

Contact: Corrie Swanepoel

Reference:
30 December 2013

NSW Department of Planning & Infrastructure
Major Projects Assessment
GPO Box 39
Sydney NSW 2001

Attention: Mr Peter McManus

Dear Mr McManus

Implications of the Proposed Concept Plan Amendments (MP_0166 MOD5)

I refer to the Department's letter received by Council on 19 November 2013 requesting comments on the proposed amendments to Wahroonga Estate Redevelopment Concept Plan (MP07_0166 MOD5). Council's comments are attached as Annexure 1 (note that this annexure is prepared to be read and printed in A3 size with a landscape orientation). Annexure 2 (*Ku-ring-gai Council Comment on preliminary plans - Amended Final*) is a report provided to the applicant on 7 March 2013 before this modification application was lodged with the department. Council's concerns raised in this correspondence also remain.

The Sydney Adventist Hospital site is a highly significant redevelopment of regional importance located within Ku-ring-gai.

Proposed development is seeing dramatic changes to the density of residential population and capacity for employment within the Wahroonga Estate that will bring many benefits regionally. As such, it is an urban development of a scale that has the potential to be an exemplar for future urban development provided the optimal balance between short-term economic gain is balanced with sound urban design outcomes and related long-term economic outcomes that are expected to flow for the coming generations.

Figures 9 and 10 below demonstrate the change in urban character across the Wahroonga Estate as it is well into its process of transition.

It is clear that provision of the open landscape setting that formed Concept Approval MP07_0166 has been incrementally eroded with the scale of development combined with modifications to building footprints.

This is in part the result of deficiencies in the approved Concept Plan. However, when combined with precinct modifications being treated in isolation, consent authorities have not been able to

assess cumulative impacts or gain an understanding of the spatial relationship across the Wahroonga Estate. What appears to be an impact confined to a single precinct cannot be considered in context of similar impacts occurring on adjoining precincts and the combined effect on the urban character.

It is not accepted that impacts internal to the site make them acceptable, again because the cumulative effect will lead to an adverse urban outcome as construction progresses.

Figures 9 and 10 provide clear evidence of the effect upon the urban character when cumulative impacts are not accounted for, and demonstrates the clear pattern of redevelopment across the Wahroonga Estate.

The community would quite reasonably question how Concept Plan MP07_0166 could be considered an accurate representation of development on the Wahroonga Estate.

While the hospital redevelopment is supported in general, it is clear that the public domain strategy for the education, residential and commercial precincts. In particular is failing with each modification that changes building types from slender to large floorplates thus increasing building footprints with the commensurate reduction to public domain/open space provisions and where boundary adjustments seek to increase density. Combined across the Estate, these will result in a poor urban outcome.



**Figure 9: The Wahroonga Estate
aerial photo January 2011**

Source: NearMap.com/photomaps



**Figure 10: The Wahroonga Estate
aerial photo July 2013**

Source: NearMap.com/photomaps

Please do not hesitate to contact me if you require any additional clarification.

Yours faithfully

Corrie Swanepoel
Manager Development Assessment Services

ANNEXURE 1 – Ku-ring-gai Council's comments on MP07_0166 MOD 5
Concept Plan - Sydney Adventist Hospital, 185 Fox Valley Road, Wahroonga – PRECINCT B - Central Church

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This report provides comments on proposed modifications, MP07_0166 MOD5, sections as follows:

- History of Modifications
- Anomalies within MP07_0166
- Comparative Context MP07_0166, MP10_0070 and modifications
- Cumulative impacts with modifications to other Precincts being sought across the Estate
- Approach to Modifications
- Subject Modifications MP07_0166 MOD5 - Precinct B Central Church
- Urban design performance criteria for Precinct B as approved under MP07_0166
- Document Inconsistencies
- Comparison between Concept Plan MP07_0166 and proposed modifications MOD5
- Consistency with meeting approved performance criteria of Concept Plan MP07_0166
- Urban Design Issues
- Landscape Design Issues
- Biodiversity, riparian and bushfire concerns
- Concerns with playing fields
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1.0 HISTORY OF MODIFICATIONS

Proposed modifications MP07_0166 MOD5 are within a procedural and design context whereby separate modifications to MP07_0166 and MP10_0070 across other precincts are currently being sought or have been approved.

These include variations that have seen a pattern of increased building footprints, increased GFA through redistributions between buildings or precincts, sought GFA increases, development site boundary adjustments that have reduced site areas while not altering sought GFA (with the net result of effectively increasing density under the auspices of being within permitted GFA), Concept Plan inconsistencies and errors in the proponent's favour. In all instances there has been a demonstrated decrease to public domain/communal /landscaped space.

The proponent's summary of MP07_0166 modifications MOD1-MOD3 is found at Attachment 1 of the document cited [https://majorprojects.affinitylive.com/public/d7242fb52914ede6edde05ce82d15f21/Final%20Modification%20Letter%20\(MOD%203\)%2002112012%20v5.pdf](https://majorprojects.affinitylive.com/public/d7242fb52914ede6edde05ce82d15f21/Final%20Modification%20Letter%20(MOD%203)%2002112012%20v5.pdf)

No graphic representation of the chronology of modifications has been submitted at any time.

Our review of modifications and urban design impacts is summarized as follows:

MP10_0070 MOD1 - Hospital - Approved 2011

(impact - decreased public domain - reduced building separations - see item 3)

Modifications:

The areas of the original project approval that are required to be modified to facilitate the first stage of construction are described below.

The modifications entail:

- 1) *A revised layout for the approved temporary car park;*
- 2) *Alteration to the layout of a permanent at grade car park and a new permanent at grade car park;*
- 3) *A minor alteration to the approved location and internal flow of the multi-deck car park (bringing the structure [6 metres] closer to the hospital wings and allowing pedestrian access at the one level); and*
- 4) *A revised entry building to better integrate various aspects of the project. The revised entry building is critical for patient and visitor flows from the multi-deck parking area to the existing hospital and new CSB.*

Further staged modifications are also proposed but these will be the subject of separate submissions.

([SAH S75W Request 230811 A1.pdf](#))

for graphic of reduced building separation see also [Proponent's Response to Submissions.pdf](#)

MP10_0070 MOD2 - Clinical Services Building - Approved 2012

(Impacts - CSB increased GFA, increase building footprint and height; decreased open space/public domain)

Modifications:

A brief description of the work involved follows:

- 1) *Alteration to the layout of a permanent on grade car park – the amended plans provide for an additional 27 car spaces. These spaces have been requested by the hospital to provide a specific parking area for medical staff. [NOTE: these deleted from final application]*
- 2) *A revised design of the Clinical Services Building that aligns with the hospital's objective to provide best clinical practice to patients by streamlining hospital procedures and allowing more time for patient attendance. The change of floor layout to an "L" shape...*

The new CSB building is slightly larger in terms of gross floor area than the previously approved building

.The proposed CSB building is now approximately 3 metres higher than originally approved...

.The CSB building is situated "internal" to the site, i.e. it is well hidden by other existing structures on site so as to not have a material impact on site amenity or views from outside the site.

([SAH S75W Request 2_300911.pdf](#))

MP10_0070 MOD3 - Education Facility (School of Nursing) - Approved 2012

(impacts - increased building footprint through height reduction within existing GFA, decreased setbacks, decreased public domain/open space); and

MP10_0070 MOD4 - Education Facility (School of Nursing) - No determination recommended for approval 2013

(impacts - increase building scale - footprint, bulk and height to match increased GFA separate MP07_0166 MOD3; decreased open space/public domain, decreased car parking);

Specifically this modification [MOD4] seeks to apply part of an overall increase in floor space (granted by virtue of a recent modification of the Concept Plan – MP 07_0166 MOD 3, dated 18 June 2013) to:

Increase the size of the Education Centre (Faculty of Nursing) from its current 3,500m2 to 6,975m2, noting that the final floor space now allocated to this building is slightly less than the 7,050m2 that has recently been

approved (by virtue of the above mentioned Concept Plan MOD 3).

We note that the design of the Education Centre has been previously modified (see MP 10_0070 MOD 3, granted 13 June 2012) to change its shape and layout but not its overall allowable size. The current modification seeks to increase the size of the centre by a second stage of works that are generally located beside and above the existing approved centre but set back further from adjacent external roads.

([S75w Modification Letter \(MOD 4\).pdf](#))

MP07_0166 MOD3 - Education Facility (School of Nursing) - Approved June 2013

(impacts - no provision in existing footprints to accommodate doubling of permitted GFA)

This modification request (MOD 3) seeks to 'reclaim' previously overstated floorspace but keep the total project within the approved limits of the concept approval, i.e. within the 94,000m2 total floor space that has been approved for hospital related buildings.

([Final Modification Letter \(MOD 3\) 02112012 v5.pdf](#))

MP07_0166 MOD4 - Precinct C Units & Student Accommodation as DA0453/12 ; Modified building envelopes for the Neighbourhood Centre; and Precinct D - Commercial Development as DA0053/13

- No determination as at Dec 2013

(impacts - Precinct C decreased site area through adjustments to internal road alignment with no commensurate reduction to GFA; increased building footprints; decreased public domain/open space/ landscape. Precinct D - increased building footprints, increased building height, increased development area; decreased landscape, decreased setbacks to Residential APZ)

This modification request (MP 07_0166 - MOD 4) seeks to amend and update the approved Concept Plan for the redevelopment of the Wahroonga Estate. The purpose of the modification is to remove any confusion regarding compliance with previously annotated building footprints and configurations for intended residential and commercial development located within the Central Hospital and Fox Valley Road East precincts....

Notably, our submission includes:

A new set of reference diagrams intended to replace specific diagrams included in the Final PPR. These diagrams include:

- a new Concept Plan with revised internal roads and building shapes/footprints for the above mentioned residential and commercial projects;
- revised building elevations, layouts and typical floorplans which precisely define the architectural elements and building edges for each project;
- revised car-parking configurations and access arrangements; and
- defined building uses that align with the existing Concept Plan approval and expected end-uses.

Architectural and Urban Design reports for each project that identify and address changes in the current submitted designs to those that were initially incorporated in the approved Concept Plan and/or as submitted with the current DAs lodged with Ku-ring-gai Council.

A revised traffic statement with respect to the proposed SPD Commercial project that discusses and supports the provision of additional on-site car parking.

([S75W Cover Letter.pdf](#))

1.1 Anomalies within MP07_0166

The MP07_0166 MOD3 increase to GFA was the result of the proponents over-stating GFA of the existing hospital by 7,552m2. This error was incorporated into approval MP07_0166 GFA and had not been corrected by the proponents once discovered until a further application was made to increase GFA. This anomaly essentially left 7,552m2 GFA unaccounted for within footprints and massing of proposed buildings in MP07_0166 and MP10_0070.

MP07_0166 MOD3 sought to redistribute approximately half of this 'bonus' floor space with the proponents intending to distribute the remainder to the Shannon Wing in a future separate application. The increased GFA was approved on

merit (due to the Department rejecting the claim for redistribution based on the proponent's error) as the increase was to be accommodated internal to the site.

A further anomaly within MP07_0166 saw a separate allocation of GFA to Precinct D - Commercial that was the result of an apparent error in the SEPP MD WER GFA map Precinct D - Fox Valley boundary that excluded 5 existing lots as can be seen in Figures 1 and 2 below.

The proponents are using part of this 'bonus' allocation of approximately 9,000m2 to increase the original MP07_0166 Precinct D - Commercial approved GFA allocation from 5,000m2 to 6,000m2. Based on the history of modifications, it would be reasonable to expect future modifications will seek to redistribute the remaining 8,000m2 'bonus' elsewhere. GFA errors within MP07_0166 total around 17,552m2.

This is highly significant in urban design considerations as it equates to buildings the size of 2 x 1,000m2 residential lots (typical in Ku-ring-gai) each having a 100% building footprint (total 2,000m2) to a height of 8 to 9 storeys.

There has been no allowance in MP07_0166 or MP10_0070 approved building footprints/building envelopes/development controls to accommodate this GFA.

Such large scale anomalies bring into question the validity of the Concept Plan as being an accurate representation of development and thus approved urban character and its capacity to deliver the urban character under which it was approved.

Figure 1 above shows Fox Valley East Precinct as a single entity with a total commercial GFA of 15,000m2. The allocation of this GFA was approved as 8,000m2 existing GFA (with 2,000m2 to augment existing functions) leaving 5,000m2 commercial GFA for the Neighbour Centre commercial building. Refer *Wahroonga Estate Redevelopment Final Preferred Project and Concept Plan 2010*, p51
<https://majorprojects.affinitylive.com/public/9cb9791229df230a0b64623e6beb5429/FINAL%20Preferred%20Project%20Report%20Part%202%20Jan%202010.pdf>

As can be seen in Figure 2, there are now two separate allocations of 15,000m2 within Precinct D - Fox Valley giving the component development site Precinct D - Commercial an unprecedented bonus of 10,000m2 on top of the of 5,000m2 allocated and for which other development controls have been based.

Further inconsistencies within MP07_0166 arise between the landscape areas nominated on the Concept Plan and required vehicular movements. Vehicular access requirements have only partly been accommodated leaving the impression of a green, leafy open landscape being achieved (and claimed in performance criteria). The reality has been quite different with extended and widened access roads, driveways, and increases to at-grade car parking.



Figure 1: Precinct D - Fox Valley East

Source: *Wahroonga Estate Redevelopment Final Preferred Project and Concept Plan 2010*, p64, Figure 53 - Precinct D Fox Valley East.

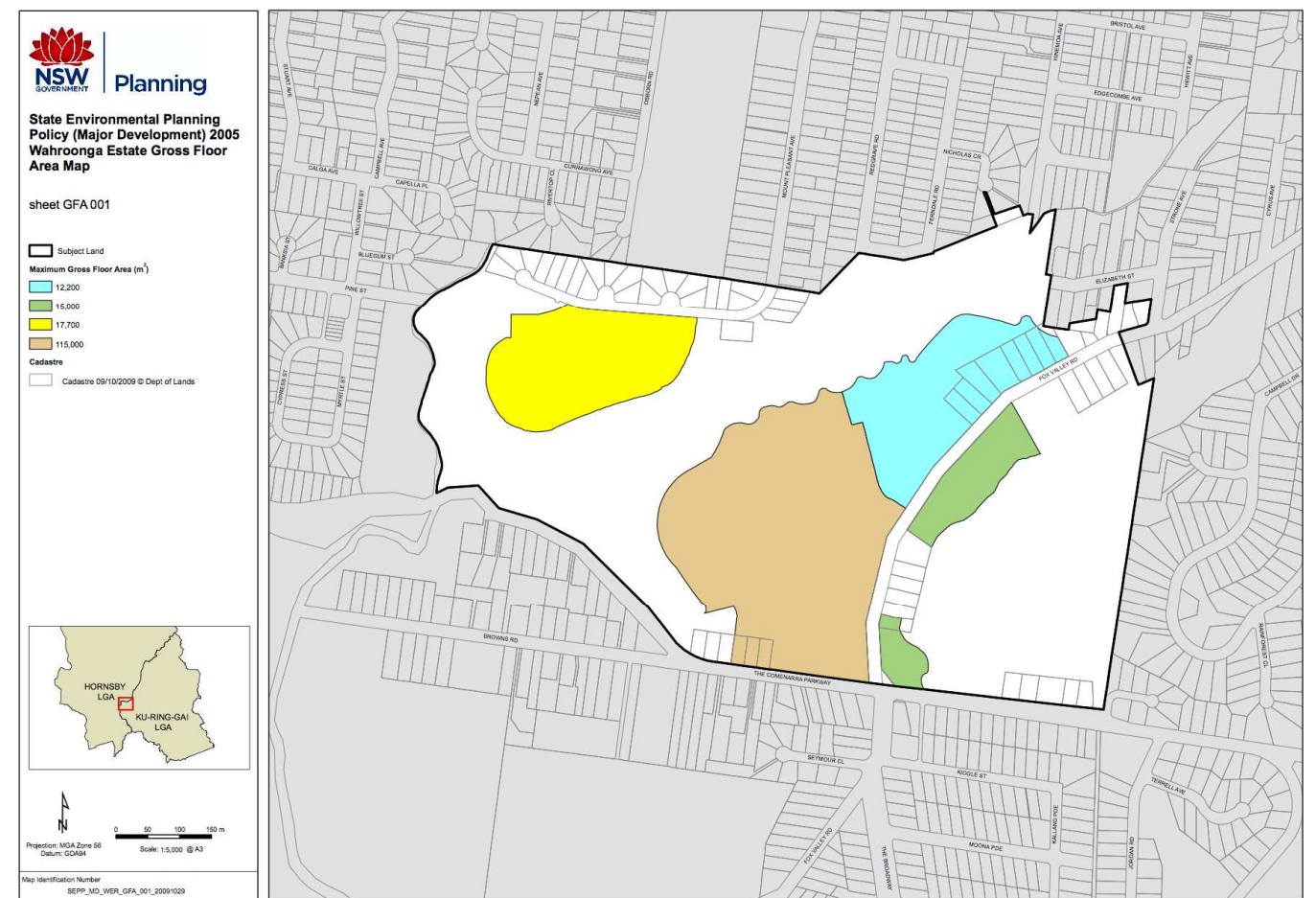


Figure 2: Wahroonga Estate Redevelopment GFA

Source: http://www.legislation.nsw.gov.au/map/SEPP_MD_WER_GFA_001_20091029.pdf?id=41766d9a-7ce2-6c77-a6dd-fbb8e9be4001

2.0 COMPARATIVE CONTEXT MP07_0166, MP10_0070 AND MODIFICATIONS



Figure 3: MP07_0166 The Concept Plan as approved

Source: Wahoonga Estate Redevelopment Final Preferred Project and Concept Plan 2010, p41, Figure 19

Figure 3 above shows MP07_0166 as the approved Concept Plan while Figure 4 opposite includes MP10_0070 and modifications to both Concept Plans extrapolated from submitted application documents sourced from the NSW Planning and Infrastructure website. These may or may not represent as built conditions on the Wahoonga Estate as seeking such information is outside the scope of this review.

However, what can be demonstrated is that such changes should be provided with each modification so that each application submits accurate base information that provides transparency to the modification process.

The comparison between Figures 3 and 4 makes quite clear the manifest deficiencies of information contained in Concept Plan MP07_0166. As can be seen in Figure 4, there is quite a different urban character emerging on the Wahoonga Estate.

Figure 3 shows that MP07_0166 did not include all hard paved surfaces and combined with proposed slender building types accommodated in a generously proportioned, green and leafy landscape setting, this formed the basis of the urban character contained within the Final PPR, understood by the community and approved under Part 3A.



Figure 4: MP07_0166 The Concept Plan with modifications extrapolated from separately submitted documents

Sources: Wahoonga Estate Redevelopment Final Preferred Project and Concept Plan 2010, p41, Figure 19

MP10_0070 MOD2 <https://majorprojects.affinitylive.com/public/811961b6e7e67e172091f821150b01f8/A-A-014%20Site%20MasterPlan%20-%20Stage%203.pdf>

MP07_0166 MOD4

<https://majorprojects.affinitylive.com/public/11dd198dd4bab83b98a6a9a2328a316e/CONCEPT%20PLAN%20REVISED.PDF>

MP07_0166 MOD5 https://majorprojects.affinitylive.com/public/3031fc049d46d885162f4c27cdb774e1/S75W01-2_The%20Concept%20Plan.pdf

Our review finds that MP07_0166 is quite misleading as there are very few areas retained as planted landscape or open space when vehicular access, hospital buildings as well as revised building footprints/building types are accommodated.

Indeed, MP07_0166 MOD5 retains those ambiguities as inadequate site planning detail has been submitted.

Concept Plans need to provide a holistic understanding that accurately represents the spatial context of *all* programmatic requirements on a single graphic representation. That is, a clear hierarchy of public domain, landscaped open spaces, pedestrian networks, vehicular movements and built form that accurately reflects the density that is intended. This is important so that cumulative impacts form part of the assessment criteria so that relationships of built form and impacts to spatial quality within and between adjacent precincts can be fully appreciated.

2.1 Cumulative Impacts of Modifications

Cumulative impacts are not able to be considered where superseded and inconsistent information is submitted as if current nor where each modification is treated in isolation (see 3.0 Approach to Sought Modifications).

This is unacceptable on a site of such significance and is highly likely to undermine the intended urban character approved under MP07_0166.

As can be demonstrated in Figures 3 and 4 and Figures 9 and 10, it is clear there are cumulative impacts across the Wahroonga Estate that have decreased the provision of space available to the public domain due to the modification of approved building types (slender slab and courtyard types) to those that have significantly much wider and less articulated building footprints, increased GFA and the inclusion of some (if not all) proposed vehicular access within the Estate.

While modifications are expected, in each instance it has been at the expense of public, communal and resident amenity within the Wahroonga Estate. The success of the redevelopment requires high levels of quality, useable open space, prioritized pedestrian networks and residents' amenity.

It is important to note that none of the building types subject to modifications have retained the slender footprints with landscaped courtyards that formed the basis for MP07_0166 approved urban character.

Repeated requests have been made for updated graphic representations of:

- The Concept Plan approved as MP07_0166 in its entirety

- A coordinated Concept Plan including MP10_0070 and all road, parking and pedestrian networks

- A coordinated Concept Plan that accurately shows previously approved and pending modifications as well as as-built information where construction has been completed.

This has not been forthcoming.

A Concept Plan is a statutory document expected to provide an accurate representation of a future urban context. Social capital and support for such development rests upon the level of its accuracy.

3.0 APPROACH TO SOUGHT MODIFICATIONS

Information prepared for each Modification application continues to treat each precinct/development site in isolation from each other and provides inadequate, inconsistent base information regarding the approved Concept Plan MP07_0166 despite consistent requests by Council to the proponents for coordinated applications that treat the Concept Plan holistically.

This is becoming increasingly important as the number and type of modifications have now established a clear pattern that is eroding spatial allocations to public domain spaces, open space as useable landscape and recreation areas as a direct result of the incremental increases of building footprints, bulk and height and density (often under the auspices of being within approved GFA).

Questions arise around the accuracy of approved building types/envelopes/building controls/provision of open space as accurate representations of approved GFA and hence the ultimate validity of MP07_0166 to deliver the urban outcomes as approved in The Concept Plan, *Wahroonga Estate Redevelopment Final Preferred Project and Concept Plan 2010*, p41, Figure 19, <https://majorprojects.affinitylive.com/public/7f3a5ba63392f979258f869d2c21c27e/FINAL%20Preferred%20Project%20Report%20Part%201%20Jan%202010.pdf>

Modifications that lead to the inclusion of the equivalent of a 2 x 1,000m² building footprint to a height of 8 or 9 storeys (17,552m²) still argued as being within permitted GFA without significant impacts to the public domain/open space character intended for the site is not accepted.

The Wahroonga Estate Redevelopment is a regionally significant, once in a generation opportunity to deliver an exemplar of a positive urban environment that supports high density living. It's success rests largely on the quality of the public/communal domain.

The proponents intention to "*remove any confusion regarding compliance with previous building footprints and configurations*" is supported where submitting a revised Wahroonga Estate Concept Plan in its entirety founded on the laying down of the public domain and open space network as the priority upon which the built form reflects the actual density being sought.

A revised Concept Plan prepared in such a way may support variations to previously approved height where public domain and open space provision is both adequate and protected. This has not occurred to date.

Our opinion is that the process for modifications being employed by the proponent is flawed and is presenting an increasingly misleading impression that:

- a) MP07_0166 approved building footprints are an accurate reflection of permitted GFA
- b) the open space and building types approved in MP07_0166 will be delivered; and
- c) no cumulative urban design impacts are occurring across the Estate from modifications when all of these clearly are not the case.

As a general note, all documents carry disclaimers to the effect that road alignments, building alignments, building footprints may change. Again, such disclaimers raise questions as to voracity of a Concept Plan to deliver what the community, quite reasonably, is expecting will be delivered based on the approval.

4.0 SUBJECT MODIFICATION PRECINCT B - CENTRAL CHURCH

MP07_0166 MOD5 - Precinct B - Central Church

The purpose of this modification is to replace figures and drawings to remove any confusion regarding compliance with previous building footprints and configurations for intended educational facilities located on land at Fox Valley Road, drafted at the very early conceptual stages of the Wahroonga Estate planning process.

Specifically this modification seeks to:

- Change the building footprints of the proposed educational facilities in Precinct B: Central Church on the Wahroonga Estate Site in response to a detailed and well considered design process.*

- Change the current road alignment of the proposed access road to better serve the needs of the school and future residential uses.*

([MP07_0166 Mod 5 Wahroonga Estate Concept Plan.pdf](#))

4.1 Urban Design Performance Criteria MP07_0166

MP07_0166 approved the following urban design performance criteria.

Central Church Precinct

A cluster of residential apartments will take advantage of close links with the hospital, church, surrounding natural landscape and good access to Fox Valley Road.

This precinct has been laid out to achieve high levels of solar access and minimal overshadowing by buildings. A central square gives an address to all the buildings and provides a focal point for the community.

Strong pedestrian linkages to surrounding streets, open space, the church and hospital precinct will help to create an active public realm whilst encourage walking within the campus.

Vehicle parking will primarily be provided beneath buildings. Some additional at-grade visitor parking and drop off space will be provided.

The character and treatment of the street edge along Fox Valley Road is important as it contributes to the approach to the Hospital. Additionally the relationship between the proposed residential flat buildings and the heritage ACA building is also important.

The building envelopes of the buildings along Fox Valley Road have been designed to create spaces between building mass to enable plantings and to break up the built form so to not be as dominating along Fox Valley Road.

(Wahroonga Estate Redevelopment Final Preferred Project and Concept Plan 2010, p61)
<https://majorprojects.affinitylive.com/public/9cb9791229df230a0b64623e6beb5429/FINAL%20Preferred%20Project%20Report%20Part%202%20Jan%202010.pdf>

Precinct	Type of use	Existing development	Proposed development
Central Church	Education	Primary school of approx. 1,200m ² and catering for approx. 200 students	Allowances for a K-12 school of 9,000m ² relocated to Precinct 2 and catering for approx. 800 students
	Church	Two churches totalling 1,600m ²	A centralised church precinct catering for 3,200m ² floor space
	Residential	Dwelling Houses 19 High density (residential flat buildings) nil	Dwelling Houses 9 in total 9 to be retained, refurbished or replaced High density (residential flat buildings) 200 in total 50 x 1 bedroom 100 x 2 bedroom 50 x 3 bedroom

Figure 5: Excerpt MP07_0166 GFA and land-use
Source: Wahroonga Estate Redevelopment Final Preferred Project and Concept Plan 2010, p50, Table 8,
<https://majorprojects.affinitylive.com/public/7f3a5ba63392f979258f869d2c21c27e/FINAL%20Preferred%20Project%20Report%20Part%201%20Jan%202010.pdf>



Campus
The landscape treatment across the this areas will help to create a 'campus' feel with high levels of pedestrian accessibility. Retention of exiting vegetation together with avenue tree planting and larger areas of open lawn will provide a strong green structure within the wider forest setting. A number of key focal spaces related to the hospital, church and residential communities will be inter-linked by a strong network of paths and cycleways placing an emphasis on pedestrian movement.

Figure 6: MP07_0166 Precinct B Landscape Character MP07_0166 Concept Plan - Precinct B - Central Church
Source: MP07_0166 Final Preferred Project Report and Concept Plan 2010 p 56
<https://majorprojects.affinitylive.com/public/9cb9791229df230a0b64623e6beb5429/FINAL%20Preferred%20Project%20Report%20Part%202%20Jan%202010.pdf>

4.2 Document inconsistencies and clarifications

Revised documents are required to address the following inconsistencies or clarifications:

Drawing S75W-01/2 The Concept Plan revised
refer https://majorprojects.affinitylive.com/public/3031fc049d46d885162f4c27cdb774e1/S75W01-2_The%20Concept%20Plan.pdf
Superseded base information is being used for the Concept Plan. All precincts are required to have updated information consistent with all approved modifications. A separate drawing is required to include all pending modifications so that clear visual comparisons can be made between the original Concept Plan MP07_0166, modifications already approved, and modifications currently being sought on all other precincts as well as the subject modifications (refer item 2.1 Cumulative Impacts for list of additional drawings required).
Should sought modifications for Precinct B be approved under the auspices of “removing confusion with compliance with the Concept Plan”, it would follow that the modified Concept Plan in its entirety would become the valid Concept Plan. Confusion as to the compliance of development applications will continue where outdated information forms parts of revised Concept Plans as multiple differing and inconsistent plans would have concurrent approval. This is highly unsatisfactory on a development of this significance.
Future perimeter road to the north east referred to in Architectural Statement does not appear in plan

Drawing S75W-02/2 Figure 45(A) Precinct B- Central Church Revised
refer https://majorprojects.affinitylive.com/public/8c26df24fd1ff90f553f376449dc44e3/S75W02-2_Precinct%20B%20Central%20Church.pdf
No section indicators on dwg
No vehicular or pedestrian access indicated for residential buildings
Base drawings of the Concept Plan are to ensure all approved modifications to footprints, internal roads, public domain, access, landscaping are accurately reflected on other precincts. Where applications are pending, a separate graphic is required that indicate the modifications being sought across the Wahroonga Estate (refer item 2.1 Cumulative Impacts for list of additional drawings required).

Drawing S75W-04/2 Figures 68(A) and 69(A) Site Sections
refer https://majorprojects.affinitylive.com/public/0684c40b9cb8106cdfb7d35c79302bfd/S75W04-2_Site%20Sections.pdf
No dimensions provided on sections (as provided in the Final PPR) so no accurate assessment of changes to public domain/open space in sought modification is possible
No section locations
Section locations nominated as replacing Final PPR but appear to be in different location to Final PPR (see p71 <https://majorprojects.affinitylive.com/public/9cb9791229df230a0b64623e6beb5429/FINAL%20Preferred%20Project%20Report%20Part%202%20Jan%202010.pdf>)
An additional section drawing is required to describe public domain conditions from Fox Valley Road through to bushland demonstrating the quality of public domain spaces and adequate building separations are achieved at critical locations.

Architectural Design Statement
refer <https://majorprojects.affinitylive.com/public/b1086a102eb48957870b420ebe82f2eb/S75W%20Architectural%20Design%20Statement.pdf>
Feasibility diagrams 7-10 for proposed residential development are quite confusing. It is unclear what requirements of APZs are not being met in some options but not in others, two APZ lines appear but it is unclear what the second line is, it is unclear why there are reduced setbacks when road alignments can be, and are, proposed to be altered, it is unclear why a single large building footprint is required and how solar access has been analyzed as there appear to be inconsistencies between units appearing to have identical orientation with some meeting solar access while others are not.
Diagram 4 does not appear to correspond to the location of buildings indicated on Diagram 5. This also is

inconsistent with representation of Drawing S75W-04/2 Figure 69(A). It is unclear what the separations mean as no dimensions are provided particularly relating to the interface between 6 and 4-storey development

4.3 Comparison between Concept Plan MP07_0166 and proposed modifications MOD5

Figures 7 and 8 provide a graphic comparison between MP07_0166 and sought modifications.

School site:

- Building footprints are proposed to be increased to accommodate the school in 3 or 4 buildings down from 5 as approved in MP07_0166
- Building types altered to accommodate large footprint of a hall
- A boundary adjustment to the school site has changed its shape to become tapered slightly decreasing site area
- It is unclear why the site boundaries required adjustment to follow the AZP given the school grounds require open space areas

Residential sites:

- Internal road realigned further to the north resulting in additional landscape within the residential development site with proposed at-grade car parking moved north and closer to the bush
- Vehicular access to Precinct B from Fox Valley Road has been moved to the west providing a separation from the school to residential buildings to the east and resulting in a staggered intersection with the internal road to the south of Fox Valley Road
- Proposed residential footprints have been amalgamated to be accommodated in 4 buildings down from the 5 approved as MP07_0166
- Area allocated to playing fields has been extended and an additional amenities block is accommodated
- No vehicular or pedestrian access has been indicated for residential buildings

4.4 Consistency with meeting the approved performance criteria of Concept Plan MP07_0166

Further information is requested to fully review proposed modifications for the following reasons:

- It is unclear why feasibility studies have not explored options that group the church, school and playing fields together with an access road separating the school from the residential. There are inherent functional conflicts where residential development surrounds the school separating it from playing fields.
- Documents do not communicate a “strong network of pedestrian paths and cycleways”
- Inadequate context describing building separations and street reservations
- Inadequate detail regarding the quality and amount of proposed open space within the school as there appears to be reduced playing space connected to the proposed school buildings that have increased in size. Supporting information needs to be submitted as to the adequacy of proposed space for the school population 800 students K-12
- While the playing fields have been extended, there does not appear to be a robust visual and/or physical connection between them and the school. This is important given the modifications to building types that are proposed
- Realignment of the road results in a significantly reduced street frontage to the playing fields
- Significant cut and fill will be required to locate playing fields as proposed whereas further to the south-west topography appears flatter
- It is noted that the Final PPR moved the school from the area to the south and directly adjoining the playing fields relocating it adjacent to the church. This split the residential components within Precinct B resulting in the school becoming somewhat isolated from the proposed open space of the playing fields and surrounding by high density residential flat buildings. The sought modifications reinforce this separation by retaining the prioritized connection to the church while tapering the site reducing the opportunity for physical and visual connections.
- Modifications between the EA and Final PPR also resulted in the removal a central pedestrian spine which had



Figure 7: MP07_0166 Concept Plan - Precinct B - Central Church
Source: MP07_0166 Final Preferred Project Report and Concept Plan 2010 p 61



Figure 8: MP07_0166 MOD5 Modified Concept Plan - Precinct B - Central Church
Source: https://majorprojects.affinitylive.com/public/4e3ca1e2720351e60b2e9a5f6e61e1e2/S75W03-2_Precinct%20B%20Detail.pdf

provided an active pedestrian environment within the residential components. It was disappointing this had been removed as the relationship between the school and residential buildings to the north is ambiguous. Building separations required to achieve SEPP 65 RFDC requirements need to be clarified.

5.0 URBAN DESIGN ISSUES

- a) MP07_0166 and MP10_0070 have not accommodated GFA anomalies leading to adverse outcomes as these become sought modifications
- b) Modifications retain inherent conflicts in site layout relating to functional relationships between church, school, playing fields and high density residential buildings
- c) There is no public domain/open space strategy that creates a cohesive hierarchy of the site arrangement - instead there is a simplistic arrangement of built form placed in generic landscape, road placement with no clear hierarchical precinct strategy coordinated as a part of a whole Concept Plan. This is a consistent theme with all modifications that the proponent have not sought to address
- d) Current/as-built MP10_0070 needs to be included on MP07_0166
- e) Inconsistent and inaccurate base information used on the MP07_0166 relating to other precinct modifications,
- f) Lack of detail regarding vehicular and hard paving areas for the residential components in particular as well as school site
- g) Areas appearing as deep soil on the School site are above basement car parking
- h) Inadequate development controls have been provided demonstrating compliance is achieved such as road reservations, setbacks to building lines, height of building information in plan, APZ requirements and their accurate location, what this means in terms of development, there is no sense of proposed 3-dimensional form.
- i) Precinct B's physical connection of the school to the playing fields is poor
- j) It appears boundary adjustments are required to accommodate the extended playing fields
- k) Reduced frontage of the internal road to proposed playing fields
- l) Precinct B amount of open space provision for the school requires further supporting information as it appears inadequate to accommodate 800 students across the full K-12 spectrum
- m) Precinct B insufficient information as to building separations
- n) Precinct B insufficient information regarding pedestrian and vehicular network to residential buildings
- o) Precinct B significant cut and fill will be required to locate playing fields as proposed whereas further to the south-west topography appears flatter and better able to support the fields. This also relates to deficiencies to proposed site arrangement
- p) Precinct B screening between proposed 6-storey residential development and the school is ambiguous as there appears insufficient deep soil within the school site to support large trees (outside the 100m APZ)
- q) Proposed amendments to residential flat building footprints are not supported where bulk has been increased in particular the buildings immediately to the north and east of the school site. Further information is required to clarify this
- r) Architectural Statement feasibility studies, APZ and setback information lack clarity

6.0 LANDSCAPE DESIGN ISSUES

Relationship between school buildings and school playing fields

- a) The proposed narrowing of the eastern school frontage and the lengthening of the residential flat building footprint directly east of the proposed school buildings prevents the visual and physical link between the school buildings and its playing fields. The proposed pedestrian link is both longer and less direct.
- b) Instead of accessing the playing fields through predominantly level open space and a direct road crossing, the school children will have to follow a longer route along what will be a sloping road that services several apartment buildings and the hospital, with greater opportunity for jay-walking prior to the playing fields.
- c) The approved building layout allowed pedestrian access for the children to the centre of the playing field lot whereas

the proposed modification redirects them to the farthest end of the field, a considerable way from the amenities and tennis courts. As the proposed playing field lot provides no car parking, it is assumed that all visitors/spectators would have to access the fields via this route. Prior to the approval of a modification to the road layout and the residential building footprints, details of the increase in distance, grade and accessibility of the proposed physical link between the school buildings and playing fields should be considered.

Quality and amount of play area being provided

- d) Prior to the increase to the size of the school buildings footprints, the applicant should demonstrate the achievement of the standards for the provision (m²/child) of play space per student.
- e) The proposed basement extension for the entire school site should consider the need for soft landscape to service the school needs of quality open space for utilisation by children at break times during school. Similarly the achievement of effective screen planting will be further limited if provided on a podium.

Basement setbacks to Fox Valley Road

- f) The proposed modification to the basements has resulted in the loss of sufficient curtilage between the school buildings and residential buildings that is required in the concept approval to achieve adequate landscape amenity as well as compatibility with the local landscape character (refer p 4 Diagram 4, Architectural Design Report – Issue B, Stanton Dahl, 2013).
- g) The proposed basement encroachment within the front setback to Fox Valley Road indicated in Diagram 4 (p 4, Architectural Design Report – Issue B, Stanton Dahl, 2013) is inconsistent with the landscaped frontage proposed in the concept approval (refer p 70, Figure 65, Section 4, Wahroonga Estate Redevelopment Concept Plan dated January 2010). To preserve landscape setting in keeping with the local landscape character, the basement should not encroach within front, side and rear setbacks of the school lots.

Setback of school buildings to residential building lots.

- h) The setbacks of the school buildings to the boundary of the adjoining residential buildings are considered insufficient to achieve the appropriate landscape outcome (refer p 71, Figure 69, Section 7, Wahroonga Estate Redevelopment Concept Plan dated January 2010). The concept approval requires minimum 5.5m setback to the shared access.
- i) Much of the setback of the school buildings where adjoining the residential buildings is taken up with hard surface areas, steps and ramps that will restrict the establishment of suitable planting in scale with the buildings.

Loss of communal open space to residential flat buildings

- j) The proposed increased size of the western end of School Lot 1 adjacent the church, reduces the area of the area proposed as communal open space associated with the residential flat buildings. If the unit numbers of the RFB's are to remain the same, consideration of the loss of required open space should be provided.

Playing field/courts and their amenities.

- k) The road layout has reduced the frontage available for vehicle access to the playing fields.
- l) The proposed playing fields should indicate the standards used to determine the size of the courts, cricket nets and the playing field. It is reasonable to expect a basic full size soccer pitch especially as the school will now incorporate a high school as well as the existing primary school.

Environmental impacts

- l) The modification relocates the playing fields into a treed area adjacent to the sensitive ecological bushland area at the northern and southern end of School Lot 2. This area is labelled on Figure 46 as 'woodland managed in accordance with APZ management plan'.
- m) The nature of these facilities require that the land be flat and consequently it is inevitable that there will be a significant amount of remodelling of earth to enable the flat areas. The impact on the adjacent critically endangered communities and Coup's Creek that these earthworks and the changes in waterflow may have has not been provided. Nor have the changes addressed issues in the Biodiversity Management Plan, in particular the section on the Vegetation Management Plan which deals specifically with the interface issue between development and conservation lands.

-
- n) Further ecological assessment of the impacts to the adjoining significant vegetation community, of the proposed tree removal and increased size of the area of fill, should be provided.

Modified Road Layout

- o) The proposed basement entry to the school relocates it from the western side of the school to the eastern side. As the basement parking includes kiss and drop spaces, the purpose of the western road becomes unclear.
- p) The relocated basement entry will relocate the principal vehicular access to the school from the existing traffic lights to the east of the church, to a proposed access at the eastern end of the school.
- q) The modified road layout and basement entry has not considered pedestrian and bicycle access into and around the site in accordance with Figure 80 of the concept plan. It is unclear whether the primary east/west link is to be retained to the school/residential area.
- r) The relocation of the basement entry to the western-most residential flat building is supported as it will provide separation between the school and residential access.

7.0 BIODIVERSITY, RIPARIAN AND BUSHFIRE CONCERNS

- a) Implications of cut and fill and remodelling earthworks, ongoing drainage management and associated runoff adjacent to the bush and Coups Creek is still of concern.
- b) Impact on adjacent ecological communities is still of concern.
- c) Due to the cut and fill nature of the proposed sports field edge, the northern edge adjoining bushland will require adequate vegetation / weed management to reduce weed impacts upon adjacent ecological communities. Particularly as this area is hidden from the general line of sight.
- d) Diagram 2, 6 and potential figure 68(A) show a “zero vegetation line” that is clearly located within the “E2”-Environmental Zone. The proposed sport field and stores and amenities should be located so as to ensure that no construction or APZs are undertaken within the E2 area.
- e) An amended SIS should address impacts upon local fauna resultant from instillation and use of the sports field flood lights.

8.0 CONCERNS WITH PLAYING FIELDS

On-site open play area

- a) The on-site open play area is inadequate for the 3 school stages, and the 800 children plus staff that will populate the school.
- b) The on-site open area will have limited amenity with overlooking and will be overshadowed from the residential buildings to the north whose setback is minimal and heights are greater than the school buildings. (dwg S75W-04/2)

Playing fields location, visibility and connection to school

- c) The playing fields are too distant from the school to be realistically used during short breaks, hence they cannot be considered as the primary open space for the school's breakout area.
- d) The playing fields do not have a direct visual or physical access to the school, they are tucked away behind the indicated residential buildings; hence their link with the school is tenuous.
- e) The playing field does not indicate a full size soccer pitch to accommodate the school's sporting needs, and confirmation is sought to ensure the cricket net run-up area and the multipurpose tennis/basketball/netball courts are of regulation size. (pg 6 of report)

9.0 STORMWATER MANAGEMENT ISSUES

The original concept stormwater report by Hyder which forms part of the concept approval showed a combined detention basin and raingarden where the playing fields are now proposed. This facility was required to achieve the environmental and water quality targets of the water cycle management strategy adopted by Hyder.

The facility has been removed from that area on the new concept plan.

A previous comment from Council in relation to the proposed school contained the following concerns:

- *Council is concerned with the location of the playing fields/courts adjacent to the sensitive ecological bushland area. The nature of these facilities requires that the land be flat and consequently it is inevitable that there will be a significant amount of remodelling of earth to enable the flat areas.*
- *The EIS should give specific quantitative details of the amount of cut and fill required to create a level play area, including the changes to the existing contours.*
- *The EIS should provide a report of the impact on the adjacent critically endangered communities and Coup's Creek that this earthwork and the changes in waterflow will have. Measures proposed to mitigate the impact of the effects of the earthworks should be clearly delineated in the EIS.*
- *The EIS should demonstrate address of the issues in the Biodiversity Management Plan, in particular the section on the Vegetation Management Plan which deals specifically with the interface issue between development and conservation lands.*

These matters will still need to be addressed in the detailed design of water management measures for the school (as the discharge of stormwater from the school will be towards the playing fields), the internal road and the playing fields themselves.

- There does not appear to be sufficient space for the required water treatment measures between the playing fields and the bushland.
- It would be advisable for a concept design to be prepared at this stage to confirm that measures can realistically fit within the available area, as there is not space within the school campus for much to be provided there.

10.0 PARKING , TRAFFIC AND ACCESS

- a) Traffic and parking is a major issue on this site and in relation to the development.
- b) No indication has been given to how the traffic flow will be dealt with despite raising these key concerns in previous correspondence (Refer Attachment 2).
- c) Key elements have not been considered/indicated: entry into basement parking and distance from Fox Valley Rd; bus stops and turning circles; numbers of parking spaces to ensure the ongoing problem of street parking is not exacerbated; roadworks to accommodate traffic flow at peak hours; method of ensuring traffic does not back up and create obstruction on Fox Valley Rd.
- e) The Architectural Design Statement mentions (on p6) that a number of factors were considered in the feasibility assessment of the whole precinct, but fails to consider bus pick up and set down locations. The analysis of these factors and the considerations by the traffic engineers (Transport and Traffic Planning Associates) should be made available;
- f) A vehicle movement plan has been provided, but a pedestrian movement plan should also be prepared, showing pedestrian access routes into the school;
- g) The “Precinct B: Detail” plan indicates a signalised intersection at the new access road with Fox Valley Road, and incorporating a road on the south-eastern side of Fox Valley Road. Although the approval of the Concept Plan for Wahroonga Estate (B7 (1) 2 (a) states RTA (RMS) and the proponent must enter into a binding Deed of Agreement for various works including intersection improvements on “Fox Valley Road with site accesses to the precinct”, more details should be provided on any RMS' concurrence and analysis of the operation of these signals. Vehicles leaving the set-down/pick-up area should be rejoining Fox Valley Road from this location if this intersection is to be signalised.

11.0 SUMMARY

The Sydney Adventist Hospital site is a highly significant redevelopment of regional importance located within Ku-ring-gai.

Proposed development is seeing dramatic changes to the density of residential population and capacity for employment within the Wahroonga Estate that will bring many benefits regionally. As such, it is an urban development of a scale that has the potential to be an exemplar for future urban development provided the optimal balance between short-term economic gain is balanced with sound urban design outcomes and related long-term economic outcomes that are expected to flow for the coming generations.

Figures 9 and 10 below demonstrate the change in urban character across the Wahroonga Estate as it is well into its process of transition.

It is clear that provision of the open landscape setting that formed Concept Approval MP07_0166 has been incrementally eroded with the scale of development combined with modifications to building footprints.

This is in part the result of deficiencies in the approved Concept Plan. However, when combined with precinct modifications being treated in isolation, consent authorities have not been able to assess cumulative impacts or gain an understanding of the spatial relationship across the Wahroonga Estate. What appears to be an impact confined to a single precinct cannot be considered in context of similar impacts occurring on adjoining precincts and the combined effect on the urban character.



Figure 9: The Wahroonga Estate - aerial photo January 2011

Source: NearMap.com/photomaps

It is not accepted that impacts internal to the site make them acceptable, again because the cumulative effect will lead to an adverse urban outcome as construction progresses.

Figures 9 and 10 provide clear evidence of the effect upon the urban character when cumulative impacts are not accounted for, and demonstrates the clear pattern of redevelopment across the Wahroonga Estate.

The community would quite reasonably question how Concept Plan MP07_0166 could be considered an accurate representation of development on the Wahroonga Estate.

While the hospital redevelopment is supported, it is clear that the public domain strategy for the education, residential and commercial precincts in particular is failing to be delivered with each modification that changes building types from slender to large floorplate thus increasing building footprints with the commensurate reduction to public domain/open space provisions and where boundary adjustments seek to increase density. Combined across the Estate, these will result in a poor urban outcome.

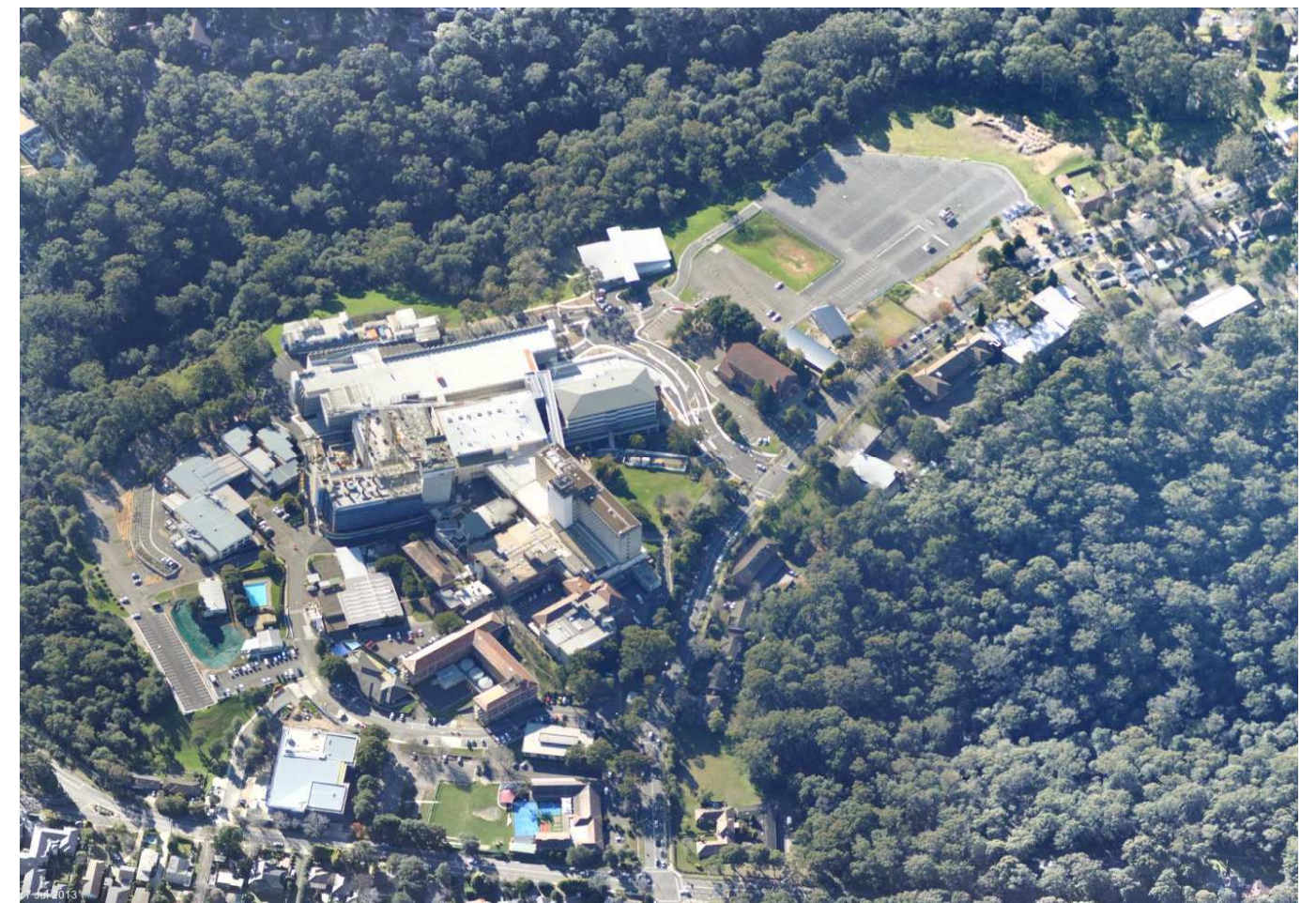


Figure 10: The Wahroonga Estate - aerial photo July 2013

Source: NearMap.com/photomaps

Ku-ring-gai Council is in receipt of your letter dated 19th February 2013. The letter is not specific about what aspect of the proposal you would like Council to review. Therefore, it is assumed, in the absence of any detail, the consultation is sought in relation to the "consultation" section of the *Director General's Environmental Assessment Requirements*.

Council has reviewed and compared your preliminary plans of the Wahroonga Adventist School with documentation approved by the Department regarding the Wahroonga Estate, which includes this site. Council has a number of matters of concern all of which centre around the lack of evidence showing compliance with the Concept Plan Approval. These key issues need to be addressed in this proposal and its EIS.

The Wahroonga Concept Plan has approval for a K-12 school of 9000sqm floor space, catering for approximately 800 students. Schedule 2 (and subsequent Modifications) of the Project Approval states a number of terms that require compliance. Council will not reiterate all those clauses, but draws your attention to the key clauses, in particular clause B3 which states:

B3 Proposed school facilities

- (1) Any future application for the proposed school is to address the following:
 - (a) Layout of school buildings and associated facilities including the proposed oval
 - (b) Design of buildings and relationship with surrounding development
 - (c) Traffic management measures (including facilities such as stopping bays, bus facilities, drop off and pick up areas, car parking and vehicular access arrangements).
- (2) The location of the proposed school oval must avoid direct and indirect impacts on critically / endangered ecological communities.

It is noted that these requirements have only partially, or not at all, been addressed in the preliminary plans sent to Council. The key issues and information that need to be addressed include:

B3 (1) (a) Layout of school buildings and associated facilities including the proposed oval.

1. Provision of final site area, and final numbers of students and staff to be accommodated.

- The Approval states an area of 9000sqm for school use. The EIS should specify the area, including playing fields/courts, that is being used for the school premises.
- The Approval gives an approximation of 800 students. The EIS should confirm this figure as the final maximum student number and not an approximation. Further, specific staff/employee numbers should be provided. The numbers and types of people using the site is critical in establishing and meeting on site requirements.

2. Relationship with future development surrounding the school site.

- The EIS and architectural plans should indicate all other existing and concept plan buildings surrounding any part of the school site, including proposed residential flat buildings to the north of the school buildings. Council's setback and other controls, alongside SEPP 65 should be applied to site the buildings.
- The placement of surrounding buildings will give a clear and fair indication of the actual relationship that will exist between the school buildings and the surrounding development, including issues of overshadowing and overlooking of the limited open space on the school building site. These issues need to be addressed in the EIS with plans, sections and shadow diagrams.

3. Connectivity between school buildings and playing fields/courts.

- Council is concerned with the tenuous relationship between the school buildings and the school playing fields/courts. The proposed remote visual connection that is depicted in the preliminary plans is highly unlikely to remain with the continued development of the estate. The EIS should address what is proposed to improve the remote connection between the school buildings and its grounds.
- With the separation of the buildings and the playing fields, clarification needs to be given on the security arrangements surrounding the field/courts. If locked fencing is proposed, these need to be indicated on the plans and sections, clearly showing points of entry into the open area.
- The plans should indicate all other concept plan buildings, including residential flat buildings, surrounding any part of the school site to give a clear and fair indication of the actual relationship that will exist between the school buildings and the open space.
- Clarification needs to be given as to the usage of the playing fields/courts and how it is envisaged that children will safely access this given the road that separates it will be servicing a number of apartment buildings to the rear.
- It is clear that the location of the playing fields/courts will not service the school's needs of quality open space for utilisation by children at break times during school. In addition the requirements for securing such a space need to be assessed. Consideration should be given to improving the connection between the school buildings and the playing fields/courts by locating grounds adjacent to the school buildings. This would enable better usage of the open space and enclose the area into the actual school grounds.

4. Quality and amount of play area being provided.

- The EIS should stipulate what area (sqm) is being provided within the school grounds for play during morning and lunch breaks and indicate these areas on the plans. In particular this is of importance since the school is K-12 and therefore will require separation between the play areas for the different stages in the school as is typical in all such schools.
- The distance from the school of the playing fields/courts suggests it is impractical to consider utilisation of that space by children, particularly younger children, at morning tea break and lunch time.
- The EIS should state what standards are being used to guide the provision (sqm/child) of play space per student. The *Ku-ring-gai Schools Development Code 1983* stipulates a playground area of minimum 20.5sqm per student.
- The preliminary plans indicate one main open space which is elevated off the ground and a secondary amphitheatre area. Given that this is not a dense urban location, it is reasonable to expect a good level of easily accessible open play areas at ground level within the proximity of the classroom buildings. The EIS should address the provision of well located play areas for the volume of students within the school.

5. Playing field/courts and their amenities.

- The EIS should indicate the standards used to determine the size of the courts, cricket nets and the playing field.
- The preliminary plans depict a playing field of limited size which will not be able to accommodate a basic full size soccer pitch. Given that this is not a dense urban area and there is opportunity to provide adequate facilities for the new school on the land surrounding the school, it is reasonable to expect that full sized pitches be provided

onsite. This is especially important as the school will now incorporate a high school as well as the existing primary school.

- Ku-ring-gai is seeing a growing trend of third party usage of facilities such as playing fields and halls in local private and public schools. Consideration should be given to the provision of playing fields that are of a size and type that would encourage shared use.
- The amenity block on the site of the playing field/courts appears to provide inadequate numbers and separation of male/female toilets for the numbers of students that will utilise the area and the distance to other school amenities. Details of provision should be provided in the EIS.
- The amenity block indicates a large covered area which appears out of proportion with the building structure. Detailed, plans, sections, elevations of this building should be included in the EIS.

6. Bushfire and evacuation safety.

- The proposal should demonstrate how it complies with the *Bushfire Management Plans* for the site, including evacuation measures.
- It is noted that the school buildings are outside the required asset protection zone, however there is concern that there is excessive reliance on the playing fields/courts for children's play and hence this could be classed as a part of the school. The playing fields/courts area is not outside this asset protection zone posing the same threat that the school population faced when the buildings were outside the asset protection zone. It is advisable that adequate play space be provided within the boundaries of the school building area which would afford a direct evacuation through the school onto Fox Valley Road.

B3 (1) (b) Design of buildings and relationship with surrounding development.

Context of the school.

- The school sits within a greater setting approved under the Wahroonga Concept Plan. Therefore, the drawings should clearly indicate the location of surrounding residential buildings and roads as per the Approved Concept Plan in both plan and section.
- Given the allowable heights of the buildings surrounding the school areas, it is important that the relationship between the school buildings and the other surrounding buildings be clearly shown, including the spaces in between. This is particularly important with regard to amenity issues of overlooking and overshadowing to and from the school.

B3 (1) (c) Traffic management measures (including facilities such as stopping bays, bus facilities, drop off and pick up areas, car parking and vehicular access arrangements).

The Concept Plan Approval states a number of conditions which the preliminary plans have not incorporated. Following are excerpts of those clauses:

B6 Road design and construction

- (2) Development applications for the internal road network in the Central Church Precinct must demonstrate that the proposal accommodates the requirements for the proposed school, including appropriate vehicular access arrangements, that school car parking facilities are provided at grade or below ground, that provision has been made for necessary bus facilities and the location of allocated on-street parking spaces for the car share scheme.

- This clause has not been addressed. The EIS needs to stipulate the numbers of people using the facility (employees, students) in order to determine whether the onsite provision is satisfactory. On site parking has to be provided for visitors, staff/employees and a proportion of HSC students to avoid street parking and the associated congestion.
- The preliminary plans make no provision for the necessary bus facilities which the school will utilise. No bus lay-bys are indicated for school buses at any location. The EIS should provide full details of numbers of school buses that will operate for this size school, and how they will be accommodated without disruption to the road network and traffic flow on Fox Valley Road during their stopping to drop/pick students, and in their routes.

B7 Agency road requirements

- (1) A binding Deed of Agreement is to be entered into between the Proponent and the RTA to undertake the following works, as detailed in the Authority's submission on the Environmental Assessment dated 18 June 2009:
 - 2. Intersection improvements at the following locations:
 - (a) Fox Valley Road with site accesses to the Precinct
 - 4. Widening Fox Valley Road between The Comenarra Parkway and the northern boundary of the site to accommodate two travel lanes in each direction. In addition, two southbound travel lanes must be provided along Fox Valley Road from the Pacific Highway to the site.

The Agreement is to outline the extent of work including lane configuration, timing of work and costs, and is to be signed and executed prior to the release of the first Construction Certificate for the site.

- The preliminary plans give no indication of the matters in the above clause. The EIS should address these matters with plans and report clearly showing the 'intersection improvements' that will be incorporated as part of this new site access roadway into the school. The flow of traffic from the new access road will be considerable and given the basement parking is located close to the intersection, a traffic study needs to be conducted to indicate how this proposal will avoid traffic congestion in the access road spilling out and blocking traffic on Fox Valley Road.
- The preliminary plans give no indication of the required road widening of Fox Valley. This is critical to show in the EIS plans and report as it will reduce the depth of footpath areas and hence the ability to provide bus lay-bys on the street.

B8 Transport

- (1) A Work Place Travel Plan and Transport Access Guide are to be submitted for approval with development applications proposing employment generating activities (eg. for commercial development in the Central Hospital and Fox Valley Road East Precincts, the proposed school, Faculty of Nursing and hospital activities)
- It is critical that this report be prepared to inform the design at an early stage to ensure it is able to accommodate the new volume of travellers and their mode of travel to work.

Car parking

- (3) The consent authority is to have regard to the provisions of the relevant Council Development Control Plan regulating car parking at the time of the application, the final Preferred Project Report and any other relevant traffic, transport and car parking reports when determining car parking requirements for employment generating land uses.
- (4) Applications for non-residential land uses must be accompanied by a traffic and car parking assessment prepared by a suitably qualified traffic planner, demonstrating that sufficient car parking has been provided having regard to the RTA's Guide to Traffic Generating Developments and Council's DCP requirements.

- The EIS should clearly state the numbers of students, staff/employees, and HSC year 12 students that will be housed by this school at full capacity. It is vital that parking be provided onsite to avoid parking congestion on the surrounding streets.
- Onsite parking should be provided for staff/employees, Year 12 students, and visitors to the school.
- The EIS should demonstrate compliance of the school parking provision and traffic management and control with the requirements of Ku-ring-gai Council's *DCP 43* and Council's *Traffic and Transport Policy*.

B3 (2) The location of the proposed school oval must avoid direct and indirect impacts on critically / endangered ecological communities.

Environmental impact

- Council is concerned with the location of the playing fields/courts adjacent to the sensitive ecological bushland area. The nature of these facilities require that the land be flat and consequently it is inevitable that there will be a significant amount of remodelling of earth to enable the flat areas.
- The EIS should give specific quantitative details of the amount of cut and fill required to create a level play area, including the changes to the existing contours.
- The EIS should provide a report of the impact on the adjacent critically endangered communities and Coup's Creek that this earthwork and the changes in waterflow will have. Measures proposed to mitigate the impact of the effects of the earthworks should be clearly delineated in the EIS.
- The EIS should demonstrate address of the issues in the *Biodiversity Management Plan*, in particular the section on the *Vegetation Management Plan* which deals specifically with the interface issue between development and conservation lands.