

Architectural Design Statement

April 2014

Wahroonga Estate Redevelopment MP 07-0166

Section 75W Modification

Wahroonga NSW

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Project Wahroonga Adventist School
Fox Valley Road, Wahroonga NSW
Job No 1318.10
Date April 2014

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1.0 Introduction

This Architectural Design Statement has been prepared in support of a Section 75W Modification to the Wahroonga Estate Approved Concept Plan MP 07-0166 submitted to the Department of Planning & Infrastructure (DPI).

The statement provides an outline of changes proposed to Precinct B (Central Church) of the Estate in relation to the educational buildings lot, playing fields lot, access road alignment and adjoining residential development lots.

This statement should be read in conjunction with the *Architectural Design Report* prepared for the SSD 5535 application for Wahroonga Adventist School.



Diagram 1: Precinct B Central Church (excerpt from Figure 45A of the Concept Plan drawings revised)

2.0 Change to Education Facility Buildings Lot from the Concept Plan

The proposed site for the educational facility is located on Fox Valley Road and will comprise two separate parcels of land known as; School Lot 1 (the main campus) on Fox Valley Road, and School Lot 2 (the playing fields area) to the north. School Lot 1 is proposed to accommodate the education facility buildings.

The parcel of land designated for School Lot 1 was shown in the Approved Concept Plan drawing as approximately orthogonal in shape and generally parallel to Fox Valley Road. However, the unmanaged vegetation north of School Lot 2 (recorded on the Bushfire Prone Land Map as Category 1 Bushfire Prone Vegetation) had generated a requirement for a 100m Asset Protection Zone (APZ) to the educational facility, which encroached onto the original shape of the lot. The boundaries of School Lot 1 were subsequently amended in the early phase of the design process in response to the APZ to ensure that the new school site would not be affected. This design process also incorporated a precinct-wide feasibility assessment to test the potential of the adjoining residential development lots and access road alignment (refer to sections 5.0 and 6.0 below).

Following this process, the change in shape to the lot has resulted in the south-western end becoming wider and the north-eastern end becoming narrower.

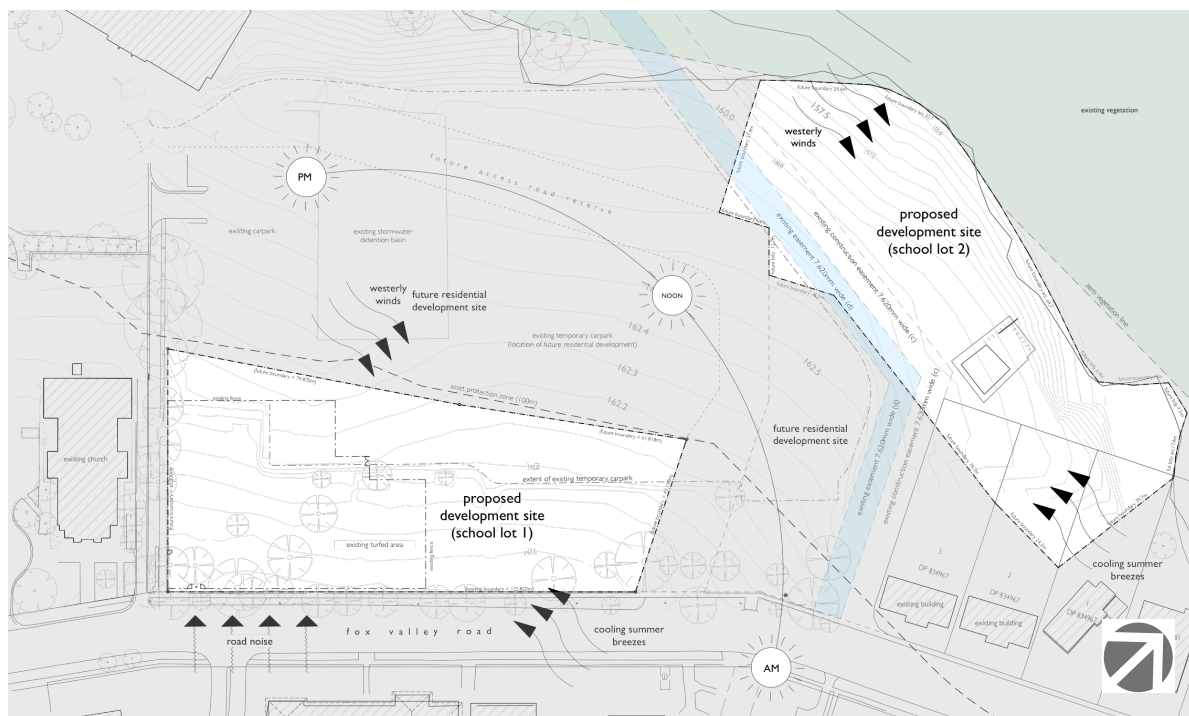


Diagram 2: School Lot 1 and School Lot 2

3.0 Change to Education Facility Building Footprints from the Concept Plan

It is envisaged that the new Wahroonga Adventist School will provide a modern co-educational facility to accommodate the growth of the School from its current population to an 800 student Prep/ Kindergarten to Year 12 (K-12) community. The new campus will comprise an overall integrated campus facility designed to express 'three schools in one' (Junior, Middle and Senior Schools).

It was desirable that the siting of each 'School' within the Lot should be designed to achieve; open outdoor space; good solar and daylight access; appropriate presentation to surrounding streetscape and public domain; good connectivity to and within the campus. The three 'Schools' will also be served by a common basement level providing for parking and 'kiss and drop' facilities.

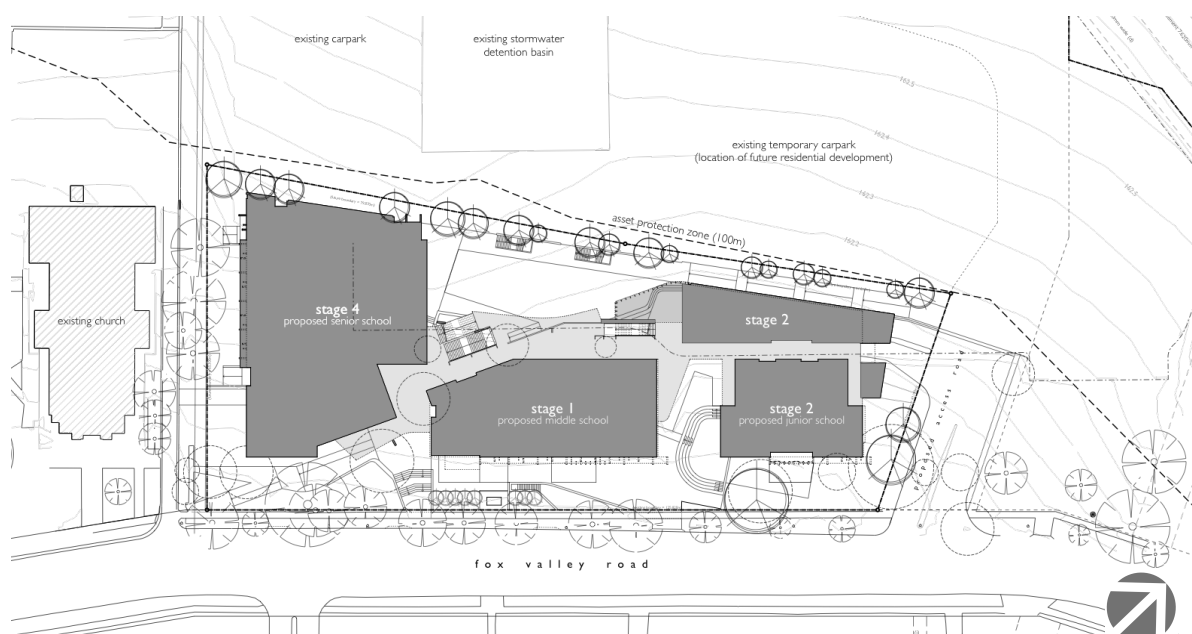


Diagram 3: School Lot 1 - 'Three Schools in One' building layout

In considering the design objectives for the new campus, a review of the indicative education facility footprints on the Approved Concept Plan drawing was undertaken early in the design phase. It was identified that the requirements of the project brief would not be met within the constraints of the shapes shown on the drawing, and a rigorous design process was undertaken to test and accommodate the brief requirements of the School on the site and respond to the surrounding context conditions, and desired future character for the precinct.

The planning arrangement of the new campus and siting for each of the three 'Schools' has been considered in order to meet functional and relational requirements in the project brief, to achieve good connectivity to and within the campus, and to reinforce a strong street edge along Fox Valley Road.

At the south-western end of the site, the presence of the existing church building has influenced the location of the Senior School being sited at that end of the campus. With the Senior School building accommodating the school hall, close access will be possible between the church and the hall which will be utilised by the church for various uses during the course of the week.

The north-eastern end of the site accommodates the Junior School building, allowing the most direct access to the Playing Fields area on School Lot 2.

The Middle School component is logically located between the Senior and Junior School stages of the campus, with the three 'schools' being linked by an 'internal street' to integrate the whole of the campus and facilitate access and movement through the School.

In considering the location of each of the three 'school' building footprints, the following were contributing factors;

Senior School:

- The Senior School, containing the school hall, is the largest of the three buildings on the campus;
- The south-eastern end of the site has the largest available footprint area due to the tapered shape of School Lot 1 (which was amended in response to the 100m APZ line) for accommodation of the Senior School;
- The south-eastern end of the site has the most direct relationship to the existing church for the school hall facility within the Senior School building;

Middle School:

- The Middle School is positioned between the Senior School and the Junior School as the logical transition between stages within the School;
- The Middle School building footprint has been located along the Fox Valley Road edge of the site to reinforce a strong street presence on the edge to the campus.
- Location of the building footprint along the Fox Valley Road edge also provides for the outdoor play space on the north-west edge of the site to become the 'heart' of the campus, with strong internal visual and functional links to each of the three 'schools'. This outdoor space is also away from the road and traffic, and allows adequate separation and amenity between the future residential development sites (to the north-west) and the school buildings, providing good solar access.

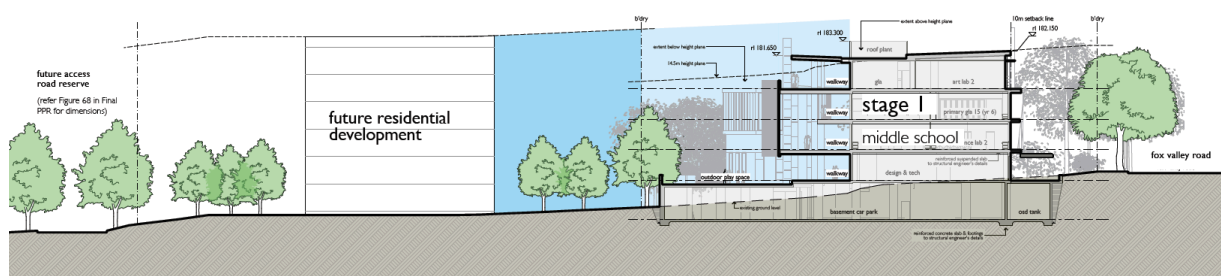


Diagram 4: Building separation to future residential development lot (section through Middle School looking north-east)

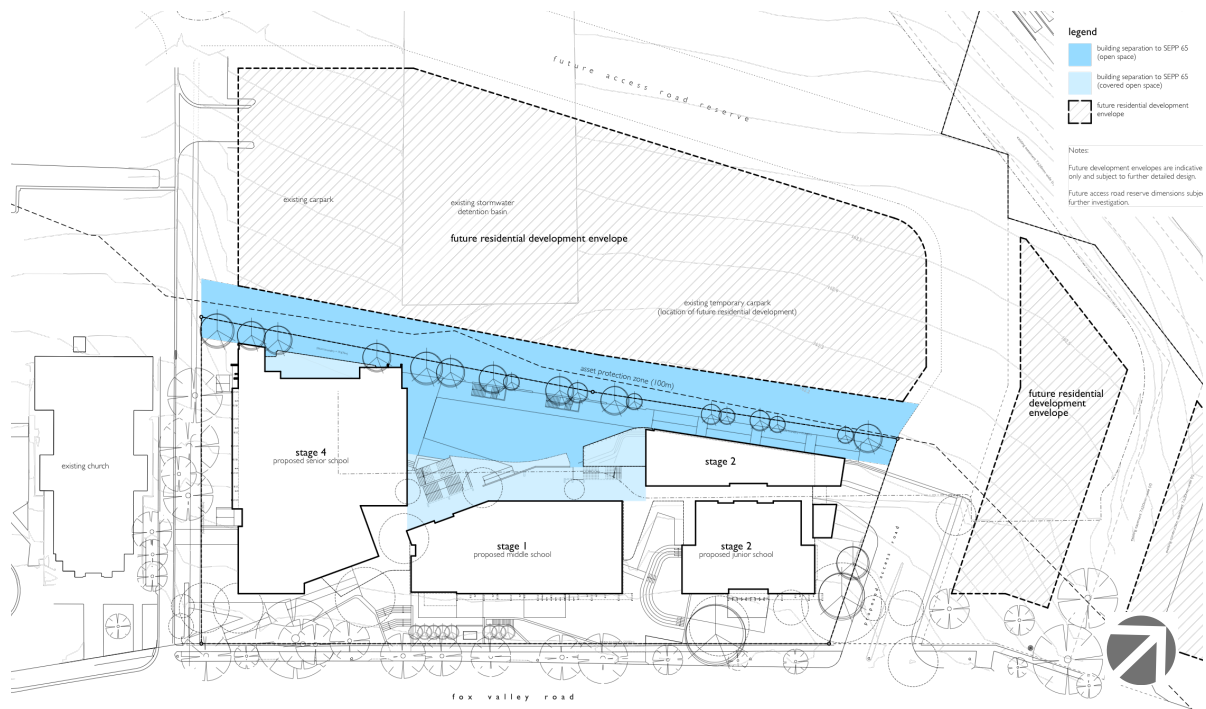


Diagram 5: Building separation to future residential development lot

Junior School:

- The north-eastern end of the site has the most direct access to the Playing Fields area on School Lot 2, for access by Junior School.
- The Junior School building footprint has been located along the Fox Valley Road edge of the site to reinforce a strong street presence on the edge to the campus.
- Location of the building footprint along the Fox Valley Road edge in relation to outdoor play space as for the Middle School above.

The resulting 'three schools in one' building footprint layout, and 'internal street' link, reflects the above design considerations for the School, and also responds to the feasibility assessment undertaken for the layout of residential development lots and new access road within the overall precinct (refer below).

4.0 Change to Playing Field Lot from the Concept Plan

School Lot 2 is located to the north of School Lot 1 between an existing easement and an area of native vegetation. The existing easement traverses Fox valley Road and continues westward through the existing area of native vegetation. School Lot 2 is proposed to accommodate outdoor playing fields and physical education courts.

The setout of School Lot 2 has been considered as part of the precinct-wide feasibility assessment incorporating; School Lot 1; the future residential development lots; and the access road (refer below). The resulting shape and size responds to the review process undertaken for the whole precinct, and achieves the objective of outdoor recreational and sporting facilities against a backdrop of native vegetation, adequate for required outdoor physical education activities. It is also envisaged that this area has the potential to become a community space within the future residential community.

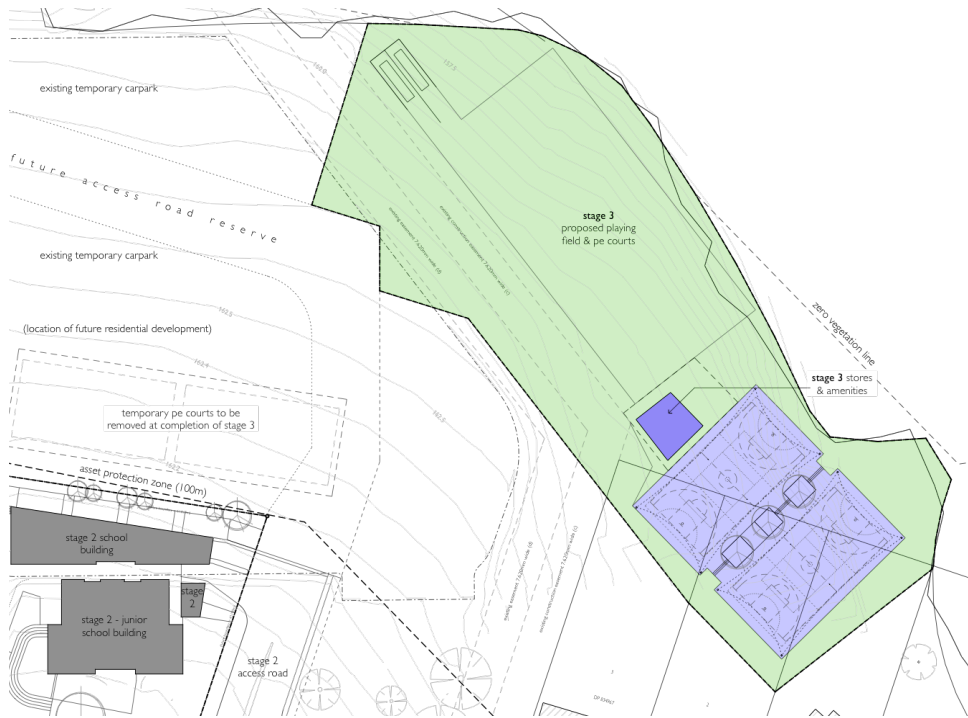


Diagram 6: School Lot 2 - Playing Fields

5.0 Change to Future Residential Development Lots from the Concept Plan

In the early phases of the design process for the setout of School Lots 1 and 2, consideration was also given to the adjoining residential development lots and their functional relationship to the education facility and access road. A precinct-wide feasibility assessment was undertaken to test the potential design of possible future multi-residential developments on the allotments, which included a site analysis and consideration of SEPP 65 principles, incorporating the following:

- Apartment mix and yield
- Natural ventilation
- Solar access
- Overshadowing
- Site setbacks
- Building separation
- Traffic and parking
- Existing easement
- Relationship to the educational facility

The analysis included a comparison of potential development options based on both the original building footprint shapes shown on the Concept Plan drawing and alternative footprint options.

From the feasibility assessment, it was determined that the resulting possible alternative layout of residential lots would be of sufficient size, depth and area to enable the design of future developments to meet the objectives of SEPP 65, and yield objectives.



Diagram 7: Feasibility - Concept Plan footprints



Diagram 8: Feasibility - possible alternative indicative footprint option 1



Diagram 9: Feasibility - possible alternative indicative footprint option 2



Diagram 10: Feasibility - possible alternative indicative footprint option 3

A review of traffic and access provisions for the precinct was also undertaken which considered safe access and 'kiss and drop' facilities for the new school, along with access to possible future residential development options (refer access road discussion below). Consideration was also given to the amenity of future multi-residential dwellings in terms of the position of the new access road providing a separation buffer to the school environment.

From the above process, an optimum access road and residential lot layout was determined which best addressed the desired outcomes for both the new education facility and the future residential community within the precinct.

6.0 Change to Access Road from the Concept Plan

An internal access road is proposed under the Approved Concept Plan connecting from Fox Valley Road and linking to the Sydney Adventist Hospital facility. On the original Concept Plan drawing, the road had been designed to provide access to future residential development lots and the Playing Fields directly, and to the educational facility lot (School Lot 1) via a driveway link.

As discussed above, the early phases of the design process for the education facility lots included a feasibility assessment for the whole precinct with consideration being given to the adjoining future residential development lots and the access road, and safe access to the new school.

Important factors for the new education facility were; making provision for safe vehicular access to the new school site; sufficient queuing space during morning and afternoon peak times; adequate 'kiss and drop' facilities within the site; and traffic considerations for the above in relation to connecting with Fox Valley Road. An analysis of these factors was undertaken in consultation with the traffic engineer (Transport & Traffic Planning Associates) as part of the design for the precinct.

From this process, it was determined that the new access road should be relocated further to the south-west to best meet the desired objectives for the precinct. This would make provision for direct vehicular access to School Lot 1 from the new access road (rather than the driveway link shown on the Concept Plan drawing), and accommodate the anticipated traffic movements associated with the new school, while also improving the amenity of future multi-residential developments to the north-east (with the access road serving as acoustic separation/privacy to the school environment).

The proposed setout of the new access road will also achieve access to the playing fields area, residential developments and on-grade parking area as for the Approved Concept Plan.



Diagram 11: Proposed access road layout (excerpt from Figure 46A of the Concept Plan drawings revised)

7.0 Conclusion

This statement demonstrates that the proposed changes to Precinct B (Central Church) of the Wahroonga Estate Approved Concept Plan - for the educational facility lots, access road and future residential development lots - have resulted from a thorough consideration of the constraints and opportunities of the precinct as a whole, and the objectives of the Approved Concept Plan.

The proposed changes will provide a positive contribution to the precinct, and to the urban character of the locality.

Stanton Dahl Architects

Appendix A

Section 75W Modification Drawings