

# Westmead Catholic Community Education Campus

State Significant Development SSD-10383

December 2021



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# **Glossary**

Abbreviation	Definition		
BDAR	Biodiversity Development Assessment Report		
CASA	Civil Aviation Safety Authority		
CIV	Capital Investment Value		
Council	City of Parramatta Council		
Crown Lands	Crown Lands, DPIE		
Department	Department of Planning, Industry and Environment		
EEC	Endangered ecological community		
ELC	Early Learning Centre		
EESG	Environment, Energy and Science Group, DPIE		
EFSG	Educational Facilities Standards and Guidelines		
EIS	Environmental Impact Statement		
EPA	Environment Protection Authority		
EP&A Act	Environmental Planning and Assessment Act 1979		
EP&A Regulation	Environmental Planning and Assessment Regulation 2000		
EPI	Environmental Planning Instrument		
ESD	Ecologically Sustainable Development		
GANSW	Government Architect NSW		
GTP	Green Travel Plan		
GSC	Greater Sydney Commission		
HNSW	Heritage NSW, Department of Premier and Cabinet		
IPC	Independent Planning Commission		
LEP	Local Environmental Plan		
Minister	Minister for Planning and Public Spaces		
NRAR	Natural Resources Access Regulator, DPIE		
OOSH	Out of School Hours facility		

PDCP	Parramatta Development Control Plan		
PLEP	Parramatta Local Environmental Plan		
PLR	Parramatta Light Rail		
RMS	Roads and Maritime Services		
SEARs	Planning Secretary's Environmental Assessment Requirements		
Secretary	Planning Secretary of the Department of Planning, Industry and Environment		
SEPP	State Environmental Planning Policy		
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011		
SSD	State Significant Development		
TAIA	Transport and Accessibility Impact Assessment		
TfNSW	Transport for NSW		
T-way	Transit-way		
WCC	Westmead Catholic Campus		
WSU	Western Sydney University, Westmead campus		

# **Executive Summary**

This report provides an assessment of a State significant development (SSD) application lodged by the Catholic Education Diocese of Parramatta (the Applicant) seeking approval for redevelopment of the Westmead Catholic Community Education Campus at Westmead including alterations and additions to existing buildings.

The proposal is SSD under clause 15(2) of Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011, as it is development for the purpose of an educational establishment comprising alterations or additions to a new school, with a capital investment value (CIV) of more than \$20 million. The proposed development would facilitate the co-location of a primary school on the existing school site and the relocation of the Sacred Heart Primary School from Ralph Street, Westmead along with contemporary teaching and learning facilities.

The application is referred to the Independent Planning Commission (IPC) for determination as City of Parramatta Council (Council) has lodged a submission objecting to the proposal.

#### **Assessment summary and conclusions**

The Department of Planning, Industry and Environment has considered the merits of the proposal in accordance with the relevant matters under section 4.15(1) and objects of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the principles of ecologically sustainable development (ESD), the issues raised in submissions as well as the Applicant's response to these. The Department concludes that the proposal in its current form, is suitable for the site subject to recommended conditions.

The Department identified traffic and transport (including car parking and drop-off / pick-up facilities), built-form, open space and landscaping, and site suitability as the key issues for assessment. The Department's assessment concludes that:

- the proposed development is located within a site which experiences and is surrounded by a highly constrained traffic environment.
- the scale of the proposed development has the potential to result in adverse traffic impacts on the surrounding road network. This potential is aggravated by sub optimal (or limited) pedestrian connectivity of the site with the surrounding residential precincts.
- the Applicant did not provide satisfactory and sufficient information with respect to traffic modelling to enable a robust and comprehensive long-term assessment of traffic impacts.
- notwithstanding, the Applicant has committed to upgrade two site access intersections, provide
  a pedestrian link through the site and implement a Green Travel Plan seeking to facilitate a
  10% modal shift target.
- while the public authorities and the Department note the gaps in the traffic assessment, it is considered that the proposed upgrades would alleviate the majority of the impacts on the surrounding intersections in the 2023 2033 timeframe.
- the proposal may, however, have significant adverse impacts on the Darcy Road/Bridge Road/Coles car park intersection, located to its west at the 2033 timeframe. The Applicant has not provided measures to alleviate the impacts on this intersection.

- consequently, instead of recommending a mitigation measure for this intersection in 2033, the
  Department (in consultation with Transport for NSW) has recommended conditions requiring
  regular traffic assessment, surveys and modelling of this intersection following commencement
  of operation of the school in 2023.
- based on the results of the modelling, the Applicant would be required to upgrade this
  intersection or alternatively nominate acceptable mitigation measures if the impacts, as
  forecast, occur.
- the through site pedestrian link (east-west) would reduce traffic congestion on Darcy Road, by assisting in the reduction in pedestrian travel distance from some parts of the catchment.
- additional conditions are recommended to ensure that the Applicant explores opportunities to connect the site to Bridge Road, to its west, through the adjoining properties.
- the Green Travel Plan (GTP) satisfactorily demonstrates that the proposed 10% mode shift to reduce car dependency and encourage sustainable transport is achievable. The GTP also considers a realistic modal shift of 5% in 2023.
- the proposed car parking is sufficient to cater for all uses on the campus, and overflow car parking from the church can also be accommodated within the site during special occasions.
- the built form of the proposed new primary school building and church are acceptable in the context of the Westmead health and education precinct.
- the Applicant has not demonstrated that suitable at-grade open space provisions are available for the students within the primary school building or that there are opportunities to use the existing campus ovals (currently used by high schools) or off-site.
- to address the above identified impacts, conditions are recommended requiring the primary school students to gain access to the existing ovals within the site, to compensate for the lack of at-grade open space for primary school children.
- the development provides benefits, including the delivery of increased student capacity to help meet demands identified in the Central City District to 2036.
- the impacts of the proposal in relation to historic and Aboriginal cultural heritage, noise, contamination, stormwater, flooding, aviation, social and wind impacts are assessed as satisfactory subject to conditions.
- the proposal in its current form, can be allowed on the site, subject to the recommended conditions detailed above.

Overall, the Department is satisfied that the impacts of the proposed development and issues raised in the submission have been adequately addressed in the Applicant's Environmental Impact Statement (EIS), Response to Submissions (RtS) and Supplementary RtS (SRtS), subject to the implementation of recommended conditions.

#### The proposal

The proposal seeks approval for the alterations and additions to the existing Westmead Catholic Campus (WCC) site. Consent is sought for alterations to an existing school building and construction of new buildings to facilitate the operation of a primary school (Kindergarten – Year 6) with 1680 students, a new early learning centre (ELC) with 200 places and 5 full-time equivalent (FTE) staff, a church (400 seats) and associated works including tree removal, access and landscaping and staged increase in student numbers.

The development would co-locate the existing Mother Teresa Primary School within the new primary school building, resulting in 1260 additional students and 76 additional FTE teaching staff. The

proposal also includes alterations to the building that currently houses the existing Mother Teresa Primary School to facilitate the ELC, school administration and resource centres. Associated works include site landscaping involving the removal of 27 trees, the planting of approximately 25 new trees on site. Other works include the establishment of two new pedestrian access points, the provision of 12 additional parking spaces and 194 new bicycle parking spaces with end-of trip facilities for staff and a drop-off / pick-up zone.

The proposal has a CIV of \$80,474,246 and would generate up to 101 FTE additional operational jobs and 1000 construction jobs.

#### The site

The WCC site is located at No. 2 Darcy Road (Lot 1 DP 1095407 and Lot 1 DP 1211982), Westmead within the City of Parramatta local government area. The existing campus has an area of approximately 12 hectares and currently accommodates three schools including Catherine McAuley Westmead (secondary girls' school), Parramatta Marist High School (secondary boys' school) and Mother Teresa Primary School (co-educational primary school), along with associated driveways, car parking areas, landscaped areas and ovals.

The project site is located in the north-west corner of the WCC site, bounded by Darcy Road to the north and north-west, a creek to the west, Parramatta Marist High School and Catherine McAuley Westmead to the east, and the WCC ovals to the south. The site contains the existing Mother Teresa Primary School, a hockey field, three basketball / tennis courts and minor supporting structures as well as vegetation, the north-western access driveway, carpark, and drop-off / pick-up area.

#### **Engagement**

The EIS was publicly exhibited between 2 May 2020 and 29 May 2020. Initially, the Department received three submissions including an objection from Council, one comment from Cumberland Council and one public submission in support of the proposal. Additionally, the Department received advice from 13 public authorities. Following the close of exhibition. Council forwarded a further three items of community correspondence in the form of objections (including one petition) to the Department. The key issues raised in the submissions include issues of site suitability, vehicle and pedestrian accessibility, site connectivity, lack of open space within the site, the provision of insufficient traffic modelling, increased traffic congestion, unsatisfactory drop-off / pick-up infrastructure, potential aviation impacts, and concerns that the proposal represents an over-development of the site.

The Department engaged with Council prior to lodgement of the RtS to discuss the key issues in relation to the site.

The Applicant sought to address the issues raised by providing a RtS, submitted on 14 September 2020. Following submission of the RtS, the Department engaged an independent traffic consultant (Bitzios) to conduct a peer review of the Applicant's traffic assessment. Following further concerns raised by Bitzios, the Department requested additional information and a SRtS was then submitted in December 2020. The RtS and SRtS incorporated minor alterations to the proposed drop-off / pick-up bays and additional traffic and transport information. The Department identified data gaps in the traffic assessment of the proposal, and actively engaged with the Applicant requesting information to close these gaps.

The Applicant submitted further SRtS between February and April 2021, seeking to address issues raised by Council, Transport for NSW (TfNSW) and Bitzios. This incorporated additional traffic related technical information, some revisions to the base case scenario, and electronic SIDRA files. The SRtS also included a review of the draft Westmead 2036 Place Strategy, and clarification regarding primary school student access to the existing campus ovals and the resulting impacts on surrounding Council-owned sportsground facilities.

TfNSW and Council reviewed the RtS and SRtS but maintained their concerns regarding the development.

In response to the concerns from the public authorities and the Department, the Applicant submitted an amended proposal on 7 September 2021 including the upgrade to the two site access intersections, creation of an internal pedestrian link and the relocation of the proposed parish church within the site, as well as the removal of some works from the scope of the SSD application. The amended proposal was re-exhibited between 10 September 2021 and 23 September 2021, whereby the Department received five submissions comprising one from Council (maintaining objection), one from Cumberland Council and three comments from members of public. The Department also received advice from 10 public authorities.

Bitzios reviewed the amended proposal and reiterated their concerns regarding the data gaps in the modelling. Bitzios also provided an independent traffic analysis of the development and concluded that the development would mainly impact on the traffic network during the AM peak in 2033. The impacts would be significant on Darcy Road/Bridge Road/Coles car park in 2033.

During the re-exhibition of the proposal, the Department, TfNSW and Council agreed that the intersection/access upgrades proposed by the Applicant, as well as the creation of the new pedestrian link would assist in improving the impacts of the development on the surrounding road network. However, the public authorities raised concerns regarding the lack of pedestrian connections to Bridge Road and the impacts on the Darcy Road/Bridge Road/Coles car park intersection. TfNSW recommended conditions requiring future traffic modelling to assess the impacts post development. Council requested that conditions be recommended requiring further connections from the western boundary of the site to Bridge Road.

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# 1 Introduction

- 1.1.1 This report provides an assessment of a State significant development (SSD) application for Westmead Catholic Community Education Campus at 2 Darcy Road, Westmead (SSD-10383).
- 1.1.2 The proposal seeks approval for the redevelopment of part of an existing school campus involving the construction of a new primary school (Kindergarten Year 6) with a capacity of 1680 students (1260 additional), as well as construction of a new 400-seat parish church and an early learning centre (ELC) with 200 pre-school students (0-5 years) and associated works.
- 1.1.3 The application has been lodged by the Catholic Education Diocese of Parramatta (the Applicant). The site is within the City of Parramatta local government area (LGA).
- 1.1.4 The Applicant has advised that the proposed new school would provide for the co-location of the existing Mother Teresa Primary School activities within the site, as well as the relocation of school functions from the nearby Sacred Heart Primary School, which is currently based at Ralph Street, Westmead approximately 800m away.

### 1.2 Site description and context

1.2.1 The project site is part of that area known as the Westmead Catholic Campus (WCC). The WCC site is located at 2 Darcy Road, Westmead, comprising two allotments, legally described as Lot 1 DP 1095407 and Lot 1 DP 1211982. The WCC site is located approximately 27 kilometres (km) west of Sydney Central Business District (CBD), approximately 2.7km north-west of Parramatta CBD and approximately 1km north-west of Westmead Railway station (Figure 1).

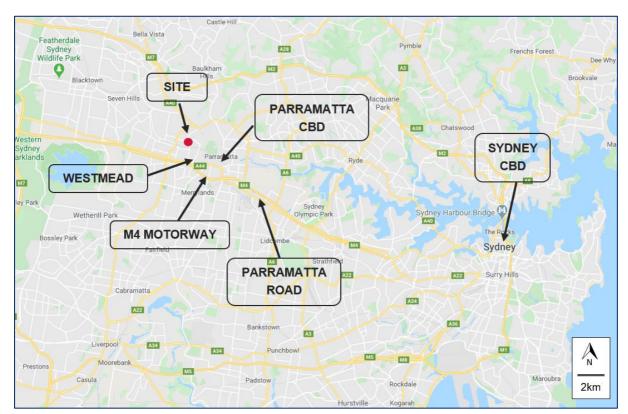


Figure 1 | Regional Context Map (Base source: Google Maps 2021)

#### Existing development and features of the WCC site

- 1.2.2 The WCC site has an area of approximately 12 hectares (ha) and is irregular in shape. The site has a dual frontage to Darcy Road in the north / north-east and is bounded by the Main Western railway line to the south, Western Sydney University Westmead campus (WSU) to the east, and high-density residential development to the west. The WCC site slopes from the north-eastern corner to the south-western corner, and there is a small creek along its western boundary.
- 1.2.3 The WCC site comprises a mix of permanent and demountable buildings ranging from single storey to four stories, two ovals, playing fields, tennis/basketball courts, outdoor play areas and car parking. The buildings comprise three schools including:
  - Catherine McAuley Westmead (secondary girls' school), which predominantly occupies the northern portion of the site.
  - Parramatta Marist High School (secondary boys' school), which occupies the central and eastern portion of the site.
  - Mother Teresa Primary School (co-educational primary school), which occupies the ground floor
    of one of the buildings along the western side of the Catherine McAuley Westmead site.
- 1.2.4 The two high schools within the WCC currently accommodate a combined population of 2186 students and 166 FTE staff, and the primary school currently accommodates 420 students and 24 FTE staff. Collectively, there are 2606 students enrolled at the three existing schools and 190 FTE staff.

#### **WCC** site access

- 1.2.5 Vehicular access to the WCC site is provided from Darcy Road via four non-signalised driveways:
  - three driveways along the north-eastern site boundary, providing access to staff carparks
  - one driveway at the north-western boundary, providing access to a general-use carpark, drop-off/ pick-up area, and bus bay.
- 1.2.6 Pedestrian access to the site is via secure entries from the southern side of Darcy Road. A pedestrian refuge on the Darcy Road median island is provided at the signalised crossing between the site and Westmead Private Hospital.
- 1.2.7 The existing WCC site is shown in **Figure 2**.

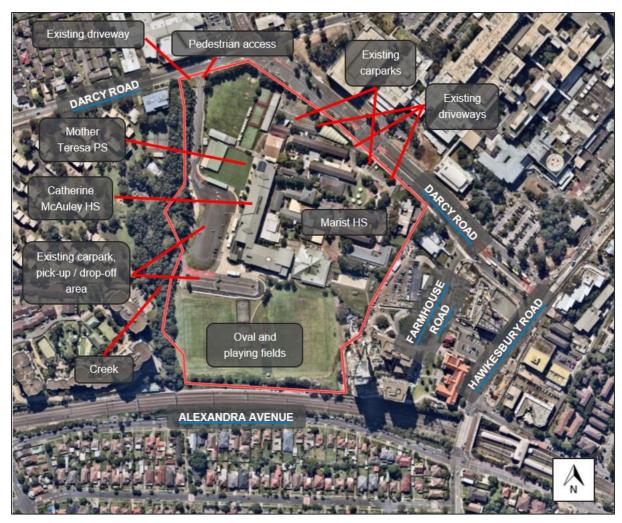


Figure 2 | WCC site Context Map (Base source: Nearmap 2021)

#### **Mother Teresa Primary School (project site)**

- 1.2.8 The site of the proposed development (hereinafter referred to as the "project site") is located in the north-west corner of the WCC site, fronts Darcy Road to the north and north-east, the creek to the west, Parramatta Marist and Catherine McAuley Westmead high schools to the east, and the WCC ovals to the south. The site generally slopes north to south.
- 1.2.9 The project site contains the existing Mother Teresa Primary School buildings (which occupies part of a building along the western side of Catherine McAuley Westmead high school), open grassed play areas, a hockey field, three basketball/tennis courts and minor supporting structures. The project site also incorporates the north-western WCC driveway, carpark, and pick-up / drop-off area.
- 1.2.10 The project site contains 0.18ha of exotic/native vegetation and 0.49ha of exotic grassland (open grassed play areas), including *Biodiversity Conservation Act 2016* listed endangered ecological community (EEC) Swamp Oak Floodplain Forest, situated along the creek to the west of the site.
- 1.2.11 The existing conditions of the project site are shown in **Figure 3**, and site photos are provided in **Figure 4** to **8**.



Figure 3 | Project site (outlined in blue) context map (Source: Nearmap 2021)



Figure 4 | WCC site from Darcy Road – looking south-west (Source: DPIE 2020)



Figure 5 | WCC site from Darcy Road – looking south (Source: DPIE 2020)



Figure 6 | North-eastern access driveway from Darcy Road (Source: Google Maps 2021)



Figure 7 | Project site – looking east towards existing primary school building (Source: DPIE 2020)



Figure 8 | Project site – looking east towards existing primary school building (Source: DPIE 2020)

#### **Public transport**

1.2.12 The north-west bus transit-way (T-way) passes the site along Darcy Road. The site is serviced by several bus services running between Parramatta and the Hills District, with both standard and T-way bus stops located within walking distance of the site on Darcy Road. T-way bus routes T63, T64 and T65 operate every 15 minutes during the AM and PM peaks, while eight other services run less frequently.

- 1.2.13 The Parramatta Light Rail (PLR), currently under construction, follows Hawkesbury Road to the east of the site. The PLR is expected to open in 2023. The PLR would connect the Parramatta CBD to the Westmead health and education precinct, Bankwest Stadium, the future Powerhouse Museum and cultural precinct on the Parramatta River, the Rosehill Gardens Racecourse and three Western Sydney University campuses at Westmead, Parramatta and Rydalmere. The PLR service would operate seven days a week and approximately every 7.5 minutes in peak periods and would include stops at Westmead Railway Station and Westmead Hospital, approximately 600m and 700m walking distance from the project site, respectively.
- 1.2.14 The proposed Westmead Metro station (part of the Sydney Metro West project), once completed, would be adjacent to the existing Westmead Railway station. The Sydney West Metro is planned to open in 2030.
- 1.2.15 The site's current and future public transport context is shown in Figure 9.

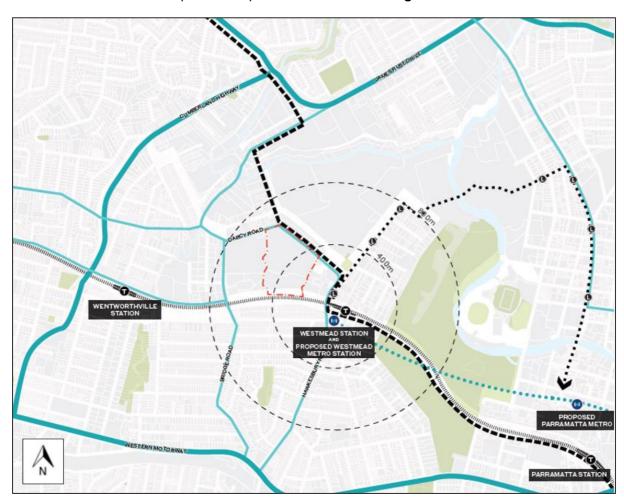


Figure 9 | Transport context map (Source: Applicant's EIS 2020)

# 1.3 Surrounding development

1.3.1 The site is within a wider precinct known as the 'Westmead health and education precinct', (Westmead precinct) outlined in the Central City District Plan 2018, characterised by a mix of uses and building forms including health and education services, commercial, industrial, and residential.

- 1.3.2 The WCC site is immediately bounded by Darcy Road to the north and north-east, WSU and health research institute to the east, the main Western railway line to the south, and hospital accommodation and medium-high density residential buildings to the west.
- 1.3.3 The land to the north and north-east of the site contains health services including Westmead Private hospital, Westmead Public Hospital and Westmead Children's Hospital, with industrial developments located further on the northern side of Toongabbie Creek (north of Westmead Hospital). Westmead town centre and Westmead Railway Station are south-east of the site, and low and medium density housing further to the east, south and west. The land north-west of the site contains commercial developments and a retirement village.
- 1.3.4 Parramatta River and Parramatta Park are located to the far east of the site, Parramatta CBD is approximately 2km from the site. **Figure 10** shows the surrounding site context.



Figure 10 | Regional context map (Source: Nearmap 2021)

# 2 Project

2.1.1 The key components and features of the proposal as amended by the Response to Submissions (RtS) and supplementary RtS (SRtS) are provided in **Table 1** and are shown in **Figure 11** to **20**.

Table 1 | Main components of the project

Aspect	Description		
Project summary	Redevelopment of the primary school including alterations and repurposing of an existing school building and construction of two new buildings to create a new primary school (1260 additional students and 76 additional FTE staff), an ELC (200 places and 25 FTE staff), a new parish church (400 seats), and associated works including tree removal, access and landscaping and staged increase in student numbers.		
Demolition	Internal demolition within the existing Mother Teresa Primary School building for the purpose of the ELC use.		
Built form	<ul> <li>Construction of a six-storey new primary school building comprising:         <ul> <li>classrooms and learning spaces.</li> <li>formal and information recreation spaces.</li> <li>canteen, storage and amenities.</li> <li>rooftop open space.</li> </ul> </li> <li>Construction of a new parish church building (church) comprising:         <ul> <li>400 seats.</li> <li>meeting rooms.</li> <li>offices, kitchen, storage.</li> <li>sacristy.</li> </ul> </li> <li>Alterations to the existing Mother Teresa Primary School building to facilitate change of use into ELC comprising:         <ul> <li>indoor and outdoor play space.</li> <li>kitchen.</li> </ul> </li> <li>Staff / administration area for the school within the Mother Teresa Primary School building.</li> </ul>		
Site area	• 118,161sqm.		
Gross floor area (GFA)	<ul> <li>Creation of additional 8158 sqm comprising:</li> <li>7153sqm (primary school building).</li> <li>1005sqm (church).</li> </ul>		
Student and staff population	<ul> <li>1460 additional students by 2033 including:</li> <li>1260 additional primary school students and 76 additional FTE staff.</li> <li>200 places in the ELC and 25 FTE staff.</li> </ul>		

Access	<ul> <li>Upgrades to the two existing access points from Darcy Road (Darcy Road/Mother Teresa and Darcy Road/multi-storey car park intersections)</li> <li>Two new pedestrian access points.</li> </ul>
Car parking	<ul> <li>12 new car parking spaces in an at-grade carpark.</li> <li>Retention of 212 existing car parking spaces.</li> </ul>
Bicycle parking	<ul> <li>194 new bicycle parking spaces, plus end-of-trip facilities for staff.</li> </ul>
Public domain and landscaping	<ul><li>Removal of 27 trees on site.</li><li>Planting of approximately 25 new trees on site.</li></ul>
Signage	Not proposed.
Jobs	<ul><li>1000 construction jobs.</li><li>101 additional operational FTE jobs.</li></ul>
CIV	• \$80,474.245.

## 2.2 Physical layout and design

- 2.2.1 The proposed buildings would be contemporary in design with modern educational facilities. The proposed development is comprised of:
  - a new six-storey primary school building at the centre of the existing Mother Teresa Primary School site.
  - a church within the north-west corner of the project site.
  - an ELC, a school resource centre and administration centre on the ground floor of the repurposed, expanded and refurbished Mother Teresa Primary School building along the eastern side of the project site.
- 2.2.2 The Applicant has advised that the development would be serviced by the existing car park (212 spaces) in addition to an approved future multi-storey carpark (capacity 260 vehicles) within the north-east corner of the WCC site and 12 new car spaces for the church (see paragraph 2.5.1).
- 2.2.3 The site layout retains the existing vehicle access from Darcy Road, opposite Westmead Hospital, and provides two new pedestrian access points. A loop road with a new at-grade carpark is proposed on the eastern side of the driveway.
- 2.2.4 Landscaped areas are proposed between the proposed new buildings and the carpark. The siting of the church would involve removal of the existing vegetation along the Darcy Road frontage and replacement with new landscaping.
- 2.2.5 The site plan showing the location of the existing and proposed buildings on the site is provided in **Figure 11** along with the driveway upgrade locations and pedestrian access points.

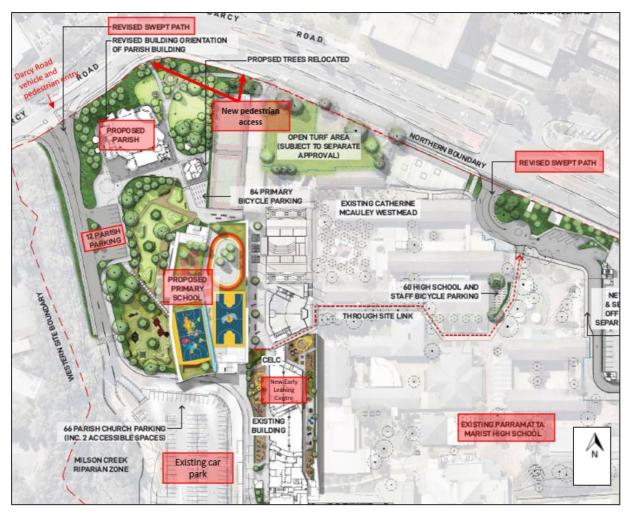


Figure 11 | Proposed site plan (Source: Applicant's SRtS 2021)

#### New primary school building

- 2.2.6 The proposed six-storey 'stacked' or vertical primary school building would have a total height of 26.5m. The building includes both vertical and horizontal above ground hard landscaped voids to facilitate multi-level indoor and outdoor zones, allowing for the integration of internal and external teaching and learning facilities and spaces. School year groups would be clustered in groups of 60 to share an age appropriate common outdoor recreation and circulation space. The building would be configured accordingly:
  - Ground: Kindergarten classrooms, canteen and open space.
  - Level 1: Years 1 and 2 classrooms and open space.
  - Level 2: Years 5 and 6 classrooms and open space.
  - Level 3: Open space.
  - Level 4: Years 3 and 4 classrooms and open space.
  - Level 5: Rooftop and open space.
- 2.2.7 The proposed building is designed to reduce vertical circulation, with year groups remaining at their learning level in the building throughout the entire duration of the day, except for when accessing one of the larger above ground outdoor open spaces within the building located one floor either above or below. The above ground outdoor learning spaces integrated within the building are designed to accommodate both practical and recreational activities, including presentations, performance,

collaboration, independent studies, project-based learning and traditional direct instruction. The Level 5 rooftop would accommodate two multi-sports courts and a synthetic turf running track. The proposed building layout and design is shown in **Figures 12** to **16**.

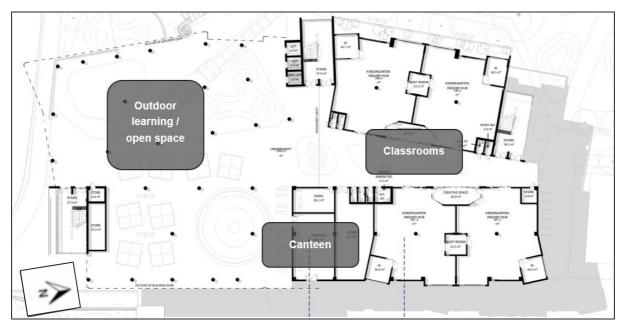


Figure 12 | Primary school – proposed ground floor plan (Source: Applicant's SRtS 2021)

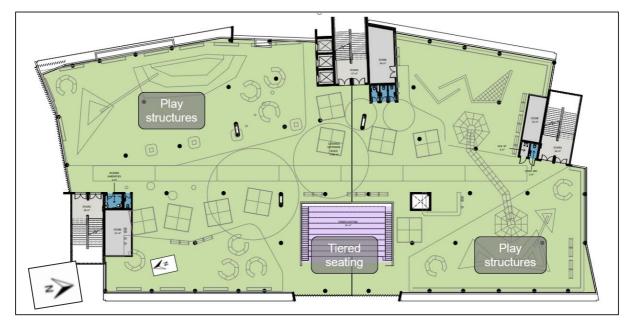


Figure 13 | Primary school – Level 3 floor plan (Source: Applicant's SRtS 2021)



Figure 14 | Primary school – Levels 2 and 4 floor plan (typical) (Source: Applicant's EIS 2020)

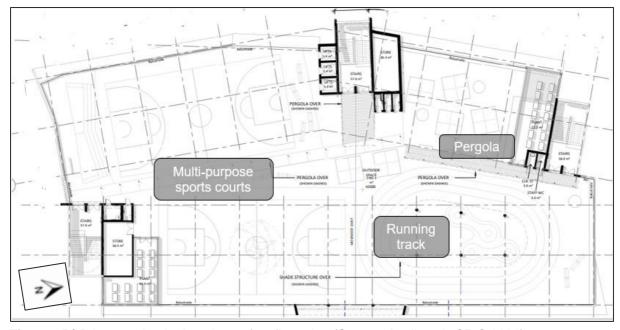


Figure 15 | Primary school – Level 5 rooftop floor plan (Source: Applicant's SRtS 2021)



Figure 16 | Primary school – view from the internal road, north-west (Source: Applicant's SRtS 2021)

#### Church

- 2.2.8 The proposed church would be located at the north-west corner of the project site and has a maximum height of 11.5m. The existing retaining wall fronting Darcy Road would be replaced by a banked planted berm running across the site, on which the building would be sited. The church would accommodate a 400-seat worship space and supporting facilities including meeting rooms, offices, a kitchen, sacristy and storage.
- 2.2.9 The building has been designed around a theme of a collection of organic 'pebble' forms (shown as offsets from the main building footprint) surrounding a central worship space. The building would incorporate a pitched roof with its high end to the north side fronting Darcy Road and set behind a cross, the intent of which is to create a defined 'entrance' to the site. The 'pebble' forms would contain ancillary facilities with gaps in between, allowing for access, ventilation and penetration of natural light to the worship space. The materiality of the building would comprise a combination of natural colours including concrete and terracotta cladding, with lighter coloured metal sheeting used for the roof.
- 2.2.10 The proposed building layout and design is shown in **Figure 17** and **Figure 18**.



Figure 17 | Church – proposed floor plan (Source: Applicant's SRtS 2021)



Figure 18 | Church – view from Darcy Road (Source: Applicant's EIS 2020)

#### The ELC, Resource Centre and Administration Centre

- 2.2.11 The ELC and the primary school's Resource Centre and Administration Centre are proposed to be located within the ground floor of the existing Mother Teresa Primary School building which would be repurposed. The Resource Centre would be adjacent to the new primary school building for easy student access. The proposal would retain the existing Administration Centre within the building to support both the primary school and the ELC.
- 2.2.12 Limited internal demolition would be required to accommodate the ELC, as shown in Figure 19. External works including alterations to glazed openings and the installation of canopies are also proposed. The proposed ground floor plan for the ELC is shown in Figure 20.

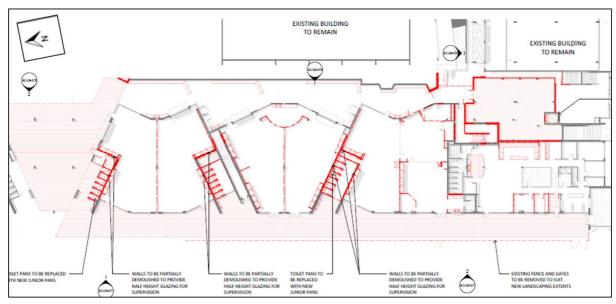


Figure 19 | Existing building – demolition plan (Source: Applicant's EIS 2020)

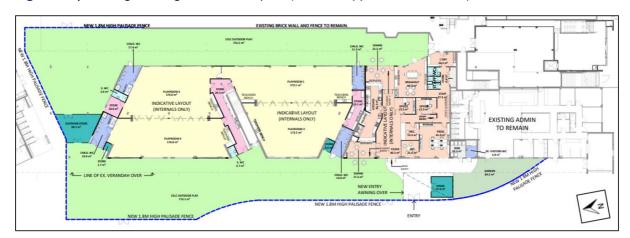


Figure 20 | ELC - proposed floor plan (Source: Applicant's RtS 2020)

#### 2.3 Uses and activities

- 2.3.1 The site would contain buildings to be used for the following purposes:
  - a primary school (K–6).
  - an ELC.
  - an administration centre.

- a new church.
- 2.3.2 The new primary school would have a capacity of 1680 students.
- 2.3.3 The school would also include an Out of School Hours (OOSH) facility for up to 800 students, however the location of the OOSH continues to not be confirmed by the Applicant.
- 2.3.4 The ELC would accommodate up to 200 pre-school students (0-5 years).
- 2.3.5 The church would provide for an existing congregation to be relocated from Ralph Street and would have a 400-seat worship space with supporting facilities.
- 2.3.6 The proposed operating hours of the school, OOSH, ELC and church are as follows:
  - primary school: 6am to 8pm (Monday to Friday).
  - OOSH: 6am to 8pm (Monday to Friday).
  - ELC: 6am to 6pm (Monday to Friday).
  - church: 8am to 10am (Monday to Friday).
     8am to 10am and 4:30pm to 7pm (Saturday).
    - 7am to 12pm (Sunday).
- 2.3.7 Figures provided by the Applicant indicate that the combined future student capacity of the WCC site, including the primary school, two high schools, and the ELC would be 4117 in 2033. The students would be serviced by an FTE staff population of 286. This represents an increase of 1511 students and 201 FTE staff above that currently located within the project site within the WCC site.
- 2.3.8 The design of the development has also considered the opportunity for shared use of facilities with the wider community when the school is not in operation, including use of the church and the outdoor space immediately north-east of the church building.
- 2.3.9 The proposal involves four regular church services, with two on Saturday (9am and 6pm) and two on Sunday (8am and 9:30am). The Applicant anticipates that up to a total of 560 people would attend the church on the weekend, spread over these four mass services. The proposal also involves use of the church during the significant religious seasons of Lent, Easter and Christmas during which time most students, staff and their families would also attend the services.
- 2.3.10 Other significant events (such as funerals, annual memorials, weddings and baptisms) would be undertaken in the church, but mostly associated with student / staff families. Weddings and funerals would take place on an ad-hoc basis, on average one wedding every two years, and approximately three funerals per year.
- 2.3.11 The proposal also involves the use of the church hall by various community groups for activities such as Taekwondo, ballet, cultural groups (preparing and practicing for festival events) and social gatherings such as birthday parties. The Applicant states that most of these activities would occur weekly or bi-weekly during school terms and outside of school hours.

#### 2.4 Construction staging and timing

- 2.4.1 The Applicant proposes construction hours as:
  - Monday to Friday: 7am to 6pm.

- Saturday: 7am to 5pm.
- Sunday and public holidays: no work.
- 2.4.2 The application proposes an 18-month construction period with the opening year being 2023:
- 2.4.3 **Table 2** outlines staff and student numbers on the WCC.

Table 2 | Staff and student numbers (current and proposed) (Source: Applicant's RtS 2020)

Group	Current – 2019	Proposed Development Opening Year – 2023	Proposed Full Operation – 2033		
Student Population					
ELC	0	100	200		
Primary school	420	660	1680		
High schools	2186	2237 (natural growth, unrelated to SSD proposal)	2237		
TOTAL	2606	2997	4117		
FTE Staff Population					
ELC	0	15	25		
Primary school	24	40	100		
High schools	166	166	166		
TOTAL	190	221	291		

# 2.5 Related development

2.5.1 On 2 November 2020, the Sydney Central City Planning Panel approved a Development Application (DA) (DA/241/2020) for the demolition of an existing building, removal of 32 trees and construction of a new three-storey carpark in the north-east corner of the site for 260 vehicles with access from Darcy Road and associated landscaping works, pedestrian access upgrades and ancillary structures on the WCC site (Figure 21).

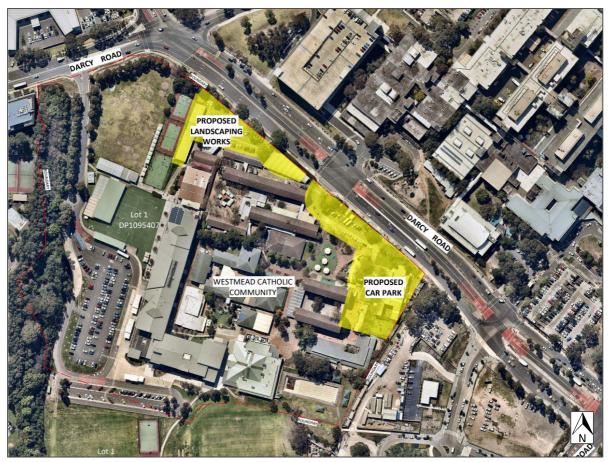


Figure 21 | Location Plan submitted to Council (extract from DA/241/2020) (Source: Applicant's Statement of Environmental Effects 2020)

- 2.5.2 The Westmead Innovation District Masterplan project which includes the WCC site was jointly commissioned by Council and NSW Health. In March 2013, after stakeholder consultation, the Westmead Alliance (a consultative group) was formed to develop a future vision for the Westmead precinct. At present, the Westmead Alliance oversees the Westmead Innovation District Masterplan. However, the public facing documents on Council's website do not provide any information on the current status of this Masterplan. Notwithstanding, Council have referred to the Masterplan in their submission. Therefore, relevant sections of the Masterplan are discussed in the context of public authority comments in Sections 5 and 6.
- 2.5.3 Additionally, the Applicant has advised that there is a long-term masterplan for the entire WCC site prepared on behalf of the Catholic Diocese and referred to as the WCC Masterplan in this report. It appears from the Applicant's documentation that some of the connections in the Westmead Innovation District Masterplan have also been reflected in the WCC Masterplan. However, the Department did not find any evidence which suggests that the WCC Masterplan was endorsed by Council or the Department. Therefore, the Department notes that it is still in a draft form. Figure 22 below shows the basic layout of the draft WCC Masterplan, including north-south and east-west connections.



Figure 22 | WCC Masterplan (Source: Applicant's RtS 2020)

#### Drop-off/pick-up area reconfiguration

- 2.5.4 The Applicant has advised that in December 2020, the existing drop-off/pick-up area was upgraded from 8 bays to 19 bays, with additional personnel managing the drop-off/ pick-up activities. This facility is proposed for use by the primary school students and parents as part of the proposed development.
- 2.5.5 The works were conducted under the complying development provisions of the State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017. The details of the reconfiguration are discussed in **Section 6.2**.

# 3 Strategic context

## 3.1 Project need and justification

- 3.1.1 The Applicant states that the key objectives of the proposed development are to:
  - relocate the existing Sacred Heart Primary School to the WCC site, noting that the Sacred Heart playground is on leased land (was due to expire in February 2021 at the time of EIS lodgement).
  - co-locate Sacred Heart Primary School, Mother Teresa Primary School, Parramatta Marist High School and Catherine McAuley Westmead at the WCC site.
  - provide a new church to meet the needs of a congregation currently located off site.
  - foster the opportunity to integrate with the Westmead innovation district outlined within the Central City District Plan.
  - implement the pedagogical teaching and learning values developed by the Applicant.
- 3.1.2 The Applicant has advised that the key drivers of the development are to realise the opportunities of the Westmead precinct renewal, to create an evangelising community, respond to population growth and student demand, and provide uncompromised play space for the Sacred Heart Primary School.
- 3.1.3 The EIS advised that two alternative development options beyond that finally proposed were considered, including a do-nothing approach and an alternative site design. The Applicant concluded that the proposed development is most suitable for the WCC site and to cater for the needs of the Catholic Diocese. This matter has been further discussed in **Section 6.5**.
- 3.1.4 The Department agrees with the Applicant that there are benefits of the proposal, including the provision of enhanced teaching and learning environments and the delivery of increased student capacity to help meet growing demand. The Department has identified some adverse impacts of the proposal on the surrounding road network. However, these impacts can be mitigated via additional conditions as discussed in **Chapter 6.** Overall, the Department agrees with the Applicant's justification of the proposal to develop the site.

#### 3.2 Greater Sydney Region Plan

- 3.2.1 The Greater Sydney Commission's (GSC) role is to coordinate and align planning to shape the future of Metropolitan Sydney. In March 2018, the GSC published the Greater Sydney Region Plan (the Region Plan) and the associated District Plans.
- 3.2.2 The Regional Plan outlines how Greater Sydney would manage growth and change and guide infrastructure delivery. It sets the vision and strategy for Greater Sydney, to be implemented through District Plans. The site is located within the Central City District, and within Greater Parramatta and the Westmead precinct (**Figure 23**). The Central City District Plan seeks to transform the Westmead precinct into an innovative district with greater diversity of knowledge-intensive jobs.
- 3.2.3 The Department notes that these strategic documents do not set objectives for, or outline the scale of, development that should occur in specific areas.

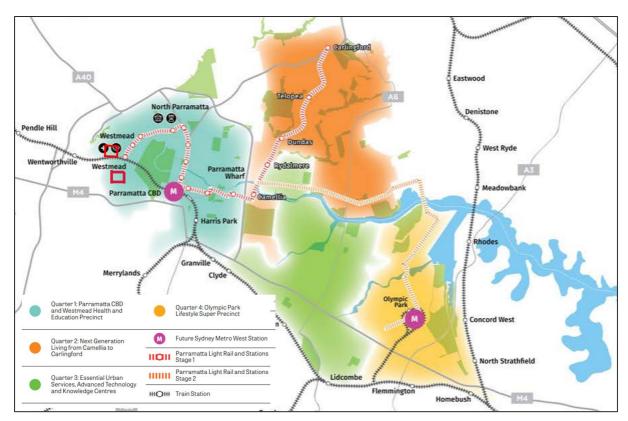


Figure 23 | The Central City District, the Parramatta CBD and Westmead Precinct (Source: Central City District Plan)

- 3.2.4 The proposal is consistent with the Regional Plan as it proposes the development of new educational infrastructure and provides for the continued shared use of facilities with the community to meet the needs of Sydney.
- 3.2.5 The proposal is consistent with the Central City District Plan as it would provide additional and contemporary school infrastructure on the site of an existing educational establishment.

#### 3.3 NSW Future Transport Strategy 2056

- 3.3.1 The Future Transport Strategy 2056 is an update to the NSW Long Term Transport Master Plan 2012 and outlines a planned and coordinated set of actions to address the challenges faced by the NSW transport system to support the State's economic and social performance over the next 40 years.
- 3.3.2 The proposed development contributes to the strategy as:
  - the site is located within walking distance to a number of public transport services.
  - it provides active transport travel options by providing bicycle parking spaces.

## 3.4 State Infrastructure Strategy 2018 – 2038

- 3.4.1 The State Infrastructure Strategy brings together infrastructure investment and land-use planning for NSW and makes recommendations for each of the state's key infrastructure sectors including education.
- 3.4.2 The proposed development contributes positively to the strategy as:

- the school provides new facilities to support the demand for increased student enrolments in the non-government school's sector.
- it provides upgraded learning spaces and modern, innovative learning environments.

## 3.5 Draft Westmead 2036 Place Strategy

- 3.5.1 The draft Westmead 2036 Place Strategy (draft Strategy) was exhibited between 14 December 2020 and 31 March 2021 and is currently under consideration by the Department.
- 3.5.2 The Department's website states that the draft Strategy sets out a vision to develop the Westmead precinct as a world-class health and innovation district over 20 years. The draft Strategy would have relevance during strategic planning processes and future planning proposals, through future Ministerial Direction under Section 9.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), which requires planning authorities to give effect to a strategy by considering the vision, objectives, planning priorities and actions in it.
- 3.5.3 The draft Strategy establishes a planning framework which emphasises connectivity, productivity, livability, and sustainability. The Department notes, however, that it does not set objectives for, or outline the scale of, development that should occur at the WCC site.
- 3.5.4 The proposed development contributes to the elements of the strategy as:
  - the school provides new facilities to support the demand for increased primary school student enrolments, noting projected residential growth in Westmead South and Parramatta North.
  - it provides upgraded learning spaces and modern, innovative learning environments.
- 3.5.5 On 25 March 2021, the Department requested that the Applicant address the draft Strategy in detail with respect to the proposal beyond the reference provided in the supplementary traffic report dated 23 December 2020.
- 3.5.6 On 1 April 2021, the Applicant submitted SRtS providing details to how the proposal is consistent with the draft Strategy with respect to the 'Big Moves' and 'Strategic Directions'. The Applicant also submitted a copy of their submission provided during the exhibition to the draft Strategy.
- 3.5.7 The Department notes that the draft Strategy includes a plan for future connections within the Westmead precinct. The connections within the precinct are relevant to the assessment of the proposal and therefore provided in the **Figure 24**.

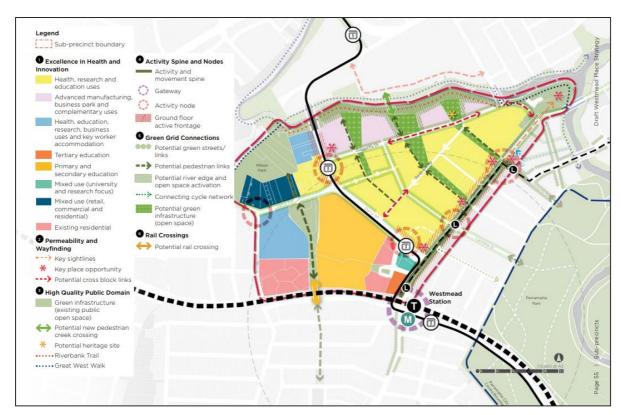


Figure 24 | Future connections within the Westmead precinct (Source: draft Strategy 2021)

3.5.8 The application, as amended, includes a through site pedestrian link and a Green Travel Plan that demonstrate that the proposal would capitalise on transport connectivity and reduce car dependency. The Department therefore considers that the proposal, as amended, is generally consistent with the draft Strategy, but would require additional measures to align with the objectives of the Strategy, as discussed in **Section 6.2.** Conditions have been recommended by the Department to ensure that the proposal, when delivered, would comply with the draft Strategy throughout its future operation.

# 4 Statutory context

## 4.1 State Significant Development

- 4.1.1 The proposal is SSD under section 4.36 (development declared SSD) of the EP&A Act, as defined under clause 15(2) of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP), as it is development for the purpose of an educational establishment comprising alterations or additions to an existing school, with a CIV of more than \$20 million.
- 4.1.2 Clause 8(2) of the SRD SEPP provisions confirm that where a single proposed development, in this instance the school component, is the subject of one development application and comprises development that is only partly State significant development declared under subclause 8(1), then the remainder of the development is also declared to be State significant development.
- 4.1.3 The proposed ELC and the church (place of worship) are sufficiently related to the school. The entire development is considered to be SSD.
- 4.1.4 In accordance with clause 8A of the SRD SEPP and section 4.5 of the EP&A Act, the Independent Planning Commission (Commission) is the consent authority as Council has made an objection to the proposal.

# 4.2 Permissibility

- 4.2.1 The site is identified as being located within the SP2 Infrastructure (Educational Establishment) zone under the Parramatta Local Environmental Plan (PLEP) 2011. The centre-based child-care facility (ELC) is permissible in the zone with consent.
- 4.2.2 An educational establishment or school, including any development and any other development that is ordinarily incidental or ancillary to an educational establishment, is permissible with consent within all the zones by virtue of clause 35(1) of the State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP).
- 4.2.3 The church, which is defined as a 'place of public worship', is permissible on the basis that it is ancillary to the educational establishment. The Applicant advised that, for the majority of the time, the church would be used for services, classes, events and meetings for the students, teachers and families attending the schools at the WCC site (as detailed in **Section 2**). The Department is satisfied that the weekend use of the church would be secondary to the weekday uses associated with the school, and that there are inextricable links between the church and the schools.
- 4.2.4 Noting the above, the Commission may determine the carrying out of the development.

## 4.3 Other approvals

4.3.1 Under section 4.41 of the EP&A Act, a number of other approvals are integrated into the SSD approval process, and consequently are not required to be separately obtained for the proposal.

- 4.3.2 Under section 4.42 of the EP&A Act, a number of further approvals are required, but must be substantially consistent with any development consent for the application (e.g. approvals for any works under the *Roads Act 1993*).
- 4.3.3 The Department has consulted with the relevant public authorities responsible for integrated and other approvals and considered their advice in its assessment of the application.

#### 4.4 Mandatory Matters for Consideration

# **Environmental Planning Instruments**

- 4.4.1 Under section 4.14 of the EP&A Act, the consent authority is required to take into consideration any environmental planning instrument (EPI) that is of relevance to the development the subject of the application. Therefore, the assessment report must include a copy of, or reference to, the provisions of any EPIs that substantially govern the project and that have been considered in the assessment of the proposal.
- 4.4.2 The Department has undertaken a detailed assessment of these EPIs in **Appendix B** and concludes that the proposal is not consistent with the requirements of all relevant EPIs. The details of the non-compliance are also discussed in **Section 6** and **Appendix B**.

#### **Objects of the EP&A Act**

4.4.3 The objects of the EP&A Act are the underpinning principles upon which the assessment is conducted. The statutory powers in the EP&A Act (such as the power to grant consent) are to be understood as powers to advance the objects of the legislation, and limits on those powers are set by reference to those objects. Therefore, in making an assessment, the objects should be considered to the extent they are relevant. A response to the objects of the EP&A Act is provided in **Table 3**.

Table 3 | Response to the objects of section 1.3 of the EP&A Act

## **Objects of the EP&A Act** Consideration (a) to promote the social and economic The proposal redevelops an existing urban site welfare of the community and a better close to services and public transport. The environment by the proper management, proposal would not impact on any natural or development and conservation of the artificial resources, agricultural land or natural State's natural and other resources, areas. The proposal seeks to maximise the use of the site and provides some public benefits including increased student capacity, improved teaching and learning facilities, and construction and operational jobs. The public benefits contribute somewhat to the social and economic welfare of the community, the merits of which are discussed in Section

**6.6**. The Department considers the proposal is in

		the public interest, subject to recommended conditions discussed in <b>Section 6</b> .
(b)	to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The proposal includes measures to deliver ecologically sustainable development (ESD), as detailed below.
(c)	to promote the orderly and economic use and development of land,	The proposal involves the economic use of the land as it would provide for the redevelopment of an existing school on land that is appropriately zoned for educational uses.
		The Applicant has proposed a number of measures to ensure not only the project site, but also the WCC can accommodate the proposed intensification of educational development and operations. The Department supports these measures, but considers that there are some residual impacts, in terms of traffic and pedestrian connectivity, which need to be managed through additional conditions. Subject to the implementation of these conditions, the proposal would promote the orderly use of the land. The merits of the proposal are considered in <b>Section 6</b> .
(d)	to promote the delivery and maintenance of affordable housing	Not applicable.
(e)	to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The proposal involves the removal of existing native trees. However, these would be replaced with new native trees and landscaping. Overall, the development would not adversely impact on any native animals and plants, including threatened species, populations and ecological communities, and their habitats.
(f)	to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The proposal would have a negligible impact on the built and cultural heritage, including Aboriginal cultural heritage (see <b>Section 6</b> ).
(g)	to promote good design and amenity of the built environment,	The design of the proposed buildings is acceptable within the context of the site (see <b>Section 6</b> ).

 to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants, The proposal is supported by detailed reports, including a structural report and a Building Code of Australia compliance statement, which demonstrate that the development is capable of meeting relevant construction standards.

As discussed in **Section 6.6**, the development is considered to provide appropriate internal amenity for users.

 to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State, The Department publicly exhibited both the proposal and then the amended proposal, which included consultation with City of Parramatta Council and other public authorities and consideration of the responses received (Sections 5 and 6).

 to provide increased opportunity for community participation in environmental planning and assessment. The Department publicly exhibited the proposal which included notifying adjoining and surrounding landowners and placing a notice in the local newspapers. The EIS was made available on the Department's website.

The amended proposal was also exhibited for 14 days by the Department and made available on the Department's website.

#### **Ecologically sustainable development**

- 4.4.4 The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:
  - the precautionary principle.
  - inter-generational equity.
  - conservation of biological diversity and ecological integrity.
  - improved valuation, pricing and incentive mechanisms.
- 4.4.5 The development proposes ESD initiatives and sustainability measures, including:
  - the use of natural ventilation and mixed-mode air conditioning, reducing energy consumption.
  - highly efficient façade system designed to respond to the local climate, including sunshades, and constructed of robust and durable materials.
  - installation of thermal insulation.
  - use of low total volatile organic compound paints, sealants, adhesives and floor coverings.
  - acoustic separation between spaces.

- 4.4.6 The EIS indicates that the principles of Green Star performance have been considered and incorporated into the Project-specific 'sustainability strategy', to ensure continued optimal operational performance through the fine tuning of systems and operational standards. The Applicant has demonstrated that the proposal can achieve a 4-star Green Star Rating.
- 4.4.7 The Department has considered the proposed development in relation to the ESD principles. The precautionary and inter-generational equity principles have been applied in the decision-making process through a rigorous assessment of the environmental impacts of the proposed development. The proposed development is consistent with the ESD principles as described in Appendix P of the EIS, which has been prepared in accordance with the requirements of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation).
- 4.4.8 Overall, the proposal is consistent with ESD principles and the Department is satisfied the proposed sustainability initiatives would encourage ESD, in accordance with the objects of the EP&A Act.

#### **Environmental Planning and Assessment Regulation 2000**

4.4.9 Subject to any other references to compliance with the EP&A Regulation cited in this report, the requirements for Notification (Part 6, Division 6) and Fees (Part 15, Division 1AA) have been complied with.

#### **Planning Secretary's Environmental Assessment Requirements**

4.4.10 The EIS is compliant with the Planning Secretary's Environmental Assessment Requirements (SEARs) and is sufficient to enable an adequate consideration and assessment of the proposal for determination purposes.

### Section 4.15(1) matters for consideration

4.4.11 The matters for consideration under section 4.15(1) of the EP&A Act that apply to SSD in accordance with section 4.40 of the EP&A Act are addressed in **Table 4**.

Table 4 | Section 4.15(1) matters for consideration

Section	on 4.15(1) Evaluation	Consideration				
(a)(i)	any environmental planning instrument	The Department's consideration of the relevant EPIs is provided in <b>Appendix B</b> of this report.				
(a)(ii)	any proposed instrument	The Department's consideration of the relevant draft EPIs is provided in <b>Appendix B</b> of this report.				
(a)(iii)	any development control plan (DCP)	Under Clause 11 of the SRD SEPP, DCPs do not apply to SSD. Notwithstanding, the Department has considered the relevant requirements of the DCP in <b>Section 6</b> .				
entere	) any planning agreement that has been d into or any draft planning agreement developer has offered to enter into	Not applicable.				

(a)(iv) the regulations	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to applications (Part 6 of the EP&A Regulation), public participation procedures for SSD and Schedule 2 of the EP&A Regulation relating to EIS.
(a)(v) any coastal zone management plan	Not applicable.
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	The EIS, RtS and supplementary RtS (including the amended proposal) adequately demonstrate that all likely impacts of the development can be appropriately mitigated, subject to implementation of additional conditions in relation to traffic and pedestrian connectivity – details are discussed in <b>Section 6</b> .
(c) the suitability of the site for the development	The information provided adequately demonstrates that the site is suitable for the development, subject to additional conditions in relation to traffic and pedestrian connectivity as discussed in <b>Section 6</b> .
(d) any submissions	Consideration has been given to the submissions received during the exhibition period and discussed in <b>Sections 5</b> and <b>6</b> .
(e) the public interest	The proposal is considered to be in the public interest, subject to the implementation of additional conditions as discussed in <b>Section 6</b> .

### **Biodiversity Conservation Act 2016**

- 4.4.12 Section 7.9(2) of the Biodiversity Conservation Act 2016 requires all applications for SSD to be accompanied by a Biodiversity Development Assessment Report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.
- 4.4.13 The Applicant submitted a BDAR waiver request as part of the EIS. The Environment, Energy and Science Group (EESG) of the Department reviewed the request and concluded that the development is not likely to have any significant impact on biodiversity values. Therefore, on 9 September 2020, the Department determined that the application is not required to be accompanied by a BDAR and a waiver in this regard was issued for the development.

# 5 Engagement

### 5.1 Department's engagement

- 5.1.1 In accordance with Schedule 1 of the EP&A Act and Part 5, Division 6 of the EP&A Regulation, the Department publicly exhibited the application from 2 April 2020 until 29 April 2020 (28 days) by placing an advertisement in the local paper. The application was also made publicly available on the Department's website.
- 5.1.2 The Department notified landholders and relevant public authorities in writing. Representatives of the Department also visited the site on 9 July 2020 to provide an informed assessment of the proposal.
- 5.1.3 The Department has considered the advice raised in the public authority submission/comments and public submissions during the assessment of the application. The submissions received are summarised in the following section of this report.

### 5.2 Summary of submissions and advices

5.2.1 A summary of the submissions and public authority advice received is provided in **Table 5**. Copies of the submissions and advice may be viewed at **Appendix A**.

Table 5 | Summary of submissions and advice

Submitter	Number	Position
Councils	2	
City of Parramatta Council (Council)	1	Object
Cumberland Council	1	Comment
Community	1	Support
TOTAL	3	
Public Authorities	13	
Transport for NSW	1	Comment
NSW Ambulance	1	Comment
Air Services Australia	1	Comment
Civil Aviation Safety Authority	1	Comment
Crown Lands, DPIE	1	Comment
Environment Protection Authority	1	Comment

DPIE Water and the Natural Resources Access Regulator	1	Comment
DPIE Environment, Energy and Science Group	1	Comment
Heritage Division, Department of Premier and Cabinet	1	Comment
Sydney Water	1	Comment
Water NSW	1	Comment
Endeavour Energy	1	Comment
Sydney Trains	1	Comment

### 5.3 Public authority submissions and advice

5.3.1 A summary of the issues raised in the Council submissions and public authority advice is provided at **Table 6** and copies of the submissions and comments may be viewed at **Appendix A**.

Table 6 | Summary of Council submissions and public authority advice to the EIS exhibition

#### Council

Council objected to the application due to the proposal's potential impacts in relation to traffic, loss of open space and a lack of connectivity. Council provided the following comments and recommendations:

#### Traffic:

- the traffic from the development associated with the drop-off / pick-up from the primary school has a high volume and is concentrated in a short period.
- the development would likely result in traffic generation figures of 534 and 606 cars
  respectively during the AM and PM drop-off / pick-up, which exceeds the capacity of the
  pick-up and set down area (given as 233 in 15 minutes). This would result in queuing
  back onto Darcy Road extending beyond the turn bays, with no management methods
  proposed.
- operational impacts to the level of service at the primary school access driveway and Bridge Road, and the intersection of Bridge Road and Darcy Road, are unacceptable given the role of the Westmead precinct.
- the large catchment of the independent school would reduce the proportion of students walking to and from school, and a large regional primary school such as this, in this location is unlikely to benefit significantly from the proposed public transport improvements within the precinct.
- increased traffic from the school could restrict future development in the area, placing identified future expansion opportunities for hospitals and university sites within the Westmead Precinct at risk.

- the lack of a pedestrian/vehicular permeable road network around the site reduces options for traffic dispersion.
- the proposed vehicle and bicycle parking provision is acceptable.
- the application fails to provide information about the management of pedestrians crossing the primary school driveway at Darcy Road.

#### Connectivity

- the site is located within an extremely large street block that is not conducive to walking, and an alternative access to the site should be created between the school buildings and the playing fields.
- an alternative access road should connect to Farmhouse Road South to the east and Bridge Road to the west, providing a more level access to Hawkesbury Road and a less hostile pedestrian environment than Darcy Road.

#### Open space and recreation

- the proposed development results in the loss of current recreation space within WCC including a junior sports field, as well as a reduction of multi-use courts from six to two.
- the reduction in open space reduces the availability of active recreational opportunities
  and a likely decreased capacity on the WCC site to accommodate the additional student
  numbers sought under this application (noting that the Applicant is also planning
  subsequent stages).
- both of the existing high schools within the WCC currently access Council sportsground
  facilities for active sport and recreation. This is required because the school is unable to
  cater for their own recreation needs on their own site. Council is unable to accommodate
  any increased demand created by the reduced open space and active recreational
  facilities within the WCC and has even less capacity to cater for the additional student
  population.
- the Applicant's Social Impact Assessment has not addressed the impact of the loss of open space and recreational facilities, nor the resulting impact on the ability of students to undertake adequate levels of physical activity within the vertical play areas.

### Zoning and permissibility

- a 'place of worship' is not permitted within the SP2 Educational Establishment zone.
- the proposed church does not rely on the school for operation, and the use is arguably a dominant use in its own right and would not be permissible.
- given the objectives of the zone and nature of uses, the Council would not object to the Department allowing the church use should it feel that it is appropriate to do so.

#### **Accessibility**

- all aspects of the public domain must be delivered according to the requirements of the Australian Standards and best practice universal design.
- pathways with a gradient of less than 1:20 and cross falls no greater than 1:40 should connect accessible buildings, facilities and spaces including transport stops, parking areas, drop off zones and public streets and footpaths surrounding the site.

#### **Biodiversity**

• given the size of the site, consideration should be given to the incorporation of Water Sensitive Urban Design (WSUD) drainage systems e.g. deep soil, bio-swales, wetlands.

#### Stormwater

 water quality of stormwater discharges should comply with Council's Development Control Plan (DCP) 2011 and modelled using 'MUSIC' or similar software. This information has not been provided as part of the EIS.

#### **Environmental health**

- the Hazardous Materials survey, dated 2016, is out of date. A new survey is required.
- insufficient information has been provided in relation to food storage areas. However, this could be addressed by way of condition, if the application is approved.

#### **Development contributions**

 the land is located within the 'outside CBD development contributions plan', and therefore a 1% levy is required. An exemption from payment should not be granted, and local contributions of \$804,742.45 should be secured by way of condition.

#### **Staging**

 the application is the first of three stages of future development for the school site, and the Applicant should be more transparent with these ambitions to allow for consideration of how the application would fit with proposed later stages.

### Other comments (from Councillors attached to Council's submission)

- the timeframe to respond to the Department during exhibition period is not sufficient.
- the demolition of the Monastery building, currently part of the Parramatta Marist High School would result in adverse heritage impacts.
- the recent lessons from Arthur Phillip High School and Ministerial directions on high rise schools should be incorporated in this proposal.
- disability access for the primary school and multi-storey carpark should be provided.
- limited communication and engagement of the community has been carried out.
- the proposed locality of the church within a school site is concerning and would impact on the capacity of the site to meet normal school activities.
- the school swimming pool was closed by the Catholic Diocese in recent years which means there are no swimming activities provided for the students.
- the demolition of Morley Centre hall which provides the entire Parramatta Marist High School with an assembly area is very concerning.
- the plans do not provide detail of the future use of the project site.
- safety of students, parents, teachers and wider community has not been considered in an already busy locality.
- the plans fail to recognise the existence of the Parramatta Marist war memorial on the site.
- the Applicant needs to consider the cumulative traffic impacts of the development with the expansion of the surrounding universities.
- the Applicant should consider an alternative proposal to build a high-rise primary school and church at the current Sacred Heart Parish site in Ralph Street Westmead which would be a better site for such a development and would avoid overdevelopment within the WCC site.

#### **Cumberland Council**

Cumberland Council advised no comment, as the site is not within the Cumberland LGA.

#### Other public authority advice

#### **Transport for NSW (TfNSW)**

TfNSW provided the following advisory comments:

#### Transport and Accessibility Impact Assessment (TAIA)

- it is unclear if the future multi-storey carpark (subject to a separate DA) is included in the traffic modelling outputs, and additional information should be provided on how the parking demand could be managed within the context of the SSD should the multi-storey carpark not be available.
- the TAIA should be revised to reflect changes to bus services in the area.
- the TAIA must be revised to consider the impact of the Sydney Metro West.
- the TAIA must provide details of daily service vehicle movements, and details of how coaches are to be deployed servicing the proposed development (access, pick-up / dropoff, and layover)

#### **Green Travel Plan (GTP)**

 noting that the proposed development would result in a significant increase in students and staff, the GTP should be further developed with information and more robust actions.

### **NSW Ambulance**

NSW Ambulance advised that during construction, the jib of the proposed crane would come to within 150 m to the north of the helicopter approach pathway to Westmead Hospital, representing little margin for flight error. Therefore, it is essential that the crane(s) are well lit, and NSW Ambulance provided detailed minimum aviation safety lighting requirements.

#### Air Services Australia

Air Services Australia confirmed that the proposal would not affect any sector or circling altitude, nor any instrument approach or departure at Westmead hospital nor Sydney Radar Terrain Clearance Chart. The proposal would also not adversely impact the performance of Precision/Non-Precision Navigational Aids, High Frequency/Very High Frequency, Radar, Communications, Advanced Surface Movement Guidance and Control Systems, Precision Runway Monitor, Automatic Dependent Surveillance Broadcast, Wide Area Multilateral or Satellite/Links.

#### **Civil Aviation Safety Authority (CASA)**

CASA raised no objections to the proposal, however noted that they do not regulate helicopter landing sites (i.e. Westmead hospital).

#### **Environment Protection Authority (EPA)**

EPA advised that they have no comment on the proposal, noting that it does not constitute a Scheduled Activity under Schedule 1 of the *Protection of the Environment Operations Act 1997*, does not require an Environment Protection Licence, nor is proposed to be carried out by or on behalf of a public authority.

### **DPIE Water and the Natural Resources Access Regulator (NRAR)**

DPIE Water and NRAR recommended that prior to approval, the Applicant:

- should identify the water source and quantity required for the construction and operation of the development.
- must obtain a Water Access Licence should the project be required to dewater 3
  megalitres or greater of groundwater per year, in accordance with the Water
  Management (General) Regulation 2018.

### **Crown Lands**

Crown Lands noted that no Crown land is affected and raised no comments on the proposal.

#### **EESG**

EESG noted that a BDAR Waiver was previous approved and raised no comments regarding flooding. EESG recommended the following:

- should approval be granted, any recommendations within the submitted Aboriginal Cultural Heritage Assessment Report (ACHAR) should form part of conditions of consent.
- as part of a condition of consent, a landscaping plan should be submitted indicating any
  proposed planting in the riparian corridor which should consist of a diversity of local
  native provenance species from the relevant native vegetation community.
- as part of any approval, a condition of consent should require a Landscaping Strategy be prepared.

#### **Sydney Trains**

Sydney Trains advised no comments, as the proposed works are distant from land in their ownership or any of their assets.

### Heritage Division of the Department of Premier and Cabinet, NSW (HNSW)

HNSW provided the following comments and recommendations:

- the EIS does not reflect all of the assessment and recommendations found in the Statement of Heritage Impact (SOHI).
- the SOHI does not adequately advise if 'relics' would be of State or local significance and advised that HNSW would assume the potential historical archaeology is of local significance.
- a permit to undertake an archaeological assessment is not required for SSD applications, as the provisions of the *Heritage Act 1977* are suspended by the SSD.
- the SEARs have not been fully addressed, as the submitted documents have not provided an Archaeological Research Design and Excavation Methodology.
- regardless of the above, HNSW recommended:
  - nomination of a suitably qualified Excavation Director who complies with the Criteria for Assessment of Excavation Directors (HNSW, 2019).
  - preparation of an Archaeological Assessment, Research Design and Excavation Methodology.
  - submission of a final archaeological report to HNSW within one year of the completion of archaeological excavation.
  - the cessation of works in affected areas(s) and notification of HNSW, where any previously unidentified substantial or intact archaeological deposits are found.

#### **Sydney Water**

Sydney Water provided the following comments and recommendations:

- potable water and wastewater servicing should be available via a watermain on Darcy Road. Amplifications, extensions and multiple connection points may be required.
- special requirements such as firefighting requirements apply to the development, and detailed requirements should be provided at the Section 73 application phase.

#### **WaterNSW**

WaterNSW advised no comment, as the site is not located near any WaterNSW land, assets or infrastructure.

#### **Endeavour Energy**

Endeavour Energy advised that they do not reserve supply for proposed developments, and there is no guarantee that the current surplus capacity within the existing local network would remain available. Endeavour Energy also advised that the connection of load to the network would need to be managed by an Accredited Service Provider.

#### 5.4 Public submissions

5.4.1 The Department received one public submission in support of the application during the EIS exhibition period.

5.4.2 Following completion of the exhibition period, the Department received a further public correspondence, and two additional correspondence forwarded by Council including one petition (with 214 typed names) objecting to the proposal. While these are not considered as formal submissions (having been lodged outside of the statutory exhibition period), the Department has considered the issues raised in the correspondence and summarised in **Table 7**.

**Table 7** | Summary of the public correspondence in objection to the proposal

Issue	Proportion of objections (%)
Increased road congestion during student drop-off / pick-up.	100
Concern that the proposal represents an over-development of the site.	33
Lack of open space provided for students.	33
Lack of sunlight within proposed play areas.	33
Lack of consultation with school stakeholders including parents.	33

### 5.5 Response to submissions

- 5.5.1 Following the exhibition of the application, the Department placed copies of all submissions and advice received, on its website, and requested the Applicant provide a response to the issues raised.
- 5.5.2 The Department also identified additional issues and sought clarification from the Applicant in relation to the following:
  - further justification regarding the reduction in available open space to service the proposed school and the lack of proposed ground level open space to adequately meet the physical recreation needs of the students at the new public school.
  - clarification regarding the total area of open space provided within the building, noting that
    pedestrian circulation areas between classrooms should not be included in the open space
    calculations.
  - details regarding solar / daylight access to the upper level open spaces.
  - additional details regarding the acoustic impact of the placement of open space adjacent to classrooms, and the suitability of the proposed handball court at ground floor.
  - details of specific safety features proposed to ensure student safety while using the upper level open spaces of the building.
  - clarification whether the proposed development would make use of the future multi-storey carpark on the site (approved as part of a separate development application to Council), and information regarding how it would be linked to the proposed development.
  - submission of an additional plan to detail car parking allocation at the site for each proposed
  - clarification regarding drop-off / pick-up areas for the ELC.
  - further information regarding bicycle parking spaces and end-of-trip facilities.

- additional information regarding the broader draft site masterplan, and in particular further justification for the relocation of the Sacred Heart Primary School and existing church from Ralph Street.
- additional information regarding the use of the church, including patronage details, justification
  for weekend use of the church to be considered an ancillary service of the school, and
  additional traffic and noise impacts that may arise due to weekend use.
- further information regarding the out of hours use of the school buildings/grounds by the community and users of OOSH care.
- additional justification for the proposed removal of trees along the Darcy Road frontage, and a detailed calculation of the proposed tree canopy on site.
- the submission of a wind impact assessment including human and pedestrian comfort criteria, including consideration of the rooftop play areas.
- provision of hourly elevational shadow diagrams for the proposed development during the winter solstice.
- provision of architectural plans which include the outline of the roof over each floor to identify the covered open space area on each level.
- provision of a photomontage to demonstrate the proposed buildings in relation to the existing buildings on site.
- 5.5.3 On 7 August 2020, the Department held a meeting with Council and TfNSW to discuss the traffic impacts of the proposal and the feasibility of traffic mitigation measures for the site. Following this meeting, Council sent an email to the Department on 20 August 2020 reiterating:
  - their traffic concerns including proposed OOSH facility, justification for the 10% modal shift, queuing into the site from Darcy Road, drop-off / pick-up arrangements.
  - that access to Farmhouse Road and Bridge Road should be provided from the site to facilitate alternate (east-west) pedestrian movements and support the modal split.
- 5.5.4 On 14 September 2020, the Applicant provided a RtS which included some amendments to the proposal (**Appendix A**). The RtS sought to address the issues raised during the exhibition of the EIS and proposed the following amendments:
  - alterations to proposed drop-off / pick-up bays, resulting in a total of 26 bays (five fewer than
    previously proposed). The Applicant advised that the revised layout would allow for greater
    traffic flow efficiency and improved safety for students, through the elimination of the need for
    vehicles to reverse into drop-off / pick-up bays.
  - omission of the proposed works associated with the fit-out of the administration area at the ground floor level of the ELC.
  - additional traffic and transport information was provided, outlining an assumed 'best-case' scenario whereby 40 – 48% of the primary student population attends the OOSH facility and these students travel to school before or after the school peak periods.
  - electronic SIDRA files for assessment.

### 5.6 Submissions to RtS

5.6.1 The RtS was notified to Council, Cumberland Council and relevant public authorities who commented on the EIS. A copy of the RtS was placed on the Department's website.

5.6.2 An additional two submissions were received from Council and advice was received from seven public authorities. A summary of the issues raised by public authorities is provided in **Table 8** and copies may be viewed at **Appendix A**.

Table 8 | Summary of Council submissions and public authority advice to the RtS

#### Council

Council maintained its objection to the proposal in response to the RtS. The following key issues remained:

#### **Traffic**

- the peak arrival traffic volumes which form the basis of the modelling scenarios rely on a 'best-case' 40 – 48% of primary students using the OOSH which is considered unachievable and is not evidence based, particularly in the AM peak.
- the modelled 10% modal split for primary school is considered optimistic, particularly as its catchment area would increase beyond the existing primary schools operating from this site and also the Sacred Heart's site.
- the proposal would increase traffic volumes at several intersections surround the site.
- the assumptions used to inform the modelling scenarios are unlikely to be achieved and are not supported, and as such the modelling scenarios do not accurately reflect the impact of the proposal.
- the impact of the development on surrounding intersections continues to be unacceptable and no suitable options to offset the impact have been explored, including the potential for a direct connection from Bridge Road to the school.

#### Connectivity

 the issue of connectivity is deferred to future 'ongoing development of the campus', however the proposed significant site intensification that results from this development warrants improved pedestrian connections be delivered as part of this development.

#### Open space and recreation

the cumulative impact of the loss of sporting fields within the WCC site on the likely need
to rely on Council facilities have been inadequately addressed, and Council raised
concerns that there would be an adverse social impact on student wellbeing by the
reduction in areas for physical activity within the site to an acceptable standard.

#### **Development contributions**

 Council did not support the assertion that the development would not generate additional demand for services and requested a commitment to pay development contributions in accordance with Council adopted contributions plan.

#### **TfNSW**

TfNSW reviewed the submitted SIDRA model and provided two submissions with the following comments:

 the future multi-storey carpark's signalised exit location currently has low demands and is expected to significantly change which needs to be considered in the applicant's modelling.

- the impacts to surrounding classified network (including the T-way) and existing traffic signal site operations is not clear with the information provided in the RtS.
- electronic SIDRA files should be provided for further review.
- the proposal may need to provide mitigation measures irrespective of a favourable SIDRA modelling review to bring the site to current and acceptable standards.
- the additional demands at the intersection of Darcy Road and Catherine McAuley Street lowers the performance of Darcy Road, and modelling indicates that a reduction of green time for Darcy Road is required to achieve acceptable level of service. However, the same distribution of green time can be accommodated for Darcy Road if Catherine McAuley Street has two exit lanes, one being an exclusive left turn lane, and this is considered a more acceptable solution.
- the proposed layout for Hawkesbury Road and Darcy Road with the PLR (time settings and phasing of lights), should be included in the Applicant's SIDRA modelling.
- the future PM model also includes an internal dummy intersection of an additional 600 two-way vehicles which are not linked to any other intersection and should be clarified and the justification for them being included in the model be provided.

#### CASA

CASA raised no objections to the proposal and noted that the NSW Ambulance had provided aviation safety lighting requirements for construction cranes and has liaised with relevant helicopter operators.

#### **DPIE Water and NRAR**

DPIE Water and NRAR advised no further comments.

#### **EESG**

EESG noted that Aboriginal cultural heritage regulation is now managed by Heritage NSW and advised no further comment in relation to biodiversity or flooding. EES reiterated that should approval be granted, conditions of consent relating to landscaping should be included.

#### **Endeavour Energy**

Endeavour Energy advised that the recommendations and comments provided previously remain valid.

#### **HNSW**

HNSW accepted the updated Statement of Heritage Impact, which indicates that the study area does not have any historic heritage items or areas of historical archaeology. Recommended that the Construction Environmental Management Plan (CEMP) includes an unexpected finds protocol.

### **HNSW Aboriginal Cultural Heritage (HNSW ACH)**

HNSW reviewed the submitted ACHAR, and provided the following comments and recommendations:

- the Aboriginal heritage values of the project are not adequately described, and an archaeological test excavation has not been completed.
- requested the Applicant should supply further information on the research design and test excavation methodology in the form of detailed mapping and supporting information, delineating the area of archaeological sensitivity and the locations of the proposed test pits.
- the impacts on Aboriginal cultural heritage values have not adequately been addressed, and the ACHAR should be revised to clearly identify the nature and extent of the proposed activity and assess the potential for the activity to impact upon Aboriginal cultural heritage values.
- the ACHAR does not attempt to avoid impact or identify conservation outcomes, and the document should include these requirements.
- the proposed mitigation measures are not adequately described or justified.

#### **Cumberland Council**

Cumberland Council advised no comment on the RtS.

### 5.7 Supplementary RtS (SRtS)

#### **Traffic and transport**

- 5.7.1 Noting the Council and other public authority comments and complexities of the application, the Department procured an independent traffic consultant (Bitzios Consulting) to conduct a peer review of the TAIA and traffic related documentation. Based on the independent traffic consultant's initial report (Bitzios report) and Council's comments on the RtS, the Department raised the following additional concerns regarding the traffic impacts of the development and the lack of sufficient quality information provided by the Applicant:
  - traffic surveys and results, including:
    - details on sample size of the survey, the names of the primary school/s surveyed and the methodology of the survey
    - a breakdown of vehicular trips generated by the development for different hours including school peak hours and regular peak hours.
  - clarification regarding the assumption that 40 48% of primary school students would make use of the OOSH care facilities, including:
    - justification to support the 40% figure used (including additional case studies of similar schools or surveys).
    - o information on the arrival and departure patterns of the existing OOSH trips.
    - assessment of the impact of the OOSH with 40 48% student population.

- details of additional staff members to be employed to cater for the additional student population in the OOSH and the associated vehicular trip generation.
- clarification of intersection performance assumptions.
- clarification regarding the submitted SIDRA modelling and request for the provision of technical files noting that the TfNSW data containing traffic cycle time, phase time, phase sequence and signal co-ordination information have likely not been used.
- reassessment of the base models used for the SIDRA modelling, noting that those used do not
  match with the model network settings and parameters and may result in inaccurate key
  modelling results and network analysis.
- a queue analysis for each site access for the AM and PM peak including information on the average observed queue lengths, explanations for varying queue observations, and any mitigation measures to address identified impacts.
- additional information or SIDRA models considering the impacts due to PLR.
- additional pedestrian safety analysis and consideration of safety measures.
- a revised TAIA assessing the cumulative impacts associated with other construction activities, including the PLR, and an assessment of road and pedestrian safety during the construction phase of the development.
- further justification and explanation of the assumed vehicle occupancy rates used.
- clarification and justification of the 10% modal shift assumption used to inform the GTP, noting that this seems to be too high (a maximum of 3-5% shift is considered achievable.
- 5.7.2 On 4 December 2020, the Department conducted a meeting with the Applicant and Bitzios to clarify the requested information and discuss the traffic impacts.
- 5.7.3 Following the meeting with the Department, on 23 December 2020, the Applicant submitted a SRtS including traffic assessment documents (**Appendix A**) that sought to address the issues raised following the review of the RtS and the Bitzios report. The SRtS included additional traffic related technical information, some revisions to the base case scenario requested by TfNSW and Bitzios.
- 5.7.4 The Department provided the Applicant's additional information for the review of Council and TfNSW, and the documents were made publicly available on the Department's website.
- 5.7.5 Following review of the SRtS, the Department continued to hold concerns regarding the adequacy of the traffic assessment provided. While the documents referred to the SIDRA modelling as having been updated, the SIDRA model files were not submitted or made available to the Department as requested by the Department.
- 5.7.6 On 4 March 2021 the Department again requested (**Appendix A**) that the Applicant submit the updated SIDRA file together with an updated base model validation report and modelling report to support the additional traffic assessment previously provided.
- 5.7.7 On 9 March 2021 Council provided comments on the SRtS indicating the following:
  - reiterated all previous concerns with the proposed OOSH modelling scenarios and 10% modal shift.
  - provided examples of other schools in the area with OOSH attendance rates that were significantly different to that argued by the applicant as likely to occur on this site.

- reiterated the previous comments that there needs to be pedestrian access between Bridge Road and the site to move people from cars to walking and consequently reduce delays on the road network, particularly on Bridge road/Darcy Road intersection.
- informed that Council has recently been asked to comment on the Westmead 2036 Draft Place Strategy and raises concerns in relation to development and traffic specifically requesting a link providing vehicle access from Bridge Road to the WCC site.
- 5.7.8 On 10 March 2021, the Applicant corrected its previous advice and advised that no further remodelling beyond the base case SIDRA model had occurred. The Applicant included links to SIDRA model files to support the traffic assessment provided to the Department to date. This letter of clarification was made publicly available on the Department's website.
- 5.7.9 On 22 March 2021, the Department held a meeting with TfNSW to discuss the application and the technical aspects of the traffic documentation.
- 5.7.10 On 29 March 2021, TfNSW provided comments to the Department on the SRtS. TfNSW submission indicated the technical note provided by the Applicant on the SIDRA modelling calibration methods was calibrated by adjusting the cycle times to match the queue lengths. Additionally, TfNSW stated that to adequately assess the potential impacts of a development the base case model must replicate observed street conditions.
- 5.7.11 On 31 March 2021 the Department received the final Bitzios report with numerous concerns and unresolved issues regarding the proposal.
- 5.7.12 On 19 May 2021, the Department wrote to the Applicant raising concerns that the traffic information submitted did not enable a comprehensive assessment to indicate that the development would not have significant and acceptable impacts on Darcy Road. Additionally, the Department raised concerns that the information submitted with respect to the quality and quantity of open space and recreational space proposed was not satisfactory.
- 5.7.13 Between May 2021 and August 2021, several meetings were held between the Department, Bitzios, TfNSW, Applicant and the Council to discuss the Department's ongoing concerns with respect to traffic and open space provisions.
- 5.7.14 In August 2021, the Department also requested Bitzios to undertake an independent assessment of the impacts of the proposed development on the surrounding road network. In response, Bitzios prepared a traffic analysis report on 8 September 2021, which:
  - recalibrated and re-validated the 2018 based SIDRA model using TfNSW guidelines.
  - provided additional analysis on the expected trip generation due to the development.
  - provided updated future year SIDRA models to reflect the expected trip generation.
  - included a sensitivity analysis to understand the level of development traffic that is likely to be serviced by the surrounding road network.
- 5.7.15 The Bitzios peer review reports are available in **Appendix D** and the results are discussed in **Section 6.2**.
- 5.7.16 The Bitzios independent traffic analysis is available in **Appendix E** and summarised in **Section 6.2**.

#### Strategic context and open space

- 5.7.17 On 24 March 2021, the Department reviewed the RtS and identified additional issues relating to open space and the proposal's alignment with the draft Strategy, and requested that the Applicant provide the following:
  - a review of the draft Strategy with respect to the proposal.
  - clarification regarding student of the new school's access to the existing high school ovals within the WCC site, the resulting recreation capacity constraints (if any) and implications on demand for access to Council sportsground facilities.
- 5.7.18 On 1 April 2021, the Applicant submitted supplementary information (**Appendix A**) that sought to address the issues relating to open space and the draft Strategy. The supplementary information was made publicly available on the Department's website.
- 5.7.19 On 4 June 2021, the Department requested information and clarification with respect to open space provision including outdoor play spaces used by OOSH, quantity of open space provided for each year group, details on circulation/access to open space within the primary school building, level of solar access to each level of covered play spaces, some of the comments provided by SDRP and an assessment with regard to the health and wellbeing of primary school students.

#### **ACHAR**

- 5.7.20 On 1 October 2020, HNSW (ACH) provided RtS advice and requested additional information with respect to ACHAR.
- 5.7.21 Following HNSW (ACH) request, on 15 October 2020, the Department requested clarification from the Applicant as to why test excavation was not carried out as per the recommendation in the submitted ACHA report submitted with the EIS.
- 5.7.22 On 10 November 2020, the Applicant submitted a response to the request for clarification which was forwarded to HNSW (ACH) for review.
- 5.7.23 On 27 November 2020, HNSW (ACH) provided advise that the concerns raised in their previous comments had been adequately addressed. HNSW (ACH) recommended test excavation to commence following the demolition works, as a condition of consent.

#### 5.8 SRtS and amended proposal

- 5.8.1 On 7 September 2021, the Applicant provided further supplementary information and included amendments to the proposal, in response to comments from the Department and public authorities.
- 5.8.2 The proposed amendments included:
  - upgrades to the main driveway providing access to the site at the north-western corner (Darcy Road / Mother Teresa intersection) including the addition of a second exit lane (turning left onto the site from Darcy Road) on the southern approach.
  - widening of the site entry at the Darcy Road / Mother Teresa intersection to accommodate the additional lane.

- upgrade to the driveway providing access to the multi-storey car park (Darcy Road / multi-storey car park) including the addition of a dedicated left-turn lane on the south-west approach of the intersection (site exit approach), provided as a 25m short lane.
- upgraded pedestrian connection within the site from Farmhouse Road.
- repositioning of the church towards the east to accommodate the further widened site entry.
- provision of new and expanded OOSH.
- removal of the primary school pick-up and drop-off area from the scope of the application as
  these works have been carried out separately as complying development under the Education
  SEPP.
- 5.8.3 The Applicant also submitted the following documents in support of the above amendments:
  - amended TAIA with SIDRA modelling, calibration and validation report with an amended OOSH capacity (lower) and some revised trip generation assumptions.
  - revised landscape plans, architectural plans and civil drawings.
  - clarification regarding open space scheduling within the site.

### 5.9 Re-exhibition of the amended proposal and submissions

- 5.9.1 The application was re-exhibited for 14 days between 10 September 2021 and 23 September 2021 inclusive on the Department's website. Adjoining landholders and relevant State and local government authorities were also notified in writing.
- 5.9.2 The Department also consulted with Council and TfNSW regarding the submitted information during the exhibition and noted the pending concerns from the public authorities.
- 5.9.3 During the re-exhibition of the application, the Department received a total of five submissions, including comment from Council and Cumberland Council and three comments from the public.
- 5.9.4 The Department also received advice from 10 public authorities.

### 5.10 Summary of submissions and comments to amended proposal

- 5.10.1 The Department received no concerns from Endeavour Energy, HNSW, EPA, NRAR, TfNSW (Sydney Trains), CASA, Sydney Water, Water NSW and Cumberland Council.
- 5.10.2 A summary of the issues raised by other public authorities and submission from Council are provided in **Table 9** below and copies may be viewed at **Appendix A**.

#### Table 9 | Summary of submissions and public authority comments to the amended proposal

#### Council

Council noted the previous consultation undertaken between the Department, TfNSW, Council and the Applicant and commented that:

- it supports the proposed traffic mitigation measures.
- it supports the clarification regarding open space.
- developer contributions should be paid.

the proposed church is not a permissible use and is not ancillary to the school.

However, Council maintained its objection due to lack of connectivity of the site with the adjoining properties and the roads and recommended that:

- the Applicant should secure a pedestrian link between Bridge Road and Farmhouse Road (eastern boundary of the site) to divert pedestrian movements away from Darcy Road as the link would also improve pedestrian access to the west and south by reducing the walking distance by approximately 450m.
- opportunities to obtain easements through the adjoining sites to connect to Bridge Road should be explored by the Applicant.
- while a vehicular access would be preferred, a pedestrian access would also improve the current situation.
- an easement securing future pedestrian access within the site from Farmhouse Road should be established to allow students and staff to access the school through the site from the east.
- except for the lack of pedestrian link, the overall masterplan is supported.
- community access to sport and recreation facilities within the site, outside of school hours should be provided.

Council commented that subject to conditions of consent requiring the creation of the pedestrian link and community access to the open space, Council would consider removing its objection.

#### **TfNSW**

TfNSW reviewed the amended proposal and supported the proposed mitigation measures by upgrading the two driveways. However, TfNSW commented that:

- the proposal may have adverse impacts on the Darcy Road / Bridge Road / Coles carpark in 2033, despite the delivery of public transport infrastructure in the Westmead precinct.
- to alleviate any negative impacts on this intersection, additional traffic mitigation work may be needed at the above intersection between 2023 and 2033 when a significant uplift in student numbers will be operational on site.
- the mitigation works are not required to be undertaken in 2023, as the intersection impacts are assessed as satisfactory in the year of opening.
- to assess the impacts of the staged increase in student numbers and the overall
  operation of the premises on the surrounding road network, further traffic analysis should
  be undertaken in the future, supported by suitable models to validate that the modelling
  assumptions made in the Applicant's TAIA are correct.
- such modelling and traffic analysis should be undertaken at 12-month intervals and the model should be calibrated and validated using methodologies endorsed by TfNSW.
- a school coach and bus parking management plan should be developed.
- a final GTP and Construction Traffic Management Plan should be developed

#### **EESG**

EESG reviewed the amended proposal and recommended a condition requiring an amended Landscape Strategy to be developed for the site to ensure that native species are added in the future landscaping.

#### Summary of public submissions

- 5.10.3 The public submissions raised the following concerns:
  - the proposed pedestrian link from Farmhouse Road would create drop-off / pick-up opportunities
    for parents from this road and create adverse impacts on the adjoining residential streets (such
    as Maple Tree Road).
  - rubbish dumping and littering would be an ongoing issue if drop-off/pick-up at Farmhouse Road increases in the future, unless permanent rubbish bins are provided in this section.
  - the application has not provided clear information about managing drop-off/pick-up on Farmhouse Road including whether a turning area would be provided on the eastern boundary if drop-off/pick-up occurs.
  - the safety of students would be compromised if they do not follow designated pedestrian paths to access the school.
  - the development would lead to additional traffic congestion on the surrounding roads.

### Independent review of amended proposal

- 5.10.4 The Department also requested Bitzios to assess the SRtS and amended proposal submitted by the Applicant.
- 5.10.5 On 20 September 2021, Bitzios provided the final comments on the amended proposal. The comments concluded that the amended proposal addresses the previous concerns regarding OOSH trip generation rate. However, the report concluded that:
  - there continue to be several gaps in the traffic modelling including theoretical estimation of trip generation, lack of queuing analysis, lack of SIDRA model calibration/validation.
  - there continue to be discrepancies in the modelled trip numbers to and from the site and the reported trip generation.
  - the OOSH capacity should be lower than assumed, based on Council's actual OOSH survey data in this area.
  - the trip distribution in the network is not clear.
  - the Application should run a sensitivity test for 2033, which has been omitted (with a 5% modal shift). This sensitivity test would provide the key design considerations and mitigation measures (if any) for nearby intersections.

### 5.11 Supplementary response to submissions after exhibition of amended proposal

5.11.1 The Department further engaged with TfNSW in October 2021 to discuss the comments provided by the public authority and the implication of the requirements on the future operation of the development.

- 5.11.2 On 14 October 2021 the Applicant provided a further SRtS responding to all submissions received during the re-exhibition period.
- 5.11.3 The Applicant's SRtS also included information regarding the overall trip generation due to the proposal, responding to the Department's request for information.
- 5.11.4 In response to the submissions received during the re-exhibition, the Applicant's SRtS indicated that:
  - an amended Landscape Strategy can be prepared and implemented post determination.
  - a through site link including required easements can be created with some alterations to the location of the pathway (south of the existing ovals). However, the Applicant also noted that a pedestrian and vehicular connection through the site (internally) would be created as part of the future masterplan for the site. Once that link is created, this easement would be extinguished.
  - improvements to the drop-off/pick-up zone within the site, the proposed modal shift and additional upgrades to the driveways would reduce traffic impacts on the surrounding network. Therefore, a further connection to Bridge Road is not necessary as part of the current proposal. As such, this connection is not feasible due to the need of multiple easements and is not within the scope of this application.
  - the proposed link through the site can be connected to Bridge Road, when such a connection is made available.
  - the church would be used as ancillary to the school.
  - objected to TfNSW request and advised that providing additional traffic analyses, in 12-month intervals would not assist in assessing the impacts due to the development as the base case conditions would continually change and therefore the results would not be comparable.
  - when an intersection study is undertaken, the school development traffic would not be able to be separated from the background traffic. Therefore, future studies at the Darcy Road/Coles carpark intersection would include changes within the network unrelated to the development.
  - given the current TAIA results the intersection is expected to experience performance issues without the school development. Therefore, any upgrades to the intersection need to be holistic, rather than requiring the Applicant to undertake the works.
  - the residential roads including Maple Tree Road are not intended to be used as a drop-off/pickup zone in the future.
  - bins can be installed at this entry to alleviate littering issues.
  - 5.11.5 The final SRtS was referred to Council and TfNSW for comments.
  - 5.11.6 TfNSW maintained their position with respect to the impacts on Darcy Road/Coles carpark intersection. TfNSW recommended conditions requiring additional traffic analysis to be undertaken at regular intervals to ensure that the impacts are monitored, and mitigation measures are proposed if, and when, needed. TfNSW does not share the Applicant's view that when the intersection study is undertaken, the school development traffic would not be able to be separated from the background traffic
  - 5.11.7 Council reviewed the Applicant's response and reiterated their concerns regarding the pedestrian connection to Bridge Road and the need to alleviate traffic impacts on Darcy Road through alternate measures.
  - 5.11.8 The Department further consulted with the Applicant in November 2021, regarding the requirements to conduct yearly traffic assessments and the approach to evidence based

- (dependent on the results of the traffic modelling) mitigation measures for the Darcy Road/Bridge Road/Coles intersection. During this consultation, the Applicant objected to the traffic modelling frequency of 12 months and considered this to be onerous. The Applicant offered the payment of a monetary contribution upfront towards the improvement of the intersection or else allow for reduced frequency of modelling (opening year, 5 years and 10 years) and monetary contribution at a later date (based on the results of the modelling)
- 5.11.9 However, the Applicant suggested capping the contribution to 8% of the total upgrade cost. This is based on the data that the proposal would contribute towards 8% of the traffic flowing through the intersection. The Department advised the Applicant that payment of monetary contribution was outside the scope of the application as planning agreements or other legal requirements have not been discussed during the assessment process.
- 5.11.10TfNSW reviewed the Applicant's initial request and advised that it had recommended the requirement of future traffic assessment to ensure that the improvements to the intersection be undertaken by thew Applicant only if any impacts due to the school operations are identified. As such, these works (while requiring TfNSW approval under the *Roads Act 1993*) would need to be done to the satisfaction of Council. Consequently, any alternate approach should be agreed with Council. TfNSW would support Council's position in this regard.
- 5.11.11 Following the above consultation, the Department recommended that the traffic modelling be undertaken at 24 months frequency and also advised the Applicant that, if needed (based on the results), the Applicant can either undertake the physical works at the intersection or else seek to negotiate with Council and TfNSW in the future to deliver the works following an alternate method, such as paying monetary contribution. This would be a post-approval matter.
- 5.11.12In November 2021, the Applicant confirmed that the number of enrolments in the opening year would be 660 (rather than 600, as mentioned in the EIS), consistent with the TAIA. The Applicant also confirmed the following in the SRtS submitted on 26 November 2021:
  - an east-west pedestrian link exists through the site, which would be maintained as the pedestrian access for the students between Farmhouse Road and the western boundary.
  - the above link should be considered by the Department in lieu of the previous documents.
  - the Applicant can explore opportunities to connect the site to Bridge Road. However, this extended link for public access requires is outside the scope of this application.
  - the traffic impacts on the Darcy Road/Bridge Road/Coles car park may occur towards 2033 (full capacity) and therefore requirements for yearly traffic assessment from 2023 is an unreasonable requirement.
  - the Department's request to undertake traffic assessment every 24 months can be acceptable, however it is unreasonable to require the Applicant to undertake mitigation measures in the future, despite the proposed development having minimal impacts on this intersection and noting that it would be difficult to separate background traffic from the school traffic in the future modelling. Further the mitigation measures cannot be undertaken within 6 months (as requested by the Department) and more time should be provided to undertake the works and/or negotiate with the public authorities to enter into any required monetary agreements.

•	the Applicant should be allowed to negotiate with Council and TfNSW to offer a monetary
J	contribution (capped at 8% of the total cost of the intersection improvement rather than an uncapped contribution).
	,

## 6 Assessment

- 6.1.1 The Department has considered the Applicant's EIS, RtS, SRtS and the issues raised in submissions in its assessment of the proposal. The Department considered the key assessment issues associated with the proposal are:
  - traffic and transport.
  - built form.
  - open space and landscaping.
  - site suitability.
- 6.1.2 The key issues are discussed in **Sections 6.2** to **6.5**. Other issues considered during the assessment are discussed in **Section 6.6**.

### 6.2 Traffic and transport

### **Background**

- 6.2.1 The Applicant's EIS was supported by a TAIA, which assessed the impacts of the development on the surrounding road network, the car parking provisions, sustainable transport options and the drop-off/pick-up adequacy.
- 6.2.2 During the EIS exhibition and following the submission of Council, TfNSW and the Department raised numerous concerns regarding the adequacy of the Applicant's traffic assessments and the impacts of the traffic generated by the proposed development on the surrounding road network. The details of the Department's engagement with various agencies, Applicant and Bitzios in relation to traffic matters have been discussed in **Section 5**.
- 6.2.3 In response to the concerns raised by the public authorities and Bitzios, the Applicant amended the proposal and included some additional driveway upgrades as well as an internal pedestrian link (discussed in **Section 2** and **Section 5**).
- 6.2.4 This section of the report only includes the assessment of the Applicant's final proposal as amended on 7 September 2021. All previous information in relation to traffic and the associated assessments on each of the Applicant's submitted modelling and assessment activities are provided in Appendix C.

### **Existing and background traffic conditions**

- 6.2.5 The WCC site is bound to the north and north-east by Darcy Road, which is classified as a State road for that section east of its intersection with Mons Road, and as a local road for that section west of the intersection. Bridge Road (west) and Hawkesbury Road (east) run parallel to the western and eastern boundaries of the WCC site respectively and intersect with Darcy Road in T-junctions. Alexandra Avenue is located south connecting Bridge and Hawkesbury Roads (Figure 26).
- 6.2.6 There are currently four access points to the WCC site. The main vehicle access to the existing main car park is directly via Darcy Road, west of Mons Road, on the north-western side. There are dedicated right and left unsignalised slip lanes that turns into this Darcy Road access driveway. Pedestrian access is also provided on the eastern side of this Darcy Road access driveway. The main carpark, drop-off / pick-up and bus bays are accessed from this access as shown in **Figure 25**.



Figure 25 | Main entry and frontage to Darcy Road (Source: Nearmap 2021)

- 6.2.7 The Applicant's amended proposal (dated 7 September 2021) includes an amended Transport and Accessibility Impact Assessment (TAIA) and Green Travel Plan (GTP), which considers the impact of the proposal on traffic in the locality.
- 6.2.8 The amended TAIA includes the background traffic volumes of the eleven identified intersections near the site that would be impacted by the development. The intersections are shown in **Figure 26**.



Figure 26 | Key intersections in the vicinity of the site (Source: Nearmap 2021)

#### Trip generation, sustainable transport and intersection performances

- 6.2.9 The amended TAIA states that tube counts were carried out on Darcy Road for a period of seven days during the AM (7:30am-9pm) the PM (2:30pm-5pm). The surveys determined that the road network peak period occurs between 7:45am-8:45am and 3pm-4pm.
- 6.2.10 The applicant conducted travel mode surveys to capture the ways in which the students and staff population within the campus (existing schools) travel to/from school. Based on the surveys, the amended TAIA estimated that the mode share for the primary school students would comprise 89.9% private car, 3.7% public transport and 6.5% active travel (walking and cycling). For primary school staff, mode share would comprise of 95% private car and 5% public transport. The school trip generation for 2023 and 2033 have been calculated on this basis.
- 6.2.11 In calculating the whole of site trip generation, the amended TAIA assumes the following:
  - background traffic growth has been adopted, based on the Sydney Strategic Traffic
     Forecasting Model (STFM) growth plots obtained from TfNSW with growth rates (per cent per annum growth) from 2016 to 2026 and are based on approved developments in Sydney.
  - 30% of the primary school students would be accommodated in the OOSH.
  - weekday services at the church would take place after 10am and conclude before 2pm. Vehicle access to and from the church would occur before and after those service times. The church would always be available for community use. The traffic movements associated with church staff and patrons would occur outside of the school peak periods and therefore would have no impact on the local road network during school peak periods.
  - the majority of the OOSH and ELC trip generation would occur outside of the AM and PM peaks.
  - the high school traffic would be redirected to the multi-storey carpark, when completed, rather than the Darcy Road/Mother Teresa site access.
  - the proposal would implement a GTP for the entire site with the following modal shift:
    - a 10% mode shift target from private car usage by staff and students for the entire campus (three schools) by 2033 (compared to 2018 mode surveys).
    - a minimum 5% modal shift for primary school students in the opening year of 2023
       (although target would be 10%) and 10% modal shift for high school students.
- 6.2.12 Based on the above assumptions, the amended TAIA provided the following trip generation estimates from the whole development, including the proposed mode share targets for years 2023 and 2033:
  - the estimated vehicle trip generation in 2023 with 10% modal shift (Figure 27).
  - the estimated vehicle trip generation in 2023 with 5% modal shift (Figure 28).
  - the estimated vehicle trip generation in 2033 with 10% modal shift (Figure 29).
- 6.2.13 As shown in Figure 28, considering a 5% modal shift instead of 10% modal shift in 2023, 15 (AM peak) 17 (PM peak) additional trips would be generated due to the development.
- 6.2.14 Additionally, the amended TAIA also included estimates of trips generated in active and public transport (for the whole of site) which concludes that:
  - 2241 active and public transport trips are estimated in 2023.
  - 2434 active and public transport trips are estimated in 2033.

		No. of Trip Road Netw		No. of 1 Road N	No. of Trips		
Gro	pup	AM Peak Hour PM Peak Hour		Before AM Peak	Inter- Peak	After PM Peak	Generate d Across the Entire Day
051.0	Children	30	4	70	0	96	200
CELC	Staff	0	0	7	0	7	14
OOSH	Students	60	8	140	0	192	400
OOSH	Staff	0	0	10	0	10	20
Primary	Students	263	298	87	0	52	700
School	Staff	14	2	5	0	17	38
High	Students	182	206	60	0	36	484
School	Staff	55	7	18	0	66	146
Parish	Attendee s	0	0	0	66	0	66
Church	Staff	0	0	0	12	0	12
То	tal	604	525	397	78	476	2080

Figure 27 | Vehicle trip generation 2023 (10% mode shift) (Source: Applicant's SRtS 2021)

Gro	quo	No. of Trips During		No. of Trips Outside of Road Network Peaks				
		AM Peak Hour PM Peak Hour		Before AM Peak	Inter-Peak	After PM Peak		
OFLO	Children	30	4	70	0	96		
CELC	Staff	0	0	7	0	7		
0.0011	Students	60	8	140	0	192		
OOSH	Staff	0	0	10	0	10		
Primary	Students	278	315	92	0	55		
School	Staff	14	2	5	0	17		
	Students	182	206	60	0	36		
High School	Staff	55	7	18	0	66		
Parish	Attendees	0	0	0	66	0     55       0     17       0     36       0     66       66     0		
Church	Staff	0	0	0	7 0 140 0 10 0 92 0 5 0 60 0 18 0	0		
To	tal	619	542	402	78	479		

Figure 28 | Vehicle trip generation 2023 (5% mode shift) (Source: Applicant's SRtS 2021)

		No. of Trip Road Netw		No. of T Road N	No. of Trips Generated		
Gro	oup	AM Peak Hour	PM Peak Hour	Before AM Peak	Inter- Peak	Afte r PM Pea k	Across the Entire Day
CELC	Children	60	8	140	0	192	400
CELC	Staff	0	0	12	0	12	24
OOSH	Students	150	20	350	0	480	1000
ООЗН	Staff	0	0	24	0	24	48
Primary	Students	666	755	222	0	133	1776
School	Staff	36	5	12	0	43	96
High	Students	182	206	60	0	36	484
School	Staff	55	7	18	0	66	146
Parish	Attendee s	0	0	0	66	0	66
Church	Staff	0	0	0	12	0	12
То	tal	1149	1001	838	78	986	4052

Figure 28 | Vehicle trip generation 2033 (10% modal shift) (Source: Applicant's SRtS 2021)

- 6.2.15 The amended TAIA has considered peak hour traffic impacts on intersections surrounding the WCC site in the form of a SIDRA analysis of the performance of the existing road network as well as future performance with and without development in 2023 and 2033. A summary of the results shows the Levels of Service (LoS) at eight intersections and three site accesses with the background conditions and the development (2023 and 2033) for AM and PM peaks.
- 6.2.16 The amended TAIA details that LoS A, B, or C indicates a good, acceptable or satisfactory level of service, respectively, for the operation of the intersection, with no mitigation measures required. LoS D, E, or F indicates the intersection is near or at capacity and if the traffic assessment demonstrates a worsening of impacts as a result of the proposal, mitigation measures should be considered.
- 6.2.17 The SIDRA analysis of the 11 identified intersections (**Figure 26**) for the AM and PM peaks, are provided in **Figures 29** and **30**. The SIDRA models assume 10% modal shift from 2023.

	Scenario:	Scen	ario 0	Scen	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
Intersection  Darcy Rd – Site Access (Mother Teresa)  Darcy Rd – Institute Rd – Mons Rd (∞)  Darcy Rd – Site Access (Catherine McAuley)  Darcy Rd – Site Access (Catherine McAuley) – Westmead Hospital  Darcy Rd – Site Access (Proposed Car Park Entry)  Darcy Rd – UWS –	Intersection	Existing		2023 Background Growth		2023 Background Growth + Dev		2033 Background Growth		2033 Background Growth + Dev		
	Type	Average Delay (s)	LOS	Average Delay (s)	LOS	Average Delay (s)	LOS	Average Delay (s)	LOS	Average Delay (s)	LOS	
	Priority (Stop)	9	Α	9	Α	6	Α	11	Α	11	Α	
Darcy Rd – Institute Rd – Mons Rd (a)	Signalised	69	Е	36	С	37	С	35	С	35	С	
	Priority (Give Way)	4	А	4	А	4	А	4	А	4	А	
	Signalised	12	Α	12	В	19	В	11	Α	17	В	
	Priority (Give Way)	3	Α	3	Α	3	Α	3	Α	3	Α	
Darcy Rd – UWS – Westmead Hospital	Signalised	22	В	22	В	21	В	21	В	21	В	
Darcy Rd – Hawkesbury Rd	Signalised	35	С	35	С	36	С	40	С	40	С	
Hawkesbury Rd – Railway Pde	Signalised	22	В	20	В	21	В	20	В	25	В	
Hawkesbury Rd – Alexandra Ave	Signalised	49	D	66	Е	69	Е	>100	F	>100	F	
Alexandra Ave – Bridge Rd	Priority (Roundabout)	15	В	17	В	17	В	22	В	21	В	
Darcy Rd – Bridge Rd – Coles Car Park	Signalised	73	F	89	F	26	В	81	F	79	F	

Figure 29 | Intersection performance AM peak (Source: Applicant's SRtS 2021)

	Scenario:	Scen	ario 0	Scen	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
Intersection	Intersection	Existing		2023 Background Growth		2023 Background Growth + Dev		2033 Background Growth		2033 Background Growth + Dev		
	Туре	Average Delay (s)	LOS	Average Delay (s)	LOS	Average Delay (s)	LOS	Average Delay (s)	LOS	Average Delay (s)	LOS	
Darcy Rd – Site Access (Mother Teresa)	Priority (Stop)	9	Α	10	Α	11	Α	13	Α	78	F	
Darcy Rd – Institute Rd – Mons Rd (a)	Signalised	65	Е	50	D	50	D	50	D	62	Е	
Darcy Rd – Site Access (Catherine McAuley)	Priority (Give Way)	4	А	4	А	4	А	4	А	4	А	
Darcy Rd – Site Access (Catherine McAuley) – Westmead Hospital	Signalised	14	Α	14	Α	25	В	13	Α	21	В	
Darcy Rd – Site Access (Proposed Car Park Entry)	Priority (Give Way)	3	А	3	А	3	A	3	A	3	А	
Darcy Rd – UWS – Westmead Hospital	Signalised	28	В	23	В	21	В	24	В	22	В	
Darcy Rd – Hawkesbury Rd	Signalised	42	С	84	F	96	F	>100	F	>100	F	
Hawkesbury Rd – Railway Pde	Signalised	38	С	41	С	66	Е	79	F	76	F	
Hawkesbury Rd – Alexandra Ave	Signalised	47	D	41	С	42	С	49	D	50	D	
Alexandra Ave – Bridge Rd	Priority (Roundabout)	12	А	12	А	12	А	14	А	14	А	
Darcy Rd – Bridge Rd – Coles Car Park	Signalised	36	С	37	С	36	С	37	С	87	F	

Figure 30 | Intersection performance PM peak (Source: Applicant's SRtS 2021)

- 6.2.18 The results presented in the amended TAIA show that trips generated by the proposal with background growth in 2023 and 2033 would cause a number of intersections to exceed their capacity, both in the AM and PM peaks.
- 6.2.19 Noting the results, the amended TAIA concludes that some intersections would exceed their capacities considering background growth alone. These include Darcy Road / Hawkesbury Road, Hawkesbury Road / Railway Parade and Hawkesbury Road / Alexandra Avenue. The development traffic would have negligible impacts on these intersections.

### Hawkesbury Road / Railway Parade intersection

6.2.20 The amended TAIA noted that the Hawkesbury Road / Railway Parade (intersection 2 in **Figure 26**) currently operates at an unacceptable LoS and would need upgrades or management measures in

the future to ensure improved operation including the development traffic. However, per discussions with Council and TfNSW, these improvements would be delivered through other development applications in the area and are outside the scope of this application.

#### Darcy Road/Institute Road/Mons Road intersection

6.2.21 With regard to the Darcy Road/Institute Road/Mons Road intersection (intersection 8 in Figure 26), the amended TAIA states that this intersection was upgraded after the traffic surveys in October 2018. Consequently, in 'Scenario 1' of Figures 29 and 30, the LoS of the intersection appears to have improved as the upgrades to the intersection are considered along with the background traffic growth.

#### Darcy Road/Mother Teresa intersection (site access)

- 6.2.22 The development would have some negative impacts on the Darcy Road/Mother Teresa (site access), which would operate at LoS F in PM peak in 2033 (intersection 9 in **Figure 26**). This would mainly be due to the increase in turning vehicle movements into and out of the site access, as well as an increase in the through traffic on Darcy Road. The worst performing movement would be the right-turn movement which determines the intersection's overall service rating.
- 6.2.23 To mitigate the adverse impacts of the proposed development on the site access, the Applicant proposes upgrades to this intersection. A second exit lane is proposed to provide the right-turn movement with a travel lane separate to the left-turn movement into the site access. This would allow the turning movements into the site access to occur simultaneously. Therefore, delay for the right-turn movement would be reduced as shown in **Figure 31**.

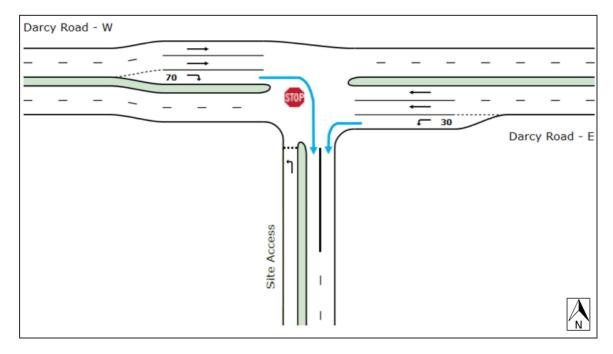


Figure 31 | Proposed upgrades to the site access (Source: Applicant's SRtS 2021)

- 6.2.24 The Applicant has undertaken a Road Safety Audit (RSA) of this concept design, as requested by TfNSW. Minor amendments to the layout have been incorporated as a result of the RSA.
- 6.2.25 The amended TAIA states that a sensitivity test of this measure has been conducted and it concludes that by proposing this measure, the intersection performance would improve to LoS C with 40 seconds average delay.

#### Darcy Road/multi-storey car park (Catherine McAuley) intersection

- 6.2.26 With regards to the Darcy Road/multi-storey car park intersection (intersection 6 in **Figure 26**), the amended TAIA observes that this intersection would operate at LoS A B despite the development traffic and the background traffic growth. However, the Applicant states that, during consultation, TfNSW advised that per the SIDRA modelling, this development would result in vehicles queuing on Darcy Road (i.e reduction of 'green time' on the road, required for unimpeded traffic flow), which is not acceptable.
- 6.2.27 To improve the above situation on this road, the Applicant proposes a dedicated left-turn lane on the south-west approach of the intersection (site exit approach), as a 25m short lane. The layout of this upgrade is provided in **Figure 32**.
- 6.2.28 The amended TAIA concludes that this proposed upgrade to the intersection would improve the green time on Darcy Road (i.e reduce the vehicle queuing) in future years and also improve the overall intersection performance by reducing average delays both in 2023 (25 secs reduced to 18 secs) and 2033 (21 secs reduced to 16 secs).

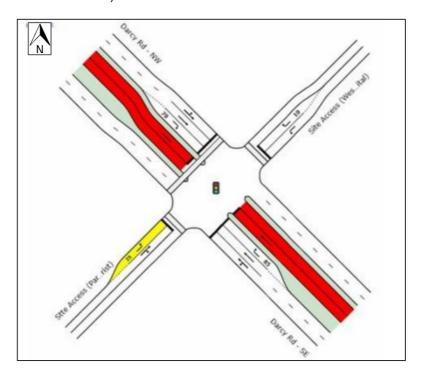


Figure 32 | Layout of Darcy Road/multi-storey car park access (Source: Applicant's SRtS 2021)

#### Darcy Road/Bridge Road/Coles carpark intersection

- 6.2.29 The amended TAIA notes that this intersection currently operates at LoS F (exceeding its capacity) with the base case scenario. The average delays at this intersection would increase by 16 secs with the background traffic in 2023.
- 6.2.30 The LoS of this intersection improves to LoS B with the development traffic in 2023. This is because of the current high school traffic being redirected to the new multi-storey car park access (when it is built), the approved new drop-off/pick-up area on the eastern part of the site (separate approval) and the implementation of the 10% mode shift through the GTP. The implementation of the mitigation strategies would result in 8% reduction in vehicle movements and improve the intersection performance.

- 6.2.31 In 2033, the intersection would operate at LoS F, due to background traffic alone. However, when the development traffic is added, the average delays appear to improve (from 81 secs to 79 secs).
- 6.2.32 The TAIA states that reduction to average delay can occur when there is an increased number of vehicles on certain movements that have a lower degree of saturation. This means that more vehicles are able to pass through the intersection during the effective green time.
- 6.2.33 The amended TAIA does not provide a clear reason or any evidence as to how the average delays at this intersection would improve in 2033, despite the development moving to full capacity and a background traffic growth.

#### Intersection performances with 5% modal shift in 2023

- 6.2.34 As discussed earlier, the Applicant has undertaken a sensitivity test with a 5% modal shift for calculating the traffic generation in 2023 (instead of 10%). The test concludes that an additional 15 (AM peak) to 17 (PM peak) vehicle trips would be generated by the development, in this scenario. The amended TAIA includes a revised SIDRA modelling for the intersection performances considering 5% shift.
- 6.2.35 The revised intersection performances show that, with a 5% modal shift, the average delay at:
  - Hawkesbury Road/Alexandra Avenue intersection would increase by 4 secs.
  - Darcy Rd / Bridge Rd / Coles carpark would increase by 1 sec.
- 6.2.36 Therefore, the amended TAIA notes no major impacts due to a reduced extent of modal shift.

#### Department's Independent review

- 6.2.37 As noted in **Section 5**, the Department requested Bitzios to review the amended TAIA. Bitzios raised a number of concerns including lack of calibration and validation, queuing analysis and data gaps in the SIDRA modelling. Bitzios also recommended that based on evidence, the OOSH capacity should be lower than 30%, being around 22%. The Bitzios report peer reviewing the Applicant's amended proposal and identifying the data gaps is provided in **Appendix D**.
- 6.2.38 In addition to the above, the Department also requested Bitzios to undertake an independent traffic analysis of the impacts of the development on the surrounding road network and compare the results with the Applicant's assessment. The independent traffic analysis (**Appendix E**):
  - utilises the traffic count survey data that the Applicant provided (for October 2018) and adjusts the volumes by adding bus traffic volume on the T-way.
  - re-calibrates and re-validates the 2018 base SIDRA model to the Transport for NSW (TfNSW)
     Traffic Modelling Guidelines (2013) and other industry guidelines.
  - updates the development trip generation and distribution to address the issues identified previously by Bitzios, Council and TfNSW.
  - updates the future year SIDRA models to reflect the revised trip generation and distribution.
  - undertakes a sensitivity analysis to understand the level of development traffic that is likely to be serviced by the surrounding road network.
- 6.2.39 The traffic analysis assumes:

- a 22% OOSH capacity based on the data provided by the Applicant on average capacity of other Catholic schools and OOSH capacities within the Paramatta LGA.
- car usage for only 50% of the staff (based on the car parking provided within the site).
- car usage percentage for primary school student mode of travel to be 80% compared to 90% per the Applicant's questionnaire survey (considering 10% modal shift).
- trip generation rates for the ELC and OOSH facilities, based on TfNSW Trip Generation Study for Child Care Centres (dated September 2015).
- 6.2.40 Adopting the above assumptions, the traffic analysis includes the predicted trip generation from the development in 2023 and 2033 and the alternative travel routes to the high school (network trip distribution) in assessing the development's impacts on the road network. The analysis also considers the proposed or recently undertaken nearby intersection upgrades as well as the proposed upgrades by the Applicant, in the updated SIDRA modelling for the 11 identified intersections in **Figure 26**.
- 6.2.41 The traffic analysis also includes a sensitivity analysis of the impacts of the development on the road network in two scenarios of reducing development capacity by 30% and 50% (i.e reduced student/ELC children numbers).
- 6.2.42 Based on the above, the traffic analysis concludes that:
  - the network would operate satisfactorily in the 2023 AM and PM peak conditions.
  - the proposed development would not have any substantial impacts on the 2033 PM peak network. However, the impacts of the development on the road network in 2033 would be significant in AM peak and requires critical assessment.
  - regarding the AM peak in 2033, the re-distribution of high school traffic to other roads/multistorey car park and modal shifts would result in reduced overall traffic flows on Hawkesbury Road as it reduces the northbound traffic on this road.
  - the performance of the Darcy Road/Mother Teresa access would improve if the suggested site access upgrades, by the Applicant, are implemented prior to 2033. However, an additional left turning short lane from the driveway may still be needed in 2033, to further alleviate the delays in left turn movements from this driveway, in the future.
  - the upgrades to the Darcy Road /multi-storey car park access intersection (including the additional left-turn lane on to Darcy Road), as proposed by the Applicant in 2023, would improve its performance in 2033.
  - the main concerns remain with the Darcy Road/Bridge Road/Coles car park intersection which would continue to operate at LoS F with significant delays in the future. The predictions for the delays (including background traffic + development) would still show little improvement in 2033, despite the upgrades to the two site access points (as proposed by the Applicant) and the redirection of traffic to the multi-storey car park.
  - the delay at the above intersection in 2033 AM peak is expected to be 264.1 secs (including upgrades), per the traffic analysis, and is considered substantial.
  - the results of traffic analysis considering 70% development capacity (30% reduction) show that the intersection performance would improve slightly. However, in the critical 2033 AM Peak the Darcy Road / Bridge Road intersection would continue to provide poor performance and experience long delays and queues on all three key approaches (212.1 sec delay).
  - for a 50% reduced capacity, the delay at this intersection would be 167 secs.

- given the above, it is evident that the development traffic contributes to the deterioration of the intersection performance at Darcy Road/Bridge Road in 2033 and upgrades to this intersection should be undertaken to alleviate such impacts.
- it is acknowledged that the above intersection is constrained by adjacent buildings and significant upgrades may not be possible. However, there are options to provide a high angle left turn lane for the westbound and southbound traffic.
- 6.2.43 In addition, the traffic analysis by Bitzios acknowledged that STFM (the basis of calculating the background traffic growth in the TAIA) has several limitations and can underestimate the future traffic demands. Consequently, Bitzios recommends that to ascertain the actual development potential and impacts, future modelling assessments should be undertaken by the Applicant parallel to investigating options to upgrade the Darcy Road/Bridge Road intersection and applying adjustment to the background traffic growth to obtain more realistic results.

#### Public authority comments and submissions

- 6.2.44 During the exhibition, Council and TfNSW reviewed the amended proposal. Council generally supported the proposed upgrades and considered that these would improve the overall performance of the road network. However, Council maintained their concerns regarding the impacts on Darcy Road/Bridge Road/Coles car park intersection. Council indicated that future traffic conditions at this intersection would be subject to the nature of future development on the south-eastern corner of this intersection. Thus, traffic conditions could be worse than the Applicant's forecast during peak times.
- 6.2.45 TfNSW reviewed the Applicant's amended proposal and the Department's independent traffic review, in the light of the previous consultations undertaken between all parties and the Applicant, to assess the impacts of the development on the surrounding road network.
- 6.2.46 TfNSW acknowledged that there are data gaps in the Applicant's assessment and agreed with the majority of the conclusions of Bitzios report peer reviewing the amended proposal. However, TfNSW also noted that despite the discrepancies in the traffic data and the modelling outputs, it is evident that the proposed upgrades to the two site access intersections, the redirection of the high school traffic and the implementation of the modal shift and/or staggering of start and finish times of the school would assist in reducing the traffic impacts of the development on the road network to year 2033.
- 6.2.47 Noting the above, TfNSW supported the proposed upgrades subject to recommended conditions requiring the upgrades to be implemented prior to the occupation of the school.
- 6.2.48 However, TfNSW shared the concerns with Bitzios regarding impacts of the development on the Darcy Road/Bridge Road/Coles car park. TfNSW considered that while the delivery of significant public transport infrastructure in the Westmead precinct (Sydney Metro and Light Rail) is reasonably expected to encourage the uptake of public transport and reduce potential vehicle trips, it cannot be assumed that the intersection of Darcy Road / Bridge Road / Coles car park driveway would operate satisfactorily in 2033.
- 6.2.49 Consequently, TfNSW recommended that additional traffic assessment including modelling of this intersection be undertaken every 12 months following commencement of operation of the school, and up to the year of full capacity students (likely 2033), to demonstrate to Council, TfNSW and the Department that the development traffic does not contribute to the deterioration of the intersection performance. If at any point in time, the modelling reveal otherwise, then additional mitigation measures including, but not limited to, the upgrade of this intersection would be required.

6.2.50 TfNSW also recommended the preparation and implementation of a school coach and bus parking management plan for the proposed development and a final GTP.

#### Applicant's response and public authority comments

- 6.2.51 The Applicant responded to the submissions during re-exhibition of the proposal and did not agree to the recommendation of traffic modelling in the future, at regular intervals. The Applicant advised that this would be unnecessary as the proposal already includes mitigation measures to alleviate traffic impacts on this intersection due to the development to ensure its satisfactory operation. The performance of the Darcy Road /Bridge Road intersection may fail due to various reasons and developments around the site in future years. The Applicant's view is that, as the development traffic cannot be separated effectively from the background, it would be difficult to ascertain whether the development contributes to the failure of, or delays at, the intersection.
- 6.2.52 Council reviewed the Applicant's response and advised that no suitable mitigation measure has been proposed by the Applicant for the Darcy Road /Bridge Road intersection, despite the Applicant's results showing unsatisfactory performance. Consequently, the Applicant's conclusion, that suitable mitigation measures have been proposed to ensure safe functioning of this intersection, was not supported and is disputed by Council.
- 6.2.53 TfNSW considered the Applicant's response but reiterated their comments in relation to the requirement for future traffic modelling needs. The mitigation measures cannot be determined for future years at Darcy Road / Coles car park, as the Applicant has not been able to demonstrate that their traffic model is fit for this purpose. Therefore, conditions of consent should be recommended requiring future traffic surveys, modelling and audits. TfNSW did not agree with the Applicant's view is that the development traffic cannot be separated effectively from the background and would be difficult to ascertain whether the development contributes to the failure of or delays. TfNSW advised that there are several methods to separate background traffic from the future school traffic, which the Applicant can develop in consultation with TfNSW.
- 6.2.54 TfNSW confirmed that if at any point in time the modelling demonstrates that the intersection performance deteriorates due to the development traffic, additional mitigation measures should be provided in the future, to ensure safe operation of this intersection.
- 6.2.55 As discussed in **Section 5**, the Department consulted with the Applicant regarding the requirement for future yearly traffic assessments, post operation of the school. During the consultation, the Applicant indicated that a preferred option would be to pay a monetary contribution towards the upgrading of the intersection upfront, in lieu of the proposed requirement for traffic assessments. The Applicant also advised that another option would be to reduce the frequency of traffic assessments and pay a monetary contribution to the relevant roads' authority, if the need for mitigation is identified. However, the Applicant recommended that any future monetary contributions from the Applicant, towards the improvement of the intersection, should be capped at 8% of the total cost of works noting that, per the Applicant's traffic modelling, the development traffic would likely contribute towards 8% of the total traffic flow through this intersection. Further, the timing of obtaining required approvals from the public authorities should be at least 12 months after the approval of the traffic assessments by the Department.
- 6.2.56 TfNSW have reviewed this request and commented that the Applicant would need to consult with Council in relation to payment of monetary contributions.

## Department's assessment

- 6.2.57 The Department has reviewed the Applicant's assessment, the public authority comments and the Bitzios traffic analysis. Based on the comments, the Department considers that the development would not have a significant impact on the road network subject to the redirection of high school traffic, upgrades to the site access intersections, 30% OOSH capacity and implementation of the 10% modal shift via the GTP.
- 6.2.58 However, the Department has remaining concerns regarding the impacts of the development on the Darcy Road/Bridge Road/Coles car park intersection at AM peak in 2033, when the development would operate at full capacity. The Applicant's traffic modelling (**Figure 29**) suggests that at AM peak in 2033, the delays at this intersection with development traffic would be less than that without the development (79 secs instead of 81 secs). However, the independent Bitzios model concludes that the delays at this intersection in 2033 would be much greater than anticipated by the Applicant's modelling results (264.1 secs). The Applicant has provided no commitment for any mitigation measures, despite noting that the intersection would operate beyond its capacity at this time.
- 6.2.59 The Department acknowledges that if the Applicant's modelling and assumptions are correct, then the development traffic may not contribute to the failure of this intersection in 2033. However, the Bitzios peer review report, as well as TfNSW assessment have identified data gaps in the traffic assessment and discrepancies in the amended TAIA (in terms of delays at the intersection). Due to these, the Department considers that the modelling results cannot be fully relied upon to be satisfied that there would be no unacceptable impacts resulting from the development by 2033.
- 6.2.60 Additionally, the timing (between 2023 and 2033) around which the development traffic would start contributing to the deterioration of the intersection operation is not clear as the student increase is proposed to be staged with no details of the staged increase having been provided.
- 6.2.61 Noting the above, the Department agrees with TfNSW that intermittent traffic modelling and monitoring would be needed in the future to ensure that the impacts of the development traffic on the road network can be compared each time. This would also ensure that any adverse impacts on the intersection due to the development can be identified and the Applicant be required to provide appropriate mitigation measures at that time, without hindering the overall operation of the school.
- 6.2.62 The Department notes that the Applicant has recently offered to pay a monetary contribution to the relevant roads' authority towards the improvement of the intersection, in the future, in lieu of undertaking the mitigation and management measures. The Applicant had not previously provided this offer as part of their application and has not entered into such an agreement prior to or during the assessment of this application. Further capping of monetary contributions to 8% of the cost of works of the intersection upgrade cannot be determined without the knowledge of the extent of upgrades needed. Consequently, the Department considers that the payment of upfront monetary contribution in lieu of undertaking future traffic assessments, is outside the scope of this application. The determination of the application does not preclude these discussions occurring between the applicant and the relevant roads authority.
- 6.2.63 The Applicant would have the opportunity to consult with Council, the Department and the TfNSW in the future and propose alternative methods (such as payment of monetary contributions) to deliver the intersection improvements, if identified via the abovementioned traffic assessments.

- 6.2.64 If no additional impacts are identified, then the Applicant would not have to do unnecessary upgrades and/or contribute towards the intersection improvement. This opportunity for evidence-based modelling verification is considered a preferrable approach as compared to the Department and TfNSW recommending that the future mitigation requirements be imposed now.
- 6.2.65 Consequently, conditions are recommended requiring that:
  - the Applicant undertakes traffic surveys, traffic assessment and modelling of the Darcy Road/Bridge Road intersection within 6 months of the commencement of operation of the school/ELC/church with 660 students (plus 100 ELC students) and obtain endorsement of the traffic assessments and the associated modelling from Planning Secretary and TfNSW.
  - such assessments be repeated every 24 months following the first assessment and the data be compared to ensure that the intersection performance is not significantly impacted by this development.
  - should the traffic assessment in any year demonstrate that the intersection performance is impacted by the development traffic, no further student increase would be permitted until mitigation and management measures are proposed by the Applicant.
  - alternate methods to deliver the intersection upgrades can be identified in lieu of physical mitigation and/or management measures, subject to agreement with TfNSW, Council and the Planning Secretary.

## Carpark operations and drop-off / pick-up facility

## Car parking provisions

- 6.2.66 The proposed development would be catered for by the existing car parking spaces on the eastern side of the project site. The high school students and staff would utilise the new multi-storey car park (subject to a local DA approval and to be completed).
- 6.2.67 The Parramatta Development Control Plan 2011 (PDCP) or the RMS Guide to Traffic Generating Developments (2002) do not provide parking provisions for schools. The PDCP requires 50 spaces for the ELC (@1 car space / 4 childcare places). In the absence of other development controls, the Applicant has considered TfNSW's recent study of traffic and parking generation associated with schools (2014). It states that parking demand for schools in metropolitan areas are an average of 0.11 spaces per student. Based on the TfNSW adopted rates, the WCC site would require 319 spaces (student population 2897 excluding ELC) in 2023 and 431 spaces in 2033 (student population 3917).
- 6.2.68 The amended TAIA indicates that there are currently 286 parking spaces on-site with 190 FTE staff, which indicates a rate of approximately 1.5 parking spaces per staff member utilising the first principles approach.
- 6.2.69 Based on the above, the amended TAIA determined that:
  - in 2023 the WCC site would need 297 car parking spaces (198 staff for ELC/primary school/high school + 99 for visitors/parents).
  - In 2033 the WCC site would need 398 car parking spaces (265 staff for ELC/primary school/high school + 133 for visitors/parents).
- 6.2.70 Notwithstanding the above, the amended TAIA identified that the WCC site is highly accessible (as discussed in **Section 1**) with a variety of public transport plus the future PLR service. Additionally, the

- WCC site would adopt a GTP to reduce car dependency of the staff. Given the Applicant's commitment to implement the GTP, the staff parking should be provided at a lower rate of 1space/ 2 staff members. This would encourage the staff to use alternate mode of transport and support the proposed modal shift targets by the Applicant.
- 6.2.71 For the church use, the PDCP provides a general guide of one car space per 5sqm of useable floor space for the first 100sqm and one car parking spaces per 3sqm of useable floor space thereafter. However, the PDCP recommends that car parking rates be validated by undertaking detailed traffic assessment and analysis. The church would have a total of 1340sqm of floor area and useable floor area of 600sqm. Based on PDCP guideline, the proposed church would require 186 spaces for patrons.
- 6.2.72 The development provides a total of 78 car parking spaces for the church. The amended TAIA justifies that the church would generate a parking demand of 186 spaces during peak times. But these would occur occasionally outside school terms (Christmas, Good Friday, Easter Sunday), when all car parking spaces within the WCC site would be available for church use. The TAIA also states that weekday services are expected to be less than half of church's capacity (approximately 40%) generating a maximum parking demand for 66 spaces which would be provided on site.
- 6.2.73 The amended TAIA states that noting the hours of operation of the OOSH and the church, it is evident that the OOSH users can use the 66 church spaces on the weekdays. Consequently, the amended TAIA proposed parking provisions shown in **Figure 33** and the allocation identified in **Figure 34**:

Group	No. of Car parking Spaces in Year 2023	No. of Car parking Spaces in Year 2033		
CELC Staff	7	12		
CELC Visitor/Parent	7	12		
Primary School Staff	19	48		
Primary Schools Visitor/Parent	19	47		
High School Staff	73	73		
High School Visitor/Parent	73	73		
Sub-total (Educational Establishments)	198	265		
Parish Staff	12	12		
Parish Visitors (a) (in use between 10am-2pm)	66	66		
Total	276	343		
OOSH Staff <sup>(b)</sup> (shared with Parish Visitor Parking allocation before 10am and after 2pm)	10 required	25 required		
OOSH Parents (c) (shared with Parish Visitor Parking allocation before 10am and after 2pm)	56 available for use (only 15 required)	41 available for use (only 38 required)		

Figure 33 | Proposed car parking provisions (Source: Applicant's SRtS 2021)

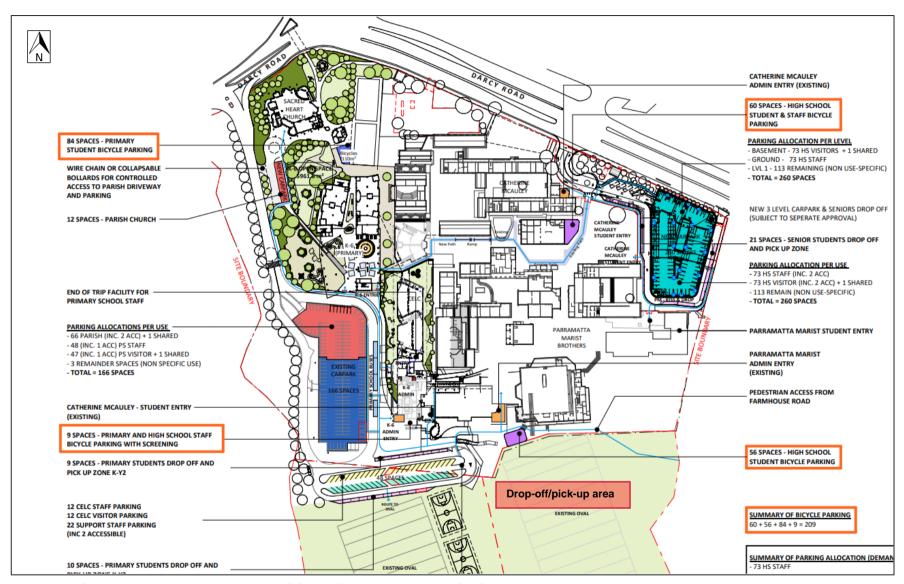


Figure 34 | Car parking allocation within the WCC site (Source: Applicant's SRtS 2021)

- 6.2.74 Overall, the car parking provisions within the site (existing and proposed) following completion of the development would be:
  - 212 existing at grade car spaces, reconfigured to cater for the proposed facilities.
  - 260 approved car spaces in the multi storey car park to cater for the existing WCC senior campus, once constructed.
  - 12 new car spaces because of the development for use by the church staff.
  - closure of an existing at-grade car park in front of Catherine McAuley, fronting Darcy Road.
- 6.2.75 The amended TIA states that the 212 car spaces would be distributed as follows:
  - 66 church parking (including 2 accessible) plus 1 shared.
  - primary school staff (48 spaces including one accessible).
  - primary school visitor/ parents (47 spaces including one accessible) plus 1 shared.
  - CELC staff (12 spaces) and visitor/ parents (12 spaces).
  - education support staff (22 spaces).
- 6.2.76 Student drop-off/pick-up facilities (19 bays) are proposed in addition to the above spaces, but within the existing car park at the rear (discussed in the following section).
- 6.2.77 Neither Council, TfNSW or Bitzios raised any concerns with the proposed car parking provisions or estimates.
- 6.2.78 The Department is satisfied that the proposed all day car parking is sufficient to cater for all the uses on the WCC site. Overflow car parking from the church can be easily accommodated within the site, during occasional requirements.

## Drop-off / pick-up facility and bus zones

6.2.79 As discussed in **Section 2.5**, the existing drop-off/pick-up area within the site, located at the rear of the existing Mother Teresa Primary School building, was reconfigured in December 2020 by the Applicant. The reconfiguration resulted in 19 bays, which would be exclusively used for the proposed primary school. The drop-off/pick-up area is identified in **Figure 34** and **Figure 35**.



Figure 35 | Drop-off/pick-up area for the primary school (Source: Applicant's SRtS 2021)

6.2.80 The Applicant's RtS stated that drop-off / pick-up times would be between 7am-9am and 2:30pm-4pm, with visitor parking permitted at other times at these spaces. The amended TAIA states that new traffic observations were undertaken in May 2021, which concludes that each car spends between 3060 seconds in dropping-off or picking-up students. The amended TAIA also concludes that the reconfiguration has significantly improved the operation of this area.

- 6.2.81 The number of cars estimated to use the drop-off/pick-up area, by the TAIA, is:
  - 2023: 132 cars in 60 minutes in AM peak and 149 cars in 60 mins in PM peak.
  - 2033: 333 cars in 60 minutes in AM peak and 378 cars in 60 mins in PM peak.
- 6.2.82 The amended TAIA has applied a conservative rate of one minute per vehicle, which means that each bay could accommodate 15 cars in a 15-minute period. Therefore, the 19 bays together could accommodate a turnover of approximately 285 cars in 15 minutes. In one hour, these 19 bays could turn-over a total of 1140 cars.
- 6.2.83 Consequently, the amended TAIA concludes that the peak number of cars in the AM and PM peak periods would be significantly lower than the maximum capacity of the drop-off/ pick-up zone and can be satisfactorily accommodated in the proposed area.
- 6.2.84 Additionally, amended TAIA reiterated that the new drop-off/pick-up facility for high school students in conjunction with the multi-storey car park would include 21 bays, be accessed separately from the eastern side and cater for the WCC senior campus. This would ensure that the two facilities operate separately and increase the overall efficiency of the drop-off/pick-up operations within the WCC site.
- 6.2.85 Adjacent to the main car park is a bus zone (if front of the proposed ELC, identified in **Figure 34**), capable of accomodating seven buses to cater for the WCC site on a daily basis and also for the weekly sporting activities during school hours. A mini-bus parking area is also proposed adjacent to the multi-storey car park (separate approval), which would cater for the proposed development, when needed.
- 6.2.86 The access to the drop-off/pick-up area for the primary school would be directly via the access driveway, whereas that of the bus zone would be via one-way circulation zone via the car park.
- 6.2.87 Council, TfNSW and Bitzios have not raised significant concerns regarding the operation of the drop-off/pick-up facility. TfNSW recommended that a school coach and bus management plan be developed to ensure the any conflicts between the bus movements, staff car movements and the drop-off/pick-up activities are efficiently managed. TfNSW also recommended that a Car Parking and High School Student Pickup/Drop-off Management Plan be prepared in the event that the proposed new multi-level car park and high school student pick-up/drop-off facility is not provided
- 6.2.88 Based on the comments from the public authorities and noting the proposed upgrades to the site access from Darcy Road, the Department is satisfied that the drop-off/pick-up facility is suitable for the site. In case of cars with high school and primary school students, the facility adjoining the multi-story car park can be used and the students can walk within the site via the proposed pedestrian links.
- 6.2.89 The Department has recommended conditions requiring an Operation Traffic and Pedestrian Management Plan including procedures regarding the drop-off / pick-up at the bus zones, the management of any potential conflict between school operation times and service vehicle times and a School coach and bus management plan, as requested by TfNSW.
- 6.2.90 However, the Department considers that the preparation of an operational traffic management plan for high school in lieu of the multi-storey car park, would not achieve the outcome that is sought for the

WCC site. Consequently, the Department has recommended a condition requiring the multi-storey car park to be delivered and be operational prior to the occupation of any building on the project site.

#### Bicycle parking and end of trip facility

- 6.2.91 The application proposes 209 bicycle spaces on the WCC site, to accommodate the requirements in 2033 (Figure 34). PDCP does not have any bicycle parking rates for schools or requirements for end-of-trip facilities. The Bicycle Parking Facilities: Austroads Guide Traffic Management suggests a bicycle parking rate of 0.3 spaces per student and staff for primary and secondary schools. The amended TAIA states this would equate to a bicycle provision of 1255 spaces by Year 2033, which is considered to be excessive compared to the current mode share of students and staff at the school. Consequently, the TAIA proposes bicycle spaces based on the 4.5-5% modal shift for primary and high school students.
- 6.2.92 The Applicant has not provided any details of the number of showers or lockers provided for the endof-trip facilities. However, the location is specified in **Figure 34**.
- 6.2.93 Public authorities have not raised concerns regarding the bicycle provisions within the site.
- 6.2.94 The Department considers the proposed 209 bicycle parking spaces are adequate for the WCC site and has recommended conditions requiring satisfactory provision of end-of-trip facilities such as showers and change rooms on site.

#### Vehicle access

#### Upgrades to vehicular access points

- 6.2.95 The WCC site currently has vehicle and pedestrian access from north-western and eastern parts of Darcy Road. The main primary school vehicle access would be retained from the existing vehicular access at the north-western part of Darcy Road, and upgraded, to cater for the additional traffic, as discussed previously. The gated access leads to an internal road along the western boundary, which would continue to act as the main internal road for the primary school.
- 6.2.96 The approved vehicular access to the multi-storey car park (under separate DA) is also proposed to be upgraded as part of this application to cater for the development traffic.
- 6.2.97 A proposed new car park (12 car spaces) for the church use, would adjoin the eastern side of this driveway. The internal road would then continue south to the drop-off / pick-up area as identified in **Figure 34**.
- 6.2.98 As discussed in the previous section, both TfNSW and Council have reviewed the proposed upgrades to the vehicular access points to the site and raise no concerns, subject to additional conditions and future approvals under the Roads Act 1993. However, the Department notes that the proposed upgrade to the Council approved vehicular access to the multi-storey car park, by adding an additional left turn lane, would result in inconsistencies with the approved plans in DA/241/2020 (discussed in **Section 2.5**).
- 6.2.99 To resolve inconsistencies between the SSD application and the approved Council DA, the Department has recommended a condition requiring DA/241/2020 to be amended by replacing the previously approved plans with the plans recommended to be approved under this SSD application.

6.2.100 Based on the comments from the public authorities, and subject to the implementation of the above condition, the Department has no concerns regarding the proposed vehicular access points, the upgrades and the car parking layout.

#### Service vehicle access

- 6.2.101The amended TAIA states that service vehicles and emergency vehicles would continue to access the WCC site via the existing Darcy Road/Mother Teresa site access. Currently, typical service/ delivery vehicles include small rigid vehicles which access the WCC site outside of school peak periods. Generally, deliveries occur during class time while there is zero/ minimal pedestrian activity, and the front office is open to accept deliveries.
- 6.2.102The Department notes that the Applicant states that the access for delivery, waste collection and maintenance vehicles movement would continue to occur as per the current arrangement. However, in addition to significant uplift in number of students, there are also new uses being introduced to the site including the church and the ELC. While the Applicant has submitted an Operational Waste Management Plan for the church and the primary school detailing the waste collection location, method of collection and frequency, no details of the ELC have been included which have requirements unique to the care of children under 5 years of age.
- 6.2.103Further, the Applicant's RtS identifies the waste holding area for the church but does not specify the collection / service vehicle size or maneuvering feasibility within the church courtyard to facilitate garbage collection, loading or unloading.
- 6.2.104The Department has reviewed the proposed access points and connections and considers that the location of the existing vehicular entry points, internal driveway and the proposed pedestrian crossing would not result in substantial conflicts subject to recommendations regarding the Operational Traffic and Access Management Plan.
- 6.2.105 However, the Department concludes that the proposal does not include satisfactory details regarding service vehicle access to the site and the supporting maneuvering details. Consequently, conditions of consent would be required to close the above gaps in information regarding service vehicle access to the site.

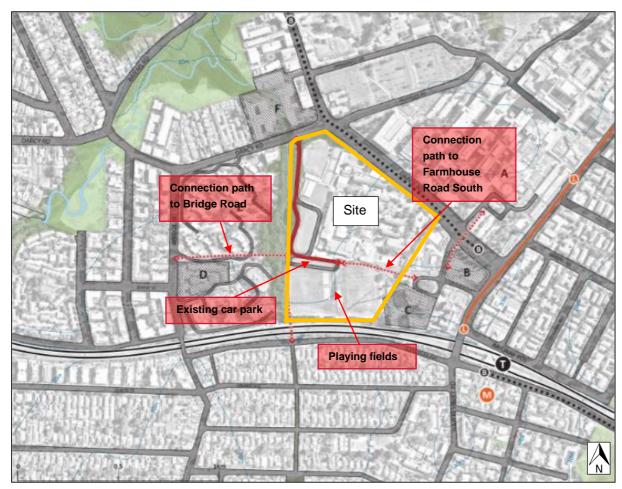
## **Pedestrian connectivity**

6.2.106 Pedestrian access would be retained from both the north-western and eastern side of Darcy Road, near the existing Catherine McAuley school (within the site) and near future multi-storey carpark. The proposal involves provision of a new footpath located on the western side of the internal access road off Darcy Road entry, removal of an existing roundabout and a new pedestrian crossing for safe movement of the users of the site (**Figure 36**).



Figure 36 | Pedestrian access within the project site (Source: Applicant's RtS 2020)

6.2.107 During the assessment of the application, Council raised concerns that Council's Westmead Innovation District Masterplan includes a vehicular and pedestrian link from the primary school carpark to Bridge Road, which has not been incorporated into the design of the development. Council emphasised that this link would alleviate traffic flow issues and also ensure connectivity of the site with surrounding roads, and therefore should be progressed as part of the development. Council also suggested that an alternative access to the project site is required between the school buildings and the playing fields that can connect to Farmhouse Road South to the east and Bridge Road to the west (Figure 37).



**Figure 37** | Excerpt from the Westmead Innovation District Masterplan showing connection paths (Source: Council's EIS submission 2020)

- 6.2.108 The State Design Review Panel (SDRP) run by the Government Architect New South Wales (GANSW) commented that it would support the creation of an education campus, including improved pedestrian access to the WCC site. However, the SDRP requested that the Applicant develop a wayfinding strategy throughout the site, provide circulation diagrams which detail access to and from the future multi-storey carpark, drop-off / pick-up arrangements for the ELC and primary school, and pedestrian access that is accessible, rationalised and legible in, around and across the site.
- 6.2.109 The Department also raised concerns regarding lack of connectivity within the site, especially from the multi-storey carpark to the project site.

Amended proposal

- 6.2.110 In response to the concerns throughout the assessment process, the Applicant submitted the amended proposal which included:
  - six pedestrian connection points to the WCC site from various directions (major and minor).
  - a new pedestrian footpath along the western side of the driveway with a pedestrian crossing.
  - an internal pedestrian path between the future multi-storey carpark and the project site.
  - a pedestrian link to the western part of the site from Farmhouse Road, which would increase accessibility and permeability of the site with the surrounding residential precincts.
- 6.2.111 The amended TAIA states that the identified provision of the link to Bridge Road from the western boundary of the site and the railway underpass on the southern side would increase the pedestrian permeability. However, this is beyond the scope of the application.
- 6.2.112 The proposed pedestrian connection points and links are identified later in Figure 38.

#### Submissions to the amended proposal

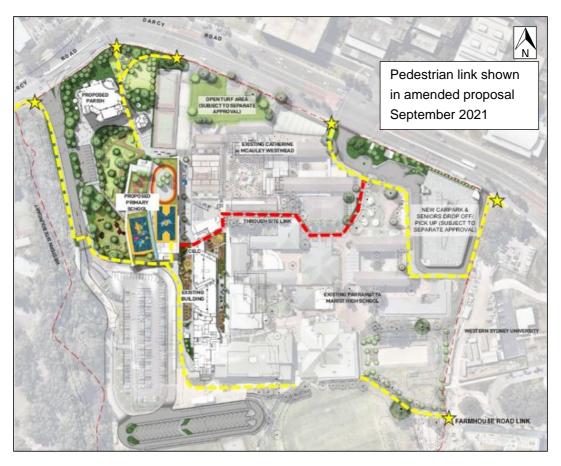
- 6.2.113 Council reviewed the Applicant's SRtS and supported the commitment to improve the pedestrian connections within the site. However, Council reiterated its concerns regarding the lack of extended pedestrian connection to Bridge Road and the need for this connection to alleviate traffic flows at the Darcy Road/Bridge Road intersection as well as improve the access to the west and south by reducing the overall walking distance by approximately 450m. This is a significant distance when considered as part of the end to end walking distance that the Applicant suggests children attending the school would walk, as part of their modal assumptions.
- 6.2.114 Council also sought clarification regarding the opportunities for providing vehicular access (ideally) through the site instead of the designated pedestrian access and recommended that the Applicant commits to obtain easements through the required portions of the site and the adjoining allotment to the west to ensure that the pedestrian connection to Bridge Road is provided in the future. The easements should ensure that this link can be treated as a public pedestrian connection, when the internal road gets extended to Bridge Road, under the wider WCC Masterplan.
- 6.2.115 However, Council noted that the securing of easement across the adjoining allotment to the west may be outside the scope of this application.
- 6.2.116 Public submissions to the amended proposal raised concerns that the proposed pedestrian links would result in Farmhouse Road being treated as a pick-up and drop-off zone, resulting in traffic congestion in this area as well as littering due to children accessing the site from this section.

#### Applicant' response

- 6.2.117 In response to Council's comments, the Applicant has initially advised that it may endeavor to obtain an easement for pedestrian access across the site, which would become operational when the western link to Bridge Road becomes available (subject to consent of other landowners). The connection would likely be located to the south of the existing ovals temporarily. However, when the east-west link (identified in **Figure 38**) is constructed, this easement would be extinguished. The latter is a preferred link in the long term, being the direct access.
- 6.2.118 However, with regard to the comments regarding the broader connectivity of the site with the surrounding road network, especially Bridge Road, the Applicant noted that the site is subject to a wider WCC Masterplan, which seeks to address connectivity and accessibility issues through the

introduction of new pedestrian and vehicular connections into and through the site. However, the nature of any future connection across the land to the west would be subject to negotiation and the development outcome on that land and is outside the scope of this application. As such, the traffic modelling has demonstrated that the proposal would not significantly impact on the Darcy Road/Bridge Road connection. Therefore, an additional mitigation measure such as an extended pedestrian connection to Bridge Road, is not considered necessary.

- 6.2.119 Council reviewed the Applicant's SRtS in October 2021 and reiterated the need for an easement across the site, and if possible, extension to Bridge Road. Council also mentioned the need for this link to be publicly accessible in the future to improve the overall connectivity of the precinct.
- 6.2.120 Following further consultation with the Department in November 2021, the Applicant identified that there is an existing pedestrian link within the site which can be utilised to provide primary school students, ELC and the church users with an east-west through pedestrian linkage within the site. The location of this existing pedestrian link, as compared to the previously proposed link, is identified in Figure 38. The Applicant advised that no easements would need to be established if this existing connection is utilised in the future for the purpose of the proposed development.



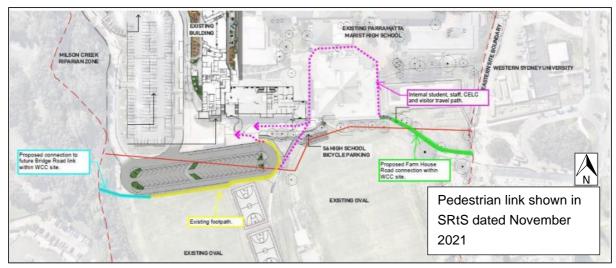


Figure 38 | Comparison of internal east-west pedestrian links within the site (Source: SRtS 2021)

- 6.2.121 The Applicant also agreed to undertake negotiations with the adjoining land to the west so that the extended link to Bridge Road can be facilitated in the future. However, the Applicant indicated that given the future extended connection to Bridge Road is identified in the WCC Masterplan, it would be delivered in the future and therefore creation of easements under this application is not required. Following delivery of the WCC Masterplan, this link can be used as a public access, subject to upgrades to security measures within the site.
- 6.2.122 The Applicant confirmed that the WCC Masterplan intends to provide pedestrian and vehicular connection along the future links. The Applicant also noted that Farmhouse Road would not be used as a drop-off/pick-up area, and if needed waste collection areas would be placed to avoid littering in the future.

#### Department's assessment

- 6.2.123 The Department has reviewed the Applicant's response and supports the proposed pedestrian link through the site as well as the overall masterplan with a variety of pedestrian connections and accesses. However, the Department does not agree that the existing link (as proposed by the Applicant in the SRtS in November 2021) is satisfactory for this purpose. The existing link is a convoluted pathway around an existing building and is not conducive for use by students and/or ELC users on a daily basis. Consequently, the Department considers that the Applicant should provide a paved pedestrian link, consistent with the diagram submitted in September 2021 (Figure 38). It appears that, to deliver this link, the Applicant may need to construct a section of the pathway, to the south of the existing building (joining the yellow dotted line in the figure). Conditions to this effect are recommended.
- 6.2.124 The Department notes that the WCC Masterplan does not form part of this SSD application and that the connection to Bridge Road forms part of this wider strategy. However, the Department also notes, from the previous discussions, that the development traffic may have significant impacts on the nearby Darcy Road/Bridge Road intersection. Consequently, the Department agrees with Council that the Applicant should not only provide the internal connection within the site, but also explore opportunities for further connections to Bridge Road via the adjoining site to the west, so that the impacts on this intersection due to future development traffic flows in 2033, are reduced. The extended connection to Bridge Road would mean that pedestrian traffic (at least) would be distributed and would be consistent with the GTP, which endeavors to target a 10% modal shift in the future.

- 6.2.125 The Department acknowledges that this would involve negotiation with adjoining owners but, if implemented, would result in a significant positive outcome for the site and the broader community. The Department considers that connecting the site to Bridge Road has sufficient nexus with this application as it assists in redistributing the pedestrian traffic, improving the efficiency of pedestrian movements and therefore achieve the modal shift by encouraging users to walk. This in turn would reduce traffic generation from the development and its impact on Darcy Road. Additionally, it is a response to the needs for broader connectivity within the precinct and, if implemented would deliver a significant community benefit for the precinct.
- 6.2.126 Based on the comments from public authorities and the assessment, the Department has recommended the following conditions:
  - the through pedestrian link be created internally within the site prior to the occupation of the school and all required easements be created (if any) to enable operation of the link along with the school.
  - a positive covenant be created on the title of the land to which this application applies, to allow for public pedestrian access along this link in the future, when the connection to Bridge Road is obtained.
  - the Applicant delivers the connection to Bridge Road, within 12 months of commencement of
    operation of the school or provides alternate timing of construction or provides satisfactory
    evidence of consultation to demonstrate that all possible opportunities have been explored to
    obtain an easement through the adjoining property to the west.

#### **Construction traffic**

- 6.2.127 The amended TAIA includes a preliminary Construction Traffic Management Plan (CTMP) and a construction traffic impact assessment as part of the TAIA, which assesses the viability of the project site being serviced by heavy vehicles during construction.
- 6.2.128 The TAIA identifies that construction traffic routes would primarily originate from Hawkesbury Road, turn left onto Darcy Road and then into the WCC site. The construction traffic would exit the project site off Darcy Road westbound onto Cumberland Highway. The TAIA notes that the delivery of the PLR Stage 1 project may cause traffic disruptions and access restriction on Hawkesbury Road. In such situations, all construction vehicles would approach the project site from the west. Possible construction traffic routes are shown in Figure 39.
- 6.2.129 The amended TAIA states that it is anticipated the proposed development would generate up to 20 two-way construction vehicle movements per day. Additionally, the TAIA states that based on a 11-hour working day, this would equate to an average of two vehicle movements in an hour.
- 6.2.130 The Applicant states that due to the proximity of the WCC site to public transport and limited on-street parking availability, construction workers would be encouraged to travel via public transport.
  Additionally, a subcontractor parking area would be established within the project site providing limited on-site parking for construction workers. Construction workers who live near each other would be encouraged to carpool together to the project site.

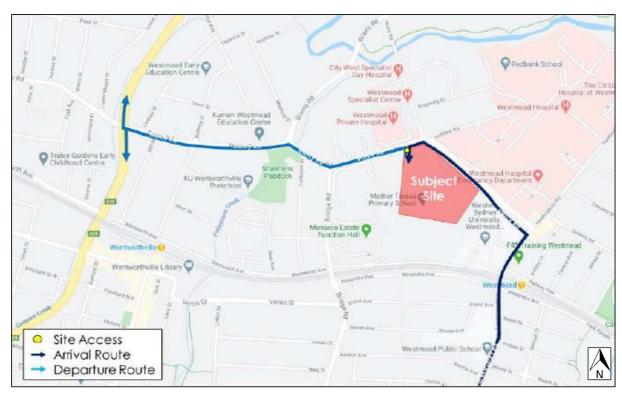


Figure 39 | Possible construction traffic routes (Source: Applicant's EIS 2020)

- 6.2.131 TfNSW and Council did not provide any comments on the proposed construction traffic.
- 6.2.132 During the assessment process, the Department requested additional information with respect to CTMP noting the significance of the site's location and the impacts of future State infrastructure proposed to be constructed in the following years, including assessment of the key cumulative impacts of the other construction activities (including the likely concurrent construction of the multistorey car park) and impacts of PLR construction, assessment of road safety at key intersection and locations subject to heavy vehicles and high pedestrian activity, and details on how pedestrian and cycle movements would be managed at all times.
- 6.2.133 In response, the Applicant's RtS stated that CTMP is generally a condition of consent prior to commencement of works and did not agree to provide a more detailed CTMP for further assessment. However, the Applicant provided some preliminary details with respect to PLR and stated that such impacts would be addressed in detail prior to commencement of works.
- 6.2.134 The Department has reviewed the matters in relation to construction traffic and considers that the Applicant has provided satisfactory evidence to demonstrate that construction traffic can be appropriately managed subject to conditions including preparation of a detailed CTMP, a Construction Worker Transportation Strategy, and pre / post dilapidation reports to ensure any road damage is rectified. However, the Applicant has not considered the possibility of the construction the multi-storey car park concurrently with the proposed development. Therefore, the Department has recommended a condition requiring the preparation of a final CTMP, adequately addressing all of the above issues raised.

#### 6.3 Built form

#### Siting of the development

- 6.3.1 The physical design and layout of the existing WCC site and the proposed development, as modified by the amended proposal, are outlined in **Sections 1.2** and **2.2**, respectively. The WCC site is located within a large street block bounded by Darcy Road, Hawkesbury Road, Bridge Road and the railway line. The project site is located within the north-west of the WCC site, on a north-south axis adjacent to the west of the existing schools' buildings with pedestrian access from Darcy Road. The site plan shows that the church would be the visible element from the Darcy Road frontage with the school building at the backdrop. Extensive landscaping would occupy the spaces between the church and school buildings, the access driveway to the west, and existing carparks to the south and buildings to the east.
- 6.3.2 Given the nature of the large block and the location of the project site within the north-west corner of the WCC site, access to the proposed development is reliant upon the existing Darcy Road / Mother Teresa site access at the north-west corner.
- 6.3.3 During the EIS exhibition Council raised significant concerns regarding the lack of connections in and around the overall WCC site, noting that the singular entry from Darcy Road and lack of accessible streets and internal share ways throughout the block results in an environment not conducive to walking. To mitigate this, Council suggested the implementation of a few pedestrian connections from the site to the surrounding streets. GANSW also provided recommendations to improve pedestrian connections within the site.
- 6.3.4 Council's submissions also raised concerns regarding the safety of the students having regard to the busy locality.
- 6.3.5 In response to the concerns raised by Council, the amended proposal incorporated pedestrian links within the site to connect Farmhouse Road with the drop-off/pick-up area behind the ELC building. The amended proposal also involved some changes to the site access and adjustments to the front boundary, which resulted in the relocation of the church marginally to the east and minor redesign of the proposed at-grade car park adjacent to the access driveway.
- 6.3.6 Council reviewed the amended proposal and generally supported the masterplan, except for the concerns regarding the pedestrian links through the site.
- 6.3.7 The Department has discussed this matter in detail in **Section 6.2** and concludes that, while the siting of the development is generally supported, the lack of pedestrian connections within and around the site remains a concern. Suitable conditions have been recommended to ensure pedestrian connections and links are created within the WCC site prior to the occupation of the school.
- 6.3.8 The siting of the development has considered the Crime Prevention Through Environmental Design Principles and assessed as satisfactory in that regard.

## **Bulk and scale**

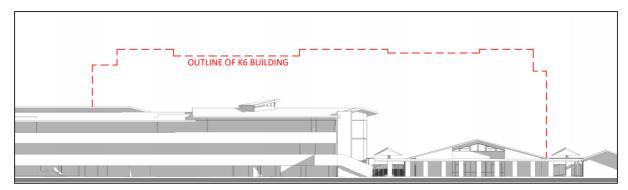
6.3.9 The WCC site is not subject to a maximum building height or floor space ratio (FSR) under the PLEP 2011. It is, however, located within 150m to the north of the normal approach pathway to the Westmead Hospital helipad, and therefore practical height limitations exist for the project site. The maximum heights of the proposed new buildings are as follows:

- primary school building 26.5m to the top of the rooftop storage area.
- church 11.5m to the roof apex (13.8m to the top of the 'cross' structure fronting Darcy Road).
- 6.3.10 Given the slope of the project site, bulk excavations would be required to provide a level ground floor for both buildings, incorporating both cut and fill of between -1.25m and +0.5m. The final ground level following the bulk earthworks would be RL 20.5 for the primary school building and RL 19.90 for the church.
- 6.3.11 The proposal seeks consent for 8158sqm of gross floor area across the two new buildings, incorporating:
  - primary school 7153sqm.
  - church 1005sqm.
- 6.3.12 The proposed church (as modified by the amended proposal) would be set back from Darcy Road by 10-15m. It would, however, appear prominently in the public streetscape, with the apex of the building's sloped roof set behind a 'cross' structure where the church fronts the junction of Darcy Road and Mons Road. This would act as a visual gateway to the WCC site. Set behind the church and further back from Darcy Road, the primary school building's northern elevation would also appear prominently as a six-storey structure when viewed from both Darcy Road and Mons Road. The buildings, as viewed from Mons Road to the north, are shown in **Figure 40**.



Figure 40 | Church and primary school buildings from Mons Road (Source: Applicant's EIS 2020)

6.3.13 The existing buildings across the WCC site's three schools' range in height from single storey to four storeys and are typically set back from Darcy Road. The proposed primary school building would be significantly taller than the existing Mother Teresa Primary School buildings immediately adjacent to the east, which range in height from single storey to three storeys, as identified in **Figure 41**.



**Figure 41** | Outline of proposed primary school building compared to the existing Mother Teresa Primary School buildings (Source: Applicant's EIS 2020)

6.3.14 In its review, Council did not raise any specific concern regarding the height or bulk of the proposed buildings. No public objections relating to height were received.

## **Detailed design and materiality**

- 6.3.15 The development incorporates a range of façade treatments to balance the visual impacts of the bulk and scale of the proposed buildings.
- 6.3.16 The proposed primary school building contains deep floor plates and is of considerably more bulk than the surrounding existing school buildings. To reduce the visual bulk of the building, the external façade of the stacked six-storey building has been designed to emphasise horizontal expression through solid elements punctured vertically by landscaped voids. Further visual relief would be provided through the installation of gradient colour-patterned perforated sun shading to the front of the building's fenestration. The building is depicted in **Figures 16, 42 and 43**.



Figure 42 | Proposed primary school building from the west (Source: Applicant's SRtS 2021).



Figure 43 | Proposed primary school building from the south-west (Source: Applicant's EIS 2020).

6.3.17 The façade treatment is identified in Figure 44.



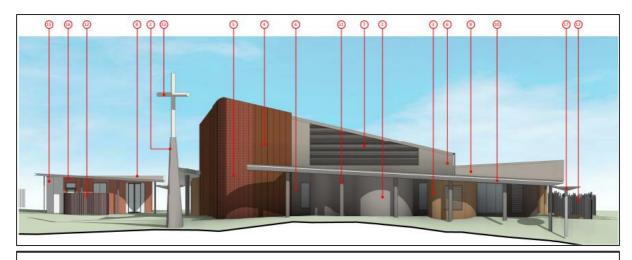
Figure 44 | Primary school external colours and finishes (Source: Applicant's SRtS 2021)

6.3.18 The multi-storey design of the school has been considered by the Applicant in laying out classrooms and their functions. Year groups are proposed to be located on specific levels across four learning communities, each of which share a covered outdoor learning space. Specialty learning areas would

- include appropriate facilities for each year group arranged to ensure that travel to reach an active open space is limited to a single storey either up or down.
- 6.3.19 The façade treatment of the primary school building incorporates a range of materials and finishes, including fibre cement panels, off-form concrete, powder coated aluminum louvres and window walls, glass and painted steel balustrades, colourbond roofing and raised and vertical landscape planters (Figure 44).
- 6.3.20 To facilitate the construction of the proposed church, the existing retaining wall fronting Darcy Road would be replaced with a steeply banked planted berm. The general layout of the church is discussed in Section 2.2. The dominant feature of the structure is its north-facing mono-pitched roof, surrounded by a skirting verandah. The building is lower and appears less bulky than the primary school building at its rear. As previously discussed, gaps between the offsets from the main worship space are designed to allow for light, ventilation and pedestrian movement. Full-height glazed openings and shaded clerestory glazing also act to reduce the visual bulk of the building. The main entry to the church is located beneath the verandah at the rear, allowing for easy connectivity with the primary school. Ceremonial vehicles would access the building via a carpark access driveway, which sits beneath a porte cochere. The building is depicted in Figures 18, 40, 45, 46 and 47.
- 6.3.21 The façade treatment of the church building incorporates a range of materials and finishes, including concrete walls, cladding, screening, full-height and clerestory glazing, and exposed external columns and fascia beams (**Figures 46** and **47**).



Figure 45 | Church viewed from Darcy Road – west (Source: Applicant's SRtS 2021)



# MATERIALS LEGEND 2. CONCRETE WALL FINISH TYPE 2 7. CLERESTORY WINDOW FRAME & LOUVRES 4. SANCTUARY WALL CLADDING 8. ROOF SHEET 5. SANCTUARY WALL SCREEN 10. SOFFIT LINING 11. SERVICE ENCLOSURE SCREEN 13. CROSS 15. OFFICE WALL CLADDING TYPE 1 16. OFFICE WALL CLADDING TYPE 2

17. RAINWATER SUMP

Figure 46 | Church external colours and finishes (Source: Applicant's SRtS 2021)

EXTERNAL COLUMNS

6. WORHSIP HALL CLADDING



Figure 47 | Church external colours and finishes (Source: Applicant's SRtS 2021)

- 6.3.22 The SDRP reviewed the design and supported the orientation of the church and the treatment along Darcy Road. In its review, Council did not raise any specific concern regarding the design of the proposed buildings. No public objections relating to building design were received.
- 6.3.23 The Department considers that the proposed primary school building has been appropriately designed for the WCC site and surrounding context. The horizontal façade of the primary school building, punctuated vertically by landscaped and glazed voids, successfully reduces the visual bulk of the building and ensures that it does not appear dominant within the context of the wider school campus. The materials and colours of the external façade add further interest and variety to the design.
- 6.3.24 The Department also considers that the church has been appropriately designed for the WCC site and surrounding context. The mono-pitched roof and north-facing raised 'cross' structure would add visual interest to the Darcy Road frontage. The materials and colours of the external façade add further interest and variety to the design. Overall, the church would act as an appropriate visual gateway to the site, set behind improved boundary landscaping.

#### **ELC**

- 6.3.25 To facilitate the conversion of the ground floor level of the existing Mother Teresa Primary School building into the ELC, minor external alterations would be required. These include the:
  - removal and enlargement of some existing glazed openings.
  - installation of new doors.
  - creation of new openings in an external wall to allow an opening to the kitchen.
  - modification of some existing balustrades / installation of new balustrades at first floor level eastern elevation.
  - installation of new external polycarbonate awnings at the ground floor eastern elevation of the building (**Figure 48**).



Figure 48 | ELC external elevation (Source: Applicant's EIS 2020)

- 6.3.26 In its review, Council or SDRP did not raise any concern regarding the proposal building alterations.
- 6.3.27 The Department considers that the minor alterations would not cause harm to the character or appearance of the building and are acceptable overall.

## 6.4 Open space and landscaping

- 6.4.1 As existing, the project site incorporates open grassed play areas, a hockey field and three basketball / tennis courts. The site also includes 0.18ha of urban exotic/native vegetation and 0.49ha of exotic grassland (open grassed play areas). To facilitate the development, 27 trees are proposed to be removed. The grassed play areas, hockey field, one of three basketball / tennis courts, and their supporting structures would also be removed.
- 6.4.2 Following the completion of the proposed development, the buildings would largely be surrounded by landscaping with minimal outdoor open recreation/play space. For the purposes of outdoor learning and recreation, students of the primary school would have access to open space comprising:
  - uncovered outdoor ground level play space along the western side of the building.
  - covered outdoor ground level play space along the western side of the building.
  - covered outdoor play and learning spaces at the ground floor undercroft and third floor level.
  - covered outdoor play and learning / circulation spaces at the first, second, and fourth floor levels.
  - uncovered open space at the fifth-floor level rooftop.
  - two existing ovals at the south of the WCC site, where necessary, for the delivery of the PDHPE curriculum, shared with students of the neighbouring high schools.
- 6.4.3 During the assessment of the application, significant concerns were raised by Council regarding the loss of existing open space available for students, and the quality and quantity of open space to be provided for future primary school students. The Department also raised a number of concerns regarding the quality and quantity of the proposed open space to be made available to meet the physical needs of students.
- 6.4.4 In its review of the EIS and upon visiting the site, the Department noted that the project site is not constrained in relation to open space provision. It is considered that there are opportunities to provide for ground level open spaces or proposed shared open space usage with the other schools within the WCC site. Therefore, the Applicant was invited to address the concerns and explore opportunities for increased usage of ground level open space within the WCC site or co-locate open spaces with the existing high schools within the site to complement the open spaces designed within the building.
- 6.4.5 Specifically, the Department requested clarification regarding the:
  - minimum amount of outdoor space to be provided per student.
  - lack of provision of ground level open space areas, despite capacity to do so within WCC.
  - level of solar access / daylight access provisions to the upper level open spaces, which are unlikely to receive sufficient sunlight during the winter solstice.
  - incorporation of circulation areas between classrooms in the calculation of 'open space'.
  - acoustic impacts of integrated open spaces and classrooms, noting that acoustic insulation between floors or timing of usage of open spaces on each level should be provided.
- 6.4.6 The Department also raised concerns regarding proposed landscaping and tree removal, noting the Applicant had provided insufficient information to justify the removal of the trees fronting Darcy Road, and advising that alternative methods to retain the trees should be explored.
- 6.4.7 The Applicant's response to each of the matters and the Department's assessment are provided below.

#### Tree removal

- 6.4.8 The Applicant's RtS provided additional information seeking to address the concerns raised by the Department and Council regarding the extent of tree removal fronting Darcy Road. The Applicant advised that the removal of the trees would allow for the removal of the existing retaining wall, enabling the provision of a cohesive and welcoming street frontage with improved access. This approach was agreed with the SDRP.
- 6.4.9 The 27 trees proposed to be removed have been assessed by an arborist, who confirmed that none are of high or very high landscape significance. The trees range in good to poor health and structural condition. Specifically:
  - five trees have a transient (<5 years) or short (5-15 years) useful life expectancy.</li>
  - of the locally indigenous species to be removed, none of the trees are sufficiently large to be remnant species.
  - most of the trees have been planted recently, likely within the past 15 years.
  - three trees proposed for retention are some of the larger and better-quality trees along the frontage and would not be impacted by the battering works.
- 6.4.10 As part of a landscaping strategy for the project site, the proposal includes (Figure 49):
  - a steeply banked planted berm fronting Darcy Road, providing two entry paths and the inclusion of an accessible ramp.
  - landscaping including mass planted garden beds comprising new native tree planting and mixed understory planting.
  - the planting of approximately 25 new trees in the area, both locally indigenous and Australian native species supplied as advanced size (75-200L) specimens.
  - tree canopy coverage throughout the development area of 25% (4508 sqm proposed and 207 sqm existing).
  - a 'Yarning Circle' adjacent to Darcy Road.

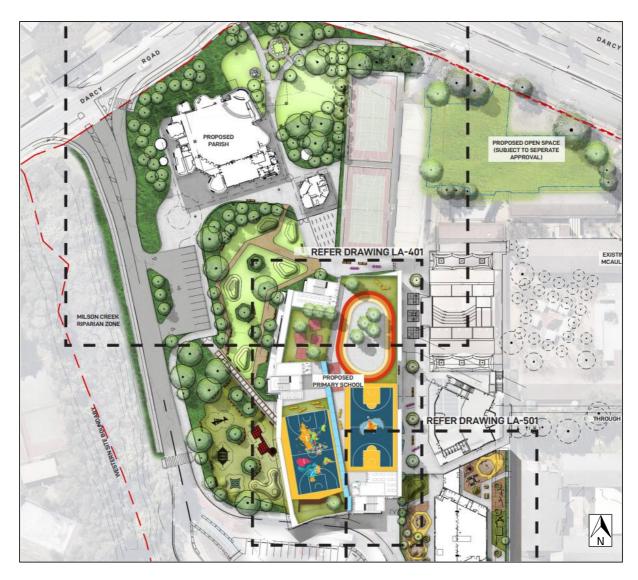


Figure 49 | Proposed landscaping - primary school and church (Source: Applicant's SRtS 2021)

- 6.4.11 The Department has considered the information provided within the RtS and is satisfied that it provides adequate justification for the removal of the trees along the Darcy Road periphery, and therefore addresses the earlier concerns raised. The proposed replacement planting within the site (with 130 trees) can suitably offset the removed trees and provide a 26% canopy cover for the project site.
- 6.4.12 The Department notes that the landscape plans submitted with the SRtS in September 2021, have some inconsistencies with the architectural plans. Consequently, the Department has recommended a condition requiring the landscape plans to be updated to match the architectural plans. However, this would not lead to major amendments to the proposed landscape masterplan.
- 6.4.13 The Department's assessment of the proposed landscaping and open space is considered below.

# Quality and scope of landscaping, play space and open area

ELC

6.4.14 The Education SEPP defines the ELC as a centre-based child care facility. The proposed ELC would have a capacity of 200 children, requiring a total of 650sqm of unencumbered indoor play space and

- 1400sqm of unencumbered outdoor play space under the provisions of the Education SEPP. The proposal satisfies these play space requirements, making provision for 896sqm and 1489sqm, respectively (identified in **Figure 20**), and therefore separate concurrence of the Regulatory Authority in relation to Clause 22 of Part 3 of the Education SEPP is not required.
- 6.4.15 The application proposes new ground floor landscaping and play space to support the ELC, including sandpits, grass and turfed areas and sandstone blocks for climbing and seating. Mass planting would provide amenity and sensory experiences, with species selection to minimise allergenic, flowering and fruiting plants. An adventure play space would provide natural elements to enable infant development of ability and experiencing nature (**Figure 50**).

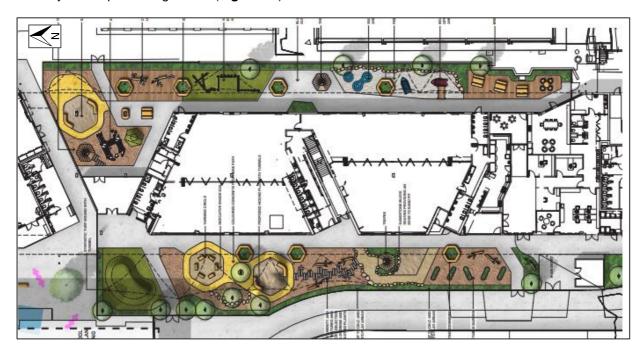


Figure 50 | Proposed landscaping - ELC (Source: Applicant's SRtS 2021)

6.4.16 The Department has assessed the functionality, quality and connection of the proposed outdoor landscaped and play spaces for the ELC and considers that it would provide adequate amenity for children and staff. The compliance of the proposal with Department's Child Care Planning Guidelines is provided in **Appendix B** and is assessed as satisfactory by the Department.

## Primary school

6.4.17 In response to the concerns raised in submissions and by the Department regarding the quantity and quality of proposed play space and open space, the Applicant's RtS acknowledged that the project site is reasonably unconstrained, and more ground level open space could feasibly be accommodated. However, the RtS stated that the design of the proposed landscaping and open space represents the best educational outcome for the school, and is supported by the Applicant's learning pedagogy, as informed by independent research. The RtS advised that the proposed open space seeks to engage all students and ensure age-appropriate outcomes through encouraging inquiry, exploration and social interaction. The immediate adjacency of play and learning areas is designed to promote multi-use of the space and allow for better supervision with less time walking between places. The design and integration of aboveground play space with learning areas is provided in Figures 13, 14 and 15.

- 6.4.18 The RtS and the SRtS (including the amended proposal) therefore did not incorporate any significant revisions pertaining to the proposed outdoor learning and play areas or landscaping. However, the Applicant sought to address the Department's concerns through the provision of further clarifying information, confirming that:
  - a total of 13,828sqm of open space would be provided as part of the new development, equating to 8.2sqm per student, comprising 7124sqm of above ground play area across levels 1-5 and 6704sqm within the ground level undercroft and the adjacent outdoor area.
  - the WCC site's existing ovals are not included in the calculated total open space.
- 6.4.19 With regard to the quality of outdoor play space to be provided, the Applicant states that it has been designed to ensure:
  - flexibility for teachers and students, ensuring multiple classes can be grouped together on the same floors for different activities facilitated through good quality indoor/outdoor flow.
  - · accessibility in all weather conditions.
  - encouragement of greater physical activity through the provision of activated spaces with a range of equipment, allowing unstructured free play and encouraging creativity, chance encounter and exploration among students.
  - provision of multi-use spaces which can be used for outdoor learning and play and circulation.
  - a range of students and sports can utilise the Level 5 rooftop space at any time, with a primary focus on fitness and exercise with multi-sport facilities, open synthetic turf areas for play and amenity, and a running track.
- 6.4.20 At SRtS stage, the Applicant clarified that dedicated open space areas have been identified for different year groups, to ensure that younger students have separate play areas to older students. The spaces would be provided adjacent to classrooms with a vertical connection to larger spaces either one level up or down. Ground floor space would be used primarily by students in Kindergarten to Year 2. There would be no dedicated area of at-grade open space for any of the other year groups who would only have access to above ground play area. Specifically, the amount of play area provided per student of each year cohort is:
  - Kindergarten, Years 1 and 2 (Ground and Level 1) 9.31 sqm per student.
  - Years 3 and 4 (Levels 4 and 5) 7.43 sqm per student.
  - Years 5 and 6 (Levels 2 and 3) 7.42 sqm per student.
- 6.4.21 While the Applicant has confirmed the above dedicated open space per year group, the SRtS also states that students would not be precluded from travelling between different levels of the building to access open space when it is appropriate to do so, such as during free play. No further details of such arrangements have been provided by the Applicant that confirms that children are free to access the ground level natural play areas during this free time or what free time represents.
- 6.4.22 Sections through outdoor learning and play spaces at Levels 2 and 3 are shown in Figure 51.

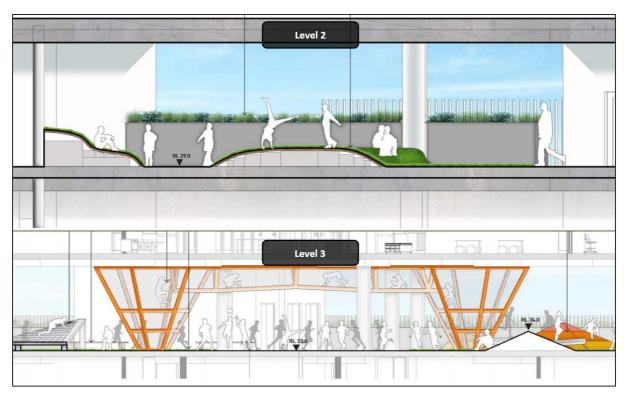


Figure 51 | Layout of open spaces (Source: Applicant's RtS 2020)

- 6.4.23 The Department has carefully considered the Applicant's justification in relation to the quantity of play space or open space on the project site available to students, noting that there are no minimum numeric requirements for open space within the Education SEPP, in the context of a school. In this regard, the Department has utilised the Educational Facilities Standards and Guidelines (EFSG) for Government schools as a guide. In the EFSG, the Department of Education indicates that a minimum play space of 10sqm per student should aim to be provided when providing new building/s on an existing Government school site.
- 6.4.24 If the above is not achievable, the EFSG specifies that the proposed play space per student must not be less than the existing area per student currently on the site. Where 10sqm per student is not achievable, and an agreement for joint use facilities with a local council or landowner is not in place, the designer must undertake a play space audit of the site to demonstrate the possible open play space that is achievable. The EFSG further states that the open space can be provided in the form of paved or grassed areas / rooftop terraces / covered outdoor learning areas. When located off-site, as access by license, play facilities should be close to the school, easily accessible, safe and secure.
- 6.4.25 The proposal does not provide a minimum play space of 10sqm per student, and the Applicant has not provided a detailed space audit of the project or wider WCC site to demonstrate the possible open play space achievable. Rather, at RtS stage the Applicant agreed that more ground level open space could be feasibly accommodated at the site. The Applicant also advised within the RtS that following the completion of the WCC Masterplan, there would be more play space area per student than recommended by the EFSG. No numerical details were provided and no date for delivery of the WCC Masterplan. As previously discussed, the WCC Masterplan does not form part of this SSD application and therefore has not been considered in the Department's assessment of the proposal or in support of the play area deficiency.

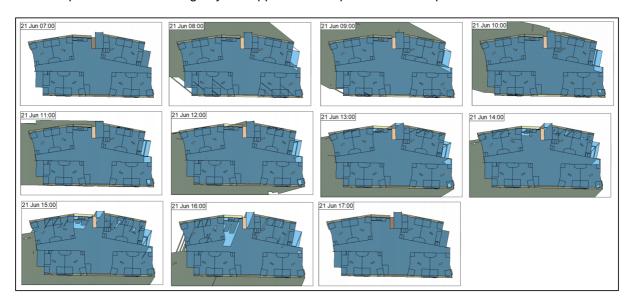
- 6.4.26 Consequently, the Department does not consider that the proposal demonstrates compliance with the EFSG, which is used as a guide for open space calculation due to lack of development controls in the Education SEPP or PLEP 2011. The Applicant also did not provide sufficient information to demonstrate opportunities for use of the school oval by the primary school children to compensate for the lack of at-grade outdoor space adjacent to the building and to provide students with an opportunity to engage in play and recreation activities such as running and kicking balls.
- 6.4.27 The Department is also concerned that the limited or no access to unencumbered open-air, at-grade play areas proposed for some students may impact on the overall quality of the outdoor learning environment. For example, students in Years 5 and 6 would have no dedicated access to at-grade or open-air play areas; they would be largely limited to the covered play areas at Levels 2 and 3, which have floor to ceiling heights of 4m and 5m, respectively. The quality of the outdoor play areas at Levels 1 to 4 is further eroded by the need for artificial lighting where natural lighting is insufficient, primarily during winter months (discussed further below). The Department's concerns are compounded by the lack of access to be provided for primary school students to the WCC ovals, also discussed below.
- 6.4.28 The Department acknowledges that the Applicant has partly responded to the constraints imposed by the multi-storey design of the school through the provision of a range of engaging passive and active play opportunities for students. However, the Department considers that the Applicant should explore opportunities to allow for more equitable access to unencumbered, open-air, and at-grade outdoor play areas for students of all year groups, both as part of the curriculum and during free play. To do so, it should be demonstrated that this can be adequately accommodated at the WCC site. The Applicant does not agree that providing expanded access to at-grade open space is a necessary part of delivering and meeting a student's education needs.

# Solar access to play and open spaces

- 6.4.29 Schedule 4 of the Education SEPP defines the design quality principles for schools. Principle 5 provides that schools should include appropriate outdoor learning and play spaces and access to sunlight.
- 6.4.30 In response to the Department's concerns regarding lack of daylight access to the open space within the school during the winter solstice, the Applicant's RtS included hourly solar access diagrams for the school and a daylight access analysis, focusing on the open space within the primary school building (**Figures 52** and **53**).
- 6.4.31 The daylight analysis included a benchmark against *AS1158.3.1:2005 Lighting for Roads & Public Spaces* and various Councils' lighting policies, including the City of Sydney 'Sydney Lights: Public Domain design code' (2015) and City of Ryde 'Open Space Lighting Policy' (draft, 2021). For sports field recreation and physical training, 50 is desirable lux as indicated in *AS2560.2.3-2007 Sports lighting*, and 21 lux is considered a mid-range lux and the highest level of illuminance for public activity areas as indicated in *AS1158.3.1:2005*.
- 6.4.32 The design of the school aims to achieve at least 50 lux lighting (as required under the Standards, and to be supplemented with artificial lighting) to the main outdoor play area at Ground Floor and Levels 3 and 5, and at least 21 lux to the outdoor areas at Levels 1, 2 and 4.
- 6.4.33 The Department notes that the Applicant has undertaken a technical study for all open and covered outdoor areas within the primary school building. However, the Department disagrees with some of

the assertions of the study which conclude that the outdoor play space at each level of the building would receive at least three hours of direct sunlight during the winter solstice. Specifically, the study notes that each level of outdoor space would receive "slivers and patches of light" during at least three hours of the day, regardless of what proportion of the space benefits from direct sunlight. For example, approximately 90 per cent of the outdoor play space on Level 4 would not receive any direct sunlight during the winter solstice (**Figure 52**), despite the assertion that the overall space would receive at least three hours of direct sunlight. The Department disagrees with this assertion and has concerns regarding the amenity afforded to students with regard to solar access during winter months, with the impact being greatest on levels 1-4. This is particularly so given that students are not necessarily free to access places within the building on another floor (that is not allocated to their year) that has better access to sun light during winter months.

6.4.34 With regard to daylight access, the SDRP requested that appropriate levels of daylight be provided to the outdoor play areas, particularly given the deep floor plates. The SDRP also encouraged the Applicant to explore the introduction of voids in circulation areas to ensure light reaches lower levels of the building, however no full-height vertical voids within the internal floor plates were introduced and incorporated into the design by the Applicant in response to this request.



**Figure 52** | Level 4 direct sunlight during winter solstice, depicted in light blue with dark blue depicting shade. (Source: Applicant's RtS 2020)

- 6.4.35 The Department acknowledges that the report demonstrates that outdoor areas would receive reasonable amounts of daylight through school hours, when an average for the year is accounted for. This conclusion is reached when comparing against the benchmarks outlined in **paragraph 6.4.31**.
- 6.4.36 Based on the annual parameter, **Figure 53** illustrates the percentage of illumination received during school hours, averaged throughout the year. The illustrations show the average annual lux dispersal for each level, for the time period 6am to 6pm.

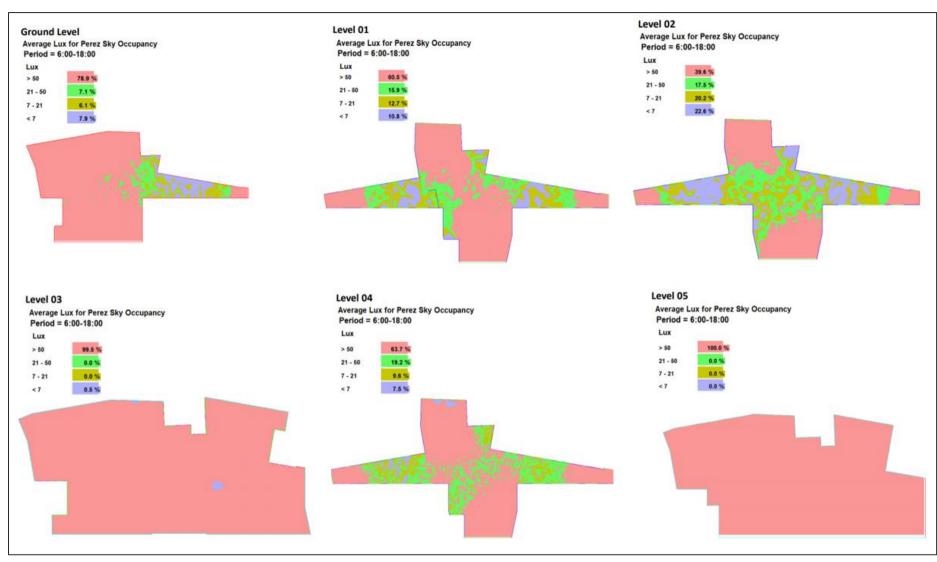


Figure 53 | Outdoor daylight access study for the open space areas (Source: Applicant's RtS 2020)

- 6.4.37 Based on the annual modelling results and supporting diagrams of daylight penetration into the open space within the school building, the analysis of average annual daylight access indicates that:
  - approximately 79% of the outdoor play area at Ground Level achieves annual average of <50 lux during operational hours throughout the year, with approximately 86% <21 lux.</li>
  - approximately 60% of the outdoor play area at Level 1 achieves annual average of <50 lux during operational hours throughout the year, with approximately 76% <21 lux.
  - approximately 39% of the outdoor play area at Level 2 achieves annual average of <50 lux during operational hours throughout the year, with approximately 57% <21 lux.</li>
  - approximately 99% of the outdoor play area at Level 3 achieves annual average of <50 lux during operational hours throughout the year, with approximately 99% <21 lux.</li>
  - approximately 64% of the outdoor play area at Level 4 achieves annual average of <50 lux during operational hours throughout the year, with approximately 83% <21 lux.</li>
  - approximately 100% of the outdoor play area at Level 5 achieves annual average of <50 lux during operational hours throughout the year, with an estimated total of 100% <21 lux.</li>
  - all outdoor play area space at Ground Level and Levels 1-5 are generally well-shaded from direct solar access during the summer solstice, with the exception of Level 5.
  - at least 80% of the average daylight received by the outdoor play areas are sufficient for the level of activities equivalent to those at a public playground.
  - artificial lighting would also be used to complement natural lighting where required.
- 6.4.38 The study concludes that the outdoor play spaces would receive reasonable amounts of daylight through the school hours but only when an average for the entire year is accounted for. The Department also acknowledges ESD principles and the requirement for sufficient covered area in schools that protect children from uncomfortable glare and heat when needed. However, the Department still holds concerns regarding the amenity afforded to students during the winter months and during the solstice, given the significant shortfall in daylight penetration at Levels 1 to 4 in particular. The significance of the impact of this shortfall would be concentrated on students in Years 5 and 6, who would be afforded no dedicated access to at-grade or open-air play space and would be largely restricted to the above ground outdoor play areas at Levels 2 and 3.
- 6.4.39 The Department considers that the lack of daylight in the open space areas within the building could be suitably compensated for students by ensuring that the Applicant is required to ensure that all primary school students are allowed suitable access the WCC ovals on a regular basis. However, details of how such access could be enabled have not been provided, and this is not proposed by the Applicant as part of the application. The capacity constraints of the existing WCC ovals is discussed further in the report below.

# **Access to WCC ovals**

- 6.4.40 The Department notes that the loss of the existing primary school current grassed play areas, a hockey field, and one of three basketball/tennis courts would likely further increase demand for use of the WCC ovals, in additional to the higher demand related to the overall increase in WCC school population.
- 6.4.41 In its review of the EIS, Council commented that both the existing Catherine McAuley Westmead and Parramatta Marist high schools within the WCC site currently access Council's sportsground facilities for their active sport and recreation needs as their physical education needs are unable to be fully catered for on the WCC site. This includes the use of facilities which are either at or near full capacity,

at Ollie Webb Reserve and Jones Park in Parramatta, Binalong Park in Toongabbie, Doyle Ground in North Parramatta and Arthur Phillip Park in Northmead. As identified in Council's draft Community Infrastructure Strategy, the area surrounding the site suffers from a lack of sportsgrounds and active recreational facilities. Both the Department and Council therefore raised significant concerns that the loss of currently available open space, together with a large increase in student numbers within the WCC site, would place undue demand on Council-owned sportsgrounds which are unable to accommodate such growth.

- 6.4.42 To address concerns raised by Council and the Department regarding potential undue demand on Council-owned sportsground facilities, at RtS stage the Applicant:
  - noted that the proposal does not involve an increase in high school enrolments and therefore asserted that it would not result in increased demand for access to Council-owned facilities.
  - advised that the introduction of primary school students to the oval facilities would not significantly change the existing shared use arrangements between the two high schools.
  - provided existing and proposed shared use schedules for the ovals for the two high schools.
- 6.4.43 The information provided for the year 2033 demonstrates that the two ovals would be scheduled for the exclusive use of high school students with no access to the primary school students (**Table 10**).

Table 10 | WCC - Indicative Oval Access (Year 2033) (Source: Applicant's SRtS, April 2021)

# **Indicative Oval Access (2033)**

	Monday		Monday Tuesday		Wednesday		Thursday		Friday		Saturday	
	Oval 1	Oval 2	Oval 1	Oval 2								
Before School	Marist – free play	McAuley – free play	Marist home game events	McAuley home game events								
Before Recess	Marist – PDHPE / Team Sports	McAuley PDHPE / Team Sports										
Recess	Marist – free play	McAuley – free play	Marist – free play	McAuley – free play	Marist – free play	McAuley – free play	Marist – free play	McAuley – free play	Marist – free play	McAuley – free play		
Recess to Lunch	Marist – PDHPE / Team Sports	McAuley PDHPE / Team Sports	Marist – PDHPE / Team Sports	McAuley PDHPE / Team Sports	Marist – PDHPE / Team Sports	McAuley PDHPE / Team Sports	Marist – PDHPE / Team Sports	McAuley PDHPE / Team Sports	Marist – PDHPE / Team Sports	McAuley PDHPE / Team Sports		
Lunch	Marist – free play	McAuley – free play	Marist – free play	McAuley – free play	Marist – free play	McAuley – free play	Marist – free play	McAuley – free play	Marist – free play	McAuley – free play		
After Lunch	Marist – PDHPE / Team Sports	McAuley PDHPE / Team Sports										
Post School	Marist – Team Sports	McAuley – Team Sports										

- 6.4.44 The Applicant's RtS advised that both primary and high school students would have access to the ovals as part of the curriculum, with staggered break times between users to ensure the safety of younger students. No quantitative information was provided to outline the scope and scale of such required access. Additionally, the schedule outlined in **Table 10** does not demonstrate that the ovals would be able to cater for at least an additional 1260 primary school students by the year 2033 without displacing students from the two high schools to off-site sportsground facilities, given that no additional oval space is proposed as part of this development.
- 6.4.45 To address Council's concerns, at SRtS stage the Applicant confirmed that the existing WCC ovals are not included in the calculated total open space for primary school students. Following review of the SRtS, Council confirmed that it no longer objects to the proposal in relation to open space and recreation.
- 6.4.46 The Department notes, however, that the Applicant has not confirmed that access to the ovals for primary school students would not form part of the curriculum. Nevertheless, for the purpose of this assessment and in accordance with the retraction of Council's objection to this element of the proposal, the Department considers that the proposal does not include access to the WCC ovals for the primary school students.

#### **Department consideration**

- 6.4.47 The Australian Government's 'Australian Physical Activity and Sedentary Behaviour Guidelines' recommend at least 60 minutes a day of moderate to vigorous intensity physical activity for children aged 5 12, being the age group represented in this application. This should involve a variety of aerobic activities, including some vigorous intensity activity. On at least three days per week, children should also engage in activities that strengthen muscle and bone.
- 6.4.48 The Department notes that a large percentage of the student population would spend extended hours within the WCC site, as part of their attendance at school and then at either morning or afternoon OOSH or both. The Department also notes the catchment identified by the Applicant from which a large proportion of the students would be drawn, contains a large portion of medium to high density housing with limited opportunity for physical activity. As such, the daily physical recreation needs of a large percentage of students, between Monday and Friday, would need to be met on the WCC site.
- 6.4.49 The public health rationale for governments at all level to promote physical activity is compelling. Physical activity is associated with a wide range of health, social, economic, and environmental benefits. Importantly, physical activity is beneficial across the lifespan, providing health benefits from infancy to old age. Important health benefits of physical activity during childhood and adolescence include favorable skeletal development, improved metabolic profile and psychological wellbeing, and an increased likelihood of physical activity later in adulthood.
- 6.4.50 In 2015, Health NSW found school age children and adolescents have:
  - low levels of physical activity, cardio-respiratory and muscular fitness.
  - low levels of active travel to school.
  - low levels of fundamental movement mastery.
  - growing prevalence of obesity in primary school children, particularly in urban areas.

- 6.4.51 Noting the above, the Department considers that all primary school students on this site should be provided with more equitable access to unencumbered, at-grade and open-air playing areas, both as part of the curriculum and for free play.
- 6.4.52 Department therefore considers it pertinent to ensure that all primary school students are provided with sufficient access to at-grade, open-air, unencumbered open space. Access should be provided at least twice per week (a minimum two hours in total).
- 6.4.53 The Department notes that the first stage of operation, which includes a primary school with a maximum enrolment of 660, represents a minimal increase beyond the existing enrolment number. The Department also notes that the Applicant has stated that the play space and the open space to be provided within the site is sufficient. Therefore, the Department is satisfied that the Applicant has demonstrated that the site can accommodate the recreational needs of 240 additional primary school students.
- 6.4.54 However, as discussed above, the Department is not satisfied that sufficient evidence has been provided by the Applicant to demonstrate that the primary school would be able to operate at full capacity, without the need for access to the WCC ovals to provide for the physical education needs of all students. Moreover, the Department is also not satisfied that the proposed internal open spaces within the primary school building is appropriate and sufficient to cater for the sporting, physical education and recreational needs of the primary school students.
- 6.4.55 Subsequently, the Department is not satisfied that sufficient evidence has been provided by the Applicant to demonstrate that the proposed primary school operating at full capacity can provide suitable access for all students to unencumbered, at-grade and open-air playing areas, without the need for students to access the existing WCC ovals. Whilst the Department holds concern regarding these elements of the proposal, this is not sufficient to recommend refusal of the application in its own right.
- 6.4.56 To ensure that all primary school students are provided with access to adequate and high-quality play space and open space, the Department has recommended conditions requiring the Applicant to:
  - demonstrate that the development can accommodate the recreational needs of all students, prior to each staged increase in capacity, at the rate of 10sqm/student within the WCC site, unless access to alternative open space locations are provided to the Department's satisfaction.
  - include details of schedule of use of the internal open spaces within the school building (as part of the Operational Management Plan for the primary school) and allocation of open space to Year groups within the school building, consistent with the RtS.
  - submit a schedule of access to the ovals by the primary school students.
  - details of any off-site arrangements for large sporting events.
  - submit an Open Space Management Plan, prior to the commencement of school operations, which demonstrates that all primary school students would have access to the ground level ovals (including WCC ovals) at least twice per week, for a minimum of two hours in total without displacing other students, unless evidence is provided to demonstrate that the Applicant has entered into an agreement with an off-site provider to fulfil student recreational needs.

#### 6.5 Site suitability

- 6.5.1 The WCC site is located in the Westmead precinct, surrounded by a mix of uses and building forms including health and education services, commercial, industrial and residential uses. Westmead is the largest health and education precinct in Greater Sydney and incorporates several major institutions including Westmead Hospital, The Children's Hospital at Westmead, Westmead Private Hospital, Children's Medical Research Institute, Westmead Medication Research Foundation, Westmead Institute for Medical Research, and campuses of Sydney University and WSU.
- 6.5.2 The draft Westmead 2036 Place Strategy (draft Strategy), recognises the precinct as being strategically aligned to become a world-class innovation, education and health precinct, aimed at making significant contributions to the Greater Parramatta and broader Sydney Region. The Strategy outlines Westmead's potential to accommodate up to 50,000 jobs by the year 2036. The Central City District Plan recognises the importance of the precinct and advises that reliable public and transport connections are required to accommodate the 24 hours a day, seven days a week operating environment.
- 6.5.3 To accommodate the continued growth and development of the precinct, the NSW Department of Education estimates an extra 89,360 students would need to be accommodated in the Central City District by 2036, with 32% of this growth predicted to occur in the Parramatta LGA. The City of Parramatta Local Housing Strategy July 2020 outlines the dwelling growth required to meet targets set out under the Central City District Plan, noting that 4470 additional dwellings are forecast for Westmead (North Precinct) by 2036.
- 6.5.4 The Department acknowledges that additional infrastructure is required to support this predicted growth. The EIS states that the proposed development would help meet growing student educational demands across the catchment, responding to a potential shortfall of 9530 primary places and 11,738 secondary places across the independent and Government school system by 2036.
- 6.5.5 The Department raises no concerns regarding the principle of continued educational use at the WCC site and supports the Applicant's approach to upgrade the two site access intersections, provide a pedestrian connection within the site, and internal drop-off/pick-up zones to accommodate the development traffic in the future without hindering the traffic flow on Darcy Road. However, the Department has raised concerns regarding the ability of the site to accommodate the full student capacity, without impacting on the nearby intersection at Darcy Road/Bridge Road/Coles car park.
- 6.5.6 As discussed in **Section 6.2**, the Department has recommended that the Applicant undertakes regular traffic assessment and monitoring to validate the impacts of the development at the above intersection, against the current assumptions in the traffic modelling within the amended TAIA.
- 6.5.7 The Department also agrees with Council's recommendation that through site pedestrian links are required to re-distribute the school traffic, improve pedestrian efficiency and reduce the overall impacts on Darcy Road. Conditions to this effect have been recommended.
- 6.5.8 The Department is satisfied that subject to the implementation of the GTP (with a 10% modal shift target), the redirection of the high school traffic to the multi-storey car park, the creation of the pedestrian links and the regular traffic monitoring post operation of the school, the development demonstrates compliance with the objective of the draft strategy to 'capitalise on transport connectivity and reduce car dependency'. When required, the Applicant may also need to implement

- mitigation and management measures (including upgrades) to the Darcy Road/Bridge Road/Coles car park intersection
- 6.5.9 As discussed in **Section 6.4**, the Department also considers that the open space within the proposed school building is not ideal to cater for the physical recreational needs of the primary school children, on its own. However, the WCC site itself contains enough sportsground capacity to accommodate a development of the scale proposed as well as the existing development, subject to appropriate scheduling of open space usage. To ensure that the site can suitably cater for the physical recreational needs of the primary school children without compromising the existing users, several conditions are recommended by the Department (discussed in **Section 6.4**) involving use of the WCC ovals by the primary school children.
- 6.5.10 The Department notes that during the EIS exhibition, Council's submission indicated that an alternative location to build a high-rise primary school and church should be considered at the current Sacred Heart Parish site in Ralph Street, Westmead. In response, the Applicant's RtS identified that expansion of the school at the Ralph Street site would mean it would be outside of the Parramatta LGA, which is not preferred by the Applicant. The location of this proposed school within the Parramatta LGA would cater for the current and future population needs within the LGA. As such, the Applicant also identified that this comment from Council contradicts its earlier comments raising general objections to vertical schools.
- 6.5.11 Notwithstanding the above assessment of site suitability, the Department considers that redevelopment of the school on another site is outside the scope of this assessment, although the Department notes that the Applicant did not do a thorough alternative options analysis.
- 6.5.12 In summary, the Department acknowledges that the scale of the development may result in some adverse impacts on traffic within the surrounding road network and access to quality open space to be used by the primary school children remains unresolved. However, the Department's consultation with Council, TfNSW and assessment of the impacts of the development concludes that the Applicant has committed to provide several mitigation measures (including intersection upgrades and pedestrian links) to overcome the identified negative impacts and render the site suitable for the development.
- 6.5.13 While the Department supports the Applicant's approach, it considers additional conditions are required to ensure that the proposed redevelopment of the site does not result in adverse impacts on the road network and caters for the play space and open space needs of the students.
- 6.5.14 The Department considers the site to be suitable for the development, subject to the Applicant implementing the recommended conditions regarding traffic assessment, pedestrian links and open space.

#### 6.6 Other issues

6.6.1 The Department's consideration of other issues is provided below in **Table 11**.

Table 11 | Summary of other issues

Issue	Findings	Department's consideration
Heritage	<ul> <li>The site does not include any items of local or State heritage significance.</li> <li>The site study area is listed on the State Heritage Inventory as containing Parramatta         Archaeological Management Unit 2891. An assessment was undertaken which determined the site does not contain historical archaeological potential. This was accepted by HNSW.</li> <li>The proposal would not have an adverse visual impact on two locally listed heritage items in the vicinity, including WSU (I628) and a Victorian residence on the grounds of WSU (I629).</li> <li>The proposal would not visually impact upon Old Government House and the former Government Domain, now Parramatta Park.</li> <li>Council's submission raised concerns with respect to the demolition of the Monastery, noting its heritage significance.</li> </ul>	<ul> <li>The Department has recommended a condition requiring the inclusion of an unexpected finds protocol regarding historic archaeology within the Construction Environmental Management Plan (CEMP).</li> <li>The Department notes that the Monastery is not a heritage listed item, nor does its demolition form part of this application.</li> </ul>
Aboriginal cultural heritage	The EIS was accompanied by an ACHAR, which concluded that the study area has the potential to contain Aboriginal archaeological	<ul> <li>The Department considers that the Applicant has adequately addressed the concerns raised by HNSW.</li> <li>The Department has recommended a condition a condition requiring the development of an Aboriginal Cultural Heritage Management Plan for the project site.</li> </ul>

deposits. Therefore, the ACHAR recommended that:

- Aboriginal archaeological test and salvage excavation be carried out.
- Aboriginal consultation continues throughout the excavations.
- any artefacts recovered remain on country and be catalogued and stored onsite.
- interpretation of the Aboriginal archaeology and history of the site be undertaken in consultation with the Registered Aboriginal Parties (RAPs).
- HNSW (ACH) raised concerns regarding the adequacy of the information contained within the ACHAR and questioned the lack of test excavation carried out at the site.
- In response, the Applicant provided additional information to address these concerns, including an indicative test pit location plan, project area mapping and further details regarding the requirement to remove/demolish existing structures located within the area of archaeological sensitivity.
- Following receipt of the additional information, HNSW (ACH) advised that they are satisfied with the ACHAR, subject to the inclusion of recommended conditions of consent.

#### Noise and vibration •

 A Noise and Vibration Assessment accompanied the EIS. The assessment established noise and vibration criteria for the construction and operation of the development in accordance with relevant legislation, standards and guidelines.

#### Operational Noise

- The Applicant's Noise and Vibration
   Assessment indicates that the use of
   the school and ELC outdoor play
   spaces, and the chapel out-of-hours,
   is expected to meet the noise
   criteria.
- Additional traffic generation would not result in any noticeable change in traffic noise levels and would meet the NSW Road Noise Policy recommendations.
- Mechanical plant and public address/school bell systems have not yet been selected.
- No public authorities raised significant concerns regarding noise generation.
- However, the Department requested the Applicant to provide some clarification regarding the acoustic treatment of the intermediate floors where open space is proposed.
- The Applicant has not provided this information detail in the report.

#### Construction Noise

- A preliminary assessment concluded that construction noise would exceed the limits set for standard hours and out-of-hours works. In order to meet the requirements, the following controls would be implemented:
  - selection of quieter plant and equipment, and regular maintenance.
  - strategic scheduling of work during periods of least impact.

- The Department has assessed the Applicant's noise assessment and is satisfied that the proposed development would not result in an unreasonable noise environment for the neighbouring properties.
- The Department notes that additional details would be needed with regard to the acoustic treatment of mechanical plants and the intermediate school building floors with recreational areas.
- The Department has recommended conditions requiring the Applicant to:
  - include details of the acoustic treatments of the internal recreational areas within the building and mechanical plants.
  - ensure that the
     proposed glazing
     within the church
     complies with the
     recommendations of
     the Noise and
     Vibration
     Assessment report.
  - o deliver an
    Operational
    Environmental
    Management Plan
    with details of use of
    the facilities
    including staggering
    of play breaks to
    ensure minimal

- consultation, notification and complaints handling.
- strategic on-site noise
  management including
  maximising distance between
  noisy activities and sensitive
  receivers, use of construction
  noise barriers, and limiting use
  of reversing beeping alarms.
- impacts to learning environments.
- prepare and implement a Community Consultation Strategy.
- include a CEMP, with a Construction
   Noise and Vibration
   Management Sub-Plan.
- a condition limiting hours of operation for the church and primary school in accordance with the hours outlined in the EIS.

#### OOSH

- The proposed OOSH care would operate within the school campus and accommodate up to 800 students.
- The EIS does not identify any specific location for the OOSH within the WCC site. The proposed hours of operation are 6am to 8pm Monday to Friday.
- No additional noise assessment taking into consideration OOSH operations has been conducted.
- The Department considers that the impacts of the OOSH operation until 8pm, including the use of outdoor play areas is unclear due to lack of assessment in the application regarding noise impacts between 7pm – 8pm.
- Consequently, the
   Department has
   recommended conditions to
   mitigate any potential
   impacts on the surrounding
   community, including:
  - restricting operational hours for OOSH to between 6am to 9am, and 3pm to 7pm.
- requiring appropriate
   management measures
   regarding OOSH car
   parking/access as part of
   an Operational Traffic and
   Access Management Plan.

#### Contamination

- A Preliminary Site Investigation (PSI) accompanied the EIS. The PSI concluded that the project site is suitable for a school, child care centre and church, as it generally has a low risk of localised or broadside contamination.
- Due to limitations in sampling density and location, the PSI recommended that:
  - an additional site walkover and sampling be undertaken following demolition of existing structures.
  - any unexpected finds encountered during construction be assessed in accordance with an unexpected finds protocol.
  - formal waste classification be required in accordance with NSW EPA Waste Classification Guidelines, in case of soil removal from the site.
- Council and EPA did not provide any comments in relation to soil contamination.

- The Department is satisfied that the Applicant has adequately addressed clause 7 of SEPP 55 and that the project site is suitable for its proposed use as a school, church and child care centre without the need for any further remediation.
- The Department has recommended conditions of consent requiring the provision of an unexpected finds protocol as part of the CEMP.

## Stormwater management

- The Applicant submitted a Water Management Plan, a Stormwater Engineering Statement and MUSIC modelling. The Applicant has calculated the required rainwater storage generated by the development.
- Stormwater from the project site is to be directed from the outlet of an underground detention tank to a proposed pipe to be connected to the rear of the existing kerb inlet pit at Darcy Road in the north-east corner of the site.
- The proposal incorporates:
  - an on-site detention tank with a minimum capacity of 148 cubic metres (m³).

the Applicant's
justification regarding the
WSUD measures
proposed and is satisfied
that landscape integrated
WSUD would not be
appropriate for the site.

- a 10m³ rainwater tank collecting "clean" runoff from the church roof.
- a 40m³ stormwater tank collecting "dirty" runoff from the primary school roof.
- Council queried the reliance on tanks to meet WSUD requirements, noting that they prefer integration of WSUD into the landscape (e.g. deep soil, bio-swales, wetlands).
- In response, the Applicant's RtS noted that the presence of ponded water within proximity to small children would present a safety hazard, even if fenced.
- The Applicant also advised that landscape integrated WSUD is not suitable for the site, noting that the utilisation of aboveground bioretention systems would result in significant catchment areas bypassing the stormwater network and subsequent stormwater quality systems. The resulting system would not meet the water quality reduction targets prescribed in the PDCP.
- Temporary sediment and erosion control measures would be implemented during construction, including sediment fencing, gravel layers at vehicle access points, regular monitoring of soil movement, and security fencing around construction areas.

The Department has recommended a condition requiring the Applicant to provide final stormwater management plans prior to the issue of a construction certificate, to demonstrate that the stormwater runoff from the site can be connected to the surrounding stormwater management system.

#### **Flooding**

- The project site is impacted by mainstream flooding on the southwestern side.
- The Department is satisfied that the proposed development would largely sit above the maximum criteria, being the PMF flood level plus a freeboard of 500mm.

- The EIS was accompanied by a
   Flood Statement, confirming that a
   majority of works (around 97%) are
   outside the extent of the Probable
   Maximum Flood (PMF) event, with
   the exception of tie-in works for the
   driveway and landscaping along the
   site frontage.
- The Flood Statement concludes that all proposed floor levels are above the maximum criteria, being the PMF flood level plus a freeboard of 500mm.
- Flood information provided by Council suggests evacuation from the site is not practical during a PMF event.
- The Flood Statement recommends the preparation of a Site Emergency Response Flood Plan to include but not be limited to:
  - closure of the facility if extreme weather event predicted.
  - measures to comply with PDCP and the requirements of the NSW Floodplain Development Manual.
  - o seeking refuge on site.

Whilst evacuation from the site is not practical during a PMF flood event, the Department notes that risk mitigation measures could be implemented. Accordingly, the Department recommends a condition requiring the Applicant prepare a Site **Emergency Response** Flood Plan as part of an Operation Environmental Management Plan for the project site.

#### Aviation

- The proposed maximum building height across the project site is RL 46.5m, including all plant and ancillary structures.
- The primary school building penetrates the boundary of the airspace as defined by the National Airports Safeguarding Framework for the protection of helicopter operations to/from Westmead Hospital, triggering the need for further assessment.
- The EIS was accompanied by an Aeronautical Impact Assessment (AIA).

- The Department is satisfied that the proposed buildings would not affect aviation operations at the Westmead Hospital site.
- The Department has recommended a condition requiring all construction crane(s) to meet minimum aviation safety lighting requirements as outlined by NSW Ambulance.

- The AIA concludes that the proposed development would not adversely impact on the safety, efficiency or regularity of aviation operations within the precinct.
   Specifically:
  - none of the proposed buildings penetrate the Helicopter Landing Site surfaces for Westmead Hospital.
  - instrument approaches to the rooftop helipad at Westmead Hospital are clear of the project site.
  - preferred flight paths to/from the helipad at the Westmead Children's Hospital are clear of the project site.
  - helicopter operations to/from the CareFlight base are clear of the project site.
  - operations to/from the Central Acute Services Building would not be adversely impacted as the helipad is higher than any proposed structures.
- NSW Ambulance advised that the jib of the proposed construction crane would come to within 150m to the north of the helicopter approach pathway to Westmead Hospital, representing little margin for flight error. Therefore, the crane(s) must meet minimum aviation safety lighting requirements.
- CASA raised no objections to the proposal.
- Air Services Australia confirmed that the proposed development would not affect any sector or circling altitude, nor any instrument approach or departure at Westmead Hospital.

# Environmental amenity

- Shadow diagrams demonstrate that the proposed development would not result in any overshadowing of adjoining properties. Shadows would fall entirely within the WCC site.
- The landscaped open space between the church and primary school building would receive satisfactory solar access, with minimal overshadowing at the winter solstice.
- The proposed buildings are set back from the WCC site boundaries and the proposal incorporates landscaped screening. Therefore, the development would not result in any unacceptable impacts on visual privacy at adjoining properties.
- The Department is satisfied that the development would have an acceptable impact upon environmental amenity.

#### **Social impacts**

- The EIS was accompanied by a Social Impact Assessment (SIA), which identified the most significant social benefits of the proposal as:
  - provision of innovative and contemporary facilities.
  - enhancement of health and diversity through effective design, including landscaping.
  - creation of a new church as an opening and welcoming venue for the community.
  - wider community benefits including the provision of accessible open space along Darcy Road and access to additional child care facilities and community spaces.
  - long-term opportunities for collaborative working with local industries.
- The SIA identified the social challenges presented by the proposal as:
  - short-term construction impacts on school users and adjoining residents.

- The Department is satisfied that the SIA adequately addresses the social impacts of the proposed development.
- The Department notes Council's concerns regarding lack of community access within the site by the community. However, the Department considers that this is not entirely within the scope of the application as the Applicant does not propose any amendments to the existing ovals. Notwithstanding, noting that community access to the existing ovals would be a significant community benefit for the locality, which already has lack of such spaces, the Department has

- disruption to existing students and staff following increase in the number of students on the WCC site.
- impacts of church construction and school expansion on students in terms of way of life and sense of place.
- Mitigation measures proposed include staged construction to allow on-site operations to continue throughout, implementation of a CEMP, and communication with key stakeholders.
- Council was concerned that the SIA does not address the loss of open space/ recreational facilities, and the resulting reduced ability of students to undertake adequate physical activity (discussed in Section 6.4).
- Council also recommended that community access to the WCC ovals and other recreational facilities within the site should be provided.
- The Applicant has agreed to facilitate community use within the church and the open space in front of the primary school. However, the Applicant did not agree to provide community use of the WCC ovals as requested by Council. The Applicant considers that this is not related to the proposal as it does not include the ovals.

recommended a condition requiring that a management plan be developed with the other owners of the site to ensure that community can access the ovals outside the school hours. at least three times a week. If this cannot be delivered prior to the issues of the occupation certificate, then consultation can be undertaken, and the plan delivered within 12 months of operation of the school. The Department also required the preparation of a Community Communication Strategy to communicate with the key stakeholders during

#### Wind impact

 A qualitative wind impact assessment accompanied the application.  The Department considers that the wind impacts of the proposal are acceptable, subject to mitigation measures.

construction.

 The Department recommended a condition requiring the Applicant to submit documentation demonstrating that the design incorporates the

- The primary school building is bulkier than the surrounding structures and would therefore affect the local wind environment.
   However, when assessed against the Lawson criteria, wind conditions are expected to be classified as acceptable for pedestrian standing or walking and would pass the distress/safety criterion.
- Outdoor play areas and corridors at ground, Levels 3 and 5 of the primary school building would be prone to pressure driven flow. The assessment therefore recommended the installation of screening, the 'closing off' of external openings of the north-south corridors, and the installation of a horizontal canopy around seating at Level 5.

recommended wind mitigation measures, prior to the commencement of construction.

#### **Accessibility**

- The EIS included an Access Review report which concluded that the proposed development complies with the provisions of the *Disability Discrimination Act 1992*.
- Council's submission to the EIS indicated that disability access should be provided for the primary school and the future multi-storey carpark.
- The Applicant's RtS reiterated that the proposal complies with all aspects of disability provisions within the site.

- The Department considers that the disability access provided for the proposal development is adequate.
- The Department recommended a condition to comply with the requirements.

# Other matters raised in submissions

- Council's submission to the EIS raised several matters outlined below:
  - exhibition timeframe was not sufficient and limited communication and engagement with community.
  - lessons learnt from Arthur Phillip High School and Ministerial directions regarding vertical schools should be incorporated.
  - the activities of the church would have conflicts with the school.
  - the school swimming pool closure in recent years has resulted in no swimming activities for the students.
  - no plans are provided regarding the future use of the site.
  - the demolition of Morley Centre Hall within the Paramatta Marist School site is concerning.
  - the plans do not show
     Parramatta Marist war memorial on site.
- The Applicant's RtS responded to each of the above issues satisfactorily as the majority of matters are outside the scope of this application.

- The Department has considered each of the issues raised as addressed below:
- The exhibition period complies with the statutory requirement of 28 days as mentioned in Section 5.
- The submission in relation to vertical schools is unclear. The Department notes that there are no specific Ministerial Directions regarding vertical schools. Therefore, no further assessment is considered necessary.
- As discussed earlier in the report, the Applicant has clarified that the church would be available for community use during the week, however it would only be available when not required by the schools.
- The matter is relation to the swimming pool, and demolition of the Morley Centre Hall are outside the scope of this application.
- The plans relate to the current application and therefore no further details of future use are needed.
- Parramatta Marist war memorial is not within the site and therefore not needed to be shown in this application.

#### 6.7 Summary of Department's consideration of submissions

6.7.1 A summary of the Department's consideration of the issues raised in submissions is provided in **Table 12**.

Table 12 | Summary of consideration of key issues raised in submissions

#### Issue Consideration Traffic The Department has assessed the traffic impacts and considers that the Concerns raised with the proposal in its current form may result in unacceptable impacts on the traffic generation, drop-off / Darcy Road/Bridge Road/Coles car park intersection. The Department pick-up and vehicular / has recommended conditions for traffic analysis in the future to validate pedestrian access. the results of the traffic report and provide additional mitigation measures where needed. The Department has assessed the proposed vehicular access points, drop-off / pick-up and considers that even without the OOSH, the Applicant has demonstrated that the drop-off / pick-up zone can accommodate the anticipated demand in 2023 and 2033, subject to conditions. The traffic matters are assessed in detail in Section 6.2. Connectivity The Department considers that the Applicant has provided sufficient Concerns that pedestrian information to demonstrate that the proposed siting of the development connections to Darcy Road and the resulting connections to surrounding uses and routes would be and Farmhouse Road have acceptable. The need for additional connections has been not been provided as part recommended as a condition. of this application. Farmhouse Road would not be used as a drop-off/pick-up zone. The new link from Farmhouse Road would Details are discussed in Section 6.2. mean that this part would be a new drop-off/pick-up area. Open space and The Department has assessed the functionality, quality and connection recreation of the open spaces, as well as the Applicant's justification for the vertical Concerns raised that there nature of the play areas within the multi-storey primary school building. would be loss in open A large number of the students who would reside in the catchment space and recreational identified by the Applicant would live in medium and high-density space for students on site housing with limited recreation offerings available. The Department also and an increase in demand notes that many of the children would spend extended hours within the on Council operated

WCC site, at school and also potentially at OOSH. This means a large

proportion of a child's physical recreation needs would need to be met within the WCC site during these extended school hours between

The Department is not satisfied that the Applicant has provided

Monday to Friday.

sportsground facilities.

adequate analysis to demonstrate that the open spaces within the multistorey primary school building would provide a range of engaging passive and active play opportunities for students to meet a child's recreation needs. Additionally, the Applicant did not provide information to demonstrate opportunities for use of the school ovals by the primary school children to compensate for the lack of at-grade outdoor space adjacent to the building.

Conditions of consent are recommended to ensure the primary school students get access to the ovals within the WCC site to compensate for the lack of open space within the project site. Details are discussed in **Section 6.4**.

### 7 Evaluation

- 7.1.1 The Department has reviewed the Environmental Impact Statement (EIS), Response to Submissions (RtS) and Supplementary RtS (SRtS) including the amended proposal and assessed the merits of the proposal, taking into consideration advice from the public authorities, including City of Parramatta Council (Council), and the concerns raised in community submissions. Issues raised have been considered, and the Department concludes that the WCC site can accommodate the proposed development subject to the proposed upgrades to the driveways and additional conditions (not limited to) requiring regular traffic modelling and assessment of nearby intersections and creation of pedestrian links connecting Farmhouse Road to the western boundary of the site.
- 7.1.2 The EIS was publicly exhibited between 2 May 2020 until 29 May 2020 (28 days). The Department received a total of three submissions, including an objection from Council, one comment from Cumberland Council and one public submission in support of the proposal. The Department also received advice from 13 public authorities. Following the completion of exhibition, the Department received three objections forwarded by Council.
- 7.1.3 The Applicant submitted a RtS on 14 September 2020, incorporating minor alterations to the proposed drop-off / pick-up bays and additional traffic and transport information. The Department engaged with Council, as well as an independent traffic consultant (Bitzios) and raised further concerns regarding traffic.
- 7.1.4 In response, the Applicant submitted an SRtS on 23 December 2020, and further SRtS between February and April 2021. This included additional traffic related technical information, some revisions to the base case scenario, SIDRA files. The SRtS also included a review of the draft Westmead 2036 Place Strategy, and clarification regarding primary school student access to the existing WCC campus ovals and the resulting impacts on surrounding Council-owned sportsground facilities.
- 7.1.5 Following consistent concerns raised by the public authorities and Bitzios, the Applicant amended the proposal on 7 September 2021 to include additional upgrades to the site's access. The amended proposal was re-exhibited for 14 days between 10 September 2021 and 23 September 2021, whereby the Department received five submissions including comments from Council and three comments from the public. Additionally, the Department received advice from 10 public authorities. The Applicant also committed to create the pedestrian link across the east-west boundary of the site in the future with the associated easements.
- 7.1.6 The Department has considered the merits of the proposal in accordance with relevant matters under section 4.15(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the principles of Ecologically Sustainable Development, and the issues raised in all submissions.
- 7.1.7 The Department identified the key issues to be traffic and transport, built form, open space and landscaping, and site suitability.
- 7.1.8 The Department's assessment of traffic impacts concludes that despite the proposed intersection upgrades proposed by the Applicant, the proposal may still result in unacceptable impacts on the surrounding road network, particularly at the Darcy Road/Bridge Road/Coles car park intersection (in 2033). However, the extent of this impact is partly uncertain as the Applicant's assessment is incomplete in part due to gaps in traffic modelling, the proposed student numbers are staged and the future LoS of the intersection relies on several other future developments in addition to this school.

Noting all these factors, the Department has recommended conditions requiring the Applicant to provide traffic assessment with modelling of the above intersection on an annual basis following commencement of operation of the school in 2023. This would enable the Department and TfNSW to verify remaining issues of concerns with the Applicant's modelling, ascertain at what stage (if any), the development traffic would impact on the intersection. The conditions require the Applicant to provide mitigation measures in relation to the intersection, at that time where evidence of unacceptable impacts is determined.

- 7.1.9 The Department also agrees with Council's concerns relating to the lack of pedestrian connectivity between the project site and surrounding transport uses, as well as the WCC site's limited vehicle entry points. The Department supports the Applicant's approach to create a pedestrian link connecting Farmhouse Road to the western boundary and considers that this would significantly improve the connectivity and permeability of the site. However, the Department has also recommended that the Applicant explore opportunities to extend this connection to Bridge Road (to the west), via the adjoining properties. While the Department notes that this would require negotiation with adjoining owners, the Applicant should still explore this opportunity due to the resultant school and greater community benefit in the future.
- 7.1.10 The Department is not satisfied that the Applicant has adequately demonstrated that the proposed open space within and around the school building contains satisfactorily designed at-grade open space to accommodate a development of the scale proposed. The Applicant has also identified that the at grade open space would only be accessible to certain year groups not all students. Consequently, the Department has recommended conditions requiring the Applicant to provide access of the primary school students to the school ovals, to the south of the project site within the WCC site.
- 7.1.11 The Department acknowledges that additional infrastructure is required to support the predicted growth of the Central City District by 2036, including the Westmead precinct. The proposal presents some benefits, including the provision of modern learning facilities and the delivery of increased student capacity to help meet the objectives of the Central City District to 2036. In this regard, the proposal would partly contribute to the health, training and innovation priorities of the Westmead precinct. However, despite commitments from the Applicant, the Department has some concerns regarding the ability of the WCC site to accommodate the intensification of uses proposed in relation to traffic impacts and open space provisions. The Department has recommended conditions to mitigate the impacts of the development.
- 7.1.12 The Department concludes that the proposal can only be accommodated within the site in its current form, subject to the implementation of the above conditions. If these conditions relating to traffic modelling, open space provisions are pedestrian connections are not implemented, the proposal may unreasonably impact on the infrastructure of the locality.
- 7.1.13 The Department's assessment has also considered a range of issues including those raised in Council, Transport for NSW and public submissions. It is concluded that many of the identified assessment issues could be acceptable or capable of being acceptable subject to appropriate mitigation. These include historic and Aboriginal cultural heritage, noise, contamination, stormwater, flooding, aviation, social and wind impacts.
- 7.1.14 The Department concludes that the application be approved subject to recommended conditions. This assessment report is hereby presented to the Commission for determination.

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Director

Social and Infrastructure Assessments

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Endorsed by:

Erica van den Honert

**Executive Director** 

Infrastructure Assessment

## **Appendices**

#### **Appendix A – List of Documents**

The following supporting documents and supporting information to this assessment report can be found on the Department of Planning, Industry and Environment's website as follows:

1. Environmental Impact Statement

https://www.planningportal.nsw.gov.au/major-projects/project/25716

2. Submissions

https://www.planningportal.nsw.gov.au/major-projects/project/25716

3. Agency Advice

https://www.planningportal.nsw.gov.au/major-projects/project/25716

4. Applicant's Response to Submissions

https://www.planningportal.nsw.gov.au/major-projects/project/25716

5. Applicant's Supplementary Response to Submissions and amended proposal

https://www.planningportal.nsw.gov.au/major-projects/project/25716

6. Additional submissions from Public Authorities and community received after close of exhibition

Electronic copies of all information provided under separate cover.

#### **Appendix B – Statutory Considerations**

#### **ENVIRONMENTAL PLANNING INSTRUMENTS**

To satisfy the requirements of section 4.15(a)(i) of the EP&A Act, this report includes references to the provisions of the EPIs that govern the carrying out of the proposal and have been taken into consideration in the Department's environmental assessment.

Controls considered as part of the assessment of the proposal are:

- State Environmental Planning Policy (State & Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities)
   2017 (Education SEPP)
- State Environmental Planning Policy No. 55 Remediation of Land (SEPP 55)
- Draft State Environmental Planning Policy (Remediation of Land) (Draft Remediation SEPP)
- Parramatta Local Environment Plan 2011 (PLEP 2011)

#### **COMPLIANCE WITH CONTROLS**

#### State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

Table B1 | SRD SEPP compliance table

Relevant sections	Consideration and comments	Complies
<b>3 Aims of Policy</b> The aims of this policy are as follows: (a) to identify development that is State significant development	The proposed development is identified as SSD.	Yes
8 Declaration of State significant development: Section 4.36  (1) Development is declared to be State significant development for the purposes of the Act if:  (a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and  (b) the development is specified in Schedule 1 or 2.	The proposal is permissible with development consent. The development is a type specified in <b>Schedule 1</b> .	Yes
Schedule 1 State significant development —general (clause 8(1))  15 Educational Establishments  (1) Development for the purpose of a new school (regardless of the capital investment value).  (2) Development that has a capital investment value of more than \$20 million for the purpose of alterations or additions to an existing school.	The proposed development is for the purpose of alterations or additions to an existing school and has a capital investment value of more than \$20 million.	Yes

(3) Development for the purpose of a tertiary institution (within the meaning of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017), including associated research facilities, that has a capital investment value of more than \$30 million.

## State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

The Education SEPP commenced on 1 September 2017 and aims to simplify and standardise the approval process for child care centres, schools, TAFEs and universities while minimising impacts on surrounding areas and improving the quality of the facilities. The Education SEPP includes planning rules for where these developments can be built, which development standards can apply and construction requirements. The application has been assessed against the relevant provisions of the Education SEPP.

The Education SEPP defines the early learning centre (ELC) as a centre-based child care facility. Clause 22 of Part 3 of the Education SEPP states that concurrence is not required for a 'centre-based child care facility' (i.e. preschool) if:

- a) the floor area of the building or place does not comply with regulation 107 (indoor unencumbered space requirements) of the Education and Care Services National Regulations, or
- b) the outdoor space requirements for the building or place do not comply with regulation 108 (outdoor unencumbered space requirements) of those Regulations.

The proposal for the ELC satisfies the numeric play space requirements for 200 children. Therefore, separate concurrence of Regulatory Authority is not required (see **Section 6.4**).

The consent authority is also required to consider the relevant provisions of the Department's Child Care Planning Guideline prior to determining an application for a centre-based childcare centre. Consideration of the relevant planning provisions of the Guidelines is provided below in **Table B2**.

Table B2 | Consideration of the Child Care Planning Guideline

Matter	Consideration and comments
Design quality principles	
Context	The proposed ELC is located within the school to take advantage of its location and build on the cultural relationship between early learning and future primary and secondary education.
Built form	The ELC is located at the ground floor level of the existing Mother Teresa Primary School building. The ELC does not adversely affect the bulk and scale of the WCC site and occupies a small area of the total school development.

Adaptive learning spaces	The design of the ELC provides three large, unobstructed indoor spaces with opportunities for adaptive learning. The design also incorporates indoor / outdoor play areas that offer an opportunity to create a unique and exciting play space environment for younger children.
Sustainability	The unencumbered internal spaces provide opportunities for cross ventilation between the proposed eastern and western outdoor play areas.
	Outdoor play space areas have been assessed as having access to satisfactory levels of natural daylight, while similarly providing areas for shade and weather protection.
	Additional sustainable measures are proposed to be incorporated into the overall design of the school.
Landscape	The landscape design for the proposed ELC has been integrated into the proposed layout of the facility to provide a diverse and functional environment.
	The east and west facing outdoor play areas visually integrate with the wider education campus, while tree planting within both play areas contribute to the overall project site landscaping strategy.
Amenity	The centre has been designed to ensure suitable outdoor and indoor play spaces are provided that would have suitable access to daylight and natural ventilation.
	The siting of the ELC at the rear of the primary school building and beneath a high school facility minimises its exposure to public places and would ensure that occupants are not exposed to adverse amenity or privacy impacts.
	The ELC is located within the centre of the WCC site, and therefore does not present any opportunities for external overlooking.
Safety	The layout of the proposed ELC incorporates a secure single-entry point through the proposed reception area of the centre adjacent to the carpark.
	The outdoor play areas would be set behind a 1.8m fence to ensure safety is maintained.
Matters for consideration	
Site selection and location	The proposed ELC forms part of the larger Catholic education campus, located at the centre of the WCC site, and therefore the use is appropriately sited to ensure no adverse acoustic, privacy or amenity impacts at the interface of the campus with other land uses.

	The ELC car parking and drop-off / pick-up would be integrated with the existing primary school facilities and is acceptable.
	The project site does not hold any preceding site contamination, flooding or bushfire constraints that would unnecessarily limit the ability for a centre-based childcare facility from being established.
Local character, streetscape and the public domain interface	The proposed integration of the ELC within an existing school building would ensure it remains compatible with the character of the locality.
	The centre has been designed to ensure it is not unreasonably exposed to the public domain and provides for a clear delineation between the ELC and the primary and high schools at the WCC site.
	The proposed location of the centre reception and staff room would ensure visibility of the carpark.
Building orientation, envelope, building design and accessibility	The proposed ELC is located at the ground floor level of an existing building, with minimal external alterations proposed.
Landscaping	The proposed ELC landscape design incorporates several passive and active landscape elements to help create a diverse and interesting learning environment.
	Appropriate screen tree planting is proposed along the western boundary of the ELC to help minimise privacy impacts into the outdoor play space from the carpark.
Visual and acoustic privacy	The ELC is located away from the public domain and offers its primary western boundary to the campus pick-up / drop-off area.  Accordingly, privacy impacts are minimised by reducing the exposure of the centre.
	The predicted noise impacts associated with the operation of the centre are generally satisfactory and would not result in adverse amenity impacts.
Noise and air pollution	The location of the ELC is not near any noise or odour generating sources that would give rise to adverse emissions.
Hours of operation	The ELC is proposed to operate between 6am and 6pm. The Department notes the proposed starting time is one hour earlier than the recommended core hours prescribed in the Guideline. However, it is noted that the nearest residential properties are not within close proximity to the WCC site.

	The Department is satisfied the additional hour in the morning period would allow for greater flexibility for working families. The earlier starting time would assist in stretching out the peak AM drop-off period.
Traffic, parking and pedestrian circulation	ELC staff/visitors would be provided with 24 dedicated parking spaces. The Applicant's assessment concludes the staff parking (12 spaces) proposed would sufficiently cater for the demand generated. No dedicated drop-off / pick-up area is proposed for the ELC.
	The traffic generation from the ELC and its impacts are discussed in <b>Section 6.4</b> .
National Regulations	
Indoor space requirements	A minimum 650sqm of unencumbered indoor space is required based on the proposed 200 spaces. The proposal provides for 896 sqm.
Laundry and hygiene	Laundry facilities are proposed to be provided on-site.
facilities	Sufficient space is available for the provision of these facilities, although limited details are provided on the architectural plans. Accordingly, the Department has recommended a condition of consent requiring detailed drawings to be certified compliant prior to the issue of a construction certificate for the proposal.
Toilet and hygiene	Toilet facilities are proposed to be provided on-site.
facilities	Sufficient space is available for the provision of these facilities, although limited details are provided on the architectural plans.  Accordingly, the Department has recommended a condition of consent requiring detailed drawings to be certified compliant prior to the issue of a construction certificate for the proposal.
Ventilation and natural light	The EIS demonstrates that the outdoor play space would receive sufficient natural light throughout the day, particularly the west-facing outdoor area. The large indoor play spaces are flanked on either side by proposed outdoor areas, providing cross ventilation.
Administrative space	The internal layout of the proposed administrative functions of the ELC has considered the interaction of staff, parents and children and visitors to ensure interactions are appropriately managed.
Nappy change facilities	The information provided contains little information regarding the design of the change facilities within the ELC. However, the Department considers that sufficient space is available for these

	facilities. The Department has recommended a condition of consent requiring detailed drawings to be certified compliant prior to the issue of a construction certificate for the proposal.
Premises designed to facilitate supervision	The internal layout of the centre, including staff rooms and toilet facilities, have been designed to facilitate supervision between educators and children.
Emergency and evacuation procedures	Emergency and evacuation procedures have not been provided as part of the EIS. However, the Department notes that these could be confirmed later. The Department has recommended a condition of consent requiring such details provided prior to the issue of a construction certificate and certified by a suitably qualified access consultant.
Outdoor space requirements	A minimum 1400sqm of unencumbered outdoor space is required based on the proposed 200 spaces. The proposal provides for 1489sqm.
Natural environment	The landscape design for the ELC incorporates opportunities for outdoor play that engage with the natural environment and encourage enquiry and exploration.
Shade	The eastern and western outdoor play areas have different characteristics, with the western space provided with some space from the floors of the building above, but predominantly uncovered. The eastern play space would be partially covered by the floors of the building above and new awnings.
	Overall, the Department considers that the outdoor play areas would be provided with sufficient shade and weather protection all year round.
Fencing	The proposal would include the provision of a 1.8m high palisade fence.
Soil assessment	A Preliminary Site Investigation (PSI) found that the project site is considered to generally have a low risk of localised or broadscale contamination.
	The Department has recommended a condition requiring an unexpected finds protocol to be provided prior to the issue of a construction certificate and certified by a suitably qualified certifier.

Clause 35(1) of the Education SEPP states development for the purpose of a school may be carried out with development consent on land in a prescribed zone. For the purposes of this clause, clause

33 identifies the WCC site's SP2 Infrastructure (Educational Establishment) as a prescribed zone. Accordingly, the proposal is permissible with development consent on the site.

In accordance with clause 35(5), the Applicant proposes to allow the use of the school and its associated facilities for the purposes of the "...physical, social, cultural or intellectual development or welfare of the community...".

Clause 35(6)(a) requires that the design quality of the development should be evaluated in accordance with the design quality principles set out in Schedule 4. An assessment of the proposal against the design principles has also be undertaken and is provided in **Table B3**.

Table B3 | Consideration of the Design Quality Principles

Design Principles	Response
Context, built form and landscape	The built form of the proposed church and primary school buildings is sympathetic to the scale of buildings in the surrounding locality. The proposed (and continued) land use as an educational establishment is also sympathetic within the context of the surrounding health and education sites.
	The Department, however, holds concerns that the proposed intensification of use warrants connectivity improvements around and within the WCC site. Conditions to this effect are recommended. Additionally, while the proposal includes landscaping, the Department raises concerns regarding the open space design and the lack of availability of at-grade open spaces as discussed in <b>Section 6.4</b> . The Department has recommended conditions requiring access to the WCC ovals to compensate for the lack of open space within the primary school building.
Sustainable, efficient and durable	The proposal includes ESD measures sufficient to achieve a 4-star Green Star rating. The materials chosen are durable and require low maintenance.
	Bicycle parking is provided within the school site and a GTP is proposed to be implemented that encourages sustainable travel modes. The Department is satisfied in this regard.
Accessible and inclusive	Accessible travel paths are provided in all sections of the school site and lifts provide vertical accessibility. Large spaces are provided on each level to ensure student accessibility and manoeuvrability is maximised.
	School student ages / years are grouped together, minimising the necessity for vertical circulation throughout teaching periods.
	The EIS is accompanied by an Access Review, which notes disabled access requirements pertaining to external site linkages, building access, common area access, sanitary facilities and parking can be readily achieved in the detailed design stage. The Department has

	recommended a condition requiring detailed drawings demonstrating compliance with relevant standards to be certified compliant prior to the issue of a construction certificate for the proposal.
Health and safety	The proposal involves the removal of existing fencing at the north- west corner of the WCC sit, to allow the parish church and its immediate surrounds to anchor an un-fenced landscaped precinct.
	The proposed primary school and ELC would be secured through a 1.8m high fence, which would enclose the existing school campus. Automatic entry gates with intercom systems would provide controlled access into the site.
Amenity	This Principle states that schools should include appropriate, efficient, stage and age appropriate indoor and outdoor learning and play spaces, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage and service areas.
	The proposal would provide future students access to the latest educational facilities, while incorporating a variety of spaces that offer students opportunities to engage in active and passive recreation that offer satisfactory levels of amenity and access to natural light and sunlight.
	The Applicant has, however, not satisfactorily demonstrated how future primary school students would be afforded access to existing school ovals for curriculum purposes, without displacing students from existing high schools and placing undue strain on Council facilities. This is discussed in <b>Section 6.4</b> and suitable conditions are recommended to ensure student access to the ovals.
Whole of life, flexible, adaptable	The proposed learning areas are flexible and provide adaptable spaces throughout the building. The outdoor learning environment offers flexible teaching space.
Aesthetics	The design of the church and primary school buildings has responded to the built form context of the locality, proposing a built form and scale generally consistent with the wider Westmead health and education precinct. The church would act as a visual gateway to the WCC site that would help integrate the proposed development within the locality.

Clause 57 of the Education SEPP requires traffic generating development that involves the addition of 50 or more students to be referred to TfNSW. The proposal was referred to TfNSW in accordance with this clause. TfNSW have recommended conditions of consent to alleviate impacts of the development on the surrounding road network.

#### State Environmental Planning Policy No. 55 - Remediation of Land

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application.

The EIS was supported by a Contamination Assessment report which provided a summary of the existing conditions of the project site and surroundings and previous contamination. The Department has assessed the submitted reports. The Department is satisfied that the Applicant has adequately addressed clause 7 of SEPP 55 and that the project site is suitable for its proposed land use as a school and childcare centre without the need for further remediation (see **Section 6.6**). An assessment of the proposal against the relevant provisions of SEPP 55 is shown in **Table B4**.

Table B4 | Assessment against relevant SEPP 55 provisions

#### **Relevant Clause**

#### **Department Comment/Assessment**

#### Clause 7

- (1) A consent authority must not consent to the carrying out of any development on land unless:
- (a) it has considered whether the land is contaminated, and
- (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or would be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and
- (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land would be remediated before the land is used for that purpose.
- (2) Before determining an application for consent to carry out development that would involve a change of use on any land specified in sub clause (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.
- (3) The applicant for development consent must carry out the

In accordance with clause 7(1)(a) and 7(2), the consent authority has considered the PSI submitted with the EIS.

The Department is satisfied that the project site is not contaminated and is suitable for its proposed use as a school, childcare centre and church.

Investigations have been undertaken and detailed in the PSI report accordingly. investigation required by sub clause (2) and must provide a report on it to the consent authority. The consent authority may require the applicant to carry out, and provide a report on, a detailed investigation (as referred to in the contaminated land planning guidelines) if it considers that the findings of the preliminary investigation warrant such an investigation.

The Department is satisfied the project site is suitable for the proposal and that no further investigations are required.

The Department has recommended a condition of consent requiring the preparation of an unexpected finds protocol to ensure appropriate measures are taken in the unlikely event areas of environmental concern are uncovered during site works.

#### Clause 9

For the purpose of this Policy, a category 1 remediation work is a remediation work (not being a work to which clause 14 (b) applies) that is: (d) development for which another State environmental planning policy or a regional environmental plan requires development consent, or

No consent for remediation works is proposed or required.

- (1) A category 1 remediation work is identified as advertised development, unless the remediation work is: (a) designated development, or (b) State significant development.
- No consent for remediation works is proposed or required.
- (2) Pursuant to section 29A of the Act, the period specified in clause 65 (5) (d) of the Environmental Planning and Assessment Regulation 1994 is extended to 30 days in relation to development identified as advertised development by this clause.

#### **Draft State Environmental Planning Policy (Remediation of Land)**

The Draft Remediation SEPP would retain the overarching objective of SEPP 55 promoting the remediation of contaminated land to reduce the risk of potential harm to human health or the environment.

Additionally, the provisions of the Draft Remediation SEPP would require all remediation work that is to carried out without development consent, to be reviewed and certified by a certified contaminated land consultant, categorise remediation work based on the scale, risk and complexity of the work and require environmental management plans relating to post-remediation management of sites or ongoing operation, maintenance and management of on-site remediation measures (such as a containment cell) to be provided to council.

The Department is satisfied that the proposal would be consistent with the objectives of the Draft Remediation SEPP.

#### Parramatta Local Environmental Plan (PLEP) 2011

The PLEP 2011 aims to guide the orderly and sustainable development of the LGA while balancing the economic, environmental and social needs of the community. The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the PLEP 2011 and the matters raised by Council in its assessment of the proposal (refer to **Section 5**). The Department concludes the development is consistent with the relevant provisions of the PLEP 2011. Consideration of the relevant clauses of the PLEP 2011 provided in **Table B5**.

Table B5 | Consideration of the PLEP 2011

PLEP 2011	Department Comment/Assessment
Clause 1.2 Aims of the Plan	The proposal would not meet all aims of the PLEP, in terms of the impacts on the road network. However, the Department has recommended conditions requiring future traffic assessments and monitoring to ensure that the development complies with the aims of the PLEP in this regard.  The proposal would, however, meet other aims of the PLEP as it:  • provides for the social needs of a growing population.  • would not impact on the natural environment of the locality.  • would contribute to the generation of employment opportunities.  • demonstrates efficient and sustainable use of energy and resources in accordance with ESD principles.
Land Use Table – Zone SP2 Infrastructure (Educational Establishment)	Educational establishments are permissible with consent in the SP2 Infrastructure (Educational Establishment) zone.
	The proposal is considered to meet the objectives of the zone as it provides an infrastructure related use.
Clause 4.3 Building height	The WCC site is not subject to a building height limit.
Clause 4.4 Floor space ration (FSR)	The WCC site is not subject to an FSR limit.
Clause 4.6 Exceptions to development standards	Clause 42 of the Education SEPP states development consent may be granted for development for the purpose of a school that is State significant development even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted.
Clause 5.10 Heritage conservation	The project site does not contain, nor is in proximity to, a heritage item or known archaeological items. The matters in relation to Aboriginal cultural heritage are discussed in <b>Section 6.4</b> .

Clause 6.1 Acid Sulfate Soils (ASS)	The eastern half of the WCC site is identified as Class 5 ASS. The project site, however, is not identified as containing ASS.
Clause 6.3 Flood planning	The Council has identified the project site as impacted by mainstream flooding. The EIS has been accompanied by a Flood Statement, which confirms that a majority of the works (around 97%) are outside the extent of the Probably Maximum Flood (PMF) event, with the exception of tie in works for the driveway and landscaping along the site frontage.
	The Department is satisfied that the results of the study demonstrate that all proposed floor levels are above the maximum criteria, being the PMF flood level plus a freeboard of 500mm.
	The Department has recommended a condition of consent requiring the provision of a Site Emergency Response Flood Plan prior to the issue of an operation certificate and certified by a qualified consultant.
Clause 6.5 Water protection	A riparian corridor flows along the western boundary of the WCC site. The Department is satisfied that the development is sited to avoid any adverse environmental impact on the corridor.  Specifically, there would be no impact on water quality, natural flow, stability of the banks or the groundwater system.
Clause 6.10 Development on certain land at Westmead	Part of the wider WCC site, known as '2A Darcy Road', is subject to clause 6.10 which requires development on land which has a frontage to Hawksbury and Darcy Roads to provide at least 30% of the gross floor area for a purpose other than residential. The Department is satisfied that the development is consistent with the provisions of clause 6.10.

#### Other policies

In accordance with clause 11 of the SRD SEPP, Development Control Plans (DCPs) do not apply to State significant development. Despite this provision, consideration of the relevant development controls contained in Council's Parramatta Development Control Plan 2011 (PDCP) is provided in **Table B6**.

Table B6 | DCP compliance table

Control	Department Comment/Assessment
Section 2.3 Site Analysis	The application does not provide sufficient information regarding the likely impacts of the proposed development with regard to service vehicle access to and from the WCC site. Conditions are recommended to ensure that these details are provide prior to the issue of the construction certificate for the proposal.

Section 2.4.2 Water Management	The proposed development has been designed to ensure that it does not impact upon the riparian corridor along the western WCC site boundary, and to ensure that flooding risks are minimised (as discussed in <b>Table B4</b> ).				
Section 2.4.4 Land Contamination	A PSI was prepared in accordance with clause 7 of SEPP No. 55. The Department is satisfied that the project site is not contaminated and is suitable for its proposed use as a school, childcare centre and church.				
Section 2.4.7 Biodiversity	The proposal includes the removal of 27 trees, including locally indigenous species. However, these would be replaced by approximately 130 trees, both locally indigenous and Australian native species. The proposal's biodiversity impact would therefore be minimised.				
Section 3.2 Building Elements	The proposed building form, massing, façades and articulation are considered to be acceptable. The church would act as a visual gateway to the WCC site that would help integrate the proposed development within the locality as discussed in <b>Section 6.3</b> .  The buildings are of an energy efficient design and the proposal includes ESD measures to achieve a 4-star Green Star rating.				
Section 3.3 Environmental Amenity	3.3.1 Landscaping The proposal includes the replacement of removed trees with locally indigenous and Australian native species to be suppled as advanced side (75-200L) specimens.  The proposed planted berm fronting Darcy Road would soften the visual impact of the church and primary school building from the streetscape.  Project site internal landscaping would provide privacy and amenity for the outdoor play areas at the primary school and ELC facilities.  3.3.3 Visual and acoustic privacy and 3.3.4 Acoustic amenity The proposed buildings would be sited a significant distance away from the nearest sensitive receivers. Operating hours are considered to be acceptable given the characteristics of the WCC site, subject to a condition limiting operational hours of the OOSH to 7pm. Overall, the proposal would not cause harmful visual or acoustic impacts.				
	3.3.5 Solar access and cross ventilation				

Internal and external solar access for learning and play spaces is

considered acceptable, as discussed in Section 6.4.

The proposed buildings would be afforded adequate cross

ventilation.

#### 3.3.6 Water sensitive urban design

The proposal complies with the relevant requirements as discussed in **Section 6.6**.

#### 3.3.7 Waste management

Proposed building materials are durable and require low maintenance. Operational and Construction Waste Management Plans have been prepared, identifying types and volumes of waste to ensure that management systems are appropriately implemented.

#### Section 3.4 Social Amenity

The EIS is accompanied by an Access Review, which notes that the development does not achieve some accessibility requirements, pertaining to external WCC site linkages, building access, common area access, sanitary facilities and parking. The report notes, however, that there is sufficient space for amendments to be made so that compliance can be readily achieved. Conditions to this effect are recommended to ensure compliance with the relevant legislation for accessibility.

The proposed primary school and ELC would be secured through a 1.8m high fence, which would enclose the existing school campus. Automatic entry gates with intercom systems would provide controlled access into the site.

#### Section 3.5 Heritage

The project site does not contain any heritage items, however it is listed on the State Heritage Inventory as containing Parramatta Archaeological Management Unit 2891.

The Applicant has submitted an ACHAR, which was referred to HNSW ACH. This matter is discussed in **Section 6**.

## Section 3.6 Movement and Circulation

#### 3.6.1 Sustainable transport

The proposal has not demonstrated how the targets for improving sustainable transport usage would be achieved on the site as discussed in **6.2**.

#### 3.6.2 Parking and Vehicular access

The Applicant has not provided sufficient information regarding the likely impacts of the development with regard to service vehicular access. Conditions of consent are recommended in this regard. Parking within the site is assessed as satisfactory.

#### 3.6.3 Accessibility and Connectivity

The scale of site intensification proposed warrants connectivity improvements around and within the WCC site to accommodate the operations of the school. The Applicant has not provided sufficient information to demonstrate that the connections to surrounding uses and routes would be acceptable as discussed in **Section 6.2**.

#### **Appendix C – Chronology of Department's Traffic Assessment**

The Applicant's EIS included a Transport and Accessibility Impact Assessment (TAIA) and Green Travel Plan (GTP), which considers the impact of the proposal on traffic in the locality.

The TAIA included the background traffic volumes of the eleven identified intersections near the site that would be impacted by the development. The intersections are shown in **Figure A1**.

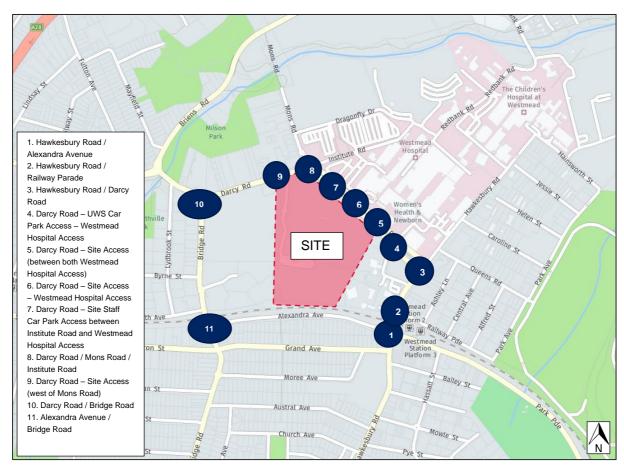


Figure A1 | Key intersections in the vicinity of the site (Source: Applicant's EIS 2020)

#### Trip generation, sustainable transport and intersection performances

The TAIA stated that a survey was carried out of journeys to and from the existing schools within the WCC site to determine the existing mode share and anticipated additional vehicle trips due to the proposed school during the AM peak (7:45am-8:45pm) the PM peak (3pm-4pm).

Based on the surveys and assessment undertaken for the application, the TAIA estimated that the mode share for the primary school students would comprise 89.9% private car, 3.7% public transport and 6.5% active travel (walking and cycling). For primary school staff, mode share would comprise 95% private car and 5% public transport. The school trip generation for 2023 and 2033 were calculated on this basis.

The TAIA stated that weekday services at the church would take place after 10am and conclude before 2pm. Vehicle access to and from the church would occur before and after those service times. The church would always be available for community use. Traffic movements associated with church

staff and patrons would occur outside of the school peak periods, and therefore, would have no impact on the local road network during school peak periods.

The TAIA stated that the ELC would generate 42 daily car trips in 2023 and 84 daily car trips per day in 2033 by parents transporting children due to the increased attendance proposed. There would be 14 daily car trips and 24 daily car trips generated by ELC staff in 2023 and 2033, respectively. However, the AM peak hour for the ELC would be between 5:30am and 6:30am and PM peak hour would be between 5:30pm and 6:30pm, which is outside the school peak hour. Consequently, the TAIA stated that the trip generation due to the ELC would have no impact

The TAIA also stated that background traffic growth has been adopted based on the Sydney Strategic Traffic Forecasting Model growth plots obtained from TfNSW with growth rates (per cent per annum growth) from 2016 to 2026 and are based on approved developments in Sydney.

In addition to the above figures, the Applicant's TAIA included a GTP which proposed a 10% mode shift target from private car usage by staff and students in years 2023 and 2033.

The TAIA recommended that a 10% mode shift from 2023 to 2033 would generate lower peak hourly traffic flows by 2033 (stabilisation year). Based on the above assumptions and surveys, a comparison of the traffic generation from the project site (church, school and ELC) in 2023 and 2033 (with and without the proposed modal shift) is shown in **Table C1**.

**Table C1** | Future traffic generation (Source: Applicant's EIS 2020)

School Peak Period	Directio n	Existing Traffic generati on (survey results	Theoretical traffic generation (vehicle/hr)	2023 Future traffic generation (vehicle/hr)	2033 No Mode Shift		2033 10% Reduction	
					Traffic generation	Net change	Traffic generati on	Net Chang e
AM Peak	IN	593	433	525	892	+459	803	+370
	OUT	438	307	388	712	+405	641	+334
PM Peak	IN	160	348	439	807	+459	726	+378
	OUT	276	365	458	831	+466	748	+383

The 'net change' shown in **Table C1** is based on the theoretical traffic generation and future growth in traffic (based on interview surveys rather than actual traffic surveys).

The TAIA considered peak hour traffic impacts on intersections surrounding the WCC site in the form of a SIDRA analysis of the performance of the existing road network as well as future performance with and without development in 2023 and 2033. A summary of the results shows the Levels of Service (LOS) at eight intersections and three site accesses with and without the 10% modal shift.

The TAIA considered peak hour traffic impacts on intersections surrounding the WCC site in the form of a SIDRA analysis of the performance of the existing road network as well as future performance with and without development in 2023 and 2033.

The TAIA detailed that LoS A, B, or C indicates a good, acceptable or satisfactory level of service, respectively, for the operation of the intersection, with no mitigation measures required. LoS D, E, or F indicates the intersection is near or at capacity and if the traffic assessment demonstrates a worsening of impacts as a result of the proposal, mitigation measures should be considered.

The results presented in the TAIA show that trips generated by the proposal with background growth in 2023 would cause the following intersections to exceed their capacities in the AM peak period:

- Darcy Road / Hawkesbury Road (LOS F).
- Hawkesbury Road / Alexandra Avenue (LOS F).

In the PM peak period, the trips generated by the proposal with background growth in 2023 would cause the following intersections to exceed capacity:

- Darcy Road / Institute Road / Mons Road (LOS D).
- Darcy Road / Hawkesbury Road (LOS D).
- Hawkesbury Road / Alexandra Avenue (LOS D).

The results also showed that trips generated by the proposal with background growth in 2033 (without modal shift) would cause the following intersections to exceed capacity in the AM peak period:

- Darcy Road Site Access (west of Mons Road) (LOS F).
- Darcy Road / Hawkesbury Road (LOS F).
- Hawkesbury Road / Alexandra Avenue (LOS F).
- Darcy Road / Bridge Road (LOS F).

In the PM peak period, the results showed that the trips generated by the proposal with background growth in 2033 would cause the following intersections to exceed capacity:

- Darcy Road Site Access (west of Mons Road) (LOS F).
- Darcy Road / Institute Road / Mons Road (LOS F)
- Darcy Road / Hawkesbury Road (LOS F).
- Hawkesbury Road / Railway Parade (LOS F).
- Hawkesbury Road / Alexandra Avenue (LOS F).
- Darcy Road / Bridge Road (LOS F).

The TAIA states that notwithstanding the above, some intersections would exceed their operational capacity in 2033, considering the background traffic growth alone. These intersections include; Darcy Road / Hawkesbury Road, Hawkesbury Road / Railway Parade, and Hawkesbury Road / Alexandra Avenue.

The TAIA also concludes that in 2023, the proposal would result in a lower average delay and improved intersection performance overall on Darcy Road (west of Mons Road), along the WCC site frontage. This would be due to redirection of the high school staff traffic as well as drop-off / pick-up to the future multi-storey carpark. However, the TAIA identifies that additional trips generated in 2033 at the Darcy Road - Site Access (west of Mons Road - 'intersection 9' in **Figure C1**) would exceed

capacity as more primary school staff and parents turning right into the WCC site would have less gaps with increased westbound through traffic flow on Darcy Road.

The TAIA also includes an additional intersection analysis considering the proposed 10% modal shift. The Applicant concludes that the operation of the local road network would improve due to lower average delays with the 10% mode shift. The Applicant notes that, some intersections would operate at capacity or over their capacities in 2033, despite the proposed modal shift.

#### **Submissions**

During the EIS exhibition, Council objected to the application on the basis that the level of traffic generated by the proposal would result in degradation and unacceptable impacts on the traffic flow to the surrounding area, particularly noting the importance and significance of the role of the medical and health services within the Westmead precinct.

Council raised concerns that the resultant LoS F at 'intersection 9' would lead to queuing beyond the right and left turn bays into the site, which would disrupt broader traffic network traffic flow not associated with the school. Additionally, Council also considered the reduction of LoS from C to F for the Bridge Road / Darcy Road intersection to be unacceptable. In this regard Council specifically advised that the proposed 10% modal shift to reduce traffic generation was unachievable and that satisfactory evidence was not provided as to how the GTP would be implemented. Council recommended that a 3 - 5% modal shift was a more practical and achievable assumption rather than 10% in this instance.

Council suggested that the proposal required amendments to address the traffic impacts and include additional measures to address traffic impacts, such as significantly reducing the number of students at the primary school. Council also referred to the Westmead Innovation District Masterplan and indicated that the pedestrian connections in this masterplan should be incorporated in this development to reduce overall traffic impacts (discussed in detail later).

TfNSW requested the Applicant to clarify whether the future multi-storey carpark was included in the traffic modelling outputs and suggested that these be included to consider the overall impacts.

TfNSW also requested that the GTP should be further developed with sufficient information and more robust actions and deliverables, including specific achievable mode share targets and initiatives to support higher targets towards walking, cycling and public transport and details of measures to encourage sustainable transport choices amongst parents, students and staff. No public submission raised concerns with respect to traffic generated by the proposed development.

On the basis of advice from Council, TfNSW and Bitzios, the Department also raised significant concerns regarding the traffic impacts of the proposal as well as the consideration for 10% modal shift with no supporting evidence. Additionally, the Department requested details of the weekend use of the church by the community and its implications on the local traffic network.

## Applicant's RtS

In response, the Applicant's RtS included an addendum TAIA stating that the proposed OOSH would operate between 6am and 6pm Monday to Friday and 40 - 48% of the students (672 – 806 students) would use the OOSH. The TAIA anticipated that the OOSH children would enter the site prior to 7:30am and leave after 4:30pm, thus not coinciding with the AM and PM school peak times. The RtS also included minor amendments to the layout of the drop-off / pick-up facility with the project site and

reiterated that the high schools within the WCC site would utilise the future multi-storey carpark facility for drop-off / pick-up. It was unclear in the RtS, whether parents would be prohibited from using this drop off for high school students.

The TAIA also included a revised trip generation as well as SIDR analysis of intersections based on four scenarios:

- Scenario 0 do nothing.
- Scenario 1 allow development with existing OOSH capacity (approximately 11% students) future multi-storey carpark, high school drop-off / pick-up facility and 10% modal shift.
- Scenario 2 allow development with 40% OOSH capacity, future multi-storey carpark, high school drop-off / pick-up facility and 10% modal shift.
- Scenario 3 allow development with 48% OOSH capacity, future multi-storey carpark, high school drop-off / pick-up facility and 10% modal shift.

The revised traffic generation at the Darcy Road Site Access, including the multi-storey car park in the four scenarios is provided in Figure A2.

	Existing	Opening Y	ear - 2023	Stabilisation Year - 2033				
Scenario	Vehicle Movements	Vehicle Movements	Reduction (%) (b)	Vehicle Movements	Reduction (%)			
			AM Peak					
0	1,031	1,217	-	2,139	-			
1	-	448	769 (63%)	1,026	1,113 (52%)			
2	-	318	899 (74%)	728	1,411 (66%)			
3	-	282	935 (77%)	646	1,493 (70%)			
,			PM Peak					
0	713 <sup>(a)</sup>	1,217	-	2,139	-			
1	-	480	737 (61%)	1,099	1,040 (49%)			
2	-	341	876 (72%)	780	1,359 (64%)			
3	-	302	915 (75%)	692 1,447 (68				

## Figure A2 | Trip generation scenarios (Source: Applicant's RtS 2020)

The Applicant's RtS also included the SIDRA analysis of the identified intersections in Figure A1 in the four scenarios as well as queuing analysis at the Darcy Road - Site Access (intersection 9 in Figure A1). Table C2 provides the comparison of the existing LoS / average delays with the four predicted scenarios in the Applicant's addendum TAIA. The Department notes that the addendum TAIA does not include any traffic generation during AM and PM peak hours associated with the ELC as the TAIA concludes that 100% of all movements of the ELC would occur outside the identified peaks and the ELC would have no relationship with parents bringing students to school during the peak. No justification is given for that conclusion.

<sup>(</sup>a) Theoretical vehicle movements.

<sup>(</sup>b) Reduction in vehicle movements is a comparison with Scenario 0 - "Do Nothing".

Table C2 | Intersection / access performance during AM and PM peak periods including the OOSH scenarios (Source Applicant's RtS 2020)

Intersectio AM/P Existi n / Access M ng	2023 Backg nd Gro	B rou d	023 ackgroun Growth + ev	2023 Backgroun d Growth + Dev (OOSH 40%)	2023 Backgro und Growth + Dev (OOSH 48%)	2033 Backgro und Growth	2033 Backgro und Growth + Dev 10% mode shift	2033 Backgroun d Growth + Dev (OOSH 40%)	2033 Background Growth + Dev (OOSH 48%)							
		LOS	LOS	Ave. Delay	LOS	Ave. Delay	LOS	Ave. Delay	LOS	LOS	Ave. Dela y	LO S	Ave. Dela y	LOS	Ave. Del ay	LOS
Hawkesbury Road / Alexandra Avenue	AM	F	F	>100s	F	>100s	F	>100s	F	F	>10 0s	F	>100 s	F	>10 0s	F
	PM	С	С	46s	D	45s	D	46s	D	F	89s	F	81s	F	80s	F
2. Hawkesbury Road / Railway	AM	В	В	24s	С	16s	В	16s	В	А	41s	С	47s	D	51s	D
Parade	PM	В	С	38s	С	38s	С	38s	С	F	>10 0s	F	>100 s	F	>10 0s	F
3. Hawkesbury Road / Darcy Road	AM	С	С	39s	С	38s	С	38s	С	С	>10 0s	F	92s	F	81s	F
	PM	С	С	55s	D	53s	D	54s	D	F	>10 0s	F	>100 s	F	>10 0s	F
4. Darcy Road – UWS Car	AM	В	В	26s	В	26s	В	26s	В	В	23s	В	23s	В	23s	В
Park Access – Westmead Hospital Access	PM	В	В	19s	В	19s	В	19s	В	В	18s	В	18s	В	18s	В
5. Darcy Road – Site Access	AM	Α	А	4s	А	4s	Α	4s	Α	А	6s	Α	6s	Α	5s	А
(between both Westmead Hospital Access)	PM	Α	А	5s	А	4s	А	5s	Α	А	5s	Α	5s	Α	5s	А
6. Darcy Road – Site Access -	AM	В	В	42s	С	44s	D	44s	D	В	32s	С	32s	С	32s	С
Westmead Hospital Access	PM	Α	А	20s	В	20s	В	20s	В	А	16s	В	17s	В	17s	В
7. Darcy Road – Site Staff Car	AM	Α	А	4s	А	4s	А	4s	Α	А	5s	Α	5s	Α	5s	А
Park Access between Institute Road and Westmead Hospital Access	PM	А	А	4s	А	4s	А	4s	А	А	5s	А	4s	А	5s	А
	AM	С	С	34s	С	34s	С	34s	С	С	32s	С	33s	С	33s	С

8. Darcy Road / Mons Road / Institute Road	PM	D	D	50s	D	50s	D	50s	D	D	73s	F	51s	D	51s	D
9. Darcy Road – Site Access (west of Mons Road)	AM	Α	В	9s	Α	8s	А	7s	Α	В	>10 0s	F	12s	Α	11s	Α
	PM	Α	А	12s	В	10s	А	10s	А	А	>10 0s	F	30s	С	21s	В
10. Darcy Road / Bridge Road	AM	С	С	23s	В	21s	В	21S	В	С	71s	F	28s	С	26s	В
	PM	В	С	41s	С	27s	В	27s	В	С	92s	F	81s	F	78s	F
11. Alexandra Avenue / Bridge Road	AM	В	В	19s	В	19s	В	19s	В	С	25s	В	28s	В	29s	В
	PM	Α	А	13s	А	13s	Α	13s	Α	В	14s	Α	15s	В	15s	В

The Applicant therefore concluded that the proposal would result in significant reduction of traffic generation in both 2023 and 2033, when compared to the background growth alone or the development scenario with no mitigation measures subject to: the OOSH accommodating up to 48% of all student students, the future multi-storey carpark getting delivered, separating the high school drop-off / pick-up and achieving the 10% modal shift from year 2023 to year 2033 across all schools in the campus, the church not having any community uses during peaks and the ELC not being accessed by staff or parents during any peak.

The RtS specifically mentioned the intersections at Darcy Road / Mons Road and Darcy Road / Bridge Road would improve significantly, if the above are implemented (**Table C2**). This in conjunction with the Government plans to improve public transport infrastructure in the precinct, would ensure that the development can be accommodated within the surrounding road network. No analysis or input from TNSW to the applicant was provided in relation to any forecast public transport outcomes at this location.

The RtS further stated that a feasible medium-high modal shift target range is between 9.5% - 12.5%. On this basis, the Applicant concluded that the 10% modal shift in the TAIA is an appropriate target for the proposed school. Additionally, the addendum to the TAIA stated that implementation of major transport infrastructure in the future would result in significant reduction of private car usage in the area. The TAIA advised that the EIS of the Sydney Metro West forecasted 83,000 fewer car trips every weekday by 2036, due to that development. This the applicant argued, in conjunction with the PLR would likely assist in reducing trip generation in the Westmead precinct overall and allowing additional capacity at the relevant intersections to accommodate the development at this location.

In this regard, the Applicant submitted a Framework Travel Plan to manage school travel demand at WCC site. The Framework Travel Plan includes a site-wide transport policy, identifies the mode share baseline, low, medium and maximum mode share targets, outlines the program that would be implemented, set out communication plan that WCC would follow to share transport expectations with staff, student and parents, and provides a monitoring and evaluation plan. The RtS indicated that the Framework Travel Plan would promote a Travel Access Guide (TAG) providing information on active travel and public transport routes as well as ways to sign-up for free and discounted student public transport travel.

The Department notes that the RtS did not include a table or figure providing the final mode share that was targeted for 2033 (in terms of percentage of students and staff in active / public transport).

With regard to the church, a separate document with proposed community uses of the church was provided to the Department. This document indicated that on the weekends, up to 560 patrons can attend the church (mainly including student families, staff and community) spread over Saturday (9am - 6pm) and Sunday (8am - 9:30am) in four masses. During the week, the church would primarily be used by the school during school hours with community use restricted to about 50 patrons outside school use. The mass congregation of the church would be restricted to a few days of the year, for major religious events.

The addendum TAIA referred to the Applicant's WCC Masterplan (not approved) and indicated that as part of this masterplan, the Applicant would include new pedestrian and vehicular connections through the site including other fine-grained connections with Bridge Road. However, these are outside the scope of this application (discussed later) and appear to involve other landowners.

The Applicant's RtS also acknowledged Council's recommendation to reduce the student numbers, however stated that this was not an economically viable option for the application. The Applicant noted that there is significant demand for primary school enrolments in the area; growth in the Westmead Precinct is forecasted to bring 4400 new dwellings as per Council's Local Strategic Planning Statement. Additionally, the Applicant advised that the Department's demographic modelling shows a significant growth in school aged children within the Westmead precinct by 2036. Consequently, the project has been designed to cater for the projected future growth in the locality.

#### Submissions to RtS

TfNSW reviewed the RtS, specifically the SIDRA analysis, and requested electronic SIDRA files to enable further assessment. TfNSW advised that the current exit location that would be used by the future multi-storey carpark exit location currently has low demands, however this would likely increase significantly post construction of the carpark. However, this impact cannot be determined or verified by TfNSW without assessing the electronic model files. Additionally, TfNSW maintained their concerns that the RtS did not include clear information assessing the level of impacts on surrounding classified road network (including the T-way) and the existing signalised intersection operations surrounding the site.

TfNSW suggested that whilst the Applicant's SIDRA files results show efficient operation of intersections, TfNSW consider that additional pedestrian safety features, phases, and a pedestrian crossing on the eastern side of Darcy Road would likely, at minimum, need to be delivered to ensure that the development provides safe access to the users without compromising the traffic in the locality.

Further, following the submission and review of the electronic SIDRA files, TfNSW identified that:

- additional demands at the intersection of Darcy Road and Catherine McAuley Street would lower the performance of Darcy Road and that the provided SIDRA modelling recommends reduction of green time of traffic signals for Darcy Road.
- the PLR should be included when assessing the impacts of Hawkesbury Road and Darcy Road.
- the SIDRA model shows delays in Hawkesbury Road and Alexandra Avenue for future 2023
   AM scenario. This has not been identified in the addendum TAIA and therefore no necessary mitigation measures have been provided for by the application resulting in acceptable impacts.
- concerningly the future 2023 PM model also includes an internal dummy intersection of additional 600 two-way vehicles which are not be linked to any other intersection. No clarification has been provided in this regard by the Applicant.

Council raised concerns that the assumptions used to inform the SIDRA model, including percentage of students using the OOSH and modal shift are unrealistic and unlikely to be achieved. To support this Council provided an analysis of observed modal splits for public and private schools with Parramatta.

Council considered the proposed development would generate unacceptable traffic impacts particularly in the AM peak when school and work travel would both tend to be compressed into a shorter period than the PM peak. Council particularly stated that the 10% modal shift would be unachievable as the catchment area of the school would be beyond the existing catchment of the WCC site, particularly noting that part of the school would accommodate students being relocated

from another school, not within a walking distance of the WCC site. As such the modelling scenarios do not accurately reflect the impact of the proposal on the traffic within the surrounding road network and that the modal shift is not consistent with other schools in similar scenarios.

Furthermore, Council raised concerns that no suitable avenues for access options have been explored by the Applicant to offset the overall impact of the proposal on Darcy Road, including the potential for a direct connection from Bridge Road to the project site which, Council considered, has the potential to provide for a range of options with more acceptable traffic outcomes.

#### Independent traffic review

Noting the concerns from the public authorities, data gaps in the application and the Applicant's modelling methodology approach, the Department arranged for peer review to be conducted of the EIS and RtS by Bitzios. Based on this independent peer review, the Department provided comments to the Applicant (following submission of the RtS) and sought clarification regarding the following identified gaps and matters of concern in the traffic assessment:

- the traffic survey covered only four hours discrete data (7:30am 9am and 2.30am 5pm) and therefore did not show the hourly traffic flows to determine the peak traffic hours for the development.
- some key information regarding the survey were not provided, including: the sample size of the survey, identification of primary school/s that were surveyed to determine relevance, the methodology of the survey.
- the theoretical estimation significantly underestimated the AM peak trips (160 less IN trips and 137 less OUT trips which is about 27% and 31% less than the actual trips). It was not clear as why the future 2023 AM trip generation was lower than the existing year of 2019 trip generation.
- the existing OOSH in the Mother Teresa Primary School is proposed to accommodate an average of 11% of the students. The proposed target population in the OOSH facility would be 40 48% of the primary school population in future. However, no information / study / justifications were provided to demonstrate why and how this would be achieved.
- the Applicant's SIDRA network modelling and the corresponding results provided in the RtS showed that several identified intersections would reach their maximum capacities by 2023 with the design traffic volume of the proposed development. Further, two intersections (Darcy Road / Hawkesbury Road and Hawkesbury Road / Alexandra Avenue) would operate at unacceptable LoS with more than 100 seconds delay. The SIDRA models and the RtS did not include any discussion on how the observed intersection LoS were determined. Furthermore, no mitigation measure or sufficient information were provided in the RtS regarding mitigation measures.
- the TAIA and RtS did not provide any queue analysis for each access road for AM and PM
  peaks. The RtS mentioned that the SIDRA 95th percentile queue was compared against the
  'average maximum' observed queues. However, it was not clear how the 'average maximum
  observed queues were calculated as no calibration criteria was defined. Further, in several
  locations, the observed queues varied significantly when compared against the SIDRA queue.
- the Sydney coordinated Adaptive traffic Sydney (SCATS) history data was not collated from TfNSW SCATS data and the corresponding '.LX' file containing traffic signal cycle time, phase time, phase sequence and signal co-ordination information including offsets were likely not been used.

- the base models used for the SIDRA modelling did not appropriately match with the model network settings and parameters. This included (but is not limited to) the use of inaccurate approach distances.
- the future intersection performance within the study area would be substantially impacted by the introduction of PLR. As part of PLR project, the operation of a number of intersections including the Darcy Road / Hawkesbury Road intersection would be substantially impacted. It was not clear how the PLR operations were considered in the future SIDRA models.
- the SIDRA models assumed three signalised intersections to be coordinated. However, no
  information was provided about the source of this assumption. Other intersections on
  Hawkesbury Road were also likely to be coordinated due to their proximity, but no clear
  information was included regarding those.
- no justification or reason for assuming the vehicle occupancy rate (whether journey to school surveys were used) was included, such as distinction between primary and high school student, consideration whether the students were in the same campus or from different schools or different occupancy rates for AM and PM.
- the assumption that 100% of the ELC students and staff would arrive/leave outside both peaks was not realistic. The Applicant also assumed that the users of the ELC would be a separate subset to other students attending the school who would arrive and leave during the peaks. Additionally, the ELC PM peak hour would coincide with the commuter PM peak and therefore should be assessed by including the regular PM peak traffic scenario in any modelling.
- the proposed assumption of 10% modal shift was too high as the proposed primary school is far from the nearby residential zones, the journey to school is in a high traffic environment for primary school aged children and private vehicle usage would likely account for almost 90% of the vehicle movements. Considering higher modal shift is a "best-case" scenario, whereas per the standard acceptable approach, the worst-case scenario should have been assessed.

Following lodgement of the Applicant's RtS and Bitzios review, the Department conducted a meeting with the Applicant to discuss the feasible options to reduce traffic impacts associated with the proposal and to clarify the SIDRA modelling outputs. The Department also engaged with Council to understand the traffic implications of the proposal and the mitigation measures that could reasonable be implemented on the site.

#### Applicant's SRtS

In response to the Department's request for additional information with respect to Bitzios' review, the Applicant provided SRtS documentation between December 2020 and March 2021, which respond to each of the points raised in the Bitzios traffic review including the following information:

- basis of determining the AM and PM peak times through tube counts on Darcy Road.
- basis of determining 40 48% OOSH capacity along with examples of other schools.
- a list of mitigation measures, which are the same as those provided with the RtS.
- provision of queue lengths used to calibrate SIDRA modelling data and basis of use of data in SIDRA modelling.

The Applicant also provided a revised base case scenario based on comments from Bitzios. The revised base case scenario demonstrated that the Darcy Road - Mons Road - Institute Road intersection (identified in **Table C3**) operate at reduced LoS in the base case, when compared to the

previous base case calculations submitted in the original TAIA provided by the Applicant. All other results remained the same.

**Table C3** | Revised base case scenario at Darcy Road / Mons Road / Institute Road intersection (Source: Applicant's SRtS 2020)

Intersections	TAIA Addendum	Revised Model (following review of Bitzios' Peer review)	Resultant Change				
Base Case	AM – LoS C	AM – LoS E	LoS C to E, for reasons as explained above				
base Case	PM – LoS D	PM – LoS F	LoS D to F, for reasons as explained above				
Future 2023 (with Background	AM – LoS C	AM – LoS C	No change				
growth and Development incl. OOSH 40%)	PM – LoS D	PM – LoS D	No change				
Future 2033 (with Background growth and Development	AM – LoS C	AM – LoS C	No change				
incl. OOSH 40% and 10% Mode Shift)	PM – LoS D	PM – LoS D	No change				

The Applicant further stated that traffic mitigation measures at the nearby intersections would be unnecessary at this stage as the configuration of these intersections would significantly vary with the upcoming PLR and Sydney Metro West projects. Consequently, the Applicant had restricted their mitigation measures to GTPs and OOSH capacities within the site only. The Applicant acknowledged that future connections may be provided to Farmhouse Road (pedestrian connection), Sydney Metro Tunnel (footpath), future Bridge Road link (footpath within site), and a future pedestrian connection under rail (within site). However, these cannot form part of the current application, would need consent from a number of adjoining owners and as such cannot be relied upon in the assessment of necessary mitigations to achieve acceptable LoS.

The electronic SIDRA files were provided to TfNSW for further assessment. However, the electronic files did not include a validation of the revised base case scenario that had been requested be provided by the Applicant. The Applicant did not provide any advice as to why this was not provided.

The Applicant's SRtS commented that 10% mode shift was considered realistic as 160 students would be living within walking distance of the WCC site and 184 students would be living along an existing public bus route. The Applicant also stated that for a 10% mode shift for primary students to be achieved, only 66 primary school students would be required to change travel mode over the next two years. Additionally, other schools have also targeted 10% mode shift which has been agreed by TfNSW, including St Patrick's College at Strathfield, which is located much further away from heavy rail, T-way bus services and future PLR.

#### Submissions to SRtS

Council reviewed the SRtS provided examples of other primary schools in the local area (in similar scenario) that have a high OOSH usage rates in the order of 20-30%. In this scenario, Council was not satisfied that the 40 - 48% assumption was feasible.

Council additionally raised that the proposal would create significant impact on the intersection of Bridge Road and Darcy Road in the PM peak in the year 2033, deteriorating from C to F (even with

10% modal split change and 40 - 48% of students using OOSH). Council reiterated their recommendation regarding a direct connection from Bridge Road to the school.

In March 2021, following a meeting with the Department and after detailed review of the Applicant's SRtS, TfNSW confirmed that that the traffic assessment and the supporting modelling provided by the Applicant did not demonstrate that the proposed development's future traffic generation would not detrimentally impact upon the surrounding classified network for the following reasons:

- several input parameters, performance measures, and calibration requirements described in the SIDRA User Guide, Section 2.6.2 2.6.4 were not followed.
- a comparison of queue lengths between observed and modelled, showed a poor correlation due to not adhering to standard calibration procedures.
- base and future intersections did not use the current intersections maximum cycle length but have adopted the cycle length operating at the time of inspection.
- the phase sequencing in the model was not in line with current operations.
- key input values that had a significant effect on results were not consistent with existing operations, example - incorrect walk times and incomplete coordination setup.
- existing 'Maximum Phase Splits' were not used.
- as detailed in Austroads Guide to Traffic Management Part 3, traffic studies and analysis
  models were required to be validated against information independent of that used to calibrate
  the model. Such verification or evidence of validation had not been provided.
- the analysis did not include the PLR at the intersection of Hawkesbury Road and Darcy Road.
   This was a major omission as this intersection may be the critical intersection within the study area and dictate cycle lengths for sites linked to it.
- the model indicated delays in Hawkesbury Road and Alexandra Avenue increasing from 71 secs/vehicle to 212 secs/vehicle for a future 2023 AM scenario.
- the future 2023 PM model also includes an anomaly with an internal dummy intersection of an additional 600 two-way vehicles not linked to any other intersection.

## Independent review

## 7.1.15 Bitzios reviewed the Applicant's SRtS and concluded that following:

- traffic generation was underestimated, the assumptions were not justified and in many
  instances the assumption methodology were unreasonable (including discounted trips and
  mode share target). Additionally, satisfactory reasons had not been provided for utilising the
  theoretical traffic generation rather than actual traffic survey results.
- the assumptions for the OOSH anticipated use of 40% were not supported due to the lack of adequate analysis and absence of adequate justifications.
- number of trips generated by the OOSH (parents and staff) during the AM and PM peak hours for this facility were assumed to be zero which did not comply with the Roads and Maritime Services (RMS) Guideline (Roads and Maritime Services Validation Trip Generation Surveys Child Care Centres Analysis Report, 2015) and could be justified.
- the proposed vehicle occupancy rates were not sufficiently justified, and directional splits had not been correctly accounted for.
- calculation of future background traffic growth was unclear.

- traffic modelling contained fundamental errors (signal timings) and the modelling report did not demonstrate that the base models were fit for the purpose that they had been used in this assessment.
- pedestrians and cyclists had not been considered in the traffic modelling.
- traffic modelling had not been updated (as requested by TfNSW) as part of RtS or SRtS.
- future road network and direct impacts to approved infrastructure projects such as Sydney Metro and PLR were not assessed satisfactorily.
- the potential traffic impacts on Darcy Road were significant with no mitigation measures proposed such as road network or intersection upgrades.

## Department's consideration

- 7.1.16 Based on the assessment by Bitzios and TfNSW, the Department considered that there was not sufficient information submitted by the Applicant with respect to traffic modelling and associated assessment of traffic impacts that was suitable for considering the nature and extent of operational traffic impacts associated with the proposal and to enable the Department to consider in forming an opinion on the likely impacts of the development.
- 7.1.17 The Department had reviewed the Applicant's EIS, RtS, SRtS and actively engaged with the Applicant requesting information to close out identified data gaps in the traffic assessment of the proposal. However, satisfactory information or revised modelling to demonstrate that the proposal would not have any unacceptable impacts on the surrounding road network, had not been submitted by the applicant.
- 7.1.18 The Department also considered that there were limited details in the GTP and Framework Travel Plan as to how the 10% mode shift target would be achieved including the final details of the mode share target to be achieved in 2033. In this regard, the Department considered that the application was not consistent with the visions of the draft Strategy as the proposal did not include sufficient information to demonstrate that it would help achieve the objective of being able to 'capitalise on transport connectivity and reduce car dependency'.
- 7.1.19 In summary the Department considered that the proposed development included several technical data gaps in the traffic modelling and unreasonably relied on a number of elements to show reduced traffic impacts on the locality in the future. However, these were elements are highly uncertain, unrealistic and not validated by satisfactory evidence or surveys. These included the Applicant's assumptions that:
  - 40 48% of all student children would be enrolled in the OOSH.
  - a 10% modal shift would be achieved from that of the existing modal split of the existing school on site and the relocated school via a GTP.
  - all children and staff within the 200 space ELC would travel outside the school peak times and the travels would also not coincide with either the AM or PM and commuter peak hours.
  - all children within the OOSH and all children and staff ELC would travel outside the school peak hours.
- 7.1.20 Considering the above, the Department considered that the proposal may result in unacceptable impacts on the surrounding road network. The Applicant determined the LoS for the intersections that would operate well over their capacity due to the background growth alone and would further deteriorate due to the development, notwithstanding the proposed measures. However, the

application failed to outline mitigation measures or provide sufficient information regarding the need for improvements to mitigate adverse traffic impacts. The technical information and traffic modelling submitted with the application were assessed as not being adequate to justify that the future impacts would be satisfactory. Further the proposed mitigation measures were unrealistic and would likely not be achieved. Therefore, the Department recommended that the application should not be approved on the basis of the above.

- 7.1.21 The Department conveyed this opinion to the Applicant and held a number of meetings between June and September 2021, as discussed in **Section 5**.
- 7.1.22 As a result of the above assessment and engagement, the Applicant submitted an amended proposal in September with additional mitigation measures. The amended proposal is assessed in **Section 6.2** of this report.

# Appendix D – Bitzios Traffic review

https://www.planningportal.nsw.gov.au/major-projects/project/25716

# Appendix E – Bitzios Independent Traffic analysis

https://www.planningportal.nsw.gov.au/major-projects/project/25716

## **Appendix F - Recommended Instrument of Approval**

https://www.planningportal.nsw.gov.au/major-projects/project/25716