

2018SSH013 – 475A Captain Cook Drive, Woollooware

MA17/0591

ASSESSMENT REPORT APPENDICES

Appendix	A	Approved Conditions of Consent DA16/1068
	B	JRPP Report DA16/1068 (2018SYE090)
	C	DPI – Fisheries – approval (7 March 2018)
	D	Pile Wall Details and Plans

Approved Conditions of Development Consent
Development Application No. 16/1068

1. Approved Plans and Documents

The development must be undertaken substantially in accordance with the details and specifications set out on the Plan / Drawings in the table below:

<i>Plan number</i>	<i>Reference</i>	<i>Prepared by</i>	<i>Date</i>
<i>Architectural Plans</i>			
A-DA-100-010 Revision E	Context Plan	Turner	Prepared 16.08.16
A-DA-100-020 Revision E	Site Plan / Staging Plan	Turner	Prepared 16.08.16
A-DA-110-001 Revision Q	Lower Ground	Turner	Prepared 14.04.17
A-DA-110-002 Revision Q	Ground	Turner	Prepared 14.04.17
A-DA-110-010 Revision P	Level 1	Turner	Prepared 07.04.17
A-DA-110-020 Revision P	Level 2	Turner	Prepared 07.04.17
A-DA-110-030 Revision L	Level 3	Turner	Prepared 07.04.17
A-DA-110-040 Revision L	Level 4	Turner	Prepared 07.04.17
A-DA-110-050 Revision M	Level 5	Turner	Prepared 07.04.17
A-DA-110-060 Revision M	Level 6	Turner	Prepared 07.04.17
A-DA-110-070 Revision Q	Level 7	Turner	Prepared 16.05.17
A-DA-110-080 Revision N	Level 8	Turner	Prepared 16.05.17
A-DA-110-090 Revision K	Level 9	Turner	Prepared 07.04.17
A-DA-110-100 Revision L	Level 10	Turner	Prepared 07.04.17
A-DA-110-110 Revision K	Level 11	Turner	Prepared 07.04.17

A-DA-110-120 Revision L	Level 12	Turner	Prepared 07.04.17
A-DA-110-130 Revision L	Level 13	Turner	Prepared 07.04.17
A-DA-110-140 Revision L	Level 14 Roof	Turner	Prepared 07.04.17
A-DA-110-201 Revision A	Building A - Minimum ADG Unit Size	Turner	Prepared 11.04.17
A-DA-110-202 Revision A	Building B - Minimum ADG Unit Size	Turner	Prepared 11.04.17
A-DA-112-001 Revision F	Adaptable Apartment Layouts	Turner	Prepared 12.04.17
A-DA-112-002 Revision F	Adaptable Apartment Layouts	Turner	Prepared 12.04.17
A-DA-210-010 Revision F	North Elevation	Turner	Prepared 16.08.16
A-DA-210-020 Revision G	South Elevation	Turner	Prepared 16.05.17
A-DA-210-030 Revision G	East Elevations	Turner	Prepared 16.05.17
A-DA-210-040 Revision G	West Elevations	Turner	Prepared 16.05.17
A-DA-210-050 Revision G	Section / North Elevation Building A	Turner	Prepared 16.05.17
A-DA-210-060 Revision F	Section / South Elevation Building B	Turner	Prepared 16.08.16
A-DA-210-070 Revision F	Section / South Elevation Building D	Turner	Prepared 16.08.16
A-DA-210-080 Revision F	Section / North Elevation Building B	Turner	Prepared 16.08.16
A-DA-310-010 Revision F	Sections AA	Turner	Prepared 01.07.16
A-DA-320-010 Revision B	Section DD	Turner	Prepared 16.08.16
A-DA-600-010 Revision B	Materials and Finishes Sample Board	Turner	Prepared 18.5.16
A-DA-700-100 Revision B	Construction Staging	Turner	Prepared 01.07.16

A-DA-900-010 Revision D	Perspective 01	Turner	Prepared 01.07.16
A-DA-900-011 Revision D	Perspective 02	Turner	Prepared 01.07.16
A-DA-900-012 Revision D	Perspective 03	Turner	Prepared 26.07.16
A-DA-900-013 Revision E	Perspective 04	Turner	Prepared 01.07.16
A-DA-900-014 Revision F	Perspective 05	Turner	Prepared 16.08.16
A-DA-900-015 Revision E	Perspective 06	Turner	Prepared 01.06.16
A-DA-900-016 Revision B	Perspective 07	Turner	Prepared 01.07.16
A-DA-900-017 Revision E	Perspective 08	Turner	Prepared 06.12.16
<i>Infrastructure Plans</i>			
CS3-2-10 Rev G	Flood Extents Plan Post Development Q100 with 2100 Sea Level	Calibre Consulting	Prepared 21.08.17
CS3-2-11 Rev A -	General Arrangement Plan - Design (2017 Survey 2) Sheet 1 of 2	Calibre Consulting	Prepared 21.08.17
CS3-2-12 Rev A -	General Arrangement Plan - Design (2017 Survey 2) Sheet 2 of 2	Calibre Consulting	Prepared 21.08.17
CS3-4-30 Rev A	Design X-Sections (2017 Survey 2) Sheet 1 of 4	Calibre Consulting	Prepared 21.08.17
CS3-4-31 Rev A	Design X-Sections (2017 Survey 2) Sheet 2 of 4	Calibre Consulting	Prepared 21.08.17
CS3-4-32 Rev A	Design X-Sections (2017 Survey 2) Sheet 3 of 4	Calibre Consulting	Prepared 21.08.17
CS3-4-33 Rev A	Design X-Sections (2017 Survey 2) Sheet 4 of 4	Calibre Consulting	Prepared 21.08.17

Drawing 01	Pedestrian Bridge	Fleetwood Urban	Prepared 08.08.17
Drawing 02	Pedestrian Bridge	Fleetwood Urban	Prepared 08.08.17
Drawing 03	Pedestrian Bridge	Fleetwood Urban	Prepared 08.08.17
<i>Landscape Plans</i>			
S3-DA-02 Rev D	Site Context and Pedestrian Links	Aspect Studios	Prepared July 2016
S3-DA-03 Rev D	Site Context Plan	Aspect Studios	Prepared July 2016
S3-DA-04 Rev D	Lower Ground / Ground Floor Plan	Aspect Studios	Prepared July 2016
S3-DA-05 Rev D	Lower Ground / Section	Aspect Studios	Prepared July 2016
S3-DA-06 Rev D	Ground Floor / Section	Aspect Studios	Prepared July 2016
S3-DA-07 Rev D	Level 1 Communal Courtyards Plan	Aspect Studios	Prepared July 2016
S3-DA-08 Rev D	Level 1 Communal Courtyards Section CC	Aspect Studios	Prepared July 2016
S3-DA-09 Rev D	Level 1 Communal Courtyards Section DD	Aspect Studios	Prepared July 2016
S3-DA-010 Rev D	Planting Strategy Lower Ground & Ground Level	Aspect Studios	Prepared July 2016
S3-DA-011 Rev D	Planting Strategy Level 1 Communal Courtyard	Aspect Studios	Prepared July 2016
LC01 Revision D	Landscape Masterplan	Habit8	Prepared 22.09.17
LC02 Revision D	Landscape Staging Plan	Habit8	Prepared 22.09.17
LC03 Revision D	Indicative Planting Strategy Plan	Habit8	Prepared 22.09.17
LC09 Revision D	Stage A2 - Landscape Concept Plan	Habit8	Prepared 22.09.17
LC10 Revision D	Stage B - Landscape Concept Plan	Habit8	Prepared 22.09.17
LC11 Revision D	Stage B -Landscape Cross Sections	Habit8	Prepared 22.09.17
LC12 Revision D	Typical Landscape Construction & Bridge Details	Habit8	Prepared 22.09.17

LC13 Revision D	Landscape Specification Notes and Maintenance Program	Habit8	Prepared 22.09.17
-----------------	--	--------	-------------------

and any details on the application form and on any supporting information received with the application except as amended by the following conditions.

Note: The following must be submitted to Sutherland Shire Council prior to the commencement of any building work.

- i) A Construction Certificate.
- ii) Notification of the appointment of a Principal Certifying Authority and a letter of acceptance from that Principal Certifying Authority.
- iii) Notification of the commencement of building works with a minimum of 2 days' notice of such commencement.

2. Design Changes Required

A. Before Construction

The following design changes must be implemented:

- i) To help activate and improve surveillance of Grove Lane a vertical window must be provided on the southern side of the entry door for each of the nine townhouses in the Part West Elevation: Building C facing Grove Lane.
- ii) To improve the sense of enclosure and experience of pedestrians in Grove Lane, provide a pergola structure with climbers at the northern end of the lane to match the one at the southern end.
- iii) A disabled access ramp must be provided on the south-eastern side of Building A to enable access between Captain Cook Drive and the terrace adjoining the commercial area colonnade (as shown on the Landscape Masterplan L005 prepared by Habit8).
- iv) The fixed louvres shown on the northern side of the balcony on Unit A.1.03 must be deleted and relocated to the southern side of the balcony of Unit A.1.04 to improve outdoor amenity for this unit.

Details of these design changes must be included in documentation submitted with the application for a Construction Certificate.

3. Integrated Development Approval - Requirement of Approval Bodies

A. General Terms of Approval from Other Approval Bodies

The development must be undertaken in accordance with all General Terms of Approval (GTA) of the following approval bodies under Section 91A of the Environmental Planning and Assessment Act 1979:

- Department of Primary Industries (Fisheries)
- Department of Primary Industries (Water)

A copy of the GTA and any further requirements of the approval body/bodies are attached to this development consent. These requirements must be incorporated in the application for a Construction Certificate.

4. Requirements of Authorities

A. Requirements from Other Authorities

The development must be undertaken in accordance with the requirements of Ausgrid as follows:

Proximity to Existing Network Assets

Overhead Power lines

There are existing overhead electricity network assets in Captain Cook Drive and Proposed Foreshore Park area.

Safework NSW Document - Work Near Overhead Powerlines: Code of Practice outlines the minimum safety separation requirements between these mains / poles to structures within the development throughout the construction process. It is a statutory requirement that these distances be maintained throughout construction. Special consideration should be given the locating and operations of cranes and the location of any scaffolding.

The “as constructed” minimum clearances to the mains should also be considered. These distances are outlined in the Ausgrid Network Standard, NS220 Overhead Design Manual. This document can be sourced from Ausgrid’s website, www.ausgrid.com.au.

Should the existing overhead mains require relocating due to the minimum safety clearances being compromised in either of the above scenarios, this relocation work is generally at the developers cost. It is also the responsibility of the developer to ensure that the existing overhead mains have sufficient clearance from all types of vehicles that are expected be entering and leaving the site.

Underground Cables

There are existing underground electricity network assets in Captain Cook Drive.

Special care should also be taken to ensure that driveways and any other construction activities within the footpath area do not interfere with the existing cables in the footpath. Ausgrid cannot guarantee the depth of cables due to possible changes in ground levels from previous activities after the cables were installed. Hence it is recommended that the developer locate and record the depth of all known underground services prior to any excavation in the area.

Safework Australia - Excavation Code of Practice and Ausgrid's Network Standard NS156 outlines the minimum requirements for working around Ausgrid's underground cables.

Prior to the commencement of works and prior to the issue of the Construction Certificate, Ausgrid requires a joint inspection of the electrical infrastructure and property in the vicinity of the project (especially the poles CR 09778, CR 09779, CR 09780 and CR 09778). (These dilapidation surveys will establish the extent of any existing damage and enable any further deterioration during construction to be observed.) The submission of a detailed dilapidation report will be required unless otherwise notified by Ausgrid.

Works shall not commence until written endorsement of the dilapidation report has been obtained from Ausgrid. The Principle Certifying Authority shall not issue the Construction Certificate until Ausgrid's written endorsement of the dilapidation report has been obtained.

Prior to the commencement of works, the Applicant shall peg-out the common boundary with Ausgrid's easement to ensure that there is no encroachment. This work is to be undertaken by a registered surveyor. Ausgrid is to be provided with minimum 7 days notification of the intent to peg the boundary and will be given 7 days to review/ comment on the survey. The Principle Certifying Authority shall not issue the Construction Certificate until the expiration of the 7 day review period. A Construction Certificate can then be issued only if there is no response from Ausgrid.

The following items are to be submitted to Ausgrid for review and endorsement prior to the commencement of any works:

- Scaffolding plan that includes identifies location of scaffolding parallel to the overhead feeder. The plan should identify how the scaffolding will be connected to earth via electrode with an earth impedance of 30ohm or less to bleed off any capacitive charge that may otherwise deliver a shock.
- A work site safety plan that identifies the clearances required from the power line for excavation equipment.

- Machinery to be used during excavation/construction.
 - An electrical safety plan including but not limited to:
 - instrumentation and the monitoring regime;
 - testing of the scaffold bleed resistor.
 - If power tools are to be used in close proximity to the transmission tower / poles shown then a locally earthed generator should be used as there is potential to receive an electric shock.
- Material storage plan identifying storage areas as long metallic materials such as pipes or steel reinforcing should not be stored in close parallel orientation to the feeder as they present a risk of induced voltage shock hazard during handling. Note for safety reasons scaffolding may not be erected in the easement as it may compromise the safety clearance to the in-service power line.

No works are to commence until written confirmation is received from Ausgrid to this condition.

The applicant is to obtain Ausgrid's endorsement prior to the installation of any hoarding or scaffolding facing the common boundary with the electrical infrastructure / easement.

As there is a risk that rubble / debris may fall down from the construction site onto the transmission power lines during demolition/excavation and or construction, a reliable method of prevention of such incidents must be provided to Ausgrid for its endorsement prior to the issue of a construction certificate.

No metal ladders, tapes and plant/machinery, or conductive material are to be used within 6 horizontal meters of any live electrical equipment. This applies to power lines not covered by "tiger tails" in accordance with WorkCover guideline "work near overhead power lines" within or adjacent to the electrical infrastructure / easement.

Prior to the issue of a Construction Certificate a Risk Assessment / Management Plan and detailed Safe Work Method Statements (SWMS) for the proposed works are to be submitted to Ausgrid for review and comment on the impacts on electrical infrastructure / easement / substation.

The Principle Certifying Authority is not to issue the Construction Certificate until written confirmation has been received from Ausgrid confirming that this condition has been satisfied.

Prior to the issuing of the Construction Certificate the Applicant is to submit to Ausgrid a plan showing all the craneage and other aerial operations for the development and must comply with all Ausgrid requirements. Ausgrid does not permit any load to be lifted over the power lines. Nor shall any part of the crane jib / boom be above the transmission power line whilst lifting a load.

The Principle Certifying Authority is not to issue the Construction Certificate until written confirmation has been received from Ausgrid confirming that this condition has been satisfied.

The Principle Certifying Authority shall not issue the Construction Certificate until written endorsement from Ausgrid has been obtained and that the Ausgrid endorsed measures have been indicated on the Construction Drawings.

The Applicant must provide a plan of how future maintenance of the development facing the electrical infrastructure / easement is to be undertaken. The maintenance plan is to be submitted to Ausgrid prior to the issuing of the Occupancy Certificate.

The Principle Certifying Authority is not to issue an Occupation Certificate until written confirmation has been received from Ausgrid advising that the maintenance plan has been prepared to its satisfaction.

Low voltage light standards in the park / foreshore area are in close proximity to the transmission line should be double insulated to prevent a shock hazard at the light standard.

Water taps that are located within the transmission easement or with pipe run parallel to the easement in excess of 15m should be supplied with non-conductive pipework to prevent a shock hazard.

If conductive pipes are required for a firefighting water supply near the transmission tower or poles, a bonded concrete pad should be installed around the base of faucet connections.

No external GPOs or electrical appliances (e.g. BBQ's) should be located in close proximity to the transmission tower and poles.

The design of the building should take into consideration the risk of capacitive charge build up on metallic windows / louvres / balustrades, etc.

5. Crime Prevention through Environmental Design

A. During Construction

Security lighting and/or a security company shall be incorporated to protect the site during the construction phase.

B. Before Occupation

To minimise the opportunity for crime, and in accordance with Crime Prevention Through Environmental Design (CPTED) principles, the development shall incorporate the mitigation

measures identified in the CPTED Assessment prepared by JBA dated August 2016, in addition to the following:

- i) Access control shall be installed to the car parking area and residential foyers to permit admission of authorised persons only (including employees of the commercial premises and residents). An intercom system shall be installed to enable controlled access for visitors.
- ii) Security lighting shall be installed to the entry and exit points, pathways, footpaths and car parking areas. External Lighting must satisfy AS1158.3.1.
- iii) The concrete floor of the parking levels shall be shined to increase light bounce.
- iv) A CCTV system shall be installed with a focus on monitoring the parking and storage areas and access points to the buildings.
- v) Signage shall be installed to assist in way finding through the development.
- vi) All Graffiti is removed as soon as is practical from the time of reporting.

6. Design Requirements for Adaptable Housing

A. Design

A report prepared by a suitably qualified Adaptable Housing Specialist must be included with the Construction Certificate, demonstrating that a minimum of 71 dwellings (combined adaptable and livable) and the required allocated vehicular parking spaces have been designed within this stage of the development. These are to comply with the requirements of AS4299 - Adaptable Housing. The report must contain a completed checklist (Appendix A - AS4299) demonstrating compliance with the requirements of a Class C Adaptable Dwellings.

The report shall demonstrate that all services (water-closet, basins, showers, floor wastes etc.) must have pipes installed in locations required for adaptation and capped ready for use. Capping points are to be identifiable within the finished bathroom.

B. Before Occupation

A suitably qualified Adaptable Housing Specialist must certify prior to the issue of any Occupation Certificate that the development has been constructed in accordance with the requirements of AS4299 - Adaptable Housing for a Class C Adaptable House. A copy of this certification must accompany the Occupation Certificate.

7. Foreshore Landscaping

A. Prior to Occupation

Prior to the issue of any Occupation Certificate:

- i) A Final occupation certificate must be issued for the works within Stages A1 and A2 detailed in DA17/1585 prior to issue of any Occupation Certificate for this development

consent (Stage 3 Residential). The landscape works to be completed must include the high level bridge as detailed in condition 31 of this consent.

This condition should also be read in conjunction with Conditions 22, 28, 29, 30, 31, 33, 35, 38, 39, 40, 41 and any other relevant conditions of this consent.

- ii) A positive covenant under Section 88B of the Conveyancing Act 1919 must be created over Lot 3 DP 1218707 requiring that the landscaping works undertaken within Stage A1 as part of DA17/1585 be maintained in perpetuity.

B. On-going

The on-going maintenance of the area within Stage A2 will be the responsibility of the relevant owner's committee for Stage 3 Residential.

8. Green Travel Plan

A. During Works

An updated Green Travel Plan shall be prepared and submitted to Sutherland Shire Council's Director - Shire Planning for approval. The Plan shall include the following:

- i) The responsibility of the Plan implementation and review.
- ii) Quantify and measurement of mode share for bus and active transport.
- iii) The setting of quantifiable mode share timeframes, targets and milestones.
- iv) Mode share target reporting, measuring, and auditing.
- v) Frequency of reporting (and where reports will be sent) .
- vi) Demonstrate how targets will be met, and how residents and commercial/ retail tenants will be compelled to participate in achieving the set mode share targets.
- vii) Plan review and amendment procedure.

B. Before Occupation

The approved Green Travel Plan shall be implemented prior to occupation and thence made readily available to all residents, visitors and any employees of the development.

9. Ecologically Sustainable Design Measures

A. Before Construction

In accordance with the Ecologically Sustainable Development Report (ARUP, July 2016), the following ESD measures shall be incorporated into the design:

- i) Implementation of energy monitoring systems to enable each household to track energy usage.
- ii) The use of recycled or FSC - Forestry Stewardship Council certified timber.

- iii) Incorporation of Photovoltaic Cells within the dedicated rooftop PV panel zones on Building A to power services provided within the communal areas.

Details shall be included with the Construction Certificate.

B. Prior to Occupation

Certification of these requirements must be provided prior to the issue of any Occupation Certificate for the Stage 3 residential development.

10. Aboriginal Archaeological Investigation

To ensure the aboriginal heritage is managed appropriately through the development, the recommendations of the La Perouse Local Aboriginal Land Council, dated 15 February 2013 must be implemented, including the following:

A. During Construction

- i) Should any Aboriginal objects (such as human or animal bone, shell material or stone artifacts) be unearthed during the works, all works must cease and the NSW Office of Environment and Heritage and La Perouse Local Aboriginal Land Council must be contacted immediately.

B. Before Occupation

- i) Interpretive signs are implemented throughout the development to promote the Aboriginal cultural heritage values of the area, in particular the heritage values of Woollooware Bay. This should be informed by research into the Aboriginal cultural heritage values of Woollooware Bay.

11. Pedestrian Wind Environment

A. Before Construction

Prior to the issue of any Construction Certificate for the building/s, the proponent shall demonstrate compliance with the recommendations of the Pedestrian Wind Environment Study prepared by Windtech dated 22 April 2016.

12. Complaints handling procedure

A. Before Construction

Prior to the issue of any Construction Certificate, a Complaints Handling Plan is to be prepared by a suitably qualified person and shall be submitted to and approved by the Accredited Certifier. Details addressing, but not limited to, how to prevent or minimise any complaint from the public or government authority, how to keep site employees up to date with accurate information and in a caring manner, and how to manage the complaint in a thoughtful and respectful manner, by understanding the concerns or needs of the person or authority.

The Complaints Handling Plan, information on the progress of the development and contact details of the Stage 2 Project Manager shall be communicated on the Cronulla Sutherland Leagues Club and developer's websites.

13. Internal Apartment Storage

A. Prior to Construction Certificate

A minimum of 888m³ of storage shall be provided within the individual apartments allocated on the basis of 6m³ per 1 bedroom unit, 8m³ per 2 bedroom unit and 10m³ per 3 bedroom units. The storage must be in addition to that provided in kitchens, bathrooms and bedrooms. Details of the storage shall be clearly shown on the Construction Certificate plans.

14. Modification of Development Consent No. DA14/0598

An application is to be made under Section 80A(5) of the Environmental Planning and Assessment Act 1979 requiring Development Consent No. DA14/0598 to be modified to require the on-going maintenance of the area within Stage A2 to be the responsibility of the relevant owner's committee for Stage 2 Residential, and this is to be done as follows:

- i) A positive covenant under Section 88B of the Conveyancing Act 1919 must be created over Lot 2 DP 1218707 requiring that the landscaping works undertaken within Stage 2 as part of DA17/1585 be maintained in perpetuity.

15. Noise Control During Construction

A. Prior to Construction

A detailed Construction Noise and Vibration Management Plan (CNVMP) must be included with any Construction Certificate. The CNVMP shall be based on the recommendations contained in the Noise Impact Assessment prepared by Acoustic Logic, dated April 2016 and the Review of Noise, Light and Bird Strike Potential, prepared by EcoLogical dated 28 July 2016 with regard to noise.

B. During Works

To minimise the noise impact on the surrounding environment the development shall be undertaken in accordance with the noise recommendations contained in the EcoLogical Review of Noise, Light and Bird Strike Potential, dated 28 July 2016. Works from construction activities are not permitted within 50m of habitat areas during October to January.

Building and demolition work must be carried out between the hours of 7:00am to 5:00pm Monday to Friday so that peak fauna foraging periods at dawn, dusk and night-time are avoided, and between 8:00am and 4:00pm Saturday.

No work must be carried out on Sundays and Public Holidays.

16. Public Place Environmental, Damage & Performance Security Bond

A. Before Issuing of any Construction Certificate

Prior to the issue of a Construction Certificate or the commencement of any works on site, whichever occurs first, the person acting on this consent must provide security to Sutherland Shire Council against damage that may be caused to any Council property and/or the environment as a consequence of the implementation of this consent. The security may be provided by way of a deposit with Council or a bank guarantee. A non-refundable inspection/administration fee is included in the bond value.

It is the responsibility of the person acting on this consent to notify Sutherland Shire Council of any existing damage to public areas in the vicinity of the development site by the submission of a current dilapidation report supported by photographs. This information must be submitted to Council at least 2 days prior to the commencement of works.

In the event that the dilapidation report is not submitted 2 days prior to commencement and the public area sustains damage the person acting on this consent may be held liable.

Should any public property and/or the environment sustain damage as a result of the works associated with this consent, or if the works put Council's assets or the environment at risk, Council may carry out any works necessary to repair the damage and/or remove the risk. The costs incurred must be deducted from the bond.

The value of the bond is \$100,000.00

Note: Bond amount includes a non-refundable administration fee which must be paid separately if security is provided by way of a deposit with Council or a bank guarantee.

Use of Bank Guarantee - As bond releases may occur under different timeframes only one bond amount/bond purpose is permitted on a Bank Guarantee. Multiple bonds will require multiple bank guarantees to be lodged.

B. After Occupation

A request for release of the bond may be made to Sutherland Shire Council after all works relating to this consent have been completed. Such a request must be submitted to Council on the 'Bond Release Request Form' signed by the owner or any person entitled to act on the consent and must be accompanied by a current dilapidation report including photographs.

SECTION 94 CONTRIBUTIONS

The following dedication of land and/or monetary contributions have been levied in relation to the proposed development pursuant to Section 94 of the Environmental Planning and Assessment Act 1979.

The Contributions Plan may be viewed on line on Council's web page (search for S94 Contributions Plan). A copy may also be viewed or purchased at the Customer Service Counter in Council's Administration Centre, Eton Street, Sutherland during office hours.

17. Monetary Contribution for Shire-Wide Open Space and Recreational Facilities

A. Before Construction

Pursuant to Section 94 of the Environmental Planning and Assessment Act 1979 and Sutherland Shire Council's Contributions Plan - Shire Wide Open Space and Recreation Facilities 2005, a monetary contribution of \$2,171,350.16 must be paid to Sutherland Shire Council toward the cost of land identified for acquisition and works contained in the Works Programme of the Contributions Plan.

This contribution has been assessed and calculated in accordance with the Shire Wide Open Space and Recreation Facilities 2005, Contribution Plan on the basis of 238 proposed Residential Flat Units.

The contribution will be indexed on 1 July in each year in accordance with the Implicit Price Deflator for Gross Fixed Capital Expenditure - Private Dwellings, with amended rates being available from Council.

Payment must be made prior to the issue of the Construction Certificate.

18. Community Facilities, Shire Wide 2003 Plan

A. Before Construction

A monetary contribution of \$358,925.42 must be made for the cost of providing community facilities.

This contribution has been assessed pursuant to s.94 of the Environmental Planning and Assessment Act, and the Sutherland Shire Contributions Plan - Community Facilities in the Sutherland Shire, after identifying the likelihood that this development will require or increase the demand for community facilities within the shire. It has been calculated on the basis 238 proposed Residential Flat Units.

The contribution will be indexed on 1 July in each year in accordance with the Implicit Price Deflator for Gross Fixed Capital Expenditure - Private Dwellings, with amended rates being available from Council.

Payment must be made prior to the issue of the Construction Certificate

19. Approvals Required under Roads Act or Local Government Act

A. Before Construction

No occupation or works are to be carried out on public land (including a road or footpath) or access provided over a public reserve adjacent to the development site without approval being obtained from Sutherland Shire Council and the necessary fee paid under the Roads Act 1993 and/or the Local Government Act 1993. These approvals must be to the satisfaction of Council for the required development works and may include but are not limited to the following:

- Detailed Frontage Works including construction of a driveway, footpath, etc.
- Road openings and restoration to provide services to the development.
- Work Zones and Hoardings.
- Skip Bins.
- Shoring / Anchoring.
- Standing of cranes, concrete pumps, etc.

Note: All Plans and Permits are required to be on site, at all times and may be requested by council officers at any time.

Note: Approval under the Roads Act or Local Government Act cannot be granted by a Principal Certifying Authority or by a Private Certifier. Failure to obtain approval may result in fines or prosecution.

20. Design and Construction of Works in Road Reserve

A. Design

Council has determined that the proposed development generates a need for the following works to be undertaken by the applicant in the road reserve. To this end a Detailed Frontage Works application under the Roads Act 1993 must be submitted to Sutherland Shire Council, prior to the release of any Construction Certificate. The form is available on Council's website. A fee applies for the relevant inspections, assessment, coordination and the issue of permits providing consent to undertake frontage works.

This design will generally comply with the approved architectural design drawings and the current website version of Council's Public Domain Design Manual (PDDM) and Public Domain Technical Manual (PDTM) except where modified by/or addressing the following:

- i) Property alignment/ boundary levels - establish the property alignment/ boundary levels and crossing profiles.
- ii) Grades - regrade footpath verge to final design levels including topsoil, turf and all associated soft landscaping as required.
- iii) Redundant Laybacks and Crossings - remove any redundant laybacks and vehicle crossings and replace with kerb and gutter (including associated road reconstruction works).
- iv) Footpath - install new footpath pavement along full frontage of site (as required).
- v) Cycleway - install new cycleway (as required).
- vi) Infrastructure Transitions - ensure there are adequate transitions between newly constructed and existing infrastructure as required.
- vii) Retaining Structures - construct retaining/slope stability walls as required.
- viii) Road Pavement - construct road pavement as required.
- ix) Kerb and Gutter - construct kerb and gutter as required including associated road pavement reconstruction including provision for a bus bay/s
- x) Street Signage - alter existing and/or install new street signage as required.
- xi) Trees - Install new street trees as approved on the landscape plans.
- xii) Undergrounding - provide replacement of existing local distribution power lines and other overhead utilities with subsurface utilities or with insulated aerial bundles cables (ABC) as required.
- xiii) Street Lighting - install new street lighting in conjunction with the undergrounding of local distribution power lines and other utilities as required.
- xiv) Utility Services - adjust public services infrastructure as required.
- xv) NBN - the Australian Government has issued a new policy on the provision of telecommunication infrastructure in new developments. The policy is effective from 1 March 2015. Developers are responsible for providing telecommunications infrastructure in their developments. To provide this infrastructure, developers need to contract a carrier to install and operate a telecommunications network.

NBN is the IPOLR (infrastructure provider of last resort) in developments of 100 lots/dwellings or more within its fixed-line footprint and in new development where its fixed-line network is available, or the NBN rollout has been announced (www.nbnco.com.au/learn-about-the-nbn/rollout-map.html).

If you use NBN, you will need to provide six months' notice before your network needs to be available.

Evidence of the lodgement of this application must be provided to the PCA prior to the release of any Construction Certificate

B. Before Construction

Prior to the release of the any Construction Certificate property alignment levels must be obtained from Sutherland Shire Council.

C. Before Occupation

Prior to the occupation of the building or the issue of any Occupation the following certification must be provided to Sutherland Shire Council:

- i) The supervising engineer must certify that the road frontage works were constructed in accordance with the development consent and associated approval under the Roads Act 1993 including the approved drawings and specification.

21. Construction Environmental Management Plan (CEMP)

A. Design

To ensure that the works can be undertaken in a manner that will prevent damage to natural environmental features, a Construction Environmental Management Plan (CEMP) must be prepared by an appropriately qualified and experienced environmental consultant.

- i) The CEMP must satisfy the objectives and controls of 'Chapter 38, "Natural Resource Management" of the Sutherland Shire Development Control Plan 2015', and the 'Sutherland Shire Environmental Specification 2007 - Environmental Site Management'.
- ii) The CEMP must be prepared in accordance with the "Guidelines for the Preparation for Environmental Management Plans", by NSW Department of Infrastructure, Planning & Natural Resources (2004).
- iii) The CEMP must address, but not be limited to, the following:
 - a) Description of works
 - b) Details of all contractors involved with the project.
 - c) Environmental awareness and training of contractors.
 - d) Compliance with legislation and regulations.
 - e) Measures to prevent noise, water, air and land pollution.
 - f) Safe access to and from the site during construction.
 - g) Safety and security of work site, road and footpath area; including details of any proposed fencing, signage, hoarding and lighting, as required.
 - h) Method of loading and unloading excavation machines, construction materials etc.
 - i) Details of how and where construction material and any waste materials will be appropriately managed, stored and disposed of.
 - j) Details of any fuel storage and management.

- k) Soil Management Plan is including detailed erosion and sediment control measures including, methods to prevent material being tracked off the site onto surrounding roadways and adjoining land.
- l) Protection of existing trees and vegetation located nearby but outside of the excavation/ construction zone.
- m) Unexpected Finds Protocol i.e. the address unexpected finds of soil or groundwater contamination etc.
- n) Contingency and emergency response plans.
- o) Inclusion of a detailed site plan/s.
- p) Consideration of and references to relevant management plans addressing, but not limited to: site remediation and ground gas management, acid sulfate soil management, vegetation management and protection, protection of microbats and migratory birds, etc.
- q) Requirement of other regulatory authorities such as NSW Department of Primary Industries - Water and Department of Primary Industries - Fisheries.

B. Prior to Commencement and Issue of Construction Certificate

The CEMP must be submitted to the satisfaction of Sutherland Shire Council, Manager Environmental Science and the Private Certifying Authority prior to commencement of works and prior to the issue of any construction certificate.

C. During Works

The site management measures within the approved CEMP must be established during site preparation, prior to the commencement of excavation/ construction. These measures must remain in place and be maintained throughout the period of works until the site is stabilised, landscaped and re-instated.

Note: An appropriately qualified and experienced environmental consultant shall be certified by following certification scheme; or demonstrate an equivalent standard:

- Environment Institute of Australia & New Zealand (EIANZ) 'Certified Environmental Practitioner (CEnvP) Scheme.

22. Pre-commencement Inspection

A. Before Works

A Pre-commencement Inspection/meeting is to be convened by the Applicant on-site a minimum 5 days prior to any demolition and/or construction activity and between the hours of 8.00 am and 4.30 pm Monday to Friday. The meeting must be attended by a representative of Council's Public Domain Assets Branch, the Principal Certifying Authority, the builder/site manager of the building/civil construction company and where necessary the supervising

engineer. The attendance of the owner is required when it is intended to use more than one builder/principal contractor throughout the course of construction.

The purpose of the meeting is to:

- i) Ensure safe passage for pedestrians, Work and Hoarded Zones are maintained in accordance with Council requirements;
- ii) Check the installation and adequacy of all traffic management devices;
- iii) Confirm that the supervising engineer has a copy of Council's Specification for Civil Works Associated with Subdivisions and Developments.

Note: An inspection fee must be paid to Council prior to the lodgement of the Notice of Commencement. Please refer to Sutherland Shire Council's Adopted Schedule of Fees and Charges.

23. Supervising Engineer

A. Before Construction

The applicant must engage an Accredited Certifier in civil engineering works or a Chartered Civil Engineer to supervise construction of any:

- i) Road frontage works.
- ii) Construction / installation of stormwater drainage.
- iii) Rainwater harvesting & reuse.
- iv) All other works.

B. During Construction

The engineer must supervise the works as listed above to ensure compliance with:

- i) All relevant conditions of development consent.
- ii) Any Consent issued under the Roads Act for this development.

C. Before Occupation

The supervising engineer must certify the works required in "A" above were undertaken and completed in accordance with the requirements of this Development Consent and to their satisfaction prior to the issue of any Occupation Certificate. This Certification to accompany the Works as Executed Plans.

24. Drainage Channel Works - Design Requirements

A. Design

A detailed drainage design must be prepared in accordance with Sutherland Shire Development Control Plan 2015 "Australian Rainfall and Runoff (1987)", Council's Drainage Design Manual and Council's "On-site Stormwater Detention Policy and Technical Specification, Australian Standard AS3500.3:2003, the BASIX Certificate issued against this development and in accordance with the recommendations of the report prepared by WMAwater (August 2017).

All works relative to the drainage channel, the proposed sheet piling and other works relative to the mitigation of flooding in Captain Cook Drive detailed in the above report and its associated drawings shall be undertaken prior to the commencement of the construction of the residential development. These works shall also include any plantings within the drainage channel area (i.e. salt marsh plantings within the area of excavation east of the sheet piling wall) to prevent scour and sediment transfer to the adjacent Aquatic Reserve.

The design must include;

- i) An easement for overland flow through the property to a drainage system within the natural catchment under Council's control. This easement width shall comply with the requirements and recommendations of WMAwater Report (August 2017).
- ii) A detailed drainage design plan supported by a catchment area plan and drainage calculations (including a Hydraulic Grade Line Analysis).
- iii) A layout of the drainage system showing existing and proposed pipe sizes, type, class, grades, lengths, drainage swales, invert levels, finished surface levels and location of all pipes with levels reduced to Australian Height Datum. Impacts on existing trees must be indicated on the plan.
- iv) A longitudinal section of the pipelines and drainage swales including existing natural surface levels, design surface levels, design invert levels of the proposed pipelines and drainage swales and the location, size and reduced level of all services to AHD where those services cross the proposed drainage lines or swales.
- v) The design floor level, including the level of any opening in the wall adjacent to the drainage easement, must be set a minimum of 500mm above the level of the overland flow of stormwater generated by a storm of design recurrence interval of 1 in 100 years, flowing along the overland escape route within the drainage easement and easement for overland surcharge within or adjacent to the site. Specific certification from a designer to this effect must be incorporated in the submitted drainage design / details.
- vi) Drainage depression must be provided for the full width and length of the easement for overland surcharge that facilitates the overland escape flow of stormwater. The escape route must be designed to have the capacity to carry the 1 in 100 year flow. Specific

certification must be provided by the designer to this effect as part of the submitted drainage design / details.

- xi) Where underground service lines (i.e. water, drainage, sewerage and gas) are required which are in conflict with the location of the root zone of trees and significant vegetation to be retained, the lines must be excavated by hand or by directional or under-boring techniques to reduce any adverse impact on the root zone of the trees.
- xii) The design drawings are to indicate the alignment, sizes, type, class, grades and lengths of all the pipelines, rainwater tanks, any irrigation system, overland flow path within the easement and proposed easement and associated structures,
- xiii) The overland flow path within the easement must match the property alignment level along the front boundary of the property.
- xiv) Drain by gravity to the receiving waters.

B. Before Construction

- i) Certification issued by an appropriately accredited person to the effect that these design requirements have been met must accompany the application for any Construction Certificate.
- ii) The required easement must be created prior to the issue of any Occupation Certificate.

C. Before Occupation

Prior to the issue of any Occupation certificate

- i) Certification must be provided from a registered surveyor to the effect that:
 - a) All civil engineering works required by this development consent have been carried out in accordance with the terms of the development consent and the approved engineering drawings with regard to location and level.
 - b) All pipes, pits and detention facilities lay within their relevant existing or proposed easements.
 - c) All rights-of-way required by conditions of this development consent have been provided.
- ii) Certification shall be provided from the supervising engineer acting as an Accredited Certifier, to the effect that:
 - a) All civil engineering and stormwater works associated with development have been carried out in accordance with the terms of the development consent, the approved engineering drawings and in the case of public works Council's "Specifications for Civil Works associated with Subdivisions and Developments".
 - b) The construction of the drainage system for the proposed development has been carried out generally in accordance with the requirements of the approved stormwater drainage plans, Council's Stormwater Management Specification and On-site Detention Policy and has been carried out in order that stormwater runoff downstream is not increased as a result of the development.

- iii) Works-as-Executed drawings certified in the above manner and containing all relevant information as required by Council's "Specification for Civil Works Associated with Subdivisions and Developments" shall accompany the application for any Occupation Certificate. The Works-As-Executed drawings must also include all relevant levels, reduced to Australian Height Datum, dimensions and locations including:
- invert levels,
 - surface and pavement levels,
 - floor levels, including adjacent property,
 - maximum water surface level for a 1% AEP storm event,
 - floor levels and freeboard, the location, volume and dimensions of the basin and level and dimensions of overflow weir, distances from boundaries and buildings.
- iv) A positive covenant under Section 88B of the Conveyancing Act 1919 must be created over Lot 3 DP 1218707 requiring that the sheet piling and channel works undertaken as part of this consent be maintained in perpetuity.

Note: Upon approval of the stormwater management designs a notation will be added to the s.149 certificate in relation to any stormwater treatment device.

D. Ongoing

The stormwater treatment facility, sheet piling and channel shall be maintained in perpetuity by the respective owner's committee's for Stage 3 Residential and be:

- i) Kept clean and free from silt, rubbish and debris.
- ii) Maintained so that it functions in a safe and efficient manner.
- iii) Not be altered without the prior written consent of the Council.

Note: Council has the ability to enforce conditions of consent and may inspect the facility, and issue fines or orders if these requirements are not being complied with.

25. Drainage Design - Detailed Requirements

A. Design

The stormwater drainage system must be designed in accordance with the approved stormwater drainage design drawing, Australian Standard AS3500.3:2003 and the BASIX Certificate issued for this development. Except where modified by the following:

- i) A detailed drainage design supported by a drainage calculation.
- ii) A longitudinal section of the pipeline within the property existing natural surface levels, design surface levels, design invert levels of the proposed pipeline and the location, size and reduced level of all services to AHD where those services cross the proposed

drainage line.

- iii) All levels reduced to Australian Height Datum.
- iv) All harvested rainwater must be used for irrigation, toilet flushing and a cold water tap in the laundry for clothes washing.

B. Before Construction

- i) Prior to the release of any Construction Certificate the proposed for overland surcharge must be registered with NSW Land and Property Information.
- ii) Certification from an Accredited Certifier in Civil Engineering or a Chartered Civil Engineer, to the effect that the drainage design is to their satisfaction and satisfies the design requirements in "A" above must accompany the application for a Construction Certificate.

C. Before Occupation

Prior to the issue of an Occupation Certificate:

- i) A Works-As-Executed drawing (WAED) of the stormwater drainage system must be prepared by a Registered Surveyor. This drawing must detail the alignment of pipelines, pits, the rainwater tanks and the detention facilities. An original or a colour copy must be submitted to Sutherland Shire Council.
- ii) The Supervising Engineer must certify the WAED of the stormwater drainage system that the stormwater drainage works, rainwater harvesting facility and rainwater reuse systems were constructed to their satisfaction and in accordance with the Development Consent. Prior to the occupation or use of the building the Applicant / Owner must submit to Council a copy of the aforementioned letter of certification.
- iii) The Supervising Engineer must certify the stormwater drainage, rainwater harvesting and rainwater reuse systems were constructed to their satisfaction and in accordance with the Development Consent. Prior to the occupation or use of the building the Applicant / Owner must submit to Council a copy of the aforementioned letter of certification.

D. Ongoing

- i) The operation of all stormwater pipelines, bio-swales, treatment devices and the like requiring conditions pertinent to rainwater harvesting and rainwater reuse must be maintained in good operating order at all times.

Note 1: Upon submission of the Certified Works-As-Executed drawing for the stormwater drainage system a notation will be added to the section 149(5) certificate advising future owners that their property is burdened by a stormwater treatment device that must be maintained, serviced and cleaned.

Note 2 Be aware that there may be significant stormwater sheet flow across the property from the existing stormwater drainage channel within the easement for overland surcharge/overland flow

26. Stormwater Treatment

A. Before Construction

The stormwater treatment measure, (bioswale), selected from the Environment Protection Authority's document "Managing Urban Stormwater - Treatment Techniques, November 1997", must be provided as part of the permanent site stormwater (water quality) management system. Details must accompany the application for any Construction Certificate.

B. Before Occupation

The above work must be completed in accordance with 'A' above to the satisfaction of the supervising engineer before the issue of any Occupation Certificate.

C. Ongoing

The stormwater treatment measure must be maintained in accordance with the design drawings and specification at all times .

Note: Upon approval of the stormwater management designs a notation will be added to the 149 certificate in relation to any required detention facility or stormwater treatment device.

27. Design of Structures Adjoining Drainage Easements

A. Design

The proposed development adjoins a drainage easement and proposed easement for overland surcharge. To ensure that the structural integrity of any structure adjoining the easement are maintained it must be designed as follows:

- i) All footings within 2m of the drainage easement must be designed in such a manner that they are supported by foundations set at a minimum of 300mm below channel invert levels or, alternatively, founded on sound rock.
- ii) The walls of any structure adjoining the easement must be designed to withstand all necessary forces should excavation be required within the easement down to the design invert levels.

B. Before Construction

Certification of A. above from an appropriately qualified engineer must accompany the application for any Construction Certificate.

C. Before Occupation

Prior to any occupation of the development or the issue of any Occupation Certificate certification from an appropriately qualified engineer detailing that the development has been constructed in accordance with A. above must be submitted to the PCA.

28. Damage to Adjoining Properties

A. Before Works

To minimise vibration damage and loss of support to buildings / structures and properties in close proximity to the development site, a Geotechnical Engineers Report must be prepared detailing constraints to be placed on earth moving and building plant and piling equipment and the method of excavation, shoring, underpinning and support. This report must be provided to the person undertaking the excavation and the Principal Certifying Authority.

B. During Works

The constraints and recommendations of the Geotechnical Engineers Report must be implemented at all times.

29. Public Utilities

This condition is imposed to facilitate the provision of services to the development and reduce conflicts between services and lot boundaries, buildings or associated facilities.

A. Before Construction

Suitable arrangements must be made with all relevant utility service providers to ensure the development is appropriately serviced by electricity, gas, telecommunications and the like, and any necessary underground conduits are provided.

Note: Should these requirements result in any significant change to the approved design an application must be made to modify the consent under s.96 of the Environmental Planning and Assessment Act.

30. Removal of Existing Bridge

A. Before Works

To mitigate against the effects of potential flooding during the course of the Stage 3 Residential Development construction, the existing pedestrian/vehicle bridge located between Ch 156.77m and 163.78m, detailed on Drwg No.CS3-2-10, Rev G dated 21/8/17, (Flood Extents Plan Post Development Q100 with 2100 Sea Level), prepared by Calibre Consulting, together with any

associated structures, must be removed prior to the commencement of all other excavation, piling and site construction works relative to Stage 3.

31. Removal of Existing Cable and Services Support Structure

A. Before Works

To mitigate against the effects of potential flooding during the course of the Stage 3 Residential Development construction, the existing cable and services support structure located between Ch.100m and 110m shown on Drwg CS3-2-10, Rev G dated 21/8/17 by Calibre Development, (Flood Extents Plan Post development Q100 with 2100 Sea Level), together with any associated structures, must be removed prior to the commencement of all other excavation, piling and site construction works relative to Stage 3.

32. Emergency Evacuation Route

A. Prior to Occupation

Prior to the issue of any occupation certificate for the Stage 3 Residential development, the Emergency Evacuation Route detailed within the "Woollooware Bay Town Centre Redevelopment - Residential Stage 1, Stage 2 and Stage 3 and Retail Flood Assessment Report" prepared by WMA Water, dated August 2016; must be fully implemented and operational. Further, during the course of construction of the Stage 3 Residential development, the temporary FERP created as part of the Stage 1 and 2 Residential development must be updated as required during the course of the Stage 3 construction.

B. Prior to Occupation

Certification of this requirement must be provided prior to the issue of any Occupation Certificate for the Stage 3 residential development.

33. Construction of Pedestrian Bridge

A. Prior to Occupation

Prior to the issue of any Occupation Certificate for the Stage 3 Residential development, the proposed pedestrian bridge located between Ch.156.77m and 163.78m on Drwg No.CS3-2-10, Rev G, dated 21/8/17 by Calibre Development, (Flood Extents Plan Post development Q100 with 2100 Sea Level), together with any associated structures, must be constructed and fully operational.

34. Dedication of Easement for Overland Flow

A. Prior to Occupation

An easement for overland flow benefitting Council must be created under the provisions of s.88E of the Conveyancing Act, as amended, prior to the issue of any occupation certificate for the Stage 3 Residential development.

This easement must be created over the full extent of the lands inundated as shown on Drwg CS3-2-10, Rev G dated 21/8/17 by Calibre Development, (Flood Extents Plan Post development Q100 with 2100 Sea Level). Should it be required to more easily define the extent of the easement boundary abutting the building, such alteration is approved provided that the alteration is made by increasing the area of the easement to the west, away from the drainage channel and above the level of the 2100 1% AEP event.

35. Flood Compatible Building Materials

A. During Works

All structures located below the 1% AEP level shown on Drwg CS3-2-10, Rev G dated 21/8/17 by Calibre Development, (Flood Extents Plan Post development Q100 with 2100 Sea Level), must be constructed of materials that are flood compatible.

B. Prior to Occupation

Certification of this requirement must be provided as part of the submission of the 'Works as Executed' plans prior to the issue of any occupation certificate for the Stage 3 residential development.

36. Certification for Structures within Easement

A. Prior to Occupation

Prior to the issue of any occupation certificate for the stage 3 residential development; certification must be provided from a suitably qualified Structural Engineer acting as an Accredited Certifier, demonstrating that all structures located within the easement for overland flow, including but not limited to the shoring for the drainage easement, can withstand forces of floodwater, debris and buoyancy. This certification must apply to all structures located in the 1% AEP event plus 500mm freeboard above that event level.

37. Drainage Channel Sheet Piling

A. During Works

The entire length of the drainage channel proposed sheet piling and any of its foundations or supports must be located completely clear of the existing drainage easement boundary and within the land that forms part of the overland surcharge path of the stage 3 residential development.

B. On-going

The ongoing maintenance of this sheet piling and any/all required foundations or supports shall be the responsibility of the strata management body/ies of the Stage 3 residential development.

38. Internal Vehicle Accessway

A. Design

The internal driveway profile, parking and manoeuvring areas must be designed in accordance with the approved architectural plans, except where modified by the following:

- i) All "one way" and "two way" traffic aisles in the car parking area must be clearly identified by signposting and pavement marking.
- ii) The ingress and egress crossing must be clearly identified by signage.
- iii) The first 3m (minimum) of any ramp from the western boundary line shall have a maximum grade of 5%.
- iv) The vertical alignment of the access driveway shall comply with AS2890.1(2004).
- v) The proposed loading and delivery area must be clearly defined with suitable signposting and pavement markings
- vi) Provide adequate sight distance for the safety of pedestrians using the footpath area.

B. Construction

Certification from an appropriately qualified engineer to the effect that the design requirements of "A" above have been met must accompany the Construction Certificate.

C. Occupation

Prior to the occupation of the development or the issue of any occupation certificate a suitably qualified engineer must certify that the works required in "A" above were undertaken and completed to their satisfaction and in accordance with the requirements of this Development Consent.

39. Car Park Design & Construction

A. Design

The basement car park must be designed in accordance with the approved architectural drawings, subject to the following modifications:

- i) A minimum headroom of 2.2m measured from the parking floor to the underside of any beam, ventilation duct or service conduit, or to the underside of any door including a security door and fittings when those doors are in an open position in accordance with clause 5.3 of AS2890.1.
- ii) Parking bays must not be enclosed, caged or a door provided.
- iii) All "disabled" parking bays and associated shared zones, "small car", "Visitor" and "Shared" spaces shall be signed.
- iv) All parking bays besides "small car" bays must provide a minimum clear parking envelop in accordance with figure 5.2 of AS2890.1. "Small Car" bays must comply with Clause 2.4.1 of AS2890.1

- v) A minimum 5.8m width is to be provided for all two-way internal roadways or ramps
- vi) Parking bays provided for adaptable units are to comply with AS2890.6 or AS4299
- vii) The security door fitted to the car parking area entrance must be independently mounted on rubber pads to prevent vibration noise transmission through the concrete walls and / or columns.
- viii) The concrete floor of the parking levels shall be shined to increase light bounce.

B. Prior to Construction

Certification from a Chartered Civil Engineer or a Registered Surveyor, to the effect that the car park layout and vehicle access-way design has been prepared in accordance with A above must accompany the application for the Construction Certificate.

C. Occupation

Prior to the occupation of the development or the issue of any Occupation Certificate a Chartered Civil Engineer or a Registered Surveyor must certify that the works required in “A” above have been completed to their satisfaction and in accordance with the requirements of this Development Consent. This certification must be provided to the PCA and a copy provided to Council.

D. On-going

Visitor parking facilities and car wash bays must be designated as common property on any future strata plan and must be continually available as common property. Parking must be allocated to individual strata lots as part of their unit entitlement and linemarked and signposted as follows:

Residential Dwellings	266 spaces (minimum 1 space per unit)
Residential Visitors	43 spaces
Car Wash Bay	1 common space
Retail/Commercial (Cafe)	6 spaces
Shared residential / visitor	4 spaces
Bicycle Parking	37 spaces
Total	319 spaces

Note: The car wash bay can be ‘double counted’ as a visitor space.

E. On-going

The approved parking must be used exclusively for car parking as approved for the life of the development.

To ensure that the car parking area satisfies the demands of the development, the car park must be made available on an unrestricted basis and free of charge at all times for employees', tenants and owners vehicles pertinent to the development.

40. Landscaping Works

A. Design

The landscaping works must be designed in accordance with the approved Landscape Plan except where modified by the following and with the final approval of the Directors of Shire Planning and Shire Infrastructure prior to the issue of the Construction Certificate:

- i) All existing trees to be retained or removed must be clearly identified on the plans. Show the tree number, species, trunk location, canopy spread, level at the base of the trunk and Tree Protection Zone (TPZ). Ensure that any excavation or filling does not occur within the TPZ of trees to be retained.
- ii) Provide detailed hardworks and planting plans for all landscaped areas including materials, details, individual plant locations/species/numbers and plant schedules.
- iii) Provide a separate lighting plan for all Level 1 communal areas and Grove Lane, as well as pathways and steps around the perimeter of the site.
- iv) Include all the landscape works between the Stage 3 building works and the eastern side of the drainage channel.
- v) Amend the plans and sections for the Level 1 communal courtyards to ensure they are consistent..
- vi) Show clearly the different edge treatments along the drainage channel.
- vii) Provide Saltmarsh planting to RL 1.1m along the western side of the drainage channel.
- viii) Where embankment slopes on the eastern side of the Grove Terrace are greater than 1 in 3, provide a retaining wall next to the footpath and shared pathway to achieve a maximum 1 in 3 slope.
- ix) Between the Grove Terrace and the footpath reduce the height of fencing from 1500mm to 1200mm. Fencing shall be open form.
- x) On both sides of the shared pathway alongside the drainage channel a minimum of 20 large to medium indigenous canopy trees must be to offset the scale and bulk of the adjoining buildings.
- xi) All vehicular trafficable pathways within the overland surcharge area are to be constructed as industrial driveways a minimum of 200mm thick as per Council's Civil Works Specifications.
- xii) In the 'quiet courtyard' at the western end of the Northern Courtyard provide a shade structure and BBQ/basic kitchen facilities.

- xiii) To achieve better solar access for the communal vegetable/herb garden, swap the location with the open lawn (No.7) at the eastern end of the Northern Courtyard. Provide facilities such as a universal toilet, all-weather structure, tools and materials storage, water supply, work bench and sink.
- xiv) Provide minimum soil depths in planter boxes as follows:
 - 1200mm for large trees.
 - 900mm for small trees and tall shrubs.
 - 600mm low shrubs.
 - 450mm grass and ground covers.
- xv) Each ground floor unit must be provided with a clothes line easily accessible from the laundry. Each unit above the ground floor must be provided with a clothes line on a balcony. Ensure that clothes lines are not visible above the balustrade.
- xvi) The communal open space areas and all planter boxes on slab must be provided with a water-efficient irrigation system, connected to a pump and the rainwater tank, to enable effective landscape maintenance.
- xvii) The private open space of each dwelling with a garden or planter box must be provided with one tap, connected to mains water, to enable hand watering.
- xviii) As the subject site is identified as being within a Greenweb Support area, all new tree plantings must be indigenous species and 80% of understorey plants must be indigenous species. All indigenous species must be selected from Sutherland Shire Council's 'Native Plant Selector' available on Council's website (www.sutherlandshire.nsw.gov.au and search for Native Plant Selector). Plant species such as *Aloe plicatilis*, *Beschorneria yuccoides*, *Juniperus conferta*, *Senecio mandraliscae* and *Pennisetum alopecuroides* 'Nafray' are unacceptable.
- xix) Substitute *Melaleuca stypheloides* for *Agathis robusta* along the Captain Cook Drive frontage.

The applicant must engage a suitably qualified Landscape Designer or Landscape Architect to oversee any design changes to the approved Landscape Plan and amendments required above. Details of these design changes must be included in the documentation submitted with the application for a Construction Certificate.

Notes:

A Landscape Designer is a person eligible for membership of the Australian Landscape Designers and Managers and a Landscape Architect is a person eligible for membership of the Australian Institute of Landscape Architects as a Registered Landscape Architect.

If demolition works occur prior to the Construction Certificate being issued, tree protection measures must be installed prior to commencement of demolition.

B. Prior to Occupation/Occupation Certificate

The landscape works must be completed in accordance with the approved Landscape Plan and amendments required by 'A' above. A Final Landscape Inspection must be carried out and a certificate issued by Council's landscape officer prior to occupation or the issue of an Occupation Certificate (interim or final). This certificate is required to ensure that all tree protection measures, landscaping works, replacement tree planting and the deep soil percentage requirements have been carried out in accordance with 'A' above and other conditions within this consent, and that all new indigenous plants on the site and within the road reserve are the correct species.

To arrange a Final Landscape Inspection please phone 9710-0333 48 hours prior to the required inspection date. An inspection fee of \$230 is required to be paid, prior to the inspection. Additional inspections will be charged at a rate of \$103 each.

C. Ongoing

All landscaping works required by 'A' above must be maintained for 12 months following the final landscape inspection date. Trees required by this condition must be maintained and protected until they are covered by Council's Controls for Preservation of Trees and Bushland Vegetation (SSCDP 2015 Chapter 38).

Any plants found faulty, damaged, diseased or dead shall be replaced with the same species in the same sized container within one month with all costs borne by the owner.

Note: If difficulty is experienced sourcing suitable indigenous plants from other suppliers, plants grown from locally provenance seed may be available from:

Sutherland Shire Council Nursery
345 The Boulevard, Gympie
Ph: 02 9524 5672

41. Vegetation Management Plan (VMP)

A. Design

The "Woollooware Bay Town Centre Foreshore Park DA - Vegetation Management Plan" by EcoLogical Australia, dated 3 October 2017, version 2 [Project Number 17SUT-6511] must be amended by an appropriately qualified and experienced ecologist as follows:

i) Saltmarsh Planting - Ground overs/climbers:

Delete *Zoysia macrantha*

Saltmarsh Planting - Rushes/grasses:

Delete *Gahnia clarkei*

Add *Ficinia nodosa*

Swale Planting - Rushes/grasses:

Delete *Juncus kraussii ssp australiensis*

Add *Gahnia clarkei* and *Juncus usitatus*

Upper Riparian Planting (Outside Easement) - Trees

Substitute *Banksia integrifolia* for *Banksia serrata*

Delete *Melaleuca linariifolia*

Upper Riparian Planting (Inside Easement) - Trees

Substitute *Cupaniopsis anarcardioides* for *Melaleuca linariifolia*

- ii) Planting densities must meet the following ratios:
- a) Swamp Oak Floodplain Forest: 1 tree every 5m², 1 shrub and 3 sedges/rushes/grasses per 1m²;
 - b) Coastal Saltmarsh: 6 plants per 1 m²;
 - c) Swale planting of rushes and grasses at 6 plants per 1m².

Note: An appropriately qualified and experienced ecologist must be certified by one of the following certification schemes; or demonstrate an equivalent standard:

- Environment Institute of Australia & New Zealand (EIANZ) 'Certified Environmental Practitioner' (CEnvP) Scheme.
- Ecological Consultants Association (NSW) Certification Scheme.

42. Tree Removal on Private and Council Land

The removal of the following trees is approved:

- i) Trees identified on the approved Landscape Plan as "existing tree to be removed".
- ii) Any declared noxious plant. The applicant is to ensure that all noxious plants are properly identified and controlled/removed.
- iii) Any tree species exempted by the Sutherland Shire Local Environmental Plan 2015.

All other vegetation that would require approval to be removed must be protected.

B. Tree Removal on Council Land

Council has preferred supplier agreements in place with arborists who are approved to carry

out arbor works on Council land. Removal / pruning of trees on Council land must only be undertaken using Council's preferred supplier at the applicant's expense. The applicant is responsible for contract management and payment of the arborist prior to works being undertaken.

Select from Council's list of preferred suppliers listed on Council's website: <http://www.sutherlandshire.nsw.gov.au/Residents/Trees/Trees-on-Council-or-Public-Land>.

Payment of the quoted amount provided must be made prior to any works commencing on site.

C. Prior to Occupation/Occupation Certificate

Any replacement tree planting must be completed in accordance with the approved Landscape Plan. Certification will be provided as part of the Final Landscape Inspection by Council's landscape officer (refer Condition - Landscaping Works).

D. Ongoing

Trees required by this condition must be maintained and protected until they are covered by Council's Controls for Preservation of Trees and Bushland Vegetation (SSCDP2015 Chapter 38). Any replacement trees found damaged, dying or dead must be replaced with the same species in the same container size within one month with all costs to be borne by the owner.

Note 1: If you have difficulty sourcing suitable indigenous plants from other suppliers, plants grown from local provenance seed may be available from:

Sutherland Shire Council Nursery

345 The Boulevard, Gympie

Ph: 02 9524 5672

Opening hours - Monday to Friday 7.00am-3.00pm (excluding public holidays).

Note 2: Tree removal works must also have regard for the requirements provided in: "Woolloomooloo Bay Town Centre Foreshore Park DA - Vegetation Management Plan" by EcoLogical Australia, dated 3 October 2017, version 2 [17SUT-6511].

43. Tree Retention and Protection

The following condition applies to all existing trees on the subject site, trees on the adjoining sites (which are potentially affected by the development works), as well as trees on the adjoining Council land that are not approved for removal.

A. Before Works

Prior to the commencement of any demolition, excavation or construction works on site the applicant must engage a suitably qualified and experienced Supervising Consulting Arborist to

oversee the measures for the protection of existing trees as listed below.

Note: A Consulting Arborist is a person with a current membership of the Institute of Australian Consulting Arboriculturalists (IACA) or alternatively a person who has obtained an Australian Qualifications Framework AQF Level 5 in Arboriculture.

All trees not approved for removal must be protected by the following measures:

- i) Any trees to be retained that have a structure proposed within their Tree Protection Zone (TPZ) must use isolated pier and beam construction for the footings. The piers must be hand dug and located such that no roots of a diameter greater than 50mm are severed or injured in the process of any site works during the construction period. The beam must be located on or above the existing soil levels. The location and details of any footings within the TPZ shall be detailed in accordance with i) above and on the Construction Certificate Plans.
- ii) Protective fencing constructed of 1.8m high chain wire mesh supported by robust posts must be installed in accordance with the approved Landscape Plan and Arborist's advice. Signage must be erected on the fence with the following words clearly displayed "TREE PROTECTION ZONE, DO NOT ENTER".
- iii) The tree protection zone within the protective fencing must be mulched with a maximum depth 75mm of suitable organic mulch (woodchips or composted leaf chip mulch) and kept regularly watered for the duration of the works subject to this consent.
- iv) No development or associated activity is permitted within the fenced tree protection zone for the duration of works subject to this consent. This includes vehicular or pedestrian access, sheds, washout areas, excavations, backfilling, installation of services (including stormwater), removal of top soil, stockpiling of soil or building materials.
- v) Where site access/egress is required over the roots of trees identified for retention and protection, provide hardwood rumble boards over a 200mm thick layer of wood chip.
- vi) Tree trunk/branch batten protection boards are to be installed as per 4.5.2 of Australian Standard (AS4970-2009) - Protection of Trees on Development Sites.

B. During Works

- i) The tree protection measures detailed in 'A' above must be maintained during construction.
- ii) The supervising Consulting Arborist must be present during any approved hand excavation or under boring works within the Tree Protection Zone (TPZ) of any tree identified for retention and protection and have the authority to direct works to ensure the trees long term preservation.

- iii) The supervising Consulting Arborist must strictly supervise that there is no disturbance or severing of roots greater than 50mm diameter and to cleanly cut those roots between 10-50mm in diameter.
- iv) If the tree/s identified for retention in 'A' above are damaged or destabilised during construction then works must cease and Council's Tree Assessment Officer (ph. 9710 0333) must be contacted to assess the tree/s and recommend action to be taken.
- v) The supervising Consulting Arborist must inspect the tree protection measures and maintain a record throughout the construction process. As a minimum an inspection must be undertaken at each hold point listed below:

Hold Point	Task	Responsibility	Certification	Timing of Inspection
1.	Indicate clearly with spray paint trees approval for removal only	Principal Contractor	Supervising Arborist	Prior to demolition and site establishment
2.	Establishment of tree protection fencing	Principal Contractor	Supervising Arborist	Prior to demolition and site establishment
3.	Supervise all excavation works proposed within the TPZ	Principal Contractor	Supervising Arborist	As required prior to the works proceeding adjacent to the tree
4.	Inspection of trees by Project Arborist	Principal Contractor	Supervising Arborist	Bi-monthly during construction period
5.	Final inspection of trees by project Arborist	Principal Contractor	Supervising Arborist	Prior to issue of interim/final Occupation Certificate

C. Before Occupation

Prior to the occupation of the development or the issue of any Occupation Certificate the supervising Consulting Arborist must provide final certification that the tree protection measures required by this condition have been maintained throughout the construction process including that the inspections required by B(v) above have been undertaken. The final certification must be provided to the PCA and a copy must be provided to Council's Landscape Officer at the time of the final landscape inspection.

Note: Tree removal works must also have regard for the requirements provided in: "Woolooware Bay Town Centre Foreshore Park DA - Vegetation Management Plan" by EcoLogical Australia, dated 3 October 2017, version 2 [17SUT-6511]

44. Supervising Environmental Consultant

A. Before Construction

The applicant must engage an appropriately qualified and experienced environmental consultant to supervise all aspects of onsite environmental management including, but not limited to, acid sulfate soil management, site remediation, ground gas management and site validation.

B. During Remediation

The environmental consultant must supervise all aspects of the works in accordance with relevant environmental management plans, including the Remedial Action Plan as reviewed and accepted by a NSW EPA accredited site auditor.

Note: An appropriately qualified and experienced environmental consultant must be certified by one of the following certification schemes; or demonstrate an equivalent standard:

- Environment Institute of Australia & New Zealand (EIANZ) 'Certified Environmental Practitioner' (CEnvP) - Contaminated Land Specialist.
- Soil Science Australia (SSA) 'Certified Professional Soil Scientist' (CPSS) - Contaminated Site Assessment & Management.
- Site Contamination Practitioners Australia (SCPA) 'Certified Practitioner'.

45. Site Remediation Works and Ground Gas Management

A. Design

The "Gas Management Plan, Cronulla Sharks Redevelopment, Stage 2 Residential Development Area, 461 Captain Cook Drive, Woollooware" by DLA Environmental, February 2013 [DL3007_S0000360]", which is Appendix B of "Remediation Action Plan, Cronulla Sharks Redevelopment Stage, Residential Development Area, 461 Captain Cook Drive, Woollooware" by DLA Environmental, February 2013 (Revision 1) [DL3007_S0000363]; must be updated and amended as relevant to the proposed development, by the appropriately qualified and experienced supervising environmental consultant.

B. Before Construction and Issue of a Construction Certificate

The updated and amended Gas Risk Assessment must be reviewed by a NSW EPA accredited site auditor who must issue an interim site audit advice verifying that the site can be made suitable for the proposed land use with the implementation of the Remediation Action Plan.

The applicant must adhere to any additional conditions or requirements that may be imposed by the accredited site auditor, in order to satisfy the accredited site auditor that the site can be made suitable for the proposed land use.

The interim site audit advice must be submitted to the satisfaction of Sutherland Shire Council's Manager, Environmental Science prior to commencement of any construction and the prior to the issue of any construction certificate.

C. During Construction

The site shall be remediated in accordance with the "Remediation Action Plan, Cronulla Sharks Redevelopment Stage, Residential Development Area, 461 Captain Cook Drive, Woollooware" by DLA Environmental, February 2013 (Revision 1) [DL3007_S000363], as updated and amended in accordance with Part A of this condition.

D. Before Occupation and Issue of an Occupation Certificate

A site audit statement must be prepared by a NSW EPA accredited site auditor that certifies that the site is suitable for the proposed land use.

The applicant must adhere to any additional conditions or requirements that may be imposed by the accredited site auditor, if required.

The site audit statement, site audit report and associated documentation must be provided to the satisfaction of Sutherland Shire Council, Manager Environmental Science prior to occupation and the issue of any occupation certificate.

Note: Site remediation and ground gas management works also must have regard for the recommendations provided in "Drainage Channel Management Requirements - Woollooware Residential Development, 461 Captain Cook Drive, Woollooware Bay, NSW" by DLA Environmental Services, 3 November 2017 [DL4244_S007746].

46. Management of Site Soil/ Fill Material

A. During Works

i) Disposal of Site Soils

Any soils to be excavated and disposed of from the site must be analysed and classified by an appropriately qualified and experienced environmental consultant, in accordance with relevant NSW EPA guidelines including the "Waste Classification Guidelines" 2014, prior to off-site disposal.

Excavated material is to be transported to an appropriately licensed waste facility by an EPA licensed waste contractor in accordance with relevant NSW EPA guidelines.

Note 1: Attention is drawn to Part 4: "Acid Sulfate Soils" of the NSW EPA "Waste Classification Guidelines" 2014, which specifies the management and disposal of actual and potential acid sulfate soils.

ii) Reused soils

Any existing soils excavated to be reused on the site must be analysed and classified by an appropriately qualified and experienced environmental consultant, in accordance with relevant NSW EPA guidelines including the "Waste Classification Guidelines" 2014, prior to reuse. These soils must be verified as being suitable for the proposed land use of the site.

iii) Importation of Fill Material

Any fill material that is imported onto the site must comprise Virgin Excavated Natural Material (VENM), Excavated Natural Material (ENM) or other suitable material in accordance with the relevant Resource Recovery Exemption issued under the *Protection of the Environment Operations (Waste) Regulation 2014*.

Note 2: Management of site soil/ fill material must have regard for the recommendations provided in "Drainage Channel Management Requirements - Woollooware Residential Development, 461 Captain Cook Drive, Woollooware Bay, NSW" by DLA Environmental Services, 3 November 2017 [DL4244_S007746].

47. Unexpected Finds - Soil and/or Groundwater Contamination

A. During Works

If unexpected soil or groundwater contamination is encountered during works, all work must cease. The situation is to be promptly evaluated by the supervising environmental consultant. The contaminated soil and/or groundwater must then be treated and/or managed under the supervision of the environmental consultant in accordance with the requirements of relevant NSW Environment Protection Authority (EPA) Guidelines.

B. Prior to recommencement of works

If unexpected contaminated soil or groundwater is treated and/or managed onsite; the supervising environmental consultant must certify that the situation was appropriately managed in accordance with the requirements of the relevant NSW EPA guidelines.

This certification must be provided to the satisfaction of the Principal Certifying Authority (PCA) and Sutherland Shire Council, Manager Environmental Science, prior to the recommencement of works.

Note: Management of unexpected finds must have regard for the recommendations provided in "Drainage Channel Management Requirements - Woollooware Residential Development, 461 Captain Cook Drive, Woollooware Bay, NSW" by DLA Environmental Services, 3 November 2017 [DL4244_S007746].

48. Groundwater Management and Protection

Groundwater that is encountered during the development must be managed and protected in accordance with, but not limited to, the requirements and recommendations of the following documents:

- i) The amended and site auditor reviewed Remediation Action Plan.
- ii) "Acid Sulfate Soil Management Plan"(ASSMP) by DLA Environmental, February 2017.
- iii) Flood Assessment Report, by MWATER, August 2017.
- iv) "Drainage Channel Management Requirements - Woollooware Residential Development, 461 Captain Cook Drive, Woollooware Bay, NSW" by DLA Environmental Services, 3 November 2017 [DL4244_S007746].

as well as any requirements stipulated by the NSW Department of Primary Industries - Water.

49. Supervising Ecologist

A. Before Commencement

The applicant must engage an appropriately qualified and experienced supervising Ecologist to supervise all aspects of biodiversity and vegetation protection / management.

B. During Works

The ecologist must supervise all aspects of biodiversity and vegetation protection/ management; and ensure compliance with the approved plans and environmental reports.

Note: An appropriately qualified and experienced ecologist must be certified by one of the following certification schemes; or demonstrate an equivalent standard:

- Environment Institute of Australia & New Zealand (EIANZ) 'Certified Environmental Practitioner' (CEnvP) Scheme.
- Ecological Consultants Association (NSW) Certification Scheme.

50. Ecological Requirements - Lighting and Bird Strike Potential

A. During Construction

i) Lighting Plan

A lighting plan for the public domain and exterior facades of the building must be submitted to the satisfaction of Sutherland Shire Council, Manager Environmental Science. The mangrove habitat is not to be directly illuminated by external lighting. A vegetated buffer must be created between light sources and the estuarine mangrove area to prevent light spill affecting habitat.

B. Ongoing

- i) The recommendations and measures of the Review of Noise, Light and Bird Strike Potential - Woollooware Bay Town Centre Residential Stage 3 (prepared by Eco Logical Australia dated 28 July 2016) must be implemented and adhered to.
- ii) Lighting within the public domain, including the exterior facades of the building, must be managed and maintained in accordance with the approved Lighting Plan as required by A above.

51. Ecological Requirements - Microbats

A. During Construction

The recommendations from the "Microbat Study, Woollooware Bay Town Centre" by EcoLogical, 22 November 2016 [15SUT-2742] and "WBTC 75W - Ecological Comment on Channel" by EcoLogical, 24 October 2017 [17SUT-6511] must be implemented during construction works to minimise impacts on microbat species, educate the community and protect microbat habitat, including the following:

- i) The engagement of a suitably qualified and experienced ecologist to inspect any culverts for microbat roosting before any reconstruction work is carried out. Any roosting microbats discovered should be relocated by a suitably qualified ecologist or fauna spotter to appropriate nest boxes.
- ii) No removal of any mangroves containing habitat hollows is to be undertaken without a suitably qualified and experienced supervising ecologist or fauna spotter.
- iii) Schedule ongoing maintenance such as weed control ensuring that it minimises the use of pesticides and herbicides within the vicinity of the mangrove area and is conducted by suitably qualified bush regenerators in accordance with the relevant Vegetation Management Plan developed specifically for the site.
- iv) Ensure mangrove areas are maintained free of rubbish and debris and the appropriate erosion and sediment control measures are in place as per Sutherland Shire Council Environmental Site Management Environmental Specification 2007 and Development Control Plan 2016.

B. Post Construction

The recommendations from the "Microbat Study, Woollooware Bay Town Centre" by EcoLogical, 22 November 2016 [15SUT-2742] and "WBTC 75W - Ecological Comment on Channel" by EcoLogical, 24 October 2017 [17SUT-6511], must be implemented during occupation to minimise impacts on microbat species and habitat, including:

- i) A vegetated buffer must be created between light sources and the Estuarine Mangrove Forest to prevent light spill affecting microbat habitat.

- ii) Schedule ongoing maintenance such as weed control ensuring that it minimises the use of pesticides and herbicides within the vicinity of the mangrove area and is conducted by suitably qualified bush regenerators in accordance with the relevant Vegetation Management Plan developed specifically for the site.
- iii) Ensure mangrove areas are maintained free of rubbish and debris and that appropriate waste disposal and recycling facilities are made available at the site.
- iv) Discourage public access to the mangroves by installing a timber bollard and chain barrier on the eastern side of the pathway in accordance with the approved Landscape Plan.
- v) Install interpretive signage to educate the community on the significance of microbats (i.e. mosquito control) and the importance of protecting their habitat.

Note 1: An appropriately qualified and experienced ecologist or bush regenerator must be certified by one of the following certification schemes; or demonstrate an equivalent standard:

- Environment Institute of Australia & New Zealand (EIANZ) 'Certified Environmental Practitioner' (CEnvP) Scheme.
- Ecological Consultants Association (NSW) Certification Scheme.
- Australian Association of Bush Regenerators.

52. Environmental Protection during Engineering and Flood Mitigation Works

A. During Construction

All works in the mangrove channel must be undertaken in accordance with the Construction Environmental Management Plan, the requirements of "Ecological Impact Assessment of Flood Engineering works in the Mangrove Channel" by ELA, 10 March 2017 [17SUT-6511] and must also be undertaken as follows:

- i) The sheet pile wall proposed to be constructed on the western edge of the channel must not be constructed of PVC or any type of plastic.
- ii) Construction must be conducted in a way that minimises the impact to mangroves, habitat and any vegetation associated with the mangrove channel.
- iii) A suitably qualified and experienced ecologist or fauna spotter must inspect any mangroves or other trees prior to removal in case there are any hollows, nests or potential fauna habitat. If fauna that requires relocation is discovered then it must be relocated in accordance with NSW Office of Environment and Heritage guidelines.
- iv) Hydro-jetting (rather than hammering) must be used to minimise impacts on the tree root systems whilst sheeting is being installed. An arborist must be onsite when this is carried out to supervise tree sensitive construction techniques including root pruning.
- v) During construction, works must incorporate sediment, erosion and dust control measures. Water runoff must be controlled during construction in accordance with a Soil and Water Management Plan. Pollutants from old landfill must be captured and treated to

prevent their release into the bay. An additional silt curtain is required downstream of the works and across the drainage channel to prevent turbid plumes entering Woollooware Bay.

Note: Engineering and flood mitigations works must also have regard for the requirement provided in: "Drainage Channel Management Requirements - Woollooware Residential Development, 461 Captain Cook Drive, Woollooware Bay, NSW" by DLA Environmental Services, 3 November 2017 [DL4244_S007746].

53. Car Wash Bays

To prevent contamination of the stormwater drainage system a car-wash bay must be provided on site:

A. Design

The wash-bay must be graded to an internal drainage point and connected to the sewer.

B. Before Construction

Details of the design satisfying 'A' above must accompany the application for a Construction Certificate.

C. Before Occupation

The Principal Certifying Authority must be satisfied that

- i) 'A' above has been complied with and
- ii) any discharge to the sewer from the premises is in accordance with the requirements of Sydney Water.

D. Ongoing

All car-wash, engine degreasing and steam cleaning must be conducted in the wash-bay detailed in 'A' above. Wastewater must be treated in accordance with the requirements of Sydney Water.

54. Garbage, Recycling and Green-waste Storage Area

To ensure the proper storage of waste from the premises:

A. Design

The garbage and recycling storage area must have a smooth impervious floor that is graded to a floor waste. A tap and hose must be provided to facilitate regular cleaning of the bins and all waste water must be discharged to the sewer in accordance with the requirements of Sydney Water. Garbage bins must be designed to prevent the escape of any liquid leachate and must be fitted with a lid to prevent the entry of vermin.

B. Before Construction

Details of compliance with 'A' above must form part of the documentation accompanying the applications for a Construction Certificate.

C. Before Occupation

The works must be completed prior to the issue of any Occupation Certificate.

D. Ongoing

All waste and recycling bins must be stored wholly within the approved waste storage area.

55. External Lighting - (Amenity)

To ensure that any lighting on the site does not cause a nuisance to neighbours or motorists on nearby roads:

A. Design

All lighting must be designed in accordance with Australian Standard AS4282 - Control of the Obtrusive Effects of Outdoor Lighting.

B. Ongoing

All lighting must be operated and maintained in accordance with the Standard above.

Note: External lighting must also have regard for the recommendations and measures provided in: "The Review of Noise, Light and Bird Strike Potential - Woollooware Bay Town Centre Residential Stage 3", by EcoLogical Australia, dated 28 July 2016).

56. Building Ventilation

To ensure adequate ventilation for the building:

A. Design

The building mechanical and / or natural ventilation systems must be designed, in accordance with the provisions of:

- i) The Building Code of Australia;
- ii) AS 1668 Part 1 - 1998;
- iii) AS 1668 Part 2 - 1991;
- iv) The Public Health Act - 2010;
- v) The Public Health Regulation 2012;
- vi) AS 3666.1 - 2002;
- vii) AS 3666.2 - 2002; and

viii) AS 3666.3 - 2000.

B. Before Construction

Details of compliance with the above must form part of the documentation accompanying the application for a Construction Certificate.

C. Before Occupation

- i) Certification must be provided by a qualified mechanical ventilation engineer that the installation of the ventilation system has been carried out in accordance with 'A' above.
- ii) Occupation of the premises must not occur until a registration application has been submitted to Council's Environment and Health Regulation Department for any cooling tower / warm water system

D. Ongoing

The ventilation system must be operated and maintained in accordance with 'A' above.

57. Car-Park Ventilation - Alternate System

To ensure adequate ventilation for the car park:

A. Design

As the basement car-park does not appear to comply with the natural ventilation requirements of Section 4 of Australian Standards AS1668.2 -1991, the car-park must be either mechanically ventilated by a system complying with AS1668.2 -1991 or alternatively, the natural ventilation system must be certified by a qualified mechanical ventilation engineer to the effect that the system is adequate. The certification shall confirm that the system will protect the health of occupants of the car park at any time it is used and satisfies the atmospheric contaminate exposure rates specified in the Worksafe Australia document: Workplace Exposure Standards for Airborne Contaminants.

B. Before Construction

Details of compliance with 'A' above must form part of the application for a Construction Certificate.

C. Before Occupation

Certification must be provided by a qualified mechanical ventilation engineer that the installation of the ventilation system has been carried out in accordance with 'A' above.

D. Ongoing

The ventilation system must be operated and maintained in accordance with 'A' above.

58. Demolition Work

To ensure that demolition of structures is carried out in an environmentally acceptable and safe manner:

A. Before Commencement

If works involve the removal of more than 10 square metres of asbestos material, a bonded asbestos licence is required. A friable asbestos licence is required to remove, repair or disturb any amount of friable asbestos. For further information contact SafeWork NSW.

B. During Works

- i) The demolition of the existing building must be carried out strictly in accordance with Australian Standard 2601 - The Demolition of Structures.
- ii) The applicant must ensure that the demolition contractor has a current public risk insurance coverage for a minimum of \$5 million. A copy of the Policy must be submitted to the Council prior to demolition.

To ensure that the removal and transportation of any asbestos material, regardless of the quantity, is carried out in an environmentally acceptable and safe manner, all work must comply with the following:

- a) Work Health and Safety Act 2011;
- b) Work Health and Safety Regulation 2011;
- c) Safe Work Australia Code of Practice - How to Manage and Control Asbestos in the Workplace;
- d) Code of Practice for the Safe Removal of Asbestos 2nd Edition [NOHSC:2002(2005)];
- e) SafeWork NSW 'Working with Asbestos - Guide 2008';
- f) Protection of the Environment Operations Act 1997; and
- g) Protection of the Environment Operations (Waste) Regulation 2005.

Asbestos waste in any form must be disposed of at a waste facility licensed by the NSW EPA to accept asbestos waste. Any asbestos waste load over 100kg (including asbestos contaminated soil) or 10m² or more of asbestos sheeting must be registered with the EPA on-line reporting tool WasteLocate. More information can be found at <https://wastelocate.epa.nsw.gov.au>.

59. Noise - Emissions and Acoustic Measures

To make provision for a comfortable internal noise environment for residential units

A. Design

The building's design and construction must incorporate the content and recommendations of the acoustic report of Acoustic Logic dated 20/4/16 and reference 20151022.1/2004A/RO/BW.

B. Before Construction

Details of the Acoustic Report's recommended acoustic treatments must be included on plans &/or specifications presented for the Construction Certificate.

With respect to mechanical plant and equipment not yet selected and hence noise output unknown; once selected, advice of the acoustic engineer is to be obtained regarding any attenuation measures required to make the item meet the design parameters of the acoustic report.

C. Before Occupation

Certification must be obtained from a qualified acoustic engineer that acoustic attenuation treatments have been properly installed.

60. Noise Control - Design of Plant and Equipment

To minimise the impact of noise from the development, all sound producing plant, equipment, machinery, mechanical ventilation system or refrigeration systems:

A. Design

All plant and equipment must be designed and located so that the noise emitted does not exceed an LAeq sound pressure level of 5dB above the ambient background level when measured at the most affected point on or within any residential property boundary.

Note: The method of measurement of sound must be carried out in accordance with Australian Standard 1055.1.

B. Before Occupation

Certification must be provided by a qualified acoustic engineer that all work associated with the installation of the acoustic measures has been carried out in accordance with 'A' above. The certification must be included with the Occupation Certificate.

C. Ongoing

All plant and equipment must be operated and maintained in accordance with 'A' above.

61. Verification of Design for Construction - SEPP 65

A. Design

Design verification must be provided by a registered Architect pursuant to SEPP 65 stating that the design intent approved by the Development Consent has been maintained in the building / architectural plans submitted with the Construction Certificate. This must accompany the application for a Construction Certificate.

B. Before Occupation

Prior to the issue of the final Occupation Certificate design verification must be provided in accordance with SEPP 65.

62. Certification Requirement of Levels

A. During Construction

At the following stages of construction:

- i) Prior to the pouring of each floor or roof slab,
- ii) Upon completion of the roof frame.

A registered surveyor must provide the Principal Certifying Authority with Certification that the stage of structure complies with the development consent in respect of levels.

B. Before Occupation

The certification referred to above must form part of the application for an Occupation Certificate.

63. Sydney Water Requirements & Section 73 Compliance Certificate

A. Before Any Works

Prior to the commencement of any works on site, including demolition or excavation, the plans approved as part of the Construction Certificate must also be approved by Sydney Water. This allows Sydney Water to determine if sewer, water or stormwater mains or easements will be affected by any part of your development. Customers will receive an approval receipt which must be included in the Construction Certificate documentation.

Please refer to the web site www.sydneywater.com.au.

B. Before Occupation / Subdivision Certificate

Prior to the issue of an Occupation Certificate or a Subdivision Certificate a Compliance Certificate under Section 73 of the Sydney Water Act, 1994, must be submitted to Council by the Principal Certifying Authority. Sydney Water may require the construction of works and/or the payment of developer charges. This assessment will determine the availability of water and

sewer services, which may require extension, adjustment or connection to the mains.

Sydney Water Advice on Compliance Certificates:

Sydney Water will assess the development and if required will issue a Notice of Requirements letter detailing all requirements that must be met. Applications can be made either directly to Sydney Water or through a Sydney Water accredited Water Servicing Coordinator. Please make early contact with the Coordinator, since building of water / sewer extensions can be time-consuming and may impact on other services as well as building, driveway or landscaping design.

Go to www.sydneywater.com.au/section73 or call 1300 082 746 to learn more about applying through an authorised WSC or Sydney Water.

64. Dial Before You Dig

A. Before Construction

Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets please contact Dial Before You Dig at www.1100.com.au or telephone on 1100 before excavating or erecting structures (this is the law in NSW).

It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via contacting the Dial before you dig service in advance of any construction or planning activities.

65. Toilet Facilities

A. During Works

Toilet facilities must be available or provided at the work site at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site before works begin and must be maintained until the works are completed.

Each toilet must:

- i) be a standard flushing toilet connected to a public sewer, or
- ii) have an on-site effluent disposal system approved under the Local Government Act 1993, or
- iii) be a temporary chemical closet approved under the Local Government Act 1993

66. Loading and Unloading

To preserve the amenity and ensure the safety of the public:

A. Ongoing

All loading and unloading of vehicles must be carried out within the site and not from the public roadway.

67. Waste Management / Loading (Commercial Waste)

A. Design

- i) Garbage storage areas are to be sized appropriately to suit the number of bins required per room as described in the Elephant's Foot Waste Management Report dated April 2016, with adequate bin handling area to allow for rotation of garbage bins.
- ii) All general deliveries to the site by Medium Rigid Vehicle (MRV) or larger must be carried out within the hard stand waste collection / loading bay within the site.
- iii) The hard stand waste collection / loading bay must be clearly signposted as being used for both the collection of waste and for all general deliveries / loading.
- iv) Commercial Waste stored on the Lower Ground Floor garbage room is to be transported to the Loading Bay on the Ground Floor through the Lower Ground Floor car park and via an internal service lift in close proximity to the loading bay on the Ground Level.

If iv) cannot be achieved then the following must be met:

- v) Collection of commercial waste by a suitable vehicle able to enter and exit the Lower Ground Floor in a forward manner.
- vi) The provision of a lined bay within the aisle adjacent parking spaces "BLD A 40", "BLD A 9" and adjacent shared area.
- v) A 3.6m wide (single direction) lane is to be maintained outside of the waste vehicle collection bay to enable vehicle movement. This will require the deletion of parking space "BLD A 17".

B. Prior to Construction

Prior to the issue of any Construction Certificate:

- i) An amended Waste Management Report is to demonstrate the changes noted in "A".
- ii) Amended architectural Plans are to depict the required number of bins and maneuvering area to demonstrate the requirements noted in "A" above.

C. Ongoing

- iii) Waste Management for the development must satisfy the following:

- Waste collection to be managed by Private Contractors;
- Waste collection to be carried out between the hours of 7am and 6pm Monday to Friday inclusive and no waste collection to be carried out on Sundays and Public Holidays; and

- The aforementioned waste collection requirement shall be adopted as a By-Law in any future Strata Plan.

END OF CONDITIONS

SYDNEY SOUTH PLANNING PANEL

Panel Ref:	2016SYE090
DA No:	DA16/1068
Local Government Area:	Sutherland Shire
Proposed Development:	Construction and use of 238 dwellings across 4 residential flat buildings including associated podium car parking, communal areas, 4 ground level non-residential tenancies and flood mitigation works and associated landscaping
Street Address:	Part Lot 3 DP 1218707 – 475A Captain Cook Drive, Woollooware
Applicant/Owner:	Bluestone Capital Ventures No. 1 Pty Ltd
Number of Submissions:	4
Regional Development Criteria (Schedule 4A of the Act)	General Development over \$20 million
List of All Relevant s79C(1)(a) Matters	<ul style="list-style-type: none"> • State Environmental Planning Policy (State and Regional Development) 2011 • State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) • State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (SEPP 65) • State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) • State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 • Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment (GMREP) • Apartment Design Guide (ADG) • Sutherland Shire Local Environmental Plan 2015 (SSLEP2015) • Sutherland Shire Development Control Plan 2015 (SSDCP 2015) • 2003 Community Facilities Contributions Plan • 2005 Shire Wide Open Space Contribution Plan
Is a Clause 4.6 variation request required?	<ul style="list-style-type: none"> • No
Does the DA require Special Infrastructure Contributions conditions (S94EF)?	<ul style="list-style-type: none"> • No
Have draft conditions been provided to the applicant for comment? Have any comments been considered by council in the assessment report?	<ul style="list-style-type: none"> • No

APPENDIX “B”

List all documents submitted with this report for the Panel's consideration	<ul style="list-style-type: none">• Draft Conditions of Development Consent• Pre-DA minutes PAD15/0028• Integrated Development General Terms of Approval (DPI Fisheries and DPI Water)• Architectural Review Advisory Panel (ARAP) comments• Concept Plan Assessment• ADG Assessment Tables• LEP / DCP 2015 Assessment Tables
Recommendation:	Approval subject to conditions
Report by:	Amanda Treharne – Development Assessment Officer Sutherland Shire Council
Report date:	November 2017

EXECUTIVE SUMMARY**REASON FOR REPORT**

This application is referred to the Sydney South Planning Panel (SSPP) as the development has a capital investment of more than \$20,000,000 and is nominated under Schedule 4A(3) of the Environmental Planning and Assessment Act, 1979. The application submitted to Council nominates the capital investment value of the project as \$64,720,000.00.

PROPOSAL

The proposal involves the third and final stage of the residential development approved under the Concept Plan (MP10_0229) by the Planning Assessment Commission (PAC) in 2012. The proposed Stage 3 works include the construction of 4 residential flat buildings over an integrated 2 storey parking podium and flood mitigation works and associated landscaping to the east of the new residential buildings.

THE SITE

The site is known as No.475A Captain Cook Drive, Woollooware and comprises a total land area of 1,684 hectares. Part Lots 1 and 2 contain Stages 1 and 2 of the residential development (Stage 1 having been completed and now occupied and Stage 2 currently under construction).

The Stage 3 site is located on the northern side of Captain Cook drive, directly west of the Southern Cross Stadium (home of the Cronulla Sutherland Rugby League Club) and to the west of Stages 1 and 2. . The site was previously utilised as sports playing fields, but currently accommodates the temporary sales suite, construction site compound and storage associated with the construction of the Stage 2 development.

ASSESSMENT OFFICER’S RECOMMENDATION**THAT:**

Pursuant to the provisions of Section 80 of the Environmental Planning and Assessment Act, 1979, Development Application No. 16/1068 for construction and use of 238 dwellings across 4 residential flat buildings including associated podium car parking, landscaping and communal areas and 4 ground level non-residential tenancies at Part Lot 3 DP 1218707 – 475A Captain Cook Drive, Woollooware is determined by the granting of consent subject to conditions.

ASSESSMENT OFFICER’S COMMENTARY**DESCRIPTION OF PROPOSAL**

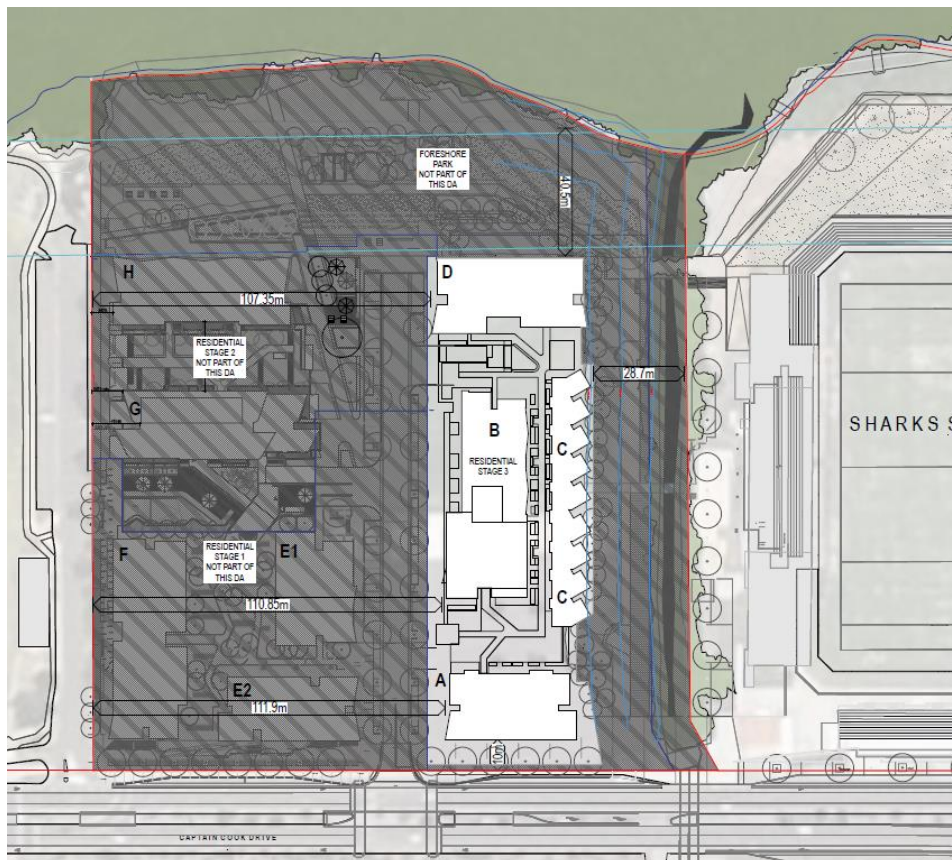
The application at the above property is for the construction of Stage 3 Residential (final residential stage) of the approved Concept Plan at the Woollooware Bay Town Centre, known as 475 Captain Cook Drive, Woollooware.

The proposal involves the construction of 4 residential flat buildings identified as Buildings A – D comprising 1 x two-storey building, 1 x 6-storey building, 1 x 7-storey building, and 1 x 13-storey building.

Detailed Stage 3 works proposed include the following:

- Site preparation works including demolition of existing structures and tree removal as required;
- Construction and use of four (4) residential flat buildings (A, B, C and D) over an integrated two (2) storey podium;
- Buildings, A, B and D are typical residential flat buildings of varying heights. Building C comprises 9 terrace houses constructed as part of the podium parking levels, which front the eastern landscaped area and tidal channel;
- 238 dwelling units comprised of:
 - 92 x 1 bedroom apartments;
 - 118 x 2 bedroom apartments;
 - 28 x 3 bedroom apartments.
- Four (4) ground level non-residential tenancies;
- 319 car parking spaces within the two-level podium;
- A community room (or Men’s Shed) on the Ground Floor Level;
- Associated landscaping and public domain works within the Stage 3 area; and
- Extension / augmentation of services and infrastructure as required including works flood mitigation works within the drainage channel and the construction of a high level emergency evacuation bridge adjacent the eastern side of Building D.

A site plan is shown below.



SITE DESCRIPTION AND LOCALITY

The site is legally described as Lot 3 in DP1218707 and known as 475A Captain Cook Drive. The current lot was created in 2016 to enable each of the three stages of the residential development to be on a separate lot. The subdivision has resulted in an alternative street address being allocated to each of the stages than was shown for the previous Stage 1 and Stage 2 applications, which were referred to as No. 461 and 471 Captain Cook Drive (respectively).

The land is owned by Sharks Residential Pty Ltd and is being developed by Bluestone Capital Ventures No. 1 Residential.

The Stage 3 residential site forms a part of the 10.06 hectares covered by the Cronulla-Sutherland Sharks Concept Plan (MP10_0229) (the Concept Plan). The Concept Plan area includes the western playing fields, football stadium, leagues club, and the club's on-ground car park. The Stage 3 site has an area of 1,684 hectares.

The Stage 3 site is bound to the west by the recently completed Stage 1 and the Stage 2 residential development (partly commenced) and Woollooware Bay to the north. Captain Cook Drive forms the southern boundary of the site and to the east across the tidal mangrove lined drainage channel is Southern Cross Stadium and associated car parking. On the southern side of Captain Cook Drive is Woollooware Golf Course.

The site is currently utilised for site offices for the construction team as well as general construction car parking. It also contains the sales suite which fronts Captain Cook Drive. The site is otherwise vacant.

Captain Cook Drive is a four lane arterial road which provides the primary vehicular access to the site. A new private road (Foreshore Boulevard) intersects with Captain Cook Drive to provide vehicle access to all three residential stages via a central raised road which terminates at the northern end of the development.

Woollooware Bay contains an environmentally sensitive area of international significance known as the Towra Point Aquatic Reserve and RAMSAR wetland. It is the largest wetland of its type in the Sydney Basin region and represents vegetation types that are now rare in the area. In August 2011, the boundary of the Towra Point Reserve was extended to include an area of shoreline to the south of the original extent of the wetlands.

Along the northern edge of the site is a 35m wide electricity easement, which contains high transmission 132kV overhead power lines. Support structures are located off site on Solander fields (to the west of the site) and adjacent to the Fitness First Complex (to the east near Woollooware Road North).

The site is a landmark site in the Sutherland Shire given its history, proximity to Woollooware Bay and association with the Cronulla-Sutherland Rugby League Club.

An aerial photo showing the location of the site and the Concept Plan area is contained below.





BACKGROUND

The following provides an overview of the history of the Woollooware Bay Town Centre development to date:

Concept Plan Approval

The site is subject to an overall Concept Plan approval (Major Project No. MP10_0229). The Concept Plan was issued on 27 August 2012 by the NSW Planning Assessment Commission (PAC) under the provisions of Part 3A of the Environmental Planning and Assessment Act (as amended). The Concept Plan granted approval for a retail centre and eight residential apartment buildings, redevelopment of the existing club and an upgrade to the Cronulla Sharks Football Stadium. The approval issued by the PAC incorporates specific terms of approval, required amendments and future environmental assessment requirements, in addition to the proponent's statement of commitments.

On 14 July 2014 the Department of Planning and Environment (DP&E) approved a modification to the concept plan (MP10_0229 MOD1). This modification related to design and administrative amendments and the facilitation of ongoing design changes.

Five further applications to modify the concept plan (MP10_0229 MOD2, MOD3, MOD4, MOD 5 and MOD 6) were then lodged with DP&E. Details of these modifications are contained in the Table below.

Proposal	Status / Approval Date	Council Reference	Department Reference
<u>MOD 2</u> <ul style="list-style-type: none"> • Include building envelopes for three new residential flat buildings, a serviced apartment/hotel building, function rooms, community rooms, additional car parking and a landscaped podium to the eastern precinct. • New Sharks Centre of Excellence is also proposed to be added to the western grandstand with new administration, training and sports-related facilities. 	Applicant reviewing submissions	DN17/0008	MP10_0229 MOD2
<u>MOD 3</u> <ul style="list-style-type: none"> • increase the maximum gross floor area (GFA) in the residential precinct from 58,420sqm to 61,370sqm; • increase the maximum gross building area (GBA) in the residential precinct from 104,419sqm to 115,402sqm; and • amend the height and building envelopes for Buildings B, C, E1, F and G in the residential precinct 	Approved 14.03.16	DN15/0015	MP10_0229 MOD3
<u>MOD 4</u> <ul style="list-style-type: none"> • amendment of the visitor and non-residential parking rates to allow for a sharing of parking spaces; and provide a car parking rate for a childcare use. 	Approved 26.10.15	DN15/0013	MP10_0229 MOD4
<u>MOD 5</u> <ul style="list-style-type: none"> • amendment of the Concept Landscape Drawings; and amendment of Condition B2 relating to the riparian setback to Woollooware Bay. 	Under assessment	DN15/0043	MP10_0229 MOD5
<u>MOD 6</u> <ul style="list-style-type: none"> • Reconfiguration of tenancy layouts and mix • Increase to GFA, from 26,473.5m² to 27,740m² • Re-alignment of the pedestrian connection from Captain Cook Drive to the foreshore • Addition of a new child care centre tenancy and community/gallery spaces 	Approved 02.08.16	DN16/0010	MP10_0229 MOD6

Proposal	Status / Approval Date	Council Reference	Department Reference
<ul style="list-style-type: none"> • Creation of a new streetscape on Level 3 • Relocation of the internal vehicular circulation ramp connection Level 1 to Level 3 from the southern façade to the north-eastern corner; • Maintain the approved quantum of car parking at 770 spaces; and Enlargement of the Leagues Club deck. 			

Stage 1 - Residential Development

The first development facilitated by the Concept Plan was DA13/0270. This DA comprised the construction of three residential flat buildings containing 220 dwellings, car parking, communal facilities, access roads, landscaping and public domain works on the subject site.

DA13/0270 was determined by the Sydney East Joint Regional Planning Panel (JRPP) with a consent issued by Council on 22 Aug 2013.

Modification to Stage 1 – Residential Development

MA14/0071 modified DA13/0270 to increase the number of dwellings from 220 to 226, revise the apartment mix, provide an additional storey to two apartments, a new outdoor rooftop cinema, amendments to apartment layouts and car parking and amended condition wording. The modified consent was issued on 23 December 2014.

There have been 6 subsequent modifications approved to the Stage 1 development (DA13/0270) being MA14/0253, MA15/0043, MA15/0044, MA16/0133, MA16/0162 and MA16/0338. Stage 1 has been built and the Occupation Certificate issued in October 2016.

Subdivision

The site was subject to a stratum land subdivision in 2016 which led to separate street addresses for each of the stratum lots. The stratum lots correspond with the three residential stages with Stage 3 (Lot 3 DP1218707) now known as 475A Captain Cook Drive, Woollooware.

Stage 2 Residential Development

On 11 December 2014, the JRPP approved Stage 2 of the residential component (Buildings G and H) of the Concept Plan (DA14/0598), subject to conditions of consent.

On 10 February 2017 MA17/0049 was lodged with Council seeking amendments to the approved Stage 2 DA14/0598. The application was approved on 19 September 2017. Stage 2 is well under construction, with its anticipated completion in February / March 2018.

Stage 3 Residential Development (subject application)

- A pre-application discussion (PAD15/0028) was held on 25 March 2015 regarding the proposed development. A formal letter of response was issued by Council dated 12 May 2015. A full copy of the advice provided to the Applicant is contained within Appendix “C” of this report.
- The current application was submitted on 19 August 2016.
- The application was placed on exhibition with the last date for public submissions being 22 September 2016. 4 submissions were received.
- An Information Session was planned to be held on 13 September 2016 but no residents attended.
- The application was considered by Council’s ARAP on 5 October 2016.
- On 25 October 2016 Council officers advised the applicant in writing of a number of issues with respect to the application. The key issue related to insufficient information regarding flood mitigation works and the need for inclusion of the eastern drainage channel as part of the Stage 3 development. Building design issues raised by Council’s architect and ARAP were also conveyed to the applicant, requiring design amendments.
- On 22 November 2016 the SSPP was briefed regarding the issues with the application and the outstanding information. The SSPP resolved that the matter be placed on hold pending continued discussions with the applicant to resolve the required flood mitigation works.
- Council officers have met with the applicant on a number of occasions. Various amended plans and reports addressing the outstanding information have been submitted over the last 10 months, the last of which was in August 2017.
- On 29 August 2017 the revised engineering plans were referred to the Department of Primary Industries (Fisheries and Water) for Integrated Development Approval. These approvals were received in September and October 2017.
- On 4 October 2017 the applicant submitted a set of landscape plans which incorporate the foreshore area as well as that area along the drainage channel. The plans were prepared for the pending MP10_0229 MOD 5 (currently under assessment with the DP&E) for the foreshore landscape works but were submitted for the subject DA at Council officer’s request and have been relied upon for the purposes of assessment with the subject DA.
- On 3 November 2017 additional information was received from DLA Environmental with respect to the area of the proposed tidal channel.
- On 9 November 2017 the applicant provided owner’s consent for the adjacent parcel of land comprising Lot 2 DP 1180482 with respect to the connection point for the high level bridge.

ADEQUACY OF APPLICANT’S SUBMISSION

In relation to the Statement of Environmental Effects, plans and other documentation submitted with the application and after several requests from Council, the applicant has provided adequate information to enable an assessment of this application.

PUBLIC PARTICIPATION

The application was advertised in accordance with the provisions of Chapter 12 of Sutherland Shire Development Control Plan 2006 (SSDCP 2006).

273 adjoining or affected owners were notified of the proposal and 4 submissions were received.

Submissions were received from the following properties:

Address	Date of Letter/s	Issues
jon@proali.com.au	12 September 2016	<ul style="list-style-type: none"> • Overdevelopment • Traffic congestion • Lack of additional road infrastructure
heatheronthecoast@hotmail.com	13 September 2016	<ul style="list-style-type: none"> • Traffic congestion • Lack of additional road infrastructure
claire_macpherson@yahoo.com.au	20 September 2016	<ul style="list-style-type: none"> • Lack of additional road infrastructure / traffic congestion • Car parking provisions lacking
PO Box 2925 Taren Point	27 September 2016	<ul style="list-style-type: none"> • Overshadowing of playing fields and golf course • Scale of proposal is out of character • Visibility of the development • Inadequate parking • Increased traffic and existing roads at capacity • Inadequate public transport • Devaluation of nearby property • Likely increase in crime

The issues raised in these submissions are as follows:

Issue 1 – Parking and Traffic Impacts / Insufficient Infrastructure

Comment: The majority of objectors were concerned that the proposed development will generate additional traffic, increase demand for on street parking particularly on Sharks home game days, and that the site is not adequately serviced by public transport.

The approval of the use under the Concept Plan and the conditions of that approval that relate to parking and traffic have, in essence, established the degree of parking and traffic impact that will result from the overall development. The parking volume has been provided as per the Concept Plan requirements and a game day management plan has been submitted to Council. Parking and traffic matters as they relate to the subject application are discussed in further detail below in the “Assessment” section of this report.

Issue 2 – Overdevelopment / scale of the development

Comment: The development parameters relating to building height and scale have largely been fixed by the Concept Plan approval, which sets specific building envelopes including the maximum height of each building. As discussed in further detail in the “Assessment” section of this report, the proposal is generally consistent with the concept plan building envelopes.

Issue 3 – Overshadowing

Comment: An objector has raised concern with respect to the impact of overshadowing on the nearby playing fields and Woollooware Golf Course. The playing fields are located to the west (Solander Fields) and to the south of the site (across Captain Cook Drive). Proposed Stage 3 is located on the eastern side of Stages 1 and 2 and as such there is no overshadowing impact on Solander Fields. A small degree of mid-winter morning shadow from the proposed Stage 3 development will fall across the northern part of the playing fields, but largely over the carpark and facilities buildings. This will not impact on the useability of the fields themselves as the fields will remain in full sunlight for the majority of the day.

In terms of the golf course, mid-winter afternoon shadow falls across a small section of the northern part of the golf course abutting Captain Cook Drive. The shadow falls across existing trees and may partially shadow one of the golf greens for a short period of time. The impact is considered negligible.

Issue 4 – Visibility of the development

Comment: Notwithstanding this, the proposed development is compliant with the building height enabled for the site under the approved Concept Plan. Marginal variations to the established building envelopes are proposed but these are of minor consequence in terms of the overall scale of the buildings. The proposed development will add to the built form of Stage 1 already complete and Stage 2 well under construction, but this is as intended under the Concept Plan.

Issue 5 – Decrease in property values

The closest residential property to Stage 3 is approximately 450m to the south-east of the site on Woollooware Road. The change in land use and the building envelopes were approved under the Concept Plan. Approval of the detailed design sought by the Stage 3 application is unlikely to result in a tangible impact on land value.

Issue 6 – Increase in crime

In terms of the concern regarding crime, the proposed development incorporates safety and crime mitigation design solutions and measures to minimise crime within and around the development. These are also reinforced through the recommended conditions of consent. The development also incorporates non-residential uses at the ground level fronting Captain Cook Drive which aim to activate the street and enable pedestrian activity during the day and night time hours.

STATUTORY CONSIDERATIONS

The subject land is located within Zone B2 Local Centre pursuant to the provisions of Sutherland Shire Local Environmental Plan 2015. The proposed development constitutes shoptop housing which is a permissible land use within the zone with development consent from Council.

The following Environmental Planning Instruments (EPI's), Development Control Plans (DCP's), Codes or Policies are relevant to this application:

- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)
- State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (SEPP 65)
- State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP)
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment (GMREP)
- Apartment Design Guide (ADG)
- Sutherland Shire Local Environmental Plan 2015 (SSLEP2015)
- Sutherland Shire Development Control Plan 2015 (SSDCP 2015)
- 2003 Community Facilities Contributions Plan
- 2005 Shire Wide Open Space Contribution Plan

STATEMENT OF COMPLIANCE

The statement of compliance below contains a summary of applicable development standards and controls and a compliance checklist relative to these:

State Environmental Planning Policy (State and Regional Development) 2011

As discussed in Section 4.0 above, the PAC (as delegate of the Minister for Planning and Infrastructure), approved a Concept Plan for the Woollooware Bay Town Centre site in 2012.

Part 3A of the Act was repealed in May 2011 and as modified by Schedule 6A to the EP&A Act, continues to apply to transitional Part 3A projects. New State Significant Developments are now assessed under *State Environmental Planning Policy (State and Regional Development) 2011*. The subject DA is not a transitional Part 3A project and does not constitute State Significant Development. Consequently, the proposal is returned to Council for assessment.

Schedule 6A of the EP&A Act contains provisions for the assessment of applications for development to which Part 3A does not continue to apply. Under these provisions, development that is covered by a Concept Plan approved under Part 3A but is subject to assessment under Part 4:

- is taken to be development which may be carried out under Part 4, despite anything to the contrary in an environmental planning instrument;

- must be consistent with any development standard within the terms of the Concept Plan approval;
- must be generally consistent with the terms of approval for the Concept Plan;
- the provisions of any environmental planning instrument or development control plan do not have effect to the extent of any inconsistency with the approved Concept Plan.

The consistency of the development with the approved Concept Plan is considered in the “Assessment” section of this report.

State Environmental Planning Policy (Infrastructure) 2007

The following provisions of State Environmental Planning Policy (Infrastructure) 2007 (SEPP 2007) apply to the development.

Clause 45 – Determination of development applications – other development

The application was referred to Ausgrid in accordance with Clause 45(2) of SEPP 2007 given the proximity of the northern part of the site to the Ausgrid easement containing overhead power lines and transmission towers. Ausgrid requires the implementation of the same conditions imposed on the Concept Plan approval. The relevant conditions are included in the draft conditions contained in **Appendix ‘A’**.

Clause 101 - Development with frontage to classified road

The development site has a direct frontage to an arterial road, being Captain Cook Drive. The arrangement for vehicular access to the site from Captain Cook Drive has been resolved with central traffic lights as part of the Concept Plan and subsequent Stage 1 approval. The traffic lights enable access to the residential stage of the development via a central road known as Foreshore Boulevard. This effectively provides the access to Stage 3 rather than directly via Captain Cook Drive (Clause 101(2)(a) and (b)). The proposed development is appropriately sited and designed to ensure no adverse amenity impacts will arise as a result of its proximity to Captain Cook Drive. Building A is setback approximately 10m from Captain Cook Drive and the lower levels will incorporate non-residential tenancies for the first two levels. The residential apartments which commence on Level 3, minimises the effect of vehicle emissions and traffic noise on residential amenity. The proposal is therefore consistent with Clause 102(2)(c) subject to noise attenuation requirements set out below..

Clause 102 - Impact of road noise or vibration on non-road development

This clause requires the consideration of the impact of road noise or vibration on the proposed development. Proposed Building A fronts Captain Cook Drive which is an arterial road. The applicant has submitted a Noise Impact Assessment prepared by Acoustic Logic to demonstrate the assessment criteria against which the proposed development has been assessed. The report utilises a lesser criteria for internal noise (being 40 dBA for bedrooms between 10pm and 7am) and 45 dBA for all other rooms during daytime hours) than that specified in Section 102 of the SEPP. Section 102 requires internal noise criteria of 35 dBA and 40 dBA respectively and as such conditions have been included in the recommendation requiring that the development be constructed to ensure compliance

with these criteria. On this basis an acceptable acoustic environment and compliance with SEPP 2007 can be achieved.

Clause 104 – Traffic Generating Development

The development is classified as traffic generating development by way of Column 3 Schedule 3 of SEPP 2007. Section 104 of SEPP 2007 is therefore relevant and the application was referred to the RMS. The RMS raised no objection on the basis that all traffic related issues have been dealt with as part of the Concept Plan approval MP 10_0229. RMS did reiterate the need for the applicant to comply with the requirements of *Schedule 5 Statement of Commitments 3 – Traffic Management* of the Concept Approval in relation to the installation / relocation of the traffic signals.

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

State Environmental Planning Policy (Building Sustainability Index) 2004 (BASIX) aims to establish a scheme to encourage sustainable residential development across New South Wales. BASIX certificates accompany the development application addressing each building within the development. The proposal achieves the minimum performance levels / targets associated with water, energy and thermal efficiency.

State Environmental Planning Policy No. 55 - Remediation of Land

State Environmental Planning Policy No. 55 - Remediation of Land (SEPP 55) requires a consent authority to consider whether the land is contaminated and, if so, whether the land will be remediated before the land is used for the intended purpose.

A Phase 2 Environmental Assessment has been undertaken by DLA Environmental for the whole residential component of the Concept Plan (i.e. Stages 1, 2 and 3). This assessment was undertaken to meet the requirements of Schedule 5, Statement of Commitment 2 of the Concept Plan approval. The assessment states that the site will require remediation with respect to issues of methane gas, acid sulphate soils and asbestos. A Remediation Action Plan (RAP) has been prepared for the residential precinct, with Stage 1 complete, Stage 2 underway and Stage 3 works to be carried out in conjunction with this application.

The RAP states that the site will be suitable for the proposed use providing the recommendations of the RAP are implemented. The RAP suggests that an on-site capping and containment solution is the most appropriate strategy. Council officers have formulated appropriate conditions of consent to ensure the implementation of the RAP and the supporting Acid Sulfate Soils Management Plan (ASSMP), Gas Management Plan and Asbestos Management Plans throughout construction. A copy of the interim Site Audit Statement will be required to be forwarded to Council prior to the issue of the Construction Certificate.

The Phase 2 report prepared by DLA and the subsequent RAP excluded the tidal channel and part of the adjacent area to the east of Building C. As a result of the inclusion of the channel area and the proposed excavation works within this to address flood mitigation, additional comment was sought

from DLA to address this gap in the reporting. Correspondence received on 3 November 2017 addresses waste classification and management; acid sulphate soils and methane gas. The correspondence concludes that the same strategies contained within the RAP can be applied to the channel area in terms of ASS and soil disposal or re-use. Management of methane is typically required in occupied and enclosed areas where accumulation of the gas has the potential to risk human health. The drainage channel does not present this environment however precautionary conditions are recommended.

Conditions of consent are contained within **Appendix ‘A’** addressing the DLA requirements. With the implementation of these conditions, Council is satisfied that the proposal would be acceptable with regard to the provisions of SEPP 55.

Greater Metropolitan Regional Environmental Plan No. 2- Georges River Catchment

Greater Metropolitan Regional Environmental Plan No. 2 (GMREP2) includes a number of aims and objectives for the environment and water quality within the catchment. Appropriate stormwater management and water quality measures are proposed and there are minimal likely adverse impacts on existing coastal processes anticipated. Council is of the view that with the implementation of the recommended conditions of consent the proposal would be consistent with the aims and objectives of GMREP2.

State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development – Design Quality Principles (SEPP 65)

State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (SEPP 65) and the accompanying Apartment Design Guide (ADG) seeks to improve the design quality of residential flat development through the application of a series of 9 design principles. The proposal is affected by SEPP 65. Sutherland Shire Council engages its Architectural Review Advisory Panel (ARAP) to guide the refinement of development to ensure design quality is achieved in accordance with SEPP 65. ARAP comments are included in **Appendix ‘B’** to this report.

A brief assessment of the proposal having regard to the design quality principles of SEPP 65 is set out below:

Design Quality Principles	Assessment
Principle 1: Context and neighbourhood character	The proposal involves three separate multi storey residential flat buildings and a building comprising multi dwelling housing in the form of terrace houses. Each of the buildings sits upon a two storey podium level comprising parking, and commercial tenancies which front Captain Cook Drive. Stage 3 will reflect a similar built form and aesthetic to the recently completed Stage 1 and Stage 2 which is under construction. Whilst a little incongruous with the surrounding locality of low-level residential, playing fields and golf courses, the proposal is in keeping

	with the desired future character established by the Concept Plan and the earlier Stage 1 and 2 approvals.
Principle 2: Built Form and Scale	The scale of the proposed built form is significant but consistent with the anticipated building heights and envelopes established by the Concept Plan. The scale of the buildings is considered appropriate when considered in the context of this and the desired future character intended for the new Woollooware Bay Town Centre.
Principle 3: Density	The density of the scheme submitted is consistent with the density permitted by the Concept Plan, as articulated by the maximum height, envelopes and GFA / GBA.
Principle 4: Sustainability	<p>The proposed development has been designed to make the most of the site's orientation and aspect. Apartment planning incorporates passive and active building systems. Minimum building depth enables dual aspect and corner apartments, shading to facades with louvres and performance glazing where required. The proposal satisfies the minimum BASIX requirements in addition to providing the following sustainability measures:</p> <ul style="list-style-type: none"> • Integrated Photovoltaic Panels on the roof of Building B. • All apartments are supplied with a smart energy meter. • Timber used on the project will be from a recycled source or FSC certified timber.
Principle 5: Landscape	Street tree planting is proposed along the eastern side of Foreshore Boulevard and the Captain Cook Drive frontage of the development. In addition, two communal landscaped areas are provided on the podium parking level connected by a landscaped 'laneway'. The landscape design will provide practical and usable areas with social opportunities and a high degree of amenity for future residents. Council would like to see the landscape works to the public domain and the tidal channel area undertaken as part of the subject consent and has conditioned this accordingly. This issue is discussed further below in the 'Assessment' Section of the report.
Principle 6: Amenity	The proposal satisfies the 'rules of thumb' contained in the Apartment Design Guide in terms of residential amenity, including minimum unit sizes and private open space, public open space, solar access and natural cross ventilation.
Principle 7: Safety	The applicant has considered Crime Prevention Through Environmental Design (CPTED) principles in the design of the project, and a CPTED report has been submitted with the application. The development provides increased activation and passive surveillance of the future foreshore park and common spaces across the site with apartments directly overlooking these spaces. Apartments line the eastern side of

	Foreshore Boulevard with direct access from street level. Residential entry and lobby areas are to be secured and well lit. A path along the eastern side of the development adjacent the drainage channel connects the development to Captain Cook Drive and will facilitate activity and direct access to the riparian foreshore area.
Principle 8: Housing Diversity and Social Interaction	The proposal provides a mix of apartment types (including 1, 2 and 3 bedroom units as well as townhouses), which will encourage diversity in the future occupation of the development. A proportion of the apartments are designed to be converted to adaptable and livable apartments. The development also includes facilities to encourage social interaction including two communal open space areas on the podium level as well as a community room and pool on the top level of Building B. A ‘men’s shed’ is also proposed within the development to provide a community use room.
Principle 9: Aesthetics	In general terms the building form, proportions and compositional strategies proposed for the development are of a good contemporary standard for buildings of this type.

Apartment Design Guide (ADG)

The applicable design guidelines for the proposed development are contained within the ADG, which is based on the 9 design quality principles set out in SEPP 65. The ADG illustrates good practice, though is not a statutory instrument. The ADG controls are also largely replicated in Council’s Draft Sutherland Shire Development Control Plan (DSSDCP2015).

When considering all of the apartment buildings in the development “collectively”, the following table provides a compliance checklist of the main ADG design criteria. It is noted that the Concept Approval has established the majority of site planning controls and acceptable building forms, envelopes, setbacks and separation distances with respect to the ADG.

Objective	Design Criteria	Proposal	ADG
Building Separation	Up to 25m (5-8 storeys): 18m habitable rooms/balconies Over 25m (9+ storeys): 24m habitable rooms/balconies	Proposal varies from ADG in some instances but complies with building envelopes set by Concept Approval	No – see Assessment Section below
Solar access	Min 70% of apartments in a building receive a	175 out of 238 (73%)	Yes

	minimum of 2 hours direct sunlight (9 am and 3 pm at mid-winter) to living areas and balconies Max 15% of apartments in a building receive no direct sunlight (9am and 3pm at mid-winter)	26 out of 238 (11%)	Yes
Natural ventilation	Min. 60% of apartments are naturally cross ventilated in the first nine storeys of the building.	145 out of 238 (61%)	Yes
Private Open Space	All apartments are required to have a primary balcony as follows; 1 bedroom = 8m ² (depth of 2m) 2 bedroom = 10m ² (depth of 2m) 3 bedroom = 12m ² (depth of 2.4m)	Proposal complies	Yes
	For apartments at ground level or on a podium or similar structure, private open space is provided instead of a balcony. Must have a minimum area of 15m ² and depth of 3m	34 podium level apartments (including the townhouses) with terrace areas varying between 22m ² – 49m ² per apartment.	Yes
Communal Open Space	25% of site area (2671m ² required)	13,705m ² foreshore park; 312m ² communal pool and lounge / entertainment area; 1620m ² landscaped podiums	Yes

Tables providing a compliance checklist of each of the 4 buildings assessed individually are contained in **Appendix ‘C’**. Generally, all of the proposed apartments provide compliant rooms (ceiling height, depth and dimensions) and sufficient balcony areas / terraces are provided to afford reasonable internal amenity to future occupants.

Local Controls – SSLEP 2015 and SSDCP 2015

The approved Concept Plan sets out the general planning parameters for the site. Clause 3B(2)(f) of Schedule 6A of the Environmental Planning & Assessment Act indicates that the provisions of any

environmental planning instrument or any development control plan do not have effect to the extent to which they are inconsistent with the terms of the approval of the concept plan. By and large, the numeric provisions of SSLEP 2015 and SSDCP 2015 are not applicable to this proposal. Further Council's Development Control Plan largely replicates the before mentioned ADG design criteria.

A Table is included in **Appendix ‘D’** addressing the main standards / controls within SSLEP2015 & SSDCP2015 relevant to the application.

SPECIALIST COMMENTS AND EXTERNAL REFERRALS

The application was referred to the following internal and external specialists for assessment and the following comments were received. A full copy of the State government responses is included in **Appendix ‘E’**.

NSW Department of Primary Industries (DPI Fisheries)

The application was referred to NSW Department of Primary Industries (Fisheries) on two occasions pursuant to s.91A of the Environmental Planning & Assessment Act, 1979 (Integrated Development). The proposed works within and adjacent the channel involve excavation within 40 metres of a waterway and the application was referred to DPI Fisheries to determine if an Activity Approval under the Water Management Act 2000 was required.

Fisheries raised concern regarding the type of plastic material which would be utilised in the sheet pile wall which the applicant proposes to shore part of the side of the channel. The concern relates to the potential for leachate into the aquatic reserve of Woollooware Bay, as well as the potential impact on commercial oyster harvesting in this area.

DPI Fisheries advised that they have no objection to the proposal subject to the applicant meeting their General Terms of Approval (GTA). The GTA's have been included in the draft conditions contained in **Appendix ‘A’** and a copy of the DPI Fisheries correspondence is attached in **Appendix ‘F’**.

NSW Department of Primary Industries (Water)

Similar to DPI Fisheries the application was also referred to DPI Water (previously Office of Water) on two occasions to ascertain if a Controlled Activity Approval (CAA) was required under the Water Management Act 2000. DPI Water advised that it was and attached its GTA's for a CAA in the event that the proposal is approved. The conditions do not constitute the CAA which must be applied for separately by the applicant once development consent is granted.

The GTA's have been included in the draft conditions in **Appendix ‘A’** and a copy of the DPI Water correspondence is contained in **Appendix ‘F’** to this report.

NSW Department of Roads and Maritime Services

RMS raises no objections to the proposal on the basis that all of the traffic related issues have already been dealt with as part of the Concept Approval. The access arrangements for the site including the intersection works on Captain Cook Drive were approved as part of the retail Project Application (MP 10_2230) approved by DP&E, for which the RMS was consulted.

In the opinion of Council, the design and review process for the traffic signals has been appropriately addressed as part of the Project Approval and was made operational with the issue of Occupation Certificate for Stage 1. No additional RMS requirements are therefore necessary as part of this application.

NSW Office of Environment and Heritage

Throughout the various stages of the concept scheme, including responses to the DP&E regarding the Test of Adequacy, draft Environmental Assessment (EA), Concept Application, the OEH indicated that further and more detailed assessments were necessary to determine likely impacts on the adjacent environmentally sensitive areas and habitats.

In the Concept Plan report, the PAC noted the special environmental significance of the site's surrounds and sought to address the limitations of the previous surveys through the imposition of Condition 22 on the Concept Approval. Condition 22 states as follows:

Future applications shall demonstrate that Office of Environment and Heritage requirements have been met in relation to:

- (a) *a Stormwater Management Plan (SMP) that details how all stormwater runoff will be collected and treated;*
- (b) *a Noise Management Plan (NMP) that investigates the likely impacts of construction and ongoing operational noise on fauna using the adjacent estuarine areas as habitat;*
- (c) *a Lighting Management Plan (LMP) that minimises the impacts of light spill on threatened fauna using the adjacent estuarine areas as roosting and foraging habitat;*
- (d) *a Bird Management Plan (BMP) that investigates the potential for bird strike from reflective surfaces associated with the development and provides details of the construction materials and design methods that will be used to avoid or minimise the likelihood of bird strike;*
- (e) *a flood study that details potential impacts on Towra Point Nature Reserve in the event of a flood and includes strategies for preventing impacts;*
- (f) *a leachate management plan to ensure that no leachate from the landfill on the site is exported to the Towra Point Nature Reserve;*
- (g) *an Acid Sulphate Soil Management Plan prepared by a suitably qualified person in accordance with the Acid Sulphate Soil Assessment Guidelines (Acid Sulphate Soil Management Advisory Committee, 1998); and*
- (h) *an assessment of Aboriginal heritage.*

The OE&H were consulted with respect to Condition 22 for both the Stage 1 and Stage 2 development applications. Concerns were raised on both DA's, but were resolved by conditions for Stage 1. With the Stage 2 application the OE&H advised that the PAC imposed Condition 22 on the Concept Plan without the consent of, or consultation with, the OE&H, and that the OE&H did not have an assessment or approval role in the DA. In their response, it was reiterated that the PAC approval did not address all of the OE&H's issues and that OE&H remained concerned that additional ecological surveys were required to better assess impacts of the development on national and internationally listed migratory and endangered shorebirds.

In the absence of input from OE&H the Chair of the JRPP for Stage 2 requested that the assessment would need to be carried out by Council's staff, or external experts if necessary. Council's environmental science unit determined that the information submitted as part of the development application was satisfactory in addressing Condition 22 within the limitations of the Concept Approval.

The subject Stage 3 application was also referred to the OE&H with respect to Condition 22 however no formal response was received. Council officers contacted OE&H to chase up a response but was advised that OE&H considered that its issues outlined in Condition 22 had not been sufficiently addressed by the applicant in either of the previous stages of the development and similarly with Stage 3.

When the subject proposal was amended by the applicant to incorporate works to the existing drainage channel Council officers again contacted OE&H. At that stage OE&H advised that they had sent a response to the DP&E with respect to the foreshore landscaping modification (MP 10_0229 MOD 5) and that no further submission would be made to Council as part of the subject Stage 3 DA. The comments raised by OE&H are essentially related to the riparian zone within the foreshore area abutting Towra Point and the OE&H objection to the proposed planting area. No specific comments are relevant to the Stage 3 Residential development.

As with the Stage 2 DA assessment, Council's environmental team has assessed the Stage 3 proposal with respect to Condition 22 of the Concept Approval and further discussion in this regard is provided in the 'Assessment' section of this report.

Sydney Water

Sydney Water was advised of the application and requested to provide comment. No response has been received to date. Comments received from Sydney Water for DA14/0598 (Stage 2) provided details regarding the water and wastewater system requirements to accommodate the additional density and required the imposition of a condition. The condition is suitable for the subject development proposal and has been included in the draft conditions of consent in **Appendix 'A'**.

Ausgrid

Council requested comment from Ausgrid regarding Conditions 26-28 of the Concept Plan approval as these relate to minimising electro-magnetic field (EMF) from the overhead power lines to the northernmost buildings.

Ausgrid has requested that Council impose the same conditions on the application as were imposed on the Concept Plan approval. These conditions have been superseded by more recent work – largely a re-phasing of some of the high voltage wires and as such it is not necessary to impose conditions 26 and 27. Condition 28 is still relevant and has been included in **Appendix ‘A’** along with the new conditions Ausgrid requires to be imposed in order to protect its’ asset and ensure safety of future occupants of the development.

NSW Police (Miranda Local Area Command)

The DA was referred to the Miranda Local Area Command Crime Prevention Officer in accordance with Council’s adopted policy for Residential Flat Buildings over 50 units. The comments made by the Crime Prevention Officer have been taken into account in the assessment of the DA.

Should the application be supported, the Police recommend a condition of consent to address the above with a requirement for appropriate lighting, CCTV, and security access be installed to the development.

Architectural Review Advisory Panel

The application was considered by Council’s ARAP on 5 October 2016, during which concerns regarding the development proposal were outlined. A copy of the ARAP report is attached as **Appendix ‘B’** with the conclusion outlined below:

Generally this proposal provides a competent architectural response for an urban model that is less assured in its overall planning vision and rationale. The scheme is generally compliant with the approved concept plan, and the Panel acknowledge this whilst making the following recommendations:

- *a final effort is applied to introduce genuine diversity through “new hands” testing the built form and expression for Building A and D.*
- *communal facilities are provided to ADG requirements for each Stage, as well as across the entire development. Solar access to common areas should be ADG compliant, and the Foreshore Parklands should be excluded from the required communal open space provisions.*
- *For a tabula rasa development such as this, there are too many ADG non-compliances that are presumably being proposed on an underlying basis of maximising yield. Internal unit amenity must not be compromised, and there is no persuasive design quality reason for this proposal not to comply with or exceed the minimum amenity standards.”*

During the design review process some of the issues raised by ARAP have been addressed, namely those relating to the design of internal unit amenity (minimum unit size requirements, solar access and cross-

ventilation). These aspects of the proposal are now compliant. More than sufficient communal open space has been provided within the development, albeit some with limited solar access during mid-winter. In addition, residents will have access to the foreshore parklands, which are extensive and receive all day solar access. The foreshore parklands are provided in addition to the minimum communal open space requirements set out under the ADG. The applicant chose not to develop the building design to ameliorate the Panel's concern regarding the lack of architectural diversity within the development (and in the context of the three stages of the development). This is addressed further in Section 9 of this report.

In the context of the SEPP 65 considerations, discussed in further detail in part 9 of this report, the proposal has been developed in a competent manner within the constraints set out by the Concept Plan. Although some recommendations of the ARAP were not adopted, it is Council's opinion that overall, the architectural design of the proposal is of a high quality.

Architect (Assessment Team)

Council's architect has undertaken an assessment of the application and advised that the proposal largely sits within the envelopes approved in the master plan. Any departure from these envelopes appears minimal and will have no perceivable impact on built form or amenity. Site planning and to some extent building form issues relating to this application have already been set out in the approved master plan. Architectural issues relating to this application are largely concerned with the articulation and expression of the built form and amenity. In this regard the articulation and expression of each building has been addressed in a competent manner.

Concern is still raised regarding the adaptable units proposed. The adaptable bathrooms still require a significant level of work to be undertaken to meet accessible requirements (toilets relocated, retiled, re-water-proofed etc. or basically a new bath room). The principles of AS4299 state: “*Later modifications to adaptable housing will prove relatively easy to do at minimum inconvenience and cost*”. Provision of an entirely new bathroom as part of the adaptable works for each unit will reduce the likelihood of people remaining in their home, instead moving on to alternative accommodation options.

Council's architect has recommended the following wording be contained in a condition to address the above concern. The intention of the condition is to prevent the need to access below slab service areas located in the neighbouring apartment below. The condition would require the Private Certifier to be satisfied with the adaptable units prior to issue of the Occupation Certificate in the following way:

- *All services (water closet, basins, showers, floor wastes) to be relocated for adaptation, must have pipes installed in locations required for adaptation and capped ready for use. Capping points are to be readily identifiable within the finished bathroom.*

A condition similar to this and incorporating the required Australian Standards has been included in the recommended conditions of consent contained in **Appendix ‘A’**.

Engineering (Assessment Team)

Council's Engineers have undertaken an assessment of the application with respect to flooding and drainage, vehicular access and parking, waste storage and collection. The application has been problematic regarding flooding and drainage, with resolution of this reached only recently with the applicant and the DPI (Water and Fisheries). This issue is discussed further below in the 'Assessment' section of the report.

The proposed vehicular access, basement manoeuvring and parking design are all acceptable having regard to the relevant Australian Standards and no objection is raised subject to conditions.

Concern is raised regarding the proposed waste storage and collection. The allocated area for the waste rooms within the two basement levels of the proposed development is inconsistent with the area required as set out in SSDCP 2015. For example, the Garbage rooms for Buildings A and B are too small to accommodate the number of bins proposed and fail to include sufficient area for bin manoeuvring. Retail waste collection is not sufficiently catered for nor is the required bulky goods storage. Conditions addressing the waste concerns above are included in **Appendix A** to form part of the consent.

Building

Council's Building Surveyor reviewed the subject proposal and provided comments regarding the submitted BCA Report prepared by AED. The report indicated that the building could comply with the BCA utilising the performance standards. Concern was raised however regarding certain aspects of the design that will likely require more information at the Construction Certificate phase but which may affect the design / aesthetics of the building. These concerns included the water supply for the sprinkler systems and the type of Aluminium Composite Panels (ACP's) to be used near the fire exits on the ground floor. The applicant was advised of the concerns but sought not to provide additional information on this until Construction Certificate stage. Draft conditions of consent have been included in **Appendix 'A'** to ensure the applicant addresses these aspects.

Landscape Architect

Council's Landscape Architect has been involved in the site redevelopment since the approved Concept Plan. The proposed podium planting and communal open space areas are largely acceptable, except for the lack of solar access during mid-winter. The Landscape Architect suggested that roof terraces may be provided to ameliorate the solar access issue in the event of any shortfall in the communal open space requirement.

The proposal is more than compliant with the 25% COS requirement. In addition to the podium level open space, the proposal includes an indoor / outdoor community room with kitchen and bathroom facilities and an infinity pool on the top floor of Building B. A community room (proposed at present to operate as a 'Men's Shed') is also proposed. In conjunction with the large swathe of foreshore parklands provided by the applicant (approximately 15,000m²) which will be accessible to all residents of the development, it is not considered reasonable to request the provision of additional roof terraces.

Council's Landscape Architect is generally satisfied with the design of the proposed podium level communal open space with the exception of Grove Lane. This area is narrow (but compliant with the Concept Plan) and surveillance / activation is somewhat lacking. The key reason for this is that the terrace housing (Building C) effectively turn their backs to the Grove with only study windows facing outwards. Whilst the ground level units in Building B have courtyard areas facing Grove Lane, the apartments are setback behind the courtyards. Increased surveillance and activation of the Lane could occur with additional windows in the western elevation of the terraces but the minimum separation distances are difficult to achieve. A review of the floor plans for the terraces indicates the most suitable window placement would be a vertical window beside the entry door. This would enable increased light and a sense of openness for the terraces, a less defensive elevation when viewed from Grove Lane but without compromising the privacy of future residents in the ground level apartments in Building B.

Council's Landscape Architect also recommends amendments to the plan along the following lines:

- an additional pergola (with climbers) at the northern end of Grove Lane (to match the one on the southern end);
- The provision of a shade structure and BBQ / basic kitchen facilities at the western end of the northern courtyard;
- Relocation of the proposed communal vegetable garden with the lawn area in the northern courtyard to enable improved solar access and the provision of facilities such as a toilet, shade structure, tools and materials structure, water supply etc.

These conditions have been included in **Appendix 'A'** along with a raft of landscape conditions for the tidal channel and the area to the west of this, in terms of planting, retaining wall treatment and fencing etc.

Environmental Science

Contamination

Council's Environmental Scientist met with the appointed site auditor who has been involved with the Stage 1 and Stage 2 residential development. For the most part, conditions imposed for Stages 1 and 2 are relevant for Stage 3. In addition to this a condition will be imposed requiring the submission of an updated Gas Management Plan (GMP) to ensure the appropriate control and monitoring of methane gas emissions on the site. The updated GMP will be required to be reviewed by the site auditor who will be required to verify that the site can be made suitable for the proposed landuse in accordance with the RAP. The interim site auditor advice will be required to be submitted to Council prior to issue of the Construction Certificate.

The relevant conditions have been included in **Appendix 'A'**.

Acid Sulfate Soils

Testing undertaken as part of the Acid Sulfate Soils Management Plan (ASSMP) concluded that the site conditions were not indicative of leachate generation. For the bulk of the proposed development Council is satisfied that mitigation measures contained in the ASSMP and RAP are adequate to ensure acid leachates have been addressed in accordance with the intention of the Concept Plan requirements. Whilst that area of the tidal channel was not tested for ASS, recent correspondence from DLA indicates that there is a high probability of ASS in sediments from the channel. Any ASS found in excavation work for the channel can be managed in accordance with the ASSMP submitted with the subject application and this has been conditioned in **Appendix ‘A’**.

Ecological Considerations

The sensitivity of the site adjacent the Towra Point Aquatic Reserve requires consideration of a number of aspects of the proposal. Council’s specialist team assessed the proposal in terms of noise effects; lightspill; and bird strike potential for the local fauna. The extent of works within the stormwater channel in terms of mangrove removal was also considered. The proposal is largely acceptable subject to recommended conditions of consent. A key aspect of the proposal is the landscaped area abutting the channel and the rehabilitation proposed for the area of channel proposed to be excavated to facilitate the flood mitigation works. The applicant has submitted the final Vegetation Management Plan (VMP) for Council’s consideration and this is also now satisfactory subject to consent conditions. Ecological considerations are discussed further in the ‘Assessment’ Section of the report below in relation to the OE&H matters and Condition 22.

Environmental Health

Council’s Environmental Health team has undertaken an assessment of the application with respect to the submitted Acoustic Report from Acoustic Logic in terms of internal noise levels for the proposed units and also with regard to the impacts of plant machinery and equipment. No objections are raised subject to the imposition of suitable conditions of development consent.

ASSESSMENT

Following a detailed assessment of the application having regard to the Heads of Consideration under Section 79C(1) of the Environmental Planning and Assessment Act 1979 and the provisions of relevant environmental planning instruments, development control plans, codes and policies, the following matters are considered important to this application.

Consistency with Project Approval

The Project Approval contains five schedules which set out the requirements for the development. An assessment of the proposal with respect to these conditions has been undertaken and is contained in **Appendix ‘G’**.

The approved Concept Plan includes gross floor area (GFA), gross building area (GBA), building envelopes, maximum height (parapet), maximum height (top of plant), and minimum setbacks for

Building D. As discussed above, a variation to the maximum height limit and building envelopes was approved by the DP&E in July.

Floor Space

The proposal's compliance with the GBA and GFA requirements contained in the Concept Plan is provided below:

	Max Permitted under Concept Plan (as modified)	Provided by Stage 1	Provided by Stage 2	Proposed by Stage 3	Total Remaining (%)
Gross Building Area – (GBA) Residential precinct	115,402m ²	37,958m ²	27,419m ²	41,214m ²	8,811m ² (7.6%)
Gross Floor Area – (GFA) Residential precinct	61,370m ²	21,271m ²	17,759m ² + (37m ² – MA17/0049) = 17,797m ²	22,182m ²	121m ² (0.19%)

The proposed development is within the residential precinct density controls contained within the Concept Plan approval with only a small proportion of GFA remaining.

Building Envelope & Height

Building height for each of the four buildings is within that specified for the maximum top of plant height limits established under the Concept Plan (as modified). This is shown in the table below:

	Concept Plan Approval	Proposed Building Height	Complies
Building A	Top of parapet – RL 32.150	RL 32.150	Yes
	Top of plant – RL 35.350	RL 34.9	Yes
	Max 7 storeys + 2 storey podium	7 storeys + podium	Yes
Building B	Top of parapet – RL 29.4	RL 29.250	Yes
	Top of plant – RL 31.10	RL 30.4	Yes
	Max 6 storeys + 2 storey podium	6 storeys + podium	Yes
	Top of parapet – RL 50.850	RL 50.850	Yes
	Top of plant – RL 51.60	RL 51.6	Yes
	Max 13 storeys + 2 storey podium	13 storeys + podium	Yes
Building C	Top of parapet – RL 15.00	RL 15.00	Yes
	Top of plant – N/A	N/A	N/A
	Max 2 storeys + 1 storey podium	2 storeys + podium	Yes
Building D	Top of parapet – RL 29.050	RL 29.050	Yes
	Top of plant – RL 32.750	RL 32.250	Yes

	6 storeys + 2 storey podium	6 storeys + podium	Yes
--	-----------------------------	--------------------	-----

In terms of the approved building envelopes (modified under MP10_0229 MOD 3) the four buildings are essentially contained within these with the exception of minor protrusions at the north-eastern end of Building C and the southern facade of Building B. An example of these variations is illustrated below.

The proposed development will result in a substantially lower GBA than that which could be achieved under the Concept Plan if the building envelope was to be literally interpreted. The protrusions to the envelope are also minor, and a result of the detailed design process subsequent to the Concept Plan approval stage.

The Building C protrusion occurs as a result of angling the balcony wall of the northern-most terrace so that it is projected to the north-east to maximise solar access and views. The southern façade of Building B is proposed to be extended slightly to the south to create additional articulation. This protrusion still sits within the articulation zone set by the Concept Approval.

The minor building protrusions result in an increased amenity through improved cross ventilation and solar access and assist to create visually interesting buildings. The proposal is generally consistent with the building envelopes approved under the Concept Plan and the overriding intent of the control. The minor protrusions to the building envelope are therefore considered acceptable.



Figure 12 – Minor protrusion of Building C northern-most apartment



Building floor plate variations to Concept Plan envelopes for Buildings C and B respectively.

Riparian Setback

The Concept Plan requires a setback of between approximately 43m to 63m from the northern boundary of the Stage 3 site to the Mean High Water Mark (MHW). The Concept Plan also calls for a vegetated riparian buffer corridor of a minimum of 40m in width, applicable to all works subject to the Concept Plan. The boundary of the proposed Stage 3 development is the same as established by the Concept Plan approval. The subject application enables a 40m vegetated riparian buffer to be honoured, however as discussed above, details regarding the treatment of the foreshore will be subject to a future Development Application.

Natural Environment Impacts & Condition 22

As discussed in detail above, eight environmental assessment requirements are included within Condition 22 of the Concept Plan approval. Council acknowledges the importance of the environmental impacts as a result of the development, but also accepts that the DP&E approval of the building envelopes under the Concept Plan has already established a degree of impact that cannot be meaningfully addressed at the detailed design phase. Notwithstanding this, the scope of works for the subject application is more sensitive than Stages 1 and 2 as it applies to the tidal channel and mangrove areas and additional scrutiny has therefore been applied to Condition 22.

Council's Environmental Science Team has responded to each of the items listed in condition 22, in the context of the parameters set by the Concept Plan approved envelopes and the OE&H commentary. A detailed response to each matter is provided below.

Stormwater Quality

After a lengthy process involving many amendments to the civil engineering plans and flood study to accommodate up-to-date survey, further detail and the requirements of both Council and DPI Fisheries and Water, the proposal is now satisfactory subject to conditions.

The applicant has addressed stormwater quality in a number of documents including the Construction Management Plan (Parkview Constructions, 14 April 2016) (CMP) and Woollooware Bay Town Centre Redevelopment Residential Infrastructure Report: Development Application – Residential Stage 3 (at&I July 2016). The CMP includes specific details relating to stormwater quality during the construction phase of the development. These include the containment of all site waters on site during construction and landscaping, and their release only when suspended solids are less than 50mg/L in order to avoid pollutants entering the Council's stormwater drainage system.

The at&I report identifies the bio-retention swale proposed for the eastern side of the development between Building C (terrace houses) and the tidal channel. The bio-swale captures sediment and debris and prevents it from entering the stormwater pipes below. The pipes will capture the runoff from the roof areas of Buildings A – D as well as the hardstand areas around them. Stormwater run-off from that part of Foreshore Boulevard will drain via a pipe to the existing stormwater system in Captain Cook Drive.

Other measures proposed to ensure improved stormwater quality in the downstream catchment and nearby Towra Point include the implementation of a trash rack at the upstream end of the culvert under Captain Cook Drive. This will reduce gross pollutants and other debris from entering the tidal channel.

Conditions of consent have been included in **Appendix ‘A’** which will require the mitigation measures detailed in these reports to be implemented, thereby ensuring stormwater runoff will be appropriately collected and treated.

Mangrove Removal

The extent of works proposed within and adjacent to the stormwater channel is intended to minimise the impact on the existing mangroves. Correspondence from the applicant's consultant Eco Logical Australia (dated 24 October 2017) outlines the means by which the mangroves will be protected whilst work is carried out. It is intended to temporarily 'tie' back the mangroves while the work is in progress and to use hydro-jetting to avoid impacts on the mangrove root systems. Water run-off is also proposed to be controlled during construction in accordance with a Soil and Water Management Plan (SWMP) to be prepared by Calibre. The SWMP will ensure that any pollutants from old landfill that may be disturbed during the hydro-jetting will be captured rather than being released untreated into the channel or nearby Towra Point Aquatic Reserve.

The proposed piling of the western bank of the channel following excavation was of initial concern to Council and DPI Fisheries in terms of the material from which the piling would be constructed. DPI Fisheries advised that plastic was not acceptable in case of leaching and the impact on downstream flora in Towra Point Aquatic Reserve. A condition has been included in **Appendix 'A'** restricting the use of PVC or plastic for the piling material.

In addition to the above, the final VMP submitted by the applicant is largely satisfactory to Council in terms of the vegetation species proposed adjacent the mangroves and channel area. The planting will include saltmarsh to RL 1.1m along the western edge of the channel which is complementary and provides a future buffer between the mangroves and the publicly accessible walking / cycling track further to the west. Conditions of consent are included in **Appendix 'A'** in this regard.

Noise

The OE&H submission to the Stage 2 DA14/0598 raised concern that the Noise Management Plan (NMP) is not a 'standalone' document and that it is the same report that was submitted to the department as part of the retail application. Clarity on which of the Noise, Light and Bird Strike Potential (NLBSP) Report (Ecological, August 2014) recommendations are being adopted was also raised.

Council and the JRPP resolved that, the format of the noise assessment is less relevant than ensuring the pertinent matters have been properly addressed to mitigate noise impacts on fauna.

The NLBSP report includes recommendations that will reduce the impact of the construction and future development on the fauna using the adjacent habitat. The report suggests that the greatest risk of noise impacts on fauna species would be during the construction phase and that construction hours should be restricted to daylight hours so that peak fauna foraging periods are avoided. Avoiding activities within 50m of habitat areas during October to January was also recommended. The OE&H indicated that this recommendation was supported.

The Stage 3 development is in close proximity to the mangroves and Woollooware Bay and as such restricted construction hours are considered relevant. A condition of consent is recommended to ensure this mitigation measure is adhered to.

Lighting

The Concept Plan calls for a Lighting Management Plan to demonstrate that the impacts of light spill on threatened fauna is minimised. The applicant has addressed light spill in the NLBSP report.

As per the noise assessment, light impacts have been assessed as part of the NLBSP report. The report provides that bats can be affected by artificial lighting and provides recommendations for measures to minimise adverse ecological impacts, including the installation of UV filters and hoods to lighting. Given the proximity of the development to the mangrove communities, compliance with these measures will be an important part of the design and ongoing use of the site.

With the implementation of a condition of consent to ensure these measures are adhered to, Council is satisfied that light spill impacts have been addressed as far as practical within the context of the Concept Plan approval.

Bird Strike

The Concept Plan calls for a Bird Management Plan to investigate the potential for bird strike from reflective surfaces and provide details of measures to minimise the likelihood of bird strike. Similarly to lighting and noise, bird strike has been addressed in the NLBSP report.

The Concept Plan has approved the envelope for a single residential tower up to 50m in height, but with lower level buildings fronting Woollooware Bay and adjacent the stormwater channel. This approval is reflected in the Stage 3 DA. There is no doubt that the approved Concept Plan enables a built form on the site which will increase the risk of bird strike compared to the flat site which exists at present.

The NLBSP report identifies measures to minimise bird strike, including glass treatments and the use of window furnishings. The measures will minimise these impacts as far as practical. A condition of consent has been imposed to ensure the recommendations of the NLBSP are adhered to. Council considers that under these circumstances, the applicant has addressed bird strike as far as required under the Concept Plan.

Flood Impacts on Towra Point

The Flood Impact Assessment (WMAwater 2017) concludes that no increased flooding impacts to Towra Point Nature Reserve are expected as a result of the proposed development. A condition of consent has been recommended to ensure the mitigation measures detailed in the Flood Report are adhered to. With the imposition of this condition, Council is satisfied that the proposal will not result in unreasonable flood impacts on Towra Point Nature Reserve.

Leachate & Acid Sulfate Management

Council's interpretation of condition 22(f) of the Concept Plan is that it requires the applicant to address acid leachates as a result of the presence of Acid Sulfate Soils (ASS) on the site. Testing

undertaken as part of the Acid Sulfate Soils Management Plan (ASSMP) concluded that the site conditions were not indicative of leachate generation. In terms of the Stage 3 buildings and method of construction Council is satisfied that mitigation measures contained in the ASSMP and RAP are adequate to ensure acid leachates have been addressed in accordance with the intention of the Concept Plan requirements.

The ASSMP excluded the 20m channel area. With the change in the scope of works to include the proposed channel and necessary flood mitigation works, Council sought additional information from the applicant's environmental consultants DLA Environmental Services. DLA submitted correspondence dated November 2017 stating that there is a high probability for the presence of ASS within the estuarine sediments along the inter-tidal flats of Woollooware Bay and therefore the channel. DLA has advised that the same management strategies apply for the channel works as those proposed for the Stage 3 development, in terms of if ASS are disturbed during excavation.

Subject to the imposition of conditions in this regard, no adverse impact is anticipated as a result of leachate or ASS.

Aboriginal Heritage

An Aboriginal Assessment (Godden Mackay Logan, February 2013) was submitted to Council as part of the Stage 2 DA14/0598. The report was not submitted with the subject DA but is relevant given that the study area for the report included the subject site. The report concludes that historically, the entire study area would have been covered by mangrove swamps; was located in the inter-tidal area and that the potential for the area to possess intact Aboriginal Archaeological deposits was low to nil. The comment provided by the OE&H on this report, was that the investigation was adequate.

Notwithstanding the above a safeguard condition was imposed on the Stage 2 DA and is relevant also for the Stage 3 DA. The condition has been included in **Appendix ‘A’**.

Conclusion to Condition 22

The applicant has adequately addressed the environmental assessments required by condition 22, within the constraints of the approved Concept Plan approval.

Landscaping and Public Domain

Similar to the building form, the public domain treatment has been set by the Concept Plan approval. This requires public domain treatments around the buildings to be in accordance with the landscape concept plans and pedestrian and cycle linkages to be provided throughout the development. To date the applicant has excluded the foreshore landscape works in front of Stages 1 and 2, stating that it wants to deliver the landscape works under one separate future development application. The applicant has stated that the landscape works will generally be provided to coincide with completion of the Residential Precinct. The Stage 1 development was completed in October 2016 and Stage 2 is due to be completed in February / March 2018. Stage 2 fronts the foreshore park area but

as yet no landscape DA has been submitted by the applicant. Stage 2 will therefore be occupied with no foreshore park available.

Prior to a DA being able to be lodged for the foreshore, the applicant has to obtain approval from the DPE to MP10_0229 MOD 5. The applicant has been seeking an amendment to the landscaping scheme approved as part of the Concept Plan (MP10_0229 MOD 5) since late 2015. This MOD is still under assessment at present and Council is preparing a submission on this at the time of writing this report.

Notwithstanding that Stages 1 and 2 were approved without a requirement for the applicant to provide the adjacent landscaping, the Stage 3 development must be considered differently. The Stage 3 development incorporates large scale engineering works adjacent Building C and within the tidal channel. This proposed works are a critical element of the flood mitigation measures required for the Residential Precinct as a whole. The applicant intends for the landscape rectification work to be delivered as part of a future landscape DA. Given that MP10_0229 MOD 5 has yet to be approved and a landscape DA is yet to be lodged with the Council, there is no certainty for Council as to the timing for delivery of these works.

Council officers have continually advised the applicant that the landscape details for the channel and the area to the east of Building C should be provided as part of the subject DA. The landscaping of this area subsequent to completion of the channel works is paramount as the engineering works cannot be left ‘unfinished’ in terms of landscaping. The salt marsh area and steep banks in front of the town houses must be stabilised quickly after the flood mitigation works are completed. It is noted that the applicant has not proposed a temporary planting strategy to mitigate the engineering works and as such the complete landscaping works must be undertaken.

The applicant recently provided Council officers a set of the revised plans which it has submitted to the DPE as part of MOD 5 so that Council officers can assess the intended treatment of the channel and the associated landscape area between the channel and Building C. The landscape plans are still largely conceptual but contain sufficient detail for the purposes of assessment and for conditions to be imposed on the subject DA for delivery of the works. These conditions are included in **Appendix ‘A’** to ensure delivery of the channel landscape works as part of the subject DA.

Podium Landscaping

In terms of the podium landscaping in and around the Stage 3 buildings, general consistency with the Concept Plan is achieved. Street planting is proposed along the eastern side of Foreshore Boulevard and along the Captain Cook frontage of the site. Two less trees are proposed along the Foreshore Boulevard but three additional trees are proposed along the Captain Cook Drive frontage compared to the approved Concept Plans. This is negligible in the overall scheme of the development.

As outlined above MP10_0229 MOD 3 granted approval for an amended layout of built form for Stage 3. No revised landscape plans were stamped as part of the MOD, with just generalised areas of

communal open space shown on the Envelope Plan. As stated above, the building footprints vary from this approved plan as does the communal open space area. The main change in the communal open space provision is removal of the ‘slivers’ which were shown in between Building C, to the side of part of Building A and in front of part of Building B (on Foreshore Boulevard. No objection is raised to the loss of these areas given they would have provided little useable area for communal open space – being more suited to landscape planting. Sufficient public landscaping is proposed on Foreshore Boulevard and along the eastern channel abutting Building C to ensure the development retains an appropriate landscape component.

As discussed in Section 8 above, minor amendments are recommended to improve the quality of the central courtyard communal area and to bring the species selection in line with the requirements for sites located in a Greenweb ‘support’ areas. Development in Greenweb support areas should ensure the retention and restoration of areas of habitat and contribute to adjacent key areas of habitat (Greenweb ‘core’ areas) to ensure their long term sustainability. Given the adjacent Greenweb core area is also associated with an internationally significant wetland community; appropriate plant selection is of critical importance.

With the implementation of the recommended conditions, Council is satisfied that the proposal is satisfactory with regard to the terms of the Concept Approval, and the objectives of SSDCP 2015 for landscaping and Greenweb sites.

Flooding and Stormwater Management

The subject site is highly flood affected being within the 1% AEP (1 in a 100 year flood event). The Concept Plan approval required the applicant to address flooding on the site and to submit modelling reports and mitigation measures to alleviate future flood events. The applicant sought to defer resolution of the flooding with both the Stage 1 and 2 developments, indicating that it would be resolved at Stage 3. Conditions of consent were imposed by the JRPP which Council considered were sufficient to ensure an acceptable environmental impact albeit the Flood Emergency Response Plan (FERP) issued as part of Stage 2 is only interim, pending the final Stage 3 resolution.

When the Stage 3 DA was lodged the applicant had sought to exclude the drainage channel and associated landscaped area from the proposal. The submitted flood reports and plan documentation were inconsistent, some utilising out of date information and providing details of works which were no longer feasible. As the subject proposal represents the last stage in the proposed residential redevelopment of the site, the flood mitigation works were required to form part of the proposal.

When the application was reported to the JRPP in November of 2016, Council officers recommended that the application be placed on hold pending receipt and assessment of the necessary flood mitigation information. The JRPP agreed with this course of action and the applicant has since been working with Council to resolve this issue.

The applicant has since provided updated flood and drainage documentation, including a Flood Assessment Report (WMAwater, 2017) and a subsequent letter dated August 2017. Pre-and post-development modelling has been undertaken and Council is generally satisfied with the reports submitted. The plans submitted detail the extent of works proposed to the channel, which comprises largely excavation along the length of the western side and the construction of a sheet pile wall. The excavation occurs above the mean high water mark (MHW) and can occur without removal of any mangroves (refer above). The excavation enables a wider and deeper channel which minimises the flood effect and ensures that any flooding which does occur, does so onto the subject site (to the west) rather than on the eastern side across the neighbouring site owned by the Cronulla Sutherland Leagues Club Ltd (CSLC).

The flood mitigation works also include the provision for an overland flow path across part of the eastern side of the channel area. Council will require an easement for this so that it can control the hard and soft landscaping and any other proposed structures within this area.

Other stormwater drainage measures proposed on the bank adjacent the channel and Building C include a large bio-swale. This is intended to capture rainwater and enable natural treatment of run-off prior to release via an underground pipe into the channel. Conditions regarding construction of this and its long-term management are included in **Appendix ‘A’**.

The scope of proposed flood mitigation works also includes removal of the existing bridge and separate cable support structure (previously used for the outside broadcast vehicles for the Sharks games) across the channel and replacement with a new high level bridge. This bridge is proposed to be located at the northern end of the channel abutting the eastern side of Building D and will extend across the channel to connect with the western side of Family Hill. The bridge provides emergency egress from the residential precinct (Stages 1, 2 and 3) in the event of a flood but also provides access for emergency service vehicles along the foreshore between the residential precinct and the Sharks site. The bridge has been located at the northern end of the channel to facilitate public access along the foreshore and is sufficiently wide to enable pedestrians and cyclists to cross safely.

The proposed bridge extends across the eastern boundary of the site into land owned by the CSLC. Owner's consent from the CSLC has been submitted with respect to these works.

Council has assessed that the modified drainage proposal is satisfactory and fit for purpose. As the works involved occur within Council's easement, conditions are imposed to ensure the requirements of the easement are fulfilled. An additional easement is required to be created over the overland flow path to the west of the channel to ensure Council's liability is protected regarding flood waters over this portion of the applicant's site. Conditions with respect to the existing easement and the new easement are outlined in **Appendix ‘A’**.

The measures outlined in the WMAwater Report (and shown on the engineering plans) will form part of the works required to be completed prior to the issue of any Construction Certificate for the Stage 3 development. Conditions to this effect are included in **Appendix ‘A’**. Subject to these conditions

Council is satisfied that there is sufficient certainty regarding the environmental impact of the development with regard to flooding.

Groundwater

The Concept Approval requires future applications to demonstrate that the development does not impact upon the health of the groundwater dependent ecosystems. The proponent has addressed groundwater contamination in their contamination assessment, which indicates that no significant groundwater contamination was encountered.

Groundwater volume can also affect the freshwater/saltwater interface and impact on non-estuarine wetland and salt marsh communities. However, the Concept Plan approval, as modified, has approved the footprint of the buildings above a two storey podium. The contamination reports submitted with the concept and Stage 2 development also acknowledge that capping would be used to manage the onsite contaminants.

This method of site remediation will prevent the infiltration of stormwater/rainwater at the site. Infiltration would normally recharge the groundwater. With the impermeable coverage of the site already set, the capacity of the detailed design stages that follow the Concept Plan are therefore limited in their capacity to address groundwater volumes through recharging the groundwater, by using treated stormwater for example.

Notwithstanding the above, it is Council's opinion that no significant groundwater dependent ecosystems are located in the near vicinity of the site, thus minimising any impacts caused by the reduced infiltration at the site. Groundwater is still present at the site and it is likely that recharge to groundwater will occur in adjacent areas, such as the foreshore landscaped area where capping is not being installed. Council is satisfied that the proposed development for Stage 3 will not result in a significant effect on groundwater dependant ecosystems.

Parking

Parking Volume

The proposal involves 238 apartments and 273m² of commercial floor space. Parking is provided on site and within the verge of the Foreshore Boulevard to accommodate a total of 319 vehicles, the majority of which are allocated as resident spaces. Access to the Stage 3 parking area is via two entrances – one which enters the Lower Ground level and one which enters the Ground Level. There is no internal ramp within the car park levels to access the two levels. The Lower Ground Level however links in with the Stage 2 carpark via a connection under Foreshore Boulevard.

Schedule 3 of the Concept Approval contains the Future Environmental Assessment Requirements (FEAR). Condition 6 of the FEAR specifies the parking rates for the residential units. Both Stage 1 (DA13/0270) and Stage 2 (DA14/0598) were granted approval with the provision of on-site parking based on the rates in Condition 6.

Subsequent to the issue of these approvals Condition 6 of the Concept Plan was amended under MP10_0229 MOD 4 granted on 26 October 2015. MOD 4 enables the refinement of the car parking rate for visitors within the residential precinct as follows:

- (b) *Within the Residential Precinct:*
- (i) *50% of the required number of commercial parking spaces must be set aside for commercial parking only;*
 - (ii) *The remaining 50% of commercial spaces and the residential visitor spaces may be shared and used by either commercial or residential visitors: and*
 - (iii) *Where the remaining 50% of commercial spaces are shared with residential visitors, the spaces may count towards both the residential visitor and commercial parking requirements set out in (a).*

Subsequent to approval of MOD 4, the Stage 1 and 2 Residential developments were amended to modify the parking provision to reflect MOD 4. The applicant is also seeking to utilize the MOD for the Stage 3 parking provision. The breakdown of parking on the site with respect to the rates in Condition 6 is as follows:

Parking type	Required Under Concept Plan	Provided	Complies?
Residential	1 per 1 bedroom = 92 1 per 2 bedroom = 118 3 per 3 bedroom = 56 Total 266	266	Yes
Commercial	1 space per 30m ² = 9 (actually 5 commercial & 4 shared)	6 commercial + 4 shared visitor	No – see below
Visitor	1 space per 5 apartments = 48 (- 4 shared spaces as per commercial split above)	43	No – see below
Total parking provision	319	319	Yes

The MOD 5 requirement is unclear as to whether the provision of commercial parking can exceed 50% or not. In this instance the applicant has proposed 66% commercial parking. The remaining 34% of spaces would equate to 3 shared visitor spaces but the applicant has proposed 4. Condition 6(b)(iii) specifies that the shared visitor parking spaces may only count towards the allocation of both commercial and visitor when they are in accordance with the requirements set out in 6(a). Notwithstanding this 6(b)(ii) enables the sharing of the residential visitor spaces for commercial or residential so there is no benefit in restricting the shared space in this instance.

Condition A4 (Schedule 2 – Terms of Approval) of the Concept Plan specifies a ‘maximum’ rate for the WBTC development, with a total of 883 spaces permitted for the Residential Precinct. The initial Stage 1 and Stage 2 development approvals (as modified) result in the provision of a total 541 spaces. In conjunction with the 319 spaces proposed as part of Stage 3, the parking provision for the precinct will be 860 spaces. This is below the maximum permitted (by 23 spaces).

Car Wash Bay

One shared car wash bay/visitor parking space is provided on the lower ground floor level. Although SSDCP 2015 requires 12 car wash bays be provided for the development, the car wash bays are not required under the Concept Plan approval. The proposal is capable of meeting the key objectives for SSDCP 2015 controls for parking despite this non-compliance.

Bicycle Parking

The Concept Approval is silent on any requirement for motorbike or bicycle parking. SSDCP 2015 requires bicycle parking to be provided at the rate of 1 per 10 dwelling units for the first 200 car spaces then 1 space per 20 thereafter. This results in a total requirement of 26 spaces. 37 spaces are provided. The applicant has provided more than adequate bicycle storage parking but not motorbike parking. The nil provision of motorbike parking is consistent with the approach taken in Stages 1 and 2.

Adaptable Housing

SSDCP 2015 requires 20% of all dwellings within the proposed development (48 units for Stage 3) to be specifically designed to be flexible and easily modified to become ‘Adaptable Housing’ (i.e. housing accessible to occupants and visitors who are or may become frail or have or develop a disability). As raised above Council’s architect was concerned with the level of modification proposed by the applicant to enable the units to be considered as adaptable and a condition of consent is imposed to ensure the level of adaptability required to achieve the standard is of a minimum.

In addition to the adaptable housing requirements SSDCP 2015 also requires that 10% of dwelling units within the development must meet the ‘Silver Standard Livable Housing Design Guidelines’. This equates to a further 24 dwelling units bringing the total for adaptable / livable housing to 71 units. The applicant has shown these units on the floor plans and provided a schedule to indicate compliance. Subject to a condition regarding the extent of modification, the proposal will satisfy the relevant objectives of SSDCP 2015.

Wind Effects

A wind report has been prepared in conjunction with the application (Windtech, August 2016). The results of the study indicate that the site is generally exposed to relatively strong north-easterly and southerly winds, largely due to the close proximity of the site to Woollooware Bay. The report includes several recommendations to ensure acceptable wind conditions in the outdoor trafficable areas within

and around the development. A condition of consent has been included in **Appendix ‘A’** to ensure the recommendations of the Windtech report are adopted.

Transmission Lines

Double Circuit 132 kV overhead transmission lines, owned and operated by Ausgrid traverse the northern portion of the subject site. For the subject application, the works to reduce EMF exposure are particularly relevant to Building D, the closest of the proposed buildings to the power lines.

As part of the Concept Plan approval, conditions of consent (26-28) were imposed to minimise EMF exposure to future occupants of the development. The conditions adopt the mitigation measures identified in the Magshield Products (AUST) International Pty Ltd report submitted by the applicant as part of the application in 2012. Such measures include reversing the phase sequence of the 917 power line, which Ausgrid commented is capable of reducing EMF levels by half in the proposed development area. Ausgrid have confirmed that design work for the rephasing of 916, which is electrically equivalent to re-phasing 917, has been completed.

A confirmation letter prepared by Magsheild Products (Aust) International Pty Ltd, submitted with the application (dated 4 May 2016) states that the EMF measurements taken following the rephasing work, reduced the EMP by 60%. Magshield has confirmed that the EMP exposure within Building D is low and similar to levels accepted for the residential Building H in Stage 2 Residential.

Conditions 26 and 27 of the Concept Approval have effectively been met. Condition 28 requires that all future applications address the required access provisions of Ausgrid. To ensure compliance with this condition, the relevant conditions of consent contained in the Ausgrid correspondence have been included in **Appendix ‘A’**.

Shuttle Bus

In its assessment of the Concept Approval, the PAC indicated that the operation of a shuttle bus was a key component of ensuring the site is accessible by means other than private transportation, given the isolation of the site from existing public transport services. The concept approval reflects this in the conditions of approval, which require each future application to demonstrate necessary agreements have been reached in securing the provision of an ongoing and reliable service to the residential precinct.

Development consents for Stage 1 and 2 Residential both included a condition requiring the implementation of the shuttle bus service. This requirement has since been superseded by the commencement of a public bus service (Route 985) on 20 November 2016, ahead of the first residential occupation of Stage 1. The service is intended initially to provide 272 trips across the week including 44 each weekday, 28 on Saturdays and 24 on Sundays. This service operates between Cronulla, Caringbah Station and Miranda.

Whilst the public bus does not provide a service to Woollooware Station, it has been considered as acceptable in terms of providing an effective, reliable bus service that provides confidence for users, (particularly commuters) and satisfactorily addresses the Concept Plan condition. No additional condition is therefore required to be imposed on the Stage 3 consent with respect to the shuttle bus.

Active Frontages

The Concept Plan requires future applications for the Residential Precinct to demonstrate that the frontages to Captain Cook Drive, the Central Boulevard and the riparian zone are activated at ground level. The Concept Plan approval also requires that all ground floor units are provided with individual and direct street access and sufficient articulation. The Stage 3 development effectively has four frontages, two being to the riparian zones, one to Captain Cook Drive and one to the Foreshore Boulevard (a private road).

The approved Concept Plan scheme includes an elevated central road (Foreshore Boulevard) and two levels of above ground parking for the Stage 3 buildings. The building design (Building A) successfully screens the podium parking on Captain Cook Drive by incorporating double height commercial spaces at Ground Level. The colonnaded walkway in front of and around the commercial tenancies dead-ends on the south-east side which is a less than desirable feature. The colonnade also relies on equitable access from the western side only – which is less than desirable if pedestrians are walking from the eastern side. The landscape plan submitted for the Concept Plan (MOD 5) shows the proposed ramp but the architectural plans have not been updated. A condition has been included in the **Appendix A** requiring the provision of the ramp connecting with the colonnade on the eastern side of Building A. This will then link the commercial tenancies with the pedestrian / cycle link which extends north-south adjacent the channel. This would improve access to the tenancies and facilitate increased activation of this frontage and that of the adjacent landscaped area.

The design of the Stage 3 development provides two storey terraces (Building C) along the eastern boundary facing the publicly accessible landscaped channel area and the Sharks stadium. These have direct access from the terraces to the adjacent public landscaped area and serve to ‘activate’ this interface. There is still a level change between the private courtyard areas and the landscaped area but this is intended to be graduated with planting and centralised stairs for these residents to access the public landscaped area. The areas on either side of the terraces are broken up at Ground Floor level by apartments which face directly over the landscaped channel area. No activation is provided at the Lower Ground Level, except for the commercial tenancies at the southern end which wrap around the corner of the building from Captain Cook Drive. It is difficult to activate more of the frontage given the carpark behind. The applicant has sought to rely on architectural detailing of these areas, interspersed with the Ground Level apartments to create sufficient visual interest and activation. The landscaped treatment of this area will also be an important contributor to the interface of the built form with the public area. A discussion regarding this is contained in Section 1.3 above.

There are six apartments on the Ground Floor Level in Building B which will front the Central Boulevard. Each of these units has direct street access via their private courtyards. The apartments

break up the vehicle entry points to the development, which are situated to the northern and southern end of the development to take advantage of the level change on Central Boulevard. There are two entry foyers for Building A and one for Building D with direct access off the Central Boulevard. Overall the design is sufficient to meet the requirement for an active street frontage to the Central Boulevard. Due to the topography of the site and level difference with the adjacent foreshore future parklands, the north facing units on the Ground Floor do not have direct pedestrian access to the riparian zone. It is proposed to mound the foreshore area in front of Building D so that the lower level carpark structure is screened. The private terraces of these apartments will sit just above the top of the bank and assist to provide natural surveillance of the parklands. The parkland itself (subject to a future DA as discussed above) is also proposed to be activated by passive and active recreation uses incorporating a cycleway link and a playground. Council is satisfied that the development, and the future uses of the parkland will effectively activate the surrounding public domain as far as practicable within the constraints of the site.

Travel Access Guide/Green Travel Plan

Condition 10 of the approved Concept Plan required the submission of a Travel Access Guide (TAG) / Green Travel Plan (GTP) with future development applications. A Travel Access Guide (TAG) has been submitted with the subject application however this is somewhat out of date given it was prepared prior to the shuttle bus service being overtaken by the public bus service. A condition of consent is recommended to the same effect as that imposed on the Stage 1 and Stage 2 requiring that an updated TAG be prepared for the future users of the Stage 3 development.

Ecologically Sustainable Development (ESD)

The site is an area of high environmental sensitivity, marked by its proximity to the areas identified as internationally significant RAMSAR wetland at Towra Point. The land is highly visible from Captain Cook Drive and is prominent within the local community given its association with the Cronulla-Sutherland Rugby League Club. The development is also part of a new town centre to be built largely on land that is unencumbered. The DP&E report on the concept plan design included the following comment on ESD:

It is recommended that a future assessment requirement be imposed to require future development applications to incorporate best practice ESD measures.

As a result, the following condition was implemented on the Concept Approval:

Future applications shall demonstrate the incorporation of ESD principles in the design, construction and ongoing operation phases of the development, including the selection of fabric and materials, water conservation and management initiatives, and energy efficiency and renewable energy initiatives.

This requirement was also applicable to the Stage 1 and 2 developments, for which the JRPP imposed conditions of consent. The applicant has taken steps to address ESD for the Stage 3

development indicating a commitment to the initiatives required by the Stage 1 and 2 consents. The development has dedicated the rooftop area on Building A for the purpose of PV panels to power the corridor lighting in each of the buildings. Any timber used on the project will be sourced from a recycled source or shall be FSC - Forestry Stewardship Council certified timber. Smart Energy Metering is also proposed so that residents can track their energy usage.

The implementation of these measures reasonably addresses the ESD requirements contained in the Concept Plan. A condition of consent is recommended to ensure their implementation.

Waste Management

Waste shutes are provided within each of the four buildings for the upper level residents for waste / recycling disposal. Residents on the Ground Level (Buildings C and D) will dispose of waste directly into the waste room on this level. The waste is proposed to be collected by a private contractor three times per week from a garbage holding area adjacent to the loading dock which is accessed via the Central Boulevard (largely constructed as part of Stages 1 and 2).

A commercial waste store for the tenancies fronting Captain Cook Drive is proposed in a room on the Lower Ground level. Private contractor waste collection is proposed but conditions are imposed regarding the location for collection, as neither Option 1 nor 2 proposed by the applicant is satisfactory

A Waste Management Plan (WMP) has been submitted with the application prepared by Elephant's Foot, 2016. This provides recommendations and measures to manage waste during the operational phase of Stage 3 of the Residential Precinct. The WMP also provides measures to address sustainability and waste avoidance and improve the amenity of future residents in regards to waste storage, transportation and collection. The measures contained in this report are recommended to be enforced through a condition of consent.

The provision of waste storage area provided in the basement levels and the means for collection of the commercial waste is still to be resolved with the applicant. Conditions of consent have been imposed in this regard requiring this to be addressed prior to issue of the Construction Certificate.

SECTION 94 CONTRIBUTIONS

The proposed development will introduce additional residents to the area and as such will generate Section 94 Contributions in accordance with Council's adopted Contributions Plans. These contributions include:

Open Space:	\$2,171,350.16
Community Facilities:	\$ 358,925.42

These contributions are based upon the likelihood that this development will require or increase the demand for local and district facilities within the area. It has been calculated on the basis of 238 new residential units.

DECLARATION OF AFFILIATION

Section 147 of the Environmental Planning and Assessment Act, 1979 requires the declaration of donations/gifts in excess of \$1,000. In addition Council's development application form requires a general declaration of affiliation. In relation to this development application no declaration has been made.

CONCLUSION

The proposed development is for the construction of four new commercial tenancies and 238 residential apartments at 475 Captain Cook Drive, Woollooware. It represents the third and final stage of residential development within the Concept Plan approved by the NSW DPE (PAC) in 2012.

The subject land is located within Zone B2 Local Centre pursuant to the provisions of Sutherland Shire Local Environmental Plan 2015. The proposed development, being shop top housing, is a permissible land use within the zone with development consent. The approval granted under the Part 3A assessment process effectively overrides the local planning instrument, establishing the building height and density controls for the site under the Concept Plan approval.

The proposed development is compliant with the Concept Plan approval. The minor protrusions beyond the maximum building envelope and floor plate are accepted as very minor and are satisfactory with regard to the Concept Plan considerations.

The subject site adjoins a sensitive wetlands environment in Woollooware Bay known as the Towra Point Aquatic Reserve. Part of the Stage 3 development area includes the tidal channel and landscape area to the west of this. The channel contains significant mangrove growth. Necessary flood mitigation works are proposed to be undertaken within and adjacent to the channel as part of the development application. The works are considered to be satisfactory to the extent that the mangroves will be protected during works and be able to be retained over the long-term. Future approvals will be required from the DPE Fisheries and Water for the works to the channel which will further safeguard the nearby wetlands.

The landscape treatment of the channel and the area adjacent to it are an intrinsic part of the application and landscape conditions have been included to require the delivery of this work as part of the subject Stage 3 development.

Part of the high level bridge which connects the proposed Stage 3 development with the adjoining CSLC site (and which serves as the evacuation route for the entire residential precinct) is required to be constructed on the CSLC site. Owner's consent from the CSLC has been submitted for these works.

In response to public exhibition 4 submissions were received. The matters raised in these submissions have been dealt with by design changes or conditions of consent where appropriate.

The application has been assessed having regard to the terms of the Concept Plan approval, the Heads of Consideration under Section 79C (1) and Schedule 6A of the Environmental Planning and Assessment Act 1979. Following detailed assessment it is considered that Development Application No. 16/1068 may be supported for the reasons outlined in this report, subject to conditions.

RESPONSIBLE OFFICER

The officer responsible for the preparation of this Report is the Manager, Major Development Assessment. (AT)

From: Carla Ganassin [<mailto:carla.ganassin@dpi.nsw.gov.au>]
Sent: Wednesday, 7 March 2018 2:56 PM
To: Amanda Treharne
Subject: Re: MA17/0591 to DA16/1068 - Stage 3 Residential

Hi Amanda,

Thanks for checking this with DPI Fisheries.

DPI Fisheries is supportive of this change to include steel rather than plastic sheet piling as part of this proposal.

Regards,

Carla Ganassin | Fisheries Manager | Aquatic Ecosystems Unit
NSW Department of Primary Industries | Fisheries NSW
Block E, Level 3, 84 Crown Street, Wollongong NSW 2500
SEND MAIL TO: Locked Bag 1 | Nelson Bay NSW 2315
T: 02 4222 8342 | F: 02 4225 9056 | E: carla.ganassin@dpi.nsw.gov.au
W: www.dpi.nsw.gov.au

Conserve, Share, Provide

PERMIT APPLICATION FORMS & FISH HABITAT PROTECTION POLICIES AT:
www.dpi.nsw.gov.au/fisheries/habitat/protecting-habitats/toolkit
EMAIL COMPLETED APPLICATIONS TO: ahp.central@dpi.nsw.gov.au
APPLICATION PROCESSING TIMES (from date received): 28 days for Permits & Consultations; 40 days for IDA Referrals

On 7 March 2018 at 11:06, Amanda Treharne <ATreharne@ssc.nsw.gov.au> wrote:
Hi Carla,

Further to our telephone conversation this morning please find attached the details of the revised sheet pile wall.

We are recommending a change to our condition to reflect the new material and to delete references to PVC.

If you require anything further from us regarding this please do not hesitate to contact me.

Best regards

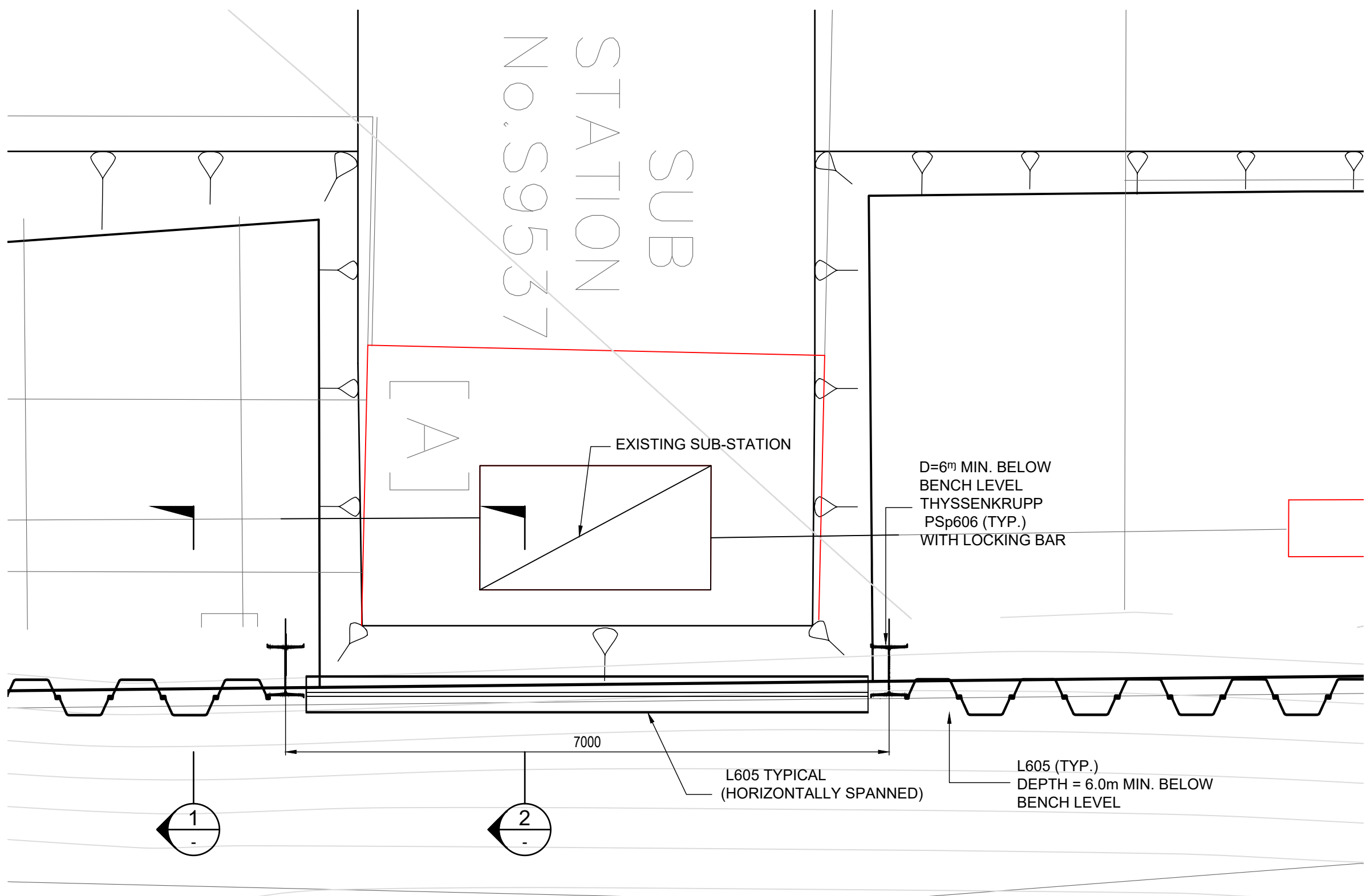
Amanda

Amanda Treharne
Environmental Assessment Officer - Planner
Major Development Assessment - Shire Planning
(02) 9710 0462
atreharne@ssc.nsw.gov.au
Find out first. Sign up now.

This email and any attachments may be confidential and may not represent Council's position.

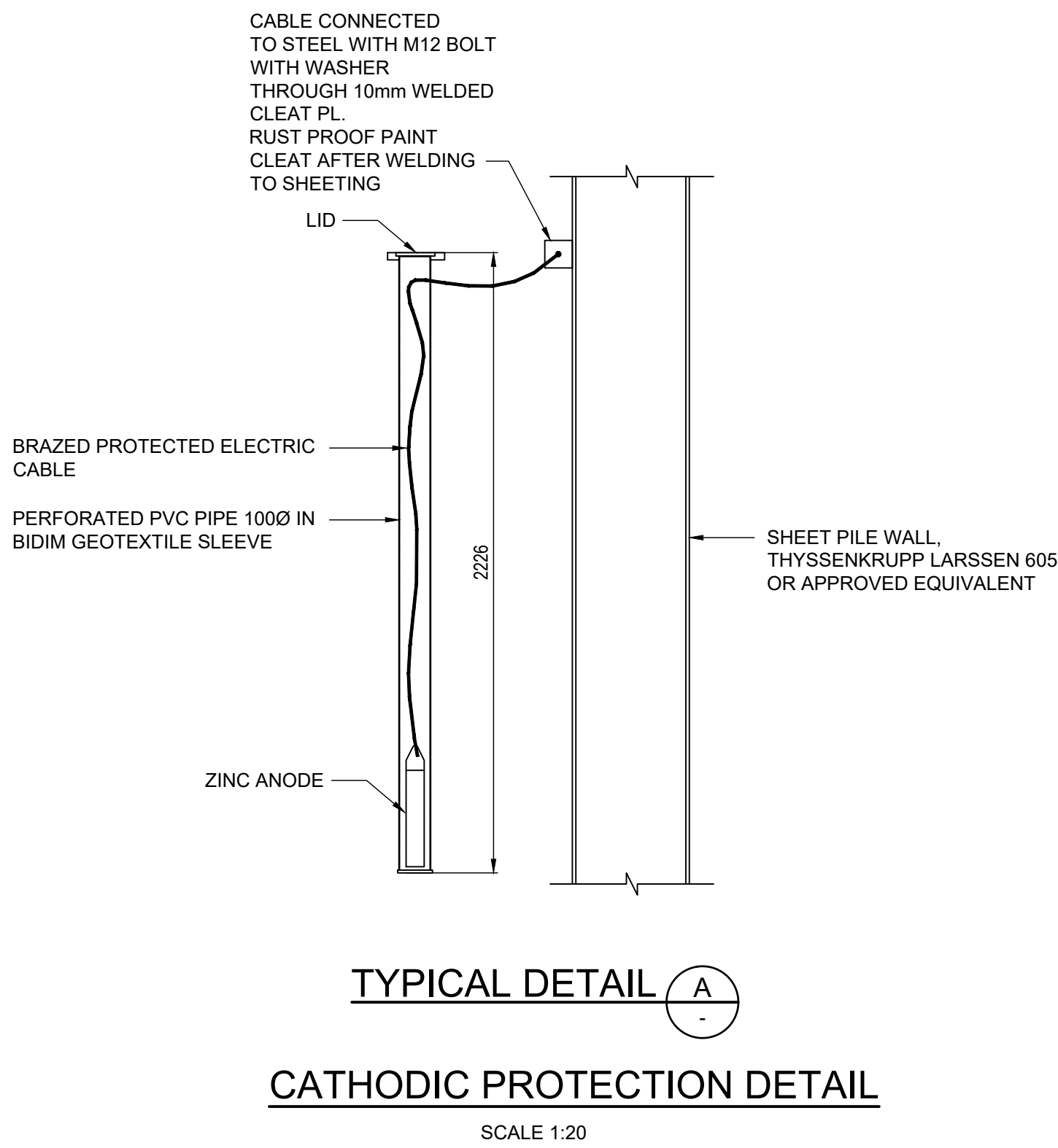
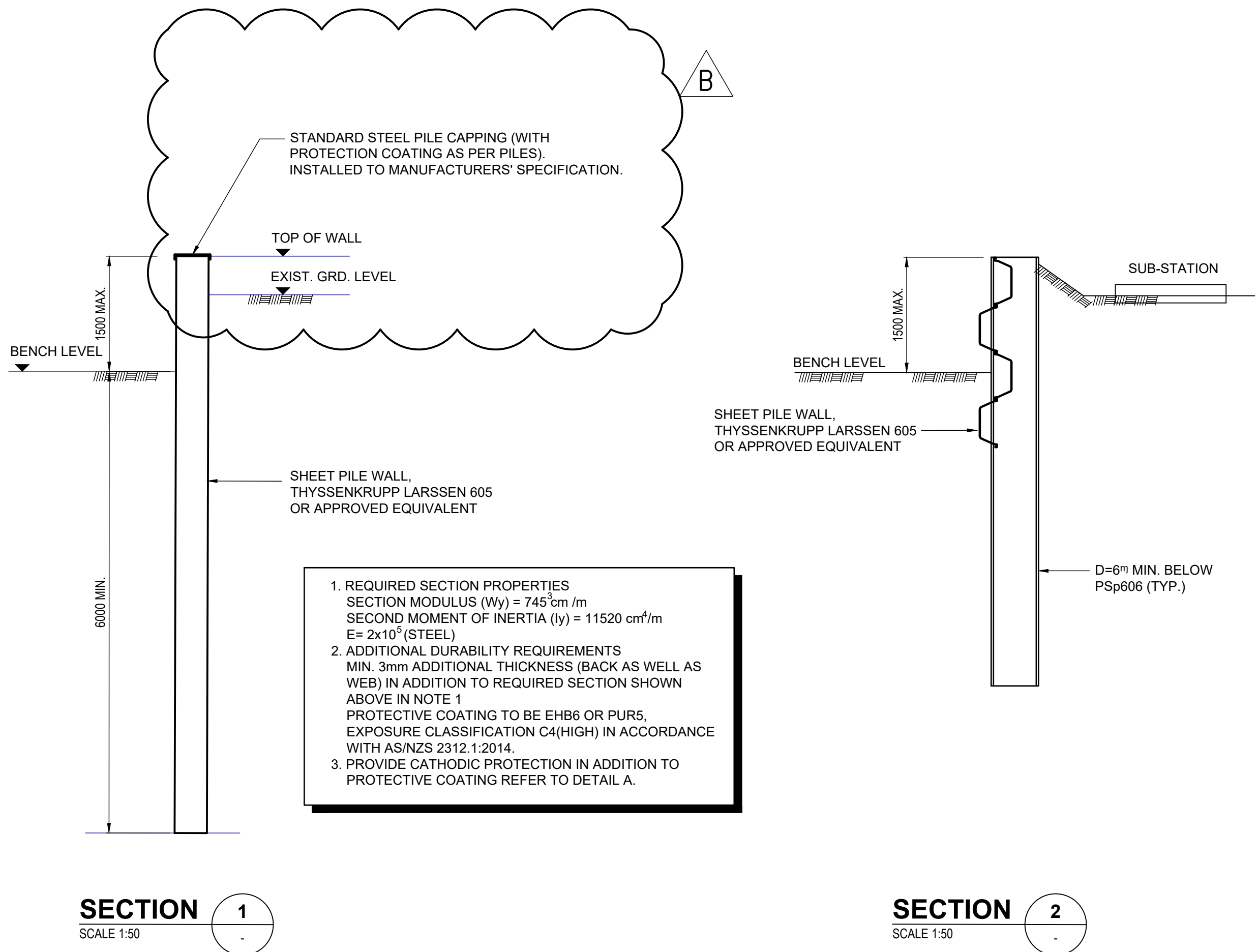
We cannot guarantee security on the email and any attachments. If you receive the email in error, please tell us and delete it and any attachments.

This message is intended for the addressee named and may contain confidential information. If you are not the intended recipient, please delete it and notify the sender. Views expressed in this message are those of the individual sender, and are not necessarily the views of their organisation.



PART PLAN SHEET PILE SHORING WALL AT SUB-STATION SCALE 1:50

NOTE: FOR FULL EXTENT OF SHORING REFER TO DRG. No CA2-2-00 REV. C
ALTERNATIVE DETAIL IF PILING OPERATION AS PER SECTION 1 IS NOT ACHIEVABLE AT SUB-STATION.



TYPICAL DETAIL A
CATHODIC PROTECTION DETAIL
SCALE 1:20

CLIENT BLUESTONE CAPITAL VENTURES

REV DATE REVISION DETAILS

DRAWN

APPROVAL

SCALE

SIZE

FOR TENDER
NOT FOR CONSTRUCTION

PROJECT

WOOLLOOWARE BAY CIVIL - STAGE 3

TITLE

SHEET PILE WALL DETAILS

CIVIL

JOB No.

16-000464

DRAWING No.
CS3-5-12

REV
B

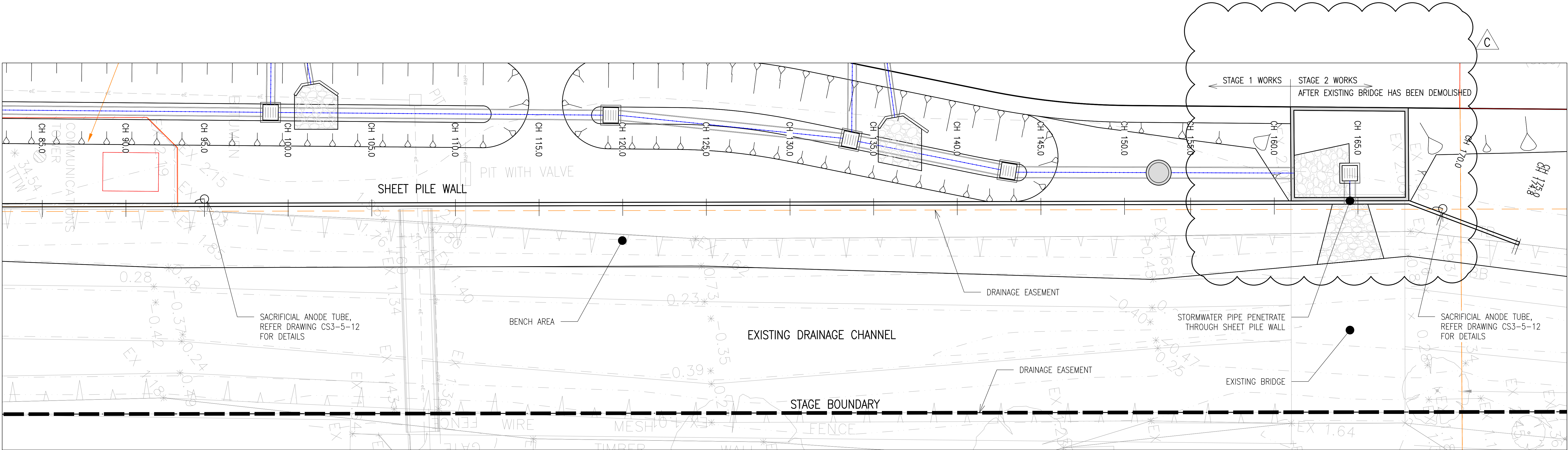
REV	DATE	REVISION DETAILS	DRAWN	APPROVAL
A	07/02/16	FOR TENDER	MD	CV
B	19/02/16	ADDED CAPPING BEAM DETAIL	RC	CV

DRAWN	APPROVAL
MD	CV
RC	CV

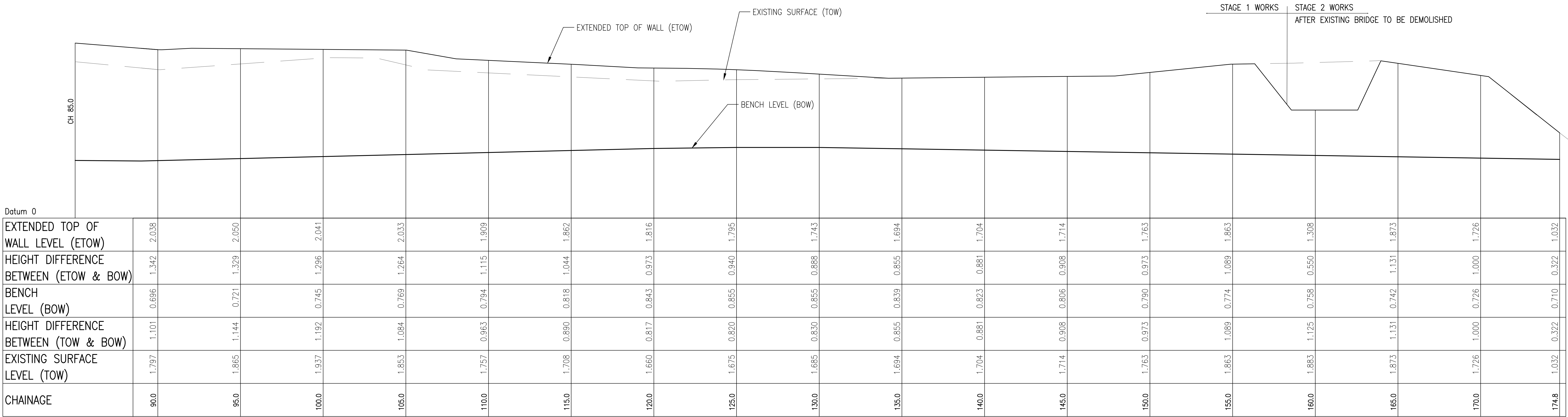
SCALE	SIZE
AS SHOWN	B1
DRAWN	MD
DESIGNED	JB
CHECKED	JB

APPROVED
DATE 7/02/16

PROJECT	WOOLLOOWARE BAY CIVIL - STAGE 3
TITLE	SHEET PILE WALL DETAILS
JOB No.	16-000464
DRAWING No.	CS3-5-12
REV	B



PLAN
SCALE 1:100



LONGITUDINAL SECTION – SHEET PILE WALL CH90 – END

SCALE (H) 1:100
SCALE (V) 1:20

REV	DATE	REVISION DETAILS	DRAWN	APPROVAL
A	22/12/17	ISSUED FOR INFORMATION	RC	CV
B	07/02/18	ISSUED FOR TENDER	RC	CV
C	19/02/18	ADDED NOTES FOR STAGING WORKS	RC	CV

SCALE	SIZE
AS SHOWN	B1
DRAWN	
DESIGNED	
CHECKED	

FOR TENDER NOT FOR CONSTRUCTION	APPROVED
DATE 7/02/18	

PROJECT	WOOLLOOWARE BAY CIVIL – STAGE 3
TITLE	SHEET PILE WALL PLAN & LONGITUDINAL SECTION SHEET 2
JOB No.	16-000464
DRAWING No.	CS3-5-11
REV	C