drainage Plans, Revision B, Drawing Nos, H-01 - H-14, Sheets 1/14 - 14/14, prepared by Green Arrow, dated 26.4.2017

Geotechnical Investigation Report prepared by J K Geotechnics, dated 15 January 2016.

Phase 2 Environmental Site Assessment, prepared by Environmental Investigation Services, dated 5 February 2016.

Acoustic Report prepared by Acouras Consultancy, dated 17.11 .2015

Access Compliance Report, prepared by Vista Access Architects, received 7 March 2018.

Waste Management Plan prepared by Elephants Foot Recycling Solutions, dated 13/9/2016.

BASIX Certificate No.678913M_04 issued 28 February 2018, received by Council 7 March 2018.

BCA Report prepared by Design Right Consulting, received by Council 7 March 2018

2. A Construction Certificate must be obtained either from Council or a privately accredited person before commencement of any construction associated with this consent.
3. The Principal Certifying Authority must be appointed prior to work commencing to supervise the work and authorise occupation/use of the building when completed.
4. A copy of the endorsed stamped plans and specifications, together with a copy of the Development Consent, Construction Certificate and any approved Traffic Management Plan are to be retained on site at all times.

Contamination

5. A Remediation Action Plan (RAP) shall be prepared to outline remedial measures for the site as recommended in Section 10 of the Phase 2 Environmental Site Assessment report prepared by Environmental Investigation Services, dated 5

February 2016. The RAP shall include remediation of the lead contamination at BH9 and removal of the UST and associated fuel infrastructure.

6. A Validation Assessment (VA) report shall be prepared on completion of the remediation as recommended in Section 10 of the Phase 2 Environmental Site Assessment report prepared by Environmental Investigation Services, dated 5 February 2016. The VA shall include additional groundwater monitoring following removal of the USTs. A copy of the RAP and VA shall be provided to Council prior to the commencement of any works on the site, other than those required to complete the remediation works.
7. A Hazardous Materials Assessment (Hazmat) as recommended in Section 10 of the Phase 2 Environmental Site Assessment report prepared by Environmental Investigation Services, dated 5 February 2016 shall be prepared for the existing buildings prior to the commencement of demolition work. A copy of the Hazmat shall be provided to Council.

Special Conditions

8. Prior to the issue of a Construction Certificate, amended architectural plans shall be prepared and submitted to the Principal Certifying Authority including the following changes:
 - a. The acoustic report prepared by Acouras Consultancy dated 17 November 2015 shall be updated to address the approved plans and the recommended measures of the report to address traffic noise shall be incorporated into the plans.
 - b. An updated Waste Management Plan which includes:
 - Provision of waste storage *room* /s capable of holding the following:
 - i. (21) x 660L bins for residential general waste;
 - ii. (58) x 240Lbins for residential recycling waste;
 - A minimum of 68m² residential bin collection room.
 - The bulk storage room shall have an area of 44m² and be conveniently located for access to the loading dock.
 - c. A roller door with a minimum width of (1 .5 m) is to be provided to the waste storage room and the bulky waste room.
 - d. A room for provision of individual water meters is to be located at or near ground level.
 - e. A minimum (23) units throughout the development shall achieve the Liveable Housing Guideline's silver level universal design features.
 - f. Unit E502 shall be increased by an additional 3m² in floor space so as to achieve compliance with the minimum 95m² floor space required as per the ADG.
9. **Prior to the issue of a Construction Certificate**, amended landscape plans and details shall be prepared and submitted to the Principal Certifying Authority showing the following changes:

- (a) A 10-12m maturity height tree shall be planted adjoining the western boundary opposite Apartment E1 01 ; "(Minimum 1 OOI)"
- (b) An additional 15-20m and 10-12m maturity height tree shall be planted adjoining the western boundary, within the deep soil zone in the nature play area (may replace existing proposed tree); "(Minimum 100L),,
- (c) 4 x 8-10m maturity height trees shall be planted adjoining the eastern boundary between the residential waste collection room and Apartment E104. Where necessary the hard landscaped areas are to be reduced in size and mounding/raised planter boxes provided to ensure suitable soil area to support the trees; "(Minimum 1 OOI)"
- (d) An additional 10-12m maturity height tree shall be planted adjoining the western boundary, opposite lobby 4 (to the west of the proposed lemon Scented Gum); "(Minimum 100L)"
- (e) The proposed Australian Tree Ferns to the north of Retail Suite 1 in the deep soil area are to be replaced with trees to reach a minimum maturity height of 10m, with a narrow growth habit;
- (f) Details are to be provided showing how the retail terraces and shared child play area are to be secured such that the general public cannot enter the remainder of the communal open space of the development. The security measures are not to prevent access by residents of the development (key operated);
- (g) The access proposed from Commercial Suite 3 to the communal open space (northern facade) is to be removed and the area between the two smaller retail terraces (to Suites 1 and 2) and the apartment building is to become communal open space accessible only to residents of the development;
- (h) A second child play area shall be provided at the north-western corner of the site which is accessible only by residents of the development;
- (i) Additional casual seating is to be provided throughout the communal open space areas affording opportunities in the sun and dappled shade;
- (j) Planter boxes (minimum 1m wide) shall be provided to separate paved areas within the communal open space area and adjoining private areas of open space; and
- (k) BBQ areas are to be provided, with a minimum of 1 BBQ, access to a tap and table and seating for at least 8 persons under a shelter in the following locations:
 - north-west corner of site;
 - north-east corner of site, and
 - to the east of the retail terraces.
- (l) Details shall be provided of soil profiles and structural design for planting on slabs, irrigation systems and drainage.
- (m) A minimum of 6 native street trees shall be planted along the Punchbowl Road frontage to reach a maturity height of 15 metres (minimum 200L). Street trees shall not be planted between, or within 3 metres of, the driveways and shall not be planted in the area of land to be dedicated for road widening. The trees shall be chosen from Council's recommended tree list.

- 10. The building shall not be occupied or used until the development has been completed in accordance with the conditions of this consent, construction has been completed in accordance with the Construction Certificate and an Occupation Certificate has been issued by the Principal Certifying Authority.
- 11. For residential flat developments which are subject to State Environmental Planning Policy (SEPP) No. 65 - Design Quality of Residential Flat Development and required to be accompanied by a design verification from a qualified designer under Clause 50(1 A) of the Environmental Planning and Assessment Act Regulation 2000, a certifying authority must not issue:

(a) a Construction Certificate unless the certifying authority has received a design verification statement from a qualified designer that verifies that the plans and specifications achieve or improve the design quality of the development for which development consent was granted having regard to the design quality principles set out in Part 2 of SEPP No. 65, in accordance with Clause 143A of the Regulations; and

(b) an Occupation Certificate to authorise a person to commence occupation or use of the residential flat building unless the certifying authority has received a design verification statement from a qualified designer that verifies that the residential flat development achieves the design quality of the development as shown in the plans and specifications in respect of which the construction certificate was issued, having regard to the design quality principles set out in Part 2 of SEPP No. 65, in accordance with Clause 154A of the Regulations.

12. A Works Permit shall be obtained from Strathfield Council at least five (5) working days prior any work (including demolition, excavation and the erection of site fencing/hording). The approved Works Permit and any approved Construction Traffic Management Plan must be complied with at all times until all demolition, building, engineering and construction work associated with the development has been completed. The permit must be retained on site at all times.
13. Prior to the issue of a Construction Certificate, photographs documenting any existing damage to the kerb and gutter and footpaths adjacent to the property shall be submitted to the consent authority. In the absence of this documentation, the applicant is liable for all damage that occurs to Councils' assets.
14. The applicant or any contractors carrying out works in public or Council controlled lands shall have public liability insurance cover to the value of \$20million and shall provide proof of such cover to Council prior to carrying out works.

Financial Matters

15. In accordance with the provisions of Section 94(1)(b) of the Environmental Planning and Assessment Act 1979 and the Strathfield Direct Development Contributions Plan 2010-2030, a contribution in the form of cash, cheque or credit card (financial transaction fee applies) shall be paid to Council for the following purposes:

Provision of Community Facilities	\$249,194.18
Provision of Major Open Space	\$1,119,824.00
Provision of Local Open Space	\$261,996.66
Provision Roads and Traffic Management	\$42,926.50
Administration	\$22,644.81
TOTAL	\$1,768,586.15

The total amount of the contribution is valid as at the date of determination and is subject to quarterly indexation. Contributions shall be indexed at the time of payment in accordance with clause 2.14 of the Strathfield Direct Development Contributions Plan 2010-2030.

Contributions must be receipted by Council and submitted to the Accredited Certifier, prior to the issue of any Construction Certificate.

Please present a copy of this condition when paying the contribution at the Customer Service Centre so that it can be recalculated.

Note: A copy of Strathfield Council's Section 94 Direct Development Contributions Plan may be downloaded from Council's website.

16. A security payment of \$22,254.00 in the form of cash, bank guarantee, cheque or credit card (financial transactions fees apply) shall be paid to Council prior to the issue of a Construction Certificate. The security payment is GST inclusive and comprises the following :

Refundable street tree protection bond	\$ 2,000.00
Refundable works bond	\$20,000.00
Non-refundable administration fee (\$127/bd)	\$ 254.00
TOTAL	\$22,254.00

The security payment covers the following matters and will be released upon satisfactory completion of these items:

- (a) road and stormwater drainage works in roadways and public areas;
- (b) installation and maintenance of sediment control measures for the duration of construction activities;
- (c) tree final inspection to ensure that Council's street trees have been retained , protected or replanted in accordance with conditions of consent and/or Arborists' report for the post final inspection twelve (12) month period; and
- (d) Ensuring no damage occurs to or building debris/materials are left on Council land including footpath, nature strip, kerb and gutter. The security bond may be used to recover the costs incurred by Council in cleaning and restoring the land to its original condition.

17. Fees are payable where Council is appointed as principal certifying authority to carry out the post-approval inspections. A quotation for the fees can be obtained by contacting Council and the fees shall be paid prior to the carrying out of any of the inspections.
- Any re-inspection which is necessary due to site access not being available, defective work, or the matter not being ready for inspection will be charged in accordance with Council's Fees and Charges Policy. Council will advise in writing if an additional re-inspection is required and the re-inspection fee shall be paid prior to release of the damage deposit. If the additional fee is not paid it will be deducted from the damage deposit.

Parking/Traffic Matters

18. A total of (225) off-street parking spaces, hard paved, line-marked, labelled and drained, shall be provided in accordance with the approved plans and distributed as follows:

Residents	176
Visitors	23
Retail/commercial	26
TOTAL	225

These spaces shall only be used for the parking of motorcycles, sedans, utilities, vans and similar vehicles up to two (2) tonne capacity.

Residential parking spaces shall be designated at a rate of at least one (1) space per 1 and 2 bedroom unit and two (2) spaces per 3 bedroom unit.

If it is proposed to strata subdivide the development in the future, parking designation shall be strictly in accordance with this condition.

19. Prior to the issue of any Occupation Certificate, fixed signage shall be placed within the basement car park of the building adjacent to the lift stating that Council will not issue residential parking permits for owners and residents of the subject site.
20. A sign shall be erected in a suitable location on the site advising that parking is available for visitors.
21. The entry point to the basement carpark area shall be fitted with security gates/shutter to control the entry and exit of vehicles to and from the basement. Any security gates/shutter shall be designed in order to ensure it is able to be opened remotely by occupants of the building.
22. The entry and exit driveways shall be suitably signposted and directional arrows shall be painted on the internal roadway.
23. All vehicles entering and leaving the site shall be driven in a forward direction only.
24. All driveways shall be separated from landscaped areas by a minimum 150mm high by 150mm wide concrete kerb or similar.
25. The vehicle spaces must not be enclosed with walls or meshed security screens without the prior approval of Council.
26. All redundant vehicular crossings shall be removed and replaced with kerb and gutter and footpath at no cost to Council.
27. Reconstruct the footpath, kerb and gutter to Council's specifications for the full frontage of the development site at the completion of all building works.
28. Purpose built storage compartment(s) shall be provided to and within each of the resident car parking bays and/or associated dwellings at the following rates:
 - o 6m³ for each one (1) bedroom unit
 - o 8m³ for each two (2) bedroom unit, and
 - o 10m³ for each unit with three (3) bedrooms or more.

In order to deter theft, the security compartments shall be designed in a manner to conceal from view and secure their contents i.e. through the use of dense, solid material and a shroud covered padlock (or similar).

Amended plans showing the location and configuration of each of storage compartment(s) shall be submitted to and approved by the Principal Certifying Authority **prior to the issue of the Construction Certificate.**

29. An application for a 'Works Zone' must be submitted to and approved by the Strathfield Council Traffic Committee prior to the commencement of any site work (including demolition). The suitability of the proposed length and duration of the Works Zone is to be demonstrated in the application for the Works Zone. The application for the Works Zone must be submitted to Council at least six (6) weeks

prior to the commencement of work on the site to allow for assessment and tabling of agenda for the Strathfield Council Traffic Committee.

The requirement for a Works Zone may be varied or waived only if it can be demonstrated in the Construction Traffic Management Plan (to the satisfaction of Council) that all construction related activities (including all loading and unloading operations) can and will be undertaken wholly within the site. The written approval of Council must be obtained to provide a Works Zone or to waive the requirement to provide a Works Zone prior to the commencement of any site work.

30. A detailed Construction Site Traffic Management Plan (CTMP) must be submitted to and approved by Council, prior to commencement of any site work (including demolition). The approved CTMP must be complied with at all times until all demolition, building, engineering and construction work associated with the development has been completed.

The CTMP must be prepared by a suitably qualified person and must include the following details, to the satisfaction of Council:

- (a) A description of the demolition, excavation and construction works
 - (b) A site plan/s showing the site, roads, footpaths, site access points and vehicular movements
 - (c) Any proposed road and/or footpath closures
 - (d) Proposed site access locations for personnel, deliveries and materials
 - (e) Size, type and estimated number of vehicular movements (including removal of excavated materials, delivery of materials and concrete to the site)
 - (f) Provision for loading and unloading of goods and materials
 - (g) Proposed route(s) from the arterial (state) road network to the site and the proposed route from the site back to the arterial road network
 - (h) Impacts of the work and vehicular movements on the road network, traffic and pedestrians
 - (i) Proposed hours of construction related activities and vehicular movements to and from the site
- OJ Current/proposed approvals from other Agencies and Authorities (including Roads and Maritime Services, Police and State Transit Authority)
- (k) Any activities proposed to be located or impact upon Council's road , footways or any public place
 - (l) Measures to maintain public safety and convenience
 - (m) Any Traffic Control Plans (TCP's) proposed to regulate traffic and pedestrian movements for construction activities (such as concrete pours, crane installation/removal etc).

Drainage/Stormwater

31. The Stormwater Concept Plans do not show a clear connection of the rising main from basement pump well 1 to the OSD tank 1. As such, prior to the issue of a Construction Certificate, an amended stormwater concept plan is to be prepared by a suitably qualified Hydraulic Engineer and submitted to the Principal Certifying Authority for approval demonstrating the following modifications:

- (a) Connection of rising main from basement pump well 1 to the OSD tank 1.

32. Details of the proposed method of stormwater disposal shall be prepared by a suitably qualified professional civil engineer in accordance with the endorsed concept plans **AND** the requirements of Council's Storm water Management Code.

In this project the above engineering plans are satisfactory as Concept plans. The assessment authority, (either (a) Council, or (b) a Private Certifier), is to satisfy themselves of the adequacy of the above plans for the purposes of Construction. They are to independently determine what details, if any, are to be added to the Construction Certificate plans, in order for the issue of the Construction Certificate.

Where a Private Certifier issues the Construction Certificate a copy must be provided to Council, prior to the issue of a Construction Certificate.

33. On-site stormwater detention storage shall be provided in conjunction with the stormwater disposal system. The storage system shall be designed in accordance with the endorsed concept stormwater plans AND Council's Stormwater Management Code. Details of the storage system shall be submitted to and approved by the Principal Certifying Authority prior to the issue of a Construction Certificate.
34. Prior to the issue of an Occupation Certificate/use of the building, written verification from a suitably qualified professional civil engineer shall be obtained, stating that all stormwater drainage and related work has been constructed in accordance with the approved plans.

In addition, detailed works-as-executed plans, prepared and signed by a registered surveyor, shall be submitted to and approved by the Principal Certifying Authority. Where changes have occurred the plans shall be marked-up in red ink and shall include levels and location for all drainage structures and works, buildings (including floor levels) and finished ground and pavement surface levels.

35. Temporary measures shall be provided and regularly maintained during demolition, excavation and construction to prevent sediment and polluted waters discharging from site. Plans showing such measures in accordance with the NSW Department of Housing, Managing Urban Stormwater, Soils and Construction Manual dated August 1998 shall be submitted to and approved by the Principal Certifying Authority prior to the issue of a Construction Certificate.
36. For drainage works within public land or connecting to Council's stormwater drainage system the following inspections will be required:-
- (a) After the excavation of pipeline trenches.
 - (b) After the laying of all pipes prior to backfilling.
 - (c) After the completion of all pits and connection points.

A minimum of 48 hours notice shall be given to Council to inspect works. Inspections may be arranged by telephoning Council's Engineering Works and Services section on 9748-9999 during office hours. Work is not to proceed until the works are inspected and approved by Council.

37. All pits shall be constructed in accordance with Australian Standard AS3500.3.
38. All subsoil drainage must be designed to meet the requirements of AS3500.
39. The proposed basement pump out system capacity shall be capable of handling 4 hours of 1 OOyr ARI storm event and the catchment contributing to it shall be limited

to the subsoil drainage and the basement access ramp area only. The pipes under the basement shall not be PVC or HDPE. The rising main shall be connected to the Silt Arrestor Pit. Final details of this system are to be submitted with the Construction Certificate application.

40. Grated drains shall be provided along the basement entry at the vehicular crossing(s) and the terraces on the lower ground floor and are to connect to the internal drainage system.
41. The OSD basin must be graded to drain completely and gradients shall not be less than 1 %. Discharge restriction from the OSD shall be by use of appropriately sized short length of reduced diameter pipe and weir; orifice plate shall not be used and a co-efficient of 0.8 shall be used for design of the pipe. Details of the storage system shall be submitted to and approved by the Principal Certifying Authority prior to the issue of a Construction Certificate.
42. All surface inlet drains upstream of the on-site detention basin must be designed so that there is no overflow before the storage is full.
43. Overflow paths shall be provided to allow for flows in excess of the capacity of the pipe/drainage system draining the site, as well as from any on-site stormwater detention storage.
44. Allowance shall be made for surface runoff from adjacent properties; and to retain existing surface flow path systems through the site. Any redirection or treatment of these flows shall not adversely affect any other properties.
45. A Positive Covenant under Section 8BE of the Conveyancing Act shall be created on the title of the property detailing the:

(a) On-site stormwater detention system **AND**

(b) All Water Sensitive Urban Design components

incorporated in the development. The wording of the Instrument shall be submitted to, and approved by Council prior to lodgement at Land & Property Information NSW. The Instrument shall be registered and a registered copy of the document shall be submitted to and approved by the consent authority prior to the issue of an Occupation Certificate/use of the building.

The positive covenant is required to prevent future modification or alteration without the written consent of the consent authority, and to ensure suitable maintenance is carried out.

46. Boundary fencing shall be erected in such a manner as not to interfere with the natural flow of ground and surface water to the detriment of any other party.
47. The sediment tank shall be inspected quarterly and cleaned as necessary. The accumulated sediment should be disposed off site as per standard practice and National guidelines. A record of quarterly maintenance of the sediment tank shall be kept and produced when requested by Council.
48. A detailed design of the Water Sensitive Urban Design (WSUD) components (stormwater treatment measures) shall be submitted to and approved by the Principal Certifying Authority prior to the issue of a Construction Certificate and shall include, but not be limited to:

Batters, levels, underdrains, high flow bypass details, clean out points, filter media details, mulching details, material specification, planting details, inlet scour protection areas, maintenance access ramps and maintenance schedule(s).

The design shall be prepared by a suitably qualified professional engineer experienced in Water Sensitive Urban Design in accordance with the approved plans, conditions of consent, Strathfield Council's Development Control Plan Part N - Water Sensitive Urban Design 2005, Strathfield Council WSUD Reference Guideline and WSUD Technical Design Guidelines for South East Queensland (SEQ Healthy Waterways Partnership) Version 1 June 2006 or subsequent updated versions.

49. All approved stormwater works are required to be carried out in accordance with the conditions of consent, approved construction certificate plans, "Strathfield Council WSUD Reference Guideline" and the Construction and Establishment Guidelines: Swales, Bioretention Systems and Wetlands (SEQ Healthy Waterways Partnership) Version 1.1 April 2010 or subsequent versions that may be updated.
50. A suitably qualified Engineer is required to inspect and certify the proposed development at the completion of each of the following construction phases (if any):
 - (i) Installation of the overflow pit and bulking out/trimming profiling;
 - (ii) Installation of under drainage;
 - (iii) Installation of cleanout points;
 - (iv) Installation of drainage layer;
 - (v) Installation of transition layer;
 - (vi) Installation of filtration media;
 - (vii) Laying of geofabric protection for build-out phase;
 - (viii) Laying of turf temporary protection layer, and
 - (ix) Final planting.
51. An Operational Management and Maintenance Report is required to be submitted to the Principal Certifying Authority prior to the issue of an Occupation Certificate outlining the proposed long term operational management and maintenance requirements of the stormwater system on the site.

A schedule or timetable for the proposed regular inspection and monitoring of the devices, maintenance techniques, reporting and record keeping requirements and associated rectification procedure shall be included in the report.
52. The utility services within the area of effect of the proposed drainage works (i.e. gas, water, sewer, electricity, telephone, etc) shall be physically located prior to the commencement of drainage works in Loftus Lane. The relevant authority's written consent for excavation adjacent to their services shall be obtained. Any adjustments required shall be at no cost to Council.
53. A Works Permit shall be obtained from Council's Customer service Centre prior to undertaking any works on public/Council-controlled lands. This includes any work on the nature strip, footpath, driveways, Council's drainage kerb & guttering and roadways.
54. The applicant or any contractors carrying out works in public or Council's controlled lands shall have public liability insurance cover to the value of \$20 million, and shall provide proof of such cover prior to carrying out the works.

55. Upon completion of drainage works within the road reserve full works-as executed plans prepared and signed by a registered surveyor, shall be submitted for Council's approval. Where changes have occurred the plans shall be marked-up in red ink and shall include levels and locations for the drainage structures and works.
56. The affected areas i.e. roadway, nature strip, footpath, kerb & guttering and driveways shall be reinstated to the satisfaction of Manager Infrastructure Planning at no cost to Council.

Public Authority Matters

57. Prior to the issue of an Occupation Certificate all existing overhead electricity and telecommunication cabling adjacent to the development site shall be consolidated into a single Aerial Bundle Cable (ABC) at the applicants' expense in accordance with the specifications of AusGrid and the telecommunications supplier.

Landscaping/Tree Matters

58. The trees listed below shall be retained at all times:

Tree	Location	Protection zone (m)	Excavation zone (m)
Group of 4 Trees noted for retention	5 x 5	Punchbowl Road frontage	4.8
Trees on adjoining properties	-	-	-

and protected by the establishment of a protection zone (in accordance with Australian Standard *AS4970-Protection of trees on development sites*) before any site works begin (including any demolition/excavation). The protection zone shall be maintained for the duration of works and implemented as follows:

(a) A minimum 1.8m high barrier (Chain wire mesh panels, plywood or wooden paling fence panels: refer to *AS4687-Temporary fencing and hoardings* for fencing requirements) shall be erected around the perimeter of the stated Protection Zone as measured from the base of the tree (or where practical). Shade cloth or similar should be attached to reduce the transport of dust, other particulate matter and liquids into the protected area. Fence posts and supports should have a diameter greater than 20mm and be located clear of roots. The barrier shall be constructed so as to prevent pedestrian and vehicular entry into the protection zone. The barrier shall not project beyond the kerb onto the roadway or any adjacent footpath.

(b) Signs identifying the Protection Zone should be installed on the fencing and be visible from within the development site. Lettering should comply with *AS4970-2009: Protection of Trees on Development Sites*.

(c) No concrete slurry or wash, building materials, builders' rubble, excavation soil or similar shall be placed or stored within the tree protection zone.

(d) The whole of the tree protection zone shall be mulched to a minimum depth of 75mm.

(e) The tree protection zone shall be regularly watered.

(f) Any major structural roots which are encountered shall be pruned by a qualified Arborist.

(g) No excavation or construction shall be carried out within the stated *Structural Root Zone* distances from the base of the trunk surface.

(h) Only permeable surfaces (e.g. decomposed granite, gravel, turfpave, permeable paving systems or soft landscaping) are permitted within the canopy spread of the trees to be protected.

59. A minimum 600mm deep root deflection barrier shall be provided on both sides of the proposed driveway crossing(s) and footpaths.
60. All noxious weeds on the site shall be removed and destroyed as per their classification under the Noxious Weeds Act.
61. The following listed trees are permitted to be removed to accommodate the proposed development however, any of the trees listed below that are located on adjoining properties must only be removed after consent from the tree's owner has been sought and obtained in writing:

Tree	Height/Spread (m)	Location
3. Eucalyptus saligna	10 x 8	Punchbowl Road frontage
4.Eucalyptus sp.	8 x 5	Eastern Elevation

62. General maintenance of Council's nature strip adjoining the development site, including regular lawn mowing, edging, irrigation of the lawn and street trees and restricting the storage of materials, rubbish and parking or driving of vehicles on the nature strip, must be carried out during the full period of all approved works (including any demolition and excavation).
63. All common and private landscape areas including all planters are to have full coverage by a fully automatic irrigation system. The design, materials and installation are to be in accordance with Sydney Water Codes and all relevant Australian Standards.
64. Evergreen shrubs with a minimum 5 litre container size achieving a minimum mature height of 3m shall be planted along side and rear boundaries to provide privacy screening and shall be maintained at all times.

Details of the selected plants shall be submitted to and approved by the Principal Certifying Authority prior to the issue of a Construction Certificate.

65. To protect existing trees, masonry fence piers must be setback a minimum 3.0 metre radius from the retained trees on the Punchbowl Rd frontage and all masonry walling between the piers within this zone must be supported on concrete beams (not strip footings).
66. Manual excavation and manual sawing of all roots is required within canopy spread of the retained trees on the Punchbowl Rd frontage.
67. A minimum level 5 (AQF5) Consultant Arborist who is currently a member or is eligible for membership to the *Institute of Australian Consulting Arboriculturists* (IACA) or *Arboriculture Australia* (AA) is to be contracted by the applicant to undertake/monitor pruning of the required branches of the retained trees on the Punchbowl Rd frontage.
68. Prior to the issue of an occupation certificate the applicant shall submit and have approved by the Principal Certifying Authority (PCA) a detailed landscape implementation plan certifying that landscaping has been provided accordance with the landscape plan prepared by Jane Irwin Landscape Architect (Drawing No. LA-01,

Rev 3) 19/4/17, as amended by conditions of this consent and the Landscape provisions contained within section 10.0 of Part A of the Strathfield Council Development Control Plan.

Construction Matters

69. Prior to the commencement of any construction or demolition work, the Applicant or principal contractor must, subject to obtaining permission from the respective property owners, provide dilapidation reports prepared by a suitably qualified person (such as a structural engineer), on the buildings located on any lot adjacent to the subject site, inclusive of ancillary structures. A copy of the respective report must be provided to the Principal Certifying Authority and neighbouring property owners that are the subject of that report.
70. The proposed development shall comply with the Building Code of Australia and details demonstrating compliance shall be submitted to the Principal Certifying Authority for approval prior to the issue of a Construction Certificate.
71. Footings shall be designed in accordance with the soil classification of H, or Highly Reactive (unless determined to the contrary by a suitably qualified person).
72. If the soil conditions require it retaining walls associated with the erection or demolition of a building or other approved methods of preventing movement of the soil must be provided, and adequate provision must be made for drainage.
73. The existing ground levels shall not be altered except in accordance with the levels shown on the approved plans as part of this consent. Finished ground surface levels shall match the existing levels at the property boundary. Any survey plan shall also show the extension of these levels in relation to adjoining properties.
74. All construction, demolition and excavation work shall be restricted to 7am and 5pm (Eastern Standard Time) on Mondays to Saturdays (inclusive) and prohibited on Sundays and public holidays.
75. All excavations and backfilling associated with the approved works must be executed safely and in accordance with appropriate professional standards. All excavations must be properly guarded and protected to prevent them from being dangerous to life or property.
76. If an excavation associated with the approved works extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation to be made:
 - (a) Must preserve and protect the building from damage; and
 - (b) If necessary, must underpin and support the building in an approved manner, and
 - (c) Must, at least seven (7) days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished.
77. There are built structures which may be in the zone of influence of the proposed works and excavations on the site. A qualified practicing geotechnical engineer must prepare a Construction Methodology Report demonstrating that the proposed construction method including any excavation and the configuration of the built structures will have no adverse impact on any surrounding property and

infrastructure. The report must be submitted with the application for a Construction Certificate and must include an investigation to determine the design parameters appropriate to the specific development and site. This would typically include;

- (a) the location and level of nearby foundations and footings (site and neighbouring);
- (b) proposed method of excavation;
- (c) Permanent and temporary support measures for excavation;
- (d) Potential settlements affecting footings and foundations;
- (e) Ground water levels (if any);
- (f) Batter slopes;
- (g) Potential vibration cause by method of excavation; and
- (h) De-watering including seepage and offsite disposal rate (if any).

Excavation, retention, underpinning and construction must be undertaken onsite by an excavation contractor with specialist excavation experience. A suitably qualified geotechnical engineer, specialising in excavation must supervise the excavation procedure.

- 78. The owner of the adjoining allotment of land is not liable for any part of the cost of work carried out, whether carried out on the allotment of land being excavated or on the adjoining allotment of land.
- 79. The common access pathways, letterboxes and entry doorways to the building shall be provided with suitable low level artificial lighting systems to ensure safe and convenient access at night. Details shall be submitted to and approved by the Principal Certifying Authority prior to the issue of a Construction Certificate.

Building Matters

- 80. Identification numbers are to be clearly displayed at the front of the premises and be easily visible from the street. If it is proposed to strata subdivide the building, the lot numbers and unit numbers shall be the same as those nominated on the approved plans and be in accordance with Council's requirements. For strata subdivision, parking spaces shall have the same lot number as the residential portion and shall not be numbered separately.
- 81. Prior to the issue of an Occupation Certificate, the applicant shall submit evidence to the Principal Certifying Authority that a Master TV antenna has been installed on the roof of the building that services all apartments.

Sustainability

- 82. Water heating systems to multi-unit residential developments shall be located so as not to be visible from public places and the ground level of adjoining properties. Details (type and location) of the water heaters shall be submitted to and approved by the Principal Certifying Authority prior to the issue of a Construction Certificate.

Demolition

- 83. Demolition shall be carried out in accordance with Australian Standard 2601 - 'The demolition of structures' or any subsequent standard and the relevant legislation.

84. The demolition of the building shall be carried out by a licensed demolition contractor. A copy of the licence shall be submitted to Council and the Principal Certifying Authority prior to any work commencing on site.
85. Details demonstrating that excavated and demolished materials including asbestos-based materials will be disposed of at an approved site shall be submitted to the Principal Certifying Authority prior to any work commencing on site.
86. The cleared ground surface of the site shall be suitably stabilised to prevent the generation of dust and the erosion of soil on the site.

Fire Safety Measures

87. Upon completion of works a final fire safety certificate is to be issued from a properly qualified person in respect of each essential fire safety measure installed within the building and specified in the fire safety schedule. The final fire safety certificate shall be provided prior to the issue of an Occupation Certificate.
88. Each 12 months after the installation of essential fire or other safety measures, the owner of a building must submit an Annual Fire Safety Statement for the building to Council. In addition a copy of the statement must be given to the NSW Fire Commissioner and a copy displayed prominently in the building.

Hoardings

89. If 'A' type hoarding is to be erected about the building site, it is to comply with NSW Workcover's requirements; shall have a minimum height of 1.8 m and comply with AS1725-2003 (Galvanized Rail-Less Chain-Wire Security Fences and Gates) or AS 4687-2007 (Temporary Fencing and Hoardings). Inverted trench mesh is not an acceptable 'A' type hoarding and as such does not satisfy AS 1725-2003 and as such shall not be installed to the building site.
90. An overhead 'B' type hoarding shall be constructed where buildings over 7.5 m in height above the footpath level and within 3.6 m of the street alignment are being erected or demolished or where the outer part of such a building adjoining a public way is being altered. Where the height of the building or the position of the site is such that danger is likely to occur from falling objects, additional safety hoarding shall be provided to the satisfaction of the principal certifying authority and Workcover NSW.
91. An overhead 'B' type hoarding shall be constructed where material is being hoisted over or across a public way.
92. The following additional requirements apply to the erection of a 'B' type hoarding:
 - (a) No advertisement of any kind shall be affixed to hoarding with the exception of a board not exceeding 2400 -mm by 1800-mm on which may be shown the architects, builders and principal certifying authority company name / contact details or any particulars regarding the subject building, and notices regarding the existing or future occupancies in the building.
 - (b) A sign reading 'billposters will be Prosecuted' shall be attached or printed upon the front of the hoarding

(c) A hydrant or other footpath box shall not be covered in any way or access to it impeded

(d) Cranes shall not be placed upon the public way unless a permit has been obtained under section 68 Local Government Act, 1993.

(e) The hoarding must be so constructed that it will not obstruct the view of traffic lights of motorists or pedestrians.

(f) The use of the roadway for the storage of building materials is not permitted.

(g) Where materials are being hoisted over a public way a sign shall be attached or printed upon the front of the hoarding at the decking level with the lettering 'Lifting Operation Above'. The lettering shall not be less than 300-mm in height.

(h) Persons undertaking the work in accordance with this Approval must hold this Approval/Permit on-site for inspection.

(i) Approval for a temporary protective structure does not permit use of the roadway for general loading and unloading from construction vehicles. This requires a separate Construction Zone Application.

U) An appropriate qualified practising structural engineer shall certify the structural stability / adequacy of the erected 'B' type hoarding. A copy of the certificate shall be forward to the principal certifying authority and to Council, where Council is not the principal certifying authority.

93. The builder shall erect and maintain all necessary hoardings, barricades and warning signs required to provide adequate public safety. Night warning lamps are to be provided where necessary and must be in place before the approved activity commences.
94. Permits are required to erect Class 'A' or 'B' type hoardings. If any type hoarding is to occupy a section of Council's property, that section will require a permit for the occupation of Council's property. The applicant, owner, builder or site supervisor must apply for specific permits and pay the appropriate hoarding fees as adopted by Council's Fees and Charges schedule. The application form is available from Council's Customer Service Department.

Air Quality

95. As required by the Protection of the Environment Operations (Noise Control) Regulation 200S, air-conditioning units or heat pump water heaters shall not be audible in the habitable rooms of any other residential premises before 5am or after 10pm on any Saturday, Sunday or public holiday, or before 7am or after 10pm on any other day.
96. Prior to the issue of any Occupation Certificate the Principal Certifying Authority shall confirm that the development has been constructed in accordance with the recommended methodology within the endorsed Acoustic report to ensure noise levels do not exceed:
- (a) in any bedroom in the building-35 dB(A) at any time between 10 pm and 7 am,
 - (b) anywhere else in the building (other than a garage, kitchen, bathroom

or hallway)-40 dB(A) at any time.

Subdivision

97. The strata subdivision of the development shall be subject to a separate application.

Disabled Access

98. The Access Compliance Report, prepared by Vista Access Architects shall be updated to address the approved plans, as amended by the conditions of this consent, and the required accessibility design features are to be included in the Construction Certificate plans.
99. Access to the building for persons with disabilities shall be in accordance with the requirements of the Building Code of Australia , the relevant standards and the requirements of the Disability (Access to Premises - Buildings) Standards 2010. Details shall be submitted to and approved by the Principal Certifying Authority prior to the issue of a Construction Certificate.
100. Accessible car parking spaces for persons with disabilities shall be provided in accordance with the Building Code of Australia and the relevant standards. Details shall be submitted to and approved by the Principal Certifying Authority prior to the issue of a Construction Certificate.
101. Prior to the issue of a Construction Certificate, certification shall be submitted to the Principal Certifying Authority demonstrating that at least 20% of the residential units meet the silver level Universal Design Guide requirements of the Liveable Housing Design. In order to meet the requirements, the following must be achieved:
- (a) A safe continuous and step free path of travel from the street entrance *and/or* parking area to a dwelling entrance that is level.
 - (b) Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces.
 - (c) A toilet on the ground (or entry) level that provides easy access.
 - (d) A bathroom that contains a hobless (step-free) shower recess.
 - (e) Reinforced walls around the toilet, shower and bath to support the safe installation of grabrails at a later date
 - (f) A continuous handrail on one side of any stairway where there is a rise of more than one metre.
 - (g) Stairways are designed to reduce the likelihood of injury and also enable future adaptation.

Waste Management

102. Submission of a comprehensive Waste Management Plan to the Principal Certifying Authority for approval prior to the issue of a Construction Certificate. Such plan shall address demolition, construction and operation waste arising from the development and shall include:-
- (a) type and likely quantity of waste arising from the demolition and construction activities;
 - (b) storage, disposal and recycling measures for all demolition and construction waste, including specific disposal points and arrangements;
 - (c) type and likely quantity of trade and operational waste arising from the proposed development. including storage and collection details. Note: Strathfield Council does not provide a trade waste service;

- (d) provision for a suitable number of 660 litre garbage bins and 240 litre recycling bins for the residential development; and
- (e) fit out details of any garbage/waste enclosures and storage areas.

Full compliance must be given to the endorsed Waste Management Plan submitted for the proposed development. Copies of any weighbridge receipts from all approved waste disposal facilities shall be retained for presentation to the Principal Certifying Authority upon request.

103. Prior to the issue of any Occupation Certificate waste identification and educational signage is to be installed within or adjacent to the waste storage room in accordance with the requirements Part H "Waste Minimisation and Management" of the Strathfield Consolidated Development Control Plan 2005.

104. A Positive Covenant under Section 88E of the Conveyancing Act shall be created on the title of the property as follows :

(a) Full and free right must be provided to Strathfield Council employees or its authorised contractors to:

- (i) Enter upon the land and remove any waste products using any vehicle or equipment as necessary;
- (b) The owner of the lot burdened shall be solely responsible for the cost of maintaining in good and sufficient repair at all times the internal roads or access ways used by Strathfield Council for the purpose of exercising its rights as set out in clause (a) above.

The wording of the Instrument shall be submitted to, and approved by Council prior to lodgement at Land & Property Information NSW. The Instrument shall be registered and a registered copy of the document shall be submitted to and approved by the consent authority prior to the issue of an Occupation Certificate.

Land Contamination

105. All soil material removed from the site is to be classified in accordance with the "Waste Classification Guidelines, Part 1: Classifying Waste" NSW DECC and disposed of at a suitably licensed facility. Copies of any weighbridge receipts from all approved waste disposal facilities shall be retained for presentation to the Principal Certifying Authority upon request.

Geotechnical

106. The recommended additional geotechnical investigation work recommended in Section 4 of the Geotechnical Investigation Report prepared by J K Geotechnics, dated 15 January 2016 shall be undertaken prior to the commencement of the excavation works approved by this consent. The construction recommendations contained in Section 4 of the Geotechnical Investigation Report prepared by J K Geotechnics, dated 15 January 2016 shall be carried out during construction of the project.

Finish of Driveway Opening

107. The walls of the driveway opening are to be finished in the material identified as MCC1 (matching the ground floor front facade material) as shown on the approved materials and finishes schedule.

Operable Conditions

108. The retail and commercial suites shall operate only between the hours of 9am and 5.30pm Monday to Friday and 9am-4pm Saturdays, except with separate approval. No approval is granted for use of the external retail/commercial courtyards, which require separate development consent for use. No approval is granted for the use of the retail/commercial suites as cafes/restaurants and such use would require separate development consent.

Integrated Development

Roads and Maritime Service

109. Roads and Maritime has previously vested a strip of land as road along the Punchbowl Road frontage of the subject property as shown by grey colour on the attached Aerial - "X".

A strip of land along the Punchbowl Road frontage of the subject property is affected in by a Road Widening Order under Section 25 of the Roads Act 1993 as published in Government Gazette 100 of 30-08-1957 as shown by pink colour on the attached Aerial- "X" and DP447679.

Therefore all new buildings or structures together with any improvements integral to the future use of the site are to be erected clear of the land acquired or reserved for road widening unlimited in height or depth. No substantial trees or trees with the potential to be substantial trees are to be planted in the area acquired or reserved for road widening for road.

110. The construction of the new left in and left out kerb and gutter crossing including the raised median within the property boundary on Punchbowl Road shall be in accordance Roads and Maritime requirements. Details of these requirements should be obtained from Roads and Maritime Services, Manager Developer Works, Statewide Delivery, Parramatta (telephone 9598 7798).

Detailed design plans of the proposed kerb and gutter crossings are to be submitted to Roads and Maritime for approval prior to the issue of a Construction Certificate and commencement of any road works. A plan checking fee (amount to be advised) and lodgement of a performance bond may be required from the applicant prior to the release of the approved road design plans by Roads and Maritime.

111. All vehicles are to enter and exit the site in a forward direction.
112. All vehicles are to be wholly contained on site before being required to stop.
113. The developer is to submit design drawings and documents relating to the excavation of the site and support structures to Roads and Maritime for assessment, in accordance with Technical Direction GTD2012/001.

The developer is to submit all documentation at least six (6) weeks prior to commencement of construction and is to meet the full cost of the assessment by Roads and Maritime. The report and any enquiries should be forwarded to:

Project Engineer, External Works
Sydney Asset Management
Roads and Maritime Services

PO Box 973 Parramatta CBD 2124.
Telephone 8849 2114
Fax 8849 2766

If it is necessary to excavate below the level of the base of the footings of the adjoining roadways, the person acting on the consent shall ensure that the owner/s of the roadway is/are given at least seven (7) days notice of the intention to excavate below the base of the footings. The notice is to include complete details of the work.

114. Detailed design plans and hydraulic calculations of any changes to the stormwater drainage system are to be submitted to Roads and Maritime for approval, prior to the commencement of any works.

Details should be forwarded to: Suppiah.Thillai@rms.nsw.gov.au

A plan checking fee will be payable and a performance bond may be required before Roads and Maritime approval is issued. With regard to the Civil Works requirement please contact the Roads and Maritime Project Engineer, External Works Ph: 8849 2114 or Fax:88492766.

115. All demolition and construction vehicles are to be contained wholly within the site and vehicles must enter the site before stopping. A construction zone will not be permitted on Punchbowl Road.
116. A Road Occupancy Licence should be obtained from Transport Management Centre for any works that may impact on traffic flows on Punchbowl Road during construction activities.

NSW Office of Water

General

117. An authorisation shall be obtained for the take of groundwater as part of the activity. Groundwater shall not be pumped or extracted for any purpose other than temporary construction dewatering at the site identified in the development application. The authorisation shall be subject to a currency period of 12 months from the date of issue and will be limited to the volume of groundwater take identified.
118. The design and construction of the building must prevent any take of groundwater after the authorisation has lapsed by making any below-ground levels that may be impacted by any water table fully watertight for the anticipated life of the building. Waterproofing of below-ground levels must be sufficiently extensive to incorporate adequate provision for unforeseen high water table elevations to prevent potential future inundation.
119. Sufficient permanent drainage shall be provided beneath and around the outside of the watertight structure to ensure that natural groundwater flow is not impeded and:
(a) any groundwater mounding at the edge of the structure shall be at a level not greater than 10 % above the level to which the water table might naturally rise in the location immediately prior to the construction of the structure; and
(b) any elevated water table is more than 1.0 m below the natural ground surface existent at the location immediately prior to the construction of the structure; and

(c) where the habitable part of the structure (not being footings or foundations) is founded in bedrock or impermeable natural soil then the requirement to maintain groundwater flows beneath the structure is not applicable.

120. Construction methods and material used in and for construction shall be designed to account for the likely range of salinity and pollutants which may be dissolved in groundwater, and shall not themselves cause pollution of the groundwater.
121. OPI Water requires documentation (referred to as a 'report') comprising measurements, maps, bore logs, calculations, results, discussion and justification for various matters related to the dewatering process must be provided. Information will be required at several stages: prior to construction commencing (initial report - which will accompany the application for the authorisation), at any time when an authorisation renewal is required or a significant change in activities occurs (intermediate report); and at the completion of dewatering and related operations (completion report).

Reports need to be submitted to OPI Water at Parramatta Office, in a format consistent with electronic retrieval without editing restrictions; raw data should be presented in Excel spreadsheets without editing restrictions.

Prior to excavation

122. The following shall be included in the initial report:
 - (a) measurements of groundwater levels beneath the site from a minimum of three relevant monitoring bores, together with details of the bores used in the assessment including bore logs and three-dimensional identification information.
 - (b) a map of the site and its immediate environs depicting the water table (baseline conditions) shown relative to the topography and approved construction footprint from the surface level and below. An assessment of the potential variation in the water table during the life of the proposed building together with a discussion of the methodology and information on which this assessment is based.
 - (c) details of the present and potential groundwater flow paths and hydraulic gradients in and around the site; the latter in response to the final volumetric emplacement of the construction.
 - (d) a schedule for the ongoing water level monitoring and description of the methodology to be used, from the date of consent until at least two months after the cessation of pumping. [OPI Water prefers that groundwater level measurements should be undertaken on a continuous basis using automatic loggers in monitoring bores.]
123. The Applicant shall assess the likely impacts of the dewatering activities on other groundwater users or structures or public infrastructure; this assessment will include an appropriate bore, spring or groundwater seep census and considerations relevant to potential subsidence or excessive settlement induced in nearby buildings and property, and be documented together with all calculations and information to support the basis of these in the initial report.
124. Groundwater quality testing of samples taken from outside the footprint of the proposed construction, with the intent of ensuring that as far as possible the natural and contaminant hydrochemistry of the potential dewatered groundwater is understood, shall be conducted on a suitable number of samples and tested by a NATA-certified laboratory. Details of the sampling locations and the protocol used, together with the test results accompanied by laboratory test certificates shall be included in the initial report. An assessment of results must be done by suitably

qualified persons with the intent of identifying the presence of any contaminants and comparison of the data against accepted water quality objectives or criteria for the intended dewatering purpose. In the event of adverse quality findings, the Applicant must develop a plan to mitigate the impacts of the hydrochemistry on the dewatered groundwater and present the details of all assessments and plans in the initial report.

125. Groundwater quality testing generally in accordance with Clause 8, shall be undertaken on any anniversary or other renewal or alteration of any dewatering authorisation.
126. A reasonable estimate of the total volume of groundwater to be extracted shall be calculated and included in the initial report; together with details and calculation methods for the parameters and supporting information to confirm their development or measurement (e.g. permeability determined by slug-testing, pump-testing or other means).
127. A copy of a valid consent for the development shall be provided in the initial report.
128. The method of disposal of pumped water shall be nominated (i.e. reinjection, drainage to the stormwater system or discharge to sewer) and a copy of the written permission from the relevant controlling authority shall be provided in the initial report. The disposal of any contaminated pumped groundwater (sometimes called "tailwater") must comply with the provisions of the *Protection of the Environment Operations Act 1997* and any requirements of the relevant controlling authority.
129. Contaminated groundwater (i.e. above appropriate NEPM 2013 thresholds) shall not be reinjected into any aquifer. The reinjection system design and treatment methods to remove contaminants shall be nominated and included in the initial report and any subsequent intermediate report as necessary.

The quality of any pumped water that is to be reinjected must be demonstrated to be compatible with, or improve, the intrinsic or ambient groundwater in the vicinity of the reinjection site.

During excavation

130. Engineering measures designed to transfer groundwater around and beneath the basement shall be incorporated into the basement construction to prevent the completed infrastructure from restricting pre-existing groundwater flows.
131. Piping, piling or other structures used in the management of pumped groundwater shall not create a flooding hazard or induce mounding of groundwater. Control of pumped groundwater is to be maintained at all times during dewatering to prevent unregulated off-site discharge.
132. Measurement and monitoring arrangements to the satisfaction of DPI Water are to be implemented. Weekly records of the volumes of all groundwater pumped and the quality of any water discharged are to be kept and a completion report provided after dewatering has ceased. Records of groundwater levels are to be kept and a summary showing daily or weekly levels in all monitoring bores provided in the completion report.
133. Pumped groundwater shall not be allowed to discharge off-site (e.g. adjoining roads, stormwater system, sewerage system, etc.) without the controlling authority's approval and/or owner's consent/so The pH of discharge water shall be managed to

be between 6.5 and 8.5. The requirements of any other approval for the discharge of pumped groundwater shall be complied with.

134. Dewatering shall be undertaken in accordance with groundwater-related management plans applicable to the excavation site. The requirements of any management plan (such as acid sulfate soils management plan or remediation action plan) shall not be compromised by the dewatering activity.
135. The location and construction of groundwater extraction works that are decommissioned are to be recorded in the completion report. The method of decommissioning is to be identified in the documentation.
136. Access to groundwater management works used in the activity is to be provided to permit inspection when required by **DPI Water** under appropriate safety procedures.

Following excavation

137. Following completion of the dewatering operations, the applicant shall submit to **DPI Water**, Parramatta Office, the completion report which shall include:
 - (a) detail of the volume of water taken, the precise periods and location of water taken, the details of water level monitoring in all of the relevant bores; and
 - (b) a water table map depicting the aquifer's settled groundwater condition and a comparison to the baseline conditions; and
 - (c) a detailed interpreted hydrogeological report identifying all actual resource and third party impacts, including an assessment of altered groundwater flows and an assessment of any subsidence or excessive settlement induced in nearby buildings and property and infrastructure.
138. The completion report is to be assessed by **DPI Water** prior to any certifying agency's approval for occupation or use of the completed construction.

You are reminded that the other conditions and terms of the original consent still apply and must be complied with.

An amended Construction Certificate may also be required, if the modification relates to changes to the building.

Yours faithfully


GEOFF BAKER
PUBLIC OFFICER

