
SYDNEY PLANNING PANEL (Sydney South West)

SPP No	2017SSW030 DA
DA Number	2882/2016/DA-C
Local Government Area	Campbelltown
Proposed Development	Demolition of all existing school buildings and removal of trees at Bardia Public School, and construction of new school buildings, a sports field, games court, play areas and landscaping
Street Address	Bardia Public School - Lot 1 DP 831150 and Lot 106 DP 1200781, Macdonald Road, BARDIA
Applicant/Owner	NSW Department of Education
Number of Submissions	1
Regional Development Criteria (Schedule 4A of the Act)	Crown development with a capital investment value over \$5 million
List of All Relevant s79C(1)(a) Matters	<ul style="list-style-type: none">• State Environmental Planning Policy (Infrastructure) 2007• State Environmental Planning Policy 55 – Remediation of Land• State Environmental Planning Policy (State Significant Precincts) 2005• Rural Fires Act 1997• Edmondson Park South Development Control Plan 2012
Does the DA require Special Infrastructure Contributions conditions (s94EF)?	No
List all documents submitted with this report for the panel's consideration	Officer's assessment report and attachments
Recommendation	Approval
Report by	Luke Joseph – Senior Development Planner
Report date	4 September 2017

Attachments

1. Recommended Conditions of Consent (under separate cover)
2. Zoning Map
3. Site Plan
4. Elevation Plans
5. Perspective Drawings
6. Landscaping Plans
7. Proposed car parking arrangement, Old Macdonald Road

Purpose

The purpose of this report is to assist the Sydney South West Planning Panel in its determination of the subject development application pursuant to the *Environmental Planning and Assessment Act 1979*.

Background and History

Bardia Public School has been located at the subject site for more than 50 years. Until 2015, it was known as Ingleburn North Public School. Its name was changed following the creation of the suburb of Bardia.

Currently Bardia Public School has only six permanent classrooms. Due to the high levels of residential growth in the catchment resulting from the development of Edmondson Park South, it is anticipated that approximately 1,000 students will need to be accommodated by the school by 2021 (an increase of approximately 750). As such, a major upgrade of the existing school facilities is required.

The site is located to the south of the planned Edmondson Park Town Centre and is identified on the Landcom Concept Plan noted in the Edmondson Park South Development Control Plan 2012.



Development within the Edmondson Park South precinct is currently ongoing. Importantly, the development of this precinct involves the realignment of Macdonald Road. Currently, Macdonald Road passes the school on its eastern side, however its new alignment will pass the school on its western side. In addition, Arthur Allen Drive is being extended from the new Macdonald Road alignment to the existing Macdonald Road alignment, and will adjoin the subject site to the south. Ultimately, although at an as yet unspecified time subject to approval by RMS, traffic signals will be provided at the intersection of Arthur Allen Drive and the new Macdonald Road alignment.

It is understood that originally the Edmondson Park South precinct was to have two 500-student public primary schools. However, for reasons unknown to the Council, the Department of Education instead decided to increase the planned capacity of Bardia Public School from 500 students to 1,000 students.

The site

The subject site is Bardia Public School, located at Macdonald Road, Bardia. The site is located approximately 650 metres to the south of Edmondson Park Railway Station. It is approximately 2.43 hectares in size, has an irregular shape, and contains a number of buildings, which are located in the eastern part of the site near the site's boundary with the current alignment of Macdonald Road. These buildings include two main school buildings containing offices and classrooms, two demountable classrooms, a covered outdoor learning area (COLA), and associated buildings used for maintenance. There is a large portion of undeveloped open space at the rear and southern boundary of the site. There are a number of trees throughout the site, although formal landscaping is minimal.

The site is adjoined to the east by the current alignment of Macdonald Road, and to the west by the future alignment of Macdonald Road, which is currently under construction. The site is adjoined to the south by Arthur Allen Drive, and to the north by residential land, which would be developed as part of the Edmondson Park South precinct.



The Proposal

This application proposes the redevelopment of Bardia Public School, incorporating the following proposed works:

- Demolition of all existing school buildings and outdoor play areas;
- Construction of three buildings, between one and two storeys including new classroom homebases, a covered outdoor learning area (COLA), community learning hub and school hall;
- On-site car parking;
- Removal of 76 trees; and
- Landscaping and the construction of a new sports field, games court and play areas.

The three proposed buildings would be located in the southern and western parts of the site, adjacent to the site's boundaries with the realigned Macdonald Road and Arthur Allen Drive. The proposed buildings would be interconnected by covered walkways and covered outdoor learning space. These buildings comprise:

- The main building: two storeys of classroom homebases, canteen and administration. The proposed building is a 'donut' shape wrapped around a split level central courtyard.
- The community learning hub: a single storey building with community learning, library and rooms for special programs. This proposed building is connected to the main building by a covered walkway.
- The hall: a single storey building with communal hall and associated store rooms, kitchen and amenities. This proposed building is connected to the learning hub by a COLA.

The application also proposes to plant new trees on the site, along the boundaries of the site and adjacent to play areas and pathways.

A variety of play areas are proposed across the site including:

- A 'quiet zone' and play space in the northern portion of the site.
- A multi-court and sports field in the eastern portion of the site.
- Additional play areas, courtyards and COLAs in the vicinity of the proposed buildings.

The part of the existing alignment of Macdonald Road to the east of the school would be incorporated into the adjoining public open space to the east of Macdonald Road. The existing road pavement would be retained for car parking and become a one way thoroughfare, under control of Council.

Vehicular entry and exit to the school is proposed to occur from the existing Macdonald Road, providing access to an off-street car parking area. On-site car parking is proposed to be provided for ten cars, including two accessible spaces. Bicycle parking is proposed to be provided along the southern side of the Hall building.

The application proposes that the existing school buildings will continue to serve the student population while the construction of the new school buildings occurs.

As this application has been made by the NSW Department of Education, it is a Crown Development Application, pursuant to clause 89 of the Environmental Planning and Assessment Act, 1979. Accordingly, the consent authority can not refuse consent to the application or impose a condition of consent without the approval of the applicant or the minister. In this regard, this report recommends approval of the application. The

recommended conditions of consent have been sent to the applicant for review, and as at the date of this report, the applicant has not responded to Council.

Report

The development has been assessed in accordance with the heads of consideration under Section 79C of the Environmental Planning and Assessment Act 1979, and having regard to those matters the following issues have been identified for further consideration.

1. Planning Provisions

1.1 State Environmental Planning Policy (Infrastructure) 2007

Division 3 of the Infrastructure SEPP relates to educational establishments. This section stipulates that educational establishments are permissible with development consent in the R1 General Residential zone within which the subject site is located.

This division of the SEPP also states that before determining a development application for development for the purposes of a school, the consent authority must take into consideration all relevant standards in the following State government publications (as in force on the commencement of this Policy):

- (a) School Facilities Standards—Landscape Standard—Version 22 (March 2002),
- (b) Schools Facilities Standards—Design Standard (Version 1/09/2006),
- (c) Schools Facilities Standards—Specification Standard (Version 01/11/2008).

However, this application states that “The above standards are no longer fully relied on as the guidelines for school design. The proposal has been designed with regard to a number of other industry and government benchmarks including the NSW Educational Facilities Standards and Guidelines (EFSG).” As the Department of Education is the proponent of the application, is a Crown authority, and is the government body responsible for the provision of schools, this advice is considered to be sound. In this regard, compliance with these standards should not be insisted upon if the Department of Education no longer fully relies upon them. An assessment of the application against these standards has not been undertaken.

Under Schedule 3 of the SEPP, an educational establishment with 50 or more students is “Traffic Generating Development” and is required to be referred to NSW Roads and Maritime Services for concurrence. The RMS has advised Council that it has no objection to the application, subject to Council’s consideration of certain minor matters that are proposed to be addressed by way of conditions of consent.

1.2 State Environmental Planning Policy 55 – Remediation of Land

SEPP 55 provides a state-wide planning approach to the remediation of contaminated land. SEPP 55 requires the consent authority to consider whether the subject land is contaminated when determining a development application. If the land is contaminated, the consent authority must be satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out.

The applicant engaged an environmental consultant to undertake a Preliminary Stage 1 Environmental Site Assessment. The findings of the report were that:

- The Areas of Environmental Concern identified in the Preliminary Conceptual Site Model pose relatively low risk to the site receptors.
- There is potential for the site to be contaminated. The risk is considered to be low.
- Contamination data has only been obtained from a limited number of boreholes to date so further investigation is required.

The environmental consultant concluded that the site can be made suitable for the proposed development provided that the following recommendations are implemented to address the data gaps and to better characterise the risks:

- Undertake a Stage 2 Environmental Site Assessment to address the data gaps identified in the report.
- Undertake a Hazardous Materials Assessment for the existing buildings should the existing buildings be required to be demolished as part of the final development.

A Stage 2 Environmental Site Assessment was undertaken by the same environmental consultant who prepared the preliminary ESA. The report concluded that that the site can be made suitable for the proposed development provided that the following recommendations are implemented to minimise the risks:

- Undertake a Hazardous Materials Assessment for the existing buildings prior to the commencement of demolition work; and
- A site inspection is undertaken by suitably qualified environmental consultant following the demolition of the buildings.

A Hazardous Materials Assessment has been submitted with the application, and a condition requiring a site inspection by a suitably qualified environmental consultant following the demolition of the buildings is recommended.

1.3 State Environmental Planning Policy (State Significant Precincts) 2005

The State Significant Precincts SEPP (formerly the Major Development SEPP) was gazetted on 20 May 2005, and is the applicable environmental planning instrument for the subject site. Part 31 of Schedule 3 of the SEPP pertains to the “Edmondson Park South Site”, within which the subject land is located. An assessment of the application against these standards is presented below:

Zoning and zone objectives

The site is zoned R1 General Residential. ‘Educational establishments’ are not listed as a prohibited use in this zone, and the proposal is therefore permitted with consent.

The objectives of this zone are as follows:

- (a) to provide for the housing needs of the community,*
- (b) to provide for a variety of housing types and densities,*
- (c) to enable other land uses that provide facilities or services to meet the day to day needs of residents.*

The proposal is consistent with objective (c) as it would provide an education facility to support the existing and future residential population within the area.

Floor Space Ratio

There is no floor space ratio applicable to the subject site.

Height of Buildings

The maximum building height applying to the site is 9.5 metres. Part of the proposed main school building would have a height of 10.7 metres and would therefore exceed this height limit. A statement justifying the departure from the control pursuant to clause 28 of Part 31 of Schedule 3 of the SEPP has been submitted with the application and is discussed below.

Exceptions to development standards

The objectives of this clause are to provide an appropriate degree of flexibility in applying certain development standards to particular development and to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause. Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

- (a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and
- (b) that there are sufficient environmental planning grounds to justify contravening the development standard.

Development consent must not be granted for development that contravenes a development standard unless the consent authority is satisfied that:

- (i) the applicant's written request has adequately addressed the matters outlined above, and
- (ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out.

As mentioned above, the proposed school building would exceed the applicable maximum building height. In this regard, the applicant has provided a statement in support of the proposed variation. This statement is presented below:

"In view of the particular circumstances of this case, strict compliance with Clause 18 of Part 31 of Schedule 3 of the SEPP is considered to be both unnecessary and unreasonable. The proposal is justified on the following environmental planning grounds:

- It represents a logical and coordinated development of the site for school use.
- It will result in improvements to the physical appearance of the site through carefully designed buildings and landscaping that is responsive to site context and its intended function.
- The architectural design of the proposal provides a good quality built form outcome for the site.
- New development will not result in overlooking, overshadowing or privacy issues.
- It will be consistent in height with the heights of buildings in surrounding areas, which have maximum allowable heights of between 9.5 metres and 12 metres.
- If the proposed building was reduced in height, a greater footprint would be required to facilitate the student accommodation. The site is already under-sized for a school of the projected student size. Reducing the height would have the effect of reducing the active play areas.

- Compliance could be achieved by reducing the scale of the development but this would undermine the visual quality of the design and the School's accommodation requirements would not be met.

Community Benefits:

The principle aim of the proposal is to provide improved infrastructure to service the education needs of the rapidly growing community. The proposed variation to the height control of the SEPP does not result in the loss of amenity to the adjoining properties as a result of overshadowing or loss of privacy and the proposed height is therefore considered to be acceptable particularly when balanced against the benefits of the project which are:

- Improved educational facilities for an existing education establishment.
- Increased accommodation needed to cater for the increased number of students in the area.
- Visual improvements to the site by creating new iconic buildings.
- Increased outdoor play area and connectivity within the site.
- The proposed façade is articulated using materials, fenestrations, screening and colours that create visual interest and assist with minimising the perceived bulk.

In summary, the proposal is considered appropriate and consistent with the objectives and intent of Clause 18 of Part 31 of Schedule 3 of the SEPP. Strict compliance with the SEPP in this case is considered to be unreasonable and unnecessary because:

- Strict compliance with the height limit would unreasonably restrict the potential to develop the facilities required by the School on a single restricted site.
- The proposed development will take place within an emerging urban context where heights up to 12 metres are envisaged.
- Strict compliance would result in increased building footprints to accommodate the growing population. This would impact on the much needed outdoor play areas required by the school to improve outdoor learning and playing outcomes.
- The proposal is consistent with the intent of Clause 18 of Part 31 of Schedule 3 of the SEPP which is to ensure development is compatible with its surrounds.

Having regard to the above, the applicant's submission satisfactorily outlines why compliance with the development standard is unreasonable and unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify contravening the development standard. Despite the proposed variation, it is considered that the proposed development will be in the public interest because it is consistent with the objectives of the maximum building height standard and the objectives of the R1 zone. Accordingly, the proposed variation to the maximum building height applicable to the site is considered to be acceptable.

1.4 Rural Fires Act 1997

Pursuant to Section 100B of the Rural Fires Act, a Bush Fire Safety Authority is required to be obtained from the Rural Fire Service prior to the development of bushfire prone land for a 'special fire protection purpose'. A school is classified as a 'special fire protection purpose' and the subject land is bushfire prone. Accordingly, the application was referred to the Rural Fire Service, who has issued a Bush Fire Safety Authority in respect of the application. The conditions within the Bushfire Safety Authority have been included within the recommended conditions of consent.

1.5 Campbelltown Local Environmental Plan 2015

The Campbelltown Local Environmental Plan 2015 does not apply to the subject land.

1.6 Edmondson Park South Development Control Plan 2012

The purpose of the Edmondson Park South DCP is to support the objectives of Part 31 of Schedule 3 of the State Significant Precincts SEPP relating to Edmondson Park South.

The Edmondson Park South DCP specifies that the provisions of Part 2 of the Campbelltown Sustainable City Development Control Plan apply to development within the Edmondson Park South precinct. These are general provisions that apply to all development. An assessment of the application against these provisions is outlined below.

Views and Vistas – The proposed school would not obscure any important views or vistas.

Sustainable Building Design – The proposed school would incorporate the following measures in order to incorporate sustainability: BCA Section J compliant levels of insulation, high performing glazing and effective shading, natural ventilation, windows that optimise natural light levels and reduce reliance on artificial lighting, energy efficient glazing to meet BCA Section J requirements, occupancy sensing lighting controls for areas with intermittent occupation, durable and low impact materials will be selected including sustainable timber and recycled materials, energy efficient lighting and fixtures and low water use fixtures.

Landscaping – The proposed landscaping consists of plants and trees that are low water use, low allergen rating, have high drought tolerance and low maintenance. The proposed planting will provide the school with microclimates that are adaptable through the seasons. All planting has been selected to work in harmony with the buildings on site and the plant species utilised are endemic to the local area.

Stormwater – The proposed development would be drained to the old Macdonald Road reserve via an On-Site Stormwater Detention System.

Waste Management – A Waste Management Plan has been submitted with the application, which outlines appropriate measures for the removal and recycling of waste during the demolition and construction phases of the development. With regard to the ongoing waste management of the school, for school hour operations, recycling and waste bins will be provided within the building and these will be emptied daily by school cleaning staff at the end of each weekday. Waste will be removed daily into skip bins located on the school grounds. Recycling will be removed daily into recycling collection bins located on the school grounds. The school's waste will be removed by licensed waste collection contractors twice a week and recycling will be removed once a week. For out of school hours events, either cleaners will be contracted or users will be required to remove all waste from the building and deposit any waste into the school's skip bins.

Part 3.7 – Schools, Childcare Centres and Community Facilities

Part 3.7 of the Edmondson Park South Development Control Plan 2012 is the primary section of the DCP that relates to schools. An assessment of the proposed school against the relevant requirements in this Part is outlined below:

Objectives

- To site school buildings to minimise impacts on adjacent residential and open space areas.
- To locate and design childcare centres so that they do not unreasonably impact upon the amenity of residential areas.
- To encourage the co-location of community and civic facilities.
- To locate and design community and civic facilities so as to enhance way-finding.

The siting of the proposed school buildings adjacent to roads would ensure that impacts on dwellings are minimised. The school is existing, and new residents would be aware of its existence. In this regard, incoming residents into the suburb of Bardia would not experience any unexpected amenity impacts.

Controls

Control	Required	Proposed	Compliance
Siting of Buildings	The siting of school buildings is to:		
	a) address the street frontage,	The school buildings address all street frontages.	Yes
	b) be setback a minimum of 35m from the boundary of a conservation area,	The buildings are not adjacent to any conservation areas.	Yes
	c) accommodate any relevant APZ requirements,	The entire property is to be managed as an inner protection area – a condition from the RFS has been imposed.	Yes
	d) meet the acoustic requirements relevant to rail and road noise,	ISEPP provisions only relate to roads >40,000 vehicles. Not applicable.	Yes
	e) retain neighbouring residential amenity	There are currently no dwellings directly adjacent to the school.	Yes
f) provide appropriate provision of set down and pick up areas.	10 car parking spaces are proposed, as well as parking within the existing Macdonald road alignment.	Yes	

Landscaping	Landscaping on school sites is to respect and retain major natural site vegetation or the theme of the nearest local park and streetscapes where possible.	Re-planting of trees and plants that are removed would consist of native species.	Yes
Bicycle Parking	All school developments are to include bicycle parking for students.	The proposed school redevelopment would involve the provision of sufficient bicycle parking	Yes
Set down/pick up zones	School set down / pick up zones are to be designed to allow the school to maintain a safe street frontage for the entry and exit of pedestrians and bicycle users.	Pedestrians and cyclists would be able to access the site from Arthur Allen Drive, whereas vehicles would access the site from the existing Macdonald Road alignment.	Yes
Way-finding and building design	Education, community buildings and places of worship are encouraged to enhance community identity and way-finding through iconic and landmark building design.	The design of the proposed school would make it easily distinguishable from surrounding development. Way-finding and internal signage is a matter for	Yes

The above table shows that the proposed development is compliant with the Edmondson Park South DCP.

2. Planning Assessment

Acoustic assessment

An acoustic report prepared by a qualified acoustic consultant has been submitted with the application. It should be noted that there are no specific acoustic criteria for schools.

A qualitative acoustic review of the proposed Bardia Public School has been conducted, which arrived at the following conclusions:

- The general school design facilitates containment of noise generated in most outside areas.
- Noise levels from traffic are expected to be normal for a school zone during morning and afternoon peak hours.
- Services noise will be adequately contained on the site; and,
- Construction Noise and Vibration will be similar to other construction noise in the areas and will be managed by the builder in their Environmental Management Plan. A condition requiring an EMP to be prepared has been recommended.

Traffic and car parking

A traffic and car parking impact assessment was undertaken for the proposed school by a qualified traffic consultant (Traffix Traffic and Transport Engineers). In addition, of particular relevance is the Transport Management and Accessibility Plan prepared by AECOM for Landcom in 2010 as part of the Edmondson Park South precinct's urban release process, which is referred to throughout the traffic and parking assessment for the school.

Existing travel modes and traffic generation

As a means of assessing the travel modes and traffic generation of the existing school and its proposed redevelopment, online travel mode questionnaire surveys were prepared by a traffic engineering consultant and distributed by the school to all staff and parents/carers.

From the results of these surveys, it is evident that 100% of staff currently drive to and from the school, and 100% of the staff who drive park within the school site. The results also show that 86.3% of students are dropped-off by private car to the school in the morning, with 78.4% of students being picked-up by private car in the afternoon. In addition, 5.9% of students utilise public transport in the morning, increasing to 11.8% in the afternoons. A small proportion (7.9%-9.8%) of students also travel to and from the school using other modes of transport such as walking or riding bikes.

Existing intersection performance

Traffic count surveys and intersection performance testing has been undertaken to assess the existing network conditions using the SIDRA modeling software program.

The surveys found that all key intersections are currently operating with acceptable delays and a Level of Service of A or B during the critical AM and PM peak periods with the exception of the Campbelltown Road/Macdonald Road intersection during the critical AM peak period, which is operating at a Level of Service of F. However, as Macdonald Road will be closed at Campbelltown Road at this location, assessment of this intersection is not of primary importance.

The traffic consultant considers that similar conditions could occur at the new intersection of Macdonald Road and Campbelltown Road when it is constructed, and that therefore RMS signaling should consider increased timing for vehicles turning right from Macdonald Road into Campbelltown Road during the critical AM peak period. The traffic consultant who prepared the 2010 Transport Management and Accessibility Plan for the Edmondson Park South Part 3A Concept Plan Application (AECOM) addressed this issue and stated that in order to accommodate development traffic in the AM peak hour, an additional short right turn lane is required on the southern approach of Macdonald Road.

Trip Generation

The Transport Management and Accessibility Plan prepared by AECOM for the Edmondson Park South precinct identifies High Level Objectives for Edmondson Park South to deliver public transport, walking and cycling journeys in line with NSW government state targets and sustainability and active transport principles as follows:

- 50% combined walk and cycle mode share for all school travel
- 25% public transport mode share for journeys to work

In adopting these mode share targets, 500 students and 38 staff would walk or cycle, and 19 staff would utilise public transport for journeys to work.

For the trip generation calculation, the impacts of 500 students and 38 staff at Bardia Public School on the local traffic network were considered in AECOM's 2010 report and the necessary traffic controls and measures have been planned to accommodate this population. This Traffic Impact Assessment addresses the additional 500 students and 37 staff which have not yet been considered in the assessment completed by AECOM.

The proposed trip generation has been estimated based on the findings of the travel mode questionnaires and incorporation of mode share objectives. This analysis produces the following trip generation rates for the unaccounted development population:

- 483 vehicle trips (247 in, 236 out) during the 8:00-9:00am peak hour
- 406 vehicle trips (200 in, 206 out) during the 3:00-4:00pm peak hour

However, this trip generation has not taken into account the High Level objectives set out in Section 6.3 of AECOM's TMAP report, where there is expected to be a 50% combine walk and cycle mode for all school travel. Therefore the trip generation rates presented above are considered to be the worst case scenario, where existing (as per survey data) travel mode splits are maintained. If AECOM's high level objectives are met and applied to the additional school population not already accounted for, the trip generation would be:

- 282 vehicle trips (145 in, 137 out) during the 8:00-9:00am peak hour
- 258 vehicle trips (127 in, 131 out) during the 3:00-4:00pm peak hour

Traffic Distribution

To estimate the distribution of the additional vehicle trips associated with the expansion of the school, online surveys were completed by existing students and staff to establish the directional split of traffic when arriving or departing the school.

All of the school's traffic would arrive at the site via the existing Macdonald Road alignment and exit to the north along the eventual new network of local residential roads proposed under the master plan. Of this traffic, 33% is expected to originate from a northerly and westerly direction, using Arthur Allen Drive and the proposed Macdonald Road to approach the school, with the remaining 67% expected to originate from a southerly and easterly direction, using Arthur Allen Drive and the eventual network of residential streets to the north and east of site (this distribution has included before and after school care traffic during the network peak periods, to provide a more conservative scenario).

Based on these expected traffic distribution patterns, the traffic consultant considers that an assessment of the following key intersections should be undertaken:

- Arthur Allen Drive and old Macdonald Road,
- Macdonald Road and Arthur Allen drive,
- Macdonald Road and Campbelltown Road.

Peak Period Intersection Performances

Given the planned intensification of the Edmondson Park South Precinct and extensive upgrades to the surrounding road network, the modelling of the key intersections outlined above has been based on the future background traffic volumes and road layouts envisaged in previous traffic studies undertaken of the Edmondson Park South Precinct by AECOM. Modelling of the key intersections identified has focused on the 8:00-9:00am peak period only. Modelling of the afternoon (3:00-4:00pm) peak hour was not considered necessary, as this would not coincide with the commuter peak hour (generally 5.00-6.00pm). The predicted 2036 intersection volumes were analysed using the SIDRA computer program to determine

their performance characteristics under the '2036 base' and '2036 base plus development' scenarios.

All key intersections are expected to operate satisfactorily under the 2026 and 2036 'base-case' scenarios, with acceptable delays and a Level of Service of D or better during the critical AM peak period. The 2026 scenario assessed by AECOM made accommodation for the existing school (accounting for 205 students and 19 staff) as well as an additional 295 students and 37 staff.

An updated assessment has been made to account for the revised proposal of 1000 students and 75 staff. The critical signalised intersections in the vicinity of the site would continue to have an acceptable level of service. Whilst the Macdonald Road/Arthur Allen Drive intersection in the vicinity of site would record an increased intersection delay, the level of service would remain an acceptable 'B'.

The traffic report concludes that the additional traffic volumes generated by the proposed development will be accommodated by the future road network, with no additional upgrades required beyond those which have been planned for. The traffic impacts of the proposed development on the external road network are therefore considered acceptable. In addition, it is pertinent to note that this analysis assumes the existing travel mode splits (as per the surveys) are to be maintained, and as such represent a 'worst case' analysis. With improved public transport facilities and the encouragement of alternative modes of transport, the development can expect to record a reduced impact on the intersections within the local network.

Traffic Safety

At present, the intersection of Macdonald Road and Arthur Allen Drive is not signalised as the traffic volumes do not warrant the installation of traffic signals. It is anticipated that the intersection will eventually be signalised when the RMS upgrades and widens Campbelltown Road and installs signals at the intersection of Campbelltown Road and Macdonald Road nearby. Provision for the signalisation of the intersection has been made both financially (via the Planning Agreement in force locally) and physically by way of conduit and other service installation.

Traffic signals at the intersection of Arthur Allen Drive and Macdonald Road would allow pedestrians to safely navigate the intersection, however at present there is no assistance for pedestrians using the intersection to access the school. As an interim solution, Council has suggested to the applicant that traffic safety devices be installed within the intersection (to the satisfaction of Council's Executive Manager City Infrastructure). At the time Council provided its conditions to the applicant, a condition to this effect was included.

Parking requirements for the proposed school

Neither the Edmondson Park South Development Control Plan 2012 nor the Campbelltown Sustainable City DCP 2015 provide specific parking rates for educational establishments.

The Department of Education has its own set of guidelines in the relation to provision of parking for staff within educational facilities. The Department's Educational Facilities Standards and Guidelines (EFSG) actively encourages the use of sustainable means of transport. Section PS610.17 (Services Zone) of the EFSG states, "In order to ensure that the available site area for teaching, learning and play is maximised, to enable community use and to encourage the use of sustainable means of transport to and from the school, on school site parking should be kept to a minimum."

The proposed provision of 10 parking spaces only equates to a parking rate of 1 parking space per seven staff members. The traffic consultant states that the required parking provision can be reduced given the proximity of the school to Edmondson Park train station, the school's location on a bus corridor, DoE and government policies, and noting that a general rule of thumb for staff facilities at a workplace would be the provision of one space per two staff. In addition, the school will provide Workplace Travel Guides to all staff, students and parents, and Transport Access Guides to parents and visitors to the school. The Workplace Travel Guide for Bardia Public School has been submitted with the application. The provision of this document to all staff, students and parents forms a recommended condition of consent.

TRAFFIX advise that they have recently been commissioned by the Department of Education to complete Traffic Impact Assessments on five primary schools across Sydney. They state that in their experience it is considered that the satisfactory operational rate for pickup and drop-off parking is 1 parking space per 30 students. Based on this rate, 34 drop-off/pick-up spaces would be required to manage the influx of private vehicles in peak periods.

Following lengthy negotiations, Council and the Department of Education have agreed to the construction of a car parking area within the old Macdonald Road reserve. It would consist of a one-way northbound road thoroughfare including kerb and gutters, footpath and access gates, and makes provision for a kiss and ride drop off/pick up area and 40 car parking spaces. The thoroughfare would exit into a residential subdivision, which is currently under consideration by Council. The car parking area would be constructed by Council however it would be paid for by the Department of Education. The car parking area would remain under the control of Council.

The Edmondson Park South Development Control Plan 2012 does not provide a rate for the provision of accessible car parking. Accordingly, this has been assessed having regard to the Building Code of Australia (BCA), which recommends that educational establishments (Class 9b Structures) provide accessible parking at a rate of 1 space per 100 parking spaces or part thereof. The proposed development would have 10 car parking spaces, two of which would be accessible spaces, which would exceed the minimum requirements of the BCA. The proposed accessible car parking spaces have been designed in accordance with AS 2890.6 (2009) Part 6: Off-street parking for people with disabilities.

Recommended Measures to assist with parking demand reduction

The Transport Management and Accessibility Plan prepared by AECOM for the Edmondson Park South precinct provides a range of measures that can be used to achieve a mode shift towards public transport. These are outlined below:

- One week free public transport (MyMulti) start up discount ticket

According to AECOM's report, each household within the Edmondson Park South Development zone (which coincides with the school catchment) will receive a free weekly travel pass to encourage early uptake of public transport.

- Bicycle User Group and promotion of Bicycle Initiatives

Cycle routes have been provided within the Edmondson Park South region to link schools to other facilities within the area. To support the installed routes, bicycle parking facilities are proposed to be provided at the school. Local Bicycle User Groups (BUGs) should be supported and Bardia Public School should support government initiatives such as bicycle week and cycle to work day.

- Walking school bus program and school travel plans

The walking bus is a concept where a group of children walk to school with one or more adults. The walking school bus aims to alleviate parents' safety concerns. These programs can change mindsets and encourage active travel in life for both adults and children. Workplace Travel Plans can be issued to teachers before the first day of work and Travel Access Guides can be provided to students and parents on the first day of school. Early issue of these documents enables alternate modes of travel to be considered before habits are established.

- Car sharing scheme

Car sharing schemes can be encouraged for both students and staff. Parents should be encouraged to car-pool multiple students to alleviate congestion during pick-up and drop-off periods. Initiatives should be implemented for staff whereby off-street parking spaces are only made available (where possible) for vehicles transporting two or more staff to work.

- Parking restraint measures

Bardia Public School should ask Council to consider installing parking restraint measures on kerb space along the Bardia Public School frontage. This should also include the provision of a Bus Zone along the southern frontage to accommodate school and public bus services.

- Bus Service from Ingleburn to Liverpool via Edmondson Park South

According to Bus Service Planning Guidelines, bus services should cover 90% of proposed development that is within 400 metres of a bus route. The provision of a bus bay outside the school on Arthur Allen Drive forms part of a Memorandum of Understanding between Council, the Department of Education, UrbanGrowth NSW, and Dahua Group, the developer of the remainder of the Bardia estate. To encourage the use of this public bus service, the school should have a designated staff member to meet school children at the Bus Stop and walk with them between the bus stop and the school gate.

- Staggered Schemes for Pick-up and Drop-off times

Staggering pick-up and drop-off times for school children can alleviate congestion during peak periods. Schemes can easily be implemented by schools through a TAG or School News Bulletin. The Scheme should be initiated as a guideline, rather than a mandatory drop-off time.

Bicycle Parking

Neither the Edmondson Park South Development Control Plan 2012 nor the Campbelltown Sustainable City DCP 2015 provide a rate for the provision of bicycle parking. In this regard, the NSW Government's 'Planning Guidelines for Walking and Cycling 2004' has been used for assessment, which requires the following bicycle parking rates:

Long Term Use: 3-5% of staff numbers
Short Term Use: 5-10% of staff numbers

With regard to the above bicycle parking rates, the school would require between six and eleven bicycle parking spaces in relation to the 75 staff.

The proposed school redevelopment would provide parking for up to 60 bicycles in the form of secure rails, along the southern site boundary. All bicycle spaces provided within the site

are required to be designed to satisfy the requirements of AS 2890.3 (2015), and this forms a recommended condition of consent.

Servicing and Buses

Provision is proposed to be made for a bus bay in Arthur Allen Drive in front of the school to accommodate the requirements of local bus operators and the school. It is understood that the bus bay will be accommodated within 4.5 metres of the approved 20 meters wide road reserve, with a portion of the footpath being situated within the school site. A minor road widening/boundary adjustment is required in order for the bus bay to be accommodated, and this is reflected in a recommended condition of consent.

Garbage servicing is to be undertaken from within the off-street parking facility outside of school hours. A garbage vehicle is capable of entering and exiting site in a forward direction, undertaking a three-point turn on site.

Flora and Fauna

The application proposes to remove 76 trees as a result of the proposed development (including 14 trees of poor structural conditions or undesirable species which are not suitable for retention within a school). Of the trees proposed for removal, 25 are of low retention value, 34 are of medium retention value and 17 are of high retention value. It is proposed to plant new trees on site.

A Flora and Fauna Assessment and Ecological Assessment has been undertaken by UBM Ecological. The Assessment has found:

- No naturally occurring Endangered, Vulnerable, Near-threatened and/or Threatened (EVNT) flora species listed under the NSW *TSC Act* (1995) or Commonwealth *EPBC Act* (1999);
- Two threatened species, a mature Narrow-leaved Black Peppermint (*Eucalyptus nicholii*) and a mature Wallangarra White Gum (*Eucalyptus scoparia*) were recorded on site, but neither species is indigenous to the Campbelltown LGA;
- There are no complete, continuous patches of native vegetation in the Subject Property, although there are patches which contain canopy components of *Cumberland Shale Hills Woodland*. Cumberland Plain Woodland is listed as Critically Endangered under the NSW *TSC Act* and (with Shale Gravel Transition Forest) and the Commonwealth *EPBC Act*.
- The Assessment of Significance undertake for Cumberland Plain Woodland has concluded that the Proposal would not provide a 'significant impact' to the CEEC and that no further studies are required.
- One microbat listed as Vulnerable under the *TSC Act* (1995) - the Eastern Freetail-bat (*Mormopterus norfolkensis*) was recorded flying over and calling over the Study Area with a 'definite' level of confidence.
- Potential habitat is available within the Study Area for the following threatened species known to occur in the Region that were not detected in the current study: Little Lorikeet (*Glossopsitta pusilla*); Varied Sittella (*Daphoenositta chrysoptera*); Grey-headed Flying-fox (*Pteropus poliocephalus*); Eastern Bentwing-bat (*Miniopterus schreibersii oceanensis*); Yellow-bellied Sheath-tail-bat (*Saccolaimus flaviventris*); and Cumberland Plain Land Snail (*Meridolum corneovirens*).
- The Assessment of Significance undertake for the above Endangered, Vulnerable, Near-threatened and/or Threatened (EVNT) fauna species has concluded that the Proposal would not provide a 'significant impact' and that no further studies are required.

The Flora and Fauna Assessment concludes that “*survey results indicate that the biodiversity values of the Bardia School site are ‘low to moderate’, with many of the mature native trees being horticultural introductions, and fauna recorded being commonly occurring urban-tolerant species.*” A number of recommendations have been made by UBM Ecological. By adopting the recommendations, the impacts of the development on the native bushland, flora or fauna species or populations occurring within site and the locality will generally be minimised.

The Flora and Fauna Assessment was reviewed by Council’s Environmental Planning section, and was found to be satisfactory. Appropriate conditions of consent have been imposed accordingly.

3. Public Participation

The application was notified to nearby and adjoining residents. Council received one detailed submission, which raised a number of issues. The submission was provided to the applicant for a response. The content of the submission as well as responses from the applicant are reproduced below:

Issue: Extensive destruction of healthy and high quality gum trees with consequent impacts on ecological balance, and environmental impact on native flora and fauna

Recent large scale development by the NSW Government department of Urban Growth has seen healthy mature gum trees destroyed en masse. On its own this has been of significant environmental impact however there is also a second direct causal ecological impact – that of altering the delicate balance of bellbirds and psyllids which has resulted in extensive psyllid attack of remaining healthy gum trees. This comes at significant financial and environmental cost, including to nearby and neighbouring land owners where gum trees have been the subject of attack as a result of the ecological imbalance. We understand that this development includes the destruction of almost eighty (80) gum trees, the majority of which are of medium to high “value”, and includes threatened species. The loss of even one gum tree adds to the damage that has been done by Urban Growth and the Edmondson Park rail link, by further unbalancing the ecology of the area and resulting in conditions for greater psyllid attack. In this instance there is anticipated to be significant detrimental impact to the gum tree canopy over Campbelltown Road which has marked the entrance to Campbelltown for a time period in the vicinity of a century. We would note that the death of further gum trees will also provide fuel for bush fires.

The DA lacks a sensitive approach to the environmental impact of its design. It lacks knowledge of, and therefore does not take account of, the abundance of native wildlife that exists in this area, including Eastern Yellow Rosellas, possums, sulfur crested cockatoos, galahs and corellas, to name just a few. It also acts as habitat for migrating black cockatoos. The loss of significant numbers of healthy gum trees has created a burden on the remaining habitat, mostly in Denham Court, and very little area for native wildlife to safely forage. The cumulative impact of destroying healthy habitat results in over foraging of the remaining healthy habitat further south as wildlife moves out and away from development to find safe foraging ground. Increased density of native populations in those areas is resulting in over foraging and damage to native bushland. In the longer term native fauna populations will diminish through reduced food supply.

Response

Bardia Public School is located on existing school land and is designated for school use under the approved Edmondson Park DCP 2012. The Edmondson Park DCP 2012

incorporates large areas of natural park land and open space which will retain large areas of gum trees within the local area.

The majority of the school site is currently comprised of cleared open areas, school buildings and gravel car parks. The existing trees on the site are generally spread around the perimeter, sparse and disconnected. There are no complete, continuous patches of native vegetation on the school site.

The ecological investigation confirmed that there were no naturally occurring Endangered, Vulnerable, Near-threatened and/or Threatened (EVNT) flora species listed under the NSW TSC Act (1995) or Commonwealth EPBC Act (1999) recorded within the site. This includes no complete, continuous patches of native vegetation in the school site, although there are patches which contain components of Cumberland Shale Hills Woodland. The Assessment of Significance undertaken for Cumberland Plain Woodland concluded that the Proposal would not provide a 'significant impact' and that no further studies are required.

The ecological survey results indicated that the biodiversity values of the school site are 'low to moderate', with many of the mature native trees being horticultural introductions, and fauna recorded being commonly occurring urban-tolerant species. The removal of trees is required to accommodate a new public school accommodating 1000 students and in order to meet the functional and educational requirements of the school. It is proposed to plant 70 new trees on the site replacing those removed and providing habitat for native wildlife that exists in the area.

There is no way of knowing that the proposed removal of trees will or will not result in psyllid attack and this is not a planning consideration. The school site is set some 35m back from Campbelltown Road with residential development proposed for the land between the school and Campbelltown Road. There is no impact to the 'gum tree canopy over Campbelltown Road' as a result of this development.

As part of the development of the design an Assessment of Significance undertaken for threaten fauna species known to occur in the Region (although none detected in the study) concluded that the Proposal would not provide a 'significant impact' and that no further studies are required. In addition, the ecological survey results indicated that the biodiversity values of the school site are 'low to moderate', with many of the mature native trees being horticultural introductions, and fauna recorded being commonly occurring urban-tolerant species.

In addition to this, the landscape design is carefully considered and sensitive to the native flora and fauna of the local area. The school site will be planted with significant areas of plantings derived from the native and endemic Cumberland Plain Forest species which will encourage biodiversity and provide habitat for native wildlife that exists in this area.

Creating a bio-diverse planting palette that provides forage and shelter for local fauna is a major design principle for Bardia Public school's planting design. The intent is to use a broad range of native and indigenous Cumberland Plain Woodland species that will grow within a public school setting without causing any safety issues for the children and staff that attend. Several species are unable to be used due to fears of limb drop, allergy issues and sharp seeds and branches.

Bush fire prevention measures such as leaf litter accumulation and canopy coverage also had to be considered when developing this planting palette. These constraints limited the selection of indigenous species somewhat, however this was overcome through the use of other native species that will grow in similar conditions and provide the delicate structure needed by local fauna to thrive. The following has been incorporated in the design:-

- Low – Under Growth Layer

- The large masses of native and locally-indigenous groundcover and grasses such as *Carex inversa*, *Lomandra multiflora* and *Hardenbergia violacea* will provide forage and shelter for small-ground dwelling herpetofauna, skinks and insects identified within the area.

- Understorey Shrub Layer

- The proposed understorey planting is a layer of complexity we are introducing on to site, as it is identified as non-existent in the ecological report.

- Large native and locally-indigenous shrubs and small trees such as *Melaleuca decora*, have been proposed across the site to encourage and provide suitable habitats for mid-storey birds that according to the ecological report are absent on site at the moment.

- Flowering native species like *Banksia spinulosa* and *Grevillea rosmarinifolia* have been proposed as feature planting, providing a food source for birds and insects and assisting in the dispersal of pollen and seeds.

- Canopy

- Large native and locally-indigenous trees such as *Eucalyptus crebra*, *Eucalyptus tereticornis* and *Eucalyptus moluccana* have been proposed to provide potential areas for roosting, nesting and breeding for local fauna such as the Little Lorikeet, Black-chinned Honeyeater, Varied Sittella etc.

- These large canopy trees have been proposed around the boundary and scattered across the site, playing an important role in connecting areas of existing vegetation to the wider context. This placement and arrangement also encourages fauna-dispersal of pollen and seed across the local landscape.

Issue: Human and economic costs of loss of natural green space well adapted to the climate and soil type of the area

Lost green space is only partially being replaced, with a man made and mostly artificial landscape or hardscaping. This amounts to vandalism. The school buildings are wrapped “donut style” around man-made structures, the development of which involves the destruction of natural environment. These aspects show a lack of understanding of current impacts of high levels of development and lost natural green space on human geography. A well thought through design and plan (which this is NOT) would have taken account of the rising human and social cost of lost green space and the increasing numbers of children and adults suffering mental illness. A lack of regular contact with nature is considered to be part of the cause of, and treatments for, this phenomenon.

The Department of Education has an extraordinary opportunity with this particular environmentally sensitive location to plan and build a school which would serve as a benchmark and focus on the natural environment in an area of Cumberland Plain Woodland. Retention of the natural green space would make the design economically and socially valuable to the Community. Developed areas with natural green space are proven to be of higher economic value than those without. In addition it would offer benefits to the school curriculum as a unique learning resource.

Response

The proposal has been designed in consultation with the School principal and the Department of Education to ensure that usable and engaging play areas and landscaping are provided. The landscape design includes significant areas of green space, including mass planted garden beds, turfed areas, a large grassed sports field and a significant number of canopy trees. The school site will be planted with significant areas of plantings derived from

the native and endemic Cumberland Plain Forest species which will provide an environmental focus for the school, contact with the natural environment and a create a unique learning resource.

The full sized grassed soccer field and multi-purpose sports court ensures the school is equipped with modern facilities allowing for active play and physical education. The quiet zone to the north of the proposed building is intended to serve special need students and work as a break-out space. This space offers students an area to play and learn whilst being enclosed by a native vegetated backdrop.

The playground adjacent to the soccer field is surrounded by native Australian trees and under-story planting and offers active play through playground equipment and passive/imaginative play through bush play elements. The planting selection has to adhere and comply with the Department of Education guidelines, avoiding species that can produce hay fever, respiratory infections, eczema, hives, toxic species and species prone to limb droppings to ensure the safety and health of the children.

In a school for 1000 students there is a requirement to provide some hard stand areas in areas of high traffic, where green spaces would not stand up to the high levels of wear and tear. These hard stand areas are generally provided to the central courtyard area, adjacent to the Hall and on pedestrian footpaths. The maintenance and ongoing up keep of the planting design has been taken into consideration and as such raised seating walls have been implemented to deter students from running through mass planted areas.

Issue: The design is inconsistent and incompatible with the heritage precinct and is out of character with the historic Bardia Barracks

The design has strong American overtones to it with a feel of students being imprisoned and encircled within a “donut style” arrangement of buildings akin to American cities. It ignores the freedom and enjoyment of the Australian open air lifestyle and an attachment to the Australian bush that is inherent and embodied in the Macarthur district. The style is a jarring contrast to the historic Bardia Barracks neighbouring it and the bushland setting from which it will emerge.

Response

The building has been designed by Australian architects in response to Australian conditions and in order to meet the functional and educational requirements of the school and the NSW Department of Education. The new school will site well within the new residential development of Edmondson Park and is designed to create a welcoming, fun and colourful environment for its students to enjoy and actively learn.

The building has been designed around a central open air courtyard space which provides a ‘heart’ of the school, integrated learning spaces and social outdoor space for the school, rather than separate buildings spread out across the site that are disconnected. The central courtyard design means that all student are connected at all times to each other and the activities of the school creating its ‘heart’. The courtyard provides a sense of privacy, security and a social gathering space which is welcoming and designed to meet school operational requirements.

The courtyard space is then connected to the wider site area to the east of the school and north of the hall through large openings at the north-east and south east corners, allowing students to enjoy the sports field, games court, playground and sensory garden.

The school has been designed in regards to Department of Education facility guidelines, avoiding species and materials that can produce hay fever, respiratory infections, eczema, hives, toxic species and species prone to limb droppings to ensure the safety and health of the children.

The building is a contemporary design reflecting the educational aspirations of the school and local community, and does not need to reflect Bardia Barracks, which are quite a distance away and served a different purpose for a different time. The history of the school site and its original purpose is reflected in the school culture and references around the school site and within the learning areas, this will be maintained in the new school building and existing grounds.

Issue: Parking is meagre and grossly insufficient

The DA is for a significantly increased school size with a corresponding significantly decreased provision for parking. The school is designed to house over one thousand (1000) students with only eleven (11) parking spaces provided. Staff (both teaching and administrative) are expected to park in surrounding streets thereby making a nuisance of themselves to residents. Bardia has undersized roads sized similar to driveways and is already showing signs of overdevelopment. It is currently over-parked with vehicles parking on and off the footpath, creating driving and pedestrian hazards. No provision for parking during regular school events has been made in the DA. No provision for disabilities has been made. This DA shows all the signs of having the same parking issues as Park Central currently exemplifies. Parents will be discouraged from walking children to school since traffic issues will make it unsafe for pedestrians, particularly young children who do not yet have the brain development to see and take account of all angles of traffic. It should be noted that the school will be situated on a main thoroughfare which will separate houses from the school. The development demonstrates backward thinking and the creation of new parking and pedestrian problems with no attempt at solutions.

The current school has a paddock of parking which has been sufficient for the smaller community it serves, including during election events. Even based on large class sizes of thirty students, over thirty teachers would be required for the new school size, without taking account of administrative staff and the need for parent and disability parking. Private vehicle use is increasing and it would be short sighted to approve a design that will create the definite future traffic and safety issues that this DA demonstrates.

We note that the Department of Education representative's response to this issue was to inform us that it is not the core business of the Education Department to provide parking for staff and parents. This leads to the conclusion that it is not their core business to provide safe access for students either since the current design demonstrates significant flaws in safe access for children and for parents who wish or require to park and walk their children to the school gate. Problems demonstrated at this early stage of design will only be compounded over coming decades when traffic volumes increase and the opportunity for correction will have been foregone once surrounding currently available land is built upon. We also note that the DA provides contradictory schematic diagrams in regard to whether and where "kiss and drop" zones will be built. Such zones are not the optimal model for safe access but have been used in already built up Sydney areas which were developed pre-vehicular transport. It is incomprehensible that such a model would be used in a modern day school which currently has parking and a district that has more than adequate available government owned land to provide a proper parking solution prior to the development of the problem.

It is also incomprehensible that the NSW State Government would seek to move McDonald Road so that the school is focused towards a main thoroughfare. If the school was focused on streets away from the main thoroughfare it would make for easier access by the

community it is intended to serve. By way of example, comparison should be made with Campbelltown North Infants/Primary School which was once situated in back streets and had easy access including more than adequate parking. The creation of a main thoroughfare – the Moore Oxley Bypass – resulted in significant traffic and pedestrian problems by bringing high volumes of traffic close to students and diminishing the parking availability to the community. An overbridge was required for pedestrians however this has not completely resolved the pedestrian safety issues. This example should serve to highlight the importance of keeping McDonald Road in its current position and creating access to the school off a community back street away from the main thoroughfare. This would be a safer outcome for the community.

Response

The Bardia school site is 2.43ha in size requiring innovative design to ensure that the available site area for teaching learning and play is maximised catering for the growth in school population due to the development of Edmondson Park and the surrounding residential areas. A compromise to achieve the maximisation of the school facilities on a small site is the provision of onsite school parking will be minimal. The parking provided on the school site provides for disabled parking requirements and meets the Australian standards and AUSTRROAD requirements. To address the provision of minimal parking the use of sustainable means of transport to and from the school will be encouraged.

The Sustainable Travel Plan is a key driver for achieving sustainable outcomes for transport and movement to the site and a Green Travel Plan has been developed for Bardia Public School. The Green Travel Plan will encourage staff, visitors and students to use other modes of transport.

School travel assistance will be provided through the provision of an Opal card at the start of the school year so students can travel for free between home and school will assist in getting students from Kindergarten to year 6 to and from home safely and keeps cars off the road at busy peak periods.

Sustainable travel plan and School travel assistance will be combined with the integration of the existing Macdonald Road as a one way thoroughfare, under control of Council, as part of the community open space provision. The Department of Education, Campbelltown Council and UrbanGrowth NSW have been working together to achieve the best outcomes for the school and the surrounding community through the development of this solution. The one way thoroughfare will allow for the local community and school to access informal parking and accommodate the pick-up and drop-off demands for the school. In addition a bus bay is to be constructed along Arthur Allen Drive to cater for school bus pick up and drop off. The access points to the school are off Arthur Allen Drive and the existing MacDonald Road providing multiple entry points from residential roads. UrbanGrowth considered the existing school and its continued operation and redevelopment to cater for increased student numbers in the design of Edmondson Park and the road network.

The use of the one way thoroughfare and bus bay, combined with adequate sized footpaths being developed around the school site (a large improvement to what is currently existing around the site), appropriate lighting, pedestrian crossings and school zones caters for the safety of the school community and will aid in encouraging parents to walk their children to school.

Issue: Human costs of poor quality of design

The DA does not have the ability to satisfy a changing educational environment with new syllabus demands and changing demographics including increasing numbers of disabled

members of the population. Evidence is that mental health issues are rising across the population generally and with youth in particular. Students have lost contact with the ability to relax, decompress, relate to other human beings and to nature. The circular nature of the design is more akin to a prison and its poor quality of design will detrimentally impact on the mental health of occupants. It will retain significant heat within the design, particularly notable when heat levels in the district have been rising due to increased development, populations and traffic. It does not have a natural environment at the centre of the “donut” to mitigate the wrapped around enclosure style of the building. The artificial centre of the school limits the options for interaction with the natural environment and discourages student appreciation of learning. The closed and rounded design decreases opportunities for passive exercise and interaction with the natural environment by occupants by bringing all classrooms together in the one precinct so that additional walking between buildings in natural open space is avoided. This discourages the early learned health benefits of exercise through walking within an educational setting and increases long term health costs to the community.

The circular design fails to take account of planned for changes to aircraft routes and the provision of an airport at Badgery’s Creek. The internal areas of the donut design will retain and echo aircraft noise. There is a lack of direct flow through of air unlike that provided for in older school room designs. The lack of a natural environment within the centre of the “donut style” will discourage learning through play. The internally focussed design denies freedom and creativity of thought in the educational setting by focusing inward to an artificial outdoor design. Of paramount concern is that the minimal exit points from buildings and from the centre of the donut provide only limited means of exit and escape from the closed design in the event of emergency and the potential for occupants to be closed in to a “lock down” style siege emergency such as that experienced in American schools. Given the traffic issues outlined at point 5 above there is insufficient thought to how emergency services would be able to address and resolve an emergency given the closed design of the DA.

Response

The school facilities have been planned and designed to achieve highest quality learning and play areas with flexible spaces engaging students in ways that reflect 21st century learning whilst supporting teachers as they deliver 21st century learning. The redevelopment will also include a connected open space, creating a welcoming and accessible school with indoor and outdoor teaching and learning spaces.

The building has been designed for flexibility to meet changing educational requirements now and in the future. It has been designed in consultation with the school principal, teachers and students to ensure their requirements and knowledge is implemented within the design, creating a school designed for the needs of the school, its users and ‘future focused learning’.

The design moves away from the traditional single sized classroom, which are teacher focused, to much larger learning spaces accommodating 3 or 4 classroom sizes with 3 or 4 teachers working together to facilitate student learning. These larger spaces are made up of a series of connected spaces with differing functions, various educational purposes and enabling different learning methods. Sliding doors between spaces provide flexibility and different levels of privacy as required.

The building includes 4 learning spaces that cater for special needs students, requiring greater levels of care. These spaces incorporate accessible toilets, showers, change areas and hoisting capability. Universal access is provided around all areas of the building.

References to ‘prisons’ and the claim that ‘its poor quality of design will detrimentally impact on the mental health of occupants’ are completely unfounded and unsubstantiated. On the

contrary, the design of these contemporary learning spaces are aimed at providing a positive impact on students and improving their learning outcomes while ensuring the creation of a safe and welcoming space.

There is no evidence to suggest that this design will retain significant heat. Appropriate plantings of Livistonia, large canopy trees and cooling rainforest species well adapted to humidity and heat are proposed within the central court yard providing relief to the architecture and hard-stand and offering an escape to a natural oasis. The central courtyard provides for both active play and gathering space through the handball courts and amphitheatre steps but also allows for passive and education play with raised seating edges adjacent to canopy trees and endemic mass planting.

There is no evidence to suggest that this building design decreases opportunities for passive exercise and walking over other designs.

A review of the EIS for Badgery's Creek airport shows that the site is well outside the ANEC noise contours of the single or 2 runway option (2063) and no treatment is required.

The building has been provided with the required means of egress and escape in accordance with the Building Code of Australia. There are exit paths adjacent to the main entries and additional exit corridors provided on the western side of the building. This is combined with the provision of emergency vehicles entry point through that car park which allows vehicle access up to the school building if required. The school is designed to create a safe and secure school which provides multiple entry and exit points in case of emergency and has a CCTV and security system designed specifically for the school design and size.

Issue: Lack of public consultation & flaws in process

As locals affected by this development we were not notified. As both the NSW State Government and Campbelltown City Council are aware Denham Court is a rural area without the usual amenities of (amongst other things) local newspapers, ADSL or NBN so local residents are mostly unaware of the development and have not had the opportunity to be consulted or informed on the Development Application and its impact on their homes and lifestyles. Attendance at an information desk with an officer from the consulting organisation seated underneath the Department of Education banner resulted in no information nor any written documentation being provided. The attending officer was unable to answer our questions and responded with, in their own words, "I assume". They advised that no detailed schematics were available and notably numbers of trees to be destroyed was unknown. It is clear that the public information process has not provided any information nor consultation and has been intended only to drive forward the development (as admitted by the officer) by a cursory "tick in the box" approach which does not meet the intention of involving and consulting the Community in these development processes. The officer at that booth sought to acquire information and did not have the information to impart to interested Community members. It has been an exercise in wasting Community members' time. As a consequence of these failures we have no confidence in the process, those undertaking the development nor in the Department of Education and its ability to design a school to meet the needs of a changing childhood demographic with significantly different challenges and needs to those of the past, in an environmentally sensitive area.

We would also note that given recent behaviours by members of the Planning Panel (PP) to decide the matter of a cemetery in the Scenic Hills during an election campaign, to decide that outcome on the day before the election and to delay the release of the outcome until after the election, thereby advantaging one of the PP members, a Council representative standing for election in circumstances where as a result of the election the membership of the Council had significantly changed on the day of the announcement, including that one

Council representative member of the PP was no longer an eligible member of the PP, we believe the reputation and impartiality of the PP to be tarnished and do not have confidence in the decision making power of the PP to make decisions with integrity and impartiality, which are in the best interests of the Community and Public it is supposed to serve.

Response

We cannot comment on the consultation undertaken for the development application or Planning Panel. However, in regards to the development of the school design and consultation undertaken by the department the following has been carried out to ensure the engagement of multiple stakeholders:-

- The project team regular meets with the Project Reference Group (PRG) which consists of the School Principal, P&C representative and School's Director to give insight and direction on the needs of the new school.
- Presentations and workshops have also been held with parents, teachers and gain insight and recommendations as to what makes a great school.
- Year 5 & 6 Students were asked to think about what they wanted in the new school and presented their vision to the project team.
- Year 4 was given a school project to help communicate what they wanted in their new school to the project team.
- Public notices were placed in the Macarthur Chronicle to advertise multiple Community Information Booths which provide the wider community a chance to learn about the project and provide feedback. Information booths have been held on 6 occasions at Ingleburn Town Centre and will continued to be held until the project is completed.
- Letter box drops were carried out to provide general project information to the surrounding residents.
- In addition to community consultation, there has been consultation with local authorities and government agencies.

4. Conclusion

The proposed expansion of Bardia Public School has been assessed against the provisions of Section 79C of the Environmental Planning and Assessment Act, 1979. The proposal has been found to satisfy the relevant State Environmental Planning Policies, the relevant provisions of Campbelltown Local Environmental Plan 2015, and the relevant provisions of Edmondson Park South Development Control Plan 2012.

It is considered that the overall social and economic impacts of the proposed development would be positive, and that potential impacts on the natural and built environments have and will be mitigated through design measures and operational conditions of consent.

The application was publicly exhibited and notified to surrounding residents, and one detailed submission was received. This submission raised a number of issues, however the proponent's responses to the matters raised are considered to adequately address the concerns.

The site's location, zoning and existing land use make it suitable for the proposed development, and the proposal is considered to be in the broad interests of the general public.

As this application has been made by the NSW Department of Education, it is a Crown Development Application, pursuant to Clause 89 of the Environmental Planning and Assessment Act, 1979. Accordingly, the consent authority cannot refuse consent to the application or impose a condition of consent without the approval of the applicant or the minister. In this regard, this report recommends approval of the application.

The recommended conditions of consent have been sent to the applicant for review, and as at the date of this report, the applicant has not responded to Council. It is envisaged that the conditions will become available to the Panel prior to its determination meeting.

Having regard to the matters discussed throughout the report, the application is recommended for conditional approval.

Officer's Recommendation

That development application 2882/2016/DA-C proposing the demolition of all existing school buildings and removal of trees at Bardia Public School, and construction of new school buildings, a sports field, games court, play areas and landscaping be approved subject to the conditions outlined in Attachment 1 (under separate cover).

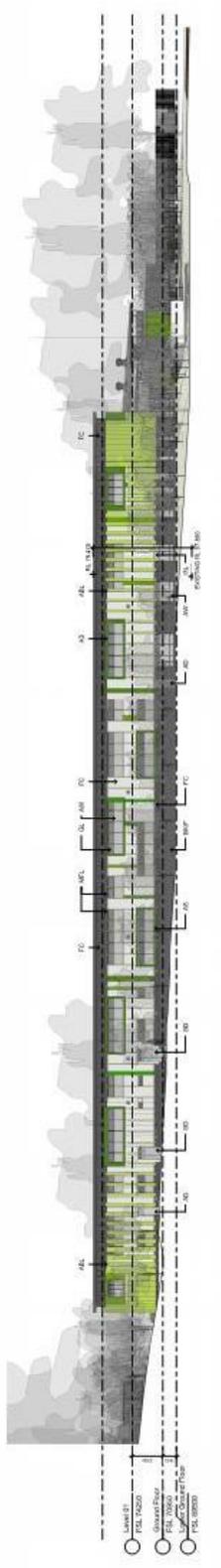
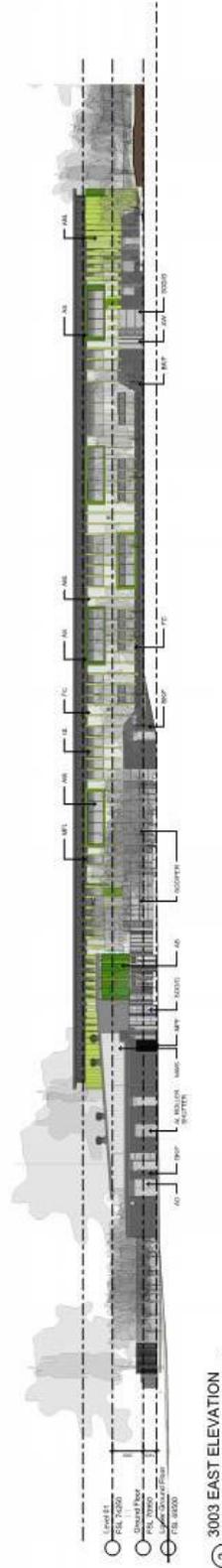
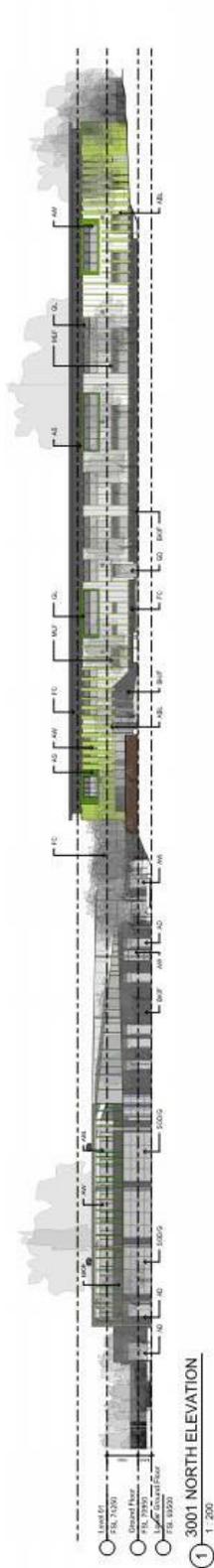
Attachment 1 – Recommended Conditions

Under separate cover.

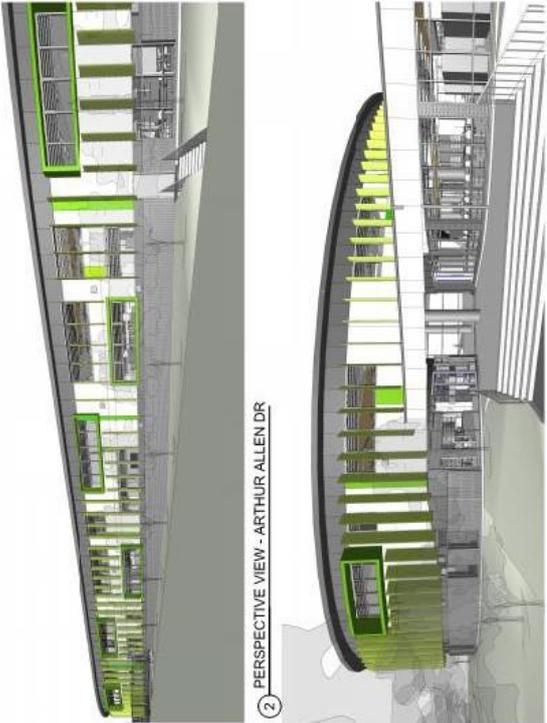
Attachment 3 – Site Plan



Attachment 4 – Elevation Plans



Attachment 5 – Perspective Drawings



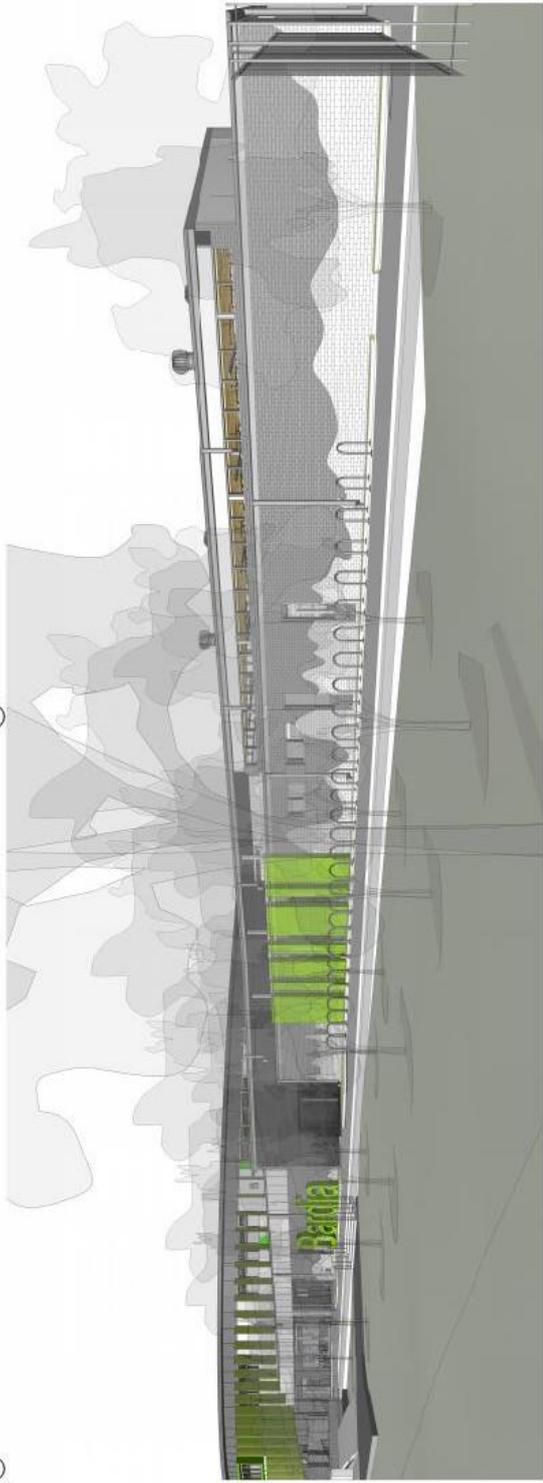
2 PERSPECTIVE VIEW - ARTHUR ALLEN DR



3 PERSPECTIVE VIEW - ENTRANCE



1 AERIAL VIEW



4 PERSPECTIVE VIEW - FRONT ELEVATION

Attachment 6 – Landscape Plans





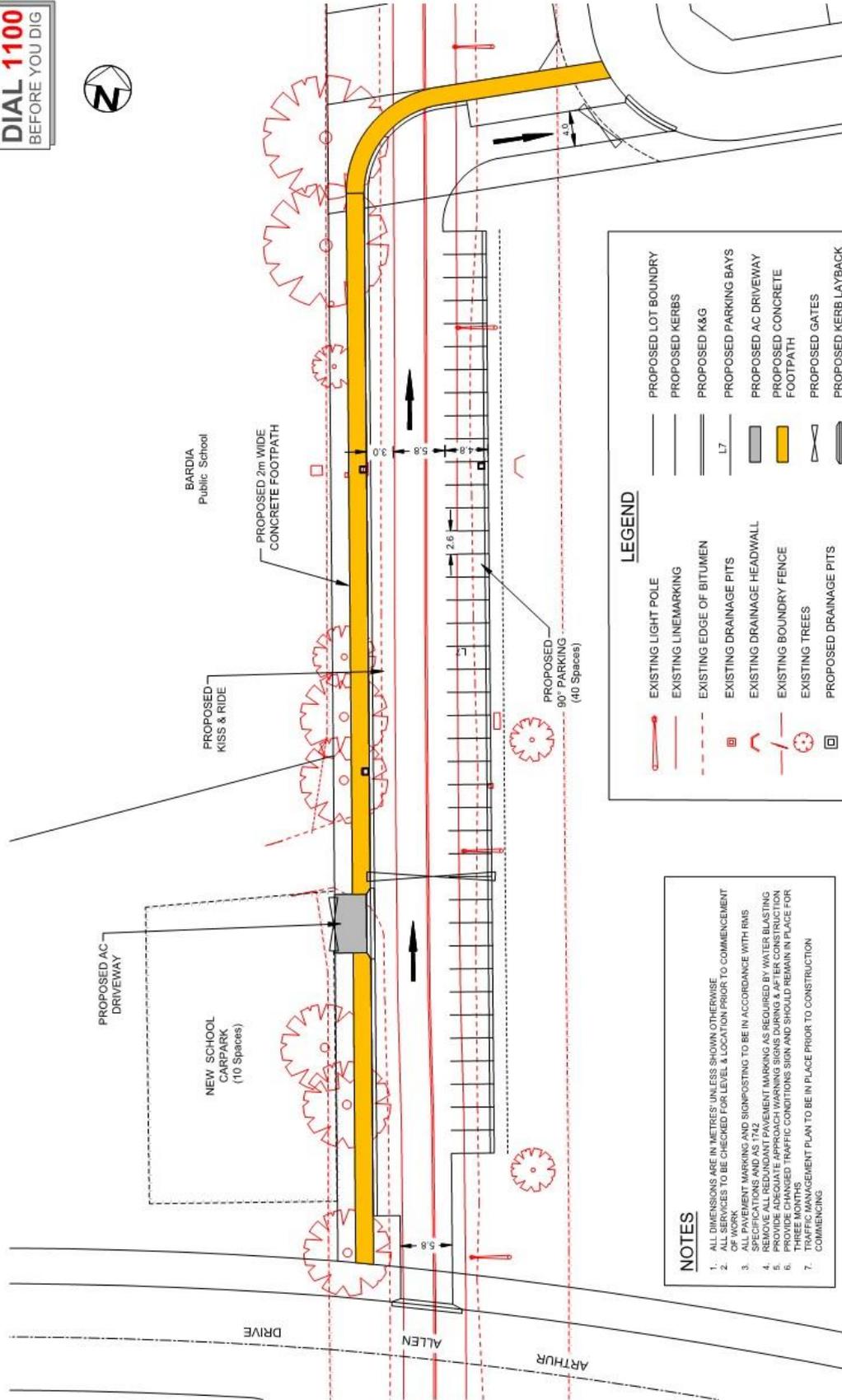
Legend

- Tree proposed
- Tree removed
- Tree retained
- Turf
- Mass planting
- Concrete pavement
- Decomposed granite
- Rubber sofall
- 2.1m high palisade boundary fence
- Custom furniture



Attachment 7 – Proposed car parking arrangement, Old Macdonald Road

DIAL 1100
BEFORE YOU DIG



BARDIA Public School

PROPOSED 2m WIDE CONCRETE FOOTPATH

PROPOSED KISS & RIDE

PROPOSED AC DRIVEWAY

NEW SCHOOL CARPARK (10 Spaces)

ARTHUR

ALLEN

DRIVE

LEGEND

	EXISTING LIGHT POLE		PROPOSED LOT BOUNDRY
	EXISTING LINEMARKING		PROPOSED KERBS
	EXISTING EDGE OF BITUMEN		PROPOSED K&G
	EXISTING DRAINAGE PITS		PROPOSED PARKING BAYS
	EXISTING DRAINAGE HEADWALL		PROPOSED AC DRIVEWAY
	EXISTING BOUNDARY FENCE		PROPOSED CONCRETE FOOTPATH
	EXISTING TREES		PROPOSED GATES
	PROPOSED DRAINAGE PITS		PROPOSED KERB LAYBACK

NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS SHOWN OTHERWISE
2. ALL SERVICES TO BE CHECKED FOR LEVEL & LOCATION PRIOR TO COMMENCEMENT
3. ALL PAVEMENT MARKING AND SIGNPOSTING TO BE IN ACCORDANCE WITH RAS SPECIFICATIONS AND AS 1742
4. REMOVE ALL REDUNDANT PAVEMENT MARKING AS REQUIRED BY WATER BLASTING
5. PROVIDE ADEQUATE APPROACH WARNING SIGNS DURING & AFTER CONSTRUCTION
6. ALL MARKED TRAFFIC CONDITIONS SIGN AND SHOULD REMAIN IN PLACE FOR THREE MONTHS
7. TRAFFIC MANAGEMENT PLAN TO BE IN PLACE PRIOR TO CONSTRUCTION COMMENCING