



ANGLICAN
RETIREMENT
VILLAGES
DIOCESE OF SYDNEY

Creating Communities of Christian Care

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23 January 2007

The Director-General
Department of Planning
23-33 Bridge Street
Sydney NSW 2000

Attention Jason Perica & Michael File

Dear Sirs

RE: MODIFICATIONS TO MAJOR PROJECT (MP 06_0094) – CONCEPT PLAN FOR THE ANGLICAN RETIREMENT VILLAGE, SANDON POINT

This letter is submitted under Division 5 of Part 3A of the Environmental Planning and Assessment Act 1979 to request the Minister for Planning to modify the approval of the concept plan prepared by the Anglican Retirement Villages (ARV) for Sandon Point.

The modifications proposed by ARV relate to specific conditions of the approval termed 'Modifications' that affect the feasibility of the concept plan. Some of the modifications proposed by ARV are to correct inconsistencies and anomalies in the approval. ARV did not have the opportunity to discuss the Modifications in the approval with the Department of Planning, and we therefore request that the Minister make further modifications as proposed in this statement in order to make the ARV concept plan a feasible and deliverable project. We believe this project is in the public interest of improving the environmental conditions on the site and providing housing choices.

This statement is submitted with the following documents:

- APZ Comparison Drawings prepared by Jones Sonter Architects;
- Statement on bushfire hazard and asset protection zones prepared by BES
- Statement on riparian corridor prepared by Cumberland Ecology
- Statement on on-site detention and riparian corridor prepared by GHD

APPROVAL PROPOSED TO BE MODIFIED

On 21 December 2007, the Minister approved the Concept Plan (MP 06_0094) for Sandon Point that includes a retirement village proposed by ARV and a residential development proposed by Stockland Developments. The approval includes 13 Modifications in Schedule 2 numbered A1-A4, B1-B5 and C1-C4. The additional modifications proposed by ARV in this request relate to the retirement village component only.

PROPOSED MODIFICATIONS TO THE APPROVAL

The additional modifications proposed by ARV relate to specific Modifications in Schedule 2 of the approval that affect the feasibility of the concept plan. These include certain parts of Modifications A1, A3, A4, B4 and B5 as described below.

Modification A1 (2) – Development Footprint

Modification A1 (1) in Schedule 2 of the approval identifies the area of land on which the development footprint is restricted. Modification A1 (2) specifies the following types of works that can occur outside the development footprint in the riparian corridors and forest on the ARV site:

- landscaping including rehabilitation of riparian corridors and forest; and
- Storm water management and utility services.

It is proposed to modify Condition A1 to allow roads and bridges to cross the riparian corridors as shown in the Concept Plan application. The road and bridge crossings of the creeks are essential to the practical operation and feasibility of the retirement village as well as to the requirement in Condition B2 for the construction of a north-south link road through the site for the community. It appears that roads and bridges have been omitted from Condition A1 (2) as an oversight. We request the Minister modify Modification A1 (2) as shown below with additions underlined:

“(2) The following development may occur on land outside the development footprint shaded grey (including land hatched pink) on the map at (4):

- (a) On Stockland Lands, Associated works;*
- (b) On ARV lands,*
 - (i) Landscaping including rehabilitation of riparian corridors and forest; and*
 - (ii) Storm water management, roads and bridges and utility services.”*

Modification A3 – Bushfire Protection Requirements

Modification A3 states the following:

“The Concept Plan is modified as follows to ensure consistency with the Planning for Bushfire Protection Guidelines all APZs shall be located within the residential zone.”

The effect of Modification A3 on the retirement village concept plan proposed by ARV is shown on the accompanying three APZ Comparison Drawings titled: Concept Application CP_A, Approved Concept Plan with Modification A3 CP_B, and Proposed Modification to Approval CP_C. In particular, the effect of Modification A3 on the APZ from the riparian corridors in Cooksons Creek and Tramway Creek and on requiring 20m internal roads effectively undermines the feasibility of ARV's proposal for a retirement village at Sandon Point by reducing the developable area from approximately 5ha to 3.5ha.

ARV did not have the opportunity to review or discuss this devastating Modification with the Department prior to the approval, and it was not raised specifically by the Department in our meeting on 6 December 2006 or in our discussions with the Department on 8 December 2006 just prior to the approval. We would expect the Department to have consulted us about such a devastating Modification.

In the Concept Application, ARV had sought a deviation from the Planning for Bushfire Protection Guidelines by:

- reducing asset protection zones from 20m to 10-15m in the creek riparian corridors given the relatively low bushfire threat posed by revegetation in the corridors proposed by ARV; and
- reducing the internal road widths from 8m to 7.5m given the surrounding cleared and managed lands providing refuge areas, good local road access, and low bushfire threat.

In response to ARV's application, the Director-General's Environmental Assessment Report stated that "a 20m APZ be provided given there is no evidence presented to support a reduction on the APZs". The submission to DoP from Rural Fire Services (RFS) stated that from an initial assessment of the information provided the RFS has determined that an Asset Protection Zone of 20m is required from the proposed riparian corridors. The RFS submission states that for the RFS to accept reduced APZs it needs to consider the anticipated fire behaviour based on the proposed revegetation of riparian corridors and any existing vegetation that is to remain. It is clear from the Director-General's report and the RFS submission that there was not sufficient information in the concept plan stage for the RFS and Director-General to agree to APZs of 10-15m in the riparian corridors.

In relation to road widths, the Director General's Environmental Assessment Report discusses a requirement in the Planning for Bushfire Protection Guidelines for a 20m road width which is not relevant to the ARV site. The RFS submission states that roads within the development are to comply with Section 4.3.1 of Planning for Bushfire Protection (i.e. a minimum 8m road width).

ARV responded to RFS in "Response to Agency Submissions" date 29 September 2006 regarding reduction in width of APZ's as follows:

"In regard to the ARV component of the development BES advise the issue raised by the RFS is correct for the riparian zones only. The APZs proposed for the riparian zones range between 10 and 15 m in width, which deviate from the 'Planning for Bushfire Protection' minimum requirement of 20 m for low risk vegetation. A smaller APZ was proposed as it was assessed that the riparian zones did not pose a fire risk equivalent to that planned for within the Guidelines for 'forest remnants'. This merit based approach for very low bushfire risk sites (i.e. APZ smaller than 20 m) has been supported by RFS in many previous integrated development applications within Sydney, Illawarra and South Coast regions."

ARV responded to RFS in "Response to Agency Submissions" date 29 September 2006 regarding proposed road widths as follows:

"AVK Environmental Management note in their letter at Appendix E that the perimeter roads (park edge roads) provide a 5.5m wide carriageway with a 2.5m wide parking bay on one side of the road. AVK Environmental Management states "that this would meet the RFS requirements if parking is restricted to the parking bays on one side of the road. Although the width of the perimeter road reserves would be less than the 20m required for Planning for Bushfire Protection 2001, the proposed buildings fronting the perimeter roads are deep enough to incorporate a building setback to make up the 20m wide Asset Protection Zone." The Concept Plan illustrates the various carriageway widths and the park edge (perimeter) roads are proposed to have a parking bay on one side only, satisfying the above statement by AVK Environmental Management."

We therefore understand that the RFS are agreeable to this outcome. The Statement of Commitments can be amended accordingly to reflect this intention and ensure that the Project Plan maintains this design feature. This will be addressed with the Preferred Project Plan report. In regard to the ARV proposal the BES report recommends compliance with 'Planning for Bushfire Protection' requirements for 'private property access' roads. The RFS comment to provide roads in compliance with 'public access' roads (due to servicing 29 September 2006 30 P:\PROJECTS\5565F Sandon Point-Consultation Issues\Agency Submissions Response\DFP JBA Response to Agency Submission.doc more than 4 dwellings) relates to a relatively new RFS policy not covered within 'Planning for Bushfire Protection' or other related legislation. The primary difference between the two is the requirement for a public road carriageway to be at least 5.5 m in width (with parking and road-side service restrictions), and a private property access road to have a carriageway at least 4 m in width."

The accompanying statement by BES, Cumberland Ecology and GHD provide the additional information to demonstrate that a 10-15m APZ in the Riparian corridors is acceptable. These statements demonstrate that:

- the revegetation proposed for the riparian corridors of Cooksons Creek and Tramway Creek poses a relatively low bushfire risk, particularly given the separation from the remnant forest, and is in a form that provides 10 to 15m APZs on either side of Cooksons Creek and on the north side of Tramway Creek;
- a 10 to 15m APZ in the riparian corridors is appropriate for the low level of bushfire risk, and consistent with deviations from the Planning for Bushfire Protection Guidelines granted by RFS for numerous other developments in the region;
- the proposed revegetation of the riparian corridors, including 10-15m APZs, will re-establish the appropriate ecological and habitat values of the corridors; and
- The proposed regeneration of the riparian corridors, including the 10-15m APZs, is appropriate for the stormwater management objectives of improving water quality and maintaining the quantity of water leaving the site.

The accompanying statement by BES also provides further information to demonstrate that the proposed internal road widths of 7.5m are consistent with the Rural Fire Service Access Policy which allows roads down to a minimum width of 5.5m.

In light of the above, we request the Minister delete Modification A3 and replace it with the following:

"The Concept Plan shall be consistent with the Bushfire Protection Assessment – Proposed Aged Care Development 'Cookson Plibrico Site' Lot 2 DP 224431 Sturdee Avenue Bulli City of Wollongong prepared by BES dated May 2006 subject to providing a minimum 20m APZ around the perimeter outside of the Turpentine Forest, and be consistent with the NSW Rural Fire Service Access Policy."

ARV will be examining the 20m APZ on the north-west edge of the Turpentine Forest and its impact on the proposed residential aged care facility at a later stage.

Modification A4 (3) (b) – Built Form Controls

Modification A4 (3) (b) effectively states that the design excellence provisions in Modification B3 must be demonstrated to achieve the maximum density proposed by ARV.

Modification B3 relates to Stockland Lands for single dwellings, not the ARV site. We understand this is a typographical error and should instead refer to the design excellence provisions in Modification B4.

We request that the Minister delete the reference to the term "B3" in Modification A4 (3) (b) and replace it with the term "B4".

Modification B4 – Design Excellence

Modification B4 states that the Statement of Commitments is modified to include specific measures for design excellence for any building to take advantage of the maximum FSR and heights proposed by ARV. These measures comprise:

- a design excellence competition;
- a jury panel of 5 appropriately qualified design professionals chaired by a registered architect; and
- specific design excellence considerations for the jury panel.

We propose to modify B4 by:

- deleting the requirement for a design excellence competition and jury panel, and
- replacing it with a requirement for a design review panel to comment on an application for any building in a way that is consistent with the related provisions in SEPP 65 - Design Quality of Residential Flat Development.

ARV acknowledges the importance of excellence in design and to this effect held a design competition at the commencement of the project to select a lead architect for this project. Following this competition ARV have entered into contracts with the design consultants. Were ARV aware that a design competition would be required prior to the design development phase of the project it would have drafted consultant contracts accordingly. As it stands, contracts are in place and the basis for the proposed modification is that any requirement for another design competition at this stage in ARV's planning and design process is impractical and unreasonable as it would impose legal and financial burdens threatening to undermine the feasibility of the project. At this stage in ARV's planning and design process, the requirement for a design competition in Modification B4 is impractical and unreasonable for the following reasons:

- ARV has already conducted a competitive design process in the selection of its preferred architect which involved the preparation and evaluation of concept designs by three architects;
- Another design competition would be an unreasonable imposition on ARV's existing contractual obligations with its architect and consultants which were finalised a year prior to any suggestion of a government requirement for a design competition in the process;
- Another design competition for buildings at this stage results in substantial and unacceptable financial and legal burdens on the project that threaten to undermine the feasibility of the project.

Given the above, we request that the Minister modify Modification B4 as shown below with deletions struck through and additions underlined to replace the requirement for a design competition with a design review panel consistent with SEPP 65.

- "(1) The Statements of Commitments are to be modified to include measures outlined below.*
- (2) In circumstances where a design review panel established under SEPP 65 – Design Quality of Residential Flat Development does not consider a building on the ARV site, the Proponent commits to holding a design excellence competition conducting a design review panel for any building proposed to take advantage of the maximum FSR and heights permitted by the Sandon Point Concept Plan, as modified.*
- (3) The Proponent shall establish a jury panel for the design excellence competition design review panel that will consider whether the proposed development exhibits design excellence only after having regard to the following matters:*
- (a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,*
 - (b) whether the form and external appearance of the building will improve the quality and amenity of the public domain,*
 - (c) whether the building meets sustainable design principles in terms of sunlight, natural ventilation, wind, reflectivity, visual and acoustic privacy, safety and security and resource, energy and water efficiency,*
 - (d) if a competition is held as referred to in sub clause (3) in relation to the development, the results of the competition.*
- (4) The Proponent is to submit the report of the jury panel design review panel as part of any future application for development.*

- (5) *For the purposes of this modification, a ~~jury panel~~ design review panel:*
 (a) *means a 5 member panel comprised of appropriately qualified design professionals chaired by a registered architect, and*
 (b) *may include an officer of Council."*

Modification B5 (3) – Response to Submissions (North-south link)

Modification B5 (3) requires ARV to commit to the construction of the north-south link road through the ARV site (which also links through the Stockland lands) as part of the second stage of development on the ARV site. It states:

"(3) The Proponent on ARV land commits to construct the North-South link as part of the second stage of development."

This requirement in Modification B5(3) is inconsistent with Modification B2(2) which requires the north-south link road to be constructed on the ARV site in the second stage only if the Wrexham Road extension to the north of the Stockland lands proceeds. It states:

Modification B2(2) is the appropriate condition on staging as the value of the north-south link for access in the precinct and for the community depends on the Wrexham Road extension to the north of the Stockland lands. If the Wrexham Road extension does not proceed by the second stage of the ARV development, there will be no additional value in constructing the north-south road link component on the ARV site. Access for the ARV site is not dependent on the completion of the north-south link road and can rely on existing road access points.

Given the circumstances above, we request that the Minister delete Modification B5 (3), and rely on Modification B2 (2) for the appropriate and reasonable staging of the construction of the north-south road link through the ARV site to relate to the timing of the Wrexham Road extension.

Modification B5 (9) – Response to Submissions (On-site detention)

Modification B5 (9) requires the proponents to commit to not requiring the provision of on-site detention systems.

The Concept Plan application includes a pond in Cooksons Creek that is an integral component of the stormwater management concept plan for the ARV site prepared by GHD. The proposed pond effectively detains stormwater on-site.

As demonstrated in the attached statement by GHD, the proposed pond is an essential component to achieving the fundamental stormwater management objectives of the concept relating to:

- improving the quality of stormwater and creek runoff leaving the site;
- maintaining stormwater drainage discharge volume and rate; and
- providing a central landscape water feature that is integral to the overall landscape amenity of the retirement village.

In light of the above, we request the Minister modify Modification B5 (9) as follows with deletions struck through and additions underlined:

"(9) ~~The proponents~~ Stockland commit to not requiring the provision of on-site detention systems on its lands."

CONCLUSION

In the current form, the Modifications A1, A3, A4, B4 and B5 in the approval for ARV's concept plan for Sandon Point effectively undermine the feasibility of the project. ARV did not have the opportunity to discuss these Modifications in the approval with the Department of Planning. We therefore request the Minister to make further modifications as proposed by ARV in this statement in order to make the ARV concept plan a feasible and deliverable project that we believe is in the public interest of improving the environmental conditions on the site and providing housing choices.

We thank you for your general support of the ARV proposal for Sandon Point. If you have any queries or would like to discuss this matter further, please do not hesitate to call me direct on Ph. 9421 5386.

Yours sincerely



Ken Barber
Chief Executive Officer

- cc The Hon. Frank Ernest Sartor, MP
NSW Minister for Planning
- cc Jason Perica
Executive Director
NSW Department of Planning
- cc Michael File
Team Leader
NSW Department of Planning



19 January 2007

Event Project Management
PO Box 6180
Frenchs Forest NSW 2086

Our ref: 21/14549/125286
Your ref:

Attn: Andrew Graham

Dear Andrew

**ARV Sandon Point Site
Modification to Major Project Application**

Your recent enquiry and the following documents refer:

- ▶ Anglican Retirement Villages Report for ARV, Surface Water Management Report, 23 May 2006; and
- ▶ Approval Conditions provided by the Minister for Planning with the Determination of Major Project MP 06_0094 Concept Plan for Redevelopment of Sandon Point.

We understand that Anglican Retirement Villages (ARV) request the amendment of a condition, which relates to the riparian corridors designated at Sandon Point. We herewith comment on stormwater quality and flooding in regard to Cooksons and Tramway Creek.

1 Condition A3

The location of APZ within or outside the riparian zone is commented on as follows:

- ▶ Flood Conveyance: Location of the APZ within the riparian zone would benefit flood conveyance, as maintenance activities associate with the APZ zone could lead to a thinning of fuel vegetation and weeds. This is expected to lead to a lower channel roughness and an increased in flood conveyance. While flow velocities are expected to be low (in the order of 1.5 to 2 m/s), it will nevertheless be important to manage vegetation within the APZ zone in order to provide channel stability. This could be achieved through a Vegetation Management Plan (VMP) at the detailed design stage, which would include bank stabilisation works in conjunction with hydrologists and landscapers; and
- ▶ Water Quality: In general stormwater pollutant treatment efficiency is related to riparian width. In the case of the proposed project:
 - It is understood that a corridor width is being established and VMP's are proposed for both creeks. These may enhance the vegetation that currently exists, thereby possibly leading to an increase in pollutant treatment efficiency;
 - In the case of Cooksons Creek, a significant part of stormwater quality treatment is proposed in the upstream lake, which is a key element of the Water Sensitive Urban Design "treatment train" for the site. This lessens the need for the downstream riparian corridors to treat instream water quality;
 - In the case of Cooksons Creek, we understand that it is not the intention to alter the reed land at the downstream boundary of the site as part of any APZ requirements. This reed land is expected to provide a significant pollutant removal function, and



- The pollutant treatment efficiency will depend on the type and management of vegetation within the APZ zone.

2 Condition B5 (9)

The recent City of Wollongong On-Site Stormwater Detention Code, June 2006 states:

In addition, OSD may not be required where development is located in the lower reaches of a catchment where OSD does not provide downstream benefits and where it can be demonstrated that runoff from the site can be conveyed through intervening properties to 'receiving waters' without adverse impact on flooding of these properties. Areas where OSD would not benefit downstream flooding are shown on the plans of Appendices A1, together with streams qualifying as 'receiving waters'.

From the Appendix A1 figure the ARV site is located in areas where OSD would not benefit downstream flooding.

The lake proposed on the ARV provided the following functionality in terms of surface water management:

- ▶ Treatment of surface water in a wetland arrangement, as part of the Water Sensitive Urban Design treatment train; and
- ▶ To a lesser degree for the provision of on-site detention (OSD), if required.

It is estimated that the removal of the OSD functionality of the lake would increase flood peaks by as little as 0.2 m³/s in a 5- and 100-year event. These small increases in peak are not expected to lead to any significant increases in flood levels and/or flood risk.

Yours faithfully
GHD Pty Ltd

Rainer Berg

Rainer Berg

Service Group Manager, Hydrology & Civil Services
2 9239 7100



22nd January 2007

Andrew Graham
Event Project Management
PO Box 6180
Frenchs Forest NSW 2086

**MODIFICATIONS TO THE MAJOR PROJECT APPLICATION BY
ANGLICAN RETIREMENT VILLAGES, SANDON POINT**

Dear Andrew

Cumberland Ecology
PO Box 2474
Carlingford Court 2118
NSW Australia
Telephone (02) 9868 1933
Mobile 0425 333 466
Facsimile (02) 9868 1977
Email: david@cumberlandecology.com.au

I refer to the Approval Conditions provided by the Minister for Planning with the Determination of Major Project MP 06_0094 Concept Plan for Redevelopment of Sandon Point. The proponent; Anglican Retirement Villages (ARV), request the amendment of Condition A3, which relates to Asset Protection Zones (APZ's) between future development zones of the Aged Care Facility and riparian vegetation, being located entirely within the development precincts. In relation to this condition, the proponent proposes the inclusion of these APZ's within the riparian corridors. I have addressed the relevant issues relating to ecology in Condition A3 for inclusion in your application.

The Director General's Assessment Report summarised concerns from relevant Government Agencies; including the NSW Department of Environment and Conservation (DEC), which has expressed concerns about the widths of riparian corridors being too narrow to perform the required ecological functions. The above mentioned issues have been discussed separately below:

- i. Corridor widths are considered insufficient by DEC, and the proposed widths might compromise the ecological function of the ecological communities.*

The riparian corridors are considered sufficient in width to act as habitat corridors for flora and fauna, and to establish and protect the endemic vegetation communities. Revegetation works are required to restore the highly degraded riparian zones of Cookson's Creek and Tramway Creek, which currently consist of reedland and exotic vegetation. The restoration of the riparian vegetation is intended to re-establish the original Coastal Freshwater Wetlands Endangered Ecological Community, to a width of 40 metres for Cookson's Creek and more than 50 metres for Tramway Creek. This will greatly improve the function of these corridors, as explained in Section 4 of the flora and fauna assessment

(Cumberland Ecology 2006). This is demonstrated in the Cookson's Creek Corridor Cross Section, Proposed Modification Plan, prepared by the landscape architect Craig Burton & Associates and provided in the Appendix to this letter.

One of the main functions of the riparian corridors is to maintain and improve the integrity of the ecological communities. Weed invasion in both riparian zones is the major cause of threat to the integrity of the Coastal Freshwater Wetlands Endangered Ecological Community (EEC) vegetation in Cookson's and Tramway Creek at present. The vegetation management plans to be implemented by ARV as part of the project will address this threat through the removal of weeds and revegetation with the appropriate species composition of the EEC. The location of APZ's within this zone would not in any way impact on the efficacy of vegetation management plans to address weed invasion or the re-establishment of the original Coastal Freshwater Wetlands Endangered Ecological Community.

The vegetation communities at Sandon Point are restricted to narrow strips on alluvial soils and do not naturally occur as wide bands of vegetation, therefore the 40 metre riparian zone to be re-established for Cookson's Creek and 50 metre riparian zone for Tramway creek is more than adequate to provide for the protection and enhancement of the future riparian vegetation and as a habitat corridor. This is supported by the fact that both creeks conform to the Riparian Corridor Management Study by the Department of Natural Resources (DNR), as Category 2 Streams, for which a 40 metre wide riparian corridor is recommended. This consists of a 20 metre wide core riparian zone and 10 metre buffer either side of this creek zone, as shown in the Cookson's Creek Corridor Cross Section Plan.

The Cookson's and Tramway Creek riparian corridors conform to the principles outlined by DNR, to the findings and recommendation of Cumberland Ecology, and are, in the opinion of Cumberland Ecology, a responsible and appropriate environmental response for the successful re-establishment of the original Coastal Freshwater Wetlands Endangered Ecological Community.

ii. Require minimum 40m buffer to EECs exclusive of APZs

Asset protection zones (APZ) will be required at the perimeters of the riparian corridors; north of Tramway Creek and on both sides of Cookson's Creek. According to the bushfire assessment by BES, the zone need not be wide (approximately 10 metres wide). For both creeks, this riparian zone will be mostly replanted; therefore the removal of existing vegetation will be limited to only weeds. The APZ will be formed as a managed zone through the careful planting of vegetation to minimise fuel loads in this zone. The EEC vegetation that currently exists in parts of both creeks is dominated by reeds in a narrow band within the creeklines, which will not require removal for an APZ, as the APZ will occur outside of the existing vegetation zone.

The creation of an APZ in the outer 10 metres of the riparian zone will not impede on revegetation works as the replanted vegetation will still contribute to the function of the ecological corridor. As shown in the Cookson's Creek Corridor Cross Section, the outer 10 metres of the riparian zone will contain native indigenous trees and shrubs representative of the EEC vegetation, therefore adding value to the corridor.

The proposed APZ's will be managed under the same vegetation management plan as the rest of the corridor and will involve a major net benefit to the ecological corridors and endangered ecological community.

In conclusion:

- The current condition of the riparian vegetation in both Cookson's and Tramway Creek is highly degraded and weed infested, and the current condition of this vegetation is a threat to the endangered ecological community of these creeks. Cookson's Creek is void of vegetation in the upstream section where the water is released from a pipe on to the floodplain;
- The major revegetation works to be implemented for both creeks will have a major benefit for the ecological community and as a corridor for flora and fauna. Asset Protection Zones are to be established in the outer sections of the reinstated vegetation corridors, and this will not involve vegetation removal, other than weeding, but will simply involve the careful planting of vegetation to minimise fuel loading and fire risk; and
- The 40 metre wide corridor is adequate as a Category 2 Stream, as recommended by DNR's study, and the APZ managed area within this zone will not compromise its function as an ecological corridor.

If you wish to discuss this matter further, please do not hesitate to call me on (02) 9868 1933.

Yours sincerely



Vanessa Bain

Project Manager / Ecologist

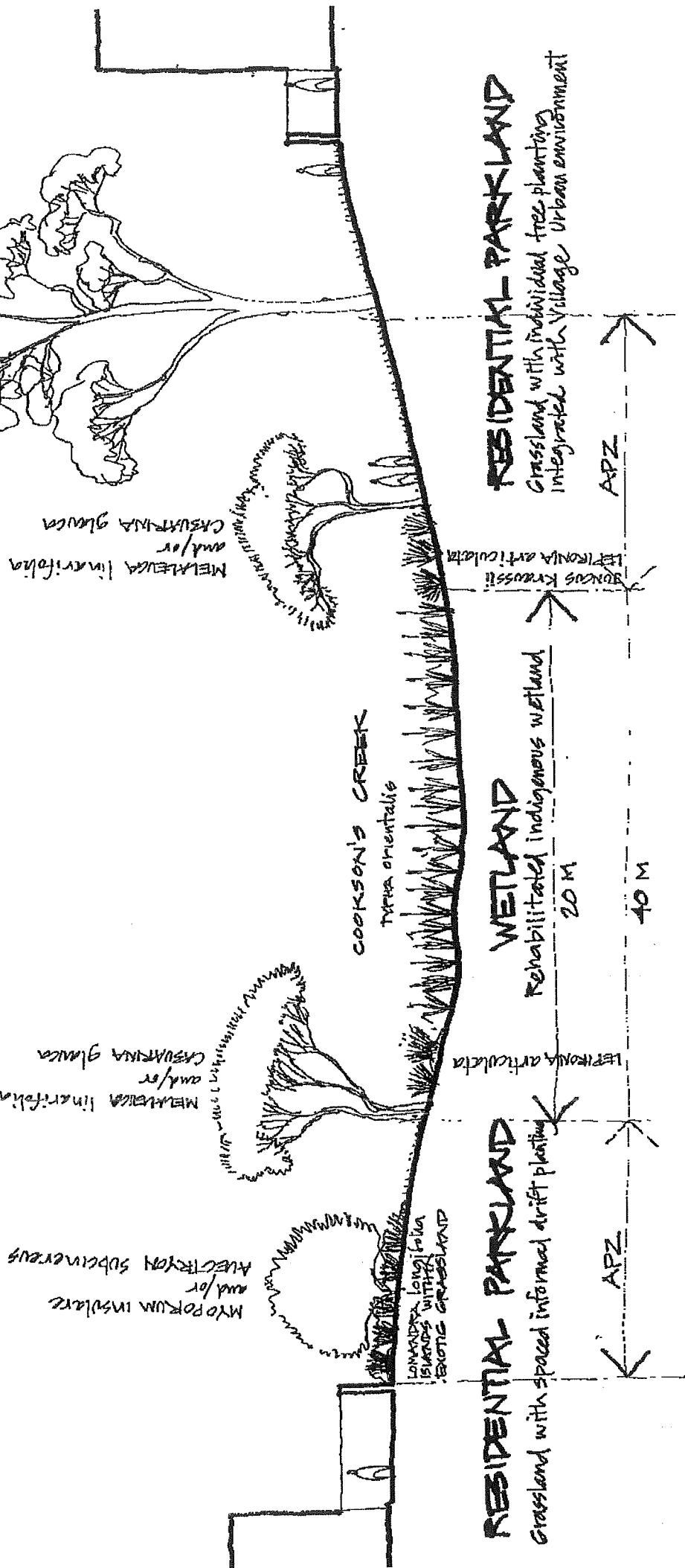
vanessa.bain@cumberlandecology.com.au

Appendix A

Cookson's Creek Corridor Cross Section –
Proposed Modification

ARV BULLI RETIREMENT VILLAGE: STURDEE AVENUE BULLI COOKSON'S CREEK CORRIDOR CROSS SECTION 1:200 PROPOSED MODIFICATION

CAB CONSULTING PTY LTD
 21 JAN. 2007



Your reference:
Our reference: 6012

22 January 2007

Andrew Graham
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Dear Andrew,

Re: Statement on bushfire hazard and asset protection zones
Major Project (mp 06_0094) –Concept plan for Anglican Retirement Village Sandon Point

I refer to the Approval Conditions provided by the Minister for Planning with the Determination of Major Project MP 06_0094 Concept Plan for Redevelopment of Sandon Point and issues raised as they relate to this application. These issues are the width and placement of Asset Protection Zones and the proposed road widths as follows.

Asset Protection Zones (APZ)

As introduced and demonstrated in the *Bushfire Protection Assessment by BES (2006)* submitted as part of the Concept Plan Application to the Department of Planning, it is proposed to provide an Asset Protection Zone (APZ) of less than 20 m for proposed development adjacent Cookson's and Tramway Creek. 'Planning for Bushfire Protection Guidelines 2001' (PBP Guidelines) makes a provision for a minimum 20 m APZ for development adjacent smaller forest remnants. Smaller forest remnants are described within the PBP Guidelines as being a forest less than 1 hectare in size, and can also be narrow corridors of vegetation as guided by consultation with the NSW Rural Fire Service.

The deemed to satisfy provisions of the PBP Guidelines with respect to APZ dimensions become a matter of a site by site risk analysis and assessment. A reduction in the standard APZ dimension of 20m can be achieved where the analysis and assessment, based on the merits of each site and the proposed development indicates the bushfire risk is expected to be lower than that expected at a site where the 20m APZ would normally be applied (e.g. a remnant just under 1 hectare in size, or a wider corridor of vegetation). A guideline on the threshold at where a minimum 20 m APZ is no longer required and a narrower APZ, or no APZ, is acceptable is not given within the PBP Guidelines. This threshold is to be determined by risk analysis and consultation with the RFS.

Asset Protection Zones less than 20 m have been approved by the NSW Rural Fire Service (RFS) for integrated developments, and local councils for other developments based on the merits and risk at each site, and in consultation with the RFS.

Asset Protection Zones are also commonly placed within riparian corridors or environmental zones, so long as the impact of the continual maintenance of the APZ does not have a significant impact on the environmental values of the riparian corridors. The flora and fauna assessment prepared by *Cumberland Ecology (2006)* concluded that the placement of the APZs within the outer 10 m of the riparian corridor would not compromise the ecological value of the corridor. Integrated development sites assessed by the RFS where APZs less than 20 m in width and occurred within the riparian zone as approved by the DNR (or DIPNR) include:

1. Ryde, 31 Malvina Street: 13 m APZ managed as a riparian zone;
2. Castle Hill, 61-65 Church Street: 15 m APZ managed as a riparian zone;
3. Scarborough, 430-432 Lawrence Hargrave Drive: 10 m riparian zone managed as an APZ;
4. Coolangatta, Lot 1 Edward Wollstonecraft Road: 10 m riparian zone managed as an APZ;
5. Leura, 5 Wascoe Street: 14 m riparian zone managed as an APZ;
6. Wollongong, Lots 53 and 54 Dempster Street: a 15-20 m riparian zone managed as an APZ; and
7. Wollongong, 20 and 22 Greenacre Road: a 10 m APZ included within the riparian zone.

The RFS in their letter of submission to the Department of Planning on the concept application (dated 18 July 2006) suggests that an APZ narrower than 20 m could be accepted based on the provision of further advice on the anticipated fire behaviour within the riparian corridors.

The Cookson's Creek riparian zone is proposed to have a 10 m APZ within the outer 10 m of the 40m corridor, leaving an inner 20 m corridor to be rehabilitated with indigenous wetland species. The attached Cookson's Creek Corridor Cross Section, Proposed Modification Plan, prepared by the landscape architect Craig Burton & Associates illustrates the concept of the APZ and riparian corridor.

The reduction of the APZ from 20 m to 10 m is supported by the low fire risk posed by the riparian corridors due to the type of vegetation communities, their lack of connectivity to other bushland areas and their narrow widths.

The vegetation in Cookson's Creek (including that proposed) will consist of wetland vegetation, will be 20 m in width and separated from the Turpentine Forest to the west (which is less than 1 hectare in size) by ponds and infrastructure. The creek will be connected to wetlands further downstream, most of which are not subject to rehabilitation as part of surrounding development and contain little native vegetation cover. BES is of the opinion that the 'bushfire hazard' will not pose the same level of risk as a 1 hectare or less sized forest, and a smaller APZ is appropriate.

The vegetation (including that proposed) in Tramway Creek will consist of wetland vegetation, be approximately 50 m in width, and connected only to wetlands further downstream, most of which are not subject to rehabilitation as part of surrounding development. BES is of the opinion that the 'bushfire hazard' will not pose the same level of risk as a 1 hectare or less sized forest, and a smaller APZ will suffice.

Due to the smaller lengths of possible fire run within the vegetated portions of the riparian corridors, and the underlying wetland and decomposing vegetation, it is highly unlikely that a crown fire will be experienced within the corridors. With an absence of crown fire, a fire moving across the surface of the wetland should be able to be controlled by fire fighters at the interface with development within a 10 m APZ.

The position of providing APZs narrower than 20 m was based on the risk analysis summarised above and contained within *Bushfire Protection Assessment by BES (2006)*. The RFS was approached early in 2006 and declined to meet and discuss the proposal.

Road widths

In addition to the issue of APZs, *Director General's Environmental Assessment Report (2006)* states that the RFS raised the concern that "the widths of the roads servicing more than 4 dwellings was less than 20 m". This interpretation of the RFS submission letter on the concept application (dated 18 July 2006) is in error. BES understands that the RFS are not concerned that the roads are less than 20 m in width.

The RFS letter requests that "proposed roads within the development that are to service more than 4 dwellings/lots will need to comply with Section 4.3.1 of Planning for Bushfire Protection 2001". This section of the PBP Guidelines lists construction and design standards for public roads (i.e. those servicing 4 dwellings/lots or more). The minimum road width under this section is 8 m. However, although not included within the PBP Guidelines, the RFS are accepting proposals using their public road policy which is listed below. The narrowest public road acceptable is 5.5 m with restrictions on the placement of parking areas and infrastructure such as hydrants. It is important to note that the narrowest road within the proposal is 7.5 m, and therefore complies with the RFS policy and the intent of the statement made within the RFS letter.

NSW Rural Fire Service Access Policy

1. All public access roads 8m wide shall locate services outside of parking reserves to ensure accessibility to reticulated water for fire suppression.
2. All public access roads between 8 and 7m wide shall be No Parking on one side with services (hydrants) located opposite parking side to ensure accessibility to reticulated water for fire suppression.
3. All public access roads between 7m and 5.5m wide shall provide parking within parking bays and locate services outside of the parking bays to ensure accessibility to reticulated water for fire suppression.
4. No two way public access roads are permitted less than 5.5m wide.
5. One way only public access roads shall be no less than 4m wide and provide parking within parking bays and locate services outside of the parking bays to ensure accessibility to reticulated water for fire suppression.
6. Parking bays shall be a minimum of 2.6 metres wide from kerb edge to road pavement. No services or hydrants are to be located within the parking bays.

7. All access roads directly interfacing the bushfire hazard vegetation shall provide roll top kerbing to the hazard side of the road.
8. All provisions for public access roads, other than where modified by the above provisions (1-7), detailed within Section 4.3 of Planning for Bushfire Protection 2001 shall be complied with.
9. All access roads servicing more than 4 dwellings are considered public access roads.
10. Fire trails shall comply with Section 4.3.3 of Planning for Bushfire Protection 2001 and shall be maintained in perpetuity.
11. Turning heads within the subdivision shall comply with Section 4.3.1 of Planning for Bushfire Protection 2001 or consult with the RFS for a performance based alternate.

Please do not hesitate to call me on the numbers above to discuss the matter further.

Yours sincerely,

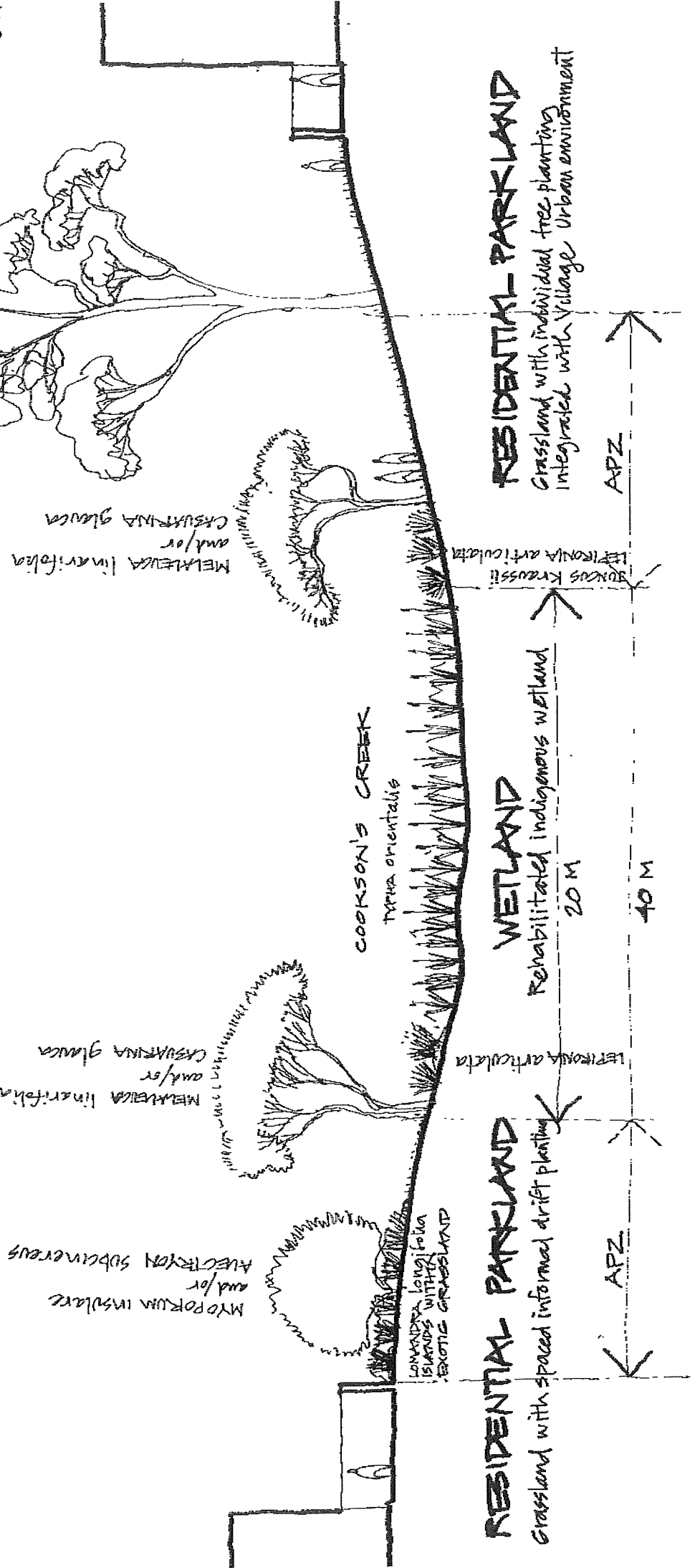
A handwritten signature in black ink, appearing to read 'D. Peterson', written in a cursive style.

David Peterson

Senior Bushfire Planner

ARV BULLI RETIREMENT VILLAGE: STURDEE AVENUE BULLI COOKSON'S CREEK CORRIDOR CROSS SECTION 1:200 PROPOSED MODIFICATION

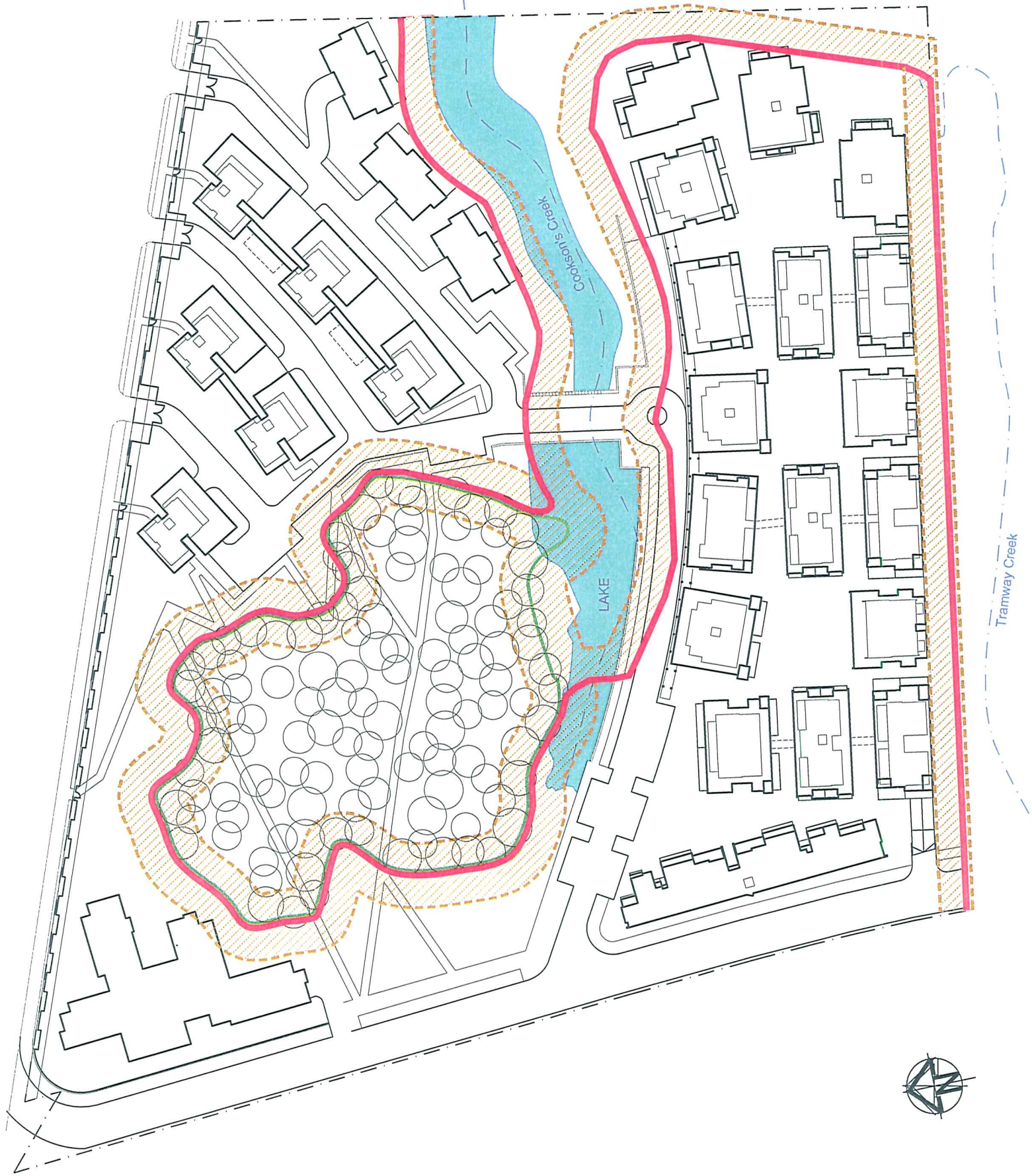
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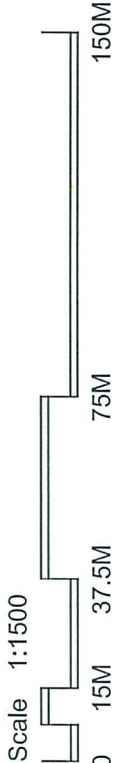
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ARV Bulli Retirement Village



LEGEND

- Zoning Boundary
- Turpentine Forest boundary
- Creeks
- APZ Boundary
- APZ Zone



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Issue A APZ Zone added

Chk. Appr. Date 19-01-07

Issue Description

Chk. Appr. Date

Project

ARV Bulli Retirement Village

Sturdee Avenue, BULLI

Anglican Retirement Villages - Diocese of Sydney

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APZ Comparison

Concept Application

Project No. 060202

Drawing No. CP A

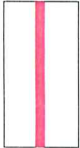




Issue A

Scale 1:1500 @ A3

Date Jan 07

Drawn JH



LEGEND		Zoning Boundary
		Turpentine Forest boundary
		Creeks
		Approved 20m APZ Boundary
		APZ Zone

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	A	APZ Zone added			19-01-07							<h1>ARV Bulli Retirement Village</h1> <h2>Sturdee Avenue, BULLI</h2> <h3>Anglican Retirement Villages - Diocese of Sydney</h3>
<div>JONES SONTERR Drafting Street Roads PO Box 1813 Roseville NSW 2059</div> <div>phone: 02 9555 7464 fax: 02 9555 7436 email: mail@jonesonterr.com.au www.jonesonterr.com.au</div> <div>APZ Comparison Approved Concept Plan with Modification A3</div>												
Scale: 1:1500 @ A3		Date: Jan 07		Drawn: JH								
Project No. 060202		Checked: Approved										
Drawing No. CP B A		Issue A										
File Data: 13-01-07 Code Ref.: A_060202 CPB5												



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JONES SONTERR Drawing Sheet P BNSW Rozelle NSW 2039 phone: 02 9555 7444 fax: 02 9555 7436 mail@jonesonterr.com.au www.jonesonterr.com.au										Project No. 060202		Checked Approved		Drawing No. CP C		Issue A		Foot Date 19-01-2021		Code Ref. JL-000002-CP05															